



## Deepwater Sculpin Fact Sheet

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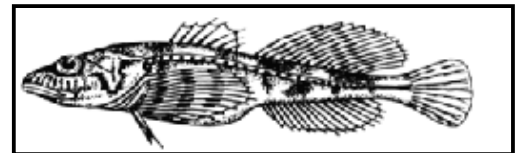
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### Deepwater Sculpin *Myoxocephalus thompsoni*

New York Status: **Endangered**

#### Description

The deepwater sculpin, New York's largest sculpin, ranges from 2 to 4.7 inches in length; however, one Lake Ontario specimen measured 9.2 inches. The fish has a long, tapered body, a blunt snout and a flat head. Unlike other sculpin species, the deepwater has four preopercular (cheekbone) spines, with the upper two spines close enough to appear as one large spine. Gill membranes join at a sharp angle and are free from the isthmus (or breast). There are two widely separated dorsal (back) fins. The second dorsal fin has a long base and long fin rays and is often enlarged on males. The caudal (tail) fin is square, the pelvic (bottom rear) fins are shaped like paddles and the pectoral (front side) fins are shaped like fans. The body has no scales, but is prickled on top. It is generally grey-brown in color with a lighter underside. The back and sides are speckled and there are thin, dark saddle-like marks on the back.



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#### Life History

The deepwater sculpin spawns year round and is usually found in cold water - 40 degrees F. or less. It spawns during the winter in Lake Michigan and during the summer and early fall in Canada. In Lake Huron, scientists determined that hatching occurs after ice breakup. The fish feeds on small crustaceans (primarily *Mysis* and *Pontoporeia*) and aquatic insects that live on the bottom.

#### Distribution and Habitat

The deepwater sculpin is found in deep, cool waters of mainland lakes in northern North America, from the Great Bear Lake in Canada to the Great Lakes. In New York State, the fish has been found in Lakes Ontario and Erie.

#### Population Status

The deepwater sculpin, abundant in Lake Ontario until 1980, was considered extirpated from this lake until caught in waters in 1996, 1998 and 1999. They were caught in Lake Erie as recently as 1995. The cause of the sculpins' population decline is unknown. However, scientists theorize that alewives and rainbow smelt may have contributed to the decline because they eat sculpin eggs and larvae. In addition, alewives and rainbow smelt compete with deepwater sculpins for food.

#### Management/Research Needs

The Department of Environmental Conservation will continue to track and report on observations of

deepwater sculpins in New York waters.

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