

**THE WHITEFISH.**

*Coregonus clupeiformis* (Mitch.), Milner. (p. 507.)

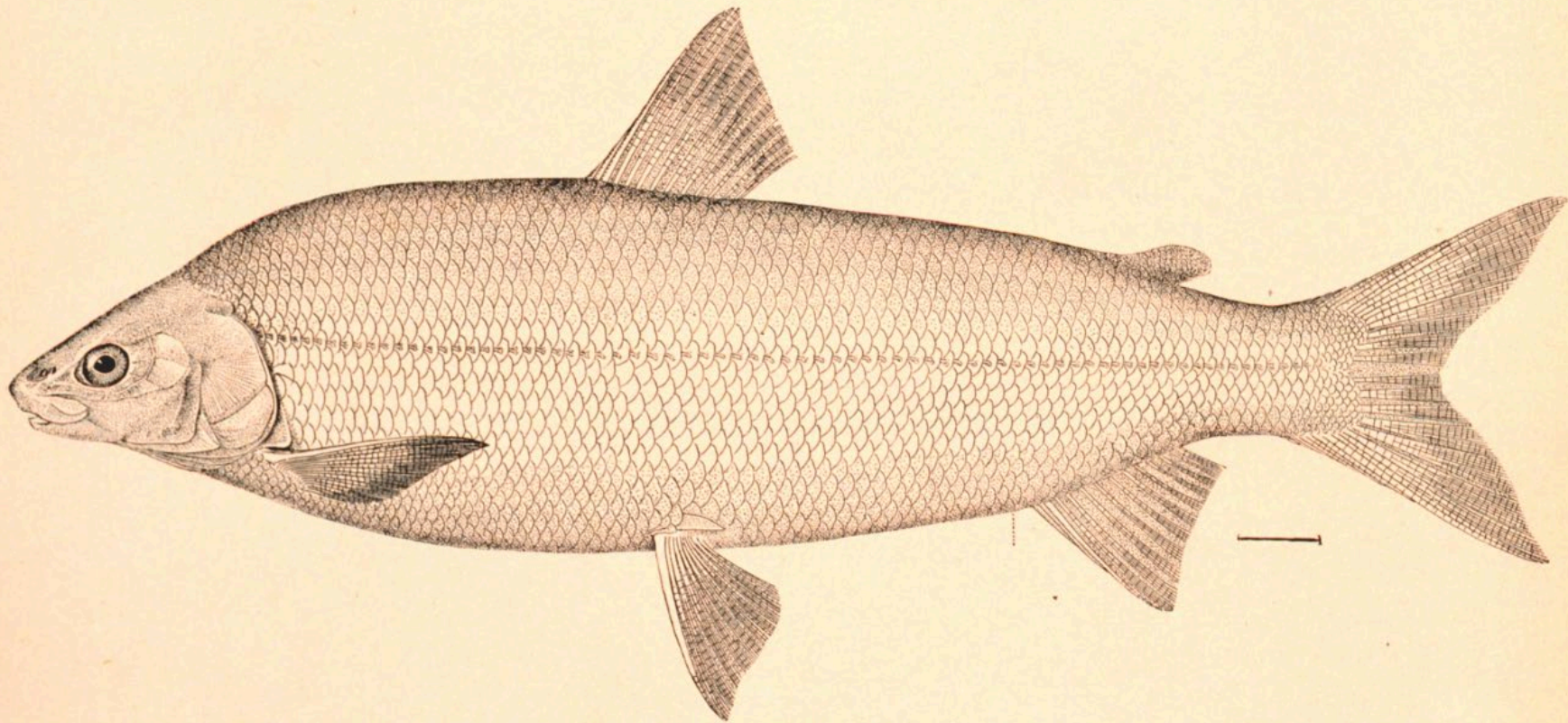
Drawing by H. L. Todd, from No. 10300, U. S. National Museum, collected at Ecorse, Mich., by George Clark.



# Whitefish Facts

- The diet of a whitefish consists mainly of benthic (bottom dwelling) invertebrates, including crustaceans, insects, snails, and occasionally other fish.
- Major predators of whitefish include burbot (also called Poor Mans Lobster), Lake Trout, Northern Pike and Walleye as well as other Whitefish.
- Whitefish live to be about 10 years old and grow to about 15 pounds.
- They are bottom dwellers and prefer cold, deep water lakes, often the same waters as one of its primary predators, the Lake Trout





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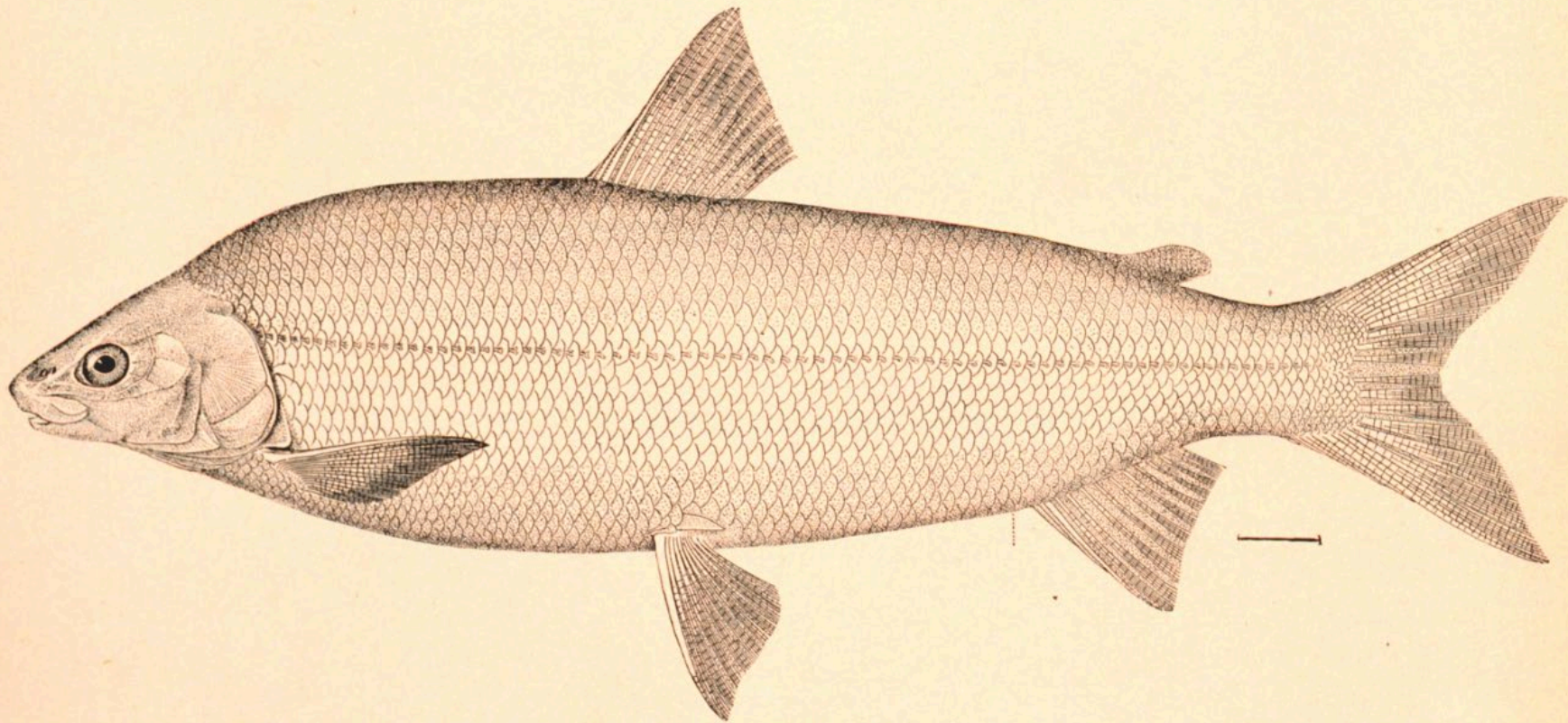
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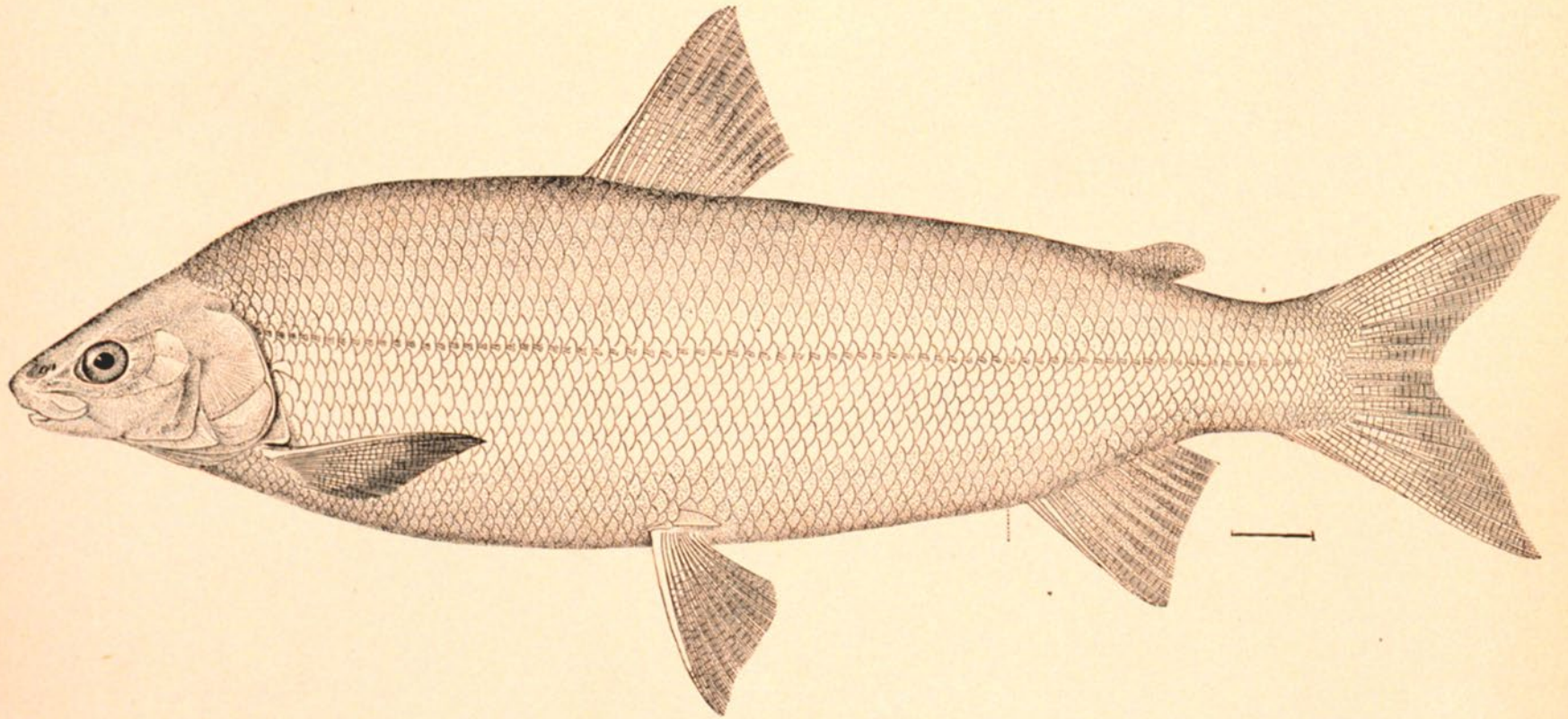
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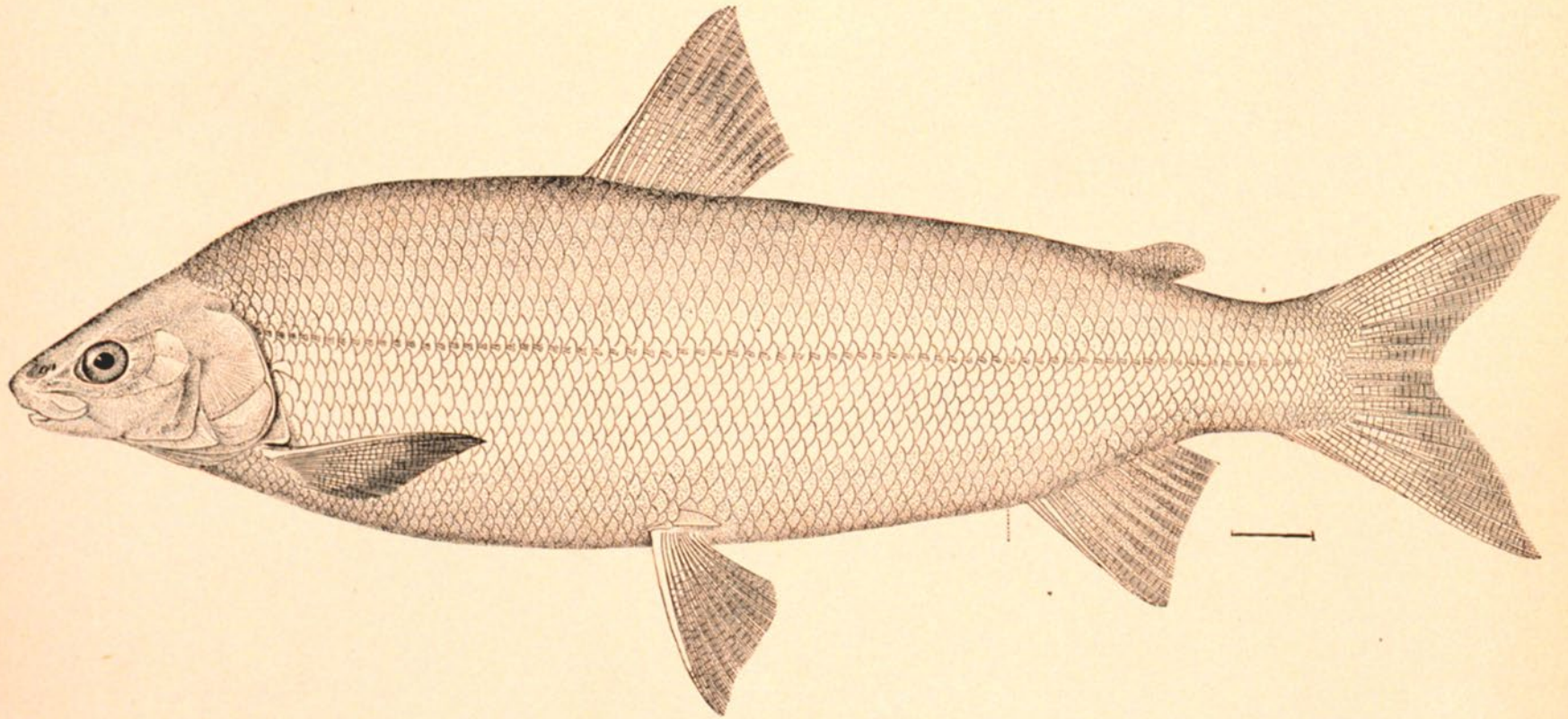
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## Thills Fish House

Location: **Marquette, Michigan**

Number of Employees: **5**

Vessels: **2**

Catch: **Whitefish for storefront sales and shipping to Chicago**

Annual Income required to remain profitable:

**\$200,000**



Thill's Fish House has been providing a wide range of fresh fish to the local Marquette area residents for over 50 years. Thill's is a family owned business that was established by one Francis Thill 50 years ago when others were using Marquette's Lower Harbor for vessels expediting iron ore and goods from Canada and lower Michigan. Francis saw that there was a niche market that he could capitalize on, while others pursued the mining interests

The Thill brothers harvest Whitefish by means of trap nets. Trap nets use many floats to support what is called a pot (or trap) of the net. A lead, the hearts and the pot of the trap may extent 40 feet up from the bottom but are completely submerged with only the marker buoy's visible at the surface. Trap nets may be as long as 1200 feet, and are set with the pot in deep water (up to 90 feet) and the lead extending towards shore or shallower water.

*-Excerpted from "Thills Fish House: Fresh catches from the lake called Gitche Gumee" by Ray Anthony on Examiner.com*





## Everett Fisheries

Location: **Port Wing, WI**

Number of Employees: **2**

Vessels: **1**

Catch: **Whitefish and Lake Trout for market sales in regional cities, and smoked fish**

Annual Income required to remain profitable:

**\$84,000**

**\*State License**



In 1889, Alick Johnson, a fisherman, came from Sweden to fish the Great Lakes. He first started fishing in Gills Rock, Wisconsin.

As the commercial fishing industry on Lake Michigan collapsed due to pollution, overfishing, and exotic invasions, Alick moved north to the supreme waters of Lake Superior where the fishing was still in its prime. In a little town called Port Wing, Alick began fishing the mighty waters of Superior with his three sons.

In 1947, Alick's youngest son Everett began smoking the freshwater fish in small oak & maple wood-fired smokehouses on his fishing dock. Ciscoes (chubs), Herring (bluefin), Whitefish, and Lake Trout were all caught and immediately brined and smoked by Everett.







## Red Cliff Tribal Fishery

Location: **Red Cliff, WI**

Number of Employees: **27**

Vessels: **10**

Catch: **Whitefish and Lake Trout for on-reservation sales, regional restaurants, storefront**

Annual Income required to remain profitable: **\$910,000**



Red Cliff manages its own commercial fishing fleet, licensing about 10 large boats each year. The department does fish population monitoring and enforces commercial and recreation fishing regulations alongside the Bad River Band of the Lake Superior Chippewa Tribe and Wisconsin's state natural resource officials. The fishery department's fleet includes a 36-foot long, 12.5-foot-wide Henley Marine boat used for enforcement and monitoring.

The tribe's commercial fishing industry makes an impact in the reservation community of about 2,000 people. Tribal enrollment is slightly more than 6,900. "Each big boat will employ three people—five to seven people in the peak season," Bainbridge reports. "There also are ripples. The fish is distributed locally" to restaurants, tribal members and other consumers.

"The tribes aren't out there just for the commercial fishing," adds Duffy. "There's subsistence fishing, too."

- Excerpted from "Investing in Fish, Preserving Red Cliff Culture" by Konnie Lamay in *Indian Country Today*, 6/20/13





## Bodin's Fishery

Location: **Bayfield, WI**

Number of Employees: **6**

Vessels: **3**

Catch: **Whitefish for storefront sales and shipping nationwide**

Annual Income required to remain profitable:

**\$222,000**



Nils Adolf Bodin immigrated from Sweden in the late 1800's. He arrived and settled into Ashland where he was a carpenter and a fisherman to make ends meet. Nils decided that being closer to Long Island, where much of the fishing took place, made better sense and moved into what was to become the Bodin Homestead in the Town of Bayview. Nils settled and married Elizabeth Johansson and had 6 children. To an extent all of them followed in their father's shoes and when they were of age, began to fish themselves. Elmer Bodin, one of the 4 sons, decided to move from the homestead down the shoreline closer to Washburn. Elmer purchased 40 acres and begin fishing on his own separate from his siblings. Elmer married Hazel Bergman, a local Washburn girl, and had two children, Roger and Richard (Dick) Bodin. Both sons went on to continue the fishing legacy and were the true creators of Bodin Fisheries. Dick's son Jeff Bodin (Captian Buddy) is now at the helm of Bodin Fisheries.







## Whitefish Challenge 1:

An abundant year with beneficial water temperatures and plenty of prey for whitefish results in strong catches. There is also a relatively high demand for fish, due to increased marketing of Lake Superior Whitefish, emphasizing its health benefits and relatively sustainable fishery.

Catch increases by 30% and price per pound stays high at \$1.89.

EAT WISCONSIN  FISH



### Lake Whitefish

**Omega-3 Fatty Acids (EPA+ DHA)** .75 grams per 6 ounces

Wild-caught Lake Michigan 1X per month

Wild-caught Lake Superior 1X per week





## Whitefish Challenge 2:

The Lake Trout population has increased in Lake Superior, and whitefish are feeling the heat. The population dropped this year due to increased predation. You may be able to make up some losses in sales of Lake Trout if you are licensed to fish them (only tribal fisheries and fisheries in Wisconsin can do this), but overall...

Catch decreases by 15% and the price per pound is at \$2.03



*Catching Lake Trout on Lake Superior.*





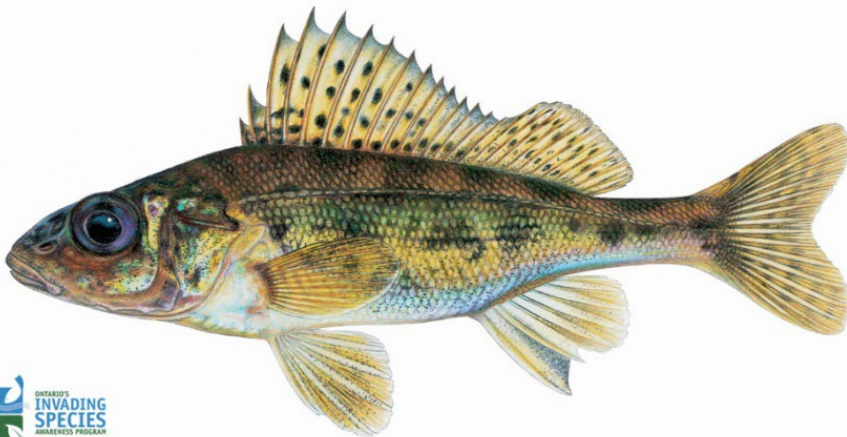
## Whitefish Challenge 3:

The Eurasian Ruffe, an invasive species to the Great Lakes system, can cause a decrease in whitefish due to their consumption of whitefish eggs. The Ruffe are opportunistic feeders of the bottom of lakes, and it will eat anything it can find, including fish eggs. Whitefish lay their eggs in shallow areas of Lake Superior. Ruffe are increasing in Wisconsin's Lake Superior Waters after Ruffe invaded the St. Louis River near Duluth, MN. Michigan waters do not seem to be impacted yet.

Michigan fisheries catch stays the same.

Wisconsin fisheries catch decreases by 10%.

The price per pound is \$1.98







## White Fish Challenge 4:

Climate change is a concern for whitefish survival. Although warmer temperatures would result in higher production rates of food sources for whitefish, the predicted rise in water temperatures would have negative impacts on whitefish reproduction and survival. Warmer fall temperatures would result in lower egg survival and therefore less recruitment from year to year of whitefish. To compensate for the decrease in recruitment and population, fishing limits would be enforced and harvests would have to be reduced in order to maintain a sustainable population.

A very unusually warm winter and summer in 2016 results in warmer than normal water temperatures and reduced spawning of whitefish. Catch limits reduced by 20% in the following year. The price per pound is at \$1.60

