

considerable manœuvring during which the snake occasionally wrapped itself around the Bittern's neck, succeeded in swallowing it.

**KING RAIL** (*Rallus elegans*).—A single bird was observed at close range on August 30, 1914, near Madison between Monona and Wanbesa Lakes. Records for the Madison region appear to be scarce.

**SOLITARY SANDPIPER** (*Helodromas solitarius*).—This species was exceedingly common along the Bois Brulé river in northwestern Wisconsin during the last week of August, 1913. The birds were usually in twos, were fully as common as Spotted Sandpipers, and were not at all timid.

**RUFFED GROUSE** (*Bonasa umbellus umbellus*).—The crops of two grouse collected by Mr. A. W. Schorger in Ashland County, in November (1914) were full of the catkins of hazel (*Corylus rostrata*, apparently). The birds were taken early in the morning. The crop of a grouse taken by the writer in Sawyer County in the first week of October (1914) was distended with small green catkins until  $2\frac{1}{2}$  inches in diameter. The bird was taken at dusk. It is probable that this catkin was also from hazel bushes. Bendire does not mention hazel as a food of the Ruffed Grouse though it is listed in Barrow's 'Birds of Michigan'.

**MOURNING DOVE** (*Zenaidura macroura carolinensis*).—Ten Doves were seen near Verona on Dec. 24, 1913, and one bird as late as Jan. 4, 1914, in the same locality.

**PILEATED WOODPECKER** (*Phlœotomus pileatus abieticola*).—This species was almost always in evidence during a canoe trip in the latter part of August, 1913, extending from the Lake Superior shore up the Bois Brulé and down the St. Croix River as far as Groutsburg, Wis. On a trip taken in the first part of October, 1914, down the Flambeau River from Lac du Flambeau to Ladysmith, only two Pileated Woodpeckers were seen. This species appears to retire so rapidly before settlement, that records showing present distribution may be of some value.

**RED-BILLED WOODPECKER** (*Centurus carolinus*).—A single bird was seen on February 1, 1914, near Blue Mounds by Mr. Schorger and the writer.

**CAROLINA WREN** (*Thryothorus ludovicianus ludovicianus*).—On Sept. 17, 1914, the writer observed a bird of this species in a fringe of bushes on the shore of Lake Mendota, Madison. The bird was under observation for half an hour and sang frequently. It was noted again on Sept. 20 and 28. There are few records of this species in Wisconsin.—NORMAN DEW. BETTS, *Madison, Wis.*

**Changes and Additions to the 'List of the Birds of Gallatin County, Montana.'**—The following changes, due to recent identifications of specimens should be made in the list of Gallatin County birds published in 'The Auk,' Vol. XXVIII, pp. 26-49.

**Astragalinus tristis tristis.** GOLDFINCH.—The specimen taken at Three Forks, February 12, 1910, should be *A. t. pallidus*, Western Goldfinch. Dr. L. B. Bishop informs me that this bird while resembling the eastern form in plumage, shows by the measurements of the bill that it

belongs to the western race, as probably all of the Gallatin County birds of this species do.

***Pinicola enucleator alascensis*.** ALASKA PINE GROSBEEK.—Two birds taken near Bozeman, December 21, 1908, have been sent to Mr. Robert Ridgway for better identification, and are considered by him to be the Rocky Mountain Pine Grosbeak, *P. e. montana*, and identical with the summer birds of the region.

The following new species may be added to the list through the observations of Mr. G. B. Thomas.

***Marila collaris*.** RING-NECKED DUCK.—Mr. Thomas secured two birds of this species near Belgrade on October 10, 1912. They were male and female and were from a flock of eight or nine birds. This is the first record of this species from Montana of which I am aware.

***Anthus spraguei*.** SPRAGUE'S PIPIT.—Mr. Thomas has written me that he has seen this bird in Gallatin County, but I have been unable to get from him the date or exact locality of this occurrence.—ARETAS A. SAUNDERS, *West Haven, Conn.*

**What Bird Lovers Owe the Late Professor King.**—Not the man who determines how many birds eat a certain insect, nor what one bird eats, but the man who passes in review all the common birds of a given region in his study of the proportions of the food, is entitled to rank as pioneer in Economic Ornithology. On this basis it is proposed that the late Professor F. H. King, formerly chief of the U. S. Division of Soils, should be considered our first important Economic Ornithologist to use modern methods in the United States.<sup>1</sup>

Many men had previously examined the food of a single species of bird in different parts of the country. Professor Samuel Aughey of Nebraska, from 1865 to 1877, studied the stomachs of Nebraska birds in relation to the number of locusts they consumed. However, not until the time of Professors S. A. Forbes of Illinois and F. H. King of Wisconsin, had anyone made a study of all the common bird species in order to record all the types of insects which birds ate. Dr. Forbes' studies of birds' stomachs were first published in 1876, according to a letter from him, dated October 15, 1912.

In an interview at the Cleveland meetings of the American Association for the Advancement of Science, December 31, 1912, Professor Forbes admitted that the work for this paper was all done in that or the preceding year, while Professor King began his paper in July, 1873, and continued it until October, 1877, the field work being done mostly in 1873-4. In 1876-8, according to a letter from Prof. J. H. Comstock, 1912, Professor King worked in the Cornell laboratory, analyzing the contents of the birds'

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<sup>1</sup> Cf. Review of Economic Ornithology in the United States by T. S. Palmer, Asst. Chief of the Biol. Survey, U. S. Dept. Agric. Yearbook for 1899. Here older authors are ranked as pioneers in the study of the food in birds' stomachs.