

Forage Task Group Executive Summary



Introduction

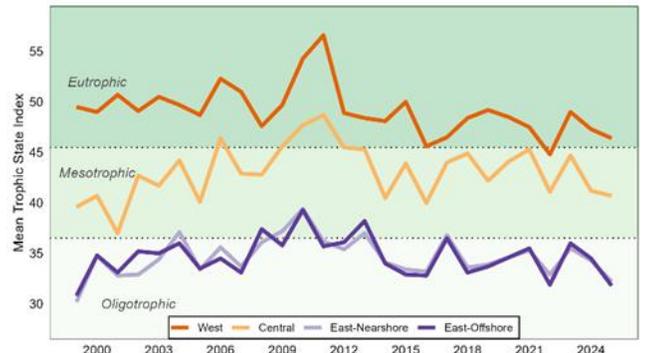
The Lake Erie Committee Forage Task Group (FTG) report addresses progress made on four charges:

1. Report on the results of the interagency lower trophic level monitoring program and status of trophic conditions as they relate to the Lake Erie Environmental Priorities.
2. Describe the status and trends of forage fish in each basin of Lake Erie and evaluate alternate data sources and methods to enhance description of forage fish abundance.
 - 2.1. Describe forage fish abundance and status using trawl data.
 - 2.2. Report on the diets of important Lake Erie predator fish where available.
 - 2.3. Describe growth and condition of Walleye, Lake Trout, and Black Bass.
3. Continue hydroacoustic assessment of the pelagic forage fish community in Lake Erie.
 - 3.1. Report on annual hydroacoustic surveys, including the use of new methods in survey design and analysis following the GLFC’s Great Lakes Hydro Acoustic Standard Operating Procedures.
 - 3.2. Explore autonomous technology integration into the survey design to increase program efficiency.
4. Act as a point of contact for any new/novel invasive aquatic species and incorporate into the USGS Nonindigenous Aquatic Species database.

The complete report is available from the Great Lakes Fishery Commission’s Lake Erie Committee Forage Task Group website (<http://www.glfc.org/lake-erie-committee.php>) or upon request from a Lake Erie Committee, STC, or FTG representative.

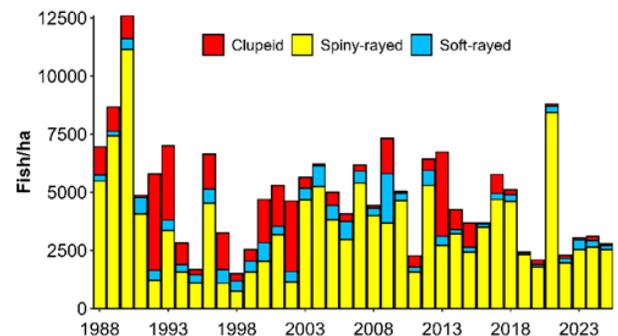
Interagency Lower Trophic Level Monitoring

The Lower Trophic Level Assessment monitoring program has measured nine environmental variables at 18 stations around Lake Erie since 1999 to characterize trends in lake productivity. In 2025, lake productivity was down compared to 2024. The Trophic State Index, which is a combination of phosphorus levels, water transparency, and chlorophyll *a*, indicated that the Central Basin was within the targeted mesotrophic status. The West Basin remained in the above-target eutrophic classification. The East Basin offshore and nearshore areas were oligotrophic in 2025. Low hypolimnetic dissolved oxygen was not observed in this survey but continues to be an issue in the Central Basin during the summer months.



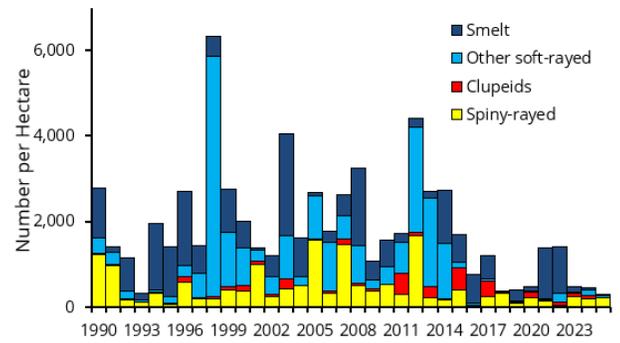
West Basin Status of Forage

In 2025, data from 67 trawl tows were used (down from 73 in 2024). Total forage density averaged 2,793 fish per hectare across the West Basin, similar to moderate levels for most years since 2019. Forage biomass (15.9 kg/ha) increased 16% from 2024. Age-0 White Perch abundance (1,471 fish/ha) declined for the second straight year. Age-0 Yellow Perch density (733 fish/ha) increased. Age-0 Gizzard Shad abundance (81 fish/ha) remained below the ten-year mean (332 fish/ha). Age-0 Alewife density (0.1 fish/ha) returned to minimal levels after a surprising 2024 (47 fish/ha). Densities of Emerald Shiners have remained low for a decade. Round Goby abundance (11 fish/ha) remained below the ten-year mean (27 fish/ha).



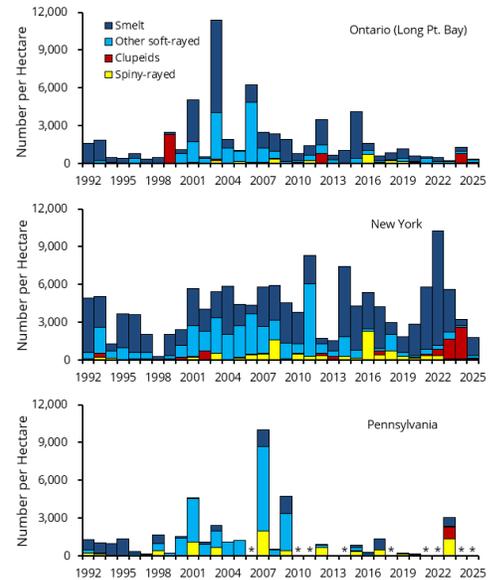
Central Basin Status of Forage

In 2025, 23 trawl tows were completed in the Ohio waters of the Central Basin. Total forage density averaged 349 fish per hectare across the Central Basin, well below the long-term mean. Total forage biomass was 5.286 kg/ha, like 2024. Age-0 Rainbow Smelt density increased slightly from 2024 and was well below the long-term average. Age-1+ Rainbow Smelt density increased slightly from 2024 and was well below the long-term mean. Round Goby indices decreased compared to 2024 but were still below the long-term mean. Spiny-rayed forage density (208 fish/ha) increased slightly from 2024. Age-0 Yellow Perch density decreased from 2024; these continue to be some of the lowest densities in the time series. Walleye densities were above the long-term mean.



East Basin Status of Forage

In 2025, overall forage fish densities were below time series averages in New York and offshore Ontario waters. Total forage biomass was 4.8 kg/ha in New York and was the fourth lowest level in the time series. Catches of age-0 and age-1+ Rainbow Smelt were low in both New York and Ontario. Emerald Shiner catches of age-0 and age-1+ remain below the time series average in New York waters. Catches of Emerald Shiner in Ontario remain low in 2025. Round Goby densities were below average in New York but above average in Ontario. Abundance of Alewife (age-0 and age-1+) declined drastically in both New York and Ontario, likely due to a winter die-off. Catches of age-0 Walleye in New York were well above-average, while catches of age-1 Yellow Perch were below-average. Catch of age-0 Lake Whitefish was at the fourth highest level in the New York time series. Catches of most other species were low in New York. In Ontario waters, age-0 Yellow Perch and White Bass increased and abundance of Trout-perch remains high. Pennsylvania did not trawl in 2025.



Hydroacoustic Assessments

The primary purpose of Lake Erie hydroacoustic surveys is to estimate densities of important forage fishes in each basin of Lake Erie in July during the new moon. After several years of comparison studies, the hydroacoustic surveys in Lake Erie adopted a common, stratified random transect design. Standardization of the survey design allows for results to be generated lake-wide and by basin. In 2025, a total of 450 km of transects were sampled, 66 water column profiles were measured, and 65 companion mid-water trawls were towed (the latter in the Central Basin only). Densities of fish (number per hectare) were highest in the East Basin, followed by the West Basin, and lowest in the Central Basin. In the East Basin, age-1+ Rainbow Smelt density declined sharply in 2025 relative to 2024. In the Central Basin, total density of fish remained low in 2025 but increased from 2024, with Rainbow Smelt being the most abundant single species in both the epilimnion and hypolimnion. In the West Basin, prey fish density decreased in 2025 and remains below the time series average.

Aquatic Invasive Species

In 2025, the USFWS Early Detection and Monitoring program did not capture any novel aquatic invasive species (AIS). No other Lake Erie agency encountered a novel AIS, either. However, the USFWS captured four Rudd (*Scardinius erythrophthalmus*) in September 2025 in Cleveland. According to the USGS Nonindigenous Aquatic Species (NAS) Database, this species was previously detected in Marblehead, OH in 2009 and in Ashtabula, OH in 2018. Additionally, one adult Rudd was reported to iNaturalist in Cleveland in 2021. USFWS also captured eight Threespine Stickleback (*Gasterosteus aculeatus*) across 3 sites in the St. Clair River in May 2025. The USGS NAS Database reports two other captures of this species in the Lake Erie basin: one near Toledo, OH in 1990, and one in Maumee Bay, OH in 1994. Lastly, a presumed Midas Cichlid (*Amphilophus citrinellus*) was found dead on a beach in Painesville, OH in August 2025 and reported to ODNR. The USGS NAS Database does not report any other captures of this species in the Lake Erie Basin. The FTG is continuing work towards incorporating the FTG Aquatic Invasive Species database as well as other agency data into the USGS NAS Database so that the data can be archived and help track AIS on a greater geographic scale.