

INSTITUTE FOR FISHERIES RESEARCH
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ANALYSIS OF A COLLECTION OF OTTER SCATS FROM THE INLET OF
PICKEREL LAKE, DICKINSON COUNTY, MICHIGAN

by

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On April 15, 1936, the Institute for Fisheries Research received a collection of complete and broken otter scats, collected on April 14, by Conservation Officer L. C. Brown, at the inlet of Pickerel Lake, T. 43 N, R 28 W., Sec. 33, Dickinson County, Michigan. These scats were later broken down by soaking in alcohol, dried and examined. The results of this examination are as follows:

The entire volume of this collection was 560 cc, of which approximately 395 cc was the fragmentary bones, scales and other indigestible portions of fish, 165 cc was fragments of crayfish and 40 cc was miscellaneous organic matter.

The 395 cc of fish remains consisted almost entirely of the fragmentary pharyngeal bones, scales, vertebra, ear bones, crystalline lens of the eyes, and various bones of the head and pelvic girdle of fishes, and in all cases were either from minnows (Cyprinidae) or suckers (Catostomidae). Most of the minnows were apparently of small size; i.e., under 6 inches in length, though one individual, a creek chub, (Semotilus atromaculatus atromaculatus), must have been about 7 inches long. The suckers were likewise rather small, for no evidence of these fish more than one foot in length was obtained. From an examination of the pharyngeal bones it appears that most of the suckers belonged to the fine-scaled sucker group of the genus Catostomus, though one pharyngeal bone apparently was from a redhorse type of sucker of the genus Moxostoma. There was no method possible by which an approximate estimate of the number of fish in these scats could be

obtained, but from the size of the average fish and the amount of fish remains, the actual number of individuals must have been rather large.

No game fish remains were noted in this collection of scats though a careful examination for such remains was made.

The 165 cc of crayfish remains seemed to be more broken down and fragmentary than in other otter scats which have been previously examined.

The 40 cc of miscellaneous organic debris consisted of a rather large list of plant and animal remnants. Some of the plant remains consisted of needles from hemlocks and other short-leaved conifers, the outer covering of the buds of deciduous trees, and small bits of grass; while the animal remains, other than fish and crayfish, consisted of a small snail (Gryaulus parvus) and traces of a few large aquatic beetles (Dytiscidae). All except a very small portion of the miscellaneous material mentioned above was in the interior of the scats and therefore it had passed through the digestive tract. Apparently this small amount of miscellaneous material had been accidentally eaten, as it clung to the otters' food or else was present in the intestinal tract of the fish or crayfish that the otter ate.

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