

BEAGN AND WATERWAY GLEANUPS







Guidebook to Beach and Waterway Cleanups



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The production of this educational document was provided with support from the National Oceanic and Atmospheric Administration's Marine Debris Program and was developed by Sheavly Consultants through Contract Project Number AB133F06CN0193, "Web-based Education Campaign for Marine Debris Awareness & Prevention."

Portions of this guidebook were compiled from excerpts from Ocean Conservancy's "ICC Coordinator Handbook" (© 2002) and "Pocket Guide to Marine Debris" (© 2006), which was first published in 1993 with funding from the U.S. Environmental Protection Agency (EPA).

Introduction

arine and other aquatic debris are more than unsightly inconveniences for beach-bound vacationers or pleasure boaters; they are one of the most pervasive pollution problems affecting our oceans and waterways.

Marine debris is any man-made object discarded, disposed of or abandoned that enters the coastal or marine environment. It may enter directly from human activities, or indirectly when washed out to sea via rivers, streams and storm drains. Since the 1960s, the world's dependence upon natural materials has been largely replaced with the use of durable, highly buoyant, synthetic items. Once they enter the ocean environment these products – such as cigarette filters, food wrappers, beverage bottles and cans, grocery and trash bags, and fishing line, nets and gear — can travel thousands of miles on ocean currents, posing a threat to ocean ecosystems and wildlife along the way. While the types of debris are as diverse as the products found around the world, they all share a common origin – people. At a critical point, someone, somewhere, mishandled it — either deliberately or thoughtlessly.

Aesthetically, marine debris is an eyesore and can have a major effect on the tourism industry in waterfront communities. More importantly, thousands of marine animals die each year from becoming entangled in debris or from ingesting it. Marine debris can impact critical habitat, smothering seagrasses or dislodging or injuring corals. Marine debris can also pose human health and safety risks. Syringes, broken glass and other hazardous items pose obvious dangers to bare-footed beach goers. Grocery and trash bags, fishing line, nets, rope and other debris can wrap around boat propellers and clog seawater intakes, causing costly damage and becoming a safety hazard. Medical and personal hygiene debris can enter waterways when sewer systems fail or overflow. These items often contain harmful bacteria and pathogens.



Congress has enacted laws to limit the dumping of garbage from boats and to help control land-based sources of marine debris by mandating the implementation of systems such as stormwater systems and combined sewer systems. Citizens have also made great efforts to fight this problem through local outreach and education efforts and worldwide beach cleanups. 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, Ocean Conservancy compiles and analyzes the data that ICC volunteers collect worldwide. 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 this pollution problem.

Understanding Marine Debris

esearchers traditionally classify marine debris as coming from land- or ocean/waterwaybased sources. Sources of land-based debris include sewer overflows and storm drains, landfills, manufacturing and sewage treatment plants and beachgoers. Ocean/waterway-based sources include boats and ships of all sizes and offshore rigs and drilling platforms.

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 MARine POLlution 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). The U.S. Congress passed the Marine Plastic Pollution Research and Control Act of 1987 to implement MARPOL Annex V, 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, if 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 requlation 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.

Landfills can also be a source of debris. Many landfills are uncovered, making it possible for animals, winds, or storms to scatter waste materials back into the environment. Other landfills are located near estuaries or marshes, which makes it easy for trash to enter nearby water bodies. Once it has left the landfill, trash can eventually reach oceans and waterways, becoming marine debris.

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.







POW LONG UNTIL IT'S GONE?

Glass bottle 1 million years
Monofilament fishing line 600 years
Plastic beverage bottles
Disposable diapers
Aluminum can
Foamed plastic buoy
Rubber boot sole50-80 years
Foamed plastic cup50 years
Tin can50 years
Leather 50 years
Nylon fabric
Plastic film canister
Plastic bag
Cigarette filter 1-5 years
Wool sock
Plywood1-3 years
Waxed milk carton 3 months
Apple core
Newspaper 6 weeks
Orange or banana peel2-5 weeks
Paper towel

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

Getting Started

s you are conducting your beach cleanup, you will discover that just about anything can be found on a beach!

Even if you're not participating in the ICC's annual cleanup efforts, data collection is still extremely important. If volunteers 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! Please help continue these important efforts by collecting data at your cleanup. Review the ICC's data card to get an idea of the types of debris you should record when you find and remove them.

If You're Participating in the ICC...

There are a number of 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 only record the items listed on the data card.

Familiarize yourself with the items listed on the data card and their associated debris-producing activities. 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.

Activities That Produce Debris

etermining 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, offshore drilling rigs and platforms and fishing piers.

Shoreline and Recreational Activities

Where does the debris come from?

- Fast food restaurants and convenience stores
- 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
- Six-pack holders
- Pull tabs
- Shotgun shells/ wadding
- Straws/stirrers

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
- Ferries

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 Debris Investigator!

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.



Items Listed on the **Data Card**

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

Shoreline and Recreational Activities

Bags (paper or plastic) Includes 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 mark-

ings should be recorded—sometimes this can give clues about where the balloon came from.

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

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 (e.g., coffee, soda cup 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.

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.

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.



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.

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.

Ocean/Waterway Activities



Bait Containers, **Packaging**

Includes any bait boxes, bait bags ("zip-lock" or plastic mesh bags) or bait cups used by recre-

ational/commercial fishers to hold bait. Many of these containers have the name of the bait company printed on them.



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.



Crab, Lobster, Fish Traps

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

Crates

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

Fishing Line

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



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 fishermen to attract fish.



Fishing Nets

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

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 one to two inches in diameter and vary in length from one to six 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.

Pallets

Wooden pallets are flat and heavy, usually four to five feet long and six to eight 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 and 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.



Rope

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



Strapping Bands

Strong, webbed bands of plastic or metal, many of which are about a halfinch in width. They may be open or closed and are

mainly used to bind materials and boxes.

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 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.

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).

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.



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.

How to Organize a Beach or Waterway Cleanup In Your Community

1. Identify beach areas and other aquatic sites (marshes, lakes, rivers, ponds) in your area that need to be cleaned and that are safe and accessible to volunteers and boaters.



- Ensure that you will have access to the site and that you have the necessary permission to be at the site.
- Identify potential volunteer check-in site(s) that will be clearly visible and have available parking. There should be a "check-in" station for volunteers to sign in and receive trash bags, data cards, pencils and instructions.
- Volunteers should be instructed to return to the check-in station when they are finished to bring back their completed data cards and trash bags.
- The check-in station should be clearly accessible and have parking. For example, if you are conducting a waterway cleanup, the station could be located next to a boat ramp or central area of a marina. You may want to post signs or posters directing people to the proper location.
- Select site coordinators who can manage cleanup activities at each site.
- Once you have identified your sites, check-in locations and site coordinators, please notify your state or country coordinator so they can have the information handy when volunteers and media call.

- 2. Identify site coordinators who can manage cleanup activities at each site. Hold a site coordinators' meeting.
- This is your opportunity to distribute materials to your local site coordinators and make sure they understand what they have to do. They should know the importance of data collection; how to fill out the report forms; the importance of keeping track of numbers of volunteers, trash collected (weight, number of bags filled), entangled animals found and the benefits of working with the media. All site coordinators should visit their site before the cleanup (well in advance of the cleanup event date), decide where they will set up their check-in station, where the dumpster and recycling container(s) should be located and where volunteers will be sent to clean.
- Review what to do in case of a health emergency (see #10) or with dead or entangled animals (see #11).
- 3. Contact merchants and other potential donors who can supply drinks, food, raffle prizes or whatever else you might need.
- Many merchants will jump at the chance to be involved in such a positive community event. It is good public relations for them, and you can make it even better by remembering to mention all your donors and sponsors in press releases or conversations with the press. Donations of this type also encourage participation.

4. Recycling.

· Contact recyclers in your area who will accept aluminum, glass and plastic bottles and make appropriate arrangements.



Recycling the aluminum, glass, plastic, and in some cases, other metals, should be a major emphasis of your cleanup. Some localities may have Recycling Coordinators in their Solid Waste Departments who can assist you.

Plan ahead for how you will collect the recyclables.
 You can have volunteers sort as they collect using a specially marked trash bag to help volunteers remember which bag to use for recyclables, or you can identify a special group of volunteers who will work during and after the cleanup to specifically sort the recyclables for processing.

We recommend that you choose the first option as it does not require the handling of the recyclables more than once and it seems the easiest. However, any way you feel comfortable organizing the separation of recyclables is fine. Be sure volunteers are instructed to separate recyclable items before they begin the cleanup.

5. Secure the support of a local solid waste hauler who will donate its services the morning of the cleanup to haul the trash.



- Contact a local waste collection company in your area. Your municipal government may help and may even waive the entrance fees at landfills or incinerators for the event. If you have any problems in locating a hauler, please contact your state or country coordinator.
- Plan ahead on how trash bags are going to be removed. Will volunteers carry them back to the check-in point, or will they leave them on the beach above the high tide mark as they are filled to be picked up later? If you chose the first option, have your volunteers start at the far end of the zone they will be cleaning and work their way back to the check-in point.

- 6. Plan ahead for handling medical (syringes, etc.) and sewage (condoms and tampons) waste or other hazardous materials.
- Children should be instructed NOT TO TOUCH any of this debris.
- Suggestions for adults include wearing gloves, putting syringes in plastic gallon containers or
 - using flags or surveying tape to mark the location of this debris so another adult can return to pick it up after the cleanup for proper disposal. Be sure to have



the volunteers record these debris items.

- Exercise extreme caution if you find any hazardous debris such as ammunition, spent shells or construction materials. Call your local waste removal authority to handle this type of debris.
- 7. Arrange for a weight scale at cleanup sites to weigh bags or get a weight from your waste hauler when they pick up your trash bags from the cleanup activity.
- You will be asked, "How many pounds of trash were collected during your cleanup?" Although this number can be deceiving (a few large, heavy items can fill a dumpster a lot faster than many



more dangerous, smaller, lighter trash items), it does sound impressive in the news and serves to highlight our trash problem.

There are several ways to calculate the weight of trash collected:

- Secure a scale similar to those used in grocery stores for weighing produce or one with a hook on it to weigh each bag of trash before it is heaved into a dumpster. This is the most accurate way of reporting the weight.
- Sometimes your waste hauler can give you the total weight of what they hauled away (either a real weight or a good estimate by the number of filled dumpsters).
- You can estimate the total weight by weighing a random sample of 10 filled trash bags, calculating the average weight per bag, and multiplying that number by the total number of filled trash bags.

If You're Participating in the ICC...

The Ocean Conservancy uses 15 pounds per bag as a standard weight for conversions in the event that alternative weighing methods are not available. In order to calculate weight using this method, see page 18.

8. Solicit volunteer participation for your cleanup and work with the media.

- Distribute posters and brochures, contact local schools, civic organizations, chambers of commerce, local environmental groups, industries and others willing to participate in the cleanup.
- If you have the time, contact specific environmental reporters (print and TV/radio media) in your area who may be interested in a "before and after" type of story. Get a photographer to shoot pictures of a cleanup site before the event to illustrate the trash problem, or supply the press with some photos of your own. This

If You're Participating in the ICC...

Use the media announcements provided by Ocean Conservancy (or your state coordinators), or create your own, and distribute to local media as well as to the groups listed above who may have their own newsletters or flyers.

The state or country coordinator will often send media advisories across the state or country. However, the media is more often interested in your local story and a personal call helps get information on the cleanup published and announced. Always mention that your local event is part of the statewide/countrywide (and international) cleanup coordinated by your state or country coordinator and Ocean Conservancy.

will help encourage participation the day of the event.

- 9. Maintain a list of people who respond and express interest in the cleanup to get an indication of the number of volunteers to expect at your cleanup sites.
 - This is optional, but may be important in case you have too many people wanting to go to a specific site. Others can possibly be diverted to different sites that may need more participants.
 - Also, consider ahead of time how volunteers will be dispersed during the cleanup to cover your whole cleanup area. For example, some zone captains mark off sections of beach every 1/8 of a mile (or whatever distance is appropriate), and estimate how many volunteers, at a minimum, are needed for each section. Wooden stakes work well as markers, or maybe telephone poles, if along a road, etc. You or your site coordinators may want to have maps of the cleanup site available for volunteers.

10. Be prepared for health emergencies.

 Have first aid kits available at each cleanup site or check-in location for small emergencies like cuts and scrapes. You and your site coordi-



nators should also review what to do in the event of a major health emergency (heat exhaustion or heatstroke, broken bone, etc.). Write out a plan and know how to get to the closest hospital or other emergency

facility. Some communities may want to have rescue personal standing by, particularly for areas expecting several hundred volunteers.

- Try to obtain walkie-talkies, two-way radios or cell phones for site captains. This is useful for staying in touch, even in the absence of emergencies. Local cellular phone companies may donate phones.
- Provide safety tips to volunteers at the check-in station (e.g., drink plenty of water, wear sunscreen, etc.).
- Find out which of your volunteers have medical training or know basic first aid or CPR.

11. Make sure volunteers know what to do with dead, entangled or injured animals.

Contact your local animal/wildlife rescue facilities to let them know that a coastal cleanup will be occurring and that volunteers may find injured wildlife. Ask how to properly care for and transport injured animals, and which animals volunteers may and may not handle.





- Dead wildlife can usually be left alone.
 However, dead entangled animals should be removed because other animals may become entangled with them.
- All entanglement and injury incidents should be reported on the data cards.

12. Arrange for someone to take photos or video of the event.

- Good video footage may be useful for future public service announcements or other educational purposes.
- All photos and slides should be clearly labeled with the photographer's name, site location and date.

If You're Participating in the ICC...

The state or country coordinators and Ocean Conservancy need slides or digital photographs of volunteers participating in cleanups at the different types of sites. Photos of entangled animals are also useful. These are used in the final report, brochures, educational materials and other publications. Active, close shots of people picking up debris, using data cards, etc. are ideal. Try not to take photos of people standing still, from behind or from too far away.

On The Day of the Cleanup

1. Set up your Check-in Station.

Be prepared before your volunteers start arriving! Have your check-in station set up with all materials; be sure your pencils are already sharpened and sign-in sheets are ready for your volunteers. Post signs, if necessary, to direct volunteers to parking areas, the check-in station and cleanup areas. Your dumpsters and recycling bins should be appropriately located and marked.



If You're Participating in the ICC...

- 1. Coordinate volunteers at cleanup sites. Zone captains and site coordinators should distribute materials and instruct the volunteers on the following points as they arrive at the check-in point:
- Your state or country coordinator and/or Ocean Conservancy will ask you for a total number of volunteers at your cleanup.
- Cataloging the type, amount and location of debris found during the cleanup provides information vital to identifying sources of the trash. This is the ICC's priority and is what makes it different from other cleanups. Volunteers in all participating countries use identical data cards translated into different languages, and all the information is compiled into a comprehensive report. Post the ICC Data Detective Poster at your cleanup site. The data is used to create long-term solutions and to improve citizen education programs about the problems caused by marine debris. Show volunteers how to use tick marks to record debris items; words such as "lots" and "many" are not useful for data analysis.

work in teams of four or five. Each volunteer in the team should be given one to two trash bags. Have them reserve one bag for aluminum, one for plastic bottles, several others for glass and to sort as they go. One volunteer should be designated the "data captain" and be responsible for recording the items picked up by the other volunteers on the data card (they can call out the items as they go). This person will become familiar with the card in short order, making this task easier.

2. As the volunteers finish, collect ALL completed data cards.

- This is very important! Tell volunteers to return the cards to the check-in station immediately after the cleanup. Have a clearly labeled box at the check-in station where the cards can be returned. Review the cards to ensure they were properly filled out, particularly with zone name, site name, etc. You may want to fill out zone and site information on the data cards before the cleanup so the volunteers don't misrepresent your zone and site locations.
- Site coordinators can start reviewing the data cards for any entangled animals not previously verbally reported, foreign items, trash from cruise lines, etc.

2. Oversee sorting and removal of the recyclable debris and other trash.

Encourage volunteers to work in teams of four or five. Each volunteer in the team should be given one to two trash bags. Have them reserve one bag for aluminum, one for plastic bottles, several others for glass and to sort as they go.

Make sure the waste hauler takes all the trash away and that no other materials are left behind.

Immediately After the Cleanup

Congratulate yourself, your site coordinators and all volunteers for an excellent job!

Recognize your local coordinators with a follow-up thank-you letter or certificate.



If You're Participating in the ICC...

- 1. Be prepared to report your cleanup's statistics to your state or country coordinator that evening or shortly thereafter.
- You should compile cleanup information, such as
 the total number of people, pounds, and miles in
 your cleanup, any entanglements, unusual items,
 number of trash bags filled, etc. as soon as possible after the cleanup. Your state or country coordinator may provide you with forms to fill out.
 Please have them ready by the phone. The media
 starts contacting cleanup organizers as early as
 Saturday evening, so it is important to have your
 best estimate, if not the final counts, available
 right after your cleanup.
- 2. Gather all completed and unused data cards, ensure that completed cards are properly coded and sorted by site and send them to your state or country coordinator.

- Keep data cards sorted by site. This allows data entry to be as uncomplicated as possible and helps with accuracy.
- 3. Please obtain a copy of any newspaper articles or other information or media announcements and send to state or country coordinator, who will then forward them to Ocean Conservancy.
- This helps Ocean Conservancy see how its media relations efforts are working, and the organization keeps these on file to demonstrate its success to sponsors.
- 4. Some state and country coordinators conduct a follow-up survey with their zone captains several weeks after the Cleanup.
- This is intended to gauge the success of the materials developed for promotion of the cleanup,
 effectiveness of media coverage, etc. They then use this information to plan for next year's cleanup to make the event more efficient and effective.

SHORELINE CLEANUP TIPS

Safety first

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

Things to bring

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

Data collection

- Clean up all debris found on your beach or shoreline.
- Don't collect natural items like driftwood or seaweed.



If You're Participating in the ICC...

Data collection

- Review the ICC data card before beginning your cleanup! Read and follow all instructions.
- Clean up all debris found on your beach or
- Record information only on the items listed on the ICC data card.
- Collect data as a team, with one person recording information on the data card while others pick up and bag the trash and sort the recyclables.
- Count and tally items in groups of five and record the total in the box.
- 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.

Estimating Distances and Weights for the ICC

ince 1986, volunteers from 127 countries have participated in the ICC. Evaluation of the cleanup activities each year highlights the amount of debris collected (weight) and the distance cleaned (miles or kilometers). Properly estimating and reporting the "Distance Cleaned" and "Total Estimated Weight Collected" is extremely important in assessing the volume of activity conducted by the volunteers in each country.



Below 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 beach transect line) cleaned by the volunteers. Do not use area measurements, such as square feet, square miles, square kilometers or acres.

If your cleaned shoreline has been measured in areas (square feet, miles, kilometers, etc.), use the following method to convert area measurements to linear distances:

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

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

Example 1: Volunteer reports cleaning one-acre area.

One acre = $43,560 \text{ ft}^2$

 $43,560 \div 10 \div 5280 = 0.825$ miles cleaned

Example 2: Volunteer reports cleaning 5000 ft²

 $5000 \div 10 \div 5280 = 0.094$ miles

ESTIMATING WEIGHT COLLECTED

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

ICC Data Cards

he data cards are critically important to the Cleanup's success. The ICC's purpose is not just to collect trash, but also to collect data and information on the sources and behaviors behind marine debris pollution. The data cards provide information on sources and behaviors and set the ICC apart from other cleanup events that only pick up trash. Ocean Conservancy also uses the cards to compile, analyze and compare the types and sources of debris collected from year to year. The cards provide for the recording of specific debris items that are indicative of the activities and sources producing the debris (recreational and shoreline, ocean/waterway, smoking-related, medical/personal hygiene and dumping activities). The result is a unique continuing global database of information collected at every cleanup around the world.

In order to be a part of the International Coastal Cleanup, your local cleanups must use ICC data



card. How many data cards will you need? Typically, three to five volunteers will work on one data card. Estimate the number of people you expect to participate in your cleanup (or increase your previous year's results by a small percentage such as 5 to 10 percent) and divide that estimate by three to five. For example, if you expect roughly 1,000 people for your state or country cleanup, order approximately 200 to 330 data cards. Please be conservative in your data card orders. Ocean Conservancy prints a finite amount each year. Data cards are currently available through Ocean Conservancy in English ish, French and Portuguese.

mperative that Ocean Conservancy receives ALL ICC data cards as soon as possible after a cleanup and no later than November 15. This will ensure that your

> analysis. Ocean Conservancy strives to process and report the ICC data results in the most timely and efficient manner possible. Your prompt response is an essential part of the reporting process.

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