

## STOMACH CONTENTS OF SOME CANADIAN BIRDS.

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The appended list gives the stomach contents of a small number of birds, the stomachs of which I have examined. In most of the stomachs of small birds, like finches, vireos, and warblers, the investigator who has not unlimited time at his disposal can usually only tell whether the contents is of vegetable or animal origin; in the latter case it takes expert knowledge of the microscopic parts of small insects to enable one to tell what insects have been eaten. The following birds have been selected either for their rarity or because they are well known. The majority have been taken near Ottawa, the others at least in Canada. Several in the list have been bought in the market. The contents of the stomachs of the birds near the end of the list, of which the percentage of the different parts is stated, have been kindly determined for the writer by the Bureau of Biological Survey, Washington, D.C., under the direction of Dr. A. K. Fisher, to whom the writer would extend his sincere thanks.

HOLBELL'S GREBE, *Colymbus holballii*; October 17, 1905, a large bunch of its own feathers.

HORNED GREBE, *C. auritus*; October 10, 1905, a bunch of its own feathers.

LOON, *Gavia imber*; May, 20, 1907, bones of fish, including at least one of the *Catostomidae* (the Suckers). Some of the gravel stones, also found, are at least half an inch long.

BITTERN, *Botaurus lentiginosus*; 1. May 12, 1904, several large beetles and other insects; 2. ?, 1905, 1 frog, 2 mice, 8 leeches; 3. October 30, 1906, 2 frogs, 2 small sunfish.

BLUE HERON, *Ardea herodias*; July 25, 1905, 1 fish, six inches long.

SPRUCE GROUSE, *Canachites canadensis*; October 31, 1904, pair, male and female, both full of spruce tips.

RUFFLED GROUSE, *Bonasa umbellus togata*; 1. September 30, 1904, clover leaves; 2. October 22, 1904, leaves, gravel and sand; 3. October 15, 1904, hawthorn (*Crataegus*) leaves; 4. April 25, 1905, leaves of Goldthread (*Captis trifolia*), and sharp-edged pebbles of quartz; 5. October 10, 1905, leaves of Aromatic Wintergreen (*Gaultheria procumbens*) and clover; 6. October 19, 1905, clover leaves only.

WILLOW PTARMIGAN, *Lagopus lagopus*; 1. January, 1907, (market), stomach filled with ends of willow twigs; 2. January, 1909, completely filled with oats.

MARSH HAWK, *Circus hudsonius*; September 17, 1907, 2 sparrows (Vesper, or Song?).