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Nov. 20, 1947

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COOPER ORNITHOLOGICAL CLUB

PACIFIC COAST AVIFAUNA
NUMBER 23

The Birds of Nevada

By

JEAN M. LINSDALE

Contribution from the California Museum of Vertebrate Zoology



BERKELEY, CALIFORNIA

Published by the Club

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EDITED BY
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AT THE
Museum of Vertebrate Zoology
University of California

NOTE

The publications of the Cooper Ornithological Club consist of two series—*The Condor*, which is the bi-monthly official organ, and the *Pacific Coast Avifauna*, for the accommodation of papers whose length prohibits their appearance in *The Condor*. The present publication is the twenty-third in the *Avifauna* series.

For information as to either of the above series, address the Club's Business Manager, W. LEE CHAMBERS, 2068 Escarpa Drive, Los Angeles, California.

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INTRODUCTION

States furnish convenient, even if not natural, units for the study of occurrence of birds in North America. Such studies are useful from several points of view. Every person with a serious interest in birds desires more complete information on the distribution of the species. Progress in analysis of many broad problems in avian biology awaits more thorough accounts of the birds of some of the states. Satisfactory solutions of even the simplest questions which confront administrators of wildlife resources depend upon an adequate knowledge of the fauna of the country. The Great Basin remains one of the last large areas in the country the avifauna of which is little known. Records assembled in the present report are calculated to fill this gap in our knowledge of distribution of western birds in so far as field work up to the present in the state of Nevada gives basis for it. Nevada ranks sixth in size among the states, but its avifauna has been studied probably least of all. It is remarkable that this large area has been without resident bird students for so long.

In 1927, the Museum of Vertebrate Zoology began, at the suggestion of its founder, Miss Annie M. Alexander, a planned survey of the bird life of Nevada. This program involved two separate projects, the present one of which is intended to be a summary of all that is known of the kinds of birds which occur in Nevada—the nature of their occurrence as to locality and time, and brief mention of local observations dealing with their natural history. The second project, not yet completed, involves a detailed faunal survey of the vertebrates of a single mountain range (Toyabe) near the center of the state where special study was made of the responses of each species to its environment and to other animals of the region.

Most compilers of state lists of birds are able to invite unusual interest for their state on account of the "abundance and variety" of its bird life. No such claim can be made for Nevada; the chief interest in its bird life results from the sparseness of population, one also which is composed of relatively few species, considering the large size of the area. The scattered representatives of most of the species make it impossible to predict where in the state any given kind of bird will occur. A bird cannot be considered as present in any given locality without actually finding it there. The same kind of uncertainty applies to the seasonal status of each kind of bird. Doubtless it is the same general group of factors which operate to keep the numbers of birds at a low level and which restrict the human population in Nevada.

The topography of Nevada results in a peculiar type of interrupted distribution which characterizes nearly every bird species found there. The long, parallel mountain chains and valleys are so arranged that to give an adequate notion of the distribution of most of the birds it is necessary to give more details than are ordinarily desirable. It is not sufficient here to give merely marginal localities.

An exceptionally great number of persons shared in the preparation of this report. The names of most of them, the ones who participated in assembling the materials by collecting specimens or keeping manuscript records of their observations, will be found in association with the specific records throughout the text. To all these observers, I am grateful; for it is all the field work on the birds of the state that I have tried to summarize.

I am thankful for privilege freely extended to me, through Harry C. Oberholser, to study and use the many notes and specimens from Nevada in the possession of the United States Biological Survey. Similar assistance was received from Alexander Wetmore and Herbert Friedmann of the United States National Museum. Specimens and notes were loaned to me by Adriaan J. van Rossem, from the collections of Donald R. Dickey and the California Institute of Technology, and by Ralph Ellis, Donald D. McLean, James Moffitt, and Kenneth E. Stager.

Joseph Grinnell has been patient in permitting the preparation of this report to extend over several years and he has offered many suggestions for its improvement. A large part of the material assembled here was gathered by E. Raymond Hall and by persons who accompanied him into the field. Special mention should be made of the following persons whose efforts, on collecting trips into Nevada with me, are responsible for the accumulation of the bulk of the material upon which this report is based: William H. Behle, Lawrence V. Compton, Chester C. Lamb, Alden H. Miller, Robert T. Orr. Finally, I would never have begun this undertaking nor have carried it to the present stage except for the plans and suggestions which resulted from Miss Alexander's interest in the Great Basin region.

JEAN M. LINSDALE

September 10, 1935

PHYSIOGRAPHY

In general, Nevada is a high plateau, 4000 to 6000 feet above sea level. The southern tip of the state drops abruptly down to the Colorado River which leaves the boundary at about 500 feet altitude. On the plateau are many mountain ranges, some of them 100 miles in length and 9000 to 11,000 feet in elevation. They are nearly parallel and mostly run north and south. These sharp, narrow ridges are separated by narrow, level-floored valleys. The only large east and west valley in the state is the one through which the Humboldt River flows. North of this is a mountainous area, broken by many low passes, which forms the divide between that river and the branches of the Snake River.

Nearly all the rivers in the state empty into lakes which have no outlet or lose their waters by absorption and evaporation as they spread out over the floors of the valleys.

In a discussion of the present and extinct lakes of Nevada, Russell (1895, p. 102) points out that "the topography is strikingly at variance with that of regions having an abundant and well-developed drainage. Many of the valley bottoms are uncut by stream channels, and are so inclosed by mountains that they would hold broad lakes before being filled to overflowing. Scores, if not hundreds, of such basins exist, but lakes are rare.

"The traveler who visits Nevada will be impressed also with the arid and frequently decidedly desert character of the country. Forests are absent, except in a few limited areas on the higher mountains. One may ride for hundreds of miles through the valleys without finding a tree to shelter him from the intense heat of the summer sun. The prevailing vegetation is the sagebrush (*Artemisia*). This, with other desert shrubs, imparts a gray tint to the russet brown of the naked land. For months together not a drop of rain falls, and for weeks in succession the sky is without a cloud."

The climate of Nevada has been summarized by Sager (1932, pp. 2-3). According to him the most striking climatic features of the state are bright sunshine, small annual rainfall in the valleys and deserts, heavy snowfall in the higher mountains, dryness and purity of the air, and phenomenally large diurnal ranges of temperature. Reno, at 4500 feet, near the western border of the state has temperature conditions near the average, with an annual mean of 50°. In summer, maximum temperatures about 100° are recorded at many stations, especially in the south. Lowest winter temperatures are in the northeastern portion. Temperatures below zero occur everywhere except in the extreme south.

The first killing frost in autumn usually occurs during the first half of September in the north and northeastern portions of the state but not until November in the south. In the north frost may occur in any month of the year, but the last killing frost occurs on the average about June 1. The length of the growing season varies greatly, but it averages from seven to eight months in the extreme south and from two to five months in most other localities.

Average annual precipitation for the Nevada section is 9.02 inches. The wettest year (1906) had an average for all the stations of 15.87 inches; the driest (1928), 4.87 inches. January has the greatest precipitation, and August the least. The eastern slope of the Sierra Nevada receives the greatest annual precipitation. The lowest portion of the plateau area just east of the Sierra and southward to the edge of Death Valley receives the least. The number of days per year with 0.01 inch or more of

precipitation varies from 14 at Clay City, southern Nye County, to 67 at Tahoe. At Marlette Lake the annual snowfall is 255 inches while at Logandale, Clark County, it is less than one inch. Evaporation at Clay City, on the eastern edge of Death Valley averages more than 11 feet per year.

The prevailing winds are from the south, southwest, and west. Wind velocities are generally light and severe wind storms occur only at rare intervals. In an average year there are 193 clear days, 87 partly cloudy days, and 85 cloudy days. At Reno the average percentage of possible sunshine is 74.

HISTORICAL SUMMARY

Exploration in Nevada by white men dates back to 1775 when some Franciscan missionaries from Mexico passed through the area on their way to California. Fremont crossed the district in 1843-1844. In 1848 this region became a part of the United States, and Nevada territory was organized in 1861. The state was admitted to the union in 1864 and the approximate present state boundaries were defined in 1866.

The most extensive and in many ways the most worthy report upon the birds of Nevada is the one by Ridgway (1877) who collected and studied birds in the state from July 4, 1867, until late September, 1868. He was zoologist for the expedition which carried on the United States Geological Exploration of the Fortieth Parallel. The route of travel extended across Nevada from 39 degrees N. at the west to the northeastern corner. Winter quarters were established at Carson City and many of the important observations were made in that neighborhood. Specimens obtained by Ridgway were preserved in the National Museum except for some that were sent away to other museums. Among this latter group of specimens were some of the most interesting ones, the present locations of which I have been unable to determine.

Nelson (1875) published a good many records of birds observed by him in 1872 on a visit to Elko County, in the vicinity of Elko.

The field season of 1871 was spent by Walter J. Hoffman in Nevada in charge of natural history work for the Wheeler Survey. He joined the party at Carlin and made observations between there and the very southern tip of the state on the Colorado River. However because of the "arid deserts" and the "unavoidably forced marches" but little work was accomplished in ornithology. A report upon these observations was published by Hoffman (1881), which included also summaries of the published writings on the birds of this state by Ridgway, Henshaw and Yarrow.

H. W. Henshaw worked as naturalist for the Wheeler Survey and spent portions of several summer seasons in Nevada. In 1876 he worked in the neighborhood of Carson City from the last week in August until September 15. From that time until November 7 he was in the vicinity of Lake Tahoe and then the season was ended by another ten days, November 10 to 20, at Carson City. In 1877 his field work began at Carson City where he worked from May 12 to June 6, and then started northward to end the season on October 1 in southern Oregon. The next year he started at the same place on July 18 and again worked northward.

In 1893 A. K. Fisher published his "report on the ornithology of the Death Valley Expedition of 1891, comprising notes on the birds observed in southern California, southern Nevada, and parts of Arizona and Utah." This was based upon explorations by several members of the Biological Survey under the leadership of C. Hart Merriam. The records from Nevada apply to that portion of the state south of 38 degrees N.

A short paper dealing with the summer birds of Washoe Lake was published by Hanford (1903) and one on the birds of the Humboldt River Valley, southern Humboldt County, by Hanna (1904). In a paper on the birds of the region about Needles, California, Hollister (1908) included mention of several species seen by him along the Colorado River in the extreme southern tip of Nevada.

An expedition from the Museum of Vertebrate Zoology in 1909 visited the Pine Forest Mountains in Humboldt County and extensive collections and observations were made. Notes upon the birds of this region were published by Taylor (1912). Other publications which include information upon the birds of Nevada are listed in the bibliography at the end of this report.

Several institutions and individuals have carried on field work upon Nevada birds which has not yet been published upon completely. Names of persons that have collected birds in the state or that have supplied records used in this report are given in another place (p. 11). Field representatives of the Biological Survey have worked in many parts of the state. A. J. van Rossem, working under the auspices of the late Donald R. Dickey and the California Institute of Technology, has prepared a report (MS) on several seasons of field work in recent years in the vicinity of the Charleston Mountains in Clark County. Mr. Ralph Ellis of Berkeley, California, has made extensive collections in the Jarbidge and Ruby mountains in Elko County. Except for a few exceptional records (Ellis, 1935) no report has been made upon the part of the materials from this survey, which pertains to birds.

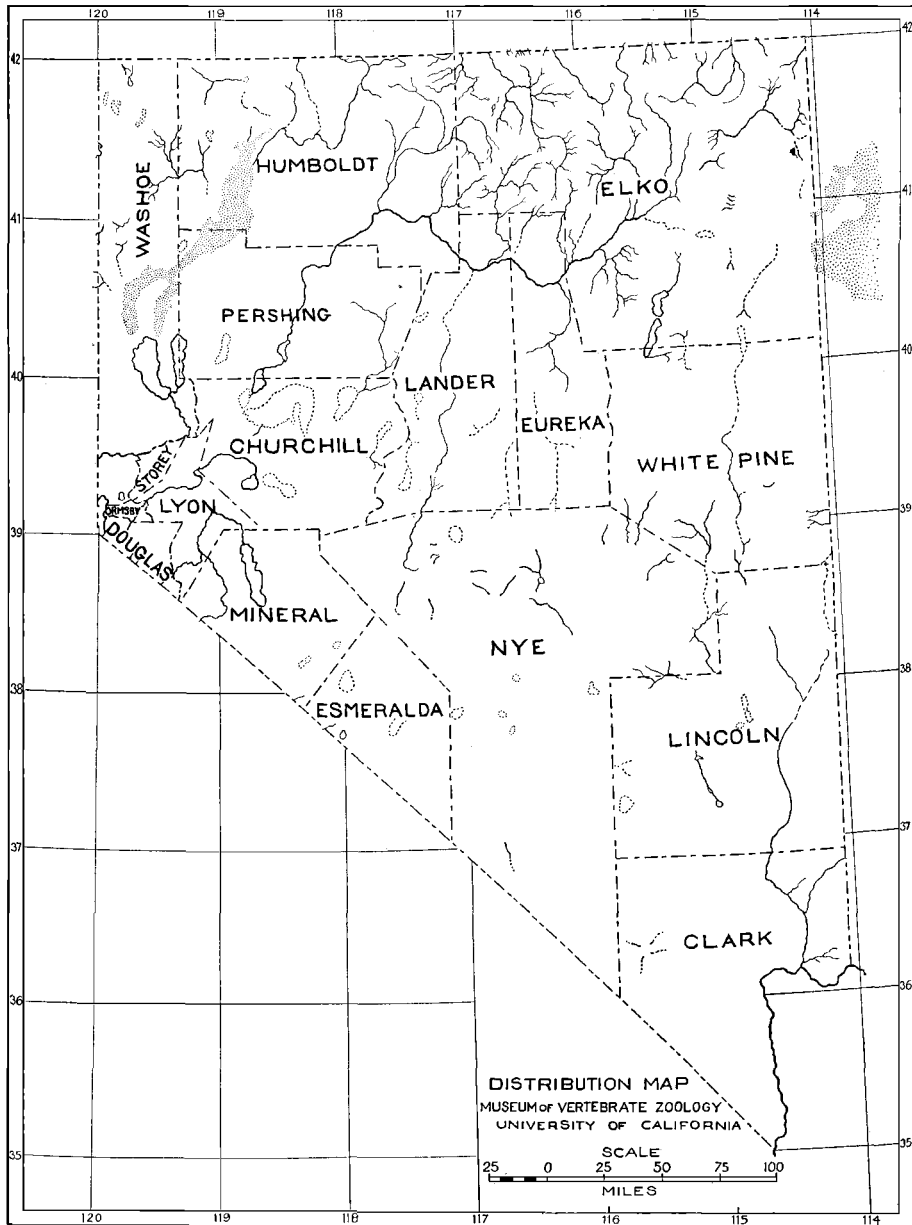
The present report is based primarily upon the birds recently obtained from Nevada by field parties sent out by the Museum of Vertebrate Zoology. Added to this information is that obtained from earlier publications dealing with the birds of this area and from examination of specimens in other collections, mainly the United States National Museum including those of the United States Biological Survey.

FIELD WORKERS

The list which follows includes the names of persons whose field work upon the birds of Nevada has provided the basis for the present report. Although most of these workers were collectors and their records have been verified from specimens, some of their records have been taken from published reports and a great many from manuscript notebooks. The years indicated are ones in which work cited in the present list was done.

Alexander, Annie M.	1909, 1926, 1927, 1928, 1930
Anderson, Howard T.	1932
Arnold, John Ronald	1933
Bailey, Vernon Orlando	1889, 1890, 1893, 1898, 1907
Baldwin, C. N.	1932
Behle, William Harroun	1934
Benson, Seth Bertram	1928, 1934
Borell, Adrey Edwin	1927, 1928, 1929
Boyers, Lloyd Morgan	1932
Brode, J. Stanley	1934
Bunch, J. R.	1916
Burt, William Henry	1930
Canfield, May	1922
Compton, Lawrence Verlyn	1929, 1933, 1934
Davis, William B.	1933, 1934, 1935
Dawson, William Leon	1922
Doutt, J. Kenneth	1931
Durrant, Stephen David	1933
Edge, Elton R.	1934
Ellis, Ralph	1927
Feathers, Dawson A.	1934
Fisher, Albert Kenrick	1908
Fisher, Walter Kenrick	1898
Fitch, Henry Sheldon	1932, 1934
Gabrielson, Ira Noel	1934
Gale, Francis Clair, Jr.	1933
Goldman, Edward Alphonso	1914, 1915, 1916
Goldman, Luther Jacob	1915
Gorham, Frank Wellington	1933
Hall, C. L.	1911
Hall, Eugene Raymond	1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935
Hanford, Forrest Sherer	1902
Hanna, Wilson Creal	1903
Harville, Ronald Patrick	1932
Hatfield, Donald Marshall	1931, 1934
Heindl, A. J.	1909
Heller, Edmund	1914
Henshaw, Henry Wetherbee	1876, 1877
Hoffman, Walter James	1871
Hollister, Ned	1905
Holt, Ernest Golsan	1915
Jaeger, Edmund Carroll	1926
Johnson, Archibald	1932, 1933, 1934
Johnson, David Horn	1934
Keeler, Charles Augustus	1889
Kellogg, Louise	1909, 1926, 1927, 1928, 1930
Kohler, John	1871
Lamb, Chester Converse	1930, 1931

Lilleland, Ole	1933
Linsdale, Jean Myron	1927, 1930, 1931, 1932, 1933, 1934
McLean, Donald Dudley	1930, 1933, 1934, 1935
Merriam, Clinton Hart	1891
Miller, Alden Holmes	1930, 1932, 1933, 1935
Miller, Loye Holmes	1932, 1933
Moffitt, James	1926
Moore, Robert Dunham	1929, 1930
Nelson, Edward William	1872, 1873, 1891
Oberholser, Harry Church	1898, 1915
Orr, Robert Thomas	1931, 1932, 1934
Palmer, Fletcher Greenleaf	1934
Parker, H. G.	1867, 1877
Peterson, Albert Edwin	1935
Piper, Stanley	1908
Poultney, H. Robert	1932
Preble, Edward Alexander	1915
Richardson, Charles Howard	1909
Richardson, William Bebb	1935
Ridgway, Robert	1867, 1868
Russell, Ward Cairns	1928, 1929, 1930, 1931, 1932, 1933, 1934 1935
Sheldon, Harry Hargrave	1929, 1932
Smith, Austin Paul	1917
Stager, Kenneth E.	1933
Stephens, Frank	1891
Streator, Clark Perkins	1896
Sumner, Eustace Lowell, Jr.	1933
Taylor, Walter Penn	1909
Van Rossem, Adriaan Joseph	1917, 1930, 1931, 1932
White, Halstead Guilford	1920
Willett, George	1914
Wilson, Paul Thomas	1933



Map of Nevada. Shows counties, the geographic units used most often in this report to designate parts of the state occupied by the various species. In the accounts of species counties are arranged usually in the following order: Washoe, Storey, Ormsby, Douglas, Lyon, Humboldt, Elko, Pershing, Churchill, Lander, Eureka, White Pine, Mineral, Esmeralda, Nye, Lincoln, Clark.

LIST OF LOCALITIES

- Ackler Creek; Elko County; 6800 feet; north end of Ruby Mountains, near 41° N.; Borell, Ellis.
 Alamo; Lincoln County; 4100 feet; Pahranaagat Valley, near 37° 20' N.; Alexander, Hall, Kellogg.
 Alder Creek; Humboldt County; 7000 feet; west side Pine Forest Mountains, near 41° 45' N., 118° 45' W.; Richardson, Taylor.
 Alder Creek Lake; Humboldt County; 7800 feet; on Alder Creek, Pine Forest Mountains; Richardson, Taylor.
 Alder Creek Ranch; Humboldt County; 5000 feet; on Alder Creek; Richardson, Taylor.
 Amargosa River; Nye County; camp at 3500 feet, 3½ miles northeast of Beatty; Davis, Douitt, Hall, Hatfield, Orr, Russell.
 Amos (Cane Springs Station); central Humboldt County; 4400 feet; west of Santa Rosa Mountains, 41° 21' N., 117° 49' W.; Richardson, Taylor.
 Anaho Island; Washoe County; largest island in Pyramid Lake, at southern end, just west of 119° 30' W.; Hall, Ridgway, Willett.
 Antelope Creek; Elko County; west side of Tuscarora Mountains, 60 miles north of Battle Mountain; Hoffman.
 Arc Dome (Toyabe Dome); northern Nye County; top 11,775 feet; 38° 50' N., in Toyabe Mountains; Bailey, L. J. Goldman, Linsdale, Oberholser.
 Arden; Clark County; station on Union Pacific Railroad about 10 miles southwest of Las Vegas; van Rossem.
 Arlemont (Chiatovich Ranch); Esmeralda County; 4900 feet; north end of Fish Lake Valley, near 37° 51' N., 118° 5' W.; Benson, Hall, Linsdale, Russell.
 Ash Meadows; southern Nye County; 2200 feet; along state line, south of 36° 30' N.; Bailey, Davis, Merriam, Russell, Stephens.
 Ash Spring; Lincoln County; 3800 feet; in Pahranaagat Valley; Boyers, Hall.
 Austin; Lander County; 6147 feet, 39° 27' N., 117° 3' W.; in Toyabe Mountains; Linsdale, A. H. Miller, Ridgway.
 Badger; Humboldt County (probably Badger Meadows, in northwestern part of the county); Streator.
 Baker; eastern White Pine County; 5700 feet; 4 miles from state line, just south of 39° N.; Hall, Russell.
 Baker Creek; White Pine County; camps at 6800, 7200, and 8500 feet; east side of Snake Mountains, south of 39° N.; Behle, Hall, Linsdale, Moore, Russell.
 Battle Mountain; Lander County; 4513 feet; 52° 38' N., 112° 0' W.; town on Humboldt River; Bailey, Hoffman.
 Bear Creek; Elko County; camp at 8000 feet; north side of Jarbidge Mountains, near 41° 50' N., 115° 28' W.; Behle, Linsdale.
 Beatty; Nye County; 3300 feet; on Amargosa River, 36° 54' N., 116° 45' W.; Canfield, Linsdale, Russell.
 Bell's Ranch; northern Nye County; 6700 feet; upper (southern) part of Reese River Valley, near 38° 55' N.; Alexander, Kellogg.
 Belleville; southern Mineral County; 5200 feet; 38° 10' N., 118° 10' W.; Hall.
 Belmont; Nye County; 38° 39' N., 116° 52' W.; at eastern base of Toquima Mountains; Hoffman.
 Belted Range; eastern Nye County; between 37° and 38° N., west of 116° W.; Russell.
 Beowawe; northern Eureka County; 4695 feet; on Humboldt River; Hall.
 Big Creek; Humboldt County; 6000-8000 feet; east side Pine Forest Mountains; Richardson, Taylor.
 Big Creek; Lander County; 6500-8000 feet; west side Toyabe Mountains, 39° 20' N.; Linsdale.
 Big Creek Ranch; Humboldt County; 4350 feet; on Big Creek, Pine Forest Mountains; Richardson, Taylor.
 Birch Creek; Lander County; camp at 7000 feet; east side Toyabe Mountains, near 39° 25' N.; Lamb, Linsdale.
 Bitter Spring; Clark County; 1800-1900 feet; on east slope of Muddy Mountains; Bailey, Merriam.
 Black Cañon; Clark County; below site of Boulder Dam; Colorado River, near 36° N.; Hoffman.
 Blair; central Esmeralda County; 4000 feet; close to 38° N.; E. A. Goldman, L. J. Goldman.
 Breen Creek; Nye County; 7000 feet; on west side Kawich Range, near 116° 30' W.; Hall, Orr, Russell.
 Buena Vista Cañon; Pershing County; 5170 feet; in West Humboldt Mountains; Ridgway.
 Buffalo Creek; Humboldt County; 40 miles northwest of Golconda, west of Santa Rosa Mountains; Preble.

- Bull Run Mountains; northern Elko County; west of 115° W.; Hoffman.
- Bunkerville; northeastern Clark County; on Virgin River; 36° 48' N., 114° 9' W.; Bailey, Merriam.
- Burned Corral Cañon; eastern Nye County; 38° 15' N., 115° 33' W.; western slope of Quinn Cañon Mountains; Arnold, Davis, Gorham, Hall, Lilleland, Russell.
- Cactus Spring; Nye County; 6500 feet, in Cactus Range, west of Cactus Flat; near 37° 43' N., 115° 50' W.; Russell.
- Candelaria; southern Mineral County; 6180 feet; 38° 9' N., 118° 5' W.; Hall.
- Cane Springs (Amos); Humboldt County; 4400 feet; south end of Quinn River Valley; Richardson, Taylor.
- Carlin; western Elko County; 4100 feet; on Humboldt River; 40° 40' N., 116° 5' W.; Bailey, Davis, Hoffman.
- Carroll Summit; on line between Churchill and Lander counties, about 39° 30' N.; in Desatoya Mountains; Linsdale.
- Carson City; central Ormsby County; 4700 feet; capital of the state; Henshaw, A. Johnson, Parker, Ridgway, Stager.
- Carson River; Lyon County; crosses county from west to east; Stager, Streator.
- Cat Creek; Mineral County; eastern slope of Walker River Range, on southeast slope of Mount Grant; Brode, Edge, Hall, D. H. Johnson, Palmer, Russell.
- Cave Spring; Esmeralda County; 6250 feet; in Silver Peak Range; Benson, Hall, Russell.
- Charleston Mountains (Spring Mountain Range); Clark County; largest mountain mass in southern Nevada; Bailey, Burt, E. A. Goldman, L. J. Goldman, Jaeger, Merriam, Nelson, Palmer, van Rossem.
- Charleston Peak; Clark County; top nearly 12,000 feet; tallest peak in Charleston Mountains; Jaeger.
- Charleston Resort; Clark County; 8000 feet; in Kyle Cañon, Charleston Mountains; Jaeger.
- Cherry Creek; northern White Pine County; 6800 feet; Steptoe Valley; south of 40° N.; Lamb.
- Chiatovich Creek; Esmeralda County; east side of White Mountains; camps at 7000 and 8500 feet; Alexander, Kellogg, Linsdale.
- Chiatovich Ranch (Arlemont); Esmeralda County; 4900 feet; in north part of Fish Lake Valley; Alexander, Hall, Kellogg, Linsdale, Russell.
- Clear Creek; Lander County; on southern line of county, east side of Toyabe Mountains; Linsdale.
- Cleve Creek; White Pine County; camp at 6900 feet; on eastern slope of Shell Creek Range; Hall, Moore, Russell.
- Cleveland Ranch; White Pine County; 6000 feet; in Spring Valley; Hall, Moore, Russell.
- Cliff Spring; Nye County; 7000 feet; in Belted Range, just north of 37° 30' N.; Baldwin, Harville, Orr, Poultney, Russell.
- Cloverdale; Nye County; southwest of Toyabe Mountains, about 22 miles west of Manhattan; Bailey, Davis, Oberholser, Russell.
- Clover Mountains; Elko County; northern end of Ruby Mountains; Ridgway.
- Coal Valley; Lincoln County; 5650 feet, at center, 11 miles north of Seeman Pass; Hall.
- Cobre; eastern Elko County; station on Southern Pacific Railroad; 41° 8' N., 114° 22' W.; A. H. Miller.
- Colorado River; Clark County; southern boundary of county and state; Benson, Compton, Feathers, Fitch, Hall, Hatfield, Hollister, Linsdale, Orr.
- Coon Creek; Elko County; 8300 feet; camp 6 miles southwest of Jarbidge in Jarbidge Mountains; A. E. Borell, Compton.
- Copper Creek; Elko County; 8300 feet; camp 6 miles southwest of Jarbidge, Jarbidge Mountains; A. E. Borell, Compton.
- Cottonwood Creek; Mineral County; camp at 7400 feet; north side of Mount Grant; Brode, Edge, Hall, D. H. Johnson, Palmer, Russell.
- Cottonwood Range (Santa Rosa Mountains); Humboldt County; about 60 miles north of Winnemucca; Behle, Hall, Linsdale, A. H. Miller, Peterson, W. B. Richardson, Russell, Streator.
- Cottonwood Spring; Clark County; 3450 feet; in eastern part of Charleston Mountains; Bailey, Merriam, Nelson.
- Coyote Spring; southern Lincoln County; near 37° N., 115° W.; van Rossem.
- Crystal Spring; Lincoln County; 4000 feet; in Pahrangat Valley; Anderson, Boyers, Hall, Harville, Poultney, Russell.
- Darrrough's; Nye County; 5600 feet; in Smoky Valley, east of Arc Dome; Linsdale.
- Davis Creek; Esmeralda County; 7500 to 8000 feet; on east side of White Mountains; Linsdale.
- Dayton; western Lyon County; 4353 feet; 39° 10' N., 119° 38' W.; Linsdale.
- Dead Mountain; southern Clark County, close to 35° 15' N., 114° 45' W.; Benson, Feathers, Fitch, Hatfield, Orr.

- Deering's (Deering's) Ranch; Elko County; on Deering's Creek, west side of Ruby Mountains; Ridgway.
- Deephole; central eastern Washoe County; 4000 feet; on north edge of Smoke Creek Desert; Hall, Russell, Streator.
- Deering Creek; Elko County; on western slope of northern part of Ruby Mountains; Ridgway.
- Desatoya Mountains; on line between Churchill and Lander counties; crossed by Lincoln Highway; Hall, Linsdale.
- Desert Valley; Lincoln County; 5300 feet; east of Pahroc Range; Anderson, Bailey, Baldwin, Fitch, Merriam, Russell.
- Devil's Hole; Nye County; 2200 feet; eastern edge of Ash Meadows; near $36^{\circ} 25' N.$, $116^{\circ} 15' W.$; Davis, Russell.
- Duck Flat; northern Washoe County; above $41^{\circ} N.$ within 6 miles of California line; Dawson.
- Duffer Peak; Humboldt County; 8400 feet; meadow in Pine Forest Mountains; A. H. Miller, Richardson, Taylor.
- Dyer; Esmeralda County; 4900 feet; ranch in Fish Lake Valley, 7 miles south of Arlemont; Benson, Hall.
- Eagle Valley; Lincoln County; camp $3\frac{1}{2}$ miles north of, at 5600 feet; Davis, Gorham, Hatfield, Russell.
- East Humboldt Mountains (Ruby Mountains); central Elko County; name sometimes applied to northern part of Ruby Mountains; Ridgway.
- Eastgate; Churchill County; on Eastgate Creek at western base of Desatoya Mountains; Bailey, Hall, Linsdale, Oberholser.
- Eldorado Cañon; Clark County; tributary to Colorado River, about $35^{\circ} 43' N.$; Gabrielson.
- Elko; Elko County; 5000 feet; $40^{\circ} 50' N.$, $115^{\circ} 45' W.$; Davis, Nelson.
- Emigrant Valley; Lincoln County; west of Desert and Timpahute mountains on eastern boundary of county; Bailey, Merriam.
- Endowment Mine; Mineral County; 6500 feet; in Excelsior Mountains; Alexander, Kellogg.
- Eureka; Eureka County; 6500 feet; $39^{\circ} 30' N.$, $115^{\circ} 59' W.$; Bailey, A. H. Miller, Oberholser.
- Excelsior Mountains; Mineral County; southwest of Mina; Alexander, Kellogg.
- Fallon; Churchill County; 4000 feet; $39^{\circ} 26' N.$, $118^{\circ} 42' W.$; A. K. Fisher, Hall, Linsdale.
- Fernley; northern Lyon County; 4150 feet; station on Southern Pacific Railroad; Hall.
- Fish Lake; Esmeralda County; 4800 feet; in Fish Lake Valley, east side of White Mountains; Benson, Hall, Russell.
- Fish Lake; Nye County; 6500 feet; in Fish Spring Valley, between Monitor and Hot Creek ranges; Hall.
- Fish Lake Valley; Esmeralda County; east of White Mountains; Bailey, Benson, Hall, Linsdale, Merriam, Russell.
- Flowing Springs; western Humboldt County; 4100 feet; close to $41^{\circ} N.$, $119^{\circ} W.$; Streator.
- Fort Churchill; central Lyon County; 4200 feet; on Carson River, near $39^{\circ} 17' N.$, $119^{\circ} 17' W.$; Ridgway.
- Fort Mojave (opposite); Clark County; 500 feet; on Colorado River; Compton, Benson, Fitch, Hall, Hatfield, Hoffman, Linsdale, A. H. Miller, L. H. Miller, Orr.
- Franklin Lake; Elko County; about 6000 feet; in Ruby Valley; Bailey, Oberholser, Ridgway.
- Franktown; Washoe County; 5100 feet; on northwestern side of Washoe Lake; Ridgway.
- Fremont Pass; Elko County; in Ruby Mountains, separates two main divisions of the range; Bailey.
- Galena Creek; Washoe County; camp at 7000 feet; east side of Mount Rose, 12 miles south of Reno; Behle, Compton, Linsdale.
- Garden Valley; Nye County; camp $8\frac{1}{2}$ miles northeast of Sharp ($38^{\circ} 9' N.$, $115^{\circ} 35' W.$); Anderson, Baldwin, Boyers, Hall, Harville, Poultney, Russell.
- Gardnerville; Douglas County; $38^{\circ} 51' N.$, $119^{\circ} 41' W.$; C. L. Hall.
- Geyser; southern White Pine County; south end Spring Valley; Behle, Linsdale.
- Gleason Creek (Gleason Spring); White Pine County; 7200 to 7500 feet; 14 miles northwest of Ely; Hall, Lamb.
- Glenbrook; Douglas County; 6300 feet; $39^{\circ} 4' N.$, $119^{\circ} 55' W.$; east side of Lake Tahoe; Keeler.
- Glendale (Truckee Meadows); Washoe County; 4370 feet; 4 miles east of Reno; Ridgway.
- Golconda; Humboldt County; 4400 feet; on Humboldt River, about 16 miles east of Winnemucca; Hanna, Preble.
- Gold Mountain; southern Esmeralda County; top 8145 feet; at $37^{\circ} 15' N.$; Bailey, Merriam.
- Goose Creek; Elko County; 5150 feet; 2 miles west of Utah line; Hall, Peterson, W. B. Richardson, Russell.
- Granite Creek; Washoe County; east side of Granite Range; Streator.

- Grapevine Cañon; Esmeralda County; in Grapevine Mountains; Nelson.
- Grapevine Mountains; southwestern Nye County; on state line south of 37° N.; Nelson.
- Greenmonster Cañon; Nye County; 7500 feet; on eastern slope of Monitor Range; Arnold, Gale, Gorham, Hall, Lilleland, Russell, Wilson.
- Groom Baldy; Lincoln County; 37° 28' N., 115° 43' W.; camp at southwest base; 7200 feet; Douth, Hall, Hatfield, Orr, Russell.
- Groom Mine; Lincoln County; 6000 feet; at south end of Timpahute Range; Hall.
- Halleck; Elko County; 5200 feet; 40° 56' N., 115° 28' W.; Bailey, Hall, Kohler.
- Hamilton; White Pine County; 8000 feet; 39° 12' N., 115° 29' W.; camp in White Pine Mountains, 3½ miles northwest; Hall.
- Hastings Pass; Elko County; Ruby Mountains; Bailey, Oberholser.
- Hazen; western Churchill County; about 16 miles northwest of Fallon; Hall.
- Hidden Forest; northern Clark County; 8500 feet; in Sheep Mountains; west of 115° W.; Burt, van Rossem.
- High Rock Cañon; northeastern Washoe County; 5000 feet; north of 41° 15' N.; Kellogg.
- Hiko; Lincoln County; 37° 33' N., 115° 12' W., in Pahrnagat Valley; Behle, Hall, Linsdale, Russell.
- Hiko Spring; Clark County; 1000 feet; 8 miles southwest of Dead Mountain; Fitch.
- Hiko Spring; Lincoln County; 4000 feet; in Pahrnagat Valley, 5 miles north of Crystal Spring; Russell.
- Hobson; White Pine County; south end of Ruby Lake; Borell.
- Hot Spring Ranch; Nye County; 6 miles south of Sunnyside, White River Valley; Hall.
- Humboldt Marshes; Churchill County; 3890 feet; near the "sinks"; Ridgway.
- Humboldt Valley; Elko to Churchill County; longest valley in state; Behle, A. K. Fisher, W. K. Fisher, Hall, Hanna, Linsdale, Ridgway.
- Huntington Valley; southern Elko County; west side Ruby Mountains; Bailey, Oberholser.
- Incline; Washoe County; 6250 feet; U. S. Forest Service camp ground at north end of Lake Tahoe; Linsdale.
- Independence Valley; Elko County; crossed by 41° N., west of 116° W.; Hoffman.
- Indian Creek; Esmeralda County; east side of White Mountains; Alexander, Hall, Kellogg, Linsdale.
- Indian Creek; Nye County; west side Toquima Range; Holt.
- Indian Spring; Esmeralda County; on Mount Magruder; Canfield.
- Indian Spring; Nye County; 6300 feet; in Belted Range; Russell.
- Indian Spring Valley; Clark County; north of Charleston Mountains; Bailey, Merriam, Nelson.
- Indian Springs; Clark County; 3280 feet; north base of Charleston Mountains; Burt, van Rossem.
- Indian Valley; Nye County; camp at 7400 feet at Sly's Ranch; between Shoshone and Toyabe mountains; Russell.
- Ione Valley; Nye County; west of Shoshone Mountains; Bailey.
- Irish Mountain; Lincoln County; in Silver Cañon Mountains, about 10 miles west of Hiko; camp on east slope at 6900 feet and at top, 8250 feet; Behle, Douth, Hatfield, Linsdale, Orr, Russell.
- Iron Point; Humboldt County; 4400 feet; on Humboldt River, east of Winnemucca; E. A. Goldman, Hanna.
- Jackson Mountains; Humboldt County; east side of Black Rock Desert; Heller.
- Jarbidge Mountains; northern Elko County; west of 115° W.; Behle, Borell, Compton, Linsdale.
- Jefferson; Nye County; 7600 feet; in Toquima Range; Arnold, Davis, Gale, Gorham, Hall, Lilleland, Russell, Wilson.
- Jerry Creek; Elko County; 6700 feet; camp in northern portion on eastern slope of Ruby Mountains; Borell, Ellis.
- Jett Cañon; Nye County; eastern slope of Toyabe Mountains, west of Round Mountain; Holt.
- Juniper Mountains (Mormon Mountains); southeastern Lincoln County; east of Muddy River, extends into Clark County; Bailey, Merriam.
- Kaolin; Clark County; on lower part of Muddy River; 4 miles north of Saint Thomas; van Rossem.
- Kawich Mountains; eastern Nye County; between 37° 50' N. and 38° N.; west of Reveille Valley; Hall, Lamb, Orr, Russell.
- Kawich P. O.; eastern Nye County; 5900 feet; near 37° 34' N., 116° 17' W.; Russell.
- Kingston Creek; Lander County; on east side of Toyabe Mountains; camps at 6500 and 7000 feet; Lamb, Linsdale, Miller.
- Kingston R. S.; Lander County; 7500 feet; on Kingston Creek, Toyabe Mountains; Lamb, Linsdale, Miller.
- Kyle Cañon; Clark County; 4000 to 10,000 feet; on east side of Charleston Mountains, north of 36° 15' N.; Jaeger, van Rossem.
- Lahontan Reservoir; Lyon and Churchill counties; 4200 feet; about 20 miles west of Fallon; Linsdale.

- Lake Tahoe; Washoe, Ormsby and Douglas counties; 6225 feet; on western border of state; Henshaw, Keeler, Linsdale.
- Lapon Cañon; Mineral County; western slope of Walker Lake Range, south of Mount Grant; Brode, Edge, Hall, D. H. Johnson, Palmer, Russell.
- Last Chance Cañon; Nye County; on east side of Toyabe Mountains; Compton, Linsdale.
- Las Vegas; Clark County; 2000 feet; 36° 10' N., 115° 0' W.; Burt, van Rossem.
- Lee Cañon; Clark County; 8200 feet; on northeast side of Charleston Mountains, north of Kyle Cañon; van Rossem.
- Lehman Cave; White Pine County; 7200 feet; about 10 miles from eastern border of state, on 39° N.; Behle, Hall, Linsdale, Russell.
- Lehman Creek; White Pine County; 8200 feet; east side of Snake Mountains, near 39° N.; Behle, Compton, Hall, Linsdale, Moore, Russell.
- Leonard Creek; Humboldt County; 6500 feet; south end of Pine Forest Mountains; Richardson, Taylor.
- Leonard Creek Ranch; Humboldt County; at mouth of Leonard Creek; Richardson, Taylor.
- Lida; Esmeralda County; 6037 feet; 37° 24' N., 117° 26' W.; in Silver Peak Range; L. J. Goldman.
- Little High Rock Cañon; Washoe County; 41° 15' N., 119° 20' W.; White.
- Little Log Spring; Esmeralda County; 6900 feet; on Mount Magruder in Silver Peak Range; Canfield.
- Little Washoe Lake; Washoe County; 5000 feet; just north of Washoe Lake; Hall, Linsdale.
- Lovelock; Pershing County; 4000 feet; 40° 10' N., 118° 25' W.; on Humboldt River; A. K. Fisher, Piper, Streator.
- Maggie Creek; western Elko County; tributary of Humboldt River, enters just east of Carlin; mentioned by Hoffman.
- Mahala; Churchill County; a station on Southern Pacific Railroad about 10 miles west of Fallon; Linsdale.
- Mahogany Cañon; Lander County; branch of Kingston Cañon; camp at 8000 feet; Toyabe Mountains; Lamb, Linsdale.
- Manhattan; Nye County; 6900 feet; mining town on west side of Toquima Mountains; Compton, Linsdale.
- Marlette Lake; southwestern Washoe County; 8000 feet; in Sierra Nevada, 39° 10' N., 2 miles east of Lake Tahoe; Hall.
- Martin Creek R. S.; Humboldt County; 7000 feet; on Road Creek, a tributary of Martin Creek, on northern slope of Santa Rosa Mountains; Behle, Hall, Linsdale, A. H. Miller, Peterson, W. B. Richardson, Russell.
- Marys River; Elko County; 5800 feet; 23 miles north of Deeth; Hall, Peterson, W. B. Richardson, Russell.
- Massacre Creek; Washoe County; 5800 feet; south of Massacre Lakes; White.
- McDermitt; northern Humboldt County; 4700 feet; on Quinn River close to northern edge of state; 41° 59' N., 117° 39' W.; Preble, Streator.
- McLeod Ranch; Nye County; in Smoky Valley, 2 miles north of Millett P.O.; Linsdale.
- McNett Ranch; Esmeralda County; 2 ranches—one 4 miles northeast of and other (upper) 4 miles southwest of Arlemont; in Fish Lake Valley; Hall, Russell.
- Meadow Creek R. S.; Nye County; Toquima Mountains; Davis, Durrant, Russell.
- Meadow Creek Valley (Meadow Valley Wash); southern Lincoln County; east side Meadow Valley Range; Bailey, Hatfield, Merriam, Orr, Russell.
- Mesquite; Clark County; 1750 feet; on Virgin River, 1 mile from Utah-Nevada line; Lamb, Grr.
- Mill City; northern Pershing County; Behle, W. K. Fisher.
- Miller's Wells; northern Esmeralda County; 4700 feet; about 13 miles northwest of Tonopah; Russell.
- Millett P.O.; Nye County; 5500 feet; near 39° N., in Smoky Valley, about 32 miles south of Austin; Alexander, Compton, Kellogg, Lamb, Linsdale, Orr.
- Mills Ranch; Churchill County; 4000 feet; on Carson River, 4 miles west of Fallon; Hall.
- Minden; Douglas County; 4750 feet; in Carson Valley; Linsdale.
- Mohawk Cañon; Nye County; west side of Toyabe Mountains; Linsdale.
- Mohawk R. S.; Nye County; in Mohawk Cañon, about 8000 feet, in Toyabe Mountains; Linsdale.
- Monitor Mountains; Nye County; east side of Ralston Valley; Hall, Russell.
- Monitor Valley; Nye County; west side of Monitor Range; Bailey, Oberholser.
- Montello; eastern Elko County; on Victory Highway about 7 miles west of Utah line; A. H. Miller.
- Moores Creek; Nye County; west side of Toquima Mountains, in Smoky Valley; Holt.

- Morgan's Ranch; Mineral County; camp at 5050 feet; on East Walker River; Feathers, Hall, D. H. Johnson, Palmer, Russell.
- Mountain City; Elko County; 41° 53' N., 115° 57' W.; on Owyhee River; W. K. Fisher, Oberholser.
- Mountain Springs; Clark County; 5500 feet; in Charleston Mountains; Bailey, Merriam, Nelson.
- Mountain Well; Churchill County; 5600 feet; in Stillwater Range, near 39° 31' N.; Hall, Russell.
- Mount Grant; Mineral County; west of south end of Walker Lake; Brode, Edge, Feathers, Hall, D. H. Johnson, Palmer, Russell.
- Mount Magruder; Esmeralda County; at southern end of Silver Peak Range; Bailey, Hall, Hoffman, Merriam.
- Mount Rose; Washoe County; top 10,800 feet; north of Lake Tahoe; Behle, Compton, Hall, Linsdale.
- Muddy Mountains; Clark County; north of Colorado River, west of Virgin River; Bailey, Merriam.
- Muddy River; Clark County; branch of Virgin River, mouth below Saint Thomas; Bailey, Merriam, van Rossem.
- Newark Valley; White Pine County; northwestern corner of county; Bailey, Oberholser.
- Nixon; Washoe County; near mouth of Truckee River; Hall.
- North Twin River; Nye County; east side of Toyabe Mountains; Compton, Linsdale.
- Nyala; Nye County; camp at 6700 feet, 7 miles east of Nyala, in Quinn Cañon Mountains; Arnold, Davis, Durrant, Gorham, Hall, Russell.
- Oak Spring; Nye County; 6000 feet; southeast of Belted Range, close to 37° 15' N., 116° 5' W.; Douth, Fitch, Hall, Hatfield, Orr, Russell.
- Oasis Valley; Nye County; 5500 feet; extends south from Springdale; Bailey, Merriam, Stephens.
- Ophir Cañon; Nye County; on east side Toyabe Mountains; Lamb, Linsdale, Orr.
- Oreana; Pershing County; 4000 feet; on Humboldt River, 40° 17' N., 118° 19' W.; Ridgway.
- Osceola; White Pine County; 6500 feet; 39° 9' N., 114° 21' W.; 10 miles northwest of Wheeler Peak; Hall, Russell.
- Overton; Clark County; 1360 feet; 36° 32' N., 114° 25' W.; Bailey, Merriam, Smith.
- Owyhee River; northern Elko County; tributary of Snake River, leaves state near 116° W.; Davis, W. K. Fisher.
- Pablo Cañon; Nye County; east side of Toyabe Mountains; Holt.
- Pahranagat Lake; Lincoln County; 3400 feet; in Pahranagat Valley, 12 miles south of Alamo; Bailey, Hall, Merriam, van Rossem.
- Pahranagat Valley; Lincoln County; 4000 feet; east side of Silver Cañon Mountains; Hall, Merriam, van Rossem.
- Pahroc Spring; Lincoln County; 5700 feet; at southern end of Pahroc Range; Bailey, Merriam.
- Pahrump Ranch; Nye County; 2667 feet; in Pahrump Valley, near 36° 12' N., 116° W.; Nelson, Sheldon.
- Pahrump Valley; Nye County; 2700 feet; west of Charleston Mountains; Fisher, Nelson, T. S. Palmer, Sheldon.
- Panaca; Lincoln County; 5765 feet; 10 miles south of Pioche, and 11 miles east, 6500 feet; Bailey, Hatfield, Merriam, Russell.
- Paradise Valley; Humboldt County; 4650 feet; north of Winnemucca; Preble.
- Peavine Creek; Nye County; in east side near southern end of Toyabe Mountains; Bailey, Davis, Holt, Linsdale, Oberholser, Orr, Russell.
- Peavine District (Peavine Mountains); Washoe County; few miles northwest of Reno, near state line; McLean, Ridgway.
- Penoyer Valley (Sand Springs Valley); western Lincoln County; between Quinn Cañon Mountains (south of) and Timpahute Range (north of); Hall.
- Peterson Creek; Lander County; 7000 feet; north end Shoshone Mountains; Feathers, Hall, D. H. Johnson, F. Palmer, Russell.
- Pigeon Spring; Esmeralda County; 6700 feet; on northwest slope Mount Magruder; Bailey, Hall, Merriam.
- Pinchot Creek; Esmeralda County; camp at 8200 feet; east side of White Mountains; Davis, Russell.
- Pine Forest Mountains; Humboldt County; 41° 40' N., 118° 45' W.; A. H. Miller, Richardson, Streator, Taylor.
- Pine Grove; Mineral County; camp 2 miles southwest at 7250 feet; Brode, Edge, Feathers, Hall, D. H. Johnson, Palmer, Russell.
- Pioche; Lincoln County; 2 miles southeast at 6000 feet; near 37° 12' N., 114° 25' W.; Gorham, Russell.
- Piper Peak; Esmeralda County; 2 miles south, 7500 feet; Silver Peak Range; Hall.

- Pole Cañon; White Pine County; 8200 feet; on eastern slope Snake Mountains, tributary to Baker Creek Cañon; Hall, Moore, Russell.
- Prospect Hill; Eureka County; southwest of Eureka, 39° 30' N.; Hoffman.
- Pyramid Lake; Washoe County; 40° 10' N., 119° 35' W.; Compton, Hall, Keeler, Linsdale, Ridgway, Streator, Willett.
- Pyramid P.O.; Washoe County; 4000 feet; on west side near north end of Pyramid Lake; Hall.
- Quartz Spring; Lincoln County; 5200 feet; on west side of Desert Mountains; Bailey, Merriam.
- Queen Mill; Mineral County; 7400 feet; 5 miles south of Queen Station; Stephens.
- Queen Mine; Mineral County; 9500 feet; 9 miles south of Queen Station; Stephens.
- Quinn River; Humboldt County; 4100 feet; in Quinn River Valley; Richardson, Taylor.
- Quinn River Crossing (Mason's Crossing); 4100 feet; 75 miles northwest of Winnemucca on Quinn River; Bendire, Richardson, Streator, Taylor.
- Quinn River Valley; Humboldt County; west of Santa Rosa Mountains; Streator.
- Reese River; Lander County; runs northward in valley west of Toyabe Mountains; Bailey, Linsdale.
- Reese River R. S.; Nye County; near south end of Reese River Valley; Linsdale.
- Rennox; northern Lander County; station on Southern Pacific Railroad; Kaeding.
- Reno; Washoe County; 4500 feet; 39° 30' N., 119° 50' W.; Behle, Compton, Hall, Linsdale, Russell.
- Reno Hot Springs; Washoe County; 4500 feet; 10 miles south of Reno; Linsdale.
- Reveille Valley; Nye County; 6200 feet; camp at Old Mill; Hall.
- Rogers Ranch; Nye County; 5500 feet; in Smoky Valley about 6 miles southeast of Millett P.O.; Compton, Lamb, Linsdale, Orr.
- Round Mountain; Nye County; 6300 feet; western base of Toquima Mountains; Holt, Linsdale.
- Ruby Lake; Elko County; 6100 feet; 40° 10' N., 115° 27' W.; eastern base of Ruby Mountains; Bailey, A. E. Borell, Ellis, Oberholser.
- Ruby Mountains (Ridgway's East Humboldt Mountains); southern Elko County; 6000 to over 11,000 feet; range 80 miles long, north to south and 8 to 20 miles wide; Bailey, Borell, Ellis, Oberholser, Ridgway.
- Ruby Valley; Elko County; north end of Franklin River Valley at eastern base of Ruby Mountains; Ridgway.
- Saint Thomas; Clark County; 1450 feet; 36° 27' N., 114° 21' W.; near Virgin River; Bailey, Burt, Merriam, van Rossem.
- Salmon River; Elko County; 5000 feet; at Shoshone Creek, 3.6 miles south of Idaho line; Behle, Linsdale.
- San Antonio; Nye County; 5400 feet; southeast of Toyabe Mountains in Smoky Valley; Hall, Lamb, Linsdale, Orr, Russell.
- Santa Rosa Mountains (Cottonwood Range); Humboldt County; about 60 miles north of Winnemucca; Behle, Linsdale, Streator.
- Sarcobatus Flat; Nye County; 4400 feet; east of Grapevine Mountains, near 37° N., 117° W.; Bailey, Merriam, Stephens.
- Schellbourne Pass; White Pine County; near northern end of Shell Creek Range; camp on east side at 6800 feet; Lamb.
- Schmidtlein Ranch; Lander County; 6500 feet; mouth of Kingston Cañon, eastern base of Toyabe Mountains; Lamb, Linsdale, A. H. Miller.
- Schurz; Mineral County; 4128 feet; about 3 miles north of north end of Walker Lake; Feathers, Hall, D. H. Johnson, F. G. Palmer, Russell.
- Searchlight; Clark County; 1500 feet; 55 miles south of Las Vegas; Compton, Linsdale.
- Secret Pass; Elko County; 6200 feet; Ruby Mountains; northern part of Ruby Mountains; Borell, Ellis.
- Secret Valley; Elko County; 40° 50' N., 115° 12' W.; east end of Secret Pass, in East Humboldt Mountains; Ridgway.
- Searchlight; Clark County; 1500 feet; 55 miles south of Las Vegas; Compton, Linsdale.
- Sheep Spring; Lincoln County; 6700 feet; in Juniper Mountains; Bailey, Merriam.
- Shell Creek Range; White Pine County; between Steptoe and Spring valleys; Hall, Lamb, Russell.
- Shingle Creek; White Pine County; 9100 feet; west side of Wheeler Peak, on western slope of Snake Mountains; Russell.
- Shoshone Mountains; Lander County; west of Toyabe Mountains and connected with them at south end; Bailey.
- Silverbow; Nye County; camp 2.8 miles east of, at 7300 feet; west of Kawich Mountains; on Mt. Diablo Base Line, 116° 30' W.; Russell.

- Silver Cañon Mountains; Lincoln County; on west side of Pahranaġat Valley; Behle, Linsdale, Orr, Russell.
- Silver Peak Range; southern Esmeralda County; east of Fish Lake Valley; Hall.
- Smith Ranch (Fish Lake); 4800 feet; in Fish Lake Valley, at northeast edge of Fish Lake; Benson, Hall.
- Smiths Creek; Lander County; 5800 and 7100 feet; east side of Desatoya Mountains; Hall, Johnson, Palmer, Russell.
- Smoke Creek (Smoky Creek); Washoe County; west of Smoke Creek Desert; Streator.
- Smoke Creek Desert; Washoe County; northwest of Pyramid Lake; Streator.
- Smoky Valley; Nye County; 5500 feet; on east side of Toyabe Mountains; Hoffman, Linsdale.
- Snake Mountains; White Pine County; high range near and parallel to eastern border of state; Behle, Compton, Hall, Linsdale, Moore, Russell.
- Snake Valley; White Pine County; east of Snake Mountains; Hall, Russell.
- Soda Lake; Churchill County; 3900 feet; on Carson Desert, 6 miles northwest of Fallon; Compton, Linsdale, Ridgway.
- Soldier Meadows (Soldier Meadows Ranch); Humboldt County; Heindl.
- South Twin River; Nye County; east side of Toyabe Mountains; Lamb, Linsdale.
- Spring Mountain (Charleston Mountain); Clark County; Grapevine Springs, near; mentioned by Hoffman.
- Spring Valley; White Pine County; 6000 feet; between Snake Mountains and Shell Creek Range; Hall, Russell.
- Steamboat Springs; Washoe County; 4600 feet at north end of Steamboat Valley; Ridgway.
- Steamboat Valley; Washoe County; 4600 feet; just south of Truckee Meadows; Ridgway.
- Steele Creek (Steels Creek); Elko County; north end of Ruby Mountains; Borell, Ellis, Ridgway.
- Stella Lake; White Pine County; 10,750 feet; in Snake Mountains, north side of Wheeler Peak; Hall, Moore, Russell.
- Steptoe Creek; White Pine County; in Steptoe Valley southeast of Ely; Hall.
- Steptoe Valley; White Pine County; 6450 feet; camp 5½ miles southeast of Ely; Hall.
- Stillwater; Churchill County; 3900 feet; 39° 30' N., 118° 30' W.; Bailey, Compton, Linsdale, Oberholser.
- Stonehouse; Humboldt County; on Humboldt River; 40° 50' N., 117° 11' W.; Hanna.
- Summit Lake; western Humboldt County; 6000 feet; in Piute and Shoshone Indian Reservations, just west of 119° W.; Streator.
- Sunnyside; Nye County; 5500 feet; camp 15 miles southwest in White River Valley; Anderson, Fitch, Poultney, Russell.
- Sutcliffe; Washoe County; 3900 feet; on west side of Pyramid Lake; Hall.
- Table Mountain; Nye County; north of Ash Meadows; Stephens.
- Tacoma; Elko County; 4900 feet; on Southern Pacific, about 2 miles from Utah Line; Hall, Russell.
- The Needles (The Pinnacles); Washoe County; 3900 feet; in northwest part of Pyramid Lake; Hall.
- Thiriot Ranch; Lincoln County; 4000 feet; in Pahranaġat Valley, 9 miles south of Hiko; Hall.
- Thousand Creek Flat; Humboldt County; northwestern corner of county; Kellogg.
- Thousand Spring Valley; Elko County; about 30 miles northeast of Wells; Ridgway.
- Timber Mountain, top 7425 feet; Nye County; camp at northwest base, 4200 feet; Hall, Russell.
- Timpahute Mountains; western Lincoln County; north of Emigrant Valley; Bailey, Merriam.
- Timpahute Valley; Lincoln County; east of Timpahute Range; Bailey, Merriam.
- Toquima Peak; Nye County; in Toquima Mountains; Arnold, Davis, Durrant, Gale, Gorham, Hall, Lilleland, Russell, Wilson.
- Toulon; Pershing County; 3930 feet; in Humboldt Valley, 12½ miles southwest of Lovelock; Hall, Peterson, W. B. Richardson, Russell.
- Toyabe Mountains; Lander and Nye counties; 39° 0' N., 117° 15' W.; Compton, Lamb, Linsdale, A. H. Miller, Orr.
- Tregaskis Well; Humboldt County; 14 miles south of Quinn River Crossing; Richardson, Taylor.
- Trout Creek; Elko County; tributary of East Fork Humboldt River, upper Humboldt Valley, on south side between Deeth and Wells; Ridgway.
- Truckee Bottoms (Truckee Valley); Washoe County; east of Reno; Compton, Linsdale, Ridgway.
- Truckee Meadows; Washoe County; 4500 feet; south and east of Reno; Compton, Linsdale, Ridgway.
- Truckee Reservation; Washoe County; 4000 feet; near mouth of Truckee River, at south end of Pyramid Lake; Ridgway.

- Truckee River; Washoe County; from Verdi, through Reno and Wadsworth, to Pyramid Lake; Compton, Linsdale, Ridgway.
- Tule Cañon; Esmeralda County; on south slope Mount Magruder; Bailey, Merriam.
- Tuscarora; Elko County; 6400 feet; $41^{\circ} 18' N.$, $116^{\circ} 11' W.$; Hoffman.
- Twin River; Nye County; 6000 feet; junction of North and South Twin Rivers; Compton, Lamb, Linsdale.
- Tybo; Nye County; camp 8 miles west of, in Hot Creek Range; Durrant, Gorham, Hall, Lilleland, Russell, Wilson.
- Upper Cottonwood Springs; Clark County; in Charleston Mountains; Merriam.
- Valcalda Spring; Esmeralda County; 7300 feet; in Silver Peak Mountains; Hall.
- Vegas Ranch; Clark County; 2000 feet; east side of Vegas Valley; Bailey, Merriam, Nelson.
- Vegas Valley; Clark County; east of Charleston Mountains; Bailey, Merriam, Nelson.
- Vegas Wash; Clark County; runs from Vegas Valley to Colorado River; Bailey, Merriam, Nelson.
- Verdi; Washoe County; on Truckee River $\frac{1}{2}$ mile from California line; Linsdale, McLean.
- Virginia City; Storey County; 6200 feet; $30^{\circ} 16' N.$, $119^{\circ} 39' W.$; Ridgway.
- Virginia Mountains; Washoe County; near and west of Pyramid Lake; Ridgway.
- Virgin River; Clark County; branch of Colorado River; Bailey, Hall, Lamb, Merriam, Orr.
- Virgin Valley; Humboldt County; northwest of Pine Forest Mountains; Alexander, Heindl, Kellogg.
- Wadsworth; Washoe County; 4000 feet; on Truckee River in southeastern part of county; Bailey, Feathers, Hall, D. H. Johnson, Oberholser, F. G. Palmer, Russell.
- Walker Lake; Mineral County; 4083 feet; $38^{\circ} 45' N.$, $118^{\circ} 45' W.$; Compton, Hall, Linsdale, Palmer, Russell.
- Washoe Lake; Washoe County; 5000 feet; $39^{\circ} 47' N.$, $119^{\circ} 15' W.$; Hall, Hanford, Henshaw, Linsdale, Stager.
- Water Cañon; White Pine County; west side of Egan Range, 8 miles north of Lund; Boyers, Fitch, Hatfield, Russell.
- Wellington; Lyon County; 4900 feet; $38^{\circ} 45' N.$, $119^{\circ} 20' W.$; Hall.
- Wells; Elko County; 5600 feet; $41^{\circ} 7' N.$, $115^{\circ} W.$; on Victory Highway; Bailey, Behle, Linsdale.
- West Humboldt Mountains; Pershing County; 4800 feet; camp in Wright's Cañon; Ridgway.
- West Walker River; Lyon County; 4800 feet; southwest of Yerington; Brode, Edge, Feathers, Hall, D. H. Johnson, F. G. Palmer, Russell.
- Wheeler Creek; Humboldt County; 4300 feet; tributary to Quinn River, at Quinn River Crossing; Richardson, Taylor.
- Wheeler Peak; White Pine County; top 13,047 feet, highest mountain in Nevada, in Snake Mountains; Behle, Compton, Hall, Linsdale, Moore, Russell.
- White Mountains; Esmeralda County; on western border of state; Alexander, Hall, Kellogg, Linsdale.
- White River Valley; eastern Nye County; between 38° and $39^{\circ} N.$; camp 14 miles southwest of Sunnyside; Boyers, Hatfield, Poultney, Russell.
- Willard Creek; White Pine County; in Spring Valley, on western slope of Snake Mountains; Hall, Lamb, Moore, Russell.
- Williams Ranch; Clark County; on Trout Creek, Charleston Mountains; Jaeger.
- Willow Creek; Elko County; near $41^{\circ} 13' N.$, $116^{\circ} 30' W.$; Hall, Peterson, W. B. Richardson, Russell.
- Willow Creek; White Pine County; 6500 feet; 2 miles south of county line; Borell, Ellis.
- Winnemucca; Humboldt County; 4300 feet; $41^{\circ} 0' N.$, $117^{\circ} 45' W.$; Bunch, Richardson, Streator, Taylor.
- Winnemucca Lake; Washoe County; on county line, east of Pyramid Lake; $40^{\circ} 10' N.$, $119^{\circ} 20' W.$; Keeler.
- Wisconsin Creek; Nye County; camp at 7800 feet; on east side of Toyabe Mountains; Lamb, Linsdale, Orr.
- Yerington; Lyon County; 4400 feet; $39^{\circ} 1' N.$, $119^{\circ} 9' W.$; C. A. Weck.
- Yount's Ranch; Clark County; near $36^{\circ} N.$; in Pahrump Valley; Bailey, Merriam.
- Yucca Pass; eastern Nye County; 4300 feet; south of Oak Spring, $4\frac{1}{2}$ miles south of $37^{\circ} N.$; Hall.

CHECK-LIST OF THE BIRDS OF NEVADA

The list which follows contains the names of forms of which I have examined specimens collected in the state of Nevada. It is far from complete as representing the whole bird fauna, for a good many species not included in it are certainly of regular occurrence there. Some of these birds are listed in a supplementary list which includes those forms which have been observed within the state but which have not been collected, or of which I have not yet examined Nevada-taken specimens. Each one of the latter group is discussed at its proper place in the text and reasons are given for considering it a Nevada bird.

Colymbus nigricollis californicus (Heermann)	Falco peregrinus anatum Bonaparte
Aechmophorus occidentalis (Lawrence)	Falco columbarius bendirei Swann
Podilymbus podiceps podiceps (Linnaeus)	Falco sparverius sparverius Linnaeus
Pelecanus erythrorhynchos Gmelin	Dendragapus obscurus pallidus Swarth
Phalacrocorax auritus albociliatus Ridgway	Dendragapus obscurus obscurus (Say)
Ardea herodias treganzai Court	Dendragapus fuliginosus sierrae Chapman
Egretta thula brewsteri Thayer and Bangs	Pediocetes phasianellus columbianus (Ord)
Butorides virescens anthonyi (Mearns)	Centrocercus urophasianus (Bonaparte)
Nycticorax nycticorax hoactli (Gmelin)	Lophortyx californica vallicola (Ridgway)
Botaurus lentiginosus (Montagu)	Lophortyx gambelii gambelii Gambel
Ixobrychus exilis hesperis Dickey and van Rossem	Oreortyx picta picta (Douglas)
Mycteria americana Linnaeus	Grus canadensis tabida (Peters)
Plegadis guarauna (Linnaeus)	Rallus limicola limicola Vieillot
Cygnus columbianus (Ord)	Porzana carolina (Linnaeus)
Branta canadensis canadensis (Linnaeus)	Fulica americana americana Gmelin
Branta canadensis leucopareia (Brandt)	Charadrius nivosus nivosus (Cassin)
Chen hyperborea hyperborea (Pallas)	Charadrius semipalmatus Bonaparte
Anas platyrhynchos platyrhynchos Linnaeus	Oxyechus vociferus vociferus (Linnaeus)
Chaulelasmus streperus (Linnaeus)	Capella delicata (Ord)
Mareca americana (Gmelin)	Numenius americanus Bechstein
Dafila acuta tzitzihua (Vieillot)	Actitis macularia (Linnaeus)
Nettion carolinense (Gmelin)	Tringa solitaria cinnamomea (Brewster)
Querquedula discors (Linnaeus)	Catoptrophorus semipalmatus inornatus (Brewster)
Querquedula cyanoptera (Vieillot)	Totanus melanoleucus (Gmelin)
Spatula clypeata (Linnaeus)	Totanus flavipes (Gmelin)
Nyroca americana (Eyton)	Pisobia bairdii (Coues)
Nyroca collaris (Donovan)	Pisobia minutilla (Vieillot)
Nyroca valisineria (Wilson)	Pelidna alpina sakhalina (Vieillot)
Nyroca affinis (Eyton)	Ereunetes mauri Cabanis
Glaucionetta clangula americana (Bonaparte)	Limosa fedoa (Linnaeus)
Charitonetta albeola (Linnaeus)	Recurvirostra americana Gmelin
Erismatura jamaicensis rubida (Wilson)	Himantopus mexicanus (Müller)
Lophodytes cucullatus (Linnaeus)	Steganopus tricolor Vieillot
Mergus merganser americanus Cassin	Lobipes lobatus (Linnaeus)
Mergus serrator Linnaeus	Larus californicus Lawrence
Cathartes aura teter Friedmann	Larus delawarensis Ord
Accipiter atricapillus (Wilson)	Sterna forsteri Nuttall
Accipiter velox velox (Wilson)	Chlidonias nigra surinamensis (Gmelin)
Accipiter cooperii (Bonaparte)	Zenaidura macroura marginella (Woodhouse)
Buteo borealis calurus Cassin	Ectopistes migratorius (Linnaeus)
Buteo swainsoni Bonaparte	Geococcyx californianus (Lesson)
Buteo lagopus s. johannis (Gmelin)	Tyto alba pratincola (Bonaparte)
Buteo regalis (Gray)	Otus asio cineraceus (Ridgway)
Aquila chrysaetos canadensis (Linnaeus)	Otus asio gilmani Swarth
Circus hudsonius (Linnaeus)	Otus flammeolus (Kaup)
Falco mexicanus Schlegel	

- Bubo virginianus occidentalis* Stone
Bubo virginianus pacificus Cassin
Bubo virginianus pallescens Stone
Nyctea nyctea (Linnaeus)
Speotyto cunicularia hypugaea (Bonaparte)
Asio wilsonianus (Lesson)
Asio flammeus flammeus (Pontoppidan)
Cryptoglaux acadica acadica (Gmelin)
Phalaenoptilus nuttallii nuttallii (Audubon)
Chordeiles minor hesperis Grinnell
Chordeiles acutipennis texensis Lawrence
Nephoecetes niger borealis (Kennerly)
Chaetura vauxi (Townsend)
Aëronautes saxatalis saxatalis (Woodhouse)
Archilochus alexandri (Bourcier and Mulsant)
Calypte costae (Bourcier)
Selasphorus platycercus platycercus (Swainson)
Selasphorus rufus (Gmelin)
Stellula calliope (Gould)
Megasceryle alcyon caurina (Grinnell)
Colaptes auratus borealis Ridgway
Colaptes cafer collaris Vigors
Centurus uropygialis uropygialis Baird
Balanosphyra formicivora bairdi (Ridgway)
Asyndesmus lewis Gray
Sphyrapicus varius nuchalis Baird
Sphyrapicus varius daggetti Grinnell
Sphyrapicus thyroideus thyroideus (Cassin)
Sphyrapicus thyroideus nataliae (Malherbe)
Dryobates villosus orius Oberholser
Dryobates villosus monticola Anthony
Dryobates villosus leucothorectis Oberholser
Dryobates pubescens leucurus (Hartlaub)
Dryobates pubescens turati (Malherbe)
Dryobates scalaris cactophilus Oberholser
Dryobates albolarvatus albolarvatus (Cassin)
Picooides arcticus (Swainson)
Picooides tridactylus dorsalis Baird
Tyrannus tyrannus (Linnaeus)
Tyrannus verticalis Say
Myiarchus cinerascens cinerascens (Lawrence)
Sayornis nigricans semiatra (Vigors)
Sayornis saya saya (Bonaparte)
Sayornis saya quiescens Grinnell
Empidonax traillii brewsteri Oberholser
Empidonax hammondii (Xantus)
Empidonax wrightii Baird
Empidonax griseus Brewster
Empidonax difficilis difficilis Baird
Myiochanes virens richardsonii (Swainson)
Nuttallornis mesoleucus majorinus Bangs and Penard
Pyrocephalus rubinus mexicanus Sclater
Otocoris alpestris leucolaema (Coues)
Otocoris alpestris lamprochroma Oberholser
Otocoris alpestris ammophila Oberholser
Tachycineta thalassina lepida Mearns
Iridoprocne bicolor (Vieillot)
Riparia riparia riparia (Linnaeus)
Stelgidopteryx ruficollis serripennis (Audubon)
Hirundo erythrogaster Boddaert
Petrochelidon albifrons albifrons (Rafinesque)
Cyanocitta stelleri frontalis (Ridgway)
Cyanocitta stelleri diademata (Bonaparte)
Cyanocitta stelleri percontatrix van Rossem
Aphelocoma californica immanis Grinnell
Aphelocoma californica woodhouseii (Baird)
Pica pica hudsonia (Sabine)
Corvus corax sinuatus Wagler
Corvus brachyrhynchos hesperis Ridgway
Cyanocephalus cyanocephalus (Wied)
Nucifraga columbiana (Wilson)
Penthestes atricapillus septentrionalis (Harris)
Penthestes gambeli abbreviatus Grinnell
Penthestes gambeli inyoensis Grinnell
Baeolophus inornatus zaleptus Oberholser
Baeolophus inornatus griseus (Ridgway)
Auriparus flaviceps acaciaram Grinnell
Psaltriparus minimus plumbeus (Baird)
Sitta carolinensis nelsoni Mearns
Sitta carolinensis tenuissima Grinnell
Sitta canadensis Linnaeus
Sitta pygmaea melanotis van Rossem
Sitta pygmaea canescens van Rossem
Certhia familiaris montana Ridgway
Certhia familiaris leucosticta van Rossem
Certhia familiaris zelotes Osgood
Cinclus mexicanus unicolor Bonaparte
Troglodytes aëdon parkmanii Audubon
Nannus hiemalis pacificus (Baird)
Thryomanes bewickii eremophilus Oberholser
Thryomanes bewickii drymoecus Oberholser
Heleodytes brunneicapillus couesi (Sharpe)
Telmatodytes palustris plesius Oberholser
Telmatodytes palustris aestuarinus Swarth
Catherpes mexicanus conspersus Ridgway
Salpinctes obsoletus obsoletus (Say)
Mimus polyglottos leucopterus (Vigors)
Dumetella carolinensis (Linnaeus)
Toxostoma lecontei lecontei Lawrence
Toxostoma dorsale dorsale Henry
Oreoscoptes montanus (Townsend)
Turdus migratorius propinquus Ridgway
Hylocichla guttata guttata (Pallas)
Hylocichla guttata nanus (Audubon)
Hylocichla guttata sequoiensis (Belding)
Hylocichla guttata polionota Grinnell
Hylocichla guttata auduboni (Baird)
Hylocichla ustulata ustulata (Nuttall)
Hylocichla ustulata swainsoni (Tschudi)
Hylocichla ustulata almae Oberholser
Hylocichla fuscescens salicicola Ridgway
Sialia mexicana bairdi Ridgway
Sialia mexicana occidentalis Townsend
Sialia currucoides (Bechstein)
Myadestes townsendi (Audubon)
Polioptila caerulea amoenissima Grinnell
Polioptila melanura melanura Lawrence
Regulus satrapa olivaceus Baird
Corthylio calendula cineraceus Grinnell
Anthus spinoletta rubescens (Tunstall)
Bombycilla garrula pallidiceps Reichenow

- Bombycilla cedrorum* Vieillot
Phainopepla nitens lepida Van Tyne
Lanius borealis invictus Grinnell
Lanius ludovicianus nevadensis Miller
Lanius ludovicianus sonoriensis Miller
Lanius ludovicianus gambeli Ridgway
Vireo bellii arizonae Ridgway
Vireo bellii pusillus Coues
Vireo vicinior Coues
Vireo flavifrons Vieillot
Vireo solitarius plumbeus Coues
Vireo solitarius cassinii Xantus
Vireo gilvus swainsonii Baird
Vermivora celata celata (Say)
Vermivora celata orestera Oberholser
Vermivora celata lutescens (Ridgway)
Vermivora ruficapilla ridgwayi van Rossem
Vermivora virginiae (Baird)
Vermivora luciae (Cooper)
Dendroica aestiva morcomi Coale
Dendroica aestiva brewsteri Grinnell
Dendroica aestiva sonorana Brewster
Dendroica coronata (Linnaeus)
Dendroica auduboni auduboni (Townsend)
Dendroica auduboni memorabilis Oberholser
Dendroica nigrescens (Townsend)
Dendroica townsendi (Townsend)
Dendroica occidentalis (Townsend)
Oporornis tolmiei (Townsend)
Geothlypis trichas occidentalis Brewster
Geothlypis trichas scirpicola Grinnell
Icteria virens longicauda Lawrence
Wilsonia pusilla pileolata (Pallas)
Wilsonia pusilla chryseola Ridgway
Setophaga ruticilla (Linnaeus)
Passer domesticus (Linnaeus)
Dolichonyx oryzivorus (Linnaeus)
Sturnella neglecta Audubon
Xanthocephalus xanthocephalus (Bonaparte)
Agelaius phoeniceus nevadensis Grinnell
Agelaius phoeniceus sonoriensis Ridgway
Icterus cucullatus nelsoni Ridgway
Icterus parisorum Bonaparte
Icterus bullockii (Swainson)
Euphagus cyanocephalus (Wagler)
Quiscalus quiscula aeneus Ridgway
Molothrus ater artemisiae Grinnell
Molothrus ater obscurus (Gmelin)
Piranga ludoviciana (Wilson)
Piranga rubra cooperi Ridgway
Hedymeles melanocephalus melanocephalus
 (Swainson)
- Guiraca caerulea interfusa* Dwight and Griscom
Guiraca caerulea salicarius Grinnell
Passerina amoena (Say)
Hesperiphona vespertina brooksi Grinnell
Carpodacus cassinii Baird
Carpodacus mexicanus frontalis (Say)
Leucosticte tephrocotis littoralis Baird
Leucosticte tephrocotis tephrocotis (Swainson)
Acanthis linaria linaria (Linnaeus)
Spinus pinus pinus (Wilson)
Spinus tristis pallidus Mearns
Spinus psaltria hesperophilus (Oberholser)
Loxia curvirostra bendirei Ridgway
Loxia curvirostra stricklandi Ridgway
Oberholseria chlorura (Audubon)
Pipilo maculatus montanus Swarth
Pipilo maculatus curtatus Grinnell
Pipilo aberti Baird
Calamospiza melanocorys Stejneger
Passerculus sandwichensis alaudinus Bonaparte
Passerculus sandwichensis nevadensis Grinnell
Ammodramus savannarum bimaculatus Swainson
Poocetes gramineus confinis Baird
Chondestes grammacus strigatus Swainson
Aimophila cassinii (Woodhouse)
Amphispiza bilineata deserticola Ridgway
Amphispiza belli nevadensis (Ridgway)
Amphispiza belli canescens Grinnell
Junco hyemalis connectens Coues
Junco oreganus shufeldti Coale
Junco oreganus thurberi Anthony
Junco oreganus mutabilis van Rossem
Junco mearnsi Ridgway
Junco caniceps (Woodhouse)
Spizella arborea ochracea Brewster
Spizella passerina arizonae Coues
Spizella breweri breweri Cassin
Spizella atrogularis atrogularis (Cabanis)
Zonotrichia leucophrys leucophrys (Forster)
Zonotrichia leucophrys gambeli (Nuttall)
Zonotrichia coronata (Pallas)
Zonotrichia albicollis (Gmelin)
Passerella iliaca schistacea Baird
Passerella iliaca canescens Swarth
Passerella iliaca monoensis Grinnell and Storer
Passerella iliaca mariposae Swarth
Passerella lincolni lincolni (Audubon)
Passerella georgiana (Latham)
Passerella melodia fallax (Baird)
Passerella melodia fisherella (Oberholser)
Passerella melodia merrilli (Brewster)
Passerella melodia saltonis (Grinnell)

SUPPLEMENT TO CHECK-LIST OF THE BIRDS OF NEVADA

Kinds which have been reported for the state but of which I have not seen specimens.

- Gavia immer* (Brünnich)
Colymbus auritus Linnaeus
Pelecanus occidentalis californicus Ridgway
Casmerodius albus egretta (Gmelin)
Branta nigricans (Lawrence)
Dendrocygna bicolor helva Wetmore and Peters

Aix sponsa (Linnaeus)
Nyroca marila (Linnaeus)
Histrionicus histrionicus pacificus Brooks
Gymnogyps californianus (Shaw)
Haliaeetus leucocephalus leucocephalus
(Linnaeus)
Pandion haliaëtus carolinensis (Gmelin)
Grus canadensis canadensis (Linnaeus)
Coturnicops noveboracensis (Gmelin)

Gallinula chloropus cachinnans Bangs
Limnodromus griseus scolopaceus (Say)
Hydroprogne caspia imperator (Coues)
Melopelia asiatica mearnsi Ridgway
Coccyzus americanus occidentalis Ridgway
Progne subis subis (Linnaeus)
Ixoreus naevius meruloides (Swainson)
Zonotrichia querula (Nuttall)
Calcarius lapponicus alascensis Ridgway

ACCOUNTS OF SPECIES

Sequence of the kinds in this list is that of the Check-List of North American birds (4th ed., 1931) of the American Ornithologists' Union. In other respects, however, this Check-List is not followed where evidence seems to point to a different conclusion as to the proper name or assignment of range. For each recognized form there is given scientific name, authority, and vernacular name. For most of the forms a condensed statement of occurrence in Nevada begins the account. This involves manner of occurrence according to geography, season and habitat, and is followed, usually, by a more detailed list of localities and dates of occurrence. As a rule, but not always followed, the localities are arranged from north to south for each county and the counties are listed in the sequence given in the list on page 13.

Specimens mentioned by number are ones examined by me (with a few exceptions explained in the text). This manner of documenting the records serves to shift responsibility from previous writers on Nevada birds and to identify the report more closely with the work of one person. In adopting this procedure I have undertaken a considerable amount of routine examination of specimens, that could have been avoided simply by accepting at their face value the published identifications by other persons. No claim is made that the assignment of specimens made here is a final one, but the identifications indicated may clarify the situation for further work in the region.

Sight records have been evaluated with as much care as those represented by skins. But a greater degree of uncertainty must remain as to their value. Many manuscript records have been discarded because of some question as to their authenticity. However, I have not hesitated to include species in the accounts on the basis of sight identification where I could see no reason to doubt its validity. The tendency shown by some workers to invent complicated tests for the inclusion of species in geographic lists seems as likely to cause error by omissions as by chance faulty inclusions. My aim has been to show as exactly as possible the status as known to date of each member of the Recent avifauna of Nevada, and thus to give to the future student the full benefit of my examination of all the materials now available.

Gavia immer (Brünnich)

COMMON LOON

Probably a regular but not numerous transient in Nevada, to be found on the larger lakes during the spring and fall migrations. Streater (MS) reported that about May 1, 1896, on Pyramid Lake, he saw a few loons which were very shy and which kept well out in the lake. Henshaw (1877, p. 1314) recorded seeing two individuals on Washoe Lake in November, 1876.

On May 13, 1932, Hall (MS) observed seven live loons along the west side of Walker Lake. In addition he saw dozens of dead loons on the shore at various places along the lake. In a cove one-fourth the way from the south end sixteen dead ones were counted within a distance of 520 paces. The cause of the death of these birds was not determined. Several live ones were seen, May 4, 1934, at this same place (Linsdale, MS).

Colymbus auritus Linnaeus

HORNED GREBE

Ridgway (1877, p. 642) referred to this species as "quite numerous in August and September in Franklin Lake, but no specimens could be obtained." Willett (MS) reported to the Biological Survey that he saw horned grebes near Anaho Island, Pyramid Lake, in early November, 1914.

Colymbus nigricollis californicus (Heermann)

EARED GREBE

Resident; most numerous during the migrations, least common in winter. Nests mostly on shallow ponds or lakes where there is a good growth of aquatic vegetation.

In Washoe County, on December 21, 1867, Ridgway (1877, p. 642) obtained an adult male on Pyramid Lake at the mouth of the Truckee River. Hall (MS) noted this grebe at Pyramid Lake nearly every day from May 15 to June 8, 1924, but not a single one was seen after the latter date. This species was much less common on the lake than the western grebe. It was usually seen in groups of five to eight individuals along the shore or around isolated rocks. One pair was seen in open water at least 250 yards from the shore. Hanford (1903, p. 50) has recorded the taking, in June, of a set of nine eggs on Washoe Lake. Many adults and young were observed on Little Washoe Lake on July 10 and August 13, 1932, and groups of adults were seen on May 16, 1933 (Linsdale, MS).

Streator (MS) found eared grebes in 1896, at Pyramid Lake, on April 29, at Summit Lake, Humboldt County, in early June, at Smoke Creek, Washoe County, in early May, and at Lovelock, Pershing County, during the first week of October.

In Paradise Valley, 20 miles north of Golconda, Humboldt County, Preble (MS) saw the carcass of an eared grebe that had been found in a pond on May 15, 1915, and which had died in captivity.

In Churchill County, this species was recorded, May 16, 1933, in Lahontan Reservoir, May 20, 1934, at Soda Lake (many in flocks), and June 22, 1933, 10 miles west of Fallon (Linsdale, MS).

Near the center of the state a transient eared grebe was observed May 14, 1930, on a pond, 5 miles southeast of Millett P.O., Nye County (Linsdale, MS).

In Mineral County a single individual was seen, May 19, 1928, on the west side of Walker Lake. Again, on May 13, 1932, this species was noted by hundreds at the same lake (Hall, MS). At the lake in Fish Lake Valley, Esmeralda County, eared grebes were observed almost daily between May 21 and June 14, 1928 (Hall, MS), and a specimen (female, no. 53622, Mus. Vert. Zool.) was preserved from there.

This bird has been noted in Pahrangat Valley, Lincoln County as follows: Lake $\frac{1}{4}$ mile north of Crystal Spring, May 27, 1932, a male and two females (nos. 61020-22, Mus. Vert. Zool.) on May 18 (Hall); lake near Alamo, May 27, 1932 (Hall, MS); Pahrangat Lake, 12 miles south of Alamo, May 24, 1891 (Fisher, 1893, p. 13) and May 23, 1932 (Hall, MS). During a snowstorm on December 13, 1928, several thousand grebes died and were found on the snow and on the roofs of houses in Caliente (Cottam, 1929, p. 80).

On June 6, 1924, a single grebe was watched as it fed by diving in water one and a half to three feet deep in a small cove of Anaho Island, Pyramid Lake (Hall, MS). During the total of about 11 minutes the bird was watched it was beneath the surface approximately 73% of the time. Around 27% of the time was taken up with rest periods on the surface. The periods of submergence averaged 32 seconds in length and ranged from 20 to 45 seconds. Length of the rest periods between dives averaged 12.7 seconds and ranged from 7 to 17 seconds.

Weights of a male and two females collected on May 18, 1932, in Lincoln County, were 310, 396, and 408.8 grams, respectively. The weight of an adult female, taken June 8 at Fish Lake, Esmeralda County, was recorded as 256.7 grams.

Aechmophorus occidentalis (Lawrence)

WESTERN GREBE

May be found at any time of year on lakes. At Pyramid Lake where Ridgway (1877, p. 641) observed it in abundance in 1867, this grebe "appeared to be permanent resident." A specimen (no. 84788, U.S.N.M.) was taken by him on January 13, 1868, at Carson City.

In 1924, Hall (MS) noted this species on several occasions between May 18 and June 21, on Pyramid Lake. The same observer saw several individuals of this bird, July 6 and 7, 1926, along the western shore of the lake, near Sutcliffe, and on July 9, 1926, at The Pinnacles. A female (no. 141378, U.S.N.M.) was taken, June 8, 1889, by Keeler, on Winnemucca Lake.

Henshaw (1877, p. 1315) reported this species as breeding abundantly on Washoe Lake where he found downy young on August 31. A female (no. 72756, U.S.N.M.) was taken September 8, 1876. About ten individuals were observed on this lake in May, 1902 (Hanford, 1903, p. 50). At least two were seen near the center of Little Washoe Lake on May 16, 1933 (Linsdale, MS). Four or more individuals were observed paired or singly on August 13, 1932, on the portion of Lahontan Reservoir, Lyon County, that is near the Lincoln Highway (Linsdale, MS). A western grebe,

killed in early October, 1916, near Winnemucca, was reported (to Biol. Surv.) by J. R. Bunch as the only one he had seen in the vicinity. On May 16, 1933, one was seen in a pond $\frac{1}{2}$ mile east of Mahala, Churchill County (Linsdale, MS). One was seen in June, 1898, at Franklin Lake, Ruby Valley, Elko County, by Bailey (MS).

On May 20, 1934, about 10 miles north of Stillwater, Churchill County, a flock was seen on open water of a lake and several young ones in white down and about one-fourth grown were watched (Linsdale, MS).

Podilymbus podiceps podiceps (Linnaeus)

PIED-BILLED GREBE

According to Ridgway (1877, p. 643) this grebe is a resident species in all suitable localities in Nevada. On the Humboldt River, Hoffman (1881, p. 252) reported several individuals observed at Battle Mountain and at Carlin Station. Specimens have been obtained as follows. Winnemucca Lake, Washoe County, female (no. 141390, U.S.N.M.), taken by Keeler, June 18, 1889; Truckee River, Washoe County, juvenile, November 18, 1867, and Carson City, Ormsby County, adult female, March 24, 1868 (Ridgway, 1877, p. 643); $4\frac{1}{2}$ miles south of Alamo, Pahrnagat Valley, Lincoln County (no. 61023, Mus. Vert. Zool.), male, weight 465.5 grams, taken by Hall, May 23, 1932.

Near Halleck, Elko County, from July 31 to August 8, 1925, Hall (MS) found five broods of young pied-billed grebes about two-thirds grown and ranging in number from three to eight. They were along the East Fork of the Humboldt River and in sloughs connected with the river.

Pelecanus erythrorhynchos Gmelin

WHITE PELICAN

Breeds on Pyramid Lake. Also present at other lakes during the summer and over most of the state in migrations.

A history of the pelican at Pyramid Lake and an extensive account of the nesting habits of the birds there (Hall, 1925, pp. 147-160), based on a study carried on between May 15 and August 3, 1924, showed that all the pelicans in the region nested on Anaho Island. On June 5 and 6, 4534 nests were counted in 13 colonies on the island. These contained 816 young and 6234 eggs. The total number of adult pelicans present in the summer of 1924 in the region was placed at 10,000. A male (no. 298662, U.S.N.M.) was taken, June 22, 1924, at Anaho Island. On May 19, 1868, at Pyramid Lake, Ridgway (1877, p. 634) killed an adult female, weight 15 pounds, and on May 28, an adult male, weight 17 pounds. On May 2, 1934, many small groups of pelicans were noted along the western shore of Pyramid Lake (Linsdale, MS).

At Washoe Lake, 50 miles southwest of Pyramid Lake, Henshaw (1877, p. 1314) wrote that pelicans appeared only in fall and in small numbers. Hanford (1903, p. 50) saw fifty to one hundred birds there in summer and saw three eggs in water one foot deep. According to him no nests had been seen there for years. Hall (*op. cit.*, p. 158) saw three pelicans on Washoe Lake, July 9 and 10, 1924. At 5:45 o'clock in the afternoon of July 9, 1932, a flock of sixteen pelicans came from the north and lit at Little Washoe Lake (Linsdale, MS). The flock moved on to the south, ten minutes later. The next morning, July 10, a single pelican was seen in flight toward the south.

On the Humboldt River, Hanna (1904, p. 48) reported the finding, on May 13, of the wing of a pelican near Iron Point, Humboldt County. Farther up the river, 10 miles west of Beowawe, Eureka County, a flock of fourteen individuals was noted, August 4, and a similar-sized flock on August 11, 1924 (Hall, *loc. cit.*). The same observer (MS) on July 27, 1935, saw three pelicans on Willow Creek, 16 miles east of Midas, Elko County.

Near Mill City, Pershing County, W. K. Fisher (MS), about sundown on the first of July, 1898, saw four pelicans fly over camp headed westward.

On May 13, 1932, a pelican was noted swimming in a pond close to Mahala, Churchill County, and a flock of fourteen birds was seen in flight, two miles west of Fallon. On August 13, 1932, six or more pelicans were swimming and one was in flight over Lahontan Reservoir, in Lyon County, and on May 16, 1933, six more were seen in the same vicinity (Linsdale, MS). In this county, in 1925, Hall (MS) saw on May 11 a flock of over a hundred birds and he noted five birds on May 26 at Lahontan Reservoir. Several were seen on Soda Lake, May 20, 1934 (Linsdale, MS).

Bailey (MS), in early May, 1898, saw a flock of about 400 pelicans flying over marshes north of Stillwater, Churchill County. Nearly as many were seen in this same locality on May 20, 1934 (Linsdale, MS).

At Walker Lake, Mineral County, five flocks aggregating seventy pelicans were seen on May

20, 1928, and approximately one hundred individuals were noted on May 13, 1932 (Hall, MS). A small flock was seen May 4, 1934, near the western shore of the lake (Linsdale, MS). On May 25, 1932, Hall (MS) examined a specimen in the collection of Joe and Dean Thiriot, that had been collected in Pahranaagat Valley, Lincoln County.

Hoffman (1881, p. 251) noted this species opposite Fort Mojave, in September, 1871.

Pelecanus occidentalis californicus Ridgway

CALIFORNIA BROWN PELICAN

On May 20, 1934, a single brown pelican was seen standing on the shore of a pond 200 yards south of the last fence, about 10 miles north of Stillwater, Churchill County. Many white pelicans were present in the vicinity. An effort was made to obtain the brown one but without success. The bird when disturbed, circled overhead along with a large flock of white pelicans and finally drifted off toward the south (Linsdale and Compton, MS).

Phalacrocorax auritus albociliatus Ridgway

FARALLON CORMORANT

Nests at Pyramid Lake; recorded infrequently during migrations in other parts of the state.

Ridgway (1877, p. 636) reported collecting a juvenile female on Pyramid Lake, August 13, 1867, and an egg on May 17, 1868. He found a nest in the top of a cottonwood tree at the mouth of the Truckee River. Henshaw collected an adult male there on May 26, 1877 (Ridgway, 1884, p. 165). Three skins of males (nos. 47138-40, Mus. Vert. Zool.) were taken July 9, 1926, by Hall at The Pinnacles. This observer, in 1924 (1926, p. 88) found the cormorant to be third in abundance (about 1000 present) among the water birds on Pyramid Lake. That year the cormorants nested on ledges of pinnacles close to the north shore of the lake and on other exposed rocks close-by. On June 28 most of the nests contained fresh eggs, while on July 26 nearly all of them held young.

On May 13, 1932, two cormorants were seen 10 miles west of Fallon, Churchill County. The birds were perched on a small island in a pond near the road (Linsdale, MS). Hoffman (1881, p. 251) reported a specimen in a collection at Carlin that was "said to have been shot near that locality in the marshes at the mouth of Maggie Creek."

Ardea herodias treganzai Court

GREAT BLUE HERON

Found regularly about the larger streams and lakes and, infrequently, in other parts of the state. Eight specimens represent this heron in Mus. Vert. Zool. A male and female (nos. 65189-90), both young of the year, were taken July 2 and 5, 1934, 10½ miles south of Yerington, on the West Walker River, Lyon County. A skull-only (no. 50617) was picked up in 1927, by Miss Annie M. Alexander, in a field 5 miles southeast of Millett P.O., Nye County. At a pond near San Antonio, Nye County, a male (no. 58914) was obtained, September 15, 1931. Another male (no. 61024) was taken May 27, 1932, in Pahranaagat Valley, Lincoln County. A female (no. 53628) was taken, May 27, 1928, at Fish Lake, Esmeralda County. Two skins (nos. 64059-60) were obtained February 2 and 8, 1934, along the Colorado River, in the southern tip of Clark County.

Ridgway (1877, p. 616) reported this species as nesting at Pyramid Lake, where he took a set of four eggs on May 23, 1868. Birds of one colony had nests five or six feet from the ground on greasewood bushes on an island. One nest was on the "Pyramid" among the rocks, about 150 feet above the surface of the lake." On May 29, 1924, a colony containing ten nests was visited on the northeast part of Anaho Island, by Hall (1926, p. 91). On that date three of the nests contained three young each, five contained four each, and one contained five young. The tenth held four eggs. The nests were made of sticks one-half inch or less in diameter and were on the tops of low greasewood bushes along the east face of a ten foot cliff. Hanna (1904, p. 48) saw this heron often, especially in sloughs, along the river in Humboldt Valley, and Henshaw (1877, p. 1312) found it common near Carson City. Recent sight records for the species are as follows: Little Washoe Lake, Washoe County, one in flight, August 13, 1932; Lahontan Reservoir, Lyon County, one on same date; 5 miles southeast of Millett P.O., Nye County, one noted, June 2, 1930, and several times in May and June 1933 (Linsdale, MS). A specimen taken in 1929, 3 miles south of Crystal Spring, Lincoln County, was seen in the collection of Joe and Dean Thiriot, May 25, 1932 (Hall, MS).

A specimen (no. 260092, U.S.N.M.) was taken, September 24, 1915, at Blair, 4000 feet, Esmeralda County by L. J. Goldman. Other records (Biol. Surv. notes) are as follows. Newark

Valley, White Pine County, one at a pond in mid-June, 1898 (Oberholser and Bailey); Iron Point, Humboldt County, one along river, September 27, 1916 (E. A. Goldman); Winnemucca, Humboldt County, one seen in latter part of September, 1896 (Streator); Lovelock, Pershing County, two near town in mid-August, 1908 (A. K. Fisher); Carson River, Lyon County, common, October 9 to 13, 1896 (Streator); Halleck, Elko County, one or two pairs noted daily, July 31 to August 8, 1925, near junction of East and North Forks of Humboldt River (Hall).

At Goose Creek, 5000 feet, Elko County, in the extreme northeastern corner of the state, this species was seen daily in mid-July, 1935 (Hall, MS).

Casmerodius albus egretta (Gmelin)

AMERICAN EGRET

An infrequent visitant. Status is indicated by the following records. Ridgway (1877, p. 617) recorded one seen along the lower Truckee River in May. Henshaw (1877, p. 1312) reported "an occasional individual seen" near Carson City. More recently, two were observed on June 2, 1930, at a pond, 5 miles southeast of Millett P.O., Nye County, and one, September 28, 1934, 1 mile south of Hiko, Lincoln County (Linsdale, MS). In September, 1930, van Rossem (MS) obtained a wing and mandible of an American egret that had been killed a few weeks previously at Indian Springs, Clark County. On December 29, 1932, A. H. Miller (MS) saw a single egret flying along the Colorado River near the southern tip of Clark County.

Egretta thula brewsteri Thayer and Bangs

SNOWY EGRET

Occurs in summer in small numbers in valleys throughout the state. Henshaw (1880, p. 323) reported it as "observed at several localities in Nevada." Two observed together, August 28, 1931, at the side of an irrigation ditch 10 miles east of Fallon, and two were seen, May 20, 1934, at the margin of Soda Lake, Churchill County (Linsdale, MS). Mus. Vert. Zool. contains four specimens collected in recent years in Nevada. An immature bird (no. 65191) was obtained, July 31, 1934, from the Truckee River, 1½ miles north of Wadsworth, Washoe County (Hall). It weighed 336 grams. An immature female (no. 51379, skeleton) from Ruby Lake, 3 miles north of Elko County line was taken on July 30, 1927, by Ellis. Another, a male, (no. 60924) was obtained, June 7, 1932, at a pond 5 miles southeast of Millett P.O., Nye County, by Orr. Also observed here on May 25 and 30 and June 15, 1933 (Linsdale, MS). The fourth, a male (no. 61025) was taken on May 22, 1932, at Hot Spring Ranch, 6 miles south of Sunnyside, White River Valley, Nye County. This one weighed 449 grams.

Skins of the two males mentioned above measure in millimeters, as follows:

number	wing	tail	tarsus	culmen
60924	266	93	112.5	85.7
61025	274	92	107	82.6

These specimens tend to confirm the conclusions reached by A. M. Bailey (1928, p. 436), who included all birds in western United States in this subspecies.

Butorides virescens anthonyi (Mearns)

ANTHONY GREEN HERON

Summer resident in the Colorado River Valley at least in the extreme southern tip of the state. Two females (nos. 64639-40, Mus. Vert. Zool.) were taken May 7, 1934, from a colony on the Colorado River, opposite Fort Mojave, in Clark County.

Nycticorax nycticorax hoactli (Gmelin)

BLACK-CROWNED NIGHT HERON

Summer resident; present in small numbers about the streams, lakes, and marshy areas. Remains through the winter in southern end of the state. Definite records, arranged by counties, are as follows.

Washoe County: Deephole, two seen May 12, 1929 (Russell, MS); one seen, July 7, 1926, near Sutcliffe, Pyramid Lake, and two on same day along Truckee River north of Nixon (Hall, MS); Washoe Lake, colony of 200 nests in May, 1900, all with young or incubated eggs by June 1 (Hanford, 1903, p. 51).

Douglas County: Glenbrook, three seen May 27, 1889, over Lake Tahoe (Keeler, MS).

Humboldt County: Paradise Valley, 20 miles north of Golconda, one seen May 30, 1915 (Preble, MS); near Golconda (Hanna, 1904, p. 48); near Winnemucca, May 11, 1909 (Taylor, 1912, p. 357).

Elko County: West side of Ruby Lake, 3 miles north of Elko County line (nos. 57080-81, Mus. Vert. Zool., in alcohol) collected on May 23, 1928, by Borell; Elko, very numerous, August 9 to 14, 1872 (Nelson, 1875, p. 352).

Pershing County: Lovelock, common in early October, 1896 (Streator, MS).

Churchill County: Stillwater, common along river and in marshes, May 2 to 10, 1898 (Oberholser and Bailey, MS); Fallon, one seen 2 miles east on July 25, 1930 (Hall, MS), and noted several times in August, 1908 (A. K. Fisher, MS); Carson River, noted almost daily, May 11 to 18, 1925 (Hall, MS).

Lander County: Battle Mountain, abundant (Hoffman, 1881, p. 246); Reese River at Lincoln Highway, one on June 22, 1933 (Linsdale, MS).

White Pine County: 5 miles southeast of Ely, in Steptoe Valley, two seen, August 14, 1930 (Hall, MS).

Esmeralda County: Arlemont (female, no. 51096, Mus. Vert. Zool.), May 21, 1927; noted, May 17, 1927, on Davis Creek, 8000 feet, White Mountains (Linsdale, MS); Fish Lake (no. 53629, Mus. Vert. Zool.), May 23, 1928.

Nye County: 5 miles southeast of Millett P.O., noted several times in summer, 1932 and 1933 (Linsdale, Orr, and Compton, MS); Ash Meadows, 2½ miles northwest of Devil's Hole, 2173 feet, female (no. 63473, Mus. Vert. Zool.), taken May 22, 1933.

Lincoln County: Noted in Pahrnagat Valley at lakes one-quarter mile north of Crystal Spring and 4 miles south of Alamo, May, 1932 (Hall, MS).

Clark County: Kaolin, noted July 23, 1932 (van Rossem, MS); Virgin River, ¾ mile east of Mesquite, noted October 1, 1931 (Orr, MS); Colorado River, ½ mile above California-Nevada Monument, male (no. 64061, Mus. Vert. Zool.), February 9, 1934 (Orr).

At Elko, Elko County, Nelson (1875, p. 352) reported the species as "very numerous." He further says, "We frequently scared them out of the bushes along the river. They must breed near here, as while making my way through an almost impenetrable thicket, on the bank of the river, I scared out at least fifty herons, nearly all young, some of which were quite ragged and bare they were so young, but I could find no nests. As there were no trees along the river they must nest in the bushes, few of which exceed twenty feet in height."

Weights of the two specimens mentioned above, from Esmeralda County, in May, were 545 and 593 grams, respectively.

Botaurus lentiginosus (Montagu)

AMERICAN BITTERN

Resident wherever marshes occur in the state. Records of occurrence, arranged by counties, are as follows.

Washoe County: December 11, 1867, Ridgway (1877, p. 618) took an adult female (no. 84598, U.S.N.M.) at the marshes on the shore of Pyramid Lake near the mouth of the Truckee River. A few were noted near there in June, 1889, by Keeler (MS). Also on November 18, 1867, Ridgway took an adult male at Truckee Meadows. Hanford (1903, p. 51) observed one individual at Washoe Lake.

Ormsby County: In the marshes near Carson City, found to be very common by Henshaw (1877, p. 1312).

Humboldt County: Stonehouse, several seen in May in a swamp nearby (Hanna, 1904, p. 48); one noted May 29, 1915, at Golconda, and another, May 30, in Paradise Valley, 20 miles north, by Preble (MS).

Elko County: August 9 to 14, 1872, abundant near Elko, often three or four in the same slough. Some young unable to fly were found in the bushes (Nelson, 1875, p. 352); Halleck, specimen (no. 61571, U.S.N.M.) taken May, 1871, sent to Tabour College, November 25, 1872.

Pershing County: Lovelock, several seen in August, 1908 (A. K. Fisher, MS).

Churchill County: One flushed, May 13, 1932, from a small marshy area at the side of the road, 10 miles west of Fallon. Later two others were seen in flight over a large marsh nearby. Several times during the hour spent here the booming note of a bittern was heard (Linsdale, MS).

Nye County: Common during the first three weeks of March, 1891, at Ash Meadows (Fisher, 1893, p. 19); 5 miles southeast of Millett P.O., noted several times between May 18 and 30, 1933 (Linsdale and Compton, MS).

Lincoln County: May 22 to 26, 1891, several seen in Pahrnagat Valley (Fisher, 1893, p. 19).

Ixobrychus exilis hesperis Dickey and van Rossem

LEAST BITTERN

Infrequent in summer. Ridgway (1877, p. 618) reported seeing one in May in willows along the lower Truckee River. On June 8, 1928, Hall (MS) flushed one from a wet meadow at Fish Lake, Esmeralda County. The bird flew to marsh vegetation in a nearby waterhole where it could not be found again. Another was noted, August 5, 1925, by the same observer near Halleck, Elko County. Two observed, June 13, 1933, in marshes south of Carson City, Ormsby County (Stager, MS).

Ellis (1935, p. 86) has reported a male (no. 4130) in his collection from west side of Ruby Lake, 3 miles north of the Elko County line, taken July 18, 1927.

Mycteria americana Linnaeus

WOOD IBIS

Summer visitant, mainly to southern portion of the state. At the Mills Ranch on the Carson River near Fallon, Churchill County, two individuals were seen wading in a slough on July 25, 1930. Five of the birds had been seen at one time earlier in the summer by members of the Mills family (Hall, MS). One (no. 61014, Mus. Vert. Zool.) of two skeletons found on a fence near Hiko, Pahrnagat Valley, Lincoln County, was picked up, June 6, 1931, by Russell. On May 25, 1932, a mounted specimen was examined (Hall, MS) in the collection of Joe and Dean Thiriot, which had been taken in the spring of 1929, in Pahrnagat Valley. A flock had been seen on the Thiriot ranch about that time. Cooke (1913, p. 22) has recorded a specimen from Nevada, taken in July, 1871, but no definite locality given, in the United States National Museum (no. 61572). Hoffman (1881, p. 246) noticed this bird in the Colorado Valley opposite Fort Mojave, Arizona. On September 21, 1930, W. H. Burt saw a flock of twenty-five wood ibises circling high in the air just east of Saint Thomas, Clark County (van Rossem, MS).

Plegadis guarauna (Linnaeus)

WHITE-FACED GLOSSY IBIS

Summer resident and transient; frequent about marshy areas, including those formed naturally as well as those resulting from irrigation.

Washoe County: Deephole, a male (no. 141504, U.S.N.M.) collected May 15, 1896, by Streater; Smoke Creek, a flock of more than a dozen seen in early May, 1896, by Streater (MS); Winnemucca Lake, specimen (no. 141457, U.S.N.M.) taken June 18, 1889, by Keeler; Washoe Lake, in 1877, appeared to be paired on May 20. Female collected on June 3 contained perfect egg in oviduct (Henshaw, 1880, p. 323); Little Washoe Lake, about six seen, May 16, 1933 (Linsdale, MS).

Humboldt County: One seen near McDermitt in early September, 1896 (Streater, MS); Quinn River Crossing, common on July 15, 1875 (Bendire, 1877, p. 142), a number seen between August 29 and September 2, 1896, also a flock of 100 birds or more about 30 miles farther up the river (Streater, MS).

Pershing County: On September 3, 1867, Ridgway (1877, p. 616) collected male and female adults and female juvenile, on Humboldt River, near Oreana.

Churchill County: Common May 2 to 10, 1898, in tule marshes and swampy meadow land near Stillwater (Oberholser and Bailey, MS), and in the same vicinity, numerous flocks were seen, May 20, 1934 (Linsdale, MS); on May 13, 1932, at 10 miles west of Fallon, a flock of about twenty was seen standing in water of a pond and a few single ones observed in flight or wading in the neighborhood (Linsdale, MS). About twelve were seen, July 12, 1929, in an irrigated field 7 miles south of Fallon (Hall, MS).

Esmeralda County: At the lake in Fish Lake Valley flocks numbering up to thirty birds were seen between May 20 and 29, 1928 (Hall, MS).

Nye County: Observed, June 2, 1930, at 5 miles southeast of Millett P.O. and May 21, 1932, at 7 miles north of San Antonio (Linsdale, MS).

Three specimens from Nevada are in the Mus. Vert. Zool., as follows.

Number 53625, not sexed but from its small size judged to be a female, collected, May 20, 1928, by Hall, at Fish Lake, 4800 feet, Esmeralda County. This one weighed 544 grams. About half the feathers on the body, especially those on the lower surface, are the worn, dull brown feathers of the winter plumage. The remainder are newly-grown feathers of the full breeding plumage. Also some of the upper feathers of the wing show an unusual amount of breakage due to wear; on some the web has broken away entirely to the shaft. Length of exposed culmen, 113 mm. The stomach contained, as noted by the collector, 17 dragon fly naiads, elytra of 2 water beetles (Dytiscidae) and 2 nematode worms.

Number 53626, male collected by Benson, same date and place. Weight 733.6 grams. Preserved as a skeleton.

Number 53627, male collected by Benson, same date and place. Weight 628 grams. This bird, too, shows mixed types of feathers on the lower surface, part of them being dark. Length of exposed culmen, 138 mm.

Cygnus columbianus (Ord)

WHISTLING SWAN

Winter visitant. Two males (nos. 6788-89) were reported by Ellis (1935, p. 86) as contained in his collection, from the west side of Ruby Lake, 6 miles north of the Elko County line. They were taken on November 5, 1929.

Henshaw (1877, p. 1312) reported the presence of swans on Washoe Lake and the sink of the Carson River in the fall. He listed the birds under the name *Cygnus buccinator*, but gave no indication that he had examined specimens to establish their true identity. Because of this and more recent information as to the status of the swans in the west, I have taken the liberty to place Henshaw's observations under *Cygnus columbianus*. Ridgway (1877, p. 619) reported swans as exceedingly numerous in December, 1867, in the vicinity of Pyramid Lake. He obtained no specimens and was unable to determine the species.

A flock of about twenty was seen October 21, 1933, in the Carson River Valley, near Carson City, Ormsby County, by A. Johnson (MS).

Branta canadensis canadensis (Linnaeus)

CANADA GOOSE

Resident; most numerous in migrations and least common in winter. Mainly restricted to larger lakes in northern and western parts of the state.

Ridgway (1877, p. 620) caught several goslings and secured their parents in May at Pyramid Lake. The latter were unable to fly, having molted their wing quills, but they took to open water when pursued. In 1924, on May 29, two were noted near the eastern shore of Pyramid Lake, and on June 7, eight were seen on Anaho Island and fourteen in a group at the north end of the lake. Local resident persons reported seeing young that summer. Several flocks, one containing eighty-seven birds, were seen along the northern shore on July 9, 1926 (Hall, MS). At Washoe Lake, Hanford (1903, p. 50) reported that nests had been found in years previous to his work there.

On July 9, 1932, a flock of twenty-five or more Canada geese was standing on the southwestern shore of Little Washoe Lake and several small groups were seen there on May 16, 1933, and two on May 4, 1934 (Linsdale, MS).

Two specimens, a male and female (nos. 6786-87) reported by Ellis (1935, p. 86) are in his collection from west side of Ruby Lake, 6 miles north of Elko County line. They were taken by Borell on November 2, 1929.

Branta canadensis leucopareia (Brandt)

LESSER CANADA GOOSE

According to Ridgway (1877, p. 620) this goose was an abundant winter visitant in western Nevada. He reported the capture of two adult males (nos. 53691-92, U.S.N.M.) on November 5 and 6, 1867, at Truckee Meadows. A male (no. 79864, U.S.N.M.) was taken November 12, 1876, at Washoe Lake by Henshaw. Fisher (1893, p. 19) reported that this species was heard, March 3 to 16, 1891, on the eastern slope of the Charleston Mountains.

Branta nigricans (Lawrence)

BLACK BRANT

The black brant has been observed in Nevada at Pyramid Lake, December, 1867 (Ridgway, 1877, p. 621), and Washoe Lake, a pair early in May (Hanford, 1903, p. 50).

Chen hyperborea hyperborea (Pallas)

LESSER SNOW GOOSE

A winter visitant, formerly at least, in large flocks. Ridgway (1877, p. 619) recorded two specimens; an immature bird (no. 53689, U.S.N.M.) from the Humboldt Marshes, October 31, 1867, and an adult male from the eastern shore of Pyramid Lake, December 28, 1867. Near Carson City, large flocks from the north were noted in October and November (Henshaw, 1877, p.

1312). An adult male (no. 79863, U.S.N.M.) was obtained. Members of the Death Valley Expedition found this goose common in the Virgin Valley, Clark County, where it was first observed, January 23, 1889, at Bunkerville (Fisher, 1893, p. 18).

Dendrocygna bicolor helva Wetmore and Peters

FULVOUS TREE-DUCK

The only definite record for the state was furnished by Henshaw (1877, p. 1313) who examined one of three specimens shot by H. G. Parker, from several large flocks which visited Washoe Lake early in 1877. The species had never before been seen at the lake. Salvadori (1895, p. 152) listed a skin in the Salvin Godman collection taken in winter at Washoe Lake, Nevada, by H. G. Parker.

Anas platyrhynchos platyrhynchos Linnaeus

MALLARD

Resident; most numerous during the migrations. In summer present about wet hay meadows and close to springs and lakes. Less frequent in winter. Records for this duck, arranged by counties, are as follows.

Washoe County: Smoke Creek, noted in early May, 1896 (Streator, MS); Big Bend of Truckee River, adult female, collected August 4, 1867 (Ridgway, 1877, p. 621); Pyramid Lake, noted June 27, 1924 (Hall, MS); The Needles, 4000 feet, Pyramid Lake, female noted, July 5, 1931 (Hall, MS); Little Washoe Lake, seven seen, May 13, 1932 (Hall, MS); Washoe Lake, found by Hanford (1903, p. 50) breeding abundantly in May.

Ormsby County: Carson City, listed by Henshaw (1877, p. 1313) as a common summer resident and very abundant in the fall and winter in this vicinity.

Humboldt County: Summit Lake, a few in early June, 1896 (Streator, MS); Iron Point, a few in Humboldt River, September 26, 1916 (E. A. Goldman, MS); Little Humboldt River near Paradise Valley, many wintered 1915-1916 (Bunch, MS); Quinn River Crossing, adult male (no. 9190, Mus. Vert. Zool.), taken May 22, 1909; Big Creek Ranch, Pine Forest Mountains, noted, June 15, 1909 (Taylor, 1912, p. 357); Golconda, common near, young on May 28 (Hanna, 1904, p. 48).

Elko County: Marys River, 23 miles north of Death (no. 67498, Mus. Vert. Zool.), July 9, 1935; Ruby Lake, four specimens in Mus. Vert. Zool. (nos. 53241-42, 53245-46), taken on December 16, 17, and 21, 1927 (Borell); Halleck, five seen October 24, 1890 (Bailey, MS).

Churchill County: Fallon, several in irrigated fields on July 12, 1929 (Hall, MS); Stillwater, common, May 2 to 10, 1898 (Oberholser and Bailey, MS).

White Pine County: Cleveland Ranch, 6000 feet, Spring Valley, two noted, July 30, 1930 (Hall, MS); 5½ miles southeast of Ely, 6450 feet, Steptoe Valley, young one on August 11, 1930 (Hall, MS).

Esmeralda County: Smith Ranch, Fish Lake Valley, a male noted on a pond, May 25, 1928 (Hall, MS).

Nye County: 5 miles southeast of Millett P.O., Smoky Valley, common nester in summer (Linsdale, MS); Oasis Valley, noted March 15 to 19, 1891 (Fisher, 1893, p. 15).

Lincoln County: Crystal Spring, 4000 feet, Pahranaagat Valley, male (no. 61026, Mus. Vert. Zool.) taken May 24, 1932 (Russell); lake 4 miles south of Alamo, noted on May 23, 1932 (Hall, MS).

Clark County: Vegas Wash, noted May 22 to 26, 1891 (Fisher, 1893, p. 15).

The male from Lincoln County, in May, weighed 1077.5 grams.

Chaulelasmus streperus (Linnaeus)

GADWALL

Resident; a few individuals present on lakes and ponds through the summer, more numerous in migrations, but not common in winter.

In the Lower Truckee Valley in May, 1868, Ridgway (1877, p. 622) found that the gadwall outnumbered all other species of ducks combined. On May 29, he took nine eggs from a nest at Truckee Reservation, made of down and placed on top of a dilapidated nest of a magpie, in a willow, about eight feet from the ground.

At Washoe Lake, Henshaw collected an adult male (no. 77595, U.S.N.M.) in May, 1877 (Ridgway, 1884, p. 159) and another (no. 79867, U.S.N.M.) on November 15, 1876; a female (no. 79870, U.S.N.M.) from the same lake was taken September 3, 1876. Hanford (1903, p. 50) noted only a few pairs on this lake. Henshaw (1877, p. 1313) reported that near Carson City this duck bred commonly and in fall was numerically one of the best represented of the family. Several pairs were

seen, May 16, 1933, and six or eight individuals were noted, July 10, 1932, along with other ducks on Little Washoe Lake (Linsdale, MS).

Near Mahala, Churchill County, several were seen on May 16, 1933 (Linsdale, MS). In early May, 1898, a pair was noted by Oberholser and Bailey (MS) along the Carson River, west of Stillwater, Churchill County. The same observers, in late June, 1898, found this duck at almost every pond throughout the marshes in Ruby Valley, Elko County. With the exception of the cinnamon teal this was the most abundant duck in the valley.

At Ash Meadows, Nye County, in 1891, members of the Death Valley Expedition noted the arrival of this duck on March 8 and an increase in numbers to March 21.

An adult male (no. 61027, Mus. Vert. Zool.) collected on May 25, 1932, by Russell at Crystal Spring, 4000 feet, Pahranaagat Valley, Lincoln County, weighed 778 grams.

Mareca americana (Gmelin)

BALDPATE

In summer uncommon in northern part of state, transient over whole state and winters in southern portion.

Near Stonehouse in the Humboldt Valley, southern Humboldt County, a flock of six or seven baldpates was seen by Hanna (1904, p. 48) on May 15. Henshaw (1877, p. 1313) reported this species as "very numerous" in late fall near Carson City. A female was taken by him on September 8, 1876, at Washoe Lake (now no. 79868, U.S.N.M.). A single individual was noted, November 1, 1890, at Battle Mountain, Lander County (Bailey, MS). At Blair, 4000 feet, Esmeralda County, on September 27, 1915, a female (no. 260091, U.S.N.M.) was obtained by L. J. Goldman. Members of the Death Valley Expedition in 1891, observed the species in southern Nevada, as follows (Fisher, 1893, p. 16). At Ash Meadows, Nye County, common, the flight beginning on March 8. In Clark County, one was killed in mid-February, in Pahrump Valley, and the species was observed in March, in Vegas Valley.

Dafila acuta tzitzihoa (Vieillot)

PINTAIL

Resident; common in summer and during the migration seasons. Few present in winter and these mainly in the lower valleys and in the southern part of the state. Nests in wet meadows and about marshy ponds and lakes. Records of the pintail, assorted by counties, are as follows.

Washoe County: Common in early May, 1896, on Smoke Creek (Streator, MS); observed at Pyramid Lake, July 9, 1926 (Hall, MS) and in December, and on Truckee Meadows in November, 1867 (Ridgway, 1877, p. 622). A specimen (no. 79869, U.S.N.M.) was taken, November 15, 1876, at Washoe Lake, by Henshaw. Hanford (1904, p. 50) reports this duck observed several times by a Mr. Steinmetz.

Humboldt County: A single individual was seen May 31, 1909, on the Quinn River (Taylor, 1912, p. 357). Hanna (1904, p. 48) records several seen in May, near Stonehouse, in the Humboldt Valley.

Ormsby County: Near Carson City, Henshaw (1877, p. 1313) found the pintail most abundant in late fall.

White Pine County: Observed daily in latter part of July, 1930, at Cleveland Ranch, 6000 feet, Spring Valley (Hall, MS).

Esmeralda County: Noted in 1928 at the lake in Fish Lake Valley as follows: May 28, 6 males; May 29, 1 male; June 14, 1 female; June 3, 12 individuals (Hall, MS).

Nye County: Several seen in May and June, 1930 and 1932, in Smoky Valley, 5 miles south-east of Millett P.O. (Linsdale, MS). At Ash Meadows, many were killed during the first two weeks of March, 1891 (Fisher, 1893, p. 17).

Clark County: At Virgin River, $\frac{3}{4}$ mile east of Mesquite, 1750 feet, common, October 1, 1931 (Orr, MS). Fisher (1893, p. 17) reported several seen March 3 to 10, 1891, by members of the Death Valley Expedition, in Vegas Wash.

Nettion carolinense (Gmelin)

GREEN-WINGED TEAL

Resident; common during migration seasons. Summer records are all in the northern portion of the state. Not numerous in winter. Likely to be seen about any of the springs, ponds, shallow lakes or streams.

Specimens in Mus. Vert. Zool. were obtained at Quinn River Crossing (male and female, nos.

9104-05) on June 3 and 4, 1909, Marys River, 23 miles north of Death (female, no. 67499), on July 9, 1935, and on the west side of Ruby Lake, 3 miles north of Elko County line (female, no. 53243), on December 14, 1927.

Taylor (1912, p. 357) reported the finding, on June 4, 1909, of a nest which contained five eggs, on Quinn River, Humboldt County. Hanford (1903, p. 50) listed this species as a common breeder at Washoe Lake. Near Carson City, Henshaw (1877, p. 1313) found it very numerous and the most abundant of any of the family in August and early September. Hoffman (1881, p. 250) noted specimens from Grapevine Springs, near Spring (Charleston) Mountain. Members of the Death Valley Expedition observed this duck to be common at Ash Meadows, at Pahrump Ranch, February 12 to 28, 1891, and about springs in Pahrump and Vegas valleys, March 3 to 6, 1891 (Fisher, 1893, p. 16). On May 25, 1932, a mounted specimen from Pahrangat Valley, Lincoln County, was examined in the collection of Joe and Dean Thiriot (Hall, MS).

Recent sight records of this duck are as follows. A male and female seen May 29, 1929, 3 miles west of Baker, White Pine County (Hall, MS); a pair on a pond 5 miles southeast of Millett P.O., Nye County, May 22, 1932; also noted in that locality several times in May, 1933 (Linsdale, MS).

Querquedula discors (Linnaeus)

BLUE-WINGED TEAL

Summer resident; rather common about the wet meadows during the nesting season. During migrations likely to occur anywhere in the state.

A male (no. 54308, Mus. Vert. Zool.) was shot, May 29, 1929, at 2½ miles east of Baker, White Pine County (Russell).

In the vicinity of Elko, Nelson (1875, p. 352) wrote that this species was abundant and that in one morning he found five broods. Ridgway (1877, p. 623) found it "rather common in May at Pyramid Lake, where breeding in the meadows." At Washoe Lake (Hanford, 1903, p. 50) listed this duck as a common breeder, but Henshaw (1877, p. 1313) considered it the least common teal near Carson City.

At Blair, Esmeralda County, a male and female (nos. 241452, 241451, U.S.N.M.) were shot on September 27, 1915 (E. A. Goldman), and a male (no. 260086, U.S.N.M.) on September 23, 1915 (L. J. Goldman).

In the southern part of the state, Hall (MS), in May, 1932, examined a mounted specimen in the collection of Joe and Dean Thiriot, which had been taken in Pahrangat Valley, Lincoln County. Another male (no. 61028, Mus. Vert. Zool.) was shot, May 25, 1932, at Crystal Spring, 4000 feet, in the same valley (Harville). Fisher (1893, p. 16) reported that one was shot but not saved, on March 20, 1891, at Ash Meadows, Nye County.

Weights of the males, taken in May, as listed above, were 334 and 366.3 grams, respectively.

Querquedula cyanoptera (Vieillot)

CINNAMON TEAL

Summer resident and transient; most common of the teals. Present wherever water occurs, even in such small amounts as springs and small temporary pools.

Specimens in Mus. Vert. Zool. are as follows. Male (no. 9106), June 4, 1909, Quinn River Crossing, Humboldt County, collected by Taylor; two females (nos. 53623-24), July 3, 1928, Fish Lake, Esmeralda County, taken by Russell; two females and a male (nos. 61029-31), May 24 and 25, 1932, Crystal Spring, 4000 feet, Pahrangat Valley, Lincoln County.

Weights of females in the order listed above were 284, 291.7, 395.5 and 377.5 grams. The male weighed 345.9 grams.

In the Truckee Reservation, Washoe County, a nest containing nine eggs was found on June 1, 1868, in a greasewood bush (Ridgway, 1877, p. 623). The same observer also reports a nest on Truckee Meadows containing eight eggs on July 16, 1867. Hanford (1903, p. 50) listed this teal as a common breeder at Washoe Lake. By May 12, Henshaw (1880, p. 327) observed that all members of this species on the lake were paired and a few had eggs. Sets found by him had nine, ten, eleven, and twelve eggs; only two had the last number. An adult male (no. 77587, U.S.N.M.) was taken there by him on June 4, 1877. The same writer (1877, p. 1313) noted that this duck breeds in great numbers in the region about Carson City. In that locality it migrates south earlier than any other species. It was not detected in November, nor in winter.

In May, 1896, Streator (MS) found this species common in Washoe County at Granite Creek, Smoke Creek, and Deephole. At Stillwater, Churchill County, in early May, 1898, Oberholser and Bailey (MS) found this duck abundant everywhere near water. The same observers in June, 1898, saw two at a warm spring near Diana's Punch-bowl in Monitor Valley, Nye County.

A flock of thirty was observed on July 17, 1935, near Tecoma, Elko County (Hall, MS).

In the center of the state the cinnamon teal is found commonly through the summer about the springs and pools in Smoky Valley. Records are between April 23 and September 9 (Linsdale, MS). Recent records of this duck in summer are as follows: 11 miles south of Carson City, Ormsby County, May 19, 1928; west side of Walker Lake, May 19, 1928; 10 miles south of to 4 miles northwest of Fallon, Churchill County, July 12, 1929; Reese River at Lincoln Highway, Lander County, June 22, 1933; Cleveland Ranch, 6000 feet, Spring Valley, White Pine County, July 30, 1930; Smith Ranch, Fish Lake Valley, Esmeralda County, May 21 to 29 and June 3 and 14, 1928; ¼ mile north of Crystal Spring, 4000 feet, Pahranaagat Valley, Lincoln County, May 27, 1932 (Hall, MS).

The Death Valley Expedition in 1891, found this duck first on March 18 (ad. male coll. Mar. 20) at Ash Meadows, Nye County. It was common and breeding, May 22 to 26, in Pahranaagat Valley, Lincoln County. In Clark County it was noted, April 30, at Upper Cottonwood Springs, eastern base of Charleston Mountains; twenty-two were noted, May 1, at Vegas Spring; noted, May 2, at Vegas Wash (Fisher, 1893, p. 16).

Spatula clypeata (Linnaeus)

SHOVELLER

Summer resident and transient; common. Possibly a few spend the winter in the southern part of the state.

In Washoe County, during May, 1896, Streator (MS) saw several shovellers at Granite Creek, Deephole, and Smoke Creek. At Pyramid Lake, Ridgway (1877, p. 624) found this duck common in May. On May 16, 1933, one was seen along the western edge of Little Washoe Lake, Washoe County (Linsdale, MS). Henshaw (1880, p. 328) reported this duck as very abundant both as a summer resident and a fall migrant near Carson City. In Churchill County several pairs were seen, May 20, 1934, at Soda Lake, and others the next day in ponds near the road at Mahala (Linsdale, MS). L. J. Goldman obtained three specimens (nos. 260087-89, U.S.N.M.) at Blair, Esmeralda County, on September 23 and 24, 1915. E. A. Goldman (MS) observed several, September 27, 1915, on a small pond at the eastern base of the Silver Peak Mountains. Members of the Death Valley Expedition found the shoveller common in March, 1891, at Ash Meadows, Nye County (Fisher, 1893, p. 17).

Aix sponsa (Linnaeus)

WOOD DUCK

Formerly rather uncommon in western part of the state. One pair reported seen in July "among the cottonwoods of the Truckee" in Washoe County (Ridgway, 1877, p. 624). Henshaw (1877, p. 1313) listed this species as rather uncommon near Carson City, Ormsby County. There are no recent reports of the presence of this species in Nevada.

Nyroca americana (Eyton)

REDHEAD

Summer resident and transient; common about many medium-sized lakes and ponds, especially in western Nevada. Early to arrive in spring and late to leave in fall.

On July 9 and 10, 1932, and May 16, 1933, the redhead was the most numerous species of duck to be seen on Little Washoe Lake (Linsdale, MS). Henshaw (1880, p. 328) reported this duck as breeding at Washoe and other lakes in western Nevada. He took an immature female (no. 79874, U.S.N.M.) on September 3, 1876, at Washoe Lake, and a male (no. 72750, U.S.N.M.) on September 8, 1876. He (1877, p. 1314) found it present, but not in great numbers, in the fall, near Carson City. On May 13, 1932, four pairs of redheads were seen on two different ponds, 10 miles west of Fallon, Churchill County. Many individuals were seen on the same ponds on August 21, 1932, and May 16, 1933 (Linsdale, MS).

A specimen (no. 260090, U.S.N.M.) was taken, September 26, 1915, by L. J. Goldman, at Blair, Esmeralda County. Fisher (1893, p. 17) reported this duck as common during the first half of March, 1891, at Ash Meadows, Nye County, and as present in March, in Vegas Valley, Clark County. Two specimens, a male and female (nos. 61032-33, Mus. Vert. Zool.) were obtained, May 25 and 30, 1932, at Crystal Spring, Pahranaagat Valley, Lincoln County. They weighed 1024.9 and 831.5 grams, respectively.

Nyroca collaris (Donovan)

RING-NECKED DUCK

Transient; records too few to show status. Ridgway reported (1877, p. 625) the occurrence of ring-necked ducks on Pyramid Lake in December. Fisher (1893, p. 18) recorded that several were shot at Ash Meadows, Nye County, by members of the Death Valley Expedition. A male (no. 4560) in the Ellis collection is from the west side of Ruby Lake, 3 miles north of the Elko County line, and was obtained on December 27, 1927 (Ellis, 1935, p. 86).

Nyroca valisineria (Wilson)

CANVAS-BACK

Transient; common on the lakes and ponds. Reports of this duck in Nevada in summer may be due to confusion of the species with the redhead.

Hanna (1904, p. 48) reported this duck as not uncommon in spring and summer of 1903, in Humboldt Valley. At Pyramid Lake, Washoe County, Ridgway shot canvasbacks in May (1877, p. 625). Henshaw (1877, p. 1314) "was told by Mr. Parker that he had shot quite a number . . . about Washoe Lake." Members of the Death Valley Expedition killed a few ducks of this species in early March at Ash Meadows, Nye County (Fisher, 1893, p. 18).

Two specimens in the Ellis collection, a male and female (nos. 4558-59), taken December 29 and 31, 1927, on the west side of Ruby Lake, 3 and 6 miles north of the Elko County line, were reported by him (1935, p. 86).

Nyroca marila (Linnaeus)

GREATER SCAUP DUCK

The greater scaup was listed by Ridgway (1877, p. 625) as a winter visitant to Pyramid Lake.

Nyroca affinis (Eyton)

LESSER SCAUP DUCK

Transient and winter visitant throughout the state; definite records all in May. This duck was observed by Ridgway (1877, p. 625) as a winter visitant to Pyramid Lake. At least six individuals were seen, May 16, 1933, near Mahala, Churchill County (Linsdale, MS). On May 20 and 21, 1932, a single male was seen near the south end of the reservoir, 7 miles north of San Antonio, Nye County (Linsdale, MS). Mus. Vert. Zool. contains skin of female, number 61034, weight 620 grams, shot, May 26, 1932, by Anderson at Crystal Spring, 4000 feet, Pahrangat Valley, Lincoln County.

Glaucionetta clangula americana (Bonaparte)

AMERICAN GOLDEN-EYE

Regular winter visitant; found in small numbers in the lakes and ditches. Two mid-winter-taken specimens in Mus. Vert. Zool. as follows: West side of Ruby Lake, 3 miles north of Elko County line, number 53244, female, taken December 15, 1927, by Borell; 30 miles east of Reno, along road to Fallon, Washoe County, number 53877, female, taken January 1, 1929, by Russell. Ridgway (1877, p. 626) observed this species on Pyramid Lake in December.

A summer straggler was taken, July 16, 1933, by Hall at Fish Lake, Fish Lake Valley, Nye County. This individual (no. 63524, Mus. Vert. Zool.) evidently had failed to migrate at the proper season on account of some morphological defect. Its plumage shows an exceptionally great amount of wear and fading, more than in any other specimen of the species in the Museum.

Charitonetta albeola (Linnaeus)

BUFFLE-HEAD

Winter visitant; found on the larger lakes. An adult male was obtained for a specimen, December 27, 1867, on Pyramid Lake, by Ridgway (1877, p. 626). Records in U.S.N.M. show that this specimen was destroyed in October, 1881. Buffle-heads were observed "in considerable numbers in the fall" near Carson City, Ormsby County, by Henshaw (1877, p. 1314). Ellis (1935, p. 86) recorded two females (nos. 4568-69) in his collection from west side of Ruby Lake, 3 miles north of Elko County line, taken December 17, 1927.

Histrionicus histrionicus pacificus Brooks

HARLEQUIN DUCK

Basis for the ascription of this duck to Nevada is the statement by Hanford (1903, p. 50) that at Washoe County, "a male was taken at Frankstown near the lake and identified by Mr. Steinmetz."

Erismatura jamaicensis rubida (Wilson)

RUDDY DUCK

Recorded as present in the state at all seasons, but probably not many remain in the northern part during the winter.

Ridgway (1877, p. 626) reported that a female killed at Pyramid Lake, in December, was the only one seen. At Washoe Lake, Hanford (1903, p. 50) noted this species "quite a number of times in open lanes of water in tule fields." Henshaw (1877, p. 1314) recorded that it was "apparently not very common" in the vicinity of Carson City. Fisher (1893, p. 18) reported that members of the Death Valley Expedition, in 1891, killed a few ruddy ducks at Ash Meadows in the middle of March, and observed the species from May 22 to 26, in Pahranaगत Valley.

Recent records for the species are as follows: Pyramid Lake, two at north end, June 28, 1924 (Hall, MS); Little Washoe Lake, Washoe County, about twenty in a group near the center of the lake on August 13, 1932 (Linsdale, MS); west side Walker Lake, Mineral County, pair, May 19, 1928 (Hall, MS); swamps west of Fallon, Churchill County, several on June 27, 1930 (Lamb, MS); 7 and 10 miles southeast of Millett P.O., Nye County, June 8 and August 20, 1932 (Linsdale, MS); 7 miles north of San Antonio, Nye County, May 20 and 21, 1932 (Linsdale, MS); lake ¼ mile north of Crystal Spring, Pahranaगत Valley, Lincoln County, seen daily from May 17 to 27, 1932 (Hall, MS); Pahranaगत Lake, Lincoln County, October 14, 1931 (van Rossem, MS).

A male (no. 6980) in the Ellis collection was reported by him (1935, p. 86) as from Hobson, south end of Ruby Lake, White Pine County, May 23, 1929.

Lophodytes cucullatus (Linnaeus)

HOODED MERGANSER

Ridgway (1877, p. 627) wrote of the hooded merganser that it was "occasionally met with in summer in the wooded valleys of the Truckee and Carson rivers, but it seemed to be very rare." Near Carson City, Ormsby County, Henshaw (1877, p. 1314) found this species "quite abundant, but occurring late in fall." A male (no. 4538) from west side of Ruby Lake, 3 miles north of Elko County line, taken December 28, 1927, was reported by Ellis (1935, p. 86) as in his collection.

Mergus merganser americanus Cassin

AMERICAN MERGANSER

Resident; known to nest at Pyramid Lake. Reported also at Walker Lake and on the Truckee and Carson rivers and in the northeastern corner of the state. The American merganser was fourth in abundance among the fish-eating birds that nested at Pyramid Lake in 1924 (Hall, 1926, p. 90). Two specimens (nos. 300322-23, U.S.N.M.) were taken on July 26. A nest containing six eggs was found, June 2, on The Pyramid, and another on June 28, containing three eggs. Young were first noted on July 18 at Anaho Island. The same observer reports (MS) dozens of young and adult mergansers at The Needles, Pyramid Lake, on July 6, 1931.

At Walker Lake, Mineral County, mergansers (2 males) were noted on May 19, 1928, and ten individuals (both sexes) on May 13, 1932 (Hall, MS). About as many were seen along the western shore of the lake on May 4, 1934 (Linsdale, MS). Ridgway (1877, p. 627) found this species during the winter on the Truckee and Carson rivers.

On July 14, 1935, an adult with a brood of young was seen on Goose Creek, 5000 feet, 2 miles west of the Utah line, Elko County (Hall, MS).

Mergus serrator Linnaeus

RED-BREADED MERGANSER

Winter visitant and transient. Found on Pyramid Lake and the Truckee River in December, 1867 (Ridgway, 1877, p. 627). Henshaw (1877, p. 1314) found it numerous near Carson City, Ormsby County, in fall. A female was noted, May 20, 1934, on Soda Lake, Churchill County (Linsdale, MS). On May 14, 1930, at 4 miles southeast of Millett P.O., 5500 feet, Nye County, a female was watched swimming alone on a pond (Linsdale, MS). An adult male was obtained,

May 2, 1891, on Vegas Wash, Clark County (Fisher, 1893, p. 15). Fitch collected a specimen (no. 61035, Mus. Vert. Zool., wt. 548.5 grams) on May 24, 1932, at Crystal Spring, 4000 feet, Pahranaagat Valley, Lincoln County. These occurrences in May are all late for localities so far south and may represent non-breeding individuals.

Cathartes aura teter Friedmann

TURKEY VULTURE

Summer resident; common over whole state.

Mus. Vert. Zool. contains a specimen (male, no. 58448) taken, May 8, 1931, 2 miles northwest of Indian Spring, 6300 feet, Belted Range, Nye County, and another (no. 53635), obtained, July 4, 1928, from Arlemont, 4850 feet, Esmeralda County. This individual, sex not determined, weighed 1305 grams. Two skeletons (male and female, nos. 63474-75) were obtained, May 18 and 19, 1933, at Ash Meadows, 2½ miles west of Devil's Hole, Nye County.

In Washoe County, Ridgway (1877, p. 595) reported the collecting of an adult male and a juvenile female, August 16, 1867, at Pyramid Lake. Three individuals were seen, May 18, 1925, 15 miles west of Reno (Hall, MS), and several by the same observer in June, 1924, and July, 1926, at Pyramid Lake.

In the neighborhood of the Pine Forest Mountains, Humboldt County, Taylor (1912, p. 364) saw turkey vultures in summer of 1909, over the open desert or in the vicinity of foothills. Hanna (1904, p. 48) found the species common in 1903, in the Humboldt Valley. Near Elko, Nelson (1875, p. 351) daily observed a flock of about twenty soaring over meadows. About Carson City, Ormsby County, Henshaw (1877, p. 1311) reported this species as common and useful as a scavenger.

Hoffman (1881, p. 244) wrote that in Nevada, the turkey vulture "arrives in the middle regions about the second or third week in March after which time it is common." He observed it also in the Colorado Valley from Fort Mojave, Arizona, northward. Jaeger (1927, p. 3) observed five birds circling above Charleston Peak on June 21, 1926. The species is common in summer in Smoky Valley and the lower part of the Toyabe Mountains in the center of the state (Linsdale, MS).

Localities where turkey vultures were observed by members of the Death Valley Expedition in 1891, are as follows. Vegas Wash, May 3; Virgin Valley, May 8; Pahranaagat Valley, May 22 to 26; Ash Meadows, May 30; Mount Magruder, June 4 to 8.

Biological Survey notes contain additional records for the following localities: Washoe County: Deephole; Granite Creek; Smoke Creek; Wadsworth. Humboldt County: McDermitt; Buffalo Creek, 50 miles north of Golconda; Golconda. Elko County: Halleck; Fremont Pass; Huntington Valley. Pershing County: Lovelock. Churchill County: Fallon. Eureka County: Eureka.

Other recent records of this species are of seven seen, May 19, 1928, at the south end of Walker Lake, Mineral County (Hall, MS); three, on August 21, 1930, at 7 miles west of Hamilton, White Pine County (Hall, MS); and noted, June 16, 1931, in Meadow Valley, 21 miles south of Caliente, Lincoln County (Orr, MS).

Gymnogyps californianus (Shaw)

CALIFORNIA CONDOR

Allotment of the California condor to the Recent avifauna of Nevada is based upon the reported finding of a complete ulna in Gypsum Cave, just out of Las Vegas. In announcing the discovery of the specimen, Miller (1931, p. 32) commented that "it is perhaps not fossil, but it is doubtless several centuries old since there has been a considerable degree of mineralization of the bone."

Accipiter atricapillus (Wilson)

GOSHAWK

Resident on at least one of the higher mountain ranges. On May 15, 1934, a goshawk was seen in flight close by and directly overhead at about 9500 feet along the trail to Stella Lake up Lehman Creek, Snake Mountains, White Pine County (Linsdale, MS).

Two specimens were obtained in Clark County by van Rossem (MS). An adult female was shot, September 16, 1930, in Hidden Forest, Sheep Mountains and an adult male, October 24, 1931, at Cold Creek Spring, Charleston Mountains.

Accipiter velox velox (Wilson)

SHARP-SHINNED HAWK

Occurs throughout the state; common in mountains, less numerous in summer than during migrations. Records arranged by counties are as follows.

Washoe County: June 12, 1931, in early afternoon two were seen in flight along shore of Lake Tahoe, near Incline (Linsdale, MS).

Humboldt County: June 20 and 27, 1909, two males (nos. 9094-95, Mus. Vert. Zool.) from Big Creek, Pine Forest Mountains; August 5, 1909, fully feathered juvenile and adult seen in grove of aspens on Leonard Creek. A few were noted in the lower part of the Pine Forest Mountains, usually along some stream (Taylor, 1912, p. 364).

Elko County: September 10, 1868, a juvenile female shot in Upper Humboldt Valley, by Ridgway (1877, p. 582) who found the species common in September along the streams flowing from the Clover Mountains. Noted September 11 to 14, 1934, in Jarbidge Mountains (Linsdale, MS).

Lander County: June 21, 1930, nest containing three eggs found, Birch Creek at 7000 feet, Toyabe Mountains (Lamb, MS); September 1 and 3, 1931, male and female (nos. 58514-15, Mus. Vert. Zool.) from same locality.

White Pine County: September 9, 1930, immature male (no. 57898, Mus. Vert. Zool.) taken on Cherry Creek at 6800 feet; May 13, 1934, male (no. 64641, Mus. Vert. Zool.) taken on Lehman Creek, 8000 feet, Snake Mountains.

Nye County: April 30, 1930, male (no. 57317, Mus. Vert. Zool.) from North Twin River, 6300 feet; May 11, 1930, female (no. 57318, Mus. Vert. Zool.) from South Twin River at 6500 feet; June 5, 1930, nest and three eggs found near Kingston R. S., 7500 feet; observed September 4, 1931, at Kingston Creek, 6500 feet; June 17, 1931, at Mohawk R.S.; May 23, 1932, Last Chance Creek, all in Toyabe Mountains (Linsdale, MS); and May 13, 1930, at 5 miles southeast of Millett P.O., in Smoky Valley (Linsdale, MS); September 22, 1931, many at Breen Creek, 7000 feet, Kawich Range, one here chasing a white-crowned sparrow on September 24, 1931 (Orr, MS); early in March, 1891, at Ash Meadows (Fisher, 1893, p. 35).

Lincoln County: May 30, 1931, female (skeleton, no. 58478, Mus. Vert. Zool.) from southwestern base of Groom Baldy, 7200 feet; September 25, 1934, female (no. 65783, Mus. Vert. Zool.) from Irish Mountain, 7000 feet.

Clark County: February 12 to 28, 1891, several seen and one killed in Pahrum Valley (Fisher, 1893, p. 35); May 2, 1891, observed at Vegas Wash; May 4, 1891, observed at Bend of Colorado River (Fisher, *loc cit.*); October 1, 1931, seen near Virgin River, $\frac{3}{4}$ mile east of Mesquite, 1750 feet (Orr, MS); noted September 22, 1930, near Saint Thomas (van Rossem, MS).

Three males, one in April and two in September, weighed 92.6, 92.0, and 93.1 grams, respectively. A female, taken in May, weighed 165 grams, one in September, 140.

Accipiter cooperii (Bonaparte)

COOPER HAWK

Numerous records in summer, mainly in the mountains.

Specimens in Mus. Vert. Zool. furnish the following records. A female (no. 65784) came from 15 miles north of Death, Elko County, September 10, 1934. A female (skeleton, no. 54314) was obtained, May 21, 1929, from a nest 8 miles east of Eastgate, 6450 feet, Desatoya Mountains, Churchill County (Hall). Another female (no. 57319) from a nest containing young, was taken June 21, 1930, on Birch Creek, 7300 feet, Toyabe Mountains, Lander County. A female (no. 58516) in streaked plumage was shot on September 11, 1931, in Smoky Valley, 5 miles southeast of Millett P.O., 5500 feet, Nye County. An adult female and two nestlings (nos. 63525-27) were obtained July 1 and 3, 1933, near Jefferson, Toquima Mountains, Nye County. Another female (no. 57899) in the same stage of plumage is from Cherry Creek, 6700 feet, White Pine County, September 13, 1930; one (no. 61036) was obtained at Crystal Spring, 4000 feet, Pahranaagat Valley, Lincoln County, May 23, 1932.

A nest containing four eggs was found, June 1, 1935, at Martin Creek R.S., Santa Rosa Mountains, Humboldt County (A. H. Miller, MS). Ridgway (1877, p. 581) took a male on October 8, 1867, in the West Humboldt Mountains, Pershing County. He often saw individuals chasing a robin or a flicker. At Ash Meadows, Nye County, a few were seen during the first half of March, 1891 (Fisher, 1893, p. 36). On October 1, 1931, several individuals were seen $\frac{3}{4}$ mile east of Mesquite, 1750 feet, Clark County (Hall, MS).

Weights of the last four females listed above were as follows: One in May, 362.5 grams; one in June, 471.3 grams; one in July, 481.4 grams; two in September, 319.0 and 362.5 grams.

Buteo borealis calurus Cassin

WESTERN RED-TAILED HAWK

Resident; common throughout the state except, possibly, extreme southern part.

Specimens are contained in Mus. Vert. Zool. as follows. Washoe County; High Rock Cañon

(no. 9312), July 23, 1909, by L. Kellogg. Lyon County: Yerington (no. 15487), September 21, 1910. Humboldt County: Virgin Valley, male (no. 9313), May 13, 1909, taken by A. M. Alexander. Lander County: Smiths Creek, 7100 feet (no. 65192), July 21, 1934, by D. H. Johnson; 12 miles east of Austin, skeleton (no. 54444), July 12, 1929, by Hall. White Pine County: Baker Creek at 8500 feet, female (no. 54315), June 2, 1929, by Russell. Mineral County: Belleville, male (skel., no. 53636), May 20, 1928, by Hall. Lincoln County: Crystal Spring, 4000 feet, Pahrnagat Valley, female (no. 61037), May 29, 1932, by Poultney.

In summer in the region of Pine Forest Mountains, Taylor (1912, p. 364) found this hawk only in the mountains and mostly in their higher portions. In the Toyabe Mountains region the species occurs in the lower valleys, but most usually it is seen in the mountains (Linsdale, MS). Hanna (1904, p. 48) found this hawk common in summer in the Humboldt Valley. Near Carson City, Henshaw (1877, p. 1311) noted this bird in the low valleys only in fall and winter.

Situations of nesting sites reported in Nevada vary from thorny bushes, six to fifteen feet from the ground, found by Hanna in the Humboldt Valley to fifteen feet above ground on a cliff near a stream, reported by Taylor, in Pine Forest Mountains, and on cliff of a dry ridge in the Toyabe Mountains (A. H. Miller, MS). A pair was discovered nesting on a pyramid at Pyramid Lake in June, 1924 (Hall, MS).

A female taken in May weighed 1156.5 grams; one in June, 3½ pounds (1588 g.).

Buteo swainsoni Bonaparte

SWAINSON HAWK

Resident; common through the larger valleys of the state. Records all north of 37° N. One specimen (female, no. 61242) in Mus. Vert. Zool. was obtained, August 20, 1932, 7 miles north of San Antonio, Smoky Valley, Nye County.

Hoffman (1881, p. 243) reported this species as frequently seen throughout the valleys of Nevada, and definitely mentions a nest and eggs near Antelope Creek. I am unable to find this locality on present day maps.

Hanna (1904, p. 48) considered the Swainson hawk as not uncommon in the Humboldt Valley. A. H. Miller (MS) found a nest containing two eggs, May 30, 1935, 5 miles north of Paradise Valley, Humboldt County. It is to be found regularly in Smoky Valley, Nye County. Records extend from April to September (Linsdale, MS). Davis (MS) found and collected a set of four eggs on May 28, 1934, 20 miles south of Owyhee, in Elko County. The nest was in a cottonwood tree.

At the Big Bend of the Truckee River, Washoe County, on July 26 and 29, 1867, Ridgway (1877, p. 587) obtained a family consisting of a male, a female, and four young hawks. On May 29, 1868, he shot an adult female that was brooding on a nest on the Truckee Reservation.

In June, 1893, Bailey (MS) usually saw thirty or forty Swainson hawks in going from his camp, 3 miles south of Pyramid Lake, to the lake. Four individuals that he killed were eating ground squirrels (*Citellus mollis*). Other localities for this bird in Biological Survey notes are Wadsworth, Washoe County; Mountain City, Huntington Valley, and Ruby Valley, Elko County; Lovelock, Pershing County; Stillwater and Fallon, Churchill County; Reese River Valley, Lander County; Newark Valley, White Pine County; 40 miles north of Belmont, Nye County.

Buteo lagopus s. johannis (Gmelin)

AMERICAN ROUGH-LEGGED HAWK

Winter visitant; reported from northern part of the state. A female obtained, on December 9, 1867, on the Truckee Reservation, near Pyramid Lake, constitutes the first well-authenticated record of occurrence of this hawk in Nevada (Ridgway, 1877, p. 589). According to the museum records, this specimen was sent in 1869, to Madison University in New York. On February 20, 1908, a male (no. 204412, U.S.N.M.) was taken by Piper at Lovelock, Pershing County.

Buteo regalis (Gray)

FERRUGINOUS ROUGH-LEG

The records given below indicate that this species is resident, but not common in the state.

A foot and leg, with feathers attached (no. 58517, Mus. Vert. Zool.) were picked up on September 8, 1931, 5 miles southeast of Millett P.O., Nye County (Lamb). Fisher (1893, p. 38) reports a specimen (no. 141140, U.S.N.M.) shot March 4, 1891, by Nelson at Pahrump Ranch, Clark County. Sight records given by him are: Vegas and Pahrump valleys and Vegas Wash, March 3 to 16; Ash Meadows; Mount Magruder, June 8, 1891.

On May 19, 1928, two individuals were seen by the side of the road from Yerington to Wellington, $\frac{1}{2}$ mile west of the county line in Lyon County (Hall, MS). On May 24, 1927, two were seen, flying together over the desert close to Chiatovich Creek, 3 miles west of Arlemont (Linsdale, MS).

On June 18, 1933, a single individual was observed near Eureka, Eureka County by A. H. Miller.

Aquila chrysaetos canadensis (Linnaeus)

GOLDEN EAGLE

Resident; occurs throughout the state, especially common about the higher mountain ranges.

This species is represented by a single specimen (skeleton, no. 61231, Mus. Vert. Zool.) picked up June 10, 1932, by Fitch, 14 miles southwest of Sunnyside, 5800 feet, White Pine County.

Eagles were seen on June 11, 1924, 2 miles west of Sutcliffe, and on May 14, 1929, at the south end of Smoke Creek Desert, Washoe County (Hall, MS). One was noted, April 30, 1934, in flight over the juniper-piñon covered hills, 17 miles northwest of Reno, Washoe County (Linsdale, MS).

In the Pine Forest Mountains, Humboldt County, Taylor (1912, p. 365) saw eagles only at the higher localities; one noted near the top of Duffer Peak, July 29, 1909. In the East Humboldt Mountains, Elko County, Ridgway (1877, p. 591) saw two eagles pursue and capture a sage hen which they carried off. The bird was picked from the ground as soon as it stopped. Henshaw (1877, p. 1311) records an eagle killed in the fall near Carson City, Ormsby County. One was seen, May 13, 1932, along the highway, 22 $\frac{1}{2}$ miles southwest of Yerington, Lyon County (Hall, MS).

In the center of the state this species is common on the Toyabe Mountains at altitudes from 5500 feet (lowest valley) to over 10,000 feet (higher ridges) (Linsdale, MS). It was observed by Hoffman (1881, p. 244) at Bull Run Mountain, Elko County, and Mount Magruder, Esmeralda County. Recent records for Esmeralda County are of two individuals, May 20, 1928, one mile east of Dyer, and one, May 21, at the Smith Ranch, both localities in Fish Lake Valley (Hall, MS). One was seen on June 20, 1929, near Baker Creek at 9500 feet, White Pine County, and another at the south end of Pahroc Valley, Lincoln County, on May 29, 1932 (Hall, MS).

In 1891, the Death Valley Expedition found golden eagles in southern Nevada as follows. March 18, Ash Meadows, one circling over a pond where there were ducks; Vegas Valley; Charleston Mountains; April 29, Pahrup Valley, three among tree yuccas; May 19, Juniper Mountains; June 1, Oasis Valley (Fisher, 1893, p. 38).

On December 27, 1932, an adult golden eagle was seen by A. H. Miller (MS) near the Colorado River at the southern end of Clark County.

Haliaeetus leucocephalus leucocephalus (Linnaeus)

SOUTHERN BALD EAGLE

Bald eagles nested on the main island in Pyramid Lake in 1866. The species was considered rare in that neighborhood by Ridgway (1877, p. 592). Another record for the state is of two adults seen about the middle of March, on a dead mesquite, in Ash Meadows, Nye County (Fisher, 1893, p. 39).

Circus hudsonius (Linnaeus)

MARSH HAWK

Resident; abundant locally throughout the state during the summer, fewer records in winter. Closely restricted to vicinity of wet meadows and marshy ground. Localities of reported occurrence are as follows.

Washoe County: Deephole, 4000 feet; Smoke Creek; eastern shore of Pyramid Lake; Big Bend of Truckee River; Truckee Reservation; Washoe Lake.

Ormsby County: Near Carson City.

Douglas County: Gardnerville.

Humboldt County: Soldier Meadows Ranch; Iron Point.

Elko County: 25 miles north of Elko.

Pershing County: Lovelock.

Churchill County: Fallon.

Lander County: Birch Creek, Toyabe Mountains.

White Pine County: 3 miles east of Baker, 5700 feet; Baker Creek at 6600 and 9000 feet; Cleveland Ranch, 6000 feet, Spring Valley; 5 $\frac{1}{2}$ miles southeast of Ely, 6450 feet, Steptoe Creek.

Esmeralda County: McNett Ranch, Fish Lake Valley; Smith Ranch, Fish Lake Valley; Silver Peak Mountains.

Nye County: 5 miles southeast of Millett P.O., Smoky Valley; Fish Lake, 6500 feet, Fish Spring Valley; Oasis Valley; Ash Meadows.

Lincoln County: Near Crystal Spring 4000 feet; Pahrnagat Valley; Meadow Creek Valley.

Clark County: Lower Muddy, Virgin, Pahrump, and Vegas valleys; Virgin River, $\frac{3}{4}$ mile east of Mesquite, 1750 feet.

In the northern part of the state a winter record is of an immature female, taken December 21, 1867, at Truckee Reservation (Ridgway, 1877, p. 580).

Feeding habits of this hawk are so interesting as to merit special attention in this Great Basin region. The stomachs of individuals killed at Pyramid Lake by Ridgway, were filled with the remains of small lizards only. At the same place marsh hawks were observed to chase small birds; Brewer and black-throated sparrows being the most numerous species. Appearance of a hawk caused great consternation among the sparrows which uttered distressed cries and made confused and desperate efforts to escape by plunging precipitately into the thickest bushes.

Near Carson City, where the marsh hawk was exceedingly numerous in the marshes, Henshaw (1877, p. 1311) thought it never interfered with the water-fowl except with wounded birds. According to his observations it derived its subsistence chiefly from the smaller species of rodents.

Weights of two females, collected in August and September, were 329.2 and 362.7 grams, respectively. A young male, in July weighed 298 grams.

Pandion haliaëtus carolinensis (Gmelin)

OSPREY

Infrequent in summer; has been observed at widely scattered localities in the state. On June 1, 1903, near Iron Point, Humboldt County, Hanna (1904, p. 48) saw two ospreys on a telegraph pole. Along the lower portion of the Truckee River, near Pyramid Lake, Ridgway (1877, p. 593) found this species to be rather common in May, 1867. Henshaw (1877, p. 1311) reported it as common on the lakes and streams near Carson City. In Pahrnagat Valley, Lincoln County, Fisher (1893, p. 41) reported that one was shot by Merriam after dark on May 24, 1891, and that several were seen at Pahrnagat Lake.

Falco mexicanus Schlegel

PRAIRIE FALCON

Resident; fairly common and widely distributed, records mostly in summer. Nests on cliffs, but forages over widely diversified adjacent areas. Definite occurrences are on record for the following counties.

Washoe County: Truckee Valley, noted by Ridgway (1877, p. 577).

Ormsby County: A juvenile male killed, November 29, 1867, at Carson City (Ridgway, 1877, p. 577).

Douglas County: One seen among marshes along Carson River near Genoa, November, 1867 (Ridgway, 1877, p. 577).

Humboldt County: Specimens are in Mus. Vert. Zool. from Thousand Creek Flat, female (no. 9315), on June 28, 1909, taken by L. Kellogg, and Virgin Valley, male (no. 9316), May 30, 1909, taken by A. J. Heindl and A. M. Alexander. Observed 5 miles north of Paradise Valley, Humboldt County, May 30, 1935 (A. H. Miller, MS). Also noted by Hanna (1904, p. 48) near Golconda in the Humboldt Valley, on May 28, 1903.

Elko County: 6 miles east of Carlin, set of four eggs taken May 12, 1935 (Davis).

Churchill County: Humboldt Marsh, noted October 31, 1867 (Ridgway, 1877, p. 577). Four and one-half miles east of Stillwater, two seen, May 19, 1929 (Hall, MS). On August 14, 1932, one was noted near Lincoln Highway, 18 miles east of Fallon and another 42 miles east of Fallon (Linsdale, MS).

Lander County: Noted at Big Creek and Birch Creek in the Toyabe Mountains, June, 1930 and 1931 (Linsdale, MS).

White Pine County: Specimen from Baker Creek at 7500 feet, female (skeleton, no. 54317, Mus. Vert. Zool.), taken June 4, 1929 (Hall).

Mineral County: One seen, May 19, 1928, at south end of Walker Lake (Hall, MS), and another, May 20, 1928, 3 miles west of Candelaria.

Esmeralda County: Four specimens, two adults and two nestlings of same family (nos. 53637-40, Mus. Vert. Zool.), taken May 31 and June 1, 1928, 7 miles north of Chiatovich Ranch (Benson, MS). Also in this county noted, May 23, 1928, $\frac{1}{2}$ mile south of Smith Ranch, June 3, 1928

miles east of Dyer, both in Fish Lake Valley, and June 15, 20, 23, and 27, at Cave Spring. Reported as observed at Mount Magruder in 1891 (Fisher, 1893, p. 39).

Nye County: Specimen, male (no. 57320), in Mus. Vert. Zool., taken April 25, 1930, at 5 miles southeast of Millett P.O., 5500 feet, Smoky Valley. Also noted at South Twin River and North Twin River, in the Toyabe Mountains (Linsdale, MS). Fisher (1893, p. 39) reports a specimen shot, March 16, 1891, at Ash Meadows, and the species seen in Pahrump Valley.

Lincoln County: Reported by Fisher (1893, p. 39) as noted in Pahrnanagat Valley, May 22 to 26, 1891.

Clark County: Observed in 1891, by members of the Death Valley Expedition at Vegas Valley, Vegas Wash, Bend of the Colorado, and the Virgin Valley near Bunkerville (Fisher, 1893, p. 39).

Weights of the two males mentioned above, taken in April and May were 496.3 and 548.8 grams, respectively. A female, collected in May, weighed 832.9 grams. These May-taken specimens made up a mated pair that was caring for young in a nest.

Falco peregrinus anatum Bonaparte

DUCK HAWK

Duck hawks were seen by Ridgway (1877, p. 575) at Pyramid Lake on May 23, 1868, and a young male (no. 53193, U.S.N.M.) was obtained by him on the Big Bend of the Truckee River on May 23, 1868. A young duck hawk, thought to be a female, was seen, October 17, 1931, flying over the Muddy River, near Saint Thomas, Clark County (van Rossem, MS).

Falco columbarius bendirei Swann

PIGEON HAWK

Winter visitant and transient; recorded mostly along western border of the state. Ridgway (1877, p. 578) recorded the taking of an adult female on Truckee Meadows, November 18, 1867. Museum records show that this specimen was sent to Madison University in New York in 1869. Donald D. McLean has two specimens of pigeon hawk from Washoe County, in his collection. A female (no. 923), he obtained, September 16, 1930, on the Truckee River, 1 mile southwest of Verdi. An adult male was taken on February 2, 1935, at the margin of the Dry Lake, north of Peavine Mountain. This one was first seen over the state line in California. On September 23, 1930, a pigeon hawk, judged by its size to be a female, was seen chasing a dove near Saint Thomas, Clark County (van Rossem, MS).

Falco sparverius sparverius Linnaeus

SPARROW HAWK

Resident; most numerous and most widespread of the hawks in summer, occurring from valleys to highest parts of mountains. In winter, probably, limited to the lower valleys. Definitely recorded from the following places.

Washoe County: Little High Rock Cañon; Granite Creek; Smoke Creek; Deephole; 2 miles north of Nixon, Pyramid Lake; Big Bend of the Truckee; Wadsworth; Washoe Lake.

Ormsby County; Near Carson City.

Douglas County: Glenbrook.

Lyon County: Fort Churchill; 12 miles south of Yerington, West Walker River.

Humboldt County: Alder Creek, and head of Big Creek, Pine Forest Mountains; Quinn River Crossing; Golconda; 5 miles north of Paradise Valley.

Elko County: Mountain City; 25 miles north of Elko; Ruby Mountains; East Humboldt Mountains.

Churchill County: Near Fallon; Churchill.

Lander County: Big Creek, Birch Creek, and Kingston Creek, Toyabe Mountains.

White Pine County: Cleve Creek, 8100 feet, Shell Creek Range; Gleason Creek, 8000 feet; Baker Creek, 7200 feet; Stella Lake, 10,750 feet, Snake Mountains.

Esmeralda County: Chiatovich Creek, 9000 feet, White Mountains; Dyer, Fish Lake Valley.

Nye County: Mohawk Creek, Wisconsin Creek, and South Twin River, Toyabe Mountains; 5 miles southeast of Millett P.O., Smoky Valley; 1½ miles southeast of Jefferson, 9100 feet, Toquima Range; San Antonio; Ash Meadows; Garden Valley, 8½ miles northeast of Sharp.

Lincoln County: Southwest base of Groom Baldy, 7200 feet; top of Irish Mountain, 8000 feet; Pahrnanagat Valley.

Clark County: Saint Thomas; Pahrump Valley; Vegas Valley; opposite Fort Mojave; Black Cañon.

Ridgway (1877, p. 579) reported the capture of an adult female near Fort Churchill, Lyon County, on December 6, 1867. In the southern part of the state members of the Death Valley Expedition found sparrow hawks in March, 1891 (Fisher, 1893, p. 40). One was noted, December 29, 1932, opposite Fort Mojave on the Colorado River, in Clark County (Miller, MS). The rest of the records are in summer.

Sparrow hawks, in Nevada, nest in cavities in trees where these are available in the valleys along streams and about ranches, and in the mountains. Also, they commonly make use of hollows about crevices in cliffs and cañon walls. Near Carson City, in May, 1868, Ridgway (*loc. cit.*) noted five cottonwoods, each with a nest of this bird.

Dendragapus obscurus pallidus Swarth

PALLID GROUSE

Resident; recorded from Toyabe, Toquima, and Monitor mountains.

In the Toyabe mountains in the center of the state, this grouse occurs frequently and is represented in Mus. Vert. Zool. as follows. An adult female (no. 57323) from Birch Creek, 8000 feet, was taken June 25, 1930 (Lamb). On Kingston Creek, at 9600 feet, an adult male (no. 58520) was taken, September 6, 1931 (Lamb) and two juvenile males (nos. 57321-22) from the same creek at 7500 feet, on June 5, 1930. Bent (1932, p. 95) records this species from Arc Dome, in the Toyabe Mountains. He also reports it from the Monitor Mountains. This is the second range east of the Toyabes, in Nye County.

The male and female from this locality, taken in September and June, weighed 1160.4 and 875.7 grams, respectively.

From the Toquima Mountains, Mus. Vert. Zool. contains specimens as follows: North slope Toquima Mountain, 9300 and 10,000 feet, July 1 and 5, 1933 (nos. 63531, 63533), two females, weight 891 and 897.5 grams, respectively. Jefferson, 1½ miles southwest and 1½ miles southeast, 9700 and 8600 feet, July 4 and 1, 1933 (nos. 63532, 63530), a female and a male; weight of latter 1244.4 grams.

Toyabe specimens compared with ones from Snake Mountains, Nevada, and Colorado show characters ascribed to the newly described race *D. o. pallidus* of Swarth (1931, p. 4). In particular the former specimens have the gray terminal band on the rectrices narrower and poorly defined (almost absent), coloration generally paler, and white markings larger and more numerous. The material now available, then, indicates that *pallidus* extends southward to central Nevada.

Dendragapus obscurus obscurus (Say)

DUSKY GROUSE

Resident on several mountain ranges in the northeastern part of the state.

An adult male (no. 54312, Mus. Vert. Zool.), weight 4 pounds, was collected, June 5, 1929, by Russell, at Pole Cañon, 8200 feet, Snake Mountains, White Pine County. A juvenile female (no. 54313, Mus. Vert. Zool.) was taken July 1, 1929, on Shingle Creek, 9080 feet in the same mountain range. On August 4, 1930, a grouse was flushed from an aspen thicket, on the north side of Cleve Creek, 10,000 feet, Shell Creek Range, White Pine County.

Ridgway (1877, p. 598) reported the capture of an adult male (wt. 2¾ lbs.) on September 4, 1868, in the East Humboldt Mountains, Elko County. Although in that vicinity this bird was seldom found in the dense pine forests, it was always found in the vicinity of them, usually in the open glades with scattered trees and brush, with thicker woods on either side. Additional localities listed for this bird by Bent (1932, p. 95) are Ruby Valley and Clover Mountains, both in Elko County. A specimen in Mus. Vert. Zool. (female, no. 65786) came from Bear Creek, 8000 feet, Jarbidge Mountains, Elko County, September 13, 1934.

Dendragapus fuliginosus sierrae Chapman

SIERRA GROUSE

Resident in Sierra Nevada and White Mountains on western border of the state. Bent (1932, p. 113) gives records of this grouse at "Truckee" and Marlette Lake, in western Nevada. If the first means the town of Truckee it is, of course, in California. A specimen (no. 65505, Mus. Vert. Zool.) was obtained, August 23, 1934, close to Marlette Lake, 8100 feet, Ormsby County (Hall). Keeler (MS) on May 30, 1889, saw a grouse and heard a number booming near Glenbrook on Lake Tahoe, Douglas County. The pair seen, July 11 and 16, 1891, at Queen Mill, near the north end of the White Mountains, in Mineral County, may have belonged to this race (Fisher, 1893, p. 30); as well as ones seen and heard, May 9 and 14, 1927, along Chiatovich Creek, 8500 feet, Esmeralda County (Linsdale, MS).

Pedioecetes phasianellus columbianus (Ord)

COLUMBIAN SHARP-TAILED GROUSE

In early days this bird was found commonly in Elko County, northeastern Nevada. In the northern part of the county Hoffman (1881, p. 245) found it in 1871, in moderate numbers on the Bull Run Mountains. Ridgway (1877, p. 599) collected a young female (no. 53660, U.S.N.M.) from the Upper Humboldt Valley, September 16, 1868, and near Trout Creek he found the species abundant in rye-grass meadows at the base of the Clover Mountains.

Centrocercus urophasianus (Bonaparte)

SAGE HEN

Resident in northern part of the state; formerly more common than now, but still present in considerable numbers. Records all north of 37° N.

Specimens in Mus. Vert. Zool. represent following localities: Head of Big Creek, Pine Forest Mountains, Humboldt County, four males (nos. 9191-94), July 19, 20, and 21, 1909. Virgin Valley, Humboldt County, female (no. 9317) May 23, 1909, collected by A. J. Heindl and A. M. Alexander. Battle Mountain, Lander County, male (no. 27790), May 13, 1917. North Fork Cat Creek, 8900 feet, Mount Grant, Mineral County, male (no. 65195), July 14, 1934. Indian Valley, 9000 feet, Shoshone Mountains, female (no. 58449), April 14, 1931; south slope Mount Jefferson, 8900 and 10,300 feet, Toquima Mountains, females (nos. 63534-36), July 3, 1933; Greenmonster Cañon, 9000 feet, Monitor Range, female (no. 63540), July 14, 1933; 2 miles north of Fish Lake, Fish Spring Valley, males (nos. 63537-39), July 11, 1933, all in Nye County.

One was noted on the eastern shore of Pyramid Lake, on June 19, 1924 (Hall, MS). Ridgway (1877, p. 600) reported the collecting of three adult females (one now no. 84556, U.S.N.M.), November 21, 1867, in the Peavine Mountain District, Washoe County. He also collected an adult male in the West Humboldt Mountains, Pershing County, on September 23, 1867. This one weighed 4½ pounds. Stager (MS) on May 21 to 23, 1933, found many nests in Granite Mountains, north of Gerlach, Washoe County. Streater took a female (no. 141371, U.S.N.M.) June 4, 1896, at Summit Lake, Humboldt County. Hanna (1904, p. 48) observed a few small flocks in the cañons near Golconda, Humboldt County. In the vicinity of the Pine Forest Mountains, Humboldt County, Taylor (1912, p. 362) found sage hens common the last of June and after, in mountains above 6000 feet. The species was most numerous on the flats near Leonard Creek. Young were out and fully feathered by June 23. Flocks of thirty were seen at the end of July and early in August. Many were seen, September 6 to 9, 1934, in the Santa Rosa Mountains, Humboldt County (Linsdale, MS).

Nelson (1875, p. 351) saw tracks, but no birds, east of Elko. He saw one bird, 25 miles north of Elko.

Sage hens are fairly numerous in the Toyabe Mountains and the adjacent valleys in the central part of the state. In summer they range high in the mountains (Linsdale, MS). Bailey obtained a male (no. 159035, U.S.N.M.) May 14, 1898, in Ione Valley, Nye County.

In the southwestern part of the state, Fisher (1893, p. 31) reported this species as formerly common on Mount Magruder, Esmeralda County, but killed off by unusually deep snow. He also reported it as occurring in gulches around Queen Mine in the northern part of the White Mountains, Mineral County. More recently, the bird has been noted in the main part of that range, in California (Linsdale, MS).

Lophortyx californica vallicola (Ridgway)

VALLEY QUAIL

Resident; now present at several localities in western Nevada, but whether native or introduced is problematical in each locality.

In Fish Lake Valley, Esmeralda County, the valley quail was found about several ranches. At Dyer, 4800 feet, a male (no. 53634) was obtained on May 26, 1928 (Hall). This bird weighed 142.5 grams. At the Chiatovich Ranch, in the same neighborhood, John Chiatovich said (1928) that this quail was native in the vicinity or had been introduced more than forty years previously, for his acquaintance with it extended back that far. A brood of eighteen young, all able to fly, was noted here on June 18, 1928, and in the early part of July the young quail were noted daily, roosting in willows (Hall, MS). Several groups were noted in May, 1927, at Chiatovich Creek, 7000 feet, White Mountains (Linsdale, MS).

Many years ago, Henshaw (1880, p. 318) commented that "this quail is nowhere indigenous along the eastern slope, as the high mountains offer a complete barrier to its extension. Those introduced about Carson appear to just hold their own."

In the vicinity of Fallon, Churchill County, where the valley quail is doubtless an introduced bird, the species is recorded on nearly every trip through the farmed, irrigated area. Records in 1932, are for May 13 and August 13 and 14. On August 13, numerous pairs were seen, one of them with a large brood of young (Linsdale, MS).

In 1928, Phillips (p. 18) wrote of the valley quail that, "early in the seventies William Dorman is said to have introduced several dozen near Virginia City, Nev., and they have greatly prospered there. There have also been introductions into the Carson City and Reno regions of Nevada, the present status of which is not known to the writer. . . . They were found rather common in the Quinn River Valley, Nev., and in the region about McDermitt, Nev., in 1915, by E. A. Preble. Preble was informed by a man familiar with conditions in that region that when he first came to Paradise Valley, Nev., in 1895, these birds were abundant, having been brought there some years before by William Stocks from some place in California. It was stated also that about 1902 a number of the Paradise Valley quail were taken to Lovelock, Nev., to replace stock planted there that had become depleted." Many were seen, September 6 to 9, 1934, near Martin Creek R. S., Santa Rosa Mountains (Linsdale, MS).

Bent (1932, p. 60) considered Anaho Island, Pyramid Lake, and Stillwater (no. 158341, U.S.N.M.) Churchill County, as localities within the natural range of the valley quail. Valley quail were observed, both adults and young, near Sutcliffe in June, 1924, and in July, 1926. Also during the latter season the species was especially abundant along the Truckee River near the Lake (Hall, MS).

McLean (1930, p. 34) records the valley quail as present in Nevada, at Virginia City, Carson City, Reno, Quinn River Valley, McDermitt, Paradise Valley, Lovelock, and Fallon. He adds the comment that, "some of these are entirely new fields but some are apparently only extensions of range." Whether or not the birds are native in each locality is difficult or impossible to determine, but in any case it seems evident that they are well established locally in the state and that at present they are thriving.

Two specimens in Mus. Vert. Zool. are from Mineral County, as follows. A female (no. 65196) was taken July 13, 1934, on the East Walker River, 5050 feet, 2 miles northwest of Morgan's Ranch. It weighed 169 grams. A male (no. 65197) taken, July 14, 1934, is from Cottonwood Creek, 7400 feet, on Mount Grant; weight 165.7 grams.

Lophortyx gambelii gambelii Gambel

GAMBEL QUAIL

Resident; common in southern part of the state, north to Quinn Cañon Mountains. Specimens in Mus. Vert. Zool. represent the following localities: Pigeon Spring 6400 feet, Esmeralda County (male, no. 51097), June 11, 1927 (Hall); Oak Spring, 6000 feet, Nye County (male and female, nos. 58450-51), May 28, 1931 (Doutt); Garden Valley, 8½ miles northeast of Sharp, Nye County (male, no. 61043), June 5, 1932 (Hall); Ash Meadows, 4.8 miles northwest of Devil's Hole, 2200 feet, Nye County (male, no. 63476), May 18, 1933 (Davis); Burned Corral Cañon, 6750 feet, Quinn Cañon Mountains, Nye County (males and two juveniles, nos. 63541-45) July 28, 1933 (Davis); 2 miles southeast of Pioche, 6000 feet, Lincoln County (juvenile male, no. 63659), August 5, 1933 (Russell); Crystal Spring, 4000 feet, Pahranaagat Valley, Lincoln County (male and female, nos. 61040-41), May 25, 1932 (Poultney), and a juvenile (male, no. 61042), May 30, 1932 (Boyers); Hiko Spring, 1000 feet, 8 miles southeast of Dead Mountain, Clark County (male and female, nos. 64065-66), February 6, 1934 (Fitch); Colorado River, 500 feet, east of Searchlight, Clark County (male and female, nos. 64063-64), January 9, 1934 (Feathers). Found to be very common, September 22, 1930, near Saint Thomas, Clark County (van Rossem, MS).

Oreortyx picta picta (Douglas)

MOUNTAIN QUAIL

Resident sparsely in the mountains of the western part of the state; possibly not native at every place it occurs now.

A skin in Mus. Vert. Zool., female (no. 53878), weight 299.4 grams, was obtained January 5, 1929, 4½ miles northwest of Reno, 5500 feet, by Russell. On June 14, 1931, two or three mountain quail were seen in a willow thicket close to Incline, on Lake Tahoe, Washoe County. The birds first flushed from the ground and then from a point six or eight feet up in the willows (Linsdale, MS). Ridgway (1877, p. 602) reported the taking of an adult male (no. 53662, U.S.N.M.) on December 27, 1867, in the Virginia Mountains, near and west of Pyramid Lake. In Ormsby County, at Carson City, Parker collected an adult male (no. 176369, U.S.N.M.) in November, 1867, and Ridgway took a mated male and female (nos. 53663, 84569, U.S.N.M.) on March 10, 1868.

In the Pine Forest Mountains, Humboldt County, Taylor (1912, p. 361) found the mountain quail rare and present only above 5000 feet. He observed a female in sagebrush near Big Creek Ranch, a male near the head of Big Creek at 8000 feet, one on Alder Creek at 6000 feet, and a family, July 20, 1909, at 7000 feet on Big Creek.

In Mineral County, a female (no. 65198, Mus. Vert. Zool.) was taken, July 12, 1934, on the South Fork of Cat Creek, 8500 feet, Mount Grant. It weighed 208 grams. Another from Cottonwood Creek, Mount Grant (skel. no. 65199) was taken July 15, 1934 (Edge).

The farthest east records for the mountain quail in Nevada, are in the Toyabe Mountains, Lander County. However, it is not absolutely certain that the species is native in that region. Recent records are for Birch Creek, 6500 feet, where one was seen, August 28, 1931 (Linsdale, MS), and Kingston Creek, 6500 feet, where a portion of a skeleton (no. 62342, Mus. Vert. Zool.) was picked up on June 20, 1930.

In the White Mountains, Esmeralda County, T. Kern reported that in 1925, he saw mountain quail on the creek which runs to the Dyer Ranch, and J. Chiatovich, saw six or eight individuals in Trail Cañon, in 1925 (Hall, MS, July, 1928). On Mount Magruder, Esmeralda County, members of the Death Valley Expedition found this species common and breeding, June 4 to 9, 1891 (Fisher, 1893, p. 27). In the collection of Donald R. Dickey, there is a specimen (no. K 720) of mountain quail, collected on July 15, 1922, at Little Log Spring, 6900 feet, in the Silver Peak Range, Esmeralda County, by Mrs. May Canfield.

Additional specimens in U.S.N.M. represent localities as follows. Granite Creek, Washoe County, two (nos. 14060-61), taken May 21, 1896, by Streater. Jackson Mountain, Humboldt County, seven (nos. 241286-92), taken in December, 1914, by Heller; Silver Peak Mountains, Esmeralda County, a female (no. 241453), taken October 3, 1915, by E. A. Goldman.

Grus canadensis canadensis (Linnaeus)

LITTLE BROWN CRANE

A transient. Fisher (1893, p. 20) reported that a female little brown crane was shot, March 10, 1891, at Ash Meadows, Nye County. The lone individual had been seen in the neighborhood for several days previous to the time of capture.

Grus canadensis tabida (Peters)

SANDHILL CRANE

Transient and summer resident at a few favorable localities. Nesting records in northeastern part of state. Ridgway (1877, p. 611) reported the sandhill crane to be "abundant in nearly all localities where extensive grassy marshes or wet meadows existed." He knew of one that was kept captive in Carson Valley. Hoffman (1881, p. 248) reported this species as abundant in wet, grassy meadows in Independence Valley, Elko County (?). He saw the species again on September 30, 1871, on the Colorado River above Black Cañon.

Ellis (1935, p. 86) reported a male (no. 5063) in his collection, taken May 22, 1928, on the west side of Ruby Lake, 3 miles north of the Elko County line.

Rallus limicola limicola Vieillot

VIRGINIA RAIL

Summer resident; restricted to wet meadows and small marshes. Not yet found nesting. In Washoe County, two or three were seen in May, among sedges bordering a pond near Pyramid Lake (Ridgway, 1877, p. 612). The species was noted by Hanford (1903, p. 51) in marshy meadows on the west side of Washoe Lake. Henshaw (1877, p. 1312) found the Virginia rail "rather numerous" near Carson City, Ormsby County. Mus. Vert. Zool. contains skins of two males (nos. 57324 and 58521), collected on May 15, 1930, and September 10, 1931, 5 miles southeast of Millett P.O., 5500 feet, Nye County. Also noted here on May 20, 24, and 28, 1933 (Compton and Linsdale, MS). In the same county, at Ash Meadows, this species was noted about the middle of March, 1891 (Fisher, 1893, p. 21).

The two males listed above collected in May and September weighed 100.5 and 94.7 grams, respectively.

Porzana carolina (Linnaeus)

SORA RAIL

Summer resident; common on small marshes and wet meadows; present in winter in southern end of the state. Nesting records are in northern and eastern parts of state. Seven specimens

represent this species in Mus. Vert. Zool., as follows: Skeleton (no. 67500), picked up June 29, 1935, near Toulon, 3900 feet, Pershing County; female (no. 53630), taken May 21, 1928, at Fish Lake, Esmeralda County, and a skeleton (no. 53631), May 29, 1928, from the same locality (also observed here July 8, 1928), both collected by Benson; a juvenile male (no. 58452) was taken, June 29, 1931, 3½ miles north of Eagle Valley, Lincoln County, by Russell; two immature birds (nos. 63656-57), August 4, 1933, from 3½ miles north of Ursine, 5900 feet, Eagle Valley, Lincoln County (Davis); male (no. 64067) taken February 3, 1934, on Colorado River, ½ mile north of California-Nevada Monument (Hatfield).

At Granite Creek, Washoe County, Streater (MS) saw two and shot one sora in May, 1896. Notes of this rail were heard, May 30, 1915, by Preble, 20 miles north of Golconda, Humboldt County. A. K. Fisher (MS) saw one August 13, 1908, at Fallon and found the species common along sloughs near Lovelock, August 14 to 19, 1908.

Taylor (1912, p. 358) on May 22, 1909, found a nest containing ten eggs in an open marsh near the Quinn River, Humboldt County. The brooding bird was flushed from the nest.

At Elko, Nelson (1875, p. 352) reported two sora rails were seen, one of which was obtained. Single individuals were watched in Smoky Valley, 5 miles southeast of Millett P.O., Nye County, on May 15, 19, and 25, 1932, and several times in May, 1933 (Linsdale, MS). At Ash Meadows, Nye County, one was seen March 10, 1891 (Fisher, 1893, p. 21). Hoffman (1881, p. 248) reported finding this species near the Great Bend of the Colorado River in 1871.

Among the breeding localities listed by Bent (1926, p. 313) for this bird is "probably Pyramid Lake."

The May-taken adult female listed above weighed 52.1 grams; the June-taken juvenile male weighed 55.1 grams. August-taken birds weighed 63.5 and 78.8 grams. A male in February weighed 84.4 grams.

Coturnicops noveboracensis (Gmelin)

YELLOW RAIL

The Fourth Edition of the A. O. U. Check-list of North American Birds (1931, p. 98) lists the yellow rail as "casual" in Nevada. An individual was identified on the evening of May 19, 1932, at a pond 5 miles southeast of Millett P.O., Smoky Valley, Nye County (Linsdale, MS).

Gallinula chloropus cachinnans Bangs

FLORIDA GALLINULE

At a small marshy area in the Colorado River Valley, near the southern tip of Clark County, on January 27, 1934, Benson (MS) saw, but was unable to obtain, a single Florida gallinule. Records from neighboring localities outside the state indicate that the species is resident in small numbers in the Colorado River region.

Fulica americana americana Gmelin

AMERICAN COOT

Summer resident and transient; present on nearly every pool of water, whether small or large, but most numerous where there is aquatic vegetation. Records for the coot, arranged by counties, are as follows.

Washoe County: Pyramid Lake, numerous in June and July, 1924, and July 9, 1926 (Hall, MS); Washoe Lake, Henshaw (1877, p. 1312) found the coot breeding in great numbers in this and nearby lakes. He took a juvenile (no. 77566, U.S.N.M.) on June 3, 1877, and another (no. 79861, U.S.N.M.) on September 8, 1876. In the fall it appeared in immense numbers. The species was found by Hanford (1903, p. 51) to be very common in the "tule fields" at this lake. Little Washoe Lake, on July 9 and 10, 1932, thirty or more coots were found on this lake; several of them on unscreened nests. On August 13, 1932, this bird was numerous in small groups around the margin of the lake (Linsdale, MS).

Humboldt County: Hoffman (1881, p. 248) found this bird in the Humboldt Valley, in a marsh, during May and June, 1871. Also noted by Hanna (1904, p. 48) in the sloughs near Stonehouse and by Taylor (1912, p. 358) who saw a single bird in the Humboldt River, near Winnemucca, on May 12, 1909.

Elko County: Two juveniles in Mus. Vert. Zool. (nos. 57089-90) came from the west side of Ruby Lake, 3 miles north of the Elko County line on July 28, 1927, and May 25, 1928 (Borell). Ridgway (1877, p. 614) captured an adult female, July 15, 1868, in Ruby Valley.

Churchill County: Many records in summer in the ditches and ponds throughout the irrigated district near Fallon (Linsdale, MS).

Lander County: Reese River where crossed by Lincoln Highway, noted several times in summer (Linsdale, MS).

Mineral County: West side of Walker Lake, twenty-two seen on May 19, 1928 (Hall, MS).

Esmeralda County: Chiatovich Creek, 7000 feet, White Mountains, May 9, 1927 (Linsdale, MS); Arlemont, May 21, 1927 (Linsdale, MS); Smith Ranch, Fish Lake Valley, noted in May, June and July, 1928 (Hall, MS).

Nye County: Smoky Valley, noted several times in May and on August 20, 1932, at a lake 3 miles southeast of Rogers Ranch (Linsdale, MS). Ash Meadows, common during first three weeks of March, 1891 (Fisher, 1893, p. 21).

Lincoln County: Pahranaagat Valley, noted, in 1932, at lakes $\frac{1}{4}$ mile north of Crystal Spring, May 27 (young one, wt. 24.5 g., no. 61044, Mus. Vert. Zool., taken by Russell, May 19, 1932) 4 miles south of Alamo, May 23, 12 miles south of Alamo, May 23 (Hall, MS). Also noted here on October 15, 1931 (van Rossem, MS).

Clark County: Found in 1891, by members of the Death Valley Expedition at Vegas Wash, May 2, and the valley of the Muddy River, May 6 (Fisher, 1893, p. 21). On July 24, 1932, van Rossem (MS) found a pair with young three-fourths grown at Kaolin.

Charadrius nivosus nivosus (Cassin)

SNOWY PLOVER

Probably a regular summer resident in small numbers. Reported once (Hanna, 1904, p. 48), in the Humboldt Valley, southern Humboldt County, where a few were seen along the shores of ponds early in May. On June 7, 1924, one (preserved as skeleton) was collected by Hall, on a grassy beach at the south end of Pyramid Lake, Washoe County. No other was seen. A female (no. 65200, Mus. Vert. Zool.) was taken, July 10, 1934, by F. G. Palmer, 8 miles southeast of Schurz, 4100 feet, on Walker Lake, Mineral County. It weighed 41.5 grams.

Charadrius semipalmatus Bonaparte

SEMPALMATED PLOVER

A male (no. 141048, U.S.N.M.) was taken May 11, 1896, by Streator at Smoke Creek, Washoe County. This constitutes the first record of this species in the state.

Oxyechus vociferus vociferus (Linnaeus)

KILLDEER

Resident; numerous in summer, but not many remain in northern part of state through the winter. Most widespread kind of shorebird in the state, occurring in all the valleys and in meadows in the mountains up to about 7000 feet altitude. Usually found about moist ground varying in character from small springs and seeps to extensive marshes, from irrigation ditches to the larger streams, and from small ponds to the larger lakes.

Specimens in Mus. Vert. Zool. come from 10 $\frac{1}{2}$ miles south of Yerington, 4500 feet, West Walker River, Lyon County; Virgin Valley, Big Creek, Meadow near Big Creek, and Quinn River Crossing, Humboldt County; west side of Ruby Lake, 3 miles north of Elko County line; Kingston Creek, Toyabe Mountains, Lander County; Arlemont, Fish Lake Valley, Esmeralda County; 5 miles southeast of Millett P.O., 5500 feet, Smoky Valley, and Monitor Valley, 7000 feet, 9 miles east of Toquima Mountains, Nye County; Crystal Spring, 4000 feet, Pahranaagat Valley, Lincoln County; southern tip of Clark County. Specimens have been reported from Carson City, Ormsby County (no. 53673, U.S.N.M., Ridgway, 1877, p. 603), and Ash Meadows, Nye County (Fisher, 1893, p. 24).

Time of nesting is shown by records of eggs or young, as follows. Eggshells found in the water of a small pool near Arlemont, Esmeralda County, on May 21, 1927, indicate that young of at least one pair had hatched (Linsdale, MS). Henshaw (1880, p. 318) found fresh eggs, May 30, at Washoe Lake. In Smoky Valley, near Millett P.O., Nye County, two broods hatched on June 8, 1932 (Orr, MS). Nearly full-grown family groups were seen, June 17, 1930, near the mouth of Kingston Creek, Lander County (Linsdale, MS). A young male from this locality, June 20, 1930, weighed 54.6 grams. Young found July 17, 1935, on Goose Creek, 2 miles west of Utah line, Elko County (Hall, MS). A small young one (no. 57093, Mus. Vert. Zool.) was collected July 18, 1927, at Ruby Lake, Elko County, by Borell. Another (no. 63546), weight 18.4 grams, was taken, July 7, 1933, in Monitor Valley, 7000 feet, Nye County, by Arnold.

Dates of occurrence in Clark which may indicate time of migration are of specimens collected on March 7 and 28, 1868, at Carson City, Washoe County (Ridgway, 1877, p. 603), and March 10,

1890 (no. 141042, U.S.N.M.) at Ash Meadows, Nye County (Fisher, 1893, p. 24). Occurrence in winter is intimated by Henshaw (1877, p. 1312) who wrote that "probably but few actually winter" in the vicinity of Carson City, Ormsby County, and by a male (no. 64068, Mus. Vert. Zool.) taken February 1, 1934, on the Colorado River, $\frac{1}{2}$ mile north of California-Nevada Monument, Clark County.

An adult female from Smoky Valley, Nye County, April 26, 1931, weighed 98.8 grams; one from Monitor Valley, same county, July 7, 1933, weighed 85.2 grams. One from Lyon County, July 4, 1934, weighed 94.5 grams. Two females from Pahrangat Valley, Lincoln County, May 18, 1932, weighed 88.1 and 90 grams; an adult male, same locality, May 22, 1932, weighed 88.5 grams; one from the Colorado River, in February, weighed 83.4 grams.

Capella delicata (Ord)

WILSON SNIBE

Present in the state at all seasons; most numerous in fall and least numerous in winter. Reported in summer south at least to 39° in Smoky Valley. Records, arranged by counties, are as follows.

Washoe County: 2 miles northwest of Reno, 4800 feet, male and female (nos. 53892-93, Mus. Vert. Zool.), January 4, 1929 (Russell); Truckee Meadows, three adult males and an adult female (no. 53677, U.S.N.M.) collected, November 7, 1867 (Ridgway, 1877, p. 607); Washoe Lake, common in marshy fields on west side of lake (Hanford, 1903, p. 51).

Ormsby County: Near Carson City, present in considerable numbers during fall migration (Henshaw, 1877, p. 1312).

Humboldt County: Stonehouse, observed near on June 3, 1903 (Hanna, 1904, p. 48).

Elko County: Goose Creek, 10 $\frac{1}{2}$ miles west of Utah line (no. 67501, Mus. Vert. Zool.), July 13, 1935; Halleck, one at Glaser Ranch, August 8, 1925 (Hall, MS); Wells, one seen October 18, 1890 (Bailey, MS); Carlin, one killed 15 miles west of, October 29, 1890 (Bailey, MS); west side of Ruby Lake, 3 miles north of Elko County line, three specimens in Mus. Vert. Zool., male and female (51382-83), August 10, 1927 (Borell), and female (skel. no. 53247), December 26, 1927 (Ellis).

Churchill County: Stillwater, heard in May, 1898 (Bailey, MS).

White Pine County: Cleveland Ranch, 6000 feet, Spring Valley, abundant, July 30, 1930 (Hall); Baker, male (no. 54309, Mus. Vert. Zool.), May 30, 1929 (Russell); Baker Creek, 6800 feet, female (no. 54310, Mus. Vert. Zool.), June 17, 1929 (Moore).

Nye County: 5 miles southeast of Millett P.O., 5500 feet, Smoky Valley, female (no. 57327, Mus. Vert. Zool.), May 13, 1930, ova beginning to enlarge; also observed, April 20, 21 and 27 and at Millett P.O. in early July, 1931, and June 14, 1933 (Linsdale, MS); Jefferson Creek, 6300 feet, Toquima Mountains, one seen April 8, 1915 (Holt, MS); Amargosa River, one obtained at head of river (Hoffman, 1881, p. 246); Ash Meadows, one shot, March 16, 1891 (Fisher, 1893, p. 22).

Clark County: Cottonwood Spring, Charleston Mountains, seen in March, 1891 (Fisher, 1893, p. 22).

A male, collected on May 30, weighed 96.9 grams, one on July 13, 85.6 grams; two females, taken May 13 and June 17, weighed 88 and 105.5 grams.

Numenius americanus Bechstein

LONG-BILLED CURLEW

Present in summer in small numbers, mostly north of 39° N. A specimen (male, no. 159033, U.S.N.M.) was recorded by Oberholser (1918, p. 188) from Franklin Lake, Elko County, June 24, 1898. Hoffman (1881, p. 247) reported that in 1871, this bird appeared "common in the marshy districts" and was found breeding in Independence Valley. Mus. Vert. Zool. contains the skins of two young birds (nos. 67502, 67504) from 1 $\frac{1}{2}$ miles northeast of Tecoma, Elko County, July 17, 1935, a skeleton (no. 67503), from Willow Creek, 16 miles east of Midas, Elko County, July 27, 1935, and a male, number 60925, taken May 29, 1932, by Orr, at 5 miles southeast of Millett P.O., 5500 feet, Nye County. A small flock was seen, September 18, 1931, at the reservoir 7 miles north of San Antonio, Nye County (Lamb, MS).

Curlews were observed by Hall (MS) in May, 1925, along sloughs 4 miles west of Fallon, Churchill County. On August 4, 1925, he saw twenty-two on a grassy flat where the highway crosses the North Fork of the Humboldt River, near Halleck, Elko County. In the same county in June, 1828, Oberholser and Bailey (MS) found this bird common about Franklin Lake and they saw two individuals at the upper end of Ruby Lake.

The Nye County specimen measures as follows: wing, 266 mm.; tarsus, 77; tail, 102; culmen,

130. The specimen from Franklin Lake measures as follows: wing, 262 mm.; tarsus, 78; tail, 120; culmen, 144.4. All these dimensions fall below the minimum for *N. a. americanus* given by Ridgway and Oberholser and within the range given for the race *occidentalis* by those workers. However, on geographic probability these birds might come nearer the former race.

Actitis macularia (Linnaeus)

SPOTTED SANDPIPER

Transient and summer resident; common throughout the state. Records, arranged by counties, are as follows.

Washoe County: Granite Creek, a few seen in late May, 1896 (Streator, MS); Pyramid Lake, a few seen early in May, 1896 (Streator, MS); Winnemucca Lake, parent and three young on slough, June 20, 1889 (Keeler, MS); Washoe Lake, common breeder along shores of the lake (Hanford, 1903, p. 51); Wadsworth, two noted along Truckee, about May, 1898 (Oberholser and Bailey, MS).

Ormsby County: Carson City, adult male (first arrival) taken April 26, 1868 (Ridgway, 1877, p. 610), and an adult female, April 28, 1868 (1884, p. 152).

Douglas County: Glenbrook, a set of four fresh eggs found, June 1, 1889 (Keeler, MS).

Humboldt County: McDermitt, one on small stream south of, on May 31, 1915 (E. A. Preble); Thousand Creek Flats, male (no. 9302, Mus. Vert. Zool.), shot, May 30, 1909 (L. Kellogg); Quinn River Crossing, two males (nos. 9080-81, Mus. Vert. Zool.), June 1 and 4, 1909; Humboldt River and Winnemucca, one seen, May 11, 1909 (Taylor, 1912, p. 360); Golconda, one seen May 25, 1915 (Preble, MS); Humboldt Valley, common (Hanna, 1904, p. 48).

Elko County: Goose Creek, 5000 feet, 2 miles west of Utah line, adults and young in July, 1935 (Hall, MS); Mountain City, female (no. 159057, U.S.N.M.) collected June 12, 1898, by W. K. Fisher; Jarbidge Mountains, summit between heads of Copper and Coon creeks, four specimens in alcohol (nos. 57094-95, Mus. Vert. Zool.) collected, July 19, 1929 (Compton); Elko, abundant, young just able to fly (Nelson, 1875, p. 352); Halleck, common, breeding in meadows along river, end of June, 1893 (Bailey, MS); Ruby Valley, a few on both lakes in June, 1898 (Oberholser and Bailey, MS).

Churchill County: Lahontan Reservoir, one seen along shore near Lincoln Highway, August 13, 1932 (Linsdale, MS); Mahala, several at margins of ponds, May 20, 1934 (Linsdale, MS); Stillwater, common, May 2 to 10, 1898 (Oberholser and Bailey, MS) and several flocks, 10 miles north, May 20, 1934 (Linsdale, MS).

Lander County: Reese River at 39° N., two seen on a meadow in late May, 1898 (Oberholser and Bailey, MS); Birch Creek, 7000 feet, female (no. 58522, Mus. Vert. Zool.), taken September 2, 1931.

White Pine County: Cherry Creek, 6800 feet, male (no. 57903, Mus. Vert. Zool.), taken September 11, 1930; Lehman Cave, 7200 feet, observed, June 19 and July 10, 1929 (Hall, MS); Baker Creek, 7200 feet, male (skel. no. 54311, Mus. Vert. Zool.), taken June 6, 1929.

Esmeralda County: Arlemont, 4900 feet, female (no. 51095, Mus. Vert. Zool.), May 21, 1927 (Linsdale); Fish Lake, 4800 feet, male (no. 53633, Mus. Vert. Zool.), May 20, 1928 (Benson).

Nye County: Cloverdale, three along a ditch, end of May, 1898 (Oberholser and Bailey, MS); 7 miles north of San Antonio, 5700 feet, male (no. 58916, Mus. Vert. Zool.), shot September 18, 1931, also observed May 20 and 21, 1932, and on latter date near Peavine Creek Ranch in adjacent Toyabe Mountains; Oasis Valley, one seen June 1, 1891 (Fisher, 1893, p. 23); Beatty, one along Amargosa River, 1 mile north on May 5, 1934 (Linsdale, MS).

Lincoln County: Pahrnagat Valley, many breeding, May 24, 1891 (Fisher, 1893, p. 23), in 1932, observed at lake $\frac{1}{4}$ mile north of Crystal Spring, on May 17 to 27 (male, no. 61049, Mus. Vert. Zool., May 23), at lakes 4 and 12 miles south of Alamo, May 23 (Hall, MS); also noted here on October 13 and 14, 1931 (van Rossem, MS); center of Coal Valley, 11 miles north of Seeman Pass, 5650 feet, two shot but not saved, May 25, 1932 (Hall, MS).

Clark County: Great Bend of Colorado River, two seen, May 4, 1891 (Fisher, 1893, p. 23); Kaolin, two seen, July 24, 1932 (van Rossem, MS).

Two adult males and a female collected in May, weighed 37.0, 37.3, and 39.3 grams, respectively. Three young, September-taken birds, two males and a female, weighed 32.4, 34.6, and 34.2 grams, respectively.

Tringa solitaria cinnamomea (Brewster)

WESTERN SOLITARY SANDPIPER

Recorded within the state during seasons of migration and irregularly in summer. Nelson (1875, p. 351) reported the solitary sandpiper as common about Elko, Elko County, August 9 to

14, 1872. A specimen, preserved in alcohol (no. 57096, Mus. Vert. Zool.) was taken August 11, 1927, by Ellis, on the west side of Ruby Lake, 3 miles north of the Elko County line. A female (no. 204775, U.S.N.M.) was obtained on August 18, 1908, at Lovelock, Pershing County (A. K. Fisher). Ridgway (1877, p. 610) considered the species rare. He observed it in the Truckee Valley on May 13, 1868, and (a single pair) on the meadows near Glendale, Washoe County, in July, 1867. A specimen (no. 65202, Mus. Vert. Zool.) was taken July 8, 1934, 3 miles south of Schurz, on Walker Lake, Mineral County. In Nye County, solitary sandpipers were observed in April, (two specimens, male and female, on April 25, nos. 57328-29, Mus. Vert. Zool.) and on June 3, 1930, at 5 miles southeast of Millett P.O., 5500 feet (Linsdale, MS).

The April-taken male and female listed above weighed 51.0 and 54.5 grams, respectively.

Catoptrophorus semipalmatus inornatus (Brewster)

WESTERN WILLET

Present regularly during the migration seasons and possibly as a breeder. Records for the Humboldt Valley are as follows.

Humboldt County: Paradise Valley, 20 miles north of Golconda, a pair May 30, 1915 (Preble, MS); southeast of Golconda, "rare" in May and June, 1903 (Hanna, 1904, p. 48). Elko County: Marys River, 22 and 14 miles north of Deeth, noted July 8 and 9, 1935 (Hall, MS); Carlin, a specimen in a local collection (1871) "was said to have been shot at the Humboldt River, near the town" (Hoffman, 1881, p. 247); Halleck, specimen (no. 61579, U.S.N.M.) taken May 5, 1871, by Kohler (Ridgway, 1884, p. 152) and noted daily along river, July 31 to August 8, 1925 (Hall, MS); Franklin Lake, three near in June, 1898 (Oberholser and Bailey, MS). Washoe County: Henshaw (1880, p. 322) reported the species as present in May at Washoe Lake and he thought that it "probably breeds." In Douglas County, 6 miles north of Minden, four were noted, May 4, 1934, at the edge of an overflow pond (Linsdale, MS). At Mahala, Churchill County, one was seen on May 20, 1934 (Linsdale, MS). Recent fall records are of one observed September 17, 1931, by Orr (MS), and two on September 18, by Lamb (MS), 7 miles north of San Antonio, Nye County. A female (no. 61243, Mus. Vert. Zool.) was taken, August 20, 1932, 3 miles southeast of Rogers Ranch, Smoky Valley, Nye County.

On July 24, 1932, van Rossem (MS) saw a willet at Kaolin, Clark County.

Totanus melanoleucus (Gmelin)

GREATER YELLOW-LEGS

Reported during the migrations and in winter in the southern end of the state. In 1872, between August 9 and 14, Nelson (1875, p. 351) reported "a few seen and one specimen shot along the river" near Elko, Elko County. Mus. Vert. Zool. contains a specimen, male, number 58917, taken on September 18, 1931, by Lamb, at the reservoir 7 miles north of San Antonio, 5700 feet, Nye County. This was the only one seen at that place. It weighed 163 grams. Another specimen, a male (no. 64069) was shot, February 11, 1934, near the Colorado River, ½ mile north of the California-Nevada Monument, Clark County. It weighed 162.1 grams.

On May 4, 1934, one was noted at the edge of an overflow pond, 6 miles north of Minden, Douglas County (Linsdale, MS).

On October 15, 1931, three greater yellow-legs were seen on Pahranagat Lake, Lincoln County (van Rossem, MS).

Totanus flavipes (Gmelin)

LESSER YELLOW-LEGS

Transient; recorded on the basis of two females (nos. 4158-59) reported by Ellis (1935, p. 86) as in his collection from west side of Ruby Lake, 3 miles north of the Elko County line, taken August 2 and 8, 1927.

Pisobia bairdii (Coues)

BAIRD SANDPIPER

Transient. During the spring migration this sandpiper was found about Pyramid Lake in May, 1868 (Ridgway, 1877, p. 608). Between August 9 and 14, 1872, Nelson (1875, p. 351) saw several flocks on the small sandbars along the Humboldt River near Elko, and he obtained one specimen. Ridgway (1877, p. 608) on August 26, 1867, obtained a female (no. 84634, U.S.N.M.) on the Humboldt Marshes, Pershing County. A male (no. 61244, Mus. Vert. Zool.) was shot on August 20, 1932, at the margin of an alkali lake, 3 miles southeast of Rogers, in Smoky Valley, Nye County. One other individual was observed there (Linsdale, MS).

Pisobia minutilla (Vieillot)

LEAST SANDPIPER

Transient. Streater obtained a female (no. 140991, U.S.N.M.) May 9, 1896, at Smoke Creek, Washoe County. Ridgway (1877, p. 608) reported the least sandpiper as seen in the vicinity of Pyramid Lake in May, 1868. He collected three young males (nos. 53682-84, U.S.N.M.) August 26, 1867, at the Humboldt Marshes, Pershing County. In Nye County, a female (no. 58523, Mus. Vert. Zool.) was found alone and collected, September 8, 1931, 6 miles southeast of Millett P.O., 5500 feet. It weighed 20 grams.

Pelidna alpina sakhalina (Vieillot)

RED-BACKED SANDPIPER

The red-backed sandpiper has been taken (female, no. 142422, U.S.N.M.), May 4, 1896, on Smoke Creek, Washoe County (Streater) and reported as present in May, 1868, at Pyramid Lake (Ridgway, 1877, p. 607).

Limnodromus griseus scolopaceus (Say)

LONG-BILLED DOWITCHER

On May 17, 1933, near Mahala, Churchill County, forty or more dowitchers in a compact flock were seen several times flying over and standing in shallow water of overflow ponds. The flock was kept moving by a prairie falcon which flew over it several times (Linsdale, MS). On May 4, 1934, at 1½ miles north of Minden, Douglas County, twelve dowitchers in a flock were feeding on mud by a pond in a farmyard (Linsdale, MS).

Ereunetes mauri Cabanis

WESTERN SANDPIPER

Transient. Bent (1927, p. 264) gives May 6 as an early date of arrival in spring migration at Smoky Creek [= Smoke Creek, Washoe County], Nevada. A female (no. 141006, U.S.N.M.) was taken at that locality, May 4, 1896, by Streater. Ridgway (1877, p. 609) observed this sandpiper at Pyramid Lake in May, 1868. At the Humboldt Marshes, on August 26, 1867, he shot three birds from a flock (one now no. 84640 in U.S.N.M.). Fisher (1893, p. 23) has recorded that Dr. Merriam, on May 6, 1891, shot a western sandpiper out of a flock of four, in the Virgin Valley, below the mouth of the Muddy River, Clark County. Hoffman (1881, p. 247) reported the observation of this species in 1871, on the Colorado River, below the ruins of Callville.

Southward migrants (nos. 67505-06, Mus. Vert. Zool.) were obtained on July 17 and 27, 1935, at 1½ miles north of Tecoma, and Willow Creek, 16 miles east of Midas, Elko County.

Limosa fedoa (Linnaeus)

MARBLED GODWIT

Transient. On July 27, 1935, a male (no. 67507, Mus. Vert. Zool.) was obtained by W. B. Richardson on Willow Creek, 16 miles east of Midas, Elko County. It weighed 355.5 grams.

Recurvirostra americana Gmelin

AVOCET

Summer resident; more abundant during migration. Records for Nevada, arranged by counties are as follows.

Washoe County: Winnemucca Lake, female (no. 141472, U.S.N.M.) taken June 19, 1889 (Keeler); at Washoe Lake, reported as an especially numerous breeder by Henshaw (1880, p. 318), and as probably breeding; "a few pairs seen on west side of lake" by Hanford (1903, p. 51). On August 13, 1932, and May 16, 1933, several were seen at the margin of Little Washoe Lake (Linsdale, MS). A female (no. 79838, U.S.N.M.) was taken, May 30, 1877, at Washoe Lake by Parker and Henshaw.

Douglas County: Minden, noted May 4, 1934, about a pond in a farmyard 1½ miles north (Linsdale, MS).

Humboldt County: Two specimens in Mus. Vert. Zool., a male (no. 9103) May 17, 1909, from Quinn River Crossing (C. H. Richardson) and one (no. 9318) May 30, 1909, from Thousand Creek Flat (L. Kellogg); also observed in Virgin Valley (Taylor, 1912, p. 360). Hanna (1904, p. 48) found the species common along the banks of alkaline ponds in Humboldt Valley.

Elko County: Ruby Valley, listed as a breeding locality by Bent (1927, p. 45).

Churchill County: Hazen, abundant near on May 15, 1929; Mahala, noted near on May 16, June 22, 1933, and May 20, 1934 (Linsdale, MS); Fallon, one on ridge by road 10 miles south of, on August 13, 1932, twenty-five in wet pasture 10 miles southeast of, on August 14, 1932 (Linsdale, MS), noted near Lincoln Highway in vicinity of, on July 12, 1929, and July 25, 1930 (Hall, MS). On June 28, 1867, an adult male and three sets of eggs, numbering three, four, and one, were collected at Soda Lake, in the Carson Desert (Ridgway, 1877, p. 605). Many were seen about the margin of this lake on May 20, 1934 (Linsdale, MS). Two specimens (nos. 204413-14, U.S.N.M.) were obtained, April 6, 1908, by Piper at Stillwater. Numerous about ponds and lakes 10 miles north of there on May 20, 1934 (Linsdale, MS).

Esmeralda County: Smith Ranch, Fish Lake Valley, observed on June 3, 5 and 14, and July 2, 1928 (Hall, MS); Blair, female (no. 260094, U.S.N.M.), taken September 21, 1915, by L. J. Goldman.

Nye County: 3 miles southeast of Rogers, Smoky Valley, numerous on August 20, 1932 (Linsdale, MS); 7 miles north of San Antonio, one seen, September 17, 1931 (Orr, MS); Ash Meadows, one (no. 141473, U.S.N.M.) of a flock of fifteen shot on March 15, 1891 (Fisher, 1893, p. 22). Cloverdale, listed as a probable breeding locality by Bent (1927, p. 45).

Lincoln County: Lake $\frac{1}{4}$ mile north of Crystal Spring, 4000 feet, Pahranaagat Valley, twenty seen on May 24, 1932 (Hall, MS).

Clark County: "Found rather common on the Colorado River near the mouth of an alkaline stream several miles west of Callville" (Hoffman, 1881, p. 248). Kaolin, five seen, July 24, 1932 (van Rossem, MS).

Himantopus mexicanus (Müller)

BLACK-NECKED STILT

Summer resident; limited to borders of alkali pools. Present at least from May to September.

An adult male, taken on June 28, 1868, at Soda Lake on the Carson Desert, was reported by Ridgway (1877, p. 606). Hoffman (1881, p. 248) mentioned several individuals collected in the Colorado Valley, below the Black Cañon.

In the Humboldt Valley, the stilt has been found common in June, wherever there were alkaline pools (Hanna, 1904, p. 48). Noted, August 7, 1925, near Halleck, Elko County (Hall, MS). Hanford (1903, p. 51) observed this bird along the west shore of Washoe Lake in May and June. One seen 6 miles north of Minden, Douglas County, on May 4, 1934, was at the margin of an overflow pond (Linsdale, MS). Recent sight records for Churchill County are as follows. May 20, 1934, several were seen at Soda Lake and many noted and a set of three eggs taken 10 miles north of Stillwater (Linsdale, MS). A male (no. 64642, Mus. Vert. Zool.) was taken, May 20, 1934, at Mahala, Churchill County. May 15, 1929, four seen in overflow in sage brush 7 miles west of Fallon; July 12, 1929, twelve or more both south and west of Fallon, along Lincoln Highway; July 25, 1930, one seen east of Hazen (Hall, MS); May 16, 1933, and May 20, 1934, noted west of Fallon (Linsdale, MS). At the Smith Ranch in Fish Lake Valley, Esmeralda County, a single individual was observed between May 20 and 24, 1928 (Hall, MS). Individuals were seen on May 20, 21 and 22, 1933, 5 miles southeast of Millett P.O., Nye County (Linsdale, MS). One was noted, on May 24, 1932, at a lake, $\frac{1}{4}$ mile north of Crystal Spring, Pahranaagat Valley, Lincoln County (Hall, MS).

Steganopus tricolor Vieillot

WILSON PHALAROPE

Summer resident and transient. Common in wet hay meadows. Has been recorded in the following counties.

Washoe: In May, 1896, noted at Granite and Smoke creeks (Streator, MS); noted in May, 1868, at Pyramid Lake (Ridgway, 1877, p. 604); two seen, June 19, 1889, at Winnemucca Lake (Keeler, MS); first noted by Henshaw (1880, p. 320) at Washoe Lake (four skins, nos. 77533-77535, 79843, U.S.N.M.) on May 17, many paired on May 23, when a female dissected contained a well developed egg; also at Washoe Lake, found breeding close to shore and common on western side (Hanford, 1903, p. 51); Washoe Valley, newly hatched young on June 20, 1933 (Stager, MS).

Douglas County: Minden, 6 miles north, two noted, May 4, 1934, at margin of shallow overflow pond (Linsdale, MS).

Humboldt County: Specimens in Mus. Vert. Zool. from Quinn River Crossing (9111-19), May 22 to June 4, 1909; Thousand Creek Flats (9303-04), June 15, 1909; Virgin Valley (9305), May 26, 1909. First noted May 20; nests found May 31 and June 2. In Humboldt Valley, a few noted,

June 1 (Hanna, 1904, p. 48). At Golconda, three were seen on May 25, 1915, and many north of town on May 29 (Preble, MS).

Elko County: Specimens in Mus. Vert. Zool. are from Willow Creek, 16 miles east of Midas (no. 67509), July 27, 1935; Marys River, 22 miles north of Deeth (no. 67508), July 6, 1935, west side of Ruby Lake, 6 miles north of county line, skeletons (nos. 51380-81), July 30, 1927, by Ellis, and 3 miles north of county line, adult in alcohol (no. 57098), August 2, 1927, by Ellis. Flock of twenty-six seen daily at Glaser Ranch, 3 miles south of Halleck, July 31 to August 8, 1925 (Hall, MS).

Churchill County: Ten miles west of Fallon, about six seen, May 13, 1932, and May 20, 1934 (Linsdale, MS); 7 miles southeast of Fallon, noted July 12, 1929, and July 25, 1930 (Hall, MS); Stillwater, observed in May, 1898 (Oberholser and Bailey, MS), also noted 10 miles north of there on May 20, 1934 (Linsdale, MS).

White Pine County: Steptoe Valley, reported by Bent (1927, p. 35) on May 12.

Esmeralda County: Fish Lake, 4800 feet, female (no. 53632, Mus. Vert. Zool.), taken May 23, 1928 (Benson), observed at same locality, May 20 to June 3, 1928. McNett Ranch, Fish Lake Valley, one seen, June 29, 1928 (Hall, MS); Silver Peak Mountains, three seen on pond at eastern base, September 27, 1915 (E. A. Goldman, MS).

Nye County: Smoky Valley, a male (no. 57330, Mus. Vert. Zool.) collected, June 26, 1930, at Millett P.O.; noted 5 miles southeast of there on May 13, 1930, and little farther south in the valley on June 8 and August 20, 1932 (Linsdale, MS). Reese River Valley, one seen, June 22, 1931, 12 miles north of Reese River R. S. (Linsdale, MS); Reveille Valley, one (no. 63548, Mus. Vert. Zool.) taken, at Old Mill, 6200 feet, July 21, 1933; Fish Lake, 6500 feet, skeleton (no. 63547, Mus. Vert. Zool.) taken July 16, 1933 (Hall).

Lincoln County: Near Crystal Spring, 4000 feet, Pahrangat Valley, five specimens, two females and three males (nos. 61050-54, Mus. Vert. Zool.) taken May 24, 26, and 29, 1932.

Three males taken in May, weighed 40.2, 46.8, and 47.2 grams. Three females of the same month weighed 62.3, 62.8 and 64 grams.

Lobipes lobatus (Linnaeus)

NORTHERN PHALAROPE

Has been reported as a transient in May and September. Near Quinn River Crossing, Humboldt County, flocks were observed on May 19 and 29, 1909 (Taylor, 1912, p. 358). Four specimens were obtained on the latter date (nos. 9107-10, Mus. Vert. Zool.). At Washoe Lake, Henshaw (1880, p. 320) observed numerous flocks during the last week of May, 1877. Seven specimens (nos. 77511, 77513, 77515-16, 77527, 77530-31, U.S.N.M.) were taken there on May 30, 1877. One (no. 67510, Mus. Vert. Zool.) was obtained, July 27, 1935, at Willow Creek, 16 miles east of Midas, Elko County.

Four specimens in Mus. Vert. Zool., two skins (nos. 62882-83) and two skeletons (nos. 65101-02), were taken May 22, 1933, by Compton, at 5 miles southeast of Millett P.O., 5500 feet, Smoky Valley, Nye County. Weights of the two females, preserved as skeletons, were 32 and 39 grams. On September 31, 1915, a female (no. 260095, U.S.N.M.) was taken at Blair, Esmeralda County (L. J. Goldman). Two males in Mus. Vert. Zool., nos. 61055-56, were collected, May 24, 1932, by Hall, at a lake close to Crystal Spring, 4000 feet, Pahrangat Valley, Lincoln County. Weights of these two individuals were 28.6 and 31 grams.

Larus californicus Lawrence

CALIFORNIA GULL

Nests at Pyramid Lake; occurs in small numbers as a transient in other parts of the state.

In the summer of 1924, Hall (1926, p. 87) considered the California gull second in abundance among the water birds nesting at Pyramid Lake. He estimated that there were 600 adult and immature birds at the lake. Three hundred young gulls were found when the nesting colony was visited June 28.

Ridgway (1877, p. 638) collected several specimens of this bird on May 20 (no. 53698, U.S.N.M.) and 25, 1868, at Pyramid Lake. He took an adult male (no. 53697, U.S.N.M.), July 29, 1867, at Big Bend on the Truckee River. The same writer (1884, p. 169) lists an adult female, taken May 26, 1877, on Pyramid Lake by H. W. Henshaw, and a specimen by the same collector, August 31, 1876, on Washoe Lake. One obtained by him on May 30, 1877, at Washoe Lake is now no. 79880 (U.S.N.M.). Hanford (1903, p. 50) reported one individual seen on Washoe Lake.

A male (no. 67511, Mus. Vert. Zool.) was obtained, July 27, 1935, on Willow Creek, 16 miles

east of Midas, Elko County. On May 19, 1928, three gulls were seen on the west side of Walker Lake, Mineral County. Specimens (nos. 65203-04, Mus. Vert. Zool.) were obtained there on July 9 and 16, 1934. A specimen in Mus. Vert. Zool. (ad. male, no. 63549) was taken, July 16, 1933, by Hall, at Fish Lake, 6500 feet, Fish Spring Valley, Nye County. It weighed 725 grams. In May, 1932, a specimen was examined in the collection of Joe and Dean Thiriot, which had been taken in Pahrana-gat Valley, Lincoln County (Hall, MS). Van Rossem (MS) saw one at Kaolin, Clark County, on July 24, 1932.

Larus delawarensis Ord

RING-BILLED GULL

Transient and winter visitant.

A ring-billed gull was seen on the Quinn River, Humboldt County, on June 1, 1909 (Taylor, 1912, p. 356). On Pyramid Lake, Ridgway (1877, p. 638) reported the capture on December 21, 1867, of an adult female (no. 53702, U.S.N.M.). Henshaw (1877, p. 1314) found it general in the region of Washoe Lake, and present in great numbers in September and October. A male (no. 204411, U.S.N.M.) was taken, November 13, 1907, at Lovelock, Pershing County (Bailey).

At a reservoir 7 miles north of San Antonio, 5700 feet, in Smoky Valley, Nye County, a male (no. 60926, Mus. Vert. Zool.) was shot on May 21, 1932. This was the only one seen and was probably a straggling non-breeder. It still showed traces of immature plumage.

Sterna forsteri Nuttall

FORSTER TERN

Summer resident; common about larger rivers and lakes.

In the Humboldt Valley, Hanna (1904, p. 48) observed the Forster tern to be common along the river. He saw as many as ten in one flock. Ridgway (1877, p. 639) observed this bird commonly in summer at Pyramid, Ruby and Franklin lakes, and the Humboldt Marshes. At Washoe Lake it was considered an abundant summer resident by Henshaw (1880, p. 332). Three specimens (nos. 77555-56, 79885, U.S.N.M.) were taken, May 17 and 19, 1877, at Washoe Lake, by Parker and Henshaw.

At Pyramid Lake, in 1924, this tern was observed almost every day during June, and up to July 4. As many as twenty individuals were seen together (Hall, MS). A female (no. 298321, U.S.N.M.) was taken there on June 19, 1924.

On May 20, 1934, several terns were seen in flight over ponds near Mahala, Churchill County (Linsdale, MS).

One was seen, July 24, 1932, at Kaolin, Clark County (van Rossem, MS).

Hydroprogne caspia imperator (Coues)

CASPIAN TERN

Ridgway (1877, p. 639) reported this tern as common in May at Washoe Lake and near Pyramid Lake, and in September, at Humboldt Marshes. Henshaw (1877, p. 1314) listed it as present in small numbers late in the fall on Washoe Lake. One to three individuals were noted by Hall, (MS) at Pyramid Lake, on July 6, 7 and 9, 1926.

Chlidonias nigra surinamensis (Gmelin)

BLACK TERN

Present in summer from May to September. According to Henshaw (1880, p. 332) the black tern "appears in Nevada early in May," and is "present during latter part of August in somewhat diminished numbers, but in September all leave for the south."

Records of black tern at Washoe Lake are as follows. Henshaw (1877, p. 1314) reported small numbers in August, none in November. An adult male was taken by Henshaw on June 4, 1877 (Ridgway, 1884, p. 172). Later, Hanford (1903, p. 50) noted several pairs "flying over tules where they probably breed." Many black terns were noted in flight over the margin of Little Washoe Lake on August 13, 1932 (Linsdale, MS). On May 21, 1934, several black terns were seen in flight over irrigated fields 1 mile east of Sparks, Washoe County (Linsdale, MS).

In the Humboldt Valley, one was seen near Iron Point on June 1, 1903, and several others later in the month (Hanna, 1904, p. 48). Two were seen, May 19, 1909, at Quinn River Crossing (Taylor, 1912, p. 356). In Elko County, the species was seen, but not commonly, in June, 1898, at Ruby and Franklin lakes (Oberholser and Bailey, MS), and singly on August 5, 6, and 7, 1925, near Halleck (Hall, MS). The Ellis collection contains a female (no. 4121) from the west side of Ruby Lake, 3

miles north of Elko County line, July 14, 1927, and two young males (nos. 4054-55) from west side of Ruby Lake, 6 miles north of Elko County line, August 2, 1927 (Ellis, 1935, p. 86). One was seen on July 7, 1935, on Marys River, 22 miles north of Deeth, Elko County (Hall, MS).

On flooded ground near the Lincoln Highway, 10 miles southeast of Fallon, Churchill County, black terns were observed on July 12, 1929 (Hall, MS) and August 14, 1932 (Linsdale, MS).

In the center of the state, this species was noted (single individuals) on May 28 and 29, 1932, at 5 miles southeast of Millett P.O., Nye County, and on August 20, 4 miles farther south (Linsdale, MS). One was seen in Fish Lake Valley, Esmeralda County, on May 27, 1928 (Hall, MS).

Zenaidura macroura marginella (Woodhouse)

WESTERN MOURNING DOVE

Resident; abundant and widespread throughout the state in summer; restricted to extreme southern portion in winter. Definite records of occurrences are available for the following places.

Washoe County: Smoke Creek; Granite Creek; Flowing Springs; Deephole; Winnemucca Lake; Virginia Mountains near Pyramid Lake; Big Bend of Truckee River.

Ormsby County: Carson City.

Douglas County: Glenbrook.

Lyon County: 10½ and 12 miles south of Yerington, on West Walker River.

Humboldt County: Badger; Summit Lake; head of Big Creek and head of Leonard Creek; Big Creek, 6500 feet, and Big Creek Ranch, Pine Forest Mountains; Cottonwood Range; 5 miles north of Paradise Valley; Quinn River Crossing; Virgin Valley; Humboldt Valley; Golconda; Winnemucca; Amos.

Elko County: Mountain City; Jarbidge Mountains; 25 miles north of Elko; Elko; Halleck; Hastings Pass, Ruby Mountains; Ruby Valley; Huntington Valley.

Pershing County: West Humboldt Mountains.

Churchill County: Mountain Well, 5600 feet; Stillwater; Eastgate.

Lander County: Birch Creek, 7000 feet; Kingston Creek, 6000 to 7500 feet.

Eureka County: Eureka.

White Pine County: Newark Valley, Cleveland Ranch, 6000 feet, Spring Valley; Gleason Creek, 7200 to 7500 feet, 14 miles northwest of Ely; 5½ miles southeast of Ely, 6450 feet, Steptoe Creek; 3 miles east of Baker; Lehman Creek, 8900 feet, Snake Mountains.

Esmeralda County: Chiatovich Creek, 7000 to 8200 feet, White Mountains; Smith Ranch, Fish Lake Valley; Cave Spring, Silver Peak Range; Mount Magruder; Gold Mountain.

Nye County: Monitor Mountains; Mohawk, R. S., Wisconsin Creek, 7800 feet, North Twin River, 6500 feet, South Twin River, 6000 feet, Arc Dome, Pablo Cañon, Peavine Creek in Toyabe Mountains; McLeod Ranch, and 5 miles southeast of Millett P.O., in Smoky Valley; 1 mile east of Jefferson, 7600 feet, Toquima Mountains, ½ mile south of Oak Spring, 5700 feet; Amargosa River, 3½ miles northeast of Beatty, 3400 feet; Oasis Valley; 5½ miles northwest of Whiterock Spring, 7200 feet, south end of Belted Range; Garden Valley, 8½ miles northeast of Sharp.

Lincoln County: 9 miles west of Groom Baldy, 5500 feet; southwest base of Groom Baldy, 7200 feet; Pahranagat Valley; Pahroc Spring; Quartz Spring on western slope of Desert Mountains.

Clark County: Mountain Spring and Upper Cottonwood Spring, Charleston Mountains; Vegas Ranch; Vegas Wash and Bend of the Colorado River; valleys of the Virgin and Muddy rivers; Sheep Spring, Juniper Mountains.

Spring dates which may represent time of arrival are May 11, 1909, at Winnemucca, along the Humboldt River (Taylor, 1912, p. 363); April 23, 1868, Carson City, Ormsby County (Ridgway, 1877, p. 597); April 24, 1930, 5 miles southeast of Millett P.O., Smoky Valley. Nye County (Linsdale, MS); May 8, 1927, Chiatovich Creek, 7000 feet, White Mountains, Esmeralda County (Linsdale, MS).

September dates which may be late seasonally for their respective localities are as follows. September 18, 1867, West Humboldt Mountains, Pershing County (Ridgway, 1877, p. 597); September 8, 1931, 5 miles southeast of Millett P.O., 5500 feet, Smoky Valley, Nye County (spec. by Lamb); September 28, 1931, south end of Belted Range, 7200 feet, Nye County (Orr, MS). Henshaw (1880, p. 315) commented that few doves are left in the state by the end of August.

Nests with eggs were found, June 20 and 26, at Big Creek, Pine Forest Mountains, Humboldt County (Taylor, 1912, p. 363); July 26 and 29, 1867, Big Bend of Truckee River, and June 3, 1868, Virginia Mountains, near Pyramid Lake, Washoe County (Ridgway, 1877, p. 597).

A female taken in May weighed 123.5 grams. Weights of six males, according to month of capture, were as follows: May, 115 and 123.3; June, 113.5; July, 113.6; August, 126.7; September, 112.6 grams.

Ectopistes migratorius (Linnaeus)

PASSENGER PIGEON

Ridgway (1877, p. 596) wrote that on September 10, 1867, he collected a young female passenger pigeon (no. 53650, U.S.N.M.) in the West Humboldt Mountains. This bird, the only one seen, flew rapidly past him and alighted upon a stick at the edge of a stream. Its stomach contained dogwood berries.

Melopelia asiatica mearnsi Ridgway

WHITE-WINGED DOVE

Present in summer along the Colorado River in extreme southern end of the state. On the afternoon of May 9, 1934, Compton (MS) saw, but was unable to obtain, a single white-winged dove in a willow tree at the edge of the flood-plain of the river, opposite Fort Mojave, in Clark County.

Coccyzus americanus occidentalis Ridgway

CALIFORNIA CUCKOO

Several California cuckoos seen by Ridgway (1877, p. 558) in July, 1867, on the Lower Truckee River, constitute the first records for the state. On June 12, 1924, a single individual was noted 2 miles west of Sutcliffe, near Pyramid Lake, Washoe County (Hall, MS).

Geococcyx californianus (Lesson)

ROAD-RUNNER

Resident in portions of Lincoln, Clark, and Esmeralda counties.

Mus. Vert. Zool. contains the skin of a male (no. 61060) road-runner, taken on May 24, 1932, by Boyers, 4½ miles south of Crystal Spring, Pahranaagat Valley, Lincoln County. It weighed 375 grams. Members of the Death Valley Expedition found this species common among sand dunes and mesquites at Ash Meadows in March, 1891, in Vegas Valley and at the Bend of the Colorado River, also in March, and in Oasis Valley (Fisher, 1893, p. 44). Recent sight records are of single individuals seen at Chiatovich Ranch, Esmeralda County, on July 2, 1928, and Hiko, Lincoln County, May 22, 1932 (Hall, MS). A road-runner seen November 12, 1914, near the eastern base of the Charleston Mountains, Clark County, was making efforts to swallow a snake (E. A. Goldman, MS). Noted September 22, 1930, near Saint Thomas, Clark County (van Rossem, MS).

On December 29, 1932, a single road-runner was flushed from the dry grass beneath the mesquites close to the Colorado River in the extreme southern part of the state, in Clark County (A. H. Miller). One was seen in this vicinity on May 10, 1934 (Linsdale, MS).

Tyto alba pratincola (Bonaparte)

BARN OWL

Present, at least formerly, in western part of the state according to Henshaw (1880, p. 313) who wrote that H. G. Parker had "information of the capture of a specimen or specimens near Carson" City. One has been observed in this vicinity in recent years by A. Johnson (MS).

Also resident in the eastern and southern parts of the state as indicated by the following records. During mid-August, 1930, two individuals were seen each night (Hall, MS) while field work was being done 5½ miles southeast of Ely, 6450 feet, Steptoe Valley, White Pine County. A specimen (male, no. 61061, Mus. Vert. Zool.) was obtained, May 26, 1932, by Boyers, at Ash Spring, 3800 feet, Pahranaagat Valley, Lincoln County. This bird weighed 519.4 grams when killed, early in the morning.

Otus asio cineraceus (Ridgway)

MEXICAN SCREECH OWL

Resident in small numbers in the southeastern part of the state. Recorded once at Ash Spring, 3800 feet altitude, Pahranaagat Valley, Lincoln County, where an adult, breeding female was obtained, May 26, 1932, by Boyers. The same collector returned to this locality on May 29, and collected three young birds, just able to leave the nest. These four specimens (nos. 61062-65, Mus. Vert. Zool.) weighed 126.5, 94.4, 84.5, and 84.9 grams, respectively.

Compared with three skins of females of *O. a. gilmani* from the Colorado River region in Arizona and California, and with two skins of females of *O. a. inyoensis* from Inyo County, California, the Ash Spring female falls near the former series in darker tone of coloration, both above

and below, and in smaller size as indicated by wing length. Wing length in this Nevada specimen is 159 mm. However, it differs from *gilmani*, being nearest like available skins of *cineraceus* from Arizona.

Otus asio gilmani Swarth

SAHUARO SCREECH OWL

Resident in the Colorado River Valley, at least in extreme southern tip of the state. A male (no. 62618, Mus. Vert. Zool.) was taken, December 29, 1932, opposite Fort Mojave, Clark County, by A. H. Miller. Another specimen was obtained there by L. H. Miller, and a third individual was seen. On February 11, 1934, a female (no. 64070, Mus. Vert. Zool.) was taken in the same neighborhood by Feathers.

Otus flammeolus (Kaup)

FLAMMULATED SCREECH OWL

The first record of flammulated screech owl for Nevada, is provided by a female, number 57332 in Mus. Vert. Zool. This bird was taken on May 8, 1930, 7:30 a.m. at 6500 feet, on South Twin River, Nye County. It weighed 58.5 grams. This locality is at the eastern base of the Toyabe Mountains and is close to the main portion of that range. The skin is considerably paler than the average of the small series of specimens available for comparison from California and Arizona. It comes nearest in coloration to one from the Huachuca Mountains, Arizona, taken on April 26, 1896.

Bubo virginianus occidentalis Stone

MONTANA HORNED OWL

Resident over most of state, except extreme southern and west-central portions. Records of horned owls, which probably refer to this race, arranged by counties, are as follows.

Washoe County: 2 miles west of Sutcliffe, Pyramid Lake, male (no. 47143, Mus. Vert. Zool.), taken July 8, 1926 (Hall, MS); Deephole, 4000 feet, heard at 3:00 a.m., May 12, 1929 (Hall, MS); Washoe Lake, noted in tule fields in June (Hanford, 1903, p. 51).

Ormsby County: Carson River near Carson City, three eggs found on April 21, 1868 (Ridgway, 1877, p. 572).

Humboldt County: Big Creek, 7000 feet, and Alder Creek, 6000 feet, Pine Forest Mountains, noted in summer of 1909 (Taylor, 1912, p. 366); Martin Creek R.S., 7000 feet, male (no. 67096, Mus. Vert. Zool.), June 2, 1935 (Miller).

Lander County: Big Creek, Birch Creek, Kingston Creek, in Toyabe Mountains, noted several times (Linsdale, MS).

White Pine County: Steptoe Valley, 6200 feet, 10 miles north of McGill, male (no. 57904, Mus. Vert. Zool.) taken, September 16, 1930 (Lamb); 7 miles north of Doyle Robinson Ranch, east side Spring Valley, one seen, June 26, 1929; 3½ miles northwest of Hamilton, 7600 feet, White Pine Mountains, heard on August 21, 1930 (Hall, MS); Baker, one dead on a fence, May 25, 1929 (Hall, MS); Lehman Creek, 8500 feet, Snake Mountains, adult female (no. 65787, Mus. Vert. Zool.), September 18, 1934.

Mineral County: 3 miles south of Schurz, 4100 feet, young female (no. 65208, Mus. Vert. Zool.), July 7, 1934 (D. H. Johnson); weight 1099.3 grams.

Esmeralda County: 7 miles north of Arlemont, two seen, July 1, 1928 (Hall, MS); Arlemont, 4800 feet; Fish Lake Valley, skeleton (no. 53650, Mus. Vert. Zool.), July 8, 1928 (Russell); Cave Spring, 6248 feet, Silver Peak Range, female (no. 53649) June 20, 1928 (Russell); Grapevine Mountains (Fisher, 1893, p. 43).

Nye County: Mohawk Creek, Wisconsin Creek, and South Twin River, Toyabe Mountains, and 5 miles southeast of Millett P.O. in Smoky Valley, noted several times (Linsdale, MS); 1 mile northeast of Jefferson, 7600 feet, Toquima Mountains, young male (no. 63550, Mus. Vert. Zool.) June 30, 1933; northwest base Timber Mountain, 4200 feet, one seen May 22, 1931 (Hall, MS); Ash Meadows, Fisher (1893, p. 43).

Lincoln County: 3 to 5 miles south of Crystal Spring, several in collection of Joe and Dean Thiriot, examined, May, 1932 (Hall, MS).

Bubo virginianus pacificus Cassin

PACIFIC HORNED OWL

Resident along the central portion of the western border of the state in the vicinity of the Sierra Nevada. A female (no. 721) in the collection of Kenneth E. Stager was taken by him on May 9, 1933, in Washoe Valley, Washoe County. It agrees with California-taken examples of the Pacific horned owl in coloration.

Bubo virginianus pallescens Stone

WESTERN HORNED OWL

Resident in southern Nevada as the following records from Clark County indicate. Charleston Mountains (Fisher, 1893, p. 43); Colorado River, 13 miles east of Searchlight, male and female (nos. 64071-72, Mus. Vert. Zool.), January 17 and 18, 1934 (Fitch and Hatfield); opposite Fort Mojave, skin in Mus. Vert. Zool. (no. 62653) taken, December 31, 1932, by A. H. Miller.

Nyctea nyctea (Linnaeus)

SNOWY OWL

A male in the Dickey collection (no. 31263) was obtained about December 1, 1929, at Indian Springs, Clark County (van Rossem, MS).

Speotyto cunicularia hypugaea (Bonaparte)

BURROWING OWL

Resident; widespread but not especially common over most of the state. Occurs in pastures, meadows and other flat land where there are burrows dug by mammals.

Three specimens (nos. 27791-93) in Mus. Vert. Zool. were taken, June 6, 1917, at Rennox, Lander County.

In Washoe County, this owl was reported as heard, May 12 and 13, 1929, at Deephole, 4000 feet (Hall, MS). One was noted, June 24, 1924, near Pyramid Lake, and, July 3, at 5 miles north-east of Reno (Hall, MS). A single individual was seen on a fence post near Washoe Lake in May (Hanford, 1903, p. 51). Ridgway (1877, p. 573) reported burrowing owls near Steamboat Springs.

Near Carson City, Ormsby County (Ridgway, 1877, p. 573) found an egg on April 25, 1868. Henshaw (1877, p. 1311) considered this species an abundant resident in some of the high pasture lands in this vicinity.

Hanna (1904, p. 76) listed the burrowing owl as not uncommon in the Humboldt Valley, Humboldt County. One was noted, July 2, 1935, 3 miles northeast of Winnemucca, same county (Hall, MS). Near Antelope Creek, about 60 miles north of Battle Mountain was the only place Hoffman (1881, p. 242) noted this bird. He saw two there.

On August 12, 1930, a burrowing owl was seen 5½ miles southeast of Ely, 6400 feet, Steptoe Valley, White Pine County (Hall, MS).

In the southern part of the state records are from Esmeralda County, noted June 4 and 14, 1928, at Smith Ranch, and June 6, 1928, 1½ miles north of Dyer, both in Fish Lake Valley (Hall, MS). The Death Valley Expedition (Fisher, 1893, p. 44) recorded several seen at Ash Meadows and one caught, March 15, 1891, in Oasis Valley, both in Nye County. Calls of this owl were heard at night, May 28, 1931, 9 miles west of Groom Baldy, 5500 feet, Lincoln County (Orr, MS). A male (no. 61066, Mus. Vert. Zool.) was taken June 2, 1932, in Penoyer Valley, 9 miles southeast of Belted Peak, in Lincoln County. It weighed 152.5 grams.

Asio wilsonianus (Lesson)

LONG-EARED OWL

Resident; common where there are tall shrubs and trees. Probably most numerous kind of owl in the state. Recorded by counties as follows.

Washoe County: Washoe Valley, adult male and female collected, January 3, 1868, and nest with four young found in willows along bank of Truckee River, May 27 (Ridgway, 1877, p. 570). Incline, one noted, May 22, 1934, at 9500 feet, near divide 6 miles north (Linsdale, MS).

Ormsby County: Reported as common near Carson City, by Henshaw (1877, p. 1311), and found the year round in copses of willows and the denser thickets bordering the swampy lands. Ridgway (1877, p. 570) on April 27, 1868, found two eggs of this species in a magpie's nest in this vicinity.

Humboldt County: One specimen in Mus. Vert. Zool., a male (no. 9189), was captured, August 1, 1909, at Duffer Peak Meadow, Pine Forest Mountains. Hanna (1904, p. 76) reported a pair nesting May 10, 1903, near Stonchouse in the Humboldt Valley.

Elko County: Noted May 10, 1871, among willows near Carlin, by Hoffman (1881, p. 241).

Lander County: Three specimens in Mus. Vert. Zool. from the Toyabe Mountains, a female and male (nos. 57335-36) taken June 4, 1930, at Kingston R. S., 7500 feet, and a female (no. 57337), June 17, 1930, on Kingston Creek at 6000 feet. Also noted at Birch Creek, where one was shot, but not saved, June 27, 1931 (Linsdale, MS).

White Pine County: 3 miles east of Baker, 5700 feet, up to ten seen from May 26 to 31 1929, and 5½ miles southeast of Ely, 6450 feet, about twelve seen, August 14, 1930 (Hall, MS).

Esmeralda County: Specimens are in Mus. Vert. Zool., as follows: A female (no. 53643), July 2, 1928, from Arlemont, 4800 feet, and a family group of young (nos. 53644-48) from Fish Lake, June 3, 1928.

Nye County: A male (no. 57333) in Mus. Vert. Zool. was taken April 22, 1930, in Smoky Valley, 5 miles southeast of Millett P.O., and a female (no. 57334), was taken, May 8, 1930, at South Twin River, 6500 feet.

Lincoln County: Coyote Spring, five or six seen on October 16, 1931 (van Rossem, MS).

Clark County: At Pahrum Ranch, February 12 to 28, 1891, a flock of eight lived in an area less than fifty yards in diameter (Fisher, 1893, p. 42); a male (no. 64073, Mus. Vert. Zool.) was taken ½ mile north of the California-Nevada Monument, February 2, 1934 (Benson).

A male taken in April and two in June weighed 285.9, 221.5 and 264 grams, respectively. Females, one in May and two in June, weighed 307.2, 269.5, and 294.0 grams, respectively. Three nestlings, from the same nest in June, weighed 262.5, 300, and 302.2 grams.

Asio flammeus flammeus (Pontoppidan)

SHORT-EARED OWL

Members of the Death Valley Expedition saw several short-eared owls early in March, 1891, at Ash Meadows, Nye County (Fisher, 1893, p. 42). Ellis (1935, p. 86) reported specimens in his collection as follows. Male (no. 6804) from west side of Ruby Lake, 3 miles north of Elko County line, October 14, 1929; male (no. 6805) from west side of Ruby Mountains, 4 miles north of Lee, Elko County, October 24, 1929; male (no. 5105) from north end of Ruby Lake, June 27, 1928.

Cryptoglaux acadica acadica (Gmelin)

SAW-WHET OWL

On September 24, 1868, an adult female saw-whet owl was obtained at Thousand Spring Valley, Elko County, by Ridgway (1877, p. 572). The bird was found asleep and captured alive as it perched on the edge of an old robin's nest, in a dense willow thicket. The skin was sent to Madison University in 1869.

Two specimens were obtained, June 18, 1928, in Kyle Cañon, Charleston Mountains, Clark County (van Rossem, MS).

Phalaenoptilus nuttallii nuttallii (Audubon)

NUTTALL POOR-WILL

Summer resident; common over most of the state, even to the extreme southern portion. Records show presence at the following places.

Washoe County: Deephole, 4000 feet; Sutcliffe Station; Truckee Reservation; Galena Creek, 7000 feet.

Ormsby County: Carson City.

Humboldt County: Badger; Big Creek Ranch, Pine Forest Mountains; Quinn River Crossing; Golconda; 16 miles north of Paradise Valley; Cottonwood Range.

Elko County: 25 miles north of Elko; 20 miles south of Owyhee; Jarbidge Mountains; Upper Humboldt Valley; East Humboldt Mountains; Hastings Pass, Ruby Mountains.

Churchill County: Mountain Well; Stillwater.

Lander County: Big Creek, Birch Creek, and Kingston Creek, Toyabe Mountains.

Eureka County: Eureka.

White Pine County: Newark Valley; Cottonwood Creek, 6400 feet, 6 miles southwest of Illipah; Gleason Creek, 8000 feet; 5½ miles southeast of Ely, 6500 feet; Spring Valley, 6100 feet, 2 miles west of Osceola; Willard Creek, 7200 feet; Snake Mountains; Baker Creek, 6200 and 8000 feet; 3 miles east of Baker.

Mineral County: 2 miles southwest of Pine Grove, 7250 feet.

Esmeralda County: Chiatovich Creek, 7000 and 8200 feet, White Mountains; Arlemont; Fish Lake; Pigeon Spring, 6400 feet; Lida, 6100 feet; Indian Spring, Mount Magruder; Gold Mountain.

Nye County: Mohawk R. S., Wisconsin Creek, Pablo Cañon, Peavine Creek, South Twin River, Toyabe Mountains; 5 miles southeast of Millett P.O., Smoky Valley; San Antonio, 5400 feet; 30 miles north of Belmont; northwest base of Timber Mountain, 4200 feet; south end of Belted Range, 7200 feet, 5½ miles northwest of Whiterock Spring; Scofield Cañon; 8½ miles east of Cliff Spring; Amargosa River, 3400 feet; Ash Meadows.

Lincoln County: Springer Spring, Irish Mountain; 9 miles west of Groom Baldy, 5500 feet; southwest base of Groom Baldy, 7200 feet; Sheep Spring, Juniper Mountains; Pahrnagat Valley.

Clark County: Vegas Ranch; 5 miles north of Searchlight; Colorado River, opposite Fort Mojave.

Chordeiles minor hesperis Grinnell

PACIFIC NIGHTHAWK

Summer resident; most numerous in the high valleys and flats in the northern part of the state.

Specimens in Mus. Vert. Zool. come from the following localities. Washoe County: Little High Rock Cañon, 5000 feet (no. 40902), June 8, 1920; 32 miles east of Reno (no. 63300), August 25, 1933. Humboldt County: Virgin Valley (nos. 9308-09), June 13, 1909, and Big Creek Ranch at the base of Pine Forest Mountains (no. 9160), June 16, 1909. White Pine County: Lehman Creek, 7200 feet (skel., no. 54323), June 7, 1929; Baker Creek, 8000 feet (nos. 57912-15), July 27, 1930. Mineral County: East Walker River, 2 miles northwest of Morgan's Ranch (no. 65212), July 19, 1934; 2 miles southwest of Pine Grove, 7250 feet (nos. 65210-11), June 28 and 30, 1934. Esmeralda County: Fish Lake, 4800 feet (nos. 53657-59), June 7 and 9, 1928. Nye County: Millett P.O., 5500 feet (nos. 61245-46), August 18, 1932; 5 miles southeast of Millett P.O., 5500 feet, Smoky Valley (no. 60927), June 8, 1932; Garden Valley, 8½ miles northeast of Sharp (no. 61070), June 7, 1932.

Ridgway (1877, p. 569) collected an adult male, August 4, 1867, in Truckee Valley, Washoe County, and two adult males, August 4, 1868, in the East Humboldt Mountains, Elko County. He found an egg, July 17, 1868, at the same locality.

Specimens were listed from the following additional localities by Oberholser (1914, p. 46): Pyramid Lake, Washoe County, June 23, 1893 (no. 140397, U.S.N.M.), and July 3, 1903; Carson City, Ormsby County, June 14, 1881 (no. 105467, U.S.N.M.). Gardnerville, Douglas County, July 13, 1898.

Other places where nighthawks, presumably of this species, have been seen, but no specimens taken are as follows: Incline, at the north end of Lake Tahoe, Washoe County, June 12, 1931 (Linsdale, MS); noted flying over tule fields at Washoe Lake, by Hanford (1903, p. 51); very abundant at Elko, Elko County, August 9 to 14, 1872 (Nelson, 1875, p. 350); common in the Humboldt Valley, Humboldt County (Hanna, 1904, p. 77); found south of Eureka, on the northern slopes of Prospect Hill (Hoffman, 1881, p. 238); seen by members of the Death Valley Expedition on Mount Magruder, Esmeralda County, June 4 to 8, 1891, and in Pahranaagat Valley, Lincoln County, May 22 to 26 (Fisher, 1893, p. 53).

Henshaw (1877, p. 1310) noted that this species was numerous in the valleys near Carson City, but that all had disappeared by the last of August.

Weights of seven males, by months, were as follows: June, 60.5; July, 58.8, 59.0, 60.8, 64.1, 66.6; August, 65 grams. Three females, collected in June, July and August weighed 71.9, 70, and 71.4 grams, respectively.

Chordeiles acutipennis texensis Lawrence

TEXAS NIGHTHAWK

Summer resident in southern part of state. A specimen in Mus. Vert. Zool. a male (no. 53660) was obtained at Fish Lake, 4800 feet, Fish Lake Valley, Esmeralda County, on June 9, 1928 (Hall). Members of the Death Valley Expedition, in 1891, found this species in Oasis Valley and Ash Meadows, both in Nye County. Another specimen, a male (no. 61069, Mus. Vert. Zool.), was shot, May 17, 1932, at Crystal Spring, 4000 feet, Pahranaagat Valley, Lincoln County (Boyers). Weights of the two males listed above were 51.1 and 56.5 grams, respectively. A specimen, male (no. 63477, Mus. Vert. Zool.) from 2½ miles west of Devil's Hole, 2173 feet, Ash Meadows, Nye County, was taken May 17, 1933; it weighed 41.5 grams (Russell). Two specimens in Mus. Vert. Zool. (nos. 64645-46) were taken May 9, 1934, on the Colorado Rover opposite Fort Mojave, in Clark County.

Nephoecetes niger borealis (Kennerly)

BLACK SWIFT

Black swifts have been reported from two localities in western Nevada, by Ridgway (1877, p. 565). On May 31, 1868, he found the wings, tail, feet and sternum of one (no. 53274, U.S.N.M.) where they had been left by a hawk or owl on a log in the woods at Truckee Reservation near Pyramid Lake. On June 23, 1868, this species was observed abundantly in Carson River valley, 7 miles above Fort Churchill, Lyon County.

Chaetura vauxi (Townsend)

VAUX SWIFT

Concerning this species Ridgway (1877, p. 566) wrote: "During our sojourn at the Truckee Reservation, near Pyramid Lake, in May and June, 1868, we saw, nearly every evening, but never

until after sundown, quite a number of small swifts which must have been this species; but they always flew at so great a height that we found it impossible to obtain a specimen in order to determine the species."

On May 18, 1933, at 10 a.m., a migrating Vaux swift was seen in flight over a pond in Smoky Valley, 5 miles southeast of Millett P.O., Nye County. A good view of the bird was obtained as it circled low over the water and within twenty feet of the observers (Linsdale and Compton, MS). Two individuals were constantly about the house at Peavine Ranch, Toyabe Mountains, Nye County, May 31 to June 2, 1898 (Oberholser and Bailey, MS). The same observers saw one Vaux swift on the mesa near Eureka in early June, 1898.

A specimen in the Dickey collection (male, no. 27520) was taken on June 10, 1929, by Sheldon at Pahrump Ranch, Nye County. It was a single bird feeding at dusk with violet-green swallows and bats.

A female (no. 64647, Mus. Vert. Zool.) was obtained, May 5, 1934, from 5 miles north of Searchlight, Clark County (Linsdale).

Aëronautes saxatalis saxatalis (Woodhouse)

WHITE-THROATED SWIFT

Summer resident and transient; common.

In northern Washoe County, white-throated swifts were noted in the summer of 1909, about cliffs of Little High Rock Cañon (Taylor, 1912, p. 370). Noted 5 miles north of Paradise Valley, Humboldt County, May 30, 1935 (A. H. Miller, MS). Ridgway (1877, p. 565) reported the capture of three adults (nos. 53276-77, 84233, U.S.N.M.) July 13 and 20, 1868, in the East Humboldt Mountains, Elko County. A female was obtained, May 12, 1935, by W. B. Davis, six miles east of Carlin, Elko County.

In the center of the state this swift is a common summer resident in the Toyabe Mountains. Nesting colonies were found at many localities in the mountains. The birds foraged over the meadows and ridges at all altitudes and out over the adjacent broad valleys. Specimens in Mus. Vert. Zool. from this region are as follows: A male (no. 57360) from 5 miles southeast of Millett P.O., 5500 feet, Smoky Valley, Nye County, June 2, 1930; two females (nos. 57361-62) from Birch Creek, 7000 feet, Lander County, June 21 and 23, 1930.

Several individuals were observed, July 28, 1930, on the eastern side of Spring Valley, White Pine County (Hall, MS).

Recent sight records for Esmeralda County are of twelve or more individuals noted on June 1, 1928, at 7 miles north of Arlemont and two at Arlemont, May 21, 1927; several at Cave Spring on June 15, and 1 mile northeast of there on June 20 (Hall, MS).

Members of the Death Valley Expedition noted the white-throated swift in 1891, at Pahroc Spring, May 22; Ash Meadows, May 30; Oasis Valley and Amargosa Desert, June 1 (Fisher, 1893, p. 55).

During the summer of 1931, this bird was noted in Lincoln County, at 6900 feet on the eastern slope of Irish Mountain, five seen on June 9; 21 miles south of Caliente in Meadow Valley, 3200 feet, June 16; 7 miles south of Caliente in Meadow Valley, 4000 feet, numerous on June 17 (Orr, MS).

Hoffman (1881, p. 237) in reporting on his travels in 1871, wrote that this species was "rather common in the more elevated regions, building in and about the fissures and projections of cliffs; was noticed again in the upper portion of the Black Cañon of the Colorado Valley, in September."

A male and two females, collected in June, weighed 40.9, 34.1, and 35.0 grams, respectively.

Archilochus alexandri (Bourcier and Mulsant)

BLACK-CHINNED HUMMINGBIRD

Summer resident; at least three definite stations in western Nevada. On June 1, 1868, an adult male (no. 53268, U.S.N.M.) and a nest containing two eggs were collected on the Truckee Reservation, near Pyramid Lake (Ridgway, 1877, p. 559). Exactly sixty years later, June 1, 1928, Hall picked up the dried dead bodies of two black-chinned hummingbirds (nos. 53661-62, Mus. Vert. Zool.) on the Chiatovich Ranch, Fish Lake Valley, Esmeralda County. Streater took a male (no. 140267, U.S.N.M.) on May 2, 1896, at Pyramid Lake.

On May 8, 1934, a male was shot, but not preserved on the Colorado River opposite Fort Mojave, in Clark County (Linsdale, MS).

Calypte costae (Bourcier)

COSTA HUMMINGBIRD

Present in summer in southern half of the state. Possibly stays through the winter in Colorado River Valley.

Two specimens (nos. 53663-64) in Mus. Vert. Zool. were taken on June 18 and 19, 1928 at Cave Spring, 6200 feet, Esmeralda County (Hall). The farthest north record is of a male seen on June 19, 1930, in Kingston Cañon, 7100 feet, Toyabe Mountains, Lander County (A. H. Miller, MS).

The Death Valley Expedition in 1891, provided several records for this hummingbird (Fisher, 1893, p. 56). Specimens were obtained at Charleston Mountains, Clark County, April 30 (no. 140283, U.S.N.M.); Panaca, Lincoln County, May 19 (no. 140284, U.S.N.M.); Ash Meadows, Nye County, May 30 (no. 142255, U.S.N.M.). Nests were found on May 3, with two full-fledged young, in Vegas Wash, on May 4, with two fresh eggs, at the Bend of the Colorado River, on May 5, with two fresh eggs, at Bitter Spring in Muddy Mountains. Other records of observation were Vegas Wash (March 10), Grapevine Mountains and Oasis Valley (March), Pahranaagat Valley (May 22 to 25) and Mount Magruder (com. on June 4 to 8).

On June 1, 1932, a specimen (no. 61071, Mus. Vert. Zool.) was obtained 8½ miles east of Cliff Spring, 6000 feet, Nye County (Harville).

In Clark County, two males (nos. 64074-75, Mus. Vert. Zool.) were shot, February 13, 1934, 7 miles south of Dead Mountain, 2700 feet, and on the Colorado River, 500 feet, ½ mile north of California-Nevada Monument.

Selasphorus platycercus platycercus (Swainson)

BROAD-TAILED HUMMINGBIRD

Summer resident; mainly along the streams in the mountains. Has been found in most of the ranges where field work has been done except the Sierra Nevada.

Specimens in Mus. Vert. Zool. indicate the widespread occurrence of this hummingbird in the state as follows. Near head of Big Creek, Pine Forest Mountains, Humboldt County, a male (no. 9082) July 1, 1909, also noted in the same mountain range on May 18 and 20, at Big Creek Ranch, and at Leonard Creek Ranch (Taylor, 1912, p. 370). A specimen in alcohol (no. 57102) was taken, July 19, 1929, between Copper and Coon creeks, Jarbidge Mountains, Elko County. A female (no. 67513, Mus. Vert. Zool.) was taken, July 24, 1935, 6 miles southwest of Mountain City, Elko County. In White Pine County, a specimen (no. 54324) was taken at Baker Creek, 9000 feet, on June 18, 1929, and another (no. 54325) at Stella Lake, 10,750 feet, Snake Mountains, on July 6, 1929.

In the center of the state there are specimens from the Toyabe Mountains, taken at Birch Creek and Kingston Creek, Lander County and from Wisconsin Creek, Ophir Creek, and South Twin River, Nye County. From 1 mile east of Jefferson, 7600 feet, Toquima Mountains, a male (no. 63556) was taken, July 1, 1933. Farther south in Nye County, 3 miles north of Indian Spring, 6700 feet, a female (no. 58457) was collected, May 6, 1931. One (no. 63557) was shot, July 16, 1933, in Greenmonster Cañon, 8200 feet, Monitor Mountains (Hall). One (no. 65213) was taken, July 22, 1934, at Smiths Creek, 7100 feet, Lander County.

Esmeralda County is represented by specimens (nos. 51102-03) from Chiatovich Creek, 8200 feet, in the White Mountains, May 15 and 16, 1927, and one (no. 53665) from Cave Spring, 6200 feet, in the Silver Peak Range, June 16, 1928.

Records for Clark County are of several individuals seen and an adult male shot, May 19, 1891 (no. 140316, U.S.N.M.), at Sheep Spring in the Juniper Mountains (Fisher, 1893, p. 58), and of frequent observation of the species in aspen, and yellow pine belts on the Charleston Mountains (Jaeger, 1927, p. 4).

Ridgway (1877, p. 560) found this species in company with the calliope hummingbird and abundant in July and August, 1868 (latest date, September 7, 1868), on the Ruby Mountains, Elko County. He took a specimen (no. 84127, U.S.N.M.) on August 29, 1868, in Ruby Valley. In one day it was noted at altitudes of 6000 feet and 12,000 feet. He saw western kingbird, black-headed grosbeak, and sharp-shinned hawk chased from the vicinity of the nest of the hummer. Nests were in scrub oaks on the sides of hills, in willows or bushes bordering streams, or on drooping twigs of cottonwoods along the water courses.

Near Chiatovich Creek, 8200 feet, White Mountains, Esmeralda County, two nests of this hummingbird were found in the spring of 1927 (Linsdale, MS). The first, found on May 16, was under construction by a female. The site was five feet above the water of the creek, on a twig of a fallen aspen which lay across the stream. Material was brought at intervals of about one and a

half minutes. Then, perching in the nest the bird, each time, shifted her body to give the nest form and at the same time added material to the outside with her bill. Even when adding matter to the rim the bird remained sitting and stretched her neck upward so as to reach the desired location. Each time at the nest the bird faced in a different direction. After three trips it perched on a nearby rose branch to rest. This nest held a single egg on May 19.

The second nest was found on May 17, in a birch at the top of the bank of Davis Creek. This one was on a horizontal twig, directly beneath a larger branch three inches in diameter and leaning at a 45° angle. The tree was not yet in leaf. Attention was directed to the nest by the female which flew to it and settled, and then uttered several call notes. When the observer, thirty feet away, made a move, the bird left the nest and moved toward him, flying almost sideways and moving about a foot, then poising in the air to watch, still with its side toward the person. When the tree was climbed the bird returned to the nest and would not leave until it was almost touched. Then it moved away only a few inches and returned immediately. The nest, with walls only about an inch high, was made of grayish material and coated on the outside with small pieces of outer birch bark. It contained two eggs.

Selasphorus rufus (Gmelin)

RUFIOUS HUMMINGBIRD

Transient; records only in fall or late summer, but doubtless present also in spring.

Ridgway (1877, p. 559) found great numbers of this hummingbird among sunflowers in August. He listed two specimens, both males, one from Truckee Reservation, August 6, 1867, and one (no. 53270, U.S.N.M.) from the East Humboldt Mountains, Elko County, September 8, 1868. Henshaw took a specimen (no. 72513, U.S.N.M.) on September 22, 1876, at Lake Tahoe, Nevada. An immature specimen (no. 9301, Mus. Vert. Zool.) was taken July 21, 1909, by A. J. Heindl, at Soldiers Meadows, Humboldt County. On September 6, 1934, a female (no. 65789, Mus. Vert. Zool.) was captured at Martin Creek R. S., 7000 feet, Santa Rosa Mountains, Humboldt County. Two others in the Museum, female and male (nos. 57916-17) were taken, August 30, 1930, by Lamb, on Willard Creek at 7200 feet, Snake Mountains, White Pine County. A male (no. 65214, Mus. Vert. Zool.) was taken on June 29, 1934, at 5 miles southwest of Pine Grove, 7250 feet, Mineral County. This represents the earliest date of capture on the southern migration so far recorded for Nevada.

Stellula calliope (Gould)

CALLIOPE HUMMINGBIRD

Summer resident and transient. Found in summer about meadows in the higher mountain ranges.

Two males were observed, June 13, 1931, in thickets in a meadow near Incline, at the north end of Lake Tahoe, in Washoe County. Another was seen, June 14, on top of a dead willow near a creek in that vicinity (Linsdale, MS). A male (no. 142260, U.S.N.M.) was taken on May 31, 1889, by Keeler at Glenbrook, Douglas County. In Humboldt County, at Martin Creek R. S., a male (no. 67097, Mus. Vert. Zool.) was obtained on June 4, 1935.

Ridgway (1877, p. 563) found this hummingbird abundant in August and September, 1868, between altitudes of 7500 and 10,000 feet in Elko County. Specimens obtained by him were an adult female (no. 53271, U.S.N.M.) on August 12, and a young male, August 29, in the Ruby Mountains, and an adult female, September 7, in Secret Valley, East Humboldt Mountains.

Hoffman (1881, p. 231) reported this species as noted at Prospect Hill, which is at latitude 39° 30' in Eureka County.

Two specimens in Mus. Vert. Zool. (males, nos. 57380-81) were obtained June 21 and 24, 1930, at Birch Creek, 7000 feet, Toyabe Mountains, Lander County (Lamb). During the latter part of May, 1933, many individuals were seen in Smoky Valley, 5 miles southeast of Millett P.O., 5500 feet, Nye County, and a female (no. 62884) was collected there on May 20 (Linsdale and Compton).

A male (no. 65215, Mus. Vert. Zool.) was obtained on June 29, 1934, from 2 miles southwest of Pine Grove, 7250 feet, Mineral County.

Megaceryle alcyon caurina (Grinnell)

BELTED KINGFISHER

Resident; found near the larger streams and, as a straggler, at other places in the state.

Ridgway (1877, p. 545) reported the capture of an adult male (no. 53284, U.S.N.M.) November 18, 1867, at Truckee Meadows, Washoe County. An immature male was taken, July 23, 1924, at Sutcliffe, Pyramid Lake (Hall, MS). Near Carson City, Ormsby County, Henshaw (1877, p.

1310) observed the kingfisher to be "common on all the streams." In Humboldt Valley, Humboldt County, Hanna (1904, p. 76) reported the species not uncommon, and Taylor (1912, p. 367) recorded one seen in 1909, at Winnemucca. Nelson (1875, p. 351) found the kingfisher common, August 9 to 14, 1872, near Elko, and saw one perched over an air hole in the frozen Humboldt River on January 1, 1873.

In the Toyabe Mountains region in the central part of the state single kingfishers were recorded on August 30, 1931, at Birch Creek, 7000 feet (Linsdale, MS); May 16, 1932, at 5 miles southeast of Millett P. O., 5500 feet in Smoky Valley (Orr, MS), and May 21, 1932, near Peavine Creek Ranch at the southern end of the range (Linsdale, MS).

At Charleston Park, Charleston Mountains, Clark County, Jaeger (1927, p. 3) reported a kingfisher seen on June 17, 1926, at the C. W. Griffith place.

Biological Survey notes contain sight records of kingfishers at the following places. Washoe County: Wadsworth. Douglas County: Glenbrook. Humboldt County: Cottonwood Range; Winnemucca. Elko County: Owyhee River; Glaser's Ranch, Halleck; Huntington Valley. Pershing County: Lovelock. Churchill County: Fallon; 2 miles south of Mills Ranch; Stillwater. Lander County: Reese River, 30 miles south of Austin. Nye County: Moore's Creek, Smoky Valley; Jefferson Creek, Toquima Mountains.

A specimen in Mus. Vert. Zool., male (no. 65216) was collected on July 31, 1934, on the Truckee River, 1½ miles north of Wadsworth, Washoe County (Hall). Its wing length is 165.5 mm.

On September 16, 1934, a kingfisher was seen on the Salmon River at Riverside Park, and another near Contact, Elko County (Linsdale, MS).

Colaptes auratus borealis Ridgway

YELLOW-SHAFTED FLICKER

A yellow-shafted flicker was obtained on September 29, 1931, by Orr at Cliff Spring, 7000 feet, north end of the Belted Range, Nye County. It was a male, number 58920, in Mus. Vert. Zool.; weight 147 grams; wing 166 mm.; tail 117.4; tarsus 29; culmen 32.3. In coloration this specimen appears to be purely of the species *auratus*; it shows no trace of *cafer* characters. Its large size suggests that it belongs with the form *Colaptes auratus borealis* rather than *C. a. luteus*. Evidently, this individual was a transient from far to the north. The bird was shot as it clung to rocks, after it had been seen in flight among piñon pines.

Colaptes cafer collaris Vigors

RED-SHAFTED FLICKER

Resident; most abundant and most generally distributed kind of woodpecker in the state. Has been definitely recorded at the following localities.

Washoe County: Granite Springs; Smoke Creek; Pyramid P.O.; Nixon; Truckee Reservation; Truckee River, 3 miles south of Pyramid Lake; Washoe Valley; Wadsworth.

Ormsby County: Carson City.

Douglas County: Glenbrook.

Lyon County: 1½ miles east of Dayton; 10½ miles south of Yerington.

Humboldt County: Badger; Quinn River Crossing; Head of Big Creek; Alder Creek; Pine Forest Mountain; Big Creek; Martin Creek R. S., Santa Rosa Mountains (Cottonwood Range); Golconda; Iron Point.

Elko County: Bear Creek, Jarbidge Mountains; Elko; Hastings Pass, Ruby Mountains; Ruby Valley; Huntington Valley.

Pershing County: West Humboldt Mountains; Lovelock.

Churchill County: Eastgate; Fallon.

Lander County: Battle Mountains; Big Creek, Birch Creek, 3 miles north of Kingston R. S., Mahogany Cañon, Kingston Creek, 6000 feet, Toyabe Mountains.

Eureka County: Eureka.

White Pine County: Lehman Creek, 8500 feet, east side Wheeler Peak; Stella Lake, 10,750 feet, Snake Mountains; Cleveland Ranch, 6000 feet, Spring Valley; Gleason Creek, 7500 feet, 14 miles northwest of Ely; Cherry Creek, 6800 feet; Shoshone; Shell Creek Range.

Mineral County: Queen Mine, White Mountains.

Esmeralda County: Chiatovich Creek, 8200 feet, White Mountains; Arlemont; Mount Magruder; two miles south of Piper Peak, 7700 feet, Silver Peak Range.

Nye County: Cliff Spring, 7000 feet, north end of Belted Range; Ash Meadows; Breen Creek, 7000 feet, Kawich Range; south end Belted Range, 5½ miles northwest of Whiterock Spring, 7200 feet; 5 miles southeast of Millett P.O., Smoky Valley, 5500 feet; South Twin River, 6500

feet; Ophir Creek, 6500 feet; Wisconsin Creek, 7800 feet, 8000 feet, and 8300 feet; Mohawk R. S.; Last Chance Cañon; Arc Dome; Peavine Creek; Manhattan; Grapevine Mountains; Monitor Mountains.

Lincoln County: Irish Mountain, 8000 feet (top); Pahrnagat Lake.

Clark County: Charleston Mountains; Pahrump Valley; Vegas Valley; Saint Thomas; Colorado River, 13 miles east of Searchlight; Colorado River, ½ mile north of California-Nevada Monument.

Centurus uropygialis uropygialis Baird

GILA WOODPECKER

This woodpecker was noted as common in the timbered bottom lands of the Colorado River in the extreme southern tip of the state by Hollister (1908, p. 458). On December 29, 1932, a male (no. 62619, Mus. Vert. Zool.) was taken in Clark County, opposite Fort Mojave, by A. H. Miller. Ten specimens (nos. 64083-92, Mus. Vert. Zool.) were collected in January and February, 1934, in the same neighborhood.

Balanosphyra formicivora bairdi (Ridgway)

CALIFORNIA WOODPECKER

A single specimen taken September 18, 1930, in the Hidden Forest, Sheep Mountains, Clark County, has been identified by van Rossem (MS) as of this race. So far as I know, his is the only record of the bird for the state.

Asyndesmus lewis Gray

LEWIS WOODPECKER

At Glenbrook, Douglas County, this was the commonest nesting woodpecker, May 28 to June 8, 1889 (Keeler, MS). In the afternoon of May 15, 1933, near Verdi, Washoe County, one was seen in flight and then perched on a telephone pole in a yard close to a house (Linsdale, MS). Streater (MS) saw Lewis woodpeckers in October, 1896, on the Carson River, in May, 1896, at Deephole, Washoe County, and in September, 1896, on the Pine Forest Mountains, Humboldt County. One was seen in early May, 1898, 3 miles east of Stillwater, Churchill County (Oberholser and Bailey, MS).

Two specimens were reported by Ridgway (1877, p. 554); an adult male (no. 53255, U.S.N.M.) from Upper Humboldt Valley, Elko County, September 12, 1868, and an adult male (no. 84360, U. S. N. M.) from Carson City, Ormsby County, April 29, 1868. The same observer noted a few individuals in the lower cañons of the East Humboldt Mountains.

On Peavine Creek, at the southern end of the Toyabe Mountains, Nye County, Holt (MS) saw individuals on May 23 and 24, 1915, about fence posts on the Seyler and Picardo ranches. A more recent record is of one seen on May 16, 1930, 6 miles southeast of Millett P.O., Nye County (Linsdale, MS).

In September, 1934, several Lewis woodpeckers were seen on the 25th at Hiko, Lincoln County, and on the next day one at Springer Spring on Irish Mountain, in the same county. Others were seen and a specimen (no. 65790, Mus. Vert. Zool.) was taken on the 29th near Beatty, Nye County.

Sphyrapicus varius nuchalis Baird

RED-NAPED SAPSUCKER

Scattered record stations show that this sapsucker lives in small numbers in the higher mountains of the state. In winter it is found in the lower valleys. Specimens have been taken as follows.

Ormsby County: Eastern slope of the Sierra Nevada near Carson City, female (no. 53248, U.S.N.M., only one seen), April 4, 1868 (Ridgway, 1877, p. 549).

Humboldt County: Martin Creek R. S., male and female (nos. 67098-99, Mus. Vert. Zool.), June 3, 1935.

Elko County: 6 miles southwest of Mountain City (no. 67514, Mus. Vert. Zool.), July 25, 1935; Thousand Spring Valley, male, September 23, 1868; Upper Humboldt Valley, female (no. 53249, U.S.N.M.), September 18, 1868 (Ridgway, *ibid.*).

Lander County: Smiths Creek, 7100 feet, pair and two young (nos. 65219-22, Mus. Vert. Zool.), July 22, 1934.

White Pine County: Cleve Creek, 8800 feet, male, no. 57920, wt. 44.4 grams, August 5, 1930; Lehman Creek, 9200 feet, two skeletons, nos. 54320-21, June 19, 1929, and six skins (nos. 64648-53),

May 13, 15, and 17, 1934 (Mus. Vert. Zool.); Baker Creek, 8500 feet, male and female (nos. 65791-92, Mus. Vert. Zool.), September 21, 1934.

Nye County: Breen Creek, 7000 feet, Kawich Range, male no. 58921, wt. 41.2 grams, September 24, 1931, (Mus. Vert. Zool.).

Clark County: West slope of mountains northwest of Charleston Peak, male (no. 142311, U.S.N.M.), February 1, 1891 (Fisher, 1893, p. 48); opposite Fort Mojave, two seen and one obtained for a specimen on December 29, 1932 (L. H. Miller, MS); Colorado River, 13 miles east of Searchlight, two males (nos. 64093-94, Mus. Vert. Zool.), January 9 and 12, 1934, and ½ mile north of California-Nevada Monument, male (no. 64095, Mus. Vert. Zool.), February 2, 1934.

Sphyrapicus varius daggetti Grinnell

RED-BREADED SAPSUCKER

A female (no. 142312, U.S.N.M.) taken at Glenbrook, on Lake Tahoe, June 1, 1889, by Keeler, represents this race in Nevada. Feathers on the breast in this specimen have black subterminal bands. Keeler (MS) reported the species to be rather uncommon in this locality in 1889. Walter Bliss took a set of four fresh eggs on June 1, the only time he had ever known the bird to breed there. Two pairs were observed among the pine trees on June 2, and a few after that time. One was seen on June 6, pecking at the roof of an old deserted hotel. An immature female (no. 80475, U.S.N.M.) was taken at Lake Tahoe, Nevada, by Henshaw. On May 1, 1934, two females (nos. 64654-55, Mus. Vert. Zool.) were obtained on Galena Creek, 7000 feet, Washoe County.

Sphyrapicus thyroideus thyroideus (Cassin)

WILLIAMSON SAPSUCKER

Inhabitant of the pine-covered eastern slopes of the Sierra Nevada along the western margin of the state. Ridgway records (1877, p. 552) the collecting of a male and female (nos. 84317, 53252, U.S.N.M.) on November 27, 1867, and a female (no. 84318, U.S.N.M.) on March 10, 1868, from the pines of the Sierra Nevada near and west of Carson City. On September 21, 1876, Henshaw took an adult male (no. 79772, U.S.N.M.) at Lake Tahoe, Nevada. A male and female (nos. 64656-57, Mus. Vert. Zool.) were taken, May 22, 1934, 6 miles north of Incline, 9000 feet, Washoe County.

Sphyrapicus thyroideus nataliae (Malherbe)

NATALIE SAPSUCKER

Resident on higher peaks of southern portion of the state; observed and one taken among yellow-pines on Irish Mountain, in Silver Cañon Mountains, central Lincoln County.

The single specimen in Mus. Vert. Zool. from Nevada, a male, number 58458, was taken June 11, 1931, by Orr, at the top of Irish Mountain, 8000 feet, Lincoln County. It weighed 50 grams, and measured as follows: wing, 133.3 mm., tail, 81.6, culmen, 23.1; tarsus, 21.2, outer toe, 14.2. Comparison of these measurements with the ones given by Ridgway (1914, p. 287) and of the skin with California-taken ones shows that it belongs with the smaller Rocky Mountain birds considered by Swarth (1917, p. 62) as a separate race. This station extends the known range of the race considerably to the northwest.

In Clark County, van Rossem (MS) obtained two specimens from Hidden Forest, 8500 feet, Sheep Mountains, September 17, 1930, and one from Lee Cañon, 9000 feet, Charleston Mountains, July 15, 1932.

Dryobates villosus orius Oberholser

MODOC WOODPECKER

Resident on the mountain ranges and along wooded streams in northwestern part of the state, south and east as far at least as Monitor Mountains. Specimens in Mus. Vert. Zool. come from the following localities.

Washoe County: Pyramid Lake, 2 miles north of Nixon (nos. 47144-45), July 7, 1926, ½ mile north of Wadsworth, 4100 feet (no. 65227), August 1, 1934; Galena Creek, 7000 and 7500 feet (nos. 61247-48, 64661), August 9, 1932, May 1, 1934; 6 miles north of Incline, 9500 feet (no. 64662) May 22, 1934.

Humboldt County: Duffer Peak (nos. 67100-03), June 5 and 6, 1935.

Lander County: Birch Creek, 7500 and 8000 feet, Toyabe Mountains (nos. 57385-87, 58532), June 23 and 24, 1930, September 2, 1931; Kingston Creek, 7000 to 10,000 feet, Toyabe Mountains (nos. 57384, 58533-34), June 14, 1930, September 5 and 6, 1931.

Mineral County: 3 miles south of Schurz, 4100 feet (nos. 65223-26), July 8 and 9, 1934.

Nye County: South Twin River, 6500 feet, Toyabe Mountains (no. 57383), April 30, 1930; north slope Toquima Mountain, 9600 feet (nos. 63558-59), July 2, 1933; Greenmonster Cañon, 7500 feet, Monitor Mountains (nos. 63560-61), July 12 and 17, 1933.

Ridgway (1877, p. 545) listed specimens (nos. 53236-37, U.S.N.M.) taken December 19 and 25, 1867, at Truckee Reservation, Washoe County and one (no. 53239, U.S.N.M.) on March 10, 1868, from Carson City, Ormsby County. Other specimens were listed by Oberholser (1911, p. 611) from Glenbrook, Douglas County (no. 140693, U.S.N.M.), and Arc Dome, Toyabe Mountains, Nye County.

Dryobates villosus monticola Anthony

ROCKY MOUNTAIN HAIRY WOODPECKER

Resident in the northeastern corner of the state. Six specimens (nos. 65794-99, Mus. Vert. Zool.) were obtained, September 12, 13, and 14, 1934, on Bear Creek, 8000 feet, Jarbidge Mountains, Elko County. A male weighed 74 grams; the three females 55, 64.5, and 66 grams. Wing lengths of the three males are 136.0, 133.5, and 132.1 mm., of the three females 132.5, 127.9, and 127.7 mm. Two more (nos. 67515-16, Mus. Vert. Zool.) came from 6 miles southwest of Mountain City, Elko County, July 3, 1935. Wing length in the adult male is 137.8 mm., of the young one, 133.7 mm.

Dryobates villosus leucothorectis Oberholser

WHITE-BREASTED WOODPECKER

Resident in the southern part of the state, where restricted to the higher mountain ranges.

In White Pine County a male (no. 65793, Mus. Vert. Zool.) was taken, September 19, 1934, on Baker Creek, 7500 feet, and three females (nos. 64658-60), May 15 and 17, 1934, on Lehman Creek, 7500 to 9000 feet, both localities in the Snake Mountains.

A specimen (female, no. 51098, Mus. Vert. Zool.) was obtained, May 17, 1927, on Chiatovich Creek, 8200 feet, White Mountains, Esmeralda County. It weighed 64.6 grams. Wing length was 128.7 mm. and length of culmen, 29.3 mm.

A female (no. 63562, Mus. Vert. Zool.), taken July 30, 1933, came from Burned Corral Cañon, 7300 feet, Quinn Cañon Mountains.

In Lincoln County, a young male (no. 63660, Mus. Vert. Zool.) was obtained, August 7, 1933, ¼ mile west of the Utah-Nevada boundary at latitude 38° 17', 7300 feet. A female (no. 260104, U.S.N.M.) was taken, July 2, 1915, at Charleston Peak, by L. J. Goldman.

An adult male, in September, weighed 65.5 grams. Three females, in May, weighed 58, 60, and 64.6 grams; one, in July, 57 grams.

Dryobates pubescens leucurus (Hartlaub)

ROCKY MOUNTAIN DOWNY WOODPECKER

Resident in northern and eastern portions of the state. Presence of this species in the state was established by Ridgway (1877, p. 546) who took two adult males, on September 12 (no. 53241, U.S.N.M.) and 17, 1868, on Deering's Creek, Upper Humboldt Valley, Elko County. The second specimen was sent on June 9, 1870, from the National Museum to H. B. Tristram of England. At Duffer Peak, 8400 feet, Pine Forest Mountains, Humboldt County, a male (no. 67109, Mus. Vert. Zool.) was obtained on June 7, 1935. On September 7, 1934, and June 1 to 6, 1935, six specimens (nos. 65800, 67104-08, Mus. Vert. Zool.) were taken near Martin Creek R. S., 7000 feet, Santa Rosa Mountains, Humboldt County. A male (no. 64663, Mus. Vert. Zool.) came from Lehman Creek, 9000 feet, Snake Mountains, White Pine County, May 15, 1934. Each of the last two weighed 25 grams. Weights of four males and two females in early June were 25.5, 26.0, 27.5, 28.5, 23.6, and 26.4 grams.

Dryobates pubescens turati (Malherbe)

WILLOW WOODPECKER

Resident in central-western portion of the state. Present regularly, but in small numbers, in the trees along the Truckee, Carson, and Walker rivers. This seems to be a small colony isolated from the main range of the race in California. A larger series might show differences in character from typical *turati*.

A. Johnson (MS) reports the downy woodpecker to be rather common in the vicinity of Carson City, Ormsby County. Specimens in Mus. Vert. Zool. came from Wadsworth, 4100 feet, Washoe County (no. 65233), July 30, 1934, and 10½ and 12 miles south of Yerington, on the West Walker River, Lyon County (nos. 65228-32), July 3, 5, and 6, 1934.

Dryobates scalaris cactophilus Oberholser

CACTUS WOODPECKER

Resident in the extreme southern end of the state, north to vicinity of Charleston Peak.

Mus. Vert. Zool. contains skin of female, number 58922, taken on October 1, 1931, by Lamb on the Virgin River, 1750 feet, $\frac{3}{4}$ mile east of Mesquite, Clark County. This bird was shot from the trunk of a small dead tree on the bank of an irrigation ditch. It weighed 30.7 grams. Merriam observed the species at Upper Cottonwood Springs at the east base of the Charleston Mountains, April 30, 1891, and at Vegas Wash on May 2 (Fisher, 1893, p. 47). A specimen (no. 62620, Mus. Vert. Zool.) was obtained, December 29, 1932, opposite Fort Mojave near the Colorado River (A. H. Miller). Six specimens (nos. 64096-101, Mus. Vert. Zool.) from near the Colorado River 13 miles east of Searchlight and $\frac{1}{2}$ mile north of the California-Nevada line were taken in January, 1934.

Dryobates albolarvatus albolarvatus (Cassin)

WHITE-HEADED WOODPECKER

Resident in small numbers in the Sierra Nevada along the western margin of the state.

Ridgway (1877, p. 547) found the white-headed woodpecker to be common throughout the winter of 1867-68, in the mountains west of Carson City, Ormsby County. He took specimens (nos. 84283, 53245, 84282, U.S.N.M.) on March 10 and April 25, 1868. The birds kept entirely among the pines, though they sometimes came down to the lower edge of the woods. Henshaw collected a male (no. 72620, U.S.N.M.) on September 16, 1876, at Lake Tahoe, Nevada. Another (no. 142314, U.S.N.M.) was taken, May 28, 1889, by Keeler at Glenbrook, Douglas County.

Picoïdes arcticus (Swainson)

ARCTIC THREE-TOED WOODPECKER

Ridgway (1877, p. 548) obtained an adult female (no. 53247, U.S.N.M.), the only one of the species seen by him, in the pines of the Sierra Nevada, near Carson City, on February 19, 1868. The bird was hammering on the trunk of a dead pine tree near the foot of the mountains. Two males (nos. 72609 and 79769, U.S.N.M.) from Lake Tahoe were taken on August 27 and September 18, 1876.

Picoïdes tridactylus dorsalis Baird

ALPINE THREE-TOED WOODPECKER

Resident in the coniferous forest on the Snake Mountains, White Pine County. On May 17, 1934, a male (no. 64664, Mus. Vert. Zool.) was shot on Lehman Creek, 9000 feet, in that range. It weighed 58 grams. A male and female (nos. 65801-02, Mus. Vert. Zool.) were taken September 18, 1934, in the same vicinity. Weights were 54 and 55.5 grams, respectively.

Tyrannus tyrannus (Linnaeus)

KINGBIRD

An infrequent summer resident in the northern portion of the state. At Big Creek Ranch, Pine Forest Mountains, Humboldt County, two females (nos. 8607-08, Mus. Vert. Zool.) were obtained, June 8 and 9, 1909, by Taylor (1912, p. 371). Farther south in the same county, in the Humboldt Valley, Hanna (1904, p. 77) observed a few individuals in June, 1903. Donald D. McLean obtained an immature female on August 5, 1934, near Lovelock, Pershing County. Two or more pairs lived in large cottonwoods in the Truckee Valley when Ridgway (1877, p. 532) made observations there in 1867 and 1868. Another female (no. 65803, Mus. Vert. Zool.), taken September 6, 1934, came from Martin Creek R. S., 7000 feet, Santa Rosa Mountains, Humboldt County.

Tyrannus verticalis Say

ARKANSAS KINGBIRD

Summer resident; occurs mainly in the valleys and lower parts of the mountains. Places of known occurrence are as follows.

Washoe County: Deephole; Pyramid Lake; 4 miles west of Sutcliffe, Virginia Mountains; Granite Creek; Wadsworth.

Ormsby County: Carson City.

Humboldt County: Big Creek Ranch, 4350 feet; Alder Creek Ranch, 5000 feet; Wheeler Creek, 4300 feet; Virgin Valley; Quinn River Crossing, 4100 feet; Humboldt Valley; Badger; Golconda.

Elko County: Elko; Mountain City; Huntington Valley; Hastings Pass, Ruby Mountains; Halleck; Tuscarora.

Pershing County: Lovelock; Toulon.

Churchill County: 1½ miles north of Mountain Well, 6200 feet; Stillwater; Eastgate; Fallon.

Lander County: Austin; Birch Creek, 7000 feet; Kingston Creek, 6000 feet.

Esmeralda County: Chiatovich Creek, 7000 and 8200 feet, White Mountains; Arlemont; Smith Ranch, Fish Lake Valley; Gold Mountain.

Eureka County: Eureka.

White Pine County: Newark Valley.

Nye County: Millett P. O.; 5 miles southeast of Millett P. O.; South Twin River, 6500 feet; Peavine Ranch; Manhattan; Cloverdale; Indian Creek, Reese River Valley; Monitor Valley; Garden Valley, 8½ miles northeast of Sharp.

Lincoln County: Crystal Spring, 4000 feet, Pahrangat Valley; Meadow Valley, 7 and 21 miles south of Caliente.

Clark County: Yount's Ranch in Pahrump Valley; Indian Springs; Vegas Ranch; Vegas Valley; near Bunkerville; Bend of the Colorado River; Charleston Peak, Colorado River, opposite Fort Mojave.

This kingbird arrives rather late in the spring and leaves early in the fall. Dates of occurrence in spring are as follows: Deephole, Washoe County, May 12, 1929 (Hall, MS); Chiatovich Creek, 7000 feet, White Mountains, Esmeralda County, May 11, 1927 (Linsdale, MS); Millett P. O., 5500 feet, Nye County, April 28, 1930 (Linsdale, MS); Vegas Ranch, May 1, 1891, and Yount's Ranch in Pahrump Valley, Clark County, April 29, 1891 (Fisher, 1893, p. 60). According to Henshaw (1877, p. 1310) the birds in the neighborhood of Carson City, leave for the south in August, all being gone by the last of the month. A specimen from Birch Creek, 7000 feet, Lander County, August 31, 1931, represents a late occurrence in the Toyabe Mountains region. Van Rossem (MS) saw this species at Indian Springs, Clark County, as late as September 15, in 1930.

The Arkansas kingbird is usually abundant in the towns and about ranch buildings. Nests are usually in tall shade trees, but they may be in small trees or on such structures as fences, windmills, buildings, and one pair was reported (Hanna, 1904, p. 77) to have built a nest on top of a box car in Humboldt Valley. Taylor (1912, p. 372) reported for the Pine Forest Mountains area that a nest found on May 20 at Quinn River Crossing was completed and held five eggs on June 5. One found on June 14 on Wheeler Creek held five eggs, and one on July 17, at Alder Creek had young nearly ready to fly. In Smoky Valley, Nye County, a nest that was started around June 3, 1930, contained four eggs on June 26. It was on an old corral fence five miles southeast of Millett P. O. Another nest was started at this same place on June 6, 1932 (Linsdale, MS).

Weights of six males in May ranged from 35.0 to 39.5 grams, average 37.9. Two males in June weighed 42.7 and 51.9 grams. Weights of four females in May were 37.5, 39.8, 41, and 41.8, average 40.0 grams. An immature female on August 31, weighed 31.7 grams. These figures indicate a decided increase in weight with the beginning of the nesting season.

Myiarchus cinerascens cinerascens (Lawrence)

ASH-THROATED FLYCATCHER

Summer resident; common in southern part of the state, extending as far north as Pyramid Lake and the Ruby Mountains, but less frequent in the higher northern areas. Also present in winter along the Colorado River.

Specimens in Mus. Vert. Zool. come from the following localities: 2 miles north of Nixon, Pyramid Lake, Washoe County, a skin (no. 47146) obtained, July 7, 1926, by Hall; West Walker River, 10½ miles south of Yerington, Lyon County, female and male (nos. 65234-35), July 3 and 6, 1934; Arlemont, 4900 feet, Fish Lake Valley, Esmeralda County, a male (no. 51104) taken May 23, 1927; Smiths Creek, 7100 feet (no. 65236), July 22, 1934, Lander County; Big Creek, 6700 feet, Toyabe Mountains, Lander County, female and male immature (nos. 61249-50), August 16, 1932; 5 miles southeast Millett P. O., 5500 feet, Smoky Valley, Nye County, female (no. 60928), May 26, 1932; Hot Creek Range, 8 miles west of Tybo, 6700 feet, Nye County, male and female (nos. 63564-65), July 10, 1933; Garden Valley, 8½ miles northeast of Sharp, Nye County, male (no. 61084), June 5, 1932; Crystal Spring, 4000 feet, Pahrangat Valley, Lincoln County, two skins (nos. 61082-83), May 17 and 24, 1932; opposite Fort Mojave, 500 feet, Clark County (no. 62621), December 31, 1932, by A. H. Miller; 5 miles north of Searchlight, Clark County (no. 64666), May 6, 1934.

Two skins in the Dickey collection, a male and female (nos. K690-91), were taken June 22, 1922, by Mrs. May Canfield, at Indian Spring, Mount Magruder, Esmeralda County; a male (EX105) was obtained, April 8, 1917, between Searchlight and Las Vegas (van Rossem).

Ridgway (1877, p. 533) reported the capture, on July 24, 1867, of an adult male (no. 53285, U.S.N.M.) at Truckee Reservation, Washoe County. He found a few in July and August among

cottonwoods on the lower Truckee River. On May 12, 1925, a male (no. 298435, U.S.N.M.) was shot 4 miles west of Fallon (Hall). Another from Pyramid Lake (no. 139967, U.S.N.M.) was taken June 12, 1889. In the cañons of the Ruby Mountains, Elko County, Ridgway observed this summer resident most often "perched upon a gnarled cedar or mountain mahogany overhanging the top of a rocky gorge or high cliff."

Henshaw (1880, p. 309) listed this flycatcher as common in the foothills near Carson City, Ormsby County.

On June 16, 1898, Oberholser and Bailey (MS) found a nest near Hastings Pass, Ruby Mountains, on a slope which descends to Ruby Valley. It was in a natural cavity in the trunk of a living juniper and contained three eggs. The female (no. 159043, U.S.N.M.) was preserved.

In the southern part of the state the Death Valley Expedition found this species in 1891, as follows: Pahrump Valley, in tree yuccas, April 29; Bend of the Colorado River, May 4; near Bunkerville, May 8; west slope of Juniper Mountains, May 19; Pahrnanagat Valley, May 23; Timpanahute Mountains, May 26; Indian Spring Valley, among the yuccas, May 28; south side of Gold Mountain, June 3; Mount Magruder, common and breeding among nut pines, June 4 to 8 (Fisher, 1893, p. 61). Van Rossem (MS) in 1932, found two pairs nesting at Indian Springs, Clark County.

The species was common, May 23, 1931, along the Amargosa River 3½ miles northeast of Beatty, Nye County (Hall, MS).

Two males taken in May and one in June weighed 28.1, 37.2, and 32.2 grams, respectively. A May-taken female weighed 27.5 grams. A male and female, in July, weighed 29.1 and 28 grams, respectively.

Mus. Vert. Zool. contains four winter-taken skins from Clark County, a male (no. 64102) from the Colorado River east of Searchlight, January 10, 1934, and three males (nos. 64103-05) taken February 6, 7 and 13, 1934, on the Colorado River, ½ mile north of the California-Nevada Monument.

Sayornis nigricans semiatra (Vigors)

BLACK PHOEBE

Present at least in winter along the Colorado River on the southern border of the state. A specimen, female (no. 62623, Mus. Vert. Zool.) was taken, December 27, 1932, opposite Fort Mojave, Clark County, by Virginia D. Miller. Seven skins from that vicinity (nos. 64106-12, Mus. Vert. Zool.) were collected between January 28 and February 11, 1934. Observed, also, at Indian Springs, September 11, 1930, and Lee Cañon, 8700 feet, August 15 to 27, 1932, in Clark County (van Rossem, MS).

Sayornis saya saya (Bonaparte)

SAY PHOEBE

Summer resident; present in most of the valleys and on lower slopes of the mountains throughout the state. Winters in the extreme southern end of the state.

Definite records of occurrence represent the following places.

Washoe County: Little High Rock Cañon; Pyramid Lake; Smoke Creek.

Ormsby County: Carson City.

Humboldt County: Virgin Valley; Big Creek Ranch; Humboldt Valley; Martin Creek R. S., 7000 feet, Santa Rosa Mountains.

Elko County: Ruby Mountains; Goose Creek, 5000 feet.

Pershing County: West Humboldt Mountains; Lovelock.

Churchill County: Mountain Well, 5600 feet; Stillwater.

Lander County: Big Creek and Birch Creek, Toyabe Mountains.

Eureka County: Eureka.

White Pine County: 3 miles east of Baker, Newark Valley.

Mineral County: East Walker River, 2 miles northwest of Morgan's Ranch.

Esmeralda County: Miller's Wells, 4800 feet; 7 miles north of Chiatovich Ranch; Chiatovich Creek, 7000 feet, White Mountains; Smith Ranch, Fish Lake Valley; Cave Spring, Silver Peak Range; north slope of Gold Mountain.

Nye County: Reese River R. S., Clear Creek, Ophir Creek, 6500 feet, South Twin River, 6500 feet, Peavine Creek Ranch, Toyabe Mountains; 5 miles southeast of Millett P.O., Moore's Creek, Smoky Valley; Round Mountain; Jefferson R. S.; Monitor Valley; 1 mile southwest of Cactus Spring, 6600 feet, Cactus Range; east end of Grapevine Cañon; Amargosa River, 3½ miles northeast of Beatty; Ash Meadows.

Lincoln County: Pahroc Spring; 10 miles south of Alamo, Pahrnanagat Valley.

Clark County: Near Bunkerville; Saint Thomas; Pahrump Valley; Vegas Valley; Bend of

Colorado River, opposite Fort Mojave; Charleston Mountains; Black Cañon; Colorado River, east of Searchlight and ½ mile north of California-Nevada line.

This phoebe has been recorded from March to September in the northern part of the state. Ridgway (1877, p. 535) collected a male and female, March 25, 1868, near Carson City, Ormsby County, and Henshaw (1877, p. 1310) reported a specimen, on September 8, from the same vicinity. Farther south the Death Valley Expedition found the species at Ash Meadows, in March, 1891 (Fisher, 1893, p. 62). Many individuals were noted in Smoky Valley, Nye County, September 9 to 11, 1931 (Linsdale, MS). A. H. Miller found the species in December, 1932, near Fort Mojave on the Colorado River, Clark County.

The following nesting records are available for Nevada. Pyramid Lake, Washoe County, two nests with eggs May 23 and 25, 1868 (Ridgway, *loc. cit.*). Toyabe Mountains region: Smoky Valley, southeast of Millett, nest just begun on April 22, 1930, finished on May 13, two eggs on May 17, five eggs on June 3; a second nest at same place nearly completed on June 26; South Twin River, 6500 feet, two eggs on April 29, 1930; Birch Creek, 7000 feet, young nearly ready to leave nest on June 26, 1930 (Linsdale, MS). Nests were found by the Death Valley Expedition June 2, 1891, at the east end of Grapevine Cañon, and May 30, at Ash Meadows, Nye County (Fisher, *loc. cit.*).

Sayornis saya quiescens Grinnell

SAN JOSÉ PHOEBE

Presence of this race in winter in Nevada is attested by a specimen, female (no. 64118, Mus. Vert. Zool.), taken February 2, 1934, on the Colorado River, close to the California-Nevada line, in Clark County (Benson).

Empidonax traillii brewsteri Oberholser

WESTERN TRAILL FLYCATCHER

Summer resident; occurs mainly in the willow thickets bordering the larger streams and in lower portions of the mountains.

In addition to the type specimen which came from Cloverdale, Nye County, May 31, 1898, Oberholser (1918, p. 93) listed skins, examined by him from Nevada, as follows: Winnemucca Lake, Washoe County, June 19, 1899 (no. 140109, U.S.N.M.); Glenbrook, May 30, 1889; Mountain City, June 12, 1898, East Humboldt Mountains, September 8, 1868 (no. 84044, U.S.N.M.), and Ruby Valley, August 29, 1868, in Elko County; Pahrnagat Valley, Lincoln County, May 23, 1891 (no. 142191, U.S.N.M.). Van Rossem took an immature female (no. 31190, Dickey coll.), September 22, 1930, at Saint Thomas, Clark County, and he found (MS) three pairs, in July, 1932, nesting at Indian Springs, Clark County.

Mus. Vert. Zool. contains specimens as follows. West Walker River, 12 miles south of Yerington, Lyon County, female (no. 65238), July 6, 1934; Big Creek Ranch, base of Pine Forest Mountains, Humboldt County, male (no. 8560), June 9, 1909; Big Creek, 6700 feet, Toyabe Mountains, Lander County, female adult (no. 61259), August 16, 1932; Fish Lake, 4800 feet, Esmeralda County, males (nos. 53667-68), May 24 and 22, 1928; Valcalda Spring, 7300 feet, Esmeralda County (no. 53669), June 22, 1928; 5 miles southeast of Millett P.O., 5500 feet, Nye County (nos. 58546-50), September 8 to 11, 1931; Crystal Spring, 4000 feet, Pahrnagat Valley, Lincoln County (nos. 61085-86), May 23 and 25, 1932.

Weights of three males and a female in May were 12.2, 12.2, 13.4, and 11.5 grams, respectively; of four males and a female in September, 10.7, 11.0, 12.8, 13.4, and 13.1 grams.

Empidonax hammondii (Xantus)

HAMMOND FLYCATCHER

Transient over whole state and possibly a summer resident on high mountains along western border. Records are in May, and August and September. Specimens are in Mus. Vert. Zool., as follows.

Humboldt County: Virgin Valley, female (no. 9251), June 2, 1909 (L. Kellogg); Martin Creek R. S., 7000 feet, Santa Rosa Mountains, three specimens (nos. 65808-09), September 6 and 7, 1934. Elko County: Bear Creek, 8000 feet, Jarbidge Mountains (nos. 65808-10), September 11, 12, and 14, 1934.

Lander County: Birch Creek, 7000 and 7500 feet, two males and three females (nos. 58551-53, 58556-57), August 29 and 31, and September 2, 1931; Kingston Creek, 6000, 7000, and 8000 feet, male and two females (nos. 58554-55, 58558), September 4 and 5, 1931.

White Pine County: Cherry Creek, 6800 feet, male (no. 57921), September 10, 1930; Lehman

Creek, 7500 feet, Snake Mountains, female (no. 64670), May 17, 1934, and a male (no. 65811), September 22, 1934.

Esmeralda County: Chiatovich Creek, 8000 and 8200 feet, male and female (nos. 51108, 51110), May 9 and 18, 1927.

Clark County: Colorado River opposite Fort Mojave, female (no. 64669), May 8, 1934.

Weights of males, one each in May and August, and five in September were 10.4, 11.2, 9.8, 9.8, 10.0, and 11.0 grams, respectively. Females taken, one in May, two in August, and six in September weighed 8.8, 10.0, 10.5, 10.8, 11.0, 11.0, 11.8, and 11.8 grams.

Specimens examined by me in U.S.N.M. are as follows. Skin (no. 298439), 4 miles west of Fallen, Churchill County, May 13, 1925; male (no. 158364), Peavine Creek, Toyabe Mountains, Nye County, June 1, 1898; female (no. 140139) Pahrangat Valley, Lincoln County, May 23, 1891.

Empidonax wrightii Baird

WRIGHT FLYCATCHER

Summer resident in most of the mountain ranges of the state. Transient in the valleys. Specimens in Mus. Vert. Zool. come from the following localities.

Washoe County: Galena Creek, 7000 and 8500 feet, August 10 and 11, 1932 (nos. 61255-57).

Humboldt County: Virgin Valley, May 16 and 19, 1909 (nos. 9248-50); Big Creek Ranch, Big Creek, Pine Forest Mountains, June 9, 27, and 29, and July 1 to 23, 1909 (nos. 8564-79); Martin Creek R. S., June 3, 1935 (no. 67112); 5 miles north of Paradise Valley, May 31, 1935 (nos. 67110-11).

Lander County: Big Creek, 8000 feet (no. 61258) August 15, 1932, Birch Creek (nos. 57421-22, 58567-69) June 21 to 25, 1930, August 29 to September 2, 1931, and Kingston Creek (nos. 57411-19, 58572-74, 61260), June, 1930, September 4 and 5, 1931, August 17, 1932, Toyabe Mountains.

White Pine County: Lehman Creek, 7500 feet, Snake Mountains, two skins (nos. 64671, 64675), May 17 and 14, 1934.

Mineral County: Cottonwood Creek, 7400 to 7900 feet (nos. 65239-43), July, 1934.

Esmeralda County: Chiatovich Creek, 7000 feet, White Mountains (no. 51109), May 11, 1927; Arlemont, 4900 feet (no. 51111), May 21, 1927; Fish Lake, 4800 feet (no. 53670), May 22, 1928.

Nye County: Mohawk Cañon, Toyabe Mountains (no. 58496), June 19, 1931; Wisconsin Creek, Toyabe Mountains (no. 57403-09), May 27 to 29, 1930; Ophir Creek, 8000 feet, Toyabe Mountains (no. 57410), May 30, 1930; South Twin River, 6500 feet, Toyabe Mountains (no. 57398), May 12, 1930; 5 miles southeast of Millett P.O., Smoky Valley (nos. 57399, 57401, 58575, 58580-82) May 13 and 17, 1930, September 9 and 11, 1931; Greenmonster Cañon, 7500 feet, Monitor Range (no. 63567) July 13, 1933; Indian Spring, 7000 feet, Belted Range (no. 58461) May 8, 1931; Breen Creek, 7000 feet, Kawich Range (no. 58923), September 22, 1931; 2½ miles west of Devil's Hole, 2173 feet, Ash Meadows (no. 63480), May 17, 1933.

The following specimens, in U.S.N.M., have been examined by me. No. 140168, Granite Creek, Washoe County, May 23, 1896; nos. 164221-22, Ruby Mountains, Elko County, June 21, 1898; no. 158381, Monitor Mountains, Nye County, June 9, 1898; no. 158362, head of Reese River, Toyabe Mountains, Nye County, May 19, 1898; nos. 158380, 158382, Arc Dome, Toyabe Mountains, May 25, 1898.

The earliest record for this species in spring is for April 21, 1868, when an adult male was shot by Ridgway (1877, p. 541), at Carson City, Ormsby County. The specimen listed above from Breen Creek, September 22, 1931, represents the latest capture in the fall. Ridgway (*loc.cit.*) captured one, September 21, 1867, on the east slope of the West Humboldt Mountains, Pershing County.

In the Pine Forest Mountains, Taylor (1912, p. 374) observed this flycatcher everywhere in the higher portions of the mountains. It was observed in limber pines on hillsides and high ridges, in aspens along streams, in mountain mahogany on arid ridges and cañon slopes, and in brushy plants generally. A nest found on July 1, 1909, held four eggs in late incubation; one in July 9 was in construction.

Ridgway (1877, p. 541) found the Wright flycatcher mainly in the aspen groves and copses of higher cañons and the mahogany woods of middle slopes. It was more abundant near Austin, in the Toyabe Mountains, than anywhere else. On July 3, 1868, he found five nests there, each with eggs.

Empidonax griseus Brewster

GRAY FLYCATCHER

Summer resident; restricted to sage brush covered areas during time of nesting, but wanders more widely in migrations. Specimens in Mus. Vert. Zool. are as follows.

Washoe County: Mouth of Little High Rock Cañon, 5000 feet, male (no. 40918), June 1, 1920; 17 miles northwest of Reno, 6000 feet, female (no. 65812), September 4, 1934.

Humboldt County: Near Pine Forest Mountain, female (no. 8580), July 31, 1909; Quinn River Crossing, 4100 feet, male and two females (nos. 8561-63), May 22 and 29, and June 2, 1909; Martin Creek, R.S., 7000 feet, Santa Rosa Mountains (nos. 65813-14), September 8 and 9, 1934.

Lander County: Birch Creek, 7000 feet, Toyabe Mountains (nos. 58559-61, 58566, 58570), August 29 to September 3, 1931; Kingston Creek, 6000 feet, Toyabe Mountains (no. 58571), September 4, 1931.

Mineral County: 2 miles southwest of Pine Grove (no. 62544), June 28, 1934.

Esmeralda County: 2½ miles south of Cave Spring, 8300 feet, Silver Peak Range, male (no. 53671), June 28, 1928.

Nye County: 5 miles southeast of Millett P.O., 5500 feet, Smoky Valley (nos. 57392-93, 57400, 57402, 58576-79), April 26, May 13 and 17, 1930, September 9 and 11, 1931; South Twin River, 6500 feet, Toyabe Mountains (nos. 57394-97), April 29, May 1, 5, and 6, 1930; 8 miles west of Tybo, 6700 feet, Hot Creek Range (no. 63566), July 9, 1933; Garden Valley, 8½ miles northeast of Sharp (no. 61087), June 5, 1932.

Clark County: Colorado River opposite Fort Mojave, three skins (nos. 64672-74), May 6 and 7, 1934.

Two females from the Toyabe Mountains region in central Nevada are in U.S.N.M. as follows. No. 158350, Arc Dome, May 25, 1898, and no. 158354, Cloverdale, May 30, 1898.

Empidonax difficilis difficilis Baird

WESTERN FLYCATCHER

Summer resident in small numbers; restricted to cañons at middle altitudes on the mountain ranges. Specimens have been collected as follows.

Humboldt County: Martin Creek R.S., 7000 feet, Santa Rosa Mountains (no. 65815, Mus. Vert. Zool.), September 7, 1934.

Elko County: 6 miles southwest of Mountain City, Cobb Creek, 6500 feet (no. 67519, Mus. Vert. Zool.), July 23, 1935.

Lander County: in the Toyabe Mountains, cañon north of Kingston Creek, 7600 feet, male (no. 57423, Mus. Vert. Zool.), June 19, 1930 (another one observed, same date, at 6700 feet in the main cañon, Miller, MS); Kingston Creek, 6000 feet, female (no. 58583, Mus. Vert. Zool.), September 4, 1931.

Nye County: Wisconsin Creek, 7000 feet (no. 60929, Mus. Vert. Zool.), June 5, 1932; Peavine Creek, male (no. 158359, U.S.N.M.), June 1, 1898; Ash Meadows, male (no. 142195, U.S.N.M.), May 30, 1891.

Esmeralda County: Mount Magruder (no. 140061, U.S.N.M.), June 5, 1891.

White Pine County: Baker Creek, 7200 feet, male (skeleton, no. 54331, Mus. Vert. Zool.), June 10, 1929.

Clark County: Saint Thomas, immature male (no. 31198, Dickey coll.), September 23, 1930.

The male listed above as collected on June 19, weighed 11.8 grams, the female 11.1 grams.

Myiochanes virens richardsonii (Swainson)

WESTERN WOOD PEWEE

Summer resident; occurs wherever there are trees, especially in the northern part of the state. Has been recorded at the following places.

Washoe County: 2 miles west of Sutcliffe, Pyramid Lake; Galena Creek, 7000 to 8500 feet; Incline, at the north end of Lake Tahoe.

Douglas County: Glenbrook.

Humboldt County: Head of Big Creek, Pine Forest Mountains; Big Creek Ranch; Quinn River Crossing; 5 miles north of Paradise Valley; Golconda.

Elko County: Copper and Coon creeks, Jarbidge Mountains; Elko; Secret Valley, East Humboldt Mountains; Ruby Valley.

Lander County: Birch Creek, 7000 feet, and Kingston Creek, 6000 feet, Toyabe Mountains.

White Pine County: Cherry Creek, 6800 feet.

Esmeralda County: Chiatovich Creek, 8200 feet; 7 miles north of Arlemont, 5500 feet, Arlemont, 4900 feet, and Fish Lake, 4800 feet, Fish Lake Valley; Mount Magruder.

Nye County: 5 miles southeast of Millett P.O., Smoky Valley; South Twin River, 6500 feet, Toyabe Mountains; Oasis Valley; Grapevine Mountains; Ash Meadows, 2½ miles west of Devil's Hole, 2173 feet; Cloverdale.

Lincoln County: Pahranaġat Valley.

Clark County: Vegas Ranch; Lee Cañon; Cold Creek; Indian Springs.

This flycatcher arrives during May, usually after the middle of the month in the northern part of the state. Time of migration in spring is indicated by the following records. May 15, 1930, and May 20, 1932, 5 miles southeast of Millett P.O., Nye County (Linsdale, MS); May 17, 1933, Ash Meadows, Nye County; May 13, 1927, Chiatovich Creek, 8200 feet, White Mountains; May 21, 1927, Arlemont, Esmeralda County (Linsdale, MS); May 22, 1928, Fish Lake, Esmeralda County (Hall, MS); May 18, 1932, Crystal Spring, Pahranaġat Valley, Lincoln County (Russell); May 1, 1891, Vegas Ranch, Clark County (Fisher, 1893, p. 64). Fall records are for September 7, 1930, Cherry Creek, White Pine County, and September 11, 1931, 5 miles southeast of Millett P.O., Nye County.

Weights of males, two in May and one in each of June, August and September were 13.9, 14.6, 13.5, 11.5, and 11.9 grams. Three May-taken females weighed 12.8, 13.2, and 13.5 grams; one in June and two in September weighed 13.3, 12.7, and 14.2 grams.

Nuttallornis mesoleucus majorinus Bangs and Penard

OLIVE-SIDED FLYCATCHER

Summer resident; present in small numbers on upper parts of some of the higher mountain ranges.

In Humboldt County, this species was reported at Quinn River Crossing, June 3, 1909, and at Big Creek Ranch, June 9, 1909 (Taylor, 1912, p. 373). On September 7, 1934, a single individual was seen near Martin Creek R.S., in the Santa Rosa Mountains, Humboldt County (Linsdale, MS). Ridgway (1877, p. 535) collected an adult male (no. 53289, U.S.N.M.) in the East Humboldt Mountains on August 29, 1868. Reported by Hoffman (1881, p. 235) as occurring in summer at least as far south as Belmont, Nye County. A member of the Death Valley Expedition on June 3, 1891, saw a single olive-sided flycatcher on the south side of Gold Mountain, Esmeralda County. Specimens in Mus. Vert. Zool. are as follows: Ridge south of Kingston Creek, 9200 feet, Toyabe Mountains, Lander County, female, number 57427, June 14, 1930; Chiatovich Creek, 8200 feet, Esmeralda County, female, number 51106, May 16, 1927; Crystal Spring, 4000 feet, Pahranaġat Valley, Lincoln County, male, number 61092, May 17, 1932, taken by Russell, and female, number 61093, May 23, 1932, taken by Baldwin.

The male listed above (no. 61092) is smaller (wing, 106.4 mm.) than the minimum given for the western race by the describers of it, but the females (wing lengths in the order listed above, 102.3, 103.1, and 104.3 mm.) are only slightly smaller than the average for *N. m. majorinus* as given by Bangs and Penard (1921, p. 90). A male, taken in May, weighed 35.1 grams. The two May-taken females, and one in June, weighed 28.5, 31.3, and 34 grams, respectively. Two females (nos. 140017, 140023, U.S.N.M.), taken May 31 and 28, 1889, at Glenbrook, Douglas County, have wing lengths of 101.5 mm. and 104 mm., respectively.

Pyrocephalus rubinus mexicanus Sclater

VERMILION FLYCATCHER

Resident in the southern end of the state. Four specimens (nos. 63483-86, Mus. Vert. Zool.) were collected May 18 and 21, 1933, at 2.5 miles west of Devil's Hole, 2173 feet, Ash Meadows, Nye County. A male and female weighed 12.2 and 13.2 grams, respectively. Two males (nos. 27522-23, Dickey coll.) were taken June 11 and 12, 1929, at Pahrump Ranch, Nye County, by Sheldon.

Several individuals of this flycatcher were observed in May, 1905, in the Colorado Valley, Clark County, a short distance above the California-Nevada boundary monument (Hollister, 1905, p. 459). A male (no. 62624, Mus. Vert. Zool.) was taken and a male and female observed opposite Fort Mojave, in the same general vicinity, on December 29, 1932 (A. H. Miller, MS). Seven skins (nos. 64125-31, Mus. Vert. Zool.) were obtained in the vicinity between January 27 and February 8, 1934.

Otocoris alpestris leucolaema (Coues)

DESERT HORNED LARK

Resident in northeastern part of the state, west and south at least to the center of the state. Specimens in Mus. Vert. Zool. represent the following counties. Some of the ones taken in late September were doubtless outside the nesting area of this race.

Elko County: 18 miles northwest to 17 miles southeast of Currie (nos. 65836-44), September 17, 1934.

Pershing County: Mill City (no. 65835), September 5, 1934.

Churchill County: 10 miles south of Fallon, 4000 feet (nos. 65885-902), September 30, 1934.

White Pine County: Lincoln Highway, 15 miles southeast of Eureka (no. 64678), May 19, 1934; Spring Valley, 17 miles north of Geysers (nos. 65845-60), September 24, 1934.

Mineral County: Near Schurz (nos. 65871-75, 65880-84), September 29, 1934.

Esmeralda County: 18 miles west of Tonopah (nos. 65867-70, 65877-79), September 29, 1934.

Nye County: 14 miles northwest of Beatty (no. 65876), September 29, 1934; 5 miles southeast of Millett P.O., 5500 feet (nos. 57428-38, 57440-43, 58588-91), April 21 to 27, 1930, May 13 to 18, 1930, and September 8 and 10, 1931; South Twin River, 6000 feet (no. 57439), May 2, 1930.

Lincoln County: Penoyer Valley, 17 miles north of Groom Baldy (nos. 61094-95), June 2, 1932; 20 miles west of Caliente (no. 65861), September 25, 1934; 1 mile south of Hiko, 4000 feet (nos. 65862-66), September 28, 1934.

A female (no. 50079, C.I.T.) was taken, October 16, 1931, at Coyote Springs, Lincoln County, and another (no. EX-122, Dickey coll.), April 12, 1917, in the vicinity of Arden, Clark County (van Rossem).

Otocoris alpestris lamprochroma Oberholser

WARNER VALLEY HORNED LARK

Resident in the western part of the state, south at least as far as Fish Lake Valley, Esmeralda County, and east at least to Churchill County. Present elsewhere in the state as a transient and winter visitant. Specimens in Mus. Vert. Zool. represent the following localities.

Washoe County: 17 miles northwest of Reno (no. 64676), April 30, 1934; 6 miles northwest of Reno (nos. 65816-30), September 4, 1930.

Lyon County: 27 miles west of Fallon (no. 65833), September 30, 1934.

Humboldt County: Virgin Valley (nos. 9257-58), June 9, 1909; Thousand Creek (no. 40919), June 17, 1920; Leonard Creek (no. 8605), August 7, 1909; Alder Creek (no. 8604), July 17, 1909; Big Creek Ranch (no. 8603), June 11, 1909; Quinn River Crossing (nos. 8590-602, 9252-56), May 4 to June 4, 1909.

Churchill County: 7 miles north of Stillwater (no. 64679), May 20, 1934, with nest and set of four eggs; 10 miles south of Fallon (nos. 65832, 65834), September 30, 1934.

Mineral County: East Walker River, 5050 feet, 2 miles northwest of Morgan's Ranch (nos. 65250-51), July 18 and 19, 1934; 8 miles south of Schurz, 4100 feet (no. 65245), July 8, 1934; Lapon Cañon, 8900 feet, Mount Grant (nos. 65248-49), July 12 and 13, 1934; southwest slope of Mount Grant, 9400 feet (nos. 65246-47), July 11, 1934.

Esmeralda County: 18 miles west of Tonopah (no. 65831), September 29, 1934; Arlemont, 4900 feet, Fish Lake Valley (nos. 51112-18), May 21 and 23, 1927.

Otocoris alpestris ammophila Oberholser

MOHAVE HORNED LARK

Resident in southwestern part of state. A male (no. 64677, Mus. Vert. Zool.) taken May 5, 1934, in Nye County, 19½ miles southeast of Goldfield, though in worn plumage seems best referred to this race. Horned larks are much less common in summer in the southern part of Nevada than in the high plateaus in the northern part of the state.

Tachycineta thalassina lepida Mearns

VIOLET-GREEN SWALLOW

Summer resident; numerous throughout the mountainous portions of the state, and often seen in the valleys.

Reported as abundant and nesting at Pyramid Lake by Ridgway (1877, p. 443) who took an adult male (no. 83251, U.S.N.M.) there on May 23, 1868, and by Henshaw (1880, p. 290). Also noted by Hall (MS), in June, 1924, and July, 1926.

There are three specimens from Humboldt County, in Mus. Vert. Zool.: One (no. 9179) from Quinn River Crossing, 4100 feet, May 28, 1909; one (no. 9180) from Duffer Peak, 9400 feet, July 30, 1909; a third (no. 9298) from Virgin Valley, 5000 feet, June 13, 1909.

In Elko County, Ridgway (*loc. cit.*) obtained an adult female (no. 53394, U.S.N.M.) July 20, 1868, in the East Humboldt Mountains and found the species nesting in July, in the eastern cañons of the Ruby Mountains.

Four violet-green swallows were noted, June 14, 1929, at Baker Creek, 7200 feet, and individuals were seen, July 31, 1930, at Cleveland Ranch, 6000 feet, both in White Pine County (Hall, MS).

This swallow was found at several localities in the Toyabe Mountains region, where it was

common in summer. Specimens in Mus. Vert. Zool. from there are, a male (no. 57446), June 12, 1930, from Kingston R.S., 7500 feet, Lander County, and a male and female (nos. 57444-45), April 23 and 26, 1930, from 6 and 5 miles southeast of Millett P.O., in Smoky Valley, Nye County.

Two specimens, both skeletons, have been preserved from Esmeralda County as follows: Female (no. 51205, Mus. Vert. Zool.), June 3, 1927, from 7 miles north of Arlemont, 5500 feet, and another (no. 53716), June 16, 1928, from Cave Spring, 6248 feet, in the Silver Peak Range. The species was also observed $4\frac{1}{2}$ miles southwest of the latter locality on June 28, 1928 (Hall, MS).

A male (no. 63568, Mus. Vert. Zool.) was taken, July 12, 1933, in Greenmonster Cañon, 7500 feet, Monitor Range, Nye County.

Members of the Death Valley Expedition in 1891 observed this species at Vegas Wash on March 10, Pahranaagat Valley on May 22 to 26, Mount Magruder on June 8, and Oasis Valley on June 1 (Fisher, 1893, p. 111). Jaeger (1927, p. 6) reported that in the Charleston Mountains, Clark County, he often saw this species above fir trees near Cathedral Rocks. Two individuals were seen, July 23, 1932, by van Rossem (MS) at Kaolin, Clark County.

Five specimens (nos. 61096-100, Mus. Vert. Zool.) were obtained, May 22 and 23, 1932, at Crystal Spring, 4000 feet, Lincoln County.

Weights of a male and female in April were 18 and 16.7 grams. A male and two females collected in May, weighed 14.2, 15.5 and 16.1 grams. A June-taken male weighed 18.1 grams.

Iridoprocne bicolor (Vieillot)

TREE SWALLOW

Transient and summer resident.

There is one skin in Mus. Vert. Zool., a female (no. 9183) taken, May 20, 1909, at Quinn River Crossing, Humboldt County. Ridgway (1877, p. 442) records three specimens (two now nos. 53390-91, U.S.N.M.) taken on March 30, 1868, at Carson City. He found the species quite numerous during May in that vicinity where it nested "under eaves, behind the weather-boarding, or about the porches of dwellings or other buildings." Sets of three and four eggs were collected on May 29, 1868, by Ridgway at Truckee Bottoms. On June 13, 1931, tree swallows were flying and calling over the camp ground at Incline, Washoe County, for most of the afternoon (Linsdale, MS).

Fisher (1893, p. 111) reported the observation of this species at Ash Meadows, on March 12, 1891. Two specimens (nos. 63487-88, Mus. Vert. Zool.) were obtained, May 17, 1933, in that vicinity at $2\frac{1}{2}$ miles west of Devil's Hole (Russell). Weights were 21.3 (male) and 17.3 grams, respectively.

Time of arrival in the spring is indicated by skins of three males (nos. 64132-34, Mus. Vert. Zool.) taken February 10 and 11, 1934, near the Colorado River in the southern end of Clark County.

Van Rossem (MS) reported this as the most common species of swallow at Kaolin Reservoir, Clark County, on July 23, 1932.

Riparia riparia riparia (Linnaeus)

BANK SWALLOW

Present in summer, but more numerous during migrations. Hanford (1903, p. 52) has definitely reported this species as breeding in the sandy banks on the east side of Washoe Lake. A large nesting colony was found on May 20, 1934, at Soda Lake, Churchill County, and a male (no. 64680, Mus. Vert. Zool.) was preserved from there (Linsdale, MS).

Other reports of observations are as follows. Humboldt Valley, southern Humboldt County, common in May and June, 1903 (Hanna, 1904, p. 77); Keeler preserved a male (no. 141850, U.S.N.M.) from Winnemucca Lake, Washoe County, June 17, 1889; Truckee Reservation, Washoe County, least numerous of all swallows in May, 1867 (Ridgway, 1877, p. 445); 5 miles southeast of Millett P.O., Nye County, migrating birds seen, May 14 and 17, 1930, and May 24 and 27, 1933 (Linsdale, MS); Bend of Colorado River, Clark County, seen about March 10, 1891 (Fisher, 1893, p. 112).

Stelgidopteryx ruficollis serripennis (Audubon)

ROUGH-WINGED SWALLOW

Transient over most of the state and summer resident at a few localities.

Specimens in Mus. Vert. Zool. represent localities, as follows: Quinn River Crossing, Humboldt County, male (no. 9181), June 2, 1909; Alder Creek, Pine Forest Mountains, Humboldt County, male (no. 9182), July 17, 1909; 3 miles south of Sutcliffe, Pyramid Lake, Washoe County,

male (no. 47154), July 6, 1925; 1 mile southeast of Tuscarora, Elko County, male (no. 67521), July 27, 1935; Goose Creek, 5000 feet, Elko County (no. 67520), July 14, 1935; Smiths Creek, 5800 feet, Lander County, skin (no. 65252), July 25, 1934; 5 miles southeast of Millett P.O., 5500 feet, Smoky Valley, Nye County, female (no. 57447), April 27, 1930; Ash Meadows, Nye County, male and female (nos. 63489-90), May 17, 1933; Crystal Spring, 4000 feet, Pahrnagat Valley, Lincoln County, female (no. 61101), May 27, 1932; Colorado River opposite Fort Mojave, Clark County, four specimens (nos. 64681-84), May 7 and 9, 1934.

Ridgway (1877, p. 446) reported the capture, on April 25, 1868, of an adult female at Carson City, Ormsby County. Hoffman (1881, p. 221) noticed this swallow along the Humboldt River, north of Battle Mountain, during the last days of May. Two, male and female (nos. 159074-75, U.S.N.M.) came from Mountain City, Elko County, June 12, 1898 (W. K. Fisher).

In the southern end of the state, in 1891, the Death Valley Expedition found this species at Ash Meadows, March 10; Vegas Wash, March 10 to 13; Bend of the Colorado River, May 4; near Bunkerville, May 8; Pahrnagat Valley, May 22 to 26. Van Rossem (MS) on July 23, 1932, found rough-winged swallows at Kaolin, Clark County, and on September 11 to 15, 1930, at Indian Springs.

A female, taken in April, weighed 11.8 grams; a male and female, in May, weighed 15.9 and 13.6 grams, respectively.

Hirundo erythrogaster Boddaert

BARN SWALLOW

Summer resident and transient; present regularly in the valleys, as the following records indicate.

Washoe County: Granite Creek, noted in May, 1896 (Streator, MS); Smoke Creek, May, 1896 (Streator, MS); Deephole, 4000 feet, noted May 12, 1929 (Hall, MS). Found nesting along the shore and on the islands of Pyramid Lake (Ridgway, 1877, p. 441) also, noted about the lake from June 1 to August 3, 1924 (Hall, MS), and found nesting near Washoe Lake (Hanford, 1903, p. 51); Wadsworth, noted in May, 1898 (Oberholser and Bailey, MS).

Humboldt County: Seven specimens (nos. 9171-77, Mus. Vert. Zool.), taken May 19 to June 4, 1909, at Quinn River Crossing, and one, a male (no. 9178), on June 17, 1909, from Big Creek Ranch, Pine Forest Mountains. Found to be common in the Humboldt Valley by Hanna (1909, p. 77).

Elko County: Found July 14, 1935, on Goose Creek, 5000 feet (Hall, MS). Nesting in August, 1872, at the mouth of a mine tunnel, 25 miles north of Elko (Nelson, 1875, p. 353). Also found nesting on eastern side of Ruby Mountains by Ridgway (1877, p. 441).

Pershing County: Ridgway (1877, p. 441) took an adult male in September, 1867, in the Valley of the Humboldt River.

Churchill County: 4 miles west of Fallon, female (no. 298442, U.S.N.M.), May 13, 1925 (Hall); Eastgate, two noted, May, 1898 (Oberholser and Bailey, MS). A nest and set of five eggs were taken, May 20, 1934, from beneath a culvert 10 miles north of Stillwater (Compton).

Lander County: Nesting, June 9, 1932, along Reese River, where crossed by Lincoln Highway and also at several points in Smoky Valley (Linsdale, MS).

White Pine County: 2½ miles east of Baker, three skeletons (nos. 54365-67, Mus. Vert. Zool.) taken May 30, 1929. Noted nesting in this locality, May 31 (Hall, MS). Twelve to fifteen individuals seen, August 9 to 14, 1930, at 5½ miles southeast of Ely, 6450 feet, Steptoe Valley.

Esmeralda County: Nesting at Smith Ranch, Fish Lake Valley, May 20 to July 3, 1928 (Hall, MS). Observed, June 8, 1891, at Mount Magruder (Fisher, 1893, p. 110).

Nye County: A male (no. 57448, Mus. Vert. Zool.) was collected, June 1, 1930, at 5 miles southeast of Millett P.O., 5500 feet, Smoky Valley. Also, observed as early as April 24, 1930, and at several other localities in the valley (Linsdale, MS). Found by the Death Valley Expedition in 1891, at Ash Meadows, March 19, and Oasis Valley, June 1 (Fisher, 1893, p. 110). Another male in Mus. Vert. Zool. (no. 61102) was taken, June 8, 1932, in Garden Valley, 8½ miles northeast of Sharp (Baldwin).

Lincoln County: Observed, May 26, 1932, near Crystal Spring, 4000 feet, Pahrnagat Valley (Hall, MS), and in the same valley, May 22 to 26, 1891 (Fisher, 1893, p. 110).

Clark County: Observed, May 7 to 8, 1891, near Bunkerville (Fisher, 1893, p. 110), and September 11 to 15, 1930, at Indian Springs (van Rossem, MS).

Two males taken in June weighed 17.3 and 20.1 grams.

Petrochelidon albifrons albifrons (Rafinesque)

CLIFF SWALLOW

Summer resident and transient; most abundant member of its family. Records of occurrence by counties are as follows.

Washoe County: Present at Pyramid Lake, May to August, 1924 (Hall). Found breeding near Washoe Lake by Hanford (1903, p. 51); Wadsworth, noted May, 1898, by Oberholser and Bailey (MS).

Lyon County: Nesting, May 19, 1928, 17 miles from Yerington along road to Wellington (Hall, MS).

Humboldt County: Three specimens in Mus. Vert. Zool., one (no. 9184) from Quinn River Crossing, June 5, 1909, and two (nos. 9185-86) from mouth of Alder Creek, Pine Forest Mountains, July 17, 1909. Found by Taylor (1912, p. 405) in the Pine Forest Mountains at all localities below 5000 feet.

Elko County: Female (no. 67522, Mus. Vert. Zool.) taken, July 14, 1935, on Goose Creek, 2 miles west of Utah line. Ridgway (1877, p. 440) reports the capture of an adult male, July 22, 1868, in the East Humboldt Mountains and the finding of a nest containing one egg, August 25, 1868, in the same vicinity.

Churchill County: Stillwater, two seen in early May, 1898 (Oberholser and Bailey, MS).

Lander County: A nesting colony at Birch Creek Meadow, 7000 feet in the Toyabe Mountains in 1930. A female (no. 57449, Mus. Vert. Zool.) was taken there on June 22, 1930.

White Pine County: Skeletons of eight (nos. 54357-64) were taken, May 28 to 30, 1929, at 2½ miles east of Baker. The species was nesting abundantly there at that time (Hall). Common in Newark Valley, June, 1896 (Oberholser and Bailey, MS).

Mineral County: Noted at Queen Mine, July 11 to 16, 1891 (Fisher, 1893, p. 110).

Esmeralda County: Smith Ranch, abundant, May 20 to 23, 1929 (Hall, MS).

Nye County: Transients noted on several occasions in Smoky Valley, 5 miles southeast of Millett P.O., earliest date, April 26, 1930. Also, starting to nest, June 1, 1930, at Millett P.O. (Linsdale, MS). Recorded at Oasis Valley, June 1, 1891 (Fisher, 1893, p. 110). A specimen in Mus. Vert. Zool., female (no. 63494) was obtained, May 17, 1933, 2.5 miles west of Devil's Hole, 2173 feet, Ash Meadows.

Lincoln County: Noted in Meadow Valley, on June 16, 1931, at 21 miles south of Caliente, 3200 feet, and June 18, at 7 miles south of Caliente, 4000 feet (Orr). Reported at Pahrnagat Valley, May 22 to 26, 1891 (Fisher, 1893, p. 110).

Clark County: The Death Valley Expedition found this species, May 3, 1891, breeding at Vegas Wash and noted it on May 4, at the Bend of the Colorado River (Fisher, 1893, p. 110). Van Rossem (MS) noted it, July 23, 1932, at Kaolin, and September 13, 1930, at Indian Springs.

A female taken in May weighed 22.8 grams, one in June weighed 21.6 grams.

Progne subis subis (Linnaeus)

PURPLE MARTIN

Reported by Ridgway (1877, p. 439) as "not common" at Carson City, and a single individual, June 18, 1868, at Virginia City.

Cyanocitta stelleri frontalis (Ridgway)

BLUE-FRONTED JAY

Resident on the higher mountain ranges along the western border of the state, from near Reno south at least to the White Mountains.

The type specimen (no. 53639, U.S.N.M.) and another individual (no. 53640, U.S.N.M.) of this race were obtained April 18, 1868, by Ridgway (1877, p. 524) from near Carson City, Ormsby County. Additional specimens were collected in this vicinity on November 27, 1867 (no. 83936, U.S.N.M.), and March 21 and 30 (no. 53638, U.S.N.M.), 1868. On February 24, 1868, during an especially heavy snow storm, Ridgway saw two jays actually within the limits of Carson City. Keeler took a male (no. 142127, U.S.N.M.), May 30, 1889, at Glenbrook, Douglas County.

At Galena Creek, 7000 feet, Washoe County, an immature male (no. 61261, Mus. Vert. Zool.) was taken August 9, 1932. Several others were heard and seen in the pine timber in this same vicinity.

In Mineral County specimens were taken in June, 1934, at 2 miles southwest of Pine Grove (nos. 65257-59, Mus. Vert. Zool.), and in July, 1934, on Cottonwood Creek, 7400 feet, Mount Grant (no. 65260, Mus. Vert. Zool.).

In May, 1927, the blue-fronted jay was observed to be common along Chiatovich Creek, 7000 to 8200 feet, on the eastern slope of the White Mountains, Esmeralda County (Linsdale, MS). Here the birds lived mostly in the aspens and other trees close to the streams.

Cyanocitta stelleri diademata (Bonaparte)

LONG-CRESTED JAY

Resident on the Snake Mountains in eastern White Pine County. Five specimens (nos. 64685-89, Mus. Vert. Zool.) were taken May 13 and 17, 1934, on Lehman Creek, 7500 feet. An adult male (no. 65903, Mus. Vert. Zool.) was taken at 8500 feet on Lehman Creek, September 18, 1934, and an immature female (no. 65904, Mus. Vert. Zool.) on Baker Creek, 8500 feet, Snake Mountains, September 19, 1934. Weights of these two were 112.5 and 103 grams, respectively.

Cyanocitta stelleri percontatrix van Rossem

SOUTHERN NEVADA JAY

A specimen from Hidden Forest, 8500 feet, Sheep Mountains, Clark County, collected September 18, 1930, was made the basis for the description of the race *C. s. percontatrix* (van Rossem, 1931, p. 328). Three additional specimens were obtained by the same collector from the Charleston Mountains. Jaeger (1927, p. 4) reported the observation of this species in Kyle Cañon, Charleston Mountains, in April, 1924, and July, 1926; as many as twenty birds in one flock.

Aphelocoma californica immanis Grinnell

CALIFORNIA JAY

Resident in the lower mountains of the western part of the state. Northernmost locality is represented by two specimens, males (nos. 47148-49, Mus. Vert. Zool.) taken July 8, 1926, by E. R. Hall, at 3 miles west of Sutcliffe, Pyramid Lake, Washoe County. Two (nos. 64690-91, Mus. Vert. Zool.) came from 17 miles northwest of Reno, April 30, 1234. An immature male (no. 61262, Mus. Vert. Zool.) was taken, August 9, 1932, at 2½ miles west of Reno Hot Springs, Washoe County. Near Carson City, on April 29, 1868, Ridgway (1877, p. 525) took three specimens (nos. 53642-43, 83949, U.S.N.M.) in the sage brush below the pines. Henshaw (1880, p. 307) found this species to be "numerous in the brushy foothills to a considerable distance north of Carson City." He took a male (no. 77479, U.S.N.M.) at Carson City, May 15, 1877. A specimen, male, number 46046, in Mus. Vert. Zool. taken in August, 1911, by C. L. Hall, at Gardnerville, Douglas County, is from southernmost locality known to me.

Aphelocoma californica woodhouseii (Baird)

WOODHOUSE JAY

Resident; present on most of the mountain ranges, except along the western border in the northern part of the state; moves into Colorado River Valley in winter. Definite records show the occurrence of this bird at the following localities.

Humboldt County: Quinn River Crossing.

Pershing County: West Humboldt Mountains.

Churchill County: Fallon.

Lander County: Big Creek, Birch Creek, 7000 feet, and Kingston Creek, 5000 to 7000 feet, Toyabe Mountains; Reese River, 33 miles south of Austin.

Eureka County: Eureka; Monitor Mountains, 25 miles southwest of Eureka.

White Pine County: East side of Schellbourne Pass, 6800 feet; Cleve Creek, 6900 feet, Shell Creek Range; Lehman Creek, 7500 feet, Snake Mountains.

Mineral County: 2 miles southwest of Pine Grove, 7250 feet; Endowment Mine, 6500 feet, Excelsior Mountains.

Esmeralda County: Chiatovich Creek, 8000 feet, White Mountains; Chiatovich Ranch, 4900 feet; Cave Spring, and 3 miles south of Cave Spring, Silver Peak Range; Pigeon Spring, 6400 feet, and Indian Spring, Mount Magruder.

Nye County: Mohawk R.S., Wisconsin Creek, Ophir Creek, South Twin River, and Pablo Cañon, Toyabe Mountains; Round Mountain; Jefferson R.S.; Grapevine Mountains; Greenmonster Cañon, 7500 and 8500 feet, Monitor Range; 4 miles north of Hot Creek, 6400 feet, Hot Creek Range; Burned Corral Cañon, 7600 feet, and 7 miles east of Nyala, 7000 feet, Quinn Cañon Mountains; Breen Creek, 7000 feet, Kawich Range; south end of Belted Range, 5½ miles northwest of Whiterock Spring, 7200 feet.

Lincoln County: Pahroc Mountains; Springer Spring, Irish Mountain.

Clark County: Juniper Mountains; Trout Creek and Kyle Cañon, Charleston Mountains; Colorado River, ½ mile above California-Nevada Monument.

This jay is found usually in the thickets of willow, birch and similar vegetation bordering the

streams, especially in the lower cañons of the mountains. But it also lives out over the ridges in brushy stands of juniper, mountain mahogany, and piñon. Woodhouse jays nest early but not as early as most other species in the family. In the Toyabe Mountains, near the center of the state nests were found on June 3 and 4, 1932 (Orr, MS). One was in a juniper and had just been vacated by the young; the other was in a piñon and held two nearly grown young and an unhatched egg.

Pica pica hudsonia (Sabine)

AMERICAN MAGPIE

Resident: common and characteristic over the whole state except the extreme southern portion, south of the line of 37° parallel. Magpies have been recorded at the following places.

Washoe County: Little High Rock Cañon; Deephole, 4000 feet; Truckee Meadows; Washoe Valley.

Ormsby County: Carson City.

Douglas County: Glenbrook.

Lyon County: 12 miles south of Yerington, West Walker River; 6 miles east of Dayton.

Humboldt County: Humboldt Valley; Martin Creek R. S., Santa Rosa Mountains; 5 miles north of Paradise Valley.

Elko County: 25 miles north of Elko; Elko; Mountain City; Bear Creek, Jarbidge Mountains; Pilot Peak; Ruby Mountains.

Pershing County: West Humboldt Mountains; Imlay.

Lander County: Battle Mountain; Austin, Big Creek, Birch Creek, Kingston Creek, Toyabe Mountains.

White Pine County: Mouth of Cleve Creek, 6500 feet, Shell Creek Range.

Esmeralda County: Arlemont; Fish Lake.

Nye County: Millett P. O., 5 miles southeast of Millett P. O., Smoky Valley; Mohawk R. S., Wisconsin Creek, South Twin River, Toyabe Mountains; Greenmonster Cañon, 8600 feet, Monitor Range.

Corvus corax sinuatus Wagler

AMERICAN RAVEN

Resident; widespread over state but not numerous.

At Pyramid Lake, Washoe County, Henshaw (1880, p. 305) found several pairs of ravens nesting "within the space of a few yards." Ridgway (1877, p. 512) reported three specimens taken on November 15, 1867, at Truckee Meadows. A specimen was listed by Oberholser (1918, p. 222) from Glendale, in this same vicinity, November 18, 1867.

Near Carson City, Ormsby County, Henshaw (1877, p. 1310) observed the raven to be a common resident. In Humboldt County, this bird was noted, in 1909, at Quinn River Crossing and Big Creek Ranch, Pine Forest Mountains (Taylor, 1912, p. 378). A. H. Miller (MS) saw one, May 30, 1935, 5 miles north of Paradise Valley, Humboldt County. Nelson (1875, p. 350) saw one or two individuals in August, 1872, south of the Humboldt River near Elko, Elko County, and (p. 354) observed the species commonly 25 miles north of Elko. Ravens were common in the Jarbidge Mountains, Elko County, in September, 1934 (Linsdale MS). Oberholser (1918, p. 222) recorded a specimen (no. 139467, U.S.N.M.) from Wells, Elko County, collected, October 18, 1890, by Bailey. On May 20, 1934, two were noted on the sandy ground, 10 miles north of Stillwater, Churchill County (Linsdale, MS).

Ravens were noted several times in the Toyabe mountains and in Smoky Valley to the eastward in Lander and Nye counties (Linsdale, MS).

A specimen (no. 54332, Mus. Vert. Zool.) was taken, May 29, 1929, 2½ miles east of Baker, White Pine County (Russell).

In the southern part of the state the Death Valley Expedition in 1891 found ravens at Ash Meadows; Pahrump Valley (2, nos. 139464-65, U.S.N.M., shot, Feb. 24); Vegas Wash (May 3, nesting); Bend of Colorado River, May 4; near Bunkerville, May 8; Juniper Mountains, May 19; Desert Valley, May 20; Pahranaagat Valley, May 22 to 26. Van Rossem (MS) on September 22, 1930, found ravens to be fairly common in singles and pairs near Saint Thomas, Clark County.

Corvus brachyrhynchos hesperis Ridgway

WESTERN CROW

Resident; not numerous. Probably more present in winter than at any other season. Transient over most of the state.

Ridgway (1877, p. 514) collected an adult male, on October 31, 1867, at Humboldt Marshes, and

another one from a flock of about six, on November 8, 1867, at Truckee Meadows, Washoe County. In the Humboldt Valley, Humboldt County, Hanna (1904, p. 77) saw a few crows early in May. Noted by Hall (MS), July 31, 1935, 5 miles north of Paradise Valley, Humboldt County. Hoffman (1881, p. 233) reported the finding of considerable numbers of crows in 1871, nesting on rocky walls a few miles southeast of Bull Run Mountain, Elko County, and at the southern extremity of Smoky Valley. In Smoky Valley, 5 miles southeast of Millett P. O., Nye County, crows were seen singly or in small groups on several occasions in May, 1930 and 1932. Local residents in this neighborhood reported the species to be most numerous in the winter (Linsdale, MS). In Pahrump Valley, southern Nye County, members of the Death Valley Expedition saw a flock of crows around a ranch during February and March, 1891 (Fisher, 1893, p. 71).

A female (no. 7052) in the Ellis collection and reported by him (1935, p. 87) came from the east base of the Ruby Mountains, 20 miles north of Ruby Valley P. O., June 29, 1929.

Cyanocephalus cyanocephalus (Wied)

PIÑON JAY

Resident; common on the lower parts of mountains wherever piñons and junipers occur. Piñon jays have been reported from the following localities.

Washoe County: 17 miles northwest of Reno.

Ormsby County: Carson City.

Elko County: Hasting's Pass, Ruby Mountains.

Lander County: Austin; Kingston Creek, 6200 feet, Toyabe Mountains.

Eureka County: Southward from Eureka.

White Pine County: Gleason Creek, 7200 feet, 14½ miles northwest of Ely; Water Cañon, 8 miles north of Lund.

Mineral County: East Walker River, 5050 feet, 2 miles northwest of Morgan's Ranch.

Esmeralda County: Chiatovich Creek, 7000 and 8200 feet, White Mountains; 2 miles south of Piper Peak; Valcalda Spring, 7300 feet; north slope of Mount Magruder, 7000 feet; Gold Mountain.

Nye County: Mohawk R. S., Wisconsin Creek, 6000 feet, Ophir Creek, 6500 feet, Last Chance Creek, 6000 feet, South Twin River, 6500 feet, Arc Dome, Pablo Cañon, Peavine Creek, Toyabe Mountains; Manhattan; Moore's Creek; Breen Creek, 7000 feet; Kawich Range; south end of Belted Range, 7200 feet, 5½ miles northwest of Whiterock Spring; Grapevine Mountains; Mount Nagle.

Lincoln County: East slope of Irish Mountain, 6900 feet; southwest base of Groom Baldy, 7200 feet.

Clark County: Juniper Mountains; Charleston Mountains.

Piñon jays are seen most often in flocks, even in the nesting season. Flocks are much larger in winter than in summer. The bird is rather closely restricted to the piñon covered ridges but flocks are seen often in flight from one ridge to another.

Eggs of this species were found on April 10, near Carson City, by Henshaw (1880, p. 306). In the same locality, Ridgway (1877, p. 517) found, on April 21, 1868, full grown young in a juniper and piñon grove. There were 100 or more nests in the one grove, already vacated except one with four young nearly ready to leave. The nests were all on horizontal branches eight or ten feet from the ground.

Nucifraga columbiana (Wilson)

CLARK NUTCRACKER

Resident; lives on upper parts of higher mountain ranges. Ranges down over lower slopes after nesting in early spring. Definite records show that the species occurs at the following places.

Washoe county: Peavine Mountains, near Sierra Nevada; Galena Creek, 7500 to 8500 feet.

Ormsby County: Carson City.

Douglas County: Glenbrook.

Humboldt County: Pine Forest Mountain; Cottonwood Range.

Elko County: Bear Creek, 8000 feet, Jarbidge Mountains; Pilot Peak, 8000 feet; East Humboldt Mountains; Ruby Mountains.

Lander County: Reese River, 33 miles southeast of Austin; Shoshone Mountains; Birch Creek and Kingston Creek, Toyabe Mountains.

White Pine County: Cleve Creek, 8500 feet, Shell Creek Range; 3 miles northwest of Hamilton, 7600 feet; Lehman Cave, 7200 feet; Baker Creek, 8000 and 10,700 feet, Snake Mountains; Stella Lake, 10,750 feet, Snake Mountains; Water Cañon, 10 miles north of Lund.

Mineral County: Queen Mine, White Mountains.

Esmeralda County: Chiatovich Creek, 8200 feet, White Mountains; Valcalda Spring.

Nye County: Mohawk R. S., Wisconsin Creek, Last Chance Creek, South Twin River, Toyabe Mountains; north slope Toquima Peak, 8600 and 9000 feet, and 3 miles north of Meadow Creek R. S., Toquima Mountains; Mount Nagle; Burned Corral Cañon, 7600 feet, Quinn Cañon Mountains.

Lincoln County: Groom Baldy, 8000 to 9000 feet.

Clark County: Charleston Mountains.

Ridgway (1877, p. 515) wrote that he discovered a nest of this species in the Ruby Mountains, in August, 1868, after the young had flown. The nest was in a hole—apparently the deserted excavation of a flicker—in a tall pine stump, about twenty feet from the ground. The nest itself was a very elaborate and symmetrical one, composed of pine needles and fine roots, with larger sticks outside.

Penthestes atricapillus septentrionalis (Harris)

LONG-TAILED CHICKADEE

Resident along streams in the Snake River drainage system in the northeastern part of the state. Nine skins in Mus. Vert. Zool. (nos. 65913-21) were taken, September 16, 1934, on the Salmon River at Shoshone Creek, 5000 feet, Elko County. This locality is on U. S. Highway 93 and is 3.6 miles from the Idaho-Nevada line. The Chickadees were in flocks in the tall thickets of willows along the stream.

Penthestes gambeli abbreviatus Grinnell

SHORT-TAILED CHICKADEE

Resident in the mountains of northwestern Nevada. Mus. Vert. Zool. contains specimens from the Pine Forest Mountains, Humboldt County, from Alder Creek (nos. 8952-53), and near Pine Forest Mountain (nos. 8954-64). In August, 1932, three specimens (nos. 61267-69, Mus. Vert. Zool.) were obtained from Galena Creek, 7000 feet, Washoe County, seven (nos. 64696-702) on May 1, 1934, and five (nos. 65989-93) on October 1, 1934. Two more (nos. 64703-04) were from 6 miles north of Incline, May 22, 1934.

Chickadees collected by Ridgway (1877, p. 411) on November 27, 1867, and March 21, 1868, near Carson City, Ormsby County, probably belonged to this race. One specimen (no. 82638, U. S. N. M.) was taken, March 28, 1868, by Ridgway at Carson City.

Penthestes gambeli inyoensis Grinnell

INYO CHICKADEE

Resident in most of the mountain ranges except in the northwestern part of the state. Also lives in the timbered valleys between mountains in the northeastern section of the state. Mus. Vert. Zool. contains specimens, as follows.

Humboldt County: Martin Creek R. S., 7000 feet, Santa Rosa Mountains (nos. 65922-38), September 6 to 8, 1934, and (nos. 67120-22), June 1 and 3, 1935.

Elko County: Bear Creek, 8000 feet, Jarbidge Mountains (nos. 65939-58), September 11 to 14, 1934; 9 miles northeast of Wells, 6000 feet (nos. 65959-67), September 15, 1934.

Lander County: 2 miles east of Carroll Summit, 6800 feet, Desatoya Mountains (nos. 61270-71), August 14, 1932; Birch Creek (nos. 58601-13), and Kingston Creek (57491-500, 58614-29, 61272-76), Toyabe Mountains.

White Pine County: East side of Schellbourne Pass, 6800 feet (no. 57926); White Pine Mountain, 8700 feet, 3 miles west of Hamilton (no. 57925); east side of Wheeler Peak, 8700 feet, Lehman Creek (nos. 54376, 64705-12, and 65968-70); Baker Creek (nos. 65971-84).

Esmeralda County: Chiatovich Creek, 8200 feet, White Mountains (nos. 51197-98), May 15 and 18, 1927; 2½ miles south of Cave Spring (no. 53744), June 28, 1928; Pinchot Creek, 8200 feet, White Mountains (no. 63496), June 3, 1933.

Nye County: Mohawk R. S. (no. 58500), and Wisconsin Creek (nos. 57482-90), Toyabe Mountains; north slope Toquima Peak, 9000 feet, Toquima Mountains (no. 63578); 5 miles west and 4½ miles northwest of White Rock Spring, Belted Range (nos. 58462, 58924); Burned Corral Cañon, 6800 feet, Quinn Cañon Mountains (no. 63579).

Lincoln County: Irish Mountain (nos. 65985-88), September 26 and 27, 1934.

Baeolophus inornatus zoleptus Oberholser

WARNER MOUNTAINS TITMOUSE

In western Nevada, Henshaw (1877, p. 288) observed this titmouse "in the foothills of the mountains and on the low ranges to the east of the main chain." He mentioned (p. 413) its occurrence in the Peavine and Virginia mountains. One (no. 53454, U.S.N.M.) was taken, November 14, 1867, by Ridg-

way, in the Peavine Mountains. In Washoe County, 17 miles northwest of Reno, 6000 feet, specimens (nos. 64713-14, Mus. Vert. Zool.) were collected on April 30, 1934, and (nos. 65994-66003, Mus. Vert. Zool.) September 4, 1934.

Baeolophus inornatus griseus (Ridgway)

GRAY TITMOUSE

Resident on the piñon-juniper covered mountains of eastern Nevada. Two skins (nos. 66004-05, Mus. Vert. Zool.) came from 9 miles northeast of Wells, 6000 feet, Elko County, September 15, 1934. Oberholser and Bailey (MS) found this species common in June, 1898, at Hasting's Pass, Ruby Mountains, Elko County. A specimen from Lehman Creek, 7500 feet, White Pine County (no. 64715, Mus. Vert. Zool.) was taken on May 17, 1934. A specimen in Mus. Vert. Zool. (female, no. 61106) was examined by him, from Las Vegas, Clark County; 8½ miles northeast of Sharp, Nye County. It weighed 15.7 grams. In Lincoln County four specimens were taken at Irish Mountain (nos. 66006-09, Mus. Vert. Zool.) September 26 and 27, 1934. In the Charleston Mountains, Clark County, Bailey shot a male (no. 141663, U. S. N. M.) on March 7, 1891, and found the species to be common among the junipers (Fisher, 1893, p. 138).

Auriparus flaviceps acaciarum Grinnell

ARIZONA VERDIN

Present near the southern border of the state in the valleys of the Virgin and Colorado rivers. Observed on October 1, 1931, to be common on the Virgin River, ¾ mile east of Mesquite, 1750 feet, Clark County (Orr, MS). A male (no. 141708, U.S.N.M.) was obtained, January 23, 1889, by Bailey, at Bunkerville. Van Rossem (1930, p. 200) has reported one specimen (no. 272697, U. S. N. M.), examined by him, from Las Vegas, Clark County. Specimens from Saint Thomas were taken July 25, 1932 (no. 50716, C.I.T.) and September 22, 1930 (nos. 31188-89, Dickey coll.); one (no. 50082, C. I. T.) from Coyote Springs, Lincoln County, was taken October 16, 1931 (van Rossem).

On December 30, 1932, a male (no. 62625, Mus. Vert. Zool.) was obtained by A. H. Miller opposite Fort Mojave, Clark County. At sunset on December 27, Miller (MS) watched one of these birds as it moved through arrowweed thickets into a mesquite where there was a nest. The bird entered the nest where it evidently was preparing to spend the night, for it did not leave before being driven out. The nest had droppings hanging at the entrance as do those in which young have been raised. The lining was clean and in good condition, being composed mostly of quail feathers. Two males (nos. 64716-17, Mus. Vert. Zool.) were taken here on May 7, 1934.

Five additional specimens (nos. 64138-42, Mus. Vert. Zool.) from this vicinity and two (nos. 64136-37) from the Colorado River, east of Searchlight, were collected in January and February, 1934.

Psaltriparus minimus plumbeus (Baird)

LEAD-COLORED BUSH-TIT

Resident; common on lower portions of the mountain ranges. Usually present in the thickets close to the streams, but also occurs in tall-shrub vegetation on the ridges. Bush-tits have been noted at the following localities.

Washoe County: Peavine Mountains; Virginia Mountains; 3 miles west of Sutcliffe, Pyramid Lake; 17 miles northwest of Reno; Incline, at the north end of Lake Tahoe.

Ormsby County: Gorge of Carson River, near Carson City.

Humboldt County: Big Creek, mouth of Big Creek, Alder Creek Lake, Leonard Creek, Pine Forest Mountains; Quinn River Crossing; Martin Creek R. S., Santa Rosa Mountains.

Elko County: West side of Ruby Lake, 3 miles north of county line.

Pershing County: West Humboldt Mountains.

Lander County: Big Creek, Birch Creek, Kingston Creek, Toyabe Mountains.

White Pine County: Cherry Creek, 6900 feet; 2½ miles southwest of Hamilton, 7650 feet; Lehman Creek, 7500 feet, Snake Mountains.

Mineral County: 2 miles southwest of Pine Grove; Queen Mine, White Mountains.

Esmeralda County: Chiatovich Creek, 7800 and 8200 feet, and Indian Creek, 6500 feet, White Mountains; 2¾ miles south of Cave Spring, 6800 feet; 4 miles southwest of Cave Spring, 7500 feet; north slope of Mount Magruder, 7000 feet.

Nye County: Mohawk R. S., Wisconsin Creek, Ophir Creek, South Twin River, Toyabe Mountains; Burned Corral Cañon, 6700 feet, Quinn Cañon Mountains; Breen Creek, 7000 feet, Belted Range; Kawich P. O., 5900 feet, Belted Range; south end of Belted Range, 7200 feet, 5½ miles northwest of Whiterock Spring; Grapevine Mountains.

Lincoln County: East slope of Irish Mountain, 6900 feet; Mormon Mountains.

Clark County: Juniper Mountains; Charleston Mountains.

Sitta carolinensis nelsoni Mearns

ROCKY MOUNTAIN NUTHATCH

Resident on Snake and Silver Cañon mountains in eastern Nevada.

Three specimens (nos. 64725-26, 66011, Mus. Vert. Zool.) came from Lehman Creek, 9500 feet, Snake Mountains, White Pine County, May 15 and September 18, 1934. An immature male from Baker Creek, 9500 feet, Snake Mountains, White Pine County (no. 66012, Mus. Vert. Zool.) was taken on September 20, 1934. An adult male and female (nos. 66013-14, Mus. Vert. Zool.) were taken September 25, 1934, at 8000 feet on Irish Mountain, Lincoln County.

Sitta carolinensis tenuissima Grinnell

INYO NUTHATCH

Resident on several mountain ranges in western and central Nevada. Range extends northward along the western border of the state to Washoe County.

Specimens reported by Ridgway (1877, p. 416) from Carson City, Ormsby County, taken on March 10 and 21 and April 3 and 4, 1868 (nos. 82584, 53446, 82686, 53445, U. S. N. M.) may belong to this race as well as three males (nos. 64729-31, Mus. Vert. Zool.) from 6 miles north of Incline, 9500 feet, May 22, 1934, a female (no. 65506, Mus. Vert. Zool.) from Incline Creek, 7100 feet, August 22, 1934, and four males (nos. 61264-65, 64727-28, Mus. Vert. Zool.) from Galena Creek, 7000 feet, Washoe County, taken August 10, 1932, and May 1, 1934. Weights of these individuals were 15.7, 16.5, 16.2 and 17 grams. Three others (nos. 66015-17, Mus. Vert. Zool.) from this locality were taken October 1, 1934. A male (no. 136538, U. S. N. M.) from Glenbrook, Douglas County, was taken May 28, 1889, by Keeler.

From Mineral County, Mus. Vert. Zool. contains three specimens (nos. 65269-71), taken June 27 and 30, 1934, 2 miles southwest of Pine Grove.

In the White Mountains, this bird was reported as heard, July 11 to 16, 1891, at Queen Station, Mineral County (Fisher, 1893, p. 136). A male (no. 63497, Mus. Vert. Zool.) was obtained, June 3, 1933, on Pinchot Creek, 8200 feet, White Mountains, Esmeralda County (Russell).

Eastward from Kingston R.S., on the western slope of Bunker Hill, Toyabe Mountains, Lander County, seven specimens (nos. 57525-27, 58501-02, 58634, 61266, Mus. Vert. Zool.) were collected. These birds were taken in June, August, and September, all in limber pines at altitudes from 9200 to 10,000 feet. Weights of the Toyabe Mountains specimens listed above were as follows. Two males in June and one in September weighed 16.1, 16.8, and 17.8 grams.

Five specimens, two adults (nos. 63654-55) and three juveniles (nos. 63581-83) in Mus. Vert. Zool., taken July 29, 1933, in Burned Corral Cañon, 6800 to 7700 feet, Quinn Cañon Mountains, eastern Nye County, agree in racial characters with birds from the White Mountains where typical *S. c. tenuissima* occurs. Two males, adult and young, each weighed 15.7 grams; two young females, 16.6 and 16.9 grams.

Sitta canadensis Linnaeus

RED-BREADED NUTHATCH

Found as a resident in small numbers in the northern half of the state and as a transient or winter visitant elsewhere. In the neighborhood of Lake Tahoe, one individual was heard, June 12, 1931, among pines northeast of Incline, Washoe County (Linsdale, MS). An adult male (no. 66026, Mus. Vert. Zool.) was obtained, October 1, 1934, on Galena Creek, 7000 feet, Washoe County.

In Humboldt County, Taylor (1912, p. 418) reported specimens collected as follows: Mouth of Wheeler Creek, female and male (nos. 8965-66, Mus. Vert. Zool.), May 26, 1909; Quinn River Crossing, male, number 8967, May 26, 1909; Big Creek Ranch, female, number 8968, June 9, 1909; head of Big Creek, female, number 8969, July 4, 1909. An immature male (no. 66018, Mus. Vert. Zool.) was taken, September 6, 1934, at Martin Creek R. S., 7000 feet, Santa Rosa Mountains, Humboldt County.

At the head of Humboldt Valley, Elko County, on September 10, 1868, Ridgway (1877, p. 416) collected an adult female (no. 53449, U. S. N. M.) and observed the species commonly in aspen groves along the streams. Later in the same month he found it common among pines at 11,000 feet in the Clover Mountains. On June 21, 1898, Bailey took a male (no. 164227, U. S. N. M.) in the Ruby Mountains. One (no. 66019, Mus. Vert. Zool.) was taken on September 11, 1934, on Bear Creek, 8000 feet, Jarbidge Mountains, Elko County.

Specimens (nos. 58635-36, Mus. Vert. Zool.) were obtained from along the streams above the meadow on Birch Creek, 7000 feet, Lander County, on August 29 and 31, 1931 (Linsdale). Both were immature males and weighed 10.7 and 11 grams. Another (no. 65273) was from Peterson Creek, July 29, 1934.

On Baker Creek, 9000 feet, Snake Mountains, White Pine County, six specimens (nos. 66020-25, Mus. Vert. Zool.) were collected on September 23, 1934.

An immature female (no. 31194, Dickey coll.) was taken September 23, 1930, at Saint Thomas, Clark County. This was obviously a transient.

Sitta pygmaea melanotis van Rossem

BLACK-EARED NUTHATCH

Resident in mountains in extreme western and extreme eastern parts of the state. Four adults were collected on February 19 and April 3 and 4, 1868, near Carson City, by Ridgway (1877, p. 417); three of these are now nos. 53452-53, 82699 (U. S. N. M.). Pigmy nuthatches were heard repeatedly, July 9, 1932, in the firs and yellow pines, 1½ miles north of the Nevada-California state line where it intersects the southeastern shore of Lake Tahoe, Douglas County (Linsdale, MS). Three specimens (nos. 71957-58, 79547, U.S.N.M.) were taken on November 7, 1876, by Henshaw at Lake Tahoe. At Glenbrook, Douglas County, Keeler found this species to be common. On June 1, 1889, he found a nest with one fresh egg and, the next day, collected a male (no. 136571, U. S. N. M.). On May 1, 1934, a female and male (nos. 64736-37, Mus. Vert. Zool.) were taken on Galena Creek, 7000 feet, Washoe County.

In the Snake Mountains, White Pine County, two specimens (nos. 66027-28, Mus. Vert. Zool.) were collected, September 19, 1934, at 8500 feet, on Baker Creek. Both were immature females and weighed 10.8 and 11 grams.

Sitta pygmaea canescens van Rossem

NEVADA PIGMY NUTHATCH

Resident on and, so far as known, restricted to the Charleston and Sheep mountains, Clark County. On the former range found to be common among pines in 1891 (Fisher, 1893, p. 137). The type specimen of *S. p. canescens* was collected, September 14, 1930, by van Rossem, in Lee Cañon, 8200 feet, and others were taken in Kyle Cañon, Charleston Mountains. On the Sheep Mountains specimens were obtained by van Rossem in the Hidden Forest.

Certhia familiaris montana Ridgway

ROCKY MOUNTAIN CREEPER

Present at least in winter in the northeastern part of the state, probably resident on the Jarbidge, Ruby and Snake mountains. Two specimens reported by Ellis (1935, p. 87) are in his collection as follows: Female (no. 6849) from west side of Ruby Lake, 3½ miles south of White Pine County line, November 1, 1929; male (no. 4622) from west side of Ruby Lake, 3 miles north of Elko County line, December 30, 1927.

Three skins (nos. 66029-31, Mus. Vert. Zool.) from Bear Creek, 8000 feet, Jarbidge Mountains, Elko County, September 12, 13, and 14, 1934, indicate that creepers are resident on that mountain range.

Four specimens (nos. 64738-41, Mus. Vert. Zool.) were taken on May 15 and 17, 1934, on Lehman Creek, 9000 to 10,000 feet, Snake Mountains, White Pine County. Two more (nos. 66032-33, Mus. Vert. Zool.) came from the same locality, September 18, 1934, and seven (nos. 66034-40, Mus. Vert. Zool.) from Baker Creek, 9000 to 10,000 feet, in the same mountain range, September 20 to 23, 1934.

Certhia familiaris leucosticta van Rossem

NEVADA CREEPER

Resident in the Sheep and Charleston mountains, Clark County. The type specimen, a male, was collected, September 17, 1930, by van Rossem, in the Hidden Forest, 8500 feet, Sheep Mountains.

Certhia familiaris zelotes Osgood

SIERRA CREEPER

Resident in the Sierra Nevada along the western border of the state. Ridgway (1877, p. 418) reported this creeper as present in winter of 1867-68, among cottonwoods in the lower Carson and Truckee valleys. On December 9, 1867, he collected an adult male (no. 53443, U. S. N. M.) on the Truckee Reservation near Pyramid Lake. A single creeper was seen, August 9, 1932, on the trunk of a large tree near the fish hatchery on Galena Creek, 6500 feet, Washoe County (Linsdale, MS). Three skins (nos. 66041-43, Mus. Vert. Zool.) came from Galena Creek, 7500 feet, October 1, 1934. At Glenbrook, Douglas County, on May 28, 1889, Keeler took a female (no. 139722, U. S. N. M.).

Cinclus mexicanus unicolor Bonaparte

DIPPER

Resident; present along permanent streams on several of the mountain ranges.

In the Pine Forest Mountains, Humboldt County, specimens (nos. 9149-50, Mus. Vert. Zool.) were obtained, August 3, 1909, at Leonard Creek and one (no. 9148) on July 5, 1909, at Alder Creek (Richardson). Hanna (1904, p. 77) saw one in a cañon, about 6000 feet, near Golconda, Humboldt County. Oberholser and Bailey (MS) found this species in June, 1898, in the East Humboldt Mountains, Elko County.

Ridgway (1877, p. 406) reported the capture, on October 4 and 11, 1867, of an adult male (no. 53335, U. S. N. M.) and female in the West Humboldt Mountains, Pershing County. Also, on November 19, 1867, he took an adult female, on the Truckee River, Washoe County. In the White Mountains, Esmeralda County, dippers were noted on Chiatovich Creek at 8200 feet, May 13 to 17, 1927 (Linsdale, MS).

In the Toyabe Mountains, a specimen (no. 57528, Mus. Vert. Zool.) was shot, June 16, 1930, on Kingston Creek, at 7000 feet, Lander County (Lamb). Also observed at Birch Creek, 7000 feet, Lander County, and on North Twin River, between 6500 and 7000 feet, Nye County (Linsdale, MS).

In White Pine County dippers were seen May 24, 1929, at 7200 feet on Lehman Creek (specimen, no. 64742, Mus. Vert. Zool., May 14, 1934) and on Baker Creek, at 6600 feet, on June 4, 1929; at 8000 feet, on July 27, 1930; at 7700 and 9000 feet, on June 18, 1929 (Hall, MS). A female (no. 64742, Mus. Vert. Zool.) was taken, May 14, 1934, on Lehman Creek, 7500 feet.

Jaeger (1927, p. 7) reported the dipper as nesting, June 20, 1926, at Williams Ranch, on Trout Creek, Charleston Mountains, Clark County.

Troglodytes aëdon parkmanii Audubon

WESTERN HOUSE WREN

Summer resident; a few spend the winter within the state. In summer, widely distributed wherever there are trees. Definite places of occurrence are as follows.

Washoe County: Truckee Bottoms; Galena Creek, 7000 to 8500 feet.

Ormsby County: Carson City.

Douglas County: Glenbrook.

Humboldt County: Head of Big Creek, Pine Forest Mountains; Martin Creek R. S., Santa Rosa Mountains.

Elko County: Bear Creek, 8000 feet, Jarbidge Mountains; Bull Run Mountains; head of Ackler Creek; Secret Pass; Secret Valley; East Humboldt Mountains.

Pershing County: West Humboldt Mountains.

Churchill County: Stillwater.

Lander County: Birch Creek and Kingston Creek, Toyabe Mountains; Smiths Creek, 7100 feet.

White Pine County: Cherry Creek, 6800 feet; Lehman Creek, 8500 feet.

Esmeralda County: Chiatovich Creek, 7000 and 8200 feet, White Mountains.

Nye County: Mohawk R. S., Wisconsin Creek, Ophir Creek, Last Chance Creek, and South Twin River, Reese River at 9500 feet, Toyabe Mountains; Ash Meadows; south of Belmont; Monitor Mountains.

Lincoln County: Irish Mountain, 8000 feet.

Clark County: Opposite Fort Mojave; north base Charleston Peak; Colorado River, east of Searchlight; Colorado River, near California line.

Presence of this species in winter in Nevada is attested by the observation of one, December 28, 1932, on the Colorado River opposite Fort Mojave by A. H. Miller (MS), and by four specimens (nos. 64143-46, Mus. Vert. Zool.) from the same locality in January and February, 1934, and by a specimen taken December 17, 1867, at Truckee Bottoms, Washoe County (Ridgway, 1877, p. 422).

Ridgway (*loc. cit.*) pointed out that the range of the house wren in Nevada is coextensive with the distribution of timber, and is governed strictly by presence or absence of trees, without special regard to their kind. Nests found by him were usually a large mass of rubbish filled in behind the loosened bark on the trunk of a tree. One nest was behind a flat mass of a small shrub which grew in moss-like patches against the face of a cliff. Another was in a low crotch of an aspen on an abandoned robin's nest; not concealed. Most of the nests found in the Toyabe Mountains region were in cavities in aspens, but two were in crevices in large rocky walls (Linsdale, MS). June seemed to be the month of greatest nesting activity; both eggs and young were found during the latter half of that month.

Nannus hiemalis pacificus (Baird)

WESTERN WINTER WREN

The occurrence of the winter wren as a winter visitant in Nevada is attested by a skin of an adult male (no. 82762, U.S.N.M.) collected on December 25, 1867, in the Truckee Bottoms, near Pyramid Lake (Ridgway, 1877, p. 424). A female (no. 155713, U. S. N. M.) from Cottonwood Range, Humboldt County, was obtained September 19, 1896, by Streater.

Thryomanes bewickii eremophilus Oberholser

BAIRD WREN

Resident in southern portion of the state. A female (no. 53741, Mus. Vert. Zool.) was shot, June 22, 1928, at Valcalda Spring, 7300 feet, in the Silver Peak Mountains, Esmeralda County. This bird weighed 10.8 grams. A male (no. 260138, U.S.N.M.) from Clayton Valley, 8 miles east of Blair, Esmeralda County, was obtained on September 27, 1915, by L. J. Goldman.

A male (no. 27521, Dickey coll.) was taken June 11, 1929, at Pahrump Ranch, Nye County. An immature female (no. 50081, C. I. T.) from Coyote Springs, Lincoln County, was taken, October 16, 1931. Many individuals of this species were seen June 8, 1931, on the eastern slope of Irish Mountain, 6900 feet, Lincoln County (Orr, MS). An immature male (no. 66047, Mus. Vert. Zool.) came from there, September 25, 1934. Members of the Death Valley Expedition found this wren at Ash Meadows, Pahrump and Vegas valleys, and in the Grapevine Mountains in March (Fisher, 1893, p. 134). The species was observed, December 28, 1932, to be common in the damp cottonwood timber and the dry mesquite tangles on the Colorado River, opposite Fort Mojave, Clark County (A. H. Miller, MS). A male (no. 64147, Mus. Vert. Zool.) was shot February 1, 1934, in this vicinity.

Thryomanes bewickii drymoecus (Oberholser)

SAN JOAQUIN WREN

Present in the western part of the state, but not numerous. A male (no. 65276, Mus. Vert. Zool.) was obtained, July 6, 1934, on the West Walker River, 10½ miles south of Yerington, 4500 feet, Lyon County (F. G. Palmer). This bird weighed 11 grams and has a wing length of 53.7 mm. Its small size and more rufescent dorsal coloration when compared with specimens from elsewhere in Nevada indicate that it is racially distinct from them. Until more material is available it seems best to assign this individual to the race *drymoecus*.

Heleodytes brunneicapillus couesi (Sharpe)

CACTUS WREN

Reported from a few localities in the southern end of the state. Recorded by the Death Valley Expedition as common about the ranch in Vegas Valley, and "still more numerous among the mesquite in Vegas Wash near the Colorado River, where the birds were in full song, March 10." On May 5 two nests were found at Bitter Springs in the Muddy Mountains. "The species was common on the high mesa between the Muddy and Virgin Rivers, May 7, where nearly every branching cactus contained the remnants of a nest, but all the young had hatched and flown away" (Fisher, 1893, p. 131).

A specimen in Mus. Vert. Zool. (no. 64148), taken January 31, 1934, came from the Dead Mountains in southern Clark County (Benson).

Telmatodytes palustris plesius (Oberholser)

WESTERN MARSH WREN

Resident; numerous in marshy places about springs, lakes, and streams over most of northern Nevada, south to about 38° N. Present in winter in at least a few localities.

According to Henshaw (1877, p. 1308) thousands of individuals winter in the sedgy margins of Washoe Lake. Ridgway (1877, p. 425) took an adult male (no. 53433, U. S. N. M.) on December 25, 1867, at Truckee Bottoms, near Pyramid Lake. In the same locality, on May 18, 1868, he found two nests with five eggs each.

Specimens in Mus. Vert. Zool. represent the following localities.

Lyon County: West Walker River, 10½ and 6 miles south of Yerington (nos. 65277-78), July 5 and 6, 1934.

Humboldt County: Quinn River Crossing (no. 8482), May 20, 1909.

Elko County: West side of Ruby Lake, 3 miles north of Elko County line, young bird in alcohol (no. 57110), July 19, 1927.

White Pine County: Cleveland Ranch, 6000 feet, Spring Valley (no. 57929), July 30, 1930.

Esmeralda County: Fish Lake, 4800 feet (nos. 53742-43), May 25 and 27, 1928.

Nye County: 5 miles southeast of Millett P. O., 5500 feet, Smoky Valley (nos. 58640-44), September 9 and 11, 1931.

Telmatodytes palustris aestuarinus Swarth

SUISUN MARSH WREN

Resident in southern Nevada; abundant along the Colorado River opposite Fort Mojave, in southern Clark County. Specimens in Mus. Vert. Zool. were obtained in that vicinity as follows: December 30 and 31, 1932 (nos. 62626-27); February 1 to 11, 1934 (nos. 64151-60); May 7 and 10, 1934, adult male and two young birds just out of the nest (nos. 64744-46). Farther up the river at 14 miles east of Searchlight, two skins (nos. 64149-50) were obtained on January 13, 1934.

Marsh wrens found nesting at Crystal Spring, 4000 feet, Pahrnagat Valley, Lincoln County, seemed to be like the ones in the Colorado Valley. Eight skins (nos. 61107-14, Mus. Vert. Zool.) were obtained there between May 19 and 22, 1932.

Catherpes mexicanus conspersus Ridgway

CAÑON WREN

Resident; records mostly from southern part of the state.

Mus. Vert. Zool. has specimens from Birch Creek, 7000 feet (female, no. 58645), Lander County, August 29, 1931; North Twin River at 6800 feet (male, no. 57534), Nye County, May 1, 1930; 2 miles west of Candelaria, 5500 feet (female, no. 53740), Esmeralda County, May 20, 1928. Ridgway (1877, p. 420) reported the capture on December 7, 1867, of an adult male (no. 53425, U. S. N. M.) near Fort Churchill, Washoe Mountains, Lyon County. This was the type specimen for the race.

Cañon wrens were found by the Death Valley Expedition, near Pahroc Spring, Pahroc Mountains, where two were seen on May 22, 1891, and in the Grapevine Mountains, where they were not common in May and June (Fisher, 1893, p. 133).

In addition to the localities in the Toyabe Mountains, represented by specimens (first two, above), this wren has been seen in Kingston Cañon at 6500 feet, 7000 feet, and 7500 feet (Linsdale, MS). Individuals were noted in June, 1928, 1½ miles northeast and 4¼ miles southwest of Cave Spring, Esmeralda County (Hall, MS).

Salpinctes obsoletus obsoletus (Say)

ROCK WREN

Summer resident; found nearly everywhere in the state for the rocky ground such as it inhabits is found over most of the area. Present in winter in southern Nevada. Records show presence of the species at the following places.

Washoe County: Granite Creek; Smoke Creek; Deephole; Virginia Mountains; Anaho Island; 17 miles northwest of Reno.

Ormsby County: Carson City.

Humboldt County: Pine Forest Mountain, Leonard Creek, Alder Creek, head of Big Creek, Big Creek Meadow, and Big Creek Ranch, Pine Forest Mountains; Virgin Valley; Humboldt Valley; Badger; Summit Lake; Martin Creek R. S., Santa Rosa Mountains; 5 miles north of Paradise Valley.

Elko County: 25 miles north of Elko; Ruby Valley; Carlin.

Pershing County: West Humboldt Mountains.

Churchill County: Mountain Well, 5650 feet; Stillwater.

Lander County: Battle Mountain; Birch Creek and Kingston Creek, Toyabe Mountains.

Eureka County: Eureka.

White Pine County: 2 miles northwest of Cleveland Ranch, 6500 feet, east side of Shell Creek Range; Newark Valley.

Esmeralda County: 7 miles north of Arlemont; Chiatovich Creek, 7000 and 8200 feet; 2 miles south of Piper Peak, 7700 feet, Silver Peak Range; Cave Spring, Valcalda Spring, 7300 feet; Tule Cañon; Mount Magruder; Gold Mountain.

Nye County: Mohawk R. S., Wisconsin Creek, Ophir Creek, Last Chance Creek, and South Twin River, Toyabe Mountains; 5 miles southeast of Millett P. O., Smoky Valley; Round Mountain; 2 miles west of Manhattan; Breen Creek, 7000 feet; Monitor Mountains; Amargosa River, 3½ miles northeast of Beatty, 3400 feet; Grapevine Mountains; Oasis Valley; Ash Meadows; 7 miles east of Nyala, 6700 feet, Quinn Cañon Mountains; Belmont.

Lincoln County: Pahroc Spring; 1½ miles northeast of Crystal Spring, 4300 feet; Meadow

Valley, 7 miles south of Caliente, 4000 feet, and 21 miles south of Caliente, 3200 feet; Pahrnagat Lake.

Clark County: Charleston Resort and Kyle Cañon, Charleston Mountains; Pahrump Valley; Black Mountain; Colorado River, $\frac{1}{2}$ mile north of California-Nevada Monument (February 3, 1934, Fitch).

The Death Valley Expedition found rock wrens at several localities in the southern part of the state in March (Fisher, 1893, p. 132). Ridgway (1877, p. 418) did not see the species anywhere in winter until it first appeared, March 20, 1868, at Carson City. He heard the first song on March 30. Fall records show presence of the species as late, at least, as September 22, 1931, when it was noted at Breen Creek, 7000 feet, Nye County (Orr, MS). In the Humboldt Valley a nest found on June 10, among rocks in a railroad cut, contained young (Hanna, 1904, p. 77). Another nest containing young was found, June 17, 1931, in Meadow Valley, Lincoln County (Orr, MS). A nest containing young nearly grown was found, May 29, 1927, in a cavity in a wall of a wash, 7 miles north of Arlemont, Esmeralda County (Linsdale, MS).

Mimus polyglottos leucopterus (Vigors)

WESTERN MOCKINGBIRD

Summer resident over most of the state; found throughout the year in the southern end.

The farthest north occurrence of the mockingbird for the state was reported by Dawson (1919, p. 42) who saw two individuals, July 28, 1918, "on Duck Flat, at a point some miles northwest of Sunkist (formerly Duck Lake)" Washoe County. This locality is well above the 41st parallel of latitude and is within 6 miles of the California line.

In Esmeralda County, two parent birds and three nestlings (nos. 53733-37, Mus. Vert. Zool.) were collected, June 11, 1928, at Fish Lake, 4800 feet (Hall). The same observer (MS) noted this species at Chiatovich Ranch, June 1, 1928, and at Dyer, June 7, 1928, both also in Fish Lake Valley. Noted 7 miles north of Arlemont, May 29 to June 8, 1927, at Arlemont, May 21 and 23, 1927, and at McNett Ranch, May 27, 1927, all in Esmeralda County (Linsdale, MS).

A male (no. 62885, Mus. Vert. Zool.) was obtained, May 29, 1933, in Smoky Valley, 5 miles southeast of Millett P. O., Nye County. This species was conspicuous, May 19 to 23, 1931, near the Amargosa River, $3\frac{1}{2}$ miles northeast of Beatty, 3400 feet, Nye County (Orr, MS).

Two specimens (nos. 61118-19, Mus. Vert. Zool.) were collected, May 24 and 30, 1932, at Crystal Spring, 4000 feet, Pahrnagat Valley, Lincoln County. Recent sight records for this county are as follows: Hiko Spring, May 25, 1932; Pahrnagat Lake, May 23, 1932, 16 miles west of Caliente, 5000 feet, May 28, 1932; pass between Emigrant Valley and Indian Spring Valley, near Lincoln-Clark County line, June 3, 1929 (Hall, MS); Desert Valley, June 5, 1931 (Orr, MS). In Clark County, a male (no. 64162, Mus. Vert. Zool.) was taken February 1, 1934, on the Colorado River, near the California line.

In the southern part of the state the Death Valley Expedition in 1891, found mockingbirds, as follows: Tule Cañon, north end of northwest arm of Death Valley, June 4; Gold Mountain, southern slope among tree yuccas, June 3; Oasis Valley, June 1; Timpahute Mountains, in tree yuccas, May 26; Pahrnagat Valley, common and breeding, May 22 to 26; Pahroc Spring, May 20 to 22; Meadow Creek Valley, May 19; valleys of Muddy and Virgin rivers, common, May 6 to 8 (Fisher, 1893, p. 127).

Dumetella carolinensis (Linnaeus)

CATBIRD

Straggler, represented in Nevada by but one record; a female (no. 53738, Mus. Vert. Zool.) taken, June 18, 1928, by Russell, at Cave Spring, 6248 feet, Esmeralda County.

Toxostoma lecontei lecontei Lawrence

LECONTE THRASHER

Resident. Reported in summer from several places south of the parallel of 37 degrees. Localities given by Fisher (1893, p. 128) are as follows: Table Mountain, Amargosa Desert, male (no. 136917, U.S.N.M.), May 6, 1891. Ash Meadows, Nye County, three males (nos. 136899-900, U.S.N.M.), March 19, 1891. Pahrump Valley, Clark County, several on February 11, 1891 (no. 136908, U.S.N.M.), and full grown young shot on April 29, among yuccas. Vegas Valley, Clark County, one killed, May 1, 1891 (no. 136905, U.S.N.M.). Virgin and Lower Muddy valleys, common; a nest found in a branching cactus on a mesa between these rivers.

Toxostoma dorsale dorsale Henry

CRISSAL THRASHER

Records in southern end of the state, in Clark County. According to Fisher (1893, p. 130) this thrasher was observed in the Virgin River Valley, on May 7, and near Bunkerville on May 8, 1891. At Cottonwood Spring, at the east base of the Charleston Mountains, a nest containing three eggs was found on March 8, 1891. The bird was shot from the nest, which was placed partly on one of the large branches of a desert willow (*Chilopsis saligua*) and partly on top of an *Atriplex canescens* bush growing under it.

At Saint Thomas, Clark County, two adults (nos. 50102-03, C. I. T.), were obtained on October 19, 1931, and a young bird (no. 50707, C. I. T.), on July 24, 1932 (van Rossem).

Opposite Fort Mojave on the Colorado River, on December 30, 1932, a crissal thrasher was seen on top of a mesquite (A. H. Miller, MS) and another was taken for a specimen in arrowweed thickets (L. Miller). A male in Mus. Vert. Zool. (no. 64163), January 13, 1934, came from the Colorado River, east of Searchlight (Fitch).

Oreoscoptes montanus (Townsend)

SAGE THRASHER

Summer resident throughout the area of tall sage brush which covers a major portion of the state, both on high and low ground. Present in winter in southern end of state. Definite records are for the following places.

Washoe County: mouth of Little High Rock Cañon; Washoe Lake; Granite Creek; Smoke Creek.

Ormsby County: Carson City.

Humboldt County: McDermitt; Summit Lake; Badger; Flowing Springs; Virgin Valley; Soldier Meadows; Big Creek and Leonard Creek, Pine Forest Mountains; Quinn River Crossing; near Stonehouse; Golconda; Martin Creek R. S., Santa Rosa Mountains.

Elko County: Mountain City; 1 mile southeast of Tuscarora; Halleck; Huntington Valley; Owyhee; 25 miles north of Elko; Elko; Jerry Creek, north end of Ruby Mountains; Independence Valley; East Humboldt Mountains; Ruby Valley.

Pershing County: Oreana; Lovelock.

Churchill County: 1 mile west of Mountain Well, 5350 feet; Fallon.

Lander County: Austin, Birch Creek and Kingston Creek, Toyabe Mountains.

Eureka County: Eureka.

White Pine County: East side of Schellbourne Pass, 6800 feet; Willard Creek, 7150 feet, Spring Valley; 1 mile north of Baker, 5800 feet; Newark Valley.

Esmeralda County: Chiatovich Creek, 7000 and 8200 feet, White Mountains; Chiatovich Ranch, Fish Lake Valley; east of Cave Spring, 7000 feet, Silver Peak Range; Mount Magruder.

Nye County: 5 miles southeast of Millett P. O., Smoky Valley; Mohawk Creek, South Twin River, Toyabe Mountains; Ralston Desert; Ash Meadows; 7½ miles east of Cliff Spring, 5900 feet; Garden Valley, 8½ miles northeast of Sharp.

Clark County: Pahrump Valley; Vegas Valley; Juniper Mountains; near Las Vegas (April 8, 1917, van Rossem); Colorado River, near California line.

In the latitude of Carson City, Ridgway (1877, p. 401) observed that this bird arrived about March 20 and left in October or November. The males began singing March 24. The first eggs were laid April 20, nests having been commenced a week or more earlier. By that time the males were perfectly silent.

Presence in winter is attested by six skins (nos. 64164-69, Mus. Vert. Zool.), taken January 31 to February 5, 1934, near the Colorado River in southern Clark County.

Nests were found at Carson City, April 24, 1868, with 3, 3, 4, 4, and 5 eggs, and April 28, with 5 eggs; one at Austin, Lander County, July 3, 1868, had 3 eggs (Ridgway, 1877, p. 401). Two nests found by Taylor (1912, p. 413) on May 17, 1909, in Humboldt County, held 4 eggs each. One at South Twin River, 6000 feet, Nye County, on May 27, 1932, contained 5 eggs; another on the same day in that vicinity was being deserted by a brood of young (Linsdale, MS). A nest in Smoky Valley, near Millett, Nye County, on May 24, 1932, held 2 eggs and 2 just-hatched young (Orr, MS). In Esmeralda County, on Chiatovich Creek, 7000 feet, White Mountains, a nearly completed nest was found on May 12, 1927; at Arlemont, 4900 feet, one found on May 21, 1927, held 4 young, just hatched and 1 egg (Linsdale, MS).

Turdus migratorius propinquus Ridgway

WESTERN ROBIN

Summer resident in the higher valleys and mountains over most of the state; winter visitant to the lower valleys and the southern part of the state. Distribution over the state is indicated by the following list of places where the species has been noted.

Washoe County: Deephole; Granite Creek; Truckee Valley; Truckee Meadows; Galena Creek, 7500 to 8500 feet; incline at north end of Lake Tahoe; Wadsworth.

Ormsby County: Carson City.

Lyon County: West Walker River, 10½ and 12 miles south of Yerington.

Humboldt County: Martin Creek; Cottonwood Range; Badger; Virgin Valley; Leonard Creek, Alder Creek, Big Creek, and Big Creek Ranch, Pine Forest Mountains; Humboldt Valley; Quinn River Crossing; Chimney Creek, near Amos; Iron Point; Winnemucca; Golconda.

Elko County: Elko; Huntington Valley; Mountain City; Bear Creek; Goose Creek.

Pershing County: Lovelock.

Churchill County: Stillwater; Eastgate.

Lander County: Austin, Big Creek, Birch Creek, and Kingston Creek, Toyabe Mountains.

Eureka County: Eureka.

White Pine County: Gleason Creek, 7200 to 7500 feet, 14 miles northwest of Ely; Lehman Creek, 7500 and 8000 feet; Stella Lake, 10,750 feet to Baker Creek, 7200 feet.

Mineral County: 2 miles southwest of Pine Grove.

Esmeralda County: Chiatovich Creek, 7000 to 8500 feet, White Mountains; Chiatovich Ranch, Fish Lake Valley; Mount Magruder.

Nye County: Mohawk R. S., Wisconsin Creek, Ophir Creek, South Twin River, Peavine Creek, Cloverdale; Toyabe Mountains; 1 mile east of Jefferson, 7600 feet, Toquima Mountains; Monitor Mountains; Ash Meadows; Greenmonster Cañon, 7500 feet, Monitor Range.

Lincoln County: Southwest base of Groom Baldy, 7200 feet.

Clark County: Virgin River, ¾ mile east of Mesquite, 1750 feet; Saint Thomas; Charleston Mountains; Pahrump Valley; Vegas Valley; Vegas Wash; Searchlight; Black Cañon; opposite Fort Mojave.

In Humboldt County, Taylor (1912, p. 420) found robins nesting, May 11, 1909, in poplars along streets in Winnemucca. In the Pine Forest Mountains nests were found on the ground and at various heights up to six feet. They were in willow, wild rose, sagebrush, aspen, poplar, and limber pine. Altitudinal range was from 4100 to 9000 feet.

Several nests were found in the Toyabe Mountains; one on June 12, 1930, at 8700 feet, was empty; one on June 18, at 6600 feet was not quite finished; one on June 21, at 7000 feet, contained four eggs; of two on June 23, 1931, one held large young and the other three eggs; one on July 1, at 8500 feet, contained three eggs.

Ixoreus naevius meruloides (Swainson)

VARIED THRUSH

An irregular winter visitant near the central-western border of the state. Henshaw wrote (1877, p. 1315) as follows: "A male of this species which I saw confined in a cage in a store in Carson City was said by the owner to have been captured during the previous spring in the adjoining mountains. For this statement I cannot vouch, but give it for what it is worth. This thrush has never been recorded from any locality east of the Sierras; yet there seems to be no reason why during the migrations, as in the case of other birds possessing a similar habitat, the species may not occur along the eastern slope. That it actually does so, however, remains to be proven." In 1880 (p. 284), he wrote that near Reno large numbers of varied thrushes made their appearance about February 1 and remained till into March, 1878.

Reported by A. Johnson (MS) in the vicinity of Carson City, Ormsby County. He saw a single bird on October 20 and 21, 1933, and at least two, between December 10 and 16. McLean (MS) saw one on December 15, 1934, ½ mile east of Verdi, Washoe County.

Hylocichla guttata guttata (Pallas)

ALASKA HERMIT THRUSH

Transient; present in winter in the southern part of the state.

A male (no. 62628, Mus. Vert. Zool.) was taken, December 31, 1932, by A. H. Miller, on the Colorado River, opposite Fort Mojave, Clark County. Wing-length in this specimen is 89.6 mm. Nine specimens (nos. 64190-98, Mus. Vert. Zool.) from this vicinity were taken in January and February,

1934. Another (no. 64189) taken January 14, 1934, was from the Colorado River, east of Searchlight. These and other individuals were feeding in the moist cottonwood timber near the river.

Hylocichla guttata nanus (Audubon)

DWARF HERMIT THRUSH

Recorded in winter from the Colorado River in the southern tip of the state where specimens were taken, January 21, 1934, east of Searchlight (no. 64186, Mus. Vert. Zool.) and January 29, close to the California line (nos. 64187-88), both localities in Clark County.

Hylocichla guttata sequoiensis (Belding)

SIERRA HERMIT THRUSH

Summer resident in Sierra Nevada and nearby ranges along the western border of the state. On August 11, 1932, two juveniles and an adult female (nos. 61277-79, Mus. Vert. Zool.) were collected on Galena Creek, 8500 feet, Washoe County. The young male and female weighed 28 and 28.5 grams, respectively; the adult female, 25 grams. On May 22, 1934, a male (no. 64751, Mus. Vert. Zool.) weight 21.9 grams, was taken 6 miles north of Incline, 9000 feet, Washoe County.

Two males, a juvenile and an adult (nos. 65284-85, Mus. Vert. Zool.) were taken, July 15 and 16, 1934, on Cottonwood Creek, 7700 feet, Mount Grant, Mineral County.

Hylocichla guttata polionota Grinnell

MONO HERMIT THRUSH

Summer resident on the Great Basin ranges over most of the state. Inhabits middle and upper slopes of mountains, nesting in groves of aspens and mountain mahoganies. Specimens in Mus. Vert. Zool. come from the following places.

Humboldt County: Duffer Peak, Pine Forest Mountains (no. 67123), June 5, 1935.

Lander County: Peterson Creek (no. 65286), July 29, 1934, Shoshone Mountains; Birch Creek (nos. 57548-53, 58663-64), June 23 and 24, 1930, September 2, 1931, and Kingston Creek (nos. 57544-47, 58665-66, 58508, 61280), June, 1930, September 6, 1931, August 17, 1932, Toyabe Mountains.

White Pine County: Cherry Creek, 6800 feet (no. 57933), September 10, 1930.

Esmeralda County: Chiatovich Creek, 7000 feet, White Mountains (no. 51201), May 8, 1927.

Nye County: Mohawk R. S. (nos. 58503-07), June 17 and 20, 1931, Wisconsin Creek (nos. 57542-43), May 29, 1930, and South Twin River, 6500 feet (no. 57541), May 1, 1930, Toyabe Mountains, north slope of Toquima Peak, 9400 feet (nos. 63589-90) and 1 mile east of Jefferson, 7600 feet (nos. 63587-88), Toquima Mountains.

Hylocichla guttata auduboni Baird

AUDUBON HERMIT THRUSH

Summer resident in mountains near eastern border of the state. Hermit thrushes which inhabit the Snake Mountains in eastern White Pine County appear to belong to this form. Eleven specimens (nos. 64752-62, Mus. Vert. Zool.) were obtained in May, 1934, from Lehman Creek, at altitudes from 7500 to 10,500 feet.

Hylocichla ustulata ustulata (Nuttall)

RUSSET-BACKED THRUSH

Summer resident in the mountains along the central-western border of the state. Ridgway (1877, p. 397) reported the capture, on June 2, 1868, of an adult female (no. 53311, U.S.N.M.) at Truckee Reservation, Washoe County. On June 13, 1931, this thrush was numerous about the camp ground at Incline, on Lake Tahoe, Washoe County (Linsdale, MS).

Hylocichla ustulata swainsoni (Tschudi)

OLIVE-BACKED THRUSH

A transient, recorded from the northeastern part of the state. Two adult males (nos. 53312, 82527, U.S.N.M.) were taken, September 1 and 11, 1868, in the East Humboldt Mountains, Elko County (Ridgway, 1877, p. 397).

Hylocichla ustulata almae Oberholser

ALMA THRUSH

Summer resident in small numbers on some mountain ranges in the northern half of the state; south to Toyabe Mountains.

Several specimens contained in Mus. Vert. Zool. In the Pine Forest Mountains, Humboldt County,

skins were obtained in the summer of 1909, as follows: Head of Big Creek, 8000 feet (nos. 9161-62), July 1; Alder Creek, 7000 feet (nos. 9163-68) July 13; Big Creek, 8000 feet (no. 9169) July 20; Leonard Creek, 6500 feet (no. 9170) August 3. Three males and a female (nos. 67124-27) were collected on June 1, 2, and 3, 1935, at Martin Creek R. S., Humboldt County.

On June 18, 1930, two males (nos. 57554-55) were collected on Kingston Creek, at 6600 and 6800 feet, in the Toyabe Mountains, Lander County. Weights were 29.6 and 33.1 grams.

The type specimen of this race, an adult male (no. 159053, U.S.N.M.) was taken on June 24, 1898, by Oberholser in the East Humboldt Mountains, opposite Franklin Lake, in Elko County. Another male (no. 159084, U.S.N.M.) was taken June 10, 1898, by W. K. Fisher, at Mountain City, Elko County; and one (no. 67526, Mus. Vert. Zool.) came from 6 miles southwest of there, July 23, 1935.

In the Toyabe Mountains they were found only in the narrow cañons on the eastern side and where the conspicuous vegetation was a jungle of birch which formed a dark, moist cover (Linsdale, MS).

Hylocichla fuscescens salicicola Ridgway

WILLOW THRUSH

Ridgway (1907, p. 63) gives the range of the willow thrush as south to Mountain City, Elko County, Nevada (male, no. 159083, U.S.N.M., taken June 13, 1898, by W. K. Fisher). This locality is in the northern part of Elko County, about 10 miles from the Idaho boundary.

Sialia mexicana bairdi Ridgway

CHESTNUT-BACKED BLUEBIRD

Numerous in winter in the southern portion of the state.

An adult male (no. 66066, Mus. Vert. Zool.) was shot, September 26, 1934, from a small flock at Springer Spring, 7000 feet, Irish Mountain, Lincoln County.

In Clark County, Fisher (1893, p. 148) listed a male (no. 136146, U.S.N.M.) shot on February 13, 1891, in the Charleston Mountains. Later, Jaeger (1927, p. 8) found this bird to be common in the yellow pine and aspen forests of those mountains, to 11,200 feet. Fisher (*loc. cit.*) also reported it at Pahrump and Vegas ranches in February and March, 1891. On December 29, 1932, many western bluebirds were noted, feeding on mistletoe berries, on the Colorado River opposite Fort Mojave, Clark County (A. H. Miller, MS). Three specimens (nos. 64199-201, Mus. Vert. Zool.) were shot January 17, 1934, on the Colorado River, east of Searchlight.

Sialia mexicana occidentalis Townsend

WESTERN BLUEBIRD

Resident; present in summer at least, in the western and central parts of the state.

A female (no. 47157, Mus. Vert. Zool.) was shot, July 7, 1926, 2 miles north of Nixon, Pyramid Lake, Washoe County (Hall).

Ridgway (1877, p. 403) reported a few families of young with parents in the wooded valley of the Truckee, near Big Bend (farthest east). At Carson City, he collected three adult males, February 21 (no. 53319, U.S.N.M.) and March 28, 1868. One of latter date is now number 53321 (U.S.N.M.). Henshaw (1877, p. 1308) reported the species as common in that vicinity on August 25, September 16, and November 10 to 20, 1876.

On August 13, 1932, a family group of western bluebirds was observed in cottonwoods along the Carson River, 1 mile east from Dayton, Lyon County (Linsdale, MS). On the West Walker River, Lyon County, a female and male (nos. 65287-88, Mus. Vert. Zool.) were taken, July 4 and 5, 1934, 10½ miles south of Yerington.

U.S.N.M. contains specimens from Pyramid Lake (nos. 136167, 141562), June 20 and 24, 1893 (Bailey); Reno (195812-13), October 12, 1904 (Hollister); Glenbrook, Douglas County (no. 136155), June 2, 1889 (Keeler); Oberholser and Bailey (MS) noted one, April 28, 1898, in a field near Wadsworth, Washoe County. Holt (MS) reported that two were seen March 20, 1915, at the ranch of F. M. Ferris on Indian Creek, Toquima Range, Nye County.

Sialia currucoides Bechstein

MOUNTAIN BLUEBIRD

Resident; when heavy winter snows come in the mountains, go to the valleys. Most closely restricted to mountains in southern part of the state. Numerous records show occurrence of this bird in the following places.

Washoe County: Little High Rock Cañon; Truckee Bottoms; Steamboat Valley; Washoe Valley; Galena Creek, 7000 feet.

Storey County: Virginia City.

Ormsby County: Carson City.

Humboldt County: Pine Forest Mountain, and head of Big Creek, Pine Forest Mountains; Badger; Martin Creek R. S., Santa Rosa Mountains.

Elko County: Elko; East Humboldt Mountains; Ruby Mountains; mountains around Bull Run; Antelope Creek; 9 miles northeast of Wells, 6000 feet.

Pershing County: West Humboldt Mountains.

Lander County: Austin, Birch Creek, and Kingston Creek, Toyabe Mountains; Shoshone Mountains, 30 miles southwest of Austin.

Eureka County: Eureka.

White Pine County: Cleve Creek, 8100 feet, Shell Creek Range; Baker Creek, 8500 feet.

Mineral County: Queen Mine, White Mountains; Lapon Cañon, 8900 feet, Mount Grant.

Esmeralda County: 5 miles southeast of Blair, Clayton Valley; Chiatovich Creek, 7000 to 8200 feet, White Mountains; Cave Spring, 6400 feet, Silver Peak Range; Mount Magruder.

Nye County: Mohawk R. S., Wisconsin Creek, Ophir Creek, Last Chance Creek, South Twin River, and Peavine Creek Ranch, Arc Dome, 10,000 feet, Toyabe Mountains; west slope of Mount Jefferson, Toquima Mountains; Grapevine Mountains; Ash Meadows; Hot Spring Cañon; Greenmonster Cañon, 7500 feet, Monitor Range.

Lincoln County: Groom Baldy, near top and at southwest base, 7200 feet; Pahroc Mountains.

Clark County: Juniper Mountains; Charleston Mountains; Pahrup Valley; opposite Fort Mojave; Colorado River, east of Searchlight.

Ridgway (1877, p. 403) found the mountain bluebird common near Virginia City, in June, where it was nesting in buildings, old mills, and abandoned shafts of mines. It was also common near Austin, Toyabe Mountains, Lander County, and in the Ruby Mountains, Elko County, in July and August, in the upper portion of the timber belt, 9000 to 11,000 feet, and nesting among rocks and in deserted holes of woodpeckers among stunted pines, juniper or mountain mahogany trees. An incomplete (?) set of three eggs was found, May 30, 1930, at 8000 feet, near Ophir Cañon, Toyabe Mountains, Nye County (Lamb, MS).

Myadestes townsendi (Audubon)

TOWNSEND SOLITAIRE

Summer resident on the higher mountains; possibly present through the winter in southern part of the state. Records of occurrence by counties are as follows.

Washoe County: Male (no. 53398, U.S.N.M.) taken December 21, 1867, from Virginia Mountains, near Pyramid Lake. Here the birds fed largely on berries of juniper and lived among these trees (Ridgway, 1877, p. 408). Noted in juniper-piñon covered hills, 17 miles northwest of Reno on April 30, 1934 (Linsdale, MS). On August 10, 1932, a single individual was seen in pine timber close to Galena Creek at 7500 feet (Linsdale, MS).

Humboldt County: One seen in September, 1896, in Pine Forest Mountains (Streator).

Lander County: Male (no. 57562, Mus. Vert. Zool.), from Kingston Creek, 7000 feet, June 18, 1930.

White Pine County: One was seen at Stella Lake, 10,750 feet, in Snake Mountains, May 15, 1934 (Linsdale, MS). Specimens (nos. 66070-72, Mus. Vert. Zool.) were taken in those mountains, September 22 and 23, 1934, on Lehman Creek, 7500 feet, and Baker Creek, 9000 feet.

Esmeralda County: Female (no. 51200, Mus. Vert. Zool.), from Chiatovich Creek, 8000 feet, May 9, 1927. Noted in this vicinity from May 8 to 23 (Linsdale, MS); Silver Peak Range, 8500 feet, female (no. 260141, U.S.N.M.), September 27, 1915 (L. J. Goldman).

Nye County: Two males (nos. 57560-61, Mus. Vert. Zool.), South Twin River, 6500 feet, Toyabe Mountains, April 30 and May 1, 1930; male (no. 58463, Mus. Vert. Zool.), 2.3 miles east of Silverbow, 7150 feet, Kawich Mountains, April 29, 1931; female (no. 58926, Mus. Vert. Zool.), Breen Creek, 7000 feet, Kawich Mountains, September 21, 1931; male (no. 141585, U.S.N.M.), Oasis Valley, March 15, 1891 (Fisher, 1893, p. 145).

Lincoln County: noted at top of Irish Mountain, 8000 feet, on June 12, 1931 (Orr, MS); Pahranaagat Lake, immature female (no. 50056, C. I. T.), October 13, 1931 (van Rossem).

Clark County: Common among cedars on Charleston Mountains in March, 1891 (Fisher, 1893, p. 145); also, in summer, heard in early morning and evening in same mountains (Jaeger, 1927, p. 8); Colorado River, east of Searchlight, male (no. 64207, Mus. Vert. Zool.), January 16, 1934 (Feathers).

Weights of four males, two in April and one each in May and June, were 27.5, 31.4, 25.6, and 34 grams, respectively; of two females, in May and September, 32.3 and 31.7 grams.

Polioptila caerulea amoenissima Grinnell

WESTERN GNATCATCHER

Present in summer, at least as far north as the Toyabe Mountains. Found in winter in the extreme southern end of the state.

A nesting pair (nos. 57563-64, Mus. Vert. Zool.) was obtained, along with the nest and four eggs, on June 20, 1930, at 6200 feet near the mouth of Kingston Creek, Lander County (Miller). A single individual was seen, June 5, 1932, farther south in the same mountain range, at 7000 feet on Wisconsin Creek, Nye County (Orr, MS). A female (no. 63593, Mus. Vert. Zool.) was obtained, July 31, 1933, 7 miles east of Nyala, 6700 feet, Quinn Cañon Mountains, Nye County. At Indian Spring, 7000 feet, Belted Range, Nye County, a male (no. 58464, Mus. Vert. Zool.) was shot on May 8, 1931 (Russell). Fisher (1893, p. 143) recorded that a pair was shot on June 7, 1891, on Mount Magruder, Esmeralda County, where the species was common in piñons. In the Charleston Mountains, Clark County, Jaeger (1927, p. 8) found this bird infrequent in mountain mahogany at 9000 feet, and increasingly common at lower altitudes. On December 29, 1932, a male (no. 62629, Mus. Vert. Zool.) was obtained by A. H. Miller on the Colorado River opposite Fort Mojave, Clark County. The species was abundant in arrowweed thickets. Three specimens (nos. 64209-11, Mus. Vert. Zool.) came from that vicinity, January 28 and 31, and February 3, 1934. Another (no. 64208, Mus. Vert. Zool.) was taken January 13, 1934, on the Colorado River east of Searchlight.

Polioptila melanura melanura Lawrence

PLUMBEOUS GNATCATCHER

Reported by Fisher (1893, p. 144) as found by members of the Death Valley Expedition at two localities in Clark County; at Bunkerville, where an adult male (no. 141706, U.S.N.M.) was shot on May 9, 1891, and Vegas Valley, where several were seen and one shot on March 13, 1891 (no. 136478, U.S.N.M.). On December 27, 1932, a male and female (nos. 62630-31, Mus. Vert. Zool.) were taken by A. H. Miller on the Colorado River opposite Fort Mojave, Clark County. Many individuals were seen in the mesquite arrowweed thickets. Five skins (nos. 64212-16, Mus. Vert. Zool.) were preserved from this vicinity, February 1 and 5, 1934.

Regulus satrapa olivaceus Baird

WESTERN GOLDEN-CROWNED KINGLET

Resident on some of the mountain ranges in eastern part of the state.

Present in summer, at least on the Snake Mountains in eastern White Pine County. Two males (nos. 64764-65, Mus. Vert. Zool.) from there were obtained, May 13 and 15, 1934, on Lehman Creek, 8000 feet. Another specimen (no. 66073, Mus. Vert. Zool.) was taken, September 18, 1934, on the same creek at 8500 feet. Two males (nos. 66074-75, Mus. Vert. Zool.) were shot, September 20 and 21, on Baker Creek, Snake Mountains.

Reported as a transient in the fall in the West Humboldt Mountains where a few were seen in bushes along streams (Ridgway, 1877, p. 410). Noted on September 13, 1934, on Bear Creek, Jarbidge Mountains, Elko County (Linsdale, MS). A male (no. 4628) reported by Ellis (1935, p. 87) is in his collection from west side of Ruby Lake, 3 miles north of Elko County line, December 30, 1927.

Corthylio calendula cineraceus Grinnell

WESTERN RUBY-CROWNED KINGLET

Transient and winter visitant; summer resident in the higher mountain ranges of the state. Specimens in Mus. Vert. Zool. represent following localities.

Washoe County: Tahoe Meadow, 8500 feet, Galena Creek, female (no. 66483), August 21, 1934; Galena Creek, 7500 feet (nos. 66114-16), October 1, 1934.

Humboldt County: Duffer Peak, Pine Forest Mountains, breeding male (no. 67129), June 7, 1935; Quinn River Crossing, two females (nos. 8662-63), May 17 and 18, 1909; Martin Creek R. S., 7000 feet, Santa Rosa Mountains (nos. 66076-81), September 7, 8, and 9, 1934, and (no. 67128), June 1, 1935.

Elko County: Bear Creek, 8000 feet, Jarbidge Mountains (nos. 66082-87), September 11, 12, and 13, 1934.

White Pine County: Lehman Creek, 8000 to 9500 feet (nos. 64766-70, 66088-97, 66109), May 13, 15 and 17, 1934, September 18 and 22, 1934; Baker Creek, 8500 to 10,000 feet (nos. 66098-108, 66110), September 19, 20, 21, and 23, 1934.

Esmeralda County: Chiatovich Creek, 7000 feet, White Mountains, female (no. 51199), May 8, 1927.

Nye County: 5 miles southeast of Millett P. O., 5500 feet, two females (nos. 57565-66), April 22 and 26, 1930.

Lincoln County: Springer Spring, 7000 feet, Irish Mountain (nos. 66111-13), September 25 and 26, 1934.

Clark County: Colorado River, opposite Fort Mojave, fifteen skins (nos. 64217-31), January 28 to February 12, 1934.

Ruby-crowned kinglets have been found in summer at Incline, on Lake Tahoe, Washoe County. On June 12, 1931, a nest containing young that were being fed by adults was seen in that vicinity. The nest was on the south side of a white fir, twenty-five feet above the ground, six feet out from the main trunk and three feet from the end of a limb (Linsdale, MS).

Ridgway (1877, p. 409) recorded an adult female, taken October 3, 1867, in the West Humboldt Mountains, Pershing County, and an adult male, December 25, 1867, in the Truckee Bottoms, near Pyramid Lake, Washoe County. At Carson City, Ormsby County, he found this the most numerous species, exceeding all other birds, in April in thickets along the foothills. It was common in winter among willows along the river banks. Noted in the Toyabe Mountains as late as May 22 (1930) at Wisconsin Creek, 7800 feet, and June 20 (1933) on Arc Dome, 10,000 feet (Linsdale, MS).

In the southern part of the state, two males (nos. 50092, 50100, C. I. T.), were taken October 17 and 18, 1931, at Saint Thomas, Clark County (van Rossem).

Anthus spinoletta rubescens (Tunstall)

AMERICAN PIPIT

Winter visitant and transient. Records for the pipit, arranged by counties, are as follows.

Washoe County: Truckee Meadows, came in immense flocks in November, 1867, and remained for the greater portion of the winter; specimens collected on November 8 and 15, 1867 (Ridgway, 1877, p. 426).

Ormsby County: Carson City, noted as abundant in winter by Henshaw (1877, p. 1308) and Ridgway (*loc. cit.*) who saw flocks in the vicinity of warm springs, where the meadow was soft and green during the coldest weather. Early fall records for this neighborhood are October 21, 1933, and October 7, 1934 (A. Johnson, MS).

Elko County: Tuscarora, observed during latter part of May, 1871 (Hoffman, 1881, p. 215); Carlin (Bailey, MS).

Pershing County: West Humboldt Mountains, adult female, taken September 17, 1867 (Ridgway, *loc. cit.*); Lovelock, one seen in October, 1896 (Streator, MS).

Lander County: Rose's Ranch, north of Battle Mountain, observed at (Hoffman, *loc. cit.*); Battle Mountain (Bailey, MS); Reese River, 33 miles south of Austin, November 26, 1890, last one seen by Bailey (MS).

Nye County: Twin River, 6000 feet, Toyabe Mountains, skin in Mus. Vert. Zool. (no. 57567) taken May 8, 1930. This bird was a female, weight 16.9 grams (Lamb).

Lincoln County: van Rossem (MS) saw many, October 14, 1931, around the shore of Pahranaagat Lake, and on the 16th the species was found commonly between that locality and Coyote Spring.

Clark County: Along Colorado River opposite Fort Mojave, many were seen in December, 1932, in the cottonwood timber near the river, in the grass beneath the trees and even under arrowweed where it bordered the sloughs. Some were flushed from logs in the flooded timberland (A. H. Miller, MS). Seven skins (nos. 64233-39, Mus. Vert. Zool.) from that locality and one (no. 64232, Mus. Vert. Zool.) from the Colorado River east of Searchlight were collected in January and February, 1934.

Bombycilla garrula pallidiceps Reichenow

BOHEMIAN WAXWING

A male and female (nos. 137926, 141853, U.S.N.M.) were shot, November 15, 1890, from a flock of eight Bohemian waxwings that were feeding on rose haws on the bank of Reese River, 30 miles south of Austin, Lander County. The next day a flock of nine stayed around the same place most of the day (Bailey).

Bombycilla cedrorum Vieillot

CEDAR WAXWING

Winter visitant; sometimes remains in summer at least as late as June.

Ridgway (1877, p. 446) collected two adult males (one now, no. 53396, U.S.N.M.), September 10, 1868, at Dearing's [*sic*] Ranch, Upper Humboldt Valley, Elko County. He found the species in September common in small companies in the thickets along streams flowing from the Clover Moun-

tains. One pair of waxwings was observed, June 13, 1903, near Iron Point, Humboldt County (Hanna, 1904, p. 77).

In the Toyabe Mountains region a flock of waxwings was seen, June 3, 1930, at the Schmidlein Ranch on Kingston Creek, Lander County, and another one, June 7, 1932, at 5 miles southeast of Millett P. O., in Smoky Valley, Nye County (Linsdale, MS). At the Chiatovich Ranch, Fish Lake Valley, Esmeralda County, flocks of waxwings were observed about the houses on May 27 and June 8, 1927 (Linsdale, MS).

Specimens in Mus. Vert. Zool. represent the following localities: Lehman Creek, 7500 feet, Snake Mountains, White Pine County, female (no. 64771), May 13, 1934 (Compton); southwest base of Groom Baldy, 7200 feet, Lincoln County, male (no. 58465), May 31, 1931 (Russell); Breen Creek, Kawich Mountains, Nye County, immature male (no. 58927), September 23, 1931 (Lamb); Kawich P. O., 5900 feet, Nye County, female (skel. no. 58943), September 25, 1931 (Lamb).

Phainopepla nitens lepida Van Tyne

PHAINOPEPLA

Resident in the southern end of the state; occurs farther north in summer, but northern limit not definitely determined.

Reported from the southern part of the state. According to Hoffman (1881, p. 211) it was observed "in the valley at the northern slope of Mount Magruder, on the eastern foothills of the Inyo Range, west of Columbus, and again at Spring Mountain, near the 'Old Spanish Trail,' though only at rare intervals." Localities given for this species by Fisher (1893, p. 113) are as follows: Resting Spring in the Amargosa Desert, where several were seen in mid-February, 1891; lower part of Vegas Valley and upper part of Vegas Wash, in March; Mountain Spring in Charleston Mountains, April 30. Recent sight records are of one seen, June 3, 1931, at Groom Mine, 6000 feet, at the south end of Timpahute Range, and several on May 25, 1932, 16 miles east of Groom Baldy, 4600 feet, Lincoln County (Hall, MS). A specimen (no. 50087, C. I. T.) was obtained, October 16, 1931, by van Rossem, at Coyote Spring, Lincoln County.

A male and female (nos. 62632-33, Mus. Vert. Zool.) were collected, December 27 and 29, 1932, by A. H. Miller, on the Colorado River opposite Fort Mojave, in Clark County. Many individuals were seen in the mesquites where this was the most numerous species. Four specimens (nos. 64244-47, Mus. Vert. Zool.) were collected there on February 2, 4, and 5, 1934. Four others (nos. 64240-43, Mus. Vert. Zool.), taken January 9, 10, and 12, 1934, are from the Colorado River east of Searchlight.

Lanius borealis invictus Grinnell

NORTHWESTERN SHRIKE

Winter visitant; reported in the vicinity of Carson City, Ormsby County, by two observers. Henshaw (1877, p. 1309) saw several individuals and noted that the species made its appearance from the north in October. He took a female (no. 95142, U.S.N.M.) there on November 1, 1883. Ridgway (1877, p. 452) collected two adult females, on February 21 (no. 53399, U.S.N.M.) and March 25, 1868, and saw several others. He found this bird confined to sheltered ravines among foothills of mountains. The ones observed were perched on the summits of the willows along a stream, patiently surveying the surrounding fields and thickets.

Bailey, on November 22, 1890, took a female (no. 141721, U.S.N.M.) on the Reese River, Lander County. On December 14, 1933, Donald D. McLean (MS) saw four individuals in Lemmon Valley, about 12 miles northwest of Reno, Washoe County.

Lanius ludovicianus nevadensis Miller

NEVADA SHRIKE

Resident; most common in the valleys. Probably fewer present in winter than in summer; winter birds may be migrants from northern areas. Definite records represent the following localities.

Washoe County: Massacre Creek, 5800 feet; 2 miles south of mouth of Little High Rock Cañon; Deephole, 4000 feet; Granite Creek; Smoke Creek; Pyramid Lake; Wadsworth.

Ormsby County: Carson City.

Lyon County: Fort Churchill.

Humboldt County: McDermitt; Badger; Alder Creek, Big Creek, and Big Creek Ranch, Pine Forest Mountains; Quinn River Crossing; Humboldt Valley; 1 mile north of Winnemucca.

Elko County: Mountain City; 25 miles north of Elko; Elko; Montello; 8 miles southwest of Montello; 2 miles southwest of Cobre; East Humboldt Mountains; west side of Ruby Lake, 3 miles north of Elko County line; Halleck.

Pershing County: Humboldt Valley; Lovelock.

Churchill County: Mountain Well, 5600 feet; Stillwater.

Lander County: Big Creek, 6700 feet, Birch Creek, and Kingston Creek, Toyabe Mountains.

White Pine County: Gleason Creek, 7500 feet; 5½ miles southeast of Ely, 6500 feet; 7 miles southwest of Osceola.

Esmeralda County: 7 miles north of Arlemont; Arlemont; McNett's Ranch; Fish Lake; 1 mile southeast of North Spring, 7150 feet; Log Spring, 7000 feet; Tule Cañon up to 8000 feet on Mount Magruder; Gold Mountain.

Nye County: Peavine Creek, Pablo Cañon, 5 miles southeast of Millett P. O., Smoky Valley; Jefferson R. S.; 1 mile northwest of Manhattan; Ash Meadows.

Lincoln County: Desert Valley; Juniper Mountains; Pahrnagat Valley; 18 miles west of Caliente, 5200 feet; Pahrnagat Lake (no. 50054, C. I. T.), October 13, 1931.

Clark County: Charleston Mountains; Mountain Spring; Las Vegas; Colorado River, opposite Fort Mojave.

Ridgway (1877, p. 453) found shrikes to be most common where there were willow thickets with meadowlands and sagebrush adjacent, but not rare on higher mountain ranges in mountain mahogany and juniper groves.

In the Pine Forest Mountains region nests were found on May 18 and 26, 1909 (Taylor, 1912 p. 407). A nest with seven eggs was reported from the Humboldt Valley by Hanna (1904 p. 77). On the eastern slope of the Pahrnagat Mountains, a nest found on May 26, 1891, in a tree yucca, contained six eggs (Fisher, 1893, p. 115).

Lanius ludovicianus sonoriensis Miller

SONORA SHRIKE

Resident in the Colorado River Valley in the extreme southern end of the state. A specimen (male, no. 62634, Mus. Vert. Zool.) was taken, December 29, 1932, by A. H. Miller opposite Fort Mojave, 500 feet, Clark County. Its wing measured 102.4 mm. in length; tail, 106.4 mm.

Lanius ludovicianus gambeli Ridgway

CALIFORNIA SHRIKE

Transient; probably occurs over most of the state. Two specimens in Mus. Vert. Zool. seem to belong to this form. One, an adult female (no. 61281), was taken, August 15, 1932, on Big Creek, 8000 feet, Toyabe Mountains, Lander County. The other, an adult male (no. 57935), was taken August 13, 1930, 5½ miles southeast of Ely, 6500 feet, White Pine County. Weights were 45 and 48 grams, respectively.

Vireo bellii arizonae Ridgway

ARIZONA VIREO

Summer resident along the Colorado in extreme southern Clark County. Three males (nos. 64773-75, Mus. Vert. Zool.) from the Colorado River, opposite Fort Mojave, May 7 and 10, 1934, represent this race.

Vireo bellii pusillus Coues

LEAST VIREO

The Death Valley Expedition obtained a male (no. 137709, U.S.N.M.) of this species at Ash Meadows, Nye County, May 30, 1891, by Bailey.

Vireo vicinior Coues

GRAY VIREO

Summer resident in southern part of the state. On June 8, 1891, a male (no. 141739, U.S.N.M.) was shot by Nelson on Grapevine Mountain, Nye County. On June 10, he saw several among piñons in Wood Cañon and found one carrying nesting material (Fisher, 1893, p. 117). A skin in Mus. Vert. Zool., male, number 58466, was taken, May 27, 1931, by Russell, 1½ miles southwest of Oak Spring, 5850 feet, Nye County.

Vireo flavifrons Vieillot

YELLOW-THROATED VIREO

A male yellow-throated vireo was collected, May 29, 1932, by Baldwin, at Crystal Spring, 4000 feet, Pahrnagat Valley, Lincoln County, Nevada. The skin is now number 61125, Mus. Vert. Zool. Weight of the bird was 17.3 grams. This specimen constitutes not only the first record of the species for Nevada, but the first one known to me for the western United States.

Vireo solitarius plumbeus Coues

PLUMBEOUS VIREO

Summer resident in mountains of northeastern Nevada. Reported by Ridgway (1877, p. 451) as rather common in July and August, 1868, on the eastern slope of the Ruby Mountains, Elko County, where it was found in the cedar and nut-pine groves on the lower slopes of the mountains or in the brushwood of the ravines. He listed two adults, taken on August 5, 1868, in the East Humboldt Mountains, Elko County; one is now no. 53416, U.S.N.M.

Fisher (1893, p. 116) reports a transient male (no. 141736, U.S.N.M.), shot May 19, 1891, by C. H. Merriam, at Sheep Spring, 6700 feet, in the Juniper Mountains [Mormon Mountains], Lincoln County.

Vireo solitarius cassinii Xantus

CASSIN VIREO

Summer resident in mountains in western part of the state; transient over whole state, more common in fall than in spring.

Ridgway (1877, p. 450) found this vireo only during the fall. It was common during September, 1868, in the thickets on the western slope of the Clover Mountains, Elko County; a specimen, (no. 53417, U.S.N.M.), collected, September 11, 1868, at the head of Humboldt Valley. He also reported one (no. 53419, U.S.N.M.), shot on September 25, 1867, in a buffalo-berry thicket in Buena Vista Cañon, on the eastern slope of the West Humboldt Mountains, Pershing County. Another (no. 83194, U.S.N.M.) from the same mountain range was taken September 9, 1867. A male was shot, May 19, 1891, by C. H. Merriam at Sheep Spring, Juniper Mountains, Lincoln County (Fisher, 1893, p. 116). A male (no. 31199, Dickey coll.) from Saint Thomas, Clark County, was taken September 23, 1930 (van Rossem).

Specimens in Mus. Vert. Zool. are as follows: Galena Creek, 7000 feet, Washoe County (nos. 61284-86), August 9 and 10, 1932. Martin Creek R. S., 7000 feet, Santa Rosa Mountains, Humboldt County (no. 66117), September 6, 1934, nine miles northeast of Wells, 6000 feet, Elko County (no. 66118), September 15, 1934. Birch Creek, 6500 to 7500 feet (nos. 58677-83), August 31 to September 3, 1931, and Kingston Creek, 6000 feet (no. 58684), September 4, 1931, Toyabe Mountains, Lander County. Chiatovich Creek, 8200 feet, White Mountains, Esmeralda County (no. 51174), May 14, 1927. Smoky Valley, 5 miles southeast of Millett P. O., 5500 feet, Nye County (no. 60934), May 22, 1932.

Weights of males, two in May, four in August, and two in early September were 13.3, 15.5, 15.6, 15.7, 16.3, 16.7, 13.7, and 14.0 grams. Two females in August and four in early September weighed 14.2, 14.4, 14.5, 15.0, 15.5, and 15.6 grams.

Vireo gilva swainsonii Baird

WESTERN WARBLING VIREO

Summer resident; common over whole state where deciduous trees or shrubs are present. Arrives early in May and leaves in early September. Definite records of occurrence are as follows.

Washoe County: Pyramid Lake, 2 miles north of Nixon (no. 47155, Mus. Vert. Zool.), July 7, 1926; Truckee River, 12 miles northwest of Wadsworth (nos. 64776-77, Mus. Vert. Zool.), May 21, 1934; Truckee Valley, adult female taken, August 6, 1867, by Ridgway (1877, p. 448); Galena Creek, 7000 to 8500 feet, August 10 and 11, 1932 (Linsdale); Incline, north end of Lake Tahoe, June 12 to 14, 1931 (Linsdale, MS).

Lyons County: Fort Churchill, Carson River, nest and two eggs, found, June 24, 1868, 4 feet from ground in cottonwood (Ridgway, *loc. cit.*).

Humboldt County: Big Creek Ranch, 6000 feet, Big Creek, 7000 feet, head of Big Creek, 8000 feet, Alder Creek Lake, 8000 feet, Pine Forest Mountains (nos. 8851-62, Mus. Vert. Zool.), June 10 to July 24, 1909; vicinity Duffer Peak, Pine Forest Mountains (nos. 67131-33, Mus. Vert. Zool.), June 5 and 6, 1935; Martin Creek R. S. (no. 67130, Mus. Vert. Zool.), June 3, 1935.

Elko County: Summit between heads of Copper and Coon creeks, Jarbidge Mountains (no. 56187, skel., Mus. Vert. Zool.), July 28, 1929; East Humboldt Mountains, female adult, taken August 27, 1868 (Ridgway, *loc. cit.*); Ruby Valley (no. 53413, U.S.N.M.), August 29, 1868, taken by Ridgway.

Pershing County: Humboldt Valley, female adult, September 7, 1867; West Humboldt Mountains, specimens on September 9, 10 (no. 53411, U.S.N.M.), and 12, 1867 (Ridgway, *loc. cit.*).

Lander County: Specimens in Mus. Vert. Zool. from Big Creek, 8000 feet (no. 61287), August 15, 1932, Birch Creek (nos. 58669-73), August 31 to September 2, 1931, and Kingston Creek (nos. 57574, 77, 58674-76, 61288), June 4 to 19, 1930, September 4 and 6, 1931, August 17, 1932, all in Toyabe Mountains.

White Pine County: Baker Creek, 7200 feet (no. 54368, skel., Mus. Vert. Zool.) June 6, 1929; also noted at 9100 feet, June 19, 1929 (Hall, MS).

Mineral County: Queen Mine, White Mountains, July (Fisher, 1893, p. 115); 3 miles south of Schurz (no. 65291, Mus. Vert. Zool.), July 8, 1934.

Esmeralda County: Chiatovich Creek, 7000 feet, White Mountains, female (no. 51173, Mus. Vert. Zool.), May 8, 1927.

Nye County: Wisconsin Creek, Toyabe Mountains (nos. 57572-73, Mus. Vert. Zool.), May 27 and 28, 1930, also noted on Mohawk Creek and North Twin River (Linsdale, MS); 5 miles southeast of Millett P. O., Smoky Valley, noted June 8, 1932 (Orr, MS); 1 mile east of Jefferson, 7600 feet (no. 63594, Mus. Vert. Zool.), July 1, 1933; ½ mile south of Oak Spring, 5700 feet (no. 58484, skel., Mus. Vert. Zool.), May 27, 1931; Greenmonster Cañon, 9000 feet, Monitor Range (no. 63595, Mus. Vert. Zool.), July 14, 1933; Ash Meadows, one shot May 30, 1891 (Fisher, 1893, p. 115).

Lincoln County: Crystal Spring, 4000 feet, Pahrnagat Valley (no. 61124, Mus. Vert. Zool.), May 22, 1932.

Clark County: Charleston Mountains, nesting in aspen (Jaeger, 1927, p. 6); Saint Thomas, male (no. 50717, C. I. T.), July 25, 1932, also noted September 22, 1930 (van Rossem).

Weights of males were as follows: In May, 10.0 and 11.1 grams; June, 10.4, 11.6, and 12.0; July, 12.0; August, 10.8; September, 10.4, 10.5, and 12.6; of females, May, 10.8 and 12.9; June, 11.5; July, 12.1; August, 11.2 and 11.5; September, 10.6, 11.0, 12.0 and 12.0.

Vermivora celata celata (Say)

ORANGE-CROWNED WARBLER

Transient and winter visitant, a female was obtained, October 23, 1931, at Indian Springs, Clark County, by van Rossem (MS). Specimens in Mus. Vert. Zool. which appear to belong to this race are as follows: Birch Creek, 7000 feet, Toyabe Mountains, Lander County (no. 58688), September 1, 1931; 5 miles southeast of Millett P. O., 5500 feet, Nye County (nos. 58691, 58693), September 8 and 10, 1931; Colorado River, opposite Fort Mojave, Clark County (nos. 64251, 64256, 64258) February 1, 8 and 13, 1934.

Vermivora celata orestera Oberholser

ROCKY MOUNTAIN ORANGE-CROWNED WARBLER

Summer resident on upper portions of several of the higher mountain ranges; transient in other parts of the state and winter visitant to extreme southern part. Specimens in Mus. Vert. Zool. and other collections represent the following localities.

Humboldt County: Head of Big Creek (nos. 8500-01, 8503, 8505), Alder Creek (nos. 8502, 8504), and meadow on Pine Forest Mountain (no. 8506), Pine Forest Mountains, June 29 and July 4, 13, 22, and August 1, 1909; Martin Creek R. S., 7000 feet, Santa Rosa Mountains (nos. 66119-21) September 8 and 9, 1934, and (no. 67134), June 1, 1935.

Elko County: Steel's Creek, north end of Ruby Mountains (nos. 57116-18), June 18, 1929. A specimen in U.S.N.M. (no. 53353) was taken September 11, 1868, in Ruby Mountains, by Ridgway, and another (no. 164223), June 20, 1898, by Oberholser.

Lander County: Birch Creek (nos. 57581-84, 58685, 58689), June 23 to 25, 1930, August 31 and September 2, 1931, and Kingston Creek (no. 61294), August 17, 1932, Toyabe Mountains.

White Pine County: Baker Creek, 8500 feet, Snake Mountains (nos. 66122-23), September 21, 1934.

Esmeralda County: Chiatovich Creek, 7000 and 8200 feet, White Mountains (nos. 51184-85), May 10 and 19, 1927.

Nye County: South Twin River, 6500 feet, Toyabe Mountains (nos. 57578-79), May 9, 1930; 5 miles southeast of Millett P. O., Smoky Valley (nos. 57580, 58692, 58694), May 16, 1930, September 8 and 10, 1931, Burned Corral Cañon, 6700 feet, Quinn Cañon Mountains (no. 63596), July 31, 1933.

Lincoln County: Irish Mountain, 7000 feet (no. 66124-25), September 25, 1934.

Clark County: Saint Thomas, immature female (no. 31197, Dickey coll.), September 23, 1930 (van Rossem). Mus. Vert. Zool. contains a skin (no. 64250) from Colorado River east of Searchlight, January 21, 1934, and six from opposite Fort Mojave, 500 feet (nos. 62636, 64252-55, 64257), December 29, 1932, February 1 to 13, 1934.

Vermivora celata lutescens (Ridgway)

LUTESCENT WARBLER

Summer resident on eastern slope of Sierra Nevada in central portion of western border of the state; transient elsewhere in Nevada.

Specimens in Mus. Vert. Zool. come from Galena Creek, 8500 feet, Washoe County (nos. 61289-

93), August 11, 1932, and from the Toyabe Mountains, Lander County, Birch Creek, 7000 feet (nos. 58686-87), August 31 and September 1, 1931, and Kingston Creek, 8000 feet (no. 58690), September 6, 1931.

A male (no. 53351, U.S.N.M.) was taken September 12, 1868, in Humboldt Valley, Elko County, by Ridgway, and another (no. 82855, U.S.N.M.) on September 8, 1868, in the East Humboldt Mountains.

A young bird (no. 31196, Dickey coll.) was taken, September 23, 1930, at Saint Thomas, Clark County (van Rossem).

Vermivora ruficapilla ridgwayi van Rossem

CALAVERAS WARBLER

The type specimen of the race *V. r. gutturalis* (no. 53354, U.S.N.M.) was obtained on September 6, 1868, in Secret Valley, East Humboldt Mountains, Elko County. It was an adult male (Ridgway, 1877, p. 427). This warbler was found commonly in September along the streams. Two specimens, male and female (nos. 58695-96, Mus. Vert. Zool.) were shot, September 2, 1931, on Birch Creek, 7500 feet, Lander County. Two females (nos. 64778-79, Mus. Vert. Zool.) came from the Colorado River opposite Fort Mojave, May 7, 1934.

That this bird nests in the neighborhood of Lake Tahoe, was indicated by the observation on June 13, 1931, of two individuals among the open pine timber two miles north of Incline, Washoe County. Both these birds were close to the ground. In August, 1932, this species was numerous on the 9th, 10th and 11th near Galena Creek, 7000 to 8500 feet, Washoe County (Linsdale, MS). A male (no. 61296, Mus. Vert. Zool.) was taken there on August 11, 1932.

Vermivora virginiae (Baird)

VIRGINIA WARBLER

Summer resident; numerous on piñon-juniper-covered lower slopes of the mountains.

Ridgway (1877, p. 428) reported the capture, on August 5, 1868, of a young bird (no. 53355, U.S.N.M.) in the East Humboldt Mountains, Elko County. He observed the species among cedar and piñon groves on the eastern slope of the Ruby Mountains, but found no individuals west of there. This warbler was common in July and August in the same groves with the black-throated gray warbler and lead-colored vireo. It lived entirely among bushes where these were dense.

The Virginia warbler was found at several localities in the Toyabe Mountains. Specimens were preserved as follows: Female (no. 57588), June 15, 1930, Kingston Creek, 7700 feet, Lander County, along with nest and four eggs (A. H. Miller, MS), and immature female (no. 58697), same locality, September 5, 1931; male (no. 57586), May 22, 1930, Wisconsin Creek, 7800 feet, Nye County; female (no. 57587), May 29, 1930, ridge south of Wisconsin Creek, 8000 feet; male (no. 57585), April 30, 1930, South Twin River, 6500 feet.

In Lincoln County, on the east slope of Irish Mountain, 7700 feet, a Virginia warbler (no. 58467) along with a nest and four eggs was taken, June 8, 1931, by Russell.

Vermivora luciae (Cooper)

LUCY WARBLER

Summer resident along the Colorado River, represented in Mus. Vert. Zool. by a female (no. 64780) taken May 8, 1934, on the Colorado River, opposite Fort Mojave. This bird weighed 6.1 grams.

Dendroica aestiva morcomi Coale

WESTERN YELLOW WARBLER

Summer resident; common near streams and in brushy thickets in valleys over most of the state, except extreme southern and northwestern portions. Specimens contained in Mus. Vert. Zool. and listed below differ from representatives of the race *D. a. brewsteri* from the San Francisco Bay region in being darker green dorsally, more heavily streaked below, and more orange below.

Lander County: Big Creek, 6700 feet (nos. 61297-98), August 16, 1932, and Birch Creek, 7000 feet, Toyabe Mountains (nos. 57592-93, 58698-700), June 21 and 23, 1930, August 29 and 30, 1931.

Esmeralda County: Arlemont, 4900 feet, Fish Lake Valley (no. 51186), May 23, 1927; Fish Lake (no. 53717), May 23, 1928.

Nye County: 5 miles southeast of Millett P. O., 5500 feet, Smoky Valley (nos. 57589-91, 58701-03), May 16 and 17, 1930, September 8 and 9, 1931; Amargosa River, 3½ miles north of Beatty (no. 58485), May 23, 1931; Garden Valley, 8½ miles northeast of Sharp (no. 61129-30), June 7, 1932.

Lincoln County: Crystal Springs, 4000 feet, Pahranaagat Valley (nos. 61126-28), May 24, 28, and 29, 1932.

Dendroica aestiva brewsteri Grinnell

CALIFORNIA YELLOW WARBLER

Summer resident in northwestern part of the state, eastward to Humboldt County and south to vicinity of Walker Lake. Specimens in Mus. Vert. Zool. represent the following places.

Washoe County: Truckee River, 12 miles northwest of Wadsworth (nos. 64800-07), May 21, 1934.

Lyon County: 10½ and 12 miles south of Yerington, West Walker River (nos. 65292-95), July 2 to 5, 1934.

Humboldt County: Virgin Valley (nos. 9289-90), May 26 and June 1, 1909; Big Creek Ranch (nos. 8538-58), June 9 to 18, 1909, and meadow, 8400 feet, Pine Forest Mountains (no. 8559), August 1, 1909; Quinn River Crossing (nos. 8529-37), May 24 to June 5, 1909; 5 miles north of Paradise Valley (nos. 67135-37), May 30 and 31, 1935.

Mineral County: 3 miles south of Schurz, 4100 feet (no. 65296), July 10, 1934.

Dendroica aestiva sonora Brewster

SONORA YELLOW WARBLER

Summer resident along the Colorado River in southern Clark County. Nineteen specimens (nos. 64781-99, Mus. Vert. Zool.) from the Colorado River, opposite Fort Mojave, in May, 1934, represent this race.

Dendroica coronata (Linnaeus)

MYRTLE WARBLER

A transient. Three spring-taken specimens represent this species in Mus. Vert. Zool. A female, number 8685, was taken, May 21, 1909, by Taylor, at Quinn River Crossing, Humboldt County. Another female, number 51187, was shot, May 8, 1927, on Chiatovich Creek, 7000 feet, White Mountains, Esmeralda County. A third, number 62886, from Smoky Valley, 5 miles southeast of Millett P. O., 5500 feet, Nye County, was taken on May 18, 1933.

Dendroica auduboni auduboni (Townsend)

AUDUBON WARBLER

Winter visitant and transient. The population of Audubon warblers in the mountains of western Nevada seems to be almost exactly intermediate between the races *auduboni* and *memorabilis*. In the absence of a detailed study of the whole species I have considered all the summer birds in Nevada as of one race. Some of the transient and winter birds, however, are obviously migrants from localities well within the summer range of *auduboni*.

Dendroica auduboni memorabilis Oberholser

ROCKY MOUNTAIN AUDUBON WARBLER

Summer resident on the higher mountain ranges; numerous throughout state during migrations; present in the valleys through the winter. Status locally is indicated by the following records.

Washoe County: Truckee Valley, female adult, taken, December 7, 1867, by Ridgway (1877, p. 434); Galena Creek, 7000 to 8500 feet, abundant in pines, August 9 to 11, 1932, two specimens (nos. 61299-300, Mus. Vert. Zool., Linsdale), and May 1, 1934 (nos. 64808-11, Mus. Vert. Zool.), and six on October 1, 1934 (nos. 66138-43); 6 miles north of Incline (no. 64822, Mus. Vert. Zool.), May 22, 1934; Incline, at north end of Lake Tahoe, several June 13, 1931 (Linsdale, MS); Lake Tahoe, a specimen (no. 72004, U.S.N.M.), taken September 18, 1876.

Ormsby County: Carson City, adult males (nos. 53371-72, U.S.N.M.), taken April 4 and 18, 1868 (Ridgway, *loc. cit.*).

Humboldt County: Virgin Valley (no. 9294, Mus. Vert. Zool.), May 31, 1909; Pine Forest Mountains (nos. 8689-700, Mus. Vert. Zool.), June 24 to July 31, 1909; Quinn River Crossing, 4100 feet (nos. 8681-84, 8686-88, Mus. Vert. Zool.), May 17 to 31, 1909; Martin Creek R. S., 7000 feet, Santa Rosa Mountains (nos. 66126-31, Mus. Vert. Zool.), September 6 to 9, 1934, and (nos. 67138-41, Mus. Vert. Zool.), June 2, 1935.

Elko County: Bear Creek, 8000 feet, Jarbidge Mountains (no. 66132, Mus. Vert. Zool.), September 11, 1934; Salmon River, at Shoshone Creek, 5000 feet (no. 66133, Mus. Vert. Zool.), September 16, 1934.

Pershing County: West Humboldt Mountains, adult males taken, September 25 and October 8, 1867, by Ridgway (*loc. cit.*).

Churchill County: 4 miles west of Fallon, male (no. 298440, U.S.N.M.), May 13, 1925 (Hall).

Lander County: Peterson Creek, 7000 feet, Shoshone Mountains, male (no. 65297, Mus. Vert.

Zool.), July 24, 1934. Big Creek, Birch Creek, Kingston Creek, Toyabe Mountains, many specimens, June 4 to September 7. Nest with five young, June 26, 1930, at Birch Creek, 7000 feet (Linsdale, MS).

White Pine County: Cherry Creek, 6800 feet, female (no. 57939, Mus. Vert. Zool.), September 14, 1930; east side of Schellbourne Pass, 6800 feet, female (no. 57938, Mus. Vert. Zool.), September 4, 1930; east side of Wheeler Peak, 8700 feet, Lehman Creek (no. 54369, Mus. Vert. Zool.), May 24, 1929 (nos. 64812-21, Mus. Vert. Zool.), May 15 and 17, 1934, and (nos. 66134, 66136, Mus. Vert. Zool.), September 18 and 22, 1934; Baker Creek, 8700 feet, male (no. 54370, Mus. Vert. Zool.), June 18, 1929, and 8500 feet, male (no. 66135, Mus. Vert. Zool.), September 21, 1934; 3 miles west of Hamilton, 8800 feet, south end of White Pine Mountains, several, August 19, 1930 (Hall, MS); west of Stella Lake, 10,750 feet, nest, July 7, 1929 (Hall, MS).

Esmeralda County: Chiatovich Creek, 7000 to 8300 feet (no. 51188, Mus. Vert. Zool.), noted May 8 to 13, 1927 (Linsdale, MS).

Nye County: Mohawk Creek, Wisconsin Creek, Ophir Creek, Last Chance Creek, South Twin River, Toyabe Mountains, many specimens, April 29 to June 17; 5 miles southeast of Millett P. O., Smoky Valley (nos. 57594-95, Mus. Vert. Zool.), April 26 and May 17, 1930, also noted May 15 to 19 and 29, 1932 (Linsdale, MS); 1 mile east of Jefferson, 7600 feet, (nos. 63597-98, Mus. Vert. Zool.), July 1 and 2, 1933, and north slope Toquima Peak, 8000 feet (no. 63599, Mus. Vert. Zool.), July 2, 1933, Toquima Mountains; Greenmonster Cañon, 9000 feet, Monitor Range (no. 63600, Mus. Vert. Zool.), July 14, 1933; 5 miles west of White Rock Spring, 7400 feet, Belted Range (nos. 58468-69, Mus. Vert. Zool.), May 12, 1931; Ash Meadows, noted March 21, 1891 (Fisher, 1893, p. 119).

Lincoln County: Groom Baldy, 9000 feet, about 12 seen on May 31, 1931 (Hall, MS); Irish Mountain, east slope at 6900 feet, abundant June 8, 1931, top at 8000 feet, noted June 12, 1931 (Orr, MS); an immature male (no. 66137, Mus. Vert. Zool.), obtained September 27, 1934.

Clark County: Noted by Death Valley Expedition of 1891, as follows: Mountain Springs and Upper Cottonwood Springs, Charleston Mountains, April 30; Yount's Ranch, Pahrupm Valley, April 28 and 29; Pahrupm and Vegas ranches, February and March (Fisher, 1893, p. 119). Charleston Mountains, noted in summer by Jaeger (1927, p. 6).

Dendroica nigrescens (Townsend)

BLACK-THROATED GRAY WARBLER

Summer resident; present on most of the mountain ranges in the state. Inhabits mainly the piñon-covered ridges on the lower mountain slopes; reported from May 12 to September 6 in central part of the state. Records are available from the following counties.

Washoe County: Galena Creek, 7500 feet, noted August 9, 1932.

Elko County: 9 miles northeast of Wells, 6000 feet, adult female (no. 66144, Mus. Vert. Zool.), September 15, 1934; west side of Ruby Lake, 3 miles north of county line, specimen in alcohol (no. 57120, Mus. Vert. Zool.); East Humboldt Mountains, four specimens (two now nos. 53373, 53376, U.S.N.M.) collected by Ridgway (1877, p. 433) July 14, and August 4, 7, and 10, 1868; also found by same observer to be abundant in July and August on the eastern slope of the Ruby Mountains.

Lander County: Specimens in Mus. Vert. Zool. come from Birch Creek (nos. 58717-18), September 1 and 2, 1931, Kingston Creek, 7500 feet (no. 58719) September 5, 1931, and Clear Creek, 6500 feet (no. 61303), August 18, 1932.

White Pine County: Mus. Vert. Zool. has specimens from east side of Schellbourne Pass, 6800 feet (no. 57940), September 2, 1930, and Water Cañon, 8 miles north of Lund (nos. 61131-32), June 13, 1932, and Lehman Creek, 7500 feet, Snake Mountains (nos. 64823-24), May 17, 1934.

Mineral County: Queen Mine, White Mountains, specimen (no. 137365, U.S.N.M.) taken July 11, 1891 (Fisher, 1893, p. 120); 2 miles southwest of Pine Grove (nos. 65298-99, Mus. Vert. Zool.), June 29, 1934.

Esmeralda County: Chiatovich Creek, 7000 to 8200 feet, White Mountains; 2 miles south of Piper Peak, 7500 feet, Silver Peak Range (no. 53718, Mus. Vert. Zool.), June 12, 1928; also noted at Valcalda Spring on June 22, 1928, and south of Cave Spring, June 28, 1928. A male and female (nos. 137367, 137363, U.S.N.M.) were obtained in piñons on Mount Magruder by the Death Valley Expedition on June 5, 1891 (Fisher, 1891, p. 120).

Nye County: Specimens in Mus. Vert. Zool. come from the following localities in the Toyabe Mountains: Ridge south of Wisconsin Creek, 8000 feet (nos. 57616-17) May 28 and 29, 1930; Wisconsin Creek, 7800 feet (no. 57615), May 25, 1930; South Twin River, 6000 feet (no. 57614), May 12, 1930. A male is from Burned Corral Cañon, 6800 feet, Quinn Cañon Mountains (no. 63602), July 29, 1933, and one is from 8 miles west of Tybo, 6700 feet, Hot Creek Range (no. 63601), July 9, 1933. In the Belted Range, one (no. 58470) from two miles north of Indian Spring, 7000 feet,

May 5, 1931, and another (no. 58471) from 5 miles west of White Rock Spring, 7150 feet, May 14, 1931. Lincoln County: Noted at Groom Baldy, 9000 feet, where four were seen on May 31, 1931 (Hall), and on the eastern slope of Irish Mountain, 6900 feet, two seen on June 8, 1931 (Orr, MS).

Clark County: At Sheep Spring, Juniper Mountains, a male (no. 137364, U.S.N.M.) was shot on May 19, 1891 (Fisher, 1893, p. 120).

Dendroica townsendi (Townsend)

TOWNSEND WARBLER

Transient; probably not very numerous over most of the state.

In Washoe County, a male (no. 64825, Mus. Vert. Zool.) taken, May 21, 1934, is from the Truckee River 12 miles northwest of Wadsworth (Compton).

Ridgway (1877, p. 432) on September 8, 1868, saw a Townsend warbler in an alder thicket in the East Humboldt Mountains, Elko County, and shot an adult male (no. 53367, U.S.N.M.), September 24, 1868, in Thousand Spring Valley, Elko County.

An adult (no. 66145, Mus. Vert. Zool.) was taken, September 18, 1934, on Lehman Creek, 8500 feet, Snake Mountains, White Pine County (Behle). It weighed 8.5 grams.

In the White Mountains, Esmeralda County, a female (no. 51189, Mus. Vert. Zool.) was taken, May 15, 1927, on Chiatovich Creek, 8200 feet. Several individuals were noted, May 11, along this same stream feeding in willows at 7000 feet (Linsdale, MS).

Dendroica occidentalis (Townsend)

HERMIT WARBLER

Transient; available records only in fall, but doubtless occurs in spring and along central-western border as a summer resident.

On August 29, 1868, a single individual of this species was seen in the lower portion of one of the eastern cañons of the East Humboldt Mountains, Elko County (Ridgway, 1877, p. 432). An immature female (no. 66146, Mus. Vert. Zool.) was shot, September 13, 1934, on Bear Creek, 7000 feet, Jarbidge Mountains, Elko County (Linsdale).

At Birch Creek, 7500 feet, in the Toyabe Mountains, Lander County, an immature male (no. 58720, Mus. Vert. Zool.) was taken, August 31, 1931. Others were seen in the same mountain range on September 2 and 5, 1931. On Galena Creek, 7000 feet, Washoe County, three specimens, an adult male and two immature birds (nos. 61304-06, Mus. Vert. Zool.) were collected August 9 and 10, 1932. One (no. 66485, Mus. Vert. Zool.) was taken, August 17, 1934, between Fallon and Hazen, Churchill County (Arnold).

Oporornis tolmiei (Townsend)

TOLMIE WARBLER

Summer resident; abundant about moist ground about springs and streams in the valleys, and in meadows and along streams in the mountains. Localities of occurrence are as follows.

Washoe County: Galena Creek, 8500 feet; Incline, at the north end of Lake Tahoe.

Ormsby County: Carson City.

Humboldt County: Alder Creek, head of Big Creek, and Big Creek, Pine Forest Mountains; Quinn River Crossing; Martin Creek R. S., 7000 feet, Santa Rosa Mountains; 5 miles north of Paradise Valley.

Elko County: 6 miles southwest of Mountain City; 39 miles north of Elko; East Humboldt Mountains; Secret Pass, 6200 feet, Ruby Mountains.

Pershing County: West Humboldt Mountains; Lovelock.

Lander County: Big Creek, Birch Creek, and Kingston Creek, Toyabe Mountains.

White Pine County: East side of Schellbourne Pass, 6800 feet; Baker Creek, 8200 feet; Lehman Creek, 7500 feet.

Esmeralda County: Chiatovich Creek, 8200 feet, White Mountains; Arlemont, 4900 feet; Fish Lake, 4800 feet; Mount Magruder.

Nye County: Mohawk R. S. and Wisconsin Creek, Arc Dome, South Twin River, Toyabe Mountains; 5 miles southeast of Millett P. O., Smoky Valley; 2 miles east of Jefferson, 7800 feet, Toquima Mountains; Greenmonster Cañon; south end of Belted Range, 5½ miles northwest of Whiterock Spring, 7200 feet; Garden Valley, 8½ miles northeast of Sharp.

Lincoln County: Pahrangat Valley; Springer Spring, 7000 feet, Irish Mountain.

Clark County: Colorado River, opposite Fort Mojave.

Records for this species are from May to September. At Chiatovich Creek, 8200 feet, White Mountains, it was first noted in 1927, on May 13. Earliest record for the central part of the state

is May 19, 1930, southeast of Millett P. O., Smoky Valley. It has been noted in the fall as late as September 28, 1931, at the south end of the Belted Range, 7200 feet, Nye County.

Nests in the Toyabe Mountains, Lander County, were found as follows: Kingston Creek, June 19, 1930, four eggs; Birch Creek, June 25, 1930, five eggs; Big Creek, June 22, 1931, five eggs.

Geothlypis trichas occidentalis Brewster

WESTERN YELLOW-THROAT

Summer resident; occupies the low portions of valleys south to the center of the state. Status locally is indicated by the following records.

Washoe County: Mouth of Truckee River, Pyramid Lake, nest in sage bush, in moist depression, containing four eggs on May 19, 1868 (Ridgway, 1877, p. 434); Washoe Lake, nest containing four eggs found on May 23 (Henshaw, 1880, p. 289).

Ormsby County: Carson City, numerous near there in summer, a few seen till into September (Henshaw, 1877, p.1308).

Lyon County: West Walker River, 10½ miles south of Yerington (no. 65300, Mus. Vert. Zool.), July 5, 1934.

Humboldt County: Virgin Valley (no. 9295, Mus. Vert. Zool.), June 8, 1909; Big Creek Ranch, Pine Forest Mountains (nos. 8512-18, Mus. Vert. Zool.), June 10 to 20, 1909; Quinn River Crossing (nos. 8509-11, Mus. Vert. Zool.), May 21, 22 and 24, 1909.

Elko County: West side Ruby Lake, 3 miles north of Elko County line (nos. 57122-23, Mus. Vert. Zool.), Secret Valley, female juvenal, taken September 23, 1868 (Ridgway, *loc. cit.*); Ruby Valley, young female (no. 53341, U.S.N.M.), taken August 29, 1868 (Ridgway, *loc. cit.*); East Humboldt Mountains, young female (no. 83110, U.S.N.M.), taken September 6, 1868.

Clark County: Saint Thomas, adult female (no. 31191, Dickey coll.), September 23, 1930 (van Rossem).

Geothlypis trichas scirpicola Grinnell

TULE YELLOW-THROAT

Summer resident in southern half of the state. Records show presence of this race in the following localities.

Esmeralda County: Chiatovich Creek, 7000 feet, White Mountains (no. 51191, Mus. Vert. Zool.), May 9, 1927; Arlemont, 4900 feet, several noted, May 21 and 22, 1927 (Linsdale, MS); Fish Lake, 4800 feet (nos. 53721-28, Mus. Vert. Zool.), May 20 to June 14, 1928.

Nye County: 5 miles southeast of Millett P. O., 5500 feet, Smoky Valley (nos. 57629-30, Mus. Vert. Zool.), April 26 and 27, 1930 (nos. 58726, 58728) September 9 and 10, 1931; Breen Creek, 7000 feet, Kawich Range (no. 58928, Mus. Vert. Zool.), September 23, 1931; 3½ to 4 miles northeast of Beatty, 3400 feet, Amargosa River, noted May 19 to 23, 1931 (Hall and Orr, MS); 2.5 miles west of Devil's Hole, 2173 feet, Ash Meadows (no. 63506, Mus. Vert. Zool.), May 17, 1933.

Lincoln County: Hiko (no. 61134, Mus. Vert. Zool.), Crystal Spring (nos. 61135-36) and 5 miles south of Crystal Spring (nos. 61137-38), 4000 feet, Pahranaagat Valley, May 23 to 29, 1932.

Clark County: Saint Thomas, female (no. 50715, C. I. T.), July 25, 1932 (van Rossem); Vegas Ranch, noted May 1, 1891 (Fisher, 1893, p. 123); Virgin River, 1750 feet, ¼ mile east of Mesquite, common on October 1, 1931 (Orr, MS); Colorado River, opposite Fort Mojave, three specimens (nos. 64828-30, Mus. Vert. Zool.), May 9 and 10, 1934.

Weights of males, two in April, six in May, one in June, and two in September were 11.4, 11.4, 9.3, 9.6, 9.8, 9.9, 10.8, 11.0, 11.1, 8.4, and 11.9 grams, respectively. Females, five in May, one each in June and September, weighed 8.5, 9.3, 10.5, 10.5, 10.5, 11.2, and 9.3 grams.

Icteria virens longicauda Lawrence

LONG-TAILED CHAT

Summer resident; most numerous on the brushy ground close to the bases of mountain ranges.

Specimens in Mus. Vert. Zool. represent the following localities: West Walker River, 12 miles south of Yerington, female (no. 65301), July 5, 1934, Lyon County. Quinn River Crossing, male (no. 9187), May 24, 1909, and Big Creek Ranch, Pine Forest Mountains, male (no. 9188), June 10, 1909, both in Humboldt County. 20 miles south of Owyhee, males (nos. 65382-83), May 27 and 28, 1934, Elko County. Kingston Creek, 6000 feet, Lander County, a nestling (no. 57633) in alcohol, June 20, 1930. Wisconsin Creek, 7800 feet, Nye County, female and male (nos. 57631-32), May 20 and 21, 1930. Also noted in Smoky Valley to eastward of Toyabe Mountains (Linsdale). Fish Lake, 4800 feet, Esmeralda County, two females (nos. 53729-30) May 21 and 24, 1928. Also noted, May 21 and 22, 1927, at Arlemont, in the same valley (Linsdale, MS). Crystal Spring, Pahranaagat Valley, Lincoln County (nos. 61139-41), May 24 and 27, 1932.

Ridgway (1877, p. 436) observed the vertical range of the chat to be greater than that of the yellow-throat. He found the former species frequently in the lower portions of cañons and obtained specimens, September 4 and 7, 1867, in the West Humboldt Mountains, Pershing County, and at the Truckee Reservation, Washoe County, May 15, 1868. Henshaw (1880, p. 290) found this species to be a rather common summer visitant in the vicinity of Carson City, Ormsby County.

Members of the Death Valley Expedition found chats in 1891 in Vegas Wash, May 3, Bend of the Colorado River, May 4, valleys of the Virgin and Muddy rivers, May 6 to 8, Pahrnagat Valley, May 22 to 26 (Fisher, 1893, p. 124).

Weights of four males in May were 21.1, 24.0, 27.8, and 30 grams; two females, same month, weighed 27.2 and 27.3 grams.

Wilsonia pusilla pileolata (Pallas)

NORTHERN PILEOLATED WARBLER

Summer resident; present but not numerous in the higher valleys and mountains over most of the state; transient over whole state. Specimens in Mus. Vert. Zool. are as follows.

Humboldt County: Virgin Valley (no. 9297), June 2, 1909; Quinn River Crossing (8507-08), May 26 and June 4, 1909.

Elko County: Salmon River at Shoshone Creek, 5000 feet (no. 66150), September 16, 1934.

Lander County: Birch Creek, 7000 and 7500 feet, Toyabe Mountains (nos. 58729-32), August 30 and 31, 1931; Kingston Creek, 6000 and 9000 feet, Toyabe Mountains (nos. 58733-35, 61316), September 4, 1931, and August 17, 1932.

White Pine County: Baker Creek, 7500 feet, Snake Mountains (no. 66151), September 19, 1934.

Esmeralda County: Chiatovich Creek, 7000 feet, White Mountains (no. 51192), May 11, 1927; Fish Lake, 4800 feet, Fish Lake Valley (no. 53731), May 23, 1928.

Nye County: Ridge south of Wisconsin Creek, 8800 feet; Toyabe Mountains (no. 57636), May 28, 1930; South Twin River, 6500 feet, Toyabe Mountains (no. 57634), May 12, 1930; 5 miles southeast of Millett P. O., 5500 feet, Smoky Valley (nos. 57635, 58736), May 16, 1930, and September 10, 1931; Amargosa River, 3400 feet, 3½ miles northeast of Beatty (no. 58486, skel. and nos. 63510-11), May 20, 1931, and May 24 and 25, 1933.

Clark County: Ten specimens (nos. 64831-40) were taken May 7 and 9, 1934, near the Colorado River, opposite Fort Mojave.

Ridgway (1877, p. 438) reported specimens of this species as follows: Truckee Valley, Washoe County, August 6, 1867 (no. 53380, U.S.N.M.); Humboldt Valley, Pershing County, September 5, 1867; West Humboldt Mountains, Pershing County, September 9 and 20, 1867; East Humboldt Mountains, Elko County, August 29 (no. 53384, U.S.N.M.) and September 1, 1868.

Wilsonia pusilla chryseola Ridgway

GOLDEN PILEOLATED WARBLER

Summer resident on eastern slope of Sierra Nevada along western border of the state. Found most often about willow thickets in the high meadows. Transient elsewhere in the state.

Eight specimens (nos. 61308-15, Mus. Vert. Zool.) were taken August 10 and 11, 1932, at Galena Creek, 7000 and 8500 feet, Washoe County.

A male (no. 64841, Mus. Vert. Zool.) taken May 9, 1934, on the Colorado River, opposite Fort Mojave, Clark County, appears to belong to this race.

Setophaga ruticilla (Linnaeus)

REDSTART

Transient, recorded once in spring. On May 30, 1928, a female, number 53732, Mus. Vert. Zool., was collected by Benson at Fish Lake, 4800 feet, Esmeralda County.

Passer domesticus (Linnaeus)

ENGLISH SPARROW

Resident, now widespread, about towns and ranches. Records arranged by counties are as follows.

Washoe County: Anaho Island, Pyramid Lake, flock on July 31, 1924; Nixon, and Sutcliffe, Pyramid Lake, noted, July 6 and 7, 1926 (Hall, MS); Reno, several noted in eastern part of town, May 13, 1932 (Linsdale, MS).

Ormsby County: Carson City, breeds (Ray, 1910, p. 88).

Humboldt County: Winnemucca, few about houses on May 11, 1909 (Taylor, 1912, p. 405).

Elko County: Goose Creek, 5000 feet, noted July 14, 1935 (Hall, MS).

Pershing County: Lovelock, noted in 1908 (A. K. Fisher).

Lander County: Austin, noted June 26, 1930, and May 14, 1932; also, on June 9, 1932, at several ranches in Smoky Valley; specimen (no. 57637, Mus. Vert. Zool.) from Kingston Creek, 6000 feet, June 17, 1930 (Lamb).

White Pine County: 5½ miles southeast of Ely, 6450 feet, Steptoe Valley, noted August 9 to 14, 1930 (Hall, MS).

Esmeralda County: Arlemont, 4650 feet, Fish Lake Valley, nestlings saved in alcohol (nos. 53702-04, Mus. Vert. Zool.), July 5, 1928 (Russell).

Nye County: Noted on several occasions at Millett P. O., 5 miles southeast of there, and at other ranches in Smoky Valley (Linsdale, MS); Beatty, six seen in street, May 23, 1931 (Hall, MS).

Lincoln County: Kuffer Ranch, 1½ miles south of Crystal Spring, 4000 feet, observed May 16 to 27, 1932 (Hall, MS); Pahrnagat Lake, two specimens (nos. 50071-72, C. I. T.), October 15, 1931 (van Rossem).

Clark County: Overton, specimen (no. 29026, Mus. Vert. Zool.), taken November 23, 1917, by A. P. Smith; Colorado River, east of Searchlight, three skins (nos. 64273-75, Mus. Vert. Zool.), January 10 and 12, 1934 (Benson).

Dolichonyx oryzivorus (Linnaeus)

BOBOLINK

Transient; possibly present in summer at a few places in northern Nevada.

On June 3, 1909, a male, number 8834, Mus. Vert. Zool., was shot by Richardson at Quinn River Crossing, Humboldt County. In Ruby Valley, Elko County, an adult female (no. 53561, U.S.N.M.) was taken on August 28, 1868, by Ridgway (1877, p. 501). Oberholser shot two males (nos. 159047-48, U.S.N.M.), June 25 and 26, 1898, at Franklin Lake, Elko County. Holt (MS) observed the species, May 26, 1915, at Peavine Ranch, Toyabe Mountains, Nye County.

Sturnella neglecta Audubon

WESTERN MEADOWLARK

Resident; mostly in the lower valleys, more common in summer than in winter. Widespread occurrence is indicated by many records as follows.

Washoe County: Deephole, 4000 feet; Truckee Reservation; 2 miles east of Fernley; Washoe Lake; Granite Creek; Smoke Creek.

Lyon County: West Walker River, 10½ and 12 miles south of Yerington.

Ormsby County: Carson City.

Douglas County: Glenbrook.

Humboldt County: Virgin Valley; Big Creek Ranch; Quinn River Crossing; Cottonwood Range; McDermitt; 5 miles north of Paradise Valley; Winnemucca.

Elko County: Elko; Humboldt River near Carlin; Halleck.

Pershing County: West Humboldt Mountains; Lovelock.

Churchill County: Fallon.

Lander County: Kingston Creek, 6000 feet, Toyabe Mountains.

White Pine County: Cleveland Ranch, 6000 feet, Spring Valley; 5 miles southeast of Ely, 6450 feet, Steptoe Valley.

Esmeralda County: Chiatovich Creek, 7000 feet, White Mountains; Chiatovich Ranch, Dyer P. O., and Smith Ranch, Fish Lake Valley; 4 miles east of Cave Spring, 7100 feet, Silver Peak Range; Mount Magruder.

Nye County: Twin River, 6000 feet, and 5 miles southeast of Millett P. O., 5500 feet, Smoky Valley; Manhattan; Cloverdale Creek; Arc Dome; Amargosa River, 3½ miles northeast of Beatty, 3400 feet; Oasis Valley; Ash Meadows.

Lincoln County: Hiko, Crystal Spring, 4000 feet, and Pahrnagat Lake, Pahrnagat Valley.

Clark County: Virgin Valley; Lower Muddy Valley; Colorado River, east of Searchlight and near California line.

Meadowlarks in Nevada live mainly in the pastures and meadows, but occasionally they occur also in the sagebrush. The species is much less common in the mountains than in the lower valleys.

Nests have been found as follows: Quinn River Crossing, Humboldt County; two on May 26 and 31, 1909, with five eggs each. A young bird just able to fly was taken there on June 22 (Taylor, 1912, p. 384). Truckee Reservation, Washoe County; one on June 3, 1868, with four eggs; and Carson City, Ormsby County; one on April 21, 1868, with five eggs (Ridgway, 1877, p. 506). Smoky Valley, 5 miles southeast of Millett P. O., Nye County; two on May 30 and June 7, 1932, with four and five eggs (Orr, MS).

Xanthocephalus xanthocephalus (Bonaparte)

YELLOW-HEADED BLACKBIRD

Resident and transient; restricted in summer to marshes. This species is likely to occur at any place in the state at some time of the year, as the following list of record stations indicates.

Washoe County: Deephole, 4000 feet; 3 miles west of Sutcliffe, Pyramid Lake; Washoe Lake; Smoke Creek.

Ormsby County: Carson City.

Humboldt County: Tregaskis Well; Quinn River Crossing; 7 miles east of Golconda; Winnemucca.

Elko County: Elko; west side Ruby Lake, 3 miles north of Elko County line.

Pershing County: Lovelock.

Churchill County: 7 miles west of Stillwater, 4000 feet; Fallon.

White Pine County: Steptoe Creek, 6400 feet, 5½ miles southeast of Ely.

Esmeralda County: Chiatovich Creek, 8200 feet, White Mountains; Chiatovich Ranch, Fish Lake Valley.

Nye County: 5 miles southeast of Millett P. O., Smoky Valley; Cloverdale; Fish Lake, 6500 feet, Fish Spring Valley; Yucca Pass, 4300 feet.

Lincoln County: Hiko Spring, ¼ mile north of Crystal Spring, 4000 feet, Pahranaagat Lake, 12 miles south of Alamo, Pahranaagat Valley; Meadow Creek Valley near Panaca.

Clark County: Yount's Ranch, Pahrump Valley; Kaolin.

According to Henshaw (1877, p. 1309) yellow-headed blackbirds are common in November about the tule sloughs near Carson City and some remain during the winter. Migrating flocks and individuals are to be found over most of the state during the latter part of April and the first half of May. Sometimes individuals are seen far out on the desert (Yucca Pass, Nye County, May 24, 1931) or high in the mountains (Chiatovich Creek, 8200 feet, White Mountains, May 14, 1927), but usually the bird is near marshy ground.

Near Carson City, Henshaw (1880, p. 301) found nests in all stages of construction by May 15. By June 1, nearly all the nests had eggs and some held young. Other nesting colonies have been found at Quinn River Crossing, May 22, 1909 (Taylor, 1912, p. 381); 7 miles east of Golconda (Hanna, 1904, p. 77); Smoky Valley, southeast of Millett P. O., May, 1932 (Linsdale); Fish Lake, Nye County (Hall, MS); Pahranaagat Valley, 4000 feet, May 27, 1932 (Hall, MS).

Agelaius phoeniceus nevadensis Grinnell

NEVADA RED-WINGED BLACKBIRD

Resident; in summer, present wherever there are marshy areas and scattered in small colonies; in winter large flocks forage over the lower valleys and about the ranches. Records for this species are as follows.

Washoe County: Deephole, 4000 feet, May 12 and 13, 1929 (Hall); mouth of Little High Rock Cañon, 5000 feet; Truckee Reservation, two nests with three eggs each, May 31, 1868 (Ridgway, 1877, p. 503); Truckee Meadows, specimens on November 8, 1867 (Ridgway, *loc. cit.*); 8 miles southeast of Reno (nos. 64845-65, Mus. Vert. Zool.), May 3, 1934; Washoe Lake (Hanford, 1903, p. 51).

Ormsby County: Carson City, adult male on March 9, 1868 (Ridgway, *loc. cit.*).

Lyon County: 6 miles north of Fernley; 10½ miles and 12 miles south of Yerington, West Walker River.

Humboldt County: Specimens in Mus. Vert. Zool. from Thousand Creek Flat, Virgin Valley, Big Creek Ranch, Pine Forest Mountains; Quinn River Crossing; Humboldt Valley (Hanna, 1904, p. 77).

Elko County: 20 miles south of Owyhee; 10 miles south of Deep Creek; Elko, along river in August (Nelson, 1875, p. 35).

Pershing County: West Humboldt Mountains, specimen on October 7, 1867, (Ridgway, *loc. cit.*).

Lander County: Specimens in Mus. Vert. Zool. from Birch Creek and Kingston Creek, Toyabe Mountains.

White Pine County: Specimen in Mus. Vert. Zool. from 7 miles southwest of Osceola, 6100 feet, Spring Valley; also observed at Cleveland Ranch, 6000 feet, Spring Valley (Hall, MS).

Mineral County: Lapon Cañon, 8900 feet, Mount Grant (Mus. Vert. Zool., spec.).

Esmeralda County: Mus. Vert. Zool. has specimens from Fish Lake, 4800 feet.

Nye County: Specimens from 5 miles southeast of Millett P. O., 5500 feet, Smoky Valley, in Mus. Vert. Zool. Noted by Death Valley Expedition in 1891, at Oasis Valley, March 15 to 19 (nesting, June 1) and Ash Meadows, specimens on March 18 (Fisher, 1893, p. 74).

Lincoln County: Specimens in Mus. Vert. Zool. from Hiko, and Crystal Spring, Pahranaagat Valley. Breeding near Panaca, May 19, 1891 (Fisher, *loc. cit.*).

Clark County: Saint Thomas, specimens (nos. 50701-04, 50709, C. I. T.), July 23 and 24, 1932 (van Rossem); Colorado River, near California line.

Agelaius phoeniceus sonoriensis Ridgway

SONORA RED-WINGED BLACKBIRD

Nests along the Colorado River, opposite Fort Mojave, Clark County, where two males and a female (nos. 64842-44, Mus. Vert. Zool.) were collected on May 7, 1934.

Icterus cucullatus nelsoni Ridgway

ARIZONA HOODED ORIOLE

A female (no. 27525, Dickey coll.) was taken June 12, 1929, by Sheldon at Pahrump, Nye County.

Icterus parisorum Bonaparte

SCOTT ORIOLE

Summer resident in the southern part of the state. Recorded from as far north as 10 miles east of Stillwater, northeast of Carson Lake, Churchill County, where on May 11, 1898, a mated male and female (nos. 158351, 158390, U.S.N.M.) were collected among junipers in a little valley (Oberholser, 1918, p. 481). Members of the Death Valley Expedition found the species near Queen Mine, White Mountains, Esmeralda County, July 11 to 16, 1891; at Mount Magruder (nos. 139324-26, U.S.N.M.) June 4 to 11, it was common among nut pines. Specimens were obtained on the Juniper Mountains, east of Panaca, May 19, and on the Charleston Mountains (no. 139327, U.S.N.M.), April 30, 1891 (Fisher, 1893, p. 76). A specimen, male, number K. 698, collection of D. R. Dickey, was taken June 26, 1922, by Mrs. May Canfield, at Indian Spring, Mount Magruder. Another (no. 27524) was taken June 12, 1929, at Pahrump Ranch, Nye County (Sheldon). Noted May 5, 1934, at several places along the Las Vegas-Searchlight road in Clark County, in particular, one was watched 5 miles north of Searchlight (Linsdale, MS).

Icterus bullockii (Swainson)

BULLOCK ORIOLE

Summer resident; present mainly in tall trees along streams and about ranches in the valleys and in lower parts of mountains. Has been recorded from the following places.

Washoe County: Little High Rock Cañon; Deephole, 4000 feet; Pinnacles, Pyramid Lake; Truckee Reservation; Granite Creek.

Ormsby County: Carson City.

Lyon County: West Walker River, 12 miles south of Yerington.

Humboldt County: Leonard Creek Ranch; Duffer Peak Meadow, 8400 feet, Alder Creek, Big Creek, 6000 feet, Pine Forest Mountains; Winnemucca; Quinn River Crossing; Humboldt Valley; Cane Springs; Paradise Valley; Buffalo Creek.

Elko County: Ruby Valley; Hasting's Pass, Ruby Mountains; Mountain City.

Pershing County: West Humboldt Mountains.

Churchill County: Stillwater; Fallon; Eastgate.

Lander County: Austin; Big Creek, 8000 feet; Kingston Creek, 6000 feet, Toyabe Mountains.

Eureka County: Eureka.

Mineral County: 3 miles south of Schurz.

Esmeralda County: Chiatovich Creek, 7000 feet, White Mountains; Chiatovich Ranch, and Smith Ranch, Fish Lake Valley.

Nye County: Ophir Creek, 6500 feet, and South Twin River, 6500 feet, Toyabe Mountains; Millett P. O., and 5 miles southeast of Millett P. O., Smoky Valley; 2.5 miles west of Devil's Hole, 2173 feet, Ash Meadows.

Lincoln County: Meadow Creek Valley near Panaca; 16 miles east of Groom Baldy, 4600 feet; Crystal Spring, 4000 feet, and Ash Spring, 3800 feet, Pahranaagat Valley; Meadow Valley, 7 miles south of Caliente, 4000 feet, and 21 miles south of Caliente, 3200 feet.

Clark County: Las Vegas; Vegas Ranch; Virgin Valley; Lower Muddy Valley; Saint Thomas.

According to Hoffman (1881, p. 231) this species appears in the Humboldt Valley about the middle of April and begins to build May 10 or 15. Dates of observation of migrating orioles in the spring are: May 9, 1927, Chiatovich Creek, 7000 feet, White Mountains (Linsdale, MS); May 12, 1930, South Twin River, 6500 feet, Toyabe Mountains (Linsdale, MS); May 24, 1932, Smoky Valley, southeast of Millett P. O. (Linsdale, MS); May 1, 1891, Vegas Ranch (Fisher, 1893, p. 77). Several records in mid-May probably represent birds already on their nesting grounds. Records in fall migra-

tion are not available except for an immature male (no. 61318, Mus. Vert. Zool.) taken August 15, 1932, at Big Creek, 8000 feet, Toyabe Mountains, Lander County (Linsdale).

Nests of orioles (one with five eggs) were found on May 11, 1909, in poplars at Winnemucca (Taylor, 1912, p. 385). A nest found in May, 1868, at Truckee Reservation, was on a drooping branch of willow (Ridgway, 1877, p. 508). Henshaw (1880, p. 302) reported that orioles begin to nest in mid-May, in the vicinity of Carson City.

Weights of five males in May were 31.3, 32.5, 33.2, 34.5, and 41.2 grams; of one in June, 36.0 grams; of one (im.) in August, 39.5 grams. Females taken in May and June, weighed 35.9 and 28.8 grams, respectively.

Euphagus cyanocephalus (Wagler)

BREWER BLACKBIRD

Resident; most numerous and most widely distributed of the blackbirds. In summer near streams in the higher valleys and mountain meadows; in winter frequents the lower valleys.

Has been recorded at the following places.

Washoe County: Mouth of Little High Rock Cañon, 5000 feet; Deephole, 4000 feet; 7 miles north of Sutcliffe, Pyramid Lake; south end of Pyramid Lake; 17 miles northwest and 8 miles southeast of Reno; Washoe Lake; Granite Creek; Wadsworth.

Ormsby County: Carson City.

Lyon County: 10½ and 12 miles south of Yerington, West Walker River.

Humboldt County: Virgin Valley; Leonard Creek; Alder Creek; Big Creek Ranch; Quinn River Crossing; Humboldt Valley; McDermitt; Martin Creek R. S., 7000 feet, Santa Rosa Mountains (Cottonwood Range).

Elko County: Goose Creek, 2 miles west of Utah line; Elko; 20 miles south of Owyhee; Mountain City; Huntington Valley; Halleck; Ruby Valley.

Pershing County: West Humboldt Mountains; Lovelock.

Churchill County: Mountain Well, 5600 feet; Fallon.

Lander County: Big Creek, Birch Creek, and Kingston Creek, Toyabe Mountains.

Eureka County: Eureka.

White Pine County: Cleveland Ranch, 6000 feet; 3 miles east of Baker; Lehman Cave.

Mineral County: 3 miles south of Schurz.

Esmeralda County: Chiatovich Creek, 7000 and 8200 feet, White Mountains; Chiatovich Ranch, and Smith Ranch, Fish Lake Valley; Silver Peak Mountains.

Nye County: South Twin River, 6500 feet, Toyabe Mountains; 5 miles southeast of Millett P. O., Smoky Valley; Hot Creek, 5900 feet, Hot Creek Valley; Fish Lake, 6500 feet, Fish Spring Valley; Breen Creek, 7000 feet, Kawich Range; 1 mile southwest of Cactus Spring, Cactus Range; Ash Meadows.

Lincoln County: 3½ miles north of Ursine, 5900 feet, Eagle Valley; Meadow Creek Valley, near Panaca; Meadow Valley, 7 miles south of Caliente, 4000 feet; Pahranaagat Valley.

Clark County: Pahrump Valley; Vegas Valley; Virgin River, ¾ mile east of Mesquite; Bunker-ville; Bend of the Colorado River.

This blackbird, in Nevada, uses a wide variety of situations for nesting sites. In Humboldt County, Taylor (1912, p. 386) found nests on May 19, 1909, near Quinn River Crossing that were 2½ to 6 feet up in willow and bramble thickets along streams. On June 10 at Big Creek Ranch, six nests were found in a sagebrush area 50 by 150 feet; others were in willow thickets. At the south end of Pyramid Lake, Ridgway (1877, p. 510) found a large colony, on June 3, 1867, nesting in a grove of piñon pines. There were more than one hundred nests and nearly every tree had one or more with as many as three occupied in a tree. Each nest was on a horizontal branch, usually near the top of the tree, twelve or fifteen feet from the ground and well concealed in a thick tuft of foliage. Most of them contained young birds. The usual number of young or eggs was four or five; maximum number, six. In the Toyabe Mountains and the adjacent Smoky Valley in the center of the state, nests were in tall sage close to meadows or streams or on the ground in hummocks of marshy areas (Linsdale, MS).

Quiscalus quiscula aeneus Ridgway

BRONZED GRACKLE

On May 22, 1932, Poultney shot a male bronzed grackle near Crystal Spring, 4000 feet, Pahranaagat Valley, Lincoln County. The specimen was prepared by Hall and is now number 61191 in Mus. Vert. Zool. This record is the first known to me for this species in the region west of the Rocky Mountains, in the United States.

Molothrus ater artemisiae Grinnell

NEVADA COWBIRD

Specimens in Mus. Vert. Zool. came from the following localities.

Quinn River Crossing, Humboldt County (nos. 8822-30), May 27 to June 5, 1909; Big Creek Ranch, Pine Forest Mountains, Humboldt County (nos. 8831-33), June 11, 1909; 5 miles southeast of Millett P. O., Smoky Valley, Nye County (nos. 57672-76), May 13 to June 13, 1930; 2 miles northwest of Morgan's Ranch, East Walker River, Mineral County (no. 65322), July 19, 1934; Arlemont, Fish Lake Valley, Esmeralda County (no. 51120), May 24, 1927; Ash Spring, Pahranaagat Valley, Lincoln County (nos. 61192-93), May 27, 1932.

Ridgway (1877, p. 501) on August 31, 1867, collected a male and female cowbird in the Humboldt Valley at Oreana, Pershing County. The only other individual seen by him was an adult male (no. 53564, U.S.N.M.) obtained on June 2, 1868, at Truckee Reservation, Washoe County. Hanna (1904, p. 77) reported this species common in the Humboldt Valley, Humboldt County, where he found eggs in nests of warblers, blackbirds and orioles. In Pahranaagat Valley, Lincoln County, a few cowbirds were seen, May 22 to 26, 1891, by members of the Death Valley Expedition (Fisher, 1893, p. 73). A female cowbird (no. K680) in the collection of Donald R. Dickey, was taken June 10, 1922, by Mrs. May Canfield, at 1½ miles north of Beatty, Nye County.

Weights of males, four in May and one in June, were 42.5, 43.0, 43.4, 45.5, and 43.0 grams, respectively; of three females in May, 32.5, 38.4, and 39.0 grams.

Molothrus ater obscurus (Gmelin)

DWARF COWBIRD

Present in summer along the Colorado River. Eight specimens (nos. 64875-82, Mus. Vert. Zool.) were obtained, May 6, 8, and 10, 1934, on the river opposite Fort Mojave.

Individuals of this cowbird were observed in May, 1905, along the Colorado River, just above the boundary monument on the California-Nevada line (Hollister, 1908, p. 460).

Piranga ludoviciana (Wilson)

WESTERN TANAGER

Summer resident; most characteristically present on Nevada mountain ranges in the belt of mountain mahogany. Present from May (May 7, 1934, Colorado River, Clark County, May 8, 1927, at Chiatovich Creek, 7000 feet, White Mountains) to September (Sept. 4, 1931, Kingston Creek, 6000 feet, Toyabe Mountains and Sept. 22, 1930, Saint Thomas, Clark County, van Rossem). Records show occurrence at the following places.

Washoe County: Truckee Reservation; Galena Creek, 7000 and 8500 feet; Incline at north end of Lake Tahoe; Granite Creek.

Humboldt County: Virgin Valley; Big Creek, Pine Forest Mountains; Quinn River Crossing; Martin Creek R. S., 7000 feet, Santa Rosa Mountains; Humboldt Valley; Golconda.

Elko County: Divide between Copper and Coon creeks, Jarbidge Mountains; 25 miles north of Elko; East Humboldt Mountains; east slope of Ruby Mountains.

Churchill County: Fallon.

Lander County: Big Creek, Birch Creek, and Kingston Creek, Toyabe Mountains.

White Pine County: Cherry Creek, 6900 feet; east side of Schellbourne Pass, 6800 feet; Lehman Creek, 9300 feet; Baker Creek, 8500 feet; Cleve Creek, 8100 feet, Shell Creek Range.

Mineral County: 2 miles southwest of Pine Grove; Cottonwood Creek, 7700 feet, Mount Grant.

Esmeralda County: Chiatovich Creek, White Mountains; Smith Ranch, Fish Lake Valley.

Nye County: Mohawk R. S.; Wisconsin Creek, Ophir Creek, Last Chance Creek, and North Twin River, Toyabe Mountains; 5 miles southeast of Millett P. O., Smoky Valley; 2 miles southeast of Jefferson, 8000 feet, Toquima Mountains; Burned Corral Cañon, 6800 feet, and 7 miles east of Nyala, 7000 feet, Quinn Cañon Mountains; Garden Valley, 8½ miles northeast of Sharp.

Lincoln County: Pahranaagat Valley.

Clark County: Juniper Mountains; Saint Thomas, Charleston Mountains; Colorado River, opposite Fort Mojave.

Piranga rubra cooperi Ridgway

COOPER TANAGER

In May, 1905, Hollister (1908, p. 461) found this tanager to be common in cottonwoods along the Colorado River in the extreme southern tip of Nevada, in Clark County. A male and female (nos. 64883-84, Mus. Vert. Zool.) were taken May 7 and 9, 1934, in the same locality. They weighed 31.7 and 37 grams, respectively.

Hedymeles melanocephalus melanocephalus (Swainson)

BLACK-HEADED GROSBEEK

Summer resident; common, especially in the bushy vegetation bordering the streams in the mountains. Sometimes occurs in mountain mahogany. Records show this bird to be present at the following localities.

Washoe County: Pyramid Lake; Truckee Reservation; Truckee River; Granite Creek.

Ormsby County: Carson City.

Humboldt County: Alder Creek and Big Creek Ranch, Pine Forest Mountains; Humboldt Valley; Golconda; Martin Creek R. S., Santa Rosa Mountains.

Elko County: Mountain City; 25 miles north of Elko; Elko; Ruby Valley.

Pershing County: West Humboldt Mountains.

Lander County: Birch Creek and Kingston Creek, Toyabe Mountains.

Eureka County: Monitor Mountains, 25 miles southwest of Eureka.

Mineral County: 2 miles southwest of Pine Grove.

Esmeralda County: Chiatovich Creek, 7000 feet, White Mountains; Log Spring on Mount Magruder.

Nye County: Wisconsin Creek, 7000 feet, South Twin River, Jett Cañon and Peavine Creek, Toyabe Mountains; San Antonio, 5400 feet; 1 mile east of Jefferson, 7600 feet, Toquima Mountains; Oasis Valley; Burned Corral Cañon, 6700 feet, Quinn Cañon Mountains.

Lincoln County: East slope Irish Mountain, 6900 feet; Meadow Valley, 7 miles south of Caliente, 4000 feet; Pahranaagat Valley; 16 miles east of Groom Baldy.

Clark County: Near Bunkerville.

The following records in May indicate the time of spring migration for this species. Truckee Reservation, specimen, May 15, 1868 (Ridgway, 1877, p. 488); Carson City, very numerous by May 15 (Henshaw, 1880, p. 300); Chiatovich Creek, 7000 feet, White Mountains, May 10, 1927 (Linsdale, MS); near Bunkerville, May 8, 1891 (Fisher, 1893, p. 106). Some late fall records are of birds obtained at West Humboldt Mountains, September 7, 1867 (Ridgway, 1877, p. 488); Kingston Creek, 6000 feet, Toyabe Mountains, September 4, 1931; San Antonio, Smoky Valley, September 18, 1931 (Lamb, MS).

Ridgway (*loc. cit.*) reported a nest and three eggs found, June 6, 1868, in a buffalo-berry thicket on the Truckee River. In Meadow Valley, 4000 feet, 7 miles south of Caliente, Lincoln County, young already out of the nest were seen on June 17, 1931 (Orr).

Guiraca caerulea interfusa Dwight and Griscom

WESTERN BLUE GROSBEEK

A male (no. 64885, Mus. Vert. Zool.) obtained May 10, 1934, from the Colorado River, opposite Fort Mojave, in Clark County, apparently belongs to this race.

Guiraca caerulea salicarius Grinnell

CALIFORNIA BLUE GROSBEEK

Summer resident in the southern end of the state, except in Colorado River Valley. Hoffman (1881, p. 228) reported finding this species in the valley north of Mount Magruder, Esmeralda County. According to Fisher (1893, p. 106) members of the Death Valley Expedition found blue grosbeaks breeding commonly in Pahranaagat Valley, May 22 to 26, 1891, and along the Lower Muddy and Virgin rivers, May 7 and 8. Merriam collected a male (no. 138112, U.S.N.M.) at Bunkerville, Clark County, on May 8, 1891. At Saint Thomas, two males (nos. 50700, 50713, C. I. T.) were taken, July 23 and 25, 1932 (van Rossem).

Passerina amoena (Say)

LAZULI BUNTING

Summer resident; fairly common over most of the state, especially in the neighborhood of streams. This bunting has been recorded in the following counties.

Washoe County: Galena Creek, 7500 feet; Truckee River; Wadsworth.

Ormsby County: Carson City.

Lyon County: West Walker River, 12 miles south of Yerington.

Humboldt County: Pine Forest Mountains, 5000 to 7000 feet; Martin Creek R. S., 7000 feet, Santa Rosa Mountains; 5 miles north of Paradise Valley.

Elko County: Elko; East Humboldt Mountains; Bull Run Mountain; Ruby Valley.

Churchill County: Eastgate.

Lander County: Austin, Big Creek, Birch Creek, and Kingston Creek, Toyabe Mountains.

Mineral County: 3 miles south of Schurz.

Esmeralda County: Chiatovich Creek, 7000 feet, White Mountains; Mount Magruder.

Nye County: North Twin River, 6500 feet; 5 miles southeast of Millett P. O., and 2 miles south of Darrough's, Smoky Valley; 1 mile east of Jefferson, 7600 feet, Toquima Mountains; Scofield Cañon, 6200 feet; Oasis Valley; Greenmonster Cañon, 7500 feet, Monitor Range.

Lincoln County: Southwest base of Groom Baldy, 7200 feet; Pahranaagat Valley.

Clark County: Juniper Mountains; Spring Mountain; Muddy River Valley; Virgin River Valley.

May 11, 1927, at Chiatovich Creek, 7000 feet, White Mountains represents an early occurrence in the central or northern portion of the state. In the southern end the Death Valley Expedition recorded the species on May 4, 1891, at the Bend of the Colorado River; May 7 and 8, in the Muddy and Virgin River valleys; May 18, at Oasis Valley (Fisher, 1893, p. 107). Henshaw (1877, p. 1309) reported that all of this species had left the vicinity of Carson City by the end of August.

In the Pine Forest Mountains, Taylor (1912, p. 404) observed lazuli buntings in quaking aspens, wild rose, gooseberry bushes, willows and alders, but never far from streams. Altitudinally, they were most common from 5000 to 7000 feet, but occurred to 8000 feet. Ridgway (1877, p. 490) noticed that the species avoids the sage brush tracts and resorts to the more thrifty shrubbery in the vicinity of streams. He found two nests, one on July 1, 1867, at Hunter's Station, Washoe County, contained two eggs; the other, on July 4, 1868, at Austin, Toyabe Mountains, held three eggs.

Hesperiphona vespertina brooksi Grinnell

WESTERN EVENING GROSBEAK

Resident, at least on the higher slopes of the mountains along the western border of the state.

A specimen (no. 61320, Mus. Vert. Zool.) was obtained, August 10, 1932, near Galena Creek, 7000 feet, Washoe County. It weighed 48 grams. A group of five individuals was seen the same day, in flight over lodgepole pines (Linsdale, MS). Stager (MS) found this species in Washoe County, on May 22, 1933, in the Granite Mountains and June 10, 1933, in Washoe Valley.

On May 19, 1927, a male and female, numbers 51124-25, Mus. Vert. Zool., were collected on Chiatovich Creek, 8200 feet, White Mountains, Esmeralda County. These birds were together, evidently mated, and perched in aspens at the side of the stream (Linsdale, MS).

Carpodacus cassinii Baird

CASSIN PURPLE FINCH

Resident; nests on nearly all the higher mountain ranges, probably of regular occurrence in the valleys in winter. The following records, arranged by counties, indicate the widespread distribution of the species in the northern part of the state.

Washoe County: Incline at north end of Lake Tahoe, one seen, June 13, 1931 (Linsdale, MS); south base of Mount Rose, 8700 feet, (no. 65507, Mus. Vert. Zool.); Granite Creek, male (no. 139716, U.S.N.M.) taken May 18, 1896 (Streator).

Ormsby County: Carson City, specimens obtained by Ridgway (1877, p. 457), March 21, 28 (nos. 53355-56, U.S.N.M.), and April 4, 1868. Reported by Henshaw (1880, p. 293) as abundant in summer in this neighborhood.

Douglas County: Two skins (nos. 139190-91, U.S.N.M.), May 31 and June 1, 1889, from Glenbrook (Keeler).

Humboldt County: Pine Forest Mountains, common above 7000 feet, specimens in Mus. Vert. Zool. (nos. 8869-89); nest found, June 26, 1909, in limber pine near head of Big Creek, contained five young (Taylor, 1912, p. 387); three skins (nos. 66162-64, Mus. Vert. Zool.), Martin Creek R. S., 7000 feet, Santa Rosa Mountains, September 6 and 9, 1934, and female (no. 67142, Mus. Vert. Zool.), June 1, 1935.

Elko County: East Humboldt Mountains, adult male (no. 53478, U.S.N.M.), collected August 10, 1868 (Ridgway, 1877, p. 457). Mountain City, male (no. 159066, U.S.N.M.), taken June 12, 1898 (W. K. Fisher).

Lander County: Specimens in Mus. Vert. Zool. from Smiths Creek, 7200 feet (no. 65337), Birch Creek, 7000 (no. 58753) and from Kingston Creek, 8500 and 8700 feet (nos. 57686-87).

White Pine County: Specimens in Mus. Vert. Zool. from east side of Schellbourne Pass, 6800 feet (no. 57945), Cherry Creek, 6900 feet (no. 57946), Baker Creek, 8700 feet (nos. 54335 and 66165). Many observed on Lehman Creek, May 11 to 16, 1934 (Linsdale, MS).

Mineral County: Three males (nos. 65334-36, Mus. Vert. Zool.) from 2 miles southwest of Pine Grove.

Esmeralda County: Indian Spring, Mount Magruder, five specimens (nos. K685-89) in collection of Donald R. Dickey, taken June 21, 1922, by Mrs. May Canfield.

Nye County: Specimens (nos. 158391-92, U.S.N.M.), May 23 and 26, 1898, from head of Reese River and Arc Dome; Cloverdale Creek, male (no. 139189, U.S.N.M.), November 29, 1890 (Bailey); Mohawk Creek, about five seen in a group of aspens, June 20, 1931 (Linsdale); Burned Corral Cañon, 6700 feet, Quinn Cañon Mountains, male and female (nos. 63615-16, Mus. Vert. Zool.), taken July 25 and 28, 1933.

Clark County: North base of Charleston Peak, male (no. 260115, U.S.N.M.), July 1, 1915 (L. J. Goldman).

A male in adult plumage, taken in June, weighed 26 grams, one in July, 25.6 grams; males in immature, streaked plumage, in June and September, weighed 27.5 and 28.3 grams. Females, in July, weighed 25.5 grams, in September, weighed 23.6 and 24.5 grams.

Carpodacus mexicanus frontalis (Say)

HOUSE FINCH

Resident; generally distributed through a wide range of conditions. Occurs in flocks, sometimes of great numbers, for a large part of the year. Localities of record for the house finch are as follows.

Washoe County: Deephole, 4000 feet; Pinnacles, Pyramid Lake; Truckee Reservation; Truckee Valley, Smoke Creek; Wadsworth.

Ormsby County: Carson River; Carson City.

Lyon County: West Walker River, 12 miles south of Yerington.

Humboldt County: Virgin Valley; mouth of Leonard Creek, and Big Creek Ranch, Pine Forest Mountains; Quinn River Crossing; Golconda Hot Springs; 5 miles north of Paradise Valley.

Elko County: Hasting's Pass, Ruby Mountains; Ruby Valley.

Pershing County: Lovelock.

Churchill County: Stillwater.

Lander County: Austin and Kingston Creek, Toyabe Mountains.

Eureka County: Eureka; Diamond Mountains.

White Pine County: 5½ miles southeast of Ely, 6450 feet, Steptoe Valley.

Esmeralda County: 7 miles north of Arlemont; Chiatovich Ranch; Cave Spring, 6248 feet, Silver Peak Range; Tule Cañon to top of Mount Magruder; Gold Mountain.

Nye County: Peavine Creek Ranch, Toyabe Mountains; 5 miles southeast of Millett P. O., Smoky Valley; Cloverdale; Burned Corral Cañon, 6750 feet, Quinn Cañon Mountains; Belmont; Breen Creek, 7000 feet; Kawich P. O., 5900 feet; Ash Meadows.

Lincoln County: Summit Spring, 4800 feet; Crystal Spring, 4000 feet, Pahranaagat Valley; Meadow Valley, 21 miles south of Caliente, 3200 feet; Quartz Spring on west side of Desert Mountains; Timpahute Mountains.

Clark County: Williams Ranch at west base of Charleston Mountains; Spring Mountain, near the "Old Spanish Trail"; Bend of Colorado River; Black Cañon.

House finches utilize a great many types of vegetation but they are in some measure independent of plants for living quarters since they make use of artificial structures or cliffs for many activities, especially for nesting sites. Nests containing five eggs were found by Ridgway (1877, p. 458) on May 25, 1868, at Pyramid Lake, on May 31, and June 2 (2 nests) at Truckee Reservation, and June 6, in Truckee Valley (one with four eggs). A nest, 7 miles north of Arlemont, Esmeralda County, on June 2, 1927, contained an egg and some small young (Linsdale, MS).

Leucosticte tephrocotis littoralis Baird

HEPBURN ROSY FINCH

Winter visitant. Three specimens (nos. 53880, 53882, 53884, Mus. Vert. Zool.) were obtained, January 4, 1929, 2¼ miles northwest of Reno, 5000 feet, Washoe County (Russell). Ridgway (1877, p. 461) reported a single flock seen January 5, 1868, in the outskirts of Virginia City, Storey County. All the fifty individuals were busily gleaning food from the surface of the snow.

Leucosticte tephrocotis tephrocotis (Swainson)

GRAY-CROWNED ROSY FINCH

Winter visitant. Russell obtained three specimens (nos. 53881, 53883, 53885, Mus. Vert. Zool.) on January 4, 1929, 2½ miles northwest of Reno, 5000 feet, Washoe County. These birds were in the same flock as the Hepburn rosy finches listed above.

Acanthis linaria linaria (Linnaeus)

COMMON REDPOLL

Winter visitant, at least to the northern part of the state. A male and female in the Ellis collection (nos. 6829-30) were reported by him (1935, p. 87) as from west side of Ruby Lake, 3 miles south of the White Pine County line, obtained November 2, 1929.

Spinus pinus pinus (Wilson)

PINE SISKIN

Summer resident; recorded from May to September usually high in the mountains. Probably present also in winter.

Specimens in Mus. Vert. Zool. represent the following localities: Virgin Valley, Humboldt County, female (no. 9281), June 2, 1909, collected by L. Kellogg (also observed [Taylor, 1912, p. 389] at Quinn River Crossing and Big Creek Ranch, Pine Forest Mountains); Lehman Creek, White Pine County, male and female (nos. 64888-89), May 15 and 17, 1934; Baker Creek, White Pine County (nos. 54336-37), June 1 and 4, 1929; Birch Creek, 7000 feet, Toyabe Mountains, Lander County, female (no. 58762), August 29, 1931 (Lamb). Also, in the Toyabe Mountains, several were noted, September 2, 1931, in aspens at 7500 feet on Birch Creek, and a flock on May 21, 1932, at Peavine Creek Ranch, Nye County (Linsdale, MS); Chiatovich Creek, 8200 feet, White Mountains, Esmeralda County, male (no. 51127), May 17, 1927.

On August 11, 1932, several siskins were seen in a meadow at 8500 feet, near Galena Creek, Washoe County (Linsdale, MS). Ridgway (1877, p. 463) reported that he collected, on September 5 and 8, 1868, an immature male (no. 53480, U.S.N.M.) and an adult male (no. 83430, U.S.N.M.) in the East Humboldt Mountains, Elko County. Jaeger (1927, p. 5) found this bird infrequent in aspen and fir timber, between altitudes of 9000 and 10,000 feet in the Charleston Mountains, Clark County.

A male and female, taken in May and August, weighed 11.6 and 10.9 grams, respectively.

Spinus tristis pallidus Mearns

PALE GOLDFINCH

Summer resident. The small number of records indicates a small population which stays close to the valleys.

Ridgway (1877, p. 461) reported the capture of an adult male, May 31, 1868, at Truckee Reservation, Washoe County. In Lander County, a male (no. 57689, Mus. Vert. Zool.) was shot, June 20, 1930, near the mouth of Kingston Cañon, 6000 feet, Toyabe Mountains (Miller). A single individual was seen, September 10, 1931, in Smoky Valley, 5 miles southeast of Millett P. O., Nye County (Linsdale, MS). Hoffman (1881, p. 223) reports a few, less than six, seen at the southern extremity of Smoky Valley. The species has been observed in Lincoln County, 7 miles south of Caliente, at 4000 feet in Meadow Valley, on June 17, 1931 (Orr, MS).

A male (no. 57689), taken in June, weighed 11.1 grams. Its wing measured 77.3 mm.

Spinus psaltria hesperophilus (Oberholser)

GREEN-BACKED GOLDFINCH

Summer resident; widespread, but not numerous in the state. Records are from April to October.

Specimens in Mus. Vert. Zool. represent this species as follows: Lyon County: two (nos. 65341-42), July 2 and 3, 1934, from West Walker River, 12 miles south of Yerington. Humboldt County: a male (no. 8606) taken June 12, 1909, at Big Creek Ranch by Taylor; male and female (nos. 66166-67) from Martin Creek R. S., 7000 feet, Santa Rosa Mountains, September 6 and 9, 1934. Lander County: a male (no. 57690), June 14, 1930, from Kingston Creek, 7300 feet; a female (no. 58764), September 4, 1931, same creek at 6000 feet; a female (no. 58763), August 30, 1931, Birch Creek, 7000 feet. Esmeralda County: a male (no. 51126), May 8, 1927, Chiatovich Creek, 7000 feet. Lincoln County: a male (no. 61204), May 26, 1932, Ash Spring, 3800 feet.

Members of the Death Valley Expedition in 1891, found this species at several localities in the southern part of Nevada, as follows: Pahranaagat Valley, a male (no. 139160, U.S.N.M.) shot, May 23; Ash Meadows, March; Queen Station in White Mountains, July 11 to 16; Upper Cottonwood Springs, Charleston Mountains, April 30; Bend of Colorado River, May 4.

Van Rossem took an immature male (no. 50080, C.I.T.), October 16, 1931, at Coyote Spring, Lincoln County.

Three males, two in May and one in June, weighed 9.2, 11.2, and 8.5 grams, respectively; a female, in August and two in September, 8.7, 10, and 11.4 grams.

Loxia curvirostra bendirei Ridgway

BENDIRE CROSSBILL

On August 29, 1868, Ridgway (1877, p. 455) shot an adult male at the foot of the East Humboldt Mountains, Elko County. U.S.N.M. records show that this specimen was sent to Princeton University in 1875. In White Pine County at Cleve Creek, 8700 feet, Shell Creek Range, a male (no. 57947, Mus. Vert. Zool.) was collected on August 4, 1930, by Russell. Another male (no. 63618, Mus. Vert. Zool.) was obtained, July 27, 1933, in Burned Corral Cañon, 6700 feet, Quinn Cañon Mountains, Nye County (Russell).

The presence of this species was reported for the neighborhood of Fallon, Churchill County, by Bailey (MS) as follows: "In a letter of July 27, 1919, Anna Bailey Mills reported a flock of crossbills feeding in the cottonwood trees near her house at Fallon, Nevada, on July 18. She noticed the leaves falling to the ground and on examining them found that each had a hollow ball on the stem which had been cut through so as to open a round hollow gall that had been full of plant lice. She shot one of the crossbills to make sure what they were up to, and found its crop and stomach well filled with the aphids that inhabit these leaf stem galls. The bird was very fat. She sent specimens of the cottonwood leaves with galls that had been cut into by the crossbills and others that were still unopened and well filled with a mass of plant lice.

"The specimens were turned over to the entomologists for identification and proved to be *Pemphigus populi-transversus* Riley."

Loxia curvirostra stricklandi Ridgway

MEXICAN CROSSBILL

In September, 1934, many crossbills were found among the conifers on the higher portions of Wheeler Peak, in the Snake Mountains, White Pine County. Judging from the behavior of the birds and examination of the freshly killed specimens, they must have been preparing to nest. An adult male and female (nos. 66168-69, Mus. Vert. Zool.) were taken, September 18, on Lehman Creek, 10,000 feet, and a female (no. 66170, Mus. Vert. Zool.) September 20, on Baker Creek, 9500 feet. Weights of the three were 44, 39, and 38.2 grams, respectively. Wing lengths, in the same order, are: 102.3, 96.9, and 91.2 mm.

Oberholseria chlorura (Audubon)

GREEN-TAILED TOWHEE

Summer resident; common over most of the mountain ranges in the state, as indicated by the following localities whence it has been recorded.

Washoe County: Galena Creek, 7500 and 8500 feet; Washoe Lake; Incline, at north end of Lake Tahoe; Smoke Creek; Deephole.

Ormsby County: Carson City.

Humboldt County: Virgin Valley; Alder Creek, Leonard Creek, and Big Creek, Pine Forest Mountains; near Golconda; Badger; Martin Creek R. S., 7000 feet, Santa Rosa Mountains; 5 miles north of Paradise Valley.

Elko County: Mountain City; Goose Creek, 2 miles west of Utah line; 25 miles north of Elko; Elko; Steel Creek, north end of Ruby Mountains; west side of Ruby Lake, 3 miles north of Elko County line.

Pershing County: Humboldt Valley; West Humboldt Mountains.

Lander County: Austin, Big Creek, Birch Creek, and Kingston Creek, Toyabe Mountains.

Eureka County: Eureka.

White Pine County: Cleve Creek, 8100 feet, Shell Creek Range; 2½ miles east of Baker; Baker Creek, 7200 feet and 8800 feet; Hamilton; Willow Creek, south end of Egan Range, 7400 feet; Gleason Creek, 7200 to 7500 feet, 14 miles northwest of Ely; Lehman Cave, 7200 feet.

Mineral County: Queen Mine, White Mountains; 2 miles southwest of Pine Grove; Cottonwood Creek, 7400 feet, Mount Grant.

Esmeralda County: Chiatovich Creek, 7000 and 8200 feet, White Mountains; Arlemont; Fish Lake; Indian Spring, and Log Spring, Mount Magruder; Tule Cañon to 8500 feet on Mount Magruder.

Nye County; Mohawk Creek, Wisconsin Creek, Ophir Creek, Last Chance Creek, and South Twin River, Toyabe Mountains; 5 miles southeast of Millett P. O., Smoky Valley; southwest slope of Mount Jefferson, 8700 feet, Toquima Mountains; south end of Belted Range, 5½ miles northwest of Whiterock Spring, 7200 feet; Burned Corral Cañon, 6700 feet, Quinn Cañon Mountains.

Lincoln County: Irish Mountain, 7000 and 8000 feet.

Clark County: Juniper Mountains; Charleston Mountains; Bend of Colorado River; Pahrump Valley.

This towhee arrives in Nevada during the latter part of April and leaves for the south towards the end of September. Earliest and latest dates of seasonal occurrence are April 25, 1868, at Carson City (Ridgway, 1877, p. 496), and September 28, 1931, at the south end of the Belted Range, 7200 feet (Orr, MS). Farther north, Ridgway (*loc. cit.*) took a male, on September 16, 1868, in Humboldt Valley.

The great majority of green-tailed towhees in Nevada live in sagebrush, but where they are available, usually on the higher slopes, other types of shrubby vegetation are inhabited.

Taylor (1912, p. 402) noted young out of the nest in the Pine Forest Mountains by July 1. On July 3 and 4, 1868, Ridgway (*loc. cit.*) found seven nests near Austin, Toyabe Mountains, all in *Symphoricarpos*, 18 to 24 inches above the ground. Of these three had two eggs, one had three, and three had four. Other nests in these mountains were as follows: 1930, June 12, four eggs, June 13, three eggs, June 24, two eggs and two young; 1931, June 24, three eggs, June 29, three young. A nest found, May 18, 1927, on Chiatovich Creek, 8000 feet, White Mountains, was empty though nearly completed (Linsdale, MS).

Pipilo maculatus montanus Swarth

SPURRED TOWHEE

Present, at least in summer, in the mountains and higher valleys in the eastern part of the state. Probably remains in part of this area through the winter. Specimens in Mus. Vert. Zool. represent the following localities.

White Pine County: Cherry Creek, 6800 feet (nos. 57950-53), September 7, 8, and 15, 1930; east side of Schellbourne Pass, 6800 feet (no. 57949), September 3, 1930; Lehman Creek, 7500 feet, Snake Mountains (nos. 64898-912), May, 1934, and (nos. 66177-79), September 22, 1934.

Lincoln County: Springer Spring, 7000 feet, Irish Mountain (nos. 66180-85), September 26 and 27, 1934.

Pipilo maculatus curtatus Grinnell

NEVADA TOWHEE

Resident in the mountains and higher valleys except in eastern and southern portions. An appreciable movement takes place in winter to lower valleys and more southern localities in the state. This towhee has been found at the following places.

Washoe County: Deephole; Granite Creek; Smoke Creek; 17 miles northwest of Reno (nos. 66186-87, Mus. Vert. Zool.), September 4, 1934; Truckee River, 2 miles southwest of Reno (no. 53891, Mus. Vert. Zool.), January 3, 1929; Galena Creek, 7500 feet (no. 66190, Mus. Vert. Zool.), October 1, 1934; Washoe Lake.

Ormsby County: Carson City.

Lyon County: 10½ and 12 miles south of Yerington (nos. 65346-49, Mus. Vert. Zool.), July 2 to 6, 1934.

Humboldt County: Big Creek, below 5600 feet, Pine Forest Mountains (nos. 9151-53, Mus. Vert. Zool.), June 16 and 27, 1909 (first of these is type for the race); Martin Creek R. S., 7000 feet, Santa Rosa Mountains (no. 66188-89, Mus. Vert. Zool.), September 6 and 8, 1934.

Elko County: Ruby Mountains, east side.

Pershing County: West Humboldt Mountains.

Lander County: Austin; Kingston Creek, 6000 to 7100 feet (nos. 57716-20, 58772-73, Mus. Vert. Zool.), June 16 to 22, 1930, September 4 and 7, 1931; Clear Creek, 6500 feet (nos. 61322-23, Mus. Vert. Zool.), August 18, 1932.

Mineral County: 2 miles southwest of Pine Grove, 7250 feet (no. 65345, Mus. Vert. Zool.), June 29, 1934.

Esmeralda County: Chiatovich Creek, 7000 feet (no. 51168, Mus. Vert. Zool.), May 11, 1927; Indian Spring, Mount Magruder.

Nye County: Wisconsin Creek, Ophir Creek, North Twin River, and South Twin River, Toyabe Mountains (Mus. Vert. Zool., 6 specimens); 1½ miles east of Jefferson, 7700 feet, Toquima Mountains (no. 63621, Mus. Vert. Zool.), July 2, 1933; 1 mile west Oak Spring (no. 61017, Mus. Vert. Zool.), May 28, 1931; 5½ miles northwest of Whiterock Spring, 7200 feet, south end of Belted Range; Breen Creek, 7000 feet; Burned Corral Cañon, 6700 feet, Quinn Cañon Mountains (nos. 63622-28, 63648, Mus. Vert. Zool.), July 26 to 29, 1933; Grapevine Mountains; 8 miles west of Tybo, 6700 feet, Hot Creek Range (skel., no. 63647, Mus. Vert. Zool.), July 10, 1933.

Nests found in the Toyabe Mountains on May 25 and June 18, 1930, contained three and four eggs, respectively (Linsdale, MS).

Pipilo aberti Baird

ABERT TOWHEE

Resident along the larger streams in the southern end of the state.

Members of the Death Valley Expedition found this species common in the valleys of the Virgin and lower Muddy rivers, May 6 to 8, 1891, as well as at the Bend of the Colorado River on May 4 (no. 13582, U.S.N.M.). At the latter place fully grown young were obtained. This towhee was observed October 1, 1931, to be common along the Virgin River, $\frac{3}{4}$ mile east of Mesquite, 1750 feet, Clark County (Orr, MS). On December 28, 1932, a female (no. 62641, Mus. Vert. Zool.) was obtained opposite Fort Mojave, 500 feet, on the Colorado River, Clark County (A. H. Miller). Several other individuals were noted in clumps of arrowweed adjoining sloughs. Two others from this vicinity (nos. 64282-83, Mus. Vert. Zool.) were taken January 31 and February 4, 1934. Three (nos. 64279-81, Mus. Vert. Zool.) were collected January 9, 10, and 21, 1934, on the Colorado River east of Searchlight.

At Saint Thomas, Clark County, van Rossem took specimens (nos. 50710, 50712, 50101, C. I. T.) on July 25, 1932, and October 19, 1931.

Calamospiza melanocorys Stejneger

LARK BUNTING

One specimen, a male (no. 138050, U.S.N.M.) was shot, April 29, 1891, by Bailey, in Pahrump Valley, Clark County (Fisher, 1893, p. 108). Preble (MS) noted the species, May 26 and 29, 1915, at Golconda, and May 30, at Willow Point, 28 miles north of Golconda, Humboldt County. Hoffman (1881, p. 228) reported that Yarrow discovered the lark bunting in Snake Valley, White Pine County.

Passerculus sandwichensis alaudinus Bonaparte

WESTERN SAVANNAH SPARROW

Present during the winter and the migration seasons. Specimens in Mus. Vert. Zool. are from: Virgin Valley, Humboldt County (nos. 9277-78), May 14 and 15, 1909; Colorado River, east of Searchlight (no. 64286), January 20, 1934.

Passerculus sandwichensis nevadensis Grinnell

NEVADA SAVANNAH SPARROW

Summer resident; probably stays through winter in southern part of the state. Inhabits grassy marshes, moist meadows, and similar types of open ground in the valleys and lower cañons. Records at the following places indicate the widespread occurrence of this species in the state.

Washoe County: Washoe Lake; Smoke Creek; Deephole; Granite Creek; Wadsworth.

Ormsby County: Carson City.

Lyon County: West Walker River, 10 $\frac{1}{2}$ miles south of Yerington.

Humboldt County: Big Creek Ranch, and Leonard Creek Flats, Pine Forest Mountains; Quinn River Crossing; Virgin Valley; Soldier Meadows; Thousand Creek Flat; Summit Lake; Paradise Valley.

Elko County: Humboldt Valley; Ruby Valley; Franklin Lake; Huntington Valley.

Pershing County: West Humboldt Mountains.

Churchill County: Stillwater; 7 miles north of Stillwater.

White Pine County: Cleveland Ranch, 6000 feet; 5 $\frac{1}{2}$ miles southeast of Ely, 6450 feet; Newark Valley.

Esmeralda County: Smith Ranch, Fish Lake Valley; Blair.

Nye County: South Twin River, 6500 feet, Toyabe Mountains; Cloverdale; 5 miles southeast of Millett P. O., 5500 feet, Smoky Valley; Fish Lake, 6500 feet, Fish Spring Valley; Breen Creek, 7000 feet, Kawich Range; Ash Meadows.

Lincoln County: Hiko Spring, Pahranaagat Lake, and Crystal Spring, 4000 feet, Pahranaagat Valley.

Clark County: Vegas Valley; Vegas Wash; Pahrump Valley; Bend of the Colorado River.

Ridgway (1877, p. 465) found this species from March to November, inclusive, in the northern part of the state. A male was collected on February 17, 1891, in Pahrump Valley, Clark County (Fisher, 1893, p. 86). This bird is found commonly in all the grassy marshes, wet wild-hay meadows, and moist fields, such as irrigated alfalfa. It is also of frequent occurrence about willows at margins of streams and ponds.

In the Pine Forest Mountain region, Humboldt County, a nest containing five eggs was found on May 24, 1909 (Taylor, 1912, p. 390). It was in a slight depression in a low hummock, surrounded

by mud and water, thus being typical for the species in this region. Henshaw (1880, p. 294) reported a nest near Washoe Lake, on May 22 which held four fresh eggs. Nests were found in Smoky Valley, Nye County, as follows: May 16, 1930, four eggs; May 29, 1932, three small young and one egg; May 30, 1932, four eggs (Linsdale, MS).

Ammodramus savannarum bimaculatus Swainson

GRASSHOPPER SPARROW

Reported as a summer resident, in small numbers in the northeastern part of the state. In Ruby Valley, Elko County, Ridgway (1877, p. 467) collected on July 22, 1868, a juvenile male (no. 53492, U.S.N.M.) From August 9 to 14, 1872, Nelson (1875, p. 349) observed the species in the meadows along the Humboldt River, but found it not common. Hoffman (1881, p. 224) records the grasshopper sparrow as breeding near Eureka, Eureka County. On May 7, 1934, a female (no. 64914, Mus. Vert. Zool.), weight 16 grams, was taken on the Colorado River, opposite Fort Mojave. This bird was evidently on its migration.

Pooecetes gramineus confinis Baird

VESPER SPARROW

Summer resident and transient; possibly present in winter in the southern part of the state. In summer only in mountains and in northern part of the state.

Records of occurrence, by counties, are as follows.

Ormsby County: Carson City, an adult female (no. 83472, U.S.N.M.), taken April 2, 1868, by Ridgway (1877, p. 466), who saw none before April 1.

Humboldt County: Specimens in Mus. Vert. Zool. from Big Creek, 7000 feet (nos. 8677-78), July 9, 1909, and Leonard Creek, 6000 and 8500 feet (nos. 8679-80), July 29 and August 3, 1909, and Martin Creek R. S., 7000 feet, Santa Rosa Mountains (nos. 66191-95), September 6 and 9, 1934; 5 miles north of Paradise Valley (nos. 67143-45), May 30 and 31, 1935.

Elko County: Two females (nos. 67532-33, Mus. Vert. Zool.), July 11 and 12, 1935, Goose Creek, 2 miles west of Utah line; female (no. 67534, Mus. Vert. Zool.), July 27, 1935, 1 mile southeast of Tuscarora; adult male (no. 53491, U.S.N.M.), taken September 6, 1868, at Secret Valley (Ridgway, 1877, p. 466). From August 9 to 14, 1872, Nelson (1875, p. 349) observed this species to be common near the Humboldt River at Elko.

Lander County: A male (no. 57726, Mus. Vert. Zool.) was collected June 14, 1930, on the ridge south of Kingston Creek, 9200 feet, Toyabe Mountains.

White Pine County: Baker Creek, 7500 and 8500 feet, Snake Mountains (nos. 66196-97, Mus. Vert. Zool.), September 19, 1934.

Mineral County: Two males (nos. 65352-53, Mus. Vert. Zool.), Lapon Cañon, 8900 feet, July 13, 1934, and one (no. 65354, Mus. Vert. Zool.) Cat Creek, 8900 feet, Mount Grant.

Nye County: Specimens (nos. 58786-90, Mus. Vert. Zool.) were taken, September 8 to 10, 1931, at 5 miles southeast of Millett P. O., 5500 feet, Smoky Valley. All these and the single individual noted, April 24, 1930, were probably transients, since none was seen in summer (Linsdale, MS). This bird was noted, March 10, 1891, at Ash Meadows (Fisher, 1893, p. 85).

Clark County: Observed, March 10 to 13, 1891, at Vegas Ranch (Fisher, 1893, p. 85).

In the Pine Forest Mountains, Taylor (1912, p. 389) observed this bird locally on the sagebrush flats of the mountains, rarely above 7000 feet. Ridgway (1877, p. 466) commented that it was most frequent during the summer on open grassy slopes of higher cañons. In the fall it descends to lower valleys and in September becomes exceedingly abundant among the rye grass meadows along the foothills of the higher ranges, apparently making a complete southward migration in winter, from the central part of the state. Summer resident birds in the Toyabe Mountains region were on the higher ridges where sparsely growing sagebrush was the chief vegetation (Linsdale, MS).

Weights of males, two in September, were 24.9 and 27.8 grams; of females, three in September, 21.7, 23.3, and 24.1 grams.

Chondestes grammacus strigatus Swainson

LARK SPARROW

Summer resident; occurs over most of the state but not continuously distributed, lingers late in the fall and, possibly remains through the winter in some sections. Records of occurrence are as follows.

Washoe County: 17 miles northwest of Reno, male (no. 64915, Mus. Vert. Zool.), April 30, 1934; Truckee Reservation, nest and four eggs taken, June 3, 1868 (Ridgway, 1877, p. 467); Washoe Lake, common on west side of lake (Hanford, 1903, p. 51).

Ormsby County: Carson City, more numerous in November than in March (Henshaw, 1877, p. 1309).

Humboldt County: Specimens in Mus. Vert. Zool. from Virgin Valley (no. 9259), Soldier Meadows (no. 9260), Big Creek Ranch (nos. 9069-72), Big Creek (nos. 9073-75), mouth of Alder Creek (no. 9076). Also common in the Humboldt Valley (Hanna, 1904, p. 77).

Elko County: Male (no. 65395, Mus. Vert. Zool.), May 26, 1934, from Elko.

Lander County: Two specimens (nos. 58791-92) from Birch Creek, 7000 feet, August 31 and September 1, 1931, and one (no. 58793) from Kingston Creek, 6000 feet, September 4, 1931. Also noted there on September 7 (Linsdale, MS).

Esmeralda County: Mount Magruder, noted June 5, 1891 (Fisher, 1893, p. 87).

Nye County: 5 miles southeast of Millett P. O., Smoky Valley, specimens (nos. 57727-28, Mus. Vert. Zool.) taken April 26 and 27, 1930; also seen April 24. Twin River, 6000 feet, Toyabe Mountains, specimen (no. 57729, Mus. Vert. Zool.), May 8, 1930. Oasis Valley, White River Valley, 15 miles west-southwest of Sunnyside, 5500 feet, specimen (no. 61216, Mus. Vert. Zool.), June 10, 1932.

Lincoln County: Desert and Pahrnagat valleys, noted May 20 to 26, 1891, and north of the Juniper Mountains, May 18 (Fisher, 1893, p. 87).

Clark County: Observed by members of the Death Valley Expedition at Mountain Spring and Upper Cottonwood Springs, Charleston Mountains, April 30, 1891, and in the valley of the Muddy River, common on May 6 (Fisher, 1893, p. 87). Virgin River, $\frac{3}{4}$ mile east of Mesquite, 1750 feet, common on October 1, 1931 (Orr).

Weights of males were as follows: Two in April, 31.8 grams each; one each in May, June, August, and September, 33.3, 27.7, 32.5, 23.4 grams. A young female (juv.) in September weighed 22.6 grams.

Aimophila cassinii (Woodhouse)

CASSIN SPARROW

An adult male (no. 135962, U.S.N.M.) shot on May 26, 1891, by Merriam in Timpahute Valley, Lincoln County, was "in worn breeding plumage, and attracted his attention by flying up from the desert brush and singing in the air" (Fisher, 1893, p. 98).

Amphispiza bilineata deserticola Ridgway

BLACK-THROATED SPARROW

Summer resident; occurs generally over lower valleys of state, but not recorded above 5000 feet in northern part. Places of recorded occurrence are as follows.

Washoe County: Mouth of Little High Rock Cañon; Anaho Island, Pyramid Lake; 2 miles west Sutcliffe; Truckee Valley; Wadsworth.

Lyon County: West Walker River, 12 miles south of Yerington; Mason Valley, 13 miles southeast of Yerington.

Humboldt County: Virgin Valley; Alder Creek Ranch; Big Creek Ranch; Quinn River Crossing.

Elko County: 13 miles north of Montello; Hasting's Pass, Ruby Mountains; East Humboldt Mountains.

Pershing County: West Humboldt Mountains.

Churchill County: 1 mile west of Mountain Well; Stillwater.

White Pine County: Newark Valley.

Mineral County: 3 miles south of Schurz.

Esmeralda County: 7 miles north of Arlemont, 5500 feet; Arlemont, 4900 feet, Fish Lake Valley; Cave Spring, 6248 feet, Silver Peak Range; from below Pigeon Spring across Fish Lake Valley; Tule Cañon; Gold Mountain; Mount Magruder.

Nye County: Summit Creek, 6000 feet, and North Twin River, Smoky Valley; Manhattan; Cloverdale; 4 miles north of Hot Creek, Hot Creek Range; Sarcobatus Flat, mouth of Grapevine Cañon; Oasis Valley; Amargosa Desert; Amargosa River, $3\frac{1}{2}$ miles northeast of Beatty, 3400 feet; Garden Valley, $8\frac{1}{2}$ miles northeast of Sharp.

Lincoln County: Desert Valley; near Pahroc Spring; Pahrnagat Valley.

Clark County: Indian Spring Valley; Pahrump Valley; Vegas Valley; Bend of Colorado River; Bunkerville; between Spring Mountain and the Colorado River.

The seasonally earliest record for the state is an observation, on April 29, 1891, in Pahrump Valley, Clark County (Fisher, 1893, p. 95). In the Truckee Valley, Ridgway (1877, p. 475) reported that few, if any, appear before May 1; in 1868, the first was seen on May 13. Records in the fall are as late as September 4, 1867, when Ridgway collected an immature bird in the West Humboldt Mountains, Pershing County.

The habitat of this sparrow was characterized by Hoffman (1881, p. 226) as extending throughout the sagebrush regions in the northern and middle portions of the state, and on the elevated deserts in the southern part. In Humboldt County, Taylor (1912, p. 396) found it only the sagebrush. Ridgway (1877, p. 475) observed that it prefers arid mesas, where the growth is scant and stunted. In Fish Lake Valley, Esmeralda County, these birds were on desert mesas where the bushes were scattered and about two feet in height. Individuals were noted singing in flight on June 8, 1927.

Several nests of this species have been found in the state. Taylor (1912, p. 396) records one in Virgin Valley, Humboldt County, which contained three eggs on July 29, 1909. Hall (MS) found one, July 17, 1935, 13 miles north of Montello, Elko County, which contained three eggs. Members of the Death Valley Expedition, in 1891, found nests in the southern part of the state, as follows: Bend of the Colorado River, two fresh eggs, May 4; Bunkerville, fresh eggs early in May; Indian Spring Valley, three eggs in nest in *Atriplex canescens*, May 28, in the west end of the valley, young able to fly on May 29; Gold Mountain, young nearly full grown, June 3 (Fisher, 1893, p. 95).

At seven miles north of Arlemont, Esmeralda County, a nest containing two eggs which an adult was brooding was found on May 28, 1927 (Linsdale, MS). The nest was 1½ feet above the ground in a bush. It was composed of light yellow grass stems and was lined with cottony material. A similar nest containing four eggs was found the following day. On May 31, a nest was found with one egg and one young bird. This one was 8 inches above the ground (Linsdale, MS).

Amphispiza belli nevadensis (Ridgway)

NEVADA SAGE SPARROW

Resident; occupies the valleys and flats over most of the state. Gathers in flocks in the fall, which wander over same type of ground inhabited in summer. Definite records of occurrence are for the following places.

Washoe County: Little High Rock Cañon; 2 to 4½ miles northwest of Reno, 4800 to 6000 feet; near Sutcliffe, Pyramid Lake; Warm Spring Flat; Truckee Reservation; Washoe Lake; Granite Creek; Smoke Creek; Wadsworth.

Ormsby County: Near Carson City.

Humboldt County: McDermitt; Summit Lake; Big Creek; Big Creek Ranch; Leonard Creek, all in Pine Forest Mountains; Quinn River Crossing; Winnemucca; near Iron Point.

Elko County: 13 miles north of Montello; Halleck; Mountain City; East Humboldt Mountains; Huntington Valley; Ruby Valley.

Pershing County: Oreana; West Humboldt Mountains

Churchill County: Stillwater.

Lander County: Kingston Creek, 6000 feet; Clear Creek, 6500 feet.

Eureka County: Eureka.

Esmeralda County: Mount Magruder.

Nye County: 5 miles southeast of Millett P. O., 5500 feet, Smoky Valley; South Twin River, 6000 feet; 4 and 6 miles northeast of San Antonio; Mohawk R. S., Toyabe Mountains; Manhattan; 8 miles east of Cliff Spring; Oasis Valley; Ash Meadows; Garden Valley, 8½ miles northeast of Sharp.

Lincoln County: Desert Valley; Pahroc Mountains; Pahranaagat Lake.

Clark County: Pahrumpp Valley; through Vegas Valley and Vegas Wash to Bend of Colorado River; Colorado River, and 8 miles above California line.

All observers in the state have found this bird living in areas of sagebrush. Ridgway (1877, p. 477) noted that it was partial to the moister valleys. Taylor (1912, p. 397) remarked that its habitat was much the same as that of the Brewer sparrow, but he found no sage sparrows, in Humboldt County, above 6000 feet, and no adults of the latter species above 4500 feet.

Ridgway noted that in the vicinity of Carson City, singing begins the last of February. He found eggs there on April 1. On April 27, 1868, in this neighborhood Ridgway found a nest with two eggs and two nests with three eggs each.

In the Pine Forest Mountains region, Taylor reports seven nests found between May 11 and June 16, 1909. Three of these contained three eggs each, and the rest four eggs each. One nest was on the ground beneath a sage bush; the others were six to eighteen inches above the ground.

A nest was found 5 miles southeast of Millett P. O., Smoky Valley, which contained a full set of three eggs on May 27, 1932 (Linsdale, MS). The young were hatching in this nest on the morning of June 9. The nest was beneath and near the center of a small rounded sage bush.

Amphispiza belli canescens Grinnell
CALIFORNIA SAGE SPARROW

Summer resident, at least in western Esmeralda County, and transient elsewhere in southern Nevada.

A specimen (no. 50859, C. I. T.) taken on August 30, 1932, by van Rossem at Cold Creek, Charleston Mountains, Clark County, was considered by him to belong to this race, as was also an adult male (no. 50093, C. I. T.), taken on October 17, 1931, at Saint Thomas, Clark County. It measured as follows: wing, 74.5 mm.; tail, 73.7; tarsus, 20.2; culmen, 9.5.

Two skins in Mus. Vert. Zool. appear to belong to this form. A female (no. 64289, wing 69.0 mm.) was obtained on January 10, 1934, on the Colorado River, 14 miles east of Searchlight, Clark County. A male (no. 51142, wing 71.6 mm.), evidently on its breeding ground, was shot on May 21, 1927, near Arlemont, 4900 feet, Esmeralda County.

Junco hyemalis connectens Coues
CASSIAR JUNCO

Transient and probable winter visitant. Found once on Salmon River at Shoshone Creek, 5000 feet, Elko County, where an immature male (no. 66198, Mus. Vert. Zool.) was obtained on September 16, 1934.

Junco oreganus shufeldti Coale
SHUFELDT JUNCO

Winter visitant. Occurrence is indicated by specimens in Mus. Vert. Zool. as follows.

Humboldt County: Martin Creek R. S., 7000 feet, Santa Rosa Mountains (nos. 66199-204), September 6, 8, and 9, 1934.

Elko County: Bear Creek, 8000 feet, Jarbidge Mountains (nos. 66205-06), September 11 and 14, 1934.

Lander County: An adult female (no. 57823) was taken June 8, 1930, near Kingston Creek, 7300 feet, Toyabe Mountains. This individual weighed 18.5 grams; its ovaries were small and showed no indication of activity. Obviously this was a stray that, for some reason, had failed to return to its summer breeding grounds.

White Pine County: Lehman Creek, 8500 and 7500 feet, Snake Mountains (nos. 66207-08), September 18 and 22, 1934; Baker Creek, 9000 feet, Snake Mountains (no. 66209), September 23, 1934.

Nye County: Breen Creek, 7000 feet, Kawich Range (nos. 58474, 58936), April 24 and September 22, 1931.

Lincoln County: Springer Spring, 7000 feet, Irish Mountain (nos. 66210-11), September 26, 1934.

Clark County: Opposite Fort Mojave, 500 feet (nos. 62642-47), December 27 to 30, 1932, and (nos. 64291-302), January and February, 1934.

Van Rossem took an immature female (no. 50069, C.I.T.) October 15, 1931, at Pahrnagat Lake, Lincoln County.

Weights of a female in April and a male in September were 18 and 15.3 grams, respectively.

Junco oreganus thurberi Anthony
THURBER JUNCO

Summer resident in the mountains of western Nevada. Specimens in Mus. Vert. Zool. come from the following places.

Washoe County: Galena Creek, 7000 and 8500 feet (nos. 61325-27), August 10 and 11, 1932, (nos. 64916-18), May 1, 1934, (nos. 66212-17), October 1, 1934.

Humboldt County: Duffer Peak Meadows, 8400 feet (no. 8701), July 30, 1909; a young bird recently out of a nest.

Mineral County: 2 miles southwest of Pine Grove (nos. 65358-59), June 30, 1934; Cottonwood Creek, 7900 feet (no. 65362), July 15, 1934; Lapon Cañon, 8900 feet (no. 65361), July 12, 1934, South Fork Cat Creek, 8500 feet (no. 65360), July 12, 1934, all on Mount Grant.

Esmeralda County: Chiatovich Creek, 8000 and 8200 feet, White Mountains (nos. 51139-41), May 9, 19 and 23, 1927.

Nye County: South Twin River, 6500 feet, Toyabe Mountains (no. 57822), April 30, 1930; obviously a transient.

Young juncos that had just left the nest were seen at Incline at the north end of Lake Tahoe, Washoe County, on June 12 and 13, 1931. On August 11, 1932, many young of the season were seen at a meadow near Galena Creek, 8500 feet, in the same county. A nest found on that date was on the

ground beneath a small stub of aspen. It held three just-hatched young and two eggs (Linsdale, MS).

Females, one each in April and May and two in August weighed 18.5, 18.6, 15.8 and 16.2 grams, respectively. An adult male in May and an immature one in August weighed 16.9 and 18.2 grams.

Junco oreganus mutabilis van Rossem

NEVADA JUNCO

The junco of the Charleston Mountains was described under the name *J. o. mutabilis* by van Rossem (1931, p. 329). The type was a male (no. 31126, coll. D. R. Dickey), collected September 14, 1930, in Lee Cañon, 8200 feet, Charleston Mountains, Clark County. The describer of the race mentioned (p. 330) 31 specimens all taken on their breeding grounds in the Charleston and Sheep mountains.

Junco mearnsi Ridgway

PINK-SIDED JUNCO

Transient. A female (no. 64919, Mus. Vert. Zool.) was taken May 17, 1934, on Lehman Creek, 7500 feet, Snake Mountains, White Pine County; evidently a late migrant.

Junco caniceps (Woodhouse)

GRAY-HEADED JUNCO

Summer resident in desert ranges in central and eastern Nevada; possibly present also in winter.

Of twenty specimens taken September 11 to 14, 1934, on Bear Creek, 8000 feet, Jarbidge Mountains, Elko County (nos. 66218-37, Mus. Vert. Zool.), four show characters near *J. mearnsi* while sixteen are near, but not exactly like series of *J. caniceps* from farther south in the state. Two others from this county (nos. 67536-37, Mus. Vert. Zool.) were taken July 20 and 25, 1935, on Pilot Peak, 8800 feet, and 6 miles southwest of Mountain City, 6550 feet.

A large series of specimens (nos. 57772-821, 58512-13, 58819-32) is contained in Mus. Vert. Zool. from the Toyabe Mountains in Nye and Lander counties. Dates represented are from April 30, 1930, to September 3, 1931. Localities represented by skins are as follows: Birch Creek, and Kingston Creek, Lander County; Mohawk R. S., Wisconsin Creek, North Twin River, and South Twin River, Nye County.

Nesting activity was noted, May 20, 1930, on a ridge near Wisconsin Creek, Toyabe Mountains, when a female was seen carrying a bundle of straws for a nest. Females collected during the following week were laying or incubating (Linsdale, MS). A nest containing four eggs was found, June 13, 1930, near the head of Big Creek, 9000 feet, Lander County (Lamb, MS).

On July 29, 1934, a gray-headed junco (no. 65363, Mus. Vert. Zool.) was taken on Peterson Creek, 7500 feet, Shoshone Mountains, Lander County.

Specimens in Mus. Vert. Zool. from White Pine County represent the following places: Cleve Creek, 8200 feet, Shell Creek Range (nos. 57956-57), August 3, 1930; 3 miles west of Hamilton, 8700 feet, White Pine Mountains (no. 57958), August 9, 1930; Lehman Creek, 9000 feet (no. 54346), June 21, 1929, (nos. 64920-26), May 13 and 15, 1934, and (nos. 66238-42, 66250), September 18, 20 and 22, 1934; Baker Creek, 8500 and 10,100 feet (nos. 54343-45) June 1, 18 and 20, 1929, and (nos. 66243-49, 66251-52), September 20, 21 and 23, 1934.

At Breen Creek, 7000 feet, Kawich Mountains, Nye County, a male (no. 58473, Mus. Vert. Zool.) was taken April 24, 1931. Other localities in Nye County, represented by specimens in Mus. Vert. Zool., are as follows: North slope of Toquima Peak, 8900 and 9000 feet, Toquima Mountains, male and female (nos. 63631-32), taken July 1 and 2, 1933, and Greenmonster Cañon, 8600 and 9000 feet, Monitor Range, two skins (nos. 63633-34), July 14, 1933.

Spizella arborea ochracea Brewster

TREE SPARROW

Winter visitant; probably of more regular occurrence than the few records indicate.

At Truckee Meadows, Ridgway (1877, p. 478) collected an adult male (no. 53522, U.S.N.M.) on November 19, 1867. At Pahump Ranch, Clark County, E. W. Nelson saw "quite a number" of tree sparrows the latter part of February, 1891. The birds appeared quite suddenly one morning before a storm which filled the valley with rain and the mountains with snow (Fisher, 1893, p. 90).

Spizella passerina arizonae Coues

WESTERN CHIPPING SPARROW

Summer resident; common on middle slopes of most of the mountain ranges in the state. Present in winter in the Colorado Valley. Has been recorded at the following localities.

Washoe County: 17 miles northwest of Reno; Galena Creek, 7000 and 8500 feet; Incline, at north end of Lake Tahoe.

Ormsby County: Near Carson City.

Humboldt County: Alder Creek, 6000 and 7000 feet, head of Big Creek, 8500 and 9000 feet, Alder Creek Lake, 7800 feet, Pine Forest Mountains; Martin Creek R. S., 7000 feet, Santa Rosa Mountains.

Elko County: East Humboldt Mountains; Ruby Mountains; Bear Creek, 8000 feet, Jarbidge Mountains; 9 miles northeast of Wells.

Lander County: Birch Creek and Kingston Creek, Toyabe Mountains.

White Pine County: Stella Lake, 10,750 feet, Lehman Creek, and Baker Creek, Snake Mountains.

Mineral County: 2 miles southwest of Pine Grove, 7250 feet.

Esmeralda County: Chiatovich Creek, 7000 and 8200 feet, White Mountains; Mount Magruder.

Nye County: Mohawk R. S., Wisconsin Creek, North Twin River, South Twin River, Toyabe Mountains; 5 miles southeast of Millett P. O., Smoky Valley; 1 mile east of Jefferson, 7600 feet, Toquima Mountains; Greenmonster Cañon, 9000 feet, Monitor Range; Breen Creek, 7000 feet, Kawich Range; south end of Belted Range, 7200 feet.

Lincoln County: Southwest base of Groom Baldy, 7200 feet; Juniper Mountains.

Clark County: Saint Thomas; Colorado River, east of Searchlight and opposite Fort Mojave.

Occurrence records of chipping sparrows in Nevada are, except for Clark County, between April 16 (1915), at Jefferson R. S., Nye County (Holt, MS) and September 28 (1931) at the south end of the Belted Range, 7200 feet, Nye County (Orr). The species is especially numerous on timbered portions of the mountains in July and August when the young are concentrated in flocks. The mountain mahogany makes up the main portion of the vegetation where chipping sparrows live on the Nevada mountains. However, the birds are often found also in yellow pines, limber pines, aspens and even in sagebrush.

A winter record is of a male and female (nos. 64303-04, Mus. Vert. Zool.) taken January 17, 1934, near the Colorado River, east of Searchlight.

A nest containing two eggs and two young was found, July 13, 1909, at Alder Creek Lake, 7800 feet, Pine Forest Mountains, Humboldt County (Taylor, 1912, p. 393). On the east slope of the Ruby Mountains, 8000 feet, Elko County, a nest was found on August 5, 1868, which contained four eggs (Ridgway, 1877, p. 479). Another nest with four eggs was found on June 15, 1930, near Kingston Creek, 8000 feet, Toyabe Mountains, Lander County (Lamb, MS).

Spizella breweri breweri Cassin

BREWER SPARROW

Summer resident; one of most abundant birds in the state, lives in sagebrush at all altitudes both in the valleys and on the mountains. Brewer sparrows have been recorded at the following places.

Washoe County: 3 miles south of Sutcliffe, Pyramid Lake; Truckee Reservation; Washoe Lake; Wadsworth; Smoke Creek; Granite Creek.

Ormsby County: Near Carson City.

Humboldt County: Summit Lake; Pine Forest Mountains, many localities, up to 9000 feet; Thousand Creek; Quinn River Crossing; Martin Creek R. S., 7000 feet, Santa Rosa Mountains; 5 miles north of Paradise Valley; Stonehouse; Winnemucca; Golconda.

Elko County: 1 mile southeast of Tuscarora; Marys River, 22 miles north of Death; 25 miles north of Elko; Elko; Ruby Valley; Steel's Creek, north end of Ruby Mountains; Halleck; Mountain City; Hasting's Pass, Ruby Mountains.

Pershing County: Lovelock.

Churchill County: Mountain Well, 5600 feet; Old River, near Carson Sink; Stillwater; Fallon.

Lander County: Austin, Big Creek, Birch Creek and Kingston Creek, Toyabe Mountains.

Eureka County: Eureka.

White Pine County: Salt Springs, 4200 feet; Cleveland Ranch, 6000 feet; Gleason Creek, 7200 to 7500 feet, 14 miles northwest of Ely; Steptoe Valley, 6450 feet, 5½ miles southeast of Ely; near Baker; Baker Creek, 6600 feet.

Mineral County: 2 miles southwest of Pine Grove, 7250 feet; Lapon Cañon, 8900 feet.

Esmeralda County: Chiatovich Creek, 7000 and 8200 feet, White Mountains; 7 miles north of Arlemont; Arlemont, Fish Lake Valley; Indian Spring, and top of Mount Magruder; Tule Cañon; Gold Mountain.

Nye County: Toyabe Mountains and Smoky Valley, several localities; Bell's Ranch, Reese River; Greenmonster Cañon, 9000 feet, Monitor Range; 7 miles east of Nyala, 6700 feet, Quinn Cañon Mountains; Ash Meadows; 8½ miles east of Cliff Spring.

Lincoln County: Juniper Mountains; 12 miles east of Hiko Spring, 4800 feet.

Clark County: Mountain Spring, Charleston Mountains; Pahump Valley; Saint Thomas; Colorado River, opposite Fort Mojave.

Dates of occurrence of this sparrow in Nevada, run from March 17 (1891) at Ash Meadows, Nye County (Fisher, 1893, p. 393) to September 23 (1930) at Salt Springs, White Pine County. Most of the individuals seen in the latter half of April and early May, 1930, in Smoky Valley, Nye County, appeared to be still in migration.

Nests of the Brewer sparrow are almost invariably built near the centers of sage bushes from one to four feet above the ground. Sixteen nests with eggs mostly in the central and northern parts of the state ranged in date from May 21 to July 4, with the bulk in the first half of June. One of these nests contained two eggs, eight contained three, and seven contained four.

Spizella atrogularis atrogularis (Cabanis)

BLACK-CHINNED SPARROW

Summer resident in southern part of the state; scarce. A single specimen (no. 27526, Dickey coll.) was collected, on June 15, 1932, by Sheldon on Trout Creek, 1 mile above Williams Ranch, Clark County.

Zonotrichia querula (Nuttall)

HARRIS SPARROW

Donald D. McLean tells me that he once examined a mounted specimen of Harris sparrow in a store in Reno, supposedly killed by a Mr. Karns, in the vicinity of Sparks, just east of Reno. Gabrielson (1935, p. 41) has recorded the capture of a male, on November 19, 1934, at the mouth of Eldorado Cañon, about 4 miles below Nelson, Clark County. This bird was one of two observed in a clump of willows a few yards from the bank of the Colorado River.

Zonotrichia leucophrys leucophrys (Forster)

WHITE-CROWNED SPARROW

Summer resident on the tops of several of the higher mountain ranges. Numerous over most of the state during migrations. Near Galena Creek, 8000 feet, on the eastern slope of Mount Rose, Washoe County, a white-crowned sparrow was singing in willow clumps on a meadow on July 10, 1932 (Linsdale, MS).

In the Pine Forest Mountains, Taylor (1912, p. 392) found this sparrow in full song from June 23 to August 4, 1909. A nest found on July 3, near the head of Big Creek, was eighteen inches above the ground in sagebrush and it contained young nearly ready to leave. Other records from Humboldt County are of a male and female (nos. 66279-80, Mus. Vert. Zool.) taken September 7 and 9, 1934, near Martin Creek R. S., 7000 feet, Santa Rosa Mountains, and six skins (nos. 67150-55) June 1 to 6, 1935.

At Fremont Pass, Ruby Mountains, Elko County, Bailey took a male (no. 164210, U.S.N.M.) on June 26, 1898. An adult male (no. 66281, Mus. Vert. Zool.) was shot, September 11, 1934, on Bear Creek, 8000 feet, Jarbidge Mountains, Elko County.

In Mineral County, a male and female (nos. 65367-68, Mus. Vert. Zool.) were taken July 12 and 13, 1934, in Lapon Cañon, 8900 feet, on Mount Grant. They weighed 26.3 and 23.9 grams, respectively.

Farther south, in the White Mountains, this is a common nesting species on the high meadows. Individuals were seen, July 11 to 16, 1891, near Queen Mine, Mineral County (Fisher, 1893, p. 88). Several mated pairs were observed and a female (no. 51128, Mus. Vert. Zool.) was taken on May 13, 1927, on Chiatovich Creek, 8200 feet, Esmeralda County (Linsdale). Transient females (nos. 51129, 53695, Mus. Vert. Zool.) were taken in Fish Lake Valley at Arlemont, 4900 feet, May 21, 1927, and at Fish Lake, 4800 feet, May 22, 1928.

On June 12, 1930, a singing white-crowned sparrow was watched for two hours in a willow thicket at 9000 feet, near Kingston R. S., Toyabe Mountains, Lander County. No other individual was noted in that vicinity in summer (Linsdale, MS). One (no. 58833, Mus. Vert. Zool.) was taken on Birch Creek, at 7000 feet, on September 2, 1931. In Smoky Valley, to the eastward from these mountains this bird was found to be common as a transient, September 8 to 11, 1931. Seven specimens (nos. 58834-37, 58839, 58843, 58847, Mus. Vert. Zool.) were obtained.

A migrant (no. 64842, Mus. Vert. Zool.) was taken May 7, 1934, on the Colorado River, opposite Fort Mojave, Clark County.

Zonotrichia leucophrys gambelii (Nuttall)

GAMBEL SPARROW

Common transient over most of the state and winter visitant in the lower valleys.

Specimens in Mus. Vert. Zool. come from the following localities: Martin Creek, 7000 feet, Santa Rosa Mountains, Humboldt County (nos. 66282-86), September 6 to 9, 1934; Bear Creek, 8000 feet, Jarbidge Mountains (nos. 66287-92), September 11 to 14, 1934, and Salmon River at Shoshone Creek, 5000 feet (nos. 66293-94), September 16, 1934, Elko County; Birch Creek, 7000 feet, Toyabe Mountains, Lander County (no. 58838), September 1, 1931; Lehman Creek, 7000 feet (nos. 66297-99), September 22, 1934, and Baker Creek, 8500 feet (nos. 66295-96), September 19, 1934, Snake Mountains, and Cherry Creek, 6700 and 6800 feet (nos. 57959-61), September 13 and 14, 1930, White Pine County; Chiatovich Creek, 7000 feet, White Mountains, Esmeralda County (no. 51130), May 12, 1927; 5 miles southeast of Millett P. O., Smoky Valley, Nye County (nos. 57852-53, 58840-42, 58844-46), April 21, 1930, and September 10 and 11, 1931; South Twin River, 6500 feet, Toyabe Mountains, Nye County (nos. 57856-57), May 8 and 10, 1930; Cactus Spring, 6500 feet, Nye County (no. 58937), September 21, 1931; Colorado River, east of Searchlight (nos. 64305-07) and near California line (nos. 64308-15) Clark County, January and February, 1934.

Specimens in U.S.N.M. are from Winnemucca (no. 153711), September 8, 1896 (Streator) and Ash Meadows (nos. 138820-21), March 11 and 19, 1891 (Fisher).

Zonotrichia coronata (Pallas)

GOLDEN-CROWNED SPARROW

An adult female (no. 53508, U.S.N.M., marked male on tag), the only one seen, was collected on October 7, 1867, in the West Humboldt Mountains, Churchill County (Ridgway, 1877, p. 472). Two specimens collected October 13, 1876, at Lake Tahoe, by Henshaw were sent to other collections by the U.S.N.M.

Zonotrichia albicollis (Gmelin)

WHITE-THROATED SPARROW

A straggler; one record. On July 15, 1934, Feathers shot a male white-throated sparrow (no. 65369, Mus. Vert. Zool.) on Cottonwood Creek, 7400 feet, Mount Grant, Mineral County. It weighed 26.3 grams. No other individual of this species was seen in the vicinity.

Passerella iliaca schistacea Baird

SLATE-COLORED FOX SPARROW

Summer resident in mountains of northern part of the state; transient farther south. Specimens in Mus. Vert. Zool. are from the following localities.

Humboldt County: Big Creek Ranch, head of Big Creek, Duffer Peak, Leonard Creek, and Meadow near Pine Forest Mountain, Pine Forest Mountains (nos. 9045-68, 4475), June 9 to August 3, 1909, and (nos. 67159-60), June 5 and 6, 1935; Quinn River Crossing (no. 9044) May 17, 1909; Martin Creek R. S., 7000 feet, Santa Rosa Mountains (no. 66300-06), September 6 to 9, 1934 (nos. 67157-58), June 2 and 3, 1935; 5 miles north of Paradise Valley (no. 67156) May 31, 1935, and (no. 67542) July 30, 1935, 13 miles north of Paradise Valley.

Elko County: Summit between heads Copper and Coon creeks, Jarbidge Mountains (nos. 56178-79) July 29, 1929; Bear Creek, 7000 feet, Jarbidge Mountains (no. 66307) September 13, 1934; 1 mile southeast of Tuscarora (no. 67541) July 27, 1935; Cedar Creek, 6000 feet, 10 miles northeast of San Jacinto (no. 67540) July 15, 1935.

Nye County: South Twin River, 6500 feet (no. 57731), May 4, 1930. This individual was apparently a transient. It weighed 30.2 grams.

White Pine County: Lehman Creek, 7500 feet, Snake Mountains (no. 66308) September 22, 1934.

Passerella iliaca canescens Swarth

WHITE MOUNTAINS FOX SPARROW

Summer resident in central portion of the state from Esmeralda County to White Pine County. Specimens in Mus. Vert. Zool. are as follows.

Lander County: Big Creek (nos. 61341-42), August 15, 1932, Birch Creek (nos. 57766-67, 58794-802), June 23, 1930, August 29, 30, and 31, and September 1, 2, and 3, 1931, Kingston Creek (nos. 57740-65, 57892-93, 58803-06), June 9 to 19, 1930, September 4, 5 and 7, 1931, all in Toyabe mountains; Smiths Creek, 7100 feet (nos. 65374-75), July 22, 1934; Peterson Creek, 7000 feet, Shoshone Mountains (no. 65376), July 27, 1934.

White Pine County: East side of Schellbourne Pass, 6800 feet (no. 57955), September 1, 1930.

Esmeralda County: Chiatovich Creek, 8000 to 8200 feet, White Mountains (nos. 51144-59), May 9 to 16, 1927.

Nye County: Mohawk R. S. (nos. 58510-11), June 17 and 19, 1931, Wisconsin Creek, 8000 feet (nos. 57733-36), May 20 to 26, 1930, Ophir Creek, 8000 feet (nos. 57737-39), May 30, 1930, South Twin River (nos. 57730, 57732) May 4 and 8, 1930, all in Toyabe Mountains; 1 mile east of Jefferson, 7600 feet, Toquima Mountains, male and female (nos. 63641-42) July 5, 1933; Greenmonster Cañon, 7500 feet, Monitor Range, male (no. 63643) July 12, 1933.

Passerella iliaca monoensis Grinnell and Storer

MONO FOX SPARROW

Summer resident at least on the Walker River Range in Mineral County. An immature male and two adult females (nos. 65370-72, Mus. Vert. Zool.) were obtained July 15, 1934, by F. G. Palmer and Hall at Cottonwood Creek, 7400 feet, Mount Grant. Weights of these three were 32, 27, and 28.2 grams, respectively. A juvenal female (no. 65373, Mus. Vert. Zool.), weight 27.5 grams, was taken July 18, 1934, by Russell on the East Walker River, 5050 feet, 2 miles northwest of Morgan's Ranch, Mineral County.

Passerella iliaca mariposae Swarth

YOSEMITE FOX SPARROW

Summer resident in the Sierra Nevada in the region of Lake Tahoe.

Specimens (nos. 61336-40, Mus. Vert. Zool.) were taken August 9 to 11, 1932, near Galena Creek, 8500 feet, and (nos. 64943-52, Mus. Vert. Zool.) May 1, 1934, on the same stream at 7100 feet. Also noted along this stream as far down as the Forest Service camp ground, 7000 feet, and at Incline at the north end of Lake Tahoe (Linsdale, MS). Both localities are in Washoe County.

Swarth (1920, p. 208) examined specimens from the American Mus. Nat. Hist., taken July 13 and 14, 1898, at Gardnerville, Douglas County, and July 16, 1898, at Sugarloaf, Douglas County.

Passerella lincolnii lincolnii (Audubon)

LINCOLN SPARROW

Transient over most of the state; winter visitant in the southern portion. Occurs in brushy places.

Specimens in Mus. Vert. Zool. are from the following places: Bear Creek, 8000 feet, Jarbidge Mountains, Elko County, immature female (no. 66309), September 13, 1934; Chiatovich Creek, 8000 feet, Esmeralda County, female (no. 51143), May 9, 1927; Breen Creek, 7000 feet, Kawich Mountains, female (no. 58475), April 24, 1931, and a male (no. 58940), September 22, 1931; Kawich P. O., 5400 feet, Nye County, female (skeleton, no. 58944), September 25, 1931; 3½ miles northeast of Beatty, 3400 feet, Amargosa River, Nye County, female (no. 63522), May 25, 1933; 2½ miles west of Devil's Hole, 2173 feet, Ash Meadows, Nye County, female (no. 63521), May 17, 1933; Colorado River, east of Searchlight (no. 64316), January 16, 1934; opposite Fort Mojave, 500 feet, Colorado River, Clark County (no. 62649), December 28, 1932, and (nos. 64317-22) January 27 to February 10, 1934.

Ridgway (1877, p. 484) took an adult male on September 16, 1868, in the Upper Humboldt Valley, at Trout Creek, Elko County, and an adult female (no. 53542, U.S.N.M.) on April 29, 1868, at Carson City, Ormsby County. Near the latter locality he found the species in April, quite abundant in the bushy fields at the base of the Sierra Nevada, particularly in places near springs or close by the streams.

In the southern part of the state, Fisher (1893, p. 100) reported a few Lincoln sparrows seen at Ash Meadows. Also the species was common in March and on May 1, at Vegas Ranch and in Vegas Wash. At Pahrnagat Lake, Lincoln County, an immature female (no. 50060, C. I. T.) was obtained on October 14, 1931 (van Rossem).

Passerella georgiana (Latham)

SWAMP SPARROW

Reported for Nevada by Ellis (1935, p. 87) on the basis of a female (no. 4612) in his collection from west side of Ruby Lake, 3 miles north of Elko County line, December 17, 1927.

Passerella melodia fallax (Baird)

MOUNTAIN SONG SPARROW

Summer resident; common from Toyabe Mountains eastward and northward, and southward as far as Pahranaagat Valley. Occurs farther south in the state during migrations and in winter. Limited to bushy thickets in lower valleys and bordering streams.

Specimens examined, mostly in Mus. Vert. Zool., represent the following places.

Elko County: 1 mile southeast of Tuscarora, 5900 feet.

Lander County: Birch Creek and Kingston Creek, Toyabe Mountains.

Nye County: 5 miles southeast of Millett P. O., Smoky Valley; Greenmonster Cañon, 7500 feet, Monitor Range.

White Pine County: Cherry Creek, 6800 feet, September 10, 1930; Willard Creek, 7200 feet, and Lehman Creek, 7500 feet, Snake Mountains.

Lincoln County: 3½ miles north of Ursine, 5900 feet, Eagle Valley; Pahranaagat Lake; Coyote Spring.

Clark County: Saint Thomas; Colorado River, east of Searchlight. Specimens from Clark County were taken in fall and winter and were outside the summer range of the race.

Passerella melodia fisherella (Oberholser)

MODOC SONG SPARROW

Summer resident; common in brushy thickets bordering streams and in the valleys in the western part of the state.

Specimens in Mus. Vert. Zool. come from the following localities: Humboldt County: Soldier Meadows; Virgin Valley; Big Creek Ranch, Pine Forest Mountains; Martin Creek R. S., 7000 feet, Santa Rosa Mountains; Quinn River Crossing. A nest found May 31, 1909, at Quinn River Crossing, held a single fresh egg; one in willows near Virgin Creek, on June 2, contained three young birds; a female with an egg in the oviduct was shot on June 11 (Taylor, 1912, p. 399).

Esmeralda County: Arlemont; Fish Lake, Fish Lake Valley.

Specimens, from within the range of this race, were collected by Ridgway (1877, p. 481) at Truckee Reservation, Washoe County; Carson City, Ormsby County; Oreana on the Humboldt River, and West Humboldt Mountains, Pershing County.

Passerella melodia merrilli (Brewster)

MERRILL SONG SPARROW

Transient and winter visitant. A male (no. 58941, Mus. Vert. Zool.) was obtained, September 23, 1931, at Breen Creek, 7000 feet, Kawich Range, Nye County; weight 20.4 grams. An adult female (no. 50084, C.I.T.) was shot, October 16, 1931, at Coyote Spring, Lincoln County (van Rossem).

Passerella melodia saltonis (Grinnell)

DESERT SONG SPARROW

Resident in the southern end of the state. On December 28 and 29, 1932, three males (nos. 62650-52, Mus. Vert. Zool.) were collected near the Colorado River, opposite Fort Mojave, Clark County, by A. H. Miller. These birds were common along the sloughs on the flood plain of the river. Others from the same vicinity (nos. 64333-47, 64954-58, Mus. Vert. Zool.) were taken in January, February, and May, 1934. Four specimens (nos. 64329-32, Mus. Vert. Zool.) were taken January 12 and 13, 1934, on the Colorado River east of Searchlight.

Calcarius lapponicus alascensis Ridgway

ALASKA LONGSPUR

Ridgway (1877, p. 464) wrote that "during the more severe portion of winter, individuals of this species were frequently detected among the large flocks of Horned Larks . . . around Carson City. They were recognized by their peculiar and unmistakable notes."

HYPOTHETICAL LIST

The following list includes birds which have been ascribed to Nevada on insufficient or unsatisfactory evidence; also a few of which specimens have been collected so near the border as to indicate that the species may occur within the state.

Ardea herodias hyperonca Oberholser. CALIFORNIA HERON. Great blue herons near the western border of Nevada may belong to this race.

Falco columbarius richardsonii Ridgway. RICHARDSON PIGEON HAWK. A specimen (no. 4388, Mus. Vert. Zool.) was obtained on January 21, 1861, at Fort Mojave, Arizona, by Cooper.

Bartramia longicauda (Bechstein). UPLAND PLOVER. In the catalogue of the collection of birds' eggs in the British Museum (Oates, 1902, p. 50) eggs of this species are recorded with the following entry: "Soda Lake, Nevada (Smiths. Inst.), Salvin Godman coll." This seems to be a misidentification.

Larus philadelphia (Ord). BONAPARTE GULL. A specimen was collected by Davis (1934, p. 71) May 30, 1934, at Riddle, Owyhee County, Idaho, just north of the northern boundary of Nevada.

Sterna antillarum antillarum (Lesson). LEAST TERN. Davis (1934, p. 71) reported this bird as observed on May 30 and June 1, 1934, at Riddle, Owyhee County, Idaho, just north of the Nevada boundary.

Micropallas whitneyi whitneyi (Cooper). ELF OWL. The type specimen of this owl was obtained at Fort Mojave, Arizona, just across the Colorado River from the southern tip of Nevada (Cooper, 1861, p. 118).

Colaptes chrysoides mearnsi Ridgway. GILDED FLICKER. Specimens of this flicker were reported by Cooper (1861, p. 121) from Fort Mojave, Arizona.

Tyrannus vociferans Swainson. CASSIN KINGBIRD. The mention of this bird by Borell and Ellis (1934, p. 15) as occurring in the Ruby Mountains region may have been unintentional. Possibly they intended to list the western kingbird.

Otocoris alpestris hoyti Bishop. HOYT HORNED LARK. This race was recorded from Nevada in the A. O. U. check-list (1931, p. 212), but I have not learned the basis for the ascription.

Otocoris alpestris leucansiptila Oberholser. SONORA HORNED LARK. I have not seen satisfactorily identified specimens of this race from Nevada, as ascribed in the A. O. U. check-list (1931, p. 215).

Perisoreus obscurus griseus Ridgway. GRAY JAY. This jay has been reported (Parmenter, 1924, p. 72) as observed on August 17, 1923, near Glenbrook, Douglas County. Mr. Parmenter wrote as follows. "We were on an elevated point some three hundred feet above the lake (Tahoe), or at about 6500 feet above sea-level. The jay was perched on top of a large pine tree and we observed him there at rest for more than ten minutes."

Vireo olivaceus (Linnaeus). RED-EYED VIREO. Reported in A. O. U. check-list (1931, p. 278) as "accidental in Nevada." I do not know the basis for this report.

Spinus lawrencei (Cassin). LAWRENCE GOLDFINCH. Reported by Cooper (1870, p. 171) as seen at Fort Mojave, Arizona, during the winter months.

Loxia leucoptera Gmelin. WHITE-WINGED CROSSBILL. Reported in A. O. U. check-list (1931, p. 329) as occurring southward irregularly to Nevada.

SUMMARY

The first general review of the avifauna of Nevada since the early paper by Hoffman in 1881, represents the result of the field work of 80 observers in the state from 1867 to 1935, inclusive. In the present list a total of 338 species and subspecies are considered as members of the Recent avifauna of Nevada. Of these I have examined skins of 315 kinds (24 per cent of those in the A. O. U. 1931 Check-List); of the remaining 23 kinds some have been collected, but for the most part they are entered here on the basis of sight records. A list of kinds whose status is hypothetical includes 14 birds. Of the birds entered in the main list, there are 276 full species, or 37 per cent as many as are included in the A. O. U. Check-List (1931).

When the whole list is analyzed on the basis of seasonal occurrence it can be divided approximately into the following proportions: Permanently resident, 42 per cent; summer resident, 30 per cent; winter visitant, 12 per cent; transient, 9 per cent; accidental or irregular, 5 per cent; extinct, 1 per cent. These percentages can be only approximate on account of the meager information concerning many of the species.

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