



2023 Shoreline Cleanup Report

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About Us

Georgian Bay is a globally unique ecosystem and is classified as a UNESCO world biosphere. With more than 30,000 islands and 2,000 kilometers of shorelines it is the largest freshwater archipelago in the world. This region is an important transitional ecosystem that contains a wide diversity of habitats from rocky shorelines to coastal wetlands, and sandy beaches. These shorelines support an incredible array of organisms; more species of reptiles and amphibians live here than anywhere else in Canada, including species at risk such as the Blanding's Turtle and the Piping Plover.



Georgian Bay Forever is a registered Canadian charity founded in 1995 with the mission of preserving the Georgian Bay aquatic ecosystem and promoting environmental protection. GBF's commitment to safeguarding the Georgian Bay ecosystem is rooted in our dedication to scientific research, action, and education to address environmental issues.

This report details the significant strides made by Georgian Bay Forever in 2023 through our generously funded shoreline program, while also outlining our plans for 2024.

Our Mission

To protect and enhance Georgian Bay through science, research, education, and action.

Our Vision

To ensure Georgian Bay is healthy and thriving forever.

Our Strategy

1

To identify, research, and put forward strategies and solutions that respond to key threats facing Georgian Bay's ecosystem.

2

To expand our impact through strategic partnerships.

3

To develop strategies that inspire action and behaviour change through communication, education, and awareness.

4

To strengthen organizational, financial and human resource capacity for staff and volunteers and build a thriving workplace.



To our dedicated volunteers

The volume of debris we recover annually consistently leaves us astounded. We extend our heartfelt gratitude to the dedicated volunteers who have generously contributed their time and energy to safeguard Georgian Bay.

This summer, we are especially thankful for the remarkable 455 volunteers who joined us in protecting Georgian Bay. Your collective efforts exemplify the substantial difference that each of us can achieve. We would like to express our sincere appreciation for your invaluable contributions and continued support of our greater mission. Your dedication and efforts enable our work to continue.

Among these volunteers, numerous families, students, and individuals have become steadfast participants in our cleanup initiatives, demonstrating their unwavering commitment to the local environment.

A special thank you to our summer students who poured their hearts, energy, and dedication into supporting our plastic pollution programs, educating the public, as well as contributing to the scientific community.



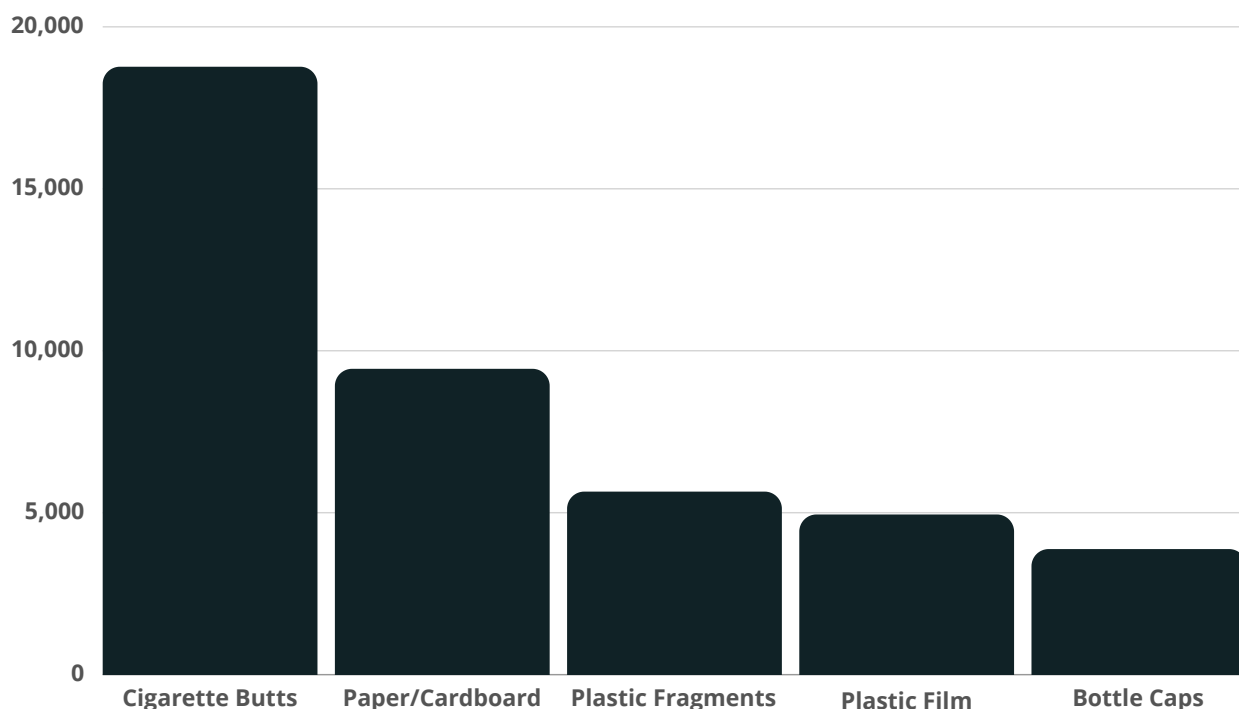
2023

The year 2023 marked a significant milestone as we completed our fifth year of shoreline cleanups, during which we observed remarkable growth in volunteer participation, collaboration and outreach. Over the span of April to August, we successfully hosted a total of 61 shoreline cleanups. Thanks to the dedication of 455 volunteers, we collectively removed an astounding 1,417.84 pounds of garbage.

Our primary focus was directed towards conducting routine cleanups at strategic locations, including The Fishway and Little River Park in The Blue Mountains, Sunset Point in Collingwood, Beach 2 at Wasaga Beach Provincial Park, and the Harbour in Midland. These efforts were pivotal in addressing and tracking human induced pollution in these popular areas.

At each shoreline cleanup, we completed waste audits on the type of litter collected, meticulously documenting the type and quantity collected at each event. This year we identified the top five most collected litter items as cigarette butts, paper/cardboard, plastic fragments, plastic film, and bottle caps.

2023 Most Commonly Collected Items

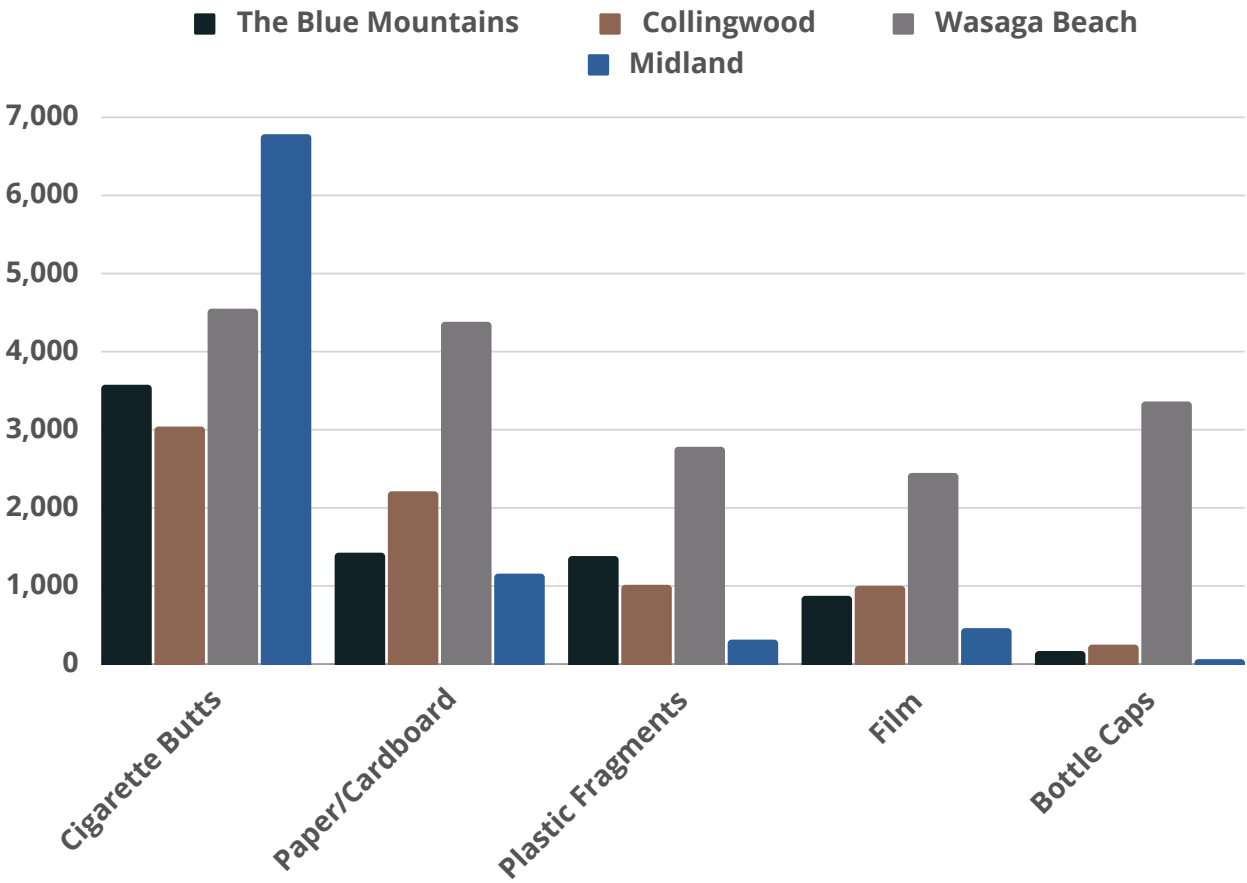


A Year in Review

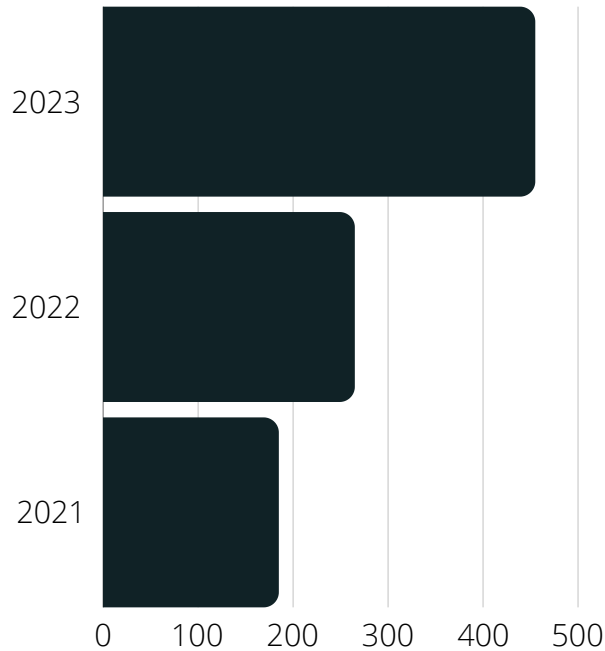
While these findings are not uncommon in global statistics, we did observe variations in the quantity of these litter types per township. When reviewing the below data, it is important to consider the number of cleanups per location:

Number of Cleanups Per Township			
The Blue Mountains	Collingwood	Wasaga Beach	Midland
20	16	13	7

The Midland Harbour was a major hotspot for cigarette butt pollution, while Wasaga Beach was a major hotspot for bottle caps. The variations in the litter collected are deeply tied to the location and its primary public access use.



Volunteer Engagement 2021-2023



Over the past three years, we have observed substantial growth in cleanups, with a significant increase in the amount of garbage collected and engagement of volunteers. From 2021-2023 we saw an increase in volunteer engagement by approximately 145.95%.

Pounds of Garbage Collected Per Year

2023	2022	2021
1,417.84	964.19	1,025.69

GBF employed an array of outreach strategies in 2023 to engage the local community and garner support for shoreline cleanup initiatives. These included an active social media presence, event registrations on town calendars, targeted emails, and coverage in local news outlets.

Furthermore, the introduction of the bi-weekly volunteer raffled added an enticing element to participation, while the incorporation of interactive information stations at our booth, such as the "Where does it go?" garbage board, enhanced engagement and awareness.



Community Collaboration

Collingwood Youth Centre

On April 18, GBF and the Collingwood Youth Centre collaborated on a joint shoreline cleanup initiative to clean the Collingwood Arboretum.



18

volunteers



112

lbs of garbage



Wasaga Beach Climate Action Team

To celebrate Earth Day, we partnered with Wasaga Beach Climate Action Team to clean Beach 1 at Wasaga Beach.



50

volunteers



187.59

lbs of garbage



Pretty River Academy

Partnering with multiple classes at Pretty River Academy, we hosted two separate cleanups at Sunset Point and the school's surrounding trail network.



70

volunteers



73.4

lbs of garbage



Community Collaboration

Magnetawan First Nation

We visited Magnetawan First Nation on July 26 for plastic pollution education and a community cleanup. The community came together using trash pickers and sand sifters to clean the shore. Some volunteers brought masks and snorkels, and dove into the river in search of any debris they could safely collect.

**20**

volunteers

**35.15**

lbs of garbage



Georgian Bay Spirit Co.

We celebrated Earth Day with Georgian Bay Spirit Co. on April 21 at Little River Park for a shoreline cleanup. We even had Mayor Matrosovs join for the afternoon.

**6**

volunteers

**42.2**

lbs of garbage



Community Collaboration

Lake Huron Coastal Centre

Over three joint shoreline cleanup projects, we cleaned Tobermory, Meaford and Owen Sound working together to educate on the harmful effects of plastic pollution.



56

volunteers



227.15

lbs of garbage

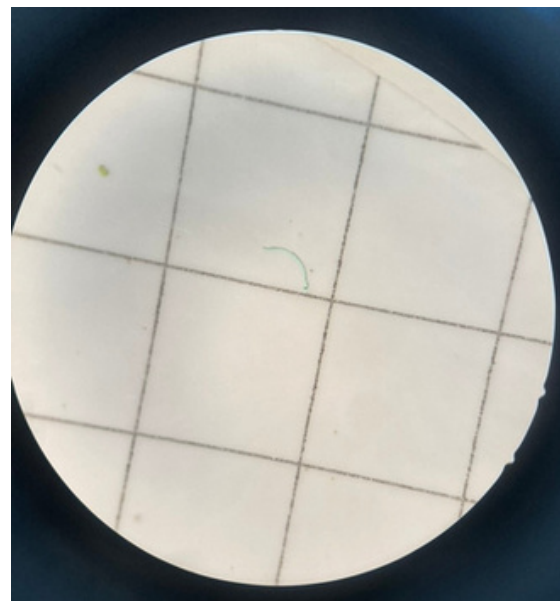


We also collaborated on water quality testing for microplastics, collecting 30 of 60 samples around Lake Huron and Georgian Bay. Together we analyzed samples under the microscope to categorize different types of microplastics.

To see results of the sampling, please visit the shared map linked below:

[Microplastics Sample Locations and Findings](#)

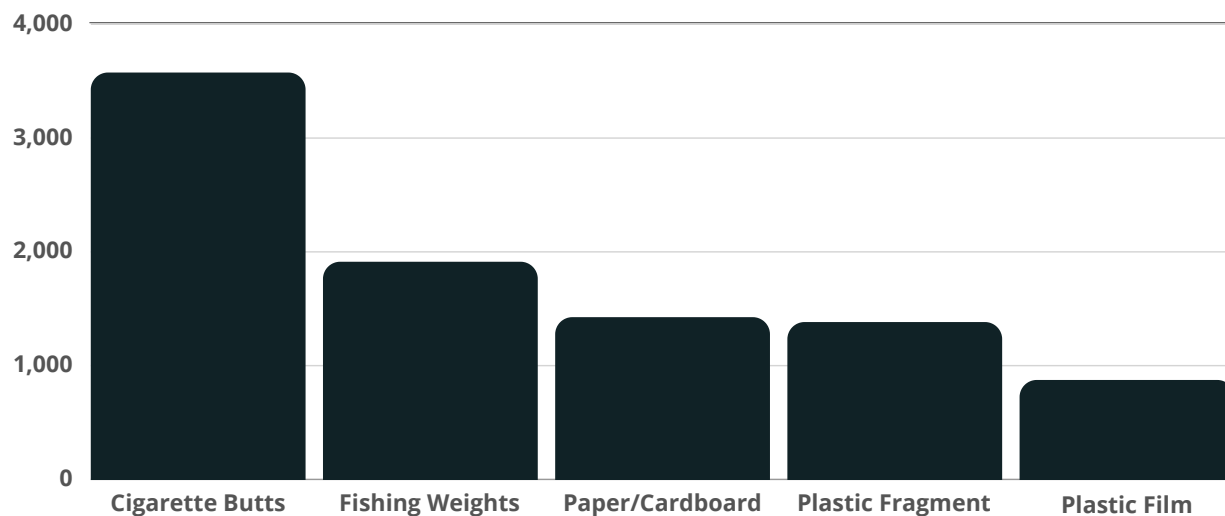
As reported by the Lake Huron Coastal Centre (LHCC), the 2023 findings reveal that 88% of samples analyzed contained microplastics in some form. Of the 224 microplastics observed, microfibers were by far the most prevalent, with a recorded count of 164. This finding is consistent with the data collected by LHCC in 2018 and 2021. Following microfibers, the second most common type of microplastic identified was film, with 45 occurrences, followed by microbeads with 14 occurrences, and fragments with just one recorded instance.



Waste Analysis By Town

The Blue Mountains

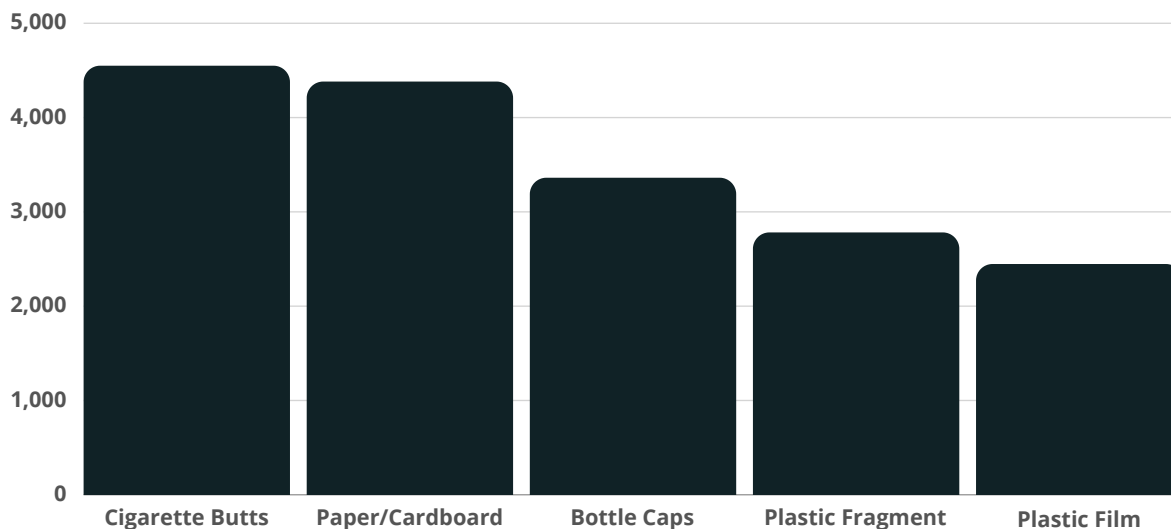
We hosted weekly cleanups at Little River Park and bi-weekly cleanups at The Fishway, resulting in a total of 129.21 lbs of garbage collected. Despite having installed cigarette butt receptacles at these locations, cigarette butt pollution was still prevalent with a total of 3,576 butts collected. We will continue to work to educate the public on the harmful impacts of cigarette butt pollution and encourage beach and park goers to utilize the receptacles.



Most notably, these locations were hotspots for fishing-related gear. Given the popular fishing areas in these locations, we saw a significant increase in fishing related litter, with both Little River Park and The Fishway harboring more abandoned fishing gear than any other shoreline cleanup location we frequented this year.

Wasaga Beach

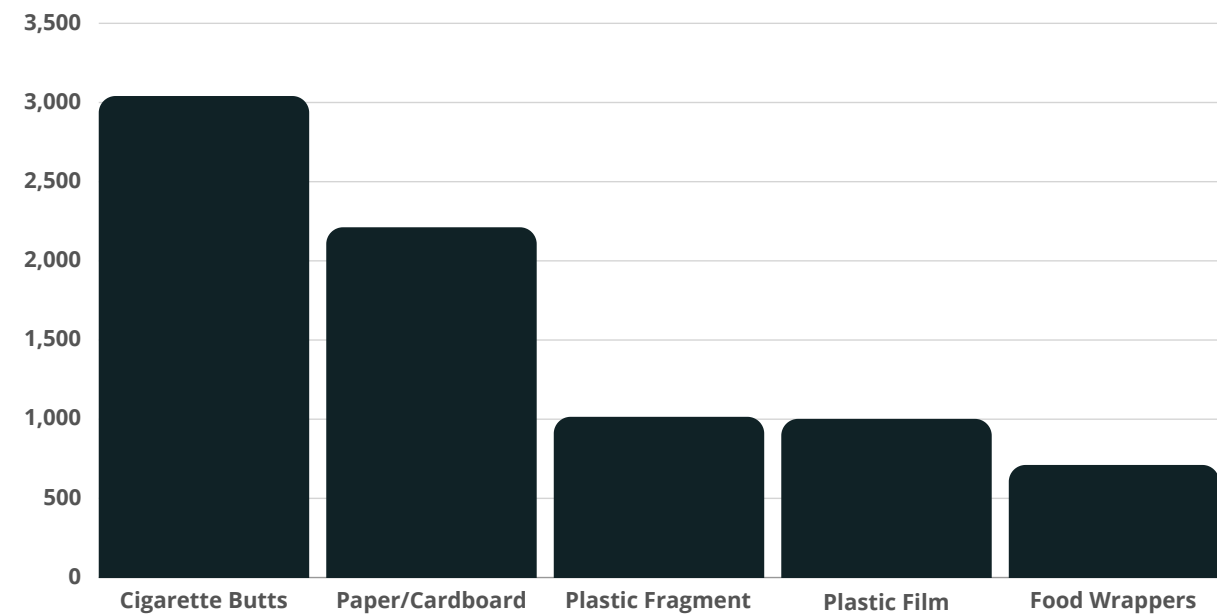
We extend our gratitude to our valued partners, the Rotary Club of Wasaga Beach and the Wasaga Beach Climate Action Team, for their dedicated collaboration in conducting weekly shoreline cleanups. Together, we achieved remarkable results by collecting an impressive 479.17 pounds of discarded waste. Among the myriad of items we gathered along the beach, cigarette butts emerged as the most prevalent, shedding light on the pressing need for enhanced enforcement measures, especially considering that smoking is prohibited on Provincial Park beaches. Equally concerning was the abundance of bottle caps discovered at Wasaga Beach, which far exceeded the quantities found at other cleanup sites.



Wasaga Beach witnesses a substantial influx of visitors, resulting in a notable presence of plastic film remnants from beach umbrellas, tents, and toys, as well as a surplus of bottle caps from various beverages and water bottles. These findings underscore the urgency of expanding educational campaigns to enlighten beachgoers about responsible packing-in-and-out policies, thereby safeguarding and preserving the pristine beauty of this cherished beach.

Collingwood

Sunset Point remained a persistent hotspot for cigarette butt litter and paper/cardboard waste, primarily due to its immense popularity and the adjacent walking trails that attract community members, tourists, and beachgoers alike. During our cleanups, we collected 293.48 pounds of garbage in total. Cigarette butts were especially abundant in areas surrounding parking lots, picnic tables, and benches, underscoring the fact that these spots serve not only as gathering points but also as unfortunate littering sites.

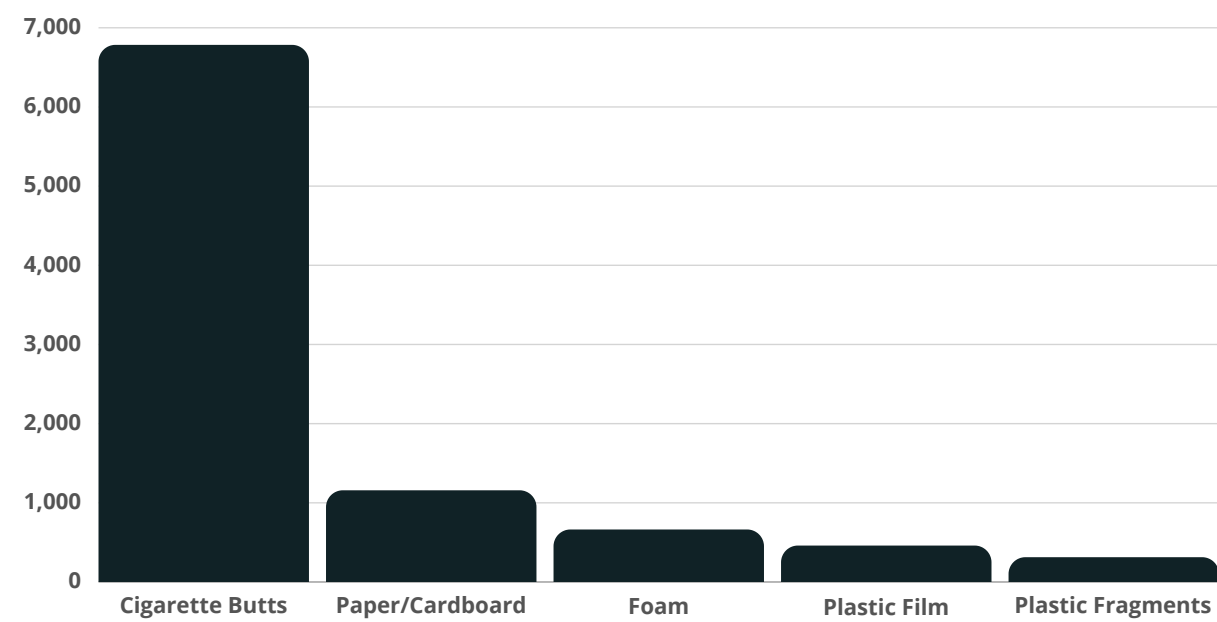


The rocky expanse along the break wall at Sunset Point continued to reveal intriguing remnants of the past – with cups, cans, bottles, and toys dating back decades.

These findings serve as a poignant reminder that once anthropogenic items infiltrate our environment, they become nearly indelible. Over time, these items weather and break down, further exacerbating the ongoing microplastic pollution crisis that poses a severe threat to our ecosystems.

Midland

The Harbour in Midland is a recent addition to GBF's cleanup initiative, officially designated as a weekly cleanup site starting from July 21, 2023. Despite its pristine natural beauty, The Harbour is facing a growing environmental challenge. After diligently conducting seven cleanups at this site, we were confronted with an alarming reality: The Harbour had quickly become the largest contributor to cigarette butt pollution among all our cleanup locations.



In total, our dedicated volunteers collected a staggering 6,784 cigarette butts during these cleanups. Shockingly, most of these discarded butts were found strewn across the grassy areas and even within designated smoking zones, highlighting the need for comprehensive action to address this critical issue.



The Critical Catch

The Critical Catch aims to reduce and remove lost, abandoned, and discarded fishing gear through shoreline cleanups and installing and distributing monofilament recycling receptacles throughout Georgian Bay.

Monofilament Fishing Line

Fishing line made from a single durable plastic fibre, does not biodegrade naturally, leading to its persistent presence in the environment. Its thin and nearly invisible nature causes it to become easily entangled and lost within vegetation, rocks and other structures, posing a major threat to fish, wildlife and ecosystems when improperly discarded or mismanaged.

Monofilament fishing line cannot be recycled through municipal waste programs. Berkley Fishing has a specialized fishing line recycling program. Collected fishing line through The Critical Catch is shipped back to Berkley Fishing for processing and safe recycling.



Recycling Receptacle Locations



Georgian Bay Forever sponsored 15 monofilament recycling receptacles from Clear Your Gear. These receptacles were installed across Georgian Bay and are monitored monthly by dedicated volunteers. Upon emptying the bins each month, we consistently found line dropped off for recycling. Throughout our shoreline cleanups, we collected all fishing line we found to return for recycling.

The specific locations can be viewed on Google Maps using the link below:

[Critical Catch Receptacle Locations](#)

Personal Recycling Containers

An element of this program focuses on promoting responsible recycling and storage of fishing line during fishing excursions, both on boats and along the shore. This summer we distributed hundreds of personal monofilament containers to anglers to encourage proper disposal and storage of their fishing line. By providing anglers with the means to conveniently manage their monofilament fishing line, we are working towards safeguarding aquatic ecosystems and promoting eco-friendly angling habits.



Collected Fishing Line Findings



As part of The Critical Catch program, GBF, in collaboration with dedicated volunteers, undertook the collection of approximately 38,418.87 meters of fishing line. This calculation is based on both the total weight and the average weight per meter, which was established through a systematic sampling method involving 10 samples of 10 meters each.

Total weight of collected fishing line: 2,070.393g

Sampling method: 10 samples of 10 meters each

Total length of fishing line sampled: 100 meters

Total weight of the sampled fishing line: 5.389g

Average weight of 1 meter of fishing line (sampled):

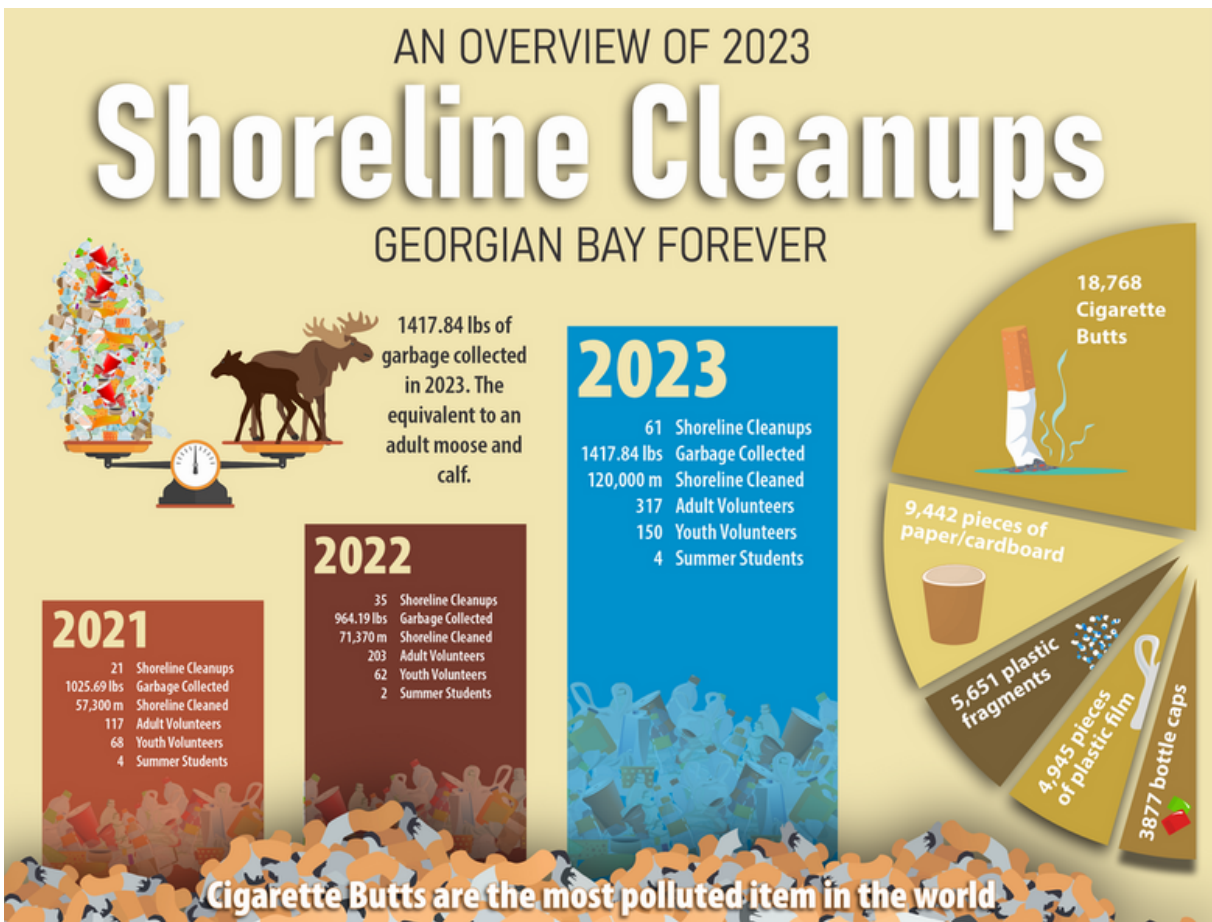
5.389 g / 100 m = 0.05389 g/m

Considerations

It is important to acknowledge that despite the diligent efforts of both staff and volunteers, it was not feasible to remove 100% of the weights, lures, and hooks from the collected fishing line. This limitation may impact the total weight recorded. It is crucial to recognize that the presented findings represent the best estimate of the total meters of fishing line collected, considering both shoreline cleanups and monofilament recycling stations.

Summary

Georgian Bay Forever expresses its sincere gratitude to the dedicated volunteers who have tirelessly worked to protect and preserve this unique ecosystem. The commitment of families, students, and individuals in our cleanup initiatives has been remarkable. In 2023, we saw 455 volunteers join us in safeguarding Georgian Bay, underscoring the difference each individual can make. We are immensely thankful for their invaluable contributions, which have been pivotal in advancing our mission and sustaining our work.



Acknowledgements

This project and many others are made possible by our wonderful partners, who continue to support and fund Georgian Bay Forever's research and outreach:

The Hodgson Family Foundation
Great Lakes Local Action Fund
Town of The Blue Mountains

Thank you to our valuable partners:

The Town of Collingwood, Town of Meaford, Wasaga Beach Provincial Park, Rotary Club of Midland, Rotary Club of Wasaga Beach, Wasaga Beach Climate Action Team, Magnetawan First Nation, Georgian Bay Spirit Co., Lake Huron Coastal Centre, Pretty River Academy, Collingwood Youth Centre, and Clear Your Gear.

A special thank you to our volunteers:

To each and every one of our volunteers, your contributions have been invaluable, and your positive impact on this project will be long-lasting. We are deeply grateful for your selflessness and the countless hours you devoted to making this endeavor a triumph.

Your commitment and hard work are a testament to the power of collective effort and the strength of a united team. We couldn't have done it without you.

Connect with Us

Georgian Bay Forever is committed to addressing plastic pollution through research, education, and innovative solutions. By working with or volunteering for GBF, you'll become an integral part of a dedicated team striving to make a positive impact on the environment.

Get Involved

Plastic-Free Pledge:

Join the GBF community in taking the Plastic-Free Pledge, committing to reducing single-use plastics in your daily life.

Community Cleanups:

Take part in local clean-up events and contribute to the removal of plastic debris from our shores and waterways.

Outreach and Education:

Help raise awareness about the issue by becoming an advocate or organizing educational activities in your community.

Fundraising:

Support our work by participating in fundraising events or organizing your own campaigns to generate resources for our programs.

Summer Employment:

Explore potential job opportunities at GBF to deepen your involvement and contribute professionally to our mission.



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