

nest. He proved he was correct the next day when he showed her a nest which contained four eggs, and which was placed in an ironwood sapling five feet from the ground. The male sang near-by while I photographed the female on the nest. On the 24th the young thrushes were well feathered and filled the nest. On the 27th Master Bell and Robert Lockwood reported that they had flown, and that the old ones were laying again. On July 1st the nest contained one egg with a big hole in it and the old birds were nowhere near it.

It was certainly delightful to find this rare Ottawa bird nesting within 150 feet of my house.

R. E. De Lury tells me he found singing Wood Thrushes in this vicinity some three years prior to my location of them.

Robert Lockwood found another nest with four eggs on June 9, 1929, at Rockcliffe Park. It was in a maple sapling about ten feet from the ground. There are about three singing males in the colony near my house.

77. *Hylocichla aliciae aliciae* (Baird). GRAY-CHEEKED THRUSH.—So few specimens are recorded from Ottawa, that it is of interest to note that one killed itself by flying against my study window, and was found beneath it on September 22, 1928.

78. *Planesticus migratorius migratorius* (Linnaeus). ROBIN.—Winter occurrences are reported fairly regularly as in the Christmas Bird Censuses. F. H. H. Williamson saw one on the morning of December 14, 1925. In one of the radio lectures on bird topics given by members of the Ottawa Field-Naturalists' Club, chiefly in the winter of 1924-25, C. B. Hutchings gave a report respecting a Robin being in Mrs. R. D.

Brown's place every morning for a couple of weeks after January 14, 1925, including one morning when the temperature was thirty degrees below zero F. It came for Mountain Ash berries, and, according to R. E. De Lury, was still there on February 10, 1925. They occur at the Experimental Farm nearly every winter according to R. E. De Lury. He says they swallow whole frozen crab-apples half-an-inch in diameter.

In the spring of 1929 a piebald specimen was seen for several days near the Rideau Bridges, Sussex Street.

79. *Sialia sialis sialis* (Linnaeus). BLUEBIRD.—R. E. De Lury banded one at Hathersall's feeding station, Carleton Avenue, just west of Ottawa on December 21, 1924.⁸

EXTRALIMITAL

80. *Alle alle* (Linnaeus). DOVEKIE.—A Dovekie was shot at Mississippi Lake, Carleton Place, Ontario, the last week in October, 1924. Identification was made by Mr. E. G. White, January 2, 1925, and checked by Mr. P. A. Taverner. I am told that the bird was shot by a Mr. Patterson. Since Carleton Place is a mile or two outside the defined boundaries of the Ottawa area, this occurrence is not included in the Ottawa list.

81. *Branta bernicla glaucogastra* (Brehm). BRANT.—A young bird was shot by Leo McDiarmid at Mississippi Lake, near Carleton Place, Ontario, on November 8, 1926. The specimen was seen in the flesh and identified by Mr. E. G. White. It was mounted and is preserved, and is apparently the first Ottawa district specimen to be saved. The locality is just outside of the defined Ottawa district.

⁸ C.F.-N., 39: 24, Jan., 1925.

FOOD OF THE AMERICAN MERGANSER, (*MERGUS MERGANSER AMERICANUS*) IN BRITISH COLUMBIA

A PRELIMINARY PAPER

By J. A. MUNRO, Chief Federal Migratory Bird Officer for the the Western Provinces, National Parks of Canada, Department of Interior,
and

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FOR some years there has been considerable public discussion regarding the food habits of those ducks commonly known as mergansers or sawbills. Many persons believe that the feeding habits of the mergansers are very destructive to fishing interests and from time to time have requested the removal of the protection afforded these birds by law or the initiation of such measures as would bring about a large reduction in their numbers. Ornithological

or fishery literature, apart from general statements concerning the fish-eating habits of these ducks, contains little precise information on the subject. Therefore, it seemed most desirable that a thorough investigation be made. Accordingly, the Migratory Bird Service of the National Parks of Canada, Department of the Interior, and the Pacific Biological Station of the Biological Board of Canada have undertaken a study of the two common species known as the American Merganser

and the Red-breasted Merganser, based on the analyses of stomach contents and observations in the field.

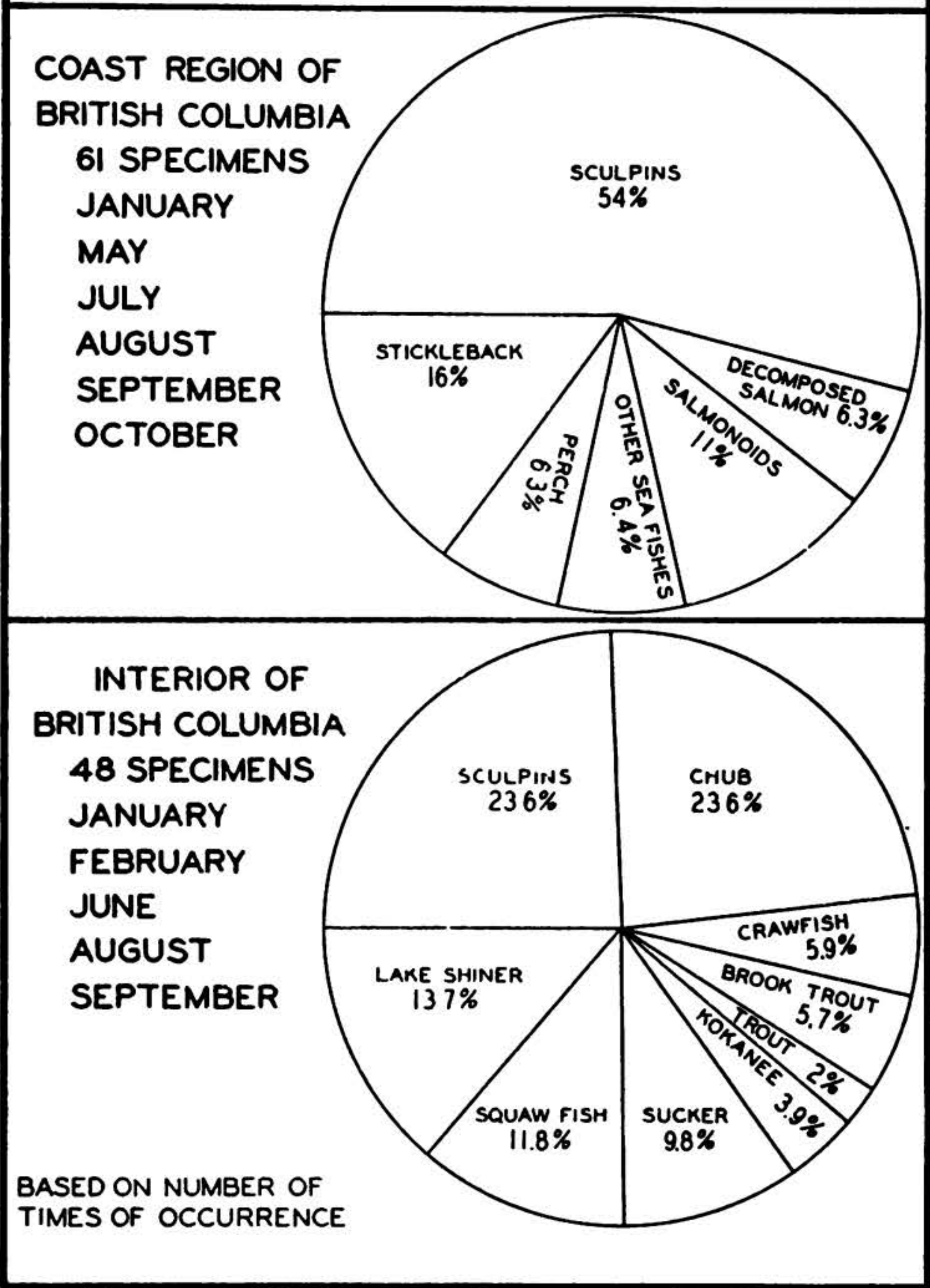
Up to the present time there have been examined one hundred and fifty-seven stomachs of the American Merganser, which material has been obtained very largely through the courtesy of the Dominion Department of Fisheries to the officers of which sincere thanks are extended. Acknowledgment is also made to the Bureau of Biological Survey, United States Department of Agriculture, Washington, D.C., for the use of certain data pertaining to Okanagan lake.

It has been thought advisable to present this preliminary report of a summary character at the present time and to postpone presentation of a detailed report upon this species and upon the Red-breasted Merganser until much more data have been assembled. It should be pointed out that the two species must be considered separately because of differences in habitats, in breeding ranges, in feeding grounds and in food materials taken. The American Merganser is resident on the lakes and rivers of the coast region and is the species commonly found on the rivers above tidal influence. It breeds in the interior also but winters there only in small numbers. The Red-breasted Merganser, on the other hand, occurs as

is relatively small migrant on the interior lakes and rivers, but winters abundantly on the coast. There it is chiefly a bird of the sea, not commonly ascending the rivers above tidal influence. The data concerning the food of the Red-breasted Merganser are not reported upon at the present time since only thirty-six stomachs have been available.

In the following tabulations the specimens have been grouped according to the four localities. It will be noted that most of the months of the year are represented but that there is a lack with respect to the spring months. It is hoped that this deficiency will be met during the next two years. In addition to the tables, diagrams are presented to illustrate the frequency of occurrence of the various species of fishes taken by mergan-

SPECIES OF FISHES
TAKEN BY
AMERICAN MERGANSER



gers in certain lakes and rivers.

FOOD ITEMS, TABULATED

Fifty-six specimens from the Interior of British Columbia collected in January, February, May, July, August, September, October and November.

FOOD ITEMS	Number of times found
Sucker, <i>Catostomus catostomus</i>	2
Sucker, <i>Catostomus macrocheilus</i>	1
Lake Shiner, <i>Leuciscus balteatus</i>	9
Chub, <i>Mylocheilus lateralis</i>	11
Sculpin, <i>Cottus asper</i>	11
Sculpin, <i>Cottus philonips</i>	1
Sculpin, unidentified <i>cottoids</i>	3
Squawfish, <i>Ptychocheilus oregonensis</i>	6
Eastern Speckled Trout, <i>Salvelinus fontinalis</i>	3
Trout, <i>Salmo</i> sp.....	1

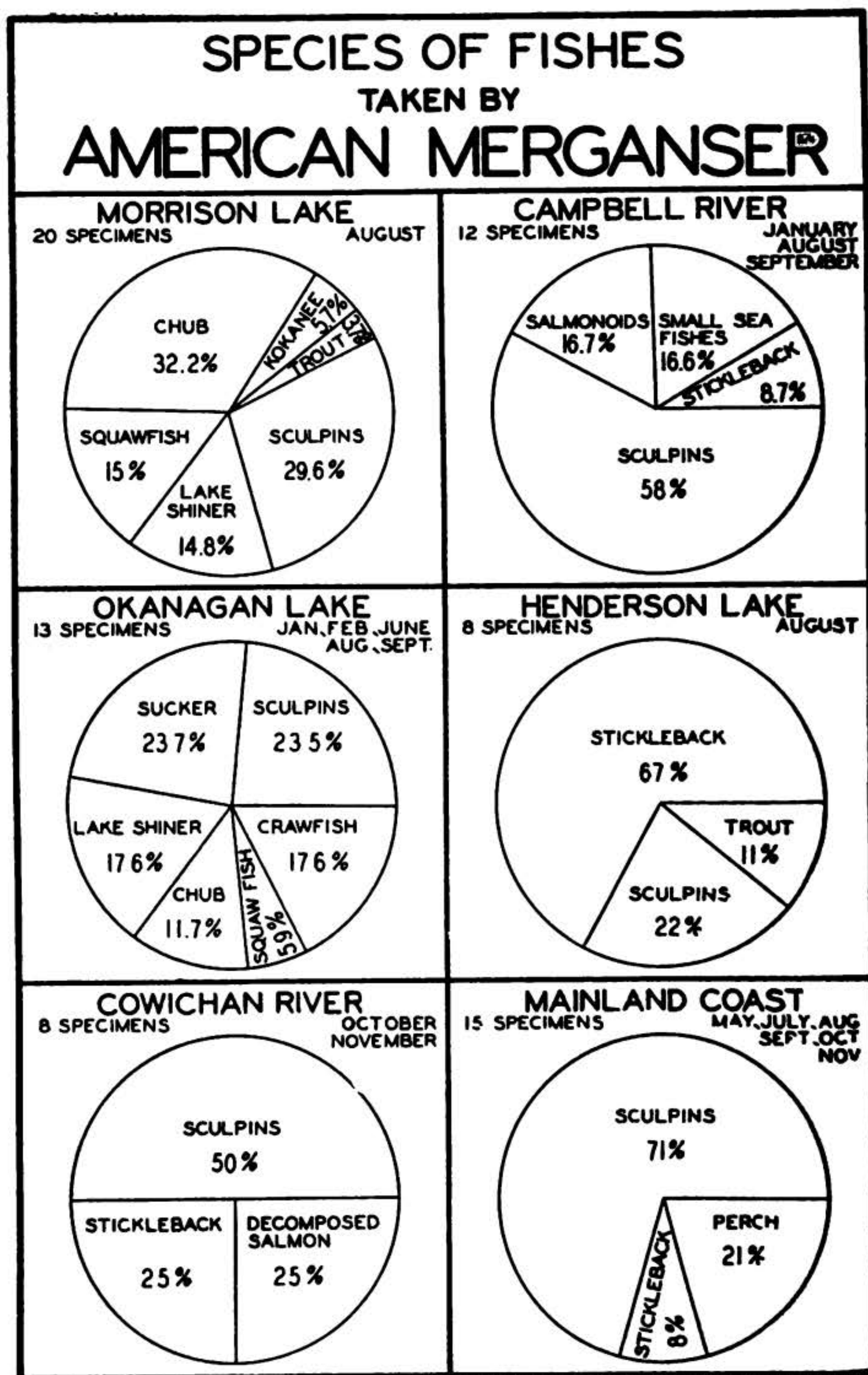
FOOD ITEMS	Number of times found
Kokanee, <i>Oncorhynchus nerka kennerleyi</i>	2
Salmon eggs (Sockeye?)....	9
Crawfish, <i>Callinassa</i> sp....	3
Stone fly, <i>Perla</i> sp. (larva).....	2
Crane fly, <i>Tipulidae</i> (adult).....	1
Dragon fly, <i>Odonata</i> (adult).....	1
Fly, <i>Diptera</i> (adult).....	3
Beetle, <i>Cerambycidae</i>	1
Beetle, <i>Carabidae</i>	1
Moth, <i>Lepidoptera</i>	1
Insect remains not identified.....	4
Fresh water sponge, <i>Porifera</i>	3

Nineteen specimens from mainland coast region collected in January, February, May, July, August, September, October and November.

Sculpin, <i>Leptocottus armatus</i>	5
Sculpin, <i>Cottus asper</i>	1
Sculpin, <i>Cottidae</i>	4
Stickleback, <i>Gasterosteus cataphractus</i>	1
Eulachon, <i>Thaleichthys pacificus</i>	2
Pipe fish, <i>Syngnathus grieseolineatus</i>	1
Perch, <i>Cymatogaster aggregatus</i>	3
Insects not identified.....	1
Crustaceans, Isopoda.....	1
Crustaceans, Amphipoda.....	1
Salmon eggs.....	3

Seventy-one specimens from Vancouver island collected in January, August, October, November and December.

Spring salmon, <i>Oncorhynchus tshawytscha</i>	1
Steelhead, <i>Salmo gairdneri</i>	1
Trout, <i>Salmo</i> sp.....	1
Stickleback, <i>Gasterosteus aculeatus</i>	9
Sculpin, <i>Cottus asper</i>	6
Sculpin, <i>Oligocottus maculosus</i>	2
Sculpin, <i>Leptocottus armatus</i>	1
Sculpin, <i>Cottidae</i> , not identified.....	11
Herring, <i>Clupea pallasii</i>	2
Rock Cod, <i>Sebastes</i> , sp.....	1
Perch, <i>Cymatogaster aggregatus</i>	1
Sand Lance, <i>Ammodytes personatus</i>	1
Decomposed salmon.....	4
Salmon eggs.....	36
Crab, Decapoda.....	2
Crustacean, Isopoda.....	2
Spider, <i>Arachnida</i>	1
Caterpillar, <i>Lepidoptera</i>	1
Fly, <i>Diptera</i> (larva).....	1
Beetle, <i>Coleoptera</i>	1



DRAWN IN ENGINEERING SERVICE, NATIONAL PARKS OF CANADA

FOOD ITEMS	Number of times found
Water Strider, Hemiptera.....	1
Insect fragments not identified.....	1
Snail, Mollusca.....	1
Fresh water sponge, <i>Porifera</i>	1
Nine specimens from Tlell river, Queen Charlotte Islands, collected in April, May and August.	
Trout, <i>Salmo</i> sp.....	3
Sculpin, <i>Cottus gulosus</i>	2
Sculpin, <i>Cottidae</i>	3
Sculpin, eggs.....	1