

1977

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### Recommended Citation

Hatch, J. T., & Clark, B. F. (1977). Morone chrysops (Rafinesque): the White Bass in Lake Superior. *Journal of the Minnesota Academy of Science*, Vol. 43 No.2, 7-7.

Retrieved from <https://digitalcommons.morris.umn.edu/jmas/vol43/iss2/4>

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# Morone chrysops (Rafinesque): the White Bass in Lake Superior

JAY T. HATCH,\* BYRON F. CLARK\*\*

**ABSTRACT**—On August 18, 1975, a young-of-the-year white bass, Morone chrysops, was beach-seined from Lake Superior at Marquette, Michigan. This is the first reported occurrence of the species in Lake Superior or its tributaries since an unverifiable sighting about 1880. Most likely the species has been recently introduced or has migrated through the St. Mary's River from Lake Huron or Lake Michigan.

On August 18, 1975, a single white bass, Morone chrysops, was collected in Lake Superior at Presque Isle Harbor, Marquette, Michigan. The specimen was a 61 mm (TL), young-of-the-year individual that was captured with a 30 m (3-mm ace mesh) beach seine. The collection was made in a shallow (0.5 to 1.0 m), sandy area between the outlet of the Presque Isle Power Station's discharge canal and the ore loading dock of the Lake Superior and Ishpeming railroad. Measured water temperatures in the area at the time of capture, shortly before midnight, ranged from 27 to 28 C. The specimen was preserved in 10% formalin.

Whether this specimen represents a new occurrence in Lake Superior is uncertain. Goode (1884) reported two apparent sight occurrences of white bass in the vicinity of the Apostle Islands, but the validity of the account cannot be established. Goode merely quoted some notes made by a Mr. Kumlien who, in turn, referred to the knowledge of a Mr. Bantin. None gave any information concerning the exact times and locations of the sightings or how and by whom identifications were made. That informal report has provided the basis for all subsequent accounts of the white bass' presence in Lake Superior. Greene (1935) reported white bass in Wisconsin waters as far north as Lake Winnebago and Green Bay in Lake Michigan but referred to Goode's report as the only account of occurrence of that fish in Lake Superior. Likewise, Hubbs and Lagler (1964) Ryder (1972), and Christie (1974) list white bass as occurring in Lake Superior, based on Goode's report.

Other records of the species' presence in the Lake Superior drainage basin are lacking. Eddy and Underhill (1974) state that the species does not occur in the Lake Superior drainage of Minnesota. White bass were not found in the Lowe collections of Michigan's Upper Peninsula (Taylor, 1954);

and according to Dr. R.M. Bailey, University of Michigan (personal communication), the Museum of Zoology has no records of white bass from the lake itself. Scott and Crossman (1973) report occurrence of white bass in Canada in Lake Huron and Lake Winnepeg, but not in Lake Superior.

Since the accuracy of Goode's report cannot be verified, it is not known whether the present collection represents a new occurrence or a re-occurrence. It is clear from the subsequent records and literature, however, that white bass have not inhabited the lake or its tributaries for at least the past 90 years. This record now establishes the presence of white bass in Lake Superior.

How white bass entered the lake is a matter of speculation. That they have not been found within the Lake Superior drainage basin strongly suggests local introduction. Migration through the St. Mary's River remains another possibility, since white bass do inhabit Lake Huron and Lake Michigan. If such migration is occurring, future collections should reveal presence of the species in the Sault Ste. Marie area.

The specimen of M. chrysops taken from Lake Superior is currently deposited in the Museum of Zoology, University of Michigan, catalogue designation: UMMZ 200205.

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