the combination of a teal with the Shoveller could have caused the general reduction in size. Also it seems safe to say that had the teal been of the genus *Nettion* some one of the distinctive peculiarities of that group would have appeared in the offspring.

In southern California the Blue-winged Teal is such a rarity that one is apt to jump to the conclusion that the bird in hand must be the result of the combination of the Cinnamon Teal and the Shoveller. If this bird were known to have been hatched in the same general region in which it was shot this assumption might be justified, but as it may well have been a migrant from farther north, where the Blue-winged Teal breeds, it is unsafe to draw such a conclusion.

Among the ducks aberrant individuals combining the characters of two distinct species are of not uncommon occurrence, and from the way in which the Anatidae have been divided generically, this usually means hybridization between distinct genera, rather than merely between species of the same genus. Several combinations have been recorded from time to time, perhaps the most common being the mixture of the features of the Mallard (Anas platyrhynchos) and the Pintail (Dafila acuta). Usually such individuals have been regarded as the offspring of diverse parentage, as "hybrids" in fact, rather than as "mutants", suddenly developing peculiar characters. The present writer has examined perhaps ten or twelve such doubtful birds, and in each case the theory of hybridization seemed to be the more plausible explanation of conditions.

The arguments already set forth by Allen (Science, n. s., vol. 22, 1905; pp. 431-434) in similar cases among other groups of birds, apply with equal force to the ducks. Among the ducks there is an added factor, as with these birds more than with any others there is the possibility of crippled birds being forced to remain at points outside the normal breeding range, among individuals of other species. In such cripples loss of flight is frequently the only disability, the birds being otherwise strong and healthy, and under such conditions it is not extraordinary that there is occasional indiscriminate pairing of individuals belonging to different races.

Museum of History, Science and Art, Los Angeles, California, February 6, 1915.

AN ANNOTATED LIST OF THE BIRDS OF KOOTENAI COUNTY, IDAHO

By HENRY J. RUST

WITH MAP AND FOUR PHOTOS BY THE AUTHOR

OOTENAI County comprises a larger portion of northern Idaho known as the Panhandle. It is bounded on the north by Bonner County, which was created by cutting off the northern half of Kootenai County, on the east extends almost to the Montana boundary line, and is bounded on the west by the State of Washington.

There is but little level prairie land in the County; of fifty-nine townships, less than four are level and about two rolling prairie, the balance being hilly or mountainous. Lake Coeur d'Alene is the largest body of water in the County, being twenty-two miles in length, narrow in width, with an area of 41.4 square miles, and with a shore line of 103 miles. Its general trend is north and south; elevation 2120 to 2136 feet. The Coeur d'Alene mountains, north and east of the Lake, are a continuation of the Bitterroot Range; in them the Coeur d'Alene

River rises and flows into southern end of the lake Five miles farther south the St. Joe River forms the other principal The tributary. Spokane River is the outlet of the lake, and empties into the Columbia about seventy-five miles northwest from the lake

Fernan Lake is a small body of water situated a short distance from Coeur d'Alene City. The lake is fed by a small creek bearing the same name, which flows through an alder swamp of nearly 100 acres extent at the east end of the lake. In this swamp and on the hills surrounding Fernan Lake I have observed 76 species of birds. Coeur d'Alene Lake and also the smaller lakes are encircled with hills which at one time were covered to the shores with a dense growth of yellow pine and fir, but in the past few years have been denuded to a great extent by forest fires and logging operations. These hills are now growing up with dense stands of young Douglas fir, white fir, western larch, lodgepole pine and yellow pine. The more open hillsides and ridges are



Fig. 45

covered with a thick growth of shrubs, mainly ocean spray (Schizonotus discolor), ninebark (Opulaster pauciflorus), buckbrush (Ceanothus sanguineus), sticky laurel (Ceanothus velutinus), and serviceberry (Amelanchier alnifolia). The undergrowth on the low hills is mostly composed of Pachistima myrsinites, thimble berry (Rubus parviflorus), bracken fern, Oregon grape, and occasion-

ally large patches of kinnikinnick, the berries of which are a favorite food of the Ruffed Grouse.

The slopes of the higher ranges including the Coeur d'Alene Mountains, which have escaped the ravages of extensive forest fires in the past six years, are covered with dense stands of white pine and Douglas fir, the open ridges and burned over areas being grown up with shrubs similar to lower hills. The kinnikinnick is replaced by large patches of blueberry, a haunt of the Richardson Grouse. The numerous mountain streams are lined with a growth of willows, alder, and *Spirea menziesii*, which latter becomes very dense in shady places near sources and outlets. Where streams flow into lakes there are often flats several acres in extent which are subject to overflow in the spring.

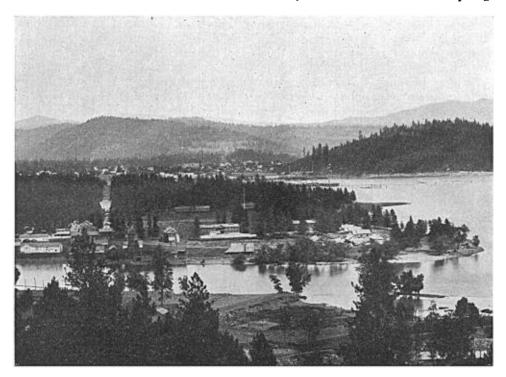


Fig. 46. Townsite of Coeur d'Alene, Idaho; head of Spokane River and Fort Sherman Military Reservation in foreground

Many of the flats are covered with a growth of tules, water grasses, willows, and *Spirea menziesii*, and are bordered with a few cottonwood and aspen and inhabited by a number of species of birds that prefer deciduous timber and marshy ground.

The scarcity of ducks and the absence of many species of shore birds in this vicinity may be due to several causes: A general decrease in numbers of waterfowl as residents and migrants, and by a lack of feeding and breeding grounds. In former years the St. Joe marshes, and a large marsh about one and a half miles west of the city, locally known as meadows, were frequented by a large number of waterfowl, many of them breeding in seclusion. Present conditions are greatly changed by continuation of high water throughout the

year, caused by the Washington Water Power Company in Spokane River at Post Falls.

The annual spring thaw and melting of deep snow in the mountains causes a heavy rise of the water lasting till the early part of June, and with the backing up of low water of the lake caused by the dam, a greater part of the marshes, flats and shores are covered to such a depth that very few species of birds are to be found. A large portion of the southern end of the lake, Chatcolet Lake and St. Joe Valley were formally included in the Coeur d'Alene Indian reservation and being free from settlement offered seclusion to many waterfowl. The opening of this reservation to settlement in 1906 has had a tendency to lessen the numbers of shore birds and Anatidae formerly seen in this locality.

One-fourth of the area of Kootenai County is embraced in the Coeur d'Alene National Forest Reserve; also a small portion including Chatcolet Lake has been set aside as a State Park. As Chatcolet Lake has always been a favorite resort of waterfowl, it is hoped the protection now offered will tend to increase the numbers as well as species. The protection offered by the Forest Reserve may in time have a noticeable effect in the increase of many species which prefer the dense coniferous timber, and mountainous regions. The old Fort Sherman military reservation, which was well represented in species, was abandoned in 1898 and later sold at public auction. It is now well built up and is a continuation of Coeur d'Alene City. (See fig. 46.)

The following list of species has been prepared from personal observations dating from March, 1910, to December, 1914. Species marked with an asterisk are, to the best of my knowledge, new records for this vicinity. In the preparation of the list I desire to express my obligations to Mr. J. Grinnell and to the Smithsonian Institution, for assistance in identifications of specimens, and to Mr. F. A. Shallis, a local taxidermist, for the privilege of examining and measuring a number of specimens in the flesh.

Aechmophorus occidentalis. Western Grebe. Not common fall and winter visitor on Lake Coeur d'Alene; also seen on Fernan Lake. Most frequently observed from September to December. A few may remain throughout mild winters when the lakes do not freeze over.

Colymbus nigricollis californicus. Eared Grebe. Rare in this locality. One adult specimen examined October 9, 1912, taken on Lake Coeur d'Alene. (Recorded in Condor, xv, p. 41.)

Podilymbus podiceps. Pied-billed Grebe. Not common fall and winter visitant on Lake Coeur d'Alene. Largest numbers noted on the lake during the month of November, 1914.

Gavia immer. Common Loon. Rare resident. Several young seen on Fernan Lake in fall; and young males examined, taken on Lake Coeur d'Alene.

Gavia stellata. Red-throated Loon. Rare. One specimen examined, a young female, taken on Lake Coeur d'Alene, October 6, 1912. (Recorded in Condon, xv, p. 41.)

Larus delawarensis. Ring-billed Gull. Not common fall and winter visitor on Lake est numbers seen on Lake Coeur d'Alene, during the fall of 1912. Very few noted in 1913-14.

Larus philadelphia. Bonaparte Gull. Not common fall and winter visitor on Lake Coeur d'Alene.

*Sterna hirundo. Common Tern. Rare. One specimen examined, taken on Lake Coeur d'Alene.

*Hydrochelidon nigra surinamensis. Black Tern. Fairly common on St. Joe marshes in June, 1914; probably breeding. One seen at Hayden Lake in June, 1914.

Mergus americanus. American Merganser. Rare fall and winter visitor. Two adult males examined, taken at Hayden Lake, November 19, 1914.

Mergus serrator. Red-breasted Merganser. Becoming rare. One specimen examined, taken on Lake Coeur d'Alene.

Lophodytes cucullatus. Hooded Merganser. Not common; occasionally seen in the fall on St. Joe River and Chatcolet Lake.

Anas platyrhynchos. Mallard. Rare resident, and migrant. At one time the most abundant duck in this locality.

Mareca americana. Baldpate. Becoming rare. Occasionally seen in the fall on St. Joe marshes.

Nettion carolinense. Green-winged Teal. A small flock seen on Coeur d'Alene River, August 18, 1910. A few taken on St. Joe marshes in the fall.

Querquedula cyanoptera. Cinnamon Teal. Becoming rare. One specimen examined, taken on St. Joe marshes.

Spatula clypeata. Shoveller. Fairly common in the fall on St. Joe marshes; may breed.

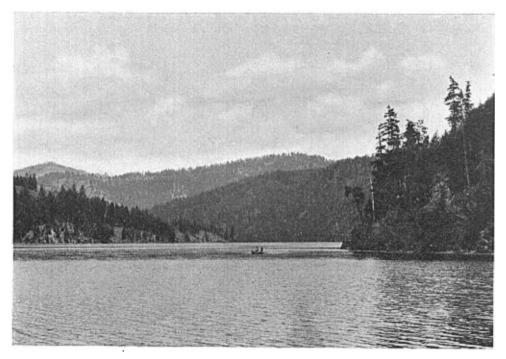


Fig. 47. VIEW SHOWING PORTION OF FERNAN LAKE AND SURROUNDING HILLS, IDAHO; LOOK-ING EAST

Aix sponsa. Wood Duck. Becoming rare. Two specimens examined September 22, 1912, taken on St. Joe marshes.

Charitonetta albeola. Bufflehead. Not common; a few seen in fall on Lake Coeur d'Alene. Also seen on Fernan Lake.

Histrionicus histrionicus. Harlequin Duck. Rare. One specimen examined, taken on St. Joe marshes.

*Oidemia deglandi. White-winged Scoter. Common on Lake Coeur d'Alene from October 20 to December 1, 1913. A number of specimens examined were young females.

Oidemia perspicillata. Surf Scoter. Rare fall migrant. One adult male examined, taken on Fernan Lake, October 9, 1912. (Recorded in Condor, xv, p. 41.)

Erismatura jamaicensis. Ruddy Duck. Common fall migrant, occurring in largest numbers after severe storms.

Branta canadensis canadensis. Canada Goose. Until recent years large flocks of Canada Geese passed over the city on their way south during the month of November, and also on returning on their northern spring migration. Large flocks would stop to

rest at the southern end of the lake and on St. Joe marshes. A few would spend the day in the grain fields in the Palouse farming district and return to the sheltered bogs of the lake to spend the night. During the fall and winter of 1913, I failed to see or hear any migrant flocks and none for the fall of 1914. Very few Geese have been seen on the lake for several years past. If migrations still continue over the same course the birds must pass over late at night and high up. They may be diminishing fast in numbers

*Olor buccinator. Trumpeter Swan. Rare fall migrant; occasionally seen at southern end of lake. One seen on Lake Chatcolet October 30, 1914.

Botaurus lentiginosus. American Bittern. Rare resident of the marshes. Taken at meadows, Lake Coeur d'Alene; also on Fernan alder swamp.

*Ardea herodias herodias. Great Blue Heron. Rare fall and winter visitor. Three specimens examined: One taken on marsh, Fernan Lake; two specimens taken along St. Joe River,—one being an adult male, February 14, 1913.

Porzana carolina. Sora Rail. Rare resident of the marshes; one specimen examined.

Fulica americana. American Coot. Fairly common in fall on open water. Large numbers congregate on Chatcolet Lake since the passage of the law prohibiting the use of motor boats in hunting water fowl on the lake.

Lobipes lobatus. Northern Phalarope. Rare-fall migrant. One specimen noted on Lake Coeur d'Alene.

Recurvirostra americana. Avocet. Rare. One specimen examined, taken on St. Joe marshes.

Gallinago delicata. Wilson Snipe. Rare fall migrant. One seen at meadows, Lake Coeur d'Alene, September 13, 1913. Two taken at Chatcolet Lake in September, 1914.

Actitis macularius. Spotted Sandpiper. Fairly common summer resident along shores of the lakes in Kootenai County. One taken at Fernan Lake, May 17. Nest with four eggs found in a field near Fernan Lake shore, June 27, 1914.

Squatarola squatarola. Black-bellied Plover. Rare. One specimen examined, taken on St. Joe marshes.

Oxyechus vociferus vociferus. Killdeer. Not common summer resident, breeding in suitable localities. Earliest record for spring arrival, March 9, 1913. None seen after September 1.

*Colinus virginianus. Bob-white. Owing to nearness to Spokane Prairie, Washington, a number of pairs of quail have shifted into this vicinity, nesting in meadows and grain fields, and raising large broods; but owing to the open season during the month of November, and deep snow in winter, there is little chance of them becoming plentiful.

Dendragapus obscurus richardsoni. Richardson Grouse. Fairly common resident throughout the mountains; most plentiful in Coeur d'Alene National Forest reserve.

Bonasa umbellus togata. Canadian Ruffed Grouse. Common resident in coniferous timber and thickets. More abundant during the season of 1914 than for many years past.

*Bonasa umbellus sabini. Oregon Ruffed Grouse. Observed for the first time during the fall of 1914. Two specimens taken and two others seen. Skins are identical with those taken in the vicinity of Portland, Oregon. With the exception of one specimen taken in deciduous thickets at Fernan Lake, this race was seen only in lodgepole pine thickets on the prairie, north of the city.

Pedioecetes phasianellus columbianus. Columbian Sharp-tailed Grouse. Becoming rare as a resident; occasionally seen in fall in small flocks on the prairie, north of the city.

*Phasianus torquatus. Mongolian Pheasant. One specimen examined, found frozen in ice on Fernan Lake in December, 1913.

Zenaidura macroura marginella. Western Mourning Dove. Fairly common summer resident, nesting in pine timber on open ridges and hillsides. Congregates in small flocks on fields in latter part of August. Nest with two fresh eggs found in small pine on Tubbs Hill, June 26, 1912.

Cathartes aura septentrionalis. Turkey Vulture. Occasionally seen during the summer.

Circus hudsonius. Marsh Hawk. Not common resident and migrant; seen in Fernan alder swamp and at meadows. Lake Coeur d'Alene.

Accipiter velox. Sharp-shinned Hawk. Fairly common summer resident, remaining late in fall. A pair noted May 10, probably nested in dense fir timber on Fernan Ridge. Nest with five eggs on Tubbs Hill, June 15; young hatched during first week in July. Young taken in dense haw thicket on Fernan Creek, December 2.

*Buteo borealis calurus. Western Red-tailed Hawk. Rare summer resident, a few pairs breeding in tall pines on the mountain sides. One specimen taken at Cougar Gulch, March 14, 1913. Food contents, small snake; from color of bits of skin judged it to be the common water snake.

Buteo swainsoni. Swainson Hawk. Rare. Three young specimens examined in September, 1913.

Archibuteo lagopus sancti-johannis. Rough-legged Hawk. Several seen along St.



Fig. 48. View showing general features of the mountainous country around Coeur d'Alene, Idaho; ridge in foreground, altitude 4859 feet, was swept by fire in 1910; growth of blueberry on right-hand, north-facing, slope

Joe River late in fall. One specimen examined, taken along St. Joe River, December 20, 1912.

Haliaeetus leucocephalus. Bald Eagle. Rare resident. A few young seen in fall, but no adults for several years.

Falco mexicanus. Prairie Falcon. Rare. One specimen examined, taken November 6, 1912. (Recorded in Condor, xv, p. 41.)

*Falco columbarius columbarius. Pigeon Hawk. Rare. One specimen examined, taken at Echo Bay, Lake Coeur d'Alene.

Falco sparverius phaloena. Desert Sparrow Hawk. Fairly common summer resident in timber along edge of prairie, west and north of the city.

Pandion haliaetus carolinensis. American Osprey. Not common summer resident, along rivers and lakes, nesting in tall cottonwoods.

Asio wilsonianus. Long-eared Owl. One specimen taken in dense fir near edge of swamp at meadows, Lake Coeur d'Alene, September 13, 1913.

Asio flammeus. Short-eared Owl. Not common. Two specimens examined. *Scotiaptex nebulosa nebulosa. Great Gray Owl. Rare winter visitor. One specimen taken at Mica Bay, Lake Coeur d'Alene, December 4, 1914: adult female.

Cryptoglaux funerea richardsoni. Richardson Owl. Rare winter visitor. One specimen seen.

Cryptoglaux acadica. Saw-whet Owl. One specimen examined.

*Otus flammeolus. Flammulated Screech Owl. Not common. One specimen examined, taken in dense thicket near Fernan Lake, September 28, 1914.

Bubo virginianus pallescens. Western Horned Owl. Fairly common resident; most frequently seen in September and October.

Bubo virginianus subarcticus. Arctic Horned Owl. Rare fall and winter visitor. Two specimens examined, one taken at Bennett's Bay, Lake Coeur d'Alene, October 28, 1912. (Recorded in Condor, xv. p. 41.)

Bubo virginianus saturatus. Dusky Horned Owl. Frequently seen in the fall in dense timber and swamps. Four specimens examined, one taken near edge of swamp at meadow, Lake Coeur d'Alene, September 13, 1913.

Nyctea nyctea. Snowy Owl. Rare winter visitor. One specimen examined, taken in city limits.

Glaucidium gnoma. Pygmy Owl. Frequently heard and seen during the months of September and October; may be resident.

Ceryle alcyon. Belted Kingfisher. Common summer resident along streams and

*Dryobates villosus monticola. Rocky Mountain Hairy Woodpecker. Common resident throughout the heavy timber. Have often seen D. v. monticola feeding on frozen apples remaining on trees, during the cold weather, within city limits.

Dryobates pubescens homorus. Batchelder Woodpecker. Not common resident. Two specimens collected in alder swamp at head of Fernan Lake.

Picoides arcticus. Arctic Three-toed Woodpecker. Male and female collected from tall dead pine near Garwood, September 29, 1914; only specimens that I have seen or

Sphyrapicus varius nuchalis. Red-naped Sapsucker. Nest containing young found June 6, 1914, in tall hemlock stub near Kelly meadow, French Gulch. Both parents were busy feeding young. Several specimens collected; one near Fernan Lake in dense thicket, and one in alder thicket near Mica Bay.

Phlocotomus pileatus abieticola. Northern Pileated Woodpecker. resident of the heavily timbered hillsides and ridges.

Colaptes cafer collaris. Red-shafted Flicker. Common summer resident, a few remaining through the winter. Winter records, November 28, December 8, February 10 and 22.

*Chordeiles virginianus henryi. Western Nighthawk. Common summer resident. arriving the first week in June and departing by middle of September. Nests on Tubbs Hill, Fernan ridges, and occasionally on prairie land.

*Chordeiles virginianus hesperis. Pacific Nighthawk. Female and eggs collected June 27, 1914; nesting on high open ridge near Fernan Lake.

Archilochus alexandri. Black-chinned Hummingbird. Not common summer resident. Nest with two eggs found on Fernan Creek, June 8.

Selasphorus rufus. Rufous Hummingbird. Occasionally seen in May and June in city limits among bright-colored flowers.

Stellula calliope. Calliope Hummingbird. Not common summer resident. observed several pairs that were nesting in dense pine thickets, but have been unable to locate any nests.

Tyrannus tyrannus. Kingbird. Not common summer resident, nesting in bushes along St. Joe and Spokane rivers.

Tyrannus verticalis. Western Kingbird. Rare summer resident. One pair with young; nest on cross-bar of pole carrying high tension electric wire, on prairie near Post Falls, July 5, 1913.

Sayornis sayus. Say Pewee. Not common summer resident; occasionally seen in city limits.

Nuttallornis borealis. Olive-sided Flycatcher. Not common summer resident in the mountains.

Mylochanes richardsoni richardsoni. Western Wood Pewee. Common summer resident, many nesting in pines in city limits.

Empidonax hammondi. Hammond Flycatcher. One specimen taken in alder thicket near Fernan Lake shore, August 1, 1914.

Empidonax wrighti. Wright Flycatcher. Not common summer resident in dense thickets. Specimen taken in dense fir thicket on Tubbs Hill, May 25, and in alder thicket in Fernan swamp, September 1.

Otocoris alpestris merrilli. Columbian Horned Lark. Common summer resident on the prairie, west and north of the city.

Pica pica hudsonia. Black-billed Magpie. Common fall and winter visitor, generally arriving early in September, remaining throughout the winter, and migrating early

Fig. 49. North Fork of Coeur d'Alene River, Altitude 2894 feet, near source in Coeur D'Alene Mountains, Idaho

in spring. Earliest record of arrival, August 27, 1914.

Cyanocitta stelleri annectens. Black-headed Jay. Common resident; most numerous in dense wooded canyons and swamps.

Perisoreus canadensis capitalis. White-headed Jay. Not common resident in the mountains.

Corvus corax sinuatus. Western Raven. Three seen April 20, 1913; one specimen examined.

Corvus brachyrhynchos hesperis. Western Crow. Not common summer and fall resident of the St. Joe Valley.

Nucifraga columbiana. Clarke Nutcracker. Irregular fall and winter visitor; abundant during good cone seasons. Abundant from October, 1911, to December 28, 1912; none seen again until August 11, 1914, the earliest date I have noted them. As they feed principally on the seeds of the western yellow pine in this vicinity, the irregularity of occurrence could be caused by pine-cone crop, which is heavy every two to four years.

Dolichonyx oryzivorus. Bobolink. Rare summer resident of St. Joe marshes. Several seen in tall grass in meadow near Wolf Lodge creek.

*Xanthocephalus xanthocephalus. Yellow-headed Blackbird. Rare summer resident of the marshes. Two specimens examined, taken on St. Joe marshes.

Agelaius phoeniceus neutralis. Columbian Red-wing. Not common summer resident; a few pairs nest in cat-tail marsh at meadow, Lake Coeur d'Alene.

Sturnella neglecta. Western Meadowlark. Common summer resident of the prairie west and north of the city. Earliest date of arrival, March 27. One seen October 31, on prairie near Post Falls.

Icterus bullocki. Bullock Oriole. Rare summer resident; one specimen seen.

Euphagus cyanocephalus. Brewer Blackbird. Not common summer resident; a few may remain throughout the winter. Small flock observed March 9, 1913, in tall

cottonwoods along bank of Spokane River; small flock seen in willow thicket, Fernan Lake. September 6.

Hesperiphona vespertina montana. Western Evening Grosbeak. Common resident. Large flocks frequently observed in city limits during the fall and winter, feeding in pines. Their loud whistling notes are often heard in the spring, after which they appear to break up into small flocks or pairs, and retire to the heavy timber in the mountains, returning again in large flocks the latter part of September. Male and female together noted August 19, on high wooded ridge near Fernan Lake. Flock of about 30 young seen September 1; one young female collected.

Carpodacus cassini. Cassin Purple Finch. One pair observed in city limits June 18, 1914.

Loxia curvirostra minor. American Crossbill. Common resident; numerous flocks seen in city limits throughout the fall and winter, retiring to the wooded hillsides during nesting season. Females with young able to fly noted May 4. February 21, 1913, I noted a pair of crossbills carrying nest material—long blades of dry grass obtained from small spots where the snow had melted—up into a dense-crowned tall lodgepole pine. I was unable to locate any nest, and on returning the next day failed to find any further evidence of nesting, not seeing the birds again in same locality.

Acanthis linaria linaria. Redpoll. Not common winter visitor. Small flock observed in city limits, April 15.

Astragalinus tristis pallidus. Western Goldfinch. Not common summer resident. A pair noted on brushy hillside, June 14; from their actions judged them to be breeding, but was unable to locate any nest.

Spinus pinus pinus. Pine Siskin. Abundant resident. Common in city limits; young Siskins able to fly, noted June 17.

*Passer domesticus. English Sparrow. A small flock arrived in the spring of 1909. They have multiplied rapidly and are now very common within the city limits; also in other towns in the county. A favorite nesting site is the top fold of awnings after these have been rolled up during the winter. In the spring, when the sun grows bright and the awnings are lowered, sparrow nests in various stages of construction, eggs, and often young birds, are scattered along the edge of the street curbing.

Plectrophenax nivalis. Snowflake. Rare irregular winter visitor. One specimen seen

Passerculus sandwichensis alaudinus. Western Savannah Sparrow. Common summer resident of the meadows. Several specimens taken September 29, in small meadow near Garwood.

Zonotrichia leucophrys gambeli. Gambel Sparrow. Abundant fall migrant. Observed in large numbers during the months of September and October in thickets and on brushy hillsides.

Spizella passerina arizonae. Western Chipping Sparrow. Abundant summer resident. First arrivals noted by middle of April, becoming common by first of May. Young and old congregate in large flocks along edges of fields and thickets from early part of August to latter part of September, when they begin to migrate; one seen October 8. Nest with four eggs found in spirea bush, June 11; nest with half-grown young found in haw bush, June 14; young able to fly June 18.

*Junco hyemalis montanus. Montana Junco. Common summer resident, arriving as early as February 22, becoming common by first week in April Pair noted gathering nest material March 27; five nests, each containing five eggs, examined May 8; young able to fly, May 19; nest with five newly hatched young, June 18; nest with five fresh eggs, June 27. The Juncos begin to congregate in flocks along roadsides and thickets by the middle of August, and migrate early in October.

Melospiza melodia merrilli. Merrill Song Sparrow. Common summer resident in swamps and thickets along mountain streams and lakes. A few remain throughout the winter in sheltered situations. Often seen around old brush-piles and outbuildings within the city limits during the winter.

*Melospiza lincolni lincolni. Lincoln Sparrow. One specimen taken in grassy meadow near Garwood, September 29, 1914.

Pipilo maculatus montanus. Spurred Towhee. Common summer resident of the brushy hillsides and draws, arriving by April 15. Last seen September 3. Young, first brood, able to fly, May 18; second brood, June 30,

Zamelodia melanocephala. Black-headed Grosbeak. Not common summer resident; most frequently observed in coniferous timber in canyons near east end of Fernan Lake.

Piranga ludoviciana. Western Tanager. Not common summer resident of the coniferous timber.

Petrochelidon lunifrons lunifrons. Cliff Swallow. Common summer resident, nesting under eaves.

Hirundo erythrogastra. American Barn Swallow. Fairly common summer resident. Migration dates, May 28-30, first week in September.

Iridoprocne bicolor. Tree Swallow. Common summer resident, nesting in cotton-woods along river and lake shores.

Riparia riparia. Bank Swallow. Not common summer resident. Small colony nests in banks of deep sand-pit and railroad, within the city limits.

Bombycilla garrula. Bohemian Waxwing. Common fall and winter visitor. Large flocks seen in city limits from latter part of November to middle of December, feeding on mountain ash berries. Many mountain ash are used as shade and ornamental trees in the city. Migration dates, November 18 and March 4.

Bombycilla cedrorum. Cedar Waxwing. Not common summer resident. Nest with three fresh eggs, seven feet from ground in haw bush, Fernan Creek, June 28.

Lanius borealis. Northern Shrike. Rare winter visitor. One seen at Kelly meadow in January, 1913; one seen in city limits, December 21, 1914.

Vireosylva olivacea. Red-eyed Vireo. Common summer resident of the deciduous thickets. Nest with four eggs, incubation slight, in red osier five feet from ground in alder swamp, at east end of Fernan Lake, June 27.

Vireosylva gilva swainsoni. Western Warbling Vireo. Common summer resident of the thickets.

Lanivireo solitarius cassini. Cassin Vireo. Not common summer resident of the dense thickets.

Dendroica aestiva. Yellow Warbler. Common summer resident of the brushy hillsides. Nest with four eggs found in spirea bush on Tubbs Hill, June 11. Young Yellow Warblers able to fly, June 14.

Dendroica auduboni auduboni. Audubon Warbler. Abundant summer resident, nesting in coniferous timber on hillsides. Common in city limits after young are able to fly. Departs early in October.

Dendroica townsendi. Townsend Warbler. Not common summer resident in dense thickets and timber. Specimen taken in an alder thicket at Fernan Lake, June 28.

Oporornis tolmici. Tolmie Warbler. Not common summer resident in swampy thickets. Several seen on brushy hillsides.

Geothlypis trichas occidentalis. Western Yellow-thrcat. Not common summer resident in deciduous thickets in vicinity of water.

Setophaga ruticilla. American Redstart. Fairly common summer resident in deciduous thickets.

Anthus rubescens. American Pipit. Not common fall migrant.

Cinclus mexicanus unicolor. American Dipper. Not common, but of regular occurrence along mountain streams. One seen along Fernan Creek, October 25.

Dumetella carolinensis. Catbird. Not common summer resident; nesting in willow thickets; young able to fly, July 10.

Troglodytes aedon parkmani. Western House Wren. Not common summer resident; often found nesting in old vacant buildings within the city limits.

Nannus hiemalis pacificus. Western Winter Wren. Fairly common resident in coniferous timber. Frequently observed in dense deciduous thickets and swamps.

Certhia familiaris montana. Rocky Mountain Creeper. Not common resident in coniferous timber. Specimen taken December 29; occasionally seen during the summer. Sitta carolinensis aculeata. Slender-billed Nuthatch. Not common resident of coniferous timber. Occasionally seen within the city limits.

Sitta canadensis. Red-breasted Nuthatch. Common resident; frequently observed in pine thickets within the city limits.

Sitta pygmaea. Pygmy Nuthatch. Abundant resident. Common within the city limits. Several pairs noted nesting in tops of telephone poles.

*Penthestes atricapillus septentrionalis. Long-tailed Chickadee. Common resident; frequently seen in city limits. Nest with seven eggs in birch stub on French Gulch Creek, May 30.

Penthestes gambeli gambeli. Mountain Chickadee. Abundant resident; common within the city limits.

Penthestes rufescens rufescens. Chestnut-backed Chickadee. Not common resident. Occasionally seen in alder swamp at east end of Fernan Lake.

Regulus satrapa olivaceus. Western Golden-crowned Kinglet. Abundant resident of coniferous timber and thickets.

Myadestes townsendi. Townsend Solitaire. Not common winter visitor. Specimen collected in city limits, January 10, 1913.

Hylocichla ustulata swainsoni. Olive-backed Thrush. Common summer resident of the dense thickets. Nest with four fresh eggs in small fir tree on brushy hillside, June 27.

*Hylocichla guttata guttata. Alaska Hermit Thrush. Several seen in dense thickets in September; specimens collected September 12 and 24.

Planesticus migratorius propinquus. Western Robin. Abundant summer resident; a few may remain during mild winters. Earliest migration date, February 11; fall migration in October.

Ixoreus naevius naevius. Varied Thrush. Fairly common resident, preferring dense thickets along canyon streams and swamps.

Sialia mexicana occidentalis. Western Bluebird. Common summer resident. Spring migration, first week in March; fall, middle of October.

Sialia currucoides. Mountain Bluebird. Common summer resident, arriving the first week in March. Fall migration in October.

Coeur d'Alene, Idaho, January 5, 1915.

FROM FIELD AND STUDY

A Northern Winter Record of the Phainopepla.—On February 12, 1915, after a severe and protracted storm, I collected an adult female Phainopepla (Phainopepla nitens) within the city of Marysville, California. The species is rare in this vicinity; even in summer its appearance is quite casual. When disovered, this individual was feeding upon a cluster of mistletoe berries in a black walnut tree. It was not particularly shy and was reluctant to desert such an excellent feeding ground, as I found when I attempted to frighten her from the place. She refused to leave, and, after circling widely, returned to the tree. Examination of the bird in hand showed it to be in apparent good health, and the body was very fat. The stomach was distended with the mistletoe berries.—Carl S. Muller, Marysville, California.

Three New Records for Kansas.—In a preliminary examination of a collection of bird skins made personally at Independence, southeastern Kansas, in 1904 and 1905, three forms have been identified that apparently have not been previously recorded from that State. All are Lower Austral forms ranging up from the south along the valley of the Verdigris River.

A Flicker (male, no. 584, coll. A. W.), taken November 28, 1904, is *Colaptes auratus auratus*, as it has a wing measurement of only 151.3 millimeters. The Northern Flicker occurs also as a winter migrant, and is represented by specimens in the collection.

Two Downy Woodpeckers secured are *Dryobates pubescens pubescens*. These specimens have the following measurements (in millimeters):

N- 000 / 11 / 555	Wing	Tail
No. 683 (coll. A. W.), male, Jan. 3, 1905	87.8	53.5
No. 783 (coll. A. W.), female, March 1, 1905	00.5	
12. 7.7, Temate, March 1, 1909	88.5	57.0

The Chickadees from this region are of more interest. Thirteen were secured, ranging in dates from December 5, 1904, to April 27, 1905, and all are referred to Penthestes carolinensis agilis. The northern limit of the Texas Chickadee has been given as Stilwell and Fort Reno, Oklahoma (Ridgway, Birds of North and Middle America, vol. III, p. 406). These Kansas records, therefore, constitute an important extension in the known range of this form.—Alex Wetmore, Biological Survey, Washington, D. C.