

THE BIRDS OF ROCKY MOUNTAIN NATIONAL PARK,
COLORADO

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SEVERAL check-lists of the birds occurring in the Rocky Mountain National Park region of Colorado have been published during the past fifty years. The most complete is that by Park Naturalist H. Raymond Gregg of March, 1938, which lists all the species then recorded from the park, and presents data establishing the more important records. The purpose of the present list is to add recent records to those published by Mr. Gregg and to summarize present information upon the migrations and other avian activities. Complete data upon these observations are available either in Mr. Gregg's check-list or in the park files, so in most cases the names of the rangers, technicians and others who have contributed records are omitted. The writer was in the field almost daily between March 19, 1939, and November 20, 1940, and had abundant opportunity to obtain information upon the occurrence, relative abundance and habits of many of the species listed.

Birds were collected in the park whenever the pressure of other work permitted, but specimens of many of the most common birds have yet to be added to the park collection. Therefore, sight records of all species have been considered valid only if they are supported by specimens collected in the park, or in the Denver or Boulder regions, and if the circumstances of the observations and the competence of the observer warrant their acceptance.

The dates cited are not intended to be arbitrary. It is hoped that they will serve as a basis for future observations that will verify or correct the conclusions presented here. In most cases, the earliest and latest dates of seasonal observations have been cited; in some instances an average date based upon several years' records has been used. Whenever a definite date has been mentioned, an observation of the species concerned has been recorded for that date.

This list, like most of those preceding it, is not restricted in its scope to the exact political boundaries of the park. Many of the most interesting records have been made near Estes Park village, two miles from the park entrance, and elsewhere a short distance below the park itself. Therefore, the area included in townships three, four, five and six north, ranges seventy-three, seventy-four, seventy-five and part of seventy-six west of the sixth principal meridian constitute the park region as covered by this paper.

Most of the borders of this area are in the Upper Transition Zone,

typified by ponderosa pine on the hillside, with aspen and willow along the streams, and occasional long meadows in the glaciated valleys. The Canadian Zone is characterized principally by dense forests of lodgepole pine and aspen, covering the mountainsides from 8000 feet to 10,000 feet elevations. Above this, the Hudsonian Zone is a narrow belt of Engelmann spruce and alpine fir reaching to timberline, at 11,000 feet. The high peaks above timberline are mostly covered with vast rolling alpine meadows and arctic willows, broken by frequent talus slides and precipitous cliffs. Dividing the park almost centrally, the continental divide forms a ridgepole down the park, with the Colorado River valley extending southward on the west and the lower foothills lying eastward to the plains thirty miles distant.

Dorothy Anderson Knox's paper, *Summer Birds of the Gothic Area, Gunnison County, Colorado* (Auk, 61: 19-30, 1944), includes four photographs of alpine and subalpine (upper Hudsonian) terrain very similar to corresponding regions of Rocky Mountain National Park.

This check-list includes a total of 215 species. Twenty-eight species have been added to the list published by Mr. Gregg, and these are indicated by an asterisk (*). Six other new species are listed as hypothetical, and six species have been relegated to that status from previous lists. One bird, Sabine's Gull, has been removed entirely.

LESSER LOON (*Gavia immer elasson*).—The single record from the area is of a bird collected twenty-five years ago on Grand Lake, now preserved in the Kaufman House there.

EARED GREBE (*Colymbus nigricollis californicus*).—Occasional Eared Grebes appear briefly each spring on Mary's Lake and Lily Lake between April 20 and May 15, and they are found also at Grand Lake. There is no evidence that the species breeds within the park area, as Babcock reported. Autumn data are indefinite, but doubtless the species occurs in the park on its way south in September or October.

[**WESTERN GREBE** (*Aechmophorus occidentalis*).—There is no definite information of the occurrence of this species in the park. Kellogg's undated fall record is cited by Sclater; Gregg probably saw one on Mary's Lake in the spring of 1937, and another uncertain observation of one was made at Sheep Lake on April 7, 1940, by Commissioner Hackett.]

PIED-BILLED GREBE (*Podilymbus podiceps podiceps*).—Although a characteristic member of the mid-spring migration (April 2 to May 8), the little heldiver is not common in the park, and stays but a short time on the lower eastern lakes and near Grand Lake. It has not been reported above 9,000 feet. It occurs somewhat less frequently during the southward migration in October (October 6 to 22).

WHITE PELICAN (*Pelecanus erythrorhynchus*).—The single record is of a bird killed at Grand Lake several years ago.

TREGANZA'S HERON (*Ardea herodias treganzai*).—This heron is found almost every spring along the streams and ponds up to 9,000 feet, but never in abundance. The spring migration is between April 3 and May 3; the fall dates are between September 13 and November 8. There are no summer records.

*BLACK-CROWNED NIGHT HERON (*Nycticorax nycticorax hoactli*).—Although not uncommon at the edge of the plains to the east, the only record is of one seen at Mary's Lake, July 28, 1940.

WHITE-FACED GLOSSY IBIS (*Plegadis guarauna*).—Gregg saw one at Mary's Lake, May 11, 1937.

[CANADA GOOSE (*Branta canadensis* subsp.).—There are no definite data to support records of this species cited in former check-lists, but probably some geese alight on ponds or on Grand Lake in migration.]

COMMON MALLARD (*Anas platyrhynchos platyrhynchos*).—Mallards return to the park as soon as the ice melts enough to give them access to open water; the arrival date varies with the season between March 12 and April 5. Resident Mallards occur almost to timberline in summer. Eggs are laid about the second week in May or later and the young leave the nests between June 5 and July 7. Small flocks gather in late summer and depart between September 25 and November 13 although a few linger until the ponds are completely covered with ice.

GADWALL (*Chaulelasmus streperus*).—Gadwalls are fairly common spring migrants (March 24 to May 12), rare in fall (late October). Kellogg reported that the species bred in the park in 1890, but it is doubtful that it does so now.

BALDPATE (*Mareca americana*).—Baldpates appear to migrate customarily below the park elevations. The only record is of a pair on Mary's Lake, March 24, 1937.

AMERICAN PINTAIL (*Anas acuta tzizihoa*).—A few migrants reach the park ponds between March 12 and May 13, but they do not stay long. There are no summer records and but one fall observation, at Sheep Lake on November 1, 1934.

GREEN-WINGED TEAL (*Anas carolinensis*).—A common early spring migrant, scarcer after the middle of May. The species is reputed to nest within the park, but no actual breeding records are available. There are no fall records, but rarely a Green-winged Teal may be found on open beaver ponds in winter.

BLUE-WINGED TEAL (*Anas discors*).—Blue-winged Teals arrive in the park later than most of the other ducks, and for a time are not uncommon on the eastern ponds, but most of them linger only a day or so. There are no breeding records. They return in moderate numbers between September 12 and October 8.

CINNAMON TEAL (*Anas cyanoptera cyanoptera*).—Found in small numbers on the eastern lakes in late April.

SHOVELLER (*Spatula clypeata*).—Shovellers are fairly common in spring migration, arriving in mid-April, and a few breed up to 9,000 feet (June 29, 1939). There are no autumn records.

REDHEAD (*Nyroca americana*).—Redheads are uncommon spring migrants between March 20 and April 14. They are somewhat more numerous in fall between October 26 and November 8.

*RING-NECKED DUCK (*Nyroca collaris*).—Small numbers of Ring-necks migrate through the lower mountains between April 16 and May 12, but there are no fall records, although the species is not uncommon in autumn in the Denver region.

CANVAS-BACK (*Nyroca valisneria*).—A male was observed at Mary's Lake on October 22, 1936.

*[GREATER SCAUP DUCK (*Nyroca marila nearctica*).—Field observations indicate that a few Greater Scaups visit the eastern ponds in mid-April with the abundant Lesser Scaups. In the absence of collected specimens, however, the species must be considered hypothetical.]

LESSER SCAUP DUCK (*Nyroca affinis*).—By March 23, when the ice is melting from the lower lakes, scaups begin to arrive, and the migration continues until May 18.

There are no summer records and the autumn migration occurs after ice has formed on the mountain lakes, so that few scaups occur in the park in fall.

*AMERICAN GOLDEN-EYE (*Glaucionetta clangula americana*).—A single drake was observed on Grand Lake, May 10, 1940.

BARROW'S GOLDEN-EYE (*Glaucionetta islandica*).—Former check-lists include this species as occasional and possibly a summer resident. Careful watch during 1939 and 1940 failed to discover it then. The only definite record is of a pair on Mary's Lake, November 4, 1936.

*BUFFLEHEAD (*Charitonetta albeola*).—This species has been recorded twice, one on Mary's Lake, April 15, 1940, and two drakes with a duck on the fish pond in front of the National Park headquarters, May 2, 1940.

WHITE-WINGED SCOTER (*Melanitta fusca deglandi*).—There is one sight record of this species made at Grand Lake during the fall of 1937 by R. J. Niedrach.

RUDDY DUCK (*Erismatura jamaicensis rubida*).—The few Ruddy Ducks that migrate to the altitudes of the park region arrive about April 14, two weeks later than their fellows appear along the edge of the plains, and they remain but a few days. Autumn brings a small number to the park in late October.

*HOODED MERGANSER (*Lophodytes cucullatus*).—Two mated pairs were observed on Mary's Lake, April 25, 1939.

AMERICAN MERGANSER (*Mergus merganser americanus*).—This species is a regular spring migrant (mid-April to May 14), but does not remain long in the vicinity. There are no fall records.

*RED-BREASTED MERGANSER (*Mergus serrator*).—This species migrates in small numbers into the park during April and May. There are no fall records.

WESTERN TURKEY VULTURE (*Cathartes aura teter*).—Vultures migrate irregularly to the park between April 20 and May 23, and it is possible that they nest there. In August, an occasional vulture migrates with the hawks down Forest Canyon at a height of at least 12,000 feet. Winter records are questionable.

EASTERN GOSHAWK (*Accipiter gentilis atricapillus*).—A few pairs of Goshawks inhabit the park, apparently being more common in the Colorado River valley than elsewhere.

SHARP-SHINNED HAWK (*Accipiter striatus velox*).—There is but one spring record of this species, a Sharp-shin having been observed at Deer Ridge, March 20, 1939. Babcock reported these hawks as rare in summer, but no definite data are available. Between September 20 and October 27 moderate numbers migrate along the ranges at altitudes between 8,000 feet and 11,000 feet.

COOPER'S HAWK (*Accipiter cooperii*).—Cooper's Hawks migrate through the lower zones of the park in small numbers in late April and early May; a very few remain through the summer. There is but one fall record, September, 1939, at Horseshoe Park.

WESTERN RED-TAILED HAWK (*Buteo jamaicensis calurus*).—The most numerous of the resident hawks, Red-tails arrive in late March and early April, nest in May in ponderosa pines or on cliffs in the Transition Zone and less frequently to timberline, and the young begin to leave the nests in early June. Most of these birds disappear in July and August, but others, probably migrants, may be seen in September and October. A few winter at the lower elevations.

SWAINSON'S HAWK (*Buteo swainsoni*).—The first Swainson's Hawks arrive in the park about May 9, and it is possible a pair or so may nest there. The fall flight is spectacular, and was especially so in 1939. On the morning of August 19 of that year, adults and young appeared over Specimen Mountain at about 14,000 feet, and

soared rapidly down Forest Canyon along the continental divide. For eight days thereafter, dozens of Swainson's Hawks passed down this canyon, joined by numbers of Marsh Hawks and an occasional Red-tail, Turkey Vulture, or other raptor. Fewer were observed after August 26, and the last was recorded on October 6.

AMERICAN ROUGH-LEGGED HAWK (*Buteo lagopus s. johannis*).—The first American Rough-legs arrive late in September or in October, and they may be found in small numbers until February 20. They are seldom seen above 9,000 feet, and appear to increase somewhat in February.

FERRUGINOUS ROUGH-LEG (*Buteo regalis*).—These hawks are infrequently seen below 9,000 feet in summer, and former observers list them as breeding here, but there is no definite evidence that they have done so in recent years.

GOLDEN EAGLE (*Aquila chrysaetos canadensis*).—Few nests of the Golden Eagle have actually been found within the park, but it is believed that about five pairs nest here. An empty nest was discovered at 9,500 feet on the Needles, June 7, 1939. A pair of eagles was seen in Wild Basin, another pair near Mount Ida, and other eagles are occasionally observed at various places in the park. Their principal food appears to be the marmot.

SOUTHERN BALD EAGLE (*Haliaeetus leucocephalus leucocephalus*).—The Bald Eagle is an uncommon winter resident on the plains near the foothills, and it may be expected to occur as a rare visitor to the park between October and April. The only definite data available are of an adult near Camp Olympus on November 4, 1939; one over Storm Pass, October 1, 1940; and another over Bighorn Mountain, March 31, 1940. An interesting legend states that eagles trapped by the Indians on Flattop Mountain many years ago were of this form rather than Golden Eagles.

MARSH HAWK (*Circus cyaneus hudsonius*).—Marsh Hawks are seldom seen in spring, and are not known to nest in the park. In late summer, however, many appear above timberline, especially at Fall River Pass, where they may be seen foraging for grasshoppers and swooping at conies. This vertical movement occurs between August 1 and September 15, after which date few Marsh Hawks are to be found at the high altitudes. The true fall migration occurs between October 1 and October 18, and most of the migrant birds fly at lower elevations.

OSPREY (*Pandion haliaeetus carolinensis*).—Ospreys migrate across the park during the last half of April. The data available would indicate that they may not occur here every year, but it is possible that they do. Old residents say that fish hawks formerly nested in the park, but it is not certain that they did. A bird seen on June 9, 1938, was probably a late migrant, not a resident.

***PRAIRIE FALCON** (*Falco mexicanus*).—A few pairs of Prairie Falcons summer in the park, and on June 7, 1939, a nest was found on Needles Ridge at 9500 feet. A pair was seen on Specimen Mountain on June 14, 1939, at 12,000 feet, but no nest was found there. A number of these hawks were seen during August, 1939, above timberline on Trail Ridge, indicating a vertical movement of birds that had nested at lower elevations. The latest date recorded is October 10, 1940, at Sheep Lake.

DUCK HAWK (*Falco peregrinus anatum*).—Duck Hawks migrate northward through the park between March 24 and April 27. No breeding records have yet been obtained in the state, but the species may nest in our mountains. The fall migration is early, between July 31 and September 12. Duck Hawks have been seen at various elevations in the park between 8,000 feet and 12,100 feet.

PIGEON HAWK (*Falco columbarius richardsoni*).—Pigeon Hawks have been seen at a number of places in all the life zones of the park. They are usually seen darting through the conifers closer to the ground than the other forest hawks. Their especial

prey appears to be the pipit, which they pursue along the shores of the lower lakes and over the alpine meadows.

EASTERN SPARROW HAWK (*Falco sparverius sparverius*).—Sparrow Hawks are not nearly as common in the park as they are along the foothills, but a few pairs nest below 8,200 feet on the eastern edge of the park. They arrive here the middle of April; mating has been observed on May 4; eggs have been found in a nest on June 26, while the young leave the nests about July 20. A number of Sparrow Hawks range into the park to timberline in late summer, but these have left by November. Two records, November 22, 1930, and December 26, 1932, probably refer to wintering individuals.

DUSKY GROUSE (*Dendragapus obscurus obscurus*).—Reported to be less common at lower elevations than formerly, resident pairs of Dusky Grouse are scattered throughout the park between 8,000 feet and timberline. They nest in May under the lodgepole pines on top of the moraines in the Canadian Zone, and higher. A female with five active chicks was seen at 8,200 feet on July 10, 1940, the same day ptarmigan chicks at about the same stage of development were found at 12,000 feet on Mount Chapin. Fledged young were flushed near Bear Lake, 9,000 feet, on July 25, 1940. There are reports of the presence of this species on the moraines in midwinter, indicating that there is little or no migratory movement here.

GRAY RUFFED GROUSE (*Bonasa umbelloides umbelloides*).—Estes Park is near the southern limit of this species' range, and there is but one breeding record; Cooke saw adults with young at 9,000 feet on the South Fork on August 12, 1899. There are no recent records, and since the species was always rare in this vicinity, it may be presumed that it no longer exists here.

SOUTHERN WHITE-TAILED PTARMIGAN (*Lagopus leucurus altipetens*).—Ptarmigan spend the entire year on the vast alpine meadows of the mountain tops, even in winter seldom descending much below the timberline spruces for shelter. Occasionally severe snows may drive a few as low as 7,500 feet. They assemble in small flocks in September to spend the winter together, separating in pairs in May and June when courtship cackles may be heard on every peak. They are very tame at this season, but once they begin to nest they become wary. The precocial young are guarded by the female during the first weeks of active life. The species is believed to be increasing here.

***SAGE HEN** (*Centrocercus urophasianus*).—A few Sage Hens live in the sagebrush basin a few miles south of the park, but the only record of their occurrence within the park area is of a flock of twenty-three that were seen in the Colorado River valley at 9,000 feet on November 25, 1939.

EASTERN BOB-WHITE (*Colinus virginianus virginianus*).—It is not certain whether the quail reported to be in this vicinity during the last century were native or introduced. They occurred at the eastern boundary of the the park, for Widmann reports them at 8,100 feet in the summer of 1910. None have been seen since that year, and the colony probably died out.

RING-NECKED PHEASANT (*Phasianus colchicus torquatus*).—Pheasants are not common in the park, and have been recorded principally from the eastern edge below 9,000 feet, although there is one record from the Colorado River valley. Most of the reports have been obtained in April, but occasionally birds are seen in summer. They breed here, young having been found at 7,700 feet on September 1, 1936. There are reports of occasional pheasants wintering near occupied cabins up to 7,800 feet, but it appears that most of the few pheasants that summer here move lower in winter.

*[CRANE (*Grus canadensis canadensis* or *G. c. tabida*).—Old residents report that cranes occurred in numbers along the Colorado River at the turn of the century, and there are indications that they have been seen in Horseshoe Park in more recent years. There are no definite records in the files. A few cranes may be seen in migration beside ponds near Loveland and Fort Collins, and an occasional visitor to the park may be expected.]

*VIRGINIA RAIL (*Rallus limicola limicola*).—A bird collected October 5, 1938, in the swamp at 8,200 feet on Mill Creek provided the first record of this species in the park. Additional observations discovered it at Lily Lake, Hidden Valley, Endovalley and Sheep Lake, and it probably occurs elsewhere. Several Virginia Rails have been heard in summer, which suggests that the species may nest within the eastern boundary of the park up to 9,000 feet.

SORA (*Porsana carolina*).—Soras can be heard calling in the marshes at Endovalley, Sheep Lake, Lily Lake and many other places frequently after May 1. They breed regularly in those places, but the only nest yet discovered was found at 9,000 feet in the Colorado River valley on June 23, 1939. Soras range higher than Virginia Rails; one was observed on June 4, 1940, at Poudre Lakes, 10,760 feet. The latest definite record is dated August 26.

AMERICAN COOT (*Fulica americana americana*).—Migrant Coots appear on our eastern lakes between April 9 and May 20, but stay only a short time. The single nesting record is of a pair that raised four young at Lily Lake (9,000 feet) in 1939. These young left the nest on August 25. Fall records are few; the only definite date is October 22, 1936.

*FLORIDA GALLINULE (*Gallinula chloropus cachinnans*).—The Florida Gallinule is a casual visitor to Colorado. On August 8, 1939, two were seen on Lily Lake, and on the 25th, direct comparison with the resident Coots there was possible, thus verifying the identification.

SEMPALMATED PLOVER (*Charadrius hiaticula semipalmatus*).—The only report of this species is of a bird near Grand Lake in the 1870's. (See Gregg, p. 18.)

KILLDEER (*Charadrius vociferus vociferus*).—Killdeers are not as abundant in the mountains as they are near the foothills, but they migrate in moderate numbers along the lower ponds and streams of the park between March 24 and May 28; rarely, they reach timberline during migration. They are less common in summer, but may be found in suitable meadows up to 8,800 feet, and probably nest here. The fall migration takes place in early October; the latest record is October 14.

WILSON'S SNIFE (*Capella delicata*).—Little flocks of snipe migrate through the park between April 17 and the middle of May, resting briefly in sloughs near beaver ponds up to 9,000 feet. They are courting when they arrive, and their winnowing may be heard every suitable night from April 17 until early June, and occasionally into July. They breed here in June, and may be flushed from swamps through the summer. They leave for the south in September and early October. A very few have been known to spend the winter within the area.

SPOTTED SANDPIPER (*Actitis macularia*).—These little waders arrive in the park between April 25 and May 8, and for several weeks numbers may be found along the streams and ponds, especially at Lily Lake where mud flats provide an abundance of their food. The migration appears to be over by June, but before then pairs have mated or are courting. They nest in June from the lower edges of the park to timberline, possibly higher.

WESTERN SOLITARY SANDPIPER (*Tringa solitaria cinnamomea*).—There are reasons to believe that this species has been overlooked, although normally it does not range

as high as does the Spotted Sandpiper. The only definite report is of one at 8,500 feet on Cub Creek, September 13, 1937.

*GREATER YELLOW-LEGS (*Totanus melanoleucus*).—These shorebirds migrate commonly along the foothills and a few reach the lower ponds of the park in spring. The first record was of a female collected April 4, 1940, at Mary's Lake; five more individuals were seen there, or at Sheep Lake, during April. There are no autumn records.

*LESSER YELLOW-LEGS (*Totanus flavipes*).—The first Lesser Yellow-legs arrive in the park a few days after their larger relatives, and may be found in small flocks on the shores of the eastern lakes. The first record was of a pair at Sheep Lake and eight on the shore of Mary's Lake on April 16, 1940. Others were seen thereafter until April 30, on which date one was collected at Sheep Lake. The species migrates abundantly along the edge of the mountains with the other shorebirds, both in spring and autumn, but there are no fall records for the park.

WESTERN SANDPIPER (*Ereunetes mauri*).—The small sandpipers are very seldom seen in the park, although they migrate in thousands along the edge of the mountains thirty miles distant. A flock of eighty-eight Western Sandpipers at Sheep Lake on May 24, 1935, is the only record of the occurrence of "peep" within the park.

AVOCET (*Recurvirostra americana*).—Avocets congregate in noisy flocks on lakes thirty miles east of the park, but rarely visit the higher altitudes of our eastern ponds. There are three spring records of their occurrence here, dated between April 20 and May 5. Gregg cites a letter and photographs taken at Grand Lake twenty-five or thirty years ago as evidence that Avocets occasionally visit the western side of the park. There is a single summer record, July 31, probably representing a premigration wanderer.

WILSON'S PHALAROPE (*Steganopus tricolor*).—Wilson's Phalaropes arrive in the park between May 4 and May 8, and the migration continues until the middle of the month. The birds are spinning in courtship when they arrive, but the few that remain to nest here cease these antics by May 21. A few pairs nest in the sloughs near beaver ponds, but the only definite record is of three nests with eggs and nestlings found in the Colorado River valley at 9,000 feet on June 24, 1939.

[RING-BILLED GULL (*Larus delawarensis*).—A few gulls are seen at Grand Lake almost every year, but no one familiar with the various gulls that have been recorded from the vicinity of the park has studied them to determine what they are. Niendrach believes they are probably Ring-billed Gulls. Gulls are not uncommon near the foothills, and records from the eastern side of the park are to be expected.]

*BLACK TERN (*Chlidonias nigra surinamensis*).—Black Terns are not uncommon near Denver on the plains, so the occurrence of a beautiful adult at Mary's Lake on the evening of May 16, 1939, is not surprising.

BAND-TAILED PIGEON (*Columba fasciata fasciata*).—Band-tailed Pigeons are more common in the yellow-pine belt than the recorded data would indicate. A band of at least fourteen visited Sheep Lake daily during the spring of 1940; pairs and small flocks were seen in many parts of the park, usually below 9,000 feet, but occasionally to timberline. The nest of this species has not been recorded from Colorado, and in spite of careful search none was discovered in the park; it is almost certain that they do nest here, however, and the nests should be located. The first Band-tailed Pigeons arrived on May 15, and the species had departed by September. Formerly, they were more abundant here than they are today, occurring in large flocks to 9,000 feet.

WESTERN MOURNING DOVE (*Zenaidura macroura marginella*).—Mourning Doves arrive at the park boundaries about April 30, and some pairs may be found through-

out the aspens and yellow pines up to 8,500 feet. Eggs have been found in nests between June 1 and 30. Doves are not nearly so common here as in Denver, but in late summer a number of vagrants visit the park, occurring as high as timberline. They leave in late September, with the latest record on September 29.

*YELLOW-BILLED CUCKOO (*Coccyzus americanus americanus*).—Yellow-billed Cuckoos are rare summer residents in the Denver region, and probably seldom range into the Transition Zone. A cuckoo of this species was observed at 7,700 feet near Twin Sisters Mountain on July 31, 1940.

ROCKY MOUNTAIN SCREECH OWL (*Otus asio maxwelliae*).—Screech Owls are less common in the park than in the Sonoran Zone, but may occasionally be heard here up to 9,000 feet in the aspens, yellow pines and lodgepoles. They are probably permanent residents, but no nests have been found.

FLAMMULATED SCREECH OWL (*Otus flammeolus flammeolus*).—The Flammulated Screech Owl is the rarest owl in the state, but a number inhabit the park. This species replaces the Rocky Mountain Screech Owl in the higher elevations and breeding records have been established between 8,000 and 10,000 feet. Nesting dates are June 15 and June 18.

MONTANA GREAT HORNED OWL (*Bubo virginianus occidentalis*).—On clear nights the soft hooting of the Horned Owl may be heard in nearly every section of the park; probably it has thrived under the protection it receives here. One beautifully constructed nest has been built on the lower limb of a ponderosa pine at Sheep Lake, ten feet from the ground; other nests have been found to timberline.

ROCKY MOUNTAIN PIGMY OWL (*Glaucidium gnoma californicum*).—The single report of the Pigmy Owl is a nesting record established May 31, 1890, at 10,000 feet. Frequented dense forests, this tiny owl has undoubtedly been overlooked, and probably still inhabits the park.

*SAW-WHET OWL (*Cryptoglaux acadica acadica*).—There are no sight records of the Saw-whet from within the park region, but twice its unmistakable note has been heard in Horseshoe Park, on April 19, 1939, and again on August 5, 1939. It is probably a rare resident of the park up to 9,000 feet.

*LONG-EARED OWL (*Asio otus wilsonianus*).—A young Long-eared Owl was captured at 8,800 feet in Wild Basin on August 19, 1940, near a nest in an Engelmann spruce. The characteristic scream of this owl has been heard at Lily Lake.

NUTTALL'S POORWILL (*Phalaenoptilus nuttalli nuttalli*).—Nuttall's Poorwills have been found only below 8,000 feet on Needles Ridge at the eastern edge of the park, but a few breed there every year. This is an open yellow-pine habitat, with an abundance of juniper and other shrubby foliage. On June 6, 1940, a single egg was discovered on the ground beside a granite boulder.

HOWELL'S NIGHTHAWK (*Chordeiles minor howelli*).—Resident nighthawks appear in the park about a week after their fellows arrive in Denver; the arrival dates here are between June 6 and June 10. They are fairly common, scattered throughout the park to timberline, and occasionally may be seen flying high above the alpine meadows. Booming has been heard as late as July 11. As elsewhere, the fall migration is early and spectacular. Every few days between August 26 and September 10, flocks of several hundred pass across the park, flying a couple of thousand feet above the ground.

NORTHEASTERN WHITE-THROATED SWIFT (*Aëronautes saxatilis sclateri*).—These swifts arrive about May 5, and immediately begin to inspect crannies in the granite cliffs on the eastern side of the park for nesting sites. The flocks remain together until the middle of the month, then break up, with many of the birds departing for

other habitats, so that relatively few are to be seen here by June. Nests were discovered on the Needles at 10,000 feet on June 7, 1939. The latest record of their occurrence here is July 10, and there are no fall records. The species does not leave the Denver region until October.

BLACK SWIFT (*Nephoecetes niger borealis*).—Widmann's observation of this species at Glacier Meadow on July 8 and 10, 1910, when he had opportunity to compare it directly with the White-throated Swift, extended the Colorado records northward.

BROAD-TAILED HUMMINGBIRD (*Selasphorus platycercus platycercus*).—A few days after the first migrant hummingbirds appear (May 9 to 15), pairs may be seen courting and mating throughout the lower park. Especially abundant in the Transition Zone, this species is seldom seen as high as timberline. The nesting period is between June 7 and July 14. Young that had been seen being fed at Sheep Lake on July 13 had left the nest two days later. The Broad-tails leave early and the latest record is August 16, except for a surprising winter record in February, 1932.

RUFIOUS HUMMINGBIRD (*Selasphorus rufus*).—The Rufous Hummingbird nests to the northwestward of the park, and has not been recorded here in spring or during its early nesting season. The southward migration begins in midsummer, and between July 25 and September 1 numbers may be seen almost anywhere in the park. They appear to be more abundant some years than others, and to migrate especially at the higher altitudes. On August 10, 1939, at least two hundred were observed feeding on a patch of larkspur at timberline on Specimen Mountain, where their brilliant plumage contrasted beautifully with the deep blue of the flowers.

EASTERN BELTED KINGFISHER (*Megaceryle alcyon alcyon*).—The kingfishers arrive about April 15, and are not uncommon throughout May, but few stay through the summer. They are more frequently seen along the Colorado River than on the eastern side of the park, and several pairs undoubtedly nest near Grand Lake. The fall migration begins in late August, but an occasional kingfisher may be found as late as October 11. Rarely, one may visit open streams in the park in winter.

*[**BOREAL FLICKER** (*Colaptes auratus borealis*).—On April 30, 1939, a golden-shafted flicker was seen that is probably referable to this form. However, as intermediates are not uncommon in this vicinity, the inclusion of this species in the list must await the collection of a specimen.]

RED-SHAFTED FLICKER (*Colaptes cafer collaris*).—Flickers arrive about March 1, and are increasingly common during April and May. Thereafter, fewer are seen, although they nest commonly throughout the park to timberline. In 1940, courtship was first observed on April 8. Nests with eggs have been found between May 24 and June 12. The young are fledged by August 1. The fall migration occurs between September 2 and October 16, and a few birds remain at the edge of the park through the winter.

WESTERN RED-HEADED WOODPECKER (*Melanerpes erythrocephalus caurinus*).—In 1890, this woodpecker was considered a rare visitor to the park, but now a small number occur here every year. These appear mostly between May 19 and June 8, but one or two are to be seen in July and August, indicating that a few may nest here. All but one of about twenty seen in 1939 were males, possibly non-breeding birds that ventured here from the usual nesting habitat thirty miles to the eastward. They have not yet been found above 9,000 feet.

LEWIS'S WOODPECKER (*Asyndesmus lewis*).—Lewis's Woodpeckers migrate in abundance along the foothills, and nest in numbers from the plains to at least as high as 6,800 feet. A few reach the park in spring (May 14), and a pair or so may breed here occasionally, more likely south of Grand Lake than elsewhere. In August, these

gaudy birds move upward into the Canadian and Hudsonian zones, singly or in small bands, and may even be found above timberline (Fall River Pass, 12,100 feet, August 20, 1939). True fall migration is in progress by September 1; some of the birds return eastward to the foothills and plains while the rest migrate down the Colorado River valley.

*[WESTERN PILEATED WOODPECKER (*Ceophloeus pileatus picinus*). The presence of these great woodpeckers in Colorado is hypothetical. Bent questions the validity of all Colorado records to date since no specimens have been collected in the state. However, the bird is almost unmistakable, and careful observation would indicate that it may rarely enter the state. There is one doubtful report of one in the park on August 12, 1937. A number of aspens scattered through the park bear large gouges that closely resemble the scars made by these birds, but the marks could have been made by insects. The Canadian and Hudsonian regions of the park are well suited as a habitat for this species.]

RED-NAPED SAPSUCKER (*Sphyrapicus varius nuchalis*).—The first Red-naped Sapsuckers reach the park the last week in April, and by early May, pairs are courting in the aspen groves up to 9,500 feet. An interesting courtship area is at the foot of the Cub Lake trail. Nest-drilling in every stage was observed May 14, 1940, at which time this was the commonest woodpecker in the park. Drilling continues until June 8, when early clutches of eggs are already being incubated. Thereafter birds are seen less frequently to the end of August, and there are no reports of the species after September 1.

NATALIE'S SAPSUCKER (*Sphyrapicus thyroides nataliae*).—Except for its association with yellow pines instead of aspens, this sapsucker has a behavior pattern similar to that of the Red-naped Sapsucker. It arrives about April 18; the nest holes are drilled between May 11 and June 3; and eggs have been found between June 6 and 14. There are no records later than July 8, and fall records are lacking from the Denver region as well as here.

ROCKY MOUNTAIN HAIRY WOODPECKER (*Dryobates villosus monticola*).—Pairs of Hairy Woodpeckers are scattered through the forests of the park from the boundaries to timberline, and have been reported every month of the year. They nest in the middle of June. There is an evident vertical migration, and the birds are especially common between 8,000 and 9,000 feet from early September until late November. During mid-winter they are scarce, but may be found then as high as 10,000 feet.

BATCHELDER'S WOODPECKER (*Dryobates pubescens leucurus*).—Although a few Batchelder's Woodpeckers winter in the park, most of them descend below its boundaries in autumn, and return in late March. For a time thereafter they are quite common in the lower aspen groves, but scatter to nest to timberline in June.

ALPINE THREE-TOED WOODPECKER (*Picoides tridactylus dorsalis*).—Nesting in small numbers in the Hudsonian Zone, preferring dense spruce and fir forests, this woodpecker is seldom seen. Little is known of its habits, but its wanderings to lower elevations at times may reflect an erratic impulse to migrate vertically. Formerly recorded only from the western side of the park, it is now evident that it drifts into the Transition Zone of the east slope as well. It has been found near Estes Park in August, October and April.

EASTERN KINGBIRD (*Tyrannus tyrannus*).—The term "summer resident," as used by former writers, does not properly describe the occurrence of this species in the park. A small number reach the edges of the park in spring about May 11, which date coincides with their more abundant migration along the foothills. These migrants do not stay in the park more than a few days, and none were seen in early

summer after June 5 in 1939. There is no evidence that they nest within the park region, but it is possible that they do so near Grand Lake. Late in summer, after nesting is over in the foothills, a number of Eastern Kingbirds move upwards into the mountains. During the last week of August and the first weeks of September, they may be found scattered through the upper Transition Zone. These birds depart by September 8, presumably joining others of their species at lower elevations for the southward migration.

ARKANSAS KINGBIRD (*Tyrannus verticalis*).—Following much the same behavior pattern as the Eastern Kingbird, this species has been recorded in spring only on May 25, 1938. In late August a number wander into the park on both slopes, being conspicuous along the meadows and streams up to 9,000 feet. They leave for their southern range by September 10.

CASSIN'S KINGBIRD (*Tyrannus vociferans vociferans*).—Cassin's Kingbird has become less common here than it was formerly, and may now be considered a casual visitant, possibly occurring in late summer. There have been no definite records since 1890.

SAY'S PHOEBE (*Sayornis saya saya*).—It is surprising that Say's Phoebe has not appeared here in spring, for it is common along the eastern edge of the mountains in April. It occurs rarely in fall up to 8,200 feet between September 9 and October 6.

LITTLE FLYCATCHER (*Empidonax traillii brewsteri*).—This flycatcher arrives late in May and remains in the park at least into August. Definite records are scarce, owing to the difficulties of field identification, but this is probably the common *Empidonax* along the streams of the Transition Zone.

LEAST FLYCATCHER (*Empidonax minimus*).—The Chebec migrates through the Transition Zone of the eastern slope between May 18 and June 20. There is no indication that it nests here, and there are no autumn records.

HAMMOND'S FLYCATCHER (*Empidonax hammondi*).—This appears to be the common *Empidonax* of the ponderosa pines and aspens of the Transition Zone, and occurs in the lower Canadian Zone as well. It arrives in the middle of April and courtship begins in late May. Its departure occurs in early September.

WRIGHT'S FLYCATCHER (*Empidonax wrighti*).—Although this species has been stated to be more common than *hammondi*, no specimen of the Wright's Flycatcher has been collected within the park, and field identification is unreliable. A nest attributed to this form was found June 28, 1903 in Moraine Park.

WESTERN FLYCATCHER (*Empidonax difficilis difficilis*).—The dates of the spring arrival of this common flycatcher have not been recorded, but it has been found nesting around cabins up to 9,000 feet on both sides of the divide, between June 17 and July 5. Its autumn departure appears to occur in early September.

WESTERN WOOD PEWEE (*Myiarchus richardsoni richardsoni*).—Pewees arrive late, about May 29, but are soon common birds of the yellow pines and aspens of the Transition Zone. They occur less abundantly in the Hudsonian Zone. Nesting dates are between June 22 and July 6. They migrate in early September.

OLIVE-SIDED FLYCATCHER (*Nuttallornis mesoleucus*).—These flycatchers arrive about June 8, and soon pairs are scattered all over the park, especially in the Canadian and Hudsonian zones between 9,000 feet and timberline. Nesting dates are recorded between June 29 and July 5. The complete song may be heard until the end of July; thereafter, until September, it is fragmentary. They are believed to depart in September.

DESERT HORNED LARK (*Otocoris alpestris leucolaema*).—Horned Larks appear in the lower meadows in April, but soon ascend to the alpine tundra, where they nest.

A number were found above timberline on April 5, 1939, and it is possible that a few birds winter on these wind-blown meadows. The alpine nesting takes place apparently in late May and in June. Most of the larks leave this habitat by mid-August.

VIOLET-GREEN SWALLOW (*Tachycineta thalassina lepida*).—In 1940 the first Violet-green Swallows did not arrive until May 10. The park files contain records that indicate that this species normally arrives between April 14 and 23, but it is probable that such observations should be referred to the Tree Swallow, which did arrive during that period in 1940. Both species are common during migration, and resident pairs often quarrel over nesting sites. Concentrating especially along the fields and streams below 8,000 feet, this species has never been recorded in the higher mountains.

TREE SWALLOW (*Iridoprocne bicolor*).—The relative abundance of this swallow and the preceding species is not clearly understood. The first migrant Tree Swallows reached the park on April 20 (1940), and other migrants went through until late May. Resident Tree Swallows began investigating nesting sites after May 4. Not until May 10 did the first Violet-greens arrive, but in a few days they outnumbered the Tree Swallows two to one. Many of these were migrants, however, and the number of residents appeared to be about evenly balanced between the two species. Their nesting ranges coincide and both forms are found commonly to 8,500 feet. More Tree Swallows nested above the park boundary (7,800 feet) than below it, while the Violet-greens were more common between that elevation and Estes Park village. Rarely, Tree Swallows are to be seen above timberline, and it is possible that a few pairs may nest that high. No nests have been found above 8,500 feet in the park, except by Bergtold, who records them to 10,500 feet. Tree Swallows appear to be more adaptable than Violet-greens, nesting not only in hollow trees and bird boxes, but also on cliffs, in eaves and under bridges. The resident swallows begin to disappear in mid-July, with the Tree Swallows being the first to leave. Those at the higher elevations appear to move out first, and by July 20 only a few pairs with late-hatching broods are to be seen. All have left by the end of August.

ROUGH-WINGED SWALLOW (*Stelgidopteryx ruficollis serripennis*).—Six Rough-winged Swallows were observed in the spring of 1940 between May 16 and 27, up to 8,200 feet. Normally, Rough-wings nest below 6,500 feet on the east slope, but it is possible that the June, 1910, observation by Widmann refers to a pair that may have nested within the park region. One pair was seen near Fish Creek in August, 1939.

BARN SWALLOW (*Hirundo rustica erythrogaster*).—A few pairs of Barn Swallows reach Estes Park village every spring about May 18, and may be found during summer occasionally to the upper limit of the Montane Zone (9,000 feet). A nest and fledglings were found in a garage at Long's Peak Inn on July 24, 1940.

NORTHERN CLIFF SWALLOW (*Petrochelidon pyrrhonota albifrons*).—In 1940, the Cliff Swallows arrived in the park a few days later than the Barn Swallows, during the fourth week of May, although records in the park files indicate that they have arrived earlier, nesting as early as May 23. Parents were feeding young in four nests on June 17, 1939. Colonies of up to twenty pairs have been established up to 8,200 feet near Estes Park, while Cliff Swallows have been seen as high as 9,500 feet in the Colorado River valley.

ROCKY MOUNTAIN JAY (*Perisoreus canadensis capitalis*).—The Camp Robber summers in the Canadian and Hudsonian forests, occasionally ranging to 13,000 feet. Although they are abundant there, no nesting data are available. In winter, most of these jays descend to the lower edge of the Canadian and upper Transition zones

(8,000 to 9,000 feet), some to Estes Park village at 7,500 feet, while a few winter as high as timberline.

WESTERN BLUE JAY (*Cyanocitta cristata cyanoptera*).—The single record of this species from the park is of one seen with a flock of Long-crested Jays at Camp Woods, at 7,800 feet (? in 1932).

LONG-CRESTED JAY (*Cyanocitta stelleri diademata*).—Long-crested Jays are most common in the upper Transition Zone, not uncommon in the lower Canadian Zone and are seen occasionally in the Hudsonian Zone in late summer. There are no nesting data available. They winter from 9,000 feet to as low as 5,000 feet.

AMERICAN MAGPIE (*Pica pica hudsonia*).—The Magpie nests from the plains to the lower edge of the Canadian Zone. It is common, but varies in numbers from year to year. Nest construction begins about March 27, and eggs have been recorded from May 12 to 24, but doubtless are also laid earlier. Magpies are found in small flocks on the alpine tundra in September and October, but winter below 9,000 feet.

AMERICAN RAVEN (*Corvus corax sinuatus*).—Ravens are uncommon permanent residents of the park. In summer they are to be found high about the peaks, where it is probable they nest. In winter they descend to the edges of the park.

WESTERN CROW (*Corvus brachyrhynchos hesperis*).—Crows have been reported more frequently in October than at any other season, but are rarely seen even then. They have been recorded in late winter, and in spring and summer as well as in autumn. The highest elevation recorded for this species is about 10,000 feet.

PIÑON JAY (*Cyanocephalus cyanocephalus*).—The Piñon Jays are erratic, visiting the east side of the park in numbers varying from a few to flocks of hundreds. They are seen most frequently in Wild Basin, but occur also near Estes Park, in the Transition and lower Canadian zones. There are a few winter records, and the latest date in spring is May 1, 1938.

CLARK'S NUTCRACKER (*Nucifraga columbiana*).—Nutcrackers have been seen carrying nesting material at elevations as low as 7,800 feet (March 6, 1940), but no nests have yet been found within the park. It is believed that the species nests principally in the upper Canadian and Hudsonian zones. Courtship begins in January and continues into March. In summer, they are conspicuous on the tips of the timberline spruces, and have been observed flying above 13,000 feet. In winter, most of them descend to the lower edges of the park, and a few go as low as 5,000 feet.

LONG-TAILED CHICKADEE (*Parus atricapillus septentrionalis*).—These chickadees nest in the Transition Zone below 8,500 feet, and have been seen carrying nesting material between March 23 and May 14. The nests are probably in old woodpecker holes in aspens. They are not common in fall and winter, but small flocks remain over the breeding range during that season.

MOUNTAIN CHICKADEE (*Parus gambeli gambeli*).—Although these chickadees nest principally in the Transition Zone, they are to be found in summer as high as timberline, and probably nest to the limit of trees. Eggs have been found between June 3 and 14, but it is believed that the species begins nesting earlier than those records would indicate. In winter, small flocks of Mountain Chickadees wander through the forests and are fairly common.

ROCKY MOUNTAIN NUTHATCH (*Sitta carolinensis nelsoni*).—These nuthatches are usually found in the ponderosa pines of the Transition Zone, but are known to nest to timberline. Many migrate down to the plains for winter.

RED-BREASTED NUTHATCH (*Sitta canadensis*).—A few of these nuthatches visit the suet trays in Estes Park village every winter. They nest between 8,000 and 10,000 feet. The single dated record is of a nest in an aspen stub near West Creek on June 5, 1940.

BLACK-EARED NUTHATCH (*Sitta pygmaea melanotis*).—In spring and fall, small bands of Pigmy Nuthatches wander through the yellow pines, calling noisily, but they scatter during the nesting season and are seldom heard then. Nests have been found between June 5 and 18, at 8,200 feet, and it is certain that the birds nest well into the Canadian Zone. There is a vertical migration, sometimes to the plains.

ROCKY MOUNTAIN CREEPER (*Certhia familiaris montana*).—Pairs of these birds are scattered throughout the conifer forests of the park, but the principal nesting habitat is the Canadian and Hudsonian zones. Nesting dates are not known, but the mating song was heard on May 14. Between August and early October, a number descend into the Transition Zone and some reach the plains. Their upward migration is in April.

DIPPER (*Cinclus mexicanus unicolor*).—Along the streams that drop from timberline through the spruce and lodgepole forests into the ponderosas, nesting pairs of ouzels are scattered about a mile apart. After the nesting season, which occurs in the middle of June, the adults and fledglings remain at the higher altitudes until September; then most of them begin to descend into lower zones for winter. Stragglers migrate as the upper waters freeze, and some will winter in the park if the larger streams remain partly free of ice.

WESTERN HOUSE WREN (*Troglodytes aëdon parkmanii*).—House Wrens arrive in the park early in May, to become the most abundant songsters of the pines and aspens through the Transition and lower Canadian zones. They sing during the nesting season, which starts in early June; and some sing to the end of July, when most of the young of the second brood are fledged. They appear to depart early, in late August and early September, but there is one October record.

[**WESTERN WINTER WREN** (*Troglodytes hiemalis pacificus*).—Until a specimen is collected, reports of Winter Wrens in the park should be considered questionable. Cooke reported them near the park in 1896, and the writer saw two birds that appeared to be Winter Wrens at Estes Park on August 24, 1939. The park offers suitable habitat, and is close to the known breeding range of the species.]

CAÑON WREN (*Catherpes mexicanus conspersus*).—Cañon Wrens nest in small numbers on Needles Ridge up to 8,500 feet, where they may be heard through May. They are rather sedentary birds, but there is some vertical migration, as is demonstrated by the occurrence of the species in other parts of the eastern slope as high as 10,500 feet in summer and late fall, and by their scarcity in winter. A pair or so winter near the nesting sites in the park each year.

ROCK WREN (*Salpinctes obsoletus obsoletus*).—Rock Wrens arrive at the park boundaries in mid-April, and some continue their migration to timberline nesting sites. They nest in late May and June. The harsh song continues until mid-July, and occasionally it may be heard in August. A few of the birds have been seen above timberline in mid-summer. The descent from the mountains begins about August 20, and by the end of September these wrens have left the park.

*[**WESTERN MOCKINGBIRD** (*Mimus polyglottos leucopterus*).—The report of a Mockingbird at Estes Park on February 15, 1939, is so unusual a date that it is reasonable to suspect that the bird actually was a shrike.]

CATBIRD (*Dumetella carolinensis*).—May 19 is the earliest arrival date recorded for the Catbird. Two or three pairs apparently nest along the Thompson River and Fall River, up to 8,500 feet, each year. They have been reported nowhere else in the park. They depart in August, with the latest date being August 23.

WESTERN BROWN THRASHER (*Toxostoma rufum longicauda*).—The Brown Thrasher has been reported from the Estes Park region only in May, not above 9,000 feet.

***SAGE THRASHER** (*Oreoscoptes montanus*).—On April 26, 1939, four Sage Thrashers were observed in and near Moraine Park at about 8,000 feet elevation. These were the only ones ever reported from the park region.

WESTERN ROBIN (*Turdus migratorius propinquus*).—A few Robins winter in the park, usually where juniper berries offer a food supply. Migrant males arrive during March, while the females and resident birds of both sexes reach the park in April and May. They nest abundantly to timberline between May 11 and July 7. They appear to be more common above 11,000 feet in late summer, and some remain near timberline after most of their fellows have left the park, September 15 to October 28. The latest alpine record is November 8.

EASTERN ROBIN (*Turdus migratorius migratorius*).—There are two acceptable sight records of the Eastern Robin in the park, both in Moraine Park at about 8,200 feet; one record is dated May 29, 1937, the other September 19, 1939.

AUDUBON'S HERMIT THRUSH (*Hylocichla guttata auduboni*).—The Hermit Thrushes arrive in the middle of May, and by the end of the month their reverberant songs ring through the lodgepole and spruce forests and along the mountain streams, to continue until the end of July. The birds nest in June and early July. Fall departure begins in late August and continues until the end of October.

***[RUSSET-BACKED THRUSH** (*Hylocichla ustulata ustulata*).—In spite of the scarcity of Colorado records, it is suspected that this thrush migrates through this region. A thrush thought to be this form was seen on May 23, 1940, in Moraine Park.]

WESTERN OLIVE-BACKED THRUSH (*Hylocichla ustulata almae*).—Olive-backed Thrushes arrive early in May, and may be heard singing on the moraines and along the streams of the lodgepole forests until mid-July. Nesting dates in the upper Transition Zone are recorded between June 30 and July 5. Fall migration occurs in September.

WILLOW THRUSH (*Hylocichla fuscescens salicicola*).—The Willow Thrush is on the list on the basis of the reports of earlier writers. It has not been seen here since 1912. It may yet be a rare visitor to these altitudes.

***EASTERN BLUEBIRD** (*Sialia sialis sialis*).—The only record of this species in the park area is of two males seen on September 25, 1939, at Estes Park.

CHESTNUT-BACKED BLUEBIRD (*Sialia mexicana bairdi*).—A few Chestnut-backed Bluebirds may arrive any time after February 21, but most of the migrants occur in the park in distinct waves in early April. A small number reach timberline, but most of the flight is through the ponderosa belt. The few pairs that remain to nest appear to arrive somewhat later, and occupy holes in aspens up to 8,000 feet, between June 13 and July 2. The fall migration, like that of spring, consists of spectacular waves of birds that are gone in a few days, and takes place between September 25 and October 6.

MOUNTAIN BLUEBIRD (*Sialia currucoides*).—Mountain Bluebirds begin to arrive in late February or early March, gradually increasing in numbers until they are the most prominent bird of the Transition Zone. Resident pairs begin to nest about May 8, while others are still migrating, but by the end of the month only the nesting individuals remain. They are scarce over most of the Canadian Zone, but are not uncommon at timberline, where they nest in fire-burned stubs. After the young are fledged, many visit the alpine meadows until their departure in late September and October. A few linger into November, and it is possible that an occasional bird may winter at the edge of the park.

TOWNSEND'S SOLITAIRE (*Myadestes townsendi*).—During winter a few solitaires may be found on the ridges and moraines of the Transition Zone, but the migrant

birds do not begin to arrive until the end of March. Their beautiful song may be heard from the forested hillsides to timberline during April, May and June, and rarely in July when most of the birds nest. During the fall migration, in late September and October, the song is again heard, louder and more brilliant than in spring.

WESTERN GOLDEN-CROWNED KINGLET (*Regulus satrapa olivaceus*).—A troupe of Golden-crowned Kinglets was seen at 9,000 feet on the Needles Ridge on April 15, 1940, which is the only spring record of the species yet obtained. They nested in the Hudsonian spruces on Twin Sisters Mountain in 1937, and were not uncommon in the upper Canadian Zone that year. The single fall record is of a small flock observed on Mount Chapin, August 18, 1940.

EASTERN RUBY-CROWNED KINGLET (*Regulus calendula calendula*).—Ruby-crowned Kinglets arrive suddenly late in April, filling the forests with their song until July; thereafter, the song is usually fragmentary, but may be heard until September. They nest in late June and July in the upper Canadian and Hudsonian zones, and depart quietly in September and October.

ROCKY MOUNTAIN PIPIT (*Anthus spinoletta alticola*).—Flocks of migrating pipits appear on the open meadows and at the edges of the lower lakes as soon as the frost is well out of the ground in late April; most of them move up to the alpine meadows within a few days. Storms may drive them down again, but after the nesting season begins in mid-June, they are seldom seen below timberline. The courtship flights end by early July, and the young are fledged by mid-August. Then the pipits begin to leave their tundras, descending to the lower meadows. Other migrant pipits join them during September and most of the birds have left the park by October.

BOHEMIAN WAXWING (*Bombycilla garrula pallidiceps*).—The erratic waxwings may be seen in numbers here one winter and not be reported again for years. Babcock reported them as sometimes quite common between October and April, but did not supply dates. Flocks visited the park in October and November, 1936, but none have been seen since.

NORTHWESTERN SHRIKE (*Lanius excubitor invictus*).—The few Northwestern Shrikes that have appeared in the park have been seen in late winter, between January 12 and February 7, all in Moraine Park at an elevation of 8,200 feet.

WHITE-RUMPED SHRIKE (*Lanius ludovicianus excubitorides*).—The spring and fall occurrences of the White-rumped Shrike correspond with the dates of its arrival and departure on the plains, so that birds that reach the park are probably migrants that nest farther north. Spring dates are April 26 and 27, and the fall migration occurs between October 27 and November 19, all in the Transition Zone. There are no winter records.

PLUMBEOUS VIREO (*Vireo solitarius plumbeus*).—The Plumbeous Vireo is usually found in the pines of the Transition and lower Canadian zones. It arrives in late May, nests during June, and migrates from the park between September 2 and 16. The period of song extends to the middle of July.

***RED-EYED VIREO** (*Vireo olivaceus*).—Red-eyed Vireos occur in small numbers in late May and early June in the aspens of the Transition Zone. There are no nesting data, but the species may breed here.

WESTERN WARBLING VIREO (*Vireo gilvus swainsonii*).—Warbling Vireos arrive in a wave about May 29, and the distinct migration continues for about a week. Nesting begins the second week of June, and eggs have been found until July 4. The young are fledged by August 1. There are no data on the fall migration.

***TENNESSEE WARBLER** (*Vermivora peregrina*).—This warbler is rare in Colorado, but has been collected in Boulder. A fine adult was singing in an aspen on Beaver

Creek, just within the park boundaries, on May 14, 1940, the only known occurrence of the species in the park.

*ROCKY MOUNTAIN ORANGE-CROWNED WARBLER (*Vermivora celata orestera*).—A specimen, one of three birds seen May 2, 1940, at 8,500 feet on Wind River, was collected. There is a record made on September 11, 1931, but the identification is doubtful.

VIRGINIA'S WARBLER (*Dendroica virginiae*).—Virginia's Warblers arrive in small numbers between May 2 and May 23, frequenting alder thickets of the Transition Zone, but sometimes singing from the tops of aspens. There is a nesting record dated June 20, probably obtained during the nineteenth century.

EASTERN YELLOW WARBLER (*Dendroica aestiva aestiva*).—Only the fringes of the heavy migration of Yellow Warblers east of the park reach this region, but a considerable number of these birds do nest along the streams up to 8,500 feet. They arrive about May 8, and nest in June and July, usually in willows of the Transition Zone. The fall migration occurs in August.

*MYRTLE WARBLER (*Dendroica coronata* subsp.).—As elsewhere, the first Myrtle Warblers precede the other warblers by several days; the earliest arrival date is April 17. The main flight is during May, when the species may be associated with Audubon's Warblers or may form exclusive flocks by itself. A single bird was observed at 10,800 feet at Milner Pass on July 9, 1940. The Myrtle Warblers return on southward migration in mid-August, just before the Audubon's Warblers start to move. Reexamination of the specimens collected from this region is needed to determine to which subspecies these birds should be assigned. It is probable that they are the recently recognized Alaska Myrtle Warbler (*Dendroica coronata hooveri* McGregor).

AUDUBON'S WARBLER (*Dendroica auduboni auduboni*).—Audubon's Warblers are abundant after their arrival between April 25 and May 4 until the end of May. Many resident pairs remain scattered throughout the park, being common even at timberline. Nests have been found in June and July. The autumn migration begins in mid-August, and continues until about October 7.

TOWNSEND'S WARBLER (*Dendroica townsendi*).—Townsend's Warbler is probably an uncommon fall migrant in the park, but there is only one definite record of its occurrence: a male was seen on August 17, 1940, at 10,800 feet on Long's Peak.

GRINNELL'S WATER-THRUSH (*Seiurus noveboracensis notabilis*).—Water-thrushes probably occur every spring, but there are few definite records. These are dated between May 23 and 30, in the Transition Zone, except for one seen on July 10, 1910, near Estes Park, and one reported at Grand Lake on August 31, 1940. The species is probably not quite so rare as has been believed.

MACGILLIVRAY'S WARBLER (*Oporornis tolmiei*).—Macgillivray's Warblers arrive the last week in May, and are common in the willow and alder thickets, especially of the Transition Zone. They nest from below the boundaries of the park nearly to timberline, and nests with eggs have been found between June 15 and July 5. A pair was found at timberline on Mount Chapin on June 3, 1940.

WESTERN YELLOW-THROAT (*Geothlypis trichas occidentalis*).—Although common in the foothills, Yellow-throats are rare in the higher mountains, and there are few reports of them in the park. A surprising record was the discovery of one by Gregg at 12,000 feet on the continental divide, September 13, 1939.

*LONG-TAILED CHAT (*Icteria virens longicauda*).—A Long-tailed Chat was seen on May 27, 1940 in the willows on Mill Creek, at 8,200 feet.

NORTHERN PILEOLATED WARBLER (*Wilsonia pusilla pileolata*).—The Pileolated

Warblers arrive the latter part of May, and many of them move to timberline by the end of the month. They nest commonly in willows between 7,500 feet and timberline, but the exact dates are not on record. They begin to leave the park in August, appearing on the plains by the middle of the month, but some remain at timberline until September.

AMERICAN REDSTART (*Setophaga ruticilla*).—Redstarts occur in small numbers not far below the park boundaries, but the only evidence of the presence of the species within the park is Babcock's statement that he saw it here at 9,000 feet.

ENGLISH SPARROW (*Passer domesticus domesticus*).—The English Sparrow was first observed within the park about 1906 and has slowly increased since. Small numbers may be found in summer through the Transition Zone near Estes Park. These birds appear to gather into a single band in winter, when they frequent the village streets.

BOBOLINK (*Dolichonyx oryzivorus*).—Bobolinks rarely wander as high as the park, but there are a few records of their occurrence here between May 25 and June 15.

WESTERN MEADOWLARK (*Sturnella neglecta*).—Meadowlarks arrive in small numbers in late March and April, a few staying to nest in the meadows of the Transition Zone. There is some suggestion of a vertical migration in the occasional occurrence of one above timberline in late summer, and a slight increase then in their numbers on the lower meadows. They leave the park by late September or early October.

***YELLOW-HEADED BLACKBIRD** (*Xanthocephalus xanthocephalus*).—Yellow-headed Blackbirds are numerous from the plains to 5,500 feet in the foothills; very uncommon above that elevation. They occur frequently in the park up to 9,000 feet in April, and a small flock was seen flying over Estes Park village on August 18, 1940.

THICK-BILLED REDWING (*Agelaius phoeniceus fortis*).—Migrant male Redwings begin to arrive between March 8 and April 10 and their migration continues into late May. The resident males and the females arrive a week or so later, and for a time territorial combats rage in the willows up to 9,000 feet. Courtship displays continue until the middle of June, by which time nesting activities are well under way. The male Redwings disappear during July, but some of the females and the young remain until mid-August.

BULLOCK'S ORIOLE (*Icterus bullockii*).—A few Bullock's Orioles have been recorded in June, all of them males. One was seen at Milner Pass, 10,800 feet, on June 9, 1940. A female was seen near Grand Lake, August 29, 1940.

RUSTY BLACKBIRD (*Euphagus carolinus*).—Rusty Blackbirds have been recorded twice in the park, each time in Moraine Park, once in October, 1936, and again on August 29, 1939.

BREWER'S BLACKBIRD (*Euphagus cyanocephalus*).—Brewer's Blackbirds arrive about May 1, and frequent the ranches up to 9,000 feet. Nests are built late in June, often on the ground. The birds form mixed flocks in late August, and begin to leave the park in September. The latest recorded date is October 30.

***BRONZED GRACKLE** (*Quiscalus versicolor*).—The Bronzed Grackle was added to the check-list on May 21, 1940, when an adult male visited Moraine Park. This is a westward extension of the range of the species, although it occurs regularly at the eastern edge of the mountains.

EASTERN COWBIRD (*Molothrus ater ater*).—The park elevations are above the usual range of the Cowbird, but there is one record of the species in Estes Park on July 3, 1910.

WESTERN TANAGER (*Piranga ludoviciana*).—Western Tanagers arrive in numbers

at the end of May, scattering over the open ponderosa forests, but seldom ranging above 8,500 feet. They nest in June and eggs have been found as late as July 4. They leave the mountains in August.

ROCKY MOUNTAIN GROSBEAK (*Hedymeles melanocephalus melanocephalus*).—These grosbeaks arrive in late May, and a few nest in the Transition Zone below 8,500 feet. Rarely, they may be seen almost as high as timberline in summer. They appear to depart by the end of August.

LAZULI BUNTING (*Passerina amoena*).—Common along the foothills, this bunting visits the park irregularly in late summer, between June 29 and August 30. The species has not yet been reported from the western side of the park.

WESTERN EVENING GROSBEAK (*Hesperiphona vespertina brooksi*).—Small flocks of Evening Grosbeaks visit here intermittently every few years. One such invasion occurred in August, 1940. A nest was found in the park by Mr. F. M. Dille at 9,000 feet on July 4, 1903.

CASSIN'S PURPLE FINCH (*Carpodacus cassinii*).—Although Cassin's Purple Finches winter in numbers in the foothills, none have been reported in the park region during that season. They arrive in the park the last week of May and ascend to 9,000 feet, and some nest in the Transition and lower Canadian zones in June and early July. They leave between September and the end of October.

COMMON HOUSE FINCH (*Carpodacus frontalis mexicanus*).—A number of House Finches reach Estes Park in summer, but they are not common, and data are scarce. It is not believed they nest here since their usual breeding range is at lower elevations.

ROCKY MOUNTAIN PINE GROSBEAK (*Pinicola enucleator montana*).—Pairs of these brilliant finches are scattered throughout the Canadian and Hudsonian conifer forests, nesting between June and August, with the young fledged by about August 13. They descend into the Transition Zone in September, when the females and young flock separately from the males. In late April they return to their higher nesting range.

HEPBURN'S ROSY FINCH (*Leucosticte tephrocotis littoralis*).—The Hepburn's Rosy Finch is second in abundance to the Gray-crowned in the large mixed flocks seen between October 27 and April 29 below 9,000 feet.

GRAY-CROWNED ROSY FINCH (*Leucosticte tephrocotis tephrocotis*).—These leucostictes predominate in many of the mixed winter flocks of rosy finches, although sometimes outnumbered by the Brown-capped form. This species has been recorded between January 15 and May 12, below 9,000 feet.

***BLACK ROSY FINCH** (*Leucosticte atrata*).—These birds are rare, but occasionally one or two are to be seen in the wintering flocks. They have been recorded in November and February up to 8,200 feet.

BROWN-CAPPED ROSY FINCH (*Leucosticte australis*).—The Brown-capped Rosy Finch nests in the cliffs above timberline throughout the park in summer, and fledged young have been observed in mid-August. The birds band together in fall, descending from the alpine meadows in September or later to spend the winter mostly below 9,000 feet in the Transition Zone. Although occasional flocks may be composed almost entirely of this species, more often they include other wintering rosy finches. These flocks disintegrate by mid-April when this form ascends to its nesting range here, while the others leave the park.

COMMON REDPOLL (*Acanthis flammea flammea*).—Redpolls may be expected to occur in the high altitudes of the park in occasional winters, but no recent records are known. Former observers have included the species in their lists.

NORTHERN PINE SISKIN (*Spinus pinus pinus*).—Siskins migrate abundantly

through the park in late April and May, singing and courting about the conifers and aspens. Nests have been found up to 8,000 feet, but pairs may be encountered to timberline during the summer. Bands are formed in August, and most of the birds descend below the park for winter.

EASTERN GOLDFINCH (*Spinus tristis tristis*).—Goldfinches occur here in varying numbers in spring, usually late in May, up to 8,500 feet; one was collected on May 20, 1939, in Moraine Park. Two were seen on August 19, 1939, but there is no evidence that the species nests in the park.

ARKANSAS GOLDFINCH (*Spinus psaltria psaltria*).—A single spring record of this bird is dated May 19, 1932. The only other report was made by Widmann of a number at 9,000 feet in July, 1910. Although some observers have suspected that this species may occasionally nest in the park region, there are no data to support the assumption.

BENDIRE'S CROSSBILL (*Loxia curvirostra bendirei*).—The erratic wanderings of the crossbills may bring them to almost any forested part of the park at any time. They are most frequently encountered in the Canadian Zone, but have been observed between 7,500 and 10,500 feet.

WHITE-WINGED CROSSBILL (*Loxia leucoptera leucoptera*).—The only record of these finches is of a flock once seen on Flattop Mountain by Babcock.

GREEN-TAILED TOWHEE (*Oberholseria chlorura*).—Green-tailed Towhees usually arrive the middle of May, and soon may be found in the shrubs of the montane zone. Nests have been found between June 10 and 29. On August 19, 1940, a young towhee was seen at 11,500 feet on Tanima Peak. Many of the towhees leave the park in August, and few are seen after September 8.

SPURRED TOWHEE (*Pipilo maculatus montanus*).—There is one dated record of the Spurred Towhee in the park region, an observation by Gregg at 7,700 feet near Estes Park, May 8, 1937.

LARK BUNTING (*Calamospiza melanocorys*).—Lark Buntings appear to be rare but regular summer visitors, whose occurrences here probably represent an altitudinal wandering. A few flocks have been found between 9,200 and 12,300 feet in August, and one was seen on June 15, 1931, at 7,500 feet below Estes Park.

NEVADA SAVANNAH SPARROW (*Passerculus sandwichensis nevadensis*).—The Savannah Sparrows arrive early in May, and scatter over the montane meadows to nest there in June. Departure occurs in August and September.

WESTERN VESPER SPARROW (*Pooecetes gramineus confinis*).—Vesper Sparrows are common on open meadows on both sides of the park, arriving early in May. A number nest in the Transition Zone, and groups of adults with fledged young have been seen in July and August. Their departure takes place in late August, although a few are found after September 1.

***WESTERN LARK SPARROW** (*Chondestes grammacus strigatus*).—There is but a single spring record of this species dated May 17, 1938, near Estes Park. In late summer, however, considerable numbers visit the park elevations, being especially prominent up to 8,500 feet, but are to be seen rarely on the alpine meadows. The species breeds near the western boundary at Grand Lake and is a common fall migrant there.

***NORTHERN SAGE SPARROW** (*Amphispiza belli nevadensis*).—A female Northern Sage Sparrow collected March 24, 1939, in Moraine Park constituted the first record for the park, and was the second specimen to be collected on the east side of the continental divide.

SLATE-COLORED JUNCO (*Junco hyemalis hyemalis*).—A few Slate-colored Juncos

may be found in the park between November 13 and March 20 in the Transition Zone, accompanied by other migrant and wintering juncos.

SHUFELDT'S JUNCO (*Junco oreganus shufeldti*).—Shufeldt's Juncos arrive about September 25 and are usually common through the winter. Their numbers increase in early March, when migrants flock through the Transition Zone, to disappear about April 10.

[**MONTANA JUNCO** (*Junco oreganus montanus*).—These juncos so closely resemble the Pink-sided Juncos that no acceptable observations of them have been made. It is believed that they are frequently present in the mixed flocks that winter or migrate through the park.]

PINK-SIDED JUNCO (*Junco oreganus mearnsi*).—This species predominates in most of the winter and migrant flocks of juncos. The first arrive the middle of September, after which they migrate through the Transition Zone until late November or December. A considerable number usually remain all winter, to be joined by migrants again in April.

GRAY-HEADED JUNCO (*Junco caniceps*).—Most of the "saddle-backs" winter below the park elevations, but a number accompany the other species usually flocking here at that season. Spring migration begins in mid-April, progressing through May, principally in the Transition and Canadian zones; thereafter resident pairs may be found throughout the forests to timberline, where they nest in June and July. Newly fledged young have been seen between July 13 and August 20. Flocks gather for the fall migration in early September, and the southward movement continues until mid-November.

WESTERN TREE SPARROW (*Spizella arborea ochracea*).—Some Tree Sparrows usually spend the winter in the park region, but never in the abundance in which they occur at lower elevations. The fall migration has been recorded throughout November, but probably begins in October. Spring migration begins in early March, when the small flocks are less noticeable than those that pass through in the fall.

WESTERN CHIPPING SPARROW (*Spizella passerina arizonae*).—Flocks of migrating Chipping Sparrows arrive in late April, scattering through the yellow pines and lower lodgepoles abundantly. Many remain to nest in June and July, and fledged young appear about July 13. Mixed flocks of Chipping Sparrows, Brewer's Sparrows and Clay-colored Sparrows form early in September, and migration continues until mid-October, after which few are seen.

CLAY-COLORED SPARROW (*Spizella pallida*).—Clay-colored Sparrows are more common in the park region than has been believed, and small numbers migrate through the Transition meadows in May. No nests have been found, but males may be heard singing until late June, and young have been observed in mid-July. Fall migration begins in September.

BREWER'S SPARROW (*Spizella breweri breweri*).—Brewer's Sparrows occur in some numbers in spring and fall through the Transition Zone. A nest found in Beaver Meadow, May 18, 1937, was tentatively referred to this species, and on July 13, 1940, an adult was seen feeding two young in Moraine Park.

WHITE-CROWNED SPARROW (*Zonotrichia leucophrys leucophrys*).—Arrival dates of this species have been recorded from March 15 to May 15, but usually the White-crowned Sparrows arrive late in April. It is probable that the earlier reports should refer to Gambel's Sparrow, which usually migrates north earlier than this form. White-crowns nest abundantly at timberline, and less commonly down to the upper edge of the Transition Zone. Fall migration begins in early September and continues until October 26, the latest date recorded.

GAMBEL'S SPARROW (*Zonotrichia leucophrys gambelii*).—There are no certain spring records of this sparrow, but a number of observations of fall migrants have been made in October, when they were in company with the White-crowned Sparrows.

[FOX SPARROW (*Passerella iliaca* subsp.).—Babcock referred the single Fox Sparrow he saw at 9,000 feet in the park region, date unknown, to the Slate-colored race (*P. i. schistacea*). However, the only specimen collected from the Denver region proved to be the Eastern Fox Sparrow (*P. i. iliaca*). Fox Sparrows are rare in Colorado, and in view of the uncertainty about which form was seen here, and the lack of data, the record should be considered hypothetical.]

LINCOLN'S SPARROW (*Melospiza lincolni*).—Lincoln's Sparrows reach the lower park in mid-May, and many of them soon ascend the valleys, nesting near the streams and marshes to timberline in June. The young are fledged by the end of July or early August. Late in August they begin to descend out of the park, and few are to be found here after September 30.

MOUNTAIN SONG SPARROW (*Melospiza melodia fallax*).—Song Sparrows begin to appear in early March, and throughout April and May numbers are to be heard singing along the streams of the Transition Zone. They nest in May and June, and are inconspicuous but fairly common through the early summer. They leave the park in late summer, and the latest record is dated September 13.

THE MORE IMPORTANT LITERATURE PERTAINING TO THE BIRDS OF THE VICINITY OF
ROCKY MOUNTAIN NATIONAL PARK

ALEXANDER, GORDON

1937. The Birds of Boulder County, Colorado. Univ. Colorado Studies, 24 (no. 2): 79-105.

1938. Observations on hybrid flickers in Colorado. Jour. Colorado-Wyoming Acad. Sci., 2: 29.

AMERICAN ORNITHOLOGISTS' UNION

1931. Check-List of North American Birds, Fourth Edition.

1944. Nineteenth Supplement to the American Ornithologists' Union Check-List of North American Birds. Auk, 61: 441-464.

BABCOCK, DEAN

1923. Birds and plants of Rocky Mountain National Park. (Estes Park Trail, Colorado, 20 pp.)

BABCOCK, DEAN, AND ASHTON, RUTH B.

1930. Birds and plants of Rocky Mountain National Park, with keys for their identification. (Published by the authors.)

BAILEY, ALFRED M., AND NIEDRACH, ROBERT J.

1938. Notes on Colorado geese. Auk, 55: 519-520.

BENT, A. C.

1919-1940. Life histories of North American birds. U. S. Nat. Mus. Bull., nos. 107, 113, 121, 126, 130, 135, 142, 162, 167, 170, 174, 176.

BERGTOLD, WILLIAM H.

1928. A guide to the birds of Colorado. (Smith-Brooks Printing Company, Denver, 207 pp.)

BETTS, NORMAN DEWITT

1913. Birds of Boulder County, Colorado. Univ. Colorado Studies, 10: 177-232.

CHAPMAN, FRANK

1900. The warblers of North America. (D. Appleton and Co., New York.)

COOKE, WELLS W.

1897. The birds of Colorado. Agri. Coll. of Colorado, Bull. 37 (Tech. Ser. no. 2): 1-144.
1898. Further notes on the birds of Colorado. Agri. Coll. of Colorado, Bull. 44 (Tech. Ser. No. 4): 145-176.
1899. More new birds for Colorado. Auk, 16: 187-188.
1900. The birds of Colorado. Agri. Coll. of Colorado, second appendix to Bull. 37. Bull. 56 (Tech. Ser. No. 5): 147-240.
1909. The birds of Colorado—Third supplement. Auk, 26: 400-422.
1912. The present status of the Colorado checklist of birds. Condor, 14: 147-153.

GREGG, H. RAYMOND

1938. Birds of Rocky Mountain National Park. Rocky Mountain Nature Assoc. Publ. 4.

HENDERSON, JUNIUS

1909. An annotated list of the birds of Boulder, Colorado. Univ. Colorado Studies, 6: 219-242.

KELLOGG, V. L.

1890. Notes on some summer birds of Estes Park. Trans. Kansas Acad. Sci., 12: 86-90.

KEYSER, LEANDER S.

1902. Birds of the Rockies. (A. C. McClurg and Co., Chicago.)

KLEINSCHNITZ, F. C.

1937. Field manual of birds, Rocky Mountain National Park. (Published by the author.)

MCGREGOR, E. C.

1897. Birds of Estes Park. Nidologist, 4: 38-39.

MINOT, HENRY D.

- 1880-81. Notes on Colorado birds. Bull. Nuttall Ornith. Club, 5: 181-182 and 223-232; *op. cit.*, 6: 89.

NIEDRACH, ROBERT J., AND ROCKWELL, ROBERT B.

1939. The Birds of Denver and Mountain Parks. Colo. Mus. Nat. Hist., Popular Series no. 5: 196 pp.

PACKARD, FRED MALLERY

1939. Northern Sage Sparrow on the east slope of the Rockies in Colorado. Auk, 56: 481-482.

SCLATER, W. L.

1912. A History of the birds of Colorado. (Witherby and Co., London, 276 pp.)

WIDMANN, O.

1911. List of birds observed in Estes Park, Colorado, from June 10 to July 18, 1910. Auk, 28: 304-319.

NATURE NOTES FROM ROCKY MOUNTAIN NATIONAL PARK

- 1929-36. (Numerous citations of observations by several persons. These are listed in detail by Gregg.)

ROCKY MOUNTAIN NATIONAL PARK

- 1900-40. (Card index of observations made at Rocky Mountain National Park.)

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SUMMER HOME OF SWAINSON'S WARBLER ALONG THE OCMULGEE RIVER, CENTRAL GEORGIA.