Pocket Guide to Marine Debris

The Ocean Conservancy

20TH ANNIVERSARY

International Coastal Cleanup

The Ocean Conservancy

The Ocean Conservancy promotes healthy and diverse ocean ecosystems and opposes practices that threaten ocean life and human life. Through research, education, and science-based advocacy, The Ocean Conservancy informs, inspires, and empowers people to speak and act on behalf of the oceans. In all its work, The Ocean Conservancy strives to be the world's foremost advocate for the oceans.

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.

This document was first published in 1993. Funding for the original preparation of this document was provided by the U.S. Environmental Protection Agency (EPA).

Printed on chlorine-free recycled paper.

Table of Contents

INTRODUCTION

Marine and other aquatic debris is more than an unsightly inconvenience for beach-bound vacationers or pleasure boaters; it is one of the world's most pervasive pollution problems affecting our waterways. By the simple process of moving from ship to sea, sewer to surf, or hand to sand, any manufactured material becomes marine debris. Cigarette and cigar filters, fishing line, disposable diapers, tampon applicators, six-pack holders, bottles and cans, syringes, tires — the litany of litter is as varied as the products available in the global marketplace, but it all shares a common origin. At a critical point, someone, somewhere, mishandled it — either deliberately or thoughtlessly. **Every piece of litter has a person's face behind it.**

Aesthetically, marine debris looks terrible and can have a major effect on the tourist industry in waterfront communities. More importantly, thousands of marine animals die each year from becoming entangled in debris or from consuming it, thinking that it is food. Marine debris can also pose human health and safety concerns. Serious injury can occur by stepping on a sharp piece of glass or metal, or worse yet, a discarded syringe. When marine debris gets caught in propellers, motors, and other machinery of commercial and recreational boats and ships, consumers pay more for products and services at the marketplace. Many debris items such as syringes, condoms, and tampon applicators are visual indicators of more serious water quality issues.

Congress has enacted laws to limit the dumping of garbage from boats and to help control land-based sources of marine debris, such as stormwater systems and combined sewer systems. Citizens have also made great efforts in fighting this problem through beach cleanups across the country and all over the world. The Ocean Conservancy acts as the coordinator for the annual International Coastal Cleanup (ICC). Volunteers clean beaches and collect information on what they find so that sources of marine debris can be targeted for education or pollution prevention campaigns.

Proper data collection is extremely important. Each year The Ocean Conservancy analyzes data cards used by over 900,000 volunteers and the results of the analysis become a powerful tool in finding the sources of marine debris, helping to identify solutions, and developing effective pollution control strategies to help prevent the problem.

HOW A GOOD IDEA GREW

Since its first beach cleanup in 1986 in Texas, The Ocean Conservancy and its international and state partners have turned the International Coastal Cleanup (ICC) into a global effort devoted to the marine environment. The first campaign brought out 2,800 volunteers who filled 7,900 trash bags with 124 tons of debris from 122 miles of Texas shoreline.

Cumulatively, since the International Coastal Cleanup began, it has included all 55 U.S. states and territories and 118 countries bordering every major body of water on Earth. In developing and developed nations; in frigid, temperate, and tropical climes; and in time zones that span the globe, *4.7 million people have collected more than 70 million pounds of debris from over 114,000 miles of shoreline!*

Most cleanups take place on the third Saturday of September, or as close to that date as possible, and all are characterized by the same, amazing phenomenon: people of all ages, income levels, and from all walks of life coming together for three hours with a single purpose — to rid their beaches and waterways of unsightly and dangerous debris.

This book is designed to serve as a reference to standardize terminology for marine debris items and to help volunteers identify unknown debris items.

How to Use This Book

This pocket guide provides the basic background information you need to participate in a beach cleanup. Be sure to read the **Quick Tips** to know what you should bring, and to prepare yourself for any situation that may occur while you are on the beach, whether it be handling sharp objects or reporting a stranded animal.

As you are conducting your beach cleanup, you will discover that just about anything can be found on a beach! There are several hazardous items, natural items, and other debris that may not be listed on the International Coastal Cleanup Data Card. **Volunteers should clean up *all* debris they find on the beach, but record only the items listed on the Data Card.**

Familiarize yourself with the **Items Listed on the Data Card.** This will make data collection easier when you are on the beach. People often work in teams with several volunteers collecting debris items while one person records the data.

Data collection is extremely important. If volunteers since 1986 had never categorized and counted the debris items that they found, beach cleanups would have just faded away. Volunteer data collection efforts have continued to change the way people think about the ocean and its ability to handle society's wastes!

QUICK TIPS

SHORELINE CLEANUP

Safety First!

- Stay away from large drums or five-gallon buckets. Report their location to the cleanup coordinator or proper authorities.
- Wear gloves to collect the debris.
- Be careful of glass, syringes, or other sharp objects.
- Don't lift anything heavy.
- Stay out of dune areas.
- Avoid stepping on dune plants and beach grasses.
- Watch for and avoid wildlife.
- Notify your beach captain immediately if you see any stranded, injured, or entangled animals.

Things to Bring

- Plenty of water
- Sunscreen and a hat to protect yourself from the sun
- Insect repellent
- Shoes or sneakers to protect your feet
- A camera to document volunteers in action and any strange items you may find
- Work gloves or rubber gloves

Data Collection

- ***Review Data Card before starting!*** Read and follow all instructions.
- Clean up ***all*** debris found on your beach or shoreline; record information ***only*** on the items listed on the Data Card.

- Collect data as a team, with one person recording information on the Data Card, while the others collect and bag the trash.
- Count items in groups of five and record the total in the box. Example: **𝍸 𝍸 II = 12**
- Do not write words like "lots" or "many." Use numbers only!
- ***Be as accurate as possible.*** The more accurate your information the better we can work to reduce and eliminate trash and debris pollution.
- Don't collect natural items like driftwood or seaweed.

UNDERWATER CLEANUP

Safety First!

- Follow all tips above for conducting a shoreline cleanup.
- Only experienced dive instructors or dive masters should serve as site coordinators.
- Check to ensure that all participating divers are certified in SCUBA.
- Make sure divers are using complete, well-maintained, reliable equipment.
- Use the "buddy system" and follow all safe diving procedures.
- Wear gloves to protect hands.
- Do not try to salvage heavy or dangerous items.
- Avoid 55-gallon drums — report their location to a marine enforcement agency.
- Be sure to maintain proper buoyancy throughout the dive. Remember to factor in the weight of the debris you are collecting.
- Know and obey local diving laws and regulations.

Preparation

- Know your waters!
- Conduct a dive site survey or orientation dive prior to the cleanup.
- Check for potential hazards.
- Check local tides and currents.
- Avoid contaminated waters and areas of heavy boat traffic.
- Choose cleanup sites that are fairly shallow and within the abilities of ***all*** participating divers.
- Notify your local medical rescue squad prior to the day of the event to inform them of the activity, the exact location of the dive site, and expected number of participants.
- Establish an onshore or onboard dive monitoring team.
- Team consists of non-divers who will remain onshore or aboard the boat during the entire underwater cleanup to monitor the dive and be prepared for any situation or emergency.
- Team should have access to a cellular phone and local emergency rescue phone numbers.
- Conduct a safety briefing with all participating divers before entering the water.
- Ensure that you cover all safety issues or concerns.
- Have divers sign a liability waiver.
- Know the exact number of divers participating in your underwater cleanup.
- Have a complete list of divers and their home contact information prior to the dive.
- Have each diver check in with the onshore or onboard monitoring team or a dive coordinator when he or she has completed the dive.

Data Collection

- Designate an onshore or onboard data collection team of non-divers.
- Team sorts and tabulates debris collected and brought in by divers.
- Team records all information on ICC Data Cards.
- Return Data Cards to The Ocean Conservancy or your state/territory or country coordinator as soon as possible for inclusion in the international marine debris database.

Protect Underwater Life!

- Work slowly and carefully to prevent damage to underwater life.
- Avoid touching or standing on living organisms such as corals.
- ***Cut*** debris such as nets and fishing line from organisms such as corals. ***Never pull it off!***
- ***Do not remove debris covered by living organisms. The debris has become their home.***

Estimating Weights and Distances

Since 1986, International Coastal Cleanup volunteers have reported removing more than 78.7 million pounds of debris from 114,017 miles of shoreline in 118 countries. Properly estimating and reporting the "Distance Cleaned" and "Total Estimated Weight Collected" is extremely important in the calculation and reporting of these numbers.

Following are some simple guidelines and tips to help you record "Distance Cleaned" and "Total Estimated Weight Collected."

Estimating Distance Cleaned

Record the "Distance Cleaned" in **miles** or **kilometers.**

- Estimate the longest linear length (i.e., from point **A** to point **B** along the beach transect line) cleaned by the volunteers. Do not use area measurements, such as square feet, square miles, square kilometers, or acres.
- Use the following method to convert area measurements to linear distances:

  Number of square feet cleaned divided by 10 ft.* divided by 5280 ft. (1 mile) = linear miles cleaned

  **10 feet represents an average linear path cleaned by a volunteer (5 feet on each side of the person)*

Example 1: Volunteer reports cleaning 1-acre area.
1 acre = 43,560 ft^2
43,560 ÷ 10 ÷ 5280 = 0.825 miles cleaned

Example 2: Volunteer reports cleaning 5000 ft^2 .
5000 ÷ 10 ÷ 5280 = 0.094 miles

Estimating Weight Collected

Record the "Total Estimated Weight Collected" in **pounds** or **kilograms.** To help you estimate, assume that: **1 "full" trash bag = 15 lbs.** *NOTE: A bag weighing more than 15 lbs. is too heavy for most volunteers to carry.*

The World of Marine Debris

SOURCES OF MARINE DEBRIS

Marine debris originates primarily from two distinct sources, the sea (and inland waterways) and the land. Ocean/inland waterways-based sources include boats and ships, from the smallest sailboat to the largest container ship, along with offshore rigs and drilling platforms. The land-based sources include combined sewer overflows and storm drains, landfills, manufacturing and sewage treatment plants, and beachgoers.

For centuries it was common practice for ships to dump their garbage at sea. The United Nations administers a treaty that provides a comprehensive approach to dealing with ocean dumping. The International Convention for the Prevention of Pollution from Ships treaty is known as **MARPOL 73/78** (an international **MAR**ine **POL**lution treaty) and contains Annexes that deal with specific discharges: I — oil, II — hazardous liquids, III — packaged hazardous materials, IV — sewage, and V — garbage (including plastics). In order to implement **MARPOL** Annex V, the U.S. Congress passed the Marine Plastic Pollution Research and Control Act of 1987, which applies to both U.S. vessels and foreign vessels in U.S. waters.

Recently, it has become more and more evident that marine debris is also coming from land-based sources. Among these sources are combined sewer overflows. Usually found in older cities, these sewer systems are combined with stormwater drainage systems. When it rains, and too much water goes into the system, overflows of raw sewage and untreated pollutants from the streets are discharged *directly* into waterways. Discharges from land-based sources are subject to regulation under a federal law called the Clean Water Act.

Another group of land-based sources include recreational beachgoers who leave behind their picnic garbage and cigarette filters on the beach to be washed out with the tides into our oceans and bays and back onto our beaches.

Land-based sources also include urban runoff from storm drains. It is a common misconception that the runoff and debris washed down storm drains is removed at a treatment plant. This debris may actually be discharged directly into local streams, rivers, and bays with no treatment whatsoever. The U.S. Environmental Protection Agency (EPA) requires cities with separate storm sewer systems to obtain a National Pollutant Discharge Elimination System (NPDES) permit. Cities must apply for this permit to ensure the EPA that their stormwater systems are operating as efficiently and cleanly as possible and that they are educating their citizens about the hazards of dumping debris and other substances down storm drains.

THE TOP TEN

The following items have the infamous honor of being the ten most abundant marine debris items found on our nation's beaches and waterways during the International Coastal Cleanup from 1996-2000. These items account for 86% of all the debris collected. This five-year composite list of debris gives insight into the behavior of people in and around waterways, as well as on land, because so much of what is dumped, dropped, or otherwise "deposited" on land ends up in the water.

Top Ten Items Collected Worldwide from 1996-2000

Debris Item		Total	Percent of Total
1.	cigarettes/cigarette filters	6,373,283	22.23%
2.	bags	3,715,043	12.96%
3.	caps, lids	2,685,110	9.36%
4.	food containers/wrappers	2,640,843	9.21%
5.	cups, plates, forks, knives, spoons	2,346,234	8.18%
6.	beverage bottles (plastic) 2 liters or less	1,254,434	4.38%
7.	beverage bottles (glass)	1,244,844	4.34%
8.	straws, stirrers	1,166,936	4.07%
9.	beverage cans	1,129,912	3.94%
10.	rope	692,615	2.42%
	Total	**23,249,253**	**81.09%**

How Long 'Til It's Gone?

Time it takes for debris to decompose in the environment	
Glass bottle	1 million years
Monofilament fishing line	600 years
Plastic beverage bottles	450 years
Disposable diapers	450 years
Aluminum can	80-200 years
Foamed plastic buoy	80 years
Rubber boot sole	50-80 years
Foamed plastic cup	50 years
Tin can	50 years
Leather	50 years
Nylon fabric	30-40 years
Plastic film canister	20-30 years
Plastic bag	10-20 years
Cigarette filter	1-5 years
Wool sock	1-5 years
Plywood	1-3 years
Waxed milk carton	3 months
Apple core	2 months
Newspaper	6 weeks
Orange or banana peel	2-5 weeks
Paper towel	2-4 weeks

Sources: U.S. National Park Service; Mote Marine Lab, Sarasota, FL and "Garbage In, Garbage Out," Audubon magazine, Sept/Oct 1998.

Activities That Produce Debris

Determining where all of the debris originates is no easy task since trash and litter can travel long distances before being deposited on our shorelines. Data compiled from beach cleanups are used to identify the activities that produce the debris found in our waterways. Many of these activities take place on land, and the debris is blown to the water, or carried by creeks, rivers, and storm drains to the shore. Other debris comes from activities on the water, including vessels (from the smallest sailboat to the largest container ship), offshore drilling rigs and platforms, and fishing piers.

Shoreline and Recreational Activities

Where does the debris come from?

- Beachgoers
- Picnickers
- Sports and festival events
- Litter carried from inland streets and storm drains

What does it include?

- Bags
- Balloons
- Beverage bottles
- Beverage cans
- Caps, lids
- Clothing, shoes
- Cups, plates, utensils
- Food wrappers/containers
- 6-pack holders
- Pull tabs
- Shotgun shells/wadding
- Straws/ stirrers
- Toys

Ocean/Waterway Activities

Where does the debris come from?

- Recreational fishing/boating
- Commercial fishing
- Oil and gas offshore rigs
- Commercial shipping
- Military ships
- Cruise ships

Ocean/Waterway Activities (Continued)

What does it include?

- Bait containers/packaging
- Bleach/cleaner bottles
- Buoys/floats
- Crab/lobster/fish traps
- Crates
- Fishing line
- Fishing lures/light sticks
- Fishing nets
- Light bulbs/tubes
- Oil/lube bottles
- Pallets
- Rope
- Sheeting/tarps
- Strapping bands

Smoking Related Activities

Where does the debris come from?

- The improper disposal and littering of smoking related materials and packaging

What does it include?

- Cigarettes/cigarette filters
- Cigar tips
- Lighters
- Tobacco packaging/wrappers

Dumping Activities

Where does the debris come from? The improper disposal (legal or illegal) of:

- Building and construction materials
- Cars and car parts
- Household appliances

What does it include?

- Appliances (refrigerators, washers, etc.)
- Batteries
- Building materials
- Cars/car parts
- 55-gallon drums
- Tires

Medical and Personal Hygiene Debris

Where does the debris come from?

- Sewers
- Storm drains
- Toilets
- Left by beachgoers

What does it include?

- Condoms
- Diapers
- Syringes/needles
- Tampons/tampon applicators

Be a Data Detective!

While cleaning up your beach, you may find a debris item that has an address, phone number, name, or other marking that will tell where it came from. By tracing an item back to its origin, or source, we might be able to find the root of the problem causing the marine debris. For example, you may find balloons that were released as part of a promotional campaign or special celebration. Occasionally the balloons will have the name of the organization or event at which they were released. You can then contact the group or individual responsible to inform them of the negative impact balloons have on the environment.

SAMPLE DATA CARD

Side A

INTERNATIONAL COASTAL CLEANUP™ DATA CARD

Data collected during The Ocean Conservancy's International Coastal Cleanup™ is used to educate people and create solutions to the problems of solid waste and litter. Through partnerships with business, government, environmental groups, and citizens, we are helping to change the behaviors and practices that create debris. Thank you for being part of this very important process.

International Coastal Cleanup

CLEANUP LOCATION

Type of Cleanup: ❑ Shoreline/Beach ❑ Underwater Location of Cleanup: State_____ County_____

Zone or County Cleaned_____ Beach Site Name:_____

Today's Date: Month_____ Day_____ Year_____ Name of Coordinator_____

Number of People Working on This Card:_____ Distance Cleaned:_____ miles or_____ km

Number of Trash Bags Filled:_____ Total Estimated Weight Collected:_____ lbs. or_____ kgs.

NAMES OF PARTICIPANTS IN YOUR GROUP

If you are interested in becoming a member of The Ocean Conservancy and/or joining our Ocean Action Network (OAN) to make your voice heard on important ocean conservation issues, please check the box(es) below your name and address. ***Thank you for helping to protect our oceans!***

1. Name:_____ Age:_____
Address:_____
City:_____ State:_____
Zip Code:_____ Country:_____
Phone: (_____)_____
Email:_____
I would like information on: ❑ The Ocean Conservancy ❑ The OAN

2. Name:_____ Age:_____
Address:_____
City:_____ State:_____
Zip Code:_____ Country:_____
Phone: (_____)_____
Email:_____
I would like information on: ❑ The Ocean Conservancy ❑ The OAN

3. Name:_____ Age:_____
Address:_____
City:_____ State:_____
Zip Code:_____ Country:_____
Phone: (_____)_____
Email:_____
I would like information on: ❑ The Ocean Conservancy ❑ The OAN

4. Name:_____ Age:_____
Address:_____
City:_____ State:_____
Zip Code:_____ Country:_____
Phone: (_____)_____
Email:_____
I would like information on: ❑ The Ocean Conservancy ❑ The OAN

ENTANGLED ANIMALS: ❑ Dead or ❑ Alive). List all entangled animals found during the Cleanup. Tell us what they were entangled in (fishing line, rope, net, etc.): _____

WHAT WAS THE MOST PECULIAR ITEM YOU COLLECTED?_____

The following national and international organizations endorse and/or support the International Coastal Cleanup:

- U.S. Environmental Protection Agency
- IUCN – The World Conservation Union
- Intergovernmental Oceanographic Commission (IOC) of the United Nations' Educational, Scientific, and Cultural Organization (UNESCO)

Please return this card to your area coordinator or mail it to:

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

Phone (757) 496-0500 Fax (757) 496-5237
www.oceanconservancy.org

Side B

ITEMS COLLECTED

The Ocean Conservancy

Human-made debris, trash and litter...
- Harms the environment & wildlife
- Causes communities to lose money
- Threatens human health & safety
- Looks bad!

Think about where all this debris comes from and how **we** can prevent it!

Please pick up all debris found on the beach. Record information on only the items listed below.

Keep a count of your items using tick marks and enter the item total in the box. **Example: 8 Beverage Cans** 𝍸 III

SHORELINE AND RECREATIONAL ACTIVITIES

(Debris from beach-goers, sports/games, festivals, litter from streets/storm drains, etc.)

- ☐ Bags
- ☐ Balloons
- ☐ Beverage Bottles (plastic) 2 liters or less
- ☐ Beverage Bottles (glass)
- ☐ Beverage Cans
- ☐ Caps, Lids
- ☐ Clothing, Shoes
- ☐ Cups, Plates, Forks, Knives, Spoons
- ☐ Food Wrappers/Containers
- ☐ Pull Tabs
- ☐ 6-Pack Holders
- ☐ Shotgun Shells/Wadding
- ☐ Straws, Stirrers
- ☐ Toys

OCEAN/WATERWAY ACTIVITIES

(Debris from recreational/commercial fishing and boat/vessel operations)

- ☐ Bait Containers/Packaging
- ☐ Bleach/Cleaner Bottles
- ☐ Buoys/Floats
- ☐ Crab/Lobster/Fish Traps
- ☐ Crates
- ☐ Fishing Line
- ☐ Fishing Lures/Light Sticks
- ☐ Fishing Nets
- ☐ Light Bulbs/Tubes
- ☐ Oil/Lube Bottles
- ☐ Pallets
- ☐ Plastic Sheeting/Tarps
- ☐ Rope
- ☐ Strapping Bands

SMOKING-RELATED ACTIVITIES

- ☐ Cigarettes/Cigarette Filters
- ☐ Cigarette Lighters
- ☐ Cigar Tips
- ☐ Tobacco Packaging/Wrappers

DUMPING ACTIVITIES

- ☐ Appliances (refrigerators, washers, etc.)
- ☐ Batteries
- ☐ Building Materials
- ☐ Cars/Car Parts
- ☐ 55-Gal. Drums
- ☐ Tires

MEDICAL/PERSONAL HYGIENE

- ☐ Condoms
- ☐ Diapers
- ☐ Syringes
- ☐ Tampons/Tampon Applicators

DEBRIS ITEMS OF LOCAL CONCERN

(Identify and count 3 other items found that concern you)

- ☐
- ☐
- ☐

Items Listed on Data Card


Grocery Bags

The following is a description of the debris items listed on The Ocean Conservancy's International Coastal Cleanup Data Card.

SHORELINE AND RECREATIONAL ACTIVITIES


Balloons

Bags
Small bags such as grocery, trash, food bags, etc., of any size, color, or material.

Balloons
Balloons are commonly made of either rubber or Mylar. Mylar balloons appear shiny or metallic and usually have a ribbon or string attached. Any identifying names or markings should be recorded—sometimes this can give clues about where the balloon came from.


Bottles

Bottles
Beverage (plastic), 2 liter or less: Any plastic water, soda, or juice containers as well as any other plastic drink containers such as beer or other beverages. ***Gallon jugs are not included in this category.***

Beverage (glass): any size, color, or shape glass beverage bottle used for juice, soda, beer, wine, or liquor.


Cans

Cans
Beverage cans: any metal can containing beverages such as soda, juice, or beer.

Caps, Lids
Includes plastic or metal caps and lids that are separate from their bottles or jars such as bottle caps or fast food beverage container lids (coffee cup, soda cup lids).


Caps, Lids

Clothing, Shoes

Includes all forms of clothing such as shirts, pants, socks, underwear, gloves, jackets, hats, etc. Also includes all forms of footwear such as dress or casual shoes, sneakers, "flip flops," sandals, water shoes, etc.

Clothing, Shoes

Cups, Plates, Forks, Knives, Spoons

Made of paper or plastic materials, these are commonly used for picnics, festivals, sporting events, fast food, etc.

Food Wrappers, Containers

Wrapping and packaging materials from all foods, including snack foods, candy, and fast food.

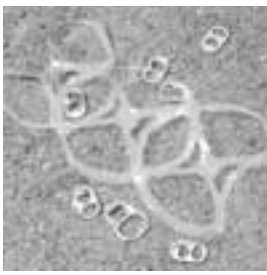
Food Packaging

Six-Pack Holders

Also called six-pack rings, these plastic yokes are used in the packaging of various beverages and engine lubricants. They may also be made to hold as few as four or as many as eight containers.

Pull Tabs

Removable metal tabs from soda, juice, or beer cans.



6-Pack Holders / Pull Tabs

Shotgun Shells, Wadding

Sometimes called shotgun shells, casings from shotgun ammunition are made of metal and plastic and are the result of skeet shooting, practice shooting, and hunting. Cleanup volunteers also frequently report finding the plastic wadding from shotgun shells that separates the powder from the shot.

Shotgun Shells, Wadding

Straws, Stirrers

Includes any disposable beverage straw or stirrer in paper, plastic, or wood.

Toys

This category includes any children's toys, including toy cars and trucks, small sand buckets and shovels, balls, kites, small toy figurines, Frisbees, etc.

Toys

OCEAN/WATERWAY ACTIVITIES

Bait Containers, Packaging

Includes any bait boxes, bait bags ("zip-lock" or plastic mesh bags), or bait cups used by recreational/commercial fishers to hold bait. Many of these containers have the name of the bait company printed on them.

Bait Containers

Bleach, Cleaner Bottles

Plastic containers that are varied in color (white, blue, green) and are usually a pint or gallon in size. They contain substances used for cleaning.

Buoys, Floats

Usually made of foamed plastic in a variety of shapes, sizes, and colors. Gillnet floats are small and elongated with grooves and holes. Ball floats are commonly used on traps and nets and frequently break free, washing onto shorelines.

Buoys, Floats

Crab/Lobster/Fish Traps

Usually square or rectangular cages with vents for crabs, lobsters, or fish to enter. They can be made of metal or wood.

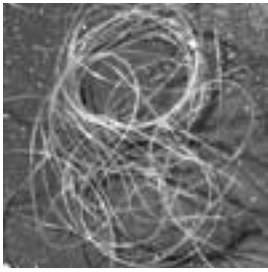
Crab Traps

Crates

Heavy wooden containers that may be found on the beach whole or in pieces.

Fishing Line

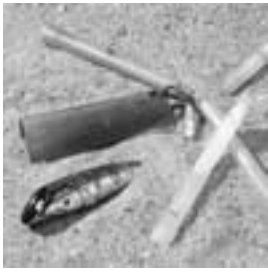
Also called monofilament fishing line, it is a thin plastic line that is usually found in strands or a tangled clump. Plastic fishing line can be clear or colored.



Fishing Line

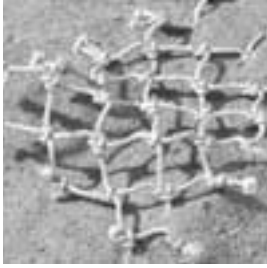
Fishing Lures, Light Sticks

Colorful plastic fishing devices that may have one or more fishing hooks attached. Also included in this category are the "glow-in-the-dark" light sticks used by fishers to attract fish.



Lures, Light Sticks

Fishing Nets
Nets may be thick or thin plastic netting and are usually found in tangled clumps. Fishing nets may be clear or colored.


Fishing Nets

Light Bulbs, Tubes
Light bulbs and fluorescent light tubes are commonly discarded from commercial vessels and offshore platforms. Incandescent light bulbs come in various sizes and shapes. Glass light tubes are generally 1-2 inches in diameter and vary in length from 1-6 feet. They may be whole or broken.

Oil, Lube Bottles
These are one-quart plastic containers for oil or lubricants. They are usually black, yellow, or white and may contain an oily residue.


Oil, Lube Bottles

Pallets
Wooden pallets are flat and heavy, usually 4-5 feet long and 6-8 inches high. They are used to help stack and transport cargo.

Plastic Sheeting, Tarps
Commonly used to cover and protect cargo and equipment onboard commercial boats/vessels. Sheeting is usually clear and thicker than a plastic bag. Tarps are usually made of plastic-coated cloth and come in a variety of colors but most commonly blue.


Plastic Sheeting

Rope
Rope is made of twisted or braided plastic or cotton, and varies in color, diameter, and length.


Rope

Strapping Bands
Strong, webbed bands of plastic or metal, many of which are about a half-inch in width. They may be open or closed and are mainly used instead of rope to bind materials and boxes.


Strapping Bands

SMOKING RELATED ACTIVITIES

Cigarettes, Cigarette Filters

Cigarette filters have been the number one debris item found in beach cleanups worldwide for the past ten years. The filters are made of cellulose acetate, a synthetic fiber that can last for several years in the environment. Also included in this category are the remains of non-filtered cigarettes.

Cigarette Filters

Cigarette Lighters

This category is for any disposable or non-disposable lighters.

Cigar Tips

The plastic cigar mouthpieces commonly used with popular brands of thin cigars.

Cigar Tips

Tobacco Packaging, Wrappers

This category includes any identifiable box, bag, cellophane wrapping material, round plastic or metal jars/cans that may have contained a tobacco product (cigarettes, cigars, chewing tobacco, pipe tobacco, snuff, etc.)

Tobacco Packaging

DUMPING ACTIVITIES

Appliances

This is a broad category that could include discarded electrical items such as washers, dryers, refrigerators, TVs, radios, toasters, freezers, etc. ***Most of these items will be too heavy to remove. Notify local authorities for professional and regulated removal.***

Appliances

Batteries

Batteries come in a variety of sizes and shapes. All batteries are an environmental hazard whether they are a small flashlight battery or a car battery. ***Do not attempt to remove large batteries such as a car or truck battery. They are very heavy and may contain dangerous chemicals. Notify local authorities for professional and regulated removal.***

Batteries

Building Materials
This broad category includes all building and construction materials such as siding, shingles, lumber, bricks, roofing material, rebar, etc.


Building Materials

Cars, Car Parts
It is not uncommon for volunteers to report abandoned and discarded cars and car parts (steering wheels, fenders, bumpers, etc.). Obviously these items do not belong in our waterways and oceans. Abandoned cars and car parts can pose an environmental hazard as they leak oil, fuel, and other toxic chemicals into the environment.

55-Gallon Drums
Large metal barrels. Drums may appear new or old and rusty. ***Do not go near a drum!*** The vapor or liquid inside could be harmful.


55-Gallon Drums

Tires
Any size rubber tire or inner tube such as those from bicycles, cars, tractors, etc., but not toys.

MEDICAL/PERSONAL HYGIENE


Diapers

Condoms
Latex or rubber condoms or pieces of condoms. They vary in color and may end up on beaches as the result of combined sewer overflows.

Diapers
This includes disposable and cloth baby diapers.


Syringes, Needles

Syringes, Needles
May have a large or small plastic shaft and may have a needle still attached to the end. Be very careful when handling these items.

Tampons, Tampon Applicators
Cylindrical, tube-like items usually pink, white, or tan in color. They often end up on beaches as a result of combined sewer overflows.


Tampons

Debris Items of Local Concern

Some debris problems can be site- or area-specific. This means that some items do not appear on the Data Card but are found in large numbers in certain areas, while not in other areas. The International Coastal Cleanup Data Card provides additional space for volunteers to add select items to the Data Card, specific to your area. Volunteers can list and count up to three additional items of debris they are finding that are of particular concern to them. ***Do not write in any items that are already listed in other categories.*** Examples of "debris items of local concern" may include the following:

Drug Paraphernalia

Bottle Cap Rings

Fireworks

Fish Baskets

Drug Paraphernalia, Crack Bags

In recent years volunteers have been reporting miniature plastic zippered baggies used to package crack cocaine. These miniature baggies are found in several colors (red, blue, green, clear) and are approximately 1 inch square in size.

Bottle Cap Rings

These small plastic rings are commonly used to seal plastic bottle caps to the tops of beverage bottles. They are commonly found on milk, juice, and soft drink bottles.

Fireworks

Fireworks or firecrackers are made of plastic and wood.

Fish Baskets or Totes

Fish baskets are similar to heavy duty laundry baskets with built-in handles made to carry about 100 lbs. of fish. They are used by the commercial fishing industry and are very commonly found in New England and Alaska.

Fish/Lobster Tags

Fish (often salmon) and lobster tags are small plastic tags that come from commercial fishing operations.

Lobster Claw Bands

Lobster claw bands are small, thick rubber bands used by the commercial lobster industry to keep lobster claws from injuring fishers. These bands are most commonly found along the coast of New England.

Lobster Claw Bands

Hard Hats

Industrial hard hats are usually colored and may have the industry or company's name embossed on them.

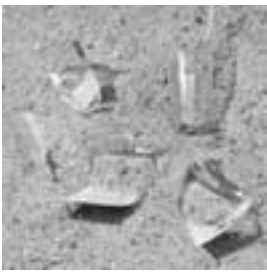
Hard Hats

Potentially Hazardous Items

While doing your beach survey, you may come across debris items that should be handled with extreme caution. Certain items, such as 55-gallon drums and five-gallon buckets, may contain dangerous chemicals. If you find these items on your beach, **DO NOT** go near them, but immediately report them to your beach cleanup coordinator. Also, items such as syringes, needles, and other sharp objects should be handled carefully. ***Always*** wear heavy leather or rubber gloves when cleaning the beach! Children should not be allowed to handle or remove any potentially hazardous items. Only adults should handle these materials.

55-Gallon Drums

5-Gallon Buckets



Sharp Objects

Heavy Objects

55-Gallon Drums

Drums may appear new or look old and rusty. These drums could contain extremely dangerous chemicals. Do not go near a drum if you see one on your beach because the vapor or liquid could be harmful.

Five-Gallon Buckets

Five-gallon buckets may also contain hazardous materials. Do not go near these buckets, but report them to your cleanup coordinator.

Glass Pieces, Sharp Objects

Be careful not to cut yourself on any glass pieces or sharp items that you may find during your cleanup. Always wear gloves and shoes and follow the instructions given by your cleanup coordinator as to whether you should remove these items from the beach.

Heavy or Buried Objects

Volunteers should not lift, push, or pull heavy objects or objects partially buried in the sand or mud. Back or muscle injuries may occur.

Medical Waste

Examples of medical waste include blood- or IV-bags and prescription medicine bottles. Be very careful and always wear gloves when picking up these items. Some prescription bottles may still contain pills or medicine. Remind young people participating in the cleanup not to touch these items.

IV Bags

Syringes, Needles

Syringes may have large or small plastic shafts and may have a needle attached to the end. Follow your cleanup coordinator's instructions as to whether you should remove syringes or needles from the beach, but if handling them, be extremely careful.

Syringes, Needles

STRANDED OR ENTANGLED ANIMALS

Marine debris has a devastating and often lethal effect on aquatic and marine wildlife. Debris that has wrapped around limbs, fins, or flippers causes circulation loss and amputation, especially as the animal grows. Animals slowed down by trailing debris are most vulnerable to predators. Ingested, debris can lead to strangulation or digestive problems. According to the Marine Mammal Commission, 136 marine species were reported in entanglement incidents in 1998, including six species of sea turtles, 51 species of seabirds, and 32 species of marine mammals. Ingestion incidents in 1998 totaled 177, affecting six of seven species of sea turtles, 111 out of the world's 312 species of seabirds and 26 species of marine mammals.

Data from the International Coastal Cleanups from 1996 through 2000 revealed that 1300 animals were found either alive or dead entangled by aquatic debris. Most entanglement victims were birds (39.5%); our volunteers found 514, while fish were the second most frequently found entangled animal (398). Fishing line caused about 518 (39.8%) of the entanglements; rope was a distant second, causing 167 (12.8%) entanglements. Volunteers also found animals entangled in balloons with ribbons, fishing nets, plastic bags, six-pack holders, wire, crab or lobster traps, plastic sheeting, and strapping bands.

IF YOU FIND DEAD, STRANDED OR LIVE ENTANGLED ANIMALS

- Do not attempt to release any live entangled animals.
- Notify your beach cleanup coordinator immediately so that the proper trained authorities can be contacted.
- Stranded sea turtles or marine mammals, such as dolphins or whales, should be reported to your local stranding network.
- **Record information on entangled animals on the Data Card**
  If an entangled animal (alive or dead) is discovered, describe the type of animal and entangling debris as specifically as possible in the space provided on The Ocean Conservancy's International Coastal Cleanup Data Card.

Natural Items

During your beach cleanup, you will probably come across items that are found on the beach naturally. These include driftwood, seaweed, and sea whips and other coral. These items are an important part of natural ecosystems. They provide a natural beauty to the beach and **should not be collected** or recorded.

Coral

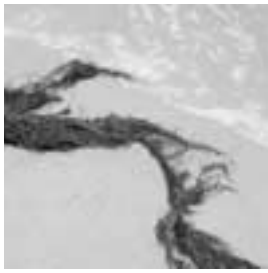
Coral

This is a skeleton deposit produced by a type of marine invertebrate. It may look and feel cement-like or stony, but it is a natural item and should be left on the beach.

Driftwood

Driftwood

Driftwood is natural wood from trees that sometimes washes up on our beaches. Please leave driftwood on the beach.



Seaweed

Seaweed

This is a general term used by the public to refer to all types of green, red, or brown algae and seagrasses.

Sea Whip

Sea Whip

This yellow, orange, or purple material looks like wire or rope, but is actually coral, a living colony of animals. Sea whip is long, thin, and has a dark, string-like core. It is a natural item found from North Carolina to the Gulf of Mexico.

Peculiar Items

The International Coastal Cleanup Data Card includes a section to record the most peculiar items collected. People have found everything imaginable, including the kitchen sink. Some of the more unusual items found on beaches in recent years include:

- Beds (mattresses)
- Toilet bowls
- Toilet seats
- Sofas, chairs, tables
- Television sets, remote controls
- Kitchen sinks
- A paint brush
- Shopping carts
- Doorknobs
- A boxing glove
- A rubber snake
- Jewelry
- An adding machine
- A toupeé
- A clip-on bowtie
- A rug
- Saw blades
- A voodoo doll
- Vacuum cleaner hoses
- A chess pawn
- Dentures
- Artificial leg
- Lottery ticket
- Airplane
- Parking meter

Toilet Seat

Rubber Snake

Jewelry

Vacuum Cleaner Hose

Lottery Ticket

Other Volunteer Opportunities

In addition to the annual International Coastal Cleanup, The Ocean Conservancy conducts the following volunteer programs that allow citizens to help protect our oceans:

National Marine Debris Monitoring Program (NMDMP)

A national scientific study on marine debris. Volunteers conduct monthly beach cleanups and debris surveys at selected sites along the U.S. coastline. Trained volunteers become "citizen scientists," adding to our knowledge on the nature and sources of marine debris pollution.

RECON (Coral Reef Monitoring)

Trained volunteer divers collect information about coral reef environments, the health of stony corals, the presence of key reef organisms, and obvious human-induced impacts. RECON is intended to increase our knowledge about the status of coral reef ecosystems so we can better conserve and protect them.

Storm Drain Sentries

A national pollution prevention program designed to heighten awareness of the connection between storm drains and local waterways. Volunteers stencil local storm drains with a "Do Not Dump" message. This program is a perfect way for schools, community groups, and volunteers to help protect local waterways.

Ocean Action Network (OAN)

The Ocean Action Network is made up of Ocean Conservancy members and other grassroots activists who want make their voices heard by state and national government officials. As an OAN member you will receive, either by email or regular mail, periodic updates on legislation and issues that need your support and response.

Take the Ocean Wilderness Pledge

Add your name to the growing list of Americans working to preserve and conserve our nation's oceans and marine life by urging federal, state, and other government bodies to establish special "wilderness" protection for at least five percent of the United States' ocean territory.

More Information

For more information about marine debris and other volunteer programs of The Ocean Conservancy, contact:

The Ocean Conservancy
Office of Pollution Prevention and Monitoring
1432 N. Great Neck Road, #103
Virginia Beach, VA 23454
Phone: 757-496-0920
Fax: 757-496-3207

For more information on the International Coastal Cleanup:
Phone: 1-800-262-BEACH (U.S. only)
Email: cleanup@oceanconservancyva.org
Website: www.coastalcleanup.org

For more information on joining the Ocean Action Network or signing the Wilderness Pledge, visit our website: www.oceanconservancy.org.

THE OCEAN CONSERVANCY

Headquarters

2029 K Street, NW
Washington, DC 20006
202-429-5609
www.oceanconservancy.org

Office of Pollution Prevention and Monitoring

1432 N. Great Neck Road, #103
Virginia Beach, VA 23454
757-496-0920

REGIONAL & FIELD OFFICES

Regional Offices

Alaska Regional Office
425 G Street
Anchorage, AK 99501
907-258-9922

Pacific Regional Office
116 New Montgomery Street
#810
San Francisco, CA 94105
415-979-0900

Southeast, Atlantic, and Gulf of Mexico Regional Office
449 Central Avenue, #200
St. Petersburg, FL 33701
727-895-2188

New England Regional Office
371 Fore Street, #301
Portland, ME 04101
207-879-5444

Field Offices

Santa Cruz
55 Municipal Wharf
Santa Cruz, CA 95060
831-425-1363

Santa Barbara
120 West Mission Street
Santa Barbara, CA 93101
805-687-2322

Florida Keys
513 Fleming Street, #14
Key West, FL 33040
305-295-3370

Virgin Islands
P.O. Box 1287
Cruz Bay, St. John, USVI 00831
340-776-4701

The Ocean Conservancy

Advocates for Wild, Healthy Oceans

www.oceanconservancy.org