



2004 International Coastal Cleanup

Summary Report Ohio

2004 State Coordinator: Linda Zmudzinski / Jill Woodyard, Ohio
Lake Erie Commission

The Ocean Conservancy
Office of Pollution Prevention and Monitoring
1432 N Great Neck Rd, Suite 103
Virginia Beach, VA 23454 USA

THE INTERNATIONAL COASTAL CLEANUP

The International Coastal Cleanup engages people to remove trash and debris from the world's beaches and waterways, to identify the sources of debris, and to change the behaviors that cause pollution.

From plastic pieces littering the shores of remote islands to furnishings and car parts clogging rivers and streams to fishing nets and line smothering and entangling coral reefs, marine debris is one of the most insidious problems facing our oceans today. Virtually no shoreline or beach on earth is free from trash. And the scene looks much the same underwater, where the ocean bottom becomes a veritable trash can for discarded goods.

The truth is, every piece of trash has the chance of becoming marine debris. And once it does, it can stay that way for weeks, months, and even years, affecting ocean life and habitats for miles. That's because today's world relies heavily on synthetic materials—such as beverage bottles, cigarette butts, and fishing line—that are durable and highly buoyant. Once this debris enters oceans and waterways, it degrades slowly and can travel thousands of miles away from its point of origin. These properties make marine debris one of the most difficult ocean problems to address.

Not that people aren't trying: for the 19th year, volunteers across the globe joined together on September 18, 2004 to remove debris from the world's oceans, streams, and waterways as part of the International Coastal Cleanup (ICC).

Today, the ICC is held around every major body of water in the world. But the Cleanup isn't just about pollution cleanup; it's also about pollution prevention. The ICC educates and empowers people to take action and become part of the solution. In addition to collecting and removing debris, volunteers record the types of debris they pick up. The Ocean Conservancy compiles and analyzes this information each year to

LAWS AND TREATIES

International Convention for the Prevention of Pollution from Ships (MARPOL 73/78): This law provides a comprehensive approach when dealing with ocean dumping by creating international guidelines to prevent ship pollution. MARPOL (enforced by the International Maritime Organization www.imo.org) has six annexes covering oil discharge, hazardous liquid control, hazardous material transport, sewage discharge, plastic and garbage disposal, and air pollution. As of March 2005, 119 countries have ratified Annex V, which controls the disposal of plastics and garbage into the oceans.

Marine Plastic Pollution Research and Control Act (MPPRCA): To implement Annex V of MARPOL, each individual country must develop its own national implementation legislation. The U.S. Congress created the MPPRCA to implement Annex V in the United States. Under MPPRCA, it is illegal to throw plastic trash off any vessel within the U.S. Exclusive Economic Zone (within 200 nautical miles of the U.S. shore). It is also illegal to throw any other garbage overboard while navigating U.S. waters (including inland waters) or within three miles of shore.

Clean Water Act: This act established pollution discharge regulations for U.S. waters, set water quality standards, and gave the country's Environmental Protection Agency (EPA) authority over pollution control programs. (www.epa.gov/region5/water/cwa.htm)

Beaches Environmental Assessment and Coastal Health Act of 2000 (B.E.A.C.H. Act): This act amended the Clean Water Act, requiring adoption of minimum health-based water quality criteria, comprehensive water testing, and notification of the public when water contamination levels are unsafe. (www.epa.gov/waterscience/beaches/act.html)

Coastal Zone Management Act (CZMA): This act works to preserve, protect, develop, restore, and enhance the United States' coastal zone resources. (www.ocrms.nos.noaa.gov)

identify the activities and general sources causing the debris. The final information is then used to educate the public, business, industry, and government officials about the marine debris problem.

THE 2004 ICC: A GLOBAL PHENOMENON

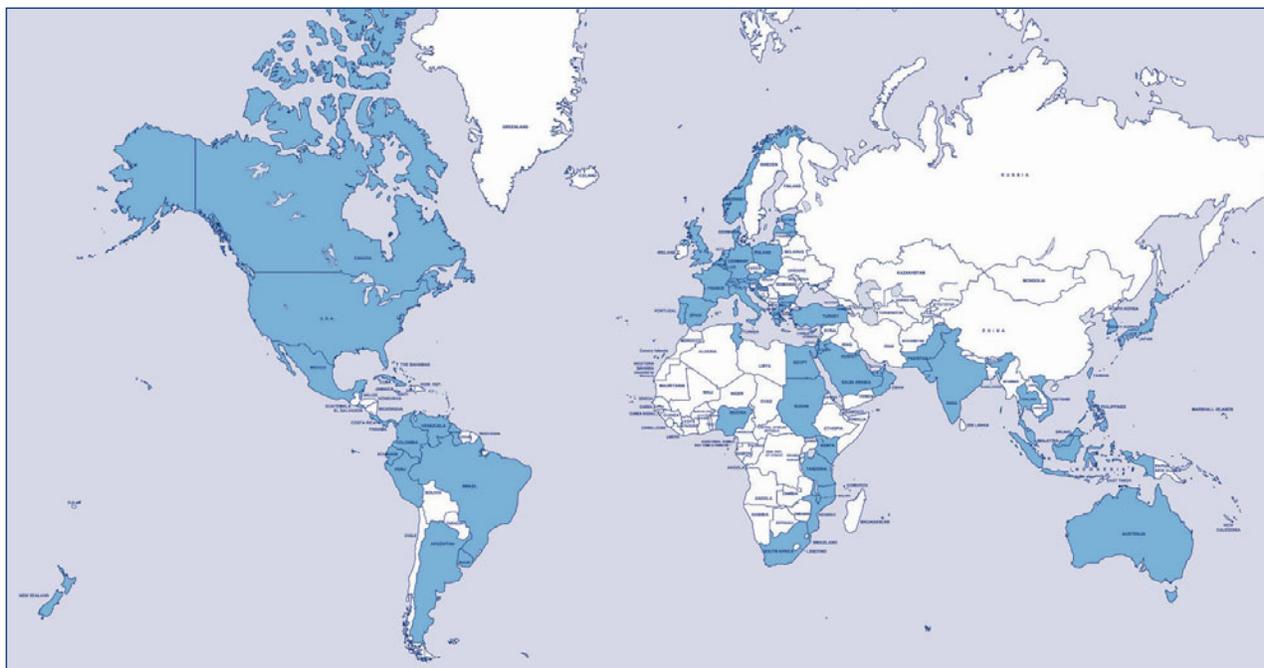
In 2004, volunteers from the United States were joined by people from 87 additional countries in cleaning up debris from our beaches, rivers, and lakes. Worldwide, more than 305,000 people removed over 7.7 million pounds of debris from more than 11,000 miles of shoreline. More than 6,600 divers participated in underwater cleanups, gathering over 155,000 pounds of debris from 382 miles of riverbed and seafloor.

The 2004 Cleanup—held on September 18, 2004—saw growth in several areas. Five new countries—Brunei, Malawi, Samoa, Sudan, and Tunisia—joined in the cleanup efforts. Volunteer participation also increased in several countries. In India, 20,160 people volunteered



for the ICC—an increase of 9,044 volunteers from last year. Nigeria more than quadrupled its volunteer participation, going from 1,632 volunteers in 2003 to 7,319 in 2004. In the United States, Georgia's cleanup efforts expanded to include "Rivers Alive" activities, increasing statewide participation to 22,198 volunteers.

2004 International Coastal Cleanup - Worldwide Participation



2004 ICC: Ohio

During the 2004 ICC in Ohio, 516 volunteers came out to clean-up shorelines and waterways. Volunteers covered 40 miles, picking up 29,500 debris items that weighed 15,891 pounds. Among ICC participants in Ohio were 7 divers, who removed 115 pounds of debris from below the water's surface. In total 4,135 debris items were retrieved from 0.8 miles of underwater area.

In Ohio, food wrappers, cigar tips, and cigarettes accounted for over one quarter of all the debris items collected.

Overall, 69 percent of the debris found in Ohio originated from land-based recreational activities such as picnics, festivals, sports, and days at the beach. Litter washed from streets, parking lots, and storm drains also contributed to this category of debris. Worldwide, shoreline and recreational activities accounted for 61 percent of the debris collected.

Smoking-related activities, in the form of cigarette filters, cigar tips, and tobacco

packaging, accounted for 22 percent of the debris found in Ohio. Globally, debris from smoking-related activities made up 21 percent of the debris collected.

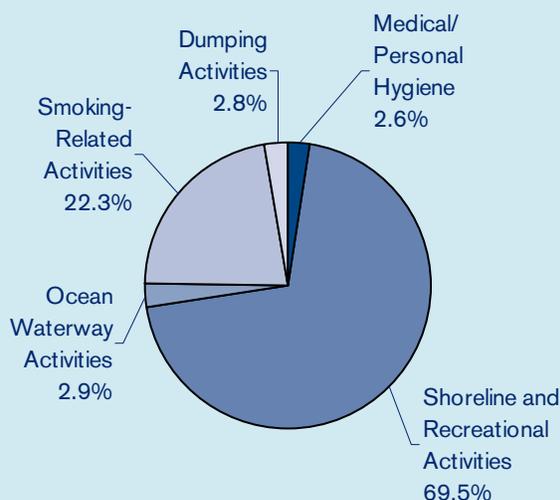
Debris items from ocean and waterway activities-activities that originate offshore-accounted for three percent of the debris found in Ohio. Worldwide ocean and waterway activities represented only 11 percent of the debris collected during the Cleanup.

Each year, the ICC tabulates a "Top Ten" list of the 10 most prevalent items found during the Cleanup. In addition to being some of the most abundant items, the Top Ten also account for 83 percent of all the debris found in Ohio. The top three items alone – food wrappers, cigar tips, and cigarettes – account for over one quarter of all debris in Ohio. Food wrappers, the number one item in Ohio, comprised three percent of the 30 thousand debris items.

Since 1990, most of the items found during the ICC have been waste from consumable

Ohio: Marine Debris

SOURCES OF DEBRIS



"TOP TEN" DEBRIS ITEMS

Debris Items	Amount	Percent of Total
1. Food Wrappers and Containers	5,199	17.6%
2. Cigar Tips	3,057	10.4%
3. Beverage Cans	2,847	9.7%
4. Cigarettes/Cigarette Filters	2,697	9.1%
5. Beverage Bottles (Plastic) 2 liters or less	2,125	7.2%
6. Bags	2,023	6.9%
7. Cups/Plates/Forks/ Knives/Spoons	1,885	6.4%
8. Beverage Bottles (Glass)	1,657	5.6%
9. Caps/Lids	1,603	5.4%
10. Straws/Stirrers	1,341	4.6%
Totals:	24,434	82.9%

goods—from cigarettes to prepackaged food and beverage products—that are discarded after the product is used or consumed. Pinpointing these types of debris and the activities that cause them aids in the tracing of sources of debris and in the creation of educational programs to help people develop a new mind set toward littering and purchasing.

DANGERS OF MARINE DEBRIS

Each year, volunteers find animals caught in a variety of debris. The results can be deadly: debris entanglement can cause lethal cuts, hampered mobility, suffocation, drowning and debris ingestion—when animals mistake debris for food—can lead to strangulation and starvation.

In 2004, volunteers found 186 animals entangled in debris worldwide. Discarded fishing line was responsible for nearly half of all entanglements, with rope and fishing nets closely following. Even though these items represent less than 10 percent of the total number of recorded items, debris such as fishing line, plastic bags, rope, and balloons can be more hazardous to wildlife.

While marine mammal entanglements may be the most well known, they comprise only 10 percent of the total entanglements found during the 2004 ICC. Fish and invertebrates accounted for more than half of all recorded entanglements. Seabirds are also victims of debris: volunteers found 46 entangled birds, nearly a quarter of the total entangled wildlife. These findings illustrate that marine debris affects all aspects of the ocean ecosystem, even those species that spend less time in and on the water.

WHAT'S BEING DONE?

Marine debris is such a pressing issue that the U.S. Commission on Ocean Policy dedicated an entire chapter on the subject in its 2004 report, which was designed to create a

Ohio: Dangerous Debris Items

Bags	2,023
Balloons	185
Crab/Lobster/Fish Traps	2
Fishing Line	76
Fishing Nets	6
Plastic Sheeting/Tarps	208
Rope	95
Six-Pack Holders	75
Strapping Bands	81
Syringes	16
Total	2,767

blueprint for a new comprehensive national ocean policy. In it, the Commission recommended several actions the United States should take to address the problem of marine debris. The report tasked the National Oceanic and Atmospheric Administration (NOAA) to work in concert with the Environmental Protection Agency to establish a marine debris management program that would focus on education and outreach, working with communities and industry, and improving debris source identification, monitoring, and research. The report also encouraged the agencies to



coordinate and implement expanded marine debris control efforts. In addition, the Commission urged the United States work on reducing derelict fishing gear and ensuring adequate facilities for garbage disposal from ships. In its findings, the Commission cited data from the ICC on several occasions.

Interest in curbing marine debris has also sparked recent Congressional action. Senators Daniel Inouye (HI) and Ted Stevens (AK) introduced the Marine Debris Research and Reduction Act to Congress in early 2005. Among other actions, the bill creates a new marine debris program within NOAA, enhances Coast Guard efforts against marine debris, and enacts a federal marine debris information clearinghouse. While it has yet to become law, the bill has garnered support in the U.S. Department of Commerce and NOAA.

Data from the last decade indicates that the majority of people do not consider their contributions to marine debris to be significant enough to warrant a change in personal behavior. This is the real problem that the ICC seeks to solve: to increase people's awareness of their contribution to the problem and inspire change. Consequently, continued education on the harmful effects debris has on our oceans, waterways, and our own lives is vital to help alter the behaviors that cause this problem. The 2004 ICC report is one of several tools The Ocean Conservancy uses in its ongoing efforts to educate society and create solutions to this long-standing problem.

WHAT YOU CAN DO

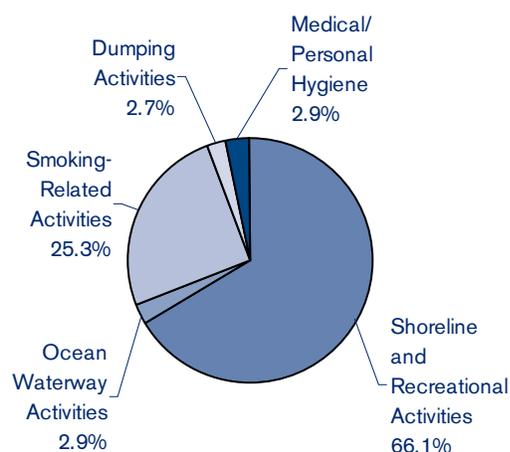
Marine debris is one of the most frustrating environmental threats because it is easily one of the most preventable: the solution is in our hands. Consequently, individual action to curb marine debris is just as important as legislative or political edicts, if not more so. Here are some steps you can take to do your part to reduce the amount of marine debris that enters our oceans and waterways:

- Dispose of trash properly. This helps to reduce the amount of trash that washes into waterways from storm drains.
- Reduce, reuse, and recycle.
- Look for alternative materials or avoid excessive packaging when deciding on purchases.
- Cut the rings of six-pack holders. This lowers the risk of entanglement to marine animals if the holders do make it out to sea.
- Participate in local beach, river, or stream cleanups.
- Educate others about marine debris
- Get involved locally

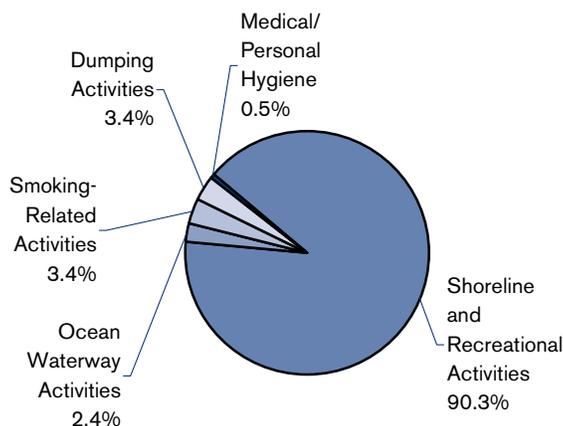
Debris items collected during the 2004 ICC in Ohio

DEBRIS ITEMS	LAND	UNDERWATER	TOTAL
Shoreline and Recreational Activities			
Bags	1,393	630	2,023
Balloons	178	7	185
Beverage Bottles (Glass)	1,389	268	1,657
Beverage Bottles (Plastic) 2 liters or less	1,867	258	2,125
Beverage Cans	2,485	362	2,847
Caps/Lids	1,491	112	1,603
Clothing/Shoes	426	52	478
Cups/Plates/Forks/ Knives/Spoons	1,530	355	1,885
Food Wrappers and Containers	3,685	1,514	5,199
Pull Tabs	223	11	234
Shotgun Shells/Wadding	461	1	462
Six-Pack Holders	63	12	75
Straws/Stirrers	1,231	110	1,341
Toys	345	40	385
Ocean and Waterway Activities			
Bait Containers/Packaging	106	28	134
Bleach/Cleaner Bottles	58	1	59
Buoys/Floats	15	1	16
Crab/Lobster/Fish Traps	2	0	2
Crates	11	0	11
Fishing Line	67	9	76
Fishing Lures/Light Sticks	47	0	47
Fishing Nets	6	0	6
Light Bulbs/Tubes	10	1	11
Oil/Lube Bottles	79	13	92
Pallets	3	0	3
Plastic Sheeting/Tarps	170	38	208
Rope	86	9	95
Strapping Bands	81	0	81
Smoking-Related Activities			
Cigar Tips	3,053	4	3,057
Cigarette Lighters	303	7	310
Cigarettes/Cigarette Filters	2,588	109	2,697
Tobacco Packaging/Wrappers	486	22	508
Dumping Activities			
55-Gallon Drums	10	4	14
Appliances (refrigerators, washers, etc.)	19	4	23
Batteries	26	3	29
Building Materials	400	72	472
Cars/Car Parts	163	51	214
Tires	65	8	73
Medical and Personal Hygiene			
Condoms	107	7	114
Diapers	33	1	34
Syringes	13	3	16
Tampons/Tampon Applicators	591	8	599
Totals	25,365	4,135	29,500

Ohio 2004 ICC - Sources of Marine Debris - Land and Underwater Cleanups



Land Cleanups



Underwater Cleanups

Ohio 2004 ICC "Top Ten" Debris Items – Land and Underwater Cleanups

Land Cleanups Only

Debris Items	Amount	Percent of Total
1. Food Wrappers and Containers	3,685	14.5%
2. Cigar Tips	3,053	12.0%
3. Cigarettes/Cigarette Filters	2,588	10.2%
4. Beverage Cans	2,485	9.8%
5. Beverage Bottles (Plastic) 2 liters or less	1,867	7.4%
6. Cups/Plates/Forks/ Knives/Spoons	1,530	6.0%
7. Caps/Lids	1,491	5.9%
8. Bags	1,393	5.5%
9. Beverage Bottles (Glass)	1,389	5.5%
10. Straws/Stirrers	1,231	4.9%
Totals:	20,712	81.7%

Underwater Cleanups Only

Debris Items	Amount	Percent of Total
1. Food Wrappers and Containers	1,514	36.6%
2. Bags	630	15.2%
3. Beverage Cans	362	8.8%
4. Cups/Plates/Forks/ Knives/Spoons	355	8.6%
5. Beverage Bottles (Glass)	268	6.5%
6. Beverage Bottles (Plastic) 2 liters or less	258	6.2%
7. Caps/Lids	112	2.7%
8. Straws/Stirrers	110	2.7%
9. Cigarettes/Cigarette Filters	109	2.6%
10. Building Materials	72	1.7%
Totals:	3,790	91.6%

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