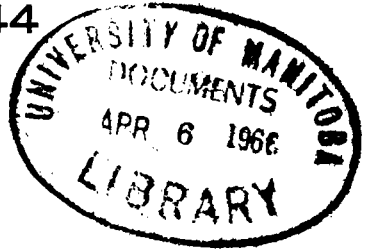


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The State Agricultural College  
THE AGRICULTURAL EXPERIMENT STATION

3) BULLETIN No. 44

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FURTHER NOTES

ON THE

# Birds of Colorado

An Appendix to Bulletin No. 37, on the  
Birds of Colorado

BY  
W. W. COOKE

APPROVED BY THE STATION COUNCIL

ALSTON ELLIS, President

FORT COLLINS, COLORADO

MARCH, 1898



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**FURTHER NOTES**  
ON  
**THE BIRDS OF COLORADO.**

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BY **W. W. COOKE.**

On the publication in March, 1897, of Bulletin No. 37 of this Station, entitled "The Birds of Colorado," the author received many letters containing additional notes. These led to quite an extensive correspondence and in several cases the examination or re-examination of large series of specimens. In addition the present writer has had a chance to personally examine several small collections not before accessible to him.

The results of this investigation are presented in the following pages. Even with these additions it is practically certain that the Colorado list will yet receive many new species.

All references are to the pages of the original edition to which this bulletin is to be considered as an appendix. On page 3, the total number of species and varieties known to occur in Colorado should be changed to 374, of which 236 are known to breed.

## CLASSIFICATION OF COLORADO BIRDS.

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Changes to be made, including those already made in the Addenda on page 128.

Page 8. **1. Residents:** Add

Phasianus torquatus.

Page 10. **4. Species that have been taken in Colorado in winter, either as rare or accidental visitors.** Add

Somateria dresseri.  
Nyctala tengmalmi richardsoni.  
Acanthis linaria rostrata.

Page 11. *B. Species that breed on the plains, but only to the foot-hills of the mountains.* Add

Philohela minor.  
Phasianus torquatus.  
Phalænoptilus nuttallii nitidus.  
Habia ludoviciana.  
Helminthophila peregrina.  
Harporhynchus bendirei.

Page 12. *D. Species that breed principally in the mountains.*  
Add

Empidonax hammondi.

Page 13. *E. Species that breed regularly only in Southern Colorado.* Add

Plegadis guarauna.

Page 13. **6. Species taken in the State during the summer,  
but not known to breed.** Omit

*Plegadis guarauna.*  
*Philohela minor.*  
*Phalænoptilus nuttallii nitidus.*

Add

*Tympanuchus americanus.*  
*Stellula calliope.*  
*Melospiza georgiana.*

Page 13. **7. Migrants.** Add

*Urinator adamsii.*  
*Porzana jamaicensis.*  
*Piranga erythromelas.*  
*Dendroica palmarum.*

Omit

*Helminthophila peregrina.*  
*Harporhynchus bendirei.*

Page 14. **8. Stragglers or doubtful species.** Add

*Urinator adamsii.*  
*Somateria dresseri.*  
*Porzana jamaicensis.*  
*Nyctala tengmalmi richardsoni.*  
*Bubo virginianus articus.*  
*Coccyzus americanus.*  
*Dryobates pubescens.*  
*Stellula calliope.*  
*Acanthis linaria rostrata.*  
*Melospiza georgiana.*  
*Piranga erythromelas.*  
*Dendroica palmarum.*

Omit

*Harporhynchus bendirei.*

Page 15. **10. Rare or irregular visitants, from the east or  
southeast.** Add

*Tympanuchus americanus.*  
*Melospiza georgiana.*

Habia ludoviciana.  
 Piranga erythromelas.  
 Dendroica palmarum.

Page 16. **12. Rare or irregular visitants from the west or southwest.** Add

Stellula calliope.

Add the star (\*) to denote breeding, to  
 Plegadis guarauna.

Page 16.

**SUMMARY.**

Total species in Colorado.....	374
1. Residents.....	88
2. Regular winter visitants from the north.....	24
3. Regular breeders that sometimes occur in winter	17
4. Rare or accidental winter visitants.....	25
5. Summer residents.....	236
A. Breeding on plains and in mountains.....	101
B. Breeding on plains, but not in mountains..	40
C. Breeding in mountains, but not on plains..	53
D. Breeding principally in mountains, sparingly on plains.....	21
E. Breeding regularly only in southern Colorado.....	21
6. Summer visitants, not known to breed.....	15
7. Migrants.....	60
8. Stragglers.....	59
9. Regular visitants from east and southeast.....	14
10. Rare visitants from east and southeast.....	38
11. Regular visitants from west and southwest.....	20
12. Rare visitants from west and southwest.....	13

## BIBLIOGRAPHY OF COLORADO ORNITHOLOGY.

Page 25. Add. BERTHOUD, E. L. Birds, their Geological History, Migration and Uses. By E. L. Berthoud, A. M., Member Phila. Academy and N. Y. Academy of Sciences. *Transcript Print*, Golden, Colo. [Issued in 1887.]

Short notes on twenty-four species of Colorado birds with reference to their distribution and migration. Includes the Wild Turkey and the Carolina Paroquet.

Page 27. Add. COCKERELL, T. D. A. The Food of Some Colorado Birds. *Am. Nat.* XVI. 1896, p. 329.

Examinations of the stomach contents of eleven species, taken by W. P. Lowe in various places in southern Colorado.

Page 27. Add. W. W. COOKE. The State Agricultural College, The Agricultural Experiment Station, Bulletin No. 37, Technical Series No. 2, The Birds of Colorado. By W. W. Cooke. Approved by the Station Council. Alston Ellis, President. Fort Collins, Colorado, March, 1897. The Smith-Brooks Printing Company, Denver, pp. 144. [Date of distribution, March 14, 1897.]

Contains an introduction on the general bird life of the State; Classification; giving lists of the birds with reference to their distribution and breeding. Dates of migration; a comparison of migration in different parts of Colorado with dates of arrival of the same species at St. Louis. Bibliography of Colorado ornithology; references to 182 books and articles. History of Colorado ornithology; giving the authority, date and place of publication for the introduction of each species into the list of Colorado birds. Birds of Colorado; being a list with brief annotations of the 363 species known to occur in the State.

COOKE, W. W. The Scarlet Ibis in Colorado. *Auk*, XVII. 1897, p. 316.

Note on the alleged occurrence of this species in the Arkansas Valley. The article is based on a mis-identification, the birds taken being really the White-faced Glossy Ibis.

COOKE, W. W. Bendire's Thrasher in Colorado. *Osprey*, II. 1897, p. 7.

Nests and eggs taken by Mr. N. R. Christie at Rouse Junction.

COOKE, W. W. A New Bird for Colorado. *Oregon Naturalist*, IV. 1897-8, p. 65.

A specimen of the Calliope Hummingbird found at Colorado Springs, July 25, 1897.

Page 29. Add. COUES, ELLIOTT. The Expeditions of Zebulon Montgomery Pike, To Headwaters of the Mississippi River, Through Louisiana Territory and in New Spain, During the Years 1805-6-7. A New Edition . . . . by Elliott Coues . . . . In Three Volumes. Vol. II. Arkansas Journey—Mexican Tour. New York, Francis P. Harper, 1895. pp. 955.

Contains the same bird notes as the original edition with the addition of a specific name to the description of the Carolina Paroquet.

Page 30. Add. Editorial. *The Republican*, April 29, 1897. [Local newspaper, published at Rocky Ford, Colo.]

Note of a Scarlet Ibis killed in that vicinity a few days before and mounted by Bert Beymer. [Specimen was really the White-faced Glossy Ibis.]

Editorial. *The Republican*, June 3, 1897.

Further notes on the capture of the birds mentioned in a previous issue with the same error of identification.

EVERMANN, B. W. and Jenkins, O. P. Ornithology from a Railroad Train. *O. & O. XIII.* 1888, pp. 65.

Notes on twenty-one species of birds seen on a trip through the Arkansas Valley and up the Las Animas River to Trinidad.

Page 33. Add. INGRAHAM, D. P. Additional Records of the Flammulated Owl (*Megascops flammeola*) in Colorado. *Auk, XII.* 1897, p. 403.

Two sets of eggs taken in May, 1897, near Beulah.

Page 34. Add. MORRISON, C. F. The Tricolored Blackbird in Colorado. *O. & O. XII.* 1887, p. 107.

Birds supposed to have been seen near Fort Lewis, February 3, 1887.

Page 35. Add. PIKE, Z. M. Exploratory Travels through the Western Territories of North America: comprising a Voyage from St. Louis, on the Mississippi, to the Source of that River, and a Journey through the Interior of Louisiana and the north-eastern Provinces of New Spain. Performed in the years 1805, 1806, 1807, by Order of the Government of the United States. By Zebulon Montgomery Pike, Major 6th Regt. United States Infantry. London: Paternoster Row. 1811. Denver: W. H. Lawrence & Co. 1889.

This is a reprint of the second edition. The book lays no claim to scientific ornithology, but it is interesting as being the first book that makes specific references to Colorado birds. Five species are mentioned or described.

Page 36. Add. RIDGWAY, ROBERT. A Monograph of the Genus *Leucosticte*, Swainson: or, Gray-crowned Purple



Finches. *Bull. Geol. and Geog. Surv. Ter. No. 2. Second Series.* May 11, 1875. pp. 51-82.

A full discussion of the three species and two varieties that inhabit the United States. Four of these forms are found in Colorado and three-fourths of the specimens that form the basis of the monograph came from Colorado.

Page 38. Add. SPRAGUE, U. [=W.] A. The Dwarf Thrush in Colorado. *Auk, XIII.* 1896, p. 85.

One taken at Magnolia, October 6, 1895, and identified by Ridgway.

## THE HISTORY OF COLORADO ORNITHOLOGY.

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Page 48. Add.

1898. **Cooke.** *Oregon Naturalist*, IV. 1897-8, p. 65. *Stellula calliope* taken at Colorado Springs and reported by C. E. Aiken.

1898. **Cooke.** *Colorado Experiment Station Bulletin No. 44.* The present publication contains the first records for Colorado of ten species as follows: *Phasianus torquatus* and *Melospiza georgiana* by Aiken; *Habia ludoviciana* by Mrs. Bacon; *Porzana jamaicensis* by Bruce; *Piranga erythromelas* by Cooke; *Nyctala tengmalmi richardsoni* by Doertenbach; *Urinator adamsii* by Hardy; *Tympanuchus americanus* by Robertson; *Dendroica palmarum* by H. G. Smith, and *Acanthis linaria rostrata* by Sprague.

Page 48. **RECAPITULATION.** Add.

1898..	W. W. Cooke.....	I	364
1898..	W. W. Cooke.....	10	374

## THE BIRDS OF COLORADO.

Page 49. 1. **Æchmophorus occidentalis.** WESTERN GREBE.

In a collection of beautifully mounted birds at the High School building at Cheyenne, Wyo., is a fine specimen of this species, that was brought to Mr. F. Bond in the flesh and mounted by him, as were the other birds in this collection. Mr. Bond writes that years when he has been collecting he has seen a few in autumn on the lakes near Cheyenne. This record, taken in connection with that already published, would indicate that this species was quite regular in visiting the eastern slope of the range, though never common.

Page 49. 2. **Colymbus holbœllii.** HOLBÆLL'S GREBE.

The same collection contains one of these birds, shot in the vicinity by Mr. Bond, who has also seen several others in autumn on the lakes. As Cheyenne is only just over the Colorado line, these records make it probable that this species will eventually be taken in Colorado east of the range.

Page 49. 3. **Colymbus auritus.** HORNED GREBE.

Mr. E. L. Berthoud writes that he has seen two specimens that were killed on the lakes northeast of Golden.

Page 50. Add. 8. **Urinator adamsii.** YELLOW-BILLED LOON.

Migratory; rare or accidental. In the collection of Mr. Manly Hardy, Brewer, Me., there is a young male of this species taken May 25, 1885, at Loveland, Colo., by W. G. Smith. Mr. Hardy writes that there can be no question whatever of the identity of the specimen. This is the first record for Colorado, and a very strange record, since the species inhabits Arctic America and is rarely found anywhere in the United States.

Page 51. 60. **Larus philadelphia.** BONAPARTE'S GULL.

To previous records add one taken November 15, 1895, at Pueblo by Mr. H. W. Nash; also one taken and several others seen by Mr. F. Bond at Cheyenne.

Page 51. 62. **Xema sabinii.** SABINE'S GULL.

Near Golden in the early days of the settlement of that country Mr. E. L. Berthoud says that these gulls were not uncommon, but have disappeared of late years.

Page 52. 120. **Phalacrocorax dilophus.** DOUBLE-CRESTED CORMORANT.

In the summer of 1897, the Cormorant was found breeding by Prof. Knight, near Buffalo, Wyo. This is quite a long distance north of Colorado, but yet it increases the probability of the bird's occurring as a breeder in this State.

Page 53. 133. **Anas obscura.** BLACK DUCK.

A third specimen can now be recorded. According to Mr. H. G. Smith one was purchased by a local taxidermist in the Denver market December 12, 1894. It is presumed that the bird was shot in Colorado.

Page 53. 135. **Anas strepera.** GADWALL.

Found by Mr. C. E. Aiken as an abundant breeder at the San Luis Lakes.

Page 55. 144. **Aix sponsa.** WOOD DUCK.

A mounted specimen is now in the possession of Mr. E. J. Oslar of Denver, that was taken at Littleton about May 1, 1892.

Page 57. Add. 160. **Somateria dresseri.** AMERICAN EIDER.

One was taken by W. G. Smith at Loveland sometime previous to 1892. Prof. Wm. Osburn writes that he saw the specimen in Mr. Smith's collection.

There is a mounted bird of this species at the rooms of the Society of Natural History in Denver. There is no record accompanying it, but it was presumably taken in Colorado nearly twenty years ago.

Page 58. 172. **Branta canadensis.** CANADA GOOSE.

During the summer of 1897, this species was noted by the present writer as nesting five miles west of NiWot at about 5,500 feet. This is several thousand feet lower than previous records.

Page 60. [185.] **Guara rubra.** SCARLET IBIS.

In the third line, the word "Texas" should be New Mexico, the reference being to the record of Dr. Coues at Albuquerque. The birds reported by Mr. Beymer in the Rocky Ford Republican and by the present writer on his authority in the Auk were really the White-faced Glossy Ibis (*Plegadis guarauna*).

Page 60. 187. **Plegadis guarauna.** WHITE-FACED GLOSSY IBIS.

Summer resident; rare. The number of known occurrences is now double what it was a year ago. As stated above the birds seen at Rocky Ford were really this species instead of the Scarlet Ibis. A flock of six were seen there on the Arkansas

River, April 23, 1897, and three of them were secured and have been mounted by Mr. Beymer. A young female, presumably of this species, was taken September 10, 1897, twenty miles east of Pueblo on the Arkansas and reported by W. F. Doertenback of Pueblo. It was not young enough to prove that it had been raised in the vicinity.

In September, 1872, Mr. C. E. Aiken saw one on the South Platte River in South Park at nearly 7,000 feet altitude. On July 1, 1875, Mr. Aiken found this species breeding at the San Luis Lakes at about 7,500 feet altitude, so that it stands at present in the Colorado list as a summer resident.

The known northern range of this species is much extended by the following record. In the spring of 1893, Mr. R. A. Wallen shot one at Red Bank, Wyo., about two hundred miles north of Laramie City.

Page 61. 191. ***Ardetta exilis***. LEAST BITTERN.

About August 5, 1897, Mr. W. A. Sprague of Boulder, saw a Least Bittern on a branch of the Grand River in Middle Park eight miles from Buchanan Pass. This is the first and only record for Colorado west of the range. Mr. H. G. Smith has one record of this species for the vicinity of Denver.

Page 61. 194. ***Ardea herodias***. GREAT BLUE HERON.

A very late migrant and also at a much higher altitude than the former records is the one reported by Mr. C. E. Aiken at over 9,000 feet on the divide between Colorado Springs and South Park, November 27, 1897.

Page 61. 197. ***Ardea candidissima***. SNOWY HERON.

This is probably not so rare a bird as was formerly believed. In addition to the seven records already noted, three specimens of this species were mounted by Mr. W. F. Doertenbach of Pueblo, during the past eight years; he also saw one on the Arkansas near Pueblo, May 9, 1897, and two young birds were sent him October 4, 1897, that were taken within six miles of Pueblo.

Mr. C. E. Aiken adds five more records, two near Leadville, in 1886, one near Denver and two from Pueblo. The Leadville specimens at about 10,000 feet are several thousand feet higher than previous records.

Page 61. 198. ***Ardea rufescens***. REDDISH EGRET.

A second record for Colorado comes from Mr. E. L. Berthoud, who shot one near Golden eight years ago.

Page 63. 212. **Rallus virginianus.** VIRGINIA RAIL.

Mr. C. E. Aiken took the nest mentioned near Fountain, El Paso County.

Page 63. Add. 216. **Porzana jamaicensis.** BLACK RAIL.

Migratory; rare. Mr. David Bruce of Brockport, N. Y., who has done a large amount of collecting in Colorado, writes that he has one that he shot in May several years ago at a pond near Denver. He thinks he has seen similar birds several times, but this is the only one he has secured. The Black Rail is a southern species coming north regularly almost to Colorado.

Page 63. 219. **Gallinula galeata.** FLORIDA GALLINULE.

A second record is added by Mr. E. L. Berthoud, who saw one in 1883 at Lathrop's Lake, twelve miles from Golden.

Page 63. [222. **Crymophilus fulcarius.** RED PHALAROPE.

According to the distribution of this species as given in the A. O. U. Check List, it should be found in Colorado, but no specimen has yet been reported. There is one in the collection of the Wyoming State University at Laramie City, that was taken September 14, 1897, at Seven Mile Lakes, Albany County, not far from the Colorado line.]

Page 64. 228. **Philohela minor.** AMERICAN WOODCOCK.

The classification can now be changed to—summer resident; rare. On July 3, 1897, Mr. Harry Horner of Timnath, found near his home a pair of Woodcock and three young. One of the young was caught. They could not have been more than a week old. In addition to the records already published, Mr. E. L. Berthoud writes that he has seen them occasionally in Jefferson and Park Counties, while once he saw them on the Arkansas.

Page 64. 230. **Gallinago delicata.** WILSON'S SNIPE.

Seen twice in the summer of 1897 in Middle Park at about 9,000 feet by Mr. W. A. Sprague of Boulder. Mr. C. E. Aiken found them breeding July 1, 1875, at the San Luis Lakes at an altitude of 7,500 feet. On January 16, 1898, Mr. Aiken saw five of these birds near Colorado Springs, and the same day two men shot fifteen along the banks of the Fountain Creek.

Page 65. 240. **Tringa fuscicollis.** WHITE-RUMPED SAND-PIPER.

To previous records add one taken by Mr. Aiken at Colorado Springs and identified by Mr. Ridgway.

Page 66. 248. **Calidris arenaria.** SANDERLING.

One was taken October 1, 1897, by Mr. H. W. Nash near Pueblo. Mr. C. E. Aiken writes that he has known of several taken near Colorado Springs.

Page 70. 300b. **Bonasa umbellus umbelloides.** GRAY  
RUFFED GROUSE.

One was shot about eighteen miles south of Denver the latter part of December, 1894. It was with several others and they were seen on several occasions. Mr. L. D. Gilmore reports seeing five January 3, 1898, and more on the following week near Sweet Water Lake in Eagle County at 8,000 feet. An old hunter there told him that they are never seen in summer, but come in the winter and are sometimes quite common.

Page 71. Add. 305. **Tympanuchus americanus.** PRAIRIE  
HEN.

Summer visitant; rare and local. There have been many reports of true "Prairie Chickens" in Colorado, but all reported previous to 1897 have proved on investigation to be Sharp-tailed Grouse. During last October the present writer saw some Prairie Chickens at Ogallala, Neb., some twenty-five miles east of the Colorado line. Diligent inquiry has revealed the fact that they are quite common a little east of Ogallala and decrease suddenly to the westward. More than half of those questioned had never seen one west of that place. They do, however, extend occasionally into Colorado, for Mr. J. S. Robertson of Barton, has seen them twice at his place, which is about two miles within the Colorado line. Though this species has for years been moving westward, its further extension will be slow and probably not for any great distance. From Ogallala westward for the next hundred and fifty miles the native country is entirely unsuited to their wants, and the only grain fields occur as isolated patches of small extent under the ditches near the South Platte River. There is little to induce the birds to enter this country, and any that did migrate there would soon be exterminated by hunters and coyotes.

Page 71. 308b. **Pediocætes phasianellus campestris.**  
PRAIRIE SHARP-TAILED GROUSE.

Reports from two hunting parties that visited northwestern Colorado during the fall of 1897 indicate that in some of the wilder regions these birds are still not uncommon. The only specimen that was brought back was typical *campestris*.

Page 71. Add. 000. **Phasianus torquatus.** RING PHEASANT.

Resident; not common and local. This is the commonly called Mongolian Pheasant that has been introduced south of Denver. Mr. Aiken also saw one in the fall of 1897 near Colorado Springs, though this may have been a bird escaped from captivity.

Page 72. 312. **Columba fasciata.** BAND-TAILED PIGEON.

Quite common and breeds in the mountains near Glenwood Springs, showing that its regular extension west of the range is rather further to the north than on the eastern slope.

Page 73. 319. **Melopelia leucoptera.** WHITE-WINGED DOVE.

Under a late date, Mr. E. L. Berthoud writes concerning his record of this species, "Besides the record of 1869, when we shot one or two, I have seen two small flocks since. There was no mistaking this bird."

Page 73. 327. **Elanoides forficatus.** SWALLOW-TAILED KITE.

In August, 1877, two were brought in the flesh to Mr. C. E. Aiken, one had been shot at Colorado Springs and the other at Manitou Park. One was also shot in August, 1883. These were probably all wanderers that had nested outside of Colorado.

Page 73. 329. **Ictinia mississippiensis.** MISSISSIPPI KITE.

Mr. C. E. Aiken has seen one near Colorado Springs.

Page 76. 356. **Falco peregrinus anatum.** DUCK HAWK.

According to Mr. C. E. Aiken a pair nested for five consecutive years in the Garden of the Gods. He secured one of the old birds in 1885.

Page 77. 364. **Pandion haliaëtus carolinensis.** AMERICAN OSPREY.

They are very common spring and summer at Sweet Water Lake in the mountains east of Glenwood Springs at 8,000 feet, writes Mr. L. D. Gilmore.

Page 77. 365. **Strix pratincola.** AMERICAN BARN OWL.

Three more records near Pueblo are added by Mr. W. F. Doertenbach—a fine male killed and mounted by him August 12, 1897, one other in 1889 and a third in 1891.

• Page 77. Add. 371. **Nyctala tengmalmi richardsoni.** RICHARDSON'S OWL.

Winter visitant; rare. The only certain record for Colorado is the male taken by Mr. H. C. Lee Meyer at Crested Butte, October 14, 1896. Through the courtesy of Mr. W. F. Doertenbach of Pueblo, the present writer had the pleasure a few days ago of examining this specimen and there can be no question of the identification.

Page 78. 373e. **Megascops asio maxwelliæ.** ROCKY MOUNTAIN SCREECH OWL.

Mr. Aiken writes that this form occurs at Colorado Springs in winter, but not in summer.



Page 78. 373g. **Megascops asio aikeni.** AIKEN'S SCREECH OWL.

According to Mr. Aiken, none of these Owls are found at Colorado Springs in the winter, indicating that this and the preceding species perform a slight migration.

Page 78. 374. **Megascops flammeola.** FLAMMULATED SCREECH OWL.

The seventh, eighth and ninth specimens taken in the United States outside of Colorado are noted by Mr. Manly Hardy, Brewer, Me., who writes: "I have an adult female and a fully grown young Flammulated Screech Owl taken in 1883 at Santa Fé, New Mexico, by Chas. H. Marsh. Also an adult male taken in the Huachuca Mountains of Arizona by a Mr. Lusk, August 24, 1895."

The twelfth and thirteenth specimens for Colorado are recorded by Capt. D. B. Ingraham, who took a set of two fresh eggs at Beulah, May 27, 1897, and on May 29 a set of three eggs slightly incubated. The females were secured in both cases and identified by Prof. Allen. (Auk, XIV. 1897, p. 403). A female Flammulated Owl was shot by Mr. W. A. Sprague near Boulder, September 22, 1897. The skin was sent to the present writer for identification. This makes the fourteenth specimen for Colorado and the twenty-third for the United States. There are six known cases of breeding, all in Colorado.

Page 79. 375a. **Bubo virginianus pallescens.** WESTERN HORNED OWL.

This is the present recognized name for this variety instead of *subarcticus* (Stone., Am. Nat. XXXI. 1897, p. 236). To settle the exact name of the common Horned Owl of Colorado, Mr. C. E. Aiken lately sent eight specimens to the Smithsonian Institution. They embraced dark and paler examples from both the plains and mountain. They were pronounced by Mr. Ridgway as all of them *pallescens*, saying, "some of them are darker than the normal average style and incline toward *saturatus*, in fact they may be fairly considered intermediate between the two, though still nearer *pallescens* than *saturatus*."

Page 80. 376. **Nyctea nyctea.** SNOWY OWL.

Two specimens shot near Colorado Springs and reported by Mr. Aiken represent about the extreme southern range of the species in Colorado.

Page 81. 379. **Glaucidium gnoma.** PYGMY OWL.

Mr. Aiken adds three records to those previously published; one on the plains at Pueblo November 1, 1871; one in the win-

ter of 1877-8 on Cheyenne Mountain, and one breeding in 1884 at Ute Pass.

Page 81. 382. **Conurus carolinensis.** CAROLINA PAROQUET.

The record of this species made by Pike in 1807 on the Arkansas River (1895 Edition by Dr. Coues, Vol. II. p. 474) is the earliest allusion to this species in Colorado, but as Pike does not mention it by name, only describes it, its proper place in the Colorado list is that already given it (p. 45) as introduced by Dr. Coues in 1877.

Page 83. 396. **Dryobates scalaris bairdi.** TEXAN WOODPECKER.

In the summer of 1897 Mr. W. P. Lowe saw a pair in company with young and feels sure that they were reared in St. Charles Cañon, Pueblo County. He saw a pair of old birds at the same place in 1896.

Page 84. 408. **Melanerpes torquatus.** LEWIS'S WOODPECKER.

Fresh eggs have been found by Mr. N. R. Christie at Rouse Junction, in southern Colorado, as early as the middle of May.

Page 85. 412. **Colaptes auratus.** FLICKER.

Noted by Evermann and Jenkins in the Arkansas Valley in Colorado. (*O. & O.*, XIII. 1888, p. 66.)

Page 85. 413. **Colaptes cafer.** RED-SHAFTED FLICKER.

Some early eggs were found by Mr. W. A. Sprague at Magnolia, altitude 7,500 feet, on May 17, 1896, and May 20, 1897.

Page 85. 418a. **Phalænoptilus nuttallii nitidus.** FROSTED POOR-WILL.

Two specimens taken by Mr. Aiken at Colorado Springs have been identified as belonging to this variety and thus extending its range to the eastern foothills.

Page 86. No. 455 is a misprint for No. 425.

Page 86. 433. **Selasphorus rufus.** RUFIOUS HUMMINGBIRD.

To the records east of the range add one taken about the middle of July, 1897, by Mr. Aiken, at Ramah, on the Divide south of Denver, at about 8,000 feet. The known northward range of this species has been greatly extended by the capture of a specimen July 24, 1897, in Carbon County, Wyo., a hundred and fifty miles northwest of Laramie City.

Page 87. Add. 436. **Stellula calliope.** CALLIOPE HUMMINGBIRD.

Summer visitant; rare or accidental. An adult male was found dead July 25, 1897, in Cheyenne Cañon, near Colorado Springs. The skin is now in the collection of Mr. C. E. Aiken.

Page 87. 447. **Tyrannus verticalis.** ARKANSAS KINGBIRD.  
448. **Tyrannus vociferans.** CASSIN'S KINGBIRD.

During a collecting trip on the Divide south of Denver, in 1897, Mr. Aiken took careful notes of the relative abundance of these two species in the breeding season, at Ramah, altitude 8,000 feet. In quite a small area he found about a hundred and fifty pairs of the Arkansas Kingbird and only about twenty-five pairs of Cassin's.

Page 89. 474a. **Otocoris alpestris leucolæma.** PALLID HORNED LARK.

The determinations of Mr. Ridgway, mentioned below, make it probable that most of the winter birds of northern Colorado should be referred to *arenicola* instead of *leucolæma*.

Page 89. 474c. **Otocoris alpestris arenicola.** DESERT HORNED LARK.

A series of ten Horned Larks from Colorado were sent by Mr. Aiken to Washington. They embraced winter and summer specimens selected from a large number to show all phases of plumage, some even having the throat white without trace of yellow. They are all referred by Mr. Ridgway to *arenicola*.

Page 91. 487. **Corvus cryptoleucus.** WHITE-NECKED RAVEN.

A nest with eggs was found by Mr. Aiken in May, 1878, on Horse Creek, seventy-five miles east of Colorado Springs.

Page 92. 491. **Nucifraga columbiana.** CLARKE'S NUTCRACKER.

The first sentence should read: "The first eggs known to science from Colorado, etc." Maj. Bendire had previously taken the nest and eggs in Oregon.

Page 93. 494. **Dolichonyx oryzivorus.** BOBOLINK.

Several more records can be added to the five previously known. Mr. H. G. Smith saw a male in a garden in the city of Denver in June several years ago. Mr. C. E. Aiken took one in fall plumage at Colorado Springs September 5, 1897. There is a mounted bird at Cheyenne taken by Mr. F. Bond, who writes: "The Bobolink is not uncommon with us. I have taken them yearly for some years; sometimes within the city limits."

Page 94. 506. **Icterus spurius.** ORCHARD ORIOLE.

Three were seen by Mr. Aiken in Beaver Creek Valley, Fremont County, in May, 1875.

Page 95. 507. **Icterus galbula.** BALTIMORE ORIOLE.

Mr. E. L. Berthoud writes that he has seen the Baltimore Oriole occasionally at Golden.

Page 95. 514a. **Coccythraustes vespertinus montanus.**  
WESTERN EVENING GROSBREAK.

Five of these birds were seen by Mr. P. L. Jones at Beulah, August 3, 1897. They remained in that vicinity for over two weeks, being seen almost every day. As Mr. Jones has also seen them late in May, it is almost certain that they breed in Colorado.

Page 97. 524. **Leucosticte tephrocotis.** GRAY-CROWNED  
LEUCOSTICTE.

According to Mr. Aiken this species is somewhat irregular in its appearance at Colorado Springs, but winters almost every year in considerable numbers and some years becomes abundant. A male and a female were taken by Mr. W. A. Sprague on November 27, 1895, at Magnolia at 7,500 feet.

Page 98. 525. **Leucosticte atrata.** BLACK LEUCOSTICTE.

A few days ago the present writer had the pleasure of examining Mr. C. E. Aiken's large collection of the *Leucosticte*. Mr. Aiken probably has more specimens of *atrata* than all other collections together. They have been taken near Colorado Springs during the winter season and as late as April 4. They have been taken during the winters 1875, 1876, 1877, 1879 and 1883. During the fall of 1894 Mr. Aiken saw them in the Uintah Mountains in Utah near where Dr. F. V. Hayden took his specimen in 1870.

This Hayden specimen has been given the credit of being the first known to science (Ridgway, Bull. Geol. and Geog. Surv. Ter. Second Series No. 2, p. 53). Mr. Aiken however calls attention to the fact that there is an earlier specimen. He says: "It was shot in March, 1870, at Sherman, Wyo., [just over the Colorado line] by J. Deuchman and sent by express to Mr. Holden in Chicago, together with about sixty specimens of *L. tephrocotis*—all in the flesh. Mr. Holden and myself examined this specimen carefully on the arrival of the shipment and as it was apparently an immature bird, we concluded that it was the young of *tephrocotis*, though the proba-

bility of its being an example of melanism was entertained. I think this specimen is still in Mr. Holden's collection. On securing my four specimens at Cañon City in April, 1874, I knew they were identical with the Holden bird and was confident that they represented an undescribed race." Mr. Holden has recorded this specimen as follows: "In one specimen, a young male, I think, the plumage is almost black, in fact it is black, except the wings and after half of the body. It is an interesting specimen." (Holden and Aiken, Proc. Bost. Soc. Nat. Hist., XV. 1872, p. 200.)

This specimen was not taken in Colorado and the first specimen for this State is the one already accredited to Mr. Aiken in 1874.

Page 98. Add. 528b. **Acanthis linaria rostrata.** GREATER REDPOLL.

Winter visitant rare or accidental. There is only one Colorado record for this northern species. Mr. W. A. Sprague shot one December 9, 1895, near Magnolia, at an altitude of 7,500 feet. Of this specimen, Mr. Ridgway says that it is not typical but near enough to be called this variety.

Page 99. **Passer domesticus.** EUROPEAN HOUSE SPARROW.

A wonderful increase has taken place with these birds during the last twelve months. They reached Fort Collins in the fall of 1896. So that now they occur along the eastern base of the foothills for nearly two hundred miles. Mr. E. L. Berthoud notes a short visit from them a few years ago at Golden, well up in the foothills, but they did not remain and none have since been seen.

Page 100. 534. **Plectrophenax nivalis.** SNOWFLAKE.

A pair were shot by Mr. Aiken at Colorado Springs the winter of 1877-8. This is the most southern record for Colorado.

Page 101. 542b. **Ammodramus sandwichensis alaudinus.** WESTERN SAVANNA SPARROW.

The question having been raised as to whether all of the Savanna Sparrows of Colorado belong to the western race, a large series was submitted by Mr. Aiken to the Smithsonian. They were all pronounced *alaudinus*. Another series sent by the present writer to Prof. Allen received the same identification. Nevertheless Mr. Aiken is quite sure that in the field he can see a difference between the breeding birds and the migrants. The latter is the larger and moves earlier, arriving at Colorado Springs the last of July to the first of August and leaves the first of October.

Page 101. 546a. **Ammodramus savannarum perpallidus.**  
WESTERN GRASSHOPPER SPARROW.

A large series of this Sparrow submitted to Prof. Allen and Mr. Ridgway are all considered as true *perpallidus*.

Page 103. 558. **Zonotrichia albicollis.** WHITE-THROATED SPARROW.

One taken by Mr. H. W. Nash at Pueblo, October 18, 1893. This is the third record for Colorado.

Page 103. 560. **Spizella socialis.** CHIPPING SPARROW.

The more the Chipping Sparrows of Colorado are investigated the more evident it becomes that the eastern form is far less common in the State than had formerly been supposed. There is need of much more work in the matter on the plains of eastern Colorado, before the distribution of the two varieties can be determined.

Page 104. 566. **Junco aikeni.** WHITE-WINGED JUNCO.

In the fifth line the "5th of October" was a misprint in the original article for the "5th of November." Mr. Aiken writes that the earliest he has seen the birds at Colorado Springs is October 26, 1897.

Page 105. 569. **Junco caniceps.** GRAY-HEADED JUNCO.

At Magnolia, Boulder County, at 7,500 feet, Mr. W. A. Sprague found eggs May 25, 1896, and young birds a week old May 29, 1897. On July 6, 1897, he also found young birds newly hatched showing that two broods are reared in northern Colorado. Mr. Aiken thinks that these Juncos winter in the mountains as far north as Colorado Springs, coming to the plains during storms and returning to the mountains as soon as the weather moderates.

Page 106. 574a. **Amphispiza belli nevadensis.** SAGE SPARROW.

The known northeastern extension of this species has been largely increased by a specimen taken just over the Colorado line in Wyoming, near Cheyenne, by Mr. F. Bond. The specimen is now mounted in his collection. This is apparently the first record east of the Front Range.

Page 107. Add. 584. **Melospiza georgiana.** SWAMP SPARROW.

Summer visitant; rare or accidental. Only one instance known, seen by Mr. Aiken, at Colorado Springs, the latter part of August, 1897. Regularly comes west only to the plains, but has been once taken in Utah.

Page 107. 585c. **Passerella iliaca schistacea.** SLATE-COLORED SPARROW.

An adult male was taken in July, 1889, at Florissant, by Dr. J. L. Goodale, now of Boston, Mass. The specimen is still in his collection, but its capture has not before been recorded. Mr. David Bruce of Brockport, N. Y., took one on the Grand River, near Glenwood Springs, during June, 1897. The bird was seen several times and was evidently breeding.

The above records are the only unquestionable ones that this species has for Colorado. They confirm the previously accepted belief that the bird is a summer resident in Colorado.

Page 108. 593. **Cardinalis cardinalis.** CARDINAL.

A second record for Colorado is that of Mr. H. W. Nash who saw one at Pueblo about November 28, 1895.

Page 108. Add. 595. **Habia ludoviciana.** ROSE-BREASTED GROSBEAK.

Summer resident; rare, if not accidental. It is with some hesitation that the present species is given a place in the Colorado list and yet after most careful investigation there seems scant possibility of error. In the summer of 1894 a pair nested near the house of Mrs. J. W. Bacon, Longmont. The male was several times seen at a distance of less than twenty-five feet and the rose color distinctly noted. Later the same bird was seen on the lawn feeding the newly fledged young. One of the latter was caught.

Page 109. 597a. **Guiraca cærulea eurhyncha.** WESTERN BLUE GROSBEAK.

Not an uncommon bird as far north as Pueblo and breeds in the foothills as far up as Beulah where Mr. P. L. Jones took four nests in 1897. Farther north at Colorado Springs it still occurs regularly though not common. North of there, the only record is that of one taken by Mr. H. G. Smith east of Morrison.

Page 109. 604. **Spiza americana.** DICKCISSEL.

One taken by Mr. C. E. Aiken at Colorado Springs August 29, 1897.

Page 110. 607. **Piranga ludoviciana.** LOUISIANA TANAGER.

There are no records of this bird breeding in Colorado below 6,000 feet, but in northeastern Wyoming at Sundance, Prof. Knight found it in 1897 breeding at 4,500 feet.

Page 110. 608. **Piranga erythromelas.** SCARLET TANAGER.

Migratory; rare. The brackets can now be removed from this species and it be entered as a Colorado bird. A few weeks

ago the present writer saw at Glenwood Springs two mounted males that were taken near Newcastle the spring of 1892. Mr. E. L. Berthoud writes that he took one on Bear Creek near Golden in 1867 and also saw one in the Del Norte Valley, in September, 1883. That it should appear at the edge of the the plains is not wonderful, but the two records west of the range were entirely unexpected.

Page 112. 624. **Vireo olivaceus.** RED-EYED VIREO.

To previous records add one seen by H. G. Smith at Denver May 22, 1892.

Page 112. 629a. **Vireo solitarius cassinii.** CASSIN'S VIREO.

One was taken by Mr. W. F. Doertenbach, near Pueblo, September 6, 1897. Two were seen and one secured.

Page 113. Add. [645a. **Helminthophila ruficapilla gutturalis.** CALAVERAS WARBLER.

One adult and one young-of-the-year were taken on Teepee Creek, Carbon County, Wyo., July 19, 1897, and one young-of-the-year near Reed's Ranch, Albany County, Wyo., August 3, 1897. These specimens are now in the museum of the State University at Laramie City. All of these birds were taken near the Colorado line, making it practically certain that this species will yet be found in western Colorado. It is certain that these birds are *ruficapilla* of either the eastern or western form, but the above reference to the western form is given merely on geographical grounds. When the present writer examined the specimens he had no means of determining the exact variety.]

Page 113. 647. **Helminthophila peregrina.** TENNESSEE WARBLER.

Summer resident; rare. This species is brought among the breeders of Colorado on the strength of two nests found by Mr. C. E. Aiken, one in Colorado Springs and one near there. Mr. F. Bond writes that he has seen these birds several times at Cheyenne during migration.

Page 115. 657. **Dendroica maculosa.** MAGNOLIA WARBLER.

One taken by Mr. H. G. Smith, near Denver, May 17, 1888.

Page 116. 665. **Dendroica nigrescens.** BLACK-THROATED GRAY WARBLER.

According to Mr. Aiken this Warbler is not an uncommon breeder in the piñon hills north and east of Cañon City. It arrives early in May.

Page 116. Add. 672. **Dendroica palmarum.** PALM WARBLER.

Migratory; rare or accidental. One was seen by Mr. H. G. Smith in Denver, June 20, 1891. The specimen was not



secured, but was seen so close at hand and so carefully identified that there is undoubtedly no mistake in the matter. This is an eastern species and comes regularly so near to Colorado that it is strange there are no more records of its occurrence here.

Page 116. 675a. **Seiurus noveboracensis notabilis.** GRINNELL'S WATER-THRUSH.

Several seen by Mr. C. E. Aiken at Cañon City in May, 1873.

Page 118. 701. **Cinclus mexicanus.** AMERICAN DIPPER.

The Dipper nested in 1897 at Coburn's mill west of Boulder at 7,000 feet, according to Mr. W. A. Sprague, and probably on Middle Boulder Creek as low as 6,500 feet.

Up to December 15, 1897, Mr. L. D. Gilmore saw one frequently on the headwaters of Clear Creek at 10,500 feet. On October 3, 1897, he saw one just above timber line near Berthoud's Pass at 11,500 feet.

Page 120. 708. **Harporynchus bendirei.** BENDIRE'S THRASHER.

Summer resident; rare and local. Mr. N. R. Christie writes that it breeds at Rouse Junction, in south central Colorado, at 6,000 feet. On June 6, 1896, he found two sets of three eggs each; June 2, a set of two eggs almost hatched; June 13, nest and four young. In 1897 one pair was noticed in May but no nests found.

Page 120. 719b. **Thryothorus bewickii leucogaster.** BAIRD'S WREN.

These Wrens are found by Mr. Christie as not uncommon at Rouse Junction, nesting about the first of June. Mr. Aiken shot one at Colorado Springs, May 1, 1879.

Page 122. 733a. **Parus inornatus griseus.** GRAY TIT-MOUSE.

Found by Mr. Aiken as a common winter resident in the foothills, northeast of Cañon City, where a few remain to breed.

Page 124. 751. **Polioptila cærulea.** BLUE-GRAY GNAT-CATCHER.

Mr. H. G. Smith has seen one at Denver.

Page 124. 754. **Myadestes townsendii.** TOWNSEND'S SOLITAIRE.

A nest with four eggs heavily incubated was taken by the present writer July 25, 1897, in Estes Park at 8,500 feet.

Page 125. 759. **Turdus aonalaschkæ.** DWARF HERMIT  
THRUSH. '

One was taken by Mr. W. A. Sprague at Magnolia, altitude  
7,500 feet, October 6, 1895.

Page 126. 766. **Sialia sialis.** BLUEBIRD.

Mr. H. W. Nash took one at Pueblo April 5, 1883.

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