THE BIRDS OF WYOMING

WITH AN EXPLANATION OF RECENT CHANGES IN
THEIR DISTRIBUTION

ECONOMIC ASPECTS ALSO CONSIDERED

BY

B. H. GRAVE AND ERNEST P. WALKER

UNIVERSITY OF WYOMING

JUNE 1, 1913

QL
684
G 76

978

THE BIRDS OF WYOMING

WITH AN EXPLANATION OF RECENT CHANGES IN THEIR
DISTRIBUTION

ECONOMIC ASPECTS ALSO CONSIDERED

BY

B. H. GRAVE AND ERNEST P. WALKER

UNIVERSITY OF WYOMING

JUNE 1, 1913

CONTENTS

	PAGE
Discussion of Wyoming conditions in regard to birds...	5
Complete list of birds known to occur in Wyoming.....	23
New records for the State.....	81
New breeding records.....	82
Summary	82
Hypothetical list	83
Local lists	87
Index to Species	131

ROCKY MOUNTAIN SCREECH OWL
(*Megascops asio maxwelliae*) Young
Sheridan, Wyoming Photo by Chas. W. Metz

WYOMING BIRDS

This bulletin is the outcome of a survey conducted by the Department of Zoology of the University of Wyoming for the purpose of ascertaining whether the balance of nature has been disturbed as more and more of the territory of the state has come under cultivation. It was thought that the changing conditions in the state, including increased raising of grain and planting of shade trees, would enable more birds to find food and suitable nesting places than formerly. The birds seemed as likely to be affected as any group of animals and the extensive data collected at an earlier period seemed to furnish a basis for comparison.

Mr. Walker, who had had experience in collecting and who is now in the government service, was employed to assist with the work of the survey. He has spent two summers in the field collecting and has brought together all available data from former collectors in the state. Letters were also written to prominent citizens of Wyoming in regard to the abundance of birds now as compared with ten years ago. The results of the work of collectors and the observations of citizens all indicate that many birds are on the increase, especially those which live partly or wholly upon seeds or insects and which are consequently of most benefit to farmers in the control of insect pests and weeds.

Old residents of the state, and collectors whose experience extends over a period of several years, are almost universally of the opinion that certain birds are much more abundant now than formerly. In their replies to circular letters sent out, they have frequently specified the species which have been affected in this way. It will readily be

seen that those mentioned are the ones which would be expected to show the influences of the factors indicated above. Those most frequently mentioned as having increased in numbers include the Robin, Meadow Lark, Bluebird, Mourning Dove, Crow, Brewer's Blackbird and Cowbird.

Many birds which were reported as rare in W. C. Knight's "Birds of Wyoming," published in 1902, are now reported by collectors as being fairly common. It seems, therefore, that Wyoming is rapidly becoming a more hospitable place for birds in general.

There is considerable evidence to show that the quail has only recently migrated into the state, and that its migration was from Nebraska up the valley of the Platte River. At present it has penetrated as far as the mouth of Horse Shoe Creek, on the Platte, and as far as Uva, on the Laramie River, which is tributary to the Platte. The quail seems to have appeared in Wyoming first about 1890, and one informant thinks that it dies off during the winters from lack of food, and is prevented from further migration into Wyoming only because of lack of seeds.

A similar evidence of the effect of food supply on the presence of birds in the state is given by Stanley Jewitt, of the U. S. Biological Survey, who says:

"I found some kinds (of birds) very common in the more cultivated sections of Idaho and Wyoming during the last three years that were almost, if not entirely, unknown a few years ago. Such birds as the Bobolink, Yellow-headed Blackbird, and Lark Bunting follow the farmer as soon as irrigation systems are completed."

One of the most interesting points ascertained is in regard to the English Sparrow. In reply to a query as to whether there are any isolated towns in Wyoming to which

this sparrow has not yet found its way, Professor B. C. Buffum replied that there seem to be none of these sparrows in some of the smaller interior towns, such as Ten-sleep and Nowood. Mrs. Eva G. Lambertson of Lander, Wyoming, reports that there were no English Sparrows in that town ten years ago, but that they are rather numerous now, having come mostly during the past five years.

Forty-five species of birds new to the state have been reported since the publication of Professor W. C. Knight's bulletin. It is hardly possible that these have all come into the state since that time. Most of them had probably been overlooked before.

The following quotations are extracts from letters received in reply to questions sent out by the writers, and are representative of the numerous letters received from the people who have had wide experience in the state.

QUOTATIONS FROM LETTERS RECEIVED.

1. From William Richard, Taxidermist, Cody, Wyoming:

"It has been my opinion for several years that the birds are on the increase, excepting the sage hens, ducks, and eagles, which seem to be decreasing."

2. From Louis Knowles, Forest Supervisor, Sundance National Forest, Sundance, Wyoming:

"There has been a marked increase in the number of birds in this region during the last ten or fifteen years. The increase has been in numbers and not in species. The increase is undoubtedly due to the gradual increase of cultivated areas."

3. From John Hunton, Fort Laramie, Wyoming:

"The Quail or Bobwhite first made its appearance in the Wyoming section of the Platte Valley at the Wyoming-

Nebraska line in the summer of 1890. They have gradually worked up the valley until they have reached the vicinity of Guernsey. They have also worked up the Laramie River to the neighborhood of Uva. They are not and have not been numerous, being pioneers, as it were. During the winter of 1908-9 a covey of twenty-two frequented my yard here and fed with my chickens. On last Friday morning, June 14, I heard two Bobwhites on my meadow at Gray Rocks, on the Laramie River, ten miles west of here. Occasional coveys are to be seen or heard along the valleys of both rivers as far as I have indicated. The quail evidently followed the course of the Platte Valley from Nebraska, and they are gradually working farther up the tributaries of the Platte as fast as the grain belt advances. I believe the cultivation of the soil to grains of various kinds is the only thing which has induced them to migrate west."

We, therefore, feel justified in concluding that the changed conditions in the state in respect to increased raising of grain, tree planting, and the irrigation of large tracts have been the direct cause of the increase in the number of birds, an increase which has been so marked that residents of the state in general have noticed and commented upon it.

Although many birds are steadily increasing in numbers, it seems likely that game birds are decreasing, owing to excessive hunting. It is rather difficult to judge of the relative numbers of certain game birds as compared with former years, because they do not nest in the state. They may seem to vary from year to year, possibly taking different routes in migration. Collectors as a rule report several species of duck less numerous than in years past. In fact, it is generally recognized that they are decreasing in

all parts of the country. The eagles are also decreasing in numbers, probably because gunners are too likely to shoot when the opportunity comes. These birds are also frequently caught in traps set for coyotes and other animals.

THE ECONOMIC VALUE OF BIRDS.

It is well known that birds are among the most important factors in checking the damage done by insects to agricultural crops. It is an established fact that insects became terrible pests in Australia shortly after the wholesale destruction of the birds from eating poisoned grain intended for rabbits. Certain families of birds feed almost exclusively upon insects. Certain other families are efficient agents for destroying weed seeds. The Sparrows, Horned Larks, and Finches, and in fact all birds which have a short, thick, conical bill, are mainly seed eaters.

THE AMOUNT OF FOOD CONSUMED BY BIRDS.

One is likely to suppose that the birds can not be of any great economic importance because they are small and insignificant in appearance. Before deciding upon this point it might be well to consider that they occur in enormous numbers and eat amounts altogether out of proportion to their size, when judged from our standards. Digestion goes on very rapidly in these warm-blooded, active animals, and so they eat almost constantly. In cases investigated, it has been shown that food passes entirely through the digestive tract in the course of an hour or an hour and a half. Birds frequently eat the equivalent of eight full meals per day and consume approximately their own weight of food. This is true more especially of young birds, which in a few cases investigated have been shown to swallow more than their own weight of food and increase from twenty to forty per cent in weight daily. Some one has

said that young nestling birds seem to be all mouth and stomach. These facts become significant when you consider that if human beings ate at the same rate, one man would require about one hundred pounds of beef steak per day, and the high cost of living would become a problem, sure enough.

The United States Department of Agriculture employs a number of reliable scientific men to investigate and report on the food and habits of birds. These men are publishing interesting figures to show the economic importance of this group of animals. The following figures are taken largely from these reports.

SOME SPECIFIC EXAMPLES.

1. "A Palm Warbler has been seen to capture from 40 to 60 insects per minute. It worked at this rate for four hours and, therefore, must have gathered about nine thousand five hundred insects in that time."

2. A Northern Yellow-throat ate eighty-nine aphids in a minute and worked at this rate for forty minutes.

3. A Nashville Warbler ate forty-two Brown Tail Caterpillars in thirty minutes.

4. Prof. Beal of the U. S. Department of Agriculture has reported that seventy entire grasshoppers and the jaws of fifty-six more were taken from the stomach of a Franklin's Gull.

5. Dr. Judd is authority for the statement that seventeen hundred weed seeds were taken from the stomach of a Bob-white.

6. The stomachs of Sparrows are always found full of weed seeds and, being so numerous, they must be regarded as important factors in checking weeds.

7. Prof. Aughey states that, during the locust outbreak in Nebraska, he saw a pair of Long-billed Marsh Wrens

take thirty-one small locusts to their nest in an hour. A pair of Rock Wrens took thirty-two locusts to their nest in an equal period of time.

INSTANCES OF EFFECTIVE WORK BY BIRDS.

Many instances might be given to show that birds are actually effective in checking outbreaks of insect pests. It seems that birds are able to collect where insects appear in unusual numbers, and so they put down uprisings which threaten to do damage. It appears that Prof. Forbes of Illinois was the first to notice this ability of birds.

1. Mr. O. E. Bremmer, in a letter to the Biological Survey, dated at San Francisco, March 16, 1908, says:

"The canker worm episode is quite a common one with us here. In one district * * * there has been a threatened invasion of the prune trees several times, but each time the Brewer's Blackbirds came to the rescue and completely cleaned them out. I have often seen bands of blackbirds working in an infested orchard. They work from tree to tree, taking them clean as they go. If a worm tries to escape by webbing down, they will dive and catch him in mid air."

2. There is a true story which reads like a myth, since it tells how the pioneers of Utah were saved from starvation by the timely appearance of a flock of gulls. In the spring of 1848, the Mormons had planted several hundred acres of wheat in the valleys southeast of the present site of Salt Lake City. In May the fields were green and beautiful, but in the latter part of this month a horde of Rocky Mountain Crickets came down from the hills and devoured every green thing in their path. The fields were black with these clumsy insects and the people were desperate. After trying in vain to destroy them by various means, they were almost disheartened, when a flock of Sea Gulls came from

the islands of the Great Salt Lake and began to devour the crickets. The strangest part of the story is that the Gulls, after filling their crops, would go to the streams and after drinking some water, would disgorge, and then return to the feast. After a few days the fields were rid of the crickets and the Gulls returned to their island homes. To this day the pioneers delight to tell how they were saved from starvation by the intervention of God in their behalf. "Both sentiment and law prevent people from killing the Gulls. In fact, when these white-winged birds are seen, they inspire a feeling of reverence." On October 1, 1913, a monument to the Gulls was unveiled in Salt Lake City. One side of it bears a bronze tablet with the following inscription:

*	*	*	*	*	*	*	*	*	*	*
*	SEA GULL MONUMENT									*
*	ERECTED IN GRATEFUL REMEMBRANCE									*
*	OF THE MERCY OF GOD									*
*	TO THE MORMON PIONEERS									*
*	*	*	*	*	*	*	*	*	*	*

3. The following quotations are from Mr. Edward Forbush of the Massachusetts Board of Agriculture:

"I once noticed that in an orchard infested by canker worms, those trees nearest some woods were soon cleared of these worms, mainly by Warblers which came from the woods and sprout land to feed upon them."

"The enormous numbers of insects that breeding Warblers must secure to feed their young may be inferred from the fact that each young bird requires fully half its own weight of insects each day. As the young are fed very largely on caterpillars, and as they are reared at a time when these insects are most plentiful, there is no doubt regarding the restraining influence exerted upon the increase

of such insect life throughout the north temperate zone by a family of birds so abundant and widely distributed as the Warblers. The usefulness of these birds in migration consists in their eminently insectivorous habits and in the power possessed by them, in common with most other birds, of assembling quickly where food is plentiful. They thus form a sort of aerial police, whose chief function is to put down uprisings of injurious insects."

"One fine Sunday in October, 1904, I saw a flock of Warblers about a few poplar trees near the river. They were feeding on swarms of mature aphids. I watched them at intervals all day. The flock seldom exceeded fifteen birds, mostly Blackpoll and Myrtle Warblers. Before night the swarms of insects that had been so numerous in the morning had dwindled so that it was rather difficult for me to secure a specimen, although the birds still found some. When I went there the next morning a single remaining bird was still finding a few, but I could not see a specimen, nor have I seen one there since."

"In 1905, I returned to my home at Wareham, Massachusetts, the first week in November, and found a flock of Myrtle Warblers busy hunting over the limbs and twigs of some apple trees and pear trees near my house. From the actions of the birds I concluded that they had discovered an outbreak of some pest, but at first I could see nothing on the twigs that they were inspecting. By watching them with a glass, however, I soon saw exactly where they were finding food. I saw that they were feeding on a minute cicada-shaped, black insect. This, indeed was the only species of insect I could find on those trees. Three of these insects were secured and two were sent to Dr. L. O. Howard, Chief of the Bureau of Entomology at Washington. He identified them as the imago of the pear tree *Psylla*, a pest which has

been very destructive to pear orchards in Maryland and New Jersey. I learned that the birds had been visiting these trees for about two weeks. At the time of my return they had evidently disposed of most of the last brood of the season, for although they were still finding a good many on the day of my return, they found very few afterwards, though they visited the trees daily for a week longer. These insects hibernate on the trees by hiding in the crevices between the twigs and are thus exposed to the attacks of birds all winter."

4. From Special Bulletin No. 3, University of Nebraska, by Bruner, I take the following interesting computations:

"In nearly every case where the food habits of our birds have been carefully studied, we find that the good done far exceeds the possible harm that might be inflicted by our birds. Allowing twenty-five insects per day as an average diet for each individual bird, and estimating that we have about one and one-half birds to the acre, or in round numbers, 75,000,000 birds in Nebraska, there would be required 1,875,000,000 insects for each day's rations. Again, estimating the number of insects required to fill a bushel at 120,000, it would take 15,625 bushels of insects to feed our birds for a single day, or 937,500 bushels for sixty days, or 2,343,750 bushels for one hundred and fifty days."

When put in this way, the economic value of the birds is easily comprehended as a real fact.

5. From an article by Dr. Sylvester Judd, of the U. S. Department of Agriculture, these figures are taken to show the amount of weed seeds destroyed by seed-eating birds:

"Prof. F. E. L. Beal, who has carefully studied this subject in the Upper Mississippi Valley, has estimated the amount of weed seed eaten by the Tree Sparrow (*Spizella monticola*), Junco (*Junco hyemalis*), and other Sparrows

that swarm down from Canada in the fall and feed on the rank growth of weeds bordering roadsides and cultivated fields. He examined the stomachs of many Tree Sparrows and found them entirely filled with weed seed, and concluded that each bird consumed at least a quarter of an ounce daily. Upon this basis, after making a fair allowance of the number of birds to the square mile, he calculated that in the State of Iowa alone the Tree Sparrow annually destroys about 1,750,000 pounds, or about 875 tons, of weed seed during its winter sojourn."

These quotations are, perhaps, sufficient to call attention to the fact of the enormous economic value of birds. We are likely to underestimate their services until we study their habits more carefully than is our custom. Many birds destroy a certain amount of grain and fruit, but even these do more good than harm in nearly every case. With very few exceptions, birds are beneficial and are protected by law.

Aside from their practical value, birds add to our pleasure. That being the case, it is well to attract them to our homes by placing food where they are likely to seek it and by planting shrubs and trees to which they may come and build their nests.

This bulletin is not intended to take the place of Prof. W. C. Knight's bulletin on "The Birds of Wyoming," which contains descriptions of the birds and many figures. It in no way replaces the earlier work, but furnishes local lists which should be of service to any who may wish to study the birds of a certain locality. It brings together the work of various collectors and observers who have given the subject considerable attention. It brings the result of the combined efforts of all collectors up to date. As stated above, forty-five new records for the state are established, as well as a few new breeding records. Comments are added at the

end of each local list concerning the new or interesting points contained in it. The first list in the bulletin includes all the birds which are known to occur in the state, and immediately following it a hypothetical list will be found. Particular attention is called to the former list because it contains an account of the food and nesting habits of the various families and should furnish valuable information to anyone who cares to learn what any particular bird feeds upon. Finally it is hoped that this bulletin will succeed in calling the attention of citizens of the state to the value of the birds and thereby arouse a sentiment which will lead to their better protection, not necessarily through law, but through a kindlier feeling of appreciation.

RECOMMENDATIONS.

The laws of the state are good and are quite sufficient if enforced. Lawless people should be made to feel insecure when they violate the statute quoted below. Public sentiment is a good thing to make a law a living force.

Little can be accomplished by multiplying laws, but a great deal can be done to attract birds to the home. Birds do not like to stay where cats are numerous. They will go where food and water are to be had and where there are trees suitable for shelter and nesting.

B. H. GRAVE.

The State Law in Reference to Birds

(From the Wyoming Compiled Statutes, 1910, Page 721.)

"SEC. 2788. UNLAWFUL TO KILL—PENALTY. Any person who shall, within the State of Wyoming, kill or catch or have in his possession, living or dead, any wild bird other than a game bird, or who shall purchase, offer, or expose for sale any such wild bird after it has been killed or caught, shall for each offense, be subject to a fine of not more than five dollars for each such bird killed or caught, or had in possession living or dead, or imprisonment for not more than ten days, or both, at the discretion of the court. For the purposes of this chapter the following only shall be considered game birds: The Anatidae, commonly known as swans, geese, brant and river and lake ducks; the Rallidae, commonly known as rails, coots, and mud-hens; the Limicolae, commonly known as shore-birds, plovers, snipe, sandpipers, tattlers, willets, curlews, godwits, and avocets, sagehens, partridges and quails.

"SEC. 2789. DESTRUCTION OF EGGS—PENALTY. Any person who shall, within the State of Wyoming, take or needlessly destroy the nest or the eggs of any wild bird, or shall have such a nest or eggs in his or her possession, shall be subject for each offense to a fine of not more than five dollars, or imprisonment for not more than ten days, or both, at the discretion of the court.

"SEC. 2793. BIRDS NOT PROTECTED. The following named birds shall be exempt from protection under the provisions of this chapter, viz.: English sparrow, magpie, sharp-shinned hawk, Cooper's hawk, gos hawk, duck hawk, golden or brown eagle, kingfisher and blue heron."

BIBLIOGRAPHY

1. Some Common Birds in Their Relation to Agriculture: F. E. L. Beal. Farmers' Bulletin No. 54.
2. Our Meadow Larks in Relation to Agriculture: F. E. L. Beal. Yearbook, Department Agriculture, 1912.
3. The Crow Blackbirds and Their Food: F. E. L. Beal. Yearbook, Department Agriculture, 1894.
4. Food of the Woodpeckers of the United States: F. E. L. Beal. Biological Survey—Bulletin No. 37.
5. Food of Our More Important Flycatchers: F. E. L. Beal. Biological Survey—Bulletin No. 44.
6. Relations Between Birds and Insects: F. E. L. Beal. Yearbook, Department Agriculture, 1908.
7. Food of the Bobolink, Blackbirds, and Grackles: F. E. L. Beal. Biological Survey—Bulletin No. 13.
8. The Relation of Birds to Fruit Growing in California: F. E. L. Beal. Yearbook, Department Agriculture, 1904.
9. The Warblers of North America: Frank Chapman. Appleton Company.
10. The English Sparrow as a Pest: Ned Dearborn. Farmers' Bulletin No. 493.
11. Hawks and Owls from Standpoint of the Farmer: A. K. Fisher. Biological Survey—Circular No. 61.
12. Useful Birds and Their Protection: Edw. Forbush. Massachusetts Board Agriculture, 1907.
13. Game Birds, Wild Fowl and Shore Birds: Edw. Forbush. Massachusetts Board of Agriculture, 1912.
14. Fifty Common Birds of Farm and Orchard: Henry W. Henshaw. National Geographic Magazine, June, 1913.
15. Value of Swallows as Insect Destroyers: Henry W. Henshaw. Biological Survey—Circular No. 56.
16. Does It Pay the Farmer to Protect Birds? Henry W. Henshaw. Yearbook, Department Agriculture, 1907.
17. Food of Nestling Birds: Sylvester D. Judd. Yearbook, Department Agriculture, 1900.
18. Birds of a Maryland Farm: Sylvester D. Judd. Biological Survey—Bulletin No. 17.

19. The Relation of Sparrows to Agriculture: Sylvester D. Judd. Biological Survey—Bulletin No. 15.
20. The Bobwhite and Other Quails of U. S. in Their Economic Relations: S. D. Judd. Biological Survey—Bulletin No. 21.
21. Birds as Weed Destroyers: Sylvester D. Judd. Yearbook, Department of Agriculture, 1908.
22. Three Important Wild Duck Foods: W. L. McAtee. Biological Survey—Circular No. 81.
23. Our Grosbeaks and Their Value to Agriculture: W. L. McAtee. Farmers' Bulletin 456.
24. Our Vanishing Shorebirds: W. L. McAtee. Biological Survey—Circular No. 79.
25. Index to Papers Relating to the Food of Birds: W. L. McAtee. Biological Survey—Bulletin No. 43.
26. Relation of Birds to Grain Aphides: W. L. McAtee. Yearbook, Department Agriculture, 1912.
27. The Horned Larks and Their Relation to Agriculture: W. L. McAtee. Biological Survey—Bulletin No. 23.
28. The North American Eagles and Their Economic Relations: H. C. Oberholser. Biological Survey—Bulletin No. 27.
29. Cuckoos and Shrikes in Their Relation to Agriculture: Beal and Judd. Biological Survey—Bulletin No. 9.
30. Some Common Game, Aquatic, and Rapacious Birds in Relation to Man: McAtee and Beal. Farmers' Bulletin 497.
31. Food of Some Well-known Birds of Forest, Farm, and Garden: Beal and McAtee. Farmers' Bulletin No. 506.
32. Bulletin No. 20, State Geological and Natural History Survey of Connecticut, 1913.

BIRD NOTES

COMPLETE LIST OF THE BIRDS OF WYOMING, WITH
NOTES AS TO THEIR DISTRIBUTION AND
ECONOMIC VALUE

REVISED TO JUNE 1, 1913

COMPILED FROM ALL AVAILABLE SOURCES
BY
B. H. GRAVE AND ERNEST P. WALKER

GENERAL LIST

ORDER I. PYGOPODES.

COLYMBIDAE (Grebes).

The Grebes are not numerous enough in this state to have any great economic importance. They feed upon a varied diet, consisting of small fish, tadpoles, small crustaceans, aquatic and land insects. They also eat a great deal of vegetable matter (grasses and water plant). They are considered harmless and their glossy feathers are valued for millinery purposes.

REFERENCES :

1. Forbush: "Game Birds and Shore Birds." Massachusetts Board of Agriculture, 1912, pp. 45 and 48.
2. U. S. Biological Survey Bulletin No. 17, p. 79.
U. S. Biological Survey Bulletin No. 38, p. 14.
1. **Aechmophorus occidentalis:** Western Grebe.
Apparently quite rare in this state. Since the publication of Knight's book it has been reported but once. This record is by Blackwelder, in the Tetons.
2. **Colymbus holboelli:** Holboell's Grebe.
"Migratory; rare. Dr. Jesurun of Douglas has one specimen taken October 18, 1893, and Mr. Bond has mounted one for the Cheyenne High School collection. Mr. Bond has seen several on the lakes at Cheyenne." (Knight.)
4. **Colymbus nigricollis californicus:** Eared Grebe.
The most common Grebe of the state, found in almost all suitable localities up to 8,000 feet. Reported by almost every observer.
6. **Podilymbus podiceps:** Pied-billed Grebe.
"Migratory; very rare. The only records are those of Bond of Cheyenne and Dr. Jesurun of Douglas. Dr. Jesurun took one specimen at Douglas, May 5, 1891." (Knight.)

GAVIIDAE (Loons).

The Loons are not abundant enough in Wyoming to be of any considerable economic importance. They feed very largely upon fish.

REFERENCES:

1. "Game Birds and Shore Birds," Forbush. Massachusetts Board of Agriculture, 1912, p. 55.
2. Yearbook of the Department of Agriculture, 1900, p. 433.
7. **Gavia immer:** Loon.
Fairly common migrant and possibly some are summer residents.

ALCIDAE (Auks, Murres, and Puffins).

34. **Alle alle:** Dovekie.
Accidental visitant. Reported by Lockwood. Specimen taken near Laramie, 1904.

ORDER II. LONGIPENNES.**LARIDAE (Gulls and Terns).**

The only Gull which occurs in sufficient numbers with us to be of economic value is the Ring-billed. While this group of birds feeds largely upon materials picked up from the surface of the water (dead or dying fish, garbage, etc.), the inland forms eat large numbers of grasshoppers and crickets. The larger species also feed upon mice and other small rodents. They have been known to rid a large territory of a pest of crickets. (See page 11, this Bulletin.) The Terns also feed upon grasshoppers and other insects.

REFERENCES:

1. Year Book, Department of Agriculture, 1908, p. 194.
2. Chapman's Hand Book of Birds, 1912, p. 152.
3. Bulletin No. 20, Connecticut Geological and Natural History Survey, 1913, pp. 264-265.
4. Bancroft's "History of Utah," p. 280.
5. "Sea Gull Monument," pp. 267-274; "Young Woman's Journal," Salt Lake City, November, 1913.

40. ***Rissa tridactyla tridactyla***: Kittiwake.

"Accidental and very rare. The Wyoming record is based upon a single specimen taken at Douglas by Dr. Jesurun, November 18, 1898. This bird has also been taken in Colorado and occasional stragglers may be looked for." (Knight.)

51. ***Larus argentatus***: Herring Gull.

Apparently increasing in numbers. Reported by Mr. Richard as being a common summer resident at Yellowstone Lake and in Big Horn Basin. There is a specimen in Cheyenne which is said to have been taken on a lake near there.

53. ***Larus californicus***: California Gull.

Mr. Lockwood reports several from the Laramie Plains. Breeds on Yellowstone Lake. See Skinner.

54. ***Larus delawarensis***: Ring-billed Gull.

Abundant summer resident on the Laramie Plains, and in the northern portion of the state. Probably occurs over almost the entire state.

55. ***Larus brachyrhynchus***: Short-billed Gull.

Exceedingly rare. Mr. Lockwood reports it from the Laramie Plains.

59. ***Larus franklini***: Franklin's Gull.

One was taken May 6th, 1912, near Wheatland, Wyoming. See Lockwood.

60. ***Larus philadelphia***: Bonaparte's Gull.

In addition to Knight's records in regard to this bird, it has been reported only by Metz, from Sheridan.

62. ***Xema sabini***: Sabine's Gull.

Two birds have been taken from the Laramie Plains. See Lockwood.

69. ***Sterna forsteri***: Forster's Tern.

"Migratory; rare. Apparently a rare bird in Wyoming; and has been reported only from the southeastern corner of the state. Mr. Bond reports it from Cheyenne and Dr. Jesurun from Douglas. I would naturally expect to find this species as a summer resident." (Knight.)

70. ***Sterna hirundo***: Common Tern.

Blackwelder in the Teton region saw what he judged to be this bird. This is our only record other than that in 1902 by Knight.

77. ***Hydrochelidon nigra surinamensis***: Black Tern.

The records of this bird are from Cody, Sheridan, Lake Como, Cheyenne and Douglas.

ORDER IV. STEGANOPODES.

PHALACROCORACIDAE (Cormorants).

From the economic standpoint the Cormorants in Wyoming are of no importance. They feed upon fish.

119. ***Phalacrocorax carbo***: Cormorant.

"Probably accidental. There is but one recorded for Wyoming and that is from Bond of Cheyenne." (Knight.)

120. ***Phalacrocorax auritus auritus***: Double-crested Cormorant.

There are but three Wyoming records, two from the Laramie Plains and one from near Buffalo. See Lockwood and Knight.

PELECANIDAE (Pelicans).

The Pelican feeds upon fish and, what is more serious, it is said to spread disease among the fish of the lakes in and near the Yellowstone Park.

REFERENCES:

1. Year Book, Department of Agriculture, 1900, p. 434.
2. Chapman's Hand Book of Birds, 1912, p. 184.

125. ***Pelecanus erythrorhynchus***: White Pelican.

Fairly common summer resident in the northwestern part of the state.

126. ***Pelecanus occidentalis***: Brown Pelican.

"Accidental. A single specimen has been taken by Bond at Cheyenne and is now in the High School collection in Cheyenne." (Knight.)

ORDER V. ANSERES.**ANATIDAE (Ducks, Geese, and Swans).**

The ducks and geese are among the principal game birds of this region. The fact that they are decreasing in numbers is interesting, if not alarming. All those that breed with us should be protected in every possible way during the breeding season. A strict compliance with game laws and perhaps a restriction of the size of the bag should be fostered by sportsmen.

The food of ducks consists of mollusks, crustaceans, insects and their larvae, and roots and seeds of aquatic plants. The young are frequently fed upon grasshoppers and shore insects. Their bills are adapted to straining the food from the mud.

The Merganser is an exception, being a fish eater.

REFERENCES:

1. Chapman's Hand Book of Birds, 1912, p. 190.
2. Year Book, Department of Agriculture, 1900, p. 435.
3. North American Fauna, 7, p. 15.
4. Bureau of Biological Survey, Circular No. 81.

129. *Mergus americanus*: Merganser.

Fairly common summer resident over most of the state.

130. *Mergus serrator*: Red-breasted Merganser.

Uncommon migrant. Reported by Knight, and from the western part of the state by Blackwelder. Clearwaters also records it.

131. *Lophodytes curculatus*: Hooded Merganser.

Probably a summer resident over the entire state. The recent records are very meager.

132. *Anas platyrhynchos*: Mallard.

The most plentiful duck of the state. Summer resident in almost all localities. A few winter with us.

135. *Chaulelasmus streperus*: Gadwall.

Fairly common summer resident over most of the state.

136. *Mareca penelope*: European Widgeon.

Mr. Percival reports having taken a male specimen in 1910. There is one specimen in the collection of mounted birds at the Cheyenne High School which was presumably taken in that vicinity.

-
137. **Mareca americana:** Baldpate.
A few during migrations. Probably decreasing in numbers.
139. **Nettion carolinense:** Green-winged Teal.
Common summer resident throughout the entire state.
140. **Querquedula discors:** Blue-winged Teal.
Common summer resident throughout the entire state.
141. **Querquedula cyanoptera:** Cinnamon Teal
Fairly common summer resident over most of the state.
142. **Spatula clypeata:** Shoveller.
Fairly common summer resident over most of the state.
143. **Dafila acuta:** Pintail.
Uncommon summer resident. Common during migrations.
144. **Aix sponsa:** Wood Duck.
Knight recorded this bird from Cheyenne and Big Horn Mountains on the authority of Frank and Fred Bond. Since then it has been observed by Richard, Metz, Buck and Clearwaters.
146. **Marila americana:** Redhead.
A fairly common migrant, but evidently decreasing in numbers.
147. **Marila valisineria:** Canvas-back.
Occurs over almost the entire state during migrations, but is at no place common.
148. **Marila marila:** Scaup Duck.
"Up to the present the only authentic record has been given by Jesurun of Douglas and but a single bird has been taken." (Knight.)
149. **Marila affinis:** Lesser Scaup Duck.
Fairly common migrant.
150. **Marila collaris:** Ring-necked Duck.
Mr. Richard reports that this duck is occasionally found about Cody. Knight recorded it from Green River and Douglas.
151. **Clangula clangula americana:** Golden-eye.
Apparently rather rare in this state. It has been recorded from Lake Como, Douglas, Cheyenne, Lake DeSmet, the

Laramie Plains, and Blackwelder reports it as a summer resident in the Big Horn Mountains.

152. *Clangula islandica*: Barrow's Golden-eye.

Fairly common resident over most of the state except the southern portion.

153. *Charitonetta albeola*: Buffle-head.

Common summer resident over most of the state. It winters about Cody.

154. *Harelda hyemalis*: Old-squaw.

The only record of this bird in Wyoming is from Mr. Richard, who reports that three specimens were taken near Cody in the fall of 1911.

155. *Histrionicus histrionicus*: Harlequin Duck.

Until recently this duck has not been reported in this state. In *The Auk* for February, 1913, there was a published record. Mr. Richard reports that these birds are resident in the mountains, a few being found on each river. Blackwelder found it in the Tetons.

162. *Oidemia americana*: Scoter.

"Migratory; probably accidental. The Wyoming record rests upon a single specimen taken by Bond at Cheyenne." (Knight.)

165. *Oidemia deglandi*: White-winged Scoter.

"Migratory; rare. A few of this species are usually seen during migrations. Grinnell has the following note: 'Seen on Yellowstone Lake in August. I mention this species with a query because, although I recognized it satisfactorily to myself, I took no specimens.' There is a beautiful specimen in the University collection that was taken at Lake DeSmet and presented by H. A. West. I have seen one good specimen that was taken at Hutton's Lakes, March, 1898." (Knight.)

166. *Oidemia perspicillata*: Surf Scoter.

"Accidental; extremely rare. Dr. Jesurun has one specimen which he shot on October 19, 1898, at one of the ponds near Douglas." (Knight.)

167. ***Erismatura jamaicensis***: Ruddy Duck.
Common migrant; and occasional winter resident.
169. ***Chen hyperboreus hyperboreus***: Snow Goose.
A rare migrant in this state. The only record that we have since 1902 is by Richard, who records that one was taken at Cody in the fall of 1910.
- 171a. ***Anser albifrons gambeli***: White-fronted Goose.
Bond reported: "I have mounted a fresh specimen which was said to have been killed at the Cheyenne Lakes."
172. ***Branta canadensis canadensis***: Canada Goose.
Common migrant over entire state. It is a fairly common breeder from the central to the northern portion of the state. Probably a part of the records which are now accredited to this form should belong to *hutchinsi*.
- 172a. ***Branta canadensis hutchinsi***: Huchin's Goose.
Mr. Lockwood reports this form. Probably many of those that are recorded under the previous form really belong here.
180. ***Olor columbianus***: Whistling Swan.
Lockwood reports this from the Laramie Plains and there is one bird in the University Museum. Knight reported a Cheyenne record. Skinner reports it as common in the Yellowstone.
181. ***Olor buccinator***: Trumpeter Swan.
Rare summer resident. Mr. Richard records two specimens taken during the fall migration of 1909. Metz also reported it. Knight gave a few other records.

ORDER VII. HERODIONES.

IBIDIDAE (Ibises).

187. ***Plegadis guarauna***: White-faced Glossy Ibis.
An uncommon bird in the state. Knight reported it and thought it was probably a summer resident. Since then we have but one record, that by Mr. Percival.

ARDEIDAE (Herons, Egrets, Bitterns, etc.)

The Herons feed mostly upon frogs, fish, snakes, and crustaceans. They also destroy large numbers of grasshoppers and mice. The Black-crowned Night Heron and the Great Blue Heron are the only ones of this family which occur in Wyoming in sufficient numbers to be of any economic value. Both are known to feed largely on grasshoppers and mice when these pests are abundant.

REFERENCES:

1. Bulletin No. 20, State Geological and Natural History Survey of Connecticut, 1913, pp. 265-266.
 2. University of California Publications.
 3. Bulletin 31, U. S. Biological Survey, p. 52.
 4. Bulletin 38, U. S. Biological Survey, p. 26.
190. ***Botaurus lentiginosus***: Bittern.
Common summer resident in southern Wyoming. Less common in the northern portion of the state.
191. ***Ixobrychus exilis***: Least Bittern.
Lockwood reports a specimen from the vicinity of Lake Como. At Cody there is a mounted specimen that was probably taken near there. Knight reported it as accidental, a specimen having been taken near Cheyenne.
194. ***Ardea herodias herodias***: Great Blue Heron.
Abundant summer resident of the lower altitudes of the entire state.
197. ***Egretta candidissima candidissima***: Snowy Egret.
The records for this bird are Lake Como, by Lockwood, and Bamforth Lakes, by Walker. Knight reports one in his book and mentions in a more recent note that one was taken at Walden, Colo., in 1901.
201. ***Butorides virescens***: Green Heron.
The first record of this species is from Laramie County, near the Nebraska line, by Clearwaters.
202. ***Nycticora nycticora naevius***: Black-crowned Night Heron.
Quite common in suitable localities across southern Wyoming. Knight recorded it as being rare, but it is evidently increasing.

ORDER VIII. PALUDICOLAE.**GRUIDAE (Cranes).**

The Cranes are rapidly disappearing and in time will probably become extinct. They feed upon frogs, small mammals, and insects. They devour enormous numbers of insects, but they also take up growing grain.

REFERENCES:

1. "Game Birds, Wild Fowl, and Shore Birds," Forbush, Mass. Board of Agriculture, 1912, pp. 482-483.
 2. Bulletin No. 31, U. S. Biological Survey, p. 53.
 3. North American Fauna, 7, p. 20-21.
204. ***Grus americana*:** Whooping Crane.
Mr. Richard reports that it is a summer resident in Yellowstone Park and Jackson Hole. Occasional spring migrant at Cody. There is a specimen at the University, which Prof. Reed says was taken from Wyoming.
205. ***Grus canadensis*:** Little Brown Crane.
An uncommon migrant. On April 3, 1912, one was brought to Mr. Lockwood to be mounted. It had been killed near the Sodergreen ranch on the Big Laramie. He was told that there had been a flock of five about there for several days. Knight recorded them as migratory.
206. ***Grus mexicana*:** Sandhill Crane.
Warren found this bird near the headwaters of the Green River. This is the only record since 1902.

RALLIDAE (Rails and Coots).

The Rails feed mostly upon grasshoppers, snails, small crustaceans and aquatic insects. Some also eat vegetable food.

REFERENCES:

1. Weed and Dearborn: "Birds in Their Relation to Man," pp. 233-234.
212. ***Rallus virginianus*:** Virginia Rail.
An uncommon summer resident. Lockwood reports it from near Laramie. Richard reports it from near Cody. Peabody also records it.

214. *Porzana carolina*: Sora.

On September 14, 1911, Walker took one at Hatton. Metz records it from Sheridan, Blackwelder from the Teton region, and Peabody from Hat Creek. Knight gave other records of it, but it is rare.

221. *Fulica americana*: Coot.

Common summer resident over almost the entire state.

ORDER IX. LIMICOLAE.**PHALAROPODIDAE (*Phalaropes*).**

The shore birds as a whole perform a valuable service by destroying great numbers of mosquitoes and mosquito larvae. Most of them feed also upon other insect pests, besides animals of less economic importance. The Phalaropes feed upon small animals found in the mud on shores, including worms, crustaceae, and small molluscs. They also catch flies and mosquitoes from the air, and the larvae of these insects from the water. They are strictly beneficial. All shore birds, or nearly all, seem to be decreasing in numbers, which is to be regretted.

REFERENCES:

1. "Birds in Their Relation to Man," Weed and Dearborn, p. 233.
2. Bureau of the Biological Survey Bulletin No. 79, by S. D. Judd.
3. "Game Birds, Wild Fowl, and Shore Birds," Forbush, Massachusetts Board of Agriculture, 1912, p. 230.
4. "Birds of Connecticut," Bulletin No. 20, Geological and Natural History Survey, pp. 266-267.

222. *Phalaropus fulicarius*: Red Phalarope.

"Very rare, if not accidental. The only specimen taken in Wyoming was that by C. W. Gilmore on the Laramie Plains during the fall of 1897. This skin was identified by Mr. Robert Ridgway of Washington, D. C." (Knight.)

223. *Lobipes lobatus*: Northern Phalarope.

Blackwelder found this species in the Teton region. "Lewiston reported them at Lake Como, Jesurun from Douglas,

Bond from Cheyenne, Coues from Big Sandy River." (Knight.)

224. *Steganopus tricolor*: Wilson's Phalarope.

Very abundant breeder about all water in southeastern Wyoming. Metz records it from Sheridan; Clearwaters says it is very abundant at Arlington; Knight gave numerous records.

RECURVIROSTRIDAE (Avocets and Stilts).

These long-legged waders are given credit for eating cutworms and grasshoppers, but their principal food is molluscs, crustaceans, and worms, which they secure from the mud. The Avocet's method of feeding is interesting and is described by Chapman as follows:

"They frequent shores and shallow pools, and, in searching for shells, crustaceans, etc., their peculiar recurved bill is used in a most interesting manner. Dropping it beneath the surface of the water until its convexity touches the bottom, they move rapidly forward, and with every step swing their bill from side to side, as a mower does his scythe. In this way they secure food which the muddy water would prevent them from seeing."

REFERENCES:

1. Handbook of Birds of Eastern North America, Frank Chapman, p. 242.
2. "Game Birds, Wild Fowl, and Shore Birds," Edward Forbush, p. 232.

225. *Recurvirostra americana*: Avocet.

Abundant summer resident over almost the entire state.

SCOLOPACIDAE (Snipes, Sandpipers, etc.).

These birds have long, sensitive bills, with which they probe the mud in search of worms, molluscs, crustaceae, and insect larvae. They also devour large numbers of mosquitoes, flies and their larvae. Though fitted by their long, bare legs and peculiar bills to live along shores and mud flats, several species prefer the open fields, as, for example, the Curlews, Woodcocks, and Upland Plovers. These birds are of considerable economic value as destroyers of grasshoppers, crickets, plant beetles, cutworms, wire

worms, grubs, etc. They are numerous enough in Wyoming to be of very considerable economic value.

REFERENCES:

1. "Birds in Their Relation to Man," Weed and Dearborn, pp. 229-232.
 2. Bulletin No. 17, U. S. Biological Survey, pp. 82-83.
228. **Philohela minor**: Woodcock.
Richard reports that one was shot near Cody in September, 1906. Probably the bird is only an accidental visitor in this state.
230. **Gallinago delicata**: Wilson's Snipe.
The early records of this bird were very meager, but since 1902 almost all the observers have noted it. Walker took parent and young in June, 1911. A few days later he found a set of four fresh eggs at the head of Centennial Valley. In the fall of 1911 these birds were common about the ice ponds and the Big Laramie River near Laramie.
232. **Macrorhamphus griseus scolopaceus**: Long-billed Dowitcher.
We have no records of this bird other than those given by Knight.
233. **Micropalama himantopus**: Stilt Sandpiper.
"Migratory; rare. But little is known of this species in Wyoming. From the records one can judge that it will be found occasionally in all of the non-mountainous parts of the state. In Bond's collection there is a female bird that was taken March 25, 1889, from a flock of four or five birds. Jesurun has taken this bird at Douglas and Coues reports it from Fort Bridger." (Knight.)
239. **Pisobia maculata**: Pectoral Sandpiper.
"Migratory and rare. It has been taken by Jesurun at Douglas and once upon the Laramie Plains. The latter specimen is in the University collection and was taken at Seven Mile Lake in November, 1897." (Knight.)
241. **Pisobia bairdi**: Baird's Sandpiper.
Fairly common migrant over the southern half of Wyoming. Probably occurs in the northern portion.

242. ***Pisobia minutilla***: Least Sandpiper.

Fairly common migrant, but most of the records are for the southern half of the state.

246. ***Ereunetes pusillus***: Semipalmated Sandpiper.

Knight records it as a rare migrant from the southern portion of the state. The only other record is by Richard, who reports that there are a few about Cody during spring migrations.

248. ***Calidris leucophaea***: Sanderling.

"Migratroy and usually rare. Dr. Jesurun reports them quite common in the springtime at Douglas and has four skins in his collection. These were taken on May 18, 23, and 26, 1892. Williston reports having taken one May 5, at Lake Como." (Knight.)

249. ***Limosa fedoa***: Marbled Godwit.

Summer resident of the Laramie Plains. Lockwood secured a specimen September 3, 1911, that was in juvenile plumage, indicating that it was reared on the plains. They are also found at Douglas and Cheyenne.

254. ***Totanus melanoleucus***: Greater Yellow-legs.

Probably decreasing in number. Since Knight's records we have only that by Mr. Richard, in which he says that there are a few about Cody during migrations.

255. ***Totanus flavipes***: Yellow-legs.

Common migrant over most of Wyoming. Possibly some may breed in the state. Flocks of several hundred were noted by Walker, in August, 1911.

256. ***Helodromas solitarius solitarius***: Solitary Sandpiper.

Knight recorded this form, but all records are here considered as referring to the following species.

- 256a. ***Helodromas solitarius cinnamomeus***: Western Solitary Sandpiper.

Fairly common summer resident over most of the state. Sawyer found nests and eggs at Hermosa, Albany County. Reported also by Walker and Jewett and doubtfully by Clearwaters and Blackwelder.

258a. *Catoptrophorus semipalmatus inornatus*: Western Willet.

This species is probably decreasing in this state. Knight said it was a rather common summer resident about semi-alpine lakes and ponds. Richard, Blackwelder, Warren and Walker report it. Most of the records are for the lower altitudes and during migrations.

261. *Bartramia longicauda*: Upland Plover.

This bird, better known as Bartramian Sandpiper, has been reported recently by only Metz and Clearwaters.

263. *Actitis macularius*: Spotted Sandpiper.

Abundant summer resident from the lower altitudes to the alpine lakes.

264. *Numenius americanus*: Long-billed Curlew.

Fairly common summer resident over most of Wyoming.

CHARADRIIDAE (Plovers).

The Plovers are typically shore birds like the Snipes, but they have shorter bills, not adapted to probing, so that they collect their food mostly from the surface. They are also quite likely to breed in the meadows away from the water. They feed almost entirely upon insects, including locusts, crickets, caterpillars, moths, wire worms, cut worms, plant beetles, mosquitoes, and mosquito larvae. They are of considerable economic value and are not harmful in the slightest degree.

REFERENCES:

1. "Birds in Their Relation to Man": Weed and Dearborn. pp. 228-229.
2. Biological Survey Circular 79, p. 2.

270. *Squatarola squatarola*: Black-bellied Plover.

Mr. Clark of Cheyenne has a specimen in his collection which he says was taken at Sloan's Lake, near there. Knight says "migratory, very rare," and gives a record from Cheyenne.

272. *Charadrius dominicus dominicus*: Golden Plover.

Lockwood reports this bird from the Laramie Plains. Knight reported it as a rare migrant.

273. *Oxyechus vociferus*: Killdeer.

Exceedingly abundant summer resident up to 8,000 feet.

274. **Aegialitis semipalmata:** Semipalmated Plover.
"Migratory; very rare. Bond has taken and mounted two specimens at Cheyenne. There are no other records pertaining to Wyoming." (Knight).
277. **Aegialitis meloda:** Piping Plover.
"Migratory; very rare. Bond has a single specimen in his collection that was taken at Cheyenne May 30, 1892." (Knight).
278. **Aegialitis nivosa:** Snowy Plover.
"Migratory; very rare. Thus far but a single specimen of this species has been taken in Wyoming, by Bond of Cheyenne. There is no reason why these birds should not be found each year during migration." (Knight).
281. **Podasocys montanus:** Mountain Plover.
Common summer resident on the plains.

ORDER X. GALLINAE.

* ODONTOPHORIDAE (Bob-whites).

The Bob-whites are known particularly as destroyers of weed seed, but during the summer months they capture large numbers of chinch bugs, grasshoppers, and various kinds of beetles. They are among the most valuable birds on the farm. It is estimated that they consume annually 1,340 tons of weed seed in Virginia and California. They also eat grain, but this is unharvested grain and hence of little value. Bob-whites have been protected by law largely because they are game birds. Even with the restriction of hunting they are frequently very much reduced in numbers. Man and cold, snowy weather are among their principal enemies.

REFERENCES:

1. Bulletin No. 21, U. S. Biological Survey, 1905.
 2. Bulletin No. 24, U. S. Biological Survey, 1905.
 3. "Birds in Their Relation to Man," Weed and Dearborn, pp. 222-223.
289. **Colinus virginianus virginianus:** Bob-white.
Small coveys are to be found on the lower portions of the Platte and Laramie Rivers, near the eastern side of the state. Seen by Aven Nelson and others.

TETRAONIDAE (Grouse, Sage Hens, and Ptarmigans).

The Grouse and Sage Hens are important game birds of the state, but they are decreasing in numbers. They feed during the summer upon grasshoppers, caterpillars, and berries of various kinds. During the winter their diet is largely vegetable, including the buds of trees. In this way they may do considerable damage. The food of the Sage Hens is about the same.

REFERENCES:

1. "Birds in Their Relation to Man," Weed and Dearborn, pp. 224-227.
 2. "Useful Birds and Their Protection," Forbush, pp. 267-274.
 3. Year Book of the Department of Agriculture, 1907, p. 172.
 4. "North American Fauna," No. 27, pp. 340-342.
297. **Dendragapus obscurus obscurus:** Dusky Grouse.
Common resident in the mountains of the southern portion of the state.
- 297b. **Dendragapus obscurus richardsoni:** Richardson's Grouse.
In the northern portion of the state this species replaces *obscurus*, having been found by Jewett, Metz and Blackwelder in both the Tetons and Big Horns.
299. **Canachites franklini:** Franklin's Grouse.
Our only record of this is from Blackwelder, who reports it from the Teton region.
- 300a. **Bonasa umbellus togata:** Canada Ruffed Grouse.
Knight recorded it from northeastern Wyoming. Jewett reports it from Star Valley. Warren, Richard and Peabody also report it.
- 300b. **Bonasa umbellus umbelloides:** Gray Ruffed Grouse.
Fairly common resident in northwestern Wyoming.
304. **Lagopus leucurus leucurus:** White-tailed Ptarmigan.
Probably a common resident in all the alpine regions of the state, but recorded only by Walker in this survey. Knight reported it as a common resident in alpine districts.
- 308a. **Pedioecetes phasianellus columbianus:** Columbian Sharp-tailed Grouse.
The early records were very unsatisfactory, but now it is reported from almost all the observers in the northern portion of the state. Probably rather uncommon.

- 308b. *Pedioecetes phasianellus campestris*: Prairie Sharp-tailed Grouse.

"Resident and common in eastern and northwestern Wyoming. I have never seen this species west of the Big Horn or Laramie Mountains." (Knight.) Warren records what he thinks was this form from the western portion of the state.

309. *Centrocerus urophasianus*: Sage Hen.

Common resident throughout the sage-brush region of the state. Not ranging into the timbered portions.

ORDER XI. COLUMBIDAE.

COLUMBIDAE (Doves and Pigeons).

These birds feed exclusively upon a vegetable diet. The Mourning Dove consumes enormous quantities of weed seeds. At times its crop contains over seven thousand small weed seeds. Doves also eat grain, mostly that which is unharvested or otherwise of small value.

REFERENCES:

1. Farmers' Bulletin No. 54, p. 6.
 2. "Useful Birds and Their Protection," Massachusetts Board of Agriculture, 1913, p. 324.
 3. "Birds in Their Relation to Man," Weed and Dearborn, pp. 219-222.
 4. "Birds as Weed Destroyers," Judd, Year Book of the Department of Agriculture, 1898, pp. 231-232.
315. *Ectopistes migratorius*: Passenger Pigeon.
- "Accidental. There is but one record for Wyoming of this bird. McCarthy reports that he took a single specimen 40 miles west of Fort Laramie in 1859. Robert Ridgway informs me that this report is correct." (Knight.)
316. *Zenaidura macroura carolinensis*: Mourning Dove.
- Very abundant summer resident over the entire state up to about 9,500 feet and possibly higher.

ORDER XII. RAPTORES.**CATHARTIDAE (American Vultures).**

The Vultures feed upon carrion. In some localities they are regarded as valuable scavengers, while in others they are disliked as nuisances. They may be the means of spreading hog cholera.

REFERENCES:

1. "Birds in Their Relation to Man," Weed and Dearborn, pp. 215-218.
2. Circular No. 76, U. S. Biological Survey, pp. 9-10.

325. Cathartes aura septentrionalis: Turkey Vulture.

Rather uncommon summer resident over the eastern half of the state. Our most westerly record is by Blackwelder in the Teton region.

BUTEONIDAE (Hawks, Eagles, Kites, etc.).

The Hawks are valuable to the agriculturist in Wyoming, because they consume great numbers of destructive rodents and insects. The Marsh Hawk and Swainson's Hawk are the two most important ones in this state. Their crops are always filled with mice and gophers. The Sharp-shinned Hawk, Cooper's Hawk, and Goshawk are not protected because of their preference for birds. The Bald Eagle feeds both upon carrion and animals which it captures by its own efforts. It is fond of fish and eats many which it finds washed up on the shore or which it steals from the Osprey. The Eagle also feeds upon ducks, geese and other game birds, as well as wild mammals of various kinds (rodents, mostly). It has been known also to attack domestic animals. The Eagle can, therefore, not be defended altogether, but it should be protected for its aesthetic value to the country.

REFERENCES:

1. Biological Survey Bulletin No. 27.
2. Biological Survey Circular No. 61.
3. Farmers' Bulletin No. 497, pp. 26-29.

331. Circus hudsonius: Marsh Hawk.

Common summer resident over almost the entire state at the lower altitudes.

332. **Accipiter velox:** Sharp-shinned Hawk.
Rather an uncommon summer resident over the entire state.
333. **Accipiter cooperi:** Cooper's Hawk.
Uncommon summer resident in the northern half of the state. There are no records for the southern portion.
334. **Astur atricapillus atricapillus:** Goshawk.
Knight gave but one record for this bird. Lockwood reports it and Walker conditionally refers one record to this species.
- 334a. **Astur atricapillus striatulus:** Western Goshawk.
Very uncommon in the state. The only records are by Metz, Lockwood and Buck.
- 337a. **Buteo borealis krideri:** Krider's Hawk.
Knight recorded it as an uncommon summer resident. Peabody is the only recent observer who reports it. Probably many of the records which are accredited to *calurus* should belong to this form.
- 337b. **Buteo borealis calurus:** Western Red-tail.
Rather uncommon summer resident over most of the state.
342. **Buteo swainsoni:** Swainson's Hawk.
An abundant hawk over almost the entire state.
- 347a. **Archibuteo lagopus sancti-johannis:** Rough-legged Hawk.
Our only recent records are from Peabody and Lockwood, who merely record this bird. Knight reported it as a rather common migrant.
348. **Archibuteo ferrugineus:** Ferruginous Rough-leg.
Apparently a fairly common resident over most of the state.
349. **Aquila chrysaetos:** Golden Eagle.
The most common eagle of the state, found throughout almost all the mountain region.
352. **Haliaeetus leucocephalus leucocephalus:** Bald Eagle.
Rather rare resident over the entire state. Apparently most common in the vicinity of Yellowstone National Park.

FALCONIDAE (The Falcons).

Of the Falcons which we have with us in Wyoming, the two most important are the Prairie Falcon and the Sparrow Hawk. The former are actively engaged in catching small mammals and some small birds. The latter confine themselves largely to mice and the larger insects, such as grasshoppers; crickets and butterflies.

REFERENCES:

1. Biological Survey Bulletin No. 61.

355. *Falco mexicanus*: Prairie Falcon.

Fairly common over most of the southern part of the state.

356a. *Falco peregrinus anatum*: Duck Hawk.

Rather rare. Since Knight's book was published, Metz and Lockwood are the only observers who have noted it. "This vicious falcon has been observed by only two collectors in Wyoming, and these observations were made over a quarter of a century ago." (Knight.)

357. *Falco columbarius columbarius*: Pigeon Hawk.

In the Big Horns, Blackwelder saw what he thought was this bird. Metz records it and Blackwelder again noted it in the Teton region. "Migratory; rare; possibly may breed in the alpine regions. We know nothing of this blood-thirsty hawk." (Knight.)

357b. *Falco columbarius richardsoni*: Richardson's Pigeon Hawk.

Found mainly in southern Wyoming, probably a summer resident. But there are no breeding records. Walker took two specimens at Green River in September, 1910. See also Lockwood.

360. *Falco sparverius sparverius*: Sparrow Hawk.

The records of this and *phalaena* are badly confused. Undoubtedly the two species mingle in this state. One or the other occurs over the entire state at all the lower altitudes. Repored by Blackwelder, Richard and Clearwaters.

360a. *Falco sparverius phalaena*: Desert Sparrow Hawk.

Reported by Blackwelder, Metz, Peabody and Clearwaters.

PANDIONIDAE (Ospreys).

The Osprey lives almost entirely upon fish, which it captures alive. If allowed to nest near the barnyard, the Osprey will keep all hawks away.

REFERENCES:

1. "Useful Birds and Their Protection," Massachusetts Board of Agriculture, 1913, p. 413.
2. Hand Book of Birds of Eastern North America, by Chapman, p. 307-308.

364. *Pandion haliaetus carolinensis*: Osprey.

Fairly common near the larger streams where fish are to be had.

STRIGIDAE (Horned Owls, etc.).

Almost all the Owls of the state are of economic importance. They destroy large numbers of rodents. The Long-eared Owls of the plains and foothills regions keep up a constant warfare on the mice and other small mammals. The Great Horned Owl and its sub-species are among the greatest enemies of rats and small ground squirrels. Most of the owls also feed upon insects and birds to some extent.

REFERENCES:

1. Biological Survey Bulletin No. 61.
2. "Birds in Their Relation to Man," Weed and Dearborn, pp. 195-204.

365. *Aluco pratinoola*: Barn Owl.

Accidental. One specimen reported by Mr. M. P. Skinner from the Yellowstone Park.

366. *Asio wilsonianus*: Long-eared Owl.

Fairly common on the plains and into the mountain regions in southern Wyoming. Less common toward the northern part of the state.

367. *Asio flammeus*: Short-eared Owl.

Apparently a rare owl in this state. The only recent records are from Richard, Peabody and Lockwood, all of whom indicate that but few occur.

370. *Scotiaptex nebulosa nebulosa*: Great Gray Owl.

Peabody reports that a single feather was found in the nest of a Canada Jay and satisfactorily identifies it as belonging to this bird. The A. O. U. list, third, edition, records it from Wyoming, probably upon the authority of Knight, who reported that one was killed in Uinta County.

372. *Cryptoglaux acadica acadica*: Saw-whet Owl.

Since Knight's work was published, but three collectors have recorded this species. All indicate that it is rare or uncommon. Probably a resident.

373e. *Otus asio maxwelliae*: Rocky Mountain Screech Owl.

Several recent observers record this owl, but it still remains quite rare. Metz has found it nesting and has photos of young birds from near Sheridan. Clearwaters has found it breeding at Arlington. Buch and Cary also record it. Lockwood reports having heard of it in Saratoga Valley. Walker doubtfully reports it from Green River.

375a. *Bubo virginianus pallescens*: Western Horned Owl.

Common resident.

375b. *Bubo virginianus subarcticus*: Arctic Horned Owl.

Lockwood reports specimens from the Laramie Plains. Knight recorded it upon the authority of the second A. O. U. list.

376. *Nyctea nyctea*: Snowy Owl.

Rare winter resident. This owl is probably more common than is generally supposed, owing to the fact that so few observations are made in the mountains during the time this bird is with us.

378. *Speoyto cunicularia hypogaea*: Burrowing Owl.

Abundant summer resident about nearly all the "dog-towns."

379. *Glaucidium gnoma gnoma*: Pygmy Owl.

Exceedingly rare. Blackwelder has reported it. See his Teton list. Reported also by Skinner.

ORDER XIV. COCCYGES.**CUCULIDAE (Cuckoos, Anis, etc.)**

The Cuckoos are shy birds which seek the cover of dense foliage in orchards, etc. Where they are abundant they are of great economic value because of their habit of feeding upon caterpillars of various kinds. They also eat beetles, grasshoppers, katydids, and other insects. The charge that they are enemies to other birds is unfounded. They are too rare in Wyoming to be of any economic importance.

REFERENCES:

1. "Birds in Their Relation to Man," Weed and Dearborn, pp. 192-194.
2. Biological Survey Bulletin No. 9.
387. **Coccyzus americanus americanus:** Yellow-billed Cuckoo.
There is a specimen in the University collection, which was found dead on the campus, June 8, 1908.
388. **Coccyzus erythrophthalmus:** Black-billed Cuckoo.
Up to 1902 but two observers reported this species. Since then Walker is the only one who has secured specimens. Peabody doubtfully records it.

ALCEDINIDAE (Kingfishers).

The Kingfishers feed almost entirely upon fish and must be regarded as detrimental from the economic standpoint.

REFERENCES:

1. Year Book of the Department of Agriculture, 1900, pp. 411-428.
2. "Birds in Their Relation to Man," Weed and Dearborn, pp. 191-192.
390. **Ceryle alcyon:** Belted Kingfisher.
Very abundant summer resident along all streams in which fish may be found.

ORDER XV. PICI.**PICIDAE (Woodpeckers).**

The Woodpeckers are most important friends of the forest. They live largely upon the larvae of boring beetles and Lipidoptera. Their adaptations of tongue, tail, and feet are evidences that these insects are their natural food. Some of the Woodpeckers are wholly beneficial, since they feed almost entirely upon these injurious larvae. The so-called Sapsuckers vary their diet of insect larvae with the cambium and sap of trees and may do considerable damage. The Red-headed Woodpecker is particularly fond of fruit, beech nuts, and grain, as well as grasshoppers, etc. The Flicker, like most Woodpeckers, eats large numbers of ants. He also feeds upon chinch bugs, grasshoppers, crickets, and cock roaches. He inhabits the open country and is found frequently upon the ground. "With the single exception of the Yellow-bellied Sapsuckers, all our Woodpeckers appear to be extremely beneficial."

REFERENCES:

1. "Food of the Woodpeckers of the United States," F. E. L. Beal, Biological Survey Bulletin No. 37.
2. "Birds in Their Relation to Man," Weed and Dearborn, pp. 181-191.
3. Farmers' Bulletin No. 506, pp. 5-14.

393d. *Dryobates villosus hyloscopus*: Cabanis's Woodpecker.

"Resident; not common. In all probability a portion of the records referred to the Harris's Woodpecker belong to this variety. But few collectors have noted them, and as a rule have referred it to some other form. Thus far the Wyoming records have been made by the National Museum only, which are as follows: Nos. 38270 and 38272, taken at Laramie Peak by Exp. Expd. West of the Missouri River; No. 10789, taken at Fort Bridger by South Pass Wagon Road Expd." (Knight.)

393e. *Dryobates villosus monticola*: Rocky Mountain Hairy Woodpecker.

Fairly common summer resident over most of the wooded regions of the state.

- 394b. **Dryobates pubescens homorus:** Batchelders' Woodpecker.
Fairly common summer resident over most of the state.
Specimens which approach *gairdneri* are frequently found.
400. **Picoides arcticus:** Arctic Three-toed Woodpecker.
Uncommon resident in the northern portion of the state.
Knight's records were all from the northwestern part,
while recent records by Peabody and Cary are from north-
eastern Wyoming.
- 401b. **Picoides americanus dorsalis:** Alpine Three-toed Wood-
pecker.
Knight said: "Common in alpine regions." Recent ob-
servers have failed to report it, with the exception of
Walker, who found it in the Medicine Bow Mountains.
402. **Sphyrapicus varius varius:** Yellow-bellied Sapsucker.
"Possibly a summer resident; but there are no breeding
records. Grinnell reports it rather abundant among the
large timber on the Medicine Bow River; Hayden cap-
tured specimens, August 9th., at Laramie Peak, in 1856;
Wood took specimens on the Medicine Bow River, August
9th, 1856; Holden reports it from the vicinity of Sherman.
There is one specimen in the University collection that was
taken in Carbon County." (Knight.)
- 402a. **Sphyrapicus varius nuchalis:** Red-naped Sapsucker.
Fairly common summer resident at the lower and middle
altitudes, in the timbered regions.
404. **Sphyrapicus thyroideus:** Williamson's Sapsucker.
"Summer resident; rather common. There are the fol-
lowing records of this bird in the state: Hayden, Lar-
amie Peak; Merriam, Yellowstone Park; Grinnell, 'ob-
served but once near Tower Creek, Yellowstone Park';
Jesurun reports one specimen from Douglas; Bond, 'rather
common during migration at Cheyenne'; Nos. 38286, 38285,
8803, 8804, and 62262 from the National Museum, have
been taken in Wyoming." (Knight.)
406. **Melanerpes erythrocephalus:** Red-headed Woodpecker.
Fairly common summer resident of the eastern and north-
ern portions of the state, not found in the southwestern
portion.

408. *Asyndesmus lewisi*: Lewis' Woodpecker.

Common summer resident in northern Wyoming.

412a. *Colaptes auratus luteus*: Northern Flicker.

Rather uncommon summer resident as compared with the following form. All records so far are from the eastern portions of the state.

413. *Colaptes cafer collaris*: Red-shafted Flicker.

Abundant summer resident throughout the state, from the plains region to timber line.

ORDER XVI. MACROCHIRES.

CAPRIMULGIDAE (Nighthawks, Whip-poor-wills, etc.).

Enormous numbers of flying insects are consumed by Nighthawks and Whip-poor-wills. Like the swallows, these birds catch their food while on the wing. Their wide mouths are kept open and so serve as traps for mosquitoes, gnats, flies, beetles, May flies, locusts, etc. Prof. Aughey of Nebraska examined seven stomachs of Nighthawks, which contained altogether three hundred and forty-eight Rocky Mountain locusts. Their principal food is insects which fly at dusk. They are very useful birds.

REFERENCES:

1. Farmers' Bulletin No. 54, pp. 13-14.
2. Biological Survey Bulletin No. 38, p. 9.
3. Year Book of the Department of Agriculture, 1904, p. 514.
4. "Birds in Their Relation to Man," Weed and Dearborn, pp. 178-180.

418. *Phalaenoptilus nuttalli nuttalli*: Poor-will.

Fairly common summer resident at the lower altitudes throughout the state.

420a. *Chordelles virginianus henryi*: Western Nighthawk.

Most of the records of Nighthawks in the state refer to this form, which is abundant summer resident at almost all altitudes up to 11,000 feet.

MICROPODIDAE (Swifts).

The Swifts are not numerous enough in Wyoming to deserve more than mere mention. They, like their allies, feed entirely upon insects which they catch while on the wing. Mosquitoes form a considerable part of their diet.

REFERENCES:

1. Biological Survey Bulletin No. 38, p. 9.
2. "Birds in Their Relation to Man," Weed and Dearborn, pp. 177-178.
3. "Useful Birds and Their Protection," Forbush, p. 340.

425. *Aeronautes melanoleucus*: White-throated Swift.

Knight reported that but little was known of this bird or its abundance in Wyoming. Apparently it is increasing and extending its range, especially in the northern portion of the state, where Richard and Metz both report it. Peabody and Blackwelder also record it. It should be found through central and southwestern Wyoming, but careful search by Walker about Green River failed to reveal any of these birds.

TROCHILIDAE (Hummingbirds).

Hummingbirds are not of great economic importance. They feed upon the nectar of flowers and a few insects. The young are fed chiefly upon small insects.

REFERENCES:

1. Year Book of the Department of Agriculture, 1900, p. 427.
2. "Birds in Their Relation to Man," Ward and Dearborn, p. 177.
3. Farmers' Bulletin No. 506, pp. 15-17.

432. *Selasphorus platycercus*: Broad-tailed Hummingbird.

Common summer resident upon the plains and high up into the mountains.

433. *Selasphorus rufus*: Rufous Hummingbird.

Knight recorded two specimens being taken. Since then Metz has noted it about Sheridan, and Blackwelder found it in the Teton region.

436. ***Stellula calliope*:** Calliope Hummingbird.

An exceedingly rare summer resident. Metz has found it nesting at Sheridan. In the third edition of the A. O. U. check list the statement is made: "Casual in Wyoming and Colorado."

ORDER XVII. PASSERES.

TYRANNIDAE (Tyrant Flycatchers).

The Flycatchers, as their name indicates, feed almost entirely upon insects, which are caught on the wing. The habits of these birds are well known to all. About 90 per cent of their food consists of insects, most of which are noxious species. The Kingbird sometimes catches honey bees, but this is not a common habit with it. About 10 per cent of the food of the common Flycatchers consists of small fruits, such as elderberries, wild cherries, blackberries, etc. All Flycatchers are highly beneficial and are among the best friends of the agriculturist.

REFERENCES:

1. "Food of Our More Common Flycatchers," Biological Survey Bulletin No. 44.
2. "Birds in Their Relation to Man," Weed and Dearborn, pp. 174-177.
3. Farmers' Bulletin No. 506, pp. 18-23.

444. ***Tyrannus tyrannus*:** Kingbird.

Fairly common summer resident in eastern Wyoming; to the westward it becomes much less common.

447. ***Tyrannus verticalis*:** Arkansas Kingbird.

Common summer resident of the lower altitudes over the entire state.

448. ***Tyrannus vociferans*:** Cassin's Kingbird.

Knight says: "Probably a summer resident, but quite rare." Our only recent records of it are by Percival, and Walker in Albany County.

452. ***Myiarchus crinitus*:** Crested Flycatcher.

"Rare and probably accidental. The Wyoming record rests upon a single specimen taken by Dr. Jesurun of Douglas on

June 14, 1896. The skin is in the doctor's collection at the present writing." (Knight.)

454. **Myiarchus cinerascens cinerascens:** Ash-throated Flycatcher.

"Very rare; but may be found as a summer resident. Coues, 'Birds of the Northwest,' p. 240, remarks: 'As in the case of the preceding species, Mr. Akins again furnishes a northernmost quotation, carrying the known range into Wyoming.' I have been unable to find Akins' note on the occurrence of *M. crinitus* in Wyoming, which this note refers to. Bond has also taken a single specimen, which is at the present time in the Cheyenne High School collection." (Knight.) The third edition of the A. O. U. check list says: "Accidental in northern Wyoming and northern Colorado." We do not know their authority for the statement "northern Wyoming"; there are no recent records of the bird in this state, so far as we have been able to ascertain.

456. **Sayornis phoebe:** Phoebe.

"Very rare; probably a summer resident in eastern Wyoming, as it is only known from the very eastern side of the state. Cary reports a single specimen from Newcastle. I have heard this bird calling in the vicinity of Sundance and Fort Laramie, but have never taken a specimen." (Knight.)

457. **Sayornis sayus:** Say's Phoebe.

Fairly common summer resident throughout the entire state at the lower altitudes.

459. **Nuttallornis borealis:** Olive-sided Flycatcher.

Metz and Walker are the only recent observers who record this bird. Apparently it is rare over the entire state.

462. **Myiochanes richardsoni richardsoni:** Western Wood Pewee.

Very abundant summer resident in the aspen groves of the lower and middle altitudes.

464. **Empidonax difficilis difficilis:** Western Flycatcher.

Probably occurs over the entire state. Blackwelder observed them in the Tetons and Walker found them during a migration at Green River. Dr. Jesurun was the only early observer who found this bird.

466. *Empidonax trailli trailli*: Traill's Flycatcher.

There is but little additional information in regard to this species. Jewett reports it as common in the vicinity of Star Valley. Cary found it at Newcastle. Walker took specimens at Green River when great numbers of small Flycatchers were about. Knight was evidently unable to secure much more definite information.

467. *Empidonax minimus*: Least Flycatcher.

We have no recent record of this Flycatcher. Knight said: "Summer resident, but there is very little data as to its distribution and abundance."

468. *Empidonax hammondi*: Hammond's Flycatcher.

"Summer resident; but little is known of its occurrence. Coues reports one specimen taken at Pacific Springs; Allen reports this species from Fort Steele; Jesurun has taken one at Douglas. There are three Wyoming skins in the Smithsonian collection. Nos. 38348 and 10880 were taken at Fort Laramie, the latter skin by Dr. Cooper. No. 10868 was taken at Fort Bridger by Drewel." (Knight.)

469. *Empidonax wrighti*: Wright's Flycatcher.

"Summer resident; abundant." (Knight.) Our recent records are by Metz, Peabody, and Lockwood. The small Flycatchers are frequently a puzzle in the field and doubtless some of the more common ones have been given the credit when it should have belonged to some other form.

ALAUDIDAE (Larks).

The Horned Larks are the most abundant birds of the plains regions. During the winter months they feed almost exclusively upon weed seeds. During the summer insects (caterpillars, beetle larvae, June beetles, grasshoppers, etc.) constitute from 20 to 40 per cent of their food. It is their ability to consume large quantities of weed seeds that make these birds of great economic value. They also feed to some extent upon waste grain, but do not injure growing crops nor grain in the shock.

REFERENCES:

1. "The Horned Larks and Their Relation to Agriculture." Biological Survey Bulletin No. 23.
2. Farmers' Bulletin No. 506, pp. 23-25.

474c. *Otocoris alpestris leucolaema*: Desert Horned Lark.

The most abundant resident of the plains region, going in great flocks in the winter. At this time the Snow-flake is found with them.

CORVIDAE (Crows, Jays, Magpies, etc.).

The Crows and Magpies are not among the protected birds in most states, and there seems to be no good reason to create a sentiment in their favor, although it is probable that the harm which they do in destroying eggs and grain and committing other depredations is balanced by the good they do in destroying small mammals, carrion, and injurious insects, grubs, etc. Young pet crows have been known to keep the cabbage patch free from the larvae of the cabbage butterfly. The crow has the habit of pulling up young corn and other growing grain. Later in the season he tears open the husk of the young ears and destroys the corn before it is mature. He is also fond of eggs and young birds.

The Magpie has even a worse record. He eats many birds' eggs and young birds and attacks wounded animals. He also steals the hunters' lunch and game. He is by nature a thief and a murderer.

The Blue Jay's habits are less open to criticism. He prefers nuts to all other food (beech nuts and acorns). They constitute 40 per cent of his food. Jays frequently eat corn and various kinds of small fruit, such as blackberries and raspberries, mulberries, and currants. Like the crow, the jays are sometimes guilty of robbing birds' nests of eggs or young. They also capture many injurious insects and are as a rule considered beneficial.

REFERENCES:

1. Biological Survey Bulletin No. 54, pp. 15-17, 18-19.
2. Year Book of the Department of Agriculture, 1900, p. 424.
3. Year Book of the Department of Agriculture, 1907, pp. 171-172.
4. "Birds in Their Relation to Man," Weed and Dearborn, pp. 167-173.

475. *Pica pica hudsonia*: Magpie.

An abundant bird found from the plains well up into the mountains wherever brush or timber exists.

477. *Cyanocitta cristata cristata*: Blue Jay.

Clearwaters reports this species as well as a few other eastern forms from the vicinity of La Grange, near the Nebraska line. Buck reports it from his region, but he probably confused it with one of the following species.

478b. *Cyanocitta stelleri diademata*: Long-crested Jay.

Along the southern boundary of the state we have a jay, some specimens of which are referable to this form. Farther to the north the Black-headed Jay is the common species and some may occur here with *diademata*. Reported by Lockwood and Walker. There are specimens of both species in the Wyoming collection.

478c. *Cyanocitta stelleri annectens*: Black-headed Jay.

Fairly common resident. In the southern portion of the state it intergrades with the preceding species.

480. *Aphelocoma woodhousei*: Woodhouse's Jay.

Occurs only along the southern portion of the state. Walker has found it at Green River and Lockwood in the vicinity of Laramie. These are the only recent records.

484. *Perisoreus canadensis canadensis*: Canada Jay.

Knight reported only the Rocky Mountain Jay, but Metz and Peabody have both found this species.

484a. *Perisoreus canadensis capitalis*: Rocky Mountain Jay.

Abundant resident almost throughout the entire state.

486. *Corvus corax sinuatus*: Raven.

Fairly common through the central and northern portions of the state. It should occur in southern Wyoming, but the only records for it are from Saratoga Valley and Riverton.

488. *Corvus brachyrhynchos brachyrhynchos*: Crow.

Common summer resident throughout almost the entire state. Buck reports both it and the Raven from his region, which is the only case that we have both recorded from the same vicinity.

488b. *Corvus brachyrhynchos hesperis*: Western Crow.

Blackwelder reports it from the Tetons and Clearwaters records it. As to whether this or the preceding form is of more common occurrence in this state, we cannot say.

491. *Nucifraga columbiana*: Clarke's Nutcracker.

Abundant resident in the mountains of the state. It ranges from 8,000 feet to timber line and above. Almost its entire food in Laramie Hills consists of the seeds of *Pinus scopulorum*.

492. *Cyanocephalus cyanocephalus*: Pinon Jay.

Apparently a fairly common resident over most of the state.

ICTERIDAE (Blackbirds, Orioles, Meadow Larks, etc.).

This family includes birds which vary considerably in food and nesting habits. In the main they are decidedly beneficial, but a few must be considered injurious.

The Bobolink, during the breeding season, consumes enormous numbers of injurious insects. At other times its food consists principally of weed seeds. During the spring and fall migrations it devastates rice fields and does great damage in the Southern states.

The Meadow Lark is decidedly beneficial, and since it is one of the most abundant birds of the plains, it is of great economic value. For some reason it has increased wonderfully in numbers recently. It feeds upon weed seeds and injurious insects (grasshoppers, May beetles, cut worms, etc.).

The various Blackbirds feed upon injurious insects, weed seeds, and grain. Some Blackbirds become quite tame during the plowing season. They follow the plow closely and pick up grub, cut worms, and other insect larvae. As a rule they are beneficial, but some species are condemned in part.

The Orioles feed upon fruit to some extent, but mainly upon injurious caterpillars. They are valuable birds.

REFERENCES:

1. Year Book of Department of Agriculture, 1895, pp. 419-430.
2. Biological Survey Bulletin No. 13.
3. Year Book of Department of Agriculture, 1894, pp. 233-248.
4. Year Book of Department of Agriculture, 1912, pp. 279-284.
5. Year Book of Department of Agriculture, 1898, pp. 227-233.
6. "Birds in Their Relation to Man," Weed and Dearborn, pp. 156-167.

494. **Dolichonyx oryzivorus:** Bobolink.

Fairly common summer resident in suitable portions of the state. Jewett found it to be common at Afton.

495. **Molothrus ater ater:** Cowbird.

Exceedingly common summer resident over the entire state at the lower altitudes.

497. **Xanthocephalus xanthocephalus:** Yellow-headed Blackbird.

Abundant summer resident about the marshes of the lower altitudes throughout the entire state.

498. **Agelaius phoeniceus phoeniceus:** Red-winged Blackbird.

Knight reported only the Red-wing, and many of the recent observers record it, from the eastern portion of the state. Blackwelder reports it from the Teton region. It is probable that some of the records should belong to some of the succeeding forms.

498d. **Agelaius phoeniceus fortis:** Thick-billed Redwing.

At the lower and middle altitudes of the entire state Redwings are found, and it is probable that most of the records should be for this species. It has been reported by Richard, Peabody, Buck, Clearwaters, and Walker. Specimens taken near Laramie are very evidently of this species.

501—1. **Sturnella neglecta:** Western Meadowlark.

Almost all the records for Meadowlarks are for *neglecta*, but Percival reports both this and *neglecta*. He has skins of both. (See his local list.)

501. **Sturnella neglecta:** Western Meadowlark.

Very abundant summer resident throughout Wyoming at the lower and middle altitudes.

507. **Icterus galbula:** Baltimore Oriole.

Percival reports that it is a fairly common summer resident in the region of Hat Creek. The third edition of the A. O. U. list reports it from Wyoming, but we know nothing of their authority for the statement.

508. **Icterus bullocki:** Bullock's Oriole.

Fairly common over most of the state; occurs in less numbers in the northern portion than in the central portion and southward.

509. **Euphagus carolinus:** Rusty Blackbird.
Knight placed this bird in his hypothetical list. Sawyer, Peabody, and Lockwood record it now.
510. **Euphagus cyanocephalus:** Brewer's Blackbird.
Abundant summer resident from the plains and well up into the mountains throughout the entire state.
- 511b. **Quiscalus quiscula aeneus:** Bronzed Grackle.
Knight reported it as not common, and since 1902 there are two observers who record it.

FRINGILLIDAE (Finches, Sparrows, etc.).

In Wyoming, as elsewhere, the Sparrows and Finches are much more abundant than any other family. This, together with their habit of consuming enormous numbers of weed seeds and noxious insects, makes them of the greatest value to the farmer and ranchman. During the summer months they feed largely upon insects and insect larvae. The young of many species are raised upon caterpillars of various kinds, including cut worms as a favorite article of food. During the colder months the Sparrows feed almost exclusively upon the seeds of weeds, and elsewhere in this bulletin figures are given to show that they destroy many tons of weed seed. The Sparrows are of very great economic value.

REFERENCES:

1. Year Book of the Department of Agriculture, 1898, pp. 221-232.
 2. Biological Survey Bulletin No. 15.
 3. Farmers' Bulletin No. 493.
 4. Farmers' Bulletin No. 506, pp. 25-29.
 5. "The Food of Nesting Birds," Year Book of the Department of Agriculture, 1900.
514. **Hesperiphona vespertina vespertina:** Evening Grosbeak.
Peabody has taken specimens of this species from Crook County. This and his other skins were verified by Oberholser. Many eastern forms are found in the region in which he worked.

- 514a. *Hesperiphona vespertina montana*: Western Evening Grosbeak.

Metz and Lockwood are the only observers of recent date who note it. Knight had but little information in regard to it.

- 515a. *Pinicola enucleator montana*: Rocky Mountain Pine Grosbeak.

over the entire state.

518. *Carpodacus cassinii*: Cassin's Purple Finch.

Fairly common summer resident in the timbered mountains over the entire state.

519. *Carpodacus mexicanus frontalis*: House Finch.

Abundant summer resident in the southern portion of the state. Our most northerly record is from Douglas, and it is doubtful if this bird ever goes much farther north in the state. It has increased remarkably in numbers during recent years.

521. *Loxia curvirostra minor*: Crossbill.

Knight recorded only Bendier's Crossbill. Richard reports that they are common winter residents high in the mountains and he thinks he has seen them there in the summer. Lockwood also reports them. There is one specimen in the collection of mounted birds at the Cheyenne High School.

- 521a. *Loxia curvirostra stricklandi*: Mexican Crossbill.

Knight's records were for *bendirei*, which is synonymous with this species. It is a fairly common summer resident in the mountains and doubtless they winter with us.

522. *Loxia leucoptera*: White-winged Crossbill.

"Resident; not common. None of these birds have been reported in recent years. Hayden reports two specimens taken at Laramie Peak, August 25, 1857, and two specimens taken on the west side of the Wind River Mountains, June 5, 1860. Coues reports one specimen taken at Box Elder Creek, August 21, 1870. From these records there is no doubt about their breeding in the state and I am quite certain that they remain all winter; but there are no winter specimens reported." (Knight.)

524. **Leucosticte tephrocotis tephrocotis:** Gray-crowned Rosy Finch.

Knight gave no records of the occurrence of this bird in the state during the summer. He merely said that it was a winter resident, with the idea in mind that it was probably a summer resident at the high altitudes. Records for it as a summer resident are now quite numerous. It is not found in summer in the Medicine Bow Mountains as was expected, but Blackwelder reports it from both the Big Horn and Teton Mountains during the summer. Warren also saw Rosy Finches. They winter quite commonly in the mountains and out on the plains. On March 16, 1912, Walker found flocks near Laramie, and in November and December at 9,000 feet, when the snow was 18 inches deep, he found them in the Medicine Bow Mountains.

- 524a. **Leucosticte tephrocotis littoralis:** Hepburn's Rosy Finch.

Lockwood and Peabody are the only observers of recent years who report it. Knight said it was a winter resident and was only known in the southeastern part of the state.

525. **Leucosticte atrata:** Black Rosy Finch.

Richard says this form is a common winter resident about Cody, with *tephrocotis*. The A. O. U. list says, "winters south to southeastern Wyoming." Ridgeway, in Vol. I, "Birds of North and Middle America," pp. 75 and 76, says it breeds on Uinta Mountains, Wyoming. Chapman, in "Color Key to North American Birds," p. 179, says, "Breeds in Idaho and Wyoming." Knight said that none of them had been reported in recent years.

528. **Acanthis linaria linaria:** Redpoll.

Fairly common winter resident, as reported by many of the collectors, but it has not occurred about Laramie during the winters of 1911, 1912, and 1913, as they formerly did.

529. **Astragalinus tristis tristis:** Goldfinch.

Messrs. Jewett and Peabody both report this species, but Jewett probably confuses it with the Pale Goldfinch, 529a. Peabody is no doubt correct, since he collected in a region where it is likely to occur and he has had his identification verified by an expert.

529a. *Astragalinus tristis pallidus*: Pale Goldfinch.

A fairly common summer resident along streams and brushy places at the lower altitudes.

530. *Astragalinus psaltria*: Arkansas Goldfinch.

"Probably very rare, if not accidental. The Wyoming record rests upon a single specimen taken by Bond at Cheyenne, May 26, 1889. Mr. Bond has the skin in his collection." (Knight.)

533. *Spinus pinus*: Pine Siskin.

Abundant summer resident in the foothills and mountains.

534. *Plectrophenax nivalis nivalis*: Snow Bunting.

Common winter resident on the plains with the Desert Horned Larks.

536. *Calcarius lapponicus lapponicus*: Lapland Longspur.

There are skins in the University collection which were taken by Knight and verified by Ridgeway, but Knight failed to record this form in his bulletin. Specimens taken by Walker about Laramie in the spring of 1912 belong to the succeeding species.

536a. *Calcarius lapponicus alascensis*: Alaska Longspur.

Peabody and Walker have taken specimens of this species. Lockwood's record is conditionally referred to this form, but may belong to the preceding.

538. *Calcarius ornatus*: Chestnut-collared Longspur.

Peabody and Percival record this and indicate that it is very common. Knight recorded that it was rare. Biological Survey collectors have found it to be fairly common summer resident in the northeastern portion of the state, and it is on this authority that the third edition of the A. O. U. check list records it.

539. *Rynchophanes mccowni*: McCown's Longspur.

Abundant summer resident on the plains and southern portion of the state, and is reported by Metz from the northern part.

540a. *Poocetes gramineus confinis*: Western Vesper Sparrow.

Very abundant summer resident at all the lower altitudes over the entire state and occurs occasionally almost to timber line.

- 542a. *Ammodramus sandwichensis savanna*: Savannah Sparrow.
"Accidental. This has been placed in the Wyoming list upon a single specimen which Dr. Jesurun has taken at Douglas. I have examined the skin and I am unable to distinguish it from the typical eastern bird." (Knight.)
- 542b. *Passerculus sandwichensis alaudinus*: Western Savannah Sparrow.
Very abundant summer resident about marshy places from the plains up to at least 9,000 feet and probably higher.
- 546a. *Ammodramus savannarum bimaculatus*: Western Grass-hopper Sparrow.
Knight did not record this bird, but Peabody, Lockwood, and Blackwelder have found it in the state.
- 552a. *Chondestes grammacus strigatus*: Western Lark Sparrow.
Rather an uncommon summer resident over the plains region and lower foothills of the state.
553. *Zonotrichia querula*: Harris' Sparrow.
Knight said migratory, rare; and that but two specimens had been found in the state. Peabody now has found it.
554. *Zonotrichia leucophrys leucophrys*: White-crowned Sparrow.
From the foothills to timber line, and even above, this bird is an abundant summer resident.
- 554a. *Zonotrichia leucophrys gambeli*: Gambel's Sparrow.
Metz is the only recent observer who positively records it. Jewett noticed White-crowned Sparrows that were possibly of this species.
558. *Zonotrichia albicollis*: White-throated Sparrow.
Lockwood has found this bird. His is the only record since that by Knight, who recorded but one specimen from the state.
- 559a. *Spizella monticola ochracea*: Western Tree Sparrow.
Apparently a rather uncommon migrant; probably a summer resident, as it has been found during late winter and early spring in southern Wyoming.
560. *Spizella passerina passerina*: Chipping Sparrow.
"Probably a summer resident, but rare. The record of this species in the state comes from the National Museum. Specimen No. 38477 was taken at Laramie Peak and No.

11213 at Fort Bridger. It is quite probable that it may be common along the eastern border of the state." (Knight.)

- 560a. *Spizella passerina arizonae*: Western Chipping Sparrow.

Fairly common summer resident over most of the state.

561. *Spizella pallida*: Clay-colored Sparrow.

Knight recorded this as a rather common summer resident, but Blackwelder in his Teton list is the only one who reports it.

562. *Spizella breweri*: Brewer's Sparrow.

Very abundant summer resident throughout the state at the lower altitudes and ranges up to almost 9,000 feet.

566. *Junco aikeni*: White-winged Junco.

Reported as fairly common summer resident from the central to the northern portion of the state, and almost a winter resident.

567. *Junco hyemalis hyemalis*: Slate-colored Junco.

Rather uncommon migrant and possibly a summer resident.

- 567b. *Junco hyemalis connectens*: Schufeldt's Junco.

Blackwelder has found it in the Tetons and Percival took a male specimen in June, 1912. These are the only records of it since Knight's record that it was quite abundant in Wyoming during migrations.

- 567f. *Junco hyemalis montanus*: Montana Junco.

"Possibly a winter resident. But little is known of this species. It is very certain that data originally referred to the Oregon Junco in part belongs to this species. These birds arrive in Laramie about the middle of March and remain for only a few weeks. There is one skin in the University collection that was taken at Laramie, September 27, 1898. The National Museum has the following numbers belonging to this species, that were taken in Wyoming: 71114, taken by A. G. Brackett, and 11180 and 11186, taken by Drexel at Fort Bridger."

- 567g. *Junco hyemalis mearnsi*: Pink-sided Junco.

The most abundant Junco during migration, at least in southern Wyoming. It is evidently a summer resident in the northern portion of the state, but has not been found as such in the southern region.

567h. *Junco hyemalis annectens*: Ridgway's Junco.

Fort Bridger is the type locality for this Junco. F. M. Bailey, in "Handbook of Birds of the Western United States," mentions it as from Wyoming. We have no recent records of it.

570b. *Junco phaeonotus caniceps*: Gray-headed Junco.

An exceedingly abundant Junco in the Laramie Hills and Medicine Bow Mountains. Walker is the only recent observer who records it. Knight indicated that it occurred only in southern Wyoming and so does the A. O. U. check list of recent issue.

574—1. *Amphispiza nevadensis nevadensis*: Sage Sparrow.

Knight reported that it was a common summer resident, but the only recent observers who report it are Metz from Sheridan and Walker from Albany County. The A. O. U. list records it from central Wyoming, probably upon Knight's record.

581b. *Melospiza melodia montana*: Mountain Song Sparrow.

Fairly common summer resident in certain parts of the state, but the only recent records of it are by Blackwelder in the Teton region, Jewett, Lockwood, Clearwaters, and Walker.

583. *Melospiza lincolni lincolni*: Lincoln's Sparrow.

Knight said that it was "probably a summer resident in the mountains, common during migrations." The recent observers to record it are Metz, Clearwaters, Blackwelder in the Teton region, and Walker from Albany County. Walker makes the following comments on it: "Very abundant summer resident from the plains up to almost 9,000 feet. Nest, with newly hatched young, found near Albany on June the 28th." (1912.)

585c. *Passerella iliaca schistacea*: Slate-colored Fox Sparrow.

Our only record of this species is by Jewett, who found them near Afton; possibly Peabody's record of the Fox Sparrow should belong to it. See hypothetical list.

588. *Pipilo maculatus arcticus*: Arctic Towhee.

Fairly common summer resident over most of the state.

588a. *Pipilo maculatus montanus*: Spurred Towhee.

Lockwood thinks he has found this bird. The recent A. O. U. check list records it from eastern Wyoming, probably upon the authority of Knight, who said it was an abundant summer resident in the northeastern portion of the state.

592—1. *Oreospiza chlorura*: Green-tailed Towhee.

Common summer resident in the sage-brush region throughout almost the entire state.

593. *Cardinalis cardinalis cardinalis*: Cardinal.

Our only record of this is by Clearwaters, who records it from the eastern portion of the state.

596. *Zamelodia melanocephala*: Black-headed Grosbeak.

The first record of its occurrence in summer in southern Wyoming is by Walker, who took one male on June 26, 1911, in Centennial Valley. Metz, Peabody, Lockwood, and Blackwelder report it. Apparently found rather commonly in northeastern Wyoming.

599. *Passerina amoena*: Lazuli Bunting.

Reported by Walker, Metz, Peabody, and Blackwelder in the Teton regions. While not common, this bird is evidently more abundant than formerly.

604. *Spiza americana*: Dickcissel.

Metz and Peabody record this from the northern and eastern portions of the state. Clearwaters has found it in eastern Wyoming. Probably it is extending its range westward and becoming a summer resident.

605. *Calamospiza melanocorys*: Lark Bunting.

One of the most abundant birds of the plains region of the state; and during post breeding migrations it occasionally goes to the higher altitudes.

TANGARIDAE (Tanagers).

During the fall migrations the Tanagers come to the lower altitudes and while there they feed largely upon the wild fruits, seeds, and insects. In California they have at times done damage to fruit. Their food is principally insects and insect larvae, which they destroy in great numbers. In the east they are efficient protectors of the oak and chestnut trees.

REFERENCES:

1. North American Fauna No. 7, p. 108.
2. North American Fauna No. 16, p. 127.
3. Year Book of the Department of Agriculture, 1904, p. 242.
4. "Useful Birds and Their Protection," Forbush, pp. 262-275.

607. *Piranga ludoviciana*: Western Tanager.

Fairly common summer resident over the middle altitudes of the state.

608. *Piranga erythromelas*: Scarlet Tanager.

"Accidental. But a single specimen has been reported from Wyoming. Mr. Frank Bond took one at Cheyenne on May 28th, 1889. The skin is in his collection. It is a male bird, in gorgeous plumage, and was alone." (Knight.)

HIRUNDINIDAE (Swallows).

The Swallows spend much time on the wing. Their habit of flying above meadows in search of insects is well known to all. They are almost entirely insectivorous during the summer months. They destroy enormous numbers of injurious insects, as well as some beneficial species. Their long pointed wings and wide gapes adapt them well to their mode of life. They feed upon mosquitoes, flies, gnats, moths, and various beetles, including the June beetles and striped cucumber beetle.

The government has issued a bulletin urging the protection of Swallows because they destroy the cotton boll weevil during migrations.

REFERENCES:

1. "Value of Swallows as Insect Destroyers," Biological Survey Circular No. 56.
2. Year Book of the Department of Agriculture, 1910, p. 418.
3. Farmers' Bulletin No. 54, pp. 36-38.
4. "Useful Birds and Their Protection," Forebush, pp. 343-348.

611. *Progne subis subis*: Purple Martin.

Peabody reports this from the eastern portion of the state. Knight recorded it also.

612. *Petrochelidon lunifrons lunifrons*: Cliff Swallow.

Exceedingly abundant summer resident over the lower or middle altitudes of the state.

613. *Hirundo erythrogastra*: Barn Swallow.

Common summer resident over most of the state at the lower altitudes.

614. *Iridoprocne bicolor*: Tree Swallow.

Knight said that it was summer resident; not common and distributed rather locally. This evidently is still the case, as only Blackwelder, Walker, and Clearwaters have noted it.

615. *Tachycineta thalassina lepada*: Northern Violet-green Swallow.

Abundant summer resident from the foothills to timber line in many portions of the state.

616. *Riparia riparia*: Bank Swallow.

Abundant summer resident over most of the state.

617. *Stelgidopteryx serripennis*: Rough-winged Swallow.

Knight said that it is probably a summer resident, but that the data was insufficient to mark its occurrence in Wyoming. Blackwelder has since recorded it from the Teton region. This is the only recent record. It is probable that many are recorded under the preceding form which should properly be placed under *serripennis*.

BOMBYCILLIDAE (Waxwings).

The Waxwings are fond of wild and cultivated fruits of various kinds. They are sometimes a nuisance in cherry trees. The young are fed mostly on insects and their larvae, and the adults are great insect destroyers. When a flock of these birds enters an orchard infested by canker worms, they are likely to rid it of these pests. Elm trees are also protected from elm leaf beetles. The Waxwings feed upon a variety of insects and they are great gluttons, stuffing on fruit or insects until they can swallow no more. They are on the whole beneficial and deserve protection.

REFERENCES:

1. North American Fauna 19, p. 89.
2. "Useful Birds and Their Protection," Forebush, pp. 209-211.

618. *Bombycilla garrula*: Bohemian Waxwing.

Knight reported that it was a winter resident and locally abundant. Richard now reports that they are common

residents in the mountains, which would indicate that they breed there. Metz, Peabody, and Percival also report it.

619. *Bombycilla cedrorum*: Cedar Waxwing.

Common resident in portions of the state. Metz, Blackwelder, and Clearwaters record it.

LANIIDAE (Shrikes).

The Shrikes are flesh eaters exclusively, their food consisting of grasshoppers, beetles, mice, and sparrows. During the summer months 75 per cent of the food of the Loggerhead Shrike consists of grasshoppers. During the winter months they feed upon birds and mice. On the whole, the Shrikes are considered beneficial.

REFERENCES:

1. Year Book of the Department of Agriculture, 1900, pp. 300-302 and 416-417.
2. Biological Survey Bulletin No. 9, pp. 15-25.

621. *Lanius borealis*: Northern Shrike.

Common winter resident.

622a. *Lanius ludovicianus excubitorides*: White-rumped Shrike.

Common summer resident over most of the state.

VIREONIDAE (Vireos).

The Vireos are among the most valuable insect destroyers. They are fond of caterpillars and the larvae of beetles which defoliate the trees. They also feed upon aphids and various species of beetles, bugs, and orthoptera. Some wild fruits are eaten also.

The Western Warbling Vireo is the only member of the family that is abundant in this state. It feeds almost exclusively upon insects that it finds on the aspens and trees of the foothills and along the streams.

REFERENCES:

1. Biological Survey Bulletin No. 30, pp. 39-40.
2. Year Book of the Department of Agriculture, 1906, pp. 194-195.
3. Year Book of the Department of Agriculture, 1900, p. 416.
4. "Useful Birds and Their Protection," Forebush, pp. 203-208.

624. *Vireosylva olivacea*: Red-eyed Vireo.

Knight said it was possibly a summer resident, but quite rare and largely confined to eastern Wyoming. The only recent record of it is by Walker, who found one at Green River well toward the western portion of the state. This specimen was taken during the fall migration of 1911.

627. *Vireosylva gilva gilva*: Warbling Vireo.

Knight considered all records of the Warbling Vireos under this head and said: "Summer resident and rather common." The only one reporting it now is Sawyer. All other observers record *swainsoni*.

627a. *Vireosylva gilva swainsoni*: Western Warbling Vireo.

Common summer resident in the foothills and about timber over almost the entire state.

629. *Lanivireo solitarius solitarius*: Blue-headed Vireo.

"Accidental. The Wyoming record is based upon a single specimen taken by Drexel at Fort Bridger, 1858." (Knight.)

629b. *Lanivireo soltarius plumbeus*: Plumbeus Vireo.

Knight said it was probably a summer resident, but that there were no breeding records. Peabody has since found it breeding in Weston and Crook Counties.

633. *Vireo belli belli*: Bell's Vireo.

"Probably accidental. The only Wyoming record comes from Grinnell, which is as follows: 'Quite abundant late in August among the timber and low brush on the streams flowing out from the Freezeout Mountains, where the writer took specimens.'" (Knight.)

MNIOTILTIDAE (Wood Warblers).

For their size probably no birds consume more insects than the Warblers do. They seem to be always hungry and hunting for food. They capture almost incredible numbers of small, noxious insects. They also eat caterpillars, beetle larvae, and insects of various kinds. The Warblers probably rank first among birds as insect destroyers. Chapman, in his "Warblers of North America," gives interesting figures on the food of these birds.

OTHER REFERENCES:

1. "Useful Birds and Their Protection," Forebush, pp. 185-203.
 2. "Birds in Their Relation to Man," Weed and Dearborn, pp. 112-119.
636. **Mniotilta varia:** Black and White Warbler.
"Accidental. Dr. Jesurun has one specimen in his collection that he captured at Douglas, May 17, 1899. The bird was alone." (Knight.)
644. **Vermivora virginiae:** Virginia Warbler.
"It seems singular, but little is known of this bird in Wyoming. In accordance with its geographical distribution, it should be a summer resident, but none of the recent observers have reported it. The A. O. U. check list, second edition, reports it as belonging to Wyoming. Besides this, Aiken is the only one to report it from the state. He notes the following: 'A fine singer, usually found on the hill-sides covered with brush.' He also states that he took eggs and nests. Further notes on this species are very desirable." (Knight.)
645. **Vermivora rubricapilla rubricapilla:** Nashville Warbler.
"Rare summer resident. Bond has taken a single specimen at Cheyenne and I have taken one specimen on Chugwater Creek, May 29, 1898. Mr. Chas. Gilmore captured two specimens in the Freezeout hills in 1897, both of which are in the University collection. One of these skins was conditionally referred to the Calaveras Warbler by W. W. Cooke. ('Further Notes on the Birds of Colorado,' Bulletin 44, State Agricultural College, Colorado, March, 1898, p. 168.)" (Knight.)
- 645a. **Vermivora rubricapilla gutturalis:** Calaveras Warbler.
One specimen found dead in a poisonous cave by M. P. Skinner of the Yellowstone Park.
646. **Vermivora celata celata:** Orange-crowned Warbler.
"Summer resident; not common. The following records have been collected: Drexel, Fort Bridger; McCarthy, Green River; Grinnell, Como Bluff; Jesurun, Douglas; Bond, Cheyenne." (Knight.) Walker took a specimen which appears to be this form, but it has not been positively identified.

646a. *Vermivora celata lutescens*: Lutescent Warbler.

"The data regarding this variety is insufficient to warrant an expression as to the extent of its occurrence in the state." (Knight.) Lockwood thinks he has found it in Albany County. Knight gives a few authentic records.

647. *Vermivora peregrina*: Tennessee Warbler.

Knight records it as accidental. Peabody is the only recent observer who records it.

648a. *Compsothlypis americana usneae*: Northern Parula Warbler.

The recent A. O. U. list records it as casual in Wyoming and Colorado. They have probably based their statement on Knight's record of 648, in which he stated it was accidental; there being but two records of the Parula Warbler in Wyoming.

652. *Dendroica aestive aestiva*: Yellow Warbler.

Abundant at all the lower and middle altitudes where it can find brush or timber suitable for nesting.

654. *Dendroica caerulescens caerulescens*: Black-throated Blue Warbler.

Mr. Lockwood reports that in 1893 he took a specimen at Casper.

655. *Dendroica coronata*: Myrtle Warbler.

The only recent records are by Richard, who reports that they are common about Cody during migrations; and by Sawyer, who reported it from the Laramie Hills. Knight said migratory, and rather uncommon, and cited a few references.

656. *Dendroica auduboni auduboni*: Audubon's Warbler.

Common breeder in the lower timbered regions of the mountains.

659. *Dendroica pennsylvanica*: Chestnut-sided Warbler.

"Probably accidental. The Wyoming record rests upon a single specimen taken at Cheyenne, May 23, 1889, by Mr. Frank Bond. Mr. Bond published this record in *The Auk*, VI, 1889, 341, and has the skin in his collection." (Knight.)

661. *Dendroica striata*: Black-poll Warbler.

"Possibly a summer resident; but no data. A very rare eastern bird that occasionally reaches Wyoming. Jesurun reports having taken it at Douglas, and Bond has two skins in his collection that were taken at Cheyenne. Williston reports a single specimen taken at Lake Como." (Knight.)

668. *Dendroica townsendi*: Townsend's Warbler.

Knight said that it was probably a summer resident in western Wyoming and cited Dr. Jesurun's taking them at Douglas. Since then, Jewett reports that one was noted at 7,500 feet in Star Valley. Cook, in "Birds of Colorado," Bulletin 56, page 219, states that there is a young bird in the Bond collection. Walker took one at Green River, September 1, 1911, and another at Hatton, in Albany County, on September 13, 1911. This probably extends its range far to the eastward of any previous record.

674. *Seiurus aurocapillus*: Oven-bird.

The first report we had of this in Wyoming was from Fisher of the University of South Dakota, who recorded it at Hulett and Sundance in June, 1911. He stated that they were fairly common summer residents there. Peabody and Clearwaters also record it.

675a. *Seiurus noveboracensis notabilis*: Grinnell's Water-thrush.

Lockwood reports it from Natrona County. Knight said that it was probably a summer resident, but that little was known of it in Wyoming. The type specimen was taken by Dr. Williston at Lake Como, on June 10, 1878. Bond took one at Cheyenne.

680. *Oporornis tolmiei*: Macgillivray's Warbler.

Moderately common summer resident over most of the state along the brushy streams of the foothills at the lower altitudes.

681a. *Geothlypis trichas occidentalis*: Western Yellow-throat.

Rather an uncommon summer resident. Knight said it is a rather common summer resident, but there are very few to be found in southern Wyoming. Northward they may be more common.

683a. *Icteria virens longicauda*: Long-tailed Chat.

Rather common summer resident over most of the state at the lower altitudes where they can find suitable brushy streams.

685. *Wilsonia pusilla pusilla*: Wilson's Warbler.

Knight reported that it is a summer resident not uncommon. Most of the recent observers have reported the Pileolated Warbler as quite common. If there is a recognizable form such as *pileolata*, it certainly occurs in this region.

685a. *Wilsonia pusilla pileolata*: Pileolated Warbler.

Abundant summer resident and ranging well up into the mountains. (See comments under the preceding species.)

687. *Setophaga ruticilla*: Redstart.

Knight recorded it as an uncommon summer resident and cited a few occurrences. Metz is the only recent observer who records it.

MOTACILLIDAE (Wagtails).

The Pipits live at high altitudes and are of but slight economic importance in Wyoming, except during migrations, when they descend to the lower altitudes and catch many insects.

REFERENCES:

1. Biological Survey Bulletin No. 38, p. 84.

697. *Anthus rubescens*: Pipit.

Knight said this was probably a summer resident and quite abundant in marshy places during the spring. Walker has found it breeding abundantly above timber line in alpine meadows in July. Jewett, Metz, Peabody, and Blackwelder record it.

700. *Anthus spraguei*: Sprague's Pipit.

"Thus far this species has been reported only by Mr. Bond of Cheyenne, who has two skins in his collection that were taken April 24, 1888. This will probably prove a rare species in Wyoming, but not accidental." (Knight.)

CINCLIDAE (Dippers).**701. *Cinclus mexicanus unicolor*: Dipper.**

Fairly common summer resident on the mountain streams. Its migrations are mainly vertical. During the summer they nest far up in the mountains and in the winters they descend to the foothills and streams, where they can find open water.

MIMIDAE (Thrashers, Mockingbirds, etc.).

The Thrashers and Catbirds nest in small bushes or shrubs. They stay near the ground as a general thing and feed their young upon cutworms, grubs, various kinds of caterpillars, and adult insects. The adult birds also consume many insects, but they are also fond of fruit. A Catbird now and then will feed upon honey bees. These birds like to build near human dwellings and their company is worth cultivating.

REFERENCES:

1. "Useful Birds and Their Protection," Forebush, pp. 178-184.
2. Farmers' Bulletin No. 54, pp. 33-35 and 39-41.
3. Year Book of the Department of Agriculture, 1900, pp. 303-304 and 415-416.
4. North American Fauna No. 33, p. 241.

702. *Oreoscoptes montanus*: Sage Thrasher.

Common summer resident throughout the sage-brush and plains region. The type specimen was taken at Sandy Creek, Wyoming.

703a. *Mimus polyglottos leucopterus*: Western Mockingbird.

Knight recorded *polyglottos*, but the record is here considered as *leucopterus*. Peabody records it. Uncommon in this state.

704. *Dumetella carolinensis*: Catbird.

Common summer resident along the streams of the plains and lower altitudes.

705. *Texostoma rufum*: Brown Thrasher.

Knight recorded it as summer resident not uncommon in eastern Wyoming, especially in areas that are below 7,000 feet elevation. Metz, Lockwood, Clearwaters, and Percival all record it.

TROGLODYTIDAE (Wrens).

The Wrens are almost entirely insectivorous. They feed upon caterpillars, grasshoppers, beetles, and bugs. All are valuable birds; the House Wren is particularly so.

REFERENCES :

1. "Useful Birds and Their Protection," Forebush, pp. 292-294.
2. Year Book of the Department of Agriculture, 1897, p. 670.
3. Biological Survey Bulletin No. 54, pp. 35-36.
4. Year Book of the Department of Agriculture, 1900, pp. 413-415.
5. Biological Survey Bulletin No. 30, pp. 65-66.

715. *Salpinctes obsoletus obsoletus*: Rock Wren.

Common summer resident along all the foothills, and in places extending out on the plains.

717a. *Catherpes mexicanus conspersus*: Canon Wren.

Knight had only one authentic record for this state, but evidently the bird has recently increased or extended its range, or both. Both Richard and Metz report it as a fairly common summer resident in northern Wyoming. Blackwelder found it in the Teton region. Lockwood has seen a bird in the vicinity of Laramie which he thinks was the Canon Wren.

721a. *Troglodytes aedon parkmani*: Western House Wren.

Common summer resident throughout the state at the lower and middle altitudes.

722a. *Nannus hiemalis pacificus*: Western Winter Wren.

Lockwood and Blackwelder are the only recent observers who have found this bird. Knight recorded that it was probably a rare summer resident.

724. *Cistothorus stellaris*: Short-billed Marsh Wren.

"Accidental. Mr. Bond of Cheyenne has a single skin in his collection that has been identified at Washington." (Knight.)

725. *Telmatodytes palustris palustris*: Long-billed Marsh Wren.

Peabody has found a Wren which he thinks should be recorded as this species. Lockwood and Knight also recorded it.

725c. *Telmatodytes palustris plesius*: Western Marsh Wren.

The only recent record is by Lockwood and Walker, who took two specimens while collecting together in May, 1912. Knight indicated that it was probably a summer resident, but so far there are no breeding records. Lockwood had found it before in this locality.

CERTHIIDAE (Creepers).

The Brown Creepers are efficient friends of the forest. They climb the tree trunks, rarely being found upon the branches. Their stiff tail feathers, sharp claws, and long, curved bills adapt them to this mode of life. They feed upon insects and their eggs, larvae, and pupae, which are hidden away in the crevices of the bark.

REFERENCES:

1. "Useful Birds and Their Protection," Forebush, pp. 177-178.
2. Year Book of the Department of Agriculture, 1908, p. 346.
3. Year Book of the Department of Agriculture, 1906, p. 197.
4. Year Book of the Department of Agriculture, 1900, pp. 296-297.

726b. *Certhia familiaris montana*: Rocky Mountain Creeper.

Knight said it is a summer resident, but that very little is known of it in the state. The recent records are by Richard, who reports that they are summer residents about Cody and Yellowstone Park. Metz, Peabody, and Blackwelder also reported it. It is possible that they are winter residents as well, because Walker found it in December in the mountains at 9,100 feet.

SITTIDAE (Nuthatches).

The Nuthatches have habits similar to those of the Brown Creeper, except that they do not confine their attentions so exclusively to the trunks of the trees. They creep over all the branches, frequently hanging head down. They feed upon insects and their larvae, which are hidden away in the bark. They are most valuable destroyers of insect pests and their habits are very interesting. They stay with us all winter long, which makes them the more valuable. In winter they eat some seeds as well as insects.

REFERENCES :

1. "Useful Birds and Their Protection," Forebush, pp. 171-177.
2. Biological Survey Bulletin No. 30, p. 68.
3. Yearbook of the Department of Agriculture, 1900, pp. 296-297.

727a. *Sitta carolinensis aculeata*: Slender-billed Nuthatch.

Knight reported it as a common resident and indicated that it is found over the entire state. The only recent observer who has noted it is Blackwelder, who found it to be quite common in the Teton region.

727c. *Sitta carolinensis nelsoni*: Rocky Mountain Nuthatch.

Peabody reports this bird as being a fairly common resident in the region in which he worked. He has skins and photographs to verify his statement.

728. *Sitta canadensis*: Red-breasted Nuthatch.

A rather uncommon Nuthatch in most of the regions. Blackwelder, however, found it to be quite common on the west slope of the Teton range.

730. *Sitta pygmaea pygmaea*: Pygmy Nuthatch.

Blackwelder found it in the Tetons. The early records were from near Cheyenne and at Sherman. The A. O. U. list includes it in southeastern Wyoming, probably upon Knight's authority.

PARIDAE (Titmice).

The Chickadees stay with us during the entire year and do valiant service in destroying destructive insects. During the winter they feed upon the eggs of plant lice which they find clinging to the bark. They also destroy the larvae and pupae of various insects which are hidden away in crevices or beneath scales of bark. The Titmice eat a small amount of seeds when insect food is not found in quantity sufficient for their needs.

REFERENCES :

1. "Birds in Their Relation to Man," Weed and Dearborn, pp. 106-109.
2. "Useful Birds and Their Protection," Forebush, pp. 163-171.
3. Year Book of the Department of Agriculture, 1907, p. 169.
4. Farmers' Bulletin No. 54, p. 42-44.

- 735a. ***Penthestes atricapillus septentrionalis***: Long-tailed Chickadee.

Very abundant summer resident at the lower and middle altitudes throughout the entire state.

738. ***Penthestes gambeli gambeli***: Mountain Chickadee.

Fully as common as the last and having the same range except vertically. It ranges from about 9,000 feet almost to timber line during the summer. In winter it merely makes a vertical migration, descending to the lower altitudes and takes the place of the preceding form, which goes southward.

744. ***Psaltriparus plumbeus***: Lead-colored Bush-Tit.

"Resident; uncommon. More abundant in western than eastern Wyoming. Stevenson reports one specimen taken at Green River; Aiken notes seeing them in flocks during the winter near Sherman; Ridgeway notes (Manual of N. A. Birds, p. 565) that this species extends from western Colorado and Wyoming to eastern Oregon, etc." (Knight.)

SYLVIIDAE (Kinglets and Gnatcatchers).

The Kinglets and Gnatcatchers are extremely small birds, but they are active insect destroyers. They feed upon plant lice, their eggs, and various small insects found upon the leaves and twigs of trees. These birds are of special value to the spruce and pine forests of the state.

REFERENCES:

1. Year Book of the Department of Agriculture, 1906, pp. 197-198.
2. "Useful Birds and Their Protection," Forebush, pp. 160-163.
3. Farmers' Bulletin No. 506, pp. 34-35.

748. ***Regulus satrapa satrapa***: Golden-crowned Kinglet.

Knight had but one record, that from Aiken. Jewett observed this bird in Star Valley. Sweeney saw one flock at Foxpark, October 9, 1912. Blackwelder observed it in the Tetons.

749. ***Regulus calendula calendula***: Ruby-crowned Kinglet.

Abundant summer resident in the pine and spruce forests.

TURDIDAE (Thrushes, Robins, Bluebirds, etc.).

Many of the Thrushes live in deep woods, but the Bluebirds and Robins nest in the more open country near human habitations.

The Bluebirds and Robins feed upon cutworms and other caterpillars, butterflies, moths, grasshoppers, crickets, bugs, beetles, etc. The Robin is fond of cultivated fruit. Both birds eat wild fruit to some extent. The young birds are fed almost entirely upon insects and their larvae, principally caterpillars and grasshoppers. The Thrushes' food does not differ materially from that of the Robin and Bluebird, except that the fruit taken is wild fruit.

This entire family of birds is beneficial, not excepting the Robin, about which some doubt has been expressed.

REFERENCES :

1. "Useful Birds and Their Protection," Forebush, pp. 155-160, 282-292.
2. Year Book of the Department of Agriculture, 1897, p. 670.
3. Farmers' Bulletin No. 54, pp. 44-46.
4. Year Book of the Department of Agriculture, 1907, pp. 168-169.

754. *Myadestes townsendi*: Townsend's Solitaire.

Common summer resident from the plains almost to timber line.

756a. *Hylocichla fuscescens salicicola*: Willow Thrush.

Rather common in the pine forests of the mountain region.

757. *Hylocichla aliciae aliciae*: Gray-cheeked Thrush.

Two or three specimens taken by Lockwood near Laramie during spring migrations.

758a. *Hylocichla ustulata swainsoni*: Olive-backed Thrush.

Lockwood has taken them in Albany County. Peabody and Clearwaters both record them. Walker has observed it also. (Peabody reported Almas Thrush, but that is now a synonym of the Olive-backed.)

759. *Hylocichla guttata guttata*: Alaska Hermit Thrush.

"There is but a single record for Wyoming. I took this specimen at Laramie, September 9, 1898. Mr. Ridgway identified the bird." (Knight.)

- 759a. **Hylocichla guttata auduboni**: Audubon's Hermit Thrush.
Knight gave but one record. Metz has found it nesting. Blackwelder records it from the Teton region. Taken by Lockwood from near Laramie.
761. **Planesticus migratorius migratorius**: Robin.
This form occurs in southeastern Wyoming. It and *propinquus* are both found here, the latter in far greater numbers.
- 761a. **Planesticus migratorius propinquus**: Western Robin.
Very abundant summer resident over the entire state.
766. **Sialia sialis sialis**: Bluebird.
Knight was doubtful as to whether or not this bird breeds in Wyoming. His only records were that several specimens had been taken by Bond of Cheyenne. Peabody now records it, and Clearwaters has seen it nesting in Laramie County.
- 767a. **Sialia mexicanai bairdi**: Chestnut-backed Bluebird.
"There is only one authentic record for Wyoming. This was made by McCarthy, who took a specimen on the Sweetwater River in 1859. There is no doubt but what they frequent southwestern Wyoming and probably breed." (Knight.)
768. **Sialia currucoides**: Mountain Bluebird.
Abundant summer resident on the plains and timber land. Found over the entire state.
- Passer domesticus**: English Sparrow.
This bird is gradually spreading in Wyoming and has reached almost all the towns. It is seldom seen at any great distance from towns or ranches.

COMMENTS

It is quite likely that collectors have not distinguished correctly between certain species. For example Knight gives 256 (Solitary Sandpiper) as fairly common, while all recent collectors refer it to 256a (Western Solitary Sandpiper). It may be that 627 (Warbling Vireo) and 627a (Western Warbling Vireo) have likewise been confused. The latter is probably the Wyoming species, if this supposition is correct, and 256a is the Sandpiper. We had a large number of skins of Wilson's and Pileolated Warblers, or at least some were labeled the one and some the other. They were indistinguishable except that there was a slight variation in color.

It is quite possible that some collectors have confused two species of Red Wing Blackbirds and that only one is represented in Wyoming. The probability is that both 498 (The Red-winged Blackbird) and 498d (The Thick-billed Redwing) are to be found in the state.

The Long-crested and Black-headed Jays are quite similar, but there seems good evidence that both species occur in southern Wyoming. It is possible that they are all variations of a single species.

Knight gives 204, 212, 478b and 585c in his hypothetical list.

NEW RECORDS FOR THE STATE.

Since the publication of W. C. Knight's "Birds of Wyoming," in 1902, the following forty-five birds, not recorded by him, have been found by one or more of the collectors who have worked in Wyoming. The records for these

birds may be found by referring to the general and local lists:

34, 53, 55, 59, 62, 136, 154, 155, 201, 204, 212, 228, 256a, 289, 299, 334a, 357b, 365, 379, 387, 436, 477, 478b, 484, 488b, 498d, 501, 507, 509, 514, 521, 529, 536, 546a, 567h, 585c, 593, 604, 627a, 645a, 654, 674, 685a, 727c, 757.

No. 627a is no doubt the same species which Knight records as 627, and hence is not new.

The same may be said of 685 and 685a, and also 256 and 256a.

NEW BREEDING RECORDS.

Since the publication of Knight's "Birds of Wyoming," the following forty-three birds which were not known before to breed in this state have been found as summer residents or breeders:

1, 51, 53, 151, 152, 155, 206, 212, 230, 249, 256a, 261, 289, 299, 300, 373c, 375, 420, 436, 466a, 478b, 484, 488b, 498d, 501, 507, 509, 515, 524, 529, 563a, 567g, 583, 585c, 593, 599, 604, 518, 527a, 529b, 674, 717a, 759a, and 766.

SUMMARY.

Number of birds positively recorded by Knight.....	288
New birds found in the state.....	45
Total positively recorded	333
Number in hypothetical list.....	26
New summer residents and breeders not recorded by Knight	44

HYPOTHETICAL LIST

A few records are not sufficiently well authenticated to warrant their being placed in the regular list, so are placed here.

133. **Anas rubripes:** Black Duck.

Hunters who were familiar with this duck in the east reported to Mr. Lockwood that they had taken specimens near Laramie.

174. **Branta nigricana:** Black Brant.

Our only record of this bird is from Clearwaters, who reports that he saw a small flock that was probably of this species. He did not secure a specimen.

215. **Coturnicops noveboracensis:** Yellow Rail.

Blackwelder records birds which he says appeared to be of this species, but none were taken, so the record is questionable.

310a. **Meleagris gallopavo silvestris:** Wild Turkey.

Clearwaters records that he has seen a specimen which bore a tag, probably in Knight's handwriting, which indicated that the specimen was taken near the southern boundary of the state. Prof. William Reed reports them from about 25 miles south of the Wyoming boundary.

337. **Buteo borealis harlani:** Harlan's Hawk.

Lockwood reports one or two specimens.

356b. **Faleo perigrinus pealei:** Peale's Falcon.

Mr. Lockwood reports having mounted a well-marked specimen at Casper. In a letter he expresses doubt of the correctness of his determination because of lack of proper means for determination at hand.

368. **Strix varia variat:** Barred Owl.

The records of this Owl in Wyoming are very unsatisfactory. Clearwaters reports that there is a mounted specimen at Newcastle, which is said to have been taken near there. In April, 1912, Walker observed an Owl in the Med-

icine Bow Mountains, which he thought was this form, but identification was not satisfactory. The A. O. U. list, third edition, says "west to eastern Wyoming," but upon what authority we cannot say.

375. **Bubo virginianus:** Great Horned Owl.

Mr. Lockwood reports having taken specimens in Albany County which show all gradations between this and the succeeding species (375a). Reported also by Buck and Walker. Because of the possibility that they confused it with the western species, it is placed in the hypothetical list.

420. **Chordeiles virginianus virginianus:** Nighthawk.

This bird was reported by Richard, but may have been confused with 420a. See local list by Richard.

465. **Empidonax virescens:** Green-crested Flycatcher.

"Accidental, if it is entitled to a place in the Wyoming fauna. The only record is that of Drexel, who reported it from Fort Bridger in 1858." (Knight.)

466a. **Epidonax trailli alnorum:** Alder's Flycatcher.

Our only record of this species is from Blackwelder's Teton list. It is no doubt authentic, as is also his record for 563a.

474a. **Octocoris alpestris leucolaema:** Pallid Horned Lark.

"There are numerous records referring to this variety as occurring in Wyoming. I have endeavored to confirm the evidence offered, but have been wholly unable to locate a single skin or specimen that has been taken. On this account, it has been placed in this list and further investigation as to its western range is very desirable." (Knight.)

474b. **Octocoris alpestris praticola:** Prairie Pallid Horned Lark.

Percival merely reports this form. It is our only record of it other than Knight's record for *leucolaema* of Coates, which he calls the Pallid Horned Lark.

478. **Cyanocitta stelleri:** Steller's Jay.

"Rare or accidental. The only possible record of this bird being taken in Wyoming comes from the National Museum. Their No. 64443 reads, 'Taken at Shoshone Lake by Dr. C. Hart Merriam.'" (Knight.)

487. **Corvus cryptoleucus:** White-necked Raven.

"Rare so far as known. The Wyoming record is based upon the observation of C. E. Aiken (Am. Nat. VII, 1873, 16), Cheyenne, Wyoming. He also states in his article in Pr. Bost. Soc., 1872, 203: 'Very common along the base of the mountains.' No other collector has found this Raven in the state." (Knight.) On page 122 of "Birds of Nebraska," by Bruner, this bird is mentioned and it should be found in this state.

499. **Agelaius gubernator californicus:** Bicolored Redwing.

In *The Auk* for 1899, Vol. 6, page 341, Bond recorded the capture of one bird, April 14, 1889. It is also mentioned by Cook in "Birds of Colorado." This record by Bond was published some years ago, before Knight's work was prepared, but Knight did not record this species.

500. **Agelaius tricolor:** Tricolored Redwing.

Sawyer reports it from near Laramie, but it is probable that he should refer to *fortis*, which is so abundant in that region.

559. **Spizella monticola monticola:** Tree Sparrow.

Reported by Percival, but should probably be referred to *ochracea*.

563a. **Spizella pucilla arenacea:** Western Field Sparrow.

The only record we have of this bird is by Blackwelder, from the Teton region. See local list by Blackwelder. See also Knight.

581a. **Melospiza melodia fallax:** Desert Song Sparrow.

Peabody reports this form, but it is quite probable that his record should be for *montana*. If it occurs in Wyoming, it is probably along the southern or southwestern region only. Walker expected to find it at Green River, but found only *montana*.

585. **Passerella illiaca illiaca:** Fox Sparrow.

Peabody caught one brief glimpse of a bird which he thinks should be recorded as this species.

598. *Passerina cyanea*: Indigo Bunting.

Clearwaters reports that he has heard of it in the eastern portion of the state, but he has never seen a specimen from that region.

683. *Icteria virens*: Yellow-breasted Chat.

"Allen reported this species from Cheyenne. (Mus. Comp. Zool. III, 1872.) This bird is not known to occur in the state and possibly it may refer to 683a." (Knight.)

733a. *Parus inornatus griseus*: Gray Titmouse.

"The Wyoming record rests upon the report of Aiken. He notes it as a common winter resident, gregarious during the first part of the winter, but since January seen only singly or in pairs." (Knight.)

748a. *Regulus satrapa olivaceus*: Western Golden-crowned Kinglet.

Peabody reports this species, but it is probable that his record should refer to 748.

767. *Sialia mexicana occidentalis*: Western Bluebird.

The only record of this species is by Percival, who merely reports it.

LOCAL LISTS

Local List No. 1. FROM WESTERN WYOMING.

BY ELIOT BLACKWELDER.

The observations on which the following list is based were made in the course of two geological expeditions in the western part of the Rocky Mountains. In a good many cases identifications are more or less uncertain, as indicated by the question marks after the names. This arises from the fact that no specimens were collected and in only a few cases were birds shot for identification. On the other hand, a very strong Zeiss field glass (12 power) was used to great advantage, and this permitted the recognition of many species which with the unaided eye would have remained uncertain.

ANNOTATED LIST.

1. Western Grebe. Apparently rather rare. One seen on Lower Dinwoodie Lake.
7. Loon. (?) Three seen on pond near Wind River postoffice.
70. Common Tern. (?) Several near pond near Fort Washakie.
130. Red-breasted Merganser. A rather common summer resident on mountain lakes and rivers throughout the district. Families of them frequently seen on swift mountain rivers.
132. Mallard. (?) A few on Bull Lake, September 6th, 1910.
139. Green-winged Teal. The commonest summer duck, on rivers from 7,000 to 9,000 feet.
140. Blue-winged Teal. (?) A small flock near Jackson, July 30th, 1910.
143. Pintail. (?) Single specimen seen in Snake River canyon, July 23rd.
152. Barrow's Golden-eye. (?) Rather common summer resident on high mountain lakes.

155. Harlequin Duck. (?) Immature individuals rather common.
In same situation as the last.
172. Canada Goose. Either this species or one of its varieties is a summer resident in the canyon of Snake River, south of Jackson.
194. Great Blue Heron. Rather common summer resident.
214. Sora. (?) A rail believed to be this species heard clearly several times near Afton and around Jackson in July.
215. Yellow Rail. Very small yellowish brown rails, almost certainly this species, were flushed from wet meadows in the bottoms near Kendall, August 21st, 1910, and near Union on Green River, August 13th, 1910. Elevations 8,000 to 9,000 feet.
221. Coot. Abundant on ponds and irrigation ditches early in September near Fort Washakie.
223. Northern Phalarope. About twenty of these trim and nervous little birds were seen swimming on a sedgy pond with coots and ducks, near Fort Washakie, September 13th, 1910.
230. Wilson's Snipe. One flushed from the bank of Wind River, below Circle, September 3, 1910.
241. Baird's Sandpiper. A small flock seen August 23rd, 1911, near the extreme head of Gros Ventre River; elevation 10,000 feet.
- 256a. Western Solitary Sandpiper. (?) A few seen near Union Pass, August 22nd.
- 258a. Western Willet. Abundant about July 1st on irrigated meadows.
263. Spotted Sandpiper. The most abundant wader in the district.
264. Long-billed Curlew. Same as 258a, but not so numerous.
273. Killdeer. Common only locally.
- 297b. Richardson's Grouse. This species is fairly common in the mountain forests.
299. Franklin's Grouse. Fairly common in pine forests.
- 300b. Gray Ruffed Grouse. A small covey of nearly full grown birds seen near Teton Pass, September 15th, 1911.
- 308a. Columbian Sharp-tailed Grouse. (?) Partridges which may well belong to this species were seen at several points around Jackson's Hole during the summer.
309. Sage Hen. Abundant on the grassy and sage-covered foothills.

316. Mourning Dove. Plentiful in the Salt River Valley near Afton.
325. Turkey Vulture. Apparently common only in the cattle country along Green River. One was seen at Teton Pass, another in Hoback Canyon, and a few near Bondurant.
331. Marsh Hawk. We met this occasionally throughout the district.
332. Sharp-shinned Hawk. (?) A single small hawk believed to be of this species seen near the west end of the Gros Ventre range, August 15th, 1911.
333. Cooper's Hawk. (?) Hawks probably of this species seen near Kendall in August, 1910, and in the middle Wind River valley early in September, 1910.
- 337b. Western Red-tail. Apparently a bird of the ranch country.
342. Swainson's Hawk. A little less common than the last. It seems to prefer the foothills and lower parts of the mountains where the country is fairly open, but has some timber.
349. Golden Eagle. Not uncommon in the high mountain ranges.
355. Prairie Falcon. Not very common. Seems to prefer the dry foothills.
357. Pigeon Hawk. A hawk almost certainly of this species examined several times at close range and with a glass. Three near the west end of the Wind River Range. Others near the southeast end of the Gros Ventre Mountains.
- 357b. Richardson's Pigeon Hawk. (?) Probably this species, but possibly *A. velox*. We saw two in the canyon of Little Wind River, September 11th, 1910; another on Dell Creek, July, 1911, and one east of Kendall, July 23rd, 1911.
- 360a. Desert Sparrow Hawk. Common in the open country and foothills, especially near ranches.
364. Osprey. Found occasionally wherever the fishing is good.
366. Long-eared Owl. (?) An owl believed to be this species seen in the forest near the east end of the Gros Ventre Range, August 21st, 1910.
- 375a. Western Horned Owl. Rather common in the forest of the mountains.
379. Pygmy Owl. One seen in the foothills northeast of Jackson.
390. Belted Kingfisher. Seen occasionally along most of the rivers.

- 393c. Rocky Mountain Hairy Woodpecker. Rather common in the lower parts of the timber belt from 7,000 to 8,500 feet altitude.
- 394b. Batchelder's Woodpecker. Less common than the last.
- 402a. Red-naped Sapsucker. Moderately common from the west end of the Wind River Range west to Idaho.
408. Lewis's Woodpecker. Not at all common in this district, except along Snake River below Jackson.
413. Red-shafted Flicker. Abundant nearly everywhere in the woods.
418. Poor-will. Fairly common below the spruce forest.
- 420a. Western Night Hawk. Rather common.
425. White-throated Swift. Rather rare. We found them nesting around the sandstone cliffs on Dinwoodie Lake and saw others in the canyon of the Popo Agie River and near Thermopolis.
432. Broad-tailed Hummingbird. Appears to be the commonest hummingbird in Wyoming.
433. Rufous Hummingbird. Apparently rare. One seen near Kendall late in July.
447. Arkansas Kingbird. Common only in the extreme west of Wyoming.
457. Say's Phoebe. Common in the open pine and aspen groves of the foothills.
464. Western Flycatcher. (?) A few believed to be of this species seen near Kendall and in Fall River Basin in July.
- 466a. Alder Flycatcher. (?) Even less common than the last.
- 474c. Desert Horned Lark. Rather common in suitable localities.
475. Magpie. Not very common in this part of the state.
- 478c. Black-headed Jay. Found only in the dense spruce forests between 8,000 and 10,000 feet and not abundant even there.
- 484a. Rocky Mountain Jay. A characteristic but not abundant denizen of the spruce forests from 7,500 to 10,000 feet.
486. Raven. A raven, probably this variety, seen occasionally in mountain valleys only. They are generally very shy, and soar away to great heights. One near Irwin, Idaho, a few near Bull Lake and around the head of Green River, and still more along the Gros Ventre Valley. Young birds just learning to fly were found August 4th among the rocky sandstone crags 3,000 feet in the Gros Ventre Valley. Late

in August, 1911, fifteen of them were encountered feeding on a dead elk.

- 488b. Western Crow. Rather rare. Two seen at Lander, September, 1910.
491. Clarke's Nutcracker. Abundant everywhere in the spruce forests. On the mountains.
492. Pinon Jay. Inhabits the juniper zone below the same forest.
494. Bobolink. A single individual seen near Afton in July, 1910.
495. Cowbird. Fairly common in the cultivated valleys near Afton.
497. Yellow-headed Blackbird. A large flock seen in the marshes north of Afton, but none elsewhere.
498. Red-winged Blackbird. Practically the same distribution as the cowbird.
- 501-1. Western Meadowlark. Common about the ranches.
508. Bullock's Oriole. Rare. One seen near Afton.
510. Brewer's Blackbird. One of the most abundant birds around the ranches.
- 515a. Rocky Mountain Pine Grosbeak. As this is a shy, quiet bird, it is easily overlooked. Its home is in the upper part of the spruce forest on the mountains between 9,000 and 10,000 feet.
518. Cassin's Purple Finch. Apparently frequents the lower edge of the timber belt in the mountains.
524. Gray-crowned Rosy Finch. In summer it is common around the high peaks. Early in September they collect in flocks and descend into the valleys.
- 529a. Pale Goldfinch. Apparently tolerably common near settlements.
533. Pine Siskin. Common in the spruce forests.
- 540a. Western Vesper Sparrow. Inhabits the open country. Abundant where there is sage brush and aspen.
- 546a. Western Grasshopper Sparrow. (?) Rare. A sharp-tailed finch apparently of this species seen in the hay meadows near Afton and Jackson.
554. White-crowned Sparrow. The most characteristic bird of the open glades in the forests.
- 560a. Western Chipping Sparrow. Not very common.
561. Clay-colored Sparrow. (?) Abundant on the sage-covered plain.

562. Brewer's Sparrow. Seen along fences in the irrigated ranch country.
- 563a. Western Field Sparrow. (?) Sparrows apparently of this species plentiful in Jackson Hole.
- 567g. Pink-sided Junco. Common in the mountain forests from 8,000 to 10,000 feet.
- English Sparrow. Common at Lander and a few seen at Big Piney. It is entirely absent elsewhere in the district.
- 581b. Mountain Song Sparrow. Seen only around settlements.
583. Lincoln's Sparrow. Seen on the willow-covered meadows.
588. Arctic Towhee. A common bird near Afton.
- 592-1. Green-tailed Towhee. A characteristic bird of the lower edge of the forest where there are aspen groves and grassy openings.
596. Black-headed Grosbeak. Rather common near Afton.
599. Lazuli Bunting. Mostly below 7,000 feet and apparently rare east of the continental divide.
607. Western Tanager. One of the characteristic birds of the spruce forest.
612. Cliff Swallow. Locally abundant.
614. Tree Swallow. (?) Rather common along Salt River.
615. Northern Violet-green Swallow. The commonest of the swallows.
617. Rough-winged Swallow. (?) Several seen in Pierre's Hole.
619. Cedar Waxwing. A few occurred at Torrey Lake.
- 622a. White-rumped Shrike. Rather rare. A single individual at Dinwoodie Lake, September 1st, 1910.
- 627a. Western Warbling Vireo. (?) Generally seen in willow thickets.
652. Yellow Warbler. Common in the large open valleys.
656. Audubon's Warbler. Fairly common.
680. MacGillivray's Warbler. Characteristic bird of the dense willow and alder thickets along the mountain creeks.
- 681a. Western Yellow-throat. Common in the marshes north of Afton.
- 685a. Pileolated Warbler. Same situation as MacGillivray's Warbler.
697. Pipit. Commonest summer resident in the alpine zone. Breeds on the mossy flats above 10,000 feet. Comes down

to the open valleys and plains 6,000 to 7,000 feet in September.

- 701. Dipper. It is common along the swift mountain brooks.
- 702. Sage Thrasher. Common on the dry sage-covered plains.
- 704. Catbird. A few seen in the Wind River Basin.
- 715. Rock Wren. Common in dry, rocky canyons below the timber belt.
- 717a. Canon Wren. A single family found in the rocky gorge of a mountain creek at 8,000 feet near Old Kendall.
- 721a. Western House Wren. Not common. A few seen near Afton.
- 722a. Western Winter Wren. (?) One seen on Upper Crystal Creek.
- 726b. Rocky Mountain Creeper. Rather common in the spruce forests.
- 727d. Slender-billed Nuthatch. Common nuthatch in summer in the spruce belt.
- 728. Red-breasted Nuthatch. Probably less common than the last, but seen in July in the Teton Range and Hoback Ridge.
- 730. Pygmy Nuthatch. Two seen in the pine forest.
- 735a. Long-tailed Chickadee. Characteristic of the willow thickets below 8,000 feet.
- 738. Mountain Chickadee. Common in the spruce forests.
- 748. Golden-crowned Kinglet. Associated with the last.
- 754. Townsend's Solitaire. Widely distributed, but not common.
- 756a. Willow Thrush. (?) Rather common among the willows.
- 759a. Audubon's Hermit Thrush. Moderately common in the spruce forests.
- 761a. Western Robin. Abundant.
- 768. Mountain Bluebird. Common.

Many other species of birds were seen, but not satisfactorily identified.

COMMENTS.

Mr. Blackwelder has traveled extensively through the northern portions of the state and has made observations on the birds. His list includes a number of species not before reported as occurring in the state, viz.: 155, 256a, 299, 379, 488, 546a, 627a, 685a.

Two or three of these and others are reported doubtfully as indicated by the question mark. In every case the doubtful records have been referred to the hypothetical list unless they were reported by other observers.

Mr. Blackwelder reports the Pipit and Gray-crowned Rosyfinch as summer residents. His list includes also a considerable number of rare species and some not reported in northern Wyoming up to this time. Note especially 1, 70, 308a, 357, 433, 515a, 599, 717a, 722a, 730, 748, and 759a.

Local List No. 2.

FROM THE VICINITY OF CODY AND THE YELLOW-STONE NATIONAL PARK.

Observations extending from the Spring of 1906 to February, 1912.

BY WILLIAM RICHARD, CODY, WYOMING.

4. Eared Grebe. Summer resident.
7. Loon. Found during the spring and fall, occasionally in winter.
51. Herring Gull. Common summer resident.
77. Black Tern. One specimen taken at Cody during the fall.
125. White Pelican. Common resident in the Park.
129. Merganser. Resident on all streams.
132. Mallard. Common summer resident about Cody. Winter resident in mild winters.
135. Gadwall. Spring and fall migrant about Cody.
137. Baldpate. Common about Cody during spring and fall migrations.
139. Green-winged Teal. Occasionally found about Cody.
140. Blue-winged Teal. Occasionally found about Cody.
141. Cinnamon Teal. Occasionally occurs about Cody as migrant. One pair was observed as a summer resident.
142. Shoveller. Common about Cody during migrations.
143. Pin-tail. Spring and fall migrant at Cody.
144. Wood Duck. During the fall of 1903 three or four were noted on the Greybull River.

146. Redhead. A few about Cody during migrations.
147. Canvas-back. A few about Cody during spring migrations.
150. Ring-necked Duck. Occasionally found about Cody during migrations.
152. Barrow's Golden-eye. Common resident.
153. Buffle-head. Common winter resident.
154. Old-squaw. Three were taken near Cody during the fall of 1911.
155. Harlequin Duck. Resident in the mountains. A few on each river. Noted on Crandall Creek and headwaters of Clark's Fork. Female and young seen on South Fork of Shoshone in summer of 1911.
167. Ruddy Duck. Common during migrations, occasional winter resident.
169. Snow Goose. One taken at Cody in the fall of 1910.
172. Canada Goose. Uncommon winter resident.
181. Trumpeter Swan. Two specimens taken during fall migration of 1909.
190. Bittern. One specimen taken in the fall of 1911.
194. Great Blue Heron. Summer resident. Not common.
204. Whooping Crane. Summer resident in Yellowstone Park, at Jackson's Lake, and occasionally found at Cody during spring migrations.
212. Virginia Rail. Specimen taken on the Greybull River, September, 1902.
221. Coot. Common summer resident.
224. Wilson's Phalarope. A few about during migrations. Probably a summer resident.
225. Avocet. A few about during migrations.
228. Woodcock. One was shot near Cody in 1906.
230. Wilson's Snipe. A few about Cody during migrations. Some winter in the neighborhood by warm springs.
241. Baird's Sandpiper. Occasional summer resident. Common during migrations.
246. Semipalmated Sandpiper. A few about Cody during migrations.
254. Greater Yellow-legs. A few about Cody during migrations.
255. Yellow-legs. A few about during migrations.
- 258a. Western Willet. A few about Cody during migrations.
264. Long-billed Curlew. Abundant summer resident.

273. Killdeer. Common summer resident.
281. Mountain Plover. Common summer resident at altitudes not higher than Cody, 5,000.
- 297b. Richardson's Grouse. Common resident, mainly at timber line.
- 300a. Canada Ruffed Grouse. Common resident. Found up to 5,900 feet.
- 308a. Columbian Sharp-tailed Grouse. Rare resident on Clark's Fork. During the winter of 1910-1911 took one specimen of a flock of four.
309. Sage Hen. Resident, but becoming scarce. Ranging from 4,000 to 5,900 feet.
316. Mourning Dove. Common summer resident.
331. Marsh Hawk. Common during migrations.
332. Sharp-shinned Hawk. Summer resident, but not common.
333. Cooper's Hawk. Summer resident, but not common.
- 337b. Western Red-tail. An uncommon summer resident.
348. Ferruginous Rough-leg. Noted only in winter.
349. Golden Eagle. Resident, becoming less common. Many are killed and trapped annually.
352. Bald Eagle. Uncommon resident.
360. Sparrow Hawk. Common summer resident.
364. Osprey. Common summer resident in Yellowstone Park.
366. Long-eared Owl. One specimen taken at Cody.
367. Short-eared Owl. One specimen taken at Cody.
372. Saw-whet Owl. Rare winter resident.
375. Great Horned Owl. Common resident.
376. Snowy Owl. Rare winter resident at Powell.
378. Burrowing Owl. Common summer resident about Cody.
390. Belted Kingfisher. Common summer resident.
406. Red-headed Woodpecker. Common summer resident.
408. Lewis's Woodpecker. Common summer resident at Cody and lower.
413. Red-shafted Flicker. Common summer resident.
420. Nighthawk. Abundant summer resident.
425. White-throated Swift. Common summer resident.
475. Magpie. Abundant resident.
- 478c. Black-headed Jay. Common resident high in the mountains.
- 484a. Rocky Mountain Jay. Common resident high in the mountains.
492. Pinon Jay. Common resident.

- 497. Yellow-headed Blackbird. Common summer resident.
- 498d. Thick-billed Redwing. Common summer resident about Cody.
- 515a. Rocky Mountain Pine Grosbeak. Resident high in the mountains.
- 518. Cassin's Purple Finch. Common summer resident high in the mountains.
- 521. Crossbill. Common winter resident high in the mountains. Probably there in the summer. Specimen taken on Rock Creek, 1902.
- 524. Gray-crowned Rosy Finch. Winter resident. Common at Cody.
- 525. Black Rosy Finch. Winter resident. Common at Cody.
- 528. Redpoll. Winter resident about Cody, but not common.
- 554. White-crowned Sparrow. Common about Cody during migrations.
- 566. White-winged Junco. Common summer resident and almost a winter resident.
- 599. Lazuli Bunting. Common summer resident at Cody and higher.
- 605. Lark Bunting. Abundant summer resident.
- 607. Western Tanager. Common summer resident in the mountains about Cody.
- 618. Bohemian Waxwing. Common resident in the mountains.
- 652. Yellow Warbler. Common about Cody during migrations.
- 655. Myrtle Warbler. Common about Cody during migrations.
- 681a. Western Yellow-throat. Common about Cody during migrations.
- 683a. Long-tailed Chat. Summer resident on Greybull River.
- 701. Dipper. Common resident.
- 702. Sage Thrasher. Common resident about Cody.
- 715. Rock Wren. Common summer resident.
- 717a. Canon Wren. Common summer resident in the canyon of Spring Creek.
- 721a. Western House Wren. Common summer resident.
- 726b. Rocky Mountain Creeper. Common summer resident.
- 735a. Long-tailed Chickadee. Common summer resident in the mountains.
- 768. Mountain Bluebird. Common summer resident about Cody and higher.
- I. S. English Sparrow. Becoming too common.

COMMENTS.

Mr. Richard was for a long time located at Cody as a taxidermist and is well acquainted with the birds of that region. He reports a number of new records in the foregoing list, viz.: 154, 155, 204, 212, 228, 498d, and 521. Some others are rare, as for example: 51, 655, and 717a. Numbers 425, 525, 599, and 717a are ranging more widely and increasing in numbers. Number 246 had not been found so far north before.

Local List No. 3.
FROM SHERIDAN AND VICINITY.

For the years 1906-1908.

BY CHAS. W. METZ.

4. Eared Grebe. Common summer resident.
7. Loon. Occasional summer resident.
54. Ring-billed Gull. Common summer resident on Lake Desmet.
60. Bonaparte's Gull. One specimen taken.
77. Black Tern. Fairly common; doubtful summer resident.
125. White Pelican. Summer resident. Rare.
129. Merganser. Common summer resident, decreasing in numbers.
132. Mallard. Common summer resident.
139. Green-winged Teal. Fairly common summer resident.
140. Blue-winged Teal. Common summer resident.
141. Cinnamon Teal. Summer resident. Not common.
142. Shoveller. Summer resident. Not common.
143. Pintail. Rare. Doubtful resident.
144. Wood Duck. Formerly a summer resident. Very rare.
146. Redhead. Fairly common. Doubtful summer resident.
147. Canvas-back. Fairly common. Doubtful summer resident.
167. Ruddy Duck. Fairly common. Doubtful summer resident.
172. Canada Goose. Uncommon summer resident.

-
181. Trumpeter Swan. Three or four specimens have been killed by hunters near Sheridan.
190. Bittern. Common summer resident, becoming less common.
194. Great Blue Heron. Uncommon summer resident; decreasing in numbers. Two rookeries in tall cottonwoods near Sheridan, 14-20 nests.
212. Virginia Rail. Doubtful summer resident. Rare. Have taken one or two specimens.
214. Sora (Carolina Rail). Common summer resident.
221. Coot. Common summer resident.
224. Wilson's Phalarope. Doubtful summer resident. Fairly common.
225. Avocet. Probably summer resident. Not common.
230. Wilson's Snipe. Probably summer resident. Fairly common.
261. Upland Plover. Rare summer resident. Nest and eggs found in early June.
263. Spotted Sandpiper. Common summer resident.
264. Long-billed Curlew. Common summer resident.
273. Kildeer. Common summer resident.
- 297b. Richardson's Grouse. Common resident in Big Horn Mountains; becoming less common.
- 308a. Columbian Sharp-tailed Grouse. Common resident from 3,300 to 5,000 feet.
309. Sage Hen. Common resident.
316. Mourning Dove. Abundant summer resident; becoming less common.
325. Turkey Vulture. Common summer resident.
331. Marsh Hawk. Common summer resident; possibly winter resident.
332. Sharp-shinned Hawk. Rare summer resident; possibly a winter resident.
- 334a. Western Goshawk. Rare summer resident; doubtful winter resident.
- 337b. Western Red-tail. Common summer resident; doubtful winter resident.
342. Swainson's Hawk. I have taken only one specimen.
349. Golden Eagle. Rare resident.
352. Bald Eagle. Very rare.
- 356a. Duck Hawk. Only a few seen.
357. Pigeon Hawk. One male taken.

- 360a. Desert Sparrow Hawk. Common summer resident; doubtful winter resident.
364. Osprey. Rare.
366. Long-eared Owl. Fairly common resident.
- 373e. Rocky Mountain Screech Owl. Rare summer resident; doubtful winter resident. Have found it nesting.
- 375a. Western Horned Owl. Rather uncommon resident.
376. Snowy Owl. Two specimens from Crook County.
378. Burrowing Owl. Common resident in prairie dog towns.
390. Belted Kingfisher. Uncommon summer resident.
- 393e. Rocky Mountain Hairy Woodpecker. Common summer resident; doubtful winter resident.
- 394b. Batchelder's Woodpecker. An uncommon summer resident.
406. Red-headed Woodpecker. Common summer resident.
408. Lewis's Woodpecker. Common summer resident in mountains.
- 412a. Northern Flicker. Rare summer resident.
413. Red-shafted Flicker. Common summer resident.
418. Poor-will. Rare summer resident. A female and young taken in foothills in August.
- 420a. Western Nighthawk. Common summer resident.
425. White-throated Swift. Rare summer resident.
432. Broad-tailed Hummingbird. Rare summer resident in eastern foothills of Big Horn Mountains.
433. Rufous Hummingbird. Rare summer resident in eastern foothills of Big Horn Mountains.
436. Calliope Hummingbird. Very rare summer resident in deciduous trees at lower altitudes than the preceding. I have taken a set of eggs.
444. Kingbird. Common summer resident.
447. Arkansas Kingbird. Common summer resident.
457. Say's Phoebe. Common summer resident.
459. Olive-sided Flycatcher. Not rare in mountains in summer.
462. Western Wood Pewee. Abundant summer resident.
469. Wright's Flycatcher. Common summer resident.
- 474c. Desert Horned Lark. Abundant resident.
475. Magpie. Common resident.
484. Canada Jay. Common resident.
488. Crow. Common summer resident.
491. Clarke's Nutcracker. Fairly common resident.

494. Bobolink. Common summer resident. More plentiful than formerly.
495. Cowbird. Common summer resident.
497. Yellow-headed Blackbird. Common summer resident.
- 498d. Thick-billed Red-wing. Abundant summer resident.
- 501-1. Western Meadowlark. Abundant summer resident.
508. Bullock's Oriole. Common summer resident.
510. Brewer's Blackbird. Summer resident. Not common.
- 511b. Bronzed Grackle. Common summer resident.
- 514a. Western Evening Grosbeck. Rare. Probably a summer resident; have taken young.
518. Cassin's Purple Finch. Two or three taken in the mountains in June.
- 521a. Mexican Crossbill. Common summer resident in mountains.
528. Redpoll. Common winter resident; doubtful summer resident.
- 529a. Pale Goldfinch. Common summer resident.
533. Pine Siskin. Common summer resident; doubtful winter resident.
534. Snow Bunting. Uncommon winter resident.
539. McCown's Longspur. Fairly common summer resident.
- 540a. Western Vesper Sparrow. Abundant summer resident.
- 542b. Western Savannah Sparrow. Summer resident.
- 552a. Western Lark Sparrow. Common summer resident.
- 554a. Gambel's Sparrow. Common during migrations; doubtful summer resident.
- 559a. Western Tree Sparrow. Uncommon summer resident.
- 560a. Western Chipping Sparrow. Common summer resident.
562. Brewer's Sparrow. Summer resident; not common.
- 567g. Pink-sided Junco. Common summer resident in the mountains.
- 574-1. Sage Sparrow. Summer resident. Little known of its abundance.
- 581b. Mountain Song Sparrow. Summer resident in mountains. Abundance not known.
583. Lincoln's Sparrow. Probably a summer resident. Only a few specimens taken.
588. Arctic Towhee. Common summer resident in foothills.
- 592-1. Green-tailed Towhee. Noted only on western slope of Big Horn Mountains.
596. Black-headed Grosbeak. Common summer resident.

599. Lazuli Bunting. Common summer resident.
604. Dickcissel. A flock of 20 to 30 noted September 7th, 1907.
605. Lark Bunting. Abundant summer resident.
607. Western Tanager. Common summer resident.
612. Cliff Swallow. Common summer resident.
613. Barn swallow. Common summer resident.
615. Northern Violet-green Swallow. Common summer resident.
616. Bank Swallow. Common summer resident.
618. Bohemian Waxwing. Winter resident; common at times.
619. Cedar Waxwing. Summer resident; not common.
621. Northern Shrike. Only a few seen.
622a. White-rumped Shrike. Common summer resident.
627a. Western Warbling Vireo. Summer resident; not common.
652. Yellow Warbler. Common summer resident.
656. Audubon's Warbler. Common summer resident.
680. Macgillivray's Warbler. Common summer resident.
681a. Western Yellow-throat. Common summer resident.
683a. Long-tailed Chat. One specimen taken in July at 7,000 feet.
685a. Pileolated Warbler. Rather rare summer resident.
687. Redstart. Common summer resident.
697. Pipit. Summer resident; not common.
701. Dipper. Common summer resident in mountains.
702. Sage Thrasher. Summer resident; only a few noted.
704. Catbird. Common summer resident.
705. Brown Thrasher. Uncommon summer resident.
715. Rock Wren. Common summer resident.
717a. Canon Wren. One specimen taken in July on Shell Creek, on west slope of Big Horn Mountains.
721a. Western House Wren. Abundant summer resident.
726b. Rocky Mountain Creeper. Summer resident; not common.
727c. Rocky Mountain Nuthatch. Uncommon summer resident.
735a. Long-tailed Chickadee. Fairly common resident.
738. Mountain Chickadee. Common resident.
749. Ruby-crowned Kinglet. Fairly common summer resident.
758a. Olive-backed Thrush. Uncommon summer resident.
759a. Audubon's Hermit Thrush. Uncommon summer resident.
761a. Western Robin. Abundant summer resident.
768. Mountain Bluebird.

COMMENTS.

This list by Metz contains a number of new records, and notes upon a few rare species which should be mentioned particularly. The new records are as follows: 212, 436, 484, 498d, 604, 627a, 685a, and 727c.

Among the rare species we note: 261, 356a, 373e, 459, and 717a.

Numbers 425, 554a, 599, and 717a seem to be extending their range and becoming more abundant, *i. e.*, coming into Wyoming from the northwest.

Local List No. 4.
FROM WESTON AND CROOK COUNTIES.

BY REV. P. B. PEABODY.

- 132. Mallard. Uncommon migrant.
- 137. Baldpate. Rare. Decreasing in number.
- 139. Green-winged Teal. Migrant; not common. Possibly breeds in Crook County.
- 149. Lesser Scaup Duck. Very rare.
- 167. Ruddy Duck. Migrant. Rare.
- 172. Canada Goose. Migrant. Uncommon. Decreasing in numbers.
- 212. Virginia Rail. Uncommon resident.
- 214. Sora (Carolina Rail). Uncommon resident.
- 230. Wilson's Snipe. Common during migrations. Winter resident.
- 256a. Western Solitary Sandpiper. Quite common migrant.
- 264. Long-billed Curlew. Common summer resident.
- 273. Killdeer. Summer resident; not common.
- 300a. Canada Ruffed Grouse. Common resident.
- 308a. Columbia Sharp-tailed Grouse. Common resident.
- 309. Sage Hen. Very common resident.
- 316. Mourning Dove. Common summer resident.

325. Turkey Vulture. Common summer resident.
331. Marsh Hawk. Uncommon summer resident; rarely winter resident.
332. Sharp-shinned Hawk. Common summer resident.
333. Cooper's Hawk. One specimen seen on fence in Weston County, summer.
337a. Krider's Hawk. Rather rare summer resident.
337b. Western Red-tail. Summer resident. Rare.
342. Swainson's Hawk. Abundant summer resident.
347a. Rough-legged Hawk. Common winter resident.
348. Ferruginous Rough-leg. Doubtful winter resident; uncommon.
349. Golden Eagle. Common winter resident. Rarely summer resident.
352. Bald Eagle. Very rare.
355. Prairie Falcon. Rare summer resident.
357b. Richardson's Pigeon Hawk. Rare winter resident.
360a. Desert Sparrow Hawk. Common summer resident.
366. Long-eared Owl. Uncommon summer resident; doubtful winter resident.
367. Short-eared Owl. Uncommon winter resident.
370. Great Gray Owl. Rare winter resident. A single contour feather found in nest of *Peris canadensis*.
373c. Rocky Mountain Screech Owl. Not uncommon resident in Crook County. Never seen in Weston County, though credibly reported there. But one specimen ever seen or taken, a juvenile—Crook County.
375a. Western Horned Owl. Common resident. Breeds in rocks.
378. Burrowing Owl. Resident; not very common.
393e. Rocky Mountain Hairy Woodpecker. Rather rare resident.
394h. Batchelder's Woodpecker. Very rare resident.
400. Arctic Three-toed Woodpecker. Winter resident. Rare. One specimen (neutral female), Bear Lodge, June.
402a. Red-naped Sapsucker. Very rare migrant. One fine male found dead at Sundance, September.
406. Red-headed Woodpecker. Common resident.
408. Lewis's Woodpecker. Common resident.
412. Northern Flicker. Common resident.
413. Red-shafted Flicker. Common resident.
418. Poor-will. Common summer resident.

- 420a. Western Nighthawk. Common summer resident.
- 425. White-throated Swift. Common summer resident.
- 432. Broad-tailed Hummingbird. Very rare summer resident.
- 444. Kingbird. Common summer resident.
- 457. Say's Phoebe. Common summer resident.
- 462. Western Wood Pewee. Very common in summer.
- 464. Western Flycatcher. Weston County, summer. Rare.
- 469. Wright's Flycatcher. Common summer resident.
- 474c. Desert Horned Lark. Abundant resident; commoner in migrations.
- 475. Magpie. Abundant resident.
- 484. Canada Jay. Resident. Very common.
- 488. Western Crow. Very rare.
- 491. Clarke's Nutcracker. Straggler.
- 492. Pinon Jay. Resident. Common in Weston County; rare in Crook County. Occurs as straggler as far southwest as Crawford, Nebr.
- 495. Cowbird. Summer resident; not common.
- 497. Yellow-headed Blackbird. Nests, not uncommonly, in swales and creek margins of Weston County.
- 498d. Thick-billed Red-wing. Common summer resident.
- 501-1. Western Meadowlark. Common summer resident.
- 508. Bullock's Oriole. Common summer resident.
- 509. Rusty Blackbird. Rare. Birds seen only; record hence *doubtful*.
- 510. Brewer's Blackbird. Common summer resident.
- 511b. Bronzed Grackle. Common during migrations; occasionally nests in Crook County.
- 514. Evening Grosbeak. Common winter resident in Crook County; rare in Weston County. None of *montana* have been found.
- 518. Cassin's Purple Finch. Very rare summer resident.
- 521a. Sierra Crossbill. Resident, varying in numbers from year to year.
- 524. Gray-crowned Rosy Finch. Common winter resident.
- 524a. Hepburn's Rosy Finch. Winter resident. About one-tenth as common as *tephrocotis*.
- 528. Redpoll. Fairly common winter resident.
- 529. Goldfinch. Common summer resident.
- 533. Pine Siskin. Irregular transient, varying in numbers.

534. Snow Bunting (Snow-flake). Rare winter resident in Crook County.
- 536a. Alaska Longspur. Rather uncommon winter resident.
538. Chestnut-collared Longspur. Occasional migrant in Weston County.
539. McCown's Longspur. Common migrant in Crook County; rare in Weston County. Probably breeds in Crook County.
- 540a. Western Vesper Sparrow. Common summer resident.
- 542b. Western Savannah Sparrow. Uncommon summer resident.
- 546a. Western Grasshopper Sparrow. Summer resident. Rather common locally.
- 552a. Western Lark Sparrow. Common summer resident in Weston County.
553. Harris's Sparrow. Very rare in Crook County; never seen in Weston.
554. White-crowned Sparrow. Common migrant in Weston County.
- 559a. Western Tree Sparrow. Abundant winter resident.
- 560a. Western Chipping Sparrow. Common summer resident.
562. Brewer's Sparrow. Common summer resident.
566. White-winged Junco. Common resident.
567. Slate-colored Junco. Not uncommon winter transient.
- 567g. Pink-sided Junco. Rare winter resident.
- 581a. Desert Song Sparrow. Very rare in Crook County, and rarer in Weston.
588. Arctic Towhee. Abundant summer resident.
596. Black-headed Grosbeak. Common summer resident.
599. Lazuli Bunting. Rare summer resident.
604. Dickcissel. Very rare summer resident in Crook County.
605. Lark Bunting. Common summer resident.
607. Western Tanager. Common summer resident.
612. Cliff Swallow. Common summer resident in Weston County.
613. Barn Swallow. Common summer resident.
615. Northern Violet-green Swallow. Common breeder in both counties.
618. Bohemian Waxwing. Abundant winter habitant in Crook County.
621. Northern Shrike. Rare winter resident.
- 627a. Western Warbling Vireo. Common summer resident in Crook County.

- 629b. Plumbeous Vireo. Common summer resident in Crook County; uncommon in Weston.
647. Tennessee Warbler. Irregular visitant.
652. Yellow Warbler. Common summer resident.
656. Audubon's Warbler. Common summer resident.
674. Oven-bird. Rather rare summer resident.
680. Macgillivray's Warbler. Common summer resident.
- 681a. Western Yellow-throat. Rather uncommon summer resident.
- 683a. Long-tailed Chat. Common summer resident.
- 685a. Pileolated Warbler. Specifically unidentified. Only two birds seen.
697. Pipit. Common migrant.
702. Sage Thrasher. Common summer resident.
704. Catbird. Common summer resident.
715. Rock Wren. Common summer resident.
- 721a. Western House Wren. Common summer resident.
- 726b. Rocky Mountain Creeper. Exceeding rare winter resident in Crook County.
- 727c. Rocky Mountain Nuthatch. Common resident.
728. Red-breasted Nuthatch. Very rare migrant. One specimen. Bear Lodge, October 29.
- 735a. Long-tailed Chickadee. Common resident.
- 748a. Western Golden-crowned Kinglet. Very rare migrant.
749. Ruby-crowned Kinglet. Very rare migrant.
754. Townsend's Solitaire. Common resident.
- 756a. Willow Thrush. Common locally—Crook County only.
- 758a. Olive-backed Thrush. Summer resident. Common locally.
- 761a. Western Robin. Abundant resident.
766. Bluebird. One taken, three heard.
768. Mountain Bluebird. Common summer resident.

COMMENTS.

The region in which Peabody collected corresponds more nearly with the eastern portion of the United States than does any other part of the state. The rainfall is greater, permitting agricultural work to be carried on without irrigation. In the lower altitudes there is a considerable growth of elm and oak. We may not, therefore, be surprised to

find some eastern species among the birds. The Canada Jay, Rusty Blackbird, Goldfinch, and Dickcissel seem to be entering the state from the east and northeast.

The following extracts were taken from a letter received from Mr. Peabody: "All my Wyoming material was fully verified by Oberholser. All Grosbeaks taken in Crook County were *vespertina*; the only *Spinus* taken was *tristis*. The data for 727c include photographs."

The following new records may be ascribed to Peabody: 212, 484, 509, 514, 529, 546a, 604, 674, 727c.

Local List No. 5. FROM THE VICINITY OF HAT CREEK, CONVERSE COUNTY.

BY G. D. PERCIVAL.

132. Mallard.	242. Least Sandpiper.
135. Gadwall.	263. Spotted Sandpiper.
136. European Widgeon. One	264. Long-billed Curlew.
male taken October 3rd,	273. Killdeer.
1910, from flock of No.	309. Sage Hen.
137.	331. Marsh Hawk.
137. Baldpate.	333. Cooper's Hawk.
139. Green-winged Teal.	352. Bald Eagle.
140. Blue-winged Teal.	360. Sparrow Hawk.
147. Canvas-back.	375. Great Horned Owl.
172. Canada Goose.	378. Burrowing Owl.
187. White-faced Glossy Ibis.	406. Red-headed Woodpecker.
One male taken May	413. Red-shafted Flicker.
20th, 1910. Only one	420a. Western Nighthawk.
seen.	444. Kingbird.
194. Great Blue Heron.	448. Cassin's Kingbird. One
221. Coot.	male taken June 23rd.
230. Wilson's Snipe.	1911.

-
457. Say's Phoebe.	539. McCown's Longspur.
474c. Desert Horned Lark.	554. White-crowned Sparrow.
474b. Prairie Horned Lark.	559. Tree Sparrow.
475. Magpie.	566. White-winged Junco.
492. Pinon Jay.	567. Slate-colored Junco.
495. Cowbird.	567b. Schufeldt's Junco. Took
497. Yellow-headed Blackbird.	male specimen with flock
498. Red-winged Blackbird.	of White-winged Juncos
501. Meadowlark. I have a pair	in June, 1912.
of both the meadowlark	567g. Pink-sided Junco.
and western meadow-	588. Arctic Towhee.
lark taken in June, 1912.	605. Lark Bunting.
501-1. Western Meadowlark.	613. Barn Swallow.
507. Baltimore Oriole. Fairly	618. Bohemian Waxwing.
common summer resi-	622a. White-rumped Shrike.
dent. Have found 15	681a. Western Yellow-throat.
nests.	704. Catbird.
524. Gray-crowned Rosy Finch.	705. Brown Thrasher.
528. Redpoll.	735a. Long-tailed Chickadee.
529a. Pale Goldfinch.	754. Townsend's Solitaire.
534. Snow Bunting.	767. Western Bluebird.
538. Chestnut-collared Long-	768. Mountain Bluebird.
spur.	

COMMENTS.

Mr. Percival here records three species which are new, viz.: 136, 501, and 507. The list also includes a number of rare species, among which may be mentioned 187, 448, and 705.

Local List No. 6.
FROM THE VICINITY OF ARLINGTON, CARBON
COUNTY, UNLESS OTHERWISE SPECIFIED.

BY REV. JOHN CLEARWATERS.

7. Loon. I saw a mounted specimen at Torrington that was killed on the Platte River, near there.
125. White Pelican. There is a mounted pelican at Thermopolis that was reported to have been killed on a pond near there.
130. Red-breasted Merganser. Two males and one female seen.
132. Mallard. Abundant summer resident.
135. Gadwall. I have killed several specimens.
139. Green-winged Teal.
140. Blue-winged Teal.
143. Pintail. Have taken it.
144. Wood Duck. Reported as summer resident in the eastern portion of the state on Bear Creek, Goshen County.
146. Redhead.
172. Canada Goose or possibly Hutchinson.
174. Black Brant. Small flock noted.
190. Bittern.
191. Least Bittern. I saw a Least Bittern at Cody.
194. Great Blue Heron. Abundant breeder.
201. Green Heron. Seen on Bear and Horse Creek, in Laramie County.
224. Wilson's Phalarope. Very abundant.
230. Wilson's Snipe. Very abundant resident. Have noted it around warm springs in winter.
- 256a. Western Solitary Sandpiper. Have seen what I judged to be this form.
261. Upland Plover. Common summer resident.
263. Spotted Sandpiper. Summer resident.
273. Killdeer. Everywhere.
297. Dusky Grouse. Killed female.
309. Sage Hen. Very abundant in all suitable localities.
316. Mourning Dove. Abundant.
325. Turkey Vulture.

331. Marsh Hawk. Have specimen.
332. Sharp-shinned Hawk.
- 337b. Western Red-tail. Possibly some noted have been *Krideri*.
342. Swainson's Hawk. Common.
349. Golden Eagle. Have seen nest said to have been there 28 years.
360. Sparrow Hawk. Summer resident.
- 360a. Desert Sparrow Hawk. Summer resident.
368. Barred Owl. Mounted specimen at Newcastle.
372. Saw-whet Owl. I have a specimen.
- 373e. Rocky Mountain Screech Owl. Nests about Arlington.
- 375a. Western Horned Owl. Very abundant.
378. Burrowing Owl. Abundant about the "dog towns."
390. Belted Kingfisher. Abundant. Breeder.
- 393e. Rocky Mountain Woodpecker. Probably this form, but doubtful.
- 394b. Batchelder's Woodpecker. Have seen it in Laramie County.
406. Red-headed Woodpecker. Very common.
- 412a. Northern Flicker. In the proportion of 1 to 20 of 413.
413. Red-shafted Flicker. Abundant.
418. Poor-will. Have heard them.
- 420a. Western Nighthawk. Abundant. Nests on bare, gravelly knolls.
432. Broad-tailed Hummingbird. Abundant.
444. Kingbird. In Laramie County.
447. Arkansas Kingbird. Abundant.
457. Say's Phoebe. Common.
462. Western Wood Pewee. Have them in eastern Laramie County.
- 474c. Desert Horned Lark. Abundant. Resident and is around the ranch all winter. During the winter of 1911-12 an elevator burned at Pine Bluffs, Wyoming, and 50 carloads of grain were destroyed. These birds collected there in immense flocks to feed upon the scattered grain. They remained the entire winter.
475. Magpie. Abundant. Breeder.
477. Blue Jay. Reported in Carbon County. I saw a Blue Jay about 12 miles over the line at Edgemont, South Dakota.
- 478c. Black-headed Jay. Abundant about Arlington, in the Wind River Mountains.

- 484a. Rocky Mountain Jay. Found in the Medicine Bow Mountains and in Wind River Mountains.
- 486. Raven. Found in the Wind River Mountains and in Big Horn Basin. One specimen killed at Ralston, Wyoming.
- 488b. Western Crow. Abundant in Carbon County.
- 495. Cowbird. Common summer resident.
- 497. Yellow-headed Blackbird. Abundant. Breeder.
- 498d. Thick-billed Red-wing. Abundant. Nesting everywhere.
- 501-1. Western Meadowlark. Abundant.
- 508. Bullock's Oriole. I saw the old nests in Laramie County.
- 510. Brewer's Blackbird.
- 519. House Finch. Have seen them in Douglas.
- 521a. Mexican Crossbill. Birds probably of this form were noted.
- 524. Gray-crowned Rosy Finch. I find them abundant winter residents.
- 529. Goldfinch.
- 533. Pine Siskin.
- 534. Snow Bunting. I saw them near Casper.
- 539. McCown's Longspur.
- 540a. Western Vesper Sparrow. Common summer resident.
- 552a. Western Lark Sparrow.
- 554. White-crowned Sparrow. I have seen it at Arlington.
- 562. Brewer's Sparrow.
- 567. Slate-colored Junco.
- 581b. Mountain Song Sparrow.
- 583. Lincoln's Sparrow. Abundant summer resident.
- 588. Arctic Towhee. Have seen in Laramie County what I think was this form.
- 592-1. Green-tailed Towhee. Seen in Laramie County.
- 593. Cardinal. Along the streams, Bear Creek and Horse Creek.
- 604. Dickcissel. Have seen it in eastern part of state.
- 605. Lark Bunting. Abundant summer resident.
- 612. Cliff Swallow. Very abundant.
- 613. Barn Swallow.
- 614. Tree Swallow. A form nesting in trees probably is this species.
- 616. Bank Swallow or possibly Rough-winged. We have one or the other of these forms.
- 619. Cedar Waxwing.
- 622a. White-rumped Shrike. Very abundant in east end of this state.

- 627a. Western Warbling Vireo.
- 652. Yellow Warbler. Occurs over the entire region.
- 656. Audubon's Warbler.
- 674. Oven-bird. Caught several in traps. They nest in mountains, not above timber line.
- 705. Brown Thrasher. In Laramie County, July, 1910, I heard one call and saw it.
- 721a. Western House Wren. Summer resident.
- 728. Red-breasted Nuthatch.
- 735a. Long-tailed Chickadee. Common. Possibly *gambeli* also.
- 749. Ruby-crowned Kinglet. Probably this form.
- 754. Townsend's Solitaire.
- 758. Olive-backed Thrush. Probably this species.
- 761. Robin. Have seen this species.
- 761a. Western Robin.
- 766. Bluebird. Have seen them in Laramie County, where they nest.
- 768. Mountain Bluebird.

COMMENTS.

Clearwaters has a number of interesting records, mostly of eastern forms which were taken near the Nebraska line.

In answer to questions about the possibility of error in his identification, Mr. Clearwaters wrote as follows: "As to the Cardinal, 593, I can be positive. I saw both male and female and heard the male give the characteristic notes. I am sure about 477, Blue Jay; 604, Dickcissel, and 201, Green Heron."

The eastern forms, 593, 477, 604, and 201, were all seen in what is now Goshen County, almost upon the Nebraska line, near La Grange.

The new species reported by Mr. Clearwaters are the following: 201, 256a, 477, 488b, 498d, 593, 604, 627a and 674.

Local List No. 7.
FROM ALBANY COUNTY, UNLESS OTHERWISE
STATED.

For the years 1906 to 1913.

BY A. E. LOCKWOOD.

34. Dovekie. One specimen taken from the lakes 20 miles southwest from Laramie, 1904. Two specimens were seen.	140. Blue-winged Teal.
53. California Gull. Specimen taken near Laramie.	141. Cinnamon Teal.
55. Short-billed Gull. Specimen taken near Laramie.	142. Shoveller.
59. Franklin's Gull. Specimen mounted for customer at Wheatland, May 6, 1912.	143. Pintail.
62. Sabine's Gull. Got two specimens; one was from James Lake, the other nearer Laramie. Both taken in the fall.	149. Lesser Scaup Duck.
120. Double-crested Cormorant. Two specimens taken from Laramie Plains.	151. Golden-eye.
129. Merganser.	152. Barree's Golden-eye.
131-1. Smew.	153. Buffle-head.
132. Mallard.	171a. White-fronted Goose.
133. Black Duck. Only on report of several hunters who were familiar with it in the East.	172a. Hutchin's Goose.
135. Gadwall.	180. Whistling Swan.
137. Baldpate.	190. Bittern (?).
139. European Teal.	191. Least Bittern.
	194. Great Blue Heron.
	197. Snowy Egret. Specimen taken from Lake Como.
	202. Black-crowned Night Heron (?).
	205. Little Brown Crane. Mounted specimen on April 3, 1912.
	212. Virginia Rail. One taken near Laramie in the spring of 1902.
	224. Wilson's Phalarope (?).
	230. Wilson's Snipe (?).
	249. Marbled Godwit. Two specimens were taken in September, 1911, and 4 or 5 others were seen. Those taken were in juvenile plumage.

263. Spotted Sandpiper.
264. Long-billed Curlew.
272. Golden Plover.
273. Killdeer.
281. Mountain Plover.
297. Dusky Grouse.
304. White-tailed Ptarmigan.
310. Mourning Dove.
325. Turkey Vulture. A small specimen, apparently a hybrid between this and the Black Vulture, was taken.
331. Marsh Hawk.
332. Sharp-shinned Hawk.
334. Goshawk.
- 334a. Western Goshawk. Several specimens, some of which were taken in Natrona and Albany Counties.
- 337b. Western Red-tail (?).
- 337d. Harlan's Hawk. One or two specimens taken which may have been confused with 337b.
342. Swainson's Hawk.
- 347a. Rough-legged Hawk.
348. Ferruginous Rough-leg.
349. Golden Eagle.
352. Bald Eagle.
355. Prairie Falcon.
- 356a. Duck Hawk. Specimen taken at Casper.
- 356b. Peale's Falcon. Well marked specimen taken near Casper, 1892.
- 357b. Richardson's Pigeon Hawk. Specimen mounted in Natrona County.
360. Sparrow Hawk.
- 360a. Desert Sparrow Hawk.
364. Osprey.
366. Long-eared Owl.
367. Short-eared Owl.
372. Saw-whet Owl.
- 373e. Rocky Mountain Screech Owl. Reported to me from Saratoga Valley.
375. Great Horned Owl. The owls seem to intergrade in Albany County, and I have taken them until the sub-species seemed to blend right into each other. Have probably taken 375 in for mounting, as I had many owls looking more like it than 375a.
- 375a. Western Horned Owl. Taken near Laramie, the common species.
- 375c. Dusky Horned Owl. Several taken near Laramie.
- 375d. Pacific Horned Owl. A few taken in Albany County.
376. Snowy Owl. Taken in Albany County.
378. Burrowing Owl.
390. Belted Kingfisher.
- 393e. Rocky Mountain Hairy Woodpecker.
406. Red-headed Woodpecker.
413. Red-shafted Flicker.
- 420a. Nighthawk.
432. Broad-tailed Hummingbird.
447. Arkansas Kingbird.

457. Say's Phoebe.
 462. Western Wood Pewee.
 469. Wright's Flycatcher.
 474c. Desert Horned Lark.
 475. Magpie.
 478b. Long-crested Jay.
 478c. Black-headed Jay.
 480. Woodhouse's Jay. Taken
 near Laramie.
 486. Raven.
 488. Crow.
 492. Pinon Jay.
 498d. Thick-billed Redwing.
 501-1. Western Meadowlark.
 508. Bullock's Oriole.
 509. Rusty Blackbird. Spec-
 men taken near Casper
 in 1901 from a flock of
 Brewer's Blackbirds.
 510. Brewer's Blackbird.
 514a. Western Evening Gros-
 beak. Taken at Laramie.
 515a. Rocky Mountain Pine Gros-
 beak. Laramie.
 519. House Finch.
 521. Crossbill. Specimens taken
 in Natrona and Albany
 Counties.
 524. Gray-crowned Rosy Finch.
 524a. Hepburn's Rosy Finch.
 Laramie.
 528. Redpoll.
 529a. Pale Goldfinch.
 536a. Alaska Long-spur.
 546a. Western Grasshopper Spar-
 row. Specimen taken in
 the vicinity of Laramie.
 554. White-crowned Sparrow.
 558. White-throated Sparrow.
 559. Tree Sparrow (?).
 562. Brewer's Sparrow.
 567. Slate-colored Junco.
 567b. Schufeldt's Junco.
 581b. Mountain Song Sparrow.
 588. Arctic Towhee.
 588a. Spurred Towhee.
 592-1. California Towhee.
 596. Black-headed Grosbeak.
 599. Lazuli Bunting.
 605. Lark Bunting.
 612. Cliff Swallow.
 616. Bank Swallow.
 621. Northern Shrike.
 646a. Lutescent Warbler.
 652. Cape May Warbler.
 654. Black-throated Blue War-
 bler. One specimen tak-
 en in 1893 in Casper.
 Two or three taken in
 Natrona County in the
 spring of 1892.
 656. Audubon's Warbler.
 675a. Grinnel's Water Thrush.
 Noted in Natrona Coun-
 ty.
 681a. Western Yellow-throat.
 683a. Long-tailed Chat.
 685a. Pileolated Warbler. Spec-
 imen taken at Laramie.
 702. Sage Thrasher.
 704. Catbird.
 705. Brown Thrasher.
 715. Rock Wren.
 717a. Canon Wren. A bird which
 I think was of this spe-
 cies was noted near Lar-
 amie.
 721a. Western House Wren.
 722a. Western Winter Wren.
 725. Long-billed Marsh Wren.

725c. Western Marsh Wren.	758a. Olive-backed Thrush.
754. Townsend's Solitaire.	759a. Audubon's Hermit Thrush.
756a. Willow Thrush.	761. Robin.
757. Gray - cheeked Thrush.	761a. Western Robin.
Took two or three specimens at Laramie during spring migrations.	768. Mountain Bluebird.
	I. C. English Sparrow.

COMMENTS.

Mr. Lockwood has had wide experience as a collector and taxidermist. His business brings him many specimens of birds and mammals which he would not otherwise see. His list includes a considerable number of species not reported by Knight, and are as follows: 34, 54, 55, 56, 59, 62, 212, 334a, 375c, 375d, 498d, 509, 521, 546a, 654, 685a, and 757.

In corresponding with Mr. Lockwood, I find that these records are well authenticated.

Local List No. 8.
FROM ALBANY COUNTY.

From May, 1911, to June, 1913.

BY ERNEST P. WALKER.

- 54. Ring-billed Gull. Common summer resident about the alkali lakes.
- 132. Mallard. Common summer resident about the alkali lakes.
- 135. Gadwall. Common migrant on the Laramie Plains.
- 139. Green-winged Teal. Common resident about streams and lakes.
- 140. Blue-winged Teal. Common migrant and probably summer resident.
- 142. Shoveller. On August 11th, 1911, adult and young seen.
- 147. Canvas-back. Common migrant.

190. Bittern. Uncommon summer resident in the Little Laramie Valley.
194. Great Blue Heron. Common summer resident. Formerly there was a large rookery near Laramie, but now there are only 3 or 4 pairs nesting there.
197. Snowy Egret. A specimen taken near Laramie, May 25th, 1913.
202. Black-crowned Night Heron. Common summer resident in the Little Laramie Valley.
214. Sora. One specimen taken on September 14th, 1911, at Webb Lake, near Hatton.
221. Coot. Common summer resident about some of the alkali lakes on the Laramie Plains.
224. Wilson's Phalarope. Abundant summer resident.
225. Avocet. Abundant summer resident about the alkali lakes.
230. Wilson's Snipe. On June 10th, 1911, in the canyon east of Pilot Knob, in the Laramie Hills, I found two young birds that had just been hatched. On June 26th, 1913, I took a set of 4 eggs at the head of Centennial Valley.
241. Baird's Sandpiper. On August 2, 1911, a few of this form were with a flock of Wilson's Phalaropes about the alkali lakes near Sprague's Lane.
255. Yellow-legs. Abundant summer resident.
- 256a. Western Solitary Sandpiper. On August 3rd, one specimen was found in the Little Laramie Valley, near Sprague's Lane.
- 258a. Western Willet. During August, 1911, these were in flocks of 10 to 15 about the alkali lakes.
263. Spotted Sandpiper. Abundant summer resident. On July 2, 1911, at Lake Owen, altitude 9,100 feet, I found a female with two young birds just out of the nest.
273. Killdeer. Abundant summer resident.
281. Mountain Plover. Small flocks of 4 to 15 were to be seen about the alkali lakes in August.
297. Dusky Grouse. Common resident in the mountains.
304. White-tailed Ptarmigan. Fairly common resident on the highest peaks of the Medicine Bow Mountains.
309. Sage Hen. Reported from the Laramie Hills near here.
316. Mourning Dove. Common summer resident.

325. Turkey Vulture. On June 25th a vulture was noted near Albany.
331. Marsh Hawk. Common summer resident on the plains.
332. Sharp-shinned Hawk. On July 24th, in the Medicine Bow Mountains, a bird judged to be this form was noted.
334. Goshawk. Mr. Z. T. Sweeney told me that on October 7th, 1912, he found one dead near Foxpark.
- 337b. Western Red-tail. Fairly common summer resident in the Laramie Hills.
342. Swainson's Hawk. Common summer resident on the plains and foothills.
355. Prairie Falcon. A few about the plains and lower altitudes.
- 357b. Richardson's Pigeon Hawk. At Hatton on September 12th, 1911, I saw a number that I thought were of this species.
366. Long-eared Owl. Uncommon resident at the middle altitudes.
378. Burrowing Owl. Fairly common summer resident about many of the "dog towns."
387. Yellow-billed Cuckoo. There is a specimen in the University collection which was found dead on the campus, June 8th, 1908.
388. Black-billed Cuckoo. On June 7th, 1911, I secured a specimen from an aspen grove east of Pilot Knob.
390. Belted Kingfisher. Abundant summer resident.
- 394b. Batchelder's Woodpecker. Common summer resident in the aspen groves.
- 400a. Alaska Three-toed Woodpecker. Common summer resident in the foothills and in timber along streams.
406. Red-headed Woodpecker. A few about the groves of timber on the plains.
- 412a. Northern Flicker. About one of these to 50 of No. 413.
413. Red-shafted Flicker. Abundant summer resident over the plains.
418. Poor-will. Common summer resident in suitable places in the foothills.
- 420a. Western Nighthawk. Abundant summer resident.
432. Broad-tailed Hummingbird. Common summer resident.
444. Kingbird. Uncommon summer resident.
447. Arkansas Kingbird. Common summer resident.
448. Cassin's Kingbird. One specimen taken at Hatton, September 18th, 1911.

457. Say's Phoebe. Abundant summer resident, nesting around the ranches.
459. Olive-sided Flycatcher. At Albany July 16th, 1911, 2 were seen. A few days after that one was noted at Lake Owen, 9,100 feet altitude.
462. Western Wood Pewee. Very abundant summer resident.
464. Western Flycatcher. At Hatton on September 13 I took one specimen.
- 474c. Desert Horned Lark. Abundant resident on the plains.
475. Magpie. Common resident.
- 478b. Long-crested Jay. Messrs. Sweeney and Jeffers of the Forest Service reported them fairly common about Foxpark and Centennial in September, 1911. (Possibly some of them may have been 478c.)
- 484a. Rocky Mountain Jay. Fairly common resident in the mountains.
488. Crow. Common summer resident on plains.
491. Clarke's Nutcracker. Very abundant in the Laramie Hills.
492. Pinon Jay. Flocks of birds which I think were of this form were noted in the Laramie Hills in May, 1911.
494. Bobolink. On May 24th, 1911, I saw one male flying northward over Laramie.
495. Cowbird. Abundant summer resident on the plains. In August a young bird fully as large as a Horned Lark was being fed by the foster parent.
497. Yellow-headed Blackbird. Common summer resident about marshy places.
- 498d. Thick-billed Red-wing. Abundant summer resident about all marshes.
- 501-1. Western Meadowlark. Abundant summer resident on the plains.
508. Bullock's Oriole. Uncommon summer resident.
510. Brewer's Blackbird. Abundant summer resident.
- 515a. Rocky Mountain Pine Grosbeak. A single bird was noted at 9,800 feet on the Medicine Bow Mountains.
518. Cassin's Purple Finch. A few noted on July 10th at Foxpark.
519. House Finch. Very abundant summer resident about the towns and ranches.

524. Gray-crowned Rosy Finch. Winter visitant in the foothills and plains. On March 16th, 1912, a flock of about 15 were found on the plains near Laramie.
- 529a. Pale Goldfinch. Fairly common about the timber and brush along streams.
533. Pine Siskin. Abundant spring migrant at the lower altitudes. Common summer resident higher up.
534. Snow Bunting. Winter resident in large flocks with the Horned Larks.
- 536a. Alaska Longspur. Very abundant migrant.
539. McCown's Longspur. Very abundant summer resident on the plains.
- 540a. Western Vesper Sparrow. The most abundant sparrow of the plains region.
- 542b. Western Savannah Sparrow. Abundant summer resident about marshes on the plains and up to 9,100 feet.
554. White-crowned Sparrow. Common migrant, and abundant breeder from 8,000 feet to timber line.
- 559a. Western Tree Sparrow. In spring of 1912-13 a few were noted about town.
- 560a. Western Chipping Sparrow. Small colonies noted in Laramie Hills and a few about town.
562. Brewer's Sparrow. The abundant sparrow of the sage-brush region.
- 567g. Pink-sided Junco. Common migrant.
- 570b. Gray-headed Junco. Common summer resident.
- 574-1. Sage Sparrow. A few noted in the Laramie Hills.
- 581b. Mountain Song Sparrow. Uncommon summer resident.
583. Lincoln Sparrow. A very abundant summer resident about swamps.
- 492-1. Green-tailed Towhee. Common summer resident in the sage-brush region of the foothills, nesting in the sage brush.
596. Black-headed Grosbeak. One specimen taken at Albany, June 26th.
599. Lazuli Bunting. At the head of Centennial Valley I found a few of these birds.
605. Lark Bunting. Abundant summer resident on the plains.
612. Cliff Swallow. Very abundant resident about the ranches and in some places nesting along the cliffs.

613. Barn Swallow. Fairly common about some of the ranches on the plains.
614. Tree Swallow. In June these were noted nesting abundantly in holes in the trees about Albany.
615. Northern Violet-green Swallow. Common summer resident from 8,000 feet to timber line. Nesting in holes in the trees, coming down to the lowlands and meadows to catch insects.
616. Bank Swallow. Fairly common along the Laramie River.
621. Northern Shrike. Fairly common winter resident.
- 622a. White-rumped Shrike. A few about the plains.
- 627a. Western Warbling Vireo. Very abundant summer resident. Found in almost all of the aspen groves.
646. Orange-crowned Warbler. A single specimen taken in September, 1912.
652. Yellow Warbler. Abundant summer resident.
656. Audubon's Warbler. Abundant summer resident.
668. Townsend's Warbler. On September 13th a single specimen was found at Hatton.
680. Macgillivray's Warbler. Uncommon summer resident.
- 681a. Western Yellow-throat. Rare. One was noted on May 24th and another was seen May 19th.
- 683a. Long-tailed Chat. Common summer resident in the brushy swamps.
- 685a. Pileolated Warbler. Very abundant from 8,000 feet to 9,000 feet in the brushy swamps.
697. Pipit. Abundant summer resident above timber line. Young were seen just out of the nest July 19th-25th.
702. Sage Thrasher. Very abundant summer resident.
704. Catbird. Common summer resident along the streams.
715. Rock Wren. Common from the plains to about 9,000 feet.
- 721a. Western House Wren. Abundant summer resident.
- 725c. Western Marsh Wren. Two specimens were taken May 19th, 1912, by Mr. Lockwood and myself.
- 726b. Rocky Mountain Creeper. Apparently a winter resident, as I found one on November 27th, at 9,100 feet, in the Medicine Bow Mountains.
728. Red-breasted Nuthatch. One seen in town on May 21, 1912.
- 735a. Long-tailed Chickadee. Common summer resident. A nest was found May 21st at Centennial.

738. Mountain Chickadee. Common resident. During the winter this form works downward and replaces *septentrionalis*, which goes southward.
748. Golden-crowned Kinglet. Mr. Sweeney reported to me that on October 2nd, 1912, he noted a small flock at Foxpark. Apparently this form is very rare throughout this region.
749. Ruby-crowned Kinglet. Very abundant summer resident. In all the heavy timber.
754. Townsend's Solitaire. Common summer resident.
- 756a. Willow Thrush. Common summer resident.
- 758a. Olive-backed Thrush. This form is probably more common than the preceding.
761. Robin. This and the following form are both found here. About one of *migratorius* to 25 of *propinquus*. •
- 761a. Western Robin. Very common summer resident.
768. Mountain Bluebird. Abundant summer resident.
- I. S. English Sparrow. Very abundant nuisance about the towns. Many are found about the ranches, but gradually spreading to the settled regions.

COMMENTS.

This list, by Walker, contains but a single new species, No. 387. The record is based upon a specimen which was found dead on the University campus and is now in the Wyoming collection of skins.

Several species included here are rare, as for example, 197, 334, 388, 448, 459, 515, 646, 725c, and 748.

The Wilson's Snipe, No. 230, and the Pipit, No. 697, are reported to be summer residents for the first time.

It is worthy of note that the Lazuli Bunting is becoming more abundant and extending its range. It, no doubt, is a summer resident.

Local List No. 9.
FROM THE VICINITY OF HERMOSA, ALBANY
COUNTY.

From March 21st, 1906, to July 6th, 1906.

BY C. H. SAWYER.

140. Blue-winged Teal.	524. Gray-crowned Rosy Finch.
256a. Western Solitary Sand-
piper. Two nests in
willows, one of six and
one of eight eggs.	540a. Western Vesper Sparrow.
263. Spotted Sandpiper.	542b. Western Savannah Spar-
row.
273. Killdeer.	554. White-crowned Sparrow.
390. Belted Kingfisher.	592-1. Green-tailed Towhee.
432. Broad-tailed Hummingbird.	605. Lark Bunting.
475. Magpie.	607. Western Tanager.
478c. Black-headed Jay.	627a. Western Warbling Vireo.
488. Crow.	652. Yellow Warbler.
495. Cowbird.	655. Myrtle Warbler.
498. Red-winged Blackbird (?).	680. Macgillivray's Warbler.
509. Rusty Blackbird. Female
No. 36. Taken June 21,
1906. Parent of nest
with four eggs near edge
of marsh.	704. Catbird.
	728. Red-breasted Nuthatch. Fe-
male taken at Hermosa,
June 17th, 1906.
	738. Mountain Chickadee.
	761a. Western Robin.
	768. Mountain Bluebird.

COMMENTS.

This list, by Sawyer, contains three new records, 256a, 509, and 627a. Nests and eggs of 256a were found. The Myrtle Warbler, which resembles Audubon's, is rare, but was reported by Knight.

Local List No. 10.
FROM GREEN RIVER.

For the latter part of August and the early part of September, 1911.

BY ERNEST P. WALKER.

- 194. Great Blue Heron. Fairly common summer resident.
- 202. Black-crowned Night Heron. On September 6th one was noted flying southward.
- 256a. Western Solitary Sandpiper. One noted on September 1, and again on September 5.
- 273. Killdeer.
- 316. Mourning Dove. Abundant from August 29th to September 8th. On August 30th I found a nest having in it one young bird about two-thirds grown, but by the 8th many had left.
- 331. Marsh Hawk. One was noted September 2nd.
- 337b. Western Red-tail. One was seen on September 4th.
- 357b. Richardson's Pigeon Hawk. On September 4th I took two of these birds.
- 366. Long-eared Owl. September 2nd I took one specimen.
- 373e. Rocky Mountain Screech Owl. On the evening of September 2nd I heard one or two calls which I am quite sure were from a bird of this species.
- 375a. Western Horned Owl. Probably fairly common in the timber along the streams.
- 390. Belted Kingfisher. Occasionally seen along Green River.
- 413. Red-shafted Flicker. Plentiful until about September 7th.
- 418. Poor-will. Late in the evening on September 5th I heard one call.
- 444. Kingbird. On August 31st I saw one specimen.
- 464. Western Flycatcher. A few seen and specimens taken.
- 474c. Desert Horned Lark. A few seen.
- 475. Magpie. Fairly common.
- 480. Woodhouse's Jay. Common, and in flocks of 8 to 10 coming close to camp and acting much like the Pinon Jay, with which it so frequently associates.
- 491. Clarke's Nutcracker. A few noted along the bluffs by the river.
- 495. Cowbird. One female seen on September 6th.
- 501-1. Western Meadowlark. Uncommon at this date.

510. Brewer's Blackbird. Common.
519. House Finch. A flock was noted at Green River.
540a. Western Savannah Sparrow. A few noted.
562. Brewer's Sparrow. Common.
567g. Pink-sided Junco. On September 6th I took a specimen.
581b. Mountain Song Sparrow. Common at Green River on September 7th.
592-1. Green-tailed Towhee. Plentiful.
607. Western Tanager. Females rather common. No males were noted during this time.
612. Cliff Swallow. On August 31st I saw one.
616. Bank Swallow. Fairly common along the Green River.
624. Red-eyed Vireo. On September 4th I took one, which was the only one seen during the year.
627a. Western Warbling Vireo. One seen on September 4th.
652. Yellow Warbler. Two were seen during this time.
668. Townsend's Warbler. On September 1st I took one specimen.
680. Macgillivray's Warbler. On September 4th I saw 4 or 5 young birds.
683a. Long-tailed Chat. Very plentiful during the early part of my stay there, but by the latter date almost all were gone.
702. Sage Thrasher. Plentiful.
704. Catbird. Common during the winter time.
715. Rock Wren. On September 1st I saw one along the bluffs by the river.
721a. Western House Wren. One seen.
728. Red-breasted Nuthatch. A few that were apparently migrating were noted in the trees by the river.
735a. Long-tailed Chickadee. Quite common.
761a. Western Robin. Very plentiful.
768. Mountain Bluebird. Bluebirds were noted in abundance. Many young were found. Some greatly resembled the Chestnut-backed Bluebird.
1. S. English Sparrow. Quite common about the town. None were noted but a couple of miles down the river.

COMMENTS.

Mr. Walker's list contains one species not before reported in the state—256a. Some others are rare, as for example, 357b, 373e, 480, 624, and 668.

The records for 480 and 624 are of particular interest because they were made well toward the western portion of the state. They had been reported in the southeastern part before.

Local List No. 11.

FROM THE GREEN RIVER BASIN, YELLOWSTONE PARK AND JACKSON'S HOLE.

For the year 1904.

BY EDWARD R. WARREN.

54. Ring-billed Gull. Several seen in Yellowstone Park and vicinity.	300a. Canada Ruffed Grouse. June 28th and 29th. Noted near head of Fremont Lake.
125. White Pelican. Seen about the Park.	308b. Prairie Sharp-tailed Grouse. Common about Jackson Hole.
132. Mallard. Several seen in Jackson Hole.	309. Sage Hen.
172. Canada Goose. Common at Gibbon meadow, Yellowstone Park.	316. Mourning Dove.
206. Sandhill Crane. Noted in several places.	331. Marsh Hawk.
258a. Western Willet. Common in meadows near Big Piney.	337b. Western Red-tail.
263. Spotted Sandpiper. Noted in almost all suitable places.	342. Swainson's Hawk.
264. Long-billed Curlew. Meadows near Big Piney.	349. Golden Eagle.
273. Killdeer.	352. Bald Eagle.
297. Dusky Grouse. Hens with young seen Little Gros-sent Creek, July 6th; Jackson Hole, July 15th; Yellowstone Park, July 27th.	360a. Desert Sparrow Hawk.
	390. Belted Kingfisher.
	393e. Rocky Mountain Hairy Woodpecker.
	402a. Red-naped Sapsucker.
	413. Red-shafted Flicker.
	420a. Western Nighthawk.
	474c. Desert Horned Lark.
	475. Magpie.
	484a. Rocky Mountain Jay.
	486. Raven.
	491. Clarke's Nutcracker.
	497. Yellow-headed Blackbird.

501-1. Western Meadowlark.	560a. Western Chipping Sparrow.
510. Brewer's Blackbird.	562. Brewer's Sparrow.
515a. Rocky Mountain Pine Gros-
beak.	567g. Pink-sided Junco.
524. Gray-crowned Rosy Finch.	607. Western Tanager.
525. Black Rosy Finch. (?)	612. Cliff Swallow.
Birds were seen which
were thought to be this
species.	613. Barn Swallow.
533. Pine Siskin.	615. Northern Violet-green
Swallow.
540a. Western Vesper Sparrow.	652. Yellow Warbler.
554. White-crowned Sparrow.	715. Rock Wren.
	761a. Western Robin.
	768. Mountain Bluebird.

COMMENTS.

There are no new species in this list, but two are worthy of special notice:

206, Sandhill Crane. This is our only record of this bird since the publication of Knight's book.

297, Dusky Grouse. The ranges of this species and Richardson's Grouse overlap in Wyoming.

Local List No. 12.

FROM STAR VALLEY AND SURROUNDING MOUNTAINS, LINCOLN COUNTY.

From August 10th to August 25th, 1911.

BY STANLEY G. JEWETT.

135. Gadwall.	263. Spotted Sandpiper. Abundant.
139. Green-winged Teal. Common.	264. Curlew. One flock of 14 at Afton.
141. Cinnamon Teal. Common.	273. Killdeer. Common.
194. Great Blue Heron. Common.	297. Dusky Grouse. Common.
256a. Western Solitary Sandpiper. Fairly common.	297b. Richardson's Grouse. Common.

300a. Canada Ruffed Grouse.	540a. Western Vesper Sparrow.
One taken.	Abundant.
316. Mourning Dove. Abundant.	524b. Western Savannah Sparrow. Common.
331. Marsh Hawk. Fairly common.	554 or 554a. White-crowned Sparrow or Gambel's Sparrow. Two taken.
333. Cooper's Hawk.	562. Brewer's Sparrow. Abundant.
337b. Western Red-tail. Common.	567g. Pink-sided Junco. Common.
342. Swainson's Hawk. Common.	581b. Mountain Song Sparrow. Common.
355. Prairie Falcon. One seen.	585c. Slate-colored Fox Sparrow. Several about Afton.
390. Belted Kingfisher. Common.	613. Barn Swallow.
402a. Red-naped Sapsucker. One taken.	616. Bank Swallow.
408. Lewis's Woodpecker. Common.	627a. Western Warbling Vireo.
413. Red-shafted Flicker. Common.	652. Yellow Warbler. Common.
420a. Western Nighthawk. Abundant.	668. Townsend's Warbler. One seen at 7,500 feet.
444. Kingbird. Abundant.	680. Macgillivray's Warbler.
447. Arkansas Kingbird. Abundant.	697. Pipit. One seen at 9,500 ft.
462. Western Wood Pewee. Common.	701. Dipper. Common.
466. Traill's Flycatcher. Common.	702. Sage Thrasher. Abundant.
475. Magpie. Common.	704. Catbird. Common.
478c. Black-headed Jay. Common.	735a. Long-tailed Chickadee. Common.
494. Bobolink. Common.	738. Mountain Chickadee. Common.
495. Cowbird. Abundant.	748. Golden-crowned Kinglet. Several seen at 7,800 ft.
497. Yellow-headed Blackbird. Abundant.	754. Townsend's Solitaire. One seen at 7,500 ft.
501-1. Western Meadowlark. Abundant.	761a. Western Robin. Common.
510. Brewer's Blackbird. Abundant.	768. Mountain Bluebird. Common.
520. Pale Goldfinch. Abundant.	English Sparrow. Common about Afton and other towns in the valley.

COMMENTS.

There are two new species in this list, 256a and 585c. Numbers 668 and 748 are rare.

Local List No. 13.
FROM THE YELLOWSTONE NATIONAL PARK.

BY M. P. SKINNER.

- 53. California Gull. Abundant summer visitant. Breeds on Yellowstone Lake.
- 155. Harlequin Duck. Occasional spring migrant; may remain and breed.
- 180. Whistling Swan. Common fall migrant.
- 204. Whooping Crane. A flock of five seen in August.
- 365. Barn Owl. Accidental. One specimen seen.
- 373e. Rocky Mountain Screech Owl. Three specimens seen in 1914.
- 379. Pygmy Owl. Occasionally seen in winter.
- 436. Calliope Hummingbird. Rare summer visitant.
- 515a. Rocky Mountain Pine Grosbeak. Common fall and winter migrant.
- 567g. Pink-sided Junco. Abundant breeder.
- 645a. Calaveras Warbler. One specimen found dead in a poisonous cave.
- 668. Townsend's Warbler. Not uncommon here.
- 685a. Pileolated Warbler. Occasional summer visitant.

COMMENTS.

This list from the Yellowstone Park has just been received. It contains eight species new to the state, viz.: 53, 155, 204, 365, 379, 436, 645a, and 685a. Of this number, two species, 365 and 645a, have not been reported by any other collectors. The killing of birds in the park is forbidden, hence Mr. Skinner took no specimens.

INDEX

This index contains page references to the General and Hypothetical lists only. To refer to local lists use the A. O. U. numbers, which are given in the general list.

A

Avocet, 34

B

Bittern, 31

Least, 31

Blackbird—

Brewer's, 6, 11, 58

Bi-colored Red-wing, 85

Red-winged, 57

Rusty, 58

Thick-billed, 57

Tri-colored Red-wing, 85

Yellow-headed, 6, 57

Bluebird, 6, 80

Chestnut-backed, 80

Mountain, 80

Western, 86

Bobolink, 6, 57

Bob-White, 6, 7, 10, 38

Brant—

Black, 83

Bunting—

Indigo, 86

Lark, 6, 65

Lazuli, 65

Snow, 61

Bush-tit—

Lead-colored, 78

C

Cardinal, 65

Catbird, 74

Chat—

Long-tailed, 73

Yellow-breasted, 86

Chickadee—

Long-tailed, 78

Mountain, 78

Coot, 17, 33

Cormorant, 26

Double-crested, 26

Cowbird, 6, 57

Crane—

Little Brown, 32

Sand-hill, 32

Whooping, 32

Creep—

Rocky Mountain, 76

Crossbill, 59

Bendire's, 59

White-winged, 59

Crow, 55

Western, 6, 55

Cuckoo—

Black-billed, 46

Yellow-billed, 46

Curlew—

Long-billed, 37

D

Dickcissel, 65

Dipper, 74

Dove—

Mourning, 6, 40

Dovekie, 24
 Dowitcher—
 Long-billed, 35
 Duck, 17, 27
 American Scaup, 28
 Baldpate, 28
 Black, 83
 Blue-winged Teal, 28
 Buffle-head, 29
 Canvas-back, 28
 Cinnamon Teal, 28
 Gadwall, 27
 Golden-eye, 28, 29
 Green-winged Teal, 28
 Harlequin, 29
 Lesser Scaup, 28
 Mallard, 27
 Merganser, 27
 Old-squaw, 29
 Pintail, 28
 Redhead, 28
 Ring-necked, 28
 Ruddy, 30
 Scoter, 29
 Shoveller, 28
 Scaup, 28
 Wood, 28

E

Eagle—
 Bald, 7, 42
 Golden, 7, 17, 42
 European Widgeon 27

F

Falcon—
 Prairie, 43
 Peale's, 83
 Finch—
 Cassin's Purple, 59

Finch (Continued)—
 Black Rosy, 60
 Gray-crowned Rosy, 60
 Hepburn's Rosy, 60
 House, 59
 Flicker—
 Northern, 49
 Red-shafted, 49
 Flycatcher—
 Alder's, 84
 Ash-throated, 52
 Crested, 51
 Green-crested, 84
 Hammond's, 53
 Least, 53
 Olive-sided, 52
 Traill's, 53
 Western, 52
 Wright's, 53

G

Golden-eye—
 American, 29
 Barrow's, 29
 Goldfinch, 60
 Arkansas, 61
 Western, 61
 Godwit—
 Marbled, 36
 Goose—
 American White-fronted, 30
 Canada, 17, 30
 Hutchin's, 30
 Lesser Snow, 30
 Goshawk, 42
 Western, 42
 Grackle—
 Bronzed, 58
 Grebe—
 American Eared, 23
 Holboell's, 23

Grebe (Continued)—

Pied-billed, 23

Western, 23

Grosbeak—

Black-headed, 65

Evening, 58

Rocky Mountain Pine, 59

Western Evening, 59

Grouse—

Canadian Ruffed, 39

Columbian Sharp-tailed, 39

Dusky, 39

Franklin's, 39

Gray Ruffed, 39

Prairie Sharp-tailed, 40

Richardson's, 39

Sage, 40

Gull—

American Herring, 25

Bonaparte's, 25

California, 25

Ring-billed, 11, 24, 25

Franklin's, 10, 25

Short-billed, 25

Sabine's, 25

H

Hawk—

Cooper's, 17, 42

Desert Sparrow, 43

Duck, 17, 43

Ferruginous Rough-legged, 42

Goss, 17, 42

Harlan's, 83

Krider's, 42

Marsh, 41

Pigeon, 43

Richardson's Pigeon, 43

Rough-legged, 42

Sharp-shinned, 17, 42

Sparrow, 43

Hawk (Continued)—

Swainson's, 42

Western Red-tail, 42

Western Goss, 42

Heron—

Black-crowned Night, 31

Great Blue, 17, 31

Green, 31

Snowy, 31

Hummingbird—

Broad-tailed, 50

Calliope, 51

Rufous, 50

I

Ibis—

White-faced Glossy, 30

J

Jay—

Black-headed, 55

Blue, 55

Canada, 55

Long-crested, 55

Pinon, 56

Rocky Mountain, 55

Steller's, 84

Woodhouse's, 55

Junco—

Gray-headed, 64

Montana, 64, 65

Pink-sided, 63

Ridgway's, 64

Schufeldt's, 63

Slate-colored, 63

White-winged, 63

K

Killdeer, 38

Kingbird, 51

Arkansas, 51

Cassin's, 51

Kingfisher—
 Belted, 17, 46
 Kinglet—
 Golden-crowned, 78
 Ruby-crowned, 78
 Western Golden-crowned, 86
 Kittiwake, 25

L

Lark—
 Desert Horned, 9, 54
 Pallid Horned, 84
 Prairie Pallid Horned, 84
 Leucosticte—
 Black, 60
 Gray-crowned, 60
 Hepburn's, 60
 Longspur—
 Alaskan, 61
 Chestnut-collared, 61
 Lapland, 61
 McCown's, 61
 Loon, 24

M

Magpie, 17, 54
 Martin—
 Purple, 66
 Meadowlark, 6, 57
 Western, 6, 57
 Merganser, 27
 Hooded, 27
 Red-breasted, 27
 Mockingbird—
 Western, 74

N

Nighthawk, 84
 Western, 49
 Nutcracker—
 Clark's, 56

Nuthatch—
 Pygmy, 77
 Red-breasted, 77
 Rocky Mountain, 77
 Slender-billed, 77

O

Old Squaw, 29
 Oriole—
 Bullock's, 57
 Baltimore, 57
 Osprey, 44
 Oven Bird, 72
 Owl—
 Arctic Horned, 45
 Barred, 83
 Burrowing, 45
 Barn, 44
 Great Gray, 45
 Great Horned, 84
 Long-eared, 44
 Pigmy, 45
 Rocky Mountain Screech, 45
 Saw-whet, 45
 Short-eared, 44
 Snowy, 45
 Western Horned, 45

P

Pelican—
 American White, 26
 Brown, 26
 Pewee—
 Western Wood, 52
 Phalarope—
 Northern, 33
 Red, 33
 Wilson's, 34
 Phoebe, 52
 Say's, 52
 Pigeon—
 Passenger, 40

Pipit, 73
 Sprague's, 73
 Plover—
 Black-bellied, 37
 Golden, 37
 Mountain, 38
 Piping, 38
 Semipalmated, 38
 Snowy, 38
 Upland, 37
 Poor-will, 49
 Ptarmigan—
 White-tailed, 39

Q

Quail, 6, 7, 17, 38

R

Rail—
 Carolina, 33
 Virginia, 32
 Yellow, 83
 Raven, 55
 White-necked, 85
 Redpoll, 60
 Redstart, 73
 Robin, 80
 Western, 6, 80

S

Sagehen, 7, 17, 40
 Sanderling, 36
 Sandpiper—
 Baird's, 35
 Least, 36
 Pectoral, 35
 Semipalmated, 36
 Solitary, 36
 Spotted, 37
 Stilt, 35
 Western Solitary, 36

Sapsucker—
 Red-naped, 48
 Williamson's, 48
 Yellow-bellied, 48
 Scoter, 29
 Surf, 29
 White-winged, 29
 Shrike—
 Northern, 68
 White-rumped, 68
 Siskin—
 Pine, 61
 Snipe—
 Wilson's, 35
 Snowflake, 61
 Solitaire—
 Townsend's, 79
 Sora, 33
 Sparrow, 9
 Brewer's, 63
 Chipping, 62
 Clay-colored, 63
 Desert Song, 85
 European House, 6, 17, 80
 Fox, 85
 Gambel's, 62
 Harris's, 62
 Lincoln's, 64
 Mountain Song, 64
 Sage, 64
 Savanna, 62
 Slate-colored Fox, 64
 Tree, 14, 85
 Western Chipping, 63
 Western Field, 85
 Western Grasshopper, 62
 Western Lark, 62
 Western Savanna, 62
 Western Tree, 62
 Western Vesper, 61

Sparrow (Continued)—

White-crowned, 62

White-throated, 62

Swallow—

Bank, 67

Barn, 67

Cliff, 66

Northern Violet-green, 67

Rough-winged, 67

Tree, 67

Swan, 17

Trumpeter, 30

Whistling, 30

Swift—

White-throated, 50

T

Tanager—

Scarlet, 66

Western, 66

Teal—

Blue-winged, 28

Cinnamon, 28

Green-winged, 28

Tern—

Black, 26

Common, 26

Forster's, 25

Thrasher—

Brown, 74

Sage, 74

Thrush—

Alaska Hermit, 79

Audubon's Hermit, 80

Gray-cheeked, 79

Olive-backed, 79

Willow, 79

Titmouse—

Gray, 86

Towhee—

Arctic, 64

Green-tailed, 65

Spurred, 65

Turkey—

Wild, 83

V

Vireo—

Bell's, 69

Blue-headed, 69

Plumbeous, 69

Red-eyed, 69

Warbling, 69

Western Warbling, 69

Vulture—

Turkey, 41

W

Warbler—

Audubon's, 71

Black and White, 70

Black-poll, 13, 72

Black-throated Blue, 71

Chestnut-sided, 71

Calaveras, 70

Lutescent, 71

Macgillivray's, 72

Myrtle, 13, 71

Nashville, 10, 70

Northern Parula, 71

Orange-crowned, 70

Pileolated, 73

Tennessee, 71

Townsend's, 72

Virginia's, 70

Wilson's, 73

Yellow, 71

Water-Thrush—

Grinnell's, 72

Waxwing—

Bohemian, 67

Cedar, 68

Widgeon—

European, 27

Willet—

Western, 36

Woodcock, 35

Woodpecker—

Alpine Three-toed, 48

Arctic Three-toed, 48

Batchelder's, 48

Cabanis's, 47

Lewis's, 49

Red-headed, 48

Rocky Mountain Hairy, 47

Wren—

Canon, 75

Long-billed Marsh, 10, 75

Rock, 10, 75

Short-billed Marsh, 75

Western House, 75

Western Marsh, 76

Western Winter, 75

Y

Yellow-legs, 36

Greater, 36

Yellow-throat—

Western, 72