



# COAST WATCHERS DATA REPORT

- 2024 -



**LAKE  
HURON  
FOREVER**



Prepared by: Huron Pines  
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# About Coast Watchers



Coast Watchers, a program designed and built by the Lake Huron Coastal Centre in Goderich, Ontario, engages community members to take an active part in observing and improving the quality of Lake Huron through individual actions. Huron Pines runs the program on the Michigan side of Lake Huron as part of the Lake Huron Forever Initiative, with the expectation that it can help guide and prioritize future restoration efforts along the Northern Michigan coast.

As part of the Coast Watchers program, participants are trained to record air and water temperatures, seasonal changes in water levels, and occurrences of sensitive or invasive plants, fish die-offs, storm damage or pollution. Volunteers monitor shoreline sections along the 168-mile stretch from Tawas City to Rogers City, Michigan. This information guides restoration efforts, while engaging local volunteers in direct science.



The Coast Watchers monitoring season runs for 26 weeks, from May 1 to October 31. Volunteers commit to observing the same stretch of shoreline each week, ideally at the same time and on the same weekday, to ensure consistent, unbiased data collection. Volunteers choose a specific spot to record observations from 15 meters on either side of their monitoring location, covering a total of 30 meters.

## Piping Plover Monitoring

In addition to shoreline monitoring, we have a group of volunteers that assist with monitoring the endangered piping plover. In collaboration with the [Great Lakes Piping Plover Conservation team](#), plover volunteers along the Lake Huron coastline are asked to keep an eye out for courting and nesting pairs. These observations continue through the breeding, nesting, and brooding phases, until the chicks are fledged.



# LAKE HURON FOREVER

The Coast Watchers program is part of the Lake Huron Forever initiative, launched in 2019 by shoreline community foundations and conservation partners from both the U.S. and Canada. This initiative is focused on advancing water quality protection and fostering healthy, sustainable communities on both sides of Lake Huron. The goal is to engage communities in preserving the lake’s health, supporting conversations and collaborations that lead to meaningful on-the-ground actions. By strengthening both the environment and the well-being of local residents, the initiative works to ensure long-term protection for Lake Huron’s ecosystems, plant and animal diversity, and surrounding communities.

## Why Community Science?

“Community science can bring a community together, give a voice to people who might not otherwise be heard, and strengthen the social bonds that make a community resilient.” There are significant gaps in shoreline data collection, particularly along the vast coastline of Lake Huron, which spans 6,170 kilometers—the longest of all the Great Lakes. With the immense size of the shoreline, it is impossible for a single agency to monitor it in detail. This is where the role of community scientists becomes essential. Volunteers play a critical role in recording changes along the coast, contributing invaluable data that supports effective management and conservation decisions for Lake Huron.

# Results

The map highlights the locations where volunteers conducted monitoring along the shoreline of Lake Huron. Each marked point on the map represents a monitoring site. Green dots are Michigan Coast Watchers and the orange dots are Ontario Coast Watchers.

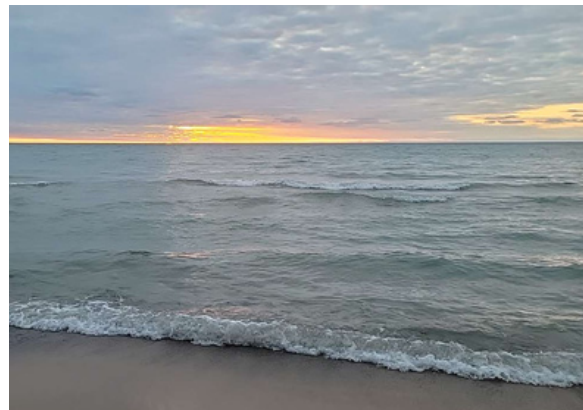
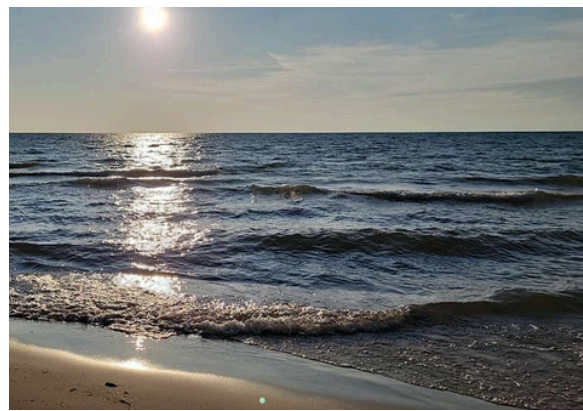


**In total, volunteers dedicated 175.9 hours to monitoring. We received 471 total data submissions from 25 active volunteers.**



# Atmospheric Conditions

The horizon was visible 94.3% of the time during monitoring visits. Monthly averages for water and air temperatures were also recorded, with the average air temperature being 67.69°F (19.83°C) and the average water temperature at 64.35°F (17.97°C). Additionally, the average Beaufort scale number, which measures wave height, was 2.4, indicating relatively small waves during most monitoring sessions.





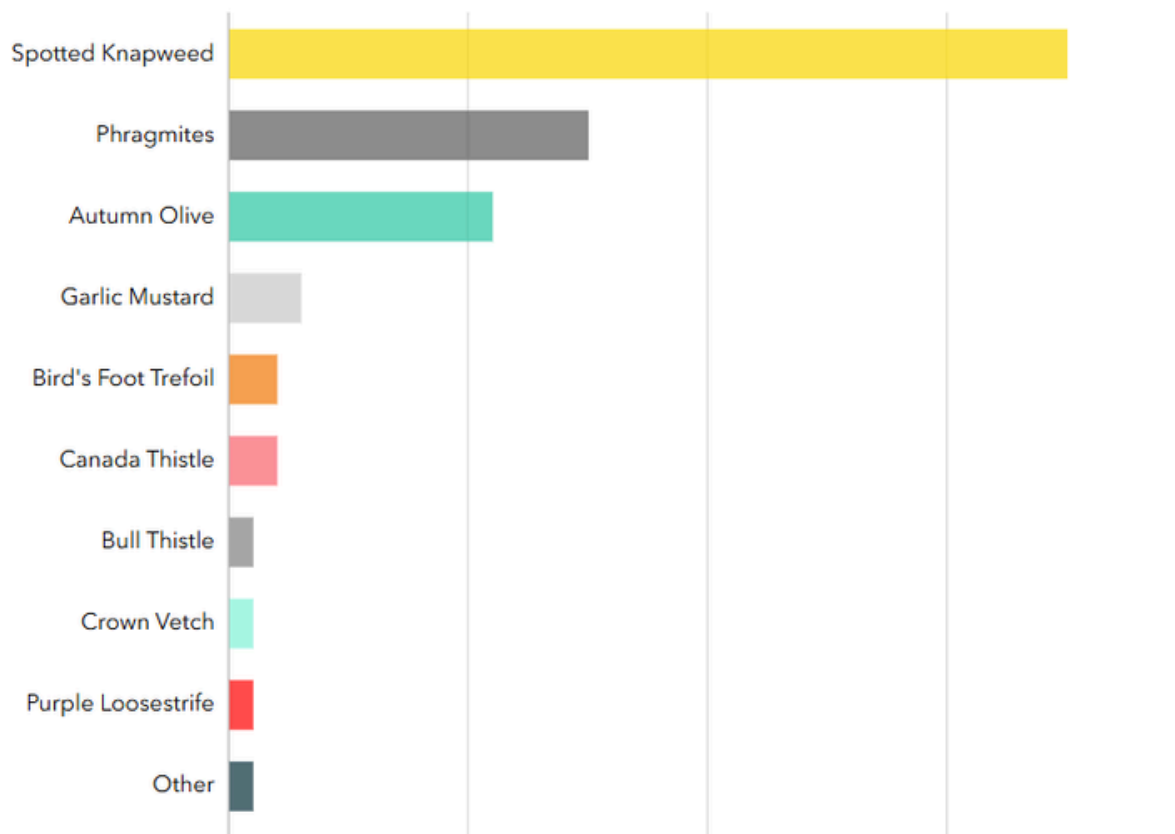
# Wildlife Observations

Wildlife was present 46% of the time during observations. The most commonly spotted species, in order of sightings, were the ring-billed gull, Canada goose, mallard, common tern, killdeer, and American robin.



# Invasive Species

Invasive species were observed 15% of the time and the most common occurrences were - spotted knapweed, phragmites and autumn olive.





# Plastic Watch

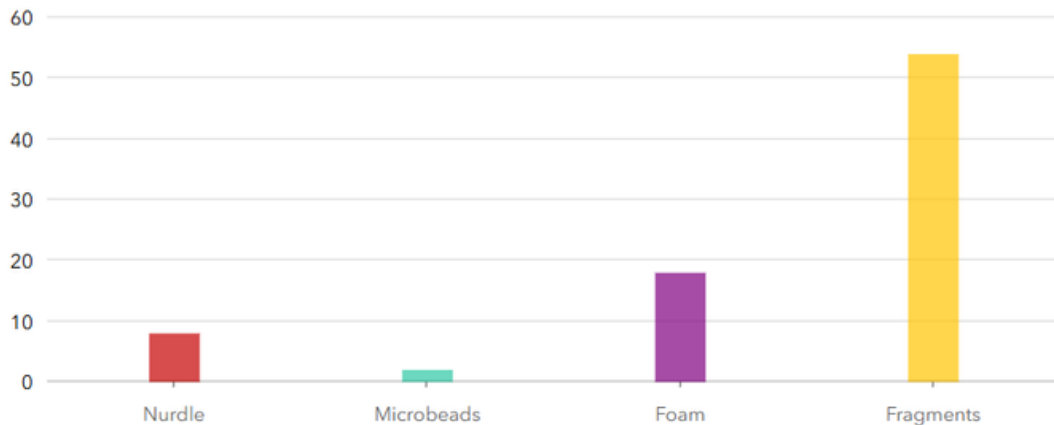
In partnership with Great Lakes Great Responsibility, volunteers removed 1,100 pieces of plastic from the shoreline. Plastics were observed in 28.6% of monitoring sessions.



The word cloud below visually represents the most common types of plastic collected, with larger words indicating more frequently observed items.



The graph below shows the most common types of microplastic found.





## Storm Damage

Storm damage was reported 9.5% of the time and erosion was reported 9.1% of the time.

The word cloud below visually represents the most common types of human made debris seen, with larger words indicating more frequently observed items.



The word cloud below visually represents the most common types of large natural debris seen, with larger words indicating more frequently observed items.



## Algae Observations

There were no concerning algae observations.



# Piping Plover Monitoring

Piping plover monitors along the Lake Huron coastline were asked to keep an eye out for courting and nesting pairs. Two pairs nested at Tawas Point State Park in 2024. Once courtship behavior was observed, volunteers helped ensure the protection of the nest sites. A fenced-off area was established, and once eggs were discovered, the Great Lakes Piping Plover Conservation team created an enclosure to protect the nests. Volunteers monitored the nest daily, noting nearby predators, human disturbances, and any tracks around the enclosure. These observations continued through the breeding, nesting, and brooding phases, until the chicks were fledged.



Photos taken through a scope by Nick Theisen

**Seven volunteers spent over 200 hours of their time watching over the Tawas Point plovers. They monitored the park for 4 months, watching over the 4 adults and 7 chicks, until those chicks successfully fledged.**



## THANK YOU TO OUR SPONSORS

**Consumers Energy**



Funding support was provided by the U.S. Fish and Wildlife Service's Great Lakes Fish and Wildlife Restoration Act

Thank you to our donors all across Michigan.

Thank you to our Lake Huron Forever Partners.



## Future Events with Huron Pines

See our [events page](#) to stay up to date on upcoming activities.

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