



The R/V Grayling - Lakes Huron and Michigan

The USGS Great Lakes Science Center is dedicated to providing scientific information for restoring, enhancing, managing and protecting living resources and their habitats in the Great Lakes region.



The Center is headquartered in Ann Arbor, Michigan, and has biological stations and research vessels located throughout the Great Lakes basin.

Background

The R/V *Grayling* is the Great Lakes Science Center's third largest ship, and is currently operating on both lakes Huron and Michigan. Docked at the Cheboygan Vessel Base in northeast lower Michigan, the *Grayling* is used primarily to carry out annual prey fish assessments. These assessments have occurred annually since the 1970's. They represent an exceptionally long data series that is being used to provide current information on the prey fish base to fisheries managers and to facilitate understanding of long term population trends in the fish

community. Data on prey fish populations are especially important in evaluating management strategies such as predator stocking and harvest quotas. Other current research projects aboard the *Grayling* include research into the applications of hydroacoustic technology in fish stock surveys, lake trout restoration, a study of



A round goby

mechanisms regulating diet and growth of lake whitefish in Lake Huron, and documenting the expansion of invasive round gobies in offshore waters and their interactions with native species.

Specifications

Built in 1977, the *Grayling* is large enough to comfortably accommodate eight people, including three crew members and five scientific personnel. It has a full galley and two heads with

showers, and can be at sea for around 17 days.

- Length: 75 feet*
- Beam: 22 feet*
- Draft: 9.8 feet*
- Displacement: 189 metric tons*
- Cruising Speed: 9.1 knots*

On-board equipment

Since the *Grayling* is primarily used for fisheries research, it is equipped with bottom and mid-water trawls, gillnets and gillnet lifter, and hydroacoustics gear. It also has limnological sampling capabilities with a bathythermograph, plankton nets, Ponar bottom sediment sampler, and side-scan sonar.

Cheboygan Vessel Base

With the R/V *Grayling* and R/V *Sturgeon*, the Cheboygan Vessel Base provides primary capability across Lake Huron and Lake Michigan. The vessels operate across three state boundaries, Canadian waters, and treaty waters. The R/V *Grayling* provides the platform for research by investigators in the Lake Huron Project, in hydroacoustics, food web dynamics, and fish community and population dynamics.

