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AN ANNOTATED LIST OF THE BIRDS OF FREMONT COUNTY, IDAHO,
AS OBSERVED DURING THE SUMMER OF 1916

By HENRY J. RUST

WITH MAP AND TWELVE PHOTOS BY THE AUTHOR

FREMONT COUNTY, Idaho, lies south and east of the center of the state, and is almost entirely confined between 110° and 113° W. Longitude, and 44° and 45° N. Latitude. The northern boundary, between this county and Montana, lies along the crest of the Rocky Mountains; on the east the county extends to the Wyoming line. In recent years three counties have been created from the lower half of Fremont, cutting off a large portion of the great sage covered plain which extends across the state in its widest part. A little over one-third of the county is covered with foothills and mountains from 6,000 to 10,000 feet in altitude; the balance is mostly sage covered plains interspersed with rolling lava.

The main ridge of the Rocky Mountains throws off numerous spurs, which, with their laterals, extend to the edge of the sage plains, forming many canyons and several large valleys. The largest stands of timber occur on the north and east exposures of these ridges.

In the Hudsonian zone the characteristic trees are the Engelmann spruce (*Picea engelmanni*) and the Alpine or balsam fir (*Abies lasiocarpa*) with some scattered Douglas firs (*Pseudotsuga taxifolia*).

In the Canadian zone are Douglas fir and Lodgepole pine (*Pinus contorta*) with scattered Engelmann spruce and large groves of aspen which also extend well down into the Transition zone. The latter is covered to a great extent with sage brush (*Artemisia tridentata*).

Most of the streams have their sources near the heads of the canyons through which they flow, and they are lined with thickets of willow, red osier, choke cher-

ry, and aspen. These growths afford nesting sites for a large number of birds. Those of the larger streams that continue to flow any great distance through the sage plains have cut deep channels through the lava and do not water the region on either side.

Since the passage of the homestead laws permitting 320 acre claims throughout the arid regions, a greater portion of the sage covered plains have been taken up by settlers. While only a small part of the entire area is under cultivation at the present time, it is only a question of a few years when the sage brush will give place to grain fields, which will no doubt exert an influence towards a change in the avifauna.

My observations, from which the following list is compiled, date from June 7 to August 29, 1916. While the list does not include all the birds that occur in the region throughout the entire year, it contains a large majority of the species to be found during the summer months.

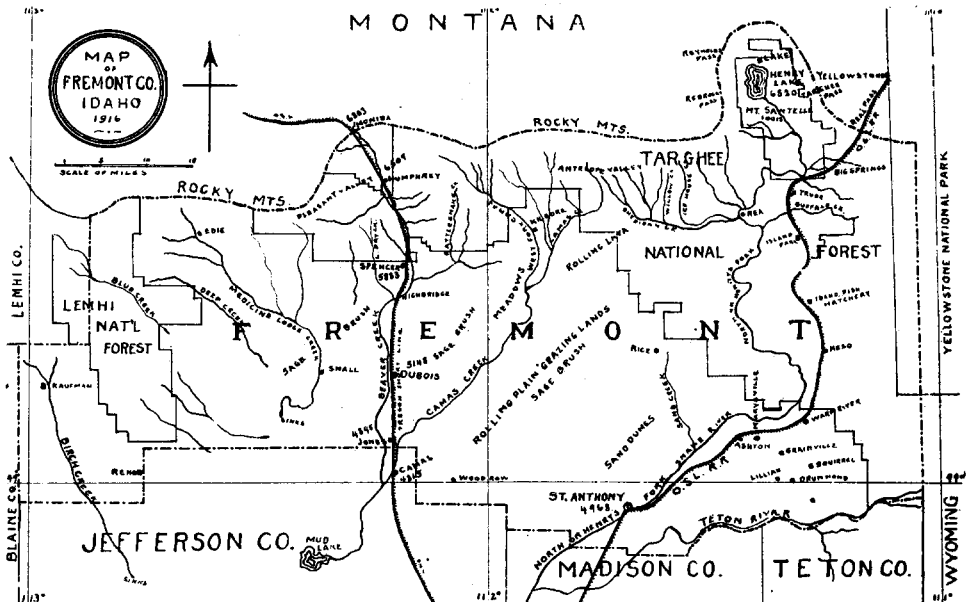


Fig. 7. MAP OF FREMONT COUNTY, IDAHO.

1. *Colymbus auritus*? Horned Grebe. A small grebe, which I took to be of this species, was seen on the outlet of Henry Lake, August 17. It disappeared below the surface of the water, permitting but a few seconds for identification.
2. *Gavia immer*. Common Loon. Occurs sparingly on Henry Lake. Several mounted specimens examined in a collection at Lake Post Office.
3. *Pelecanus erythrorhynchos*. White Pelican. Three birds seen flying near shore of Henry Lake. Mounted specimen examined in a collection at Lake Post Office.
4. *Mergus serrator*. Red-breasted Merganser. Occurs sparingly on Henry Lake.
5. *Anas platyrhynchos*. Mallard. A number of large flocks of mallards were seen just at dusk flying low over the small marshes along Ice House Creek, August 16. A female with four young able to fly seen on Ice House Creek, August 26. Quite a number were seen on the north fork of the Snake River, August 25.
6. *Mareca americana*. Baldpate. Several seen at Woods Reservoir on West Fork Camas Creek, July 17.
7. *Nettion carolinense*. Green-winged Teal. Fairly common along small streams, and occasionally seen in small overflow ponds. Also in numbers on Henry Lake.

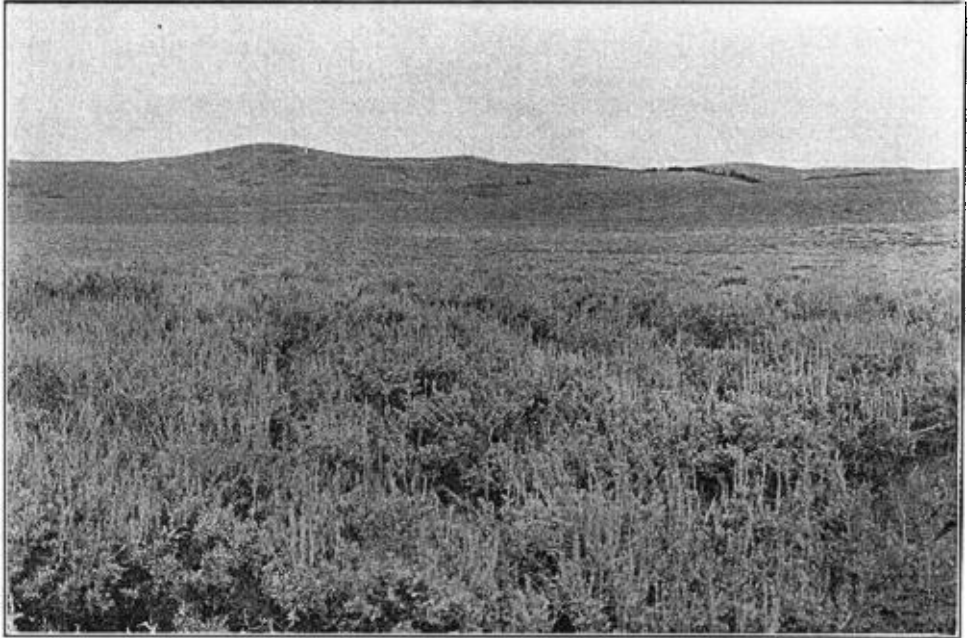


Fig. 8. LOOKING WEST FROM SPENCER, FREMONT COUNTY, IDAHO; THE BEGINNING OF THE GREAT SAGE PLAIN; UPPER SONORAN ZONE, MERGING INTO TRANSITION IN THE FAR DISTANCE.

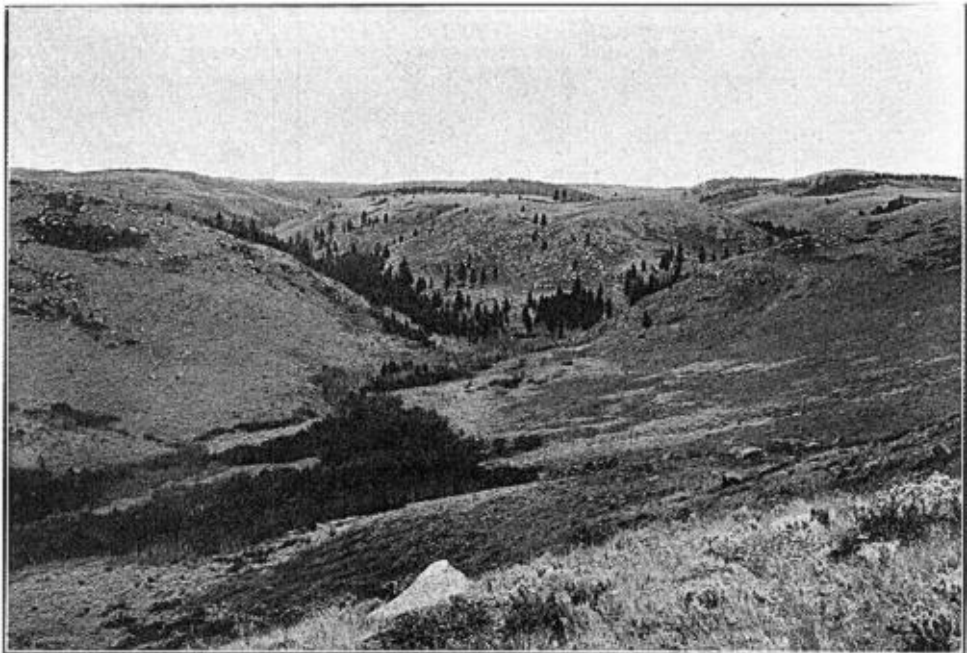


Fig. 9. THE FORKS OF LITTLE DRY CREEK, IDAHO; IN THE TRANSITION ZONE.

8. *Querquedula discors*. Blue-winged Teal. Several seen on a small storage pond on Ice House Creek, August 17.
9. *Olor buccinator*. Trumpeter Swan. Occurs sparingly on Henry Lake. Several mounted specimens examined in the collection at Lake Post Office, including a female with two young taken on the Lake.
10. *Ardea herodias herodias*. Great Blue Heron. Fairly common along marshes near North Fork of the Snake River. Five adults seen at one time on August 18. A young male about half grown was taken on Little Dry Creek, near Spencer, July 14.
11. *Porzana carolina*. Sora Rail. One specimen found dead floating on the water near the shore of Henry Lake, August 25.
12. *Fulica americana*. Coot. A small flock observed on a pond at Camas Meadows, near Kilgore, August 26.
13. *Recurvirostra americana*. Avocet. A flock of eight adults observed in a small shallow overflow pond near Small, June 20. The pond was only a short distance from a ranch house, and the birds were quite tame, allowing a close approach. They remained about the pond the entire day, probably to rest.
14. *Lobipes lobatus*. Northern Phalarope. Two seen in company with Avocets on a small pond near Small, June 20.
15. *Gallinago delicata*. Wilson Snipe. One seen in a small swampy meadow along Ice House Creek, and several seen at Camas Meadows, August 26.
16. *Ereunetes mauri*. Western Sandpiper. A small flock seen near the shore of Henry Lake, and also along an irrigation ditch near Spencer, August 27.
17. *Actitis macularia*. Spotted Sandpiper. Common along streams and ponds throughout the county. Young still in the downy stage seen at Woods Reservoir, on the West Fork of Camas Creek, July 16.
18. *Oxyechus vociferus*. Killdeer. Common along streams and ponds throughout the county.
19. *Dendragapus obscurus richardsoni*. Richardson Grouse. One male seen in Little Dry Creek Canyon, July 8. A female with three young was seen in the same canyon among Douglas firs, August 10.
20. *Bonasa umbellus togata*. Canada Ruffed Grouse. Two adult males seen on July 8 in Little Dry Creek Canyon, among Douglas firs near the creek. A female with about ten nearly grown young was flushed from a lodgepole pine thicket along the road near the North Fork of the Snake River, near Rea Post Office, on August 26.
21. *Pedioecetes phasianellus columbianus*. Columbian Sharp-tailed Grouse. Becoming very rare throughout the county. One small flock was observed on August 26, among sage brush, along the road near Kilgore.
22. *Centrocercus urophasianus*. Sage Grouse. Until recent years abundant throughout the county, now becoming very scarce.
A female with two young was seen on a high ridge, July 8, a female with four young at Burnside Ranch, July 10, a female with two young near Highbridge, August 10, three adult birds on a high ridge near Spencer, July 31, one adult near Sheridan Creek, August 17, and a flock of about six, two of which were secured, near Kilgore, August 26.
- These are all the birds I saw during the three months spent in Fremont County. I found one deserted nest containing six eggs, July 9. It was a common sight to see parties of sportsmen hunting Sage Grouse over the plains in automobiles, and the ease and rapidity of this style of hunting will soon exterminate the species entirely.
23. *Zenaidura macroura carolinensis*. Mourning Dove. Found breeding in considerable numbers in willow thickets along small streams in the vicinity of Spencer, June 8. One nest with two eggs was found on the ground under sage brush, June 16. The majority of nests were from two to five feet from the ground in bent-over willows.
24. *Cathartes aura septentrionalis*. Turkey Vulture. Two seen July 31, near a high ridge at the head of Little Dry Creek Canyon.
25. *Circus hudsonius*. Marsh Hawk. Several seen July 18, along Camas Meadows near Kilgore.
26. *Accipiter velox*. Sharp-shinned Hawk. A pair observed a number of times during the latter part of June and during July, in a Douglas fir thicket in Little Dry Creek Canyon. They were probably nesting.

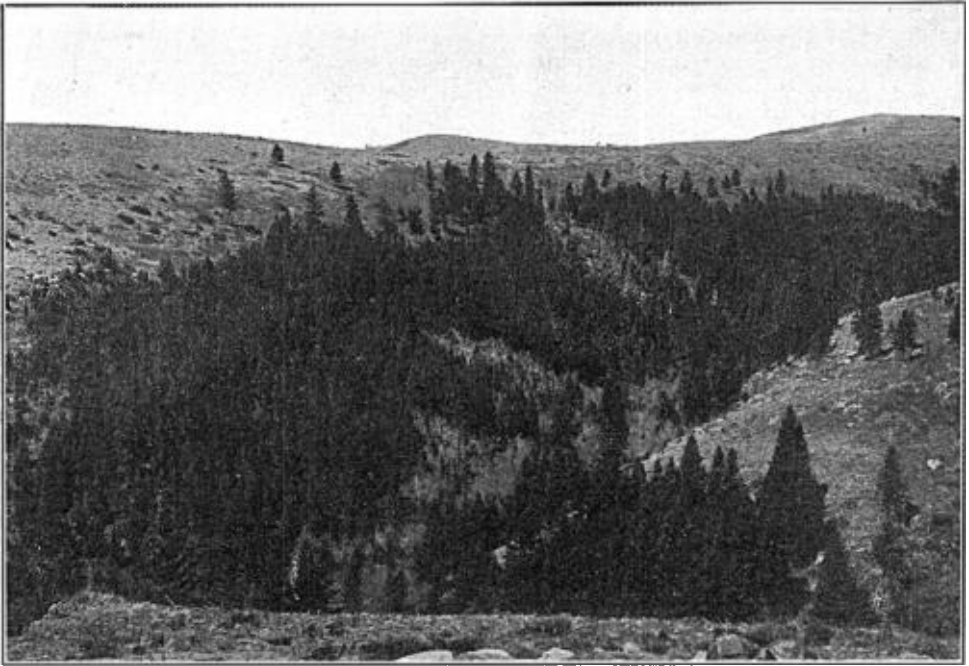


Fig. 10. NEAR HEAD OF LITTLE DRY CREEK CANYON, FREMONT COUNTY, IDAHO; DOUGLAS FIR TIMBER ON SLOPES; BEGINNING OF CANADIAN ZONE, WITH BLACK-HEADED JAY, CANADA RUFFED GROUSE, RUBY-CROWNED KINGLET, AND ROCKY MOUNTAIN HAIRY WOODPECKER AS CHARACTERISTIC BIRDS.

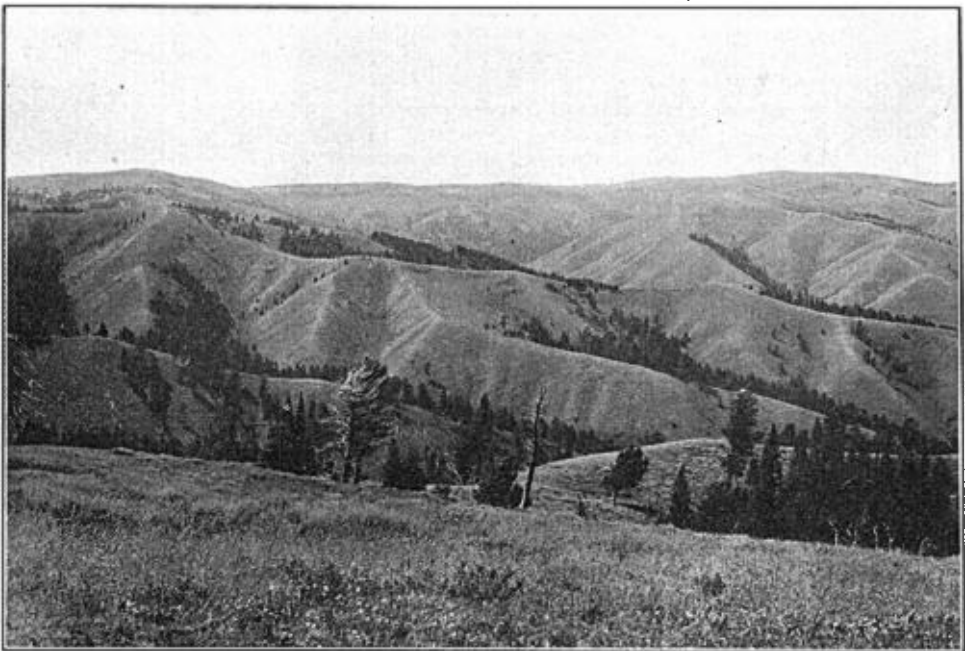


Fig. 11. PORTION OF THE CONTINENTAL DIVIDE, ROCKY MOUNTAINS, ABOUT FIFTEEN MILES WEST FROM HUMPHREY, IDAHO; THE HIGHER RIDGES ARE IN THE HUDSONIAN ZONE.

27. *Accipiter cooperi*. Cooper Hawk. Occurs sparingly throughout the county. One was seen near Spencer, July 18, and one near Small, August 11.

28. *Buteo borealis calurus*. Western Red-tail. One pair observed in Little Dry Creek Canyon, June 19. Probably nesting.

29. *Buteo swainsoni*. Swainson Hawk. Fairly common throughout the county. Seen most frequently along low foothills and over sage plains, early in the morning and late in afternoon, in search of small rodents.

On the first of August I found two dead weasels near the edge of a cultivated field on the Burnside Ranch, near Spencer. I had often seen Swainson Hawks circling low over the fields, and concluded that the weasels were killed by the hawks by mistake, as they probably would not be desirable as food.



Fig. 12. NEST AND EGGS OF MOUNTAIN SONG SPARROW, IN ROSE BUSH.

30. *Aquila chrysaetos*. Golden Eagle. Occurs sparingly in the high mountains along the Continental Divide. Several mounted specimens examined in a collection at Lake Post Office.

31. *Falco sparverius phalaena*. Desert Sparrow Hawk. Fairly common throughout the county. A pair observed nesting near the top of a dead snag in Little Dry Creek Canyon, June 19, another pair in a cavity near the top of a cottonwood in Beaver Creek Canyon, June 26.

32. *Pandion haliaetus carolinensis*. Osprey. Occurs sparingly along the North Fork of the Snake River, and about Henry Lake. One seen at Henry Lake on August 25.

33. *Asio wilsonianus*. Long-eared Owl. An adult bird was flushed from under a

large sage bush near Highbridge, June 26. It lit on a fence post, where it remained for some time.

34. *Asio flammeus*. Short-eared Owl. A mounted specimen examined in a collection at Lake Post Office, which had been taken in the vicinity of Henry Lake.

35. *Cryptoglaux acadica acadica*. Saw-whet Owl. A mounted specimen examined, in the above-mentioned collection, which had been taken in the vicinity of Henry Lake.

36. *Bubo virginianus pallescens*. Western Horned Owl. Occurs sparingly in heavily wooded canyons along the Continental Divide.

37. *Bubo virginianus subarcticus*. Arctic Horned Owl. A mounted specimen examined in the collection at Lake Post Office, which had been taken in the vicinity of Henry Lake.



Fig. 13. NEST AND EGGS OF THE SAGE THRASHER, IN SAGE BUSH.

38. *Glaucidium gnoma gnoma*. Pigmy Owl. A mounted specimen examined in the collection at Lake Post Office, which had been taken in the vicinity of Henry Lake.

39. *Ceryle alcyon*. Belted Kingfisher. Common along streams throughout the county. Observed in greatest numbers along the North Fork of the Snake River, on August 25.

40. *Dryobates villosus monticola*. Rocky Mountain Hairy Woodpecker. Fairly common in Douglas fir timber along ridges and at heads of canyons.

41. *Dryobates pubescens homorus*. Batchelder Woodpecker. Occurs sparingly in dense willow thickets along banks of streams, and in quaking aspen groves at low elevations.

42. *Colaptes cafer collaris*. Red-shafted Flicker. Fairly common throughout timbered portions of the county, and also seen in scattered cottonwood groves along the low foothills.

43. *Phalaenoptilus nuttalli nuttalli*. Poor-will. None seen, but one heard calling late in the evening of August 11, at the mouth of Little Dry Creek Canyon.

44. *Chordeiles virginianus henryi*. Western Nighthawk. Several noted on June 8 along open ridges of Little Dry Creek Canyon. They became fairly common by July 1; very few were seen after August 20.

45. *Selasphorus platycercus?* Broad-tailed Hummingbird. On July 9 one was seen several times in a willow thicket near the head of a small open canyon near Spencer.



Fig. 14. NEST AND EGGS OF GREEN-TAILED TOWHEE, BENEATH SAGE BUSH.

46. *Tyrannus verticalis*. Western Kingbird. Four seen near a ranch house a short distance from Henry Lake, August 25.

47. *Nuttallornis borealis*. Olive-sided Flycatcher. Occurs sparingly in the heavily wooded canyons. Observed July 9 in dense Douglas fir woods near the head of Little Dry Creek Canyon.

48. *Myiochanes richardsoni richardsoni*. Western Wood Pewee. One seen June 23 near a small grove of cottonwood trees on the Burnside Ranch near Spencer.

49. *Otocoris alpestris leucolaema*. Desert Horned Lark. Common throughout sage covered plains and valleys. Also frequently observed around cultivated fields near Small.

50. *Pica pica hudsonia*. Magpie. On June 5 and August 29 Magpies were noted commonly in Montana along the Oregon Short Line, nearly to Monida, Fremont County. I had expected to find them common in Fremont County, but not a single one was observed during the summer. I was told that they had been common in former years, and I found a number of old nests in willow thickets, near springs, but there were none of recent make.

51. *Cyanocitta stelleri annectens*. Black-headed Jay. Occurs sparingly in the heavily wooded canyons throughout the county.

52. *Corvus brachyrhynchos hesperis*. Western Crow. Not common. One seen along Little Dry Creek, near Spencer, July 15, and three near Kilgore, August 26.



Fig. 15. NEST AND EGGS OF BREWER SPARROW, IN SAGE BUSH, SHOWING DEEPLY CUPPED STRUCTURE.

53. *Nucifraga columbiana*. Clarke Nutcracker. Occurs sparingly in heavily wooded canyons throughout the county. A number of full grown young were seen in Little Dry Creek Canyon, June 18.

54. *Molothrus ater ater*. Cowbird. Two seen at a stock corral near Highbridge, June 26. Cowbird eggs were found in the following nests: Brewer Blackbird, one, with five eggs of the owner; White-crowned Sparrow, one, with a set of four; Sage Sparrow, two, with one of owner. In the last mentioned instance I removed the two Cowbird eggs, and the mother sparrow deserted her nest.

55. *Xanthocephalus xanthocephalus*. Yellow-headed Blackbird. Two seen near Kilgore, August 26, in company with a large flock of Redwings.



Fig. 16. NEST OF SAGE GROUSE, DESERTED, ON GROUND BENEATH SAGE BUSH.



Fig. 17. NEST OF SAGE SPARROW, IN SAGE BUSH, AND CONTAINING TWO EGGS OF THE COWBIRD.

56. *Agelaius phoeniceus fortis*. Thick-billed Redwing. Two pairs seen in tall grass along the edge of a small pond near Small, June 23. Several large flocks seen in marshes along Camas Creek, August 26.
57. *Sturnella neglecta*. Western Meadowlark. Fairly common throughout the sage plains and valleys. A few pairs were found nesting among sage brush along the edge of a cultivated field near Highbridge, June 26.
58. *Icterus bullocki*. Bullock Oriole. Male and female seen in willow and birch thicket along Little Dry Creek Canyon, July 29.
59. *Euphagus cyanocephalus*. Brewer Blackbird. A number of pairs found nesting in willows, rose bushes, service-berry bushes and sage brush, along Little Dry Creek, near Spencer, June 11 to 20. Nests were mostly at low elevations, one being found on the ground near a small irrigation ditch.
60. *Pinicola enucleator montana*. Rocky Mountain Pine Grosbeak. One specimen examined, in the collection at Lake Post Office. I was told they occur as winter visitors in the mountains around the Lake.
61. *Carpodacus cassini*. Cassin Purple Finch. A pair observed feeding on the ground at Burnside ranch, near Spencer, June 18. Also seen in timber near the headwaters of the West Fork of Camas Creek, July 16.
62. *Astragalinus tristis pallidus*. Western Goldfinch. Several pairs noted during July among the willows and in weed patches along Little Dry Creek, at the Burnside ranch.
63. *Spinus pinus*. Pine Siskin. A few seen in Douglas fir thickets near the head of Little Dry Creek Canyon, June 15.
64. *Passer domesticus*. English Sparrow. Fairly common in towns along the Oregon Short Line, where it was observed at Spencer and Dubois. Four pairs had taken up their residence on the Burnside ranch, three miles west from Spencer, where they were nesting in a cottonwood grove near the house. Two nests were large pendant affairs, about twenty feet up in the trees, woven of horse hair, dry grasses and sheep wool, and lined with chicken feathers. Another nest was built on forking branches next to the trunk, eight feet from the ground. One pair decided to occupy a newly completed nest of a Cliff Swallow under a gable of the house. A half day of watchful waiting and the swallows retired. The sparrows began carrying up straws, etc., for lining, but a few of their rude attempts at alighting on the rim of the frail structure brought it down. The same performance was repeated in another gable with the same results.
65. *Poocetes gramineus confinis*. Western Vesper Sparrow. Fairly common on the sage covered plains. A nest with four eggs was found near Spencer, June 7, built at the base of a sage bush; another with five eggs near Highbridge, June 13, in a similar situation.
66. *Passerculus sandwichensis alaudinus*. Western Savannah Sparrow. Occurs sparingly in meadows throughout the county. Noted at Camas Meadows, July 16, and near Spencer, August 1.
67. *Zonotrichia leucophrys leucophrys*. White-crowned Sparrow. Several pairs noted in June along Little Dry Creek. A nest with five eggs, including one of the Cowbird, was found June 20, under a small bush near running water.
68. *Spizella passerina arizonae*. Western Chipping Sparrow. A pair seen in a Douglas fir thicket near the head of Little Dry Creek Canyon, June 11. Probably breeding.
69. *Spizella breweri*. Brewer Sparrow. The most common breeding bird of the sage brush. Earliest nesting date, June 16. Sets of three eggs most commonly found, though occasionally four are laid.
70. *Junco hyemalis connectens?* Intermediate Junco. Found commonly in lodgepole pine thickets near the North Fork of the Snake River, north of Rea, on August 25.
71. *Junco hyemalis mearnsi*. Pink-sided Junco. Several pairs noted in Douglas fir thickets near the head of Little Dry Creek Canyon, June 18. A nest containing partly feathered young was found July 8, placed under the projecting ledge of a large rock.
72. *Amphispiza nevadensis nevadensis*. Sage Sparrow. Fairly common throughout the sage plains. A nest containing one egg, with two of the Cowbird, was found near Spencer, July 7, placed in a low sage bush.

73. *Melospiza melodia montana*. Mountain Song Sparrow. Fairly common in willow thickets and marshy places along streams. A nest with four eggs was found near Spencer, June 13, placed in the crotch of a rose bush, a few inches above water.



Fig. 18. NEST, NESTING SITE, AND EGGS OF WESTERN VESPER SPARROW.

74. *Melospiza lincolni lincolni*. Lincoln Sparrow. Occurs sparingly in willow thickets along streams, near the heads of canyons.

75. *Oreospiza chlorura*. Green-tailed Towhee. Common on brushy hillsides, and often seen on open ridges. Two nests were found near Spencer, June 23, composed of sage twigs and bark, lined with fine dry grass, and placed low in sage bushes. One, just completed, was in a small open draw, the other, containing three eggs, on a high ridge. The parent birds were very shy.

76. *Zamelodia melanocephala*. Black-headed Grosbeak. Occurs sparingly in thickets along streams. Several pairs, probably breeding, seen in Little Dry Creek Canyon, June 18.

77. *Passerina amoena*. Lazuli Bunting. One pair seen in a willow thicket along the creek in Little Dry Creek Canyon, June 18. Probably nesting.

78. *Piranga ludoviciana*. Western Tanager. Occurs sparingly in groves of quaking aspen, and in Douglas fir thickets in the canyons.

79. *Petrochelidon lunifrons lunifrons*. Cliff Swallow. Common throughout the county, nesting under eaves and on faces of rock cliffs. They leave during the last week in August.

80. *Hirundo erythrogaster*. Barn Swallow. A nest was found, built on a rafter in a barn on the Burnside ranch, near Spencer. On August 1 it contained three young able to fly, and one infertile egg.

81. *Tachycineta thalassina lepida*. Northern Violet-green Swallow. Observed in small numbers in open portion of Little Dry Creek Canyon during June and July.

82. *Riparia riparia*. Bank Swallow. A small colony was nesting in a high sand bank near the outlet of Henry Lake, August 17.

83. *Bombycilla cedrorum*. Cedar Waxwing. Several seen in thickets along Little Dry Creek the latter part of June.

84. *Lanius ludovicianus excubitorides*. White-rumped Shrike. A single bird seen August 16, perched on a fence post along the road, between Kilgore and Rea.

85. *Vireosylva gilva swainsoni*. Western Warbling Vireo. Fairly common in willow thickets and quaking aspen groves, along streams in the canyons.

86. *Lanivireo solitarius cassini*. Cassin Vireo. Common in willow thickets and quaking aspen groves. A nest with four fresh eggs was found July 6, in a small willow along Little Dry Creek.

87. *Dendroica aestiva aestiva*. Yellow Warbler. Common in thickets along streams. Two nests, each containing five eggs, found in rose bushes along Little Dry Creek, June 16.

88. *Dendroica auduboni auduboni*. Audubon Warbler. Common in Douglas fir thickets in the canyons.

89. *Oporornis tolmiei*. Tolmie Warbler. Occurs sparingly in willow thickets along streams. Parent birds with young were seen in willows along the West Fork of Camas Creek, July 16.

90. *Icteria virens longicauda*. Long-tailed Chat. Several seen in willows along Little Dry Creek on the Burnside ranch, near Spencer, July 15.

91. *Cinclus mexicanus unicolor*. Dipper. Female with three young able to fly, seen on logs crossing the West Fork of Camas Creek, July 16.

92. *Oreoscoptes montanus*. Sage Thrasher. Common throughout the sage covered plains, and also seen on low ridges. A nest with four eggs, placed in a sage bush on a low ridge, was found near Spencer, June 19.

93. *Dumetella carolinensis*. Catbird. Several pairs noted nesting in willow thickets along Little Dry Creek during the last week in June.

94. *Salpinctes obsoletus obsoletus*. Rock Wren. Several seen, on July 31, among large boulders along the ridges in Little Dry Creek Canyon.

95. *Troglodytes aedon parkmani*. Western House Wren. A pair was found nesting in an old building on the Burnside ranch, June 15. A nest containing young was found in a hole in a fence post, near the old buildings at Woods Reservoir, in the West Fork of Camas Creek, July 16.

96. *Penthestes atricapillus septentrionalis*. Long-tailed Chickadee. Fairly common in willow thickets and quaking aspen groves, where numerous nesting cavities were found in dead stubs.

97. *Penthestes gambeli gambeli*. Mountain Chickadee. Common in Douglas fir timber on high ridges and canyon sides.

98. *Regulus satrapa olivaceus*. Western Golden-crowned Kinglet. A few seen in Douglas fir and Engelmann spruce thickets near the head of Little Dry Creek Canyon, June 18.

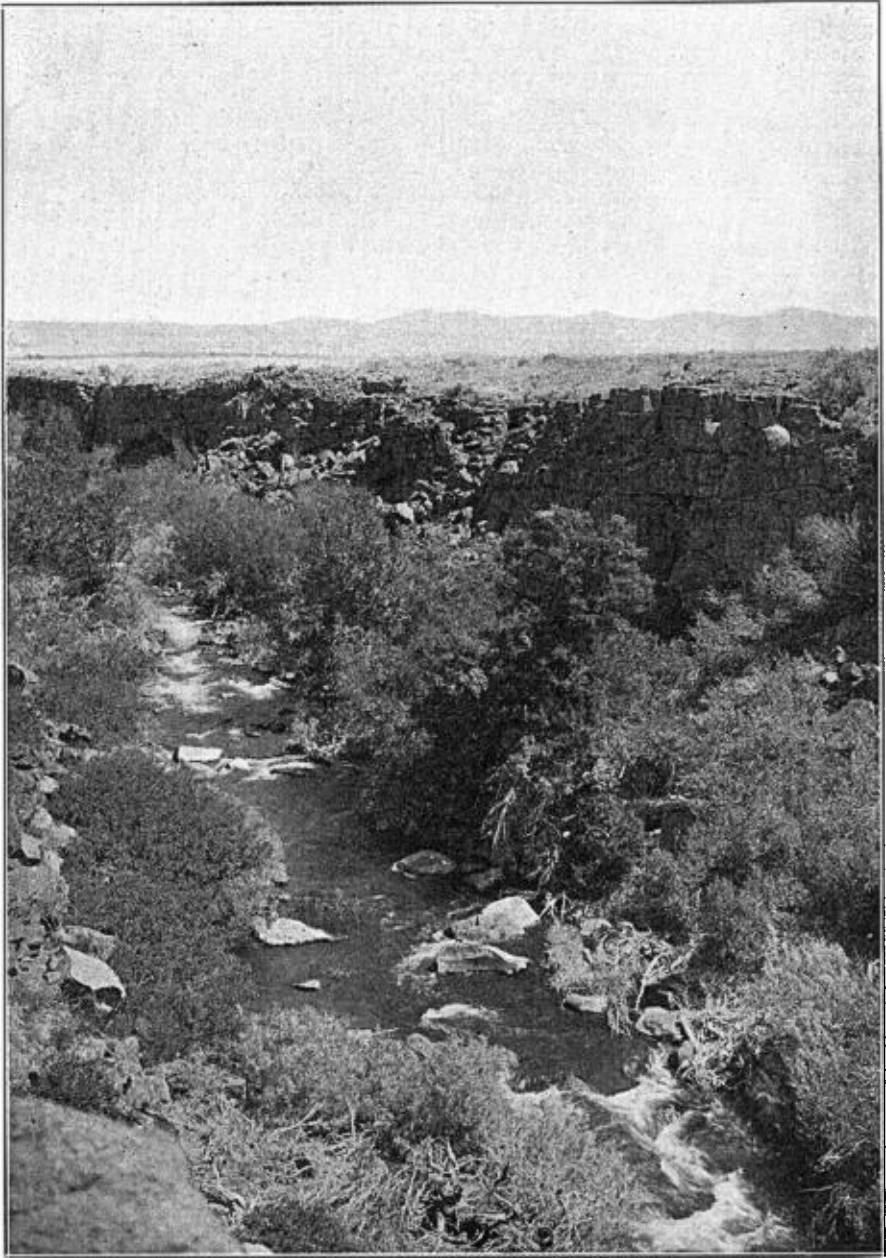


Fig. 19. BEAVER CREEK NEAR HIGH BRIDGE, IDAHO, SHOWING THE GENERAL CHARACTER OF STREAMS THAT FLOW THROUGH THE SAGE PLAINS.

99. *Regulus calendula calendula*. Ruby-crowned Kinglet. Fairly common in the Douglas fir and Engelmann spruce thickets in the canyons and on the wooded ridges.

100. *Hylocichla fuscescens salicicola*. Willow Thrush. Occurs sparingly in dense willow thickets in large open meadows. Noted at the outlet of Beaver Creek Canyon, June 25, and at Camas Meadows, July 16.

101. *Hylocichla guttata auduboni*. Audubon Hermit Thrush. Fairly common in willow thickets near heads of canyons. Noted at head of Little Dry Creek Canyon, June 18.

102. *Planesticus migratorius propinquus*. Western Robin. Common throughout the county, nesting in trees and bushes in the vicinity of ranch buildings, and in thickets along mountain streams. A nest with three eggs was found in a service-berry bush along Little Dry Creek, June 11; one with four eggs on a limb near the base of a cottonwood tree at the Burnside ranch, June 14.

103. *Sialia currucoides*. Mountain Bluebird. Occurs sparingly along foothills and in open canyons throughout the county. A nest containing three young able to fly was found in a hole in a fence post on the Burnside ranch, June 28.

Coeur d'Alene, Idaho, January 20, 1917.

SOME NOTES ON THE EFFECTS UPON BIRD LIFE, OF THE CORPUS CHRISTI STORM OF AUGUST 18, 1916

By R. A. SELL

BIRDS are governed by instinct. Their actions are so dependent upon instinctive tendencies that they are often unable to meet with success new and strange conditions. But is there any animal that does the best thing possible in a real emergency? How do horses and dogs behave at fires? Recall the peculiar things men and women do during storms and earth-quakes!

It seems to be the nature of birds to lose self-control quickly in emergency; yet there are some instances in which birds have been seen to act on the spur of the moment with such an insight and directness as could only be expected from animals that are rated much higher in the scale of intelligence. While the panic of a chicken flying and squawking along in front of a team of horses rather than turning to one side is proverbial, there are many instances of the same kind of fowls defending their young with tact and courage, besides the innumerable instances of wild birds staying with their nests or dropping into the water during fires.

Corpus Christi Bay is separated from the Gulf of Mexico by a chain of narrow sand-spits, and the passes connecting the two bodies of water are so shallow that it is necessary to keep a dredge at work continually in order to keep a channel open for the small boats that ply along the coast. Bird Island is a narrow sandy island so named because so many birds nest there that literally acres of eggs are to be found there during the laying season.

At Rockport there is a double row of posts, nearly a mile long, the remains of an old pier, and this was a favorite resort for pelicans. One observer reports seeing the entire line occupied by pelicans, a pelican to a post; in other words a double line of pelicans almost a mile long. At times these ungainly birds could be seen swinging themselves through the air and then awkwardly plunging down into the water only to flop out again with the fish, for they seldom miss.

The first indication of the storm here of interest was a stiff north wind and an ashen sky. There was no calm immediately preceding the storm, but