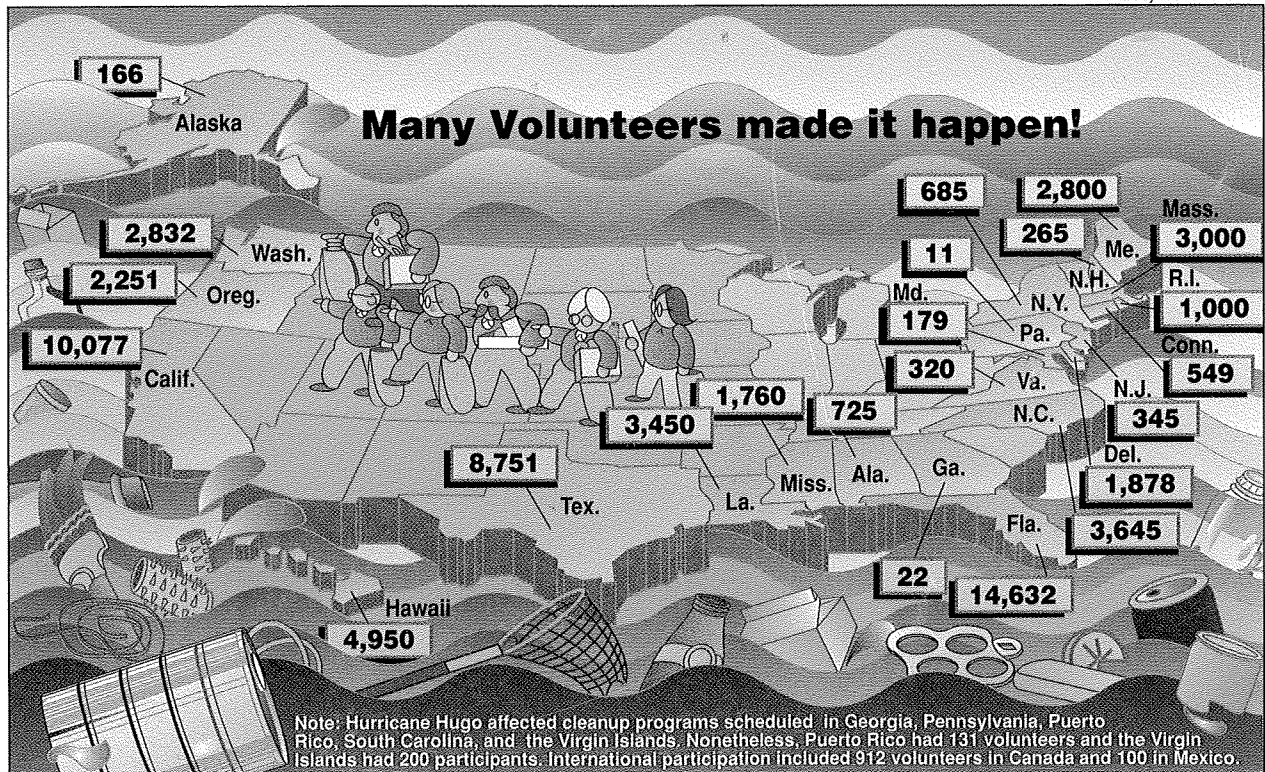


# CLEANING NORTH AMERICA'S BEACHES

## 1989 BEACH CLEANUP RESULTS

Chart by RICHARD GAGE



CENTER FOR MARINE CONSERVATION

# **CLEANING NORTH AMERICA'S BEACHES**

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**CENTER FOR MARINE CONSERVATION**

# CLEANING NORTH AMERICA'S BEACHES: 1989 BEACH CLEANUP RESULTS

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The Center for Marine Conservation (CMC) established in 1972, is a marine conservation organization dedicated to protecting marine wildlife and conserving coastal and ocean resources. To further these conservation goals, CMC conducts policy-oriented research; promotes public awareness, education, and citizen involvement; supports domestic and international programs for marine wildlife and their habitats; and advocates sound policies concerning the marine environment. The National Beach Cleanup, part of CMC's Clean Ocean Campaign, is supported by the Center's 110,000 members and special contributions from the U.S. Environmental Protection Agency, National Oceanic and Atmospheric Administration, The Society of the Plastics Industry (SPI), The Council for Solid Waste Solutions (a division of SPI), and DOW Chemical, U.S.A.

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THE WHITE HOUSE

WASHINGTON

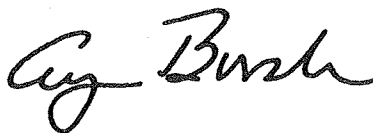
October 25, 1989

I am delighted to send my warm greetings to everyone gathered for this meeting at the invitation of the Center for Marine Conservation. Congratulations to all the State Coordinators who helped to make Coastweek 1989 a tremendous success.

America's beaches are part of our beautiful and precious coastal environment. Through your leadership and coordination, thousands of citizens made valuable contributions to preserving these areas by volunteering their time to help clean up our beaches and shorelines. The spirit of concern and cooperation displayed by these volunteers goes to the heart of what makes America strong. Your dedication to this worthy endeavor is exemplified by your participation in this meeting to discuss future clean-up efforts.

Every one of the more than 60,000 people who participated in the 1989 beach clean-ups deserves the heartfelt thanks of all Americans. I salute your dedication, your enthusiasm, and, most of all, your efforts to improve our nation's coastal environment.

Barbara joins me in sending our best wishes. God bless you.

A handwritten signature in cursive script, reading "George Bush". The signature is written in dark ink and is positioned in the lower right quadrant of the page.

## ACKNOWLEDGEMENTS

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This report contains information from more than 13,000 data cards that were completed by volunteers as part of the second annual Beach Cleanup, the most extensive effort to date to categorize the types and quantities of beach debris. As in 1988, this effort included beach cleanups in every U.S. coastal state. This year information on beach debris was also collected in Canada and Mexico, making this a truly international event.

Information from this citizen monitoring effort was compiled by the Center for Marine Conservation (CMC) as part of the National Marine Debris Database. The Database was established in 1988 for beach cleanups conducted during COASTWEEKS (a annual celebration of the coasts conducted each fall). Sponsored by the U.S. Environmental Protection Agency, the National Oceanic and Atmospheric Administration, and the U.S. Coast Guard, the Database serves to involve citizens in the identification of specific debris problems in different parts of the country. Information on the types and sources of trash collected during the first national beach cleanup in 1988 has been published in a report entitled *Cleaning America's Beaches: 1988 National Beach Cleanup Results*.

It should be noted that while the Database is organized by CMC, the valuable information contained in this report is the result of the hard work and dedication of a national network of beach cleanup coordinators and volunteers. In each state or country, there is a very special group or individual who spent countless hours organizing their state or locality's cleanup efforts. The efforts of these beach cleanup coordinators were facilitated by a network of individuals, referred to as "Zone Captains" or "Beach Captains" who helped to coordinate beach cleanups on the local level. Within each locality there were also many groups who donated supplies, refreshments, publicity, and encouragement (a list of these sponsors is given in the appendices). And then there are the 65,636 volunteers who donated three hours of their weekend to remove dangerous marine debris from our coastlines and to record information on the types and quantities of debris collected to assist in the development of permanent solutions. To each and every one of these individuals, we extend our thanks and congratulations for a job well done.

In the fall, after the 1989 Beach Cleanup, a meeting of beach cleanup coordinators was held in Washington, D.C. to evaluate the progress that has been made over the past two years, share ideas, and plan for the 1990 Beach Cleanup. Upon conclusion of this meeting, the letter on the adjacent page was delivered. The sentiments of this letter from the White House are greatly appreciated by all who made the 1989 Beach Cleanup a success.



Six tons of debris were removed from this beach on the uninhabited island of Kahoolawe, as part of Hawaii's "Get the Drift and Bag It."

## INTRODUCTION

---

In the fall of 1988, nearly 1,000 tons of trash were removed from America's beaches by more than 47,000 citizen volunteers--an impressive haul for three hours of work. More than 60 percent of the nearly 2,000,000 litter items collected were plastics, a lightweight, strong, and durable material that can become deadly when improperly disposed of in marine areas.

While the problem of debris in coastal areas has been one of graphic proportions, this volunteer effort illustrated just one more good reason why something should be done to stop the onslaught of trash on our coasts and shorelines.

Three months later, on December 31, 1988, an international treaty came into effect that put an end to dumping plastic trash from ships at sea. Known as Annex V of the International Convention for the Prevention of Pollution from Ships (or the MARPOL Treaty), the treaty prohibits at-sea dumping of plastic materials and regulates the distance from shore that all other solid waste materials may be dumped. To date, 40 countries have signed the treaty, including the United States. The Marine Plastic Pollution Research and Control Act of 1987 (Public Law 100-220, Title II) is the U.S. implementing legislation for Annex V.

During the following fall of 1989, the volunteer troops, which had grown in number to more than 65,600, returned to the beaches to assess the progress that had been made in the ten months since the international treaty had taken effect. But they did not find pristine beaches benefitting from the protective measures of Annex V. Rather, they again found hundreds of tons of trash.

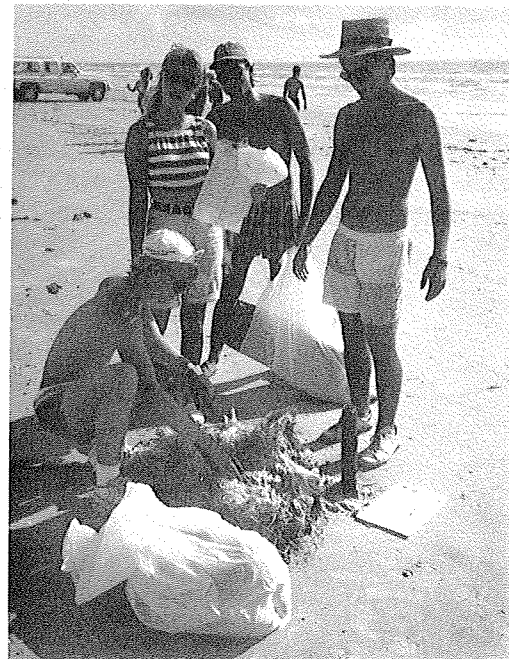
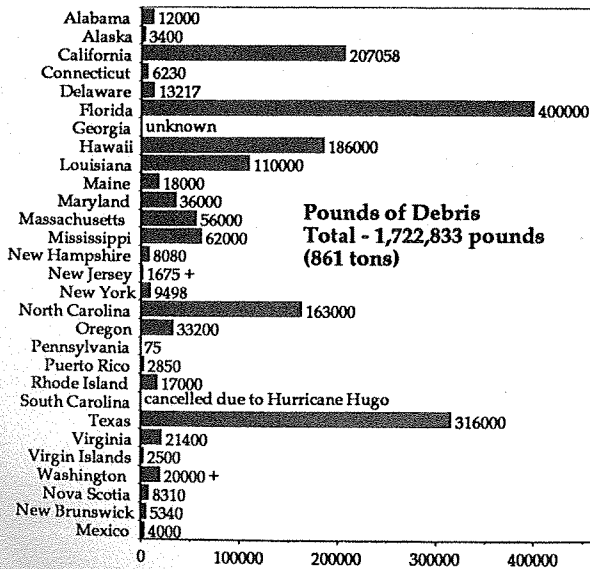
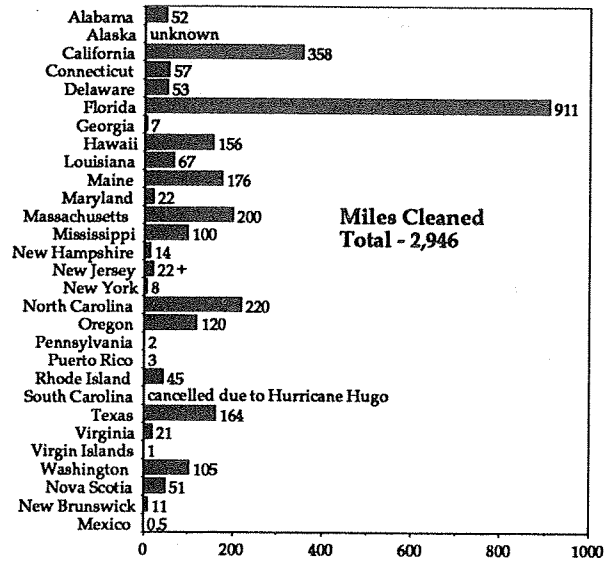
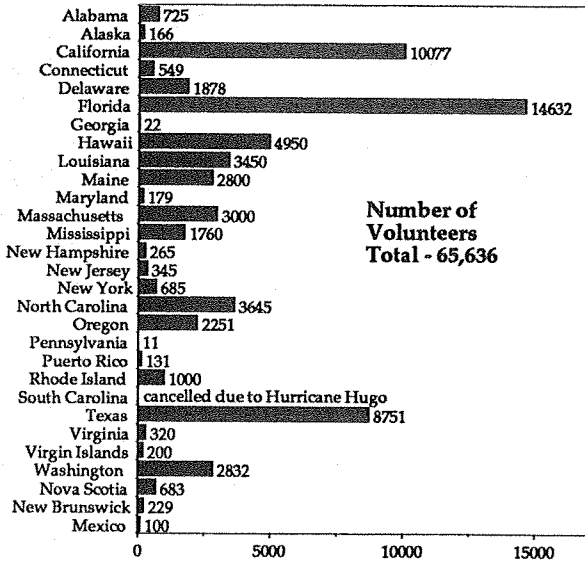
Perhaps those who continue to use our oceans as a waste receptacle are not aware of the new law. Maybe they do not know that their debris is not just unsightly, but that it is dangerous to human health and safety, and expensive for coastal communities burdened with repeated cleanup costs. Moreover, perhaps they do not realize that this trash kills thousands of marine mammals, sea turtles, seabirds, and fish every year that become entangled in plastic or ingest plastic junk mistaking it for food. This floating debris can also be a hazard to navigation by fouling propellers causing vessel damage and endangering boaters. Surely they are not considering the fact that the plastic they dump today will serve as an ugly reminder to future generations of our careless disregard for marine resources.

Or maybe those still dumping trash at sea do not care. Maybe they even think that the ocean is big enough to hide their actions. They are mistaken.

This report presents specific information compiled by more than 65,600 volunteers who have become very serious about protecting our coastal areas from environmental damage. It also shows that beach cleanup participants are becoming adept at identifying the sources of beach debris.

FIGURE 1.

Results from the 1989 Beach Cleanup



"+" indicates complete information not available

## RESULTS

---

In total, 65,636 volunteers participated in beach cleanups in 1989 in 25 U.S. states and territories including Alabama, Alaska, California, Connecticut, Delaware, Florida, Georgia, Hawaii, Louisiana, Maine, Maryland, Massachusetts, Mississippi, New Hampshire, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Puerto Rico, Rhode Island, Texas, Virginia, the U.S. Virgin Islands, and Washington (Figure 1). Due to landfall of Hurricane Hugo on September 22, 1989 in Charleston, the South Carolina statewide beach cleanup scheduled for the next day was canceled and participation in several other states was affected. The total number of volunteers that participated in 1989, however, increased in part because the "National" Beach Cleanup went "International": cleanups were conducted in two Canadian provinces, Nova Scotia and New Brunswick, as well as Cozumel, Mexico.

Beach cleanup volunteers covered a reported 2,946 miles of America's shoreline (including Canada and Mexico) and collected more than 860 tons of debris. Although the total amount of tonnage reported is less than 1988, the methods used to weigh debris varied among cleanups, and therefore the estimates of the weight are not exact. However, the amount of trash collected was not the focus of the 1989 Beach Cleanup. It is not enough to say that there is a lot of trash on our beaches--we already know this to be true. Rather, the questions these volunteers attempted to answer are what kinds of trash and where is it coming from.

### What is the Most Prevalent Type of Debris Found on America's Beaches?

To determine the types and quantities of debris found nationwide volunteers used a standardized data card that was developed by CMC with input from a network of beach cleanup coordinators. The data card was divided into eight major category types--plastic, glass, styrofoam<sup>1</sup>, rubber, metal, paper, wood, and cloth (Figure 2). In total, the data card listed 65 types of debris items. For all major material types, a category for "other" was included to insure that items not specifically listed on the data card would be recorded. Data cards also requested specific information on the sources of foreign debris items as indicated by product labels or other markings, observations of entangled or stranded marine wildlife, observations of peculiar debris items, comments, and the name and address of volunteers. Volunteers were also given a one page guide which gives information on how to use the data card, identifies (by photo) certain debris items listed on the card that may not be familiar to volunteers, and explains how their data would be used to compile a national assessment of beach debris (Figure 3). Spanish versions of the data card and guide were provided to cleanup volunteers in Puerto Rico and Cozumel.

In total, volunteers reported finding 3,013,778 debris items on U.S. beaches (Table 1). As in 1988, the amount of plastic reported surpasses all other categories, accounting for 1,895,502 of the items, or approximately 63 percent (Figure 4). In 1988, 62 percent of the debris collected nationwide was plastic, indicating that the composition of debris has remained essentially unchanged over the year.

The percentages of the remaining debris items collected in 1989 have also shown little change over the year with 11.1 percent glass, 10.6 percent metal, 9.8 percent paper, 2.4 percent wood, 2.0 percent rubber, and 1.3 percent cloth.

---

<sup>1</sup>The term "styrofoam" was used on the data card instead of the more technical term "foamed plastic" to assist volunteers in debris identifications. In data analyses, plastic and styrofoam items were grouped together and are referred to as "plastic."

## FIGURE 2. Data Card Used by 1989 Beach Cleanup Volunteers (front)

### BEACH CLEANUP DATA CARD

Thank you for completing this data card. Answer the questions and return to your area coordinator or to the address at the bottom of this card. This information will be used in the Center for Environmental Education's National Marine Debris Data Base and Report to help develop solutions to stopping marine debris.

Name \_\_\_\_\_ Affiliation \_\_\_\_\_  
 Address \_\_\_\_\_ Occupation \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ M \_\_\_\_\_ F \_\_\_\_\_ Age: \_\_\_\_\_  
 Today's Date: Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_ Name of Coordinator \_\_\_\_\_  
 Location of beach cleaned \_\_\_\_\_ Nearest city \_\_\_\_\_  
 How did you hear about the cleanup? \_\_\_\_\_

#### SAFETY TIPS

1. Do not go near any large drums.
2. Be careful with sharp objects.
3. Wear gloves.
4. Stay out of the dune areas.
5. Watch out for snakes.
6. Don't lift anything too heavy.

**WE WANT YOU TO BE SAFE**

Number of people working together on this data card \_\_\_\_\_ Estimated distance of beach cleaned \_\_\_\_\_ Number of bags filled \_\_\_\_\_

SOURCES OF FOREIGN DEBRIS. Please list all items that have foreign labels.

Country	Item Found
Example: <i>Mexico</i>	<i>plastic bottle - "Clarisol"</i>

STRANDED AND/OR ENTANGLED ANIMALS (Please describe type of animal and type of entangling debris. Be as specific as you can.)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

What was the most peculiar item you collected? \_\_\_\_\_

Comments \_\_\_\_\_

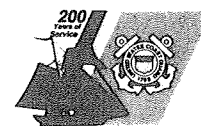
\_\_\_\_\_

**Thank you!**

**PLEASE RETURN THIS CARD TO  
YOUR AREA COORDINATOR  
OR MAIL IT TO:**

**Center for Environmental Education**  
1725 DeSales Street, NW  
Washington, DC 20036

**A Membership Organization**



## FIGURE 2. Data Card Used by 1989 Beach Cleanup Volunteers (back)

### ITEMS COLLECTED

You may find it helpful to work with a buddy as you clean the beach, one of you picking up trash and the other taking notes. An easy way to keep track of the items you find is by making tick marks. The box is for total items; see sample below.

egg cartons ||||| Total  
16 cups ||||| Total  
22

	Total number of items		Total number of items
<b>PLASTIC</b>		<b>STYROFOAM®</b> (or other plastic foam)	
bags:		buoys _____	<input type="checkbox"/>
trash _____	<input type="checkbox"/>	cups _____	<input type="checkbox"/>
salt _____	<input type="checkbox"/>	egg cartons _____	<input type="checkbox"/>
other _____	<input type="checkbox"/>	fast-food containers _____	<input type="checkbox"/>
bottles:		meat trays _____	<input type="checkbox"/>
beverage, soda _____	<input type="checkbox"/>	pieces:	
bleach, cleaner _____	<input type="checkbox"/>	larger than a baseball _____	<input type="checkbox"/>
oil, lube _____	<input type="checkbox"/>	smaller than a baseball _____	<input type="checkbox"/>
other _____	<input type="checkbox"/>	other (specify) _____	<input type="checkbox"/>
buckets _____	<input type="checkbox"/>	<b>RUBBER</b>	
caps, lids _____	<input type="checkbox"/>	balloons _____	<input type="checkbox"/>
cups, spoons, forks, straws _____	<input type="checkbox"/>	gloves _____	<input type="checkbox"/>
diapers _____	<input type="checkbox"/>	tires _____	<input type="checkbox"/>
disposable lighters _____	<input type="checkbox"/>	other (specify) _____	<input type="checkbox"/>
fishing line _____	<input type="checkbox"/>	<b>METAL</b>	
fishing net:		bottle caps _____	<input type="checkbox"/>
longer than 2 feet _____	<input type="checkbox"/>	cans:	
2 feet or shorter _____	<input type="checkbox"/>	aerosol _____	<input type="checkbox"/>
floats & lures _____	<input type="checkbox"/>	beverage _____	<input type="checkbox"/>
hardhats _____	<input type="checkbox"/>	food _____	<input type="checkbox"/>
light sticks _____	<input type="checkbox"/>	other _____	<input type="checkbox"/>
milk, water gallon jugs _____	<input type="checkbox"/>	crab/fish traps _____	<input type="checkbox"/>
pieces _____	<input type="checkbox"/>	55 gallon drums	
pipe thread protector _____	<input type="checkbox"/>	rusty _____	<input type="checkbox"/>
rope:		new _____	<input type="checkbox"/>
longer than 2 feet _____	<input type="checkbox"/>	pieces _____	<input type="checkbox"/>
2 feet or shorter _____	<input type="checkbox"/>	pull tabs _____	<input type="checkbox"/>
sheeting:		wire _____	<input type="checkbox"/>
longer than 2 feet _____	<input type="checkbox"/>	other (specify) _____	<input type="checkbox"/>
2 feet or shorter _____	<input type="checkbox"/>	<b>PAPER</b>	
6-pack holders _____	<input type="checkbox"/>	bags _____	<input type="checkbox"/>
strapping bands _____	<input type="checkbox"/>	cardboard _____	<input type="checkbox"/>
syringes _____	<input type="checkbox"/>	cartons _____	<input type="checkbox"/>
tampon applicators _____	<input type="checkbox"/>	cups _____	<input type="checkbox"/>
toys _____	<input type="checkbox"/>	newspaper _____	<input type="checkbox"/>
vegetable sacks _____	<input type="checkbox"/>	pieces _____	<input type="checkbox"/>
"write protection" rings _____	<input type="checkbox"/>	other (specify) _____	<input type="checkbox"/>
other (specify) _____	<input type="checkbox"/>	<b>WOOD</b> (leave driftwood on the beach)	
<b>GLASS</b>		crab/lobster traps _____	<input type="checkbox"/>
bottles:		crates _____	<input type="checkbox"/>
beverage _____	<input type="checkbox"/>	pallets _____	<input type="checkbox"/>
food _____	<input type="checkbox"/>	pieces _____	<input type="checkbox"/>
other (specify) _____	<input type="checkbox"/>	other (specify) _____	<input type="checkbox"/>
fluorescent light tubes _____	<input type="checkbox"/>	<b>CLOTH</b>	
light bulbs _____	<input type="checkbox"/>	clothing/pieces _____	<input type="checkbox"/>
pieces _____	<input type="checkbox"/>		
other (specify) _____	<input type="checkbox"/>		

(OVER)

# FIGURE 3. Marine Debris Guide Used by 1989 Beach Cleanup Volunteers (front)

## A GUIDE TO GOOD DATA COLLECTION

When you help at a beach cleanup, you'll be asked not only to remove marine debris, but to record on Data Cards the kinds and amounts of trash you find.


The information you record on these cards will be used by The Center for Environmental Education (CEE) in a national marine debris study to help policy makers on the state, federal and international levels develop solutions to ending the serious marine debris problems facing all coastal states.

Data collected since 1986 and analyzed by CEE has been used in reports, in testimony on Capitol Hill and at the International Maritime Organization meetings in London to determine how plastic trash will be handled by ships at sea and at ports all around the world.

### DATA COUNTS! . . . YOUR HELP WILL MAKE A DIFFERENCE!



### HELPFUL TIPS FOR DATA COLLECTORS:

1. Count items in groups of five like this , and record the total in the box.
2. Do not write the words "Lots" or "Many". Only numbers of items can be put into the computer.
3. Stranded Animals: In this section, please list animals you find stranded or dead on the beach and, if possible, any entangling debris items.
4. Sources: In this section, please list foreign items found and country, if identifiable.
5. Please leave natural items on the beach like driftwood, sea whip and seaweed. Avoid stepping on dune grass and plants. These things hold the sand and prevent erosion.
6. Work with a few people, have one person record the numbers while others collect and bag the trash.
7. Please return your data card to your area coordinator so that all your data will be added to state and national totals.



### National Marine Debris Data Base Sponsored By:



\*Copyright 1988, Center for Environmental Education, Inc.

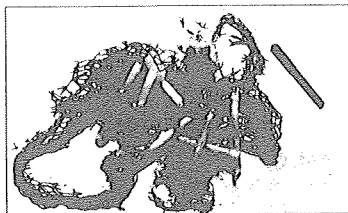
Return this card for future use

# FIGURE 3. Marine Debris Guide Used by 1989 Beach Cleanup Volunteers (back)

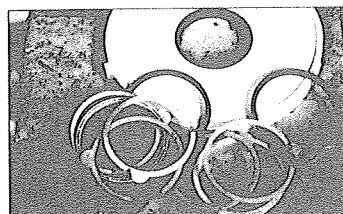
## GUIDE TO MARINE DEBRIS

The best data recording can be done if you know what the items listed on your cards look like.

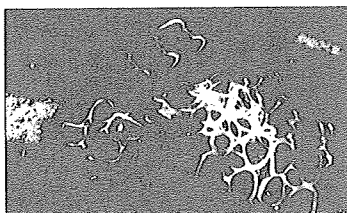
Here are some examples of unusual items you may find.



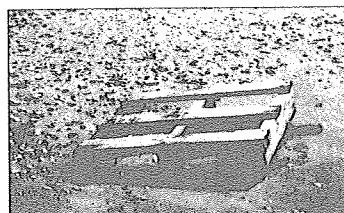
**Light Sticks.** Listed under plastic, these clear plastic tubes about 6 inches long are mostly used by fishermen. When new, the liquid will glow in the dark and attract fish to baited hooks.



**Write Protection Rings.** Listed under plastic, these are used on computer tapes on ships doing seismic testing.



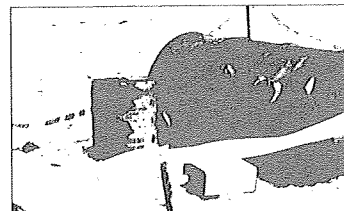
**6-Pack Rings.** Listed under plastic, these items are used to hold cans.



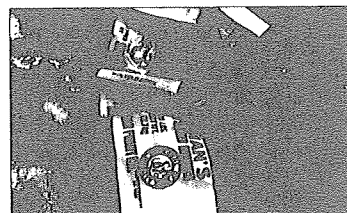
**Wooden Pallets.** Listed under wood, these items are used to help stack and transport cargo.



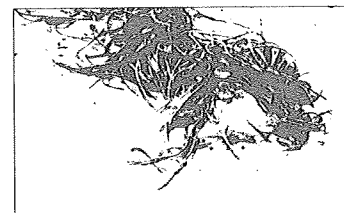
**Strapping Bands.** Listed under plastic, these strong, narrow, light-weight plastic bands are used to bind materials and boxes.



**55 Gallon Drums.** Listed under metal, these drums could contain dangerous chemicals. **Do not go near a drum** because the vapor or liquid could hurt you.



**Vegetable Sacks.** Listed under plastic, these large mesh bags are used to hold bulk quantities of onions, potatoes, or fruit.



**Sea Whip.** This yellow, orange or purple colony of animals is long, thin and has a dark string-like core. This may look like wire or rope, but it is a natural item found from North Carolina to the Gulf of Mexico. Please leave this on the beach.

### FOR YOUR SAFETY

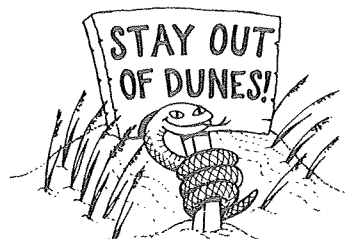
Do not approach any 55 gallon drums. They may contain dangerous liquids. Even the vapor could harm you. Leave the drum, but record it on your card.

Do not go into the dunes: snakes may be there.

Be very careful of broken glass and other sharp objects.

Wear gloves.

Don't lift anything heavy.



Copyright 1988, Center for Environmental Education, Inc.

**THANK YOU for your help and interest in keeping the coast and ocean safe for all of us and for marine wildlife!**

**TABLE 1.**

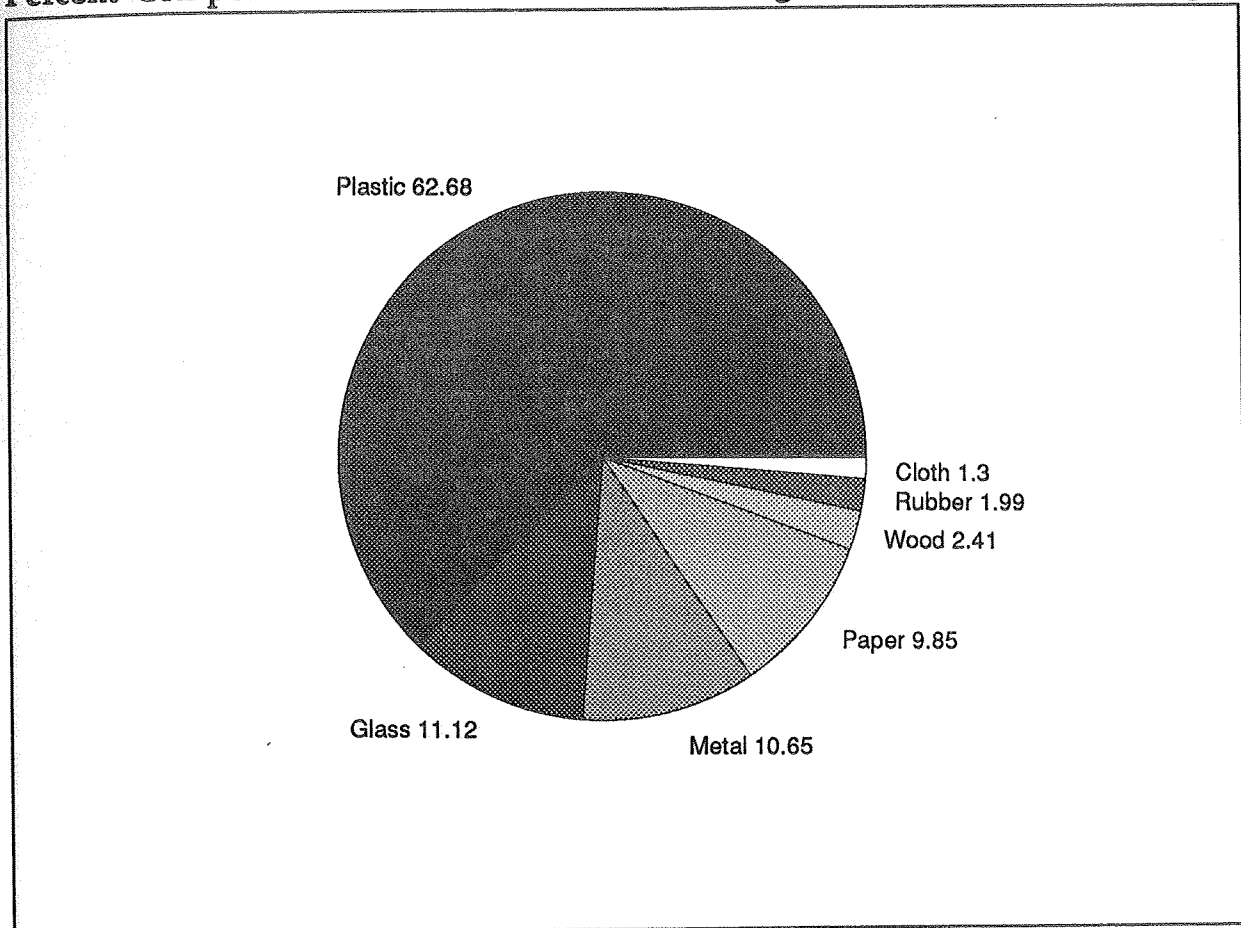
**Total Number of Debris Items Collected During 1989 U.S. Beach Cleanups**

<b>PLASTIC</b>		<b>STYROFOAM</b>	
Bags:		Buoys	11,313
trash	93,184	Cups	106,301
salt	3,983	Egg cartons	8,968
other	98,078	Fast-food containers	32,095
Bottles:		Meat trays	17,246
beverage, soda	78,015	Pieces:	
bleach, cleaner	24,782	large	48,730
oil, lube	17,597	small	197,364
other	28,008	Other	16,245
Buckets	8,557		
Caps, lids	145,938	<b>RUBBER</b>	
Cigarette butts	164,141	Balloons	18,251
Cups, spoons, forks, straws	170,805	Gloves	8,137
Diapers	7,741	Tires	5,191
Disposable lighters	14,767	Other	28,259
Fishing line	21,902		
Fishing net:		<b>METAL</b>	
longer than 2 feet	5,773	Bottle caps	68,249
2 feet or shorter	8,430	Cans:	
Floats & lures	9,109	aerosol	14,462
Hard hats	605	beverage	125,512
Light sticks	14,052	food	9,207
Milk or water gallon jugs	30,759	other	9,405
Pieces	242,119	Crab/fish traps	1,575
Pipe thread protector	3,762	55 gallon drums	
Rope:		rusty	2,356
longer than 2 feet	32,379	new	328
2 feet or shorter	58,985	Pieces	21,807
Sheeting:		Pull tabs	26,732
longer than 2 feet	6,640	Wire	11,869
2 feet or shorter	13,422	Other	29,434
Six-pack rings	35,090		
Strapping bands	18,610	<b>PAPER</b>	
Syringes	2,678	Bags	27,530
Tampon applicators	16,318	Cardboard	22,416
Toys	12,896	Cartons	20,275
Vegetable sacks	8,625	Cups	34,503
"Write protection" rings	4,204	Newspaper	14,792
Other	48,805	Pieces	142,110
		Other	35,228
<b>GLASS</b>		<b>WOOD</b>	
Bottles:		Crab/lobster traps	1,402
beverage	135,352	Crates	1,693
food	10,709	Pallets	2,099
other	4,293	Pieces	58,785
Fluorescent light tubes	2,531	Other	8,719
Light bulbs	8,095		
Pieces	167,657	<b>CLOTH (clothing, pieces)</b> 39,233	
Other	6,561		

**TOTAL = 3,013,778**

FIGURE 4.

Percent Composition of Debris Collected During 1989 U.S. Beach Cleanups



Plastics are still the most abundant type of debris found on the state level; every state reported that plastics were the most prevalent type of debris ranging from more than 76 percent in Pennsylvania to a low of 47 percent in Puerto Rico<sup>2</sup> (which also had the lowest amount of plastics in 1988) (Figure 5). In total, eleven states had more plastics than the national figure: Florida, Hawaii, Louisiana, Maryland, Massachusetts, New Jersey, New York, Oregon, Pennsylvania, Texas, and Virginia. States with large amounts of plastics in both 1988 and 1989 included Louisiana, New Jersey, New York, Oregon, and Texas.

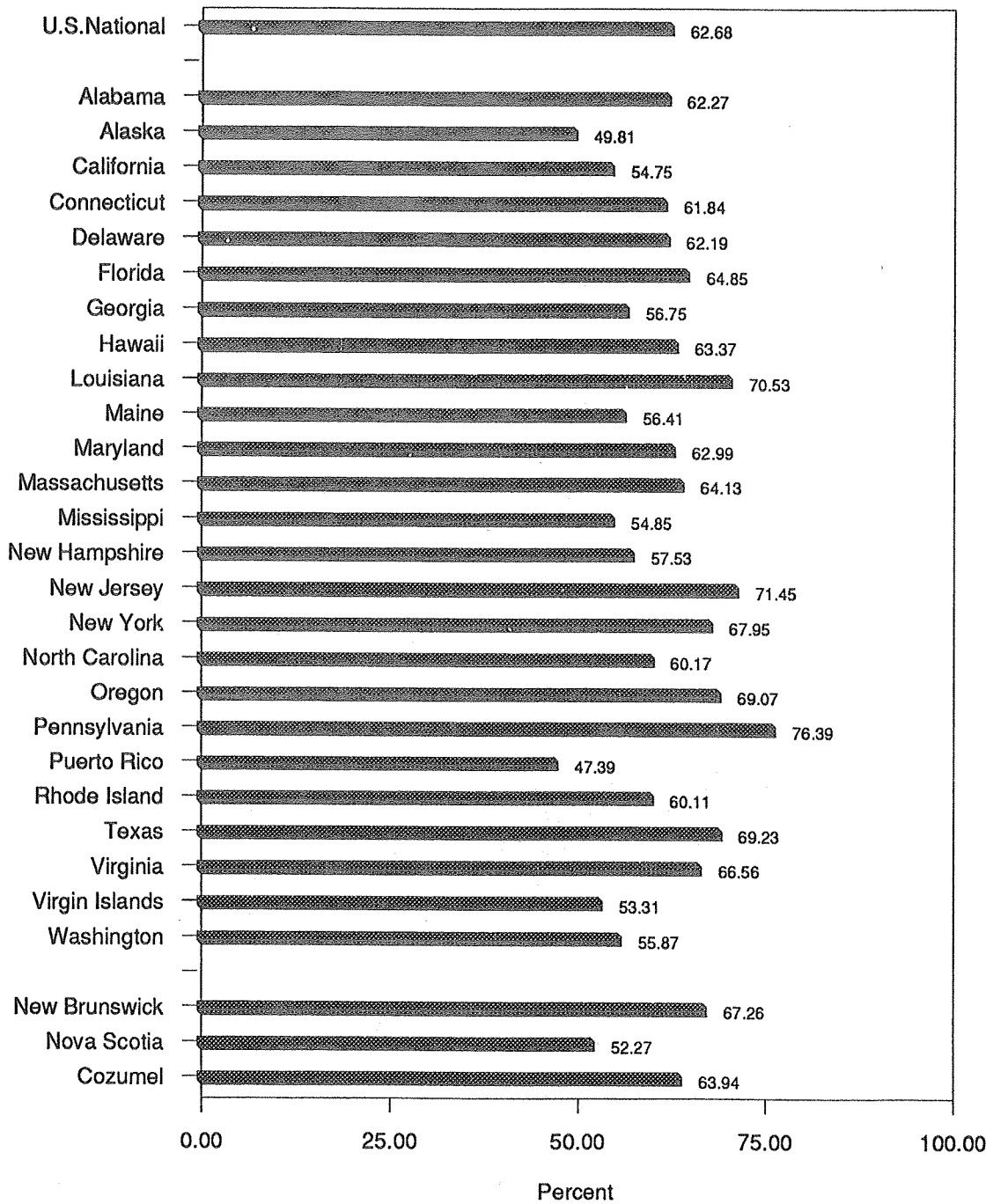
An additional 75,563 debris items were collected during the cleanups in Canada and Mexico bringing the total number of debris items collected on America's beaches to 3,089,341--in just three hours. Based on these cleanup results it is now evident that the prevalence of plastic beach debris is not a problem limited to the United States. Plastics accounted for approximately 67 percent of the debris collected in New Brunswick, 58 percent of the debris in Nova Scotia, and 61 percent of the debris in Cozumel<sup>3</sup>.

<sup>2</sup>For means of comparison, Puerto Rico and the U.S. Virgin Islands are treated presented in this reported as U.S. "states."

<sup>3</sup>Results of data collected during cleanups in Canada and Mexico are presented in this report under the section entitled "Canada and Mexico Analyses."

FIGURE 5.

Plastic Debris Collected During 1989 Beach Cleanups



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## The Dirty Dozen

In 1988, twelve specific types of debris received the dubious distinction of being named the "Dirty Dozen" of U.S. beaches. Essentially, these were the most common items found in coastal areas. And, with one exception, cigarette filters, the same items are reported for the "Dirty Dozen" 1989. These items are listed below. A comparison of 1988 and 1989 is given in Table 2.

1. plastic pieces (fragments of larger plastic objects)	242,119
2. small foamed plastic pieces (styrofoam-like)	197,364
3. plastic eating utensils including cups, spoons, forks and straws	170,805
4. glass pieces (fragments of glass objects)	167,657
5. cigarette filters (butts)	164,141
6. plastic caps and lids	145,938
7. paper pieces (fragments of paper items)	142,110
8. glass beverage bottles	135,352
9. metal beverage cans	125,512
10. foamed plastic cups (styrofoam-like)	106,301
11. miscellaneous plastic bags	98,078
12. plastic trash bags	93,184

Collectively, these twelve debris items constituted nearly 60 percent of all debris items recorded. If these items were eliminated from U.S. beaches, our beaches would be only about one-third as dirty as they are today. Other debris items reported in abundance included:

13. plastic soda bottles	78,015
14. metal bottle caps	68,249
15. plastic rope (2 feet or shorter)	58,985
16. wood pieces (fragments of larger wood items)	58,785
17. large foamed plastic pieces	48,730
18. cloth and pieces of clothing	39,233
19. plastic six-pack rings	35,090
20. paper cups	34,503
21. long pieces of rope	32,379
22. foamed plastic fast-food containers	32,095
23. plastic milk/water jugs	30,759
24. miscellaneous plastic bottles	28,008
25. paper bags	27,530

Besides those items specifically listed on the data card, volunteers reported finding just about everything imaginable on America's beaches--including Easter eggs, Christmas tinsel, explosives, inflatable dolls, a wedding contract, and several American flags. Many noted numerous pieces of men's and ladies' underwear to be "peculiar" and an assortment of personal hygiene and contraceptive devices as "disgusting." But not all the debris collected was trash. Several volunteers were rewarded for their efforts by finding treasure--a total of 76 dollars in all (not including one half of a 50 dollar bill found in California). Other valuable finds included an 18 karat gold ring and a silver olive fork found in Hawaii. Several volunteers reported finding fish tags from Canadian salmon, two of which were found on the east coast of Florida.

TABLE 2.

The Dirty Dozen of 1989

Rank*	Total Number Reported	Percent of Total Debris Collected
1. (1) plastic pieces	242,119	8.03
2. (2) small foamed plastic pieces	197,364	6.55
3. (3) plastic eating utensils (cups, spoons, forks and straws)	170,805	5.67
4. (11) glass pieces	167,657	5.56
5. (*) cigarette filters (butts)	164,141	5.45
6. (7) plastic caps and lids	145,938	4.84
7. (8) paper pieces	142,110	4.72
8. (6) glass beverage bottles	135,352	4.49
9. (4) metal beverage cans	125,512	4.16
10. (5) foamed plastic cups	106,301	3.53
11. (10) miscellaneous plastic bags	98,078	3.25
12. (9) plastic trash bags	93,184	3.09
<b>TOTAL</b>	<b>1,298,031</b>	<b>59.34</b>

\* numbers in parenthesis indicate rank in 1988. Cigarette filters were not recorded as a separate debris item in 1988 (see "A New Debris Item Worthy of Note—Cigarette Filters").

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Last year, 11 bottles were found with notes inside. These messages are still washing to our shoreline: in 1989 nine bottles with notes were reported. A Maryland volunteer, for instance, found a wine bottle sent from an author in Pennsylvania and responded with a postcard from Ocean City, Maryland. Two California volunteers found bottles with notes including one that had been tossed off the Golden Gate Bridge by a visitor from England while the other had a note dated from 1982 stating "Help me, I'm lost at sea. If you find me I will grant you a wish." In addition, a bottle found on Seapoint Beach, Maine contained a "Hello from Rick and Claudine from Boothbay Harbor" and a rum bottle found in Texas enclosed this message: "For a good time go to Taft and find Ken."

### **An Update on Bottle Bills**

Bottles and associated goods are again a prevalent category of wastes found on U.S. beaches. This includes plastic, glass, and metal beverage cans and bottles, in addition to plastic six-pack rings, metal bottle caps, and metal pull tabs. Collectively, bottles and associated goods constituted nearly 16 percent of all debris items reported in 1989 as compared to 17 percent in 1988.

The highest amount of bottles and associated goods was found in the Virgin Islands with approximately 26 percent (Figure 6). The ten states with the largest amounts of bottles and associated goods were, in order of greatest abundance: the Virgin Islands; Washington; New Jersey; Georgia; Puerto Rico; North Carolina; Alabama; Mississippi; Florida; and Rhode Island. It is of interest to note that none of these states have enacted beverage container deposit laws, or "bottle bills," in which a few cents are added to price of the beverage. This deposit is refunded when the container is returned by the consumer.

In contrast, Oregon, which has bottle bill legislation, defended its 1988 title by again having the lowest amount of bottles and associated goods with approximately 7 percent. Other states with notably fewer amounts of these wastes were Alaska, Connecticut, Maine, Massachusetts, and Pennsylvania; of these states Connecticut, Maine, and Massachusetts have also enacted bottle bills.

However, as was apparent in 1988, some states with bottle bill legislation, such as Delaware and New York, have higher amounts of bottle goods as compared to the national figure. In Delaware however, metal beverage cans (the second most common debris item reported) are not included in the state bottle bill legislation.

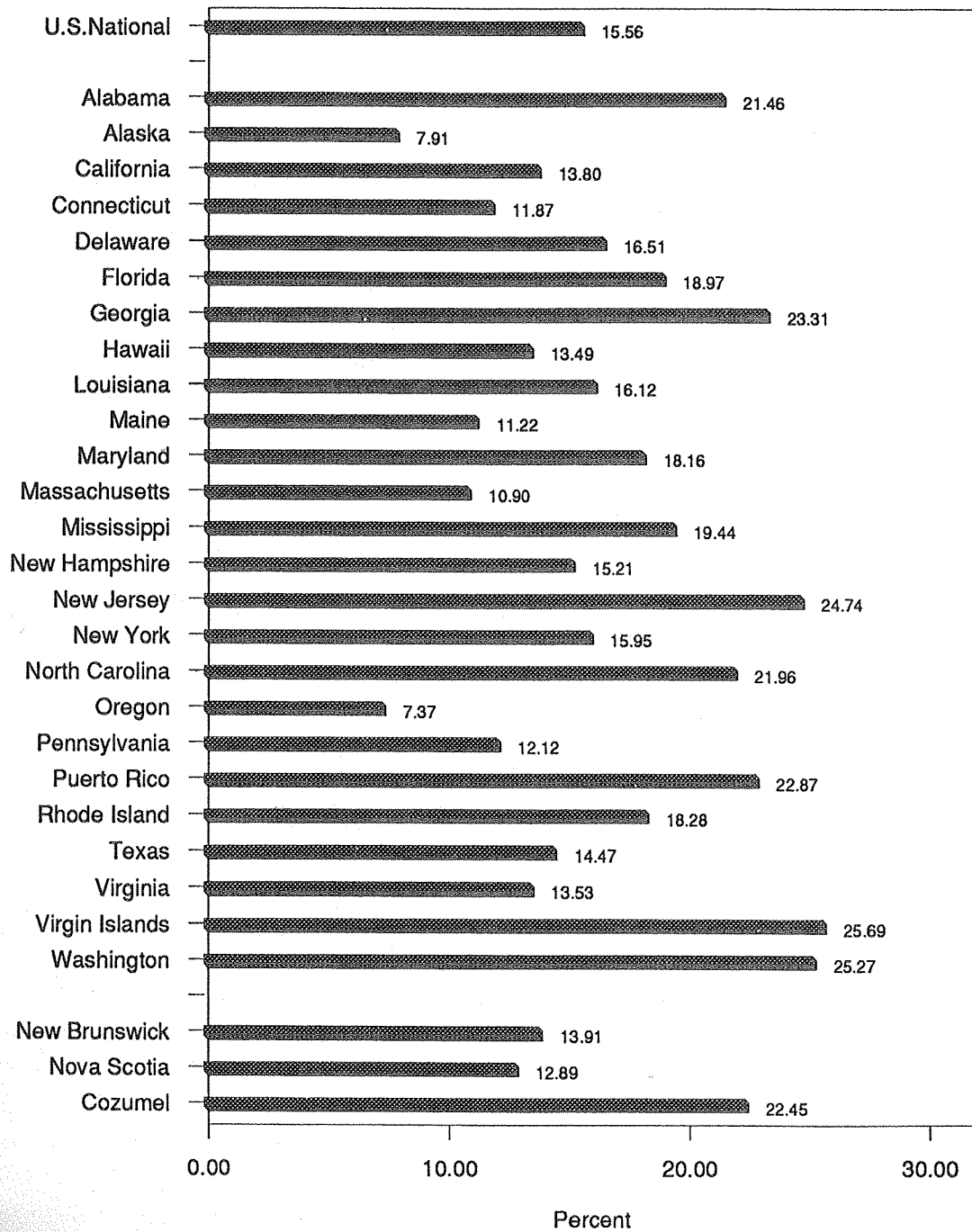
As compared to U.S. beaches, bottles and associated goods appear to be slightly less abundant in Canada, accounting for nearly 14 percent of the debris collected in New Brunswick and 13 percent in Nova Scotia. However, the problem is more severe in Cozumel, Mexico where more than 22 percent of all debris collected were bottles and associated goods.

### **An Update on Degradable Plastics**

Small pieces or fragments of plastic are still the most common items found on America's beaches. In recent years, we have heard much about degradable plastics technology. However, this technology should not be considered a solution to the marine debris problem. Degradable plastics do not just disappear--they merely break down into smaller and smaller plastic pieces. Moreover, degradable plastics do nothing to mitigate the problem of ingestion of plastic pieces by marine wildlife. In fact, increased usage of degradable plastics may compound the problem of ingestion.

FIGURE 6.

Bottles and Associated Goods Collected During 1989 Beach Cleanups



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However, certain items, such as degradable plastic six-pack rings may help to reduce the time during which a marine animal may become entangled, and several states have enacted legislation that require six-pack rings to be photodegradable. "Photodegradable" plastics degrade upon exposure to ultraviolet light (as opposed to "biodegradable" plastics that are combined with starch which can be eaten by microorganisms). Interestingly, of the 35,090 plastic six-pack rings collected nationwide, the highest percentages of six-pack rings were found in Texas and Washington, two states that do not have degradable six-pack legislation (Table 3). In fact, of the nine states with higher numbers of plastic six-pack rings as compared to the national figure, six do not have degradable six-pack legislation. Additionally, Florida's legislation did not take effect until just two months prior to the beach cleanup which may explain the high number of plastic six-pack rings in this state.

On the other hand, seven states without degradable plastic six-pack ring legislation had fewer six-pack rings compared to the national figure. Therefore, it is difficult to conclude at this time whether degradable six-pack ring requirements are the cause for fewer plastic six-pack rings as beach debris.

### **What Goes Up, Does Come Down**

There have been numerous reports that marine animals, particularly sea turtles, ingest balloons mistaken for real food. Because of this problem, the state of Florida has enacted legislation banning mass balloon releases, and several other coastal states, including Virginia, Delaware, and California have considered similar legislation.

During the 1989 beach cleanup, 18,251 balloons were reported on U.S. beaches. Another 251 balloons were reported in Canada. Balloons were twice as abundant than the national figure in the states of Pennsylvania, Massachusetts, and Delaware, four times more prevalent in Maryland, and five times greater in Virginia. Since balloons launched in coastal areas are likely to come down in marine areas, coastal states should carefully assess the need for mass balloon launches. For example, one volunteer in Palm Beach County, Florida, reported finding a balloon from Bimini, Bahamas. Other reports of balloons traceable to their point of origin included one from Pennsylvania found on Beach Plum Island, Delaware, and two balloons found on uninhabited Matagorda Island in Texas imprinted with the name of "Chevron." And while Florida has banned balloon launches, beach cleanup volunteers in this state found several balloons traceable to specific sources including Carnival Cruise Lines, "Chuck E. Cheese Pizza Time Theatre," and 62 balloons from the Olive Garden Restaurant (a restaurant chain), 50 of which were found on the Gulf coast of Florida, while the other 12 were found on the east coast.

### **A New Debris Item Worthy of Note--Cigarette Filters**

Picking trash up off the beach while recording data is no easy task. But one way to frustrate a beach cleanup volunteer is to clean a beach that has apparently been mistaken for an ashtray. This seems to be a common occurrence on America's beaches, based on the 164,141 cigarette filters that were reported nationwide. Although cigarette filters were not specifically listed on the data card, many volunteers made their own line for this item. Therefore, even more cigarette filters were probably collected.

Most cigarette filters are made of cellulose acetate which is a synthetic material (a material that does not occur naturally). Cigarette filters are classified as plastics and fall within the definition of plastics under MARPOL Annex V. Many volunteers who reported cigarette filters, however, recorded this information under the category of paper. Perhaps this is why cigarette filters are so abundant on our beaches: people think filters are paper and will degrade rapidly.

This new information on the abundance of cigarette filters on our beaches indicates the need to educate smokers about their contribution to the debris problem. A suggested name for this new campaign is "Get Your Butt Off the Beach!"

TABLE 3.

Percentage of Plastic Six-Pack Rings Collected During 1989 Beach Cleanups

Rank	Percent of Total Debris Collected	Degradable Legislation as of September 1989
1. Texas	2.54	No
2. Washington	2.04	No
3. Mississippi	1.68	No
4. New Jersey	1.51	Yes (effective 4/21/86)
5. Virgin Islands	1.45	No
6. Rhode Island	1.39	Yes (effective 7/1/87)
7. Florida	1.37	Yes (effective 7/1/89)
8. Alabama	1.34	No
9. Louisiana	1.33	No (effective 1/1/91)
U.S. National	1.16	
10. New York	.93	Yes (effective 9/12/83)
11. Alaska	.84	Yes (effective 10/1/81)
12. Hawaii	.78	No (effective 1/1/90)
13. Delaware	.77	Yes (effective 1/15/83)
Puerto Rico	.77	No
14. California	.73	Yes (effective 11/1/82)
15. Virginia	.68	No
16. Oregon	.62	Yes (effective 9/1/78)
17. North Carolina	.61	No (effective 1/1/90)
18. Massachusetts	.53	Yes (effective 1/17/83)
19. Maryland	.50	No
20. Connecticut	.45	Yes (effective 10/1/84)
21. New Hampshire	.42	No
22. Maine	.41	Yes (effective 1/1/78)
23. Pennsylvania	.28	Yes (effective 10/1/88)
24. Georgia	.19	No

\* Note: Additional states that have enacted degradable plastic six-pack rings to date include: Vermont (effective 1/1/77); Minnesota (effective 1/1/89); Michigan (effective 6/1/89); Iowa (effective 7/1/89); North Dakota (effective 7/1/89); Wisconsin (effective 1/1/90); Missouri (effective 1/1/91); Nebraska (effective 1/1/91); and South Dakota (effective 1/1/91).

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## Sources of Beach Debris

The majority of debris items found on U.S. shorelines are packaging and disposable plastic products. Since these wastes may be generated by a diversity of ocean and land-based sources many items cannot be traced to a single source. Certain debris items listed on the data card, however, were used as "indicator items" traceable to specific debris sources. These indicator items were first identified by CMC in 1986 with the assistance of the Texas Coastal Cleanup Steering Committee which included representatives of marine industry groups who were familiar with the types of debris that could potentially be generated by industry members. For instance, plastic cyalume light sticks were identified by representatives of the fishing industry as items generated by longline fisheries, and write-enable protection rings were identified by petroleum industry representatives as coming from the computer tapes used by vessels conducting seismic activities.

Using this information, CMC identified 28 indicator items which fall under four categories: 1) galley-type wastes generated by vessels, 2) fishing and boating gear, 3) operational wastes generated by vessels and offshore petroleum operations, and 4) sewage-associated wastes indicative of inadequate sewage treatment practices. In addition, a fifth category of medical wastes which includes plastic syringes was established due to the publicity these items have received. It is important to recognize that there is variability in the sources of some indicator items in different parts of the country. For instance, plastic trash bags which are used as an indicator of galley wastes from vessels at sea may also be generated by people who have illegally dumped household wastes on a beach. Therefore, while preliminary information can be used to provide a means of comparison on a national level, it will be important for government, industry, and other groups in each state and locality to assess the data reported from their area in terms of potential sources of debris items.

In 1988, these 28 indicator items accounted for more than 16 percent of the debris reported nationwide. In 1989, these debris items accounted for a nearly equal amount, 15 percent (Figure 7). This information should not be interpreted to mean that these are the only wastes generated by offshore sources. Rather, the presence of indicator items may show that some of the untraceable debris items, such as disposable plastic products and packaging, may also be generated by these sources.

Data cards returned this year indicated that beach cleanup volunteers are becoming particularly conscientious about identifying sources of debris. In several cases, volunteers provided detailed descriptions of certain debris items such as a cup found in Texas that apparently came from Conoco, a petroleum company (Table 4). While not all of these debris items may have been generated by the sources indicated by volunteers, this information demonstrates that citizens are becoming increasingly serious about data collection. An overview of each category of indicator items follows.

### *Galley Wastes*

The amount of trash attributed to galleys of ships has decreased, but only slightly. This includes findings of plastic trash bags, bleach and cleaner bottles (including one 6-gallon plastic dish washing bottle from the U.S. Navy), milk and water jugs, vegetable sacks, egg cartons, and meat trays. In 1988, galley wastes were the most prevalent category of indicator items reported, accounting for approximately 8 percent of the trash collected nationwide. In 1989, galley wastes accounted for approximately 6 percent. It is hoped that this is just the beginning of a downward trend. Yet the prevalence of these items in specific areas of the country has not changed. As in 1988, Louisiana again has the highest concentration of galley wastes with nearly 14 percent--more than two times greater than the national figure (Figure 8). And plastic milk and water jugs were the most common galley-type waste reported in this state for a second year in a row. Texas had the second highest amount of galley wastes with 10 percent (Texas was also ranked second in 1988). One of the more unusual galley waste items reported was an egg carton found at Padre Island National Seashore, Texas, that not only had all 12 eggs intact, but apparently had been afloat at sea long enough to be covered by barnacles.

TABLE 4.

Potential Sources of Debris Reported During 1989 Beach Cleanups

*Galley Wastes*

Location Found	Type of Debris	Source Indicated
California San Diego County	6-gallon plastic dish washing Compound #7930-00-880-4754	U.S. Navy
Rhode Island Middletown	35 cups	from the <i>Del Lemonade</i> out of Newport
Texas Port Aransas	cup from "Conoco-TLWP" 1750' Heerema Taylor O.I	Conoco

*Fishing/Boating Gear*

Location Found	Type of Debris	Source Indicated
Maryland Assateague Island	clam tag NMFS #0021967	unknown
Oregon Yachats to Waldport	3 crates	Newport Shrimp Company
Yachats to Waldport	wood crate	Riverside Fish Company
Yachats to Waldport	plastic bait container	Jerry Williams Bait (437-2188)
Texas Rockport	large plastic buoy	Resinex of Italy, Serial #8482
Virginia Oceanview	plastic bait bag	Jack's Bait and Squid (with address)

*Operational Wastes*

Location Found	Type of Debris	Source Indicated
California San Francisco Co. San Diego County	plastic drum lid wood pallet	Letica Corporation, Rochester Harper & Row, La Jolle Shores Beach
San Diego County San Diego San Diego	wood damage control plug 3 hearing protective devices dust masks	U.S. Navy U.S. Navy U.S. Navy
Texas Galveston Bay City Padre Island N.S. Port Aransas Corpus Christi	marine industrial chemicals hard hat blue strapping #0091848 strapping large plastic sheet	Gyro Chemicals Equipment, Houston Aggreko, Inc. Lykes Brothers Steamship Company Lykes Brothers Steamship Company <i>Esso Baltimore</i>

TABLE 4 (continued).

Potential Sources of Debris Reported During 1989 Beach Cleanups

*Medical Wastes*

Location Found	Type of Debris	Source Indicated
Florida Palm Beach County Broward County	medicine bottle with pills plastic arm tags	U.S. Navy, <i>USS John F. Kennedy</i> Tamarac Hospital

*Other*

Location Found	Type of Debris	Source Indicated
California Alameda County	shipping labels	San Francisco Bulk Mailing Center
Delaware Beach Plum Island	balloon	Pennsylvania
Florida Martin County Palm Beach County Franklin County Pinellas County Charlotte County	12 balloons balloon 50 balloons balloon plastic suntan bottle	Olive Garden Restaurant Bimini Olive Garden Restaurant Chuck E. Cheese Pizza Time Theatre Hotel Beach Club, Cancun
Maine Old Orchard Beach	plastic bread tray	Table Talk Pie Company
North Carolina Wrightsville	balloon	Hanover Center
Texas Matagorda Island Port Aransas Galveston  Galveston	2 balloons 30 meat order papers bag with address of USCG, Houston, TX 77828 chemical canister, biological mask Lot# 1DL85K001-978 DAAA09-8C-G-2005 P.O.0041	Chevron Ditta Meat Packing, Pasadena U.S. Coast Guard unknown
Washington Moclips-Ilwaco	blue plastic tag #184715	unknown
Nova Scotia, Canada	mail reply card for tracking currents	Bedford Institute of Oceanography, Nova Scotia

FIGURE 7.

Indicator Items Reported from 1989 Beach Cleanups

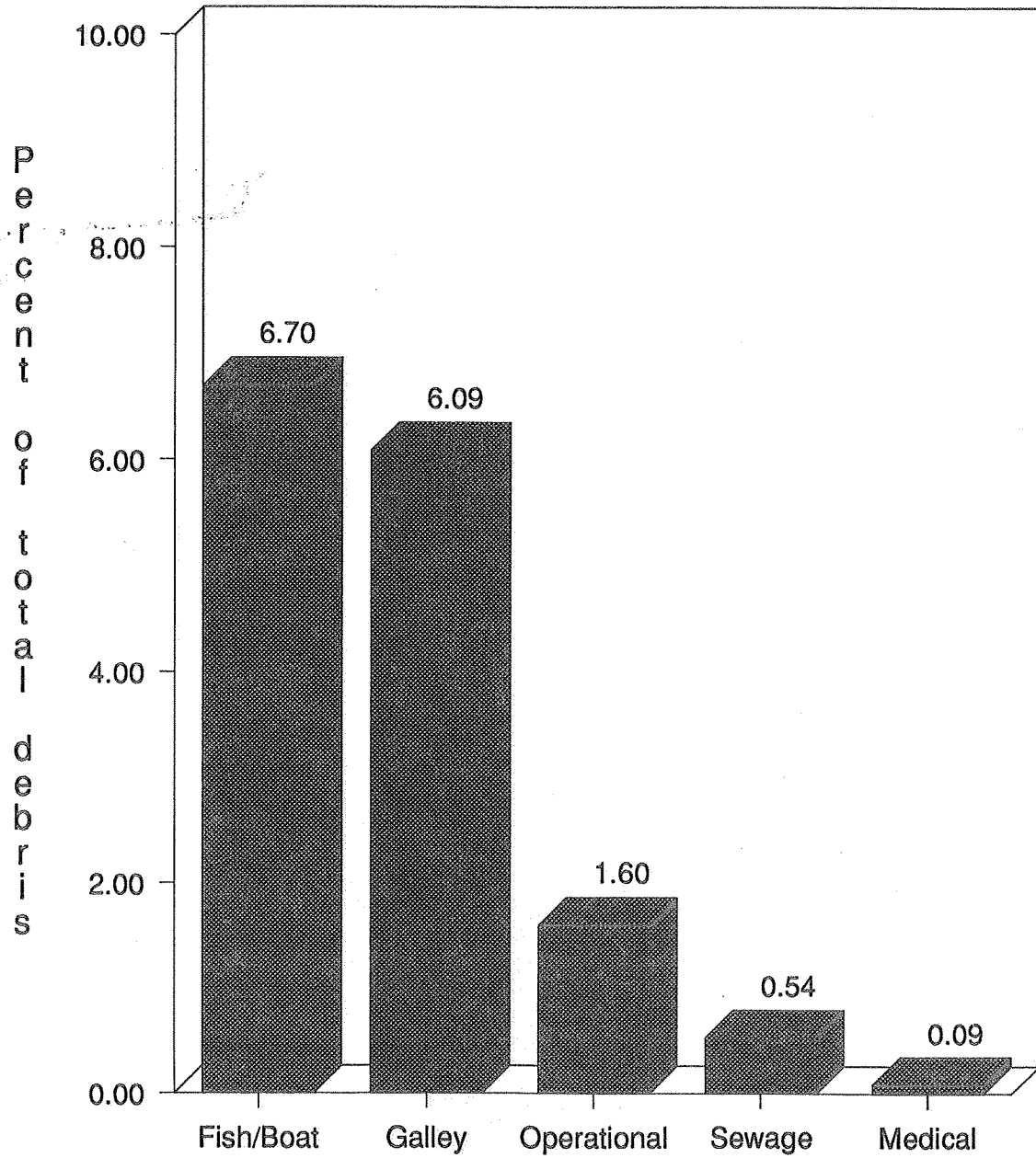
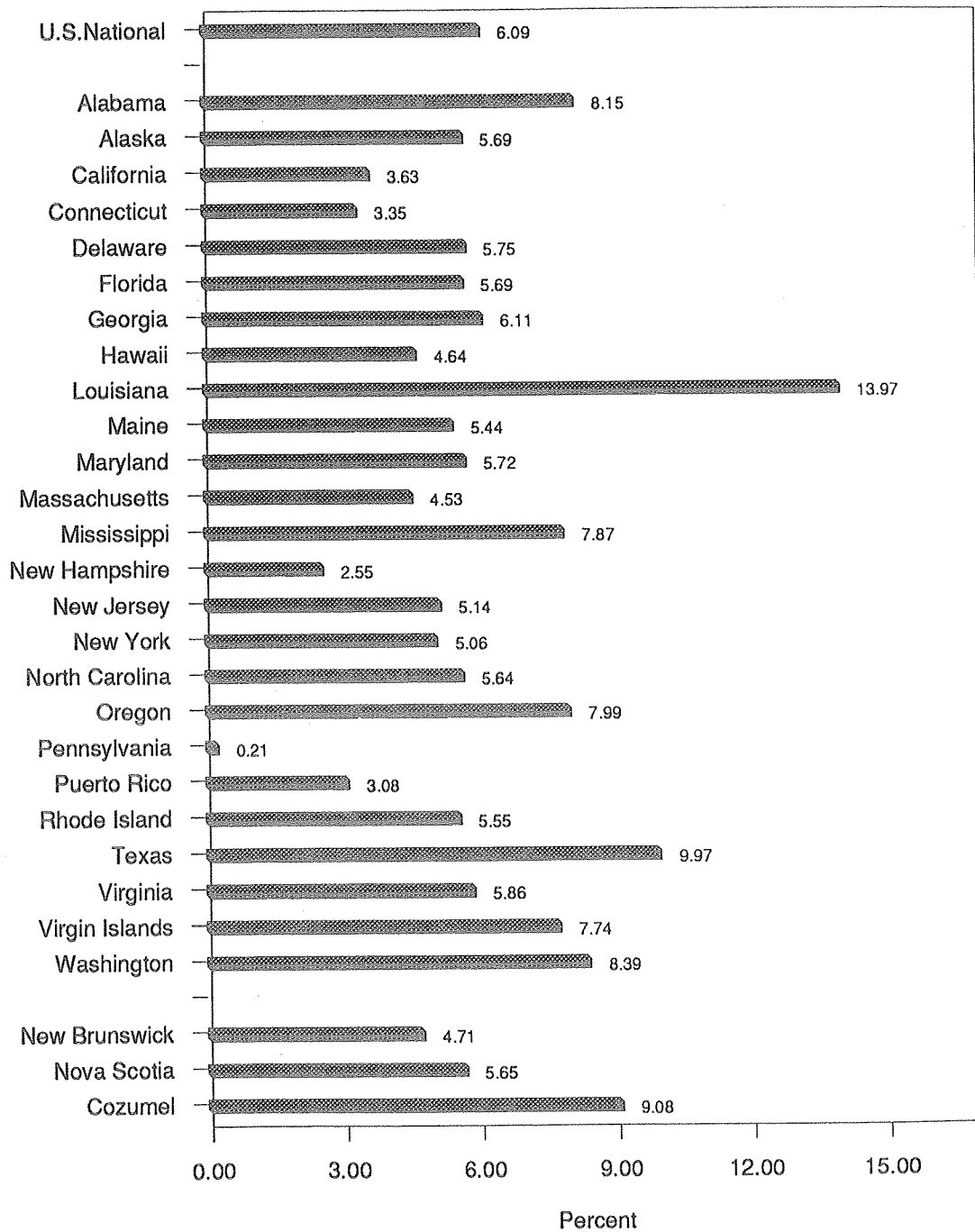


FIGURE 8.

Galley Wastes Collected from 1989 Beach Cleanups



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Other states with comparatively high amounts of galley-type wastes were Washington, Alabama, Oregon, Mississippi, the Virgin Islands, and Georgia. As in 1988, this information indicates that states that border the Gulf of Mexico, the North Pacific, and islands such as those cleaned in Georgia and the Virgin Islands appear to be the most affected by offshore dumping of galley wastes.

Galley wastes are nearly equal in abundance in Canada as compared to U.S. beaches: galley wastes accounted for approximately 6 percent of all debris items in Nova Scotia and 5 percent in New Brunswick. Cozumel, on the other hand, had more galley wastes than the U.S. national figure with approximately 9 percent. It is particularly noteworthy that 202 plastic trash bags, 187 plastic bleach and cleaner bottles, 166 plastic milk and water jugs, and 32 plastic vegetable sacks were found on the one-half mile of beach cleaned in Mexico.

#### *Wastes Attributable to Recreational and Commercial Fishing and Boating*

The amount of fishing and boating gear found on our beaches showed little change. In 1988, wastes generated by commercial and recreational fishermen accounted for 6.1 of the total number of debris items reported. In 1989, 6.7 percent, was attributable to these groups. This includes plastic salt bags used by commercial fishermen in preparing their catch, plastic fishing nets, light sticks, floats and lures, buoys, rubber gloves, and metal and wood traps. Other items commonly used by fishermen and boaters are fishing line, plastic rope, and motor oil and lubricant bottles.

The most commonly reported debris items in this category in both years were large and small pieces of plastic rope, followed by pieces of plastic fishing line. Both are known to kill marine wildlife through entanglement and ingestion. In Florida, beach cleanup volunteers collect fishing line separately so that it can be weighed and measured; a total of 467 miles was collected on 911 miles of Florida coastline in 1989; an additional 305 miles of fishing line was collected from 915 miles in 1988.

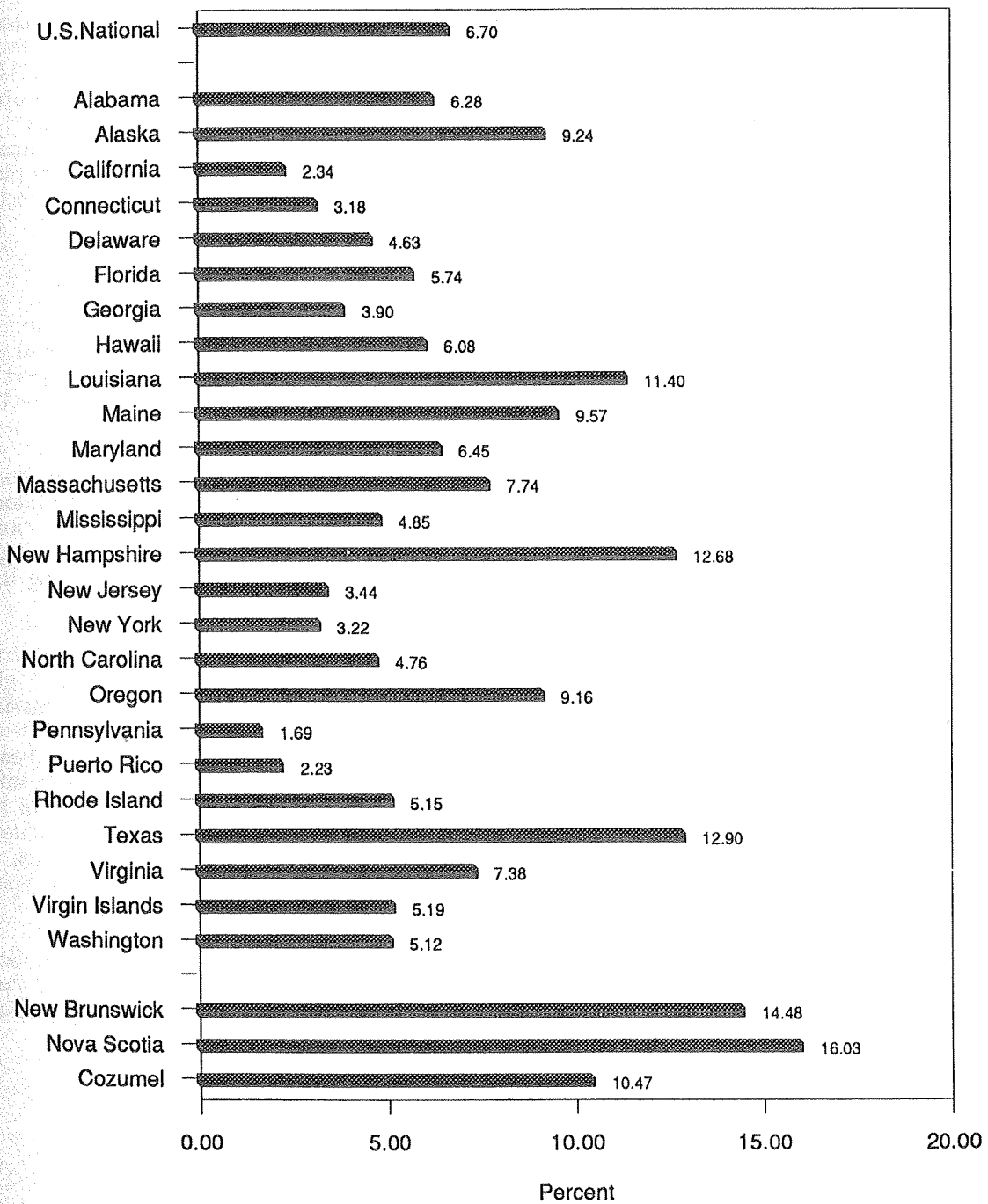
Information recorded on the length of plastic fishing nets and rope indicates that the distinction between the size of these debris items was not significant in 1988 or 1989, although pieces two feet in length or shorter are slightly more common. In many cases, shorter pieces of rope and net may actually indicate intentional discard of these items as waste materials, while larger pieces may indicate accidental losses. However, smaller pieces of rope may also result from breakage due to weathering, or from accidental losses due to collisions with boat propellers. In any case, it is unfortunate to note that larger pieces of these materials, which are more likely to pose a threat to marine wildlife in terms of entanglement, are nearly equal in abundance to smaller pieces.

Texas has replaced Maine as having the highest concentration of boating and fishing wastes in the United States, with rope pieces being the most common debris item found. In general, fishing and boating gear appear to be most prevalent in four regions: in states bordering the western Gulf of Mexico, namely Texas and Louisiana; the North Atlantic states of Maine, New Hampshire, and Massachusetts; at the mouth of the Chesapeake Bay in Virginia; and the North Pacific states of Oregon and Alaska. As in 1988, fishing and boating wastes appear to be least abundant in California, Connecticut, Pennsylvania, and Puerto Rico (Figure 9).

Compared to the United States, fishing and boating gear accounts for an even greater amount of debris in Canada with more than 14 percent of these wastes reported among debris collected in New Brunswick and 16 percent in Nova Scotia. Cozumel also had more of this type of trash than the United States with more than 10 percent. This may be attributed to the fact that neither Canada nor Mexico are signatory to the MARPOL Treaty.

FIGURE 9.

Fishing and Boating Gear Collected During 1989 Beach Cleanups



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## Operational Wastes

While Annex V of the MARPOL Treaty regulates the discharge of galley wastes, and fishing and boating gear, it also applies to wastes generated during offshore operations, such as petroleum industry activities, or gear and equipment used on cargo vessels. These wastes are classified as operational wastes and accounted for approximately 2 percent of the debris collected in 1988. In 1989, the amount of operational wastes was essentially the same with 1.6 percent. This included 18,610 plastic strapping bands and 6,640 large pieces of plastic sheeting used to bind boxes and crates (including a piece of sheeting from the ship the *Esso Baltimore*), 1,693 wooden crates, and 2,099 wooden pallets used to transport materials and packages (such as the pallet from "Harper and Row of La Jolle" found in San Diego). Other items attributable in part to offshore operations and vessels included the 8,095 glass light bulbs and 2,531 fluorescent light tubes. Items specifically traceable to petroleum industry operations included the 3,762 plastic pipe thread protectors and 4,204 plastic write-enable protection rings. In addition, many of the 605 plastic hard hats found were probably generated by petroleum operations conducted offshore including the hard hat embossed with "Aggreko, Incorporated" found in Texas.

Washington had the highest amount of operational wastes with approximately 5 percent (Figure 10). Neighboring Oregon also had a high amount. The most abundant type of operational waste found in both of these states were plastic strapping bands. But while operational wastes are generally thought to be generated by cargo vessels and petroleum operations, Oregon's volunteers reported that three crates were marked from the Newport Shrimp Company, while another was from Riverside Fish Company thus indicating that commercial fishing operations account for a portion of the operational wastes in this state.

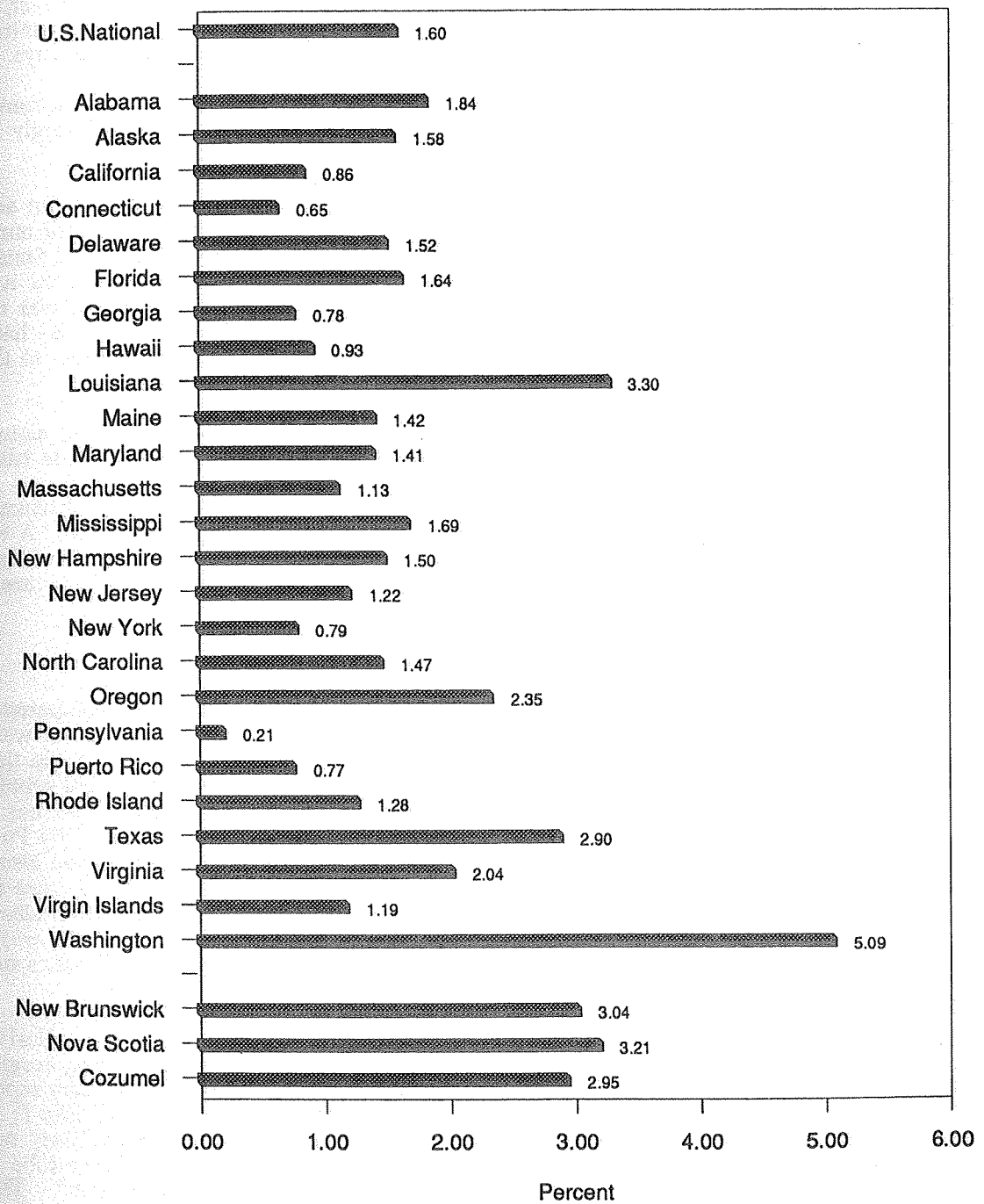
Other states with relatively high concentrations of operational waste included all states bordering the Gulf of Mexico, namely Alabama, Florida, Louisiana, Mississippi, and Texas in addition to Virginia. Operational wastes were also relatively abundant in Cozumel accounting for close to 3 percent of the debris collected. The abundance of operational wastes in states bordering the Gulf of Mexico is attributed to extensive petroleum operations and commercial shipping traffic. Virginia's beaches are also exposed to extensive shipping through the Chesapeake Bay.

In the Gulf of Mexico, while plastic strapping bands were the most abundant operational waste found in Florida and Texas (including straps from Lykes Brothers Steamship Company), glass light bulbs were the most abundant type of operational wastes found in Alabama, Louisiana, and Mississippi. Unfortunately, MARPOL Annex V allows for the discharge of non-plastic items, such as glass light bulbs, beyond 12 miles from land. And while the Gulf of Mexico has a heavy concentration of shipping traffic, it is also a unique repository of marine debris, due to infrequent flushing actions of tides and currents. Therefore, the protective measures of Annex V of the MARPOL Treaty may not be sufficient to reduce the marine debris problem and eliminate items, such as glass light bulbs, from washing ashore on Gulf coast beaches. For these reasons, U.S. and international authorities are currently considering designating the Gulf of Mexico as a "Special Area" that would also prohibit dumping of non-plastic garbage.

Operational wastes appear to be least abundant in the states of California, Connecticut, Georgia, Hawaii, New York, Pennsylvania, and Puerto Rico. With the exception of Georgia and Puerto Rico, this was also true in 1988. Operational wastes were more prevalent in both Canadian provinces as compared to the United States.

FIGURE 10.

Operational Wastes Collected During 1989 Beach Cleanups



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### *Sewage-Associated Wastes*

Sewage-associated wastes are still an eyesore, particularly in the northeast where sewer systems discharge plastic items directly into marine areas. Many sewage treatment systems in this area of the United States are combined with storm water systems, termed "combined sewage systems." In these systems, raw sewage mixes with runoff from storm drains. Under normal operating conditions these combined sewage systems trap pieces of solid waste materials. However, during times of heavy rainfall the capacities of these systems are exceeded and the overflow--untreated sewage and accompanying solid waste materials--is diverted directly into local waterways.

Plastic tampon applicators are used as an indicator of inadequate sewage systems. In some parts of the country tampon applicators are found commonly enough that people have jokingly named them "beach whistles."

A total of 16,318 plastic tampon applicators were reported from U.S. beach cleanups but accounted for less than one percent of all debris items reported. Yet, the trends in abundance of tampon applicators show, as in 1988, that this is a noticeable problem in the northeast United States. The amount of plastic tampon applicators reported in New Jersey was much higher than the national figure--approximately seven times greater (Figure 11). The amount in Massachusetts was more than five times greater than the national percentage. New York and Rhode Island also had comparatively high amounts of plastic tampon applicators, and Connecticut was equal to the national figure.

The 1988 beach cleanup data revealed that inadequate sewer systems are also present along Lake Erie. Based on the data collected during the 1989 beach cleanup conducted at Presque Isle State Park in Pennsylvania, this problem has yet to be corrected--the amount of plastic tampon applicators reported is more than two times greater than the national average. Furthermore, as part of New York's cleanup, a group from Oswego cleaned a beach on Lake Ontario. A total of 218 plastic tampon applicators were found constituting more than 5 percent of all the debris collected--almost 10 times greater than the national figure. Inadequate sewage systems are also indicated in Delaware, North Carolina, Maryland, and Nova Scotia.

### *Medical Wastes*

Medical wastes were found during the 1989 cleanup, but in very small amounts compared to other types of debris collected. In 1988, plastic syringes were used to indicate medical wastes since they have been a major problem in some areas of the United States, principally in the New York-New Jersey area during the summers of 1987 and 1988. In 1989, syringes were reported in all but two of the 25 states. The 2,678 syringes reported amounts to less than 0.1 percent of the total debris. The greatest concentration of syringes was reported in Texas, followed by Puerto Rico, and Delaware and Washington (Figure 12). Texas, Puerto Rico, and Washington also had comparatively high levels in 1988. New York, which had the highest amount of syringes reported in 1988, was ranked fourth in 1989. Florida, Louisiana, Mississippi, and Rhode Island also had higher levels of plastic syringes compared to the national figure. In addition, medical wastes were abundant in Cozumel with 10 times more syringes reported than the United States or Canada.

As in 1988, beach cleanup volunteers appeared to be sensitized to the problem of medical wastes. Many noted items other than syringes that appeared to be medical related, including surgical gloves, tubing and transfusion bags, blood vials, and bandages. In Florida, volunteers reported several plastic arm tags from Tamarac Hospital and a bottle of pills from the *USS John F. Kennedy*. Some volunteers, however, provided detailed descriptions of items that were most likely not medical debris. One debris item in particular was often described as "a clear plastic tube sealed at both ends with hole in one end containing yellow liquid--possibly a urine sample." This description, however, closely fits that of a plastic light stick used by fishermen.

Illegal drugs and paraphernalia were also reported. In New York, volunteers specifically identified 110 "crack" vials, 26 bags of "crack," one bag of "crack" bottle caps, and one bag of "pot."

FIGURE 11.

Sewage-Associated Wastes Collected During 1989 Beach Cleanups

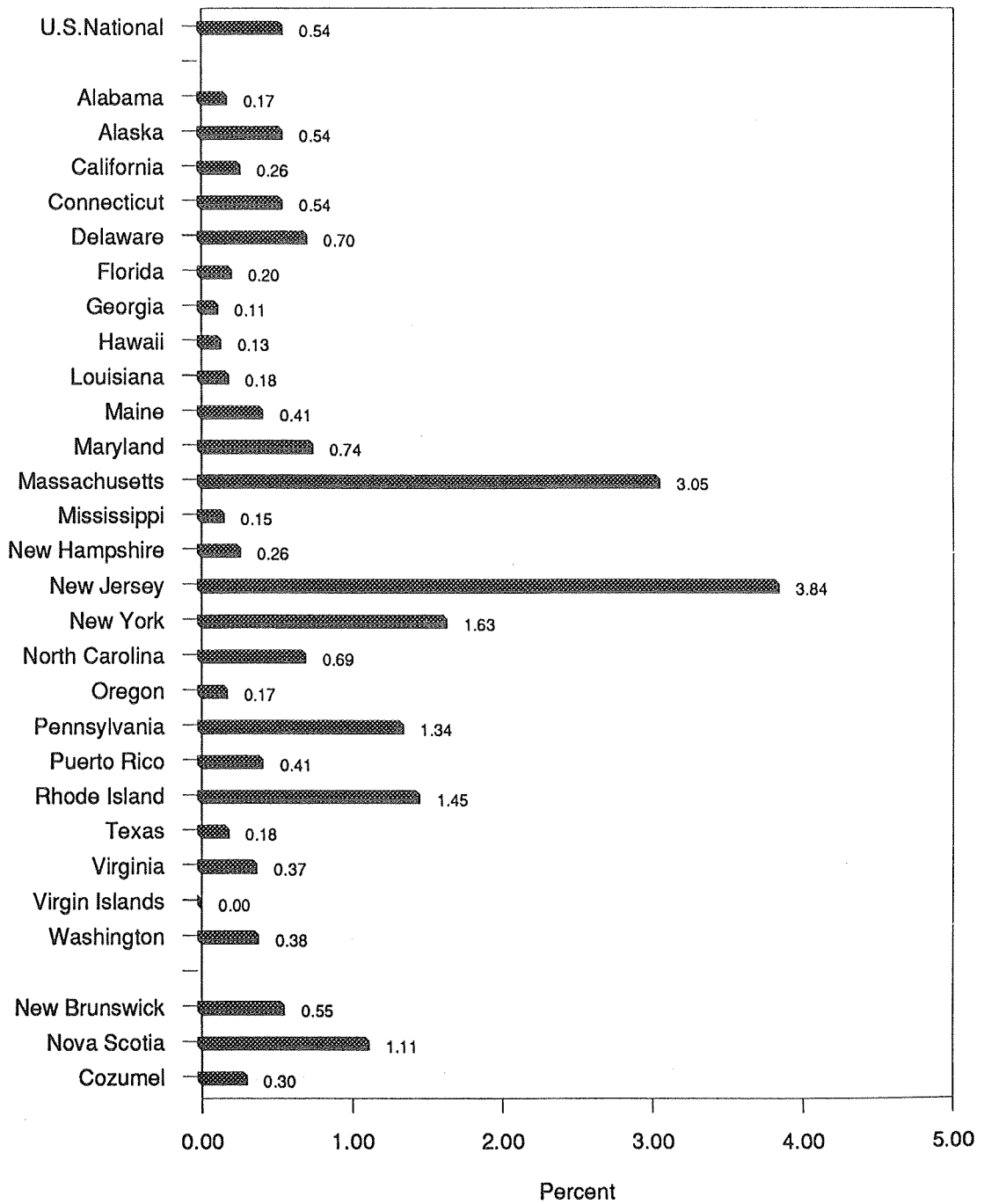
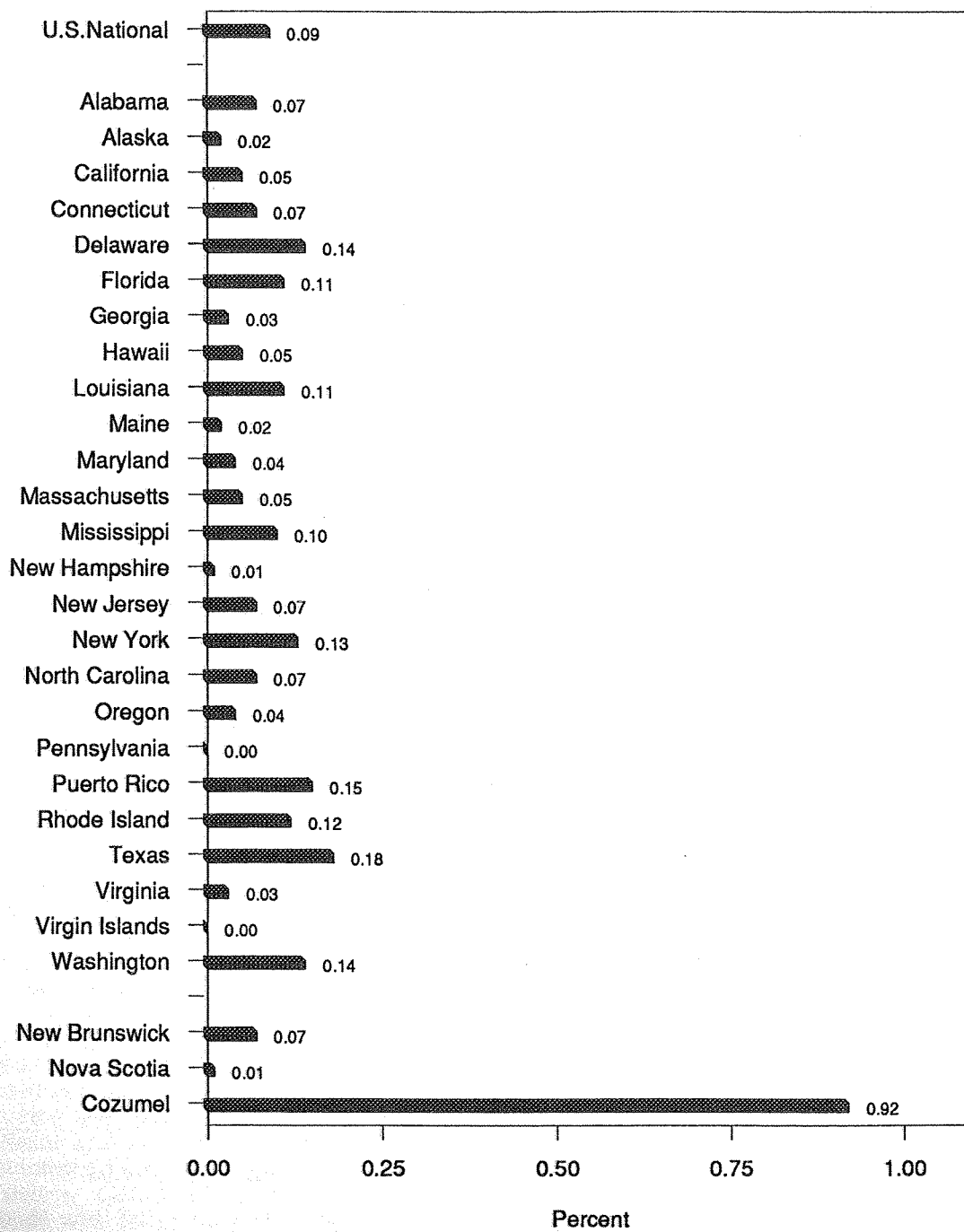


FIGURE 12.

Medical Wastes Collected During 1989 Beach Cleanups



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## Foreign Sources of Beach Debris

Prior to the enactment of MARPOL Annex V, more than 1,000 foreign label items from 49 countries were recorded on U.S. beaches. Although some of these items may have been domestically generated, the majority were food packaging and empty bottles of cleaning agents dumped by the international shipping fleet. At the time of the 1988 beach cleanup, dumping trash at sea was not illegal. However, even after the enactment of Annex V, this year's volunteers were amazed to find a multitude of debris items from foreign sources.

In order to identify foreign sources of debris, volunteers were asked to note all items that had foreign labels. As a result, more than 2,000 foreign label items were recorded including six international brands of bug spray and seven types of toilet bowl cleaner bottles. At least 55 countries were identified. Countries with debris found for the first time included Czechoslovakia, Ecuador, Iceland, Indonesia, Nicaragua, Poland, and Romania: perhaps most peculiar were a plastic salt bottle from Oman and a milk carton from the United Arab Emirates.

In the United States, foreign debris was reported from the following locations: Antilles, Argentina, Austria, Bahamas, Belgium, Brazil, Bulgaria, Canada, Chile, China, Colombia, Costa Rica, Cuba, Czechoslovakia, Denmark, Dominican Republic, Ecuador, El Salvador, Finland, France, "Germany," Greece, Guatemala, Iceland, India, Indonesia, Israel, Italy, Jamaica, Japan, "Korea," Malaysia, Mexico, Netherlands, New Zealand, Nicaragua, Norway, Oman, Pakistan, Philippines, Poland, Portugal, Romania, Singapore, Spain, Sweden, Taiwan, Thailand, Trinidad, Turkey, Union of Soviet Socialist Republics, United Arab Emirates, United Kingdom, Venezuela, Viet Nam, and Yugoslavia. In addition, many volunteers reported items as being "Arabic," "South American," or "oriental" in origin. A listing of all foreign debris items reported in each state is given in Appendix 2.

Foreign debris was found in 21 of the 25 states; no foreign debris was reported in New Jersey, Pennsylvania, Puerto Rico, or Rhode Island. Texas defended its title for having, by far, the largest amount and assortment of international beach debris, where more than 1,000 foreign debris items were reported from at least 33 countries with Mexican debris items being the most common. Among the Mexican debris items reported were at least 50 plastic bottles of "El Pinador" cleaner, 100 plastic bottles of motor oil, and 260 plastic bottles of bleach (206 of which were specifically identified to be either "Clarasol" or "Clarisol," brand names). The abundance of bleach bottles may indicate that bleach is being used for some specific reason in the Gulf of Mexico.

Annex V of the MARPOL Treaty now prohibits the discharge of plastic wastes from ships at sea. The treaty applies to all ships of nations signatory to this treaty. In the United States, no vessel from any country and of any size (ranging from super tankers to rubber rafts) may discharge plastics within 200 miles of our coastline. This should reduce the amount of debris that is dumped and subsequently washed onto our beaches. Among the foreign debris items reported, the following countries are signatory to the MARPOL Treaty: Austria, Belgium, China, Colombia, Czechoslovakia, Denmark, Finland, France, "Germany" (both the German Democratic Republic and the Federal Republic of Germany), Greece, Italy, "Korea" (the Democratic People's Republic of Korea but not the Republic of Korea), Japan, Netherlands, Norway, Oman, Poland, Portugal, Sweden, Union of Soviet Socialist Republics, United Kingdom, and Yugoslavia.

The participation of Canada and Mexico shed some light on the fact that the U.S. is not blameless--many of the debris items recorded as "foreign" by cleanup volunteers in these countries were of U.S. origin including several plastic milk jugs in Nova Scotia and New Brunswick, and numerous plastic bottles in Cozumel. Although neither Canada nor Mexico are parties to the MARPOL Treaty, countries that are signatory to MARPOL Annex V must comply with the regulations in Canadian and Mexican waters.

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In addition to recording information on foreign labels, many volunteers noted debris items traceable to passenger cruise ships. Cruise ships must also comply with the international treaty. But based on beach cleanup data this does not seem to be the case, particularly with regard to the amount of cruise line trash found on Florida's beaches. Debris from cruise lines is readily identifiable since items are often embossed with company names. Volunteers reported 44 findings of cruise line trash consisting of more than 70 individual items (Table 5). Forty of these cases were reported in Florida, primarily in southeastern counties bordering the Atlantic. Many of the cruise lines reported operate ships out of southeastern Florida to the Bahamas and Caribbean. Cruise line companies may argue that the trash collected in 1989 was dumped 10 months ago prior to enactment of Annex V and has since washed ashore--an unlikely explanation for the intact bag of cups, cans and garbage that came ashore in Monroe County, Florida. In any event, the disposal practices of these companies will be under close scrutiny during future cleanups.

### **Wildlife Entanglement**

Finally, volunteers were asked to note any cases of wildlife entanglement or strandings found during the beach cleanup. In 1988, 42 animals affected by debris were reported, of which more than 38 were birds primarily entangled in plastic fishing line. Unfortunately, the number of reported entanglements has increased. In total, 65 animals were reported entangled in debris items and two additional dead birds were reported to have ingested debris (Table 6). This number does not include several animals that were described as entrapped in bottles. It does include 46 entangled birds, 25 of which involved fishing line. Five of these animals were released by cleanup volunteers including a seagull in California, a pelican and two gulls in Florida, and a herring gull at Assateague Island National Seashore in Virginia which was released by Virginia's State Beach Cleanup Coordinator, David Cottingham. Other entanglements that were discovered during the cleanup but were not recorded on data cards included three sea turtles in Florida found entangled in fishing nets; two of these were still alive and were freed by cleanup volunteers.

The number of animals found affected by debris during 1989 is alarming not only because the number of reports has increased, but, as was emphasized in 1988, these animals were noted on just a fraction of our nation's coastline and within just three hours.

TABLE 5.

Passenger Cruise Line Debris Reported During 1989 Beach Cleanups

Location Found	Type of Debris	Cruise Ship Indicated
Florida		
Indian River County	balloon	Carnival Cruise Lines
Dade County	plastic cup	Carnival Cruise Lines
Martin County	plastic cup	Chandris Fantasy Cruises
Monroe County	plastic garbage bag filled with cups, cans, and garbage	Chandris Fantasy Cruises
Dade County	napkin	Costa Cruises Inc.
Martin County	plastic cup	Crown Cruise Line
Martin County	8 plastic cups and napkins	Crown Cruise Line
Palm Beach County	plastic shampoo bottle	Crown Cruise Line
Duval/St. Johns	plastic bottle	Holland America Line
Martin County	plastic bottle "Flex" shampoo	Holland America Line
Dade County	plastic shampoo bottle	Holland America Line
Monroe County	2 plastic shampoo bottles	Holland America Line
Franklin County	plastic shampoo bottle	Holland America Line
Brevard County	2 plastic cups	Norwegian Cruise Line
Brevard County	2 cigarette lighters	Norwegian Cruise Line, <i>SS Norway</i>
Palm Beach County	cigarette lighter	Norwegian Cruise Line, <i>SS Norway</i>
Martin County	4 plastic cups	Norwegian Cruise Line
Dade County	2 plastic cups	Norwegian Cruise Line
Monroe County	2 plastic cups	Norwegian Cruise Line
Broward County	plastic baggage tag	Pacquet Cruises
Brevard County	metal shoe shine kit	Premier Cruise Lines
St. Lucie County	2 shampoo bottles	Premier Cruise Lines
Brevard County	2 plastic bottles bath gelee	Princess Cruises
Brevard County	plastic shampoo bottle	Princess Cruises
Brevard County	plastic bottle	Royal Caribbean Cruise Lines
St. Lucie County	3 plastic bottles	Royal Caribbean Cruise Lines
St. Lucie County	plastic shampoo bottle	Royal Caribbean Cruise Lines
St. Lucie County	plastic lotion bottle	Royal Caribbean Cruise Lines
St. Lucie County	plastic cup	Royal Caribbean Cruise Lines
St. Lucie County	plastic conditioner bottle	Royal Caribbean Cruise Lines
Martin County	2 plastic shampoo bottles	Royal Caribbean Cruise Lines
Martin County	6 plastic cups	Royal Caribbean Cruise Lines
Palm Beach County	plastic shoe polish bottle	Royal Caribbean Cruise Lines
Palm Beach County	2 plastic shampoo bottles	Royal Caribbean Cruise Lines
Palm Beach County	plastic conditioner bottle	Royal Caribbean Cruise Lines
Broward County	plastic suntan oil bottle	Royal Caribbean Cruise Lines
Broward County	plastic bottle	Royal Caribbean Cruise Lines
Dade County	2 shampoo bottles	Royal Caribbean Cruise Lines
Dade County	plastic shampoo bottle	Royal Caribbean Cruise Lines
Dade County	pencil	Royal Caribbean Cruise Lines
Palm Beach County	plastic cup	Scandinavian Cruise Line
Massachusetts (Metro Boston)	plastic cups	Massachusetts Bay Lines
North Carolina (Waynesboro)	plastic cup	Norwegian Cruise Line
Texas (Rockport)	plastic container	Ocean Cruise Lines
Virginia (Fisherman Is.)	plastic cup	Chandris Fantasy Cruises

TABLE 6.

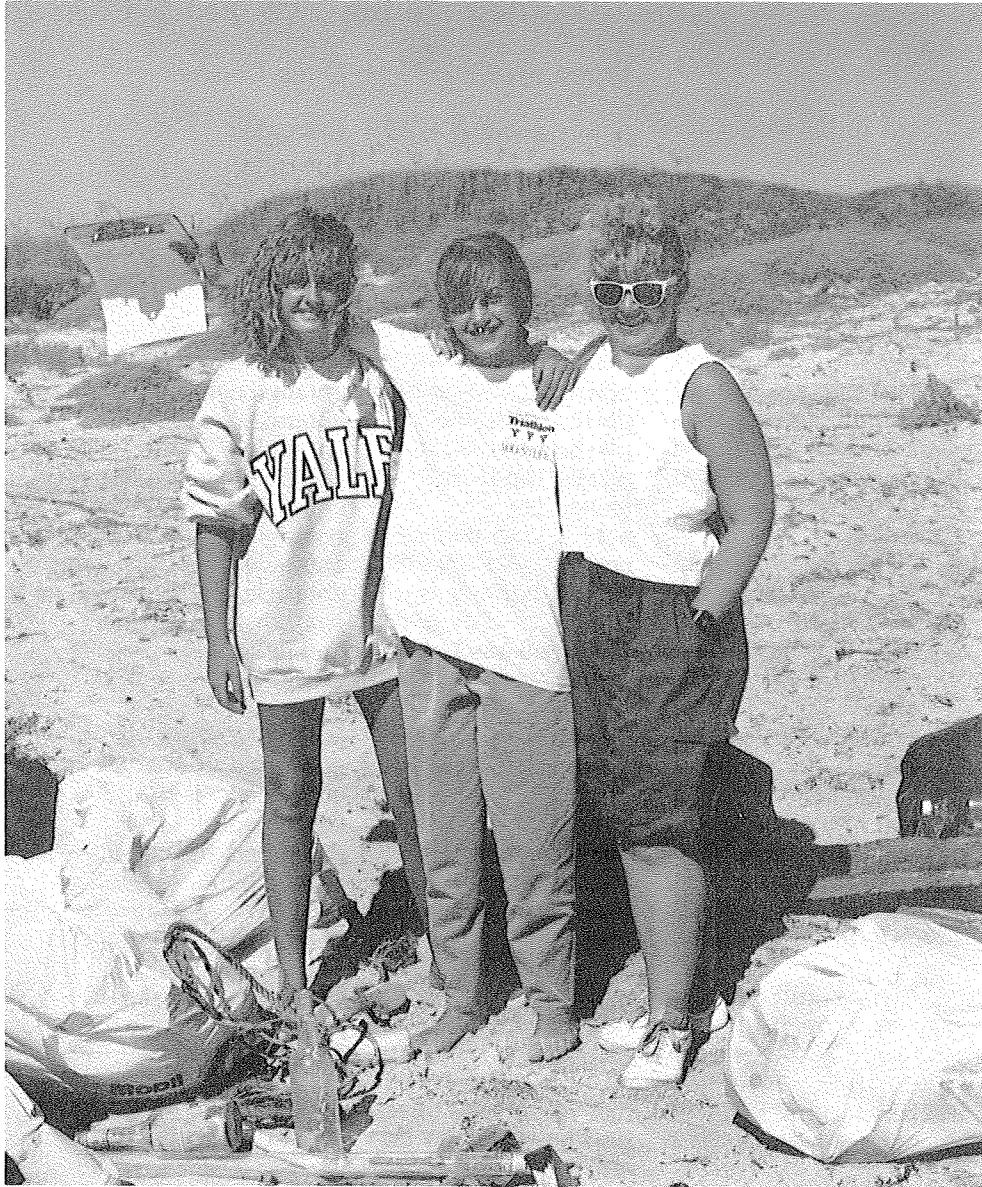
Wildlife Impacted by Debris Reported During 1989 Beach Cleanups

State	Animal	Debris Item	Other Comments
Alabama	fish	plastic bag	entangled
California	2 birds	fishing line	both entangled in line
	common murre	fishing line	entangled around neck
	seagull	fishing line	entangled
	seagull	fishing line	entangled (rescued)
	bird	fishing line	entangled
	seagull	fishing line & hook	entangled in line (hook in wing)
	2 birds	fishing line or net	entangled
	cormorant	fishing hooks	entangled
	seagull	gill (fishing) net	entangled
	seagull	plastic rope	entangled
seagull	string or tape	entangled	
seabird	wire	entangled	
crab	styrofoam & six-pack ring	entangled	
crab	plastic bottle	trapped inside (freed)	
mouse	beer bottle	dead	
Delaware	bird	fishing line	entangled, lure in mouth
Florida	5 pelicans	fishing line	entangled (one released)
	2 seagulls	fishing line	entangled
	2 gulls	fishing line	entangled (rescued)
	heron	fishing line	entangled
	bird	fishing line	entangled
	seagull	plastic	entangled, broken wing
	seagull	plastic bag	entangled
pelican	unknown	entangled	
Hawaii	green sea turtle	fishing line	entangled, front flipper
Maine	seagull	wire	entangled
	bird	plastic milk jug	entangled, head inside jug
	seagull	wad of string	ingested, protruding from beak
	skate	fishing line	entangled
	seagull	fishing hook	bird ingested fish on hook (fishing rod, line and hook attached)
Mississippi	snapping turtle	plastic bag	entangled
	garter snake	fishing line	entangled
	fiddler crabs	plastic bottle	entrapped

TABLE 6 (continued).

Wildlife Impacted by Debris Reported During 1989 Beach Cleanups

State	Animal	Debris Item	Other Comments
New York	sea turtle	plastic packing tape	entangled
North Carolina	crabs & egg cases	fishing line	entangled
Oregon	gull	fishing line	entangled
	seagull	fishing line	entangled
	common murre	plastic rope	entangled
	seagull	plastic six-pack ring	entangled
	bird	plastic string	entangled around feet
	seagull	plastic string	entangled
	2 birds	plastic rope	entangled
	seagull	plastic rope	entangled
	cormorant	plastic net	entangled
	seagull	net	entangled
	2 fish	net	entangled
	seagull	fishing hook & line	entangled, alive, hook in mouth, trailing line
Puerto Rico	fish	plastic six-pack ring	entangled
	fish	plastic	entangled
Texas	catfish	plastic	entangled
	fish	plastic strapping band	entangled
	drum (fish)	rope	entangled
	fish	fishing line	entangled
	crab	plastic onion sack	entangled (released)
	crab	plastic carpet threads	entangled
	shrimp	plastic ring from milk jug lid	entangled
Virginia	herring gull	fishing rig	entangled (released)
Washington	seagull	fishing line	entangled
Nova Scotia	herring gull	fish net	entangled
	mice	pop bottle	caught inside



## CONCLUSION

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In general, the composition of trash found on America's beaches has remained relatively unchanged since the first national beach cleanup in 1988. Despite the fact that an international ban on ocean dumping of plastics took effect prior to the 1989 cleanup, plastics still account for most of the trash found on our coasts and shorelines. Moreover, the most prevalent types of beach debris, or the "Dirty Dozen" is practically identical to what was discovered in 1988 with the exception of cigarette filters which so infuriated beach cleanup volunteers that they deemed it time to start pointing fingers at those who are treating our beaches like an ashtray.

Realistically, however, a dramatic change in the composition of beach debris was not expected. Effective implementation and enforcement of the treaty will take time. In addition, it is not known how long the plastics collected in the fall of 1989 were afloat at sea, or how much of the beach cleaned had not benefitted from previous cleanups. As was reported, the percentage of items traceable to the galleys and operations of vessels, and other maritime activities, including those of petroleum industries, commercial and recreational fisheries, and pleasure boats, has changed very little. But with the ability to compare two years of data, certain trends are becoming apparent, such as the concentration of offshore generated wastes on beaches in the Gulf of Mexico, the North Pacific, and New England. Hence, if a decrease in the amount of plastics collected during beach cleanups occurs over the next few years as a result of Annex V, it will be these areas where it will be most evident. If not, as can be seen from the increased level of volunteer participation (despite Hurricane Hugo), there is a growing number of citizens ready and able to help identify offenders. And for some groups, such as passenger cruise line companies, this should be considered as a sincere warning!

This year's inclusion of data obtained from cleanups conducted in Canada and Mexico revealed that the abundance of plastic beach debris is not a problem limited to the United States. Since neither of these countries are signatory to the MARPOL Treaty, future comparisons of beach cleanup data will help to assess the effectiveness of Annex V in the United States. On the other hand, data findings may also provide the impetus for Canada and Mexico to become signatory countries.

Turning attention to land, it is clear that coastal municipalities contribute their share to the marine debris problem--sewage associated wastes. Because tampon applicators are an aesthetic problem they can negatively affect the economies of coastal communities. This type of impact was clearly demonstrated as a result of the infamous medical debris wash-ups of 1987 and 1988. Repeated findings of plastic tampon applicators will certainly not enhance the image of states that fail to address this problem, primarily New York, New Jersey, and Massachusetts in addition to shoreline areas in the Great Lakes of Erie and Ontario. Moreover, plastic tampon applicators are just the "tip of the iceberg." In essence, if applicators are prevalent in these areas one can only imagine what else is being dumped into coastal waterways as a result of inadequate sewage treatment.

The annual data collection effort is also beginning to show that the general public, not commercial maritime operations and industry, is a major source of beach debris. Traditionally, and particularly in the wake of the devastating oil spills of 1989, it has been easy to identify corporate giants as the villains. And while marine industries clearly deserve part of the blame, in doing so we tend to overlook our own individual contributions. However, as we learn more about the composition of beach debris, we are finding that marine resources are equally threatened by seemingly small, individual actions, made serious by their numbers rather than the volume of each--like a tossed plastic cup or a tangle of fishing line. The abundance of beverage bottles and associated goods emphasizes this problem. Continued monitoring of beach debris may point to the need to implement additional measures directed at the land-based sources of this debris.

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Finally, one overall finding of the 1989 beach cleanup data is that it is very similar to the data of 1988. The percentage of plastic beach debris was nearly equal for both years, the Dirty Dozen was essentially the same, and the abundance of indicator items was fairly similar. Moreover, specific trends in types and sources of debris are becoming apparent in certain areas of the country. Recognizing that while a decrease would be preferable in many of these areas of data comparisons, the consistency of data collected for these two years points to the fact that citizens are becoming very good data collectors. Furthermore, it was noted that attention to accuracy has improved, the level of detail has increased, and many volunteers are becoming very specific in their identification of beach debris. Remember, these people are volunteering three hours of their weekend to pick up someone else's trash. But most beach cleanup volunteers do so because they realize the importance of individual action in solving the debris problem. Now it is time for governments, industries, private organizations, and other individuals to use the information presented in this report to implement solutions to the marine debris problem. Working together we can make a difference!

1989 National Beach Cleanup  
Raw Data Summary

	AL	AK	CA	CT	DE	FL	GA	HI	LA	ME	MD	MA	MS	NH	NJ	NY	NC	OR	PA	PR	RI	TX	VA	VI	WA	WT'L	TOTAL
<b>PLASTIC</b>																											
Bags	1185	499	11462	720	2628	19170	93	8458	2481	3320	466	4480	2322	285	550	2311	6102	3672	0	326	2447	19062	602	169	374	93184	
Trash	57	3	524	9	139	531	1	318	215	179	76	220	162	3	63	18	197	193	0	143	182	708	24	3	15	3983	
Salt	1088	134	12921	1202	3334	19229	130	9161	1535	4472	897	8375	1654	521	439	2203	5173	5229	37	388	3188	15318	984	109	357	98078	
Other	2276	181	6711	979	2662	15097	296	4852	2932	2731	513	4632	2881	552	1307	3303	10559	10300	7	231	2202	10709	919	96	357	78015	
Bottles	610	320	859	105	618	4106	98	1915	1971	1101	178	1213	635	62	143	339	1118	554	0	100	467	7804	310	68	88	24782	
Bleach	370	284	1111	227	492	3172	54	853	953	1679	112	1000	1290	77	249	528	1041	300	0	84	510	2800	299	27	85	17597	
Oil	554	186	2179	273	731	6440	82	1871	1210	985	187	1385	746	71	380	949	1336	751	7	143	438	6613	365	44	82	28008	
Other	125	93	499	64	281	1906	16	821	449	321	58	442	184	13	66	211	563	191	0	17	445	1669	90	9	24	8557	
Buckets	2683	560	17357	1343	3869	31543	224	11783	5620	4017	953	10210	4209	781	1160	3372	6402	3886	352	423	3393	29437	1668	119	574	145938	
Caps/lids	735	24	52031	2118	4235	32116	191	28543	529	3452	55	10266	2965	988	0	853	8378	3800	0	598	1456	10180	542	23	63	164141	
Cigarette butts	2015	96	20736	3932	5322	47533	800	17432	2236	3445	1139	13348	3151	942	2429	6403	9408	1919	327	3710	5246	16725	1686	256	369	170805	
Cups/straws	97	15	924	107	84	1601	51	1333	167	178	10	421	114	17	99	179	366	162	1	78	188	1458	32	16	43	7741	
Diapers	261	31	1319	102	300	4155	22	961	595	306	133	917	365	57	109	303	1030	253	1	12	497	2763	206	15	54	14767	
Lighters	172	39	2222	262	561	5130	23	4294	417	382	59	989	264	109	49	460	978	477	1	32	549	4287	97	11	38	21902	
Fishing line	50	88	241	31	131	872	5	1110	160	289	16	582	75	39	9	89	214	177	0	9	159	1360	51	6	10	5773	
Net	51	29	364	41	166	956	16	1641	152	652	10	1518	112	186	11	61	273	421	0	5	142	1558	53	2	10	8430	
Long	125	131	446	76	350	1745	28	1997	384	259	198	396	316	27	11	121	607	231	15	5	176	1304	128	5	28	9109	
Short	2	2	19	0	7	170	0	38	49	25	1	27	14	0	1	3	73	1	0	27	2	136	6	1	1	605	
Floats, lures	111	5	449	24	96	4478	2	390	825	46	32	287	173	5	16	80	732	110	0	8	69	6044	65	2	3	14052	
Hardhats	932	135	1586	181	724	5610	77	1459	3569	1192	292	2134	1520	87	138	389	1370	661	3	48	569	7666	270	9	138	30759	
Lightsticks	2467	2163	28129	2444	6455	36457	312	40743	5361	8687	2060	19680	3847	1415	1294	6544	11136	9259	230	1279	5415	40447	2620	343	332	242119	
Milk/water jugs	63	33	489	9	132	649	1	351	161	169	23	227	48	11	11	35	152	162	0	12	18	972	10	9	15	3762	
Pieces	364	542	1321	117	442	4642	27	1948	1651	1953	190	2435	505	573	86	260	1106	1328	0	17	531	11901	337	12	91	32379	
Pipe thread	555	477	3281	213	898	7560	37	4390	1961	3528	378	6646	571	1207	139	422	2358	3968	5	92	1045	18538	542	42	132	58985	
Rope	59	48	325	53	125	1069	3	297	186	399	54	279	60	84	86	93	278	228	0	35	127	2556	42	1	153	6640	
Sheeting	59	56	853	78	360	2211	7	464	266	757	87	1063	144	202	162	171	577	431	0	99	272	4871	132	8	92	13422	
Long	538	158	3405	156	615	8145	14	2552	1022	498	91	1114	1244	85	267	609	1065	541	4	145	986	11406	166	49	215	35090	
Short	137	190	1871	78	486	3433	13	1503	629	674	74	1201	301	177	74	192	743	1058	3	25	484	4726	193	25	320	18610	
6-pack holders	27	4	216	23	110	635	2	178	84	19	7	96	71	3	12	83	120	32	0	28	83	822	8	0	15	2678	
Strapping bands	70	102	1231	187	556	1166	8	424	137	503	135	6455	112	54	681	1068	1204	150	19	77	1027	822	90	0	40	16318	
Syringes	181	77	1247	193	611	2648	20	1199	251	433	181	1252	136	118	103	490	787	289	11	44	389	1964	227	10	35	12896	
Tampon app.	67	18	1107	67	182	1102	12	818	97	474	30	1101	195	47	32	59	283	871	0	7	233	1735	48	6	34	8625	
Toys	20	4	600	43	80	883	1	227	99	133	8	166	83	23	14	66	140	195	0	0	143	1246	20	3	7	4204	
Vegetable sacks	569	264	8041	699	2142	8892	89	5481	931	2070	382	3866	835	330	380	380	2411	2021	31	105	1492	5281	648	54	145	48805	
Write protector																											
Other																											

	AL	AK	CA	CT	DE	FL	GA	HI	LA	ME	MD	MA	MS	NH	NJ	NY	NC	OR	PA	PR	RI	TX	VA	VT	WA	NAT'L	TOTAL	
<b>GLASS</b>																												
Bottles	2090	332	20518	681	2515	36709	482	15799	4454	3618	831	4090	3249	539	1196	2394	9616	1649	10	633	3781	18630	848	209	489	135352		
Food	286	23	1168	20	129	2189	24	550	716	191	159	470	437	12	36	96	735	265	0	28	214	2792	124	1	44	10709		
Other	97	8	351	21	52	806	7	246	205	245	5	276	179	12	97	83	327	103	0	18	127	983	31	12	2	4293		
Light tubes	62	0	38	2	39	685	1	95	274	10	9	24	87	0	1	9	145	57	0	3	3	957	18	0	12	2531		
Light bulbs	320	7	196	7	169	2274	26	277	985	117	64	211	566	2	22	50	579	203	0	12	63	1771	154	1	19	8995		
Pieces	716	4741	34614	3300	3905	15409	380	25520	1094	14232	492	13898	4541	1016	545	4785	4514	3344	4	2821	3881	22317	1085	157	346	167657		
Other	25	175	1288	79	167	811	17	1039	56	831	21	572	152	14	7	39	154	99	0	0	230	704	31	49	1	6561		
<b>STYROFOAM</b>																												
Buoys	201	81	558	152	151	2841	34	1516	573	1404	16	1138	238	92	32	184	446	310	0	1	172	1022	94	19	38	11313		
Cups	2510	182	12953	1574	3277	25366	431	9073	4787	4550	671	5883	2808	545	559	2181	7939	2836	9	160	2867	13775	934	114	317	106301		
Egg Cartons	170	13	359	23	141	1425	42	373	915	111	24	231	406	12	7	64	341	159	0	17	49	3868	92	8	118	8968		
Fast-food	683	63	4194	384	665	7421	103	5862	979	1017	80	1309	1024	194	165	523	1618	966	0	21	718	3817	111	38	140	32095		
Meat trays	302	88	1548	72	293	2286	140	2199	1705	405	50	441	736	27	41	151	680	1028	0	85	170	4565	100	1	133	17246		
Pieces	619	429	5427	579	961	12279	184	5026	1526	2839	262	3413	1101	197	282	2005	3577	1179	0	85	913	5432	235	12	168	48730		
Large	1699	1489	41520	2430	3629	40393	526	22211	4093	8272	1159	14174	2455	1041	965	5052	12033	8704	20	191	3000	20638	1018	40	632	197364		
Small	110	55	2726	175	564	4089	74	1672	332	522	96	794	435	489	39	426	632	331	1	67	163	2331	82	13	7	16245		
Other	136	16	3457	138	1070	2762	32	1214	99	536	482	2694	171	66	34	449	1368	429	16	6	569	1675	741	6	85	18251		
Balloons	178	23	420	33	80	761	13	259	355	1272	11	425	436	61	6	58	215	171	3	9	110	3103	45	4	86	8137		
Gloves	66	80	808	125	165	821	4	419	132	359	76	255	125	52	9	101	380	141	0	57	198	515	269	8	26	5191		
Tires	256	405	3565	251	609	4485	26	5305	472	2815	136	2746	408	489	91	538	968	566	4	237	571	3055	210	20	31	28259		
Other	822	122	16582	799	1101	13901	145	8860	762	2324	144	4183	2436	286	190	1067	3490	1275	86	689	1773	6564	144	56	468	68249		
Bottle caps	299	126	1454	79	454	2786	64	1112	1244	583	94	707	491	34	180	258	1181	309	0	25	270	2432	169	10	101	14462		
Cans	2341	641	13664	1350	5775	33125	806	9898	3050	3903	1702	8223	3489	1505	1393	2711	12930	1496	43	310	3684	11434	1183	426	430	125512		
Aerosol	169	20	1240	98	205	1536	60	1346	319	475	43	333	453	31	37	161	747	245	1	78	150	1392	49	9	50	9207		
Beverage	209	228	1218	90	331	1394	17	1102	422	674	48	569	288	77	44	184	704	193	4	42	134	1306	74	16	57	9405		
Food	39	2	159	7	29	208	7	133	53	231	1	290	62	56	44	9	41	15	0	2	25	137	28	1	1	1575		
Other	32	37	358	15	54	247	3	157	118	146	5	87	76	6	6	37	233	65	0	39	129	483	17	2	4	2356		
Crab/fish traps	7	7	31	10	3	50	1	15	4	21	0	17	2	0	0	3	80	5	0	2	6	64	0	0	0	328		
Drums	205	805	3733	335	479	3375	24	2793	293	1581	116	1552	470	192	11	480	1385	552	2	318	584	2322	131	15	54	21807		
Pieces	536	58	3508	169	498	5412	19	2262	173	543	19	841	1061	140	41	359	864	422	22	2325	537	6166	21	30	706	26732		
Pull tabs	153	283	2739	108	295	1333	17	1428	182	599	55	561	199	74	6	115	605	337	0	70	187	1967	65	22	53	11869		
Wire	222	424	10247	510	682	3949	31	3090	315	1767	119	1965	615	223	46	590	1225	637	0	147	582	2232	101	91	40	29434		
Other																												

NAT'L  
TOTAL

	AL	AK	CA	CT	DE	FL	GA	HI	LA	ME	MD	MA	MS	NH	NJ	NY	NC	OR	PA	PR	RI	TX	VA	VI	WA	TOTAL
<b>PAPER</b>																										
Bags	383	50	5623	292	693	5160	39	2517	589	1027	81	1298	877	193	67	584	1706	930	7	126	895	4055	90	69	189	27530
Cardboard	236	27	4763	218	566	3655	43	1927	428	823	74	1626	884	196	89	375	1451	1282	9	146	618	2628	126	14	162	22416
Cartons	314	37	3526	260	480	3719	36	1983	485	866	77	1579	835	159	113	306	957	752	5	133	556	2846	151	8	92	20275
Cups	586	36	4323	512	778	8626	67	4160	575	941	104	2674	1096	279	204	595	2195	831	18	118	1484	3928	158	40	155	34503
Newspaper	76	35	3906	114	407	2545	10	1421	186	406	10	957	430	112	49	336	698	1080	2	62	242	1600	30	18	60	14792
Pieces	2355	262	40564	1977	3653	22575	425	12715	1515	5909	494	10684	5101	1436	240	1798	7600	5401	44	693	3273	12131	652	41	572	142110
Other	588	140	9552	381	804	5318	128	3208	434	1228	75	3733	1585	396	44	414	1765	1315	4	285	820	2825	110	32	44	35228
<b>WOOD</b>																										
Crab/lobster traps	3	2	73	37	28	195	4	28	46	312	7	248	36	170	0	10	67	11	0	0	24	85	16	0	0	1402
Crates	29	4	243	20	73	221	11	82	75	87	16	114	30	7	4	31	256	64	0	8	36	239	39	0	4	1693
Pallets	46	9	210	13	105	314	3	169	77	106	8	149	56	3	3	36	221	80	0	23	33	415	14	0	6	2099
Pieces	634	105	8604	781	2139	11631	172	4281	1348	2014	744	4514	1401	313	120	838	7486	1101	41	163	1317	8124	782	80	52	58785
Other	164	17	1597	91	275	1496	7	1004	149	411	134	586	272	28	16	414	665	212	0	17	167	853	87	11	46	8719
<b>CLOTH</b>																										
Clothing	396	177	6774	413	1347	7771	98	3690	971	1691	268	2901	770	494	78	667	2311	1266	10	323	1016	5291	327	116	167	39233

TOTAL ITEMS/ZONE 40095 18865 466455 31841 79759 592401 7558 327841 76870 121342 18167 211758 73853 20421 17719 65459 175410 86967 1419 18947 70911 448557 24256 3371 10546 3013778

1989 National Beach Cleanup  
Raw Data Summary

		Nova Scotia			
		New Brunswick		Cozumel	TOTAL
<b>PLASTIC</b>					
Bags	Trash	193	1236	93	1522
	Salt	62	116	89	167
	Other	620	880	234	1734
Bottles	Beverage	909	960	379	2248
	Bleach	366	475	187	1028
	Oil	751	801	191	1743
	Other	242	413	235	890
Buckets		129	204	82	415
Caps/lids		1385	1537	264	3186
Cigarette butts		63	0	0	63
Cups/straws		583	653	246	1482
Diapers		35	63	55	153
Lighters		41	77	28	146
Fishing line		80	73	84	237
Net	Long	184	234	18	436
	Short	208	836	30	1074
Floats, lures		93	75	35	203
Hardhats		0	3	18	21
Lightsticks		9	34	62	105
Milk/water jugs		327	192	166	685
Pieces		3051	3085	913	7049
Pipe thread		125	15	24	164
Rope	Long	1039	1046	73	2158
	Short	1775	2226	88	4089
Sheeting	Long	140	132	3	275
	Short	81	280	8	369
6-pack holders		175	167	95	437
Strapping bands		528	934	0	1462
Syringes		21	4	62	87
Tampon app.		165	430	20	615
Toys		45	83	72	200
Vegetable sacks		28	47	32	107
Write protector		7	18	36	61
Other		427	874	113	1414
<b>GLASS</b>					
Bottles	Beverage	1819	1694	633	4146
	Food	234	90	67	391
	Other	9	7	21	37
Light tubes		8	4	32	44
Light bulbs		84	20	41	145
Pieces		2362	3741	188	6291
Other		33	44	0	77
<b>STYROFOAM</b>					
Buoys		67	273	33	373
Cups		2600	1047	12	3659
Egg Cartons		43	94	14	151
Fast-food		279	206	17	502
Meat trays		174	145	14	333
Pieces	Large	439	705	24	1168
	Small	2261	1860	33	4154
Other		161	55	40	256

	Nova Scotia			
	New Brunswick		Cozumel	TOTAL
<b>RUBBER</b>				
Balloons	125	126	0	251
Gloves	42	223	3	268
Tires	61	123	9	193
Other	231	255	107	593
<b>METAL</b>				
Bottle caps	414	672	162	1248
Cans	188	317	155	660
Aerosol	837	1436	230	2503
Beverage	90	196	82	368
Food	144	340	18	502
Other	15	23	3	41
Crab/fish traps	57	97	8	152
Drums	2	9	8	19
Rusty	452	538	83	1073
New	22	69	22	93
Pieces	194	397	26	617
Pull tabs	348	181	3	532
Wire				
Other				
<b>PAPER</b>				
Bags	126	149	83	358
Cardboard	10	412	66	488
Cartons	189	315	73	577
Cups	109	194	5	308
Newspaper	41	87	6	134
Pieces	409	978	67	1454
Other	400	103	1	504
<b>WOOD</b>				
Crab/lobster traps	23	255	0	278
Crates	9	62	19	90
Pallets	12	55	27	94
Pieces	346	2208	133	2687
Other	24	57	16	97
<b>CLOTH</b>				
Clothing	271	700	46	1017
<b>TOTAL ITEMS/ZONE</b>	<b>30024</b>	<b>38765</b>	<b>6774</b>	<b>75563</b>



## STATE ANALYSES

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Following is the analysis of data collected in each state. For each state a description of the cleanup was provided by state coordinators or others involved in the organization of the state cleanup. Included for each state is percent composition of debris, the "Dirty Dozen," sources of debris, major characteristics of debris in each zone, stranded and/or entangled wildlife reported, most peculiar debris items reported, and information on 1990 beach cleanups. The raw data summary is included at the end of each state analysis.



## ALABAMA

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September 23, 1989  
725 Volunteers  
52 Miles Cleaned  
12,000 Pounds of Debris Collected  
40,095 Debris Items Reported

Coordinated By: John Marshall  
Alabama Department of Environmental  
Management  
2204 Perimeter Road  
Mobile, AL 36615  
(205) 479-2336

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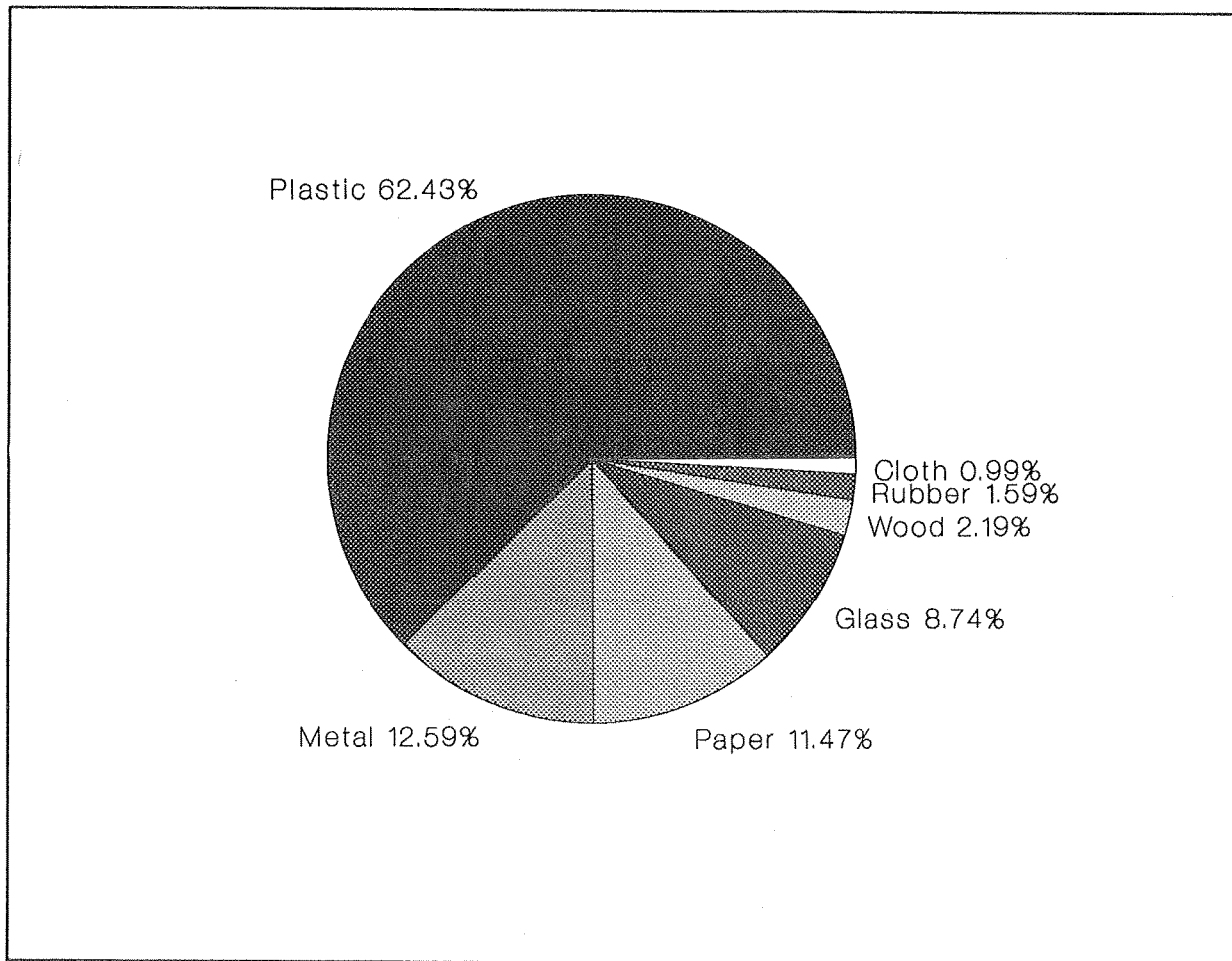
The 1989 Alabama Coastal Cleanup was cosponsored by the Alabama Department of Environmental Management (ADEM), the Alabama Department of Economic and Community Affairs (ADECA), and the Alabama Department of Conservation and Natural Resources (ADCNR). The number of volunteers increased from 630 in 1988 to 725. Dauphin Island accounted for 400 participants.

Approximately 12,000 pounds of trash were collected in 1,934 trash bags. The cleanup area expanded from 40 miles to 52 miles. Most of the increase came in Mobile County, where Sand Island and Little Dauphin Island were added to the Dauphin Island zone.

No stranded or entangled animals were reported during the 1989 cleanup. The only noteworthy items reported were two unopened bottles of Vodka found on Dauphin Island.

John Marshall

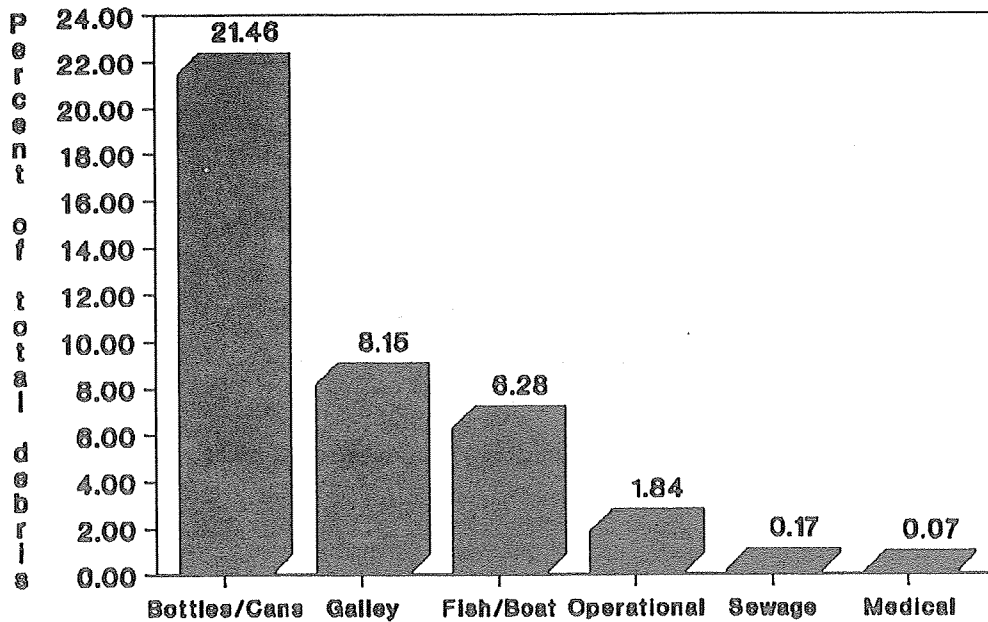
**PERCENT COMPOSITION OF ALABAMA'S BEACH DEBRIS:**



**ALABAMA'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic caps, lids	2,683	6.69
2. foamed plastic cups	2,510	6.26
3. plastic pieces	2,467	6.15
4. paper pieces	2,355	5.87
5. metal beverage cans	2,341	5.84
6. plastic beverage bottles	2,276	5.68
7. glass beverage bottles	2,090	5.21
8. plastic cups, spoons, forks, straws	2,015	5.03
9. small foamed plastic pieces	1,699	4.24
10. plastic trash bags	1,185	2.96
11. miscellaneous plastic bags	1,088	2.71
12. plastic milk, water gallon jugs	932	2.32
<b>TOTAL</b>	<b>23,641</b>	<b>58.96</b>

**MAJOR TYPES AND SOURCES OF ALABAMA'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Dauphin Island	61.62	plastic beverage bottles
Fort Morgan Peninsula	70.85	plastic pieces
Gulf Shores Public Beach	58.23	metal beverage cans
Gulf State Park/Orange Beach	54.45	paper pieces

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

Debris Related	Other Reports
1 fish inside a plastic bag	4 birds
	1 crab
	1 stingray
	2 dead rats
	1 dead lizard
	3 dead fish

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**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Dauphin Island	car frame, men's underwear, ceiling fan, 2 unopened bottles of Smirnoff Vodka, engine block, shopping cart, vibrator, bra (36C), numerous rubber bricks
Fort Morgan Peninsula	formica sink, 60 pounds of large rope with colorful fringes
Gulf Shores Public Beach	tongue depressor, several Skoal (chewing tobacco) cans
Gulf State Park/Orange Beach	umbrella frame, hotel bedspread, Florida Lotto ticket, first-aid kit, condom, women's underwear, 20-foot diameter fuel hose, golf tee

\* not all items indicated as peculiar by volunteers are listed

**FOR INFORMATION ON ALABAMA'S 1990 BEACH CLEANUP CONTACT:**

John Marshall  
Alabama Department of Environmental Management  
2204 Perimeter Road  
Mobile, AL 36615  
(205) 479-2336

**CLEANUP DATE: Saturday, September 22, 1990**

1989 National Beach Cleanup  
Raw Data Summary

ALABAMA

	Dauphin Is.	Fort Morgan	Gulf Shores	Gulf State Park	STATE TOTAL	
<b>PLASTIC</b>						
Bags	Trash	520	334	44	287	1185
	Salt	45	4	7	1	57
	Other	541	190	11	346	1088
Bottles	Beverage	1392	515	109	260	2276
	Bleach	326	227	1	56	610
	Oil	251	104	0	15	370
	Other	253	208	0	93	554
Buckets		59	28	10	28	125
Caps/lids		1111	930	51	591	2683
Cigarette butts		359	77	2	297	735
Cups/straws		687	687	69	572	2015
Diapers		57	22	0	18	97
Lighters		107	120	2	32	261
Fishing line		91	37	0	44	172
Net	Long	29	12	0	9	50
	Short	26	16	0	9	51
Floats, lures		73	27	0	25	125
Hardhats		2	0	0	0	2
Lightsticks		13	59	0	39	111
Milk/water jugs		531	345	3	53	932
Pieces		718	951	4	794	2467
Pipe thread		13	31	0	19	63
Rope	Long	149	170	0	45	364
	Short	240	176	1	138	555
Sheeting	Long	28	19	0	12	59
	Short	23	21	0	15	59
6-pack holders		347	119	13	59	538
Strapping bands		46	61	3	27	137
Syringes		5	13	2	7	27
Tampon app.		32	24	0	14	70
Toys		46	102	0	33	181
Vegetable sacks		22	26	2	17	67
Write protector		16	1	0	3	20
Other		211	204	1	153	569
<b>GLASS</b>						
Bottles	Beverage	1221	447	71	351	2090
	Food	155	111	3	1	286
	Other	40	51	0	6	97
Light tubes		27	21	0	14	62
Light bulbs		152	135	0	33	320
Pieces		345	88	0	283	716
Other		6	15	0	4	25
<b>STYROFOAM</b>						
Buoys		155	21	0	25	201
Cups		1079	797	115	519	2510
Egg Cartons		88	68	2	12	170
Fast-food		303	149	117	114	683
Meat trays		183	81	0	38	302
Pieces	Large	348	134	36	101	619
	Small	621	598	46	434	1699
Other		89	17	0	4	110

	Dauphin Is.	Fort Morgan	Gulf Shores	Gulf State Park	STATE TOTAL
<b>RUBBER</b>					
Balloons	54	31	1	50	136
Gloves	38	90	0	50	178
Tires	40	11	0	15	66
Other	81	93	1	81	256
<b>METAL</b>					
Bottle caps	307	123	26	366	822
Cans					
Aerosol	166	116	0	17	299
Beverage	1132	480	147	582	2341
Food	103	28	0	38	169
Other	101	79	3	26	209
Crab/fish traps	28	0	0	11	39
Drums					
Rusty	21	3	0	8	32
New	5	2	0	0	7
Pieces	102	31	0	72	205
Pull tabs	174	77	0	285	536
Wire	75	40	0	38	153
Other	77	78	0	67	222
<b>PAPER</b>					
Bags	165	59	70	89	383
Cardboard	145	46	14	81	286
Cartons	183	66	26	39	314
Cups	304	70	67	145	586
Newspaper	35	5	15	21	76
Pieces	1085	330	12	928	2355
Other	263	99	0	226	588
<b>WOOD</b>					
Crab/lobster traps	3	0	0	0	3
Crates	7	19	0	3	29
Pallets	3	39	0	4	46
Pieces	112	121	3	398	634
Other	27	104	1	32	164
<b>CLOTH</b>					
Clothing	215	71	7	103	396
<b>TOTAL ITEMS/ZONE</b>					
	18232	10904	1118	103	40095



Kate McVay and her students helped clean Mission Beach in Kodiak, Alaska.

## ALASKA

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June 25-26, 1988  
166 Volunteers  
Unknown Miles Cleaned  
3,400 Pounds of Debris Collected  
18,855 Debris Items Reported

Coordinated By: Joaqlin Estus  
Coastal Management Program  
Division of Governmental Coordination  
P.O. Box AW  
Juneau, AK 99811  
(907) 465-3562

Douglas Schneider  
Alaska Sea Grant College Program  
University of Alaska, Fairbanks  
138 Irving II  
Fairbanks, AK 99775-5040  
(907) 474-7086

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Elementary students in Thorne Bay, Alaska went on an unusual field trip last year. Instead of visiting a museum or factory they spent three days on a remote Southeast beach--picking up trash coughed up by the Pacific Ocean. Thorne Bay's beach cleanup taught students valuable lessons about the dangers and consequences of ocean pollution, and helped rid at least a part of Alaska's pristine shores of unsightly marine litter.

Thorne Bay is one of several schools and communities expanding environmental education efforts. Ketchikan, Petersburg, Juneau, Kodiak, Sitka, Skagway, Ninilchik, and Unalaska, among others, also held beach cleanups in 1989.

Helping draw attention to the marine litter problem, the Alaska Marine Debris Action Group (AMDAG) coordinated the first statewide beach cleanup campaign in 1988. As a result 238 volunteers removed five tons of trash from just 10 miles of beach that first year.

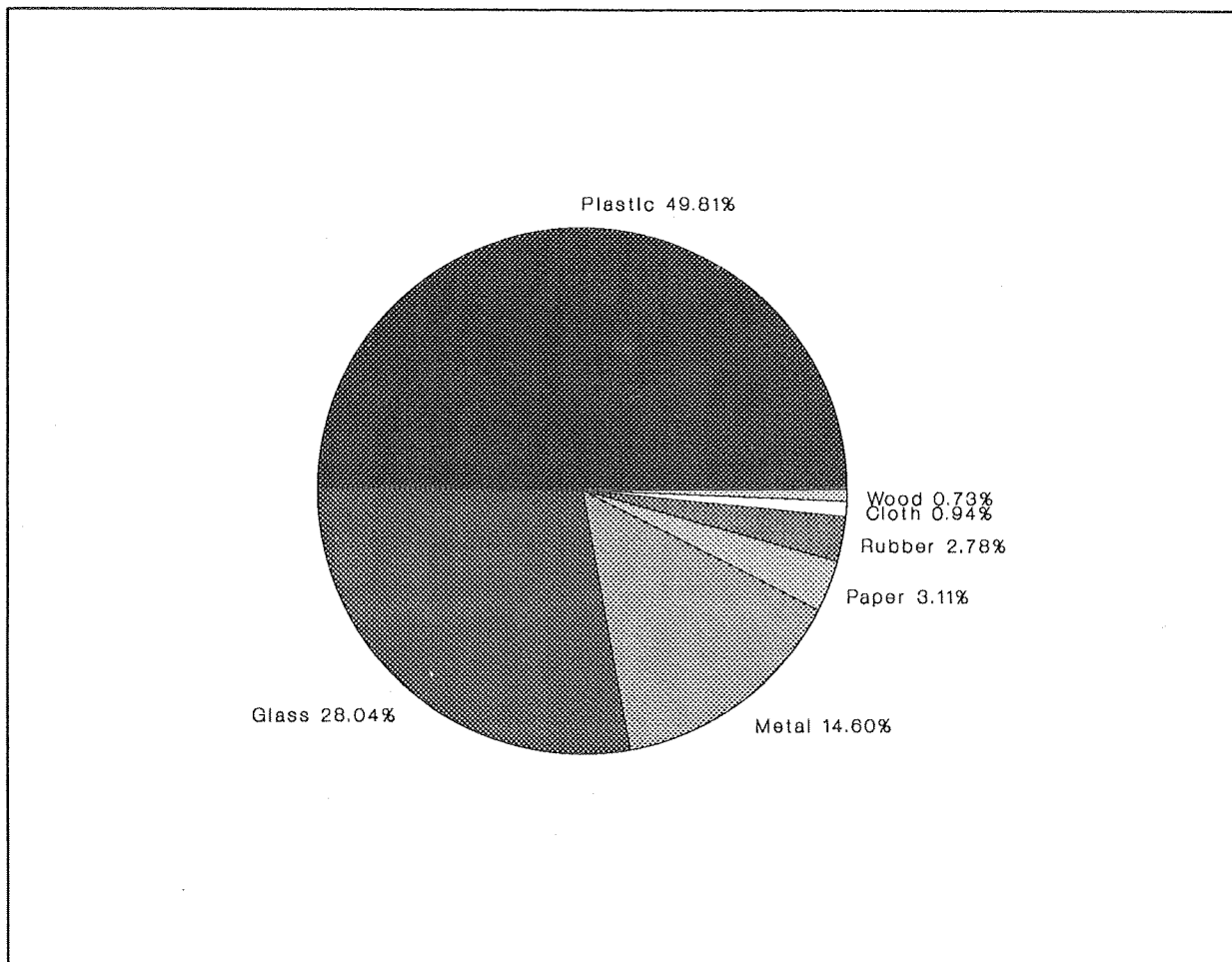
In 1990, AMDAG is working with the Alaska Department of Education and Alaskans for Litter Prevention And Recycling (ALPAR) to encourage even more participation among educators in coastal litter cleanups. AMDAG is composed of representatives from various local, state, and federal agencies with an interest in environmental protection. The effort is coordinated by the Alaska Sea Grant College Program and the Alaska Coastal Management Program.

To help educators plan marine debris activities, AMDAG is making available to educators a packet of information material, and curriculum suggestions. The packet contains posters, stickers, coloring books, activity ideas, brochures on the marine debris problem, and a step-by-step guide to organizing a beach cleanup.

In addition to school efforts, some 200 Alaska communities each spring conduct litter cleanups to remove the winter accumulation of litter from community parks, streets, and neighborhoods. ALPAR coordinates and supplies garbage bags to community cleanups. ALPAR's activities are underwritten by grants from Carrs Shopping Centers, Conoco Inc., the Anchorage Daily News, Safeway, Alaska Distributors, and other businesses. Educators are encouraged to coordinate efforts with the ALPAR representative in their community. To find out who the cleanup coordinator is in your area contact Audrey Lee at ALPAR (for address see end of Alaska's report).

Douglas Schneider

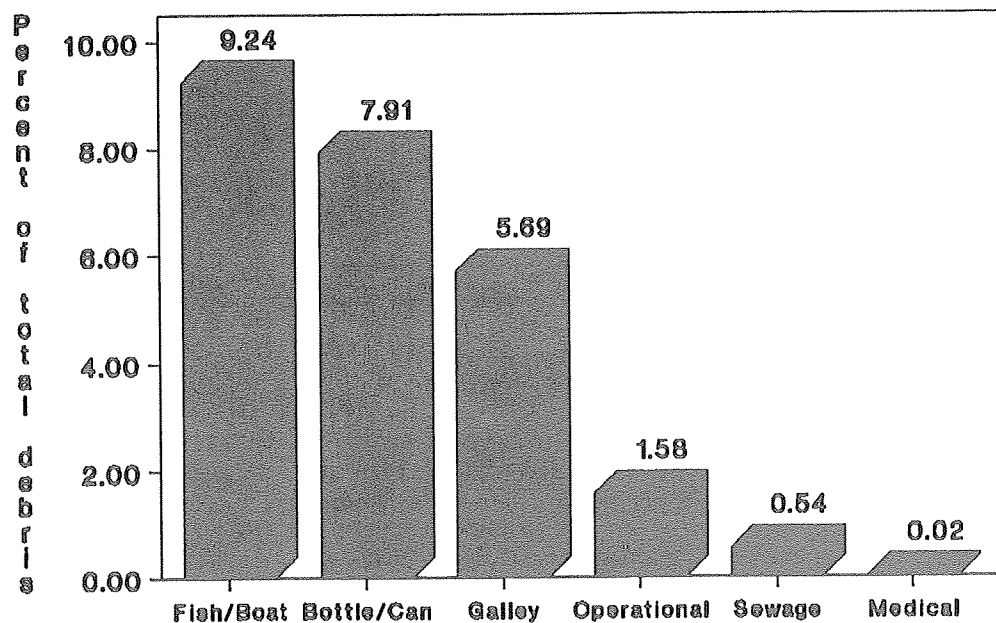
**PERCENT COMPOSITION OF ALASKA'S BEACH DEBRIS:**



**ALASKA'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. glass pieces	4,741	25.14
2. plastic pieces	2,163	11.47
3. small foamed plastic pieces	1,489	7.89
4. metal pieces	805	4.26
5. metal beverage cans	641	3.39
6. plastic caps and lids	560	2.97
7. plastic rope (longer than 2 feet)	542	2.87
8. plastic trash bags	499	2.64
9. plastic rope (2 feet or shorter)	477	2.52
10. large foamed plastic pieces	429	2.27
11. glass beverage bottles	332	1.76
12. plastic bleach, cleaner bottles	320	1.70
<b>TOTAL</b>	<b>12,998</b>	<b>68.88</b>

**MAJOR TYPES AND SOURCES OF ALASKA'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Ketchikan	41.85	glass pieces
Prince of Wales Island	77.55	plastic pieces
Petersburg	9.09	glass pieces
Skagway	81.12	plastic caps, lids
Ninilchik	68.42	plastic beverage bottles
Homer Spit	61.70	plastic trash bags, cigarette butts
Kodiak	55.92	plastic trash bags
Unalaska	93.84	plastic rope (2 feet or shorter)
Tununak	37.50	plastic trash bags

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

None reported.

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**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Ketchikan	car seat springs, large foam rubber cushion, plastic pumpkin head, deer skull, woman's panties, 100 feet of gill net, basketball
Prince of Wales Island	six inner tubes, several bottles of "Visqueen," glass float (fishing buoy)
Petersburg	surveying tape, 31-pound tug boat bow bumper, large electric breaker bar, large wooden spool, water-logged sleeping bag, can opener
Skagway	aspirin, baby powder, and pill bottles
Kodiak	plastic garbage can, metal grill
Tununak	two-burner stove

**FOR INFORMATION ON ALASKA'S 1990 BEACH CLEANUP CONTACT:**

Joaqlin Estus  
Coastal Management Program  
Division of Governmental Coordination  
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Douglas Schneider  
Alaska Sea Grant College Program  
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138 Irving II  
Fairbanks, AK 99775-5040  
(907) 474-7086

Audrey Lee  
Alaskans for Litter Prevention and Recycling  
3514 Svassar Drive  
Anchorage, AK 99508  
(907) 272-9326

**CLEANUP DATE: Spring 1990**

1989 National Beach Cleanup  
Raw Data Summary

ALASKA

		Prince of Wales Ketchikan	Wales Petersburg	Skagway	Homer Spit Ninilchik	Kodiak	Unalaska Tununak	STATE TOTAL	
<b>PLASTIC</b>									
Bags	Trash	148	122	137	33	11	38	9	499
	Salt	0	2	0	0	1	0	0	3
	Other	23	46	16	33	1	2	13	134
Bottles	Beverage	41	96	6	5	6	3	24	181
	Bleach	26	236	35	15	0	8	0	320
	Oil	51	218	1	7	0	6	0	284
	Other	128	44	2	11	0	1	0	186
Buckets		33	58	0	2	0	0	0	93
Caps/lids		119	344	3	50	0	2	12	560
Cigarette butts		23	1	0	0	0	0	0	24
Cups/straws		39	34	9	2	1	8	0	96
Diapers		6	6	2	0	0	1	0	15
Lighters		8	18	2	2	0	1	0	31
Fishing line		4	14	6	0	1	2	12	39
Net	Long	18	57	3	2	0	2	4	88
	Short	5	17	0	2	0	5	0	29
Floats, lures		53	74	3	0	0	1	0	131
Hardhats		2	0	0	0	0	0	0	2
Lightsticks		0	2	0	0	3	0	0	5
Milk/water jugs		73	34	23	4	0	1	0	135
Pieces		143	1908	53	35	2	2	20	2163
Pipe thread		3	20	9	0	0	1	0	33
Rope	Long	115	320	48	16	1	4	18	542
	Short	101	256	21	35	0	1	13	477
Sheeting	Long	24	6	0	18	0	0	0	48
	Short	17	0	0	37	0	2	0	56
6-pack holders		40	72	6	16	0	2	22	158
Strapping bands		26	92	0	18	0	1	2	190
Syringes		0	4	0	0	0	0	0	4
Tampon app.		17	81	0	4	0	0	0	102
Toys		15	46	12	2	0	2	0	77
Vegetable sacks		7	4	0	5	0	2	0	18
Write protector		0	4	0	0	0	0	0	4
Other		96	138	14	4	0	11	1	264
<b>GLASS</b>									
Bottles	Beverage	185	39	53	35	0	0	12	332
	Food	0	20	0	1	0	1	0	23
	Other	5	3	0	0	0	0	0	8
Light tubes		0	0	0	0	0	0	0	0
Light bulbs		3	2	2	0	0	0	0	7
Pieces		1495	143	3049	32	0	3	19	4741
Other		1	5	166	0	0	0	3	175
<b>STYROFOAM</b>									
Buoys		36	38	7	0	0	0	0	81
Cups		85	58	18	12	0	2	7	182
Egg Cartons		6	4	1	1	0	0	1	13
Fast-food		39	14	2	0	0	8	0	63
Meat trays		36	32	5	6	0	0	9	88
Pieces	Large	179	227	10	10	0	0	1	429
	Small	95	1334	10	4	0	9	37	1489
Other		6	42	312	0	0	0	0	55

	Prince of Wales		Skagway	Homer Spit		Unalaska			STATE	
	Ketchikan	Petersburg		Ninilchik	Kodiak	Tununak		TOTAL		
<b>RUBBER</b>										
Balloons	2	6	1	2	0	0	5	0	16	
Gloves	10	6	2	0	0	0	5	0	23	
Tires	9	56	10	0	0	0	5	0	80	
Other	8	59	312	1	0	0	25	0	405	
<b>METAL</b>										
Bottle caps	93	18	4	0	0	6	1	0	122	
Cans										
Aerosol	35	80	7	3	0	0	1	0	126	
Beverage	188	185	235	10	1	4	13	0	641	
Food	2	6	5	1	0	0	0	6	20	
Other	17	50	159	1	0	0	1	0	228	
Crab/fish traps	0	0	2	0	0	0	0	0	2	
Drums										
Rusty	4	32	0	0	0	0	1	0	37	
New	0	6	0	0	0	0	1	0	7	
Pieces	86	404	295	0	1	1	5	13	805	
Pull tabs	28	28	2	0	0	0	0	0	58	
Wire	22	170	83	0	1	0	6	0	283	
Other	67	220	106	1	2	2	23	0	424	
<b>PAPER</b>										
Bags	21	4	7	1	0	5	12	0	50	
Cardboard	8	6	6	3	0	0	4	0	27	
Cartons	19	12	3	0	0	0	3	0	37	
Cups	27	2	6	0	0	0	1	0	36	
Newspaper	9	20	0	0	1	0	5	0	35	
Pieces	95	76	75	0	0	1	13	0	262	
Other	118	12	9	0	0	1	0	0	140	
<b>WOOD</b>										
Crab/lobster traps	0	1	0	0	0	1	0	0	2	
Crates	3	1	0	0	0	0	0	0	4	
Pallets	1	8	0	0	0	0	0	0	9	
Pieces	37	55	6	0	0	7	0	0	105	
Other	0	8	6	0	0	3	0	0	17	
<b>CLOTH</b>										
Clothing	23	30	102	0	0	1	21	0	177	
<b>TOTAL ITEMS/ZONE</b>	<b>4507</b>	<b>7896</b>	<b>5184</b>	<b>482</b>	<b>19</b>	<b>94</b>	<b>422</b>	<b>211</b>	<b>40</b>	<b>18855</b>



Data collected at California's Coastal Cleanup will be used to prepare a California Action Plan to reduce the debris problem in this state.



## CALIFORNIA

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September 23, 1989  
10,077 Volunteers  
358 Miles Cleaned  
207,058 Pounds of Debris Collected  
466,455 Debris Items Reported

Coordinated By: Jack Liebster  
California Coastal Commission  
631 Howard Street  
San Francisco, CA 94105  
(415) 543-8555

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California's 1989 Coastal Cleanup was an incredible success! More than 10,000 volunteers came out on September 23, and picked up more than 200,000 pounds of trash and debris. That's almost double the number of volunteers from 1988.

The California Coastal Commission initiated a new television and radio public service announcement campaign which helped to increase volunteer turnout. The campaign has won four awards including one from the Northern California Advertisers Association (the "Addy" award), the State Information Officers Council, Sacramento Film Festival, and the "Joey" award of the San Jose Convention and Visitors Bureau.

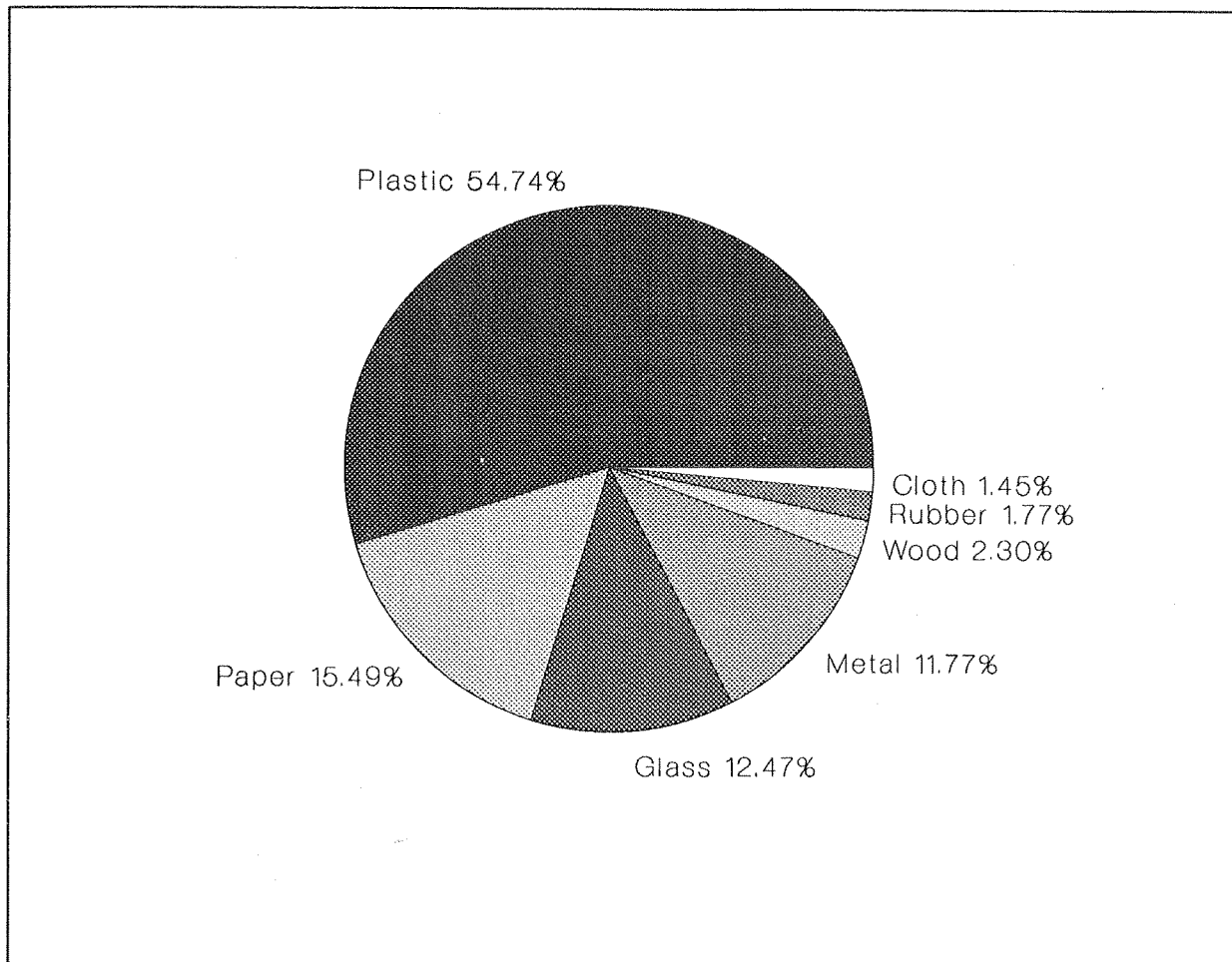
The statewide project, organized by the California Coastal Commission, drew volunteers from all over California. Families, individuals, youth, church, and school groups as well as businesses and citizen groups not only cleaned the beaches but also sorted and recycled much of what they found. The Center for Marine Conservation's Pacific Coast Regional Office in San Francisco conducted a focused data collection campaign with information packets and slide shows to inform volunteers of the importance of beach cleanup data collection. This data, fed into the National Marine Debris Database, is vital information for governmental and environmental agencies assessing the impact of debris polluting the ocean and coastline. As a result the number of completed data cards returned for analysis increased ten-fold.

All along California's 1,000 miles of coastline volunteers cleaned the beach of everything from the usual bottles, bags, used disposable diapers, and plastic, to stoves, car parts, refrigerators, couches, and a complete motorcycle. The Monterey County volunteers liberated a crab that had crawled into a recyclable plastic soda bottle as a baby and got stuck when it grew too large to escape. In Alameda, volunteers found a message in a bottle written by a visitor from England and thrown off the Golden Gate Bridge in May 1989. The Coastal Commission is writing the gentleman a note asking him not to litter our oceans.

The cleanup statistics are a sad and obvious indicator that California continues to suffer from a plague of trash. That is why the Coastal Commission has taken the annual one-day Coastal Cleanup and turned it into a year-round program--the Adopt-A-Beach Recycling and Cleanup Program. The objective of the program is twofold. The first is to get the beaches and coastline clean. The hundreds of pounds of trash volunteers removed over the past years has made a real impact--especially in areas normally inaccessible to regular maintenance programs. Secondly, and more importantly, the Coastal Commission and cooperating groups believe that educating and raising the awareness of the approximately 140 million people who come to the coast each year is the way to make positive and lasting changes in the fate of our coastline. The National Marine Debris Database is a powerful and integral part of that education process. The 1990 statewide cleanup is scheduled for September 22. The following data reflects that the job is far from done, but working together, Californians are making tremendous progress.

Jack Liebster

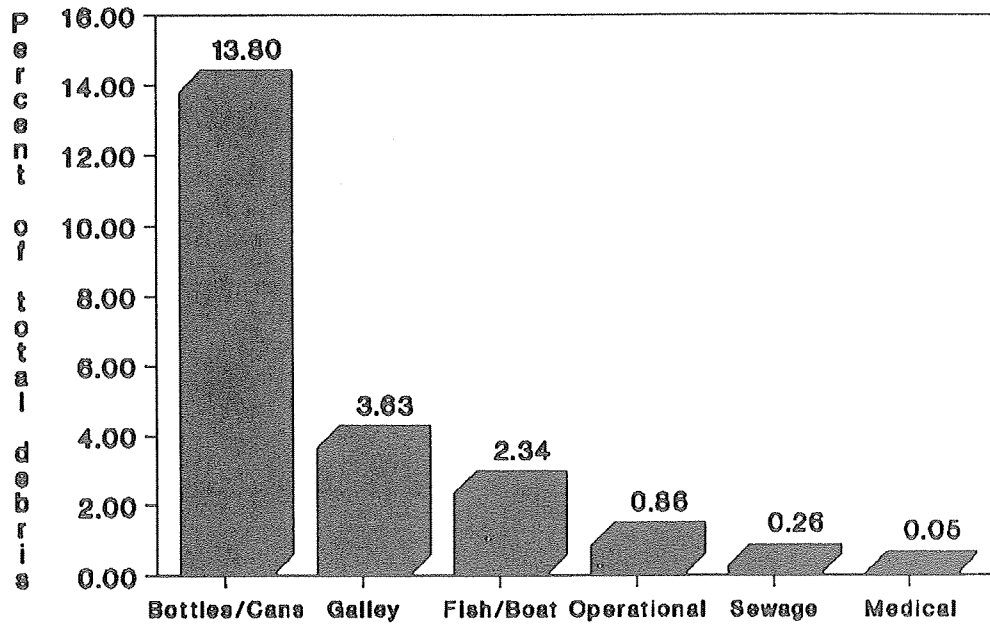
**PERCENT COMPOSITION OF CALIFORNIA'S BEACH DEBRIS:**



**CALIFORNIA'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. cigarette butts	52,031	11.15
2. small foamed plastic pieces	41,520	8.90
3. paper pieces	40,564	8.70
4. glass pieces	34,614	7.42
5. plastic pieces	28,129	6.03
6. plastic cups, spoons, forks, straws	20,736	4.45
7. glass beverage bottles	20,518	4.40
8. plastic caps, lids	17,357	3.72
9. metal bottle caps	16,562	3.55
10. metal beverage cans	13,664	2.93
11. foamed plastic cups	12,953	2.78
12. miscellaneous plastic bags	12,921	2.77
<b>TOTAL</b>	<b>311,569</b>	<b>66.80</b>

**MAJOR TYPES AND SOURCES OF CALIFORNIA'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris
Del Norte County	50.31	paper pieces
Humboldt County	42.48	paper pieces
Mendocino County	55.66	small foamed plastic pieces
Sonoma County	52.07	cigarette butts
Marin County	65.81	small foamed plastic pieces
San Francisco County	58.17	plastic pieces
Solano County	45.42	glass pieces
Alameda County	55.43	glass pieces
San Mateo County	52.95	cigarette butts
Santa Cruz County	45.89	cigarette butts
Monterey County	50.59	glass pieces
San Luis Obispo County	52.87	cigarette butts
Santa Barbara County	39.80	glass pieces
Ventura County	48.52	paper pieces
Los Angeles County	67.99	plastic cups, spoons, forks, straws
Orange County	74.81	cigarette butts
San Diego County	55.45	cigarette butts

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

**Debris Related**

cormorant with perch fishing hooks in mouth and tail  
 common murre entangled with fishing line around neck  
 seagull entangled in plastic fishing line  
 seagull entangled in plastic rope  
 seagull wrapped in gill net  
 seagull entangled in string or tape  
 seagull entangled in fishing line with hook in one wing  
 seagull entangled in fishing line, rescue was successful  
 seabird entangled in wire  
 2 birds entangled in one piece of fishing line with hooks attached  
 2 birds entangled in fishing line or netting  
 bird entangled in fishing line  
 crab entangled in a bunch of small debris styrofoam, and a plastic 6-pack holder  
 crab caught in a plastic bottle (freed)  
 dead mouse in a beer bottle

**Other Reports**

1438 dead birds (many shot)  
 56 dead seals/sea lions  
 4 dead rats  
 1 dead ferret  
 1 dead cow  
 1 dead gopher  
 1 dead sheep  
 1 dead shrew  
 1 dead cat  
 1 dead raccoon  
 1 dead pig  
 1 dead mouse  
 2 dead deer (one fawn)  
 1 dead opossum  
 1 dead sea otter  
 2 dead squirrels  
 1 dead dog  
 1 dead snake  
 4 octopus living in beer cans and bottles  
 1 stingray inside a tire

**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Del Norte County	bed sheet, Monopoly board, motorcycle fender, American flag, car headlight, area rug, asthma inhaler, "hot pink thing", one dollar bill, stove, bedspring
Humboldt County	window screens, condom, Adopt-A-Beach bag surrounded by trash, plastic animal head spout
Mendocino County	falsie pad, electric stuffed teddy bear
Sonoma County	blue condom, clock, basketball-size hunk of human hair, Madonna tape "Like A Virgin" together with condom, pink shoe, colostomy bag, sanitary napkins, snake bite kit, political candidate billboard, Mercedes-Benz bumper, car battery lid, pacifier, men's underwear, tooth brush, "lost sole" (shoe), bicycle seat, car grill
Marin County	bathothermograph (Model F-4), "No Parking" sign, Chinese coin, U.S. Postal mail crate, golf bag, men's underwear, "whale vomit", white leather cowboy boot, leather necktie, sanitary napkin, pencil sharpener, Popeye head (toy), one complete Capri sailboard deck
San Francisco County	lavender pantyhose, skylight frame, plastic shopping cart, curling iron
Solano County	brush, dentures, ten dollar bill, buried motorcycle, aircraft surface cleaner tube of vampire blood, part of a bowling ball, plastic fingernail Alameda two television sets, 20 lbs. of "gross undefinables", marijuana pipe, "crack" pipe, smushed Twinkie, two toilets, computer chip, typewriter ribbon cartridge, wig, 10-of-diamonds playing card, porta-potty, birth control pills, headless Count Dracula toy, pink garbage can, alligator toothbrush, letter in a bottle from 1982
San Mateo County	boxer shorts, Christmas ornament, Barbie doll head, cowboy boot, contraceptive sponge, hair curler, sanitary napkin, condoms, car muffler, car engine, 1984 Doberman Pinscher award
Santa Cruz County	one-half a \$50 bill, underwater detonation device, bed frame, Volvo hubcap, phone book, mailbox, traffic cone, condom

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**MOST PECULIAR DEBRIS ITEMS REPORTED (continued):**

Monterey County	20 sticks of dynamite, quart of red paint, television fuse, Barbie doll shoe, "Danger-Asbestos Hazard" warning tape
San Luis Obispo	plastic devil, rear car axle, dryer drum, green moldy pantyhose, ping-pong ball, hashish pipe, small sailing ship
Santa Barbara County	three-quart cooking pot, burned sacrificial surfboard, dustpan, umbrella, wig, couch, fish tank, Chicago Bears hat, finger splints, thermal underwear, leopard bikini underwear, umbrella, condom, tear-away panties
Ventura County	bag of human feces, bedsprings, corn-cob pipe, fake grass, spark plug, "Barbie" barbells, two table legs, condoms, "No Parking" sign (underwater), bread rack
Los Angeles County	intravenous bag, bra, Big-Wheel toy, fake \$20 bill, plastic Santa Claus and sleigh, fishing line with worms attached to stockings, prosthetic joint for some unknown limb, blow dryer, bathing suit (bottom only)
Orange County	plastic shower curtain ring, a note "Help me, I'm lost at sea. If you find me, a wish will be granted," tape recorder, underwear (men's size 34)
San Diego County	fire extinguisher, neck brace with no neck, bra, bike frame, knee pad, oven broiler pan, plastic ninja star, burned sacrificial surfboard, two teddy bears, grocery cart, "I Love a Clean San Diego" button, condom, seagull cookie cutter, snow ski pole, plastic toy eyeball, mattress, drug paraphernalia, sanitary napkins

\* not all items indicated as peculiar by volunteers are listed

**FOR INFORMATION ON CALIFORNIA'S 1990 BEACH CLEANUP CONTACT:**

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For information on data collection:

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(415) 391-6204

**CLEANUP DATE: Saturday, September 22, 1990**

1989 National Beach Cleanup CALIFORNIA

Rav Data Summary

	CALIFORNIA													STATE TOTAL			
	Del Norte	Humboldt	Mendocino	Sonoma	Marin	San Francisco	Solano	Alameda	San Mateo	Santa Cruz	Monterey	San Luis O	S. Barbara		Ventura	Los Angeles	Orange
<b>PLASTIC</b>																	
Bags	467	397	3	598	381	641	93	870	556	1026	499	726	614	1323	1058	229	1981
Trash	86	1	0	15	11	8	1	23	4	145	12	0	33	18	91	14	62
Salt	734	292	49	885	515	559	75	907	669	880	968	588	582	1844	1376	269	1729
Other	206	79	14	219	428	150	145	873	306	708	441	196	593	681	685	252	755
Bottles Beverage	91	6	9	44	117	6	6	181	32	19	41	21	57	77	45	9	98
Bleach	83	4	4	32	93	18	3	226	40	35	54	44	27	64	176	67	111
Oil	110	17	13	75	223	53	9	320	38	81	132	58	139	346	226	106	233
Other	27	4	2	13	71	12	8	64	97	21	32	15	26	38	10	13	46
Buckets	429	235	31	731	1332	883	140	1652	817	1347	763	542	731	1814	2608	1152	2150
Caps/lids	661	310	9	4827	1070	2059	176	837	2927	6376	1474	3882	2154	4691	3725	8300	8603
Cigarette butts	325	72	15	521	995	810	62	1462	814	1209	865	489	883	2337	5176	1916	2785
Cups/straws	50	13	3	29	37	18	4	59	54	46	40	20	201	109	124	20	97
Diapers	41	4	1	45	75	50	9	273	46	50	50	29	46	154	89	101	256
Lighters	123	48	6	265	58	64	77	315	106	77	65	57	63	111	370	132	285
Fishing line	14	1	0	24	25	9	3	27	22	7	12	11	27	22	7	3	27
Long	54	8	0	37	29	17	1	23	21	17	25	7	29	37	14	5	40
Short	22	9	0	36	43	18	11	88	6	11	30	9	35	25	28	15	60
Floats, lures	1	0	0	1	0	1	1	7	2	1	3	0	0	0	0	0	1
Hardhats	1	0	0	10	9	16	4	28	9	166	16	6	8	23	14	7	123
Lightsticks	105	20	8	48	130	22	6	300	79	350	55	27	66	119	72	60	119
Milk/water jugs	1349	474	63	1812	1767	2158	77	2015	1039	1958	1833	1049	1276	2591	2647	1933	4088
Pieces	13	5	0	22	249	13	6	16	4	4	12	0	6	31	42	12	54
Pipe thread	210	27	9	109	128	77	4	53	56	57	154	35	48	89	83	35	147
Rope	561	127	10	312	323	211	10	98	174	128	306	66	117	327	100	130	281
Short	5	5	0	16	36	10	1	38	19	16	21	11	14	25	45	13	50
Long	36	17	0	40	84	33	5	114	32	24	31	23	52	112	87	22	141
6-pack holders	61	25	0	79	113	124	37	461	176	329	165	67	169	479	379	139	602
Strapping bands	25	23	3	44	92	81	7	370	76	76	126	19	46	223	290	63	307
Syringes	2	5	0	3	7	8	1	60	7	10	7	1	5	15	15	38	32
Tampon app.	5	4	3	23	53	49	6	148	25	44	25	21	22	51	647	35	70
Toys	25	14	4	35	54	46	10	204	69	93	52	34	98	118	110	112	169
Vegetable sacks	57	13	0	61	38	45	8	137	42	108	82	49	56	110	65	81	155
Write Protector	7	1	5	17	23	29	12	63	53	41	12	6	23	33	166	56	53
Other	192	129	17	421	1035	414	69	987	355	415	590	412	326	840	498	254	1087
<b>GLASS</b>																	
Bottles Beverage	482	227	48	1237	682	378	231	1060	1512	4252	1476	967	1680	2490	1041	498	2257
Food	93	26	10	444	70	9	2	69	26	88	11	34	61	44	110	13	58
Other	8	8	1	6	26	18	0	47	15	15	53	23	6	52	28	6	39
Light tubes	0	0	0	1	21	1	0	2	0	0	0	0	1	11	0	0	0
Light bulbs	14	2	1	6	48	4	0	28	6	10	14	14	7	21	4	5	12
Pieces	979	710	19	3381	594	1082	678	4509	2165	3513	2577	1924	4627	3294	1645	620	2297
Other	31	19	2	26	94	14	7	531	95	93	5	13	22	118	24	22	172
<b>STYROFOAM</b>																	
Buoys	26	16	2	9	88	45	3	77	11	8	39	4	23	54	74	2	77
Cups	297	139	14	543	795	220	98	2276	603	712	923	396	752	1436	1871	402	1476
Egg Cartons	10	0	0	6	24	14	0	67	14	23	41	12	11	32	32	25	48
Fast-food	174	42	2	112	243	67	29	753	210	215	201	87	243	529	566	213	508
Meat trays	60	16	3	129	242	42	6	302	160	88	78	26	67	142	67	7	113
Pieces Large	208	21	23	299	533	110	39	842	319	316	358	237	307	473	511	266	565
Small	629	215	115	3242	3833	1680	234	3594	1714	1924	2144	1248	1849	3108	4635	6887	4469
Other	20	1	22	164	167	62	2	45	97	79	673	52	100	588	286	44	324

STATE TOTAL

Orange San Diego

Los Angeles

Ventura

S. Barbara

San Luis O

Monterey

Santa Cruz

Alameda

San Mateo

Solano

San Francisco

Marin

Sonoma

Mendocino

Humboldt

Del Norte

	Del Norte	Humboldt	Mendocino	Sonoma	Marin	San Francisco	Solano	San Francisco	Alameda	San Mateo	Santa Cruz	Monterey	San Luis O	Ventura	Los Angeles	Orange	San Diego	STATE TOTAL
<b>RUBBER</b>																		
Balloons	13	10	4	82	134	121	22	412	109	255	168	48	170	367	394	377	771	3457
Gloves	16	16	1	13	12	33	2	55	33	14	14	2	49	18	36	16	73	420
Tires	51	38	7	20	30	7	8	271	51	45	14	15	33	75	53	6	84	808
Other	255	125	25	195	193	149	104	438	110	209	155	65	214	364	219	207	538	3565
<b>METAL</b>																		
Bottle caps	228	149	8	1821	368	700	169	771	1016	1870	583	611	1058	2902	1456	908	1944	16562
Cans	34	3	4	19	72	12	2	573	47	138	50	15	39	126	71	59	190	1454
Aerosol	611	246	43	893	636	178	132	826	557	1740	965	966	1118	1856	653	550	1694	13664
Beverage	151	29	23	44	73	21	3	132	40	151	62	73	92	118	38	16	174	1240
Food	33	53	6	80	115	49	7	130	63	129	47	22	44	136	64	41	139	1218
Other	16	7	0	3	1	1	0	3	7	7	9	5	23	15	5	39	18	159
Crab/fish traps	18	36	0	0	8	30	0	15	39	44	6	7	28	66	13	3	45	358
Drums	0	3	0	1	3	1	0	3	0	2	12	0	0	2	0	0	4	31
Rusty	182	47	9	208	157	121	10	461	123	336	292	170	296	391	204	162	564	3733
New	42	21	1	319	77	71	34	229	213	318	199	266	161	297	164	196	900	3508
Pieces	69	27	0	254	57	105	27	221	115	341	140	273	167	278	83	239	343	2739
Pull tabs	412	422	11	572	235	290	25	676	350	1405	359	127	1290	830	278	1104	1861	10247
Wire																		
Other																		

	Del Norte	Humboldt	Mendocino	Sonoma	Marin	San Francisco	Solano	San Francisco	Alameda	San Mateo	Santa Cruz	Monterey	San Luis O	Ventura	Los Angeles	Orange	San Diego	STATE TOTAL
<b>PAPER</b>																		
Bags	304	70	3	302	117	221	46	492	269	445	381	209	437	868	581	93	785	5623
Cardboard	378	84	3	229	131	198	46	524	224	518	421	254	260	640	343	55	455	4763
Cartons	166	35	16	175	97	75	18	265	190	273	258	92	298	590	333	58	587	3526
Cups	154	30	7	137	76	99	44	356	229	438	259	140	344	659	507	149	695	4323
Newsprint	123	65	3	235	113	209	15	335	253	456	168	65	388	449	438	109	482	3906
Pieces	1763	815	59	2768	1475	1998	98	1729	1851	3431	2241	1808	3490	6400	3050	1484	6104	40564
Other	442	279	16	533	1430	637	16	347	86	940	644	434	438	1077	677	256	1280	9552
<b>WOOD</b>																		
Crab/lobster traps	0	1	0	0	0	2	0	1	1	0	0	5	0	29	8	0	14	73
Crates	5	0	1	4	27	4	0	10	4	10	10	2	50	28	3	7	78	243
Pallets	7	2	0	1	5	4	0	38	11	4	21	48	10	22	10	4	23	210
Pieces	140	90	0	246	485	633	10	772	365	462	1047	398	500	1010	656	336	1454	8604
Other	32	18	0	104	156	211	2	35	65	117	122	62	129	170	65	31	278	1397
<b>CLOTH</b>																		
Clothing	256	143	37	326	271	191	42	727	334	560	331	260	474	924	439	224	1235	6774

TOTAL ITEMS/ ZONE	Del Norte	Humboldt	Mendocino	Sonoma	Marin	San Francisco	Solano	San Francisco	Alameda	San Mateo	Santa Cruz	Monterey	San Luis O	Ventura	Los Angeles	Orange	San Diego	STATE TOTAL
	15110	6704	830	30638	23658	18829	3298	38347	22476	41819	26586	20014	29957	52016	42787	31332	62054	466455



Jim O'Rourke looks for beach debris at Ocean Beach, Connecticut.  
*Photo by Skip Weisenburger, courtesy of The Day.*

## CONNECTICUT

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September 23, 1989  
549 Volunteers  
56.5 Miles Cleaned  
6,230 Pounds of Debris Collected  
34,841 Debris Items Reported

Coordinated by: Peg Van Patten  
Connecticut Sea Grant Program  
University of Connecticut  
Marine Science Institute, Avery Point  
Groton, CT 06340  
(203) 445-3459

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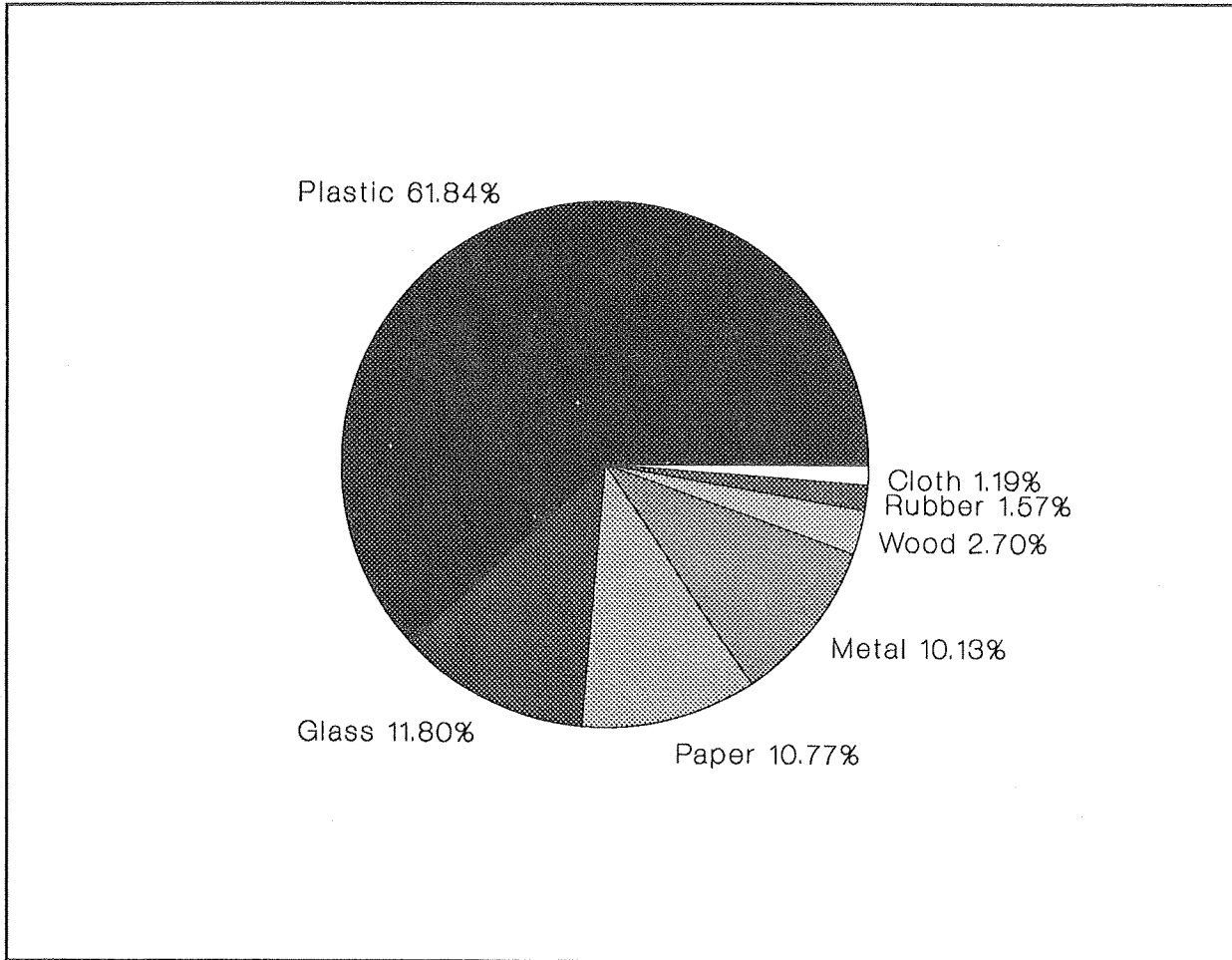
An unprecedented 555 volunteers conducted the most extensive survey of beach debris in Connecticut's history, as part of the national marine debris survey. Volunteers bagged trash on beaches from Westport to Stonington, covering most of the state's coastline, in spite of Hurricane Hugo. Many zone captains commented that the beaches looked immaculate to begin with, but small pieces of plastic (including styrofoam), plastic drinking straws, and cigarette butts were ubiquitous. Still, there were some surprises. In Milford, an eroding landfill left volunteers a refrigerator, two washing machines, a car transmission, and two dozen tires. In New Haven there were six syringes. The discovery of 24 55-gallon drums of unknown origin was another surprise. Volunteers included Boy and Girl Scouts, Sea Explorers, school children, college students, families, members of environmental and educational organizations, congressmen, and two mayors.

Congressman Christopher Shay's office used information from the cleanup for drafting polystyrene legislation for the town of Stamford, and Representative Mary Mushinsky of Wallingford used plastic data for legislation on plastic tampon applicators. Legislators in New Jersey have already used Connecticut's 1988 data to draft nine bills concerning fast-food packaging, six-pack rings, plastic hygiene products, and pull tabs on beverage cans.

Special thanks to zone captains Maria Sepa and Rick Schreiner, Long Island Sound Task Force (Westport, Darien, Norwalk and Stamford); Stephanie Cone of Long Island Sound America (Fairfield); Maisa Tisdale of Ocean Classroom (Bridgeport); Peter Holm, Skipper of Ship 25, Milford Sea Explorers (Milford); Laura Norwitz, Schooner, Inc. (East and West New Haven); Brenda Dorr, Thames Science Center (Rocky Neck and Harkness Memorial Park); Bernadette Bode, Mystic Marinelife Aquarium (Stonington Point and Bluff Point, Groton); Regina Mission (Ocean Beach, New London); Charles Enders (Pleasure Beach, Waterford); and Becca Saffran and Bill Sharp, Westport Conservation Commission (Cochene Island). Thanks also to the Cetacean Society (Wethersfield) and Students for a Clean Environment (Connecticut College).

Peg Van Patten

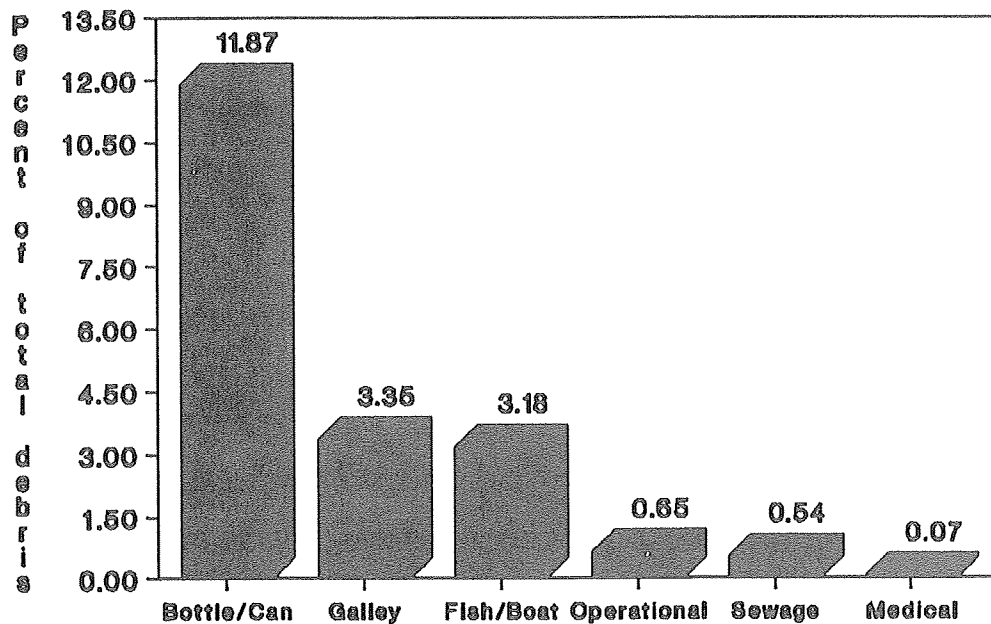
**PERCENT COMPOSITION OF CONNECTICUT'S BEACH DEBRIS:**



**CONNECTICUT'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic cups, spoons, forks, straws	3,982	11.43
2. glass pieces	3,300	9.47
3. plastic pieces	2,444	7.01
4. small foamed plastic pieces	2,430	6.97
5. cigarette butts	2,118	6.08
6. paper pieces	1,977	5.67
7. foamed plastic cups	1,574	4.52
8. metal beverage cans	1,350	3.87
9. plastic caps, lids	1,343	3.85
10. miscellaneous plastic bags	1,202	3.45
11. plastic beverage bottles	979	2.81
12. metal bottle caps	799	2.29
<b>TOTAL</b>	<b>23,498</b>	<b>67.42</b>

**MAJOR TYPES AND SOURCES OF CONNECTICUT'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris
Western (Darien, Norwalk, Stamford, Westport)	63.45	plastic cups, spoons, forks, straws
Milford	41.15	glass pieces
Bridgeport	59.24	glass pieces
Rocky Neck	58.07	cigarette butts
Harkness	57.58	plastic cups, spoons, forks, straws
Bluff Point	68.91	miscellaneous plastic bags
Cochene Island	60.07	metal beverage cans
E/W New Haven	65.98	small foamed plastic pieces
Ocean Beach	67.55	plastic cups, spoons, forks, straws
Stonington	68.80	paper pieces
Whites Beach	86.43	small foamed plastic pieces

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**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

Debris Related	Other Reports
None reported	6 birds 3 crabs 2 skunks

**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Western	"crack" vial, large rope four inches thick and 40 feet long, ice tray
Milford	golf tees, soccer ball, Snoopy pencil eraser, rug
Bridgeport	garage door opener, diaper that had "#2" in it
Rocky Neck	golf ball, men's underwear, bathing suit, car parts
Harkness	toothbrush holder, cloth diaper
E/W New Haven	teapot, bag of marijuana, bra strap, sanitary napkins, condoms (3 unused, 1 used), plastic swimming pool, insulin vial, numerous bricks, tile, insulation and lumber possibly from waterfront development
Ocean Beach	underwear, padlock, used condom
Stonington	panty hose, golf ball, tongue depressor
Whites Beach	"crack" vial

\* not all items indicated as peculiar are listed

**FOR INFORMATION ON CONNECTICUT'S 1990 BEACH CLEANUP CONTACT:**

Peg Van Patten  
Connecticut Sea Grant Program  
University of Connecticut  
Marine Science Institute, Avery Point  
Groton, CT 06340  
(203) 445-3459

**CLEANUP DATE: Saturday, September 22, 1990**

1989 National Beach Cleanup CONNECTICUT

Raw Data Summary

PLASTIC	Milford		Rocky Neck		Bluff Point		E/W New Haven		Stonington		STATE TOTAL	
	Western	Bridgeport	Harkness	Bluff Point	Cochene Is.	Ocean Beach	Whites Beach					
Bags	69	48	38	80	23	120	93	196	33	17	3	720
Trash	0	2	0	1	0	0	0	2	4	0	0	9
Salt	99	105	17	117	95	136	72	427	106	25	3	1202
Other	91	67	23	32	10	39	137	524	50	6	0	979
Bottles	6	7	1	0	7	1	10	68	2	3	0	105
Beverage	7	11	5	7	2	3	52	126	11	0	3	227
Bleach	13	39	9	7	4	4	42	142	9	3	1	273
Oil	0	1	2	15	3	1	4	24	12	2	0	64
Other	159	132	90	110	34	77	92	341	254	37	17	1343
Buckets	155	89	0	364	36	0	31	547	368	471	57	2118
Caps/lids	390	248	77	351	110	54	66	832	1732	55	17	3932
Cigarette butts	3	2	0	4	8	2	3	83	2	0	0	107
Cups/straws	12	16	5	1	2	8	10	40	7	1	0	102
Diapers	34	58	11	10	41	8	17	77	1	1	4	262
Lighters	0	0	0	1	0	1	11	16	1	1	0	31
Fishing line	1	2	4	2	0	4	13	13	0	1	1	41
Net	15	13	7	3	3	2	18	13	0	0	2	76
Floats, lures	0	0	0	0	0	0	0	0	0	0	0	0
Hardhats	0	9	1	0	5	0	1	6	1	1	0	24
Lightsticks	19	7	2	5	20	8	27	76	15	2	0	181
Milk/water jugs	243	261	70	282	48	54	107	870	362	98	49	2444
Pieces	1	0	0	2	0	0	0	5	1	0	0	9
Pipe thread	17	25	2	3	4	4	15	31	5	1	10	117
Rope	23	21	5	9	5	21	34	58	19	15	3	213
Short	7	3	5	0	0	0	1	36	1	0	0	53
Sheeting	19	2	7	3	0	1	0	42	0	3	1	78
Long	22	30	10	17	4	6	18	28	13	8	0	156
Short	7	3	10	16	0	2	10	23	5	0	2	78
6-pack holders	4	3	0	0	0	0	1	15	0	0	0	23
Strapping bands	19	11	7	15	8	11	26	79	9	0	2	187
Syringes	24	21	14	13	4	2	11	68	27	2	7	193
Tampon app.	8	8	3	5	3	1	13	8	16	0	2	67
Toys	3	11	0	9	0	2	10	1	7	0	0	43
Vegetable sacks	53	64	41	66	9	28	48	193	116	74	7	699
Write protector												
Other												



Western Milford Rocky Neck Bluff Point E/W New Haven Stonington STATE  
 Bridgeport Harkness Cocheme Is. Ocean Beach Whites Beach TOTAL

PAPER-----

Bags	79	62	32	23	10	6	0	49	23	8	0	292
Cardboard	16	24	21	3	9	3	13	51	75	3	0	218
Cartons	32	36	20	19	9	6	14	76	39	8	1	260
Cups	58	128	15	85	6	8	15	96	97	4	0	512
Newspaper	4	23	3	29	3	3	0	16	28	5	0	114
Pieces	101	326	31	324	96	45	31	510	379	131	3	1977
Other	8	168	3	61	9	5	1	58	48	20	0	381

WOOD-----

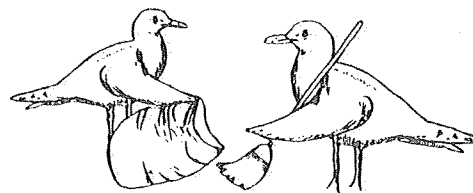
Crab/lobster traps	0	0	1	0	31	1	0	3	0	1	0	37
Crates	1	0	0	2	1	1	3	12	0	0	0	20
Pallets	1	2	0	0	2	0	0	8	0	0	0	13
Pieces	76	75	72	18	24	30	24	397	50	8	7	781
Other	5	5	6	14	6	0	1	36	14	1	3	91

CLOTH-----

Clothing	45	63	11	47	17	16	8	130	62	14	0	413
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TOTAL ITEMS/ZONE 2826 4202 1229 3017 990 1042 2349 12538 5014 1295 339 34841

## Get The Drift And Bag It!



## DELAWARE

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September 30, 1989  
1,878 Volunteers  
53.25 Miles Cleaned  
13,217 Pounds of Debris Collected  
79,759 Debris Items Reported

Coordinated By: Nancy Rolli and  
David Small  
Delaware Department of Natural Resources  
and Environmental Control  
89 Kings Highway, P.O. Box 1401  
Dover, DE 19901  
(302) 736-4506

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Delaware held its third annual coastal cleanup, Get the Drift and Bag It, on Saturday, September 30, 1989 from 9 a.m. to noon. The weather cooperated but started out cool and gray in the early hours. Approximately 1,878 volunteers cleaned 53.25 miles of trash from beaches bordering the Atlantic Ocean and the Delaware River and Bay. The project was cosponsored by the Department of Natural Resources and Environmental Control and the Du Pont Company.

Delaware has 59 miles of beaches, ranging from popular Rehoboth Beach on the Atlantic to many rural, back-road beaches along the Delaware River. The cleanup attempted to clean 53.25 miles of accessible beach.

Volunteers, ranging from scout troops to senior citizen organizations, families, the U.S. Environmental Protection Agency in Washington, D.C., and the Du Pont Company, collected 1,539 bags of trash averaging seven pounds each. The trash included paper, cans, bottles, foam products, six-pack rings, plastic bags and sheeting, balloons, plywood, and cigarette butts. Heavy debris, such as tires and refrigerators were removed. Unusual debris found were a washer, eight steel drums (55-gallon), car batteries, five butane tanks, and bug spray from Germany and a mercurochrome bottle from Holland believed to come from ships. Volunteers were encouraged to wear gloves.

The Mobil Chemical Company supplied the trash bags, Southland Corporation supplied coupons for sodas. Browning-Ferris Industries donated manpower and two trash trucks for collecting full trash bags from river and bay areas.

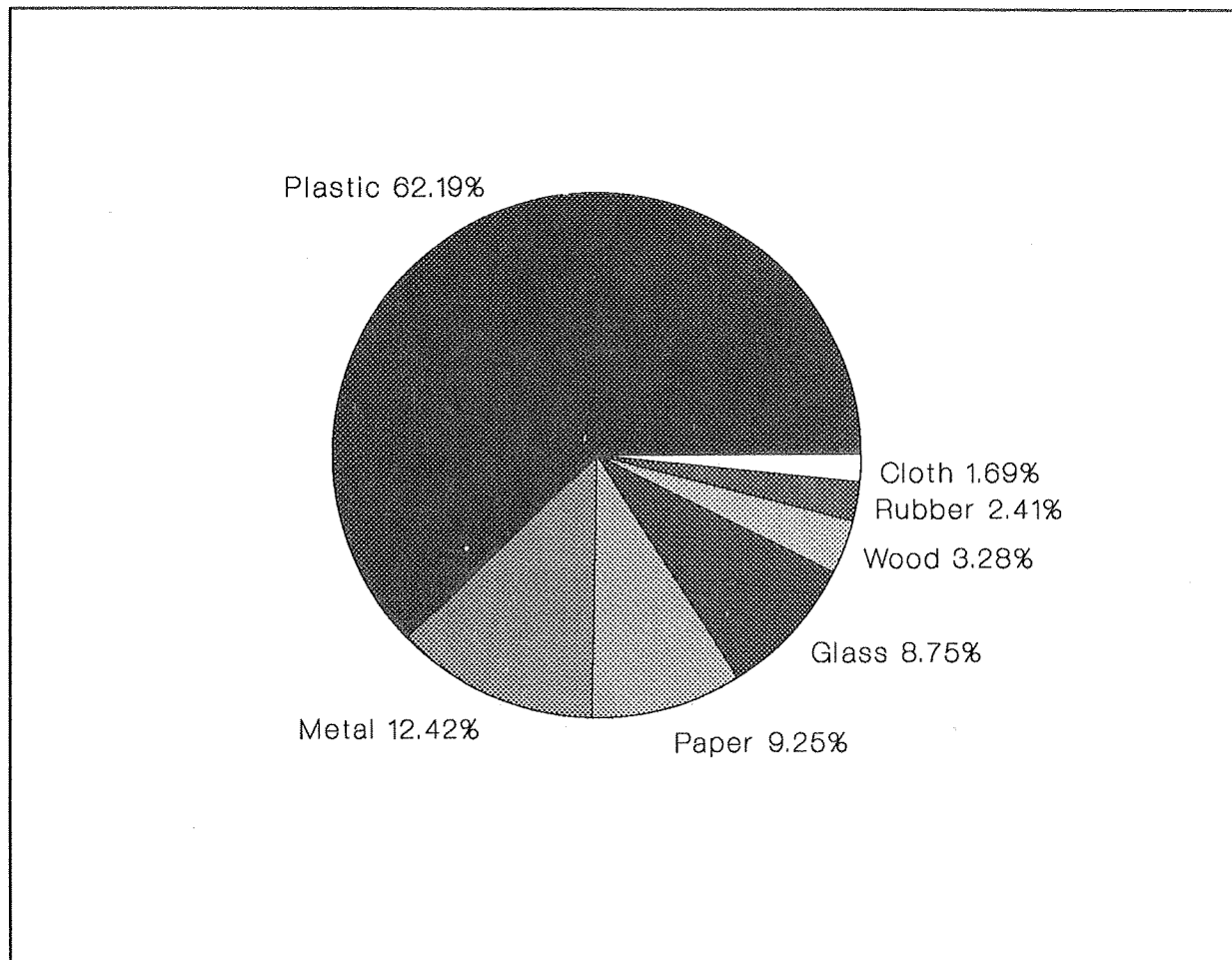
The Du Pont Company asked us to co-sponsor this national effort to enlist public support to find solutions to the marine litter problem and we received a \$10,000 grant. The project was an example of the partnership required between government, industry, and the general public to help solve the solid waste dilemma. This grant was used by the Department to fund promotional and educational support for the cleanup.

About 400 Du Pont employees and their families participated in the cleanup. As part of a pilot program, the Du Ponters separated plastic litter from other wastes. Du Pont arranged to have these plastics made into 12 park benches at the Center for Plastics Recycling Research at Rutgers University. The benches will be donated to the state for placement along Delaware's beaches during the first quarter of 1990.

Delawareans and residents from neighboring states are proud of Delaware's pristine beaches and want to see them remain the natural attraction that they are.

Nancy Rolli

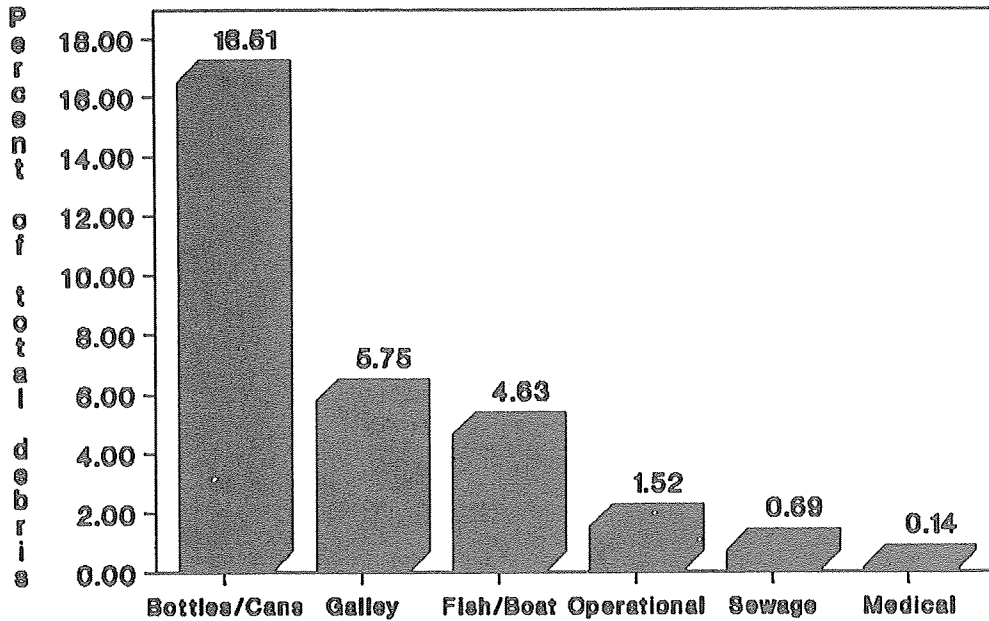
**PERCENT COMPOSITION OF DELAWARE'S BEACH DEBRIS:**



**DELAWARE'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic pieces	6,455	8.09
2. metal beverage cans	5,775	7.24
3. plastic cups, spoons, forks, straws	5,322	6.67
4. cigarette butts	4,235	5.31
5. glass pieces	3,905	4.89
6. plastic caps, lids	3,869	4.85
7. paper pieces	3,653	4.58
8. small foamed plastic pieces	3,629	4.55
9. miscellaneous plastic bags	3,334	4.18
10. foamed plastic cups	3,277	4.11
11. plastic beverage bottles	2,662	3.34
12. plastic trash bags	2,682	3.29
<b>TOTAL</b>	<b>48,798</b>	<b>61.18</b>

**MAJOR TYPES AND SOURCES OF DELAWARE'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Battery Park	71.68	plastic pieces
Augustine Beach	55.07	plastic pieces
Woodland Beach	35.08	glass pieces
Pickering Beach	34.18	glass pieces
Kitts Hummock	44.12	metal beverage cans
North Bowers	36.98	metal beverage cans
South Bowers	52.83	metal beverage cans
Bennet's Pier	51.72	metal beverage cans
Big Stone Beach	55.66	metal beverage cans
Slaughter Beach	52.06	metal beverage cans
Fowler's Beach	76.80	foamed plastic cups
Primehook	51.68	metal beverage cans
Broadkill Beach	59.24	metal beverage cans
Beach Plum Island	50.74	metal beverage cans
Lewes Beach	55.68	plastic pieces
Cape Henlopen (bayside)	64.36	plastic trash bags
Cape Henlopen (oceanside)	73.68	plastic pieces
Gordon's Pond	68.99	plastic pieces

**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE (continued):**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Rehoboth/Deauxville	70.27	plastic cups, spoons, forks, straws
Dewey Beach	64.47	small foamed plastic pieces
Delaware Seashore State Park	66.79	plastic cups, spoons, forks, straws
Bethany Beach	94.43	plastic pieces
South Bethany Beach	62.59	foamed plastic cups
Fenwick Island	66.85	plastic cups, spoons, forks, straws
Fenwick Island State Park	63.82	plastic cups, spoons, forks, straws

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

Debris Related	Other Reports
large seabird with fishing line and red bobber tangled around lower bill	1 sea turtle (50-100 lbs.) with right flipper chewed off
"dog that I had with me got entangled in fishing line"	6 sea additional turtles
	7 sea gulls
	6 other birds
	1 rabbit
	1 mouse
	1 cat
	1 dog

**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Battery Park	stove, refrigerator, plastic dragonfly, tennis balls, carpet, lipstick
Augustine Beach	rubber nose, left boot, live shotgun shell
Woodland Beach	nasty pictures, medicine bottle
Pickering Beach	house gutter, back seat of car, numerous shotgun shells
Kitts Hummock	motorcycle
North Bowers	stove, air conditioner, water heater, refrigerator, car tail pipe
South Bowers	bowling pins, refrigerator
Bennet's Pier	hot water heater, door
Big Stone Beach	31 shotgun shells, fly swatter
Slaughter Beach	rug, plastic flower, raincoat
Fowler's Beach	plastic fly swatter
Primehook	jar with unknown substance, unopened beer, plastic baseball bat
Broadkill Beach	plastic fangs, heating element, tennis ball
Beach Plum Island	balloon from Pennsylvania, car seat, toilet seat, sanitary napkin, American flag, women's underwear, men's underwear (Hanes)
Lewes Beach	sausage wrapper, shower curtain, car muffler, runner's baton, men's underwear (size 32), bra, "If I knew what it was I'd describe it"
Cape Henlopen (bayside)	lightening rod, condoms, arm chair, seine net
Cape Henlopen (bay)	accelerator pedal, girl's underwear, "Condo for Sale" sign
Gordon's Pond	plastic douche bottle, traffic pylon base
Rehoboth/Deauxville	condom, underwear, plastic shoe, table top, auto grill
Dewey Beach	bikini underwear, lace bra, Miss Piggy band-aid
Delaware Seashore S.P.	bra, bottle of birth control pills, toilet seat cover
South Bethany	swim trunks, water pistol

\* not all items indicated as peculiar by volunteers are listed

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**FOR INFORMATION ON DELAWARE'S 1990 CLEANUP CONTACT:**

Nancy Rolli  
Delaware Department of Natural Resources and Environmental Control  
89 Kings Highway, P.O. Box 1401  
Dover, DE 19901  
(302) 736-4506

**CLEANUP DATE: Saturday, September 29, 1990**



Volunteers celebrated a successful cleanup as part of Delaware's "Get the Drift and Bag It."

1989 National Beach Cleanup  
Raw Data Summary

DELAWARE

Augustine Woodland Pickering Kitts M.Bowers Bennett Slaughter Primehook Beach Plum Cape Hen.(B) Gordon's Dewey Bethany Fenwick Is. STATE  
Batt.Park Woodland Kitts S.Bowers Bennett Slaughter Primehook Beach Plum Cape Hen.(B) Gordon's Dewey Bethany Fenwick Is. STATE  
Fowler's Broadkill Lewes Cape Hen.(0) Rehoboth DE S.P. S.Bethany Fen.SP TOTAL

PLASTIC

Bags	81	89	59	38	48	104	105	87	19	133	1	29	74	120	86	266	145	34	338	129	434	0	52	16	141	2628
Trash	8	3	0	7	1	3	0	20	0	0	0	0	6	0	1	1	0	0	13	0	64	0	0	2	10	139
Salt	98	82	41	35	48	35	129	26	31	197	11	38	270	84	238	229	164	37	274	178	861	0	5	107	116	3334
Other	361	157	79	43	27	57	50	34	91	228	7	63	176	136	101	86	224	28	96	32	461	0	48	33	44	2662
Bottles	64	10	9	21	11	10	22	12	39	55	3	12	34	62	18	7	33	12	18	8	126	0	16	7	9	618
Beverage	101	39	24	13	5	15	22	23	25	25	6	11	34	20	18	3	32	7	5	4	56	0	8	4	2	492
Bleach	60	72	12	10	15	10	15	3	20	74	4	9	68	18	34	14	40	20	37	16	133	0	15	13	19	731
Oil	45	6	4	4	3	2	9	4	3	25	1	4	31	24	5	11	15	4	7	10	55	0	5	1	3	281
Other	461	154	36	39	11	64	41	23	46	358	8	77	168	118	148	96	130	132	449	110	919	3	46	84	148	3869
Caps/lids	19	30	1	8	0	5	0	0	0	29	0	33	117	0	315	9	167	40	1322	441	226	1316	4	86	67	4235
Cigarette butts	318	134	19	32	43	64	52	37	53	264	9	137	319	157	330	148	318	134	449	171	996	30	73	180	292	5322
Cups/straws	3	2	0	0	0	10	4	1	0	4	0	0	5	0	2	1	9	0	4	3	31	0	3	0	2	84
Diapers	48	6	5	7	2	0	0	0	6	21	1	5	20	6	7	6	8	11	25	13	79	2	6	5	11	300
Lighters	11	3	7	6	3	12	8	10	16	110	5	45	73	19	35	33	34	5	11	4	85	4	7	1	14	561
Fishing line	2	0	1	4	0	0	1	7	0	13	0	3	30	14	3	17	12	0	4	2	8	0	3	0	7	131
Net	4	2	0	1	0	0	2	2	0	18	0	19	28	7	12	22	4	6	9	3	23	0	1	1	2	166
Long	8	4	0	1	1	3	7	6	5	49	2	13	29	12	9	9	17	9	16	9	113	1	8	5	14	350
Short	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	4	0	0	0	1	0	0	0	0	7
Floats, lures	0	3	0	0	1	0	0	1	0	6	0	1	2	6	4	2	3	1	6	1	10	9	35	1	4	96
Hardhats	60	34	13	8	9	12	33	17	19	61	2	10	48	76	28	12	59	17	30	4	130	0	29	4	9	724
Lightsticks	925	456	44	81	6	62	101	39	114	694	0	345	699	91	496	127	324	146	336	168	868	125	5	79	124	6455
Milk/water jugs	2	0	0	4	0	0	1	0	0	7	0	0	2	3	1	1	78	0	2	0	29	0	2	0	0	132
Pieces	12	6	2	10	3	7	9	6	6	61	0	14	35	16	16	25	40	8	21	14	98	0	10	9	14	442
Pipe thread	7	8	1	10	0	9	15	1	24	91	2	36	69	24	42	45	91	16	47	17	250	1	22	22	48	898
Long	35	3	0	1	0	1	0	2	1	5	0	4	20	1	2	1	6	3	1	3	26	0	9	1	0	125
Short	43	0	0	5	2	1	8	13	0	31	0	9	101	3	4	2	7	12	17	14	66	0	9	2	11	360
6-pack holders	130	89	4	4	1	18	8	21	8	51	0	11	20	21	18	23	26	9	31	8	75	22	8	2	7	615
Strapping bands	64	27	0	5	1	7	4	3	8	39	2	6	23	1	14	11	39	14	33	41	96	11	16	12	9	486
Syringes	18	6	0	0	0	0	0	0	0	4	0	1	5	0	0	1	10	0	4	0	49	0	0	3	9	110
Tampon app.	142	25	7	5	1	0	4	1	11	27	0	9	26	13	18	10	23	15	27	5	128	0	8	9	42	556
Toys	98	10	5	5	2	7	8	3	10	24	3	4	22	20	46	14	26	14	44	36	141	18	13	13	25	611
Vegetable sacks	2	1	3	3	0	0	2	0	1	15	0	7	14	2	8	2	10	4	7	7	51	10	5	2	25	182
Write protector	18	1	2	2	0	0	0	0	2	5	0	0	2	4	1	0	0	4	9	2	10	6	3	2	5	80
Other	358	21	9	39	7	14	65	10	53	204	1	35	220	60	73	40	203	51	82	142	362	3	1	37	52	2142

	Augustine	Pickering	N.Bowers	Bennett	Slaughter	Primehook	Beach Plum	Cape Hen.(B)	Gordon's	Dewey	Bethany	Fenwick Is.	STATE													
Batt.Park	Woodland	Kitts	S.Bowers	Big Stone	Fowler's	Broadkill	Lewes	Cape Hen.(O)	Rehoboth	DE S.P.	S.Bethany	Fen.SP	TOTAL													
GLASS-----																										
Bottles	146	123	58	55	117	173	74	148	228	120	70	118	13	147	50	501	0	30	47	47	2515					
Food	12	0	2	1	0	5	8	2	2	8	0	1	13	5	3	1	1	5	5	4	42	0	7	2	0	129
Other	2	0	0	0	1	1	1	2	3	4	2	2	3	1	2	7	0	1	1	1	15	52				
Light tubes	5	1	0	2	0	0	1	0	2	3	0	1	5	1	0	1	11	0	1	0	0	39				
Light bulbs	17	0	0	0	1	0	0	4	17	23	2	3	12	0	10	3	47	0	2	4	4	169				
Pieces	558	262	378	700	1	43	50	1	103	30	0	186	40	32	153	52	42	140	260	78	709	0	19	14	54	3905
Other	14	3	1	3	0	8	1	0	3	18	0	21	45	5	1	4	2	2	2	1	29	0	0	2	2	167
STYROFOAM-----																										
Buoys	2	1	0	14	1	0	13	6	2	18	0	13	2	10	3	5	7	2	12	2	36	0	2	0	0	151
Cups	140	100	41	67	29	96	86	43	39	262	18	79	216	209	187	87	189	39	406	122	591	0	72	83	76	3277
Egg Cartons	7	3	0	1	2	0	0	1	14	0	2	1	7	7	7	2	29	1	8	2	38	0	5	3	8	141
Fast-food	108	14	11	12	7	43	41	8	10	34	0	8	37	16	21	24	26	17	74	14	80	0	23	7	30	665
Meat trays	23	25	14	2	7	6	15	0	8	0	4	16	17	15	3	14	4	25	4	78	0	6	1	6	293	
Pieces	137	14	2	42	8	4	14	4	15	70	2	17	37	47	31	8	82	16	104	35	185	0	22	42	23	961
Large	546	119	9	92	13	28	29	6	10	177	8	105	194	93	128	16	157	64	638	208	731	0	27	77	154	3629
Small	15	0	4	18	1	3	0	0	2	0	0	3	7	0	2	210	2	9	0	272	0	4	8	4	564	
Other																										
RUBBER-----																										
Balloons	50	8	0	11	3	8	10	17	20	83	5	47	75	52	72	61	95	39	60	39	233	6	13	30	33	1070
Gloves	10	4	1	3	2	7	3	3	1	7	0	3	8	7	0	3	2	0	2	0	9	0	2	1	2	80
Tires	47	4	1	11	2	9	10	2	0	13	0	5	9	1	5	19	5	0	7	0	9	0	1	1	4	165
Other	53	34	23	15	3	12	23	2	6	41	0	10	27	12	32	26	41	4	26	35	138	4	11	13	18	609
METAL-----																										
Bottle caps	169	76	103	43	0	75	6	3	5	63	0	16	51	33	95	13	17	22	100	36	107	0	30	11	27	1101
Cans	34	13	1	1	20	7	9	4	5	42	2	15	128	30	9	3	17	4	8	3	79	0	10	6	4	454
Beverage	144	64	44	146	175	226	176	126	126	757	11	238	1041	679	156	75	108	45	237	198	796	2	54	76	75	5775
Food	0	2	1	3	60	16	4	7	0	17	0	7	15	9	29	4	3	0	3	6	16	0	2	0	1	205
Other	11	31	6	5	18	16	2	8	7	44	0	25	13	16	23	9	7	1	12	6	60	0	5	3	3	331
Crab/fish traps	0	1	3	1	0	1	0	0	3	8	0	1	2	2	1	2	1	0	0	0	3	0	0	0	0	29
Drums	1	0	1	3	4	5	1	0	0	2	0	2	2	5	2	2	2	2	2	0	18	0	0	0	0	54
Rusty	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3
New	33	19	9	9	1	22	18	11	6	52	0	39	27	21	21	13	18	2	21	34	72	0	4	7	20	479
Pieces	32	83	62	15	0	7	6	1	1	18	0	2	8	5	35	15	8	0	108	13	39	20	9	0	11	498
Pull tabs	10	4	1	13	0	51	2	1	7	19	0	14	9	9	22	5	26	4	11	12	46	1	15	0	13	295
Wire	31	42	12	12	2	49	24	4	7	17	0	19	55	25	68	6	23	19	119	45	78	3	4	6	12	682
Other																										

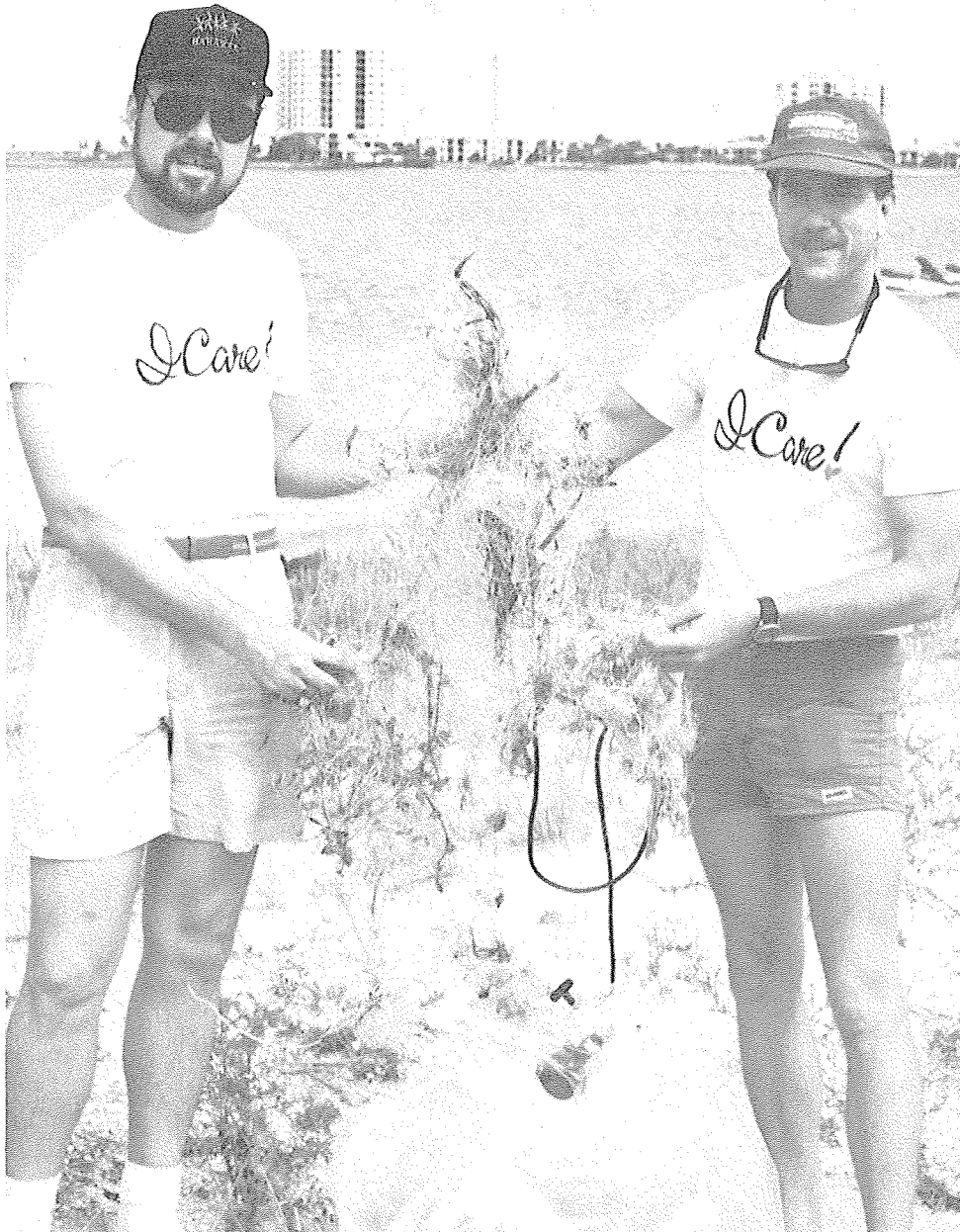
Augustine Pickering M.Bowers Bennett Slaughter Primehook Beach Plum Cape Hen.(B) Gordon's Dewey Bethany Fenwick Is. STATE  
 Batt.Park Woodland Kitts S.Bowers Big Stone Fowler's Broadkill Lewes Cape Hen.(O) Rehoboth DE S.P. S.Bethany Fen.SP TOTAL

	25	44	7	9	0	71	30	16	4	37	1	11	35	21	99	26	21	3	69	26	102	0	11	8	17	693		
Bags	4	57	4	4	1	47	41	23	5	76	0	8	23	38	39	32	12	4	31	17	52	0	16	9	23	566		
Cardboard	13	39	7	6	3	20	31	25	13	43	1	15	32	20	38	15	12	4	22	21	67	0	7	8	18	480		
Cartons	42	46	28	5	0	55	14	9	9	40	0	9	17	12	111	29	43	12	136	32	88	0	11	15	15	778		
Cups	11	8	8	14	0	75	3	5	1	18	0	6	16	13	50	5	21	2	38	20	38	0	20	6	29	407		
Newspaper	146	281	69	52	0	132	91	75	53	221	0	122	114	67	443	148	149	44	470	191	453	0	10	92	230	3653		
Pieces	19	102	3	8	6	22	7	3	2	46	0	9	48	19	57	7	21	11	190	26	108	0	2	19	69	804		
Other	-----																											

	1	2	0	4	0	1	0	0	5	3	0	0	6	1	0	2	0	0	0	0	0	3	0	0	0	0	28	
Crab/lobster traps	0	0	2	13	5	0	10	5	0	11	0	2	3	3	3	2	6	1	3	1	3	0	0	0	0	0	73	
Crates	4	2	0	1	0	4	2	0	1	6	0	1	1	3	1	3	13	0	12	2	24	5	0	2	18	105		
Pallets	90	35	17	143	28	82	78	13	14	100	0	151	104	32	184	48	199	18	179	113	312	25	54	76	104	2139		
Pieces	14	1	8	15	35	5	15	0	1	22	0	18	14	3	13	6	22	3	11	15	33	2	10	2	7	275		
Other	-----																											

	63	44	6	20	16	42	67	25	14	162	1	55	118	60	113	75	63	14	73	52	178	26	19	17	24	1347		
Clothing	-----																											

TOTAL ITEMS/ZONE 6395 3194 1334 2045 723 1925 1747 926 1236 5732 125 2357 5564 3039 4522 2211 4092 1361 7988 3064 13581 1655 1016 1442 248579759



Two members of a corporate dive club display a tangle of monofilament fishing line found in Pinellas County, Florida. A total of 487 miles of fishing line was collected in statewide during the third Florida Coastal Cleanup. *Photo by Heidi Lovett, CMC*



## FLORIDA

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September 23, 1989  
14,632 Volunteers  
911 Miles Cleaned  
395,440 Pounds of Debris Collected  
592,401 Debris Items Reported

Coordinated By: Heidi Lovett and  
Edward Proffitt  
Center for Marine Conservation  
Bayfront Tower  
1 Beach Drive SE, Suite 304  
St. Petersburg, FL 33701  
(813) 895-2188

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The third statewide Florida Coastal Cleanup held on September 23 was a huge success, and set new records for volunteer participation. Nearly 15,000 volunteers cleaned 911 miles of coast and collected approximately 200 tons of debris. In terms of both miles covered and numbers of volunteers, this was the largest single cleanup anywhere in the world, surpassing the record set by Florida in 1988.

Once again, due to the tremendous amount of fishing activity conducted year round, monofilament fishing line was found in great amounts throughout the state. All told, an estimated 467 miles of monofilament line were cleaned from beaches, estuaries, and offshore reefs.

The Florida Coastal Cleanup would not have been possible without the hard work and assistance of many, many people throughout the state. Although organized primarily by CMC staff, members of federal and state government agencies and private industry served on our steering committee. First Brands Corporation donated 38,000 clear garbage bags so that certain materials, such as aluminum cans, glass bottles, and plastic bottles could be separated from the trash for recycling after the cleanup.

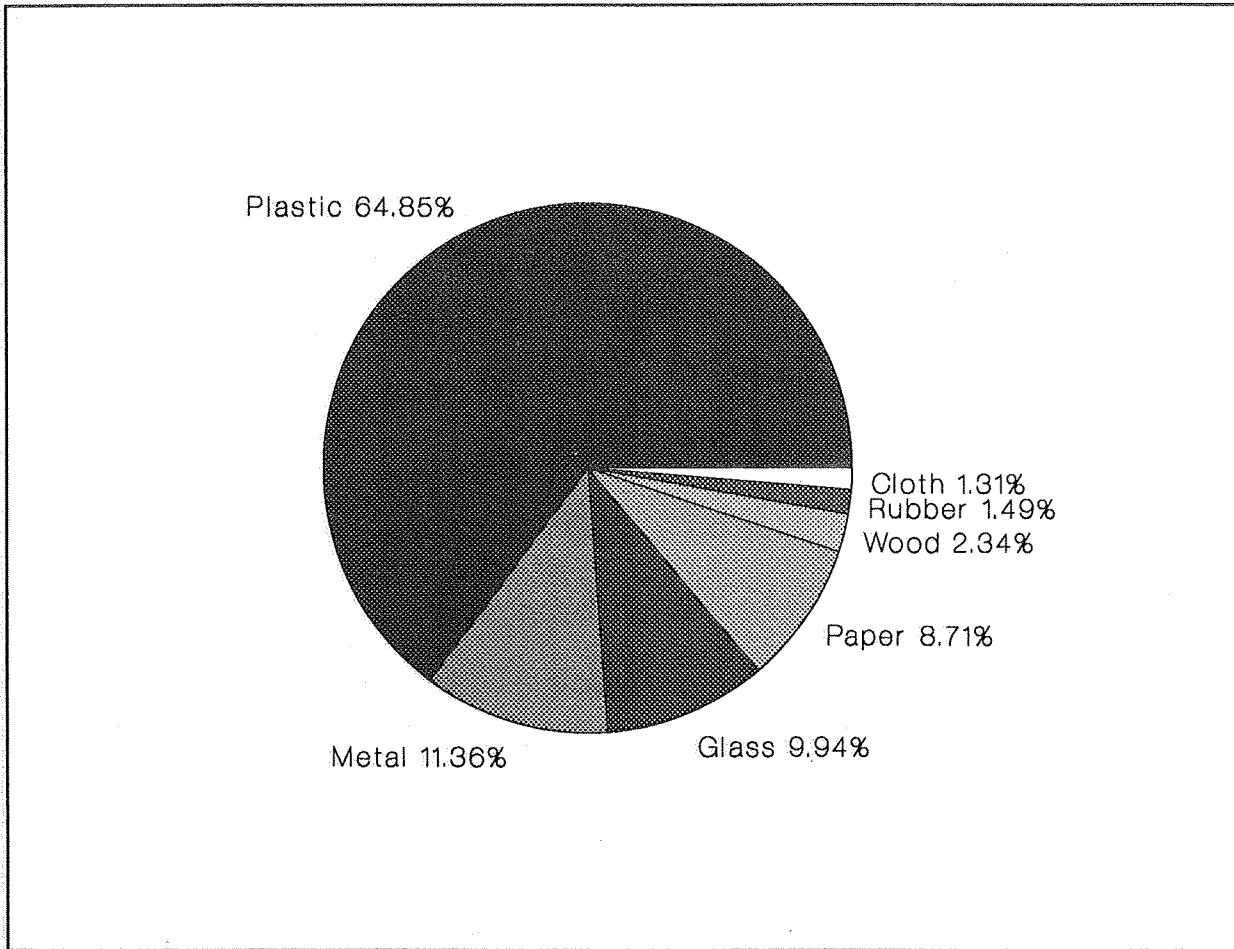
Governor Bob Martinez joined in the cleanup in Ft. Myers and presented the Center for Marine Conservation with a proclamation in support of this and future cleanups. CMC's Florida Office has been nominated for their second Take Pride in America Award and has taken the lead in design and implementation of an Adopt-A-Shore program for the State of Florida. Such a program would encourage groups and the business community to be responsible for cleaning a section of beach three times a year. Data collection will also be encouraged during these cleanups.

Statewide, 15 dead sea turtles and birds, and even one dead opossum, were found entangled in monofilament fishing line or fishing nets during the cleanup. On a happier note, three other birds and two sea turtles that were found entangled were still alive and thus saved from certain death by cleanup volunteers.

The huge success of the cleanup is a tribute to the 77 Zone Captains who did a tremendous job of local organizing, and to the citizens of Florida who, once again, turned out in record numbers to defend our title for having the largest number of citizens willing and able to protect the beauty of our coast. Thank you!

Heidi Lovett and Ed Proffitt

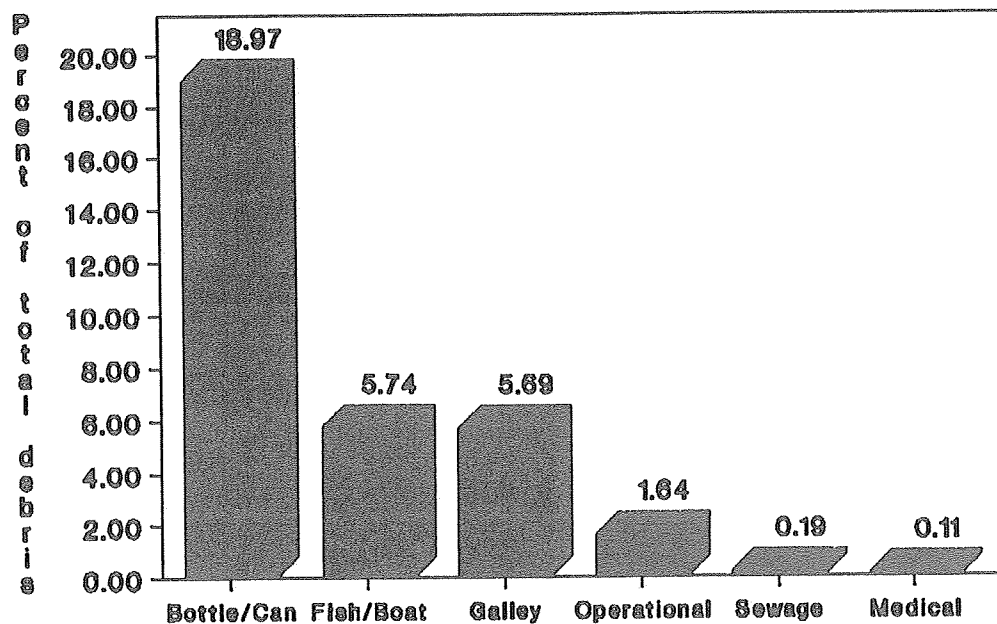
**PERCENT COMPOSITION OF FLORIDA'S BEACH DEBRIS:**



**FLORIDA'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic cups, spoons, forks, straws	47,533	8.02
2. small foamed plastic pieces	40,393	6.82
3. plastic pieces	39,457	6.66
4. glass beverage bottles	36,709	6.15
5. metal beverage cans	33,125	5.59
6. cigarette butts	32,116	5.42
7. plastic caps and lids	31,543	5.32
8. foamed plastic cups	25,366	4.28
9. paper pieces	22,575	3.81
10. miscellaneous plastic bags	19,229	3.24
11. plastic trash bags	19,170	3.23
12. pieces of glass	15,409	2.60
<b>TOTAL</b>	<b>362,625</b>	<b>61.14</b>

**MAJOR TYPES AND SOURCES OF FLORIDA'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Duval County	21.61	glass pieces
Duval/St. John's Counties	71.81	small foamed plastic piece
Flagler County	71.99	small foamed plastic pieces
Volusia County	84.11	small foamed plastic pieces
Brevard County	77.44	plastic pieces
Indian River County	68.16	small foamed plastic pieces
St. Lucie County	73.70	small foamed plastic pieces
Martin County	64.56	metal beverage cans
Palm Beach County	71.13	plastic cups, spoons, forks, straws
Broward County	64.79	plastic cups, spoons, forks, straws
Dade County	68.35	glass beverage bottles
Monroe County	63.20	glass beverage bottles
Collier County	63.05	metal beverage cans
Lee County	54.73	metal beverage cans
Charlotte County	47.34	metal beverage cans
Sarasota County	65.39	small foamed plastic pieces
Manatee County	58.74	glass beverage bottles
Hillsborough County	55.95	glass beverage bottles

**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE (continued):**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Pinellas County	62.82	plastic cups, spoons, forks, straws
Pasco County	48.46	glass beverage bottles
Hernando County	68.69	small foamed plastic pieces
Dixie County	52.73	glass beverage bottles
Jefferson County	73.77	miscellaneous plastic bags
Wakulla County	44.90	metal beverage cans
Franklin County	59.67	miscellaneous plastic bottles
Gulf County	69.56	plastic caps, lids
Bay County	66.05	plastic pieces
Walton County	78.57	plastic caps, lids
Okaloosa County	57.19	plastic cups, spoons, forks, straws
Escambia County	50.32	glass beverage bottles

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

Debris Related	Other Reports
dead pelican entangled near Christmas tree erosion control line	3 loggerhead sea turtles
seagull with broken wing entangled in plastic	8 other dead sea turtles (unidentified)
seagull entangled in plastic bag	6 dead sea turtle hatchlings
2 gulls entangled in fishing line (released)	5 dead pelicans
bird entangled in fishing line	1 dead frigate bird
2 dead sea gulls entangled in fishing line	1 duck with broken wing, crippled foot
heron with leg damaged by fishing line	12 seagulls
5 pelicans entangled in fishing line (one released)	1 dolphin skull
	1 dead duckling
	1 dead alligator

\*additional wildlife entanglements were reported to the state coordinator, but were not recorded on volunteers' data cards.

**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Duval County	mop head, pornographic magazine, Thor action figure
Duval/St. John's	mattress, voltage regulator, condoms, jock strap, blood sample bottle
Flagler County	laundry basket, dish pan, bra, washing machine agitator, hair curler
Volusia County	plastic eye, jock strap, drug vial
Brevard County	ladies' and men's underwear, leg brace, five dollar bill, condoms, steering wheel, Easter grass, Christmas tinsel, pacifier
Indian River County	television, couch, mattress, chair leg, sofa, bedsprings
St. Lucie County	five mattresses, water heater, oven tray, steering wheel, surfer's leash, laundry basket, swimming pool, WW II mine, three post-hole diggers, television picture tube
Martin County	Easter grass, toilet bowl float, ping pong balls, four hubcaps, plastic peace symbol, bedpan, jar of honey, car jack, Lamborghini (plastic), men's underwear
Palm Beach County	"crack" pipe, twenty dollar bill, Lord and Taylor credit card, hair curler, steering wheel, sanitary napkins, ear phones, shower head, knitting needle, toilet brush, television picture tube, 19-inch television, "Dwarf hat", burned Star Wars doll, drugs from the USS Kennedy

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**MOST PECULIAR DEBRIS ITEMS REPORTED (continued):**

Broward County	jock strap, ladies' panties, "humongous" salad mixing spoon, pacifier, international driving permit (Great Britain), broiler drip pan, one dollar bill, plastic palm tree, Barbie doll pants, aquaculture salmon tags from Canada, 30 straws in front of the Yankee Clipper Beach Bar (Ft. Lauderdale)
Dade County	Coast Guard hat, steering wheel, coffee pot, swimming pool, television, propane torch, men's underwear, x-rated cigarette lighter, auto back seat, Italian refrigerator, Ford car bumper, golf cart, Canadian salmon tag, bra, plastic apple, milk crate from Charleston, SC, female blow-up doll
Monroe County	refrigerator (small), car engine, water heater, two stoves, muffler, stand-up Hoover vacuum, pistol, teapot lid, bike fender
Collier County	television picture tube, car jack, jar of pickled pigs feet, bra, baby stroller, Fruit of the Looms, bed sheets, rat trap
Lee County	designer condom, badminton racquet, bed springs, pie pan, bra
Sarasota County	muffler, stove, water heater, bed springs, condom, computer case
Manatee County	Batman head (toy), pool cue, jock strap, five dollar bill, stove top, fly swatter, plastic Christmas tree, mattress, steering wheel
Hillsborough County	swimming pool, table top, car bumper, toilet bowl float, condoms, five dollar bill, plastic lemon, plastic leg, blow-up doll (female), hair dryer, bath tub, television (Sony), sprinkler head, freezer, windshield
Pinellas County	rubber pterodactyl, condom, rubber nose, television, three bras, hubcap, shopping cart, half of a dollar bill, jockey shorts, sword (plastic), sanitary napkin, Michael Jackson sticker
Pasco County	boat horn, Airwick deodorizer, plumbing pipe with faucet, hub caps, checkbook, Cabbage Patch doll, driver's license
Hernando County	40-gallon hot water tank
Dixie County	old wooden crab traps, bed headboard, air conditioner cover
Wakulla County	Busch Gardens raincoat, lottery ticket, leather jacket, refrigerator parts, rubber thumb rest from musical instrument, Ritz Carlton tennis visor
Franklin County	ring box, electric radio, brake hub, runner for sliding door, rubber doormat, foam wrapped in plastic, big pieces of ballast styrofoam
Gulf County	baby toilet seat, bouquet plastic roses
Bay County	bikini top, vacuum attachment

\* not all items indicated as peculiar by volunteers are listed above.

**FOR INFORMATION ON FLORIDA'S 1990 BEACH CLEANUP CONTACT:**

Heidi Lovett or Edward Proffitt  
Center for Marine Conservation  
Bayfront Tower  
1 Beach Drive SE, Suite 304  
St. Petersburg, FL 33701  
(813) 895-2188

**CLEANUP DATE: Saturday, September 22, 1990**

1989 National Beach Cleanup FLORIDA  
Raw Data Summary

	Duval	St. Johns	Flagler	Volusia	Brevard	Indian River	St. Lucie	Martin	Broward	Dade	Monroe	Collier	Lee	Charlotte	
PLASTIC-----															
Bags	152	335	293	417	1250	665	842	486	744	1640	2732	1512	479	466	320
Trash				86	77	7	2	11	21	43	51	29	19	0	45
Salt	1	38	0	86	77	7	2	11	21	43	51	29	19	0	45
Other	302	1417	267	1039	1774	605	468	257	732	815	1896	771	839	434	350
Bottles Beverage	47	222	238	195	540	1062	692	701	1017	618	1396	1242	467	159	329
Bleach	8	48	86	123	158	378	299	117	330	163	526	507	64	57	36
Oil	13	31	45	43	105	264	171	106	165	127	317	324	105	32	50
Other	48	157	88	184	325	417	420	141	307	232	605	652	89	154	39
Buckets	44	21	19	37	97	108	75	86	126	86	341	178	75	15	10
Caps/lids	333	931	954	1506	3551	1393	1852	994	2511	2120	2054	1146	667	742	333
Cigarette butts	1004	2288	12	2893	967	278	1506	161	443	1258	190	4	6417	415	1175
Cups/straws	662	1258	738	3034	4364	1874	1836	1173	3592	5863	2532	1460	1920	1490	669
Diapers	40	73	6	15	52	24	36	24	45	86	48	82	118	44	21
Lighters	45	113	61	161	353	186	140	1237	332	202	305	141	123	159	54
Fishing line	61	98	50	151	384	342	216	253	202	288	292	225	339	229	99
Long	10	19	6	44	63	44	44	44	43	64	71	76	27	10	40
Short	16	29	17	103	92	45	54	51	93	73	79	47	31	12	17
Floats, lures	10	32	26	31	69	91	57	96	102	34	192	84	38	48	39
Hardhats	3	0	15	0	4	5	0	6	55	13	8	4	4	4	1
Lightsticks	16	94	88	314	477	390	329	289	809	301	379	280	20	10	14
Milk/water jugs	42	72	70	139	158	281	134	174	271	425	641	634	176	44	61
Pieces	495	2096	1044	2528	4474	1855	1932	894	3020	2847	1838	1327	1209	1162	805
Pipe thread	1	8	79	10	18	27	40	10	63	21	21	39	29	2	19
Rope	39	132	132	245	533	184	172	163	331	169	694	368	100	85	47
Sheeting	122	293	213	487	1377	280	342	372	739	593	548	244	147	167	77
Long	3	14	45	17	47	27	39	27	52	33	262	134	19	21	10
Short	6	28	37	68	94	87	122	39	212	105	322	331	70	16	17
6-pack holders	41	171	90	303	614	142	186	326	508	400	580	655	224	60	144
Strapping bands	11	84	69	199	422	107	208	167	322	247	316	138	60	41	45
Syringes	8	5	7	54	125	47	54	45	63	28	37	23	3	3	4
Tampon app.	9	19	19	58	84	61	59	72	137	85	72	14	14	13	14
Toys	28	120	27	144	184	93	103	74	223	134	169	191	80	102	30
Vegetable sacks	8	13	1	14	81	56	16	28	62	39	95	42	82	56	32
Write protector	4	13	12	52	53	111	37	20	91	72	35	12	36	10	29
Other	159	386	130	423	642	321	389	187	465	800	605	210	497	364	162

	St. Johns	Volusia	Indian River	Martin	Broward	Monroe	Lee
	Flagler	Brevard	St. Lucie	Palm Beach	Dade	Collier	Charlotte
	Duval	Brevard	St. Lucie	Palm Beach	Dade	Collier	Charlotte
<b>GLASS</b>							
Bottles Beverage	286	424	727	1037	1012	2552	538
Food	8	23	107	92	54	410	19
Other	9	10	90	30	25	76	7
Light tubes	1	17	10	37	7	89	2
Light bulbs	3	36	95	112	65	228	14
Pieces	756	189	1249	357	1291	812	237
Other	11	4	104	38	25	106	30
<b>STYROFOAM</b>							
Buoys	6	24	81	199	66	418	73
Cups	328	475	1884	1113	1206	1737	506
Egg Cartons	4	22	154	52	33	250	5
Fast-food	19	134	246	219	393	699	93
Meat trays	11	38	82	95	42	164	46
Pieces Large	156	360	1079	549	393	1160	247
Small	745	3062	3703	2014	2070	1763	700
Other	43	105	150	84	227	133	50
<b>RUBBER</b>							
Balloons	34	134	301	47	333	116	61
Gloves	4	19	50	139	34	39	27
Tires	6	12	16	30	19	131	19
Other	100	146	337	236	251	272	102
<b>METAL</b>							
Bottle caps	122	125	399	317	868	589	530
Cans Aerosol	13	30	95	132	156	171	19
Beverage	246	1381	1233	1031	1603	2264	1636
Food	4	56	11	26	40	139	20
Other	29	31	69	40	38	157	20
Crab/fish traps	2	1	0	1	4	2	4
Drums Rusty	5	1	2	21	15	12	7
New	0	0	4	7	6	0	5
Pieces	98	101	267	153	309	131	121
Pull tabs	31	26	210	93	218	132	138
Wire	45	13	30	55	55	43	69
Other	56	67	128	49	86	165	398

St. Johns Volusia Indian River Martin Broward Monroe Lee  
 Duval Flagler Brevard St. Lucie Palm Beach Dade Collier Charlotte

	St. Johns	Volusia	Indian River	Martin	Broward	Monroe	Lee								
	Duval	Flagler	Brevard	St. Lucie	Palm Beach	Dade	Charlotte								
PAPER-----															
Bags	33	150	111	56	128	118	182	175	204	447	297	300	250	37	134
Cardboard	18	64	82	40	100	108	74	68	193	222	177	376	170	13	113
Cartons	50	121	28	13	157	105	85	101	203	202	165	242	308	60	106
Cups	93	300	178	97	408	310	193	326	493	684	328	474	547	148	232
Newspaper	20	31	39	12	83	54	83	59	105	223	158	261	147	35	66
Pieces	256	902	205	600	967	501	551	299	974	2413	497	686	1309	1391	1256
Other	100	98	76	238	433	70	89	124	133	582	259	81	283	132	130

WOOD-----															
Crab/lobster traps	3	1	0	11	0	4	1	4	5	2	17	54	7	13	1
Crates	3	5	2	14	16	20	12	4	9	3	15	21	16	4	1
Pallets	1	8	13	19	12	14	6	14	13	5	35	15	10	26	5
Pieces	174	289	137	573	817	663	624	203	867	769	427	653	395	694	186
Other	49	22	9	96	104	71	56	45	169	74	77	21	78	48	34

CLOTH-----															
Clothing	110	199	79	62	259	328	205	231	421	380	552	503	370	231	237

TOTAL ITEMS/ZONE 7882 21361 10224 24768 40143 25898 23154 16276 34991 37825 38456 31485 27178 15326 14346

1989 National Beach Cleanup  
Raw Data Summary

	FLORIDA										STATE TOTAL					
	Sarasota	Manatee	Pinellas	Hillsborough	Pasco	Hernando	Dixie	Jefferson	Franklin	Bay		Walton	Okaloosa	Escambia		
Bags	67	499	2229	1642	724	30	34	2	89	146	229	348	13	398	387	19170
Trash	0	3	19	47	7	0	0	1	1	0	0	3	0	14	6	531
Salt	89	691	1851	2076	391	3	88	56	159	257	533	240	71	440	318	19229
Other	42	394	1683	1084	348	132	53	5	156	660	230	495	22	533	335	15097
Bottles Beverage	12	71	263	105	40	70	18	0	30	40	71	202	30	228	26	4106
Bleach	31	123	542	174	51	52	46	2	55	26	26	66	11	55	14	3172
Oil	7	71	386	279	47	0	17	3	40	900	135	329	52	244	72	6440
Other	20	37	215	90	43	1	5	0	12	38	17	45	1	46	18	1906
Buckets	80	893	2309	2287	264	133	104	3	250	568	588	806	269	1294	508	31543
Caps/lids	123	742	1117	7744	960	0	0	0	15	80	0	1573	0	345	406	32116
Cigarette butts	200	1090	3122	6699	303	10	10	3	75	320	382	529	110	1516	699	47533
Cups/straws	25	78	216	356	27	0	4	0	3	15	31	20	1	64	47	1601
Diapers	22	218	542	358	70	26	5	0	2	58	23	101	11	181	36	4155
Lighters	5	77	611	362	410	4	3	1	21	55	27	196	6	109	14	5130
Fishing line	1	13	121	37	19	2	1	0	3	16	4	18	0	9	4	872
Long	0	4	55	47	26	0	0	0	4	2	8	17	1	32	1	956
Short	24	90	211	146	87	15	8	2	25	55	11	64	2	47	9	1745
Floats, lures	0	4	5	4	17	0	0	0	0	6	1	8	0	2	1	170
Hardhats	11	10	24	34	9	0	0	0	0	107	128	135	30	165	15	4478
Lightsticks	88	98	792	276	205	128	37	0	25	182	106	97	26	179	49	5610
Milk/water jugs	138	919	1904	3689	367	125	35	26	362	728	298	1239	247	1243	611	39457
Pieces	20	12	55	95	11	0	0	0	0	0	2	44	0	20	2	649
Pipe thread	0	76	445	148	39	1	5	0	23	114	65	104	25	123	80	4642
Long	7	76	299	252	41	24	14	0	37	60	117	201	30	344	57	7560
Short	4	23	102	84	7	0	4	0	13	11	7	11	12	37	4	1069
Sheeting	8	18	203	255	11	0	9	0	28	7	16	41	10	47	4	2211
Short	112	352	1579	688	91	20	19	3	50	101	153	131	15	246	141	8145
6-pack holders	7	25	247	141	21	20	3	1	11	39	136	118	66	140	22	3433
Strapping bands	5	14	58	22	2	0	0	0	0	7	4	2	0	15	0	635
Syringes	18	33	90	61	5	0	0	0	1	16	6	9	4	35	19	1166
Tampon app.	21	92	227	268	22	2	6	0	1	60	40	59	18	99	31	2648
Toys	20	31	92	110	54	2	2	0	6	42	4	19	7	73	15	1102
Vegetable sacks	10	3	69	75	14	0	0	1	1	12	49	21	0	26	15	883
Write protector	47	371	497	1073	121	3	10	1	92	333	45	169	33	224	133	8892
Other																

	Manatee	Pinellas	Hernando	Jefferson	Franklin	Bay	Okaloosa	STATE								
	Sarasota	Hillsborough	Pasco	Dixie	Wakulla	Gulf	Walton	Escambia	TOTAL							
<b>GLASS</b>																
Bottles Beverage	129	1813	5611	3620	1857	49	183	12	444	924	315	907	48	1039	1056	36709
Food	4	22	230	65	34	37	14	1	19	47	34	106	1	127	20	2189
Other	0	18	17	33	28	0	0	2	1	11	50	2	2	12	32	806
Light tubes	0	4	8	16	9	0	0	1	0	82	8	27	0	23	10	685
Light bulbs	3	29	137	42	22	15	2	2	7	224	38	119	4	71	12	2274
Pieces	46	421	2146	1714	608	30	20	0	139	322	76	171	6	682	481	15409
Other	0	20	34	61	12	0	13	0	9	4	8	57	0	6	12	811
<b>STYROFOAM</b>																
Buoys	14	36	179	130	41	35	4	7	52	60	12	31	2	31	17	2841
Cups	195	786	3118	2365	4777	84	165	8	201	431	256	323	60	636	518	25366
Egg Cartons	11	37	137	55	20	6	5	0	8	43	36	35	13	35	8	1425
Fast-food	102	160	1388	980	142	144	18	0	28	113	116	115	12	189	148	7421
Meat trays	15	65	435	156	58	52	12	0	25	84	47	46	5	57	26	2286
Pieces Large	97	325	1257	844	192	111	92	5	74	303	100	163	20	342	110	12279
Small	228	1185	2488	3731	439	163	51	3	202	150	339	920	119	780	387	40393
Other	3	102	465	584	33	0	0	2	8	134	4	16	3	47	20	4089
<b>RUBBER</b>																
Balloons	6	83	208	459	35	4	1	0	8	60	11	36	9	85	24	2762
Gloves	1	19	58	18	60	0	1	0	2	23	17	11	9	28	5	761
Tires	3	20	174	109	15	3	0	0	9	1	7	11	0	21	13	821
Other	10	131	316	487	113	0	3	1	33	70	24	181	16	195	56	4485
<b>METAL</b>																
Bottle caps	97	278	1690	1944	272	40	38	0	178	101	249	216	7	612	596	13901
Aerosol	14	100	270	80	79	10	39	1	38	35	32	423	3	93	46	2786
Cans Beverage	116	1391	3293	3306	931	123	147	4	869	967	366	439	67	868	417	33125
Food	0	92	285	125	62	10	24	1	39	19	15	31	1	42	9	1536
Other	16	29	172	88	67	0	15	15	12	44	2	106	7	64	37	1394
Crab/fish traps	2	3	29	19	3	2	12	1	6	4	0	1	0	4	0	203
Drums Rusty	2	3	4	13	32	0	1	0	0	4	0	3	0	21	19	247
New	20	0	0	0	8	0	0	0	6	0	0	0	0	0	0	50
Pieces	24	67	377	411	149	2	8	0	64	34	25	88	3	125	81	3375
Pull tabs	41	157	639	796	142	13	39	0	145	26	5	136	3	520	189	5412
Wire	1	106	193	161	61	8	3	0	6	15	10	10	1	30	35	133
Other	46	115	835	524	174	0	2	1	33	48	10	57	10	78	99	3949

	Manatee	Pinellas	Hernando	Dixie	Jefferson	Franklin	Bay	Walton	Okaloosa	Escambia	STATE TOTAL					
	Sarasota	Hillsborough	Pasco		Wakulla	Gulf										
<b>PAPER</b>																
Bags	38	191	684	524	92	9	45	0	27	131	60	82	4	355	296	5160
Cardboard	24	222	578	405	88	0	19	0	40	75	19	58	3	208	98	3655
Cartons	48	84	580	409	111	17	21	0	9	62	78	64	8	154	128	3719
Cups	32	191	1017	1127	167	24	42	0	33	134	278	74	12	437	247	8626
Newspaper	49	100	413	271	35	3	20	0	22	60	8	12	1	91	84	2545
Pieces	84	567	1764	3408	636	54	38	0	360	266	65	607	31	1009	879	22575
Other	61	150	605	874	190	0	3	1	36	147	10	124	58	164	67	5318
<b>WOOD</b>																
Crab/lobster traps	0	0	17	31	3	0	12	0	0	0	0	2	0	6	1	195
Crates	0	10	26	9	0	0	0	0	2	3	1	4	8	13	0	221
Pallets	0	5	27	28	27	0	0	0	3	4	2	9	0	8	5	314
Pieces	22	216	1182	1208	204	109	2	0	34	214	42	303	31	513	80	11631
Other	13	40	176	96	54	0	0	0	3	40	4	47	1	65	4	1496
<b>CLOTH</b>																
Clothing	69	291	1126	989	273	74	28	0	51	112	57	159	16	232	127	7771
<b>TOTAL ITEMS/ZONE</b>																
	2950	16935	56568	63123	12909	2035	1682	183	4873	10693	6328	13792	1727	18691	10599	592401

## GEORGIA

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September 23, 1989  
22 Volunteers  
Unknown Miles Cleaned  
Unknown Pounds of Debris Collected  
7,558 Debris Items Reported

Coordinated By: Jay Calkins  
Georgia Marine Extension Service  
P.O. Box 13687, McWhorder Drive  
University of Georgia, Skidaway Island  
Savannah, GA 31416  
(912) 356-2496

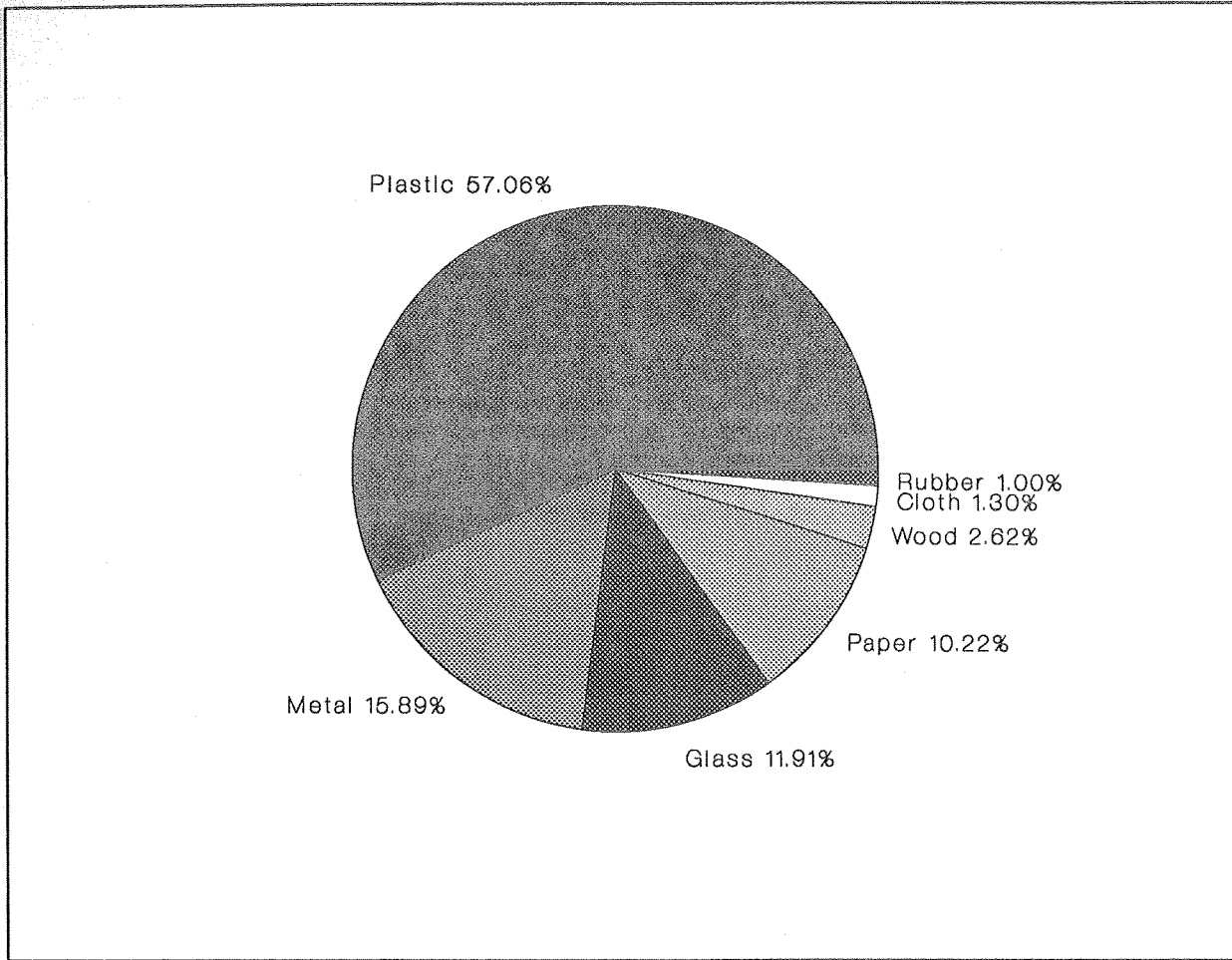
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Beachsweep '89 was set up to coincide with the National Beach Cleanup. Several meetings brought together a number of state and Federal organizations, environmental groups, and other civic groups in order to clean our beaches. Zone captains were in place, boats from the University of Georgia Marine Extension Service and volunteers were organized to carry workers to the remote barrier islands, and hundreds of volunteers had committed their time to Beachsweep '89. However, an enormous storm called "Hugo" appeared to be heading directly at Savannah, Georgia during the week of Beachsweep. Thoughts quickly changed about being near a barrier island. Boats were tied down or moved out of town, windows were taped, and all of us headed for high ground. Fortunately for us, Hugo struck land north of the Georgia coast making a real mess in South Carolina. But a few volunteers managed to clean some of the beaches in following weeks.

We will try again this year, and hope for good weather.

Dr. Jay Calkins

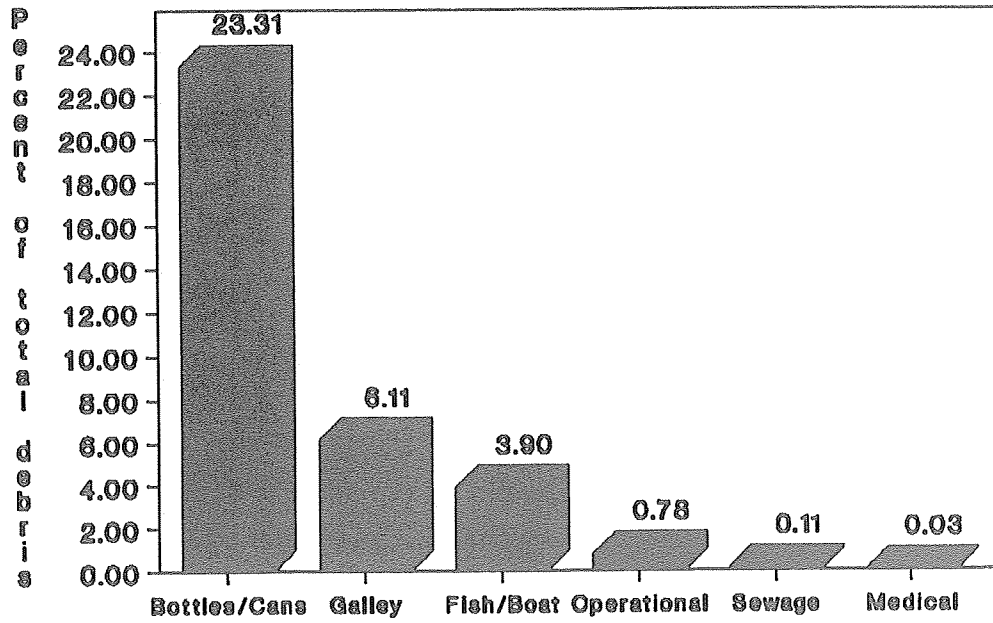
**PERCENT COMPOSITION OF GEORGIA'S BEACH DEBRIS:**



**GEORGIA'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. metal beverage cans	806	10.66
2. plastic cups, spoons, forks, straws	800	10.58
3. small foamed plastic pieces	526	6.96
4. glass beverage bottles	482	6.38
5. foamed plastic cups	431	5.70
6. pieces of paper	425	5.62
7. pieces of glass	380	5.03
8. pieces of plastic	312	4.13
9. plastic beverage bottles	296	3.92
10. plastic caps and lids	224	2.96
11. cigarette butts	191	2.53
12. large foamed plastic pieces	184	2.43
<b>TOTAL</b>	<b>5,057</b>	<b>66.91</b>

**MAJOR TYPES AND SOURCES OF GEORGIA'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Data was collected at one zone, Wassaw Island.

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

None reported.

**MOST PECULIAR DEBRIS ITEMS REPORTED:** Weight bench with Oriental graffiti, rusted radio transmitter, a watch still running with correct time, bed and pink panties, pieces of a copper roof, multitudinous condom wrappers, blue jeans, fireworks, wedding contract

**FOR INFORMATION ON GEORGIA'S 1990 BEACH CLEANUP CONTACT:**

Jay Calkins  
Georgia Marine Extension Service  
P.O. Box 13687, McWhorder Drive  
University of Georgia, Skidaway Island  
Savannah, GA 31416  
(912) 356-2496

**CLEANUP DATE: Saturday, September 22, 1990**

1989 National Beach Cleanup  
Raw Data Summary

GEORGIA

Wassaw Island

PLASTIC-----			RUBBER-----	
Bags	Trash	93	Balloons	32
	Salt	1	Gloves	13
	Other	130	Tires	4
Bottles	Beverage	296	Other	26
	Bleach	98	METAL-----	
	Oil	54	Bottle caps	145
	Other	82	Cans Aerosol	64
Buckets		16	Beverage	806
Caps/lids		224	Food	60
Cigarette butts		191	Other	17
Cups/straws		800	Crab/fish traps	7
Diapers		51	Drums Rusty	3
Lighters		22	New	1
Fishing line		23	Pieces	24
Net	Long	5	Pull tabs	19
	Short	16	Wire	17
Floats, lures		28	Other	31
Hardhats		0	PAPER-----	
Lightsticks		2	Bags	39
Milk/water jugs		77	Cardboard	43
Pieces		312	Cartons	36
Pipe thread		1	Cups	87
Rope	Long	27	Newspaper	10
	Short	37	Pieces	425
Sheets	Long	3	Other	128
	Short	7	WOOD-----	
6-pack holders		14	Crab/lobster traps	4
Strapping bands		13	Crates	11
Syringes		2	Pallets	3
Tampon app.		8	Pieces	172
Toys		20	Other	7
Vegetable sacks		12	CLOTH-----	
Write protector		1	Clothing	98
Other		89		
GLASS-----				
Bottles	Beverage	482	TOTAL ITEMS/ZONE	7558
	Food	24		
	Other	7		
Light tubes		1		
Light bulbs		26		
Pieces		380		
Other		17		
STYROFOAM-----				
Buoys		34		
Cups		431		
Egg cartons		42		
Fast-food		103		
Meat trays		140		
Pieces	Large	184		
	Small	526		
Other		74		



The U.S. Marines airlifted six tons of debris off the uninhabited island of Kahoolawe as part of Hawaii's "Get the Drift and Bag It."

# HAWAII

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October 14, 1989  
4,950 Volunteers  
156 Miles Cleaned  
186,000 Pounds of Debris Collected  
327,841 Debris Items Reported

Coordinated By: John Yamauchi  
Hawaii State Litter Control Office  
205 Koula Street  
Honolulu, HI 96813  
(808) 548-3400 or 548-6444

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On Saturday, October 14, 1989, Hawaii's beaches and shorelines were cleaned and surveyed for ocean debris and trash. Ninety-three tons of debris were cleaned from 153 beach areas on the islands of Kauai, Lanai, Maui, Oahu, Hawaii, and even the uninhabited island of Kahoolawe. This beach cleanup, themed "Get the Drift and Bag It," was designed to focus public attention on the problem of marine debris and its impact on aquatic and terrestrial wildlife.

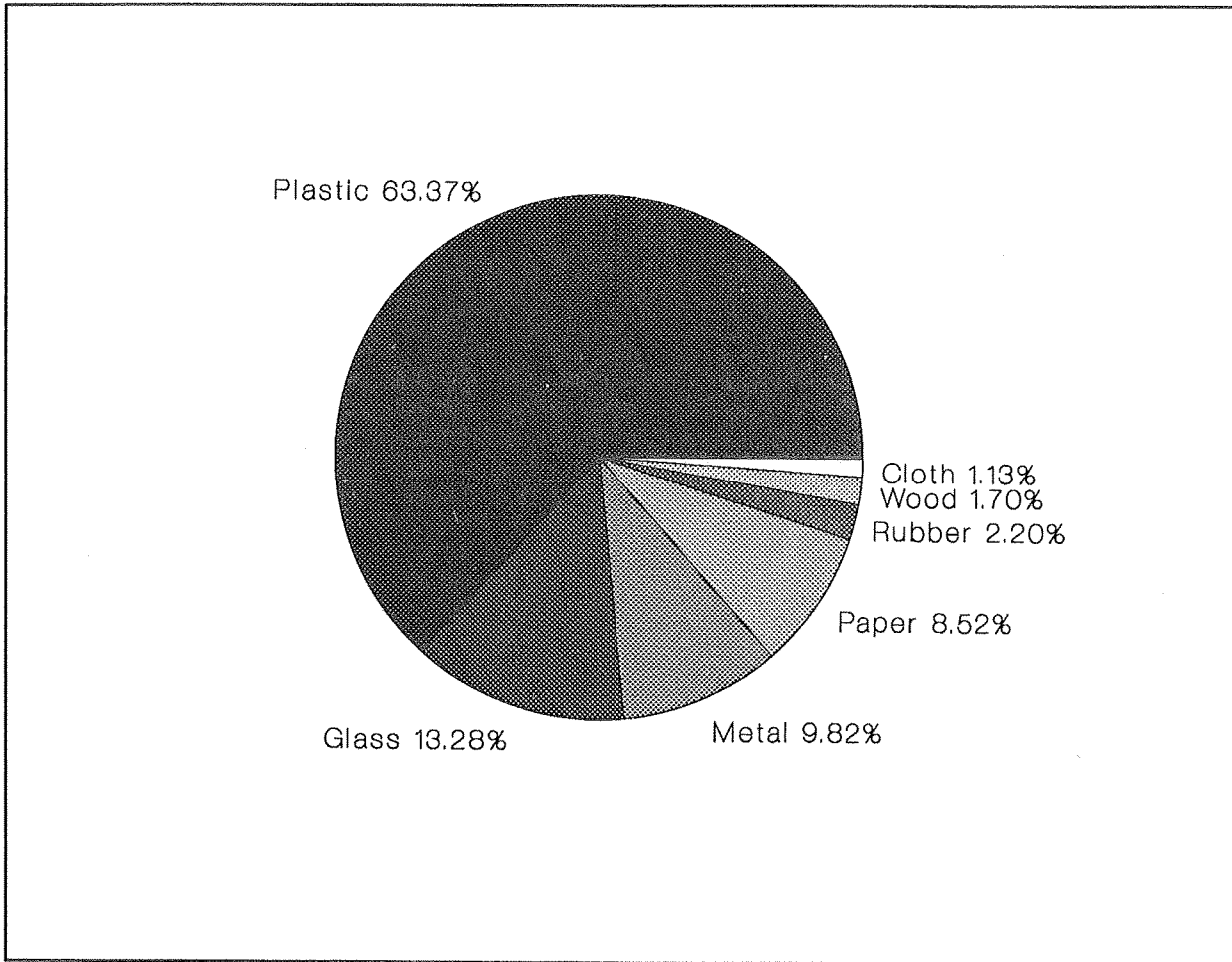
A total of 4,950 volunteers participated in the cleanup. The tons of debris collected included plastic, styrofoam, fishing nets, and lines which have been known to kill marine animals in Hawaii including Hawaiian monk seals, green sea turtles, and birds. On the uninhabited island of Kahoolawe, the cleanup this year was again conducted on Kanapou Bay. Here approximately six tons of pure marine drift was collected consisting predominantly of plastic and was airlifted off the beach.

Community organizations, military personnel, conservation groups, boy and girl scouts, school groups, dive clubs, commercial and leisure fishing organizations, ocean sports enthusiasts, recreational clubs, businesses, and tourists all pitched in to make this "Get the Drift and Bag It" cleanup a big success.

The cleanup was coordinated by the following organizations: Community Work Day Program, State Litter Control Office, County of Hawaii Department of Parks and Recreation, Pacific Whale Foundation, and the Maui Community Work Day Program. The "Get the Drift and Bag It" cleanup was sponsored by the Governor's Advisory Committee on Litter Control.

John Yamauchi

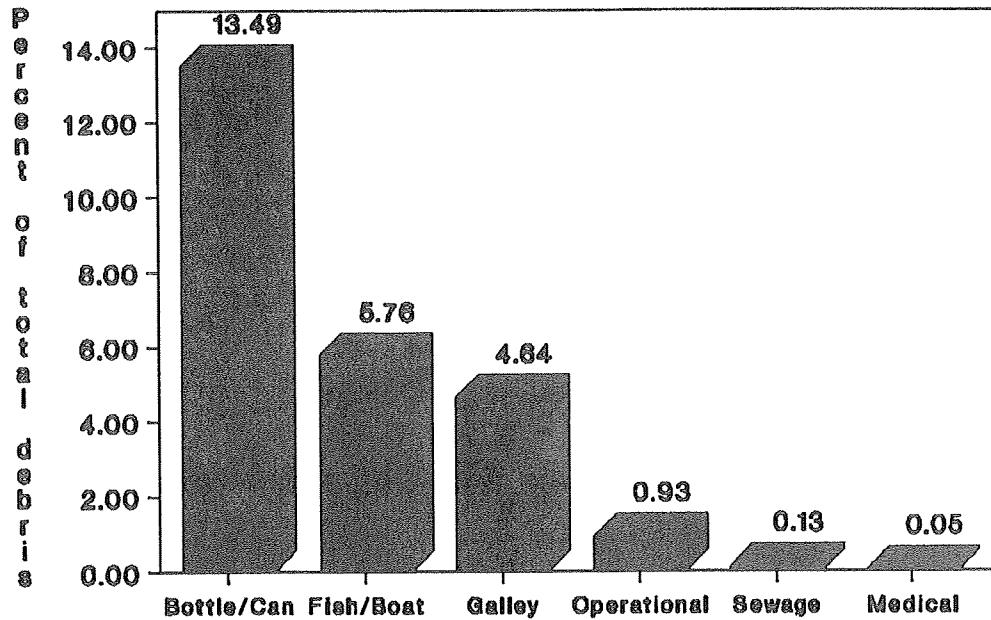
**PERCENT COMPOSITION OF HAWAII'S BEACH DEBRIS:**



**HAWAII'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic pieces	40,743	12.43
2. cigarette filters	28,543	8.71
3. glass pieces	25,520	7.78
4. plastic cups, spoons, forks, straws	22,211	6.77
5. foamed plastic cups	17,432	5.32
6. glass beverage bottles	15,799	4.82
7. paper pieces	12,715	3.88
8. plastic caps and lids	11,783	3.59
9. metal beverage cans	9,898	3.02
10. miscellaneous plastic bags	9,161	2.79
11. foamed plastic cups	9,073	2.77
12. plastic trash bags	8,458	2.58
<b>TOTAL</b>	<b>211,336</b>	<b>64.46</b>

**MAJOR TYPES AND SOURCES OF HAWAII'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Hawaii	44.49	glass beverage bottles
Maui	59.80	plastic pieces
Kahoolawe	94.52	plastic pieces
Oahu	64.32	plastic pieces
Kauai	63.61	plastic pieces

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

Debris Related	Other Reports
spotted one small live green sea turtle with monofilament fishing line entangled around front flipper	none

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**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Hawaii	chop sticks, contact lens holder, auto and tractor parts, missile remnant, gun holster, pink dinosaur (plastic), seat from car, lei-making needle, hieroglyph depicting a man, car hood
Maui	50 pornographic magazines, car windshield, condoms, engine, chair leg, mattress
Kahoolawe	several empty ordinances and shell casings, umbrella handle, Tupperware covers, food coloring, ping pong and tennis balls, yo-yo, cafeteria tray, swimming pool, toilet brush, back of a television, garter belt, 11 toothbrushes
Oahu	men's underwear (BVD's), sanitary napkin, Volkswagen bumper, screw driver, wind shield wiper, head phones, pant hose, small motor, skateboard, quartz clock, false teeth, copper bell, plastic lizard ring, Barbie doll, orange panty with green flowers, shower head, rat trap, frying pan, typewriter, adding machine, tractor trailer tire, blanket, clothes line pole, portable carrier for luggage, two engine blocks, 18 karat gold ring, live shotgun shell, silver olive fork, kissing potion, door knob, rubber man, plastic mustache
Kauai	sofa, water heater, dentures (upper)

\* not all items indicated as peculiar by volunteers are listed above.

**FOR INFORMATION ON HAWAII'S 1990 BEACH CLEANUP CONTACT:**

John Yamauchi  
Hawaii State Litter Control Office  
205 Koula Street  
Honolulu, HI 96813  
(808) 548-3400 or 548-6444

**CLEANUP DATE: Saturday, October 20, 1990**

1989 National Beach Cleanup  
Raw Data Summary

HAWAII

		Hawaii	Maui	Kahoolawe	Oahu	Kauai	STATE TOTAL
<b>PLASTIC</b>							
Bags	Trash	970	604	56	5951	877	8458
	Salt	18	22	5	267	6	318
	Other	446	515	18	7212	970	9161
Bottles	Beverage	389	962	175	2583	743	4852
	Bleach	91	295	361	819	349	1915
	Oil	109	108	33	498	105	853
	Other	114	231	184	1157	185	1871
Buckets		85	116	155	363	102	821
Caps/lids		745	1322	396	7891	1429	11783
Cigarette butts		1967	1671	396	23427	1082	28543
Cups/straws		1105	1191	346	13479	1311	17432
Diapers		185	191	1	797	159	1333
Lighters		82	77	31	663	108	961
Fishing line		494	245	5	2860	690	4294
Net	Long	45	130	162	619	154	1110
	Short	23	171	83	1015	349	1641
Floats, lures		112	122	206	454	1103	1997
Hardhats		13	3	5	14	3	38
Lightsticks		60	10	6	275	39	390
Milk/water jugs		233	156	63	810	197	1459
Pieces		1402	2695	6718	25450	4478	40743
Pipe thread		15	21	1	288	26	351
Rope	Long	111	156	248	1100	333	1948
	Short	174	205	363	3103	545	4390
Sheeting	Long	53	16	17	144	67	297
	Short	33	38	1	359	33	464
6-pack holders		222	327	96	1524	383	2552
Strapping bands		36	172	124	947	224	1503
Syringes		3	6	4	150	15	178
Tampon app.		32	39	13	289	51	424
Toys		47	65	25	942	120	1199
Vegetable sacks		90	111	1	488	128	818
Write protector		6	19	6	184	12	227
Other		425	739	138	3592	587	5481
<b>GLASS</b>							
Bottles	Beverage	2690	1493	83	9735	1798	15799
	Food	56	116	10	320	48	550
	Other	92	8	6	105	35	246
Light tubes		1	1	9	54	30	95
Light bulbs		11	4	8	196	58	277
Pieces		2668	1809	11	19446	1586	25520
Other		195	20	2	786	36	1039
<b>STYROFOAM</b>							
Buoys		62	88	457	638	271	1516
Cups		658	720	30	6632	1033	9073
Egg Cartons		60	34	4	252	23	373
Fast-food		508	921	25	3811	597	5862
Meat trays		239	244	12	1319	385	2199
Pieces	Large	248	589	294	3267	628	5026
	Small	909	1559	1348	16392	2003	22211
Other		51	81	43	1382	115	1672

	Hawaii	Maui	Kahoolawe	Oahu	Kauai	STATE TOTAL
<b>RUBBER</b>						
Balloons	104	57	28	971	54	1214
Gloves	32	31	0	175	21	259
Tires	31	64	9	206	109	419
Other	443	419	309	3548	586	5305
<b>METAL</b>						
Bottle caps	2113	878	89	4952	828	8860
Cans						
Aerosol	161	148	7	651	145	1112
Beverage	1905	1559	67	5002	1365	9898
Food	158	226	2	775	185	1346
Other	125	136	0	687	154	1102
Crab/fish traps	28	7	1	21	76	133
Drums						
Rusty	12	11	1	117	16	157
New	1	5	0	9	0	15
Pieces	295	246	9	1846	397	2793
Pull tabs	424	171	1	1464	202	2262
Wire	155	89	2	1003	179	1428
Other	236	249	7	2344	254	3090
<b>PAPER</b>						
Bags	369	347	3	1453	345	2517
Cardboard	310	215	1	112	289	1927
Cartons	295	263	2	1154	269	1983
Cups	385	396	5	2781	593	4160
Newspaper	107	128	1	966	219	1421
Pieces	1349	1345	5	8670	1346	12715
Other	282	200	2	2200	524	3208
<b>WOOD</b>						
Crab/lobster traps	0	3	0	13	12	28
Crates	2	4	0	67	9	82
Pallets	17	9	1	133	9	169
Pieces	403	243	16	3300	319	4281
Other	38	93	7	763	103	1004
<b>CLOTH</b>						
Clothing	318	426	30	2520	396	3690
<b>TOTAL ITEMS/ZONE</b>	<b>28481</b>	<b>28406</b>	<b>13389</b>	<b>222952</b>	<b>34613</b>	<b>327841</b>



Villerie Reggio, of the U.S. Minerals Management Service, helped clean Fourchon Beach as part of Louisiana's Adopt-A-Beach program.

## LOUISIANA

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September 23, 1989  
3,450 Volunteers  
67 Miles Cleaned  
110,000 Pounds of Debris Collected  
76,870 Debris Items Reported

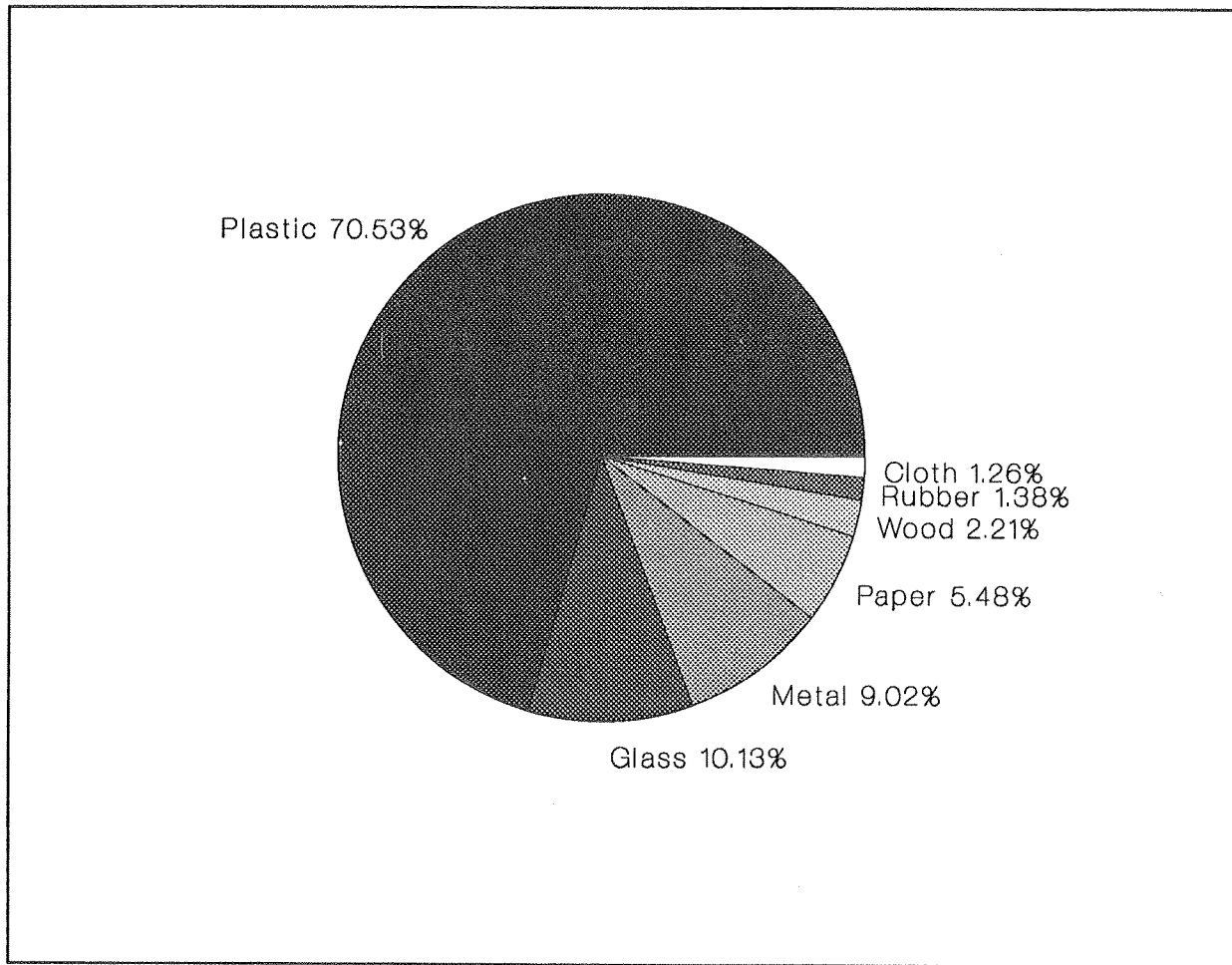
Coordinated By: Barbara Colthrap  
Louisiana Department of Culture,  
Recreation and Tourism  
P.O. Box 94291  
Baton Rouge, LA 70804-9291  
(504) 342-8148

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Beachsweep '89 was the most successful beach cleanup to date with 3,450 people signing in with zone coordinators. The volunteers picked up 55 tons of trash and debris and covered 67 miles of coastline. Grand Isle had 1,200 people; Fourchon, 647; Cameron 659; and others were at Acadiana, Timbalier and Chandelier Islands.

Barbara Colthrap

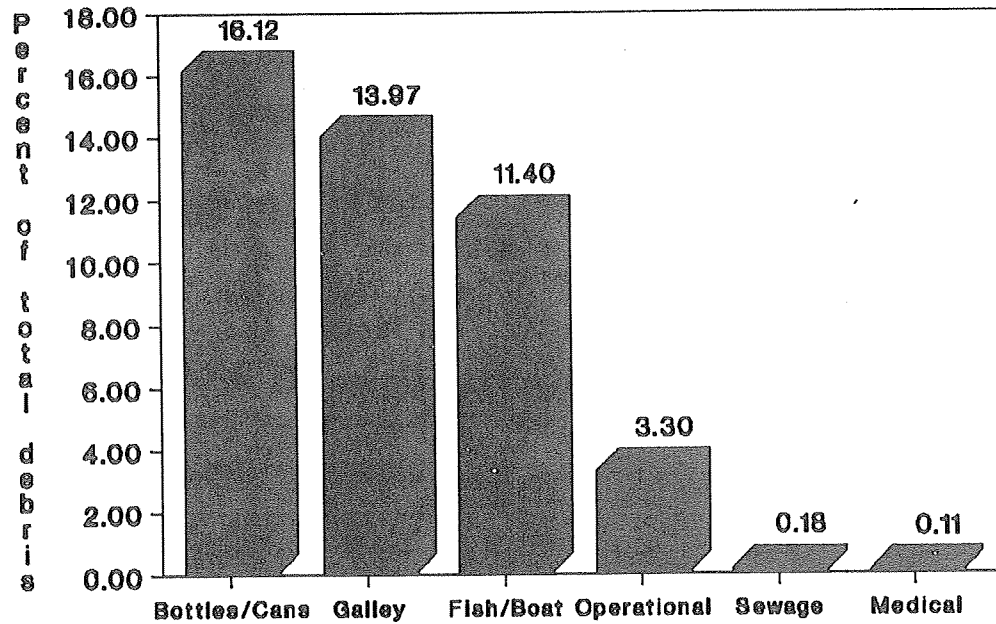
**PERCENT COMPOSITION OF LOUISIANA'S BEACH DEBRIS:**



**LOUISIANA'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic caps and lids	5,620	7.31
2. plastic pieces	5,361	6.97
3. foamed plastic cups	4,787	6.22
4. glass beverage bottles	4,454	5.79
5. small foamed plastic pieces	4,093	5.32
6. plastic milk/water gallon jugs	3,569	4.64
7. metal beverage cans	3,050	3.96
8. plastic beverage bottles	2,932	3.81
9. plastic trash bags	2,481	3.22
10. plastic cups, spoons, forks, straws	2,236	2.91
11. plastic bleach, cleaner bottles	1,971	2.56
12. plastic rope (2 feet or shorter)	1,961	2.55
<b>TOTAL</b>	<b>42,515</b>	<b>55.26</b>

**MAJOR TYPES AND SOURCES OF LOUISIANA'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Fourchon Beach	24.39	glass beverage bottles
Grand Isle	78.87	plastic pieces
Isles Dernieres	71.47	plastic milk, water gallon jugs
Rutherford Beach	73.22	plastic caps, lids
Grand Terre	65.83	metal beverage cans
Timbalier Island	70.68	plastic caps, lids
Fourchon Beach (Minerals Management Ser.)	64.58	glass beverage bottles

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

None reported.

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**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Fourchon Beach	truck body, carburetor, plasma bag, license (paper), birth control pills, fan belt, three douche bottles, lawn mower grass catcher, toilet seat
Grand Island	radio tube, ladies bra, walkman headset, television, chemical bottle, bath tub, pool cleaner, bags of white powder, coconut, porpoise head with orange teeth, fire hose, linoleum
Isles Dernieres	food ration container, rod and reel, 5-gallon Texaco bucket
Rutherford Beach	wallet with identification, eight air conditioner motors, 1979 Ford Granada, 1974 Pinto
Grand Terre	disposable douche, wood picture frame
Timbalier Island	refrigerator, plastic baby head, Hummingbird depth finder, unopened can of beer
Fourchon Beach (Minerals Mangement Service)	automobile fender skirt, paint roller, foreign medical tube

\* not all items indicated as peculiar by volunteers are listed above.

**FOR INFORMATION ON LOUISIANA'S 1990 BEACH CLEANUP CONTACT:**

Barbara Colthrap  
Louisiana Department of Culture, Recreation and Tourism  
P.O. Box 94291  
Baton Rouge, LA 70804-9291  
(504) 342-8148

**CLEANUP DATE: Saturday, September 22, 1990**

1989 National Beach Cleanup  
Raw Data Summary

LOUISIANA

		Grand Island		Rutherford		Timbalier		STATE	
		Fourchon Beach	Isles Dernieres	Grand Terre	Minerals Mgmt.			TOTAL	
<b>PLASTIC</b>									
Bags	Trash	1169	439	82	215	48	191	337	2481
	Salt	73	25	23	45	4	27	18	215
	Other	762	268	53	249	18	65	120	1535
Bottles	Beverage	911	331	304	208	239	734	205	2932
	Bleach	595	153	202	130	346	489	56	1971
	Oil	275	107	61	40	228	223	19	953
	Other	410	114	141	120	60	324	41	1210
Buckets		120	42	40	35	25	180	7	449
Caps/lids		1179	1560	288	704	544	1200	145	5620
Cigarette butts		176	209	4	3	0	0	137	529
Cups/straws		745	492	93	87	54	480	285	2236
Diapers		78	24	3	16	0	13	33	167
Lighters		115	108	22	143	19	150	38	595
Fishing line		144	76	11	38	60	48	40	417
Net	Long	45	21	6	19	17	43	9	160
	Short	40	37	3	16	5	39	12	152
Floats, lures		97	80	25	36	35	91	20	384
Hardhats		13	2	10	5	3	15	1	49
Lightsticks		109	124	43	155	0	378	16	825
Milk/water jugs		1050	453	365	258	510	788	145	3569
Pieces		1182	1630	224	686	670	613	356	5361
Pipe thread		35	55	7	17	0	47	0	161
Rope	Long	504	322	90	232	61	319	123	1651
	Short	469	417	113	416	71	301	174	1961
Sheeting	Long	52	54	4	38	3	28	7	186
	Short	50	76	12	48	6	63	11	266
6-pack holders		325	183	32	188	36	193	65	1022
Strapping bands		134	80	26	123	5	230	31	629
Syringes		16	20	6	21	1	17	3	84
Tampon app.		38	42	5	21	0	29	2	137
Toys		74	41	16	15	10	79	16	251
Vegetable sacks		35	12	5	20	2	16	7	97
Write protector		21	43	6	11	0	15	3	99
Other		230	189	86	156	41	164	65	931
<b>GLASS</b>									
Bottles	Beverage	1419	467	253	387	712	787	429	4454
	Food	155	66	76	95	33	268	23	716
	Other	39	16	28	14	19	88	1	205
Light tubes		29	20	37	28	21	138	1	274
Light bulbs		118	105	139	84	97	429	13	985
Pieces		588	170	20	98	27	106	85	1094
Other		11	6	7	13	5	9	5	56
<b>STYROFOAM</b>									
Buoys		254	52	40	34	43	132	18	573
Cups		1371	1014	291	193	730	956	232	4787
Egg Cartons		229	128	82	94	55	302	25	915
Fast-food		323	162	60	38	82	222	92	979
Meat trays		647	338	118	75	64	368	95	1705
Pieces	Large	550	302	88	75	121	331	59	1526
	Small	1239	1378	170	309	106	607	284	4093
Other		66	136	37	26	15	61	11	352

	Grand Island Fourchon Beach	Isles Dernieres	Rutherford	Grand Terre	Timbalier Minerals Mgmt.	STATE TOTAL		
<b>RUBBER</b>								
Balloons	16	12	2	43	13	99		
Gloves	83	19	23	69	12	355		
Tires	60	22	6	13	6	132		
Other	177	86	27	41	6	472		
<b>METAL</b>								
Bottle caps	235	97	29	44	65	762		
Cans								
Aerosol	409	128	104	98	65	1244		
Beverage	676	248	253	228	765	3050		
Food	115	28	26	28	37	319		
Other	151	85	34	26	59	422		
Crab/fish traps	6	9	12	2	12	53		
Drums								
Rusty	52	15	7	15	2	118		
New	1	0	1	0	0	4		
Pieces	132	45	9	47	4	293		
Pull tabs	82	23	6	23	0	173		
Wire	73	32	1	18	0	182		
Other	83	70	9	38	17	315		
<b>PAPER</b>								
Bags	393	62	9	22	1	589		
Cardboard	226	77	13	17	16	428		
Cartons	234	66	8	24	8	485		
Cups	210	91	19	37	43	575		
Newspaper	134	33	3	3	1	186		
Pieces	750	349	38	70	8	1515		
Other	174	49	7	36	1	434		
<b>WOOD</b>								
Crab/lobster traps	21	12	0	10	0	46		
Crates	19	9	5	9	2	75		
Pallets	12	16	18	7	2	77		
Pieces	474	355	17	168	133	1348		
Other	28	56	5	11	23	149		
<b>CLOTH</b>								
Clothing	474	134	48	94	36	971		
<b>TOTAL ITEMS/ZONE</b>	<b>23809</b>	<b>14417</b>	<b>4596</b>	<b>7318</b>	<b>6588</b>	<b>14956</b>	<b>5186</b>	<b>76870</b>



Maine's volunteers were part of a Gulf-wide cleanup including Massachusetts, New Hampshire, and New Brunswick and Nova Scotia, Canada.

## MAINE

## IT'S SHORE WORTH SAVING

---

September 23, 1989  
2,800 Volunteers  
176 Miles Cleaned  
18,000 Pounds of Debris Collected  
121,342 Debris Items Reported

Coordinated By: Flis Schauffler  
Maine Coastal Program  
State Planning Office  
184 State Street  
State House Station 38  
Augusta, ME 04333  
(207) 289-3261

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Maine's 1989 Coastal Cleanup expanded on the success of past years, attracting a record turnout of 2,800 volunteers (double the number that participated in '88). Nine tons of debris were removed from 176 miles of shoreline. The average amount of debris per mile along Maine's shore was 103, down from 133 in 1988. We're hoping that this is due to people discarding less, but it may be a result of Hurricane Gabrielle that hit a week or two before the cleanup.

The amount of trash averaged 137 pounds per mile south of Freeport, 105 pounds per mile along the midcoast, and 73 pounds per mile downeast. This difference may be attributed to the predominant habitats (sand beach and saltmarsh "attract" more debris than the rocky shore downeast) and to numbers of shore visitors and boaters. In addition to the trash collected, there were 13 dead gulls found (two entangled and one that had swallowed a fish hook and line). Several foreign items of debris were also found, many of which were from Canada.

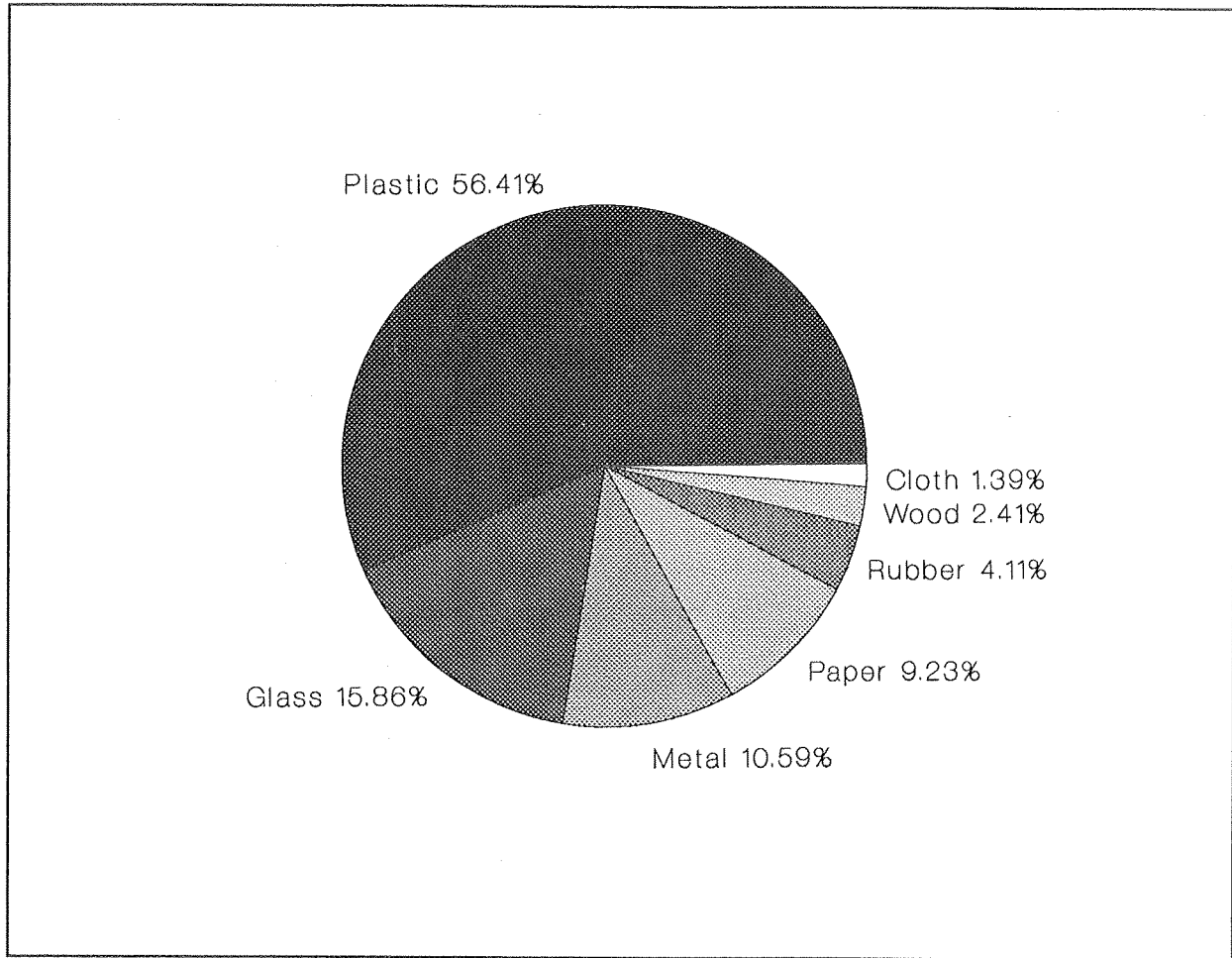
For the first time in the cleanup's five-year history, the Marine Coastal Program initiated a Gulf-wide cleanup effort involving concurrent cleanups in Maine, Massachusetts, New Brunswick, New Hampshire, and Nova Scotia. Approximately 7,000 volunteers turned out from Cape Cod Bay to the Bay of Fundy, despite poor weather conditions. This international initiative attracted significant media attention and helped promote public awareness of the Gulf as a resource at risk.

The most important aspects of this year's cleanup were the international cooperation; the number of children involved (five times as many as last year); and the release of a new publication entitled *Charting Our Course*, an activity guide for teachers (grades 6-12) on water quality in the Gulf of Maine. In addition, more than a dozen businesses supported the cleanup effort, donating over \$7,000 worth of goods and services.

Thank you to all who participated in making the '89 Coastal Cleanup Maine's largest ever!

Flis Schauffler

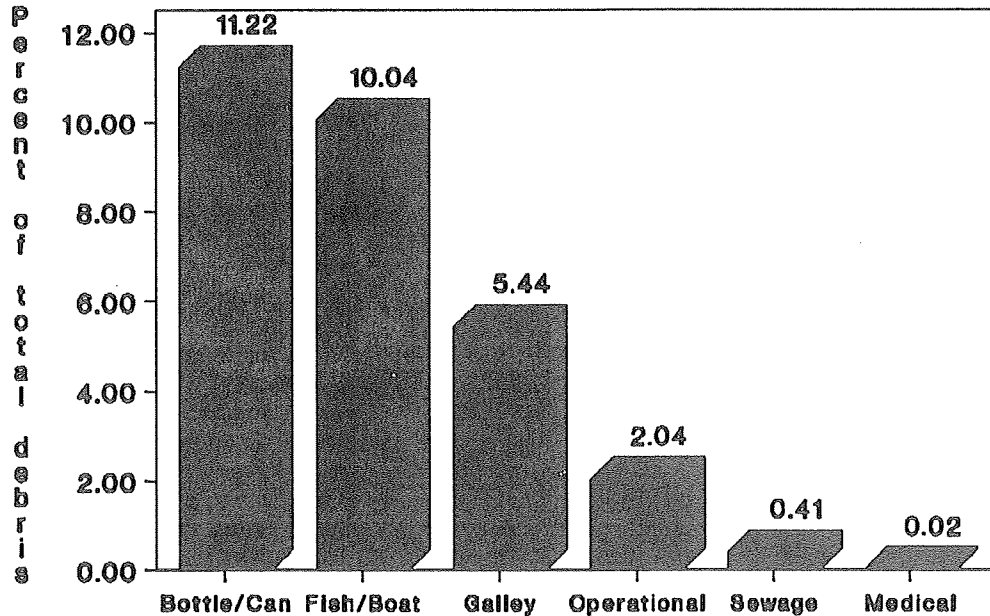
**PERCENT COMPOSITION OF MAINE'S BEACH DEBRIS:**



**MAINE'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. glass pieces	14,232	11.72
2. plastic pieces	8,687	7.16
3. small foamed plastic pieces	8,272	6.81
4. paper pieces	5,909	4.87
5. foamed plastic cups	4,550	3.75
6. miscellaneous plastic bags	4,472	3.68
7. plastic caps, lids	4,017	3.31
8. metal beverage cans	3,903	3.22
9. glass beverage bottles	3,618	2.98
10. plastic rope (2 feet or shorter)	3,528	2.91
11. cigarette butts	3,452	2.84
12. plastic cups, spoons, forks, straws	3,445	2.83
<b>TOTAL</b>	<b>68,085</b>	<b>56.08</b>

**MAJOR TYPES AND SOURCES OF MAINE'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Eastport/Lubec	59.85	metal beverage cans
Cutler	60.69	plastic caps, lids
Jonesport	57.85	small foamed plastic pieces
Addison/Harrington	61.21	plastic cups, spoons, forks, straws
Steuben	66.63	plastic pieces
Schoodic	66.16	plastic cups, spoons, forks, straws
Sullivan	50.22	glass pieces
Lamoine	37.14	glass pieces
Cranberry Isles (and Long Island)	77.32	plastic pieces
Mount Desert Island	53.99	glass pieces
Deer Isle	69.20	plastic pieces
Cape Rosier Region (Brooksville, Sedgewick)	69.25	small foamed plastic pieces
Castine	49.41	glass pieces
Blue Hill/Surry	75.57	small foamed plastic pieces
Searsport/Stockton Springs	52.26	small foamed plastic pieces
Bangor	57.49	paper pieces
Penobscot Bay Islands	55.59	glass pieces
Belfast/Northport	68.04	miscellaneous plastic bags

**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE (continued):**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Lincolnton Beach	59.72	plastic pieces
Camden	56.64	glass pieces
Rockland (and Port Clyde)	67.42	foamed plastic cups
Thomaston Region (Cushing, St. George)	66.34	small foamed plastic pieces
Waldoboro	54.42	glass pieces
Damariscotta Region (Newcastle, Bristol, Bremen)	63.22	plastic pieces
Wiscasset	100.00	plastic six-pack rings
Georgetown	53.24	glass pieces
Phippsburg	24.22	glass pieces
Brunswick	25.91	glass pieces
Casco Bay Islands	43.88	plastic pieces
Freeport	63.91	foamed plastic cups
Yarmouth	60.99	plastic rope (2 feet or shorter)
Chebeague Island	35.48	metal pieces
Portland/Falmouth	35.71	metal bottle caps
South Portland/Cape Elizabeth	42.56	glass pieces
Scarborough	76.92	plastic rope (longer than 2 feet)
Saco	73.73	plastic oil, lube bottles
Old Orchard Beach	46.42	glass pieces
Wells	55.31	plastic rope (longer than 2 feet)
York	70.26	plastic milk, water gallon jugs
Kittery/Eliot	56.78	glass pieces

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

Debris Related	Other Reports
seagull entangled in wire	3 dead seals
skate entangled in fishing line	1 dead red fox
dead bird with head caught inside plastic milk jug	2 dead seagulls
seagull ingested fish on hook (fishing rod, line and hook attached to dead seagull)	9 dead other birds
seagull skeleton with wad of string in throat and protruding out beak	1 dead shark

**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Eastport/Lubec	bottle with note from Boothbay Harbor "Hello from Rick and Claudine," New Brunswick aquaculture salmon tag, Mickey Mouse night light, television, windshield, nuclear filter,
Cutler	salmon band from Canada, pantyhose
Addison/Harrington	plastic Easter egg
Steuben	barnacle-covered sneaker, sled, sanitary napkin
Sullivan	rat repellent pellets, fire hose, bug-filled sock
Mount Desert Island	waterbed mattress, sink
Deer Isle	storm door
Castine	engine block, sea sled, foil windmill
Camden	gas pedal, bedpost, New Brunswick aquaculture salmon band
Rockland	shopping cart, bra, pom-pom

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**MOST PECULIAR DEBRIS ITEMS REPORTED (continued):**

Thomaston Region	ice machine door
Georgetown	salmon tag from New Brunswick, sled, steering wheel, shopping cart
Casco Bay Islands	hair dryer, caulk gun
Freeport	car transmission

\* not all items indicated as peculiar by volunteers are listed above.

**FOR INFORMATION ON MAINE'S 1990 BEACH CLEANUP CONTACT:**

Flis Schaffler  
Maine Coastal Program  
184 State Street  
State House Station 38  
Augusta, ME 04333  
(207) 289-3261

**CLEANUP DATE: Saturday, September 29, 1990**

1989 National Beach Cleanup  
Raw Data Summary

MAINE

	Eastport	Cutler	Jonesport	Addison	Steuben	Schoodic	Sullivan	Lamoine	Cranberry Is.	Mt.Desert	Cape Rosier	Blue Hill	Searsport	Bangor	Penobscot	Belfast	Camden			
PLASTIC-----																				
Bags	82	2	4	2	4	0	34	1	7	91	51	88	24	38	36	0	131	93	7	60
Trash	15	15	2	1	3	0	0	0	0	0	3	0	0	2	2	0	12	3	0	3
Salt	116	12	0	5	13	0	26	0	40	160	69	109	58	91	23	0	71	78	4	78
Other	203	19	3	6	197	0	1	0	3	99	57	63	14	35	68	0	103	110	10	46
Bottles	66	34	3	4	106	0	1	0	3	29	36	28	0	13	10	0	49	34	12	21
Eleach	118	28	10	7	252	0	0	0	0	54	86	36	0	16	34	0	84	15	9	56
Oil	39	1	0	1	39	0	0	0	0	70	15	47	38	11	5	0	16	21	8	27
Other	33	4	0	0	17	1	0	0	0	11	8	3	0	9	2	0	8	7	0	3
Buckets	161	10	3	4	20	5	9	2	21	85	84	56	55	48	118	0	102	53	9	76
Caps/lids	0	0	0	0	0	0	13	0	0	54	1	87	38	0	36	0	204	0	0	3
Cigarette butts	46	8	1	2	3	0	10	3	6	68	10	25	18	31	79	0	56	49	7	49
Cups/straws	21	2	0	0	0	0	0	0	0	2	3	5	2	0	0	0	17	32	0	2
Diapers	6	4	0	0	0	0	0	0	0	2	2	7	0	8	3	0	10	15	0	8
Lighters	7	0	0	0	20	1	0	1	1	16	12	1	2	4	1	0	7	7	0	10
Fishing line	14	1	0	0	7	0	1	0	0	28	5	2	0	2	0	0	7	3	0	4
Net	15	11	0	2	10	0	3	0	2	77	4	3	0	7	4	0	20	8	3	6
Long	8	3	0	0	1	0	0	0	0	7	6	5	0	5	10	0	7	13	0	3
Short	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Floats, lures	0	2	0	0	7	0	1	0	0	4	0	1	0	0	0	0	1	2	0	0
Hardhats	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lightsticks	90	39	3	6	87	1	1	1	0	17	34	22	4	9	24	0	42	30	12	33
Milk/water jugs	310	22	0	12	22	0	2	0	56	145	100	379	5	298	130	0	253	141	7	62
Pieces	1	1	0	0	12	0	1	0	0	14	5	2	0	6	4	0	3	5	0	0
Pipe thread	132	10	37	0	37	7	0	0	9	186	48	48	0	21	7	0	86	37	11	45
Rope	204	25	8	10	15	3	2	0	16	629	40	30	3	20	20	0	120	34	10	56
Sheeting	18	5	15	0	1	2	0	0	5	11	28	6	0	2	4	0	11	15	2	8
Long	17	15	0	0	0	1	0	0	13	24	42	10	0	7	20	0	19	48	0	23
Short	28	8	5	2	2	0	0	2	1	7	24	33	2	11	20	3	22	13	1	8
6-pack holders	64	6	12	15	7	0	0	0	0	8	5	5	2	9	8	0	20	15	0	6
Strapping bands	2	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	2	2	0	0
Syringes	13	1	0	0	0	0	0	0	0	3	6	12	0	2	13	0	16	4	1	3
Tampon app.	14	4	0	1	1	0	1	0	0	7	3	4	1	0	14	0	9	19	8	4
Toys	12	1	20	0	2	0	0	0	0	2	5	13	0	3	4	0	18	4	0	83
Vegetable sacks	1	2	0	0	0	0	0	0	0	2	0	6	0	3	0	0	4	3	5	0
Write protector	65	1	3	8	7	0	5	0	3	34	65	58	1	60	27	0	47	87	9	14
Other																				

	Eastport	Cutler	Jonesport	Addison	Steuben	Schoodic	Lamoine	Mt.Desert	Cape Rosier	Blue Hill	Bangor	Belfast	Camden						
						Sullivan	Cranberry Is.	Deer Isle	Castine	Searsport	Penobscot	Lincolnville							
GLASS-----																			
Bottles	206	23	4	3	35	0	5	10	60	53	161	6	78	54	0	82	85	4	37
Food	29	3	0	0	0	0	0	6	2	13	0	7	0	7	0	8	10	1	1
Other	7	0	0	1	0	0	0	5	2	36	0	20	1	0	0	8	46	0	2
Light tubes	1	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0
Light bulbs	16	1	0	1	2	0	0	8	0	2	2	1	1	3	0	2	3	2	2
Pieces	400	6	15	55	16	0	27	193	39	718	439	2037	528	0	156	424	5	35	35
Other	27	5	0	1	7	0	4	63	1	200	4	123	0	0	7	38	1	8	8
STYROFOAM-----																			
Buoys	14	5	2	6	243	0	3	55	43	29	0	7	5	5	0	83	32	14	39
Cups	183	38	10	15	18	0	18	2	6	175	128	83	20	55	166	0	79	150	27
Egg Cartons	9	2	0	0	1	0	0	2	1	2	0	12	2	0	0	2	1	1	3
Fast-food	69	7	0	0	10	0	4	0	20	10	5	0	32	14	0	11	45	4	34
Meat trays	41	0	0	2	5	0	0	10	2	8	0	7	12	0	12	14	0	26	26
Pieces	167	7	12	4	45	0	5	59	49	35	1	22	91	0	47	112	21	88	88
Small	417	30	20	8	61	0	19	121	64	90	3	24	179	0	113	144	67	129	129
Other	30	0	0	0	2	0	1	20	11	7	0	5	0	0	32	4	1	3	3
RUBBER-----																			
Balloons	11	6	0	0	1	0	0	6	7	15	9	9	9	19	0	16	7	2	13
Gloves	25	2	2	4	14	1	2	19	14	4	0	18	7	0	23	4	2	2	2
Tires	20	2	7	1	5	1	6	4	3	11	0	5	7	0	8	14	5	7	7
Other	99	1	2	7	33	0	2	13	96	20	53	21	56	39	0	58	21	3	26
METAL-----																			
Bottle caps	86	14	3	0	6	0	7	25	61	10	29	114	18	33	0	105	51	1	13
Cans	16	9	0	0	32	0	1	12	20	13	31	0	16	14	0	17	16	1	8
Aerosol	136	31	32	5	144	3	3	55	60	13	53	26	0	123	44	29	93	93	93
Beverage	92	2	0	6	17	0	4	15	27	5	4	0	6	16	0	15	6	0	15
Food	23	0	0	1	8	0	11	31	23	5	109	4	0	4	0	17	38	4	6
Other	0	0	2	0	13	0	0	2	2	4	2	0	1	1	0	0	2	0	1
Crab/fish traps	5	0	0	1	4	0	0	7	4	1	2	0	3	5	0	3	9	0	2
Drums	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	2	1	0	0
Rusty	149	7	20	4	42	0	6	108	34	22	90	4	76	11	0	60	62	8	26
New	31	8	10	0	0	0	1	8	1	4	19	5	15	0	20	6	0	6	6
Pieces	39	2	7	5	9	0	1	4	100	11	0	11	9	0	13	19	0	4	4
Pull tabs	148	2	1	12	7	0	11	9	38	89	48	32	59	17	0	29	21	3	49
Wire																			
Other																			

	Eastport	Cutler	Jonesport	Addison	Schoodic	Lamoine	Mt.Desert	Cape Rosier	Blue Hill	Bangor	Belfast	Camden
			Steuben	Sullivan	Cranberry Is.	Deer Isle	Castine	Searsport	Penobscot	Lincolnville		

PAPER

Bags	56	0	6	0	1	33	9	13	34	37	14	0	7	31	0	16
Cardboard	35	0	0	0	13	11	3	2	5	11	3	0	38	24	1	26
Cartons	53	4	0	1	12	3	33	7	0	20	19	0	21	19	1	17
Cups	20	0	0	0	0	20	2	6	11	13	11	0	11	47	2	17
Newspaper	23	0	0	0	0	10	2	41	2	0	32	0	8	9	0	5
Pieces	244	2	5	10	4	207	63	67	68	149	109	0	139	78	6	69
Other	25	2	0	2	2	53	8	11	15	17	10	0	12	15	0	13

WOOD

Crab/lobster traps	1	0	1	0	10	0	0	0	0	5	1	0	4	10	0	1
Crates	5	0	0	0	6	7	0	2	0	0	0	0	2	7	3	1
Pallets	3	1	0	0	3	14	4	2	0	8	1	0	0	3	1	10
Pieces	46	24	10	4	2	143	16	25	25	7	14	0	91	51	38	27
Other	22	2	0	0	5	21	24	4	1	17	2	0	5	13	11	63

CLOTH

Clothing	69	4	12	18	15	1	4	0	30	160	30	66	4	38	17	0	31	23	3	30
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TOTAL ITEMS/ZONE  
 5621 548 311 265 1732 26 430 42 620 3950 1826 3311 1123 3859 2244 3 3094 2760 407 1998

1989 National Beach Cleanup  
Raw Data Summary

MAINE

	Rockland	Thomaston	Waldoboro	Damariscotta	Wicasset	Georgetown	Phippsburg	Brunswick	Casco Bay	Freeport	Yarmouth	Chesapeake	Portland	S.Portland	Scarborough	Saco	Old Orchard	Wells	York	Kittery	STATE TOTAL
PLASTIC																					
Bags	381	97	54	35	104	8	23	415	13	203	331	85	82	380	25	88	2	33	82	108	3320
Salt	8	11	0	0	0	0	1	12	0	34	6	29	2	5	3	4	0	1	0	2	179
Other	286	251	112	33	83	11	38	700	6	321	309	362	78	321	51	115	53	161	51	177	4472
Bottles	176	33	36	80	5	32	327	39	83	119	115	49	65	19	48	2	53	108	225	2731	
8 each	80	42	18	16	13	3	8	69	22	45	36	80	7	42	0	7	0	3	24	137	1101
Oil	126	87	38	66	9	3	13	105	30	35	64	135	4	20	3	14	0	6	10	106	1679
Other	89	10	5	3	30	3	6	64	10	37	33	32	21	43	6	99	1	25	36	74	985
Buckets	16	9	5	2	5	1	4	22	1	56	18	19	17	8	2	3	0	5	6	16	321
Caps/lids	268	131	27	52	91	18	228	420	32	182	264	178	81	238	51	158	37	190	268	182	4017
Cigarette butts	129	40	0	0	60	19	12	826	0	193	95	8	131	901	62	0	417	0	8	115	3452
Cups/straws	188	56	3	8	139	12	74	295	7	87	145	177	68	348	135	164	290	206	437	135	3445
Diapers	14	0	1	1	4	1	7	4	0	2	5	4	6	19	2	5	0	1	8	8	178
Lighters	6	4	4	7	2	2	15	26	3	17	22	9	10	16	0	10	1	20	45	22	306
Fishing line	30	3	2	4	18	3	8	15	4	1	8	4	4	28	12	33	0	20	39	57	382
Net	47	11	2	5	0	0	12	13	0	7	8	4	2	22	20	13	0	1	3	45	289
Short	58	20	3	10	7	1	28	51	0	29	20	29	7	51	32	28	0	5	27	71	652
Floats, lures	11	33	0	6	13	2	14	18	4	0	8	12	5	9	6	9	0	3	8	30	259
Hardhats	19	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	4	25
Lightsticks	2	0	1	0	0	0	6	5	0	2	2	0	2	3	1	3	0	1	0	2	46
Milk/water jugs	112	60	8	8	19	1	24	100	35	70	39	100	16	31	10	13	4	8	28	51	1192
Pieces	568	231	56	67	218	17	597	996	15	694	620	824	127	544	69	351	141	203	93	312	8687
Pipe thread	6	2	4	0	0	0	0	45	0	1	4	4	0	18	0	3	1	0	3	24	169
Rope	233	114	7	27	20	4	38	94	7	34	62	85	12	74	40	138	1	44	48	150	1953
Long	368	92	20	38	55	9	41	167	13	60	84	130	20	216	74	258	3	183	144	308	3528
Short	31	32	3	0	20	0	2	19	8	9	17	74	3	24	1	7	0	2	7	17	399
Sheeting	43	86	12	0	29	0	5	34	6	34	49	79	6	14	1	5	1	5	91	18	757
6-pack holders	34	22	7	1	7	2	9	51	0	11	42	25	17	19	3	7	1	8	31	9	498
Strapping bands	58	29	3	5	29	0	3	42	2	47	55	33	8	34	26	30	2	14	27	45	674
Syringes	0	0	0	0	0	0	0	2	0	0	2	2	2	3	0	3	0	0	0	0	19
Tampon app.	25	3	0	1	2	1	13	30	6	17	42	19	63	94	5	25	1	14	22	46	503
Toys	6	9	4	9	7	4	16	32	0	16	16	14	8	19	21	35	10	54	27	36	433
Vegetable sacks	20	19	3	1	6	0	3	96	2	41	22	24	5	17	2	16	0	2	12	16	474
Write protector	8	2	0	1	3	0	3	34	0	4	7	1	16	7	1	2	1	0	17	0	133
Other	160	47	23	23	57	4	117	291	2	73	118	101	41	135	45	65	17	136	28	93	2070

	Rockland	Thomaston	Waldoboro	Damariscotta	Georgetown	Brunswick	Freepoint	Chebeague	S. Portland	Saco	Wells	Kittery	STATE TOTAL									
				Wicasset	Phippsburg	Casco Bay	Yarmouth	Portland	Scarborough	Old Orchard	York											
<b>GLASS</b>																						
Bottles	395	79	28	37	29	14	34	561	36	233	192	84	141	423	69	84	4	36	116	115	3618	
Food	10	3	0	6	3	0	0	35	4	8	5	10	4	8	0	3	0	0	0	4	8	191
Other	51	1	0	2	1	0	4	14	0	1	7	0	8	28	0	0	1	0	2	0	0	245
Light tubes	0	2	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	1	10
Light bulbs	5	2	1	0	1	0	3	42	0	3	1	3	0	2	0	1	4	0	1	4	3	117
Pieces	1198	199	22	107	282	22	18	2525	11	88	755	92	1150	1898	10	99	135	76	61	279	14232	
Other	20	1	1	7	9	0	1	121	0	15	19	3	7	125	0	5	0	3	2	3	831	
<b>STYROFOAM</b>																						
Buoys	122	65	6	14	11	5	17	105	27	54	67	85	17	47	7	16	0	5	35	116	1404	
Cups	356	102	44	29	92	6	41	439	31	193	297	276	111	513	38	105	1	111	141	227	4550	
Egg Cartons	5	0	0	1	0	1	2	5	1	6	4	1	1	4	4	1	0	0	1	35	111	
Fast-food	85	12	1	4	14	1	33	128	4	58	69	14	30	81	24	36	7	28	46	53	1017	
Meat trays	39	14	10	3	7	0	8	76	1	17	14	24	9	15	9	1	0	4	8	7	405	
Pieces	177	37	6	26	23	12	61	207	38	222	206	156	47	215	44	47	14	289	61	185	2839	
Large	576	106	14	42	151	49	902	577	78	950	420	416	204	780	106	344	43	325	164	528	8272	
Small	53	18	6	3	6	0	4	42	8	14	15	9	2	123	2	2	3	45	1	50	522	
Other																						
<b>RUBBER</b>																						
Balloons	19	19	1	2	7	31	10	63	0	39	37	15	12	30	6	20	20	46	14	24	536	
Gloves	22	175	69	21	11	1	3	450	1	148	52	47	10	72	2	3	0	7	2	33	1272	
Tires	19	19	5	1	3	1	3	85	3	9	24	15	10	37	6	2	0	2	2	5	359	
Other	258	118	26	19	29	6	83	174	1	243	243	117	69	289	56	213	12	110	114	85	2815	
<b>METAL</b>																						
Bottle caps	208	47	0	25	55	8	83	257	0	55	220	8	85	228	40	55	73	61	191	43	2324	
Cans	19	10	1	0	4	3	8	61	10	8	9	23	13	15	1	7	2	147	8	28	583	
Aero.	152	71	6	32	58	9	66	244	52	274	146	149	65	145	48	143	3	89	212	916	3903	
Food	39	6	1	1	1	0	1	33	4	12	7	6	7	31	13	10	0	3	9	61	475	
Other	46	8	2	6	2	3	1	82	11	15	15	12	7	66	3	9	0	29	2	71	674	
Crab/fish traps	17	0	1	3	5	2	11	20	0	0	3	0	1	6	3	2	0	1	5	121	231	
Drums	14	2	4	0	0	0	0	11	4	1	6	9	2	37	0	0	0	2	0	8	146	
Rusty	0	0	0	0	0	0	0	0	0	1	0	3	0	7	0	0	0	0	0	0	21	
New	184	63	1	13	18	0	16	85	0	57	39	35	25	74	7	11	3	79	7	135	1581	
Pieces	40	13	0	16	13	2	14	30	1	16	68	0	9	27	1	16	74	23	28	8	543	
Pull tabs	81	10	0	7	6	7	3	35	1	2	12	5	18	82	4	2	7	19	28	20	599	
Wire	124	32	3	4	23	20	12	263	0	80	190	77	27	124	11	48	18	17	80	39	1767	
Other																						

	Thomaston	Damariscotta	Georgetown	Brunswick	Freeport	Chebeague	S. Portland	Saco	Hells	Kittery	STATE										
	Waldoboro	Wicasset	Phippsburg	Casco Bay	Yarmouth	Portland	Scarborough	Old Orchard	York	York	TOTAL										
<b>PAPER</b>																					
Bags	13	7	20	6	31	139	14	47	98	7	42	13	52	39	12	1027					
Cardboard	15	0	14	5	16	90	12	29	99	3	19	23	55	42	37	823					
Cartons	9	5	8	20	23	104	21	18	78	2	39	8	29	42	39	866					
Cups	19	3	2	21	5	75	141	4	28	78	13	14	24	50	116	20	941				
Newspaper	5	1	2	5	0	2	36	1	3	28	7	19	37	2	16	7	49	13	19	406	
Pieces	130	19	35	296	22	130	761	11	186	459	133	260	869	114	105	200	319	115	142	5909	
Other	12	24	5	66	4	72	312	1	32	0	21	39	110	13	45	12	162	48	10	1228	
<b>WOOD</b>																					
Crab/lobster traps	24	4	4	7	2	1	6	14	3	31	3	7	15	3	8	0	14	17	38	312	
Crates	4	2	1	6	0	0	1	13	1	2	6	1	1	5	0	1	0	1	1	8	87
Pallets	5	0	0	4	0	0	8	0	4	11	0	2	5	0	0	0	0	2	2	12	106
Pieces	107	146	5	43	45	13	12	214	21	57	124	78	198	12	46	16	53	48	165	2014	
Other	33	21	3	2	9	1	3	16	0	20	18	6	6	38	1	4	2	26	5	6	411
<b>CLOTH</b>																					
Clothing	147	74	13	12	18	5	28	147	7	48	69	95	54	134	32	84	7	94	46	64	1691
<b>TOTAL TITERS/ZONE</b>																					
	8652	3302	801	1056	2477	398	3266	14162	657	5710	6971	4912	3605	11086	1454	3468	1722	3827	3617	6421	121342



**A refrigerator found on Assateague Island National Seashore required additional help to get off the beach during Maryland's cleanup. Photo courtesy of Assateague Island National Seashore**

## MARYLAND

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September 9, 1989  
179 Volunteers  
22 Miles Cleaned  
36,000 Pounds of Debris Collected  
18,167 Debris Items Reported

Coordinated By: Judy Johnson  
Committee to Preserve Assateague Island  
616 Piccadilly Road  
Towson, MD 21204  
(301) 828-4520

Ilia Feher  
110 West Federal Street  
Snow Hill, MD  
(301) 631-2640

Karen Aspinwall  
National Aquarium of Baltimore  
501 E. Pratt Street  
Baltimore, MD 21202  
(301) 576-3888

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The Beach Cleanup on Assateague Island National Seashore in Maryland was an inspiring and tremendous day! Everyone was enthusiastic about being able to take part in a hands-on effort to do something about the litter, plastic, and pollution problem. The spirit was contagious and lasted throughout the day.

Due to our mailings and press releases, and efforts by the Worcester Environmental Trust, 127 volunteers turned out (including 12 from the National Aquarium in Baltimore, some from the Telephone Pioneers and Singles Club in Salisbury, nearly 30 from the Environmental Protection Agency, Region III, Philadelphia, 32 from Assateague Mobile Sportsfisherman's Association (AMSA), and about 20 from Assateague State Park and Assateague Island National Seashore, making a total of 179 people, compared to 72 in 1988. All declared it a most satisfying day and look forward to helping next year!

More than 18,000 different pieces were collected in Maryland, adding up to a total of 18 tons (10 tons of trash; 8 tons wood and heavy items). The greatest amount of foreign debris came from Mexico, with other items from France, Spain, China, Italy, Holland, Belgium, Iceland, England, Brazil, the Orient, Japan, and Greece.

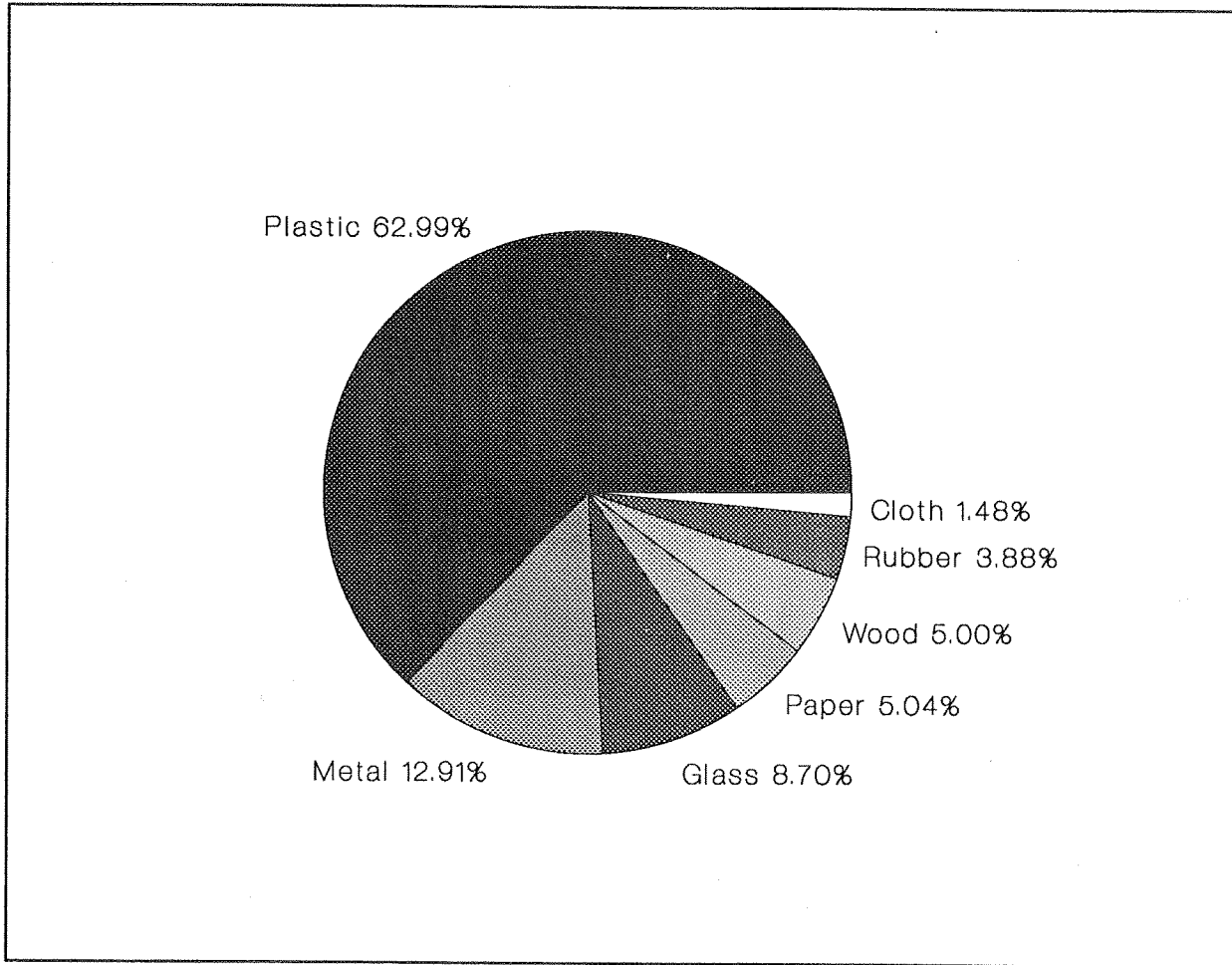
On inquiring why fewer tires were found in Maryland compared to the cleanup on Assateague Island in Virginia, I learned that AMSA had collected all the tires on the Maryland beach in March, a total of 1.5 tons. This would make the total tons for the year of 19.5. The source of these tires are artificial reefs that were placed offshore but have since broken apart.

Balloons are another major problem, and National Park Service Director James Ridenour issued a directive in August, stating that the National Park Service will not permit the sale or use of helium balloons within park units unless they can be controlled or recovered.

All in all, those who took part in the cleanup found it a rewarding experience, full of camaraderie, and it gave them a feeling that they were doing something really worthwhile and constructive.

Judy Johnson

**PERCENT COMPOSITION OF MARYLAND'S BEACH DEBRIS:**

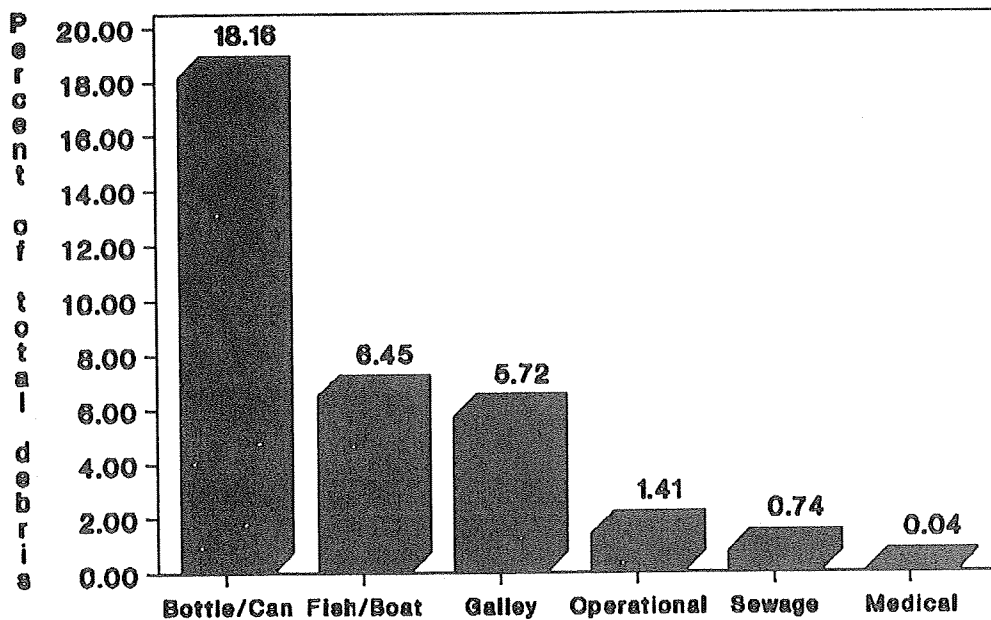


**MARYLAND'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic pieces	2,060	11.34
2. metal beverage cans	1,702	9.37
3. small foamed plastic pieces	1,159	6.38
4. plastic cups, spoons, forks, straws	1,139	6.27
5. plastic caps, lids	953	5.24
6. miscellaneous plastic bags	897	4.94
7. glass beverage bottles	831	4.57
8. wood pieces	744	4.09
9. foamed plastic cups	671	3.69
10. plastic beverage bottles	513	2.82
11. paper pieces	494	2.72
12. glass pieces	492	2.71
<b>TOTAL</b>	<b>11,655</b>	<b>64.14</b>

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**MAJOR TYPES AND SOURCES OF MARYLAND'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Data was collected for one zone in Maryland, Assateague Island National Seashore.

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

None reported.

**MOST PECULIAR DEBRIS ITEMS REPORTED:** television tube, car mirror, sanitary napkin, typewriter ribbon, note in a bottle from person in Pennsylvania (finder sent author an Ocean City, Maryland postcard).

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**FOR INFORMATION ON MARYLAND'S 1990 BEACH CLEANUP CONTACT:**

**Judy Johnson  
Committee to Preserve Assateague Island  
616 Piccadilly Road  
Towson, MD 21204  
(301) 828-4520**

**CLEANUP DATE: Saturday, September 8, 1990**



**Maryland's beach cleanup trucked 18 tons of trash off Assateague Island National Seashore. Photo courtesy of Assateague Island National Seashore**

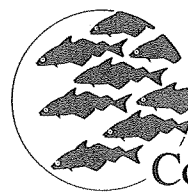
1989 National Beach Cleanup  
Raw Data Summary

MARYLAND

Assateague Island

PLASTIC-----			RUBBER-----	
Bags	Trash	466	Balloons	482
	Salt	76	Gloves	11
	Other	897	Tires	76
Bottles	Beverage	513	Other	136
	Bleach	178	METAL-----	
	Oil	112	Bottle caps	144
	Other	187	Cans	Aerosol 94
Buckets		58		Beverage 1702
Caps/lids		953		Food 43
Cigarette butts		55		Other 48
Cups/straws		1139	Crab/fish traps	1
Diapers		10	Drums	Rusty 5
Disposable lighters		133		New 0
Fishing line		59	Pieces	116
Net	Long	16	Pull tabs	19
	Short	10	Wire	55
Floats/lures		198	Other	119
Hardhats		1	PAPER-----	
Light sticks		32	Bags	81
Milk/water jugs		292	Cardboard	74
Pieces		2060	Cartons	77
Pipe thread		23	Cups	104
Rope	Long	190	Newspaper	10
	Short	378	Pieces	494
Sheets	Long	54	Other	75
	Short	87	WOOD-----	
6-pack holders		91	Crab/lobster traps	7
Strapping bands		74	Crates	16
Syringes		7	Pallets	8
Tampon applicators		135	Pieces	744
Toys		181	Other	134
Vegetable sacks		30	CLOTH-----	
Write protector		8	Clothing	268
Other		382		
GLASS-----				
Bottles	Beverage	831		
	Food	159		
	Other	5		
Light tubes		9		
Light bulbs		64		
Pieces		492		
Other		21		
STYROFOAM-----				
Buoys		16		
Cups		671		
Egg cartons		24		
Fast-food		80		
Meat trays		50		
Pieces	Large	262		
	Small	1159		
Other		96		
			TOTAL ITEMS/ZONE	18167

## MASSACHUSETTS



## Coastweeks 89 Massachusetts

September 23, 1989  
3,000 Volunteers  
200 Miles Cleaned  
56,000 Pounds of Debris Collected  
211,758 Debris Items Reported

Coordinated By: Anne Smrcina  
Coastal Zone Management Program  
100 Cambridge Street, 20th Floor  
Boston, MA 02202  
(617) 727-9530

Results of Coastsweep '89 show a heightened environmental awareness and concern among all age groups in Massachusetts. Almost 3,000 individuals cleared 28 tons of debris from approximately 200 miles of shoreline, with volunteers ranging from second graders to senior citizens. Forty-nine coastal communities had at least some part of their shoreline cleaned during the coastal cleanup effort.

Of particular note was the prominent role students played in the cleanup--at Scusset Beach students from the Hoxie School (Bourne) second grade and their parents hosted the cleanup. Fourth graders from Osterville Bay School scoured Sandy Neck Beach in Barnstable, while fifth and sixth graders from Falmouth's Morse Pond School made beaches in their town more beautiful. Over 50 students from Tufts University joined the Revere Beach cleanup and Boston College students traveled to Nahant. Boy Scouts, Cub Scouts, Girl Scouts, and Brownie troops all took part in various local events.

At Monomoy Island, an ideal location to study water-borne debris due to the low number of visitors to this National Wildlife Refuge, 11 volunteers picked up 1,455 items, of which 68 percent was plastic. Prominent among the debris items were plastic bags, rope, plastic caps and lids, plastic and glass bottles, and metal cans.

Plastic tampon applicators were found in abundance along many Boston Harbor beaches, including the kick-off cleanup at Revere. Even Monomoy had 19 of these "beach whistles." Inadequate sewage treatment plants and combined sewer overflows in Boston are the source of this problem.

Many six-pack rings made of degradable plastic were found to be brittle and broke apart when handled. New legislation requiring a 60-day degradation period will further lessen the threat to marine animals from these plastic rings.

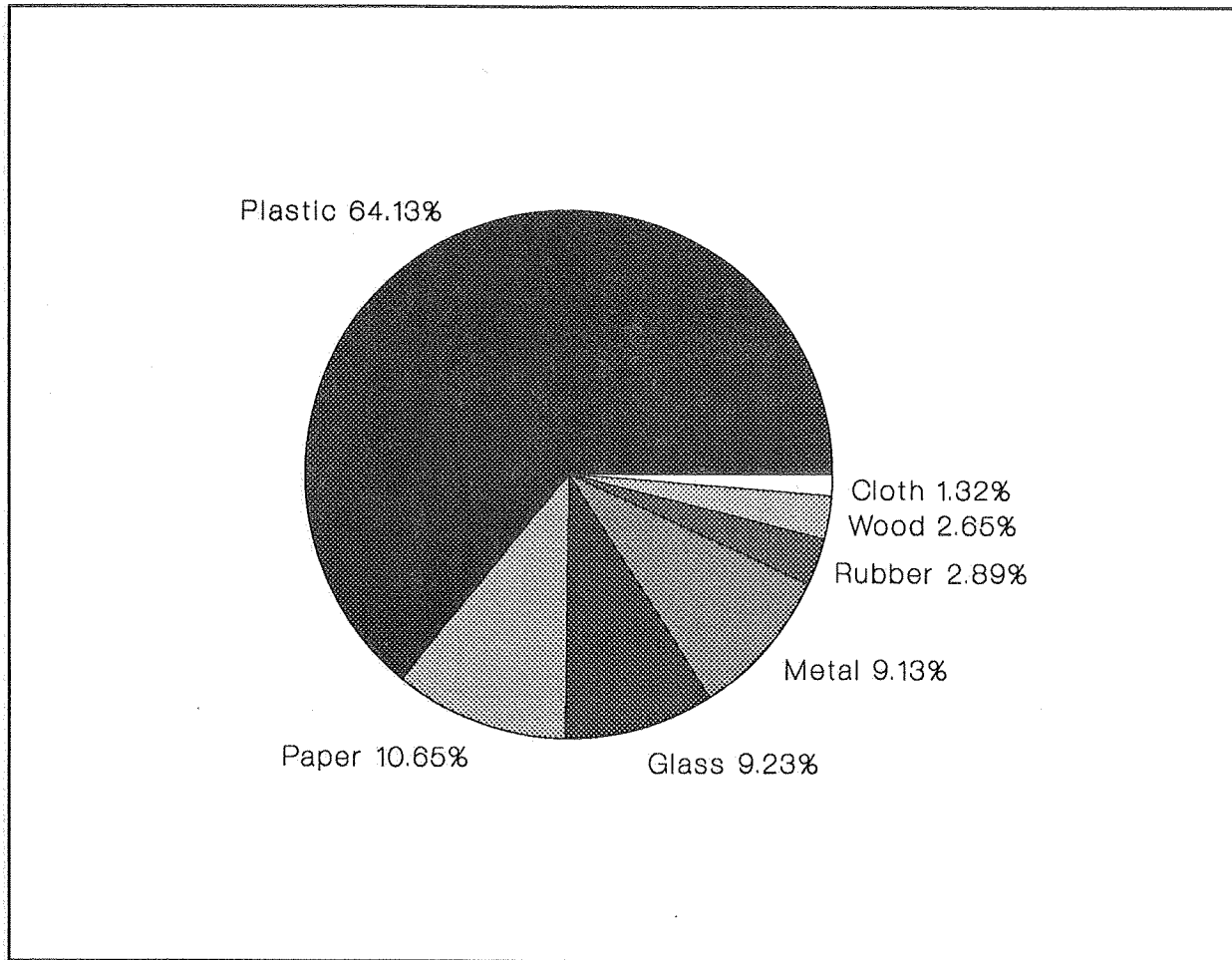
Again, as last year, medical debris was a minuscule portion of the total number of items retrieved, and most of the syringes found were probably associated with shoreside drug use.

Polystyrene foam collected at five locations will be washed, shredded and processed into pellets to be reused in other plastic items by Plastics Again, Inc. in Leominster, Massachusetts--the first polystyrene foam recycling operation in the nation. On Nantucket Island a recycling committee sorted through all the collected debris and found significant amounts of recyclable glass, metal, paper and plastic.

A "thank you" is extended from CZM to all cleanup leaders, participants, and corporate donations including Sonoco Products and Mobil Chemical for bags; Samuel Perkins Medical Supply Company and Damon Clinical Laboratories for latex gloves; Waste Management of North America for trash removal; and WBZ-TV 4 (Boston) and WLNE-TV 6 (Providence/New Bedford) for their sponsorship of the cleanup campaign.

Anne Smrcina

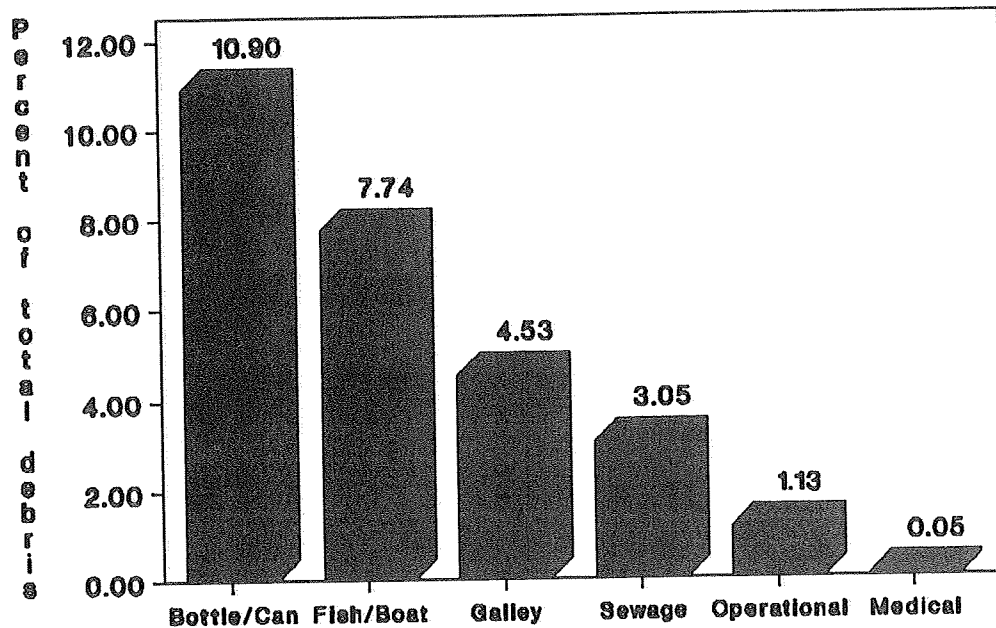
**PERCENT COMPOSITION OF MASSACHUSETTS' BEACH DEBRIS:**



**MASSACHUSETTS' 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic pieces	19,680	9.29
2. small foamed plastic pieces	14,174	6.69
3. glass pieces	13,898	6.56
4. plastic cups, spoons, forks, straws	13,348	6.30
5. paper pieces	10,684	5.05
6. cigarette butts	10,266	4.85
7. plastic caps, lids	10,210	4.82
8. miscellaneous plastic bags	8,375	3.95
9. metal beverage cans	8,223	3.88
10. plastic rope (2 feet or shorter)	6,646	3.14
11. plastic tampon applicators	6,455	3.05
12. foamed plastic cups	5,883	2.78
<b>TOTAL</b>	<b>127,842</b>	<b>60.37</b>

**MAJOR TYPES AND SOURCES OF MASSACHUSETT'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
North Shore (Amesbury to Nahant-Short Beach)	64.68	glass pieces
Metro Boston (Revere Beach to Quincy)	63.76	glass pieces
South Shore (Waymouth to Plymouth-Nelson Beach)	67.80	plastic pieces
Cape Cod (Bourne-Scusset Beach to Nantucket)	62.15	plastic pieces
Southeast (Warham-Onset to Westport-Horseneck Beach)	60.12	foamed plastic cups

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**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

**Debris Related**

2 birds entangled in fishing net  
seagull ingested plastic rope  
bird strangled by string attached to balloon  
hermit crab caught in plastic bottle

**Other Reports**

3 dead birds

**MOST PECULIAR DEBRIS ITEMS REPORTED:**

North Shore	metal door for boat freezer, sponge contraceptive, plastic bottle of bilge cleaner, plastic toy sled covered with barnacles, racquet ball racquet, eye dropper, tree feeder, two plasma bottles and tubes, flea collar, manhole cover, boat stove top, underwear in lobster trap, refrigerator drawer, six hollow red sticks, G.I. Joe doll
Metro Boston	plastic bear playing a violin, American flag, new sneakers, bedpan, grenade, bench seat from van, box spring mattress, large chunks of styrofoam (size of bale of hay)
South Shore	ice skates, air compressor, purple underwear, 75-foot boat cover, plastic fire hydrant, couch, chair, extra large propane tank, rubber penis, binoculars, boxer shorts, garter belt, prescription for eye glasses, queen size panty hose, seat belt, umbrella
Cape Cod	horse feed bag, jock strap, croquette mallet, intravenous tube, basketball net, 20 yards of rope wrapped and melted around boat propeller, sofa, boat roller, rope hammock, fire extinguisher drum, trailer
Southeast	grease gun, fisherman's bib, bag of cocaine (or similar substance)

\* not all items indicated as peculiar by volunteers are listed above.

**FOR INFORMATION ON MASSACHUSETTS' 1990 BEACH CLEANUP CONTACT:**

Anne Smrcina  
Coastal Zone Management Program  
100 Cambridge Street, 20th Floor  
Boston, MA 02202  
(617) 727-9530

**CLEANUP DATE: Saturday, September 29, 1990**

1989 National Beach Cleanup MASSACHUSETTS  
Raw Data Summary

		Metro Boston		Cape Cod		STATE	
		North Shore	South Shore	Southeast		TOTAL	
<b>PLASTIC-----</b>							
Bags	Trash	671	603	1145	1652	409	4480
	Salt	47	76	32	51	14	220
	Other	1097	699	2183	3312	1084	8375
Bottles	Beverage	1070	543	1397	1364	258	4632
	Bleach	242	131	383	401	56	1213
	Oil	230	127	318	264	61	1000
	Other	213	152	306	534	180	1385
Buckets		79	89	95	160	19	442
Caps/lids		2063	2129	2837	2711	479	10210
Cigarette butts		1758	3937	1005	3354	212	10266
Cups/straws		2092	4031	2556	3985	684	13348
Diapers		91	70	84	112	64	421
Lighters		160	201	319	195	42	917
Fishing line		238	64	194	408	85	989
Net	Long	174	28	83	272	25	582
	Short	475	42	382	546	73	1518
Floats, lures		106	71	82	122	15	396
Hardhats		0	4	23	0	0	27
Lightsticks		27	73	34	138	15	287
Milk/water jugs		319	177	518	1001	119	2134
Pieces		3297	4407	4345	6763	868	19680
Pipe thread		25	123	42	35	2	227
Rope	Long	625	160	724	794	132	2435
	Short	1496	495	2161	2234	260	6646
Sheeting	Long	40	41	91	85	22	279
	Short	207	140	378	312	26	1063
6-pack holders		158	283	287	325	61	1114
Strapping bands		262	111	436	363	29	1201
Syringes		15	39	29	11	2	96
Tampon app.		888	1578	3059	891	39	6455
Toys		210	199	422	354	67	1252
Vegetable sacks		469	48	312	251	21	1101
Write protector		37	46	59	13	11	166
Other		676	743	1026	1342	79	3866
<b>GLASS-----</b>							
Bottles	Beverage	665	648	769	1573	435	4090
	Food	145	43	35	235	12	470
	Other	23	38	71	110	34	276
Light tubes		3	1	0	19	1	24
Light bulbs		25	15	23	145	3	211
Pieces		3644	4196	2075	3158	825	13898
Other		334	96	67	64	11	572
<b>STYROFOAM-----</b>							
Buoys		443	171	321	157	46	1138
Cups		938	882	989	1974	1100	5883
Egg Cartons		40	11	12	140	28	231
Fast-food		345	274	270	319	101	1309
Meat trays		94	50	58	191	48	441
Pieces	Large	659	496	930	1065	263	3413
	Small	3504	2966	3186	3866	652	14174
Other		277	178	68	255	16	794

	Metro Boston		Cape Cod		STATE TOTAL	
	North Shore	South Shore	South Shore	Southeast		
<b>RUBBER</b>						
Balloons	364	156	1131	971	72	2694
Gloves	71	79	103	139	32	424
Tires	52	39	88	59	17	255
Other	697	376	966	634	73	2746
<b>METAL</b>						
Bottle caps	591	1029	742	1384	437	4183
Cans						
Aerosol	112	74	159	317	45	707
Beverage	1292	554	2378	3363	636	8223
Food	33	80	43	165	12	333
Other	116	100	112	193	48	569
Crab/fish traps	87	8	183	12	0	290
Drums						
Rusty	15	16	19	35	2	87
New	2	2	3	10	0	17
Pieces	217	310	488	449	88	1552
Pull tabs	94	227	150	322	48	841
Wire	150	86	149	147	29	561
Other	314	371	372	764	144	1965
<b>PAPER</b>						
Bags	248	270	152	480	148	1298
Cardboard	245	360	346	543	132	1626
Cartons	228	318	354	492	187	1579
Cups	388	641	585	834	226	2674
Newspaper	96	239	151	442	29	957
Pieces	1239	2732	1723	4252	738	10684
Other	627	679	939	1297	191	3733
<b>WOOD</b>						
Crab/lobster traps	136	7	80	20	5	248
Crates	23	60	10	17	4	114
Pallets	39	66	21	18	5	149
Pieces	1029	679	670	1908	228	4514
Other	136	88	98	248	16	586
<b>CLOTH</b>						
Clothing	640	486	503	953	219	2801
<b>TOTAL ITEMS/ZONE</b>	<b>39977</b>	<b>41857</b>	<b>48939</b>	<b>68094</b>	<b>12899</b>	<b>211758</b>



Mississippi Secretary of State, Dick Molpus (left) and Joe Gill, Deputy Director of Mississippi Bureau of Marine Resources, were part of the cleanup crew at West Ship Island, Mississippi. *Photo courtesy of Gulf Islands National Seashore*



## MISSISSIPPI

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September 23, 1989  
1760 Volunteers  
100 Miles Cleaned  
62,000 Pounds of Debris Collected  
73,853 Debris Items Reported

Coordinated By: Dianne Hunt  
Mississippi Department of Wildlife, Fisheries  
and Parks  
2620 Beach Boulevard  
Biloxi, MS 39531  
(601) 385-5860

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The Mississippi Coastal Cleanup evolved from a 1987 effort organized by Gail Bishop of the Gulf Islands National Seashore (GINS), Dianne Hunt of the Bureau of Marine Resources (BMR), and Jim Franks, then with BMR and now with the Gulf Coast Research Laboratory. In 1987, 100 volunteers removed 275 bags of trash from Horn and West Ship Islands. In 1988 the Mississippi-Alabama Sea Grant Consortium joined GINS and BMR representatives in spearheading organization of the Mississippi Marine Trash Task Force and establishing a coastwide cleanup. In 1989, 1,760 volunteers collected an estimated 31 tons of trash from approximately 100 miles of Mississippi beaches and shorelines. Areas cleaned were five barrier islands (including the only two barrier islands in the Gulf of Mexico designated as wilderness by the National Park Service), two nearshore islands, and mainland shorelines in all three Mississippi coastal counties.

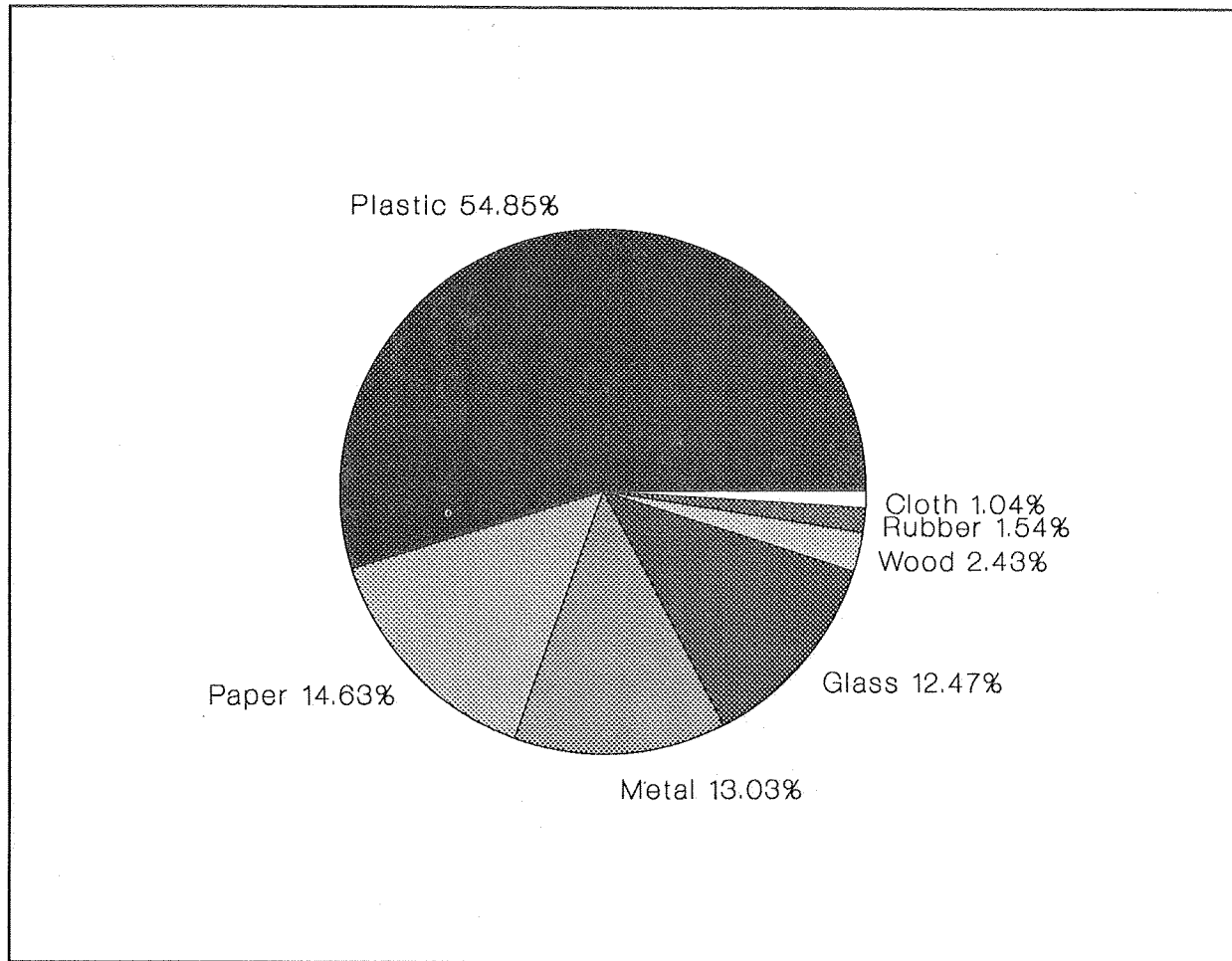
Volunteers scoured Mississippi shorelines for three or more hours bagging trash and using data cards. Based on estimates of 20 pounds of trash per bag, volunteers picked up an average of 620 pounds of trash per mile. In 1988, 1,200 volunteers removed an estimated 1.5 tons per mile, more than any other state except Georgia and Texas. Cleanup officials attributed the higher volume of trash in 1988 to the fact that much of the cleanup targeted undeveloped barrier islands which have limited access, are not routinely cleaned, and would have large amounts of debris accumulating over time. The drop in pounds per mile in 1989 is, in part, a reflection of the inclusion of routinely maintained beaches in the cleanup. As a result of public concern aroused by the removal of 45 tons of trash in 1988, the Mississippi Marine Litter Act of 1989 was passed. This is the first law in the nation specifically addressing marine litter at the state level.

Cleaning Mississippi's barrier islands also presents special problems because they are located 10-12 miles from the mainland and are accessible only by boat. However, we did come up with the idea of a "good garbage barge" that greatly assisted cleanup efforts. Mississippi Power Company, Colle Towing, and Waste Management, Inc. joined barge, tug, and dumpsters to provide a floating traveling garbage pick-up station. The barge with dumpsters a-top was pushed slowly just offshore from island to island and enabled boaters to offload their trash before traveling back to the mainland through four to six-foot seas.

Accomplishments of the 1989 cleanup include a 46 percent increase in number of participants over the 1988 effort and an increase in the amount of mainland shoreline cleaned due to the mayoral appointment of a coordinator for each city and county along the coast responsible for coordinating cleanup activities and data collection. The oil companies were also an integral part of the cleanup with Mobile supplying trash bags and Chevron providing a crew boat to take the media and our honorary chairmen, Secretary of State Dick Molpus and 93-year-old Margaret Byron (also known as "Auntie Litter") to Ship Island for the day's events. Chevron further hosted a hot dog cookout on Cat Island and helped shuttle trash from the island to their lugger which in turn transported the bags to the "garbage barge." We have also been fortunate to receive donations of Coca-Cola, pencils from our local banks, food, and the cooperation of the entire coastal community.

Dianne Hunt

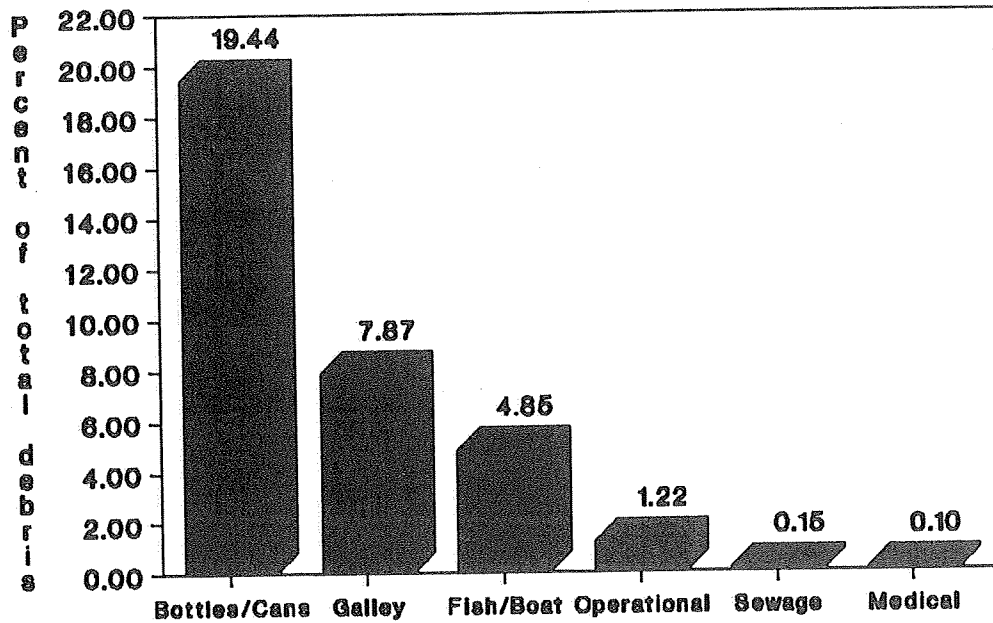
**PERCENT COMPOSITION OF MISSISSIPPI'S BEACH DEBRIS:**



**MISSISSIPPI'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. paper pieces	5,101	6.91
2. glass pieces	4,541	6.14
3. plastic caps, lids	4,209	5.70
4. plastic pieces	3,847	5.21
5. metal beverage cans	3,489	4.72
6. glass beverage bottles	3,249	4.40
7. plastic cups, spoons, forks, straws	3,151	4.27
8. cigarette butts	2,965	4.01
9. plastic beverage bottles	2,881	3.90
10. foamed plastic cups	2,808	3.80
11. large foamed plastic pieces	2,455	3.32
12. metal bottle caps	2,436	3.30
<b>TOTAL</b>	<b>41,132</b>	<b>55.68</b>

**MAJOR TYPES AND SOURCES OF MISSISSIPPI'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Petis Bois Island	62.88	metal beverage cans
Horn Island	63.39	metal beverage cans
Gulf Park Estates	56.48	plastic pieces
Ship Island	64.87	plastic caps, lids
Cat Island	63.63	plastic beverage bottles
Deer Island	61.87	foamed plastic cups
Round Island	62.37	small foamed plastic pieces
Pascagoula	66.86	foamed plastic cups
Belle Fontaine	69.34	plastic pieces
Ocean Springs	58.59	glass pieces
Biloxi	38.68	paper pieces
Gulfport	53.02	paper pieces
Pass Christian	46.17	paper pieces
Hancock County	48.85	paper pieces

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**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

**Debris Related**

garter snake entangled in fishing line  
alligator snapping turtle shell entangled in  
plastic bag  
fiddler crabs trapped in plastic 2-liter bottle

**Other Reports**

dead seal with spear through head

**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Horn Island	pet food dish, yellow condom
Gulf Park Estates	computer circuit board
Cat Island	washing machine agitator, submerged sofa bed
Deer Island	toilet paper dispenser
Round Island	television
Ocean Springs	road sign, leather jacket, night light
Biloxi	20 full cans of Budweiser, Alf underwear, toy roach
Gulfport	full six-pack of beer
Pass Christian	plastic rose, plastic mushroom, full bottle of liquor
Hancock County	mailbox, AM/FM headset, toilet seat, pillow

\* not all items indicated as peculiar by volunteers are listed above.

**FOR INFORMATION ON MISSISSIPPI'S 1990 BEACH CLEANUP CONTACT:**

Dianne Hunt  
Mississippi Department of Wildlife, Fisheries and Parks  
2620 Beach Boulevard  
Biloxi, MS 39531  
(601) 385-5860

**CLEANUP DATE: Saturday, September 22, 1990**

1989 National Beach Cleanup  
Raw Data Summary

MISSISSIPPI

PLASTIC	MISSISSIPPI										STATE TOTAL			
	Petit Bois	Horn Island	Gulf Park	Ship Island	Cat Island	Deer Island	Round Island	Pascagoula	Ocean Springs	Biloxi		Gulfport	Hancock	
								Belle Fontaine		Pass Christian				
Bags	35	62	118	122	191	147	28	67	365	166	395	244	377	2322
Trash	2	12	0	5	59	3	0	0	14	49	3	8	7	162
Salt	10	34	51	104	14	52	7	47	299	173	338	204	192	1654
Other	90	202	82	254	688	157	79	111	215	63	179	227	519	2881
Bottles	47	59	29	90	172	35	18	54	38	6	15	19	45	635
Bleach	33	116	44	217	370	88	42	67	101	20	40	44	57	1290
Oil	45	141	27	127	120	42	25	33	39	24	30	36	57	746
Other	10	33	4	24	23	18	6	14	19	2	4	4	23	184
Buckets	82	225	110	409	364	98	43	79	274	311	663	464	1078	4209
Caps/lids	15	0	118	98	0	143	0	20	577	252	1221	474	47	2965
Cigarette butts	39	53	91	90	314	142	28	52	192	279	841	415	610	3151
Cups/straws	0	1	2	3	27	2	5	2	12	16	10	13	28	114
Diapers	7	76	5	47	18	19	3	10	33	16	30	34	65	365
Lighters	5	17	6	13	49	6	3	8	12	7	33	11	88	264
Fishing line	3	7	5	9	8	3	4	2	10	0	2	3	19	75
Net	2	2	3	39	10	17	7	3	3	2	11	4	8	112
Long	8	39	18	15	115	9	2	9	18	5	10	14	49	316
Short	2	3	0	1	1	1	0	1	0	0	0	0	5	14
Floats, lures	2	3	0	1	1	1	0	1	0	0	0	0	0	5
Hardhats	15	20	20	9	44	1	0	1	3	16	7	4	33	173
Lightsticks	87	152	64	203	395	145	34	98	109	10	65	32	118	1520
Milk/water jugs	83	105	273	360	91	243	31	126	664	244	755	584	333	3847
Pieces	0	0	2	4	5	1	1	0	2	0	22	0	11	48
Pipe thread	22	54	13	100	95	35	12	29	30	17	21	35	39	505
Rope	17	48	4	94	90	27	5	40	72	36	32	64	35	571
Long	3	4	6	6	1	1	2	4	18	2	3	4	6	60
Short	2	8	0	2	9	2	3	0	11	68	3	14	12	144
Sheeting	19	49	47	65	126	40	11	14	129	79	145	120	377	1244
6-pack holders	4	19	2	27	28	3	5	7	26	22	21	22	109	301
Strapping bands	0	16	0	4	3	0	0	1	8	5	17	3	14	71
Syringes	7	27	0	10	1	4	0	10	3	4	11	5	29	112
Tampon app.	3	7	2	10	10	7	0	3	19	8	32	15	19	136
Toys	5	16	1	7	24	4	2	7	17	8	40	9	54	195
Vegetable sacks	0	2	1	17	5	1	0	1	4	3	18	19	12	83
Write protector	30	52	16	106	56	32	5	24	83	166	150	99	10	835
Other														

	Petit Bois	Horn Island	Ship Island	Deer Island	Pascagoula	Ocean Springs	Biloxi	Gulfport	Hancock	STATE TOTAL					
		Gulf Park	Cat Island	Round Island	Belle Fontaine		Pass Christian								
<b>GLASS</b>															
Bottles	121	213	165	233	567	210	71	22	109	309	220	156	290	563	3249
Beverage	30	95	5	50	126	27	8	2	13	10	0	5	7	59	437
Food	7	22	3	6	12	3	0	0	7	7	29	71	6	6	179
Other	9	30	2	9	9	2	0	1	1	2	1	1	0	20	87
Light tubes	38	110	9	98	160	41	15	10	26	12	2	11	5	29	566
Light bulbs	13	18	217	51	127	68	99	0	38	1092	617	858	766	577	4541
Pieces	0	4	0	2	6	1	1	0	0	36	1	83	7	11	152
Other															
<b>STYROFOAM</b>															
Buoys	11	33	8	57	64	5	0	1	9	13	4	12	3	18	238
Cups	38	96	110	191	395	255	69	46	93	209	90	250	221	745	2808
Egg Cartons	8	42	4	50	162	18	10	8	22	14	3	12	10	43	406
Fast-food	13	17	50	40	67	44	21	1	17	62	63	148	68	413	1024
Meat trays	8	53	22	86	193	78	21	4	64	71	8	70	23	35	736
Pieces	41	61	121	92	163	79	26	20	77	146	16	165	40	54	1101
Large	27	137	94	191	137	125	139	16	98	543	98	259	262	329	2455
Small	17	9	0	33	161	17	4	0	14	25	6	73	22	54	435
Other															
<b>RUBBER</b>															
Balloons	0	4	3	23	34	1	4	2	7	8	48	10	14	13	171
Gloves	5	108	11	39	27	7	7	5	17	42	11	21	25	111	436
Tires	1	8	4	13	8	6	0	1	6	13	11	6	9	39	125
Other	7	10	6	34	34	18	1	2	11	28	40	145	47	25	408
<b>METAL</b>															
Bottle caps	16	28	34	49	64	43	12	19	19	88	163	784	202	915	2436
Cans	17	79	6	71	136	27	7	3	29	24	4	7	9	72	491
Aerosol	142	250	182	396	910	181	72	22	89	237	113	153	214	528	3489
Beverage	5	14	7	22	33	11	8	2	7	11	3	15	7	308	453
Food	8	20	3	21	13	11	2	0	12	41	12	59	47	19	268
Other	0	1	0	0	17	0	11	0	4	1	7	0	3	18	62
Crab/fish traps	1	8	3	8	5	3	0	0	0	13	16	11	4	4	76
Drums	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
Rusty	5	16	16	7	13	66	9	0	21	46	35	98	83	55	470
New	7	4	51	30	6	68	4	2	2	127	74	258	159	269	1061
Pieces	1	1	18	5	8	6	5	1	10	17	18	36	15	58	199
Pull tabs	5	12	15	51	30	22	8	0	11	66	80	128	173	14	615
Wire															
Other															



## NEW HAMPSHIRE

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September 23-24, 1989  
265 Volunteers  
14 Miles Cleaned  
8,080 Pounds of Debris Collected  
20,421 Debris Items Reported

Coordinated By: Julia Steed Mawson  
Odiorne Point Visitor's Center  
UNH Sea Grant  
MEC Administration Building  
University of New Hampshire  
Durham, NH 03824  
(603) 436-8043 or 749-1565

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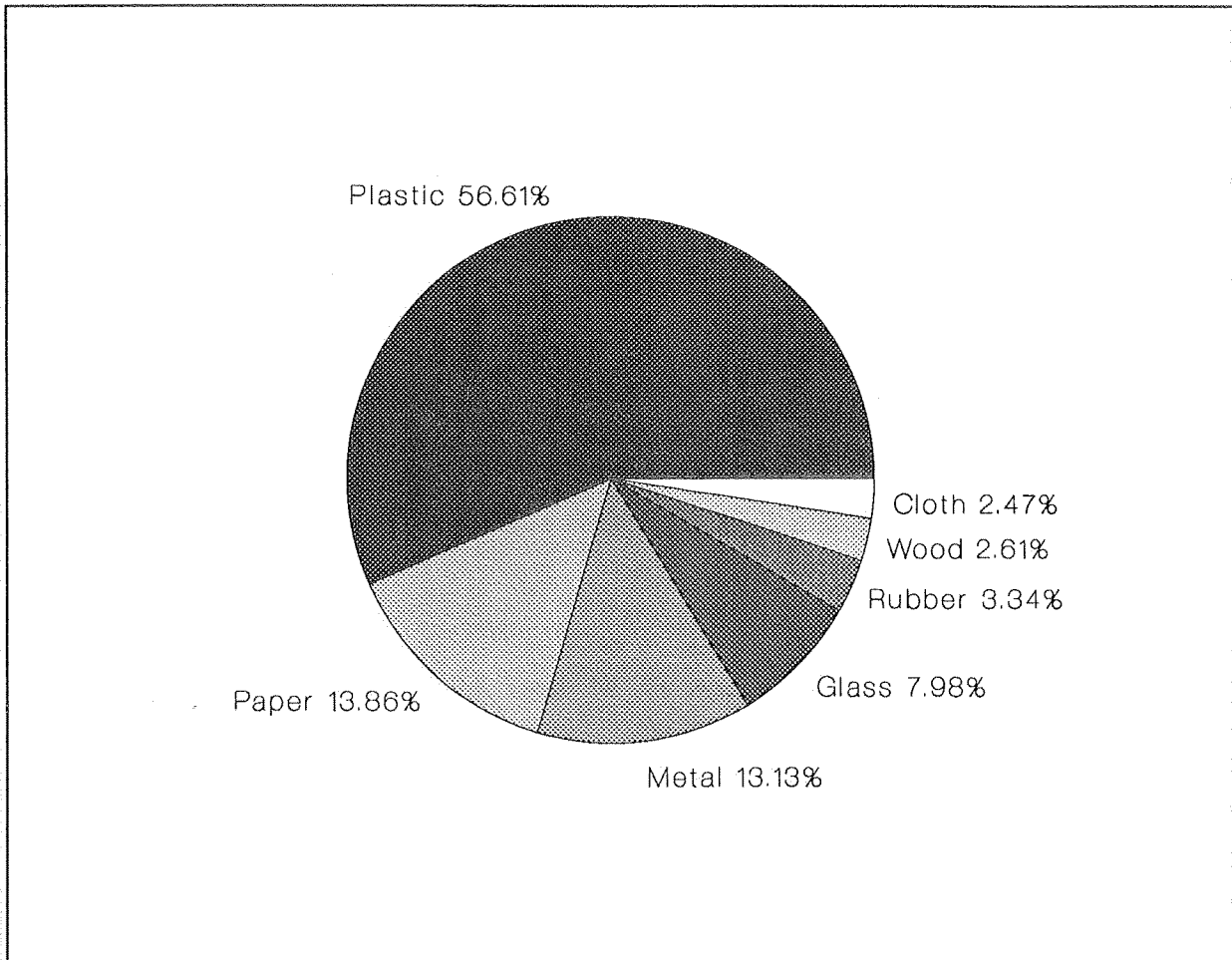
Volunteers from across the state gathered at 10 sites along the New Hampshire coast over the weekend of September 23-24 to participate in the 1989 coastal cleanup. In total, 265 volunteers picked up over 8,000 pounds of debris from 14 miles of coastline.

Our thanks go out to the various groups who helped make this event such a success. They include: 4H Ocean Explorers, New Hampshire Yankee, Swiftwater Girl Scout Council, Exeter Area Junior Women's Club, New Hampshire Fish and Game, Rye Elementary School, Rye Junior High School, Portsmouth Planning Office, League of Women Voters, Portsmouth Conservation Commission, Portsmouth Children's Museum, Albacore Park and the New Hampshire Division of Parks.

A celebration of the event and the volunteers took place at Odiorne Point State Park following the cleanup. Music was provided by Steve Schuck. Odiorne Point State Park is jointly sponsored by Sea Grant Extension, New Hampshire Division of Parks, New Hampshire Audubon, and the Friends of Odiorne Point, Incorporated.

Julia Steed Mawson

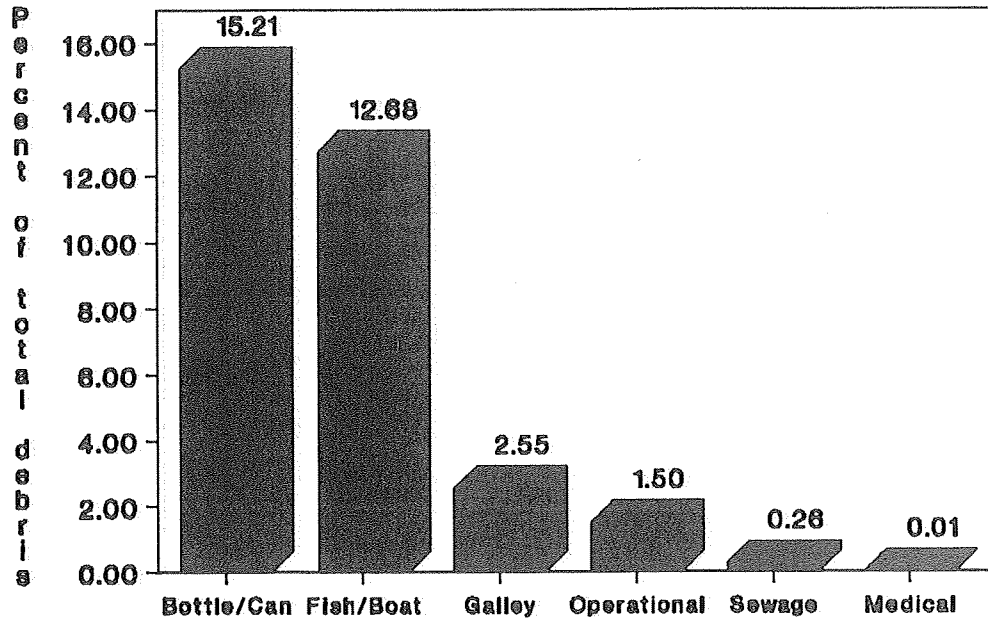
**PERCENT COMPOSITION OF NEW HAMPSHIRE'S BEACH DEBRIS:**



**NEW HAMPSHIRE'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. metal beverage cans	1,505	7.37
2. paper pieces	1,436	7.03
3. plastic pieces	1,415	6.93
4. plastic rope (2 feet or shorter)	1,207	5.91
5. small foamed plastic pieces	1,041	5.10
6. glass pieces	1,016	4.98
7. cigarette butts	988	4.84
8. plastic cups, spoons, forks, straws	942	4.61
9. plastic caps, lids	781	3.82
10. plastic rope (longer than 2 feet)	573	2.81
11. plastic beverage bottles	552	2.70
12. foamed plastic cups	545	2.67
<b>TOTAL</b>	<b>12,001</b>	<b>58.77</b>

**MAJOR TYPES AND SOURCES OF NEW HAMPSHIRE'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
North Mill Pond	46.72	metal beverage cans
Little Harbor	46.14	glass pieces
Ragged Neck	65.78	small foamed plastic pieces
Odiorne Point	59.14	plastic rope (2 feet or shorter)
Wallis Sands	58.16	metal beverage cans
Jenner's Beach	60.89	cigarette butts
North Hampton	53.94	small foamed plastic pieces
Hampton State Park	51.11	metal beverage cans
Seabrook	45.42	paper pieces

**STRANDED AND/OR ENTANGLED WILDLIFE:**

None Reported.

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**MOST PECULIAR DEBRIS ITEMS REPORTED:**

North Mill Pond	underwear, shorts, bicycle, car batteries, car radio, car seat, shopping cart
Little Harbor	cylinder head, golf balls, paint brush,
Odiorne Point	life jacket, wine glass, golf balls, 8-track tape
Wallis Sands	large grass mat, rugs, pills, vacuum, "Bag-a-Bug" (full)
Jenner's Beach	condoms, several balloons and ribbon
Hampton State Park	school tardy slip, rubber boot

\* not all items indicated as peculiar by volunteers are listed above.

**FOR INFORMATION ON NEW HAMPSHIRE'S 1990 BEACH CLEANUP CONTACT:**

Julia Steed Mawson  
Odiorne Point Visitor's Center  
c/o UNH Sea Grant  
MEC Administration Building  
University of New Hampshire  
Durham, NH 03824  
(603) 436-8043 or 749-1565

**CLEANUP DATE: Saturday, September 29, 1990**

1989 National Beach Cleanup NEW HAMPSHIRE  
Raw Data Summary

		Little Har.	Odiorne	Jenners	Hampton S.P.	STATE					
		N.Mill	Ragged Neck	Wallis	N.Hampton	Seabrook	TOTAL				
<b>PLASTIC</b>											
Bags	Trash	41	7	8	77	53	9	0	66	24	285
	Salt	0	0	1	2	0	0	0	0	0	3
	Other	18	18	48	75	156	34	2	104	66	521
Bottles	Beverage	63	127	29	63	111	18	4	77	60	552
	Bleach	1	4	4	7	30	3	2	11	0	62
	Oil	4	7	7	16	25	2	2	11	3	77
	Other	9	6	4	23	15	1	3	7	3	71
Buckets		1	0	2	4	4	2	0	0	0	13
Caps/lids		0	21	46	173	146	89	30	196	80	781
Cigarette butts		0	5	125	312	39	506	0	1	0	988
Cups/straws		14	16	44	246	164	160	39	212	47	942
Diapers		3	1	0	2	0	1	0	5	5	17
Lighters		3	2	4	7	9	6	0	19	7	57
Fishing line		0	0	30	48	22	6	0	1	2	109
Net	Long	0	0	3	17	12	3	1	3	0	39
	Short	0	1	25	63	67	17	1	11	1	186
Floats, lures		0	6	6	6	6	0	0	0	3	27
Hardhats		0	0	0	0	0	0	0	0	0	0
Lightsticks		0	0	0	1	1	1	0	2	0	5
Milk/water jugs		3	0	9	13	22	0	1	30	9	87
Pieces		65	71	126	390	371	208	75	95	15	1415
Pipe thread		0	0	5	4	0	2	0	0	0	11
Rope	Long	10	5	30	400	91	21	2	12	2	573
	Short	0	4	107	734	270	69	7	14	2	1207
Sheeting	Long	2	0	4	58	6	11	0	1	2	84
	Short	9	0	5	158	2	24	0	4	0	202
6-pack holders		13	2	8	24	9	6	0	20	3	85
Strapping bands		6	3	15	134	1	9	1	0	8	177
Syringes		0	0	0	0	1	2	0	0	0	3
Tampon app.		3	2	5	13	11	5	1	11	3	54
Toys		8	4	3	8	39	17	2	34	3	118
Vegetable sacks		7	0	7	2	17	0	8	6	0	47
Write protector		0	0	0	1	3	19	0	0	0	23
Other		13	9	15	153	62	13	9	43	13	330
<b>GLASS</b>											
Bottles	Beverage	56	70	9	120	46	47	13	96	82	539
	Food	4	1	0	3	0	2	0	1	1	12
	Other	1	2	0	2	1	0	0	5	1	12
Light tubes		0	0	0	0	0	0	0	0	0	0
Light bulbs		0	0	0	1	1	0	0	0	0	2
Pieces		54	223	10	369	72	52	79	117	40	1016
Other		1	8	3	1	1	0	0	0	0	14
<b>STYROFOAM</b>											
Buoys		1	12	7	21	30	10	0	11	0	92
Cups		39	21	66	91	92	55	9	86	86	545
Egg Cartons		3	0	0	0	2	0	0	7	0	12
Fast-food		6	2	15	33	19	23	4	56	36	194
Meat trays		0	0	5	3	8	5	1	4	1	27
Pieces	Large	23	12	23	28	61	4	20	10	16	197
	Small	23	8	187	107	275	91	205	109	36	1041
Other		1	1	63	223	98	31	2	36	4	489

	Little Har. N.Mill	Odiorne Ragged Neck	Wallis	Jenners Wallis	N.Hampton	Hampton N.Hampton	S.P. Seabrook	STATE TOTAL		
<b>RUBBER</b>										
Balloons	0	1	2	13	29	18	0	66		
Gloves	1	1	5	43	10	1	0	61		
Tires	5	3	3	31	7	1	1	52		
Other	22	10	63	223	98	31	2	489		
<b>METAL</b>										
Bottle caps	3	5	12	67	23	39	11	286		
Cans	8	0	7	3	7	0	4	34		
Beverage	78	48	123	290	511	77	19	1505		
Food	2	3	11	8	2	0	0	31		
Other	2	4	3	62	3	0	0	77		
Crab/fish traps	0	0	14	12	10	17	2	56		
Drums	0	0	0	0	5	0	1	6		
Rusty	0	0	0	0	0	0	0	0		
New	0	0	0	0	0	0	0	0		
Pieces	40	12	3	69	49	5	3	192		
Pull tabs	20	0	8	24	2	24	1	140		
Wire	20	1	5	32	5	2	1	74		
Other	21	5	19	75	19	34	10	223		
<b>PAPER</b>										
Bags	8	6	9	33	10	15	5	193		
Cardboard	16	3	9	54	37	25	8	196		
Cartons	0	1	9	35	19	31	15	159		
Cups	16	3	23	47	26	19	9	279		
Newspaper	1	0	3	21	7	2	25	112		
Pieces	25	13	106	346	273	389	10	1436		
Other	2	2	7	80	41	40	130	396		
<b>WOOD</b>										
Crab/lobster traps	0	0	12	31	115	3	0	170		
Crates	1	0	1	2	3	0	0	7		
Pallets	0	1	0	0	0	0	0	3		
Pieces	21	1	30	38	98	52	13	313		
Other	3	2	1	6	7	3	2	28		
<b>CLOTH</b>										
Clothing	16	11	29	304	84	16	5	494		
<b>TOTAL ITEMS/ZONE</b>	<b>839</b>	<b>817</b>	<b>1575</b>	<b>3984</b>	<b>3874</b>	<b>2416</b>	<b>799</b>	<b>2504</b>	<b>1180</b>	<b>20421</b>



Amie Lofton, a Marine Academy of Science and Technology student, joined Clean Ocean Action's "Trash Attack" at Sandy Hook, New Jersey.

## NEW JERSEY

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September 23, 1989  
345 Volunteers  
21.5 Miles Cleaned  
1,675 Pounds of Debris Collected  
17,719 Debris Items Reported

Sandy Hook Coordinated By:  
Valarie Maxwell  
Clean Ocean Action  
Box 505, Building 18, Hartshorne Drive  
Highlands, NJ 07732  
(201) 872-0111

Long Beach Island Coordinated By:  
Patricia Morton-Toth  
Alliance for a Living Ocean  
P.O. Box 95  
Ship Bottom, NJ 08008  
(609) 698-7966

Island Beach State Park Coordinated By:  
Will Berson  
New Jersey Department of Environmental  
Protection  
501 East State Street CN 401  
Trenton, NJ 08625  
(609) 292-8973

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Clean Ocean Action held its autumn "Trash Attack" beach cleanup on September 23 at Sandy Hook in cooperation with the American Littoral Society and the National Park Service. Two hundred and fifty people participated, and teams of volunteers wore different color T-shirts, provided by the Asbury Park Press. Green teams picked up recyclable glass and cans, while blue teams picked up non-recyclable. Group captains in black tallied the trash and supervised the cleanup. School groups included the Marine Academy of Science and Technology, Howell Organization to Protect the Environment from Howell Township High School, groups from Marlboro and West Milford townships, and an environmental science class from Rutgers University. The Rutgers class was just beginning its work, and returned every week or two for the remainder of the semester to monitor the amount of trash and try to determine its origin.

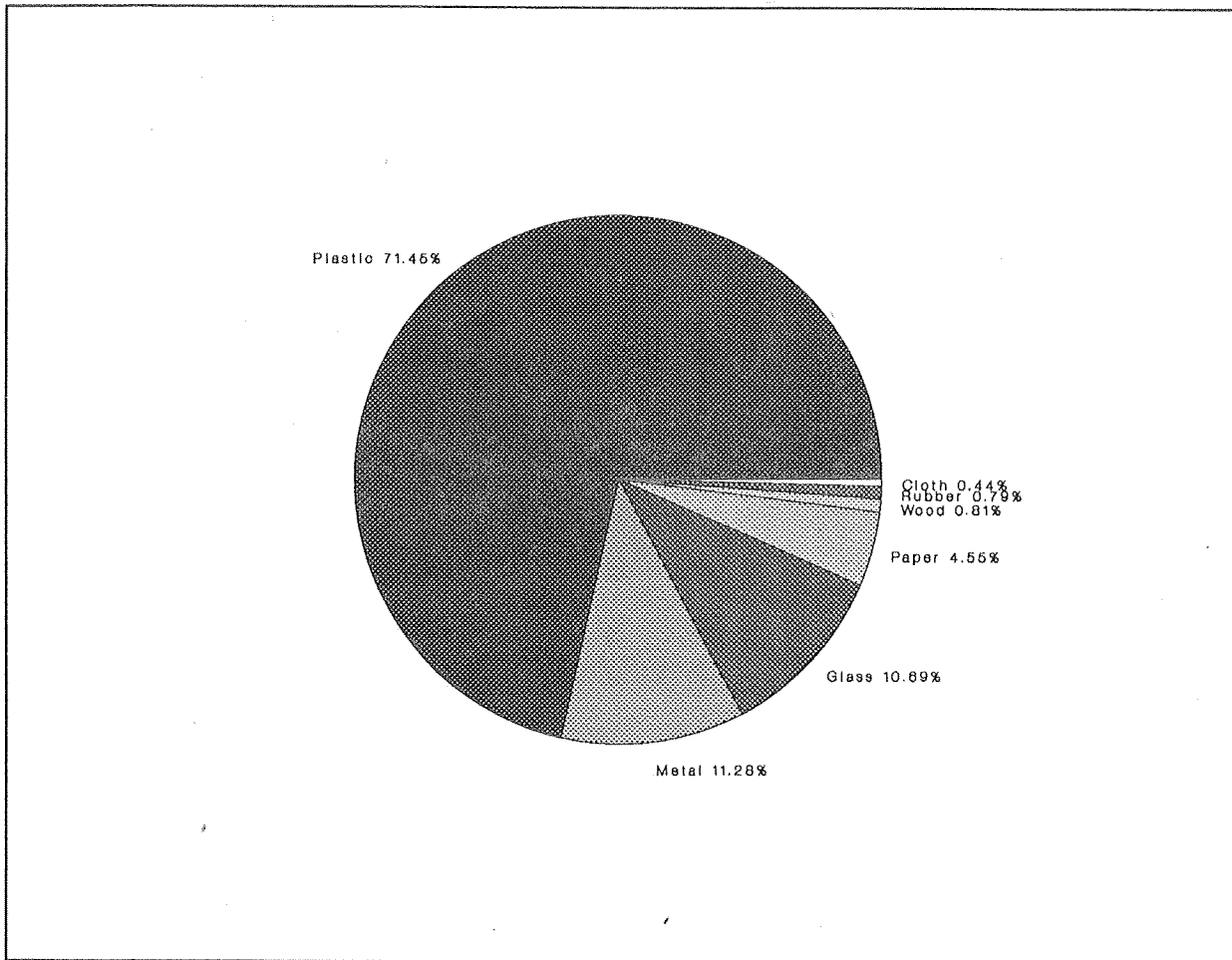
The trash collected included a few hypodermic needles, plastic vials believed to have contained the drug "crack," a large bottle of unidentified pills, six mismatched shoes, a car seat, and a bag of trash that was already sorted into recyclable and non-recyclables. Two construction hardhats and a road construction marker were also found. No entangled animals were seen, such as the turtle found suffocated by a plastic bag during the May cleanup, although a large sea turtle was found whose shell had been presumably cut by a boat propeller. After the cleanup, a press conference was conducted to show the success of the cleanup and to identify solutions to the problem of flotsam and litter.

Susie Feiring  
Clean Ocean Action

Although Sandy Hook was the only cleanup in New Jersey for which data was collected using the standardized data cards, a cleanup was also conducted on September 23 on Long Beach Island sponsored by the Alliance for a Living Ocean (ALO). More than 50 volunteers participated which resulted in the collection of more than 50 bags of debris from 18 miles of coastline. Most of the bottles and cans collected were turned in for recycling. Many of these participants are part of ALO's Adopt-A-Beach Program and have accepted responsibility for cleaning up and reporting their findings on a daily or weekly basis throughout the summer with some continuing during the winter. ALO's Adopt-A-Beach Program won a Take Pride in America award in 1989.

Virginia Gottshall  
Alliance for a Living Ocean

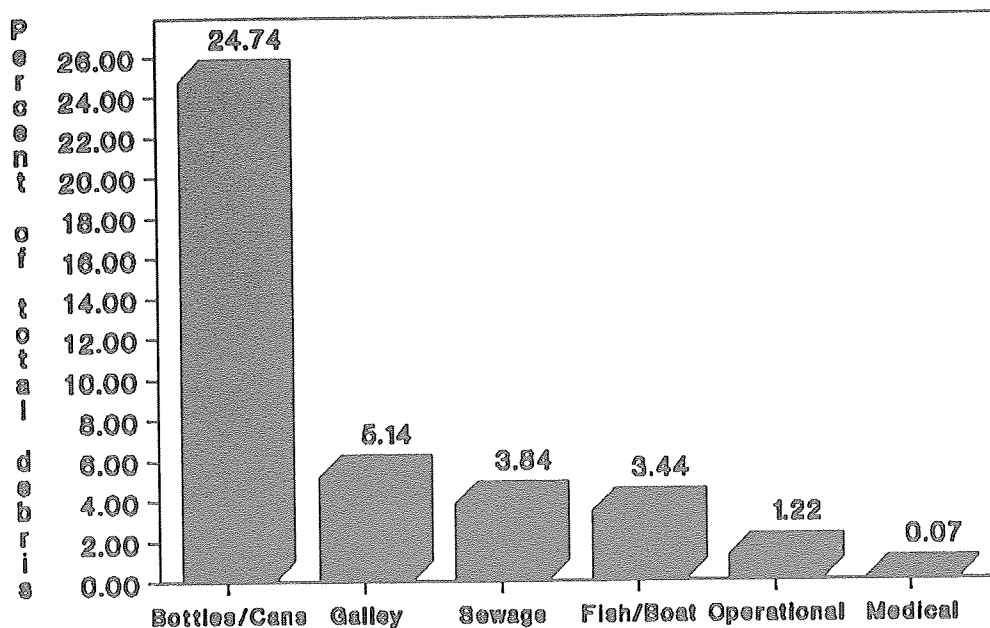
**PERCENT COMPOSITION OF NEW JERSEY'S BEACH DEBRIS:**



**NEW JERSEY'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic cups, spoons, forks, straws	2,429	13.71
2. metal beverage cans	1,393	7.86
3. plastic beverage bottles	1,307	7.38
4. plastic pieces	1,294	7.30
5. glass beverage bottles	1,186	6.69
6. plastic caps, lids	1,160	6.54
7. small foamed plastic pieces	965	5.45
8. plastic tampon applicators	681	3.84
9. foamed plastic cups	559	3.15
10. plastic trash bags	550	3.10
11. glass pieces	545	3.08
12. miscellaneous plastic bags	439	2.48
<b>TOTAL</b>	<b>12,508</b>	<b>70.58</b>

**MAJOR TYPES AND SOURCES OF NEW JERSEY'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Data was collected for one zone in New Jersey, Sandy Hook.

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

Debris Related	Other Reports
None reported	sea turtle with shell cut by propeller

**MOST PECULIAR DEBRIS ITEMS REPORTED:** can of mace, paper used to wrap cocaine, fire extinguisher, arrow, bottle of brandy, road sign from the Bronx (New York), wallpaper, burned engine, 23 "crack" vials, six other drug vials.

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**FOR INFORMATION ON NEW JERSEY'S 1990 BEACH CLEANUP CONTACT:**

Susie Feiring  
Clean Ocean Action  
Box 505  
Building 18, Hartshorne Drive  
Highlands, NJ 07732  
(201) 872-0111

**CLEANUP DATE: Saturday, September 22, 1990**

1989 National Beach Cleanup  
Raw Data Summary

NEW JERSEY

Sandy Hook

PLASTIC-----			RUBBER-----	
Bags	Trash	550	Balloons	34
	Salt	63	Gloves	6
	Other	439	Tires	9
Bottles	Beverage	1307	Other	91
	Bleach	143	METAL-----	
	Oil	249	Bottle caps	190
	Other	380	Cans Aerosol	180
Buckets		66	Beverage	1393
Caps/lids		1160	Food	37
Cigarette butts		0	Other	44
Cups/straws		2429	Crab/fish traps	44
Diapers		99	Drums Rusty	6
Lighters		109	New	0
Fishing line		49	Pieces	11
Net	Long	9	Pull tabs	41
	Short	11	Wire	6
Floats/lures		11	Other	46
Hardhats		1	PAPER-----	
Light sticks		16	Bags	67
Milk/water jugs		138	Cardboard	89
Pieces		1294	Cartons	113
Pipe thread		11	Cups	204
Rope	Long	86	Newspaper	49
	Short	139	Pieces	240
Sheets	Long	86	Other	44
	Short	162	WOOD-----	
6-pack holders		267	Crab/lobster traps	0
Strapping bands		74	Crates	4
Syringes		12	Pallets	3
Tampon app.		681	Pieces	120
Toys		103	Other	16
Vegetable sacks		32	CLOTH-----	
Write protector		14	Clothing	78
Other		380		
GLASS-----				
Bottles	Beverage	1186		
	Food	36		
	Other	97		
Light tubes		1		
Light bulbs		22		
Pieces		545		
Other		7		
STYROFOAM-----				
Buoys		32		
Cups		559		
Egg cartons		7		
Fast-food		165		
Meat trays		41		
Pieces	Large	282		
	Small	965		
Other		39		
			TOTAL ITEMS/ZONE	17719



**American Littoral Society members and local residents of Fort Tilden Beach in Rockaway were part of New York's statewide beach cleanup. Photo by Don Riepe**

## NEW YORK

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September 24, 1989  
685 Volunteers  
8 Miles Cleaned  
9,497.5 Pounds of Debris Collected  
65,459 Debris Items Reported

Coordinated By: Roberta Weisbrod and  
Marian Roet  
New York State Department of  
Environmental Conservation  
Hunters Point Plaza  
Long Island City, NY 11101  
(718) 482-4992

Don Riepe  
American Littoral Society  
28 West 9th Road  
Broad Channel, NY 11793  
(718) 634-6467

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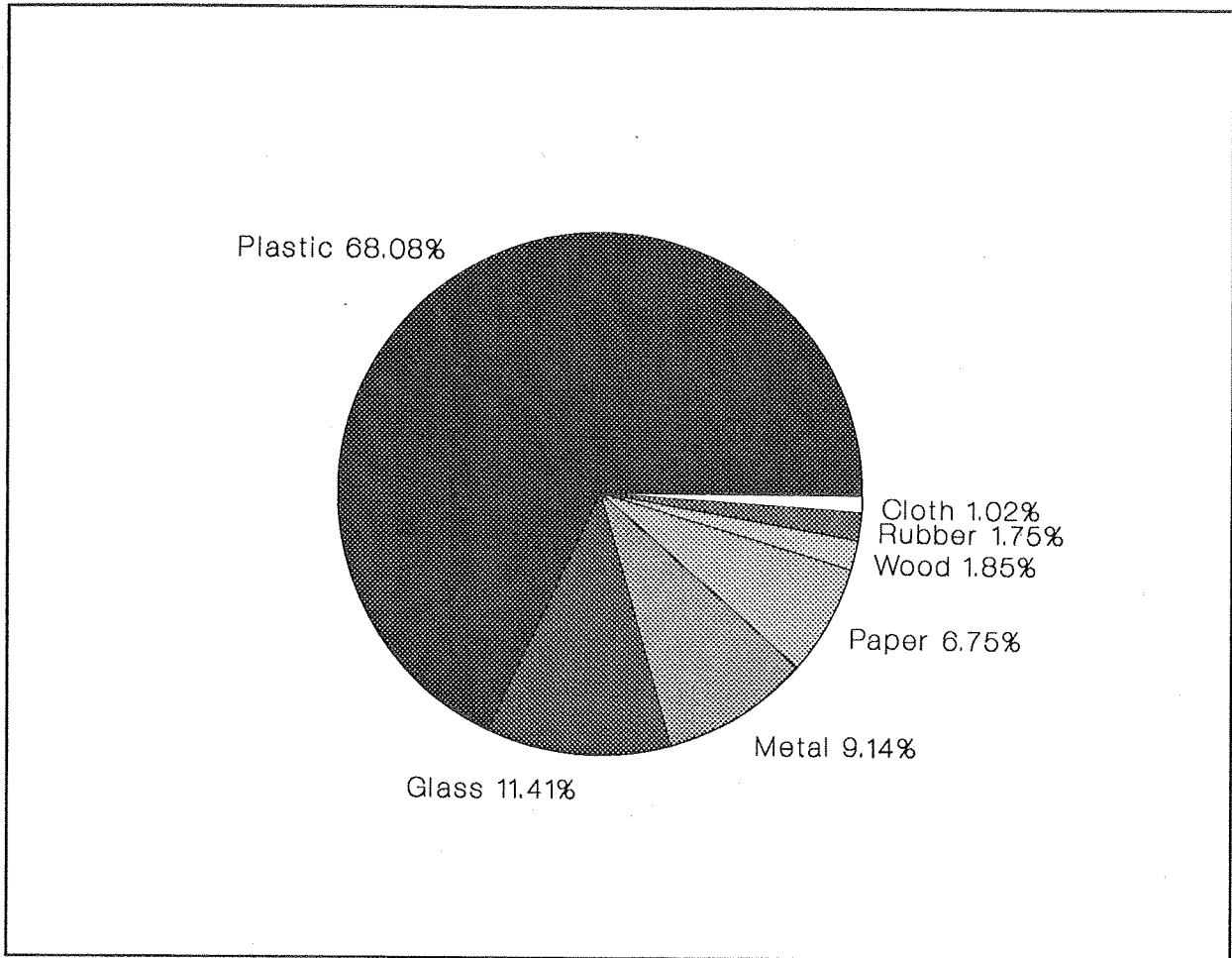
Approximately 1,000 people came out for cleanups at 30 beaches in New York State. Cleanups were on Long Island Sound, on the traditional beaches of the south shore of Long Island; they took place in every one of the five boroughs of New York City; and this year we extended our range up the Hudson River to Rockland County. In contrast to the previous two years, the weather was good, even sublime.

Many public officials participated. Of note is Member of Congress Nita Lowey. The list of sponsors of the cleanup continues to grow. We note the enthusiastic addition of Singles for Charity to the roster. We Care About New York, a non-profit NYC cleanup organization, again provided bags, gloves, and strong logistic support. New York State Office of Parks, and Recreation and Historic Preservation helped fund the tee-shirts which each participant received and also provided strong logistic support. EPA gave the organizers a grant, through the Bight Restoration Program, to implement MARPOL Annex V at marinas. Together with New Jersey and many of the beach cleanup day teams we are planning public education programs at major marina areas this summer.

An unusual finding of the cleanup was six dead sea turtles. Entanglement didn't seem to be the cause; the hurricane was possibly implicated.

Roberta Weisbrod

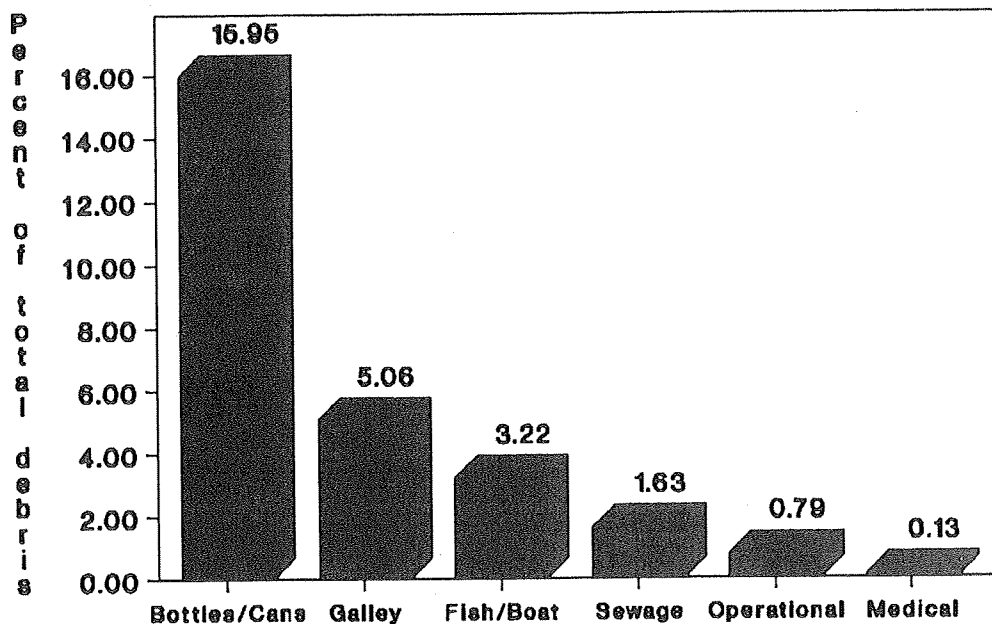
**PERCENT COMPOSITION OF NEW YORK'S BEACH DEBRIS:**



**NEW YORK'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic pieces	6,544	10.00
2. plastic cups, spoons, forks, straws	6,403	9.78
3. small foamed plastic pieces	5,032	7.69
4. glass pieces	4,785	7.31
5. plastic caps, lids	3,372	5.15
6. plastic beverage bottles	3,303	5.05
7. metal beverage cans	2,711	4.14
8. glass beverage bottles	2,394	3.65
9. plastic trash bags	2,311	3.53
10. miscellaneous plastic bags	2,203	3.37
11. foamed plastic cups	2,181	3.33
12. large foamed plastic pieces	2,005	3.06
<b>TOTAL</b>	<b>43,244</b>	<b>66.06</b>

**MAJOR TYPES AND SOURCES OF NEW YORK'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Coney Island	69.33	small foamed plastic pieces
Breezy Point	82.96	plastic cups, spoons, forks, straws
Plum Beach	50.08	glass pieces
South Beach	85.26	plastic cups, spoons, forks, straws
DuBos Point	75.41	plastic trash bags
Long Beach	63.03	plastic cups, spoons, forks, straws
Jones Beach	64.67	plastic cups, spoons, forks, straws
Fire Island	76.92	plastic pieces
Ponquogue	69.60	small foamed plastic pieces
Mashomack	65.17	small foamed plastic pieces
Pelham Bay	62.18	glass pieces
Sunken Meadow	53.64	plastic cups, spoons, forks, straws
City Island	62.14	foamed plastic cups
Manor Haven	43.19	glass pieces
Rye Playland	48.86	metal beverage cans
Rye Marshland	87.20	small foamed plastic pieces
Glen Island	87.48	plastic pieces

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**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE (continued):**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Manor Park	64.29	plastic pieces
Mamaroneck	42.12	glass pieces
Read	69.54	plastic pieces
Hudson Park	83.96	plastic cups, spoons, forks, straws
Piermont	65.81	small foamed plastic pieces
Stony Point	49.26	glass pieces
Oswego (Lake Ontario)	82.53	plastic pieces

**STRANDED AND/OR ENTANGLED WILDLIFE:**

Debris Related	Other Reports
dead sea turtle entangled in plastic packing tape	5 dead sea turtles

**MOST PECULIAR DEBRIS ITEMS REPORTED:** New York beach cleanup volunteers reported finding numerous items which they identified to be medical wastes including 110 "crack" vials, 26 bags of "crack," and one bag of "pot." These and other peculiar items are reported below.

Coney Island	crack vials
Plum Island	toilet from boat, crack vial, full bottle of vodka, upholstered chair, flag stand, fresh flowers and fruit
DuBos Point	wine bottle with note, glow in the dark condom
Long Beach	1950s bottles
Jones Beach	curtain rod, plastic door panel from car, stuffed Garfield
Fire Island	rusted part of car, seat and piece of toilet
Ponquogue	Pictionary game, finger paints, volleyball net
Glen Island	bag of "crack" bottle tops, pieces of a yarmulke, bag of "pot"
Manor Park	medical heart tab, pitch fork, gas tank
Mamaroneck	muffler, underpants, television, plastic champagne corks, hypodermic needles
Stony Point	15-foot power boat, two rafts, dental retainer
Oswego	26 "crack" bags, plastic llama, plastic bullets, "crack" vials

\* not all items indicated as peculiar by volunteers are listed above.

**FOR INFORMATION ON NEW YORK'S 1990 BEACH CLEANUP CONTACT:**

Roberta Weisbrod  
New York State Department of Environmental Conservation  
Hunters Point Plaza  
Long Island City, NY 11101  
(718) 482-4992

Don Riepe  
American Littoral Society  
28 West 9th Road  
Broad Channel, NY 11793  
(718) 634-6467

**CLEANUP DATE: Sunday, September 23, 1990**

1989 National Beach Cleanup NEW YORK

Raw Data Summary

	Breezy Point		South Beach		Long Beach		Fire Island		Mashomack		Sunken Meadow	
	Coney Island	Plum Beach	DuBos Beach	South Beach	DuBos Point	Jones Beach	Ponquogue	Fire Island	Ponquogue	Pelham Bay	Sunken Meadow	
PLASTIC-----												
Bags	118	12	176	10	310	40	363	16	14	142	203	115
Trash	4	0	0	0	0	0	3	0	0	0	0	5
Salt	80	241	36	20	207	32	207	96	26	139	63	126
Other	94	367	470	268	90	62	331	23	25	52	164	130
Bottles Beverage	18	20	34	22	6	7	49	4	4	26	18	5
Bleach	11	47	54	36	20	1	58	4	10	10	51	8
Oil	12	145	64	20	17	16	129	39	7	30	20	46
Other	3	13	6	9	6	7	29	5	2	10	8	11
Buckets	126	390	130	131	39	79	396	91	28	68	114	139
Caps/lids	128	16	0	3	0	5	32	289	10	0	0	17
Cigarette butts	227	997	242	430	99	181	830	150	29	26	133	428
Cups/straws	11	5	4	1	1	0	4	1	1	2	3	8
Diapers	8	22	28	9	7	10	51	7	0	4	22	23
Lighters	23	11	12	0	18	1	15	4	13	6	1	29
Fishing line	2	0	0	0	0	0	4	2	2	2	1	4
Net	4	0	0	0	0	3	8	7	25	2	0	2
Short	4	3	3	1	2	1	5	0	2	12	11	4
Floats, lures	0	0	0	0	0	0	1	0	0	0	0	0
Hardhats	3	1	20	6	2	0	26	0	0	2	0	1
Lightsticks	5	38	4	49	20	2	31	7	20	13	21	12
Milk/water jugs	220	155	114	52	30	97	615	398	30	274	89	263
Pieces	3	0	0	1	0	0	3	0	0	0	3	10
Pipe thread	0	19	6	4	1	3	61	17	3	26	10	16
Rope	12	13	6	1	4	15	108	55	8	22	4	46
Long	2	25	16	5	9	1	8	1	0	0	0	4
Short	4	29	24	6	9	3	18	5	6	0	0	7
Sheeting	17	69	40	25	11	5	21	6	0	6	13	23
Long	14	15	2	4	2	0	22	17	3	0	1	10
Short	2	6	2	29	2	0	2	0	0	0	5	3
6-pack holders	29	75	8	126	6	28	332	18	0	2	11	21
Strapping bands	21	13	34	22	4	8	71	14	4	0	28	30
Syringes	1	0	10	1	0	8	2	2	4	3	0	2
Tampon app.	9	0	10	1	11	0	5	0	0	0	1	6
Toys	112	0	75	62	26	28	162	13	42	283	43	48
Vegetable sacks												
Write protector												
Other												

	Breezy Point		South Beach		Long Beach		Fire Island		Mashomack		Sunken Meadow	
	Coney Island	Plum Beach	DuBos Point	Jones Beach	Ponguogue	Pelham Bay	Sunken Meadow	Pelham Bay	Sunken Meadow	Pelham Bay	Sunken Meadow	
GLASS-----												
Bottles Beverage	47	175	252	56	113	35	228	12	28	151	180	213
Food	1	2	11	0	4	5	26	2	1	0	1	9
Other	0	0	38	1	2	6	14	2	0	0	6	1
Light tubes	0	0	0	0	0	0	1	4	1	0	0	0
Light bulbs	3	8	0	6	3	1	16	1	1	2	2	2
Pieces	140	18	772	26	17	104	421	3	4	119	297	160
Other	0	0	5	9	0	1	4	0	1	0	1	0
STYROFOAM-----												
Buoys	1	1	0	0	0	2	37	3	10	8	29	16
Cups	43	91	84	29	50	46	189	15	0	88	73	282
Egg Cartons	0	3	0	2	13	2	14	0	3	0	0	2
Fast-food	40	24	24	6	38	3	27	1	0	2	12	27
Meat trays	13	5	2	0	10	1	16	3	0	0	8	27
Pieces Large	46	102	22	20	22	9	143	20	16	36	20	45
Small	436	128	54	87	14	50	517	68	140	98	230	204
Other	149	0	0	1	1	1	171	9	3	0	9	34
RUBBER-----												
Balloons	7	33	0	3	2	18	72	48	28	34	33	33
Gloves	1	2	4	2	0	0	8	1	1	14	4	3
Tires	7	1	30	1	3	0	6	0	0	0	1	1
Other	33	6	15	27	3	9	82	12	11	8	31	19
METAL-----												
Bottle caps	80	42	48	20	0	49	136	34	3	4	28	100
Cans Aerosol	3	12	20	3	22	3	31	1	7	4	14	35
Beverage	56	52	256	38	67	16	345	44	63	114	58	255
Food	1	0	1	1	16	0	17	3	0	4	6	15
Other	5	0	21	11	9	3	16	0	2	2	4	28
Crab/fish traps	1	0	0	0	0	0	0	0	1	0	0	1
Drums Rusty	0	0	2	5	0	2	3	0	1	0	3	1
New	1	0	0	0	0	0	0	0	0	0	0	1
Pieces	24	12	82	1	0	12	46	24	0	14	3	73
Pull tabs	17	33	24	2	0	7	47	1	0	0	1	30
Wire	9	0	2	0	1	2	21	0	0	0	0	13
Other	63	0	44	5	7	21	76	19	21	26	20	107

Breezy Point    South Beach    Long Beach    Fire Island    Mashomack    Sunken Meadow  
 Plum Beach    DuBos Point    Jones Beach    Ponguogue    Pelham Bay

PAPER-----

Bags	44	26	18	7	16	0	68	9	0	6	40
Cardboard	22	40	6	1	9	5	34	32	7	18	47
Cartons	13	10	14	3	11	9	30	8	3	22	50
Cups	15	16	37	7	11	3	75	10	3	30	70
Newspaper	20	4	26	1	12	2	94	14	5	0	53
Pieces	195	10	28	7	12	43	418	109	6	38	281
Other	10	0	2	3	1	6	71	13	2	12	175

WOOD-----

Crab/lobster traps	0	0	0	0	0	0	0	0	1	0	1
Crates	6	1	0	0	1	1	11	0	0	0	2
Pallets	0	0	0	0	0	1	12	0	0	2	4
Pieces	31	0	12	5	6	73	240	6	1	93	58
Other	3	100	4	5	0	1	61	1	1	0	12

CLOTH-----

Clothing	51	34	36	3	13	7	65	10	12	28	37	42
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TOTAL ITEMS/ZONE    2964    3738    3626    1758    1468    1201    7911    1833    704    2139    2287    4174

1989 National Beach Cleanup  
Raw Data Summary

NEW YORK

PLASTIC	Manor Haven		Rye Marsh		Manor Park		Read		Piermont		Oswego		STATE TOTAL
	City Island	Rye Playland	Glen Island	Manor Park	Mamaroneck	Hudson Park	Stony Point	Piermont	Stony Point	Oswego	Stony Point	Oswego	
Bags	274	14	26	10	247	54	39	2	6	67	23	30	2311
Trash	0	0	0	0	0	1	0	0	0	3	0	2	18
Salt	57	58	30	120	125	96	39	136	12	131	59	67	2203
Other	377	9	53	72	91	145	22	66	60	149	91	92	3303
Bottles Beverage	12	0	3	2	5	8	1	2	4	24	9	56	339
Bleach	21	0	11	8	9	19	4	4	4	53	15	70	528
Oil	34	7	6	32	166	7	6	16	0	35	17	78	949
Other	5	0	4	3	2	12	0	2	7	6	10	51	211
Buckets	404	15	12	119	245	75	48	14	23	152	159	375	3372
Caps/lids	0	0	0	93	248	0	0	0	0	0	9	3	853
Cigarette butts	466	45	74	275	42	84	56	152	275	109	117	536	6403
Cups/straws	41	1	5	0	68	3	2	4	8	2	3	1	179
Diapers	13	1	1	8	12	11	3	2	10	20	3	28	303
Lighters	129	8	17	3	12	7	6	2	7	116	9	11	460
Fishing line	54	0	7	0	0	0	0	0	0	9	0	2	89
Long	0	0	2	0	0	0	0	0	0	6	0	2	61
Short	25	1	1	4	4	3	3	0	2	5	5	20	121
Floats, lures	0	0	0	0	0	0	0	0	0	1	0	1	3
Hardhats	1	0	0	0	0	0	0	0	0	11	0	7	80
Lightsticks	42	1	4	2	2	9	11	2	2	12	14	66	389
Milk/water jugs	196	44	29	854	439	560	100	508	18	131	240	1088	6544
Pieces	0	0	0	0	0	1	1	4	0	5	0	4	35
Pipe thread	10	3	7	2	12	18	4	0	3	8	5	22	260
Rope	5	5	1	8	17	15	2	2	2	10	0	61	422
Long	1	1	1	2	0	1	0	0	0	8	0	8	93
Short	0	1	3	7	1	13	1	0	0	2	4	28	171
Sheeting	107	4	3	11	15	15	60	14	16	37	25	66	609
Long	11	5	1	6	6	7	0	10	0	7	0	49	192
Short	13	0	1	4	2	1	1	2	3	1	1	3	83
6-pack holders	81	1	0	9	23	15	0	4	8	40	13	218	1068
Strapping bands	9	0	7	18	74	13	2	0	3	20	11	84	490
Syringes	5	0	0	3	2	3	0	1	0	12	0	0	59
Tampon app.	0	0	0	0	3	0	0	0	12	0	0	8	66
Toys	2	16	20	207	322	10	2	53	19	18	16	67	1646
Vegetable sacks													
Write protector													
Other													

	Manor Haven		Rye Marsh		Manor Park		Read		Piermont		Oswego		STATE TOTAL
	City Island	Rye Playland	Glen Island	Rye Marsh	Manor Park	Mamaroneck	Hudson Park	Stony Point	Hudson Park	Stony Point	Oswego	Stony Point	
GLASS-----													
Bottles Beverage	513	4	20	24	27	17	34	18	120	97	15		2394
Food	10	0	5	5	0	2	0	0	9	0	3		96
Other	1	0	0	0	1	1	0	1	3	2	4		83
Light tubes	1	0	0	0	0	0	0	2	0	0	0		9
Light bulbs	2	0	1	1	0	0	0	0	1	0	0		50
Pieces	266	195	75	313	41	500	350	16	77	834	21		4785
Other	1	6	1	1	1	0	0	6	0	0	2		39
STYROFOAM-----													
Buoys	9	1	6	0	7	13	6	6	10	0	13		184
Cups	578	24	33	32	36	66	52	52	17	152	99		2181
Egg Cartons	1	0	0	0	2	8	2	0	5	0	1		64
Fast-food	122	0	7	5	10	15	88	2	11	27	26		523
Meat trays	20	0	0	0	4	3	1	0	21	11	1		151
Pieces Large	81	2	6	946	30	9	6	82	23	117	175		2005
Small	199	30	24	1520	137	96	17	375	30	204	288		5032
Other	5	4	3	11	4	1	3	6	4	4	3		426
RUBBER-----													
Balloons	17	3	8	12	22	4	16	4	0	7	2		449
Gloves	4	1	2	0	1	5	0	0	1	4	0		58
Tires	7	0	2	2	0	0	2	2	18	5	13		101
Other	5	19	6	114	25	24	8	5	14	5	41		538
METAL-----													
Bottle caps	227	7	33	3	13	17	17	0	62	106	26		1067
Cans	28	0	5	9	3	12	4	2	19	2	17		258
Aerosol	238	19	82	64	15	53	29	473	10	125	101		2711
Beverage	22	1	2	1	3	3	8	2	33	18	4		161
Food	3	1	6	1	1	1	0	0	16	2	50		184
Other	3	0	0	0	0	0	0	2	2	0	0		9
Crab/fish traps	5	0	0	0	0	0	2	0	3	0	10		37
Drums Rusty	1	0	0	0	0	0	0	0	0	0	0		3
New	10	11	13	5	22	25	3	6	12	4	78		480
Pieces	63	7	1	1	0	0	18	0	20	87	0		359
Full tabs	13	9	4	1	6	1	5	0	5	8	15		115
Wire	16	38	14	10	3	18	16	13	21	17	15		590
Other													

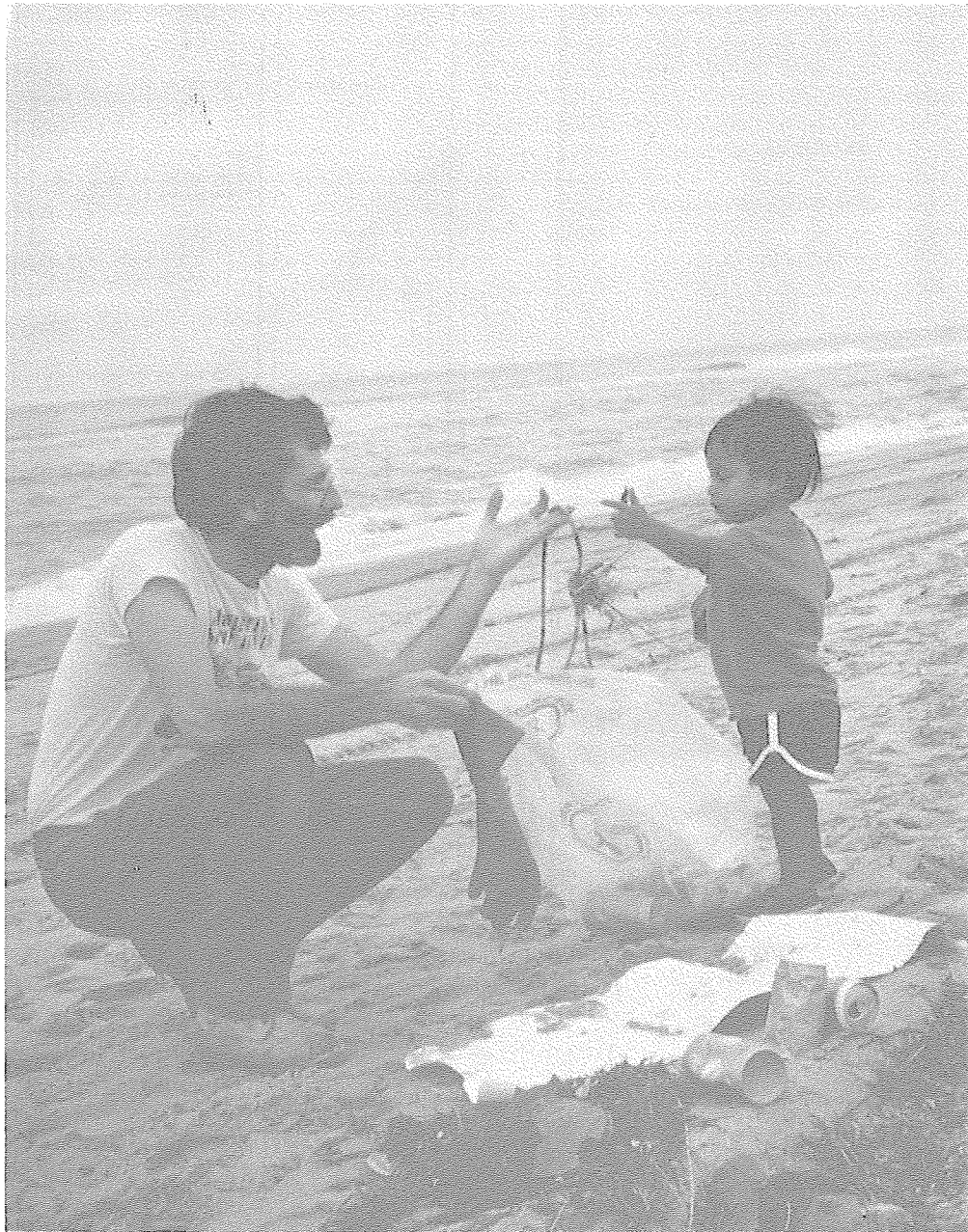
Manor Haven Rye Marsh Manor Park Read Piermont Oswego  
 City Island Rye Playland Glen Island Mamaroneck Hudson Park Stony Point  
 STATE  
 TOTAL

	City Island	Manor Haven	Rye Playland	Rye Marsh	Glen Island	Manor Park	Mamaroneck	Read	Hudson Park	Piermont	Stony Point	Oswego	STATE TOTAL
<b>PAPER</b>													
Bags	139	4	1	0	8	12	33	50	7	49	26	12	584
Cardboard	53	7	1	0	2	2	14	2	0	31	9	21	375
Cartons	20	2	8	2	7	4	9	10	0	29	22	11	306
Cups	160	6	27	0	14	0	42	0	9	24	13	18	595
Newspaper	17	0	1	0	1	0	38	0	0	21	9	16	336
Pieces	121	14	16	40	79	13	100	38	10	84	69	48	1798
Other	5	0	1	5	36	1	15	10	0	19	10	5	414

<b>WOOD</b>													
Crab/lobster traps	4	3	1	0	0	0	0	0	0	0	0	0	10
Crates	3	0	1	2	0	0	0	0	0	1	0	1	31
Pallets	1	0	1	1	0	0	5	0	0	2	3	4	36
Pieces	5	17	70	1	47	27	25	0	0	21	5	37	838
Other	5	6	2	22	13	17	1	2	17	3	1	6	414

<b>CLOTH</b>													
Clothing	89	16	17	5	13	28	14	4	0	55	7	81	667

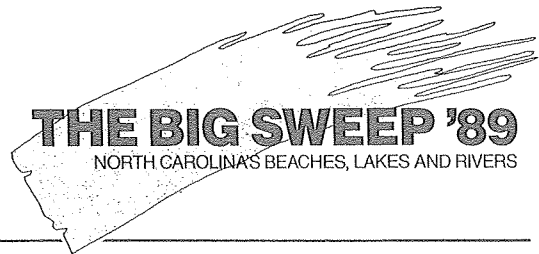
**TOTAL ITEMS/ZONE** 5488 697 835 5041 3228 2204 1396 2193 717 2659 2966 4109 65459



North Carolina's "Big Sweep" offered opportunities for all generations to learn about the need to protect the beauty of the coast.

## NORTH CAROLINA

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September 30, 1989  
3,645 Volunteers  
220 Miles Cleaned  
163,000 Pounds of Debris Collected  
175,410 Debris Items Reported

Coordinated By: Lundie Spence, Kathy Hart,  
Nancy Davis, and Sarah Friday  
University of North Carolina  
Sea Grant College Program  
Box 8605  
Raleigh, NC 27695-8605  
(800) 27SWEEP

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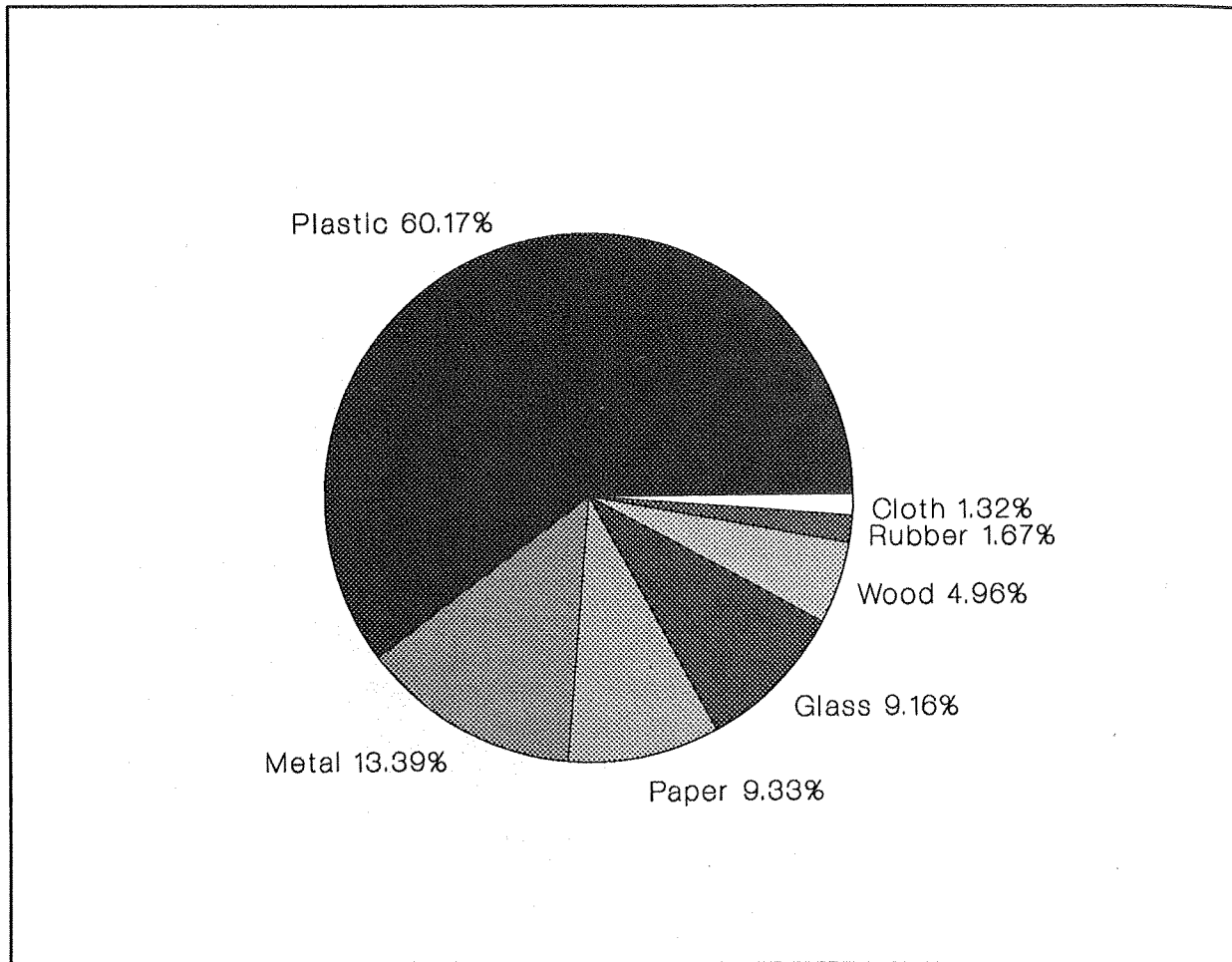
Big Sweep '89 was the first statewide waterway cleanup in the nation. Expanded from the '87 and '88 Beach Sweep to include the inland lakes, rivers, and sounds, Big Sweep '89 proved to be a growing grass-roots event. Local people who wanted their lake to be included in the cleanup kept the Telecom-USA toll free number ringing. For the first time, T-shirts were printed to raise money for the education efforts. Over 5,000 were sold before, during and after the event.

With the help of zone captains and the media, 8,000 to 10,000 volunteers were expected to get involved with litter pickup and a small recycling effort. But, Hurricane Hugo beat us to the punch, and the September 23 date was abandoned. Rescheduled for the following Saturday, the coastal cleanup ran smoothly. Big Sweep volunteers helped to clear some hurricane debris. However, a few southern islands were so badly damaged that cleanups had to be postponed indefinitely. Torrential rains and flooding canceled many of the Piedmont and mountain site cleanups during the second date. Despite the problems, more than 3,600 volunteers collected 81.5 tons of litter from the waterways.

Three important results came from Big Sweep '89: 1) involvement of shorelines statewide--marine, estuarine, and freshwater; 2) interagency commitment increased along with interest from sponsors and greater interaction with other projects; and 3) production of the first set of educational materials.

Lundie Spence

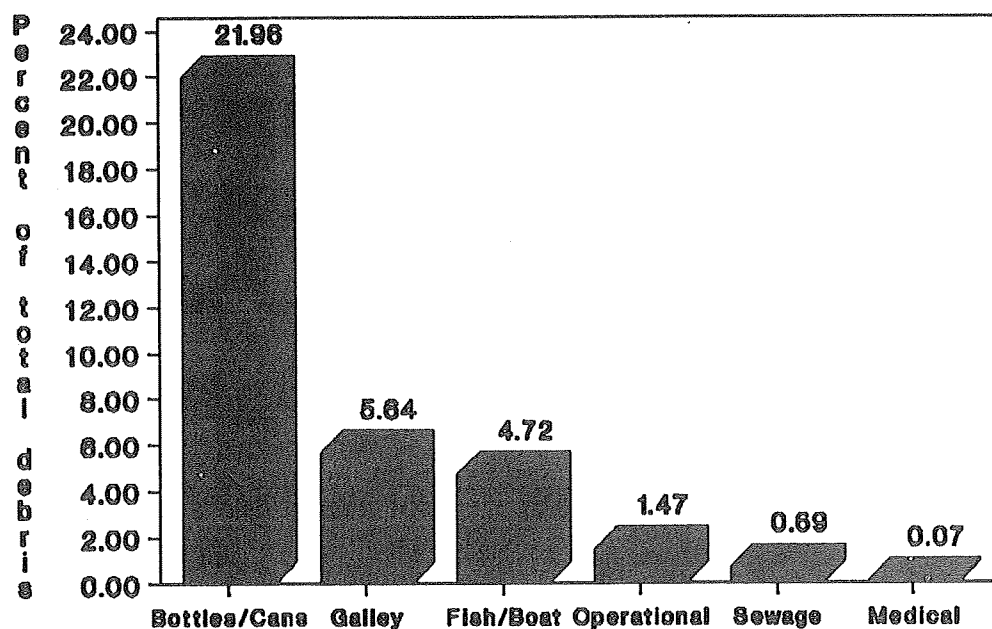
**PERCENT COMPOSITION OF NORTH CAROLINA'S BEACH DEBRIS:**



**NORTH CAROLINA'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. metal beverage cans	12,930	7.37
2. small foamed plastic pieces	12,033	6.86
3. plastic pieces	11,136	6.35
4. plastic beverage bottles	10,559	6.02
5. glass beverage bottles	9,616	5.48
6. plastic cups, spoons, forks, straws	9,408	5.36
7. cigarette butts	8,378	4.78
8. foamed plastic cups	7,939	4.53
9. paper pieces	7,600	4.33
10. wood pieces	7,486	4.27
11. plastic caps, lids	6,402	3.65
12. plastic trash bags	6,102	3.48
<b>TOTAL</b>	<b>109,589</b>	<b>62.48</b>

**MAJOR TYPES AND SOURCES OF NORTH CAROLINA'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
South Shores	61.31	metal beverage cans
Kitty Hawk	68.40	small foamed plastic pieces
Kill Devil	68.93	plastic cups, spoons, forks, straws
South Nags Head	66.85	plastic cups, spoons, forks, straws
Pea Island	69.81	plastic cups, spoons, forks, straws
Hatteras	63.50	metal beverage cans
Ocracoke	59.84	metal beverage cans
Cape Lookout	51.67	metal beverage cans
Radio Island	41.85	glass pieces
Atlantic Beach (East)	65.26	foamed plastic cups
Atlantic Beach (West)	66.89	plastic cups, spoons, forks, straws
Fort Macon	75.90	small foamed plastic pieces
Pine Knoll	77.08	plastic trash bags
Indian Beach	69.35	small foamed plastic cups
Emerald Isle	78.55	cigarette butts
Sugarloaf	66.42	foamed plastic cups
Bogue Sound (East)	78.94	small foamed plastic pieces
Bogue Sound (West)	65.86	foamed plastic cups

**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Newport	56.92	plastic trash bags
Topsail	49.22	wood pieces
Lee Island	61.63	plastic beverage bottles
Wrightsville	56.89	cigarette butts
North Mansboro	59.64	metal beverage cans
South Mansboro	63.64	small foamed plastic pieces
Carolina Beach	57.68	metal beverage cans
Fort Fisher	53.22	plastic trash bags
Kure Beach	47.79	wood pieces
Zeke's Island	67.99	plastic beverage bottles
Waynesboro	73.84	plastic pieces
Roanoke River	63.06	plastic beverage bottles
Pamlico	44.42	glass beverage bottles
Pungo River	58.60	plastic beverage bottles
Tar River	61.25	plastic beverage bottles
Holiday Island	44.21	metal beverage cans
White Lake	67.86	plastic cups, spoons, forks straws
Lake Johnson	57.18	small foamed plastic pieces
Shelley Lake	59.30	small foamed plastic pieces
Salem Creek	20.40	metal beverage cans
Dan River	59.17	glass beverage bottles
Hope Mills	48.33	glass beverage bottles
Jordan Lake	57.33	glass beverage bottles
Lake Wheeler	27.99	glass beverage bottles
Falls Lake	50.54	metal beverage cans
Harris Lake	60.30	glass beverage bottles
Lake Hiawasse	81.27	glass beverage bottles
Lake Lure	51.42	metal beverage cans

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

Debris Related	Other Reports
crabs, skate egg cases, and whelk egg cases entangled in fishing line	5 dead sea turtles
dead rabbit in plastic bag	3 dead seagulls
	10 dead other birds
	1 bag of shrimp

**MOST PECULIAR DEBRIS ITEMS REPORTED:**

South Shores	kerosene heater, marine radio, perfume bottle, tuberculin syringe, bag of orange dye, throat culture sampler (unopened), television
Kitty Hawk	barnacle-covered golf ball
Kill Devil	Old Spice aftershave, bag of blood, vial, plastic plate labeled "Peregrine 210719"
S. Nags Head	55-gallon drum with foam insulation inside
Pea Island	car frame, toilet seat, plastic surgical skin marking pen
Hatteras	artificial seaweed
Ocracoke	bottle with message
Radio Island	vibrator, Confederate flag, 5.56 mm blank and 20 mm casing
Atlantic Beach (West)	wallet, drug vial, tooth brushes, underwear
Fort Macon	boat switch, bed sheet, panty liner

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**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Pine Knoll	suitcases
Indian Beach	food handler's disposable plastic glove, douche bottle
Emerald Beach	buried beach umbrella (open), corked medical bottle, tar, tooth paste
Sugarloaf	high heel shoe
Newport	toilet seat cover, underwear
Topsail	prescription bottle from Idaho, women's bathing suit, women's bra, condoms, washing machine agitators, sea rations, metal casing with triggering device
Wrightsville	barnacle-encrusted thong, Jimmy Hoffa, ladies' underwear, "Fruit of the Looms", beer pitcher, key chain and ring, used condoms
S. Mansboro	Siberian salmon eggs, cars, tea pitcher, plastic duck, sauce pan, boot
Carolina Beach	intravenous bag, underwear
Holiday Island	school desks and lockers
White Lake	golf balls, fangs, baby pacifier
Lake Johnson	computer chip, ladies' panties
Hope Mills	numerous glass medical bottles (insulin?)
Jordan Lake	car engine, lawn mower blade, traffic cone, chandelier globe, bullet, golf balls
Lake Hiwassee	disposable diapers mixed with church literature

\* not all items indicated as peculiar by volunteers are listed above.

**FOR INFORMATION ON NORTH CAROLINA'S 1990 BEACH CLEANUP:**

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University of North Carolina  
Sea Grant College Program  
Box 8605  
Raleigh, NC 27695-8605  
(919) 737-2454

**CLEANUP DATE: Saturday, September 22, 1990**

1989 National Beach Cleanup NORTH CAROLINA  
Raw Data Summary

	S. Shores	Kill Devil	Pea Is.	Hatteras	Cape Lookout	Atlantic(E)	Ft. Macon	Indian Bch.	Sugarloaf	Bogue(W)	Topsail	Wrightsville											
				Ocracoke	Radio Is.	Atlantic(W)	Pine Knoll	Emerald Is.	Bogue(E)	Newport	Lee Island	N. Mansboro											
PLASTIC																							
Bags	191	78	311	39	68	121	233	203	99	172	67	181	232	54	611	8	45	40	84	1544	5	394	74
Trash	58	12	1	0	1	5	0	0	1	0	10	1	0	0	4	0	0	0	0	69	1	10	0
Salt	134	103	266	31	123	120	165	125	149	62	184	69	52	232	653	1	82	63	54	818	39	380	64
Other	434	108	224	41	294	241	137	571	873	60	64	219	82	129	277	193	89	123	45	2053	173	535	278
Bottles	121	22	77	21	143	42	46	46	42	29	4	7	9	15	34	43	5	10	1	125	14	17	21
Bleach	71	6	29	7	74	24	39	74	79	4	27	16	7	7	27	26	3	4	0	149	21	10	10
Oil	83	33	88	15	171	48	37	46	35	11	12	30	37	19	109	10	11	16	27	141	8	54	22
Other	63	1	19	10	60	4	16	17	5	9	7	8	3	7	41	2	1	8	0	44	5	10	7
Buckets	513	219	555	122	419	220	122	71	140	100	219	178	131	159	722	8	31	57	33	561	22	486	57
Caps/lids	79	26	135	0	1	8	4	0	0	0	541	169	42	20	1929	0	39	67	0	1151	0	237	0
Cigarette butts	663	297	918	307	825	250	89	82	291	121	679	113	212	92	776	1	64	59	20	805	25	852	43
Cups/straws	23	13	6	1	55	2	8	9	37	0	4	11	0	1	9	0	2	6	0	34	0	12	2
Diapers	64	25	58	8	42	150	8	39	20	18	36	35	45	24	84	6	8	4	2	112	6	79	14
Lighters	72	32	51	7	21	88	8	14	27	6	10	15	5	17	78	9	12	6	20	168	24	87	0
Fishing line	11	4	3	0	4	11	8	4	2	23	4	48	0	0	20	0	2	2	1	25	2	10	1
Net	8	9	11	12	12	12	3	5	3	9	0	31	5	31	27	0	0	4	3	26	0	17	0
Long	38	23	25	8	25	26	5	1	11	3	6	33	3	10	25	1	4	1	3	82	15	46	3
Short	9	0	1	0	3	0	0	2	0	0	0	9	0	0	6	0	0	0	0	2	0	0	0
Floats, lures	50	23	162	34	34	43	30	17	0	12	14	9	9	9	7	50	0	3	1	100	23	35	4
Hardhats	204	70	52	17	56	48	30	68	20	4	7	17	12	9	192	21	14	20	2	166	9	19	9
Lightsticks	268	345	682	57	457	345	263	219	206	83	290	265	168	261	1653	9	148	96	42	923	7	1004	102
Milk/water jugs	10	2	22	1	4	16	29	1	1	0	8	10	1	0	1	7	3	1	0	0	0	0	19
Pieces	56	34	106	3	118	53	32	55	23	12	20	67	16	14	149	35	24	35	10	68	4	28	7
Pipe thread	110	113	192	39	166	87	40	60	45	85	72	225	45	42	283	61	174	90	6	111	3	67	8
Rope	10	2	16	7	21	35	5	25	11	3	1	3	1	3	15	1	1	4	0	30	0	13	0
Long	52	28	28	25	48	51	3	6	48	3	3	13	6	6	23	6	0	1	0	52	0	40	2
Short	132	33	77	14	16	18	18	37	77	2	22	13	10	11	72	7	22	21	4	106	7	27	3
Sheeting	63	54	78	9	94	75	21	6	22	7	10	20	12	17	64	7	10	4	1	35	9	20	6
6-pack holders	19	5	12	1	7	3	0	6	1	0	2	5	2	0	4	1	3	0	0	1	0	1	0
Strapping bands	177	122	409	102	102	74	7	7	3	0	11	4	3	4	24	0	1	0	0	24	0	12	2
Syringes	44	12	71	18	56	18	10	7	4	22	38	12	7	5	121	2	4	1	0	75	0	59	6
Tampon app.	26	2	62	15	6	0	5	5	6	0	0	1	1	2	16	0	6	5	0	55	6	16	4
Toys	29	2	6	0	7	2	2	0	6	4	13	0	0	7	7	0	2	1	0	20	1	22	0
Vegetable sacks	39	89	190	23	40	65	45	53	23	14	160	93	25	147	184	9	25	28	1	236	4	348	56
Write protector																							
Other																							

Kitty Hawk S.Nags Head Hatteras Cape Lookout Atlantic(E) Ft. Macon Indian Boh. Sugarloaf Bogue(W) Topsail Wrightsville  
S. Shores Kill Devil Pea Is. Ocracoke Radio Is. Atlantic(W) Pine Knoll Emerald Is. Bogue(E) Newport Lee Island N. Mansboro

	451	172	296	48	215	195	188	528	752	85	95	69	44	125	173	123	29	49	38	1681	40	828	78
Bottles																							
Beverage	33	8	56	7	94	15	33	74	3	0	0	5	11	8	12	1	5	8	0	72	6	16	3
Food	18	2	13	1	24	2	4	17	7	0	3	1	3	5	8	0	8	0	0	33	1	10	0
Other	38	1	18	3	21	12	3	5	0	0	0	4	1	0	7	1	0	0	0	8	2	6	2
Light tubes	81	30	32	16	76	28	8	17	1	0	4	16	10	3	14	37	6	3	3	49	14	29	6
Light bulbs	67	41	99	30	17	79	66	84	937	18	195	44	51	28	239	4	30	20	11	763	6	383	102
Pieces	1	13	12	0	3	1	1	3	0	0	6	3	1	2	16	2	2	0	0	12	1	12	0
Other																							

STYROFOAM

Buoys	20	21	13	7	21	26	10	23	0	8	3	17	1	6	22	0	5	12	6	121	6	14	5
Cups	631	225	270	76	216	181	112	98	132	330	91	122	97	137	371	270	108	178	36	950	47	575	152
Egg Cartons	24	15	8	1	5	3	13	27	6	1	5	23	5	9	16	3	0	1	2	71	6	16	4
Fast-food	159	118	82	18	25	44	4	57	82	8	12	12	14	6	47	27	15	29	8	203	4	56	3
Meat trays	66	34	53	3	51	42	3	50	11	15	10	23	13	11	28	9	1	8	0	65	4	32	12
Pieces	241	93	253	32	176	132	56	48	49	36	28	129	56	33	295	54	27	81	19	682	11	198	37
Large	428	353	811	103	340	331	183	96	77	129	221	483	205	484	763	30	359	72	70	1082	46	1148	179
Small	12	4	3	3	8	43	6	9	0	0	2	18	0	3	102	39	4	6	2	87	2	23	2
Other																							

RUBBER

Balloons	164	72	165	30	329	121	31	2	2	1	24	10	5	5	115	0	4	4	0	97	20	62	3
Gloves	19	6	18	0	12	11	3	13	2	0	0	0	3	2	17	0	0	1	7	35	0	9	2
Tires	30	1	6	1	3	14	8	3	5	1	3	4	1	8	17	0	3	4	2	103	1	24	6
Other	17	8	65	4	19	27	11	13	30	17	23	36	8	15	52	1	10	6	2	125	4	143	15

METAL

Bottle caps	223	70	168	13	16	99	23	22	127	11	250	21	32	4	100	0	5	29	43	601	2	430	15
Cans	199	20	37	17	73	109	53	37	7	1	4	22	18	3	49	10	2	10	3	137	17	42	13
Aerosol	675	175	378	60	188	410	291	788	610	127	153	120	87	235	450	224	72	126	53	1479	120	1002	399
Beverage	34	3	24	4	28	19	88	36	21	3	3	3	4	2	34	1	1	14	0	63	36	27	17
Food	43	4	26	2	28	5	22	30	14	16	5	6	2	2	27	1	4	4	11	176	0	39	6
Other	2	0	1	0	0	0	2	0	0	0	1	0	0	0	3	1	0	2	0	18	0	0	1
Crab/fish traps	14	0	2	1	4	0	5	14	34	5	6	4	0	0	4	0	0	1	10	29	1	37	1
Drums	2	0	0	0	2	0	0	43	0	0	0	0	0	0	2	0	0	0	0	0	2	0	18
Rusty	23	13	53	11	29	11	11	44	57	21	24	12	5	9	30	0	3	9	15	197	3	188	27
New	67	3	40	37	0	25	1	9	49	2	110	2	2	0	8	0	1	6	22	89	2	28	0
Pieces	22	4	28	7	11	6	94	10	73	9	13	8	4	4	24	0	2	8	2	83	0	70	4
Pull tabs	42	13	46	11	70	3	14	39	50	10	18	19	8	0	55	3	7	42	1	146	4	161	13
Wire																							
Other																							

Kitty Hawk S.Nags Head Hatteras Cape Lookout Atlantic(E) Ft.Macon Indian Bch. Sugarloaf Bogue(W) Topsail Wrightsville  
 S.Shores Kill Devil Pea Is. Ocracoke Radio Is. Atlantic(W) Pine Knoll Emerald Is. Bogue(E) Newport Lee Island N.Mansboro

	S.Shores	Kill Devil	Pea Is.	Ocracoke	Radio Is.	Atlantic(W)	Pine Knoll	Emerald Is.	Bogue(E)	Newport	Lee Island	N.Mansboro											
PAPER																							
Bags	121	72	80	21	10	34	13	30	87	26	36	22	12	8	52	0	4	21	13	477	8	116	3
Cardboard	99	52	64	30	19	31	20	71	135	30	17	20	7	5	44	4	14	15	13	321	3	92	3
Cartons	61	6	46	17	47	7	20	30	111	27	14	8	16	1	32	3	3	7	3	196	2	52	4
Cups	244	39	97	5	12	59	29	34	222	54	24	15	26	21	71	5	13	21	34	389	10	256	7
Newspaper	68	71	39	3	1	6	2	1	5	7	3	3	0	34	14	0	4	7	2	128	0	75	1
Pieces	217	56	217	108	110	153	71	66	106	189	143	188	49	136	339	1	53	90	43	1942	8	1288	23
Other	45	19	75	10	75	26	44	25	5	11	30	16	4	26	132	5	12	19	1	688	0	240	7
WOOD																							
Crab/lobster traps	0	0	6	0	0	0	4	0	0	0	0	1	0	0	5	0	0	0	0	50	0	0	0
Crates	7	10	9	0	9	0	0	2	0	16	0	1	0	5	4	0	0	0	0	163	1	1	1
Pallets	16	15	11	2	4	0	6	0	0	0	3	0	0	1	2	0	0	1	0	128	0	4	0
Pieces	163	263	412	59	288	113	40	50	69	40	86	160	37	174	439	20	30	48	32	2546	20	880	20
Other	7	2	128	30	7	11	7	3	4	1	11	4	11	30	30	0	19	2	0	222	0	54	0
CLOTH																							
Clothing	156	35	134	30	65	154	29	49	137	20	37	28	6	10	92	11	16	27	16	344	16	218	30

TOTAL ITEMS/ZONE 8965 4108 9337 1855 6324 4893 3100 4448 6372 2153 4261 3631 2042 2972 12846 1364 1719 1769 882 26764 907 15868 2012

1989 National Beach Cleanup NORTH CAROLINA  
Raw Data Summary

	Carolina Beach	Kure Beach	Waynesboro	Pamlico	Tar Riv.	White Lk.	Shelley Lk.	Dan Riv.	Jordan Lk.	Falls Lk.	Lk.Hiwassee	STATE														
	S.Masonboro	Ft.Fisher	Zeke's Is.	Roanoke Riv.	Pungo Riv.	Holiday Is.	Lk.Johnson	Salem Creek	Hope Mills	Lk.Wheeler	Harris Lk.	Lk.Lure	TOTAL													
PLASTIC																										
Bags	76	192	47	137	16	53	25	18	50	4	151	11	20	5	10	17	312	34	36	10	11	0	13	6102		
Trash	2	2	5	0	1	2	1	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	197		
Salt	92	158	34	55	119	133	64	59	26	13	27	61	70	0	14	35	103	71	4	27	12	0	7	5173		
Other	252	339	37	141	233	139	488	115	101	306	110	15	219	36	56	57	310	117	9	54	32	30	120	10559		
Bottles	18	36	5	6	5	23	12	1	4	12	26	0	3	1	1	4	24	34	0	2	2	5	0	1118		
Bleach	14	23	5	0	17	10	30	26	9	4	40	2	44	7	6	10	55	12	2	3	4	3	1	1041		
Oil	64	26	12	4	8	34	14	1	9	6	19	1	14	2	2	8	7	26	3	5	0	0	8	1336		
Other	7	17	7	8	4	2	10	1	2	3	46	2	22	2	0	3	66	11	1	1	0	0	1	563		
Buckets	47	93	11	42	23	283	29	57	39	16	73	42	78	7	6	40	121	101	9	48	10	50	32	6402		
Caps/lids	12	206	0	82	0	191	0	0	45	0	0	0	0	0	0	0	46	1167	20	70	0	0	100	8378		
Cigarette butts	106	251	8	235	42	142	76	26	34	16	65	273	67	27	8	19	160	88	23	54	17	55	32	9408		
Cups/straws	2	2	0	4	1	5	3	31	0	0	14	0	0	1	2	3	6	4	0	5	0	40	8	366		
Diapers	11	9	4	4	1	29	7	10	0	5	7	5	8	7	0	2	17	6	3	0	5	1	2	1030		
Lighters	33	19	2	23	10	14	3	11	6	3	15	0	6	4	0	0	13	22	1	2	11	0	3	978		
Fishing line	4	8	2	0	0	5	1	1	0	0	0	0	0	0	0	5	3	0	0	0	0	0	0	214		
Net	0	8	5	0	1	23	0	2	0	4	0	0	0	0	2	4	0	0	0	0	0	0	0	273		
Long	9	12	3	5	6	33	6	3	5	0	8	4	40	1	0	1	17	21	0	7	13	0	2	607		
Short	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	73		
Floats, lures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	732	
Hardhats	5	1	0	2	1	45	0	10	0	0	0	0	2	0	0	0	6	0	0	0	0	0	0	0	0	0
Lightsticks	14	39	2	7	12	14	12	7	1	0	29	1	10	10	2	6	86	16	0	2	3	20	11	1370		
Milk/water jugs	307	334	2	195	76	999	161	120	27	30	95	213	196	19	27	20	138	217	20	36	0	0	11	11136		
Pieces	0	1	0	0	0	2	5	0	0	0	2	1	0	0	0	0	3	0	0	1	0	0	0	0	152	
Pipe thread	14	24	0	6	3	62	1	0	8	0	4	3	0	0	0	2	4	4	1	0	1	0	0	1106		
Rope	14	46	3	5	8	118	6	0	0	0	1	8	1	0	0	0	6	5	2	1	10	0	0	2358		
Sheeting	5	21	0	0	4	3	0	2	2	4	10	0	0	0	7	9	0	0	0	1	2	0	1	278		
Long	9	30	0	0	1	47	0	1	2	4	21	0	0	0	8	10	0	0	0	0	0	0	0	577		
Short	7	24	0	10	16	43	38	29	10	0	19	3	23	1	1	11	11	8	1	7	3	10	41	1065		
6-pack holders	4	1	0	0	2	42	0	0	3	0	0	24	0	3	3	0	13	1	2	1	0	0	0	743		
Strapping bands	0	0	0	1	1	2	0	1	0	0	1	0	0	0	0	0	39	2	0	0	0	0	0	120		
Syringes	1	5	0	1	1	18	0	0	40	0	0	2	2	0	0	4	12	0	0	0	0	30	0	1204		
Tampon app.	5	6	1	3	1	10	0	3	1	11	24	22	47	11	7	2	14	12	1	10	0	0	4	787		
Toys	4	11	0	1	1	7	1	0	3	0	0	0	0	0	0	2	3	3	2	3	1	0	1	283		
Vegetable sacks	0	1	0	0	0	0	0	0	1	0	5	0	0	0	0	0	1	0	0	1	0	0	0	140		
Write protector	0	1	0	0	0	0	0	0	1	0	5	0	0	0	0	0	1	0	0	1	0	0	0	0		
Other	33	21	5	13	15	177	35	15	6	4	5	42	21	10	4	8	7	73	7	2	2	0	9	2411		

Carolina Beach Kure Beach Waynesboro Pamlico Tar Riv. White Lk. Shelley Lk. Dan Riv. Jordan Lk. Falls Lk. Lk.Hiwassee STATE  
 S.Masonboro Ft.Fisher Zeke's Is. Roanoke Riv. Pungo Riv. Holiday Is. Lk.Johnson Salem Creek Hope Mills Lk. Wheeler Harris Lk. Lk.Lure TOTAL

GLASS	129	204	18	97	60	115	0	210	62	213	245	10	345	40	125	160	445	327	206	96	66	60	81	9616	
Bottles	10	31	0	6	1	14	3	0	1	6	23	0	4	4	6	11	4	125	1	6	0	0	9	735	
Food	5	5	6	0	0	9	1	5	0	2	1	0	1	2	0	0	111	19	0	0	0	0	0	327	
Other	4	0	2	0	0	1	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	145	
Light tubes	6	14	3	1	2	22	5	0	1	2	7	0	3	0	0	0	17	11	0	1	0	0	1	579	
Light bulbs	54	76	0	48	6	189	60	153	7	0	29	38	36	0	39	18	226	170	11	24	0	0	16	4514	
Pieces	0	2	0	0	0	19	2	0	3	1	3	1	0	0	6	0	1	24	0	1	0	0	0	154	
Other																									
-----																									
STYROFOAM																									
Buoys	9	4	3	3	1	22	0	1	2	4	8	1	0	0	0	0	9	9	3	0	0	0	0	0	446
Cups	211	170	31	208	98	158	321	34	66	190	195	15	200	57	27	85	183	105	21	38	43	0	78	7939	
Egg Cartons	0	9	2	1	0	5	1	2	4	4	27	1	1	0	0	1	3	11	0	0	1	0	4	341	
Fast-food	12	28	2	8	22	4	56	65	22	59	58	19	61	26	1	7	64	22	6	7	0	15	21	1618	
Heat trays	6	12	4	9	10	9	21	0	7	6	22	0	3	9	0	2	1	9	0	2	2	0	2	680	
Pieces	121	112	4	76	13	11	44	16	6	98	42	27	73	46	0	38	13	42	3	4	17	0	5	3577	
Large	826	371	8	210	16	815	148	89	11	93	47	112	512	100	0	120	133	328	14	14	0	10	63	12033	
Small	2	2	2	0	1	40	18	0	10	2	3	2	165	0	0	0	1	4	0	1	0	0	1	632	
Other																									
-----																									
RUBBER																									
Balloons	4	8	3	10	2	41	0	1	0	0	2	6	3	0	0	0	9	4	2	7	0	0	0	1368	
Gloves	1	18	5	1	4	5	0	0	1	0	6	0	0	0	0	0	8	5	0	0	0	0	1	215	
Tires	2	2	1	0	2	4	9	8	2	2	37	1	2	0	29	0	9	12	1	2	1	1	5	380	
Other	14	8	3	5	1	30	6	3	7	3	22	16	70	61	14	4	14	32	1	1	2	0	0	968	
-----																									
METAL																									
Bottle caps	11	93	10	97	1	33	285	39	31	6	45	34	73	14	11	10	213	46	22	38	28	0	46	3490	
Cans	10	13	30	36	5	11	16	2	0	18	28	1	24	9	1	5	11	64	1	0	0	0	13	1181	
Aerosol	622	518	38	335	197	277	216	134	64	145	253	102	399	90	278	57	179	380	134	131	21	0	138	12930	
Beverage	33	9	0	7	13	13	4	16	0	62	56	3	2	0	2	11	5	22	6	2	0	0	16	747	
Food	10	9	9	1	12	12	10	0	4	17	14	3	22	3	41	2	8	46	1	3	0	0	4	704	
Other	4	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	41	
Crab/fish traps	5	0	1	0	0	6	1	2	0	0	29	0	0	0	2	0	12	3	0	0	0	0	0	233	
Drums	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	80	
Rusty	83	21	4	18	4	37	21	5	15	2	88	3	50	0	17	0	162	49	4	3	0	0	4	1385	
New	10	21	2	59	2	9	24	0	1	0	1	27	26	2	2	8	6	88	16	23	0	0	34	864	
Pieces	8	7	0	8	0	8	6	1	4	2	14	8	3	0	2	0	25	19	2	0	1	0	1	605	
Pull tabs	74	32	4	19	4	35	26	5	3	24	54	6	12	1	22	1	10	97	12	5	0	0	4	1225	
Wire																									
Other																									

Carolina Beach Kure Beach Waynesboro Pamlico Tar Riv. White Lk. Shelley Lk. Dan Riv. Jordan Lk. Falls Lk. Lk.Hiwassee STATE  
 S.Masonboro Ft.Fisher Zeke's Is. Roanoke Riv. Pungo Riv. Holiday Is. Lk.Johnson Salem Creek Hope Mills Lk. Wheeler Harris Lk. Lk.Lure TOTAL

	8	29	7	31	0	10	17	33	14	4	75	15	26	1	40	8	79	8	7	14	5	0	9	1706
Bags	11	9	5	11	3	6	23	6	10	14	50	3	9	0	11	15	110	7	5	0	1	1	32	1451
Cardboard	13	12	1	7	3	7	21	30	6	0	30	1	14	9	0	16	33	12	5	6	3	0	15	957
Cartons	14	21	2	15	0	15	25	34	9	16	48	20	40	8	10	7	112	23	17	18	1	0	53	2195
Cups	3	3	1	7	0	3	4	10	2	0	39	90	4	2	10	0	27	2	0	0	0	0	17	698
Newspaper	99	267	30	268	8	185	144	197	85	9	108	11	237	16	47	19	35	145	41	13	0	0	40	7600
Pieces	6	3	2	12	2	0	1	0	19	0	11	3	9	4	10	3	32	125	0	6	0	0	2	1765
Other																								

WOOD

Crab/lobster traps	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67
Crates	3	4	12	2	0	1	1	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	256
Pallets	7	1	3	10	0	2	1	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	221
Pieces	40	466	9	488	8	129	1	10	23	0	126	8	6	0	1	0	173	7	1	0	1	0	0	7486
Other	6	5	1	3	0	11	0	1	1	22	18	2	0	1	1	0	0	10	0	0	0	0	0	665

CLOTH

Clothing	36	50	10	42	32	78	24	41	20	0	70	20	11	2	22	10	115	44	3	10	3	0	8	2311
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TOTAL ITEMS/ZONE 3705 4636 481 3149 1162 5111 2596 1704 959 1471 2757 1344 3342 661 941 894 4256 4530 693 829 335 331 1130 175410



Teamwork on the part of Oregon Telephone Pioneers was needed to remove heavy debris during Oregon's "Get the Drift and Bag It." *Photo by Landra Snow*

## OREGON

---



October 8, 1989  
2,251 Volunteers  
120 Miles Cleaned  
33,200 Pounds of Debris Collected  
86,967 Debris Items Reported

Coordinated By: Judie Neilson  
Oregon Department of Fish and Game  
P.O. Box 59  
Portland, OR 97207  
(503) 229-5406

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An empty tube of Japanese toothpaste, a bottle of hair restorer from Finland, and a portable toilet of unknown origin were among the items found by the 2,200 volunteers who joined in the October 7 cleanup of Oregon's beaches.

This annual fall event began in Oregon in 1984, and has since expanded to a national program with 22 coastal states involved. Oregon's 1989 "Get the Drift and Bag It" volunteers picked up about 16 tons of plastic, wood, and metal debris between Astoria and Brookings, bringing the total to more than 116 tons gathered since the cleanup started.

While I was with the Oregon Department of Fish and Wildlife, I organized Oregon's first cleanup in 1984, and this was my sixth cleanup. I noticed a definite trend in who participates in that this is becoming a regular, annual event for a lot of people. Many started in 1984 and have returned every year since.

Volunteers give many reasons for getting involved, but a comment by one 1989 participant in the Charleston area probably sums up the general feeling. Robin Davidson of North Bend wrote on her data card, "We believe in a clean and safe environment, and are concerned about marine life. We always have fun. It is kind of like a treasure hunt."

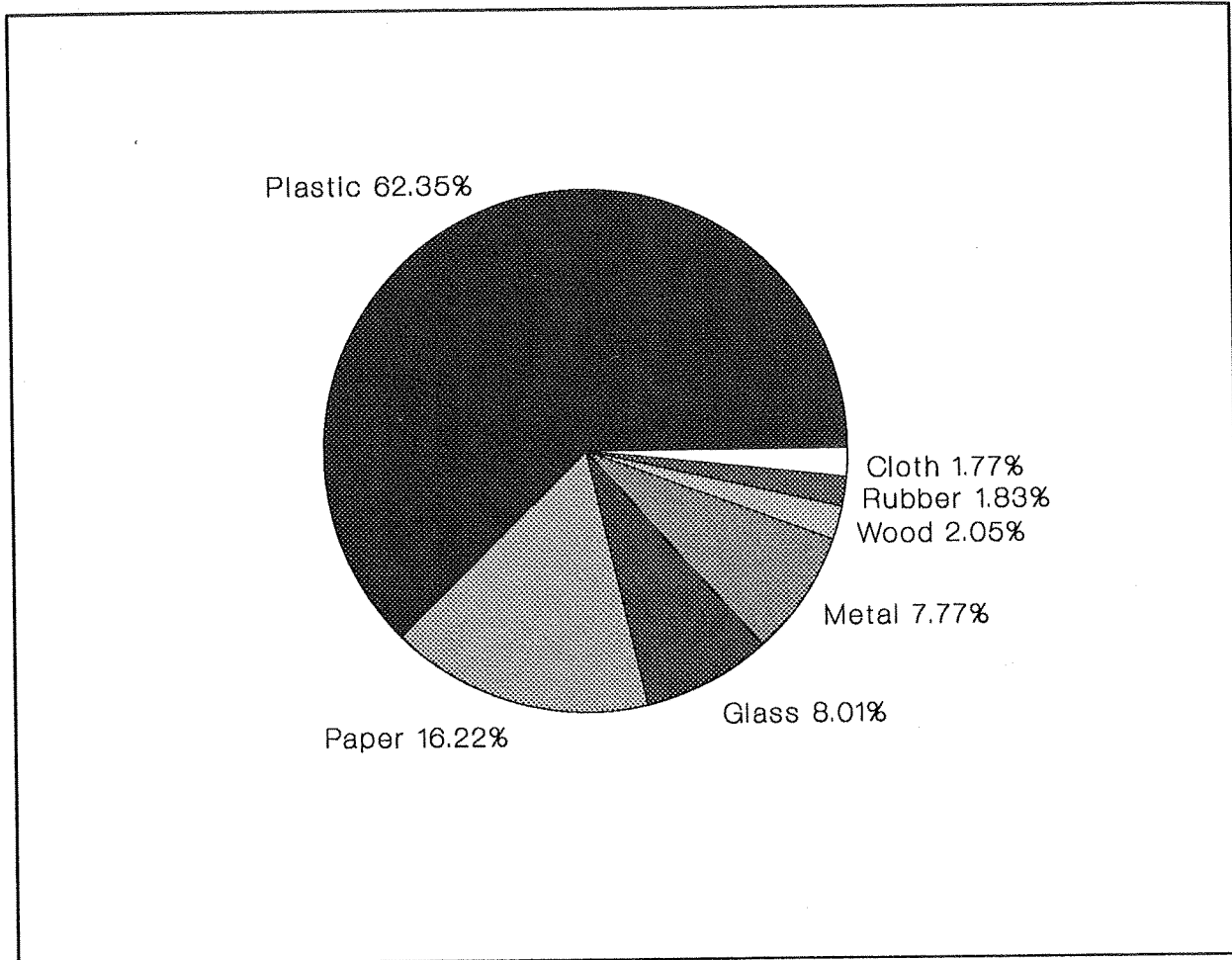
Judie Neilson

*Please note that Judie Neilson, the "Mother of Beach Cleanups," has not only changed her address, but she was married on November 10, 1989 and therefore has changed her name! Judie was last reported to be constructing 1,000 bluebird nesting boxes in Indiana--in her spare time of course! Judie can be contacted at:*

*Judie Hansen  
1502 South County Road, 525W  
Danville, IN 46122  
(317) 745-2948*

*Congratulations Judie, and keep up the great work!*

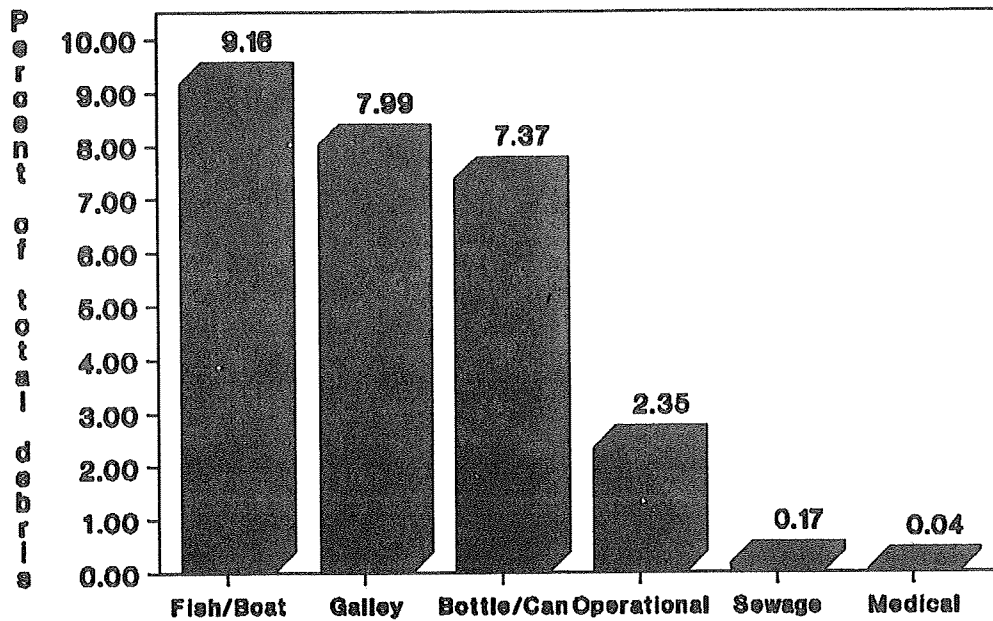
**PERCENT COMPOSITION OF OREGON'S BEACH DEBRIS:**



**OREGON'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic pieces	9,259	10.65
2. small foamed plastic pieces	8,704	10.01
3. paper pieces	5,401	6.21
4. miscellaneous plastic bags	5,229	6.01
5. plastic rope (2 feet or shorter)	3,968	4.56
6. plastic caps, lids	3,886	4.47
7. cigarette butts	3,800	4.37
8. plastic trash bags	3,672	4.22
9. glass pieces	3,344	3.85
10. foamed plastic cups	2,836	3.26
11. plastic cups, spoons, forks, straws	1,919	2.21
12. glass beverage bottles	1,649	1.90
<b>TOTAL</b>	<b>53,667</b>	<b>61.72</b>

**MAJOR TYPES AND SOURCES OF OREGON'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Arch Cape (to Columbia River)	66.22	miscellaneous plastic bags
Garibaldi (to Arch Cape)	56.20	paper pieces
Sandlake (to Garibaldi)	69.90	plastic pieces
Depoe Bay (to Cascade Head)	66.71	small foamed plastic pieces
Waldport (to Depoe Bay)	75.11	small foamed plastic pieces
Yachats (to Waldport)	72.01	plastic pieces
Florence (to Yachats)	86.05	plastic pieces
Reedsport (to Florence)	72.48	miscellaneous plastic bags
Coos Bay (to Reedsport)	67.25	small foamed plastic pieces
Sixes River (to Coos Bay)	72.70	miscellaneous plastic bags
Ophir (to Sixes River)	39.17	metal beverage cans, paper pieces
Brookings (to Ophir)	53.11	small foamed plastic pieces

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**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

**Debris Related**

gull entangled in fishing line  
dead seagull entangled in plastic six-pack ring  
dead seagull entangled in piece of netting  
dead seagull entangled in long plastic rope  
dead bird with plastic string wrapped around feet  
dead seagull entangled in plastic string  
dead seagull entangled in fishing line  
dead common murre entangled in plastic rope  
2 dead birds entangled in plastic rope  
dead cormorant entangled in plastic netting  
seagull (alive) entangled with fishing hook in mouth and trailing fishing line  
2 dead fish entangled in net

**Other Reports**

1,218 dead birds (includes 318 seagulls, 267 murre, 45 cormorants, 5 grebes, 2 mud ducks, 1 black-necked stilt, and 580 other birds)  
15 dead seals  
1 dead deer  
2 dead stingrays

\* all animals are listed as identified by volunteers.

**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Arch Cape	two surgical gowns, ice pick, bedsprings, mattress, numerous fireworks, manhole size tar (2-3 inches thick), 30 rolls of newspaper, doll arm
Garibaldi	nasal spray bottle, condoms, racquetball racquet, rocket launchers (fireworks), kite tail, croquette mallet sticks, bank statement, railroad spikes, men's undershorts, house slipper, sex wax container, glass bong
Sandlake	toilet seat, rubber wiggle worm, plastic baseball bat, motorcycle seat, porta-potty, "For Sale" sign, dune buggy, water heater, 252 linoleum tiles
Depoe Bay Waldport	condom, car bumper, 100-pound railing from Peter Iredale ship, women's panties styrofoam from Depoe Bay Fleet of Flowers, empty 35-pound can of shortening, wooden crate from Newport Shrimp Company, front end of car, plastic bait container from "Jerry Williams Bait (437-2188)," wooden crate from Riverside Fish Company, lawn mower, plastic pet food dish, plastic bag ("Sure-Strike Herring Bait")
Florence	underwear, douche bottle, hair dye tube, plastic pizza protector, rubber frog, pieces of wood window sill, "R-rated" clothing bag
Reedsport Coos Bay	men's BVD's, freezer fly swatter, baby bottle, barbed wire, refrigerator, fortune cookie fortune, Oregon Department of Agriculture Device License (dated 6-24-85), totally nude woman, unopened can of beer
Sixes River	false fingernail
Ophir	"Airwalk" skate board
Brookings	sanitary napkin, orange condom, fan belt, frying pan, men's underwear (red), electrical outlet, television tray, semi-truck mud flap, crab ring, girl's panties

\* not all items indicated as peculiar by volunteers are listed above.

**FOR INFORMATION ON OREGON'S 1990 BEACH CLEANUP CONTACT:**

Bill Hasty  
Oregon Department of Fish and Game  
P.O. Box 59  
Portland, OR 97207  
(503) 229-5406

**CLEANUP DATE: Saturday, October 13, 1990**

1989 National Beach Cleanup OREGON  
Raw Data Summary

	Arch Cape	Garibaldi	Depoe Bay	Waldport	Yachats	Florence	Reedsport	Coos Bay	Sixes River	Ophir	Brookings	STATE TOTAL
PLASTIC												
Bags	648	405	319	582	134	718	199	157	92	5	77	3672
Trash	47	2	25	16	4	70	1	9	9	0	4	193
Salt	1007	516	791	760	167	314	274	585	371	8	163	5229
Other	158	113	96	76	50	96	53	91	51	1	99	1030
Bottles	103	34	124	78	13	45	59	40	24	4	24	554
Beverage	45	29	47	27	6	18	31	33	17	2	37	300
Bleach	224	64	130	51	20	65	31	67	33	3	30	751
Oil	30	21	24	16	6	7	26	20	9	1	16	191
Other	303	426	359	783	132	546	121	258	173	10	309	3886
Caps/lids	348	259	377	989	184	330	109	118	73	0	46	3800
Cigarette butts	177	194	172	302	117	143	83	120	61	9	178	1919
Cups/straws	28	18	20	20	3	9	4	19	1	0	25	162
Diapers	12	33	31	39	17	30	18	29	5	1	19	253
Lighters	55	60	85	90	12	39	7	6	11	1	52	477
Fishing line	44	7	16	58	3	10	4	9	2	0	0	177
Long	45	15	15	208	16	40	5	27	2	2	1	421
Short	19	26	41	30	5	10	24	35	15	2	10	231
Floats, lures	0	0	0	1	0	0	0	0	0	0	0	1
Hardhats	8	6	5	54	5	13	4	3	1	0	0	110
Lightsticks	71	53	113	107	21	38	88	52	46	3	40	661
Milk/water jugs	771	924	917	1329	527	2711	247	257	264	5	337	9259
Pieces	8	45	7	63	10	3	9	3	4	0	0	162
Pipe thread	207	58	205	238	34	233	39	130	80	4	34	1328
Long	310	342	468	878	140	809	104	270	195	4	126	3968
Short	68	17	35	38	2	15	12	5	9	0	9	228
Sheeting	47	61	90	36	0	51	32	17	14	0	16	431
Long	91	56	72	66	11	76	33	21	14	2	36	541
Short	113	98	169	235	54	136	41	33	26	1	35	1058
6-pack holders	5	3	2	7	0	1	3	1	3	0	4	32
Strapping bands	34	21	13	25	4	24	1	10	8	0	2	150
Syringes	44	33	37	68	14	29	1	3	17	1	9	289
Tampon app.	99	101	162	162	17	97	43	29	8	0	75	871
Toys	9	3	77	71	3	12	0	0	2	0	7	195
Vegetable sacks	249	220	388	265	176	114	58	138	40	0	108	2021
Write protector												
Other												

	Garibaldi		Depoe Bay		Yachats		Reedsport		Sixes River		Brookings		STATE TOTAL
	Arch Cape	Sandlake	Waldport	Waldport	Florence	Coos Bay	Coos Bay	Ophir	Ophir	Ophir	Ophir	Ophir	
<b>GLASS</b>													
Bottles Beverage	258	189	157	266	249	34	90	50	126	62	10	158	1649
Food	43	25	64	22	26	0	16	21	19	11	1	17	265
Other	26	3	27	6	3	0	5	5	13	7	3	5	103
Light tubes	20	1	7	10	6	0	2	7	2	2	0	0	57
Light bulbs	18	94	23	10	12	4	9	8	11	3	8	3	203
Pieces	220	759	684	468	418	115	56	19	106	31	2	466	3344
Other	2	5	5	21	32	1	4	0	18	0	2	9	99
<b>STYROFOAM</b>													
Buoys	71	16	39	49	74	1	11	19	12	7	1	10	310
Cups	201	431	387	240	716	223	91	67	184	72	1	223	2836
Egg Cartons	31	6	18	17	34	7	12	9	11	6	3	5	159
Fast-food	62	121	121	120	144	55	35	78	92	44	3	91	966
Meat trays	66	85	209	28	156	47	86	68	164	61	1	57	1028
Pieces Large	114	142	276	114	147	57	79	24	110	35	2	79	1179
Small	341	760	767	1383	1426	515	2240	69	600	98	5	500	8704
Other	36	40	27	3	74	18	4	30	92	2	0	5	331
<b>RUBBER</b>													
Balloons	73	41	32	69	64	5	32	14	24	38	0	37	429
Gloves	40	15	24	11	23	5	16	5	20	5	1	6	171
Tires	17	11	31	27	8	6	1	4	10	9	1	16	141
Other	53	18	101	78	108	21	40	18	38	13	1	77	566
<b>METAL</b>													
Bottle caps	95	246	98	213	198	35	82	18	81	19	2	188	1275
Cans	50	33	52	6	41	2	18	22	24	11	3	47	309
Beverage	199	292	212	169	139	37	74	42	101	49	12	170	1496
Food	23	34	38	21	47	26	14	2	20	4	1	15	245
Other	25	10	34	10	37	4	17	10	20	14	2	10	193
Crab/fish traps	3	4	0	5	1	0	0	0	0	0	0	2	15
Drums Rusty	6	4	14	18	14	2	0	2	2	1	0	2	65
New	0	2	1	2	0	0	0	0	0	0	0	0	5
Pieces	31	84	207	58	78	15	5	4	37	4	0	29	552
Pull tabs	28	102	10	45	62	11	20	3	82	23	1	35	422
Wire	21	60	34	63	26	26	6	6	7	0	0	88	337
Other	70	149	101	41	103	15	27	23	52	16	0	40	637

	Arch Cape	Caribaldi	Depoe Bay	Waldport	Yachats	Reedsport	Coos Bay	Sixes River	Ophir	Brookings	STATE TOTAL	
-----												
PAPER-----												
Bags	110	159	128	129	28	50	46	104	12	1	104	930
Cardboard	268	149	132	191	62	117	38	74	35	61	50	1282
Cartons	143	102	53	77	30	38	43	68	34	1	63	752
Cups	78	125	102	82	54	128	28	64	18	1	92	831
Newspaper	186	183	248	75	46	37	21	103	31	0	53	1080
Pieces	601	1158	645	514	326	299	199	370	155	12	452	5401
Other	182	237	79	221	47	60	57	162	15	0	147	1315
-----												
WOOD-----												
Crab/lobster traps	3	0	6	2	0	0	0	0	0	0	0	11
Crates	12	5	3	28	1	8	2	0	1	0	1	64
Pallets	22	4	4	20	4	7	1	4	4	0	4	80
Pieces	134	79	197	250	29	119	42	29	69	0	43	1101
Other	19	36	26	38	16	25	12	9	14	0	4	212
-----												
CLOTH-----												
Clothing	160	153	144	169	93	103	36	80	43	6	126	1266
-----												
TOTAL ITEMS/ZONE	9588	10435	10712	14027	3930	10935	2936	5740	2758	217	5457	86967



Neither rain nor cold stopped Pennsylvania's volunteers, including Cherri and Bill Engell, from participating in the annual cleanup at Presque Isle State Park on Lake Erie. *Photo courtesy of Erie Times-News*

## PENNSYLVANIA

---

September 23, 1989  
11 Volunteers  
2 Miles Cleaned  
75 Pounds of Debris Collected  
1,419 Debris Items Reported

Coordinated By: Debbie Gutowski  
Presque Isle State Park  
P.O. Box 8510  
Erie, PA 16505  
(814) 871-4251

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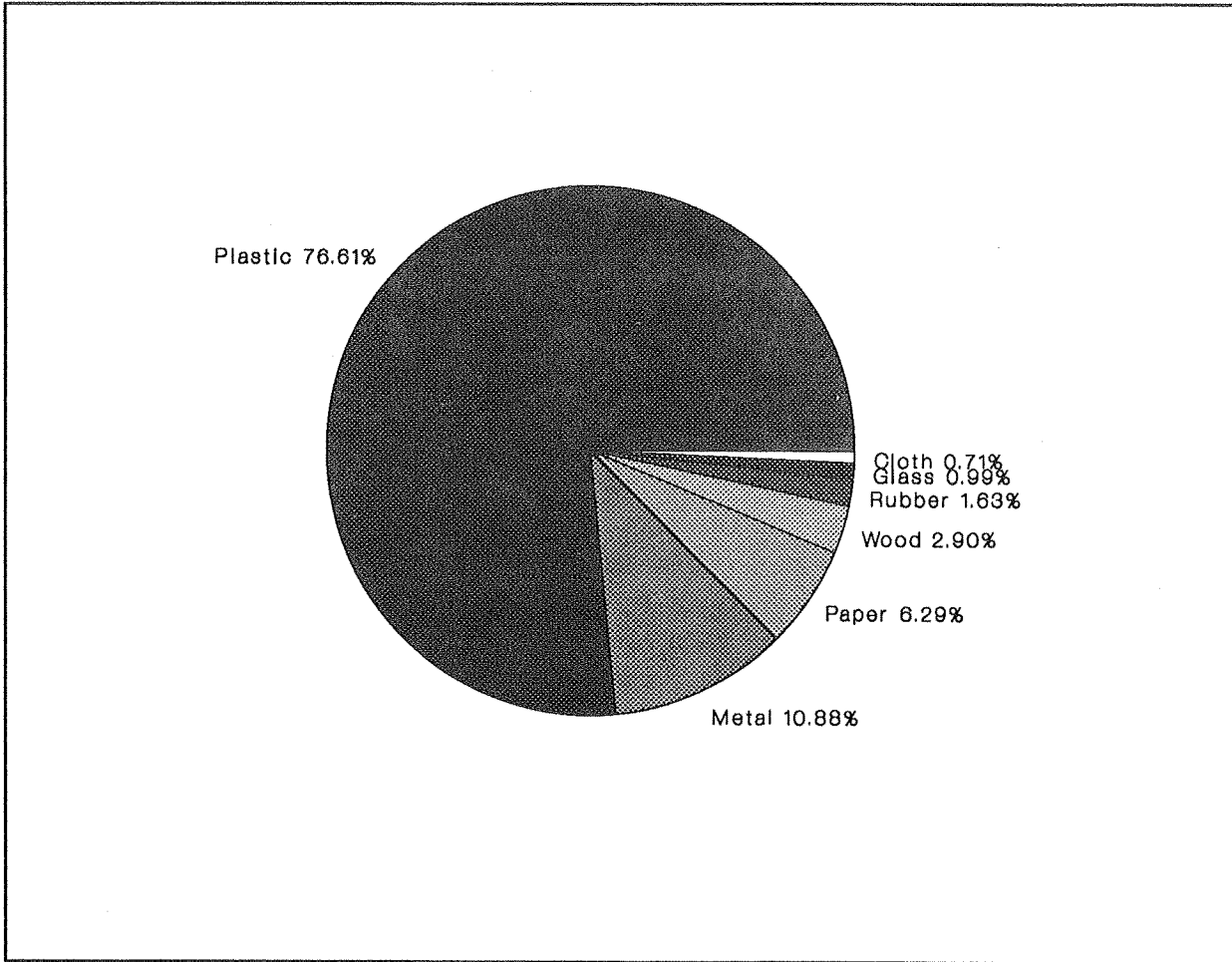
The cleanup of September 1989 at Presque Isle State Park was our second year of participation in the Coastweek Cleanup. We advertised for volunteers in news releases and radio spots.

Unfortunately, the day of the cleanup was cold, rainy, and very windy. But neither rain nor cold could stop the 11 volunteers who participated in the cleanup. Despite the tough working conditions, these volunteers cleaned two miles of beach and collected approximately 75 pounds of trash. Most of the trash collected was plastics.

McDonalds supplied hamburgers and orange drink for the volunteers and Putt-Putt Golf and Games supplied pencils for use with the data cards.

M. Frances Stein  
Presque Isle State Park

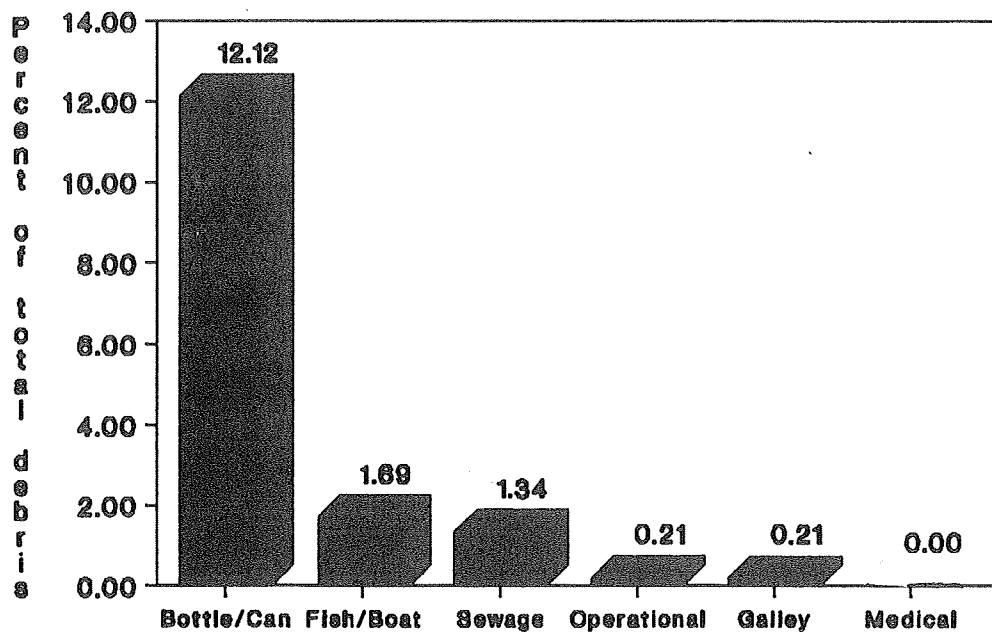
**PERCENT COMPOSITION OF PENNSYLVANIA'S BEACH DEBRIS:**



**PENNSYLVANIA'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic caps, lids	352	24.81
2. plastic cups, spoons, forks, straws	327	23.04
3. plastic pieces	230	16.21
4. metal bottle caps	86	6.06
5. paper pieces	44	3.10
6. metal beverage cans	43	3.03
7. wood pieces	41	2.89
8. miscellaneous plastic bags	37	2.61
9. metal pull tabs	22	1.55
10. small foamed plastic pieces	20	1.41
11. plastic tampon applicators	19	1.34
12. paper cups	18	1.27
<b>TOTAL</b>	<b>1,239</b>	<b>87.32</b>

**MAJOR TYPES AND SOURCES OF PENNSYLVANIA'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Data was collected for one zone in Pennsylvania, Presque Isle State Park.

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

None reported.

**MOST PECULIAR DEBRIS ITEMS REPORTED:** hair curler, two combs, taco sauce packet, D-cell batteries, tennis balls

**FOR INFORMATION ON PENNSYLVANIA'S 1990 BEACH CLEANUP CONTACT:**

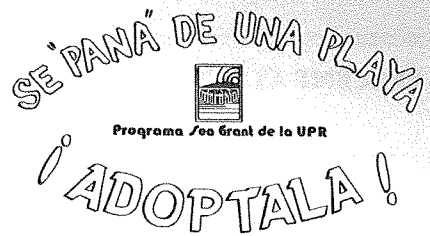
Frances Stein  
Presque Isle State Park  
P.O. Box 8510  
Erie, PA 16505  
(814) 871-4251

**CLEANUP DATE: Saturday, September 22, 1990**





Volunteers, including these in Puerto Rico, were often surprised to find strange items such as plastic light sticks.



## PUERTO RICO

---

September 22, 1989  
131 Volunteers  
3 Miles Cleaned  
2,850 Pounds of Debris Collected  
18,947 Debris Items Reported

Coordinated By: Ruperto Chaparro  
UPR Sea Grant Program, RUM-UPR  
P.O. Box 5000  
Mayaguez, PR 00709-5000  
(809) 832-8045

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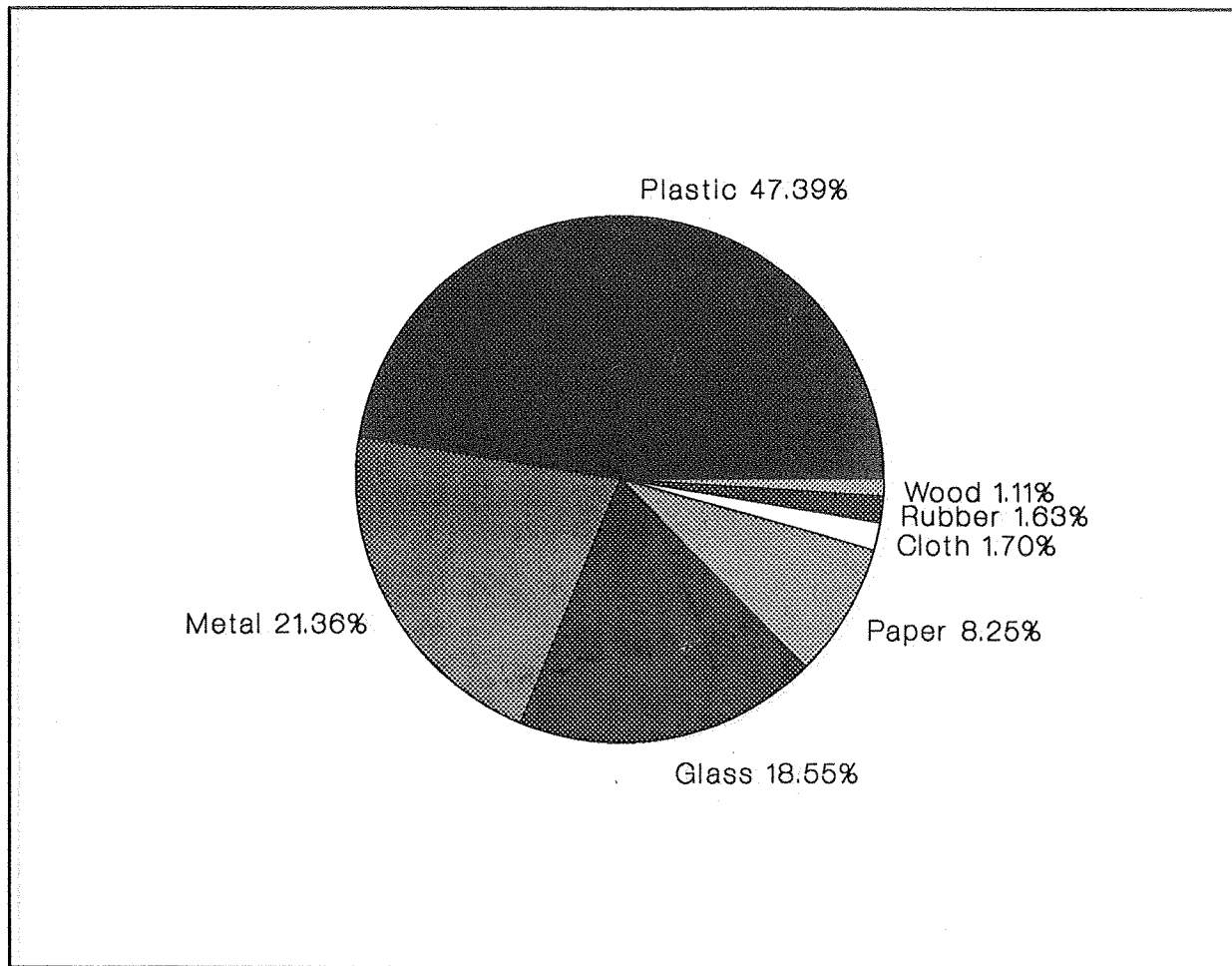
The 1989 Coastweeks cleanups coordinated by the University of Puerto Rico Sea Grant College Program were interrupted by the pass of Hurricane Hugo. Only the cleanup at Jobos beach at the municipality of Isabela was completed at the scheduled time because this part of the island was not hit by the hurricane. Two other cleanups were completed after Hugo's pass, at Pinones in the municipality of Loiza and at Ocean Park in San Juan. All the other cleanups scheduled for Coastweeks '89 were suspended since many of the volunteers had lost their houses and hence there were other priorities.

One hundred and thirty-one volunteers from the Ramey Environmental Group, the Gilberto Concepcion de Gracia High School, and the Rio Piedras Heights High School showed up to clean our beaches. All four beaches were covered adequately by volunteers. Most of the debris collected fell into the categories of plastic and glass. Several dead crustaceans and fish entangled in plastic six-pack holders were also found.

I would like to acknowledge all the adoptive parents and volunteers for helping to document marine debris and to the Department of Natural Resources for making the cleanup a success. In 1990 we will make up for what we could not do in 1989 with annual cleanups and ongoing educational activities to reduce littering. Publicity for Coastweeks 1990 will be more extensive with PSAs, news releases, a press conference, newsletter, and interviews. We hope to expand the number of adoptive parents and beaches including Mona Island, Vieques and Culebra.

Ruperto Chaparro

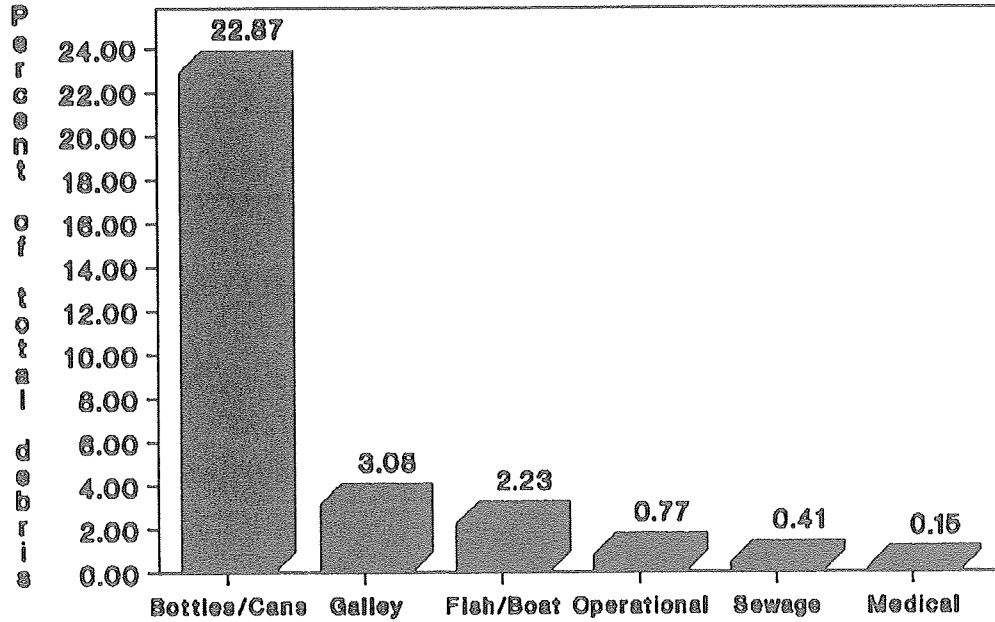
**PERCENT COMPOSITION OF PUERTO RICO'S BEACH DEBRIS:**



**PUERTO RICO'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic cups, spoons, forks, straws	3,710	19.58
2. glass pieces	2,821	14.89
3. metal pull tabs	2,325	12.27
4. plastic pieces	1,279	6.75
5. paper pieces	693	3.66
6. metal bottle caps	689	3.64
7. glass beverage bottles	633	3.34
8. cigarette butts	598	3.16
9. plastic caps, lids	423	2.23
10. miscellaneous plastic bags	388	2.05
11. plastic trash bags	326	1.72
12. cloth pieces	323	1.70
<b>TOTAL</b>	<b>14,208</b>	<b>74.99</b>

**MAJOR TYPES AND SOURCES OF PUERTO RICO'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Pinones	46.08	plastic cups, spoons, forks, straws
Ocean Park	45.41	plastic cups, spoons, forks, straws
Jobos	48.29	plastic cups, spoons, forks, straws

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

Debris Related	Other Reports
fish entangled in plastic six-pack ring	none
dead chicken (head missing) with one leg and string around foot	
dead fish in metal beverage can	
dead fish entangled in plastic	

---

**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Pinones watch, toothpaste tube, pudding can (full), bandage, animal jawbone, car parts, ear plug, toilet seat, laundry basket, pacifier, love note  
Ocean Park thermal underwear, surgical gloves, pantyhose, men's pants, unmatched pair of socks, sanitary napkin, flashlight, intravenous bag, baseball cap, bedsprings, baby bottle  
Jobos bed springs, condoms, baby bottle, unwrapped chocolate bar, plastic duck, ladies' underwear, sweater

**FOR INFORMATION ON PUERTO RICO'S 1990 BEACH CLEANUP CONTACT:**

Ruperto Chaparro  
UPR Sea Grant Program, RUM-UPR  
P.O. Box 5000  
Mayaguez, PR 00709-5000  
(809) 832-8045

**CLEANUP DATES: September 29-30 and October 6-7, 1990**

1989 National Beach Cleanup  
Raw Data Summary

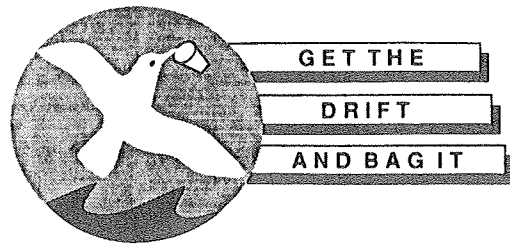
PUERTO RICO

		Ocean Park					
		Pinones		Jobos	TOTAL		
<b>PLASTIC-----</b>					<b>PLASTICO</b>		
Bags	Trash	173	74	79	326	Bolsas	De basura
	Salt	80	30	33	143		Saladitos
	Other	58	136	194	388		De otro tipo
Bottles	Beverage	70	28	133	231	Botellas	De bebidas, de gaseosas
	Bleach	8	2	90	100		De jabon, de limpiador
	Oil	35	5	44	84		De aceite, de lubricante
	Other	8	22	113	143		De otro tipo
Buckets		1	11	5	17	Cubetas	
Caps/lids		25	132	266	423	Tapas, chapas	
Cigarette butts		1	17	580	598	Cigarillo	
Cups/straws		417	668	2625	3710	Vasos, cucharas, tenedores, sorbetos	
Diapers		54	0	24	78	Panales	
Lighters		2	1	9	12	Encendedbres desechables	
Fishing line		10	2	20	32	Linea de pesca	
Net	Long	7	0	2	9	Red de pescalarga	
	Short	0	0	5	5	Corta	
Floats, lures		1	0	4	5	Carnada artificial	
Hardhats		10	9	8	27	Cascos duros	
Lightsticks		0	2	6	8	Varas (palos) de luz	
Milk/water jugs		11	6	31	48	Botellones de leche, de agua	
Pieces		238	78	963	1279	Pedazos (de plastico)	
Pipe thread		4	7	1	12	Cintas de goma (gomas)	
Rope	Long	3	0	14	17	Soga	Larga
	Short	16	0	76	92		Corta
Sheeting	Long	0	26	9	35	Chapa de plastico larga	
	Short	37	46	16	99	Chapa de plastico corta	
6-pack holders		25	4	116	145	Vuntas	
Strapping bands		2	6	17	25	Bandas de embalaje	
Syringes		0	14	14	28	Jeringuillas	
Tampon app.		11	6	60	77	Aplicadores de "tampones"	
Toys		17	13	14	44	Juguetas	
Vegetable sacks		4	0	3	7	Sacos de vegetales	
Other		17	12	76	105	Otro tipo	
<b>GLASS-----</b>					<b>VIDRIO</b>		
Bottles	Beverage	158	135	340	633	Botellas	De bebidas
	Food	13	3	12	28		De alimento
	Other	4	0	14	18		De otro tipo
Light tubes		0	0	3	3	Bombillas/tubos de luz fluorescente	
Light bulbs		5	6	1	12	Bombillas	
Pieces		94	426	2301	2821	Pedazos de vidrio	
Other		0	0	0	0	Otro tipo	
<b>STYROFOAM-----</b>					<b>GOMESPUMA</b>		
Buoys		0	0	1	1	Boyas	
Cups		46	26	88	160	Vasos	
Egg Cartons		0	10	7	17	Envases de huevos	
Fast-food		11	2	8	21	Envases de comidas tipo norteamericano	
Meat trays		22	26	37	85	Bandejas de carne	
Pieces	Large	14	22	49	85	Pedazos	Larga
	Small	18	88	85	191		Corta
Other		2	53	12	67	Otro tipo	

Ocean Park					
	Pinones		Jobos	TOTAL	
<b>RUBBER-----</b>					<b>GOMA</b>
Balloons	2	0	4	6	Globos
Gloves	1	0	8	9	Guantes
Tires	12	28	17	57	Gomas
Other	150	29	58	237	Otro tipo
<b>METAL-----</b>					<b>METAL</b>
Bottle caps	84	215	390	689	Tapas de botella
Cans	Aerosol	14	4	7	Latas
	Beverage	175	38	97	De aerosol
	Food	45	4	29	De bebidas
	Other	1	17	24	De alimento
Crab/fish traps		2	0	0	Otro tipo
Drums	Rusty	23	9	7	Trampas de cangrejos/peces
	New	0	2	0	Za facones de 55 galones - Mohosos
Pieces		109	60	149	Za facones de 55 galones - Nuevos
Pull tabs		170	456	1699	Pedazos de metal
Wire		2	35	33	Lenguetas de latas
Other		38	18	91	Alambre
				147	Otro tipo
<b>PAPER-----</b>					<b>PAPEL</b>
Bags		48	12	66	Bolsas
Cardboard		89	14	43	Cajas de carton
Cartons		48	46	39	Carton
Cups		48	12	58	Vasos
Newspaper		37	7	18	Periodoco
Pieces		109	104	480	Pedazos de papel
Other		19	70	196	Otro tipo
<b>WOOD-----</b>					<b>MADERA</b>
Crab/lobster traps		0	0	0	Trampas de cangrejo y langosta
Crates		5	2	1	Cajones de madera
Pallets		4	12	7	Paletas
Pieces		30	104	29	Pedazos de madera
Other		1	1	15	Otro tipo
<b>CLOTH-----</b>					<b>TELA (TRAPO)</b>
Clothing		166	35	122	Ropa/pedazos de trapo
<b>TOTAL ITEMS/ZONE</b>	<b>3164</b>	<b>3488</b>	<b>12295</b>	<b>18947</b>	<b>TOTALES</b>

## RHODE ISLAND

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September 23, 1989  
1000 Volunteers  
45 Miles Cleaned  
17,000 Pounds of Debris Collected  
71,911 Debris Items Reported

Coordinated By: Eugenia Marks  
Audubon Society of Rhode Island  
12 Sanderson Road  
Smithfield, RI 02917  
(401) 231-6444

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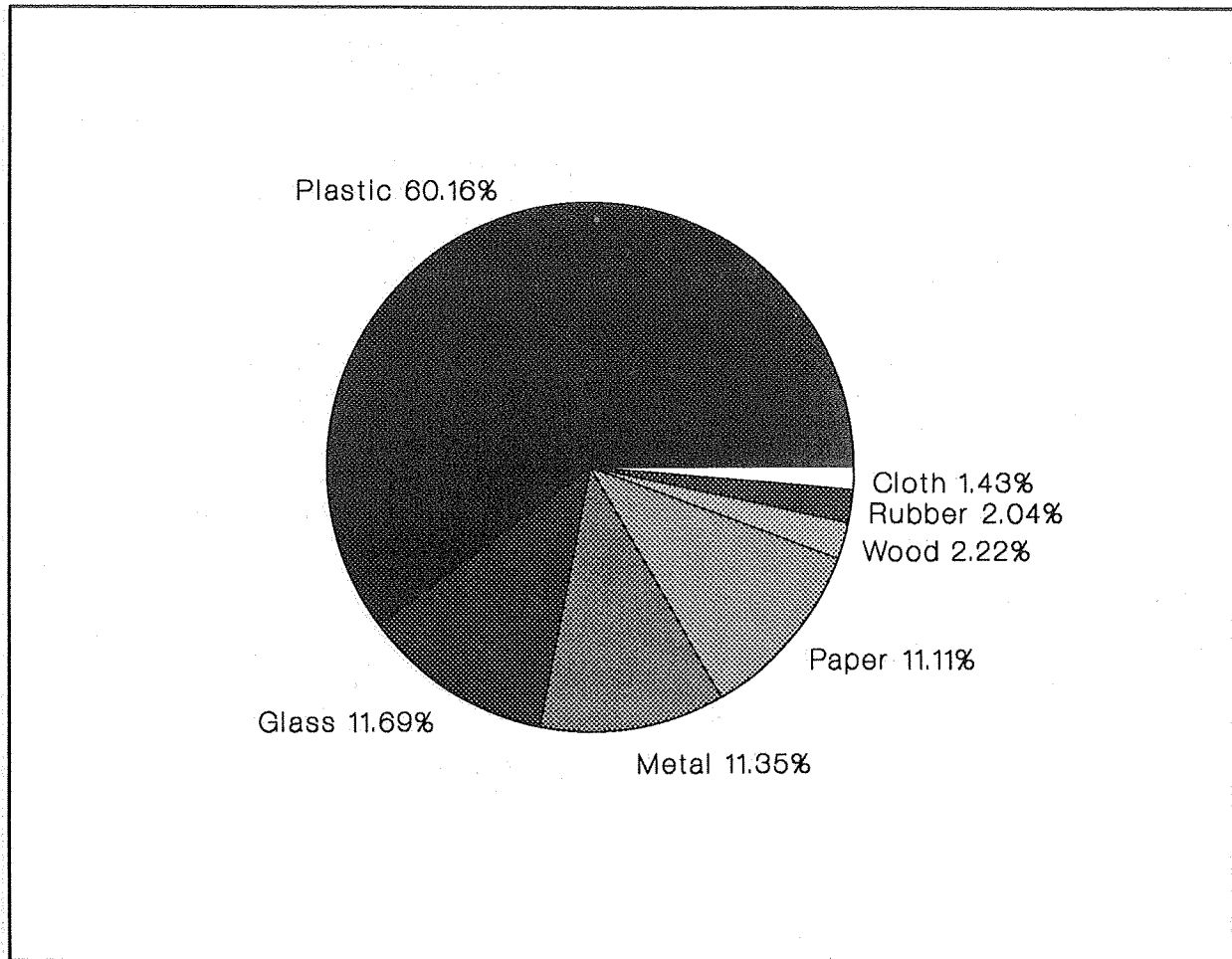
Volunteers for Rhode Island's 1989 "Get the Drift and Bag It" leaned into gale force winds from Hurricane Hugo's fringes and scooped litter faster than the breeze could blow it away. The light weight plastic skipped off the white caps and bounded up the sand toward the dunes, where volunteers captured the bits and pieces.

Thanks to all who turned out on our scheduled day, as well as to those who picked up trash on the following Saturday, to make another successful year.

Corporate sponsors from WLNE television and Hospital Trust National Bank brought out 400 more volunteers than have swept the beaches in previous years. It is through the efforts of the 1000 volunteers and dedicated work of organizations like the Audubon Society of Rhode Island, the Massachusetts Coastal Zone Management, and the Rhode Island Department of Environmental Management that our coastline and marine life will be saved!

Eugenia Marks

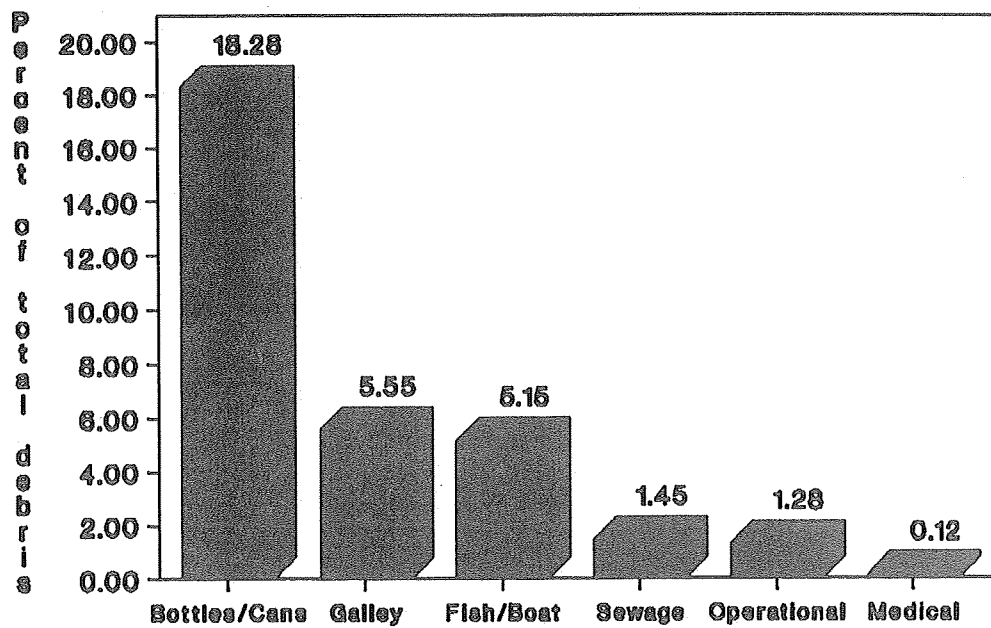
**PERCENT COMPOSITION OF RHODE ISLAND'S BEACH DEBRIS:**



**RHODE ISLAND'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic pieces	5,415	7.64
2. plastic cups, spoons, forks, straws	5,246	7.40
3. glass pieces	3,881	5.47
4. glass beverage bottles	3,781	5.33
5. metal beverage cans	3,684	5.20
6. plastic caps, lids	3,393	4.78
7. paper pieces	3,273	4.62
8. miscellaneous plastic bags	3,188	4.50
9. small foamed plastic pieces	3,000	4.23
10. foamed plastic cups	2,867	4.04
11. plastic trash bags	2,447	3.45
12. plastic beverage bottles	2,202	3.11
<b>TOTAL</b>	<b>42,377</b>	<b>59.76</b>

**MAJOR TYPES AND SOURCES OF RHODE ISLAND'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Westerly	71.13	plastic cups, spoons, forks, straws
Charleston	66.13	plastic pieces
South Kingston	45.79	metal beverage cans
Narragansett	57.11	plastic cups, spoons, forks, straws
North Kingston	41.29	glass beverage bottles
East Greenwich	43.13	glass pieces
East Providence	56.59	glass beverage bottles
Barrington	87.85	plastic pieces
Bristol Harbor	54.67	glass pieces
Mt. Hope Bay	77.56	plastic trash bags
Portsmouth	58.65	plastic pieces
Providence	78.01	plastic pieces
Middletown	59.76	plastic cups, spoons, forks, straws
Tiverton	53.25	cigarette butts
Little Compton	62.05	foamed plastic cups

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**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

None reported.

**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Westerly	toilet bowl float, sleeping bag, medical centrifuge vial, killer whale blow-up toy
Charleston	large aluminum part (from airplane?)
North Kingston	"Homo Erotic" magazine pages
East Greenwich	baby's swimming pool, 25-foot rubber casing, hockey stick
East Providence	gas tank and suspension system for truck, bowling ball
Bristol Harbor	cork stoppered jar with urine sample, boat trailer, cans containing urine, tomato plant with eight tomatoes growing on it
Mt. Hope Bay	snow ski
Portsmouth	medical thermometer, cloth strawberry, dirt bike

\* not all items indicated as peculiar by volunteers are listed above.

**FOR INFORMATION ON RHODE ISLAND'S 1990 BEACH CLEANUP CONTACT:**

Eugenia Marks  
Audubon Society of Rhode Island  
12 Sanderson Road  
Smithfield, RI 02917  
(401) 231-6444

**CLEANUP DATE: Saturday, September 22, 1990**

1989 National Beach Cleanup

Raw Data Summary

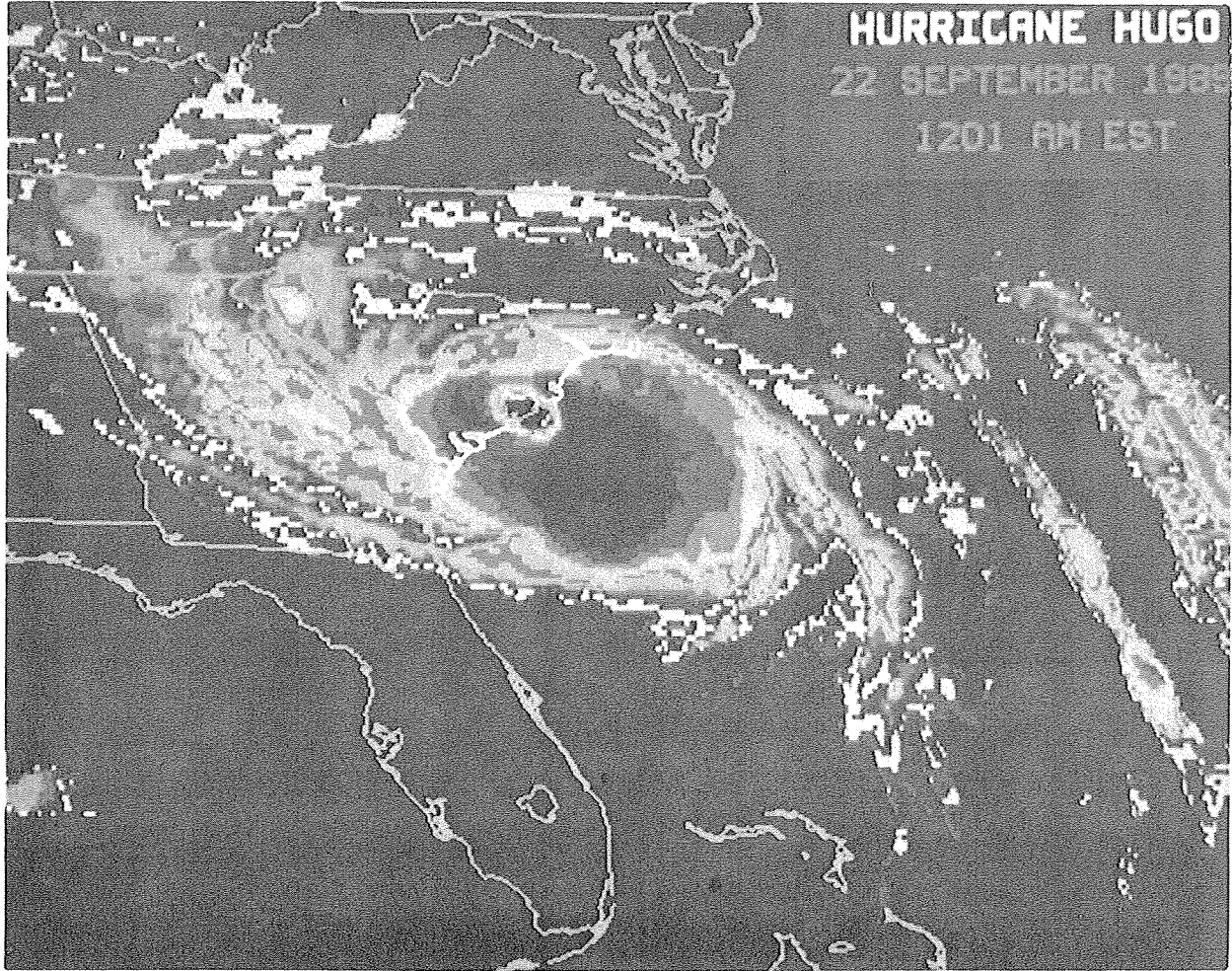
RHODE ISLAND

	Charlestown		Narragansett		E.Greenwich		Barrington		Mt.Hope Bay		Prudence		Tiverton		STATE TOTAL
	Westerly	S.Kingston	N.Kingston	N.Kingston	E.Providence	Bristol Harbor	Bristol Harbor	Portsmouth	Middletown	Little Compton	STATE TOTAL				
<b>PLASTIC</b>															
Bags	313	53	0	153	12	154	492	33	282	301	317	100	174	61	2447
Trash	150	0	0	9	0	0	4	0	0	0	2	16	0	1	182
Salt	283	161	0	207	176	189	408	83	186	158	633	267	123	213	3168
Other	282	97	0	70	18	163	446	7	299	62	387	165	147	37	2202
Beverage	78	31	10	11	1	2	104	0	48	26	40	66	43	4	467
Bleach	73	18	3	2	1	95	152	0	37	19	42	36	12	18	510
Oil	57	8	0	86	7	17	53	14	53	16	47	50	14	15	438
Other	227	10	0	4	1	9	24	0	14	4	120	14	12	6	445
Buckets	835	79	10	200	59	254	446	109	216	57	362	292	320	138	3393
Caps/lids	0	0	0	288	1	0	135	64	72	38	133	0	465	260	1456
Cigarette butts	1256	214	12	584	73	177	572	210	330	99	657	345	520	174	5246
Cups/straws	63	0	0	23	1	11	2	0	15	1	27	1	29	3	188
Diapers	110	61	4	14	8	29	114	4	27	7	39	48	23	9	497
Lighters	51	19	0	32	6	71	73	0	101	17	54	11	53	59	549
Fishing line	11	5	3	5	1	1	18	7	4	1	68	2	21	12	159
Net	8	18	0	23	5	2	10	0	17	2	15	6	28	7	142
Long	43	32	0	5	0	6	15	2	23	3	21	5	14	5	176
Short	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
Floats, lures	4	2	0	0	2	2	18	0	1	1	6	1	9	1	69
Hardhats	106	34	7	8	8	25	129	1	75	10	47	27	68	20	569
Lightsticks	338	352	0	392	54	271	473	601	421	286	1053	695	321	158	5415
Milk/water jugs	2	0	0	2	0	3	0	0	3	0	6	1	0	1	18
Pieces	70	41	8	49	7	15	37	0	56	21	106	49	27	41	531
Pipe thread	146	92	0	212	26	16	66	8	46	41	165	99	38	65	1045
Rope	6	10	11	3	1	5	21	0	4	1	47	6	3	9	127
Long	25	39	0	7	11	16	30	6	32	3	63	15	1	24	272
Short	97	72	1	9	31	151	74	10	234	2	82	65	85	22	986
6-pack holders	31	80	0	24	18	21	18	2	62	26	65	70	43	14	484
Strapping bands	54	1	0	0	2	4	3	2	1	1	9	2	4	0	83
Syringes	165	188	5	18	10	46	282	23	50	20	87	95	27	7	1027
Tampon app.	57	13	3	15	9	15	43	20	35	9	61	24	66	17	389
Toys	37	0	0	14	7	33	3	0	35	11	41	42	10	0	233
Vegetable sacks	1	42	0	1	0	7	13	0	3	0	4	1	63	2	143
Write protector	56	39	4	39	119	51	215	62	257	50	149	135	230	86	1492
Other															

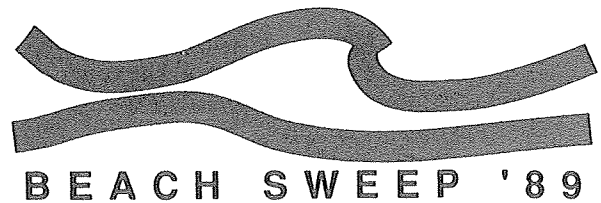
	Charlestown		Narragansett		E.Greenwich		Barrington		Mt.Hope Bay		Prudence		Tiverton		STATE TOTAL	
	Westerly	S.Kingston	N.Kingston	E.Providence	Bristol Harbor	Portsmouth	Middletown	Little Compton								
<b>GLASS</b>																
Bottles	348	124	50	190	405	537	785	7	388	18	406	52	252	199	20	3781
Food	52	5	0	0	1	8	15	0	6	0	45	1	43	2	36	214
Other	4	22	0	2	0	5	48	0	3	4	36	1	1	1	0	127
Light tubes	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	3
Light bulbs	2	5	0	0	0	2	13	0	5	0	2	2	10	1	21	63
Pieces	101	13	0	447	58	633	755	16	693	73	809	59	162	62	0	3881
Other	1	1	0	2	23	3	65	1	2	1	118	1	1	11	0	230
<b>STYROFOAM</b>																
Buoys	64	9	5	10	0	1	26	0	20	0	11	11	8	6	1	172
Cups	528	122	26	141	44	198	463	0	314	65	435	178	238	155	60	2867
Egg Cartons	7	1	0	7	1	0	14	0	6	2	3	1	7	0	0	49
Fast-food	75	24	11	13	19	35	123	0	97	9	72	23	167	30	20	718
Meat trays	19	6	2	3	2	3	45	0	13	6	22	4	41	4	0	170
Pieces	164	54	13	14	19	62	197	2	81	26	100	65	103	13	0	913
Small	531	266	25	318	35	172	362	2	539	78	359	120	155	38	0	3000
Other	6	3	0	2	3	5	80	0	2	0	35	3	13	11	0	163
<b>RUBBER</b>																
Balloons	142	63	7	33	9	5	19	28	44	8	52	35	99	9	16	569
Gloves	8	1	0	5	0	23	30	1	7	0	13	10	10	0	2	110
Tires	17	5	0	0	3	3	108	1	15	0	29	13	1	3	0	198
Other	27	16	0	101	28	31	98	6	61	12	124	16	33	18	0	571
<b>METAL</b>																
Bottle caps	145	135	30	183	39	84	151	0	331	12	114	20	324	188	17	1773
Cans	47	5	2	2	3	11	89	0	47	2	15	5	34	4	4	270
Beverage	412	174	33	140	284	510	429	2	358	60	600	217	220	235	10	3684
Food	41	6	0	4	2	11	6	0	20	2	14	2	27	11	4	150
Other	8	4	0	8	1	12	34	1	4	8	32	6	11	5	0	134
Crab/fish traps	9	3	3	3	0	4	0	0	1	0	0	0	2	0	0	25
Drums	5	0	0	15	1	0	92	0	6	1	7	0	2	0	0	129
Rusty	2	0	0	3	0	0	1	0	0	0	0	0	0	0	0	6
New	31	29	0	48	12	42	86	1	180	14	59	11	25	46	0	584
Pieces	36	41	30	50	20	34	54	0	45	1	32	4	149	41	0	537
Pull tabs	9	3	3	10	1	19	57	1	18	7	24	7	15	13	0	187
Wire	21	6	0	60	46	56	52	0	48	23	149	39	36	46	0	582

	Westerly	Charlestown	Narragansett	E.Greenwich	Barrington	Mt.Hope Bay	Prudence	Tiverton	STATE							
	S.Kingston	N.Kingston	E.Providence	Bristol Harbor	Portsmouth	Middletown	Little Compton	TOTAL								
<b>PAPER</b>																
Bags	236	10	0	39	11	69	118	1	107	9	62	24	154	25	30	895
Cardboard	72	9	3	34	3	50	73	0	53	7	98	20	148	48	0	618
Cartons	95	17	5	31	15	81	77	0	56	9	81	9	37	43	0	556
Cups	197	67	12	77	7	181	208	0	226	8	139	21	236	85	20	1484
Newspaper	28	13	2	24	5	24	45	0	38	1	30	1	25	6	0	242
Pieces	226	165	5	382	88	371	296	18	331	105	568	197	309	212	0	3273
Other	69	124	0	60	19	43	74	83	40	8	190	48	15	47	0	820
<b>WOOD</b>																
Crab/lobster traps	6	3	0	6	0	0	5	0	1	0	0	1	2	0	0	24
Crates	11	2	0	1	0	4	10	0	1	0	3	0	4	0	0	36
Pallets	3	0	0	6	0	0	17	0	1	0	1	3	2	0	0	33
Pieces	82	57	6	200	1	65	365	7	174	13	181	38	67	61	0	1317
Other	11	3	0	56	8	7	17	0	14	2	28	8	5	8	0	167
<b>CLOTH</b>																
Clothing	105	43	2	44	43	153	160	2	84	20	162	47	48	102	1	1016

TOTAL ITEMS/ZONE 9038 3472 356 5283 1935 5418 10255 1448 7519 1907 10216 4174 6235 3279 477 70911



## SOUTH CAROLINA



September 23, 1989  
Canceled Due to Hurricane Hugo

Coordinated By: Jennie Summerall  
South Carolina Sea Grant Consortium  
287 Meeting Street  
Charleston, SC 29401  
(803) 727-2078

As Saturday, September 23 approached last fall, we at the South Carolina Sea Grant Consortium looked forward to the state's second annual coastwide cleanup. Alarmed by weather reports early that week, we watched aghast as it became clear that Hurricane Hugo was likely to hit South Carolina just in time for Beach Sweep '89. By Wednesday morning we had officially cancelled the Sweep, and by Friday morning the storm had come and gone, leaving absolute chaos in its wake. There was no question of a rain date for our cleanup event. Most beaches were inaccessible for weeks.

Now that things are back to nearly normal in South Carolina it's apparent that the message of Beach Sweep did not go unheard. In fact, some residents are unaware that South Carolina Beach Sweep '89 never actually took place! Developments in last year's program will undoubtedly stand us in good stead as we plan for Beach Sweep 1990.

South Carolina's first beach cleanup was held in 1988, and was recognized with a national Take Pride in America Award. Building on the success of that event, South Carolina Sea Grant hired Jennie Summerall for a six-month position as state coordinator of the 1989 cleanup. Working with Virginia Beach, SC Sea Grant's Public Information Specialist, the coordinator was responsible for fundraising, promotion, education, and volunteer organization. The state was divided into five zones, each overseen by area coordinators: Beth Day of the SC Marine Extension Program (Horry and Georgetown), Dan Bell of SC Parks, Recreation and Tourism (Charleston), Dave Smith of SC Marine Extension Program (Edisto), Nancy Schaaf of Trash and Litter Control for Beaufort County (Beaufort), and Sharon Richardson-McLain of the Coastal Zone Education Center (Hilton Head). Zone captains were recruited in each area to help with volunteer organization on the day of the Sweep. Approximately four thousand participants were expected for Beach Sweep '89. Among them were sportsfishing clubs, divers planning an underwater Sweep, shrimpers planning an island cleanup, school groups, Governor Carroll Campbell and many more.

Major monetary donors to South Carolina Beach Sweep '89 (\$500 or more) were the Governor's Task Force on Litter, the SC State Development Board, Kiawah Resort Associates, the Post and Courier Foundation, and Amoco. Other sponsors provided or paid for specific products: the Planters Lifesaving Company sponsored pencils, Burger King sponsored ten thousand Beach Sweep bumper stickers, Dataw Island sponsored visors for zone captains, Sonoco provided plastic garbage bags, Oneita provided a discount on t-shirts (which were sold for \$8.00 each), Furlong Printing printed brochures, and International Paper paid the mailing costs for these. In addition, the SC Broadcaster's Association assisted with public service announcements, and Sunbelt Coca-Cola Bottling sponsored extensive radio advertising.

Recycling was a primary educational focus of the 1989 Beach Sweep campaign. With the help of Waste Management, state firefighters, and Amoco, plans were made to recycle debris collected in the cleanup. Aluminum cans were to have gone to the firefighter's ACBC (Aluminum Cans for Burned Children) program. Thanks to Amoco, most of the plastic trash had been destined for transformation into "plastic lumber" benches for state beaches.

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By combining the Center for Marine Conservation's slide show on plastic debris and a series of recycling slides, a new slide show has been created addressing both issues. The South Carolina Wildlife Federation made it possible for us to duplicate this show, and twenty copies will be widely circulated this spring and beyond. Another part of our recycling emphasis was a pamphlet printed by SC DHEC which was to have been distributed to Beach Sweep volunteers. These now will be distributed with the slide show. Our seventy zone captains were sent subscriptions to GARBAGE magazine. The zone captain network promises to be an important element in future Beach Sweep success.

As we look ahead to Beach Sweep 1990, we're certain that public awareness of the hazards of marine debris, Marpol regulations and recycling will remain important goals. In addition we may emphasize litter laws, the provision of containers at docks and beaches, and the start-up of an Adopt-A-Beach program. One year after Hurricane Hugo, both the animals and human inhabitants of South Carolina will benefit more than ever from a coastal cleanup campaign. Onward to September 1990!

Jennie Summerall

**FOR INFORMATION ON SOUTH CAROLINA'S 1990 BEACH CLEANUP CONTACT:**

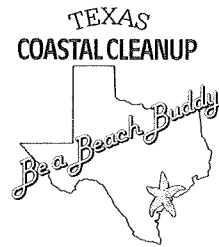
Virginia Beach  
South Carolina Sea Grant Consortium  
287 Meeting Street  
Charleston, SC 29401  
(803) 727-2078

**CLEANUP DATE: Saturday, September 15, 1990**



Young "Beach Buddies" work together to remove a large mass of rope from Padre Island National Seashore.  
*Photo by Linda Maraniss, CMC*

## TEXAS



---

September 23, 1989  
8,751 Volunteers  
164 Miles Cleaned  
316,000 Pounds of Debris Collected  
448,557 Debris Items Reported

Coordinated By: Linda Maraniss  
Center for Marine Conservation  
1201 West 24th Street  
Austin, TX 78705  
(512) 477-6424

Angela Farias  
Texas General Land Office  
1700 N. Congress Avenue  
Austin, TX 78701  
1-800-85BEACH or (512) 463-5108

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In September 1986, the Center for Marine Conservation sponsored the first Texas Coastal Cleanup. This inspired the Texas General Land Office to create the Adopt-A-Beach Program which conducts two statewide cleanups each year. Currently more than 17 groups have adopted 172 miles of accessible Texas coast. A total of 39,000 volunteers have picked up over 1,900 tons of trash from Texas beaches during the cleanups.

The fourth annual Texas Coastal Cleanup, co-sponsored by the Center for Marine Conservation and the Adopt-A-Beach Program, was held on Saturday, September 23 from the borders of Mexico to McFadden Beach near Louisiana. Approximately 8,751 "Beach Buddies" traveled to the coast from all over the state, making this the largest beach cleanup ever held in Texas.

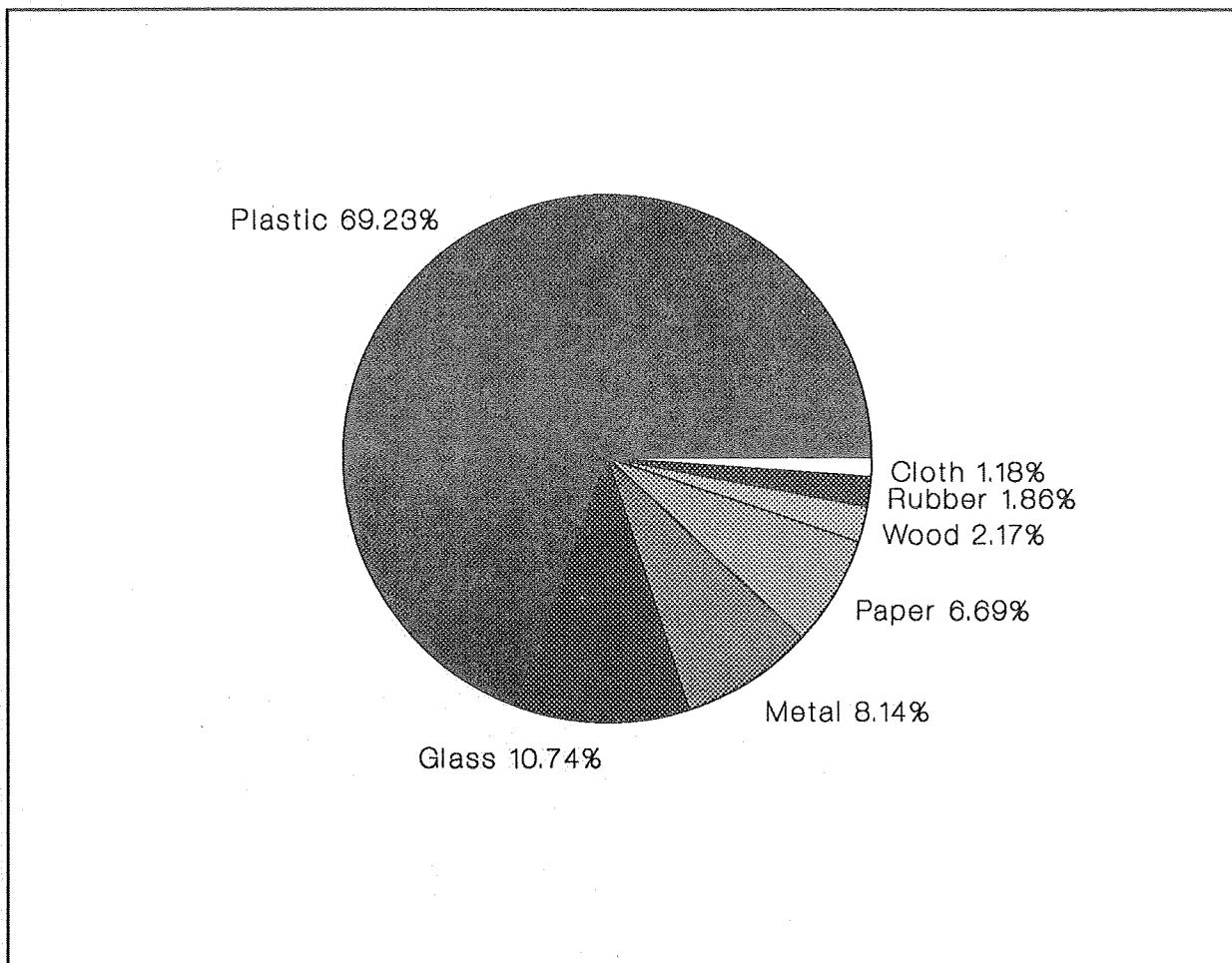
The theme for the 1989 cleanup was "Bring a Buddy to the Beach." Many Texas state and congressional legislators participated in the cleanup. Senator Lloyd Bentsen urged Beach Buddies to come to the coast in a radio public service announcement and Lucky the Dolphin invited everyone to help clean the beaches in a television spot.

The results of this cleanup were amazing. Volunteers cleaned not only the beaches but several bay areas as well. School groups from all over Texas arrived by car and school bus. Following the cleanup, volunteers returned their data cards and received a special "thank you" certificate and button. At some locations volunteers were treated to refreshments. Donations in the form of equipment, supplies, and food helped make this year's cleanup a huge success. The Lower Colorado River Authority printed 7,000 posters. The Texas Hotel Motel Association and the Center for Marine Conservation arranged for 16 coastal hotels to offer Beach Buddy discounts to out-of-town volunteers. Mobil Oil Corporation generously donated 350,000 trash bags to the beach cleanup campaign in Texas.

The Center for Marine Conservation and Adopt-A-Beach Program extend a heartfelt "thank you" to our volunteer zone captains, who do an excellent job coordinating their local cleanups. These special people include: Joe Ideker, Virginia Decker, Russell Osborne, Don and Wendy Flint, Ray Allen, Karen Adams, Chris Sandstrom and the Port Aransas Clean Team, John Washburn, Marlene Paul, Carol Allen, Glenda Stephens, J.J. House, Pat Ratcliff, Kim McAdams, Charles Moss, Russ O'Connor, Laura Olafson, May Ann Young, and Dennis Swearingen.

Linda Maraniss  
Angela Farias

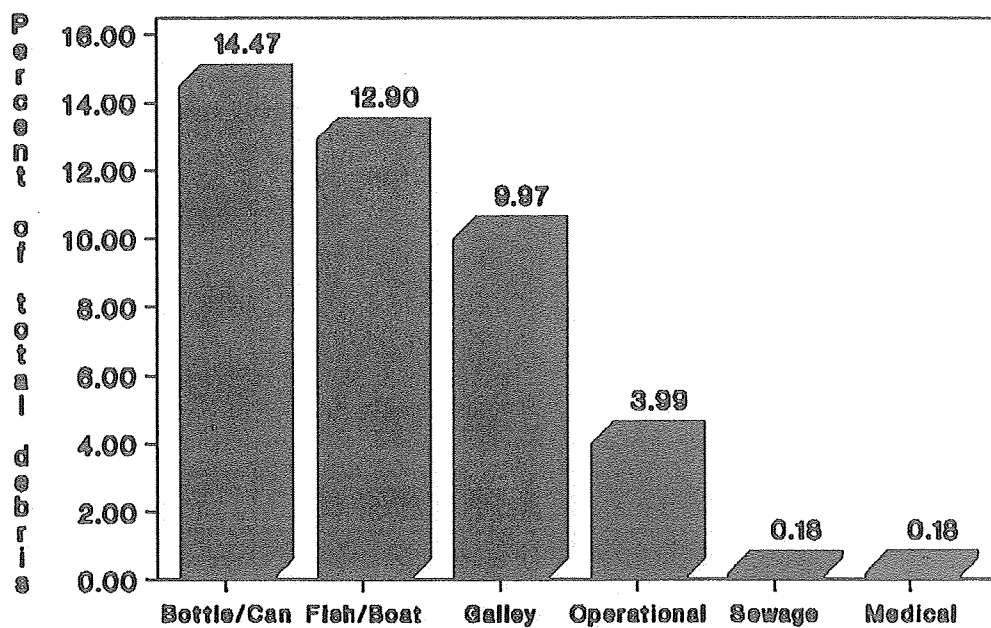
**PERCENTAGE COMPOSITION OF TEXAS' BEACH DEBRIS:**



**TEXAS' 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic pieces	40,447	9.02
2. plastic caps, lids	29,437	6.56
3. glass pieces	22,317	4.98
4. small foamed plastic pieces	20,638	4.60
5. plastic trash bags	19,062	4.25
6. glass beverage bottles	18,630	4.15
7. plastic rope (2 feet or shorter)	18,538	4.13
8. plastic cups, spoons, forks, straws	16,925	3.77
9. miscellaneous plastic bags	15,318	3.41
10. foamed plastic cups	13,775	3.07
11. paper pieces	12,131	2.70
12. plastic rope (longer than 2 feet)	11,901	2.65
<b>TOTAL</b>	<b>239,119</b>	<b>53.30</b>

**MAJOR TYPES AND SOURCES OF TEXAS' BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Beaumont	70.13	plastic caps, lids
Bolivar Peninsula	70.57	plastic pieces
Galveston	68.22	plastic pieces
Brazoria	65.01	plastic pieces
Bay City	64.20	plastic bleach, cleaner bottles
Port Lavaca	60.79	paper pieces
Matagorda Island	76.44	plastic caps, lids
St. Joe Island	78.52	plastic bleach, cleaner bottles
Rockport	52.91	plastic pieces
Port Aransas	70.12	plastic pieces
Corpus Christi	68.74	plastic pieces
Padre Island National Seashore	78.29	plastic pieces
South Padre Island	57.80	glass beverage bottles
Boca Chica	60.20	glass pieces

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**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:****Debris Related**

dead catfish entangled in plastic  
dead fish entangled in small plastic  
strapping bands  
large dead drum (fish) entangled in  
strands of rope  
dead fish entangled in fishing line  
crab entangled in plastic vegetable onion  
sack (released)  
crab caught in milk carton  
crab caught in Coke bottle  
crab entangled in plastic carpet threads  
shrimp entangled in plastic ring from  
cap of milk jug

**Other Reports**

12 dead seagulls  
1 dead pelicans  
1 dead western sandpiper  
1 dead sparrow  
1 dead hummingbird  
12 other dead birds  
1 dead sea turtle (hatchling)  
2 dead coyotes  
1 dead dog  
3 dead rats  
1 dead snake  
numerous dead fish and crabs (including  
7 large red drums and  
one 50-pound grouper (fish))

**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Beaumont	medical bottle with pills, car battery, large commercial light bulb, diaphragm
Bolivar	car bumper, styrofoam cup "For Police Use Only, Not For Sale. Thanks From Stop and Go," test tube full of "weird mind-altering substances"
Galveston	a nickel, mouse trap, watermelon, pantyhose, 45 mph sign and post, twenty dollar bill, flannel pajamas, Jimmy Hoffa, State Department papers, car door, television, three bags of dog food, head of cabbage, rubber brain, "The Wreck of the Edmund Fitzgerald" scrap metal, half of a four thousand dollar bill (presumably toy)
Brazoria	hubcap, one dollar bill, underwear, condom (red), curtain rods, mattress, electric fan, jar of pickles (pickles intact), colostomy bag, a quarter, ceiling fan, plastic Christmas tree
Port Lavaca	tea strainer, one dollar bill, mattress
Matagorda	motorcycle helmet, plastic cover from back of television, large truck tire, ear plug, two balloons from "Chevron"
St. Joe	jar of peanut butter, toilet brush, tooth paste
Rockport	hand grenade, a nickel, freezer, parts of a pinata
Port Aransas	"Don't Mess With Texas" bag, red panties, laundry basket, AT&T calling card, intravenous tubing, ping-pong ball, Woody Woodpecker doll, human skeleton with cement around feet, freezer, hundreds of toothbrushes
Corpus Christi	a nickel, a full intravenous bottle, knee pad, sanitary napkins, 19-inch Zenith television, cheerleader's pom-pom, underwear, condom, swimming pool, television antenna, dozen eggs in carton (10 intact), boot (size EEE), bathroom rug, plastic hamburger, head of cabbage, rum bottle with note "For a good time go to Taft and find Ken"
Padre Island	chemical canister, one dozen eggs intact in a barnacle encrusted carton, intravenous bottle, jock strap, condom, bra, washing machine agitator, Coast Guard life vest
South Padre	hammer, valium tablets, condom, bra, "Don't Mess With Texas Beaches" bag, car hood, 1965 quarter, photo of naked woman, bed frame, child's car seat, jock strap, five dollar bill, melted high heel, Playboy magazine
Boca Chica	9x12 foot carpet, hammer

\* not all items indicated as peculiar by volunteers are listed above.

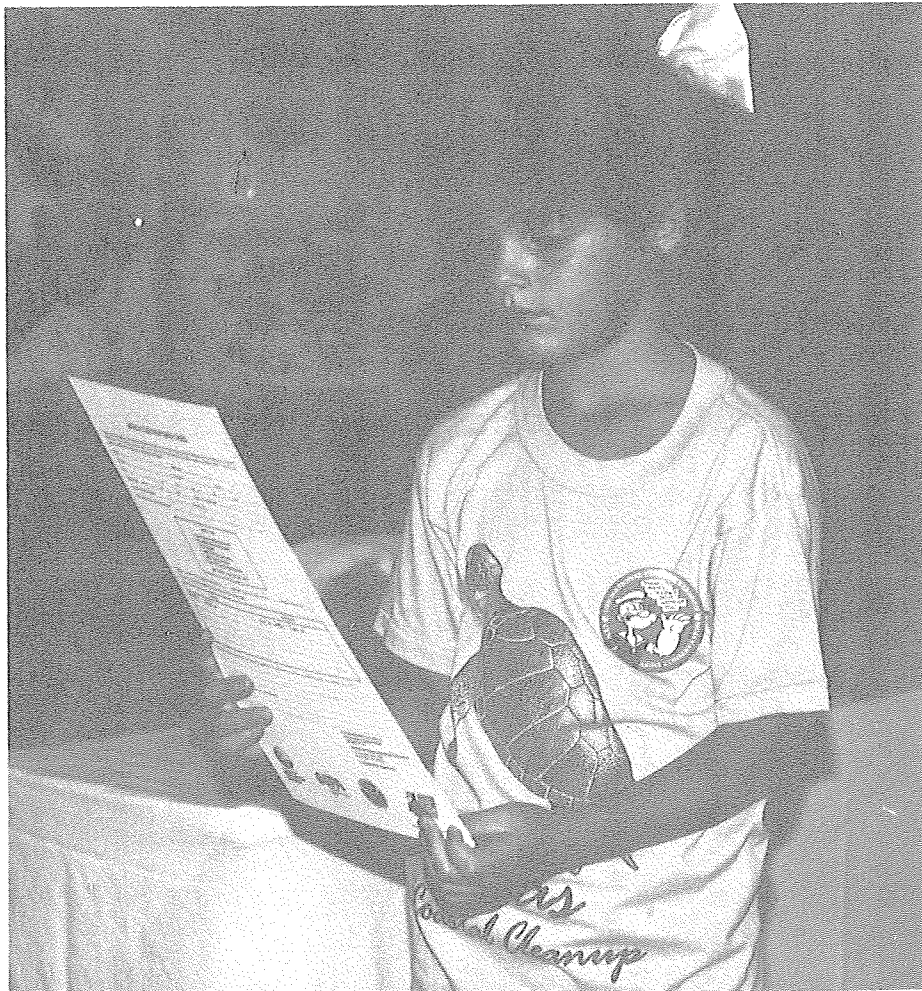
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**FOR INFORMATION ON TEXAS' 1990 BEACH CLEANUP CONTACT:**

Linda Maraniss  
Center for Marine Conservation  
1201 West 24th Street  
Austin, TX 78705  
(512) 477-6424

Angela Farias  
Texas General Land Office  
1700 N. Congress Avenue  
Austin, TX 78701  
1-800-85BEACH or (512) 463-5108

**CLEANUP DATE: Saturday, September 22, 1990**



**A young Texas "Beach Buddy" reviews the data card before heading for the beach.**  
*Photo by Linda Maraniss, CMC*

1989 National Beach Cleanup  
Raw Data Summary

TEXAS

	Bolivar		Brazoria		Pt. Lavaca		St. Joe		Pt. Aransas		PINS		Boca Chica		STATE TOTAL
	Beaumont	Galveston	Bay City	Matagorda	Rockport	Corpus Chr.	S. Padre Is.	Chica	Chica	Chica	Chica	Chica	Chica	Chica	
PLASTIC-----															
Bags	201	857	4641	1797	13	41	112	23	233	1690	4636	2005	2335	478	19062
Trash	20	62	123	33	0	0	4	0	67	61	163	74	93	8	708
Salt	170	838	3496	1719	15	59	93	80	314	1800	3547	1350	1314	523	15318
Other	161	532	1641	1958	31	99	242	113	151	555	2372	1366	1157	331	10709
Bottles	45	394	744	830	87	16	585	148	8	403	1826	2020	542	156	7804
Bleach	18	203	296	315	27	32	145	28	43	92	667	538	326	70	2800
Oil	81	307	986	674	38	10	484	67	166	453	1379	1462	344	162	6613
Other	35	82	369	228	24	3	113	11	13	89	315	229	146	12	1669
Buckets	750	1055	7323	3051	54	135	680	20	185	4459	6039	3609	1539	538	29437
Caps/lids	0	173	3488	1157	0	31	0	1	2	4259	704	25	171	169	10180
Cigarette butts	218	782	5677	1581	41	120	186	18	255	2473	2978	1133	1193	270	16925
Cups/straws	4	121	209	190	2	7	28	5	26	56	199	67	412	132	1458
Diapers	60	98	672	479	13	3	58	4	16	219	583	343	167	48	2763
Lighters	42	133	1187	415	16	34	18	7	23	1014	835	314	177	72	4287
Fishing line	29	44	206	211	5	3	28	3	11	191	287	215	99	28	1360
Long	48	49	316	188	14	2	10	2	4	297	378	177	53	20	1558
Short	37	63	332	253	11	7	44	0	8	91	259	114	49	36	1304
Floats, lures	5	12	12	6	1	0	24	0	2	4	16	51	3	0	136
Hardhats	64	127	1187	515	33	1	200	2	2	764	1592	894	582	81	6044
Lightsticks	146	567	1336	1009	74	45	246	134	69	438	1663	1262	575	102	7666
Milk/water jugs	579	2252	13096	3428	11	308	608	35	564	6812	6883	3729	1437	705	40447
Pieces	7	19	243	81	3	5	14	0	0	121	302	140	33	4	972
Pipe thread	280	447	2845	1907	25	20	254	12	31	1266	2467	1550	606	191	11901
Rope	380	748	5069	2097	24	72	206	6	35	2876	3965	2035	822	203	18538
Long	55	227	503	179	24	1	56	7	21	252	677	422	116	16	2556
Short	123	452	1105	305	26	19	62	6	25	721	1137	715	137	38	4871
6-pack holders	335	698	3710	1381	40	55	116	29	80	1132	2075	945	550	260	11406
Strapping bands	128	269	1210	629	39	4	113	6	4	635	911	510	183	85	4726
Syringes	17	27	174	110	2	0	9	0	7	82	212	143	27	12	822
Tampon app.	17	30	173	60	13	0	11	0	16	84	223	103	81	11	822
Toys	16	81	508	203	4	12	42	2	15	227	430	206	162	56	1964
Vegetable sacks	21	191	396	114	13	7	8	18	5	138	382	192	202	48	1735
Write protector	18	38	166	54	3	4	8	4	7	267	377	191	98	11	1246
Other	123	184	1522	541	18	40	143	19	48	853	871	472	310	137	5281

	Bolivar		Brazoria		Pt. Lavaca		St. Joe		Pt. Aransas		PIMS		Boca Chica		STATE TOTAL
	Beaumont	Galveston	Bay City	Matagorda	Rockport	Corpus Chr.	S. Padre Is.								
<b>GLASS</b>															
Bottles	192	700	2898	6163	59	121	346	32	313	491	2573	1380	2865	497	18630
Food	36	64	249	643	18	19	191	8	0	86	511	521	400	46	2792
Other	3	34	150	218	0	0	48	1	11	60	253	113	74	18	983
Light tubes	20	26	118	132	20	0	51	2	1	109	223	213	33	9	957
Light bulbs	33	46	189	346	31	0	143	2	4	105	359	431	57	25	1771
Pieces	578	699	9650	1182	25	96	51	6	149	3343	2597	877	1645	1419	22317
Other	5	69	200	104	0	0	6	0	1	37	127	55	75	25	704
<b>STYROFOAM</b>															
Buoys	20	39	167	123	9	5	46	7	14	74	227	143	120	28	1022
Cups	134	690	3490	2139	22	81	172	53	199	1186	2750	1436	1069	354	13775
Egg Cartons	43	145	401	588	47	4	156	14	8	249	1211	740	213	49	3868
Fast-food	44	223	959	642	12	20	58	10	39	270	792	318	333	97	3817
Meat trays	60	172	676	733	31	35	167	19	1	403	1200	670	271	127	4565
Pieces	48	179	1079	1096	12	41	130	57	6	522	1091	739	353	79	5432
Small	187	575	7382	2892	25	66	229	34	75	2977	3287	1859	778	272	20638
Other	18	41	483	1031	2	9	21	1	12	146	378	86	56	47	2331
<b>RUBBER</b>															
Balloons	30	86	476	350	3	6	29	0	15	180	295	118	67	20	1675
Gloves	99	423	375	444	87	12	38	20	13	316	744	371	113	48	3103
Tires	7	31	121	62	27	5	4	1	13	50	110	43	38	3	515
Other	24	55	772	370	18	14	57	5	27	381	652	315	310	55	3035
<b>METAL</b>															
Bottle caps	145	176	1405	774	5	79	68	8	59	1486	1214	402	525	218	6564
Cans	23	99	386	700	29	8	104	11	26	68	431	392	126	29	2432
Aerosol	176	693	3003	1743	43	115	228	87	172	894	1663	985	1454	178	11434
Beverage	18	131	213	227	6	11	24	19	14	87	280	124	155	83	1392
Food	6	38	251	186	8	4	27	6	27	128	319	133	124	49	1306
Other	6	5	18	23	1	0	21	0	0	6	29	21	6	1	137
Crab/fish traps	6	11	61	57	2	2	1	5	5	30	177	32	96	1	483
Rusty	3	0	5	7	0	0	0	0	1	3	32	0	10	6	64
New	0	0	5	5	5	15	12	3	66	360	547	110	247	35	2322
Pieces	27	43	697	215	0	26	18	0	53	3750	763	254	276	44	6166
Full tabs	36	70	345	231	8	9	6	1	53	490	459	90	148	21	1967
Wire	21	116	594	316	11	20	15	2	46	309	334	95	286	67	2232
Other															

Bolivar Brazoria Pt.Lavaca St. Joe Pt.Aransas PINS Boca Chica STATE  
 Beaumont Galveston Bay City Matagorda Rockport Corpus Chr. S.Padre Is. TOTAL

PAPER-----

Bags	86	213	1261	459	5	27	4	1	111	204	688	133	735	128	4055
Cardboard	29	214	566	286	5	18	19	13	103	195	505	126	449	100	2628
Cartons	26	149	722	419	19	15	31	10	84	165	533	195	385	93	2846
Cups	63	313	944	495	1	40	13	5	145	207	855	245	505	97	3928
Newspaper	28	91	577	242	0	18	0	0	76	163	173	34	174	24	1600
Pieces	56	429	5270	1385	12	141	72	2	561	1566	1306	298	803	230	12131
Other	18	119	1036	513	0	7	6	1	87	323	390	63	183	79	2825

WOOD-----

Crab/lobster traps	10	2	6	10	1	0	0	0	0	1	14	5	15	21	85
Crates	4	7	47	23	3	0	1	0	12	9	70	21	40	2	239
Pallets	5	12	102	59	3	0	12	0	6	39	95	30	51	1	415
Pieces	133	185	2299	481	35	68	116	3	134	1164	1645	854	855	152	8124
Other	5	47	252	121	1	4	11	2	24	85	170	51	53	27	853

CLOTH-----

Clothing	56	420	1278	639	13	39	54	19	89	452	948	461	663	160	5291
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TOTAL ITEMS/ZONE 6826 20132116674 56827 1408 2395 7756 1280 5311 58043 84370 44183 33275 10077 448557



Cub Scout troops pitched in to remove a metal crab trap from Buckroe Beach, Virginia.

## VIRGINIA

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September 16 and 23, 1989  
308 Volunteers  
20.5 Miles Cleaned  
21,400 Pounds of Debris Collected  
24,256 Debris Items Reported

Ocean Beaches Coordinated By:  
David Cottingham  
National Oceanic and Atmospheric  
Administration  
Office of Chief Scientist  
14th Street and Constitution Avenue  
Room 6222  
Washington, DC 20230  
(202) 377-5181

### Chesapeake Bay Coordinated By:

Deborah Blanton  
Hampton Clean City  
Commission  
22 Lincoln Street  
Hampton, VA 23669  
(804) 727-6394

Kathy O'Hara  
Center for Marine  
Conservation  
306A Buckroe Avenue  
Hampton, VA 23664  
(804) 851-6734

Candy Tomlinson  
Sierra Club York River Group  
216 Susan Constant Drive  
Newport News, VA 23062  
(804) 764-7633/7900

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More than 100 hardy volunteers braved the threat of thunderstorms and predictions of day-long rain to haul in as much as ten tons of debris on Assateague Island on September 16.

The second annual Assateague Island Beach Cleanup was cosponsored by the Audubon Naturalist Society (ANS), the U.S. Fish and Wildlife Service (FWS), and the National Park Service (NPS).

The beach cleanup effort has given some ANS volunteers a firsthand opportunity to do their part to help marine wildlife. This year, I helped to catch a herring gull that could not fly because it was hooked with a fishing rig. A small dogfish was caught on another of the hooks on the rig. Last year volunteers freed a red fox that was entangled in a scrap of fishing net.

According to the Chincoteague National Wildlife Refuge Superintendent, John Schroer, refuge staff were glad for the volunteer help to clean the beach, because they could not get it done any other way. Schroer and his own family were important volunteers themselves. While his family was out picking up trash from their section of the island, John shuttled participants up and down the beach.

The debris at Assateague Island this year was similar to that found last year. Volunteers collected more than 240 tires, 1,000 cans, and 750 bottles along with assorted pieces of plastic, balloons, fishing rope, and styrofoam in all shapes and sizes.

On behalf of the ANS Chincoteague Committee, I would like to express our appreciation to Debbie Melvin of the FWS and Ann Bell of the NPS for their efforts in organizing local volunteers and staff. We also appreciated all the hard work of the Refuge and Seashore staffs and look forward to working with them again next year. We also want to thank Archer-Daniel Midland for donating biodegradable plastic bags that volunteers used to collect trash.

David Cottingham

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The Coastweeks Beach Cleanup on September 23 was a great success despite threats of Hurricane Hugo. The Cleanup, cosponsored by Hampton Clean City Commission, the Center for Marine Conservation, and the Sierra Club York River Group, focused on increasing community consciousness to maintain a clean beach.

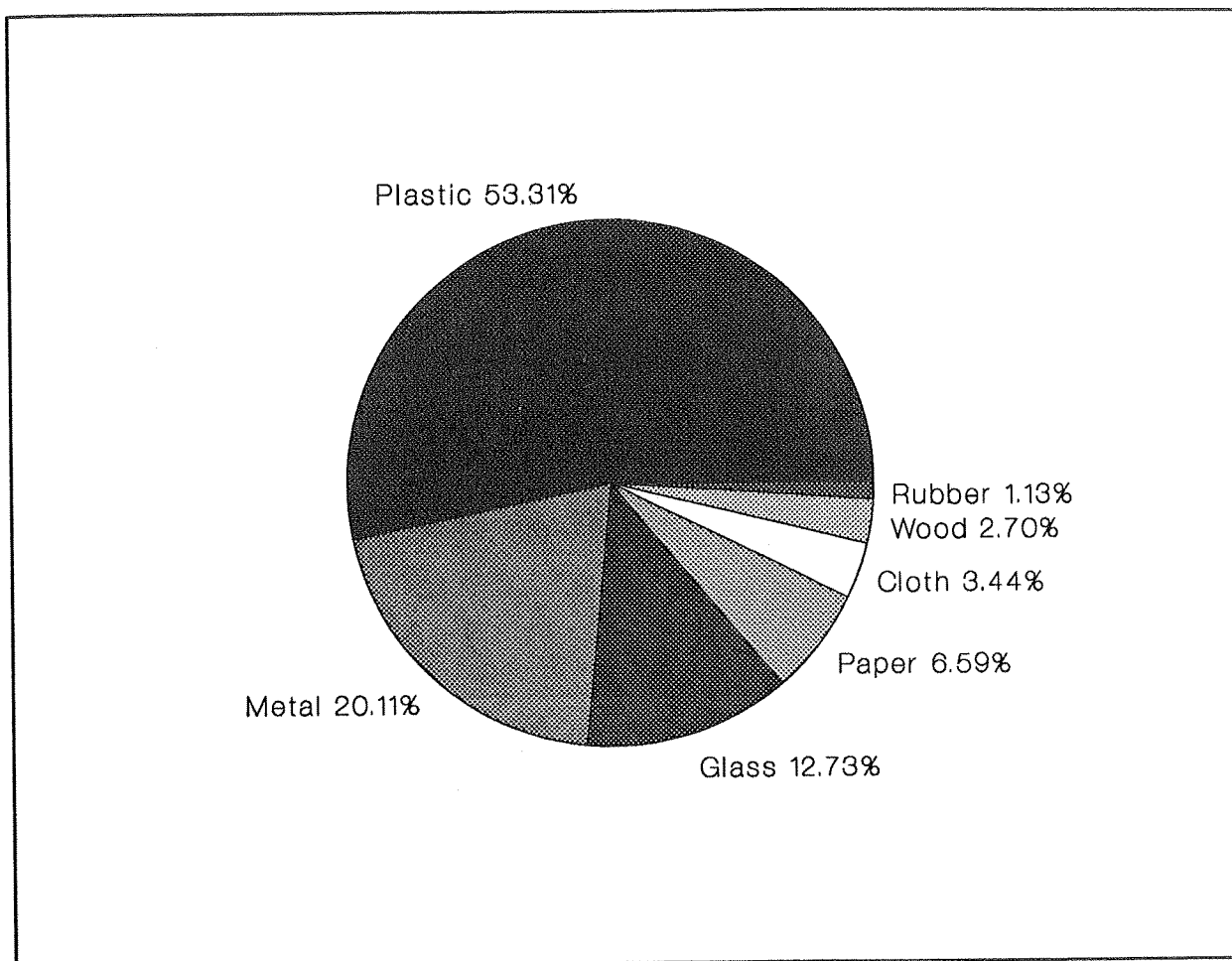
Salt Ponds, Grandview, and Buckroe beaches were covered by 164 participants who collected 1,949 pounds of litter in less than three hours. Plastics made up the majority of debris. It is of interest to note that cigarette filters, or "butts," were more prevalent on beaches with public access, such as Buckroe Beach and Oceanview, as compared to other zones cleaned in Virginia with limited access (i.e. Fisherman's Island National Wildlife Refuge, Grandview Nature Preserve, and False Cape State Park). Based on this finding, it is more likely that cigarette filters are an indication of littering by beach goers as opposed to being carried to shore from offshore sources.

The Salt Ponds volunteers included the Buckroe Civic Association, the Student National Environmental Health Association of Old Dominion University, and Armada Hoffler representatives. The Buckroe Beach volunteers were Syms Middle School, Circle K, Thomas Nelson Community College, Phi Mu Alpha Sinfonia (ODU), Hampton Roads Jaycees, Kecoughtan High School Ecology Club, Phoebus High School Beautification Committee, Brownie Troop 1024 and Chesapeake Bay Youth Conservation Corps. The Boy Scouts, Cub Scouts and community leaders worked Grandview Beach area and provided 75 volunteers. Among the unusual items collected were a marine signal kit, rubberized overalls, and a head of cabbage.

Special thanks also go to the organizers of three additional cleanups in Virginia: the Sierra Club which conducted a cleanup on Fisherman's Island National Wildlife Refuge; Fran Adams of the American Association of University Women who organized a cleanup at False Cape State Park; and the National Oceanic and Atmospheric Administration's Atlantic Marine Center in Norfolk, which cleaned a mile of beach in Oceanview. Some of the more unusual items found at the National Wildlife Refuge and State Park were a hardhat and an antique Pepsi bottle at False Cape while a toilet seat and a plastic cup from a cruise ship were found on Fisherman's Island. At Oceanview, findings included shotgun shells, fishing rods, ear plugs (presumably generated by the military), a hospital name tag, and a pair of false teeth.

Deborah Blanton  
Kathy O'Hara

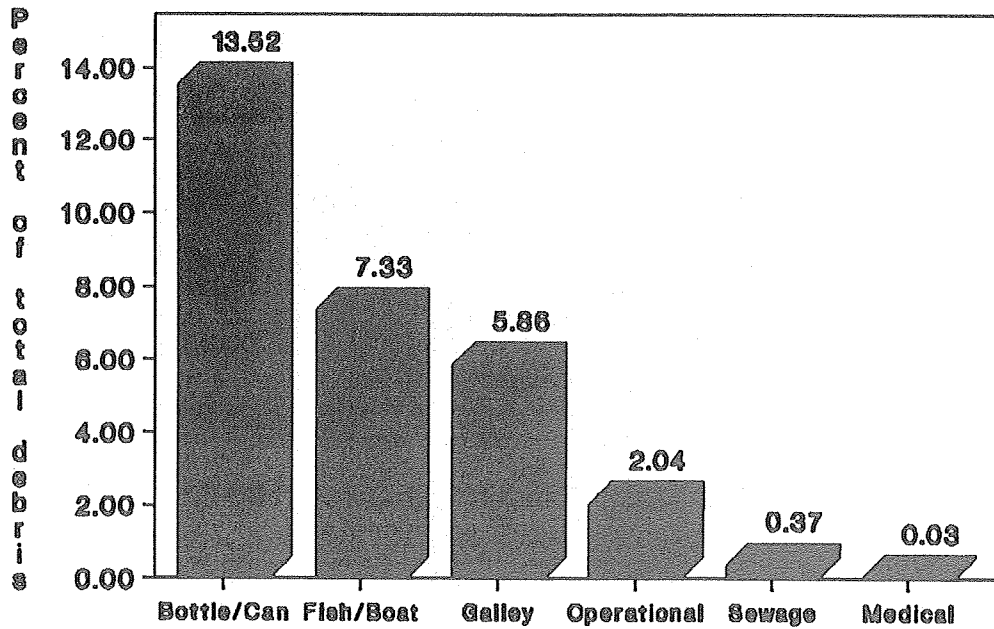
**PERCENT COMPOSITION OF VIRGINIA'S BEACH DEBRIS:**



**VIRGINIA'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic pieces	2,620	10.80
2. plastic cups, spoons, forks, straws	1,686	6.95
3. plastic caps, lids	1,668	6.88
4. metal beverage cans	1,183	4.88
5. glass pieces	1,085	4.47
6. small foamed plastic pieces	1,018	4.20
7. miscellaneous plastic bags	984	4.06
8. foamed plastic cups	934	3.85
9. plastic beverage bottles	919	3.79
10. glass beverage bottles	848	3.50
11. wood pieces	782	3.22
12. rubber balloons	741	3.05
<b>TOTAL</b>	<b>14,468</b>	<b>59.65</b>

**MAJOR TYPES AND SOURCES OF VIRGINIA'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Assateague Island National Seashore	70.20	plastic pieces
Fisherman's Island National Wildlife Refuge	60.50	metal beverage cans
Buckroe Beach	61.37	plastic pieces
Grandview Nature Preserve	41.97	glass pieces
Oceanview	67.71	plastic cups, spoons, forks, straws
False Cape State Park	75.19	plastic pieces

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

Debris Related	Other Reports
herring gull entangled in fishing rig (freed)	dead seagull

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**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Assateague Island	computer board with chips, ice cube tray, bow and arrow, toilet, sink, plastic bottle from "Utopia," several hundred feet of electrical wire connected to three motor parts, baseball hat, dinosaur (toy), baby pacifier
Buckroe Beach	baby toy arm, head of cabbage, car distributor cap
Grandview	automobile, football, bed pillow
Oceanview	bait bag from Jacks Bait and Squid, P.O. Box 152, Currituck, NC 27929
False Cape State Park	antique Pepsi bottle

\* not all items indicated as peculiar by volunteers are listed above.

**FOR MORE INFORMATION ON VIRGINIA'S 1990 BEACH CLEANUPS CONTACT:**

Ocean Beaches: David Cottingham  
National Oceanic and Atmospheric Administration  
Office of Chief Scientist  
14th Street and Constitution Avenue, Room 6222  
Washington, DC 20230  
(202) 377-5181

**CLEANUP DATE: Saturday, September 15, 1990**

Chesapeake Bay: Deborah Blanton  
Hampton Clean City Commission  
22 Lincoln Street  
Hampton, VA 23669  
(804) 727-6394

Kathy O'Hara  
Center for Marine Conservation  
306A Buckroe Avenue  
Hampton, VA 23664  
(804) 851-6734

**CLEANUP DATE: Saturday, September 22, 1990**

1989 National Beach Cleanup VIRGINIA  
Raw Data Summary

		Fisherman Assateague	Grandview Buckroe	False Cape Oceanview	STATE TOTAL			
<b>PLASTIC</b>								
Bags	Trash	284	79	54	37	144	4	602
	Salt	17	0	6	1	0	0	24
	Other	617	22	63	44	225	13	984
Bottles	Beverage	667	118	56	14	52	12	919
	Bleach	212	55	23	8	4	8	310
	Oil	99	115	56	13	15	1	299
	Other	252	61	25	7	17	3	365
Buckets		70	12	6	1	1	0	90
Caps/lids		734	174	226	61	378	95	1668
Cigarette butts		286	1	159	1	91	4	542
Cups/straws		753	87	240	22	547	37	1686
Diapers		4	0	14	1	12	1	32
Lighters		142	24	19	3	15	3	206
Fishing line		50	12	8	11	13	3	97
Net	Long	34	6	9	1	1	0	51
	Short	33	5	4	9	2	0	53
Floats, lures		72	34	10	3	3	6	128
Hardhats		2	0	0	2	1	1	6
Lightsticks		29	8	17	0	7	4	65
Milk/water jugs		203	19	27	10	11	0	270
Pieces		1431	151	268	46	467	257	2620
Pipe thread		6	0	3	1	0	0	10
Rope	Long	243	29	35	5	14	11	337
	Short	386	32	47	14	41	22	542
Sheeting	Long	37	1	3	0	0	1	42
	Short	102	4	8	2	15	1	132
6-pack holders		100	14	22	3	24	3	166
Strapping bands		117	9	43	4	20	0	193
Syringes		4	0	2	1	1	0	8
Tampon app.		71	2	2	0	5	10	90
Toys		163	13	17	3	23	8	227
Vegetable sacks		34	3	3	0	6	2	48
Write protector		16	0	3	1	0	0	20
Other		420	51	74	6	70	27	648
<b>GLASS</b>								
Bottles	Beverage	402	236	97	27	43	43	848
	Food	105	10	0	2	0	7	124
	Other	22	2	0	0	1	6	31
Light tubes		15	2	0	0	0	1	18
Light bulbs		109	35	4	0	1	5	154
Pieces		86	6	157	266	500	70	1085
Other		19	1	7	1	3	0	31
<b>STYROFOAM</b>								
Buoys		22	39	23	7	2	1	94
Cups		467	114	205	53	85	10	934
Egg Cartons		51	13	25	3	0	0	92
Fast-food		54	14	20	2	21	0	111
Meat trays		71	14	5	4	2	4	100
Pieces	Large	131	21	66	8	17	2	235
	Small	492	90	242	27	36	131	1018
Other		30	3	31	13	5	0	82

	Fisherman Assateague	Buckroe	Grandview Oceanview	False Cape	STATE TOTAL		
<b>RUBBER</b>							
Balloons	606	65	17	8	23	22	741
Gloves	12	5	3	13	11	1	45
Tires	251	8	7	0	3	0	269
Other	125	21	30	12	19	3	210
<b>METAL</b>							
Bottle caps	43	1	30	10	55	5	144
Cans	95	41	26	3	2	2	169
Beverage	559	268	111	81	149	15	1183
Food	26	10	3	2	7	1	49
Other	31	20	12	5	4	2	74
Crab/fish traps	5	2	11	9	1	0	28
Drums	8	2	4	1	1	1	17
Rusty	0	0	0	0	0	0	0
New	62	6	37	3	19	4	131
Pull tabs	2	0	5	1	11	2	21
Wire	30	3	13	6	11	2	65
Other	52	10	14	18	2	5	101
<b>PAPER</b>							
Bags	26	11	17	3	23	0	80
Cardboard	62	15	35	2	10	2	126
Cartons	65	34	23	5	23	1	151
Cups	32	4	84	1	37	0	158
Newspaper	6	0	13	1	10	0	30
Pieces	285	26	199	57	69	16	652
Other	30	17	35	7	20	1	110
<b>WOOD</b>							
Crab/lobster traps	1	0	10	5	0	0	16
Crates	8	6	20	4	1	0	39
Pallets	8	0	5	1	0	0	14
Pieces	436	20	259	52	13	2	782
Other	31	24	17	3	7	5	87
<b>CLOTH</b>							
Clothing	152	35	60	16	62	2	327
<b>TOTAL ITEMS/ZONE</b>	<b>12815</b>	<b>2395</b>	<b>3534</b>	<b>1077</b>	<b>3534</b>	<b>911</b>	<b>24256</b>

## VIRGIN ISLANDS

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October 7, 1989  
200 Volunteers  
1.08 Miles Cleaned  
More Than 2,500 Pounds of Debris Collected  
3,371 Debris Items Reported

Coordinated By: Natalie Peters  
Virgin Islands Marine Advisory  
University of the Virgin Islands  
St. Thomas, VI 00802  
(809) 776-9200 x-1242

Elba McIntosh  
Department of Natural Resources  
45A Estate Nisky, Suite 231  
St. Thomas, VI 00802  
(809) 774-3320 x-131 or 132

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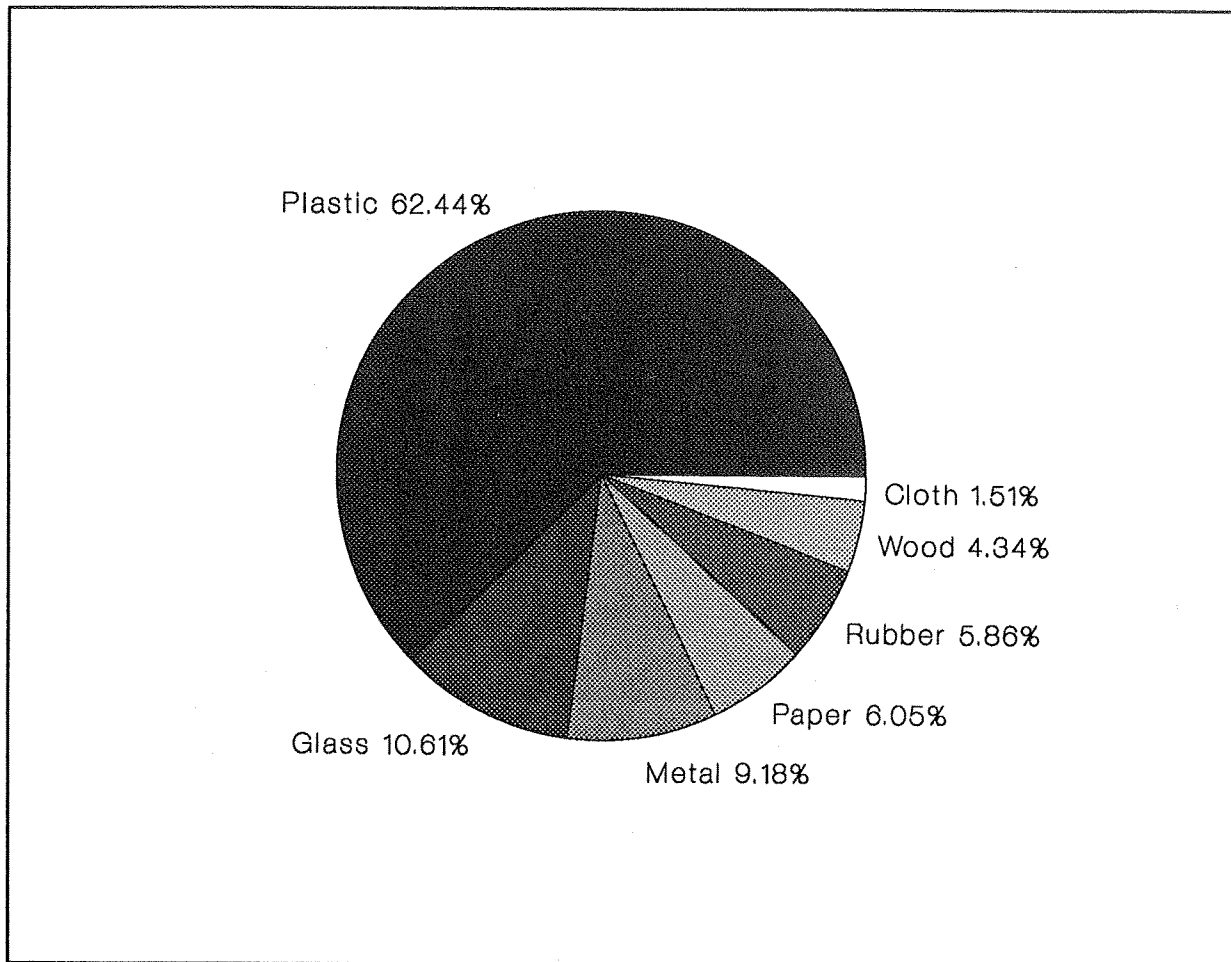
Most of the cleanups scheduled in the Virgin Islands during Coastweeks were either postponed or cancelled due to Hurricane Hugo. However, 200 volunteers participated in post-Hugo cleanups in October at Brewer's Beach, St. Thomas, followed by November cleanups on St. John's Honeymoon Beach, Mary's Creek, Cruz Bay Beach, and Haulover Bay.

The cleanup on Brewer's Beach was planned in observance of Thanksgiving Day. The beach was filled with debris in the wake of Hurricane Hugo. Cleanup volunteers included members of the St. Thomas Environmental Education Association, Kids and the Sea, University of the Virgin Islands Explorers Club, Underwater Sports Club, Brewer's Bay swimmers, and the Public Works Department. Working with gloves and rakes they collected 28 large bags of debris and flotsam amounting to 2,500 pounds. According to Natalie Peters of the Virgin Islands Marine Advisory Service and coordinator of the cleanup, the amount of aluminum cans found was especially disturbing since there is a local plant to recycle cans. However, much of the debris collected was storm-related, which was often large and either buried or entangled in the natural vegetation including a 10-foot section of a sailboat's deck that was buried under the sand. Divers participating in an underwater cleanup at this site recovered a 35-foot PVC drainage pipe and 30 large sheets of galvanized roofing.

Later in November, beach cleanups previously scheduled during Coastweeks were conducted in St. John by the Environmental Studies Program of the Virgin Islands as part of a field trip program to develop awareness of coastal problems. Organized by Patricia Mortenson, an environmental studies teacher for the St. John/St. Thomas school district, each class had a sponsor in the community that donated transportation or funds for transportation. Data from 44 bags of trash was collected by the Marcelli School, a 4-H Club, Peace Corps School, and Julius E. Sprauve School, and Pine Peace School.

According to Natalie Peters, the effort of this year's cleanup was the most energetic to date, especially under the strenuous conditions caused by the hurricane.

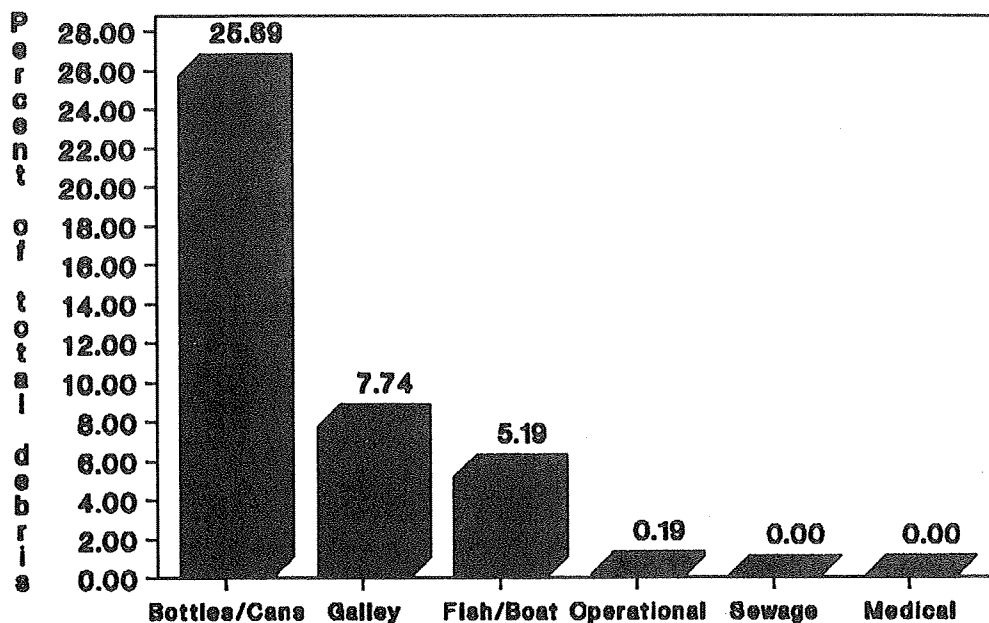
**PERCENT COMPOSITION OF VIRGIN ISLAND'S BEACH DEBRIS:**



**VIRGIN ISLAND'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. metal beverage cans	426	12.64
2. plastic pieces	343	10.18
3. plastic cups, spoons, forks, straws	256	7.59
4. glass beverage bottles	209	6.20
5. plastic trash bags	169	5.01
6. glass pieces	157	4.66
7. plastic caps, lids	119	3.53
8. cloth pieces	116	3.44
9. foamed plastic cups	114	3.38
10. miscellaneous plastic bags	109	3.23
11. plastic beverage bottles	96	2.85
12. wood pieces	80	2.37
<b>TOTAL</b>	<b>2,194</b>	<b>65.08</b>

**MAJOR TYPES AND SOURCES OF THE VIRGIN ISLAND'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Brewer's Beach	40.53	metal beverage cans
Honeymoon Creek	49.38	cigarette butts
Mary's Creek	88.67	plastic pieces
Cruz Bay	38.56	metal beverage cans
Haulover Beach	76.71	plastic pieces

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

Debris Related	Other Reports
none reported	crabs and fish found in cans underwater

**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Brewer's Beach	35-foot PVC drainage pipe, 30 sheets galvanized roofing (found underwater) large boat pieces
Mary's Creek	metal buoy, boat cover, doll's hair

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**FOR INFORMATION ON THE VIRGIN ISLANDS' 1990 BEACH CLEANUP CONTACT:**

Elba McIntosh  
Department of Natural Resources  
45A Estate Nisky, Suite 231  
St. Thomas, VI 00802  
(809) 774-3320 x-131 or 132

**CLEANUP DATE: COASTWEEKS 1990 (September 16 - October 8, 1990)**



**Beach cleanup volunteer Capp Yess looks for debris in a post-Hurricane Hugo pond on Brewer's Bay Beach, St. Thomas.  
Photo by Steve Rockstein, Daily News**

1989 National Beach Cleanup  
Raw Data Summary

VIRGIN ISLANDS

		Honeymoon Beach	Cruz Bay			TOTAL	
		Brewer's Beach	Mary's Creek	Haulover Beach			
<b>PLASTIC</b>							
Bags	Trash	13	8	37	70	41	169
	Salt	0	0	0	0	3	3
	Other	15	4	30	43	17	109
Bottles	Beverage	29	0	6	60	1	96
	Bleach	1	0	23	14	30	68
	Oil	0	0	18	3	6	27
	Other	5	0	20	14	5	44
Buckets		1	0	5	1	2	9
Caps/lids		58	0	22	4	35	119
Cigarette butts		0	11	0	12	0	23
Cups/straws		89	6	29	107	25	256
Diapers		11	0	0	5	0	16
Lighters		7	0	4	4	0	15
Fishing line		0	0	2	6	3	11
Net	Long	0	0	1	1	4	6
	Short	0	0	1	0	1	2
Floats, lures		0	0	0	5	0	5
Hardhats		0	0	1	0	0	1
Lightsticks		0	0	0	0	2	2
Milk/water jugs		5	0	2	0	2	9
Pieces		15	3	55	0	270	343
Pipe thread		0	0	0	9	0	9
Rope	Long	0	0	3	0	9	12
	Short	8	0	2	1	31	42
Sheeting	Long	0	0	0	0	1	1
	Short	2	0	4	0	2	8
6-pack holders		9	0	34	1	5	49
Strapping bands		0	0	13	0	12	25
Syringes		0	0	0	0	0	0
Tampon app.		0	0	0	0	0	0
Toys		6	0	2	0	2	10
Vegetable sacks		5	0	1	0	0	6
Write protector		0	0	2	0	1	3
Other		17	6	5	13	13	54

<b>GLASS</b>							
Bottles	Beverage	49	8	11	136	5	209
	Food	0	0	1	0	0	1
	Other	0	0	2	10	0	12
Light tubes		0	0	0	0	0	0
Light bulbs		0	0	0	0	1	1
Pieces		45	0	0	18	94	157
Other		15	0	0	0	34	49

<b>STYROFOAM</b>							
Buoys		0	0	9	7	3	19
Cups		42	0	6	65	1	114
Egg Cartons		3	0	2	3	0	8
Fast-food		21	2	2	13	0	38
Meat trays		1	0	0	0	0	1
Pieces	Large	1	0	6	5	0	12
	Small	4	0	12	16	8	40
Other		0	0	1	10	2	13

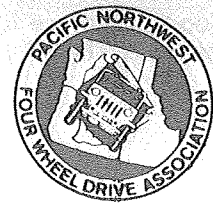
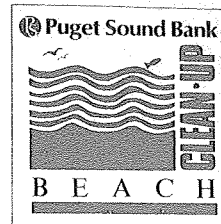
	Honeymoon Beach		Cruz Bay			
	Brewer's Beach	Mary's Creek		Haulover Beach		TOTAL
<b>RUBBER</b>						
Balloons	0	0	0	5	1	6
Gloves	3	0	0	1	0	4
Tires	6	1	0	1	0	8
Other	0	1	1	16	2	20
<b>METAL</b>						
Bottle caps	19	1	1	34	1	56
Cans						
Aerosol	4	0	1	5	0	10
Beverage	192	5	6	220	3	426
Food	4	1	1	3	0	9
Other	0	0	0	16	0	16
Crab/fish traps	0	0	1	0	0	1
Drums						
Rusty	0	0	1	1	0	2
New	0	0	0	0	0	0
Pieces	0	0	0	15	0	15
Pull tabs	28	0	0	2	0	30
Wire	1	0	2	18	1	22
Other	42	2	2	43	2	91
<b>PAPER</b>						
Bags	23	7	1	38	0	69
Cardboard	4	2	1	7	0	14
Cartons	0	0	0	8	0	8
Cups	14	2	0	24	0	40
Newspaper	4	1	0	13	0	18
Pieces	0	4	0	34	3	41
Other	14	1	0	17	0	32
<b>WOOD</b>						
Crab/lobster traps	0	0	0	0	0	0
Crates	0	0	0	0	0	0
Pallets	0	0	0	0	0	0
Pieces	32	2	9	24	13	80
Other	4	1	0	5	1	11
<b>CLOTH</b>						
Clothing	37	2	5	70	2	116
<b>TOTAL ITEMS/ZONE</b>	<b>908</b>	<b>81</b>	<b>406</b>	<b>1276</b>	<b>700</b>	<b>3371</b>



Washington volunteers used burlap sacks to collect debris from Commencement Bay in Puget Sound, Washington.

## WASHINGTON

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September 16, 1989  
2,832 Volunteers  
105 Miles Cleaned  
200,000+ Pounds of Debris Collected  
10,546 Debris Items Reported

Puget Sound Coordinated By:  
David Parent  
Puget Sound Bank  
1119 Pacific Avenue  
Tacoma, WA 98402  
(206) 593-3770

Ocean Beaches Coordinated By:  
Arlene Brooks  
Pacific Northwest 4-Wheel Drive Association  
21520 SE 346  
Auburn, WA 98002  
(206) 833-8747

Marguerite Kurth  
Washington State Parks  
7150 Clearwater Lane  
Olympia, WA 98504  
(206) 753-5759

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Ten tons of marine debris and litter were gathered from more than 50 Puget Sound beaches during the highly successful 1989 Puget Sound Bank Beach Cleanup Day Held on September 16, 1989.

This second annual event drew some 2,000 volunteers including over 1,300 Puget Sound Bank employees and their families, and 700 representatives from local clubs, businesses, and organizations. It helped to heighten awareness of the hazards of beach littering and dumping marine debris at sea. The event was praised by news media throughout the region, including *The Seattle Post-Intelligencer*, which applauded the efforts of the volunteers for the cleanup and for "calling public attention to the carelessness of too many people who treat the waters and beaches of Puget Sound as their personal trash receptacles."

David Parent

Our eighteenth year of coordinating Operation Shore Patrol is history and the Pacific Northwest Four Wheel Drive Association can look back on the third weekend in September knowing it has completed another successful year.

It has been a goal to bring to the public's attention the problem of litter along the Washington coastline--this was partly accomplished this year with our first public service announcements (10 and 30 second videos) courtesy of KTZZ-TV Channel 22 in Seattle.

Operation Shore Patrol has stepped forward and has shown leadership in the fight against litter in the coastal communities and now is noted as the "kick off program" for Washington Coastweeks.

In cooperation with the Washington State Parks and Recreation and the Department of Ecology the Pacific Northwest 4-Wheel Drive Association coordinates and works with local communities and other organizations such as: Good Sams, Telephone Pioneers, scouts, and Tribal Nations which has resulted in 832 volunteers for 1989. They have traveled a total of 130,577 miles that weekend and volunteered 6,420 hours which netted 90 cubic yards of litter--PLUS! The PLUS items come in different shapes and sizes--tires, wheels, refrigerators, and plastic sheeting so large that a winch has had to be used to dislodge the items partly buried in the sand.

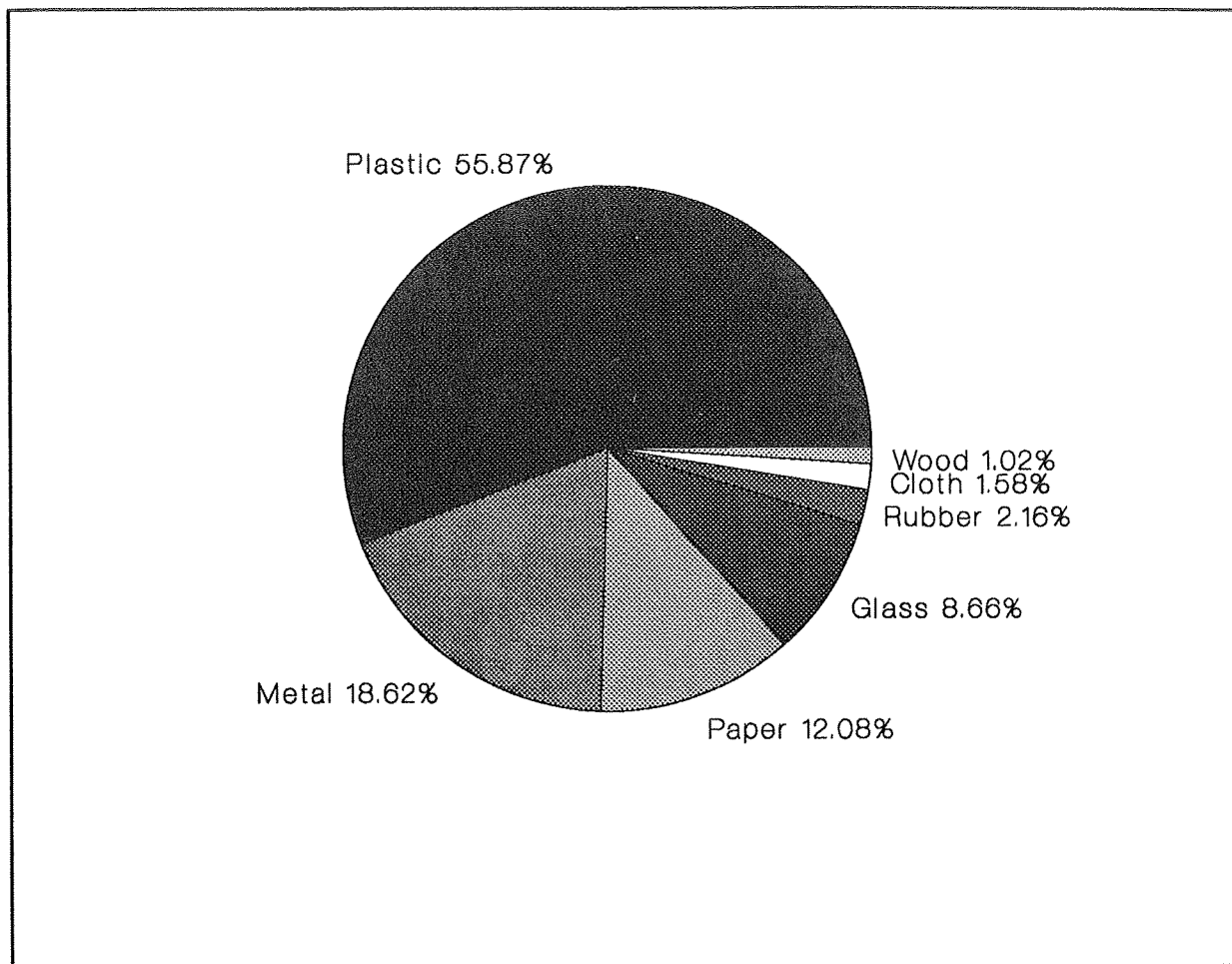
Good News--we have seen a decrease in aluminum cans, thanks to the recycling program. On the other side, the plastic/foam items, foreign and domestic, have not decreased.

The local communities and organizations have supported our program by donating door prizes and various discounts, and supplying the volunteers with breakfasts and lunches. Our thanks go out to our Region Chairmen, Georgia Fleury and Frankie Allen, Region 1; Dave Harrison, Region 2; and Linda Jessen, Region 3.

Special thanks go to Marguerite Kurth of Washington State Parks and Jerry Thielen of Department of Ecology, for their hard work, materials and supplies which has made our job easier. Last but not least, to our PNW members and other various organizations who participated--without you there would be no OPERATION SHORE PATROL!!

Arlene Brooks

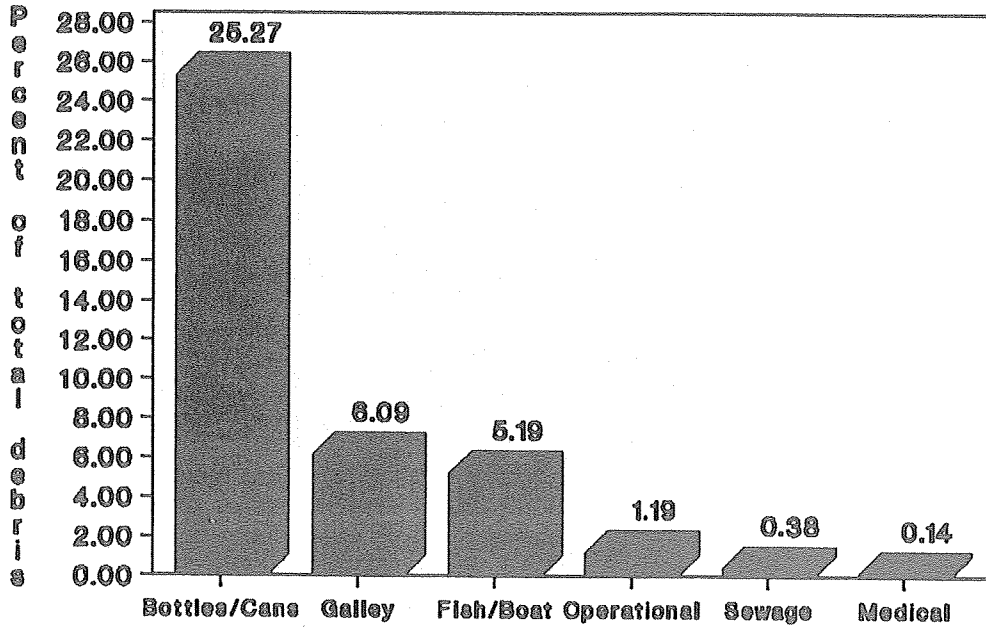
**PERCENT COMPOSITION OF WASHINGTON'S BEACH DEBRIS:**



**WASHINGTON'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. metal pull tabs	706	6.69
2. small foamed plastic pieces	632	5.99
3. plastic caps, lids	574	5.44
4. paper pieces	572	5.42
5. glass beverage bottles	489	4.64
6. metal bottle caps	468	4.44
7. metal beverage cans	430	4.08
8. plastic trash bags	374	3.55
9. plastic cups, spoons, forks, straws	369	3.50
10. miscellaneous plastic bags	357	3.39
plastic beverage bottles	357	3.39
11. glass pieces	346	3.28
<b>TOTAL</b>	<b>5,674</b>	<b>53.80</b>

**MAJOR TYPES AND SOURCES OF WASHINGTON'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Mathews Beach	50.89	cigarette butts
Lincoln Park	48.20	plastic cups, spoons, forks, straws
Blake Island	39.39	small foamed plastic pieces
Alki Point	52.34	metal beverage cans
Twin Harbors State Park	71.66	small foamed plastic pieces
Marine Park	47.58	miscellaneous plastic bags
Titlow Beach	47.58	plastic caps, lids
Steilacoom	20.00	metal pull tabs
Luhr Beach	28.93	metal bottle caps
Tolmie State Park	24.71	metal beverage cans
	47.69	small foamed plastic pieces
Moclips/Ilwaco	67.39	rubber balloons
		plastic caps, lids

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**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

**Debris Related**

dead young seagull entangled  
in fishing line

**Other Reports**

many dead seagulls and skates with oil  
on bodies

**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Lincoln Park	antique paintbrush, 42-ounce beer bottle
Blake Island	brontosaurus (toy)
Steilacoom	vinyl couch cover
Tolmie State Park	Mickey Mouse underwear
Moclips/Illwaco	laundry basket, "whoopie" cushion

\* not all items indicated as peculiar by volunteers are listed above.

**FOR INFORMATION ON WASHINGTON'S 1990 BEACH CLEANUPS CONTACT:**

Puget Sound: David Parent  
Puget Sound Bank  
1119 Pacific Avenue  
Tacoma, WA 98402  
(206) 593-3770

**CLEANUP DATE: Saturday, September 15, 1990**

Ocean Beaches: Arlene Brooks  
Pacific Northwest 4-Wheel Drive Association  
21520 SE 346  
Auburn, WA 98002  
(206) 833-8747

Volunteer Coordinator  
Washington State Parks  
7150 Clearwater Lane  
Olympia, WA 98504  
(206) 753-5759

**CLEANUP DATES: Saturday and Sunday, September 15-16, 1990**

1989 National Beach Cleanup WASHINGTON  
Raw Data Summary

PLASTIC	WASHINGTON										STATE TOTAL	
	Mathews Beach	Lincoln Park	Blake	Alki	Twin Har.	Marine Park	Titlow	Steilacoom	Luhr	Toimie S.P. Moclips-Ilwaco		
Bags	0	7	2	30	5	6	1	3	6	8	306	374
Trash	0	0	0	0	0	0	0	0	0	0	15	15
Salt	0	11	0	0	29	0	0	2	0	0	315	357
Other	10	13	2	16	2	20	30	12	9	1	242	357
Bottles Beverage	0	1	0	1	0	0	0	0	0	0	86	88
Bleach	0	1	0	0	1	0	0	0	0	0	83	85
Oil	0	0	3	0	4	30	0	0	0	0	45	82
Other	0	0	0	1	0	0	0	1	0	1	21	24
Buckets	0	46	10	25	12	37	20	6	0	1	417	574
Caps/lids	50	11	0	0	0	0	0	0	0	1	0	63
Cigarette butts	50	40	2	22	5	25	36	9	22	1	157	369
Cups/straws	0	0	0	0	0	8	0	0	1	0	34	43
Diapers	0	1	15	2	0	2	3	0	1	0	30	54
Lighters	0	0	6	1	1	0	10	0	2	0	18	38
Fishing line	0	0	0	0	1	0	0	0	0	0	9	10
Met	0	0	0	0	1	0	0	0	0	0	8	10
Long	0	1	1	0	0	0	0	0	0	0	28	28
Short	0	0	0	0	0	0	0	0	0	0	1	1
Floats, lures	0	0	0	0	0	0	0	0	0	0	3	3
Hardhats	0	0	0	0	0	0	0	0	0	0	127	138
Lightsticks	0	0	0	0	0	0	0	6	0	0	160	332
Milk/water jugs	0	0	0	1	4	0	0	0	0	0	10	15
Pieces	20	27	4	30	17	2	0	13	59	0	71	91
Pipe thread	0	0	0	0	0	5	0	0	0	0	95	132
Rope	0	0	2	1	5	5	3	4	0	0	145	153
Long	0	5	20	2	4	0	3	0	3	0	85	92
Short	0	0	0	0	1	0	4	3	0	0	172	215
Sheeting Long	0	0	0	0	2	5	11	1	2	0	300	320
Short	10	5	0	6	3	5	0	0	0	0	11	15
6-pack holders	0	8	0	1	4	5	0	2	0	0	37	40
Strapping bands	0	2	1	0	0	2	1	0	0	0	21	35
Syringes	1	0	0	0	0	0	0	0	0	0	28	34
Tampon app.	0	2	4	2	2	0	0	0	0	0	1	7
Toys	0	3	0	1	0	0	0	2	0	0	109	145
Vegetable sacks	0	0	0	5	0	0	0	0	1	0	0	0
Write protector	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	3	25	0	4	0	0	2	2	0	0	0

Lincoln Park Alki Marine Park Steilacoom Tolmie S.P. STATE  
 Mathews Beach Blake Twin Har. Titlow Moclips-Ilwaco TOTAL

GLASS	Mathews Beach	Blake	Twin Har.	Alki	Marine Park	Titlow	Steilacoom	Luhr	Moclips-Ilwaco	STATE TOTAL
Bottles Beverage	0	35	25	8	20	35	21	41	1	489
Food	0	0	5	1	0	10	0	0	0	44
Other	0	0	0	0	0	0	0	0	0	2
Light tubes	0	0	0	0	0	0	0	0	0	12
Light bulbs	0	0	0	0	2	0	0	1	0	19
Pieces	20	76	20	0	1	35	34	53	1	346
Other	0	0	0	0	0	0	0	0	0	1

STYROFOAM

Buoys	0	0	0	0	0	0	0	0	0	38
Cups	0	9	20	25	5	10	5	4	6	317
Egg Cartons	0	0	0	0	2	0	2	0	0	118
Fast-food	0	0	0	3	2	20	1	10	1	140
Meat trays	0	0	0	0	3	0	1	4	0	133
Pieces Large	0	27	1	2	7	0	0	0	0	168
Small	30	166	1	260	9	0	6	0	10	632
Other	0	0	0	0	0	0	0	0	0	7

RUBBER

Balloons	25	15	0	16	1	2	0	0	10	85
Gloves	0	1	0	2	0	0	0	0	0	86
Tires	0	0	1	0	0	5	5	0	1	26
Other	0	1	0	2	0	0	1	3	10	31

METAL

Bottle caps	10	63	20	25	2	32	50	38	8	468
Cans	0	1	0	0	0	0	0	0	0	101
Beverage	35	15	50	17	4	15	12	2	69	430
Food	0	0	0	1	0	0	1	0	1	50
Other	0	0	0	0	0	0	30	11	0	57
Crab/fish traps	0	0	1	0	0	0	0	0	0	1
Drums	0	0	0	0	0	0	0	0	0	4
Rusty New	0	0	0	0	0	0	0	0	0	0
Pieces	0	2	25	0	1	0	0	12	10	54
Pull tabs	30	69	2	21	0	5	525	0	28	706
Wire	0	7	5	0	0	5	6	13	6	53
Other	0	1	0	0	5	0	0	4	11	40





## CANADA AND MEXICO ANALYSES

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Following is the analysis of data collected in New Brunswick and Nova Scotia, Canada, and Cozumel, Mexico. For each cleanup a description was provided by coordinators or others involved in the organization of the cleanup. Included for each cleanup is percent composition of debris, the "Dirty Dozen," sources of debris, major characteristics of debris in each zone, stranded and/or entangled wildlife reported, most peculiar debris items reported, and information on 1990 beach cleanups. The raw data summary is included at the end of each analysis.

## NEW BRUNSWICK, CANADA

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September 30, 1989  
229 Volunteers  
11.79 Miles (19 Kilometers) Cleaned  
5,340 Pounds of Debris Collected  
30,024 Debris Items Reported

Coordinated By: Kim Saunders  
New Brunswick Museum  
277 Douglas Avenue  
St. John, New Brunswick  
Canada E2K 1E5  
(506) 658-1842

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September 23, 1989--the sun is shining, the sky is clear, and people are anxious to participate in the first ever coast cleanup along the shores of the Bay of Fundy.

This was the start of a terrific day throughout New Brunswick and each area coordinator regarded the coast cleanup a huge success. Three areas along the shores of the Bay of Fundy were cleaned by energetic volunteers: the coastal area near Fundy National Park; beaches of Saint John; and the coves and inlets of Grand Manan Island. Girl Guide groups, families, cub and scout troops, school groups, and keen individuals eagerly made their way to the coast to join the area coordinators for the morning and afternoon. Armed with gloves, tally cards, and garbage bags, volunteers spent hours collecting and documenting marine debris. Their reward--seeing the piles of garbage bags on the shore. One volunteer shouted "We did it!"

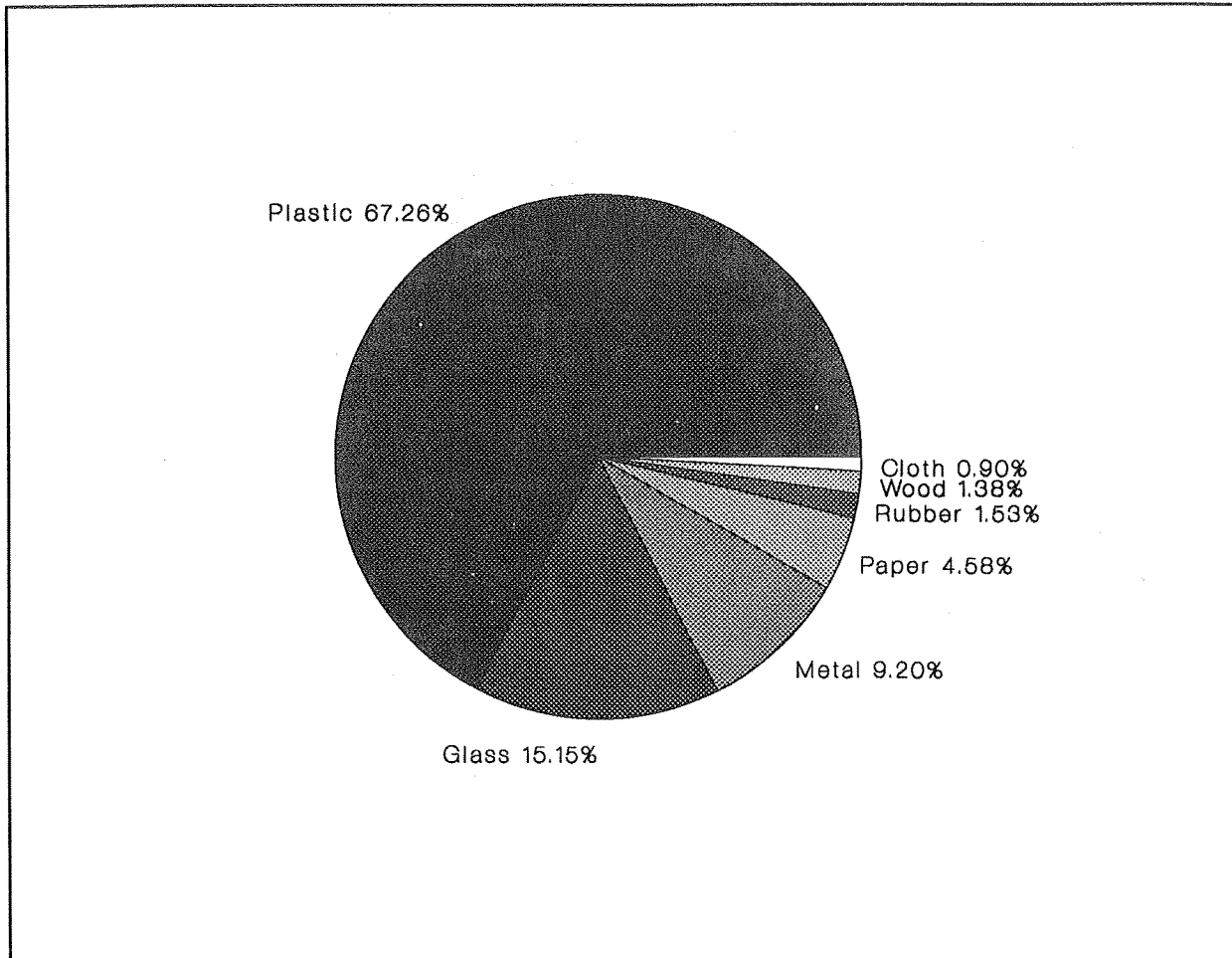
Debris from exotic places such as Mexico, the USSR, and Florida accumulated on the shores of New Brunswick. Volunteers were amazed and intrigued by the variety of debris they were collecting--styrofoam, fish tags, helium balloon ends (with ribbon), furniture, medical wastes, to name a few. More than two tons of garbage were collected on one beach in Saint John alone.

The area coordinators near Fundy National Park were able to separate the debris into items they could recycle and deposited their goods at the local recycle depot. The organizers on Grand Manan Island were able to return some of the fishing equipment retrieved in the cleanup to local fishermen.

New Brunswick communities will be participating in the 1990 Coast Cleanup during the week of September 29 through October 6, 1990. Participating in the international program with Maine, Massachusetts, New Hampshire, and Nova Scotia--Gulf of Maine/Bay of Fundy--has been extremely worthwhile. The 1990 effort will continue with as much enthusiasm and interest as 1989, because 'It's Shore Worth Saving.'

Kim Saunders

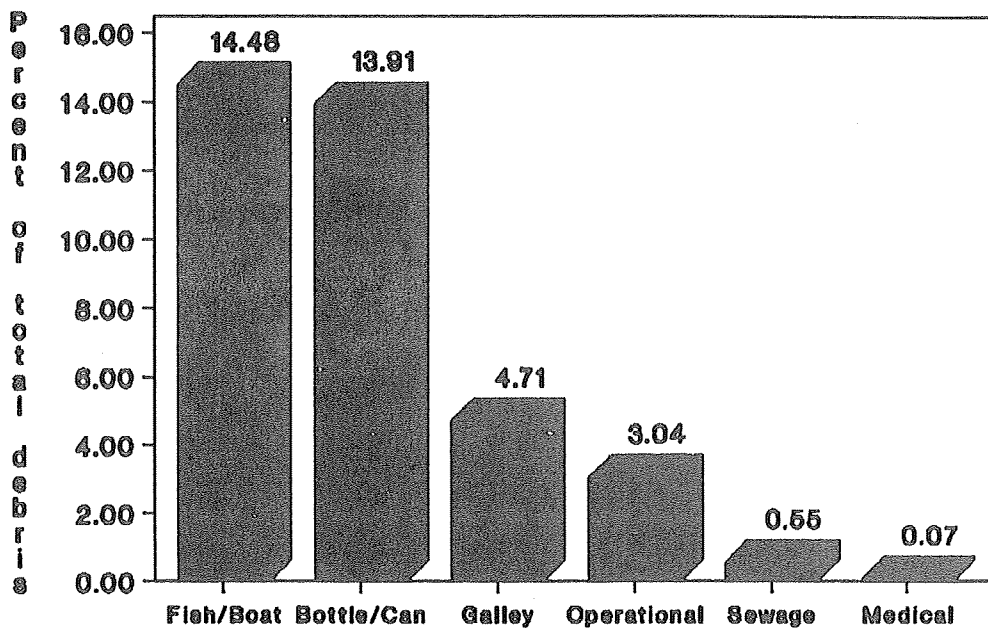
**PERCENT COMPOSITION OF NEW BRUNSWICK'S BEACH DEBRIS:**



**NEW BRUNSWICK'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic pieces	3,051	10.16
2. foamed plastic cups	2,600	8.66
3. glass pieces	2,362	7.87
4. small foamed plastic pieces	2,261	7.53
5. glass beverage bottles	1,819	6.06
6. plastic rope (2 feet or shorter)	1,775	5.91
7. plastic caps, lids	1,385	4.61
8. plastic rope (longer than 2 feet)	1,039	3.46
9. plastic beverage bottles	909	3.03
10. metal beverage cans	837	2.79
11. plastic oil, lube bottles	751	2.48
12. miscellaneous plastic bags	620	2.07
<b>TOTAL</b>	<b>19,409</b>	<b>64.64</b>

**MAJOR TYPES AND SOURCES OF NEW BRUNSWICK'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Mary's Point-Alma	75.11	foamed plastic cups
Grand Manan	71.56	plastic rope (2 feet or shorter)
Saints Rest	55.37	glass pieces
Partridge Island	62.20	small foamed plastic pieces

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

None reported.

**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Grand Manan message in coffee jar  
 Saints Rest Venetian blinds, "gingerbread" type house trim, weather balloon transmitter

\* not all items indicated as peculiar by volunteers are listed above.

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**FOR INFORMATION ON NEW BRUNSWICK'S 1990 BEACH CLEANUP CONTACT:**

Kim Saunders  
New Brunswick Museum  
277 Douglas Avenue  
St. John, New Brunswick  
Canada E2K 1E5  
(506) 658-1842

**CLEANUP DATE: Saturday, September 29, 1990**

1989 National Beach Cleanup NEW BRUNSWICK, CANADA  
Raw Data Summary

		Grand Manan	Partridge Island			TOTAL
		Mary's Pt.-Alma	Saints Rest			
<b>PLASTIC</b>						
Bags	Trash	193	63	215	4	475
	Salt	17	36	9	0	62
	Other	65	368	184	3	620
Bottles	Beverage	567	136	201	5	909
	Bleach	151	148	66	1	366
	Oil	445	232	73	1	751
	Other	102	90	49	1	242
Buckets		36	78	15	0	129
Caps/lids		610	451	321	3	1385
Cigarette butts		0	0	63	0	63
Cups/straws		267	91	225	0	583
Diapers		3	5	27	0	35
Lighters		16	10	15	0	41
Fishing line		43	30	7	0	80
Net	Long	122	55	7	0	184
	Short	124	62	22	0	208
Floats, lures		61	17	15	0	93
Hardhats		0	0	0	0	0
Lightsticks		3	3	3	0	9
Milk/water jugs		229	74	22	2	327
Pieces		588	832	1627	4	3051
Pipe thread		34	41	50	0	125
Rope	Long	388	559	92	0	1039
	Short	378	1048	349	0	1775
Sheeting	Long	96	14	30	0	140
	Short	19	14	48	0	81
6-pack holders		120	28	27	0	175
Strapping bands		285	171	72	0	528
Syringes		4	2	15	0	21
Tampon app.		43	36	86	0	165
Toys		15	5	25	0	45
Vegetable sacks		20	2	6	0	28
Write protector		4	1	2	0	7
Other		63	151	213	0	427
<b>GLASS</b>						
Bottles	Beverage	1081	393	344	1	1819
	Food	196	23	15	0	234
	Other	2	5	2	0	9
Light tubes		8	0	0	0	8
Light bulbs		73	6	4	1	84
Pieces		285	388	1676	13	2362
Other		1	14	17	1	33
<b>STYROFOAM</b>						
Buoys		27	30	8	2	67
Cups		1982	214	373	31	2600
Egg Cartons		26	4	11	2	43
Fast-food		160	30	88	1	279
Meat trays		98	21	48	7	174
Pieces	Large	180	182	74	3	439
	Small	941	365	866	89	2261
Other		14	14	128	5	161

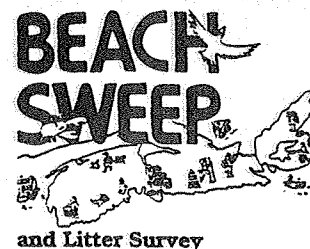
	Grand Manan	Partridge Island		
Mary's Pt.-Alma	Saints Rest			TOTAL

RUBBER					
Balloons	76	12	37	0	125
Gloves	15	22	5	0	42
Tires	13	35	13	0	61
Other	32	93	105	1	231
METAL					
Bottle caps	164	82	168	0	414
Cans					
Aerosol	100	57	31	0	188
Beverage	333	255	249	0	837
Food	9	55	26	0	90
Other	26	65	51	2	144
Crab/fish traps	8	7	0	0	15
Drums					
Rusty	1	12	38	6	57
New	0	1	1	0	2
Pieces	42	151	255	4	452
Pull tabs	0	17	5	0	22
Wire	23	29	131	11	194
Other	29	37	281	1	348
PAPER					
Bags	21	62	41	2	126
Cardboard	15	36	50	0	101
Cartons	42	41	106	0	189
Cups	1	28	80	0	109
Newspaper	4	11	26	0	41
Pieces	39	101	264	5	409
Other	15	11	374	0	400
WOOD					
Crab/lobster traps	11	8	4	0	23
Crates	4	3	2	0	9
Pallets	8	3	1	0	12
Pieces	76	132	113	25	346
Other	4	2	18	0	24
CLOTH					
Clothing	73	74	124	0	271
TOTAL ITEMS/ZONE					
	11369	7984	10434	237	30024



Many families turned out for the Nova Scotia cleanup, despite the blustery day.

## NOVA SCOTIA, CANADA



September 23, 1989  
683 Volunteers  
51.23 Miles (82.5 Kilometers) Cleaned  
8,310 Pounds of Debris Collected  
38,765 Debris Items Reported

Coordinated By: John Thorpe  
Clean Nova Scotia Foundation  
1675 Bedford Row  
P.O. Box 2528, Station M  
Halifax, Nova Scotia  
Canada B3J 3N5  
(902) 424-5245

In keeping with the goals of The Clean Nova Scotia Foundation, the Beach Sweep and Litter Survey was designed to provide a practical demonstration of enhancing our visual environment while informing the public of the impact of littering.

The timing of this project coincided with an International Beach Cleanup Programme organized by the Center for Marine Conservation in Washington. Nova Scotians were invited to visit their favorite beach equipped with garbage bags to collect litter and with data sheets to record their findings. Many people made this a family outing, while others recruited the help of enthusiastic groups of "environmentally friendly" people. Although several individuals were discouraged from participating due to the effects of Hurricane Hugo, over eighty beaches in sixteen counties were covered in Nova Scotia.

All returned data sheets were expertly completed. Several contained additional comments, data and photographs. Many volunteers wrote accompanying letters stating how much they had enjoyed participating and their surprise at the composition of the debris that had accumulated along the beaches. The enthusiasm and interest was reflected by the media which bolstered the campaign. Community newspapers passed on the invitation to their readers encouraging their involvement. Radio stations gained responses from volunteers who listened to their talk show on the cleanup. National and local television coverage of the event provided windy beach scenes of "beach sweepers" and their spoils.

Over seven hundred volunteers including members of The Clean Nova Scotia Foundation cleaned a total of almost eighty-three kilometers (51 miles) of shoreline. Plastics overwhelmingly accounted for the majority of items collected.

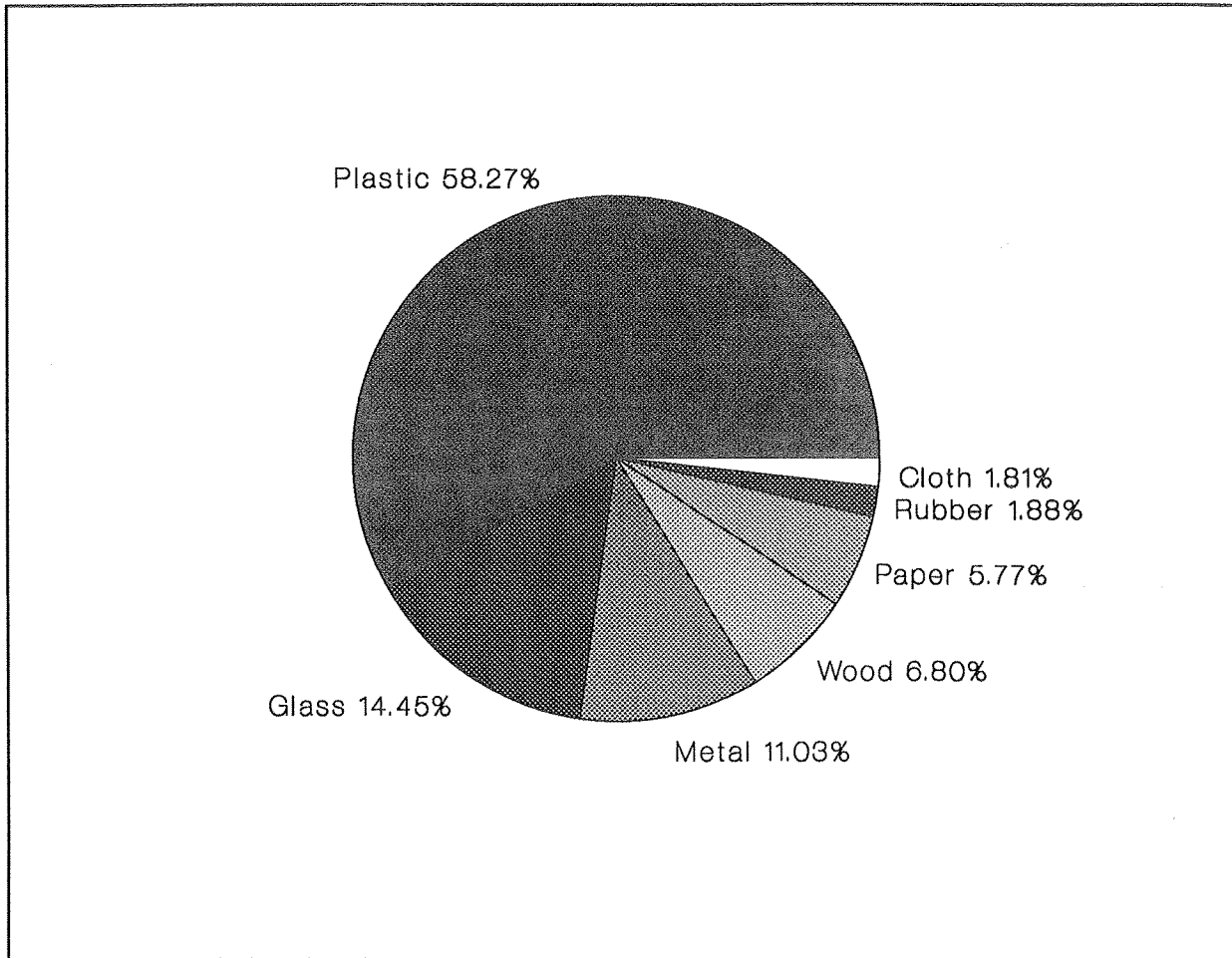
Not included in the official count were sixteen dead sea gulls, one dead herring gull caught in a fish net, two dead cormorants, one dead small grey shore bird, one young semi-decomposed seal and two dead mice caught inside a pop bottle.

Several peculiar items were encountered such as a washing machine, a parking meter, discarded cemetery wreaths and a valid credit card.

Information on beach litter along the Fundy Coast was shared with the State of Maine. The Clean Nova Scotia Foundation will be sending a report on Beach Sweep to the federal government as they ponder the merits of Canada becoming a co-signee of the International Maritime Organization's MARPOL Annex V. The Foundation will also use this experience to evaluate the organization of future cleanup campaigns and to develop recommendations for marine litter prevention techniques.

John Thorpe

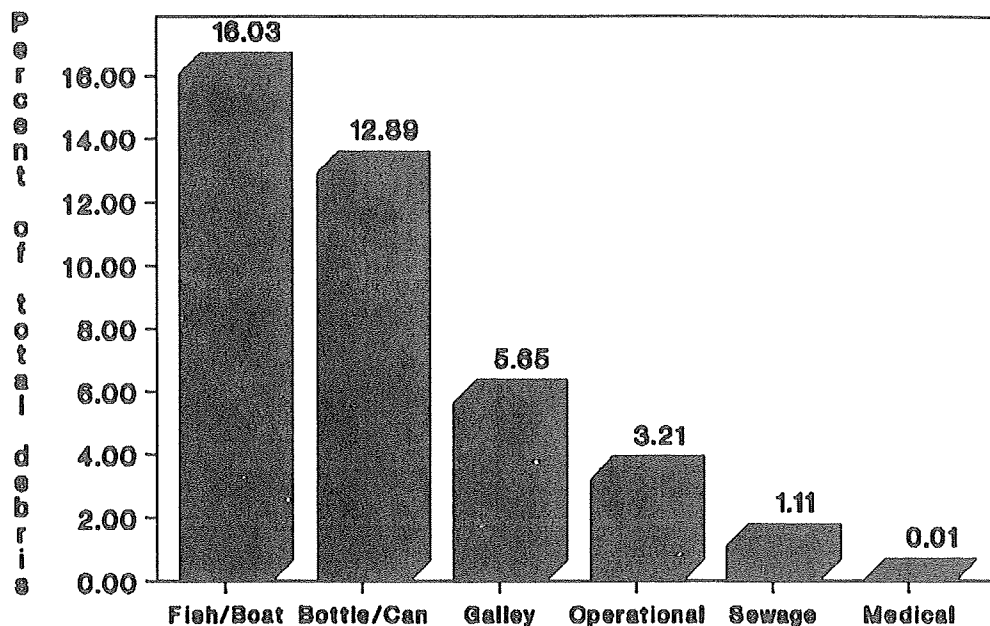
**PERCENT COMPOSITION OF NOVA SCOTIA'S BEACH DEBRIS:**



**NOVA SCOTIA'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. glass pieces	3,741	9.65
2. plastic pieces	3,085	7.96
3. plastic rope (2 feet or shorter)	2,226	5.74
4. wood pieces	2,208	5.70
5. small foamed plastic pieces	1,860	4.80
6. glass beverage bottles	1,694	4.37
7. plastic caps, lids	1,537	3.96
8. metal beverage cans	1,436	3.70
9. plastic trash bags	1,236	3.19
10. foamed plastic cups	1,047	2.70
11. plastic rope (longer than 2 feet)	1,046	2.70
12. paper pieces	978	2.52
<b>TOTAL</b>	<b>22,094</b>	<b>56.99</b>

**MAJOR TYPES AND SOURCES OF NOVA SCOTIA'S BEACH DEBRIS:**



**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

**Debris Related**

dead herring gull caught in fish net  
2 dead mice caught in pop bottle

**Other Reports**

16 dead seagulls  
2 dead cormorants  
1 dead small gray shore bird  
1 dead seal

**MOST PECULIAR DEBRIS ITEMS REPORTED:** part of a boat "Skeena," nearly full unbroken jar of mayonnaise, refrigerator shelf, vacuum cleaner, six cylinder flathead engine and transmission, disposable plastic gas mask, lined rubber pants with zipper, old pop bottles, protective dust mask, plastic Christmas tree, transmission box, stove, Bedford Institute mail reply card for tracking currents, railroad tie, armrest from vehicle, chimney pipe, homemade volleyball net and poles, bed springs, three meter piece of duct work, paint roller, golf balls, rolling pin, washing machine, parking meter, jaw bone of large animal, car headlight, valid credit card, aerosol contraceptive spray, sleeping bag, bleach bottles tied together, full coffee tin, cemetery wreath, windshield wiper, bicycle seat, 272 shotgun shells, 281 lobster trap bands, 168 elastic and lobster claw bands, and four fish tags.

\* not all items indicated as peculiar by volunteers are listed above.

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**FOR INFORMATION ON NOVA SCOTIA'S 1990 BEACH CLEANUP CONTACT:**

John Thorpe  
Clean Nova Scotia Foundation  
1675 Bedford Row  
P.O. Box 2528, Station M  
Halifax, Nova Scotia  
Canada B3J 3N5  
(902) 424-5245

**CLEANUP DATE: Saturday, September 29, 1990**

1989 National Beach Cleanup  
Raw Data Summary

NOVA SCOTIA, CANADA

		TOTAL			TOTAL
<b>PLASTIC</b> -----			<b>RUBBER</b> -----		
Bags	Trash	1236	Balloons		126
	Salt	116	Gloves		223
	Other	880	Tires		123
Bottles	Beverage	960	Other		255
	Bleach	475	<b>METAL</b> -----		
	Oil	801	Bottle caps		672
	Other	413	Cans	Aerosol	317
Buckets		204		Beverage	1436
Caps/lids		1537		Food	196
Cigarette butts		0		Other	340
Cups/straws		653	Crab/fish traps		23
Diapers		63	Drums	Rusty	97
Lighters		77		New	9
Fishing line		73	Pieces		538
Net	Long	234	Pull tabs		69
	Short	836	Wire		397
Floats/lures		75	Other		181
Hardhats		3	<b>PAPER</b> -----		
Light sticks		34	Bags		149
Milk/water jugs		192	Cardboard		412
Pieces		3085	Cartons		315
Pipe thread		15	Cups		194
Rope	Long	1046	Newspaper		87
	Short	2226	Pieces		978
Sheeting	Long	132	Other		103
	Short	280	<b>WOOD</b> -----		
6-pack holders		167	Crab/lobster traps		255
Strapping bands		934	Crates		62
Syringes		4	Pallets		55
Tampon app.		430	Pieces		2208
Toys		83	Other		57
Vegetable sacks		47	<b>CLOTH</b> -----		
Write protector		18	Clothing		700
Other		874	-----		
<b>GLASS</b> -----			-----		
Bottles	Beverage	1694	<b>TOTAL ITEMS/ZONE</b>		38765
	Food	90	-----		
	Other	7	-----		
Light tubes		4	-----		
Light bulbs		20	-----		
Pieces		3741	-----		
Other		44	-----		
<b>STYROFOAM</b> -----			-----		
Buoys		273	-----		
Cups		1047	-----		
Egg cartons		94	-----		
Fast-food		206	-----		
Meat trays		145	-----		
Pieces	Large	705	-----		
	Small	1860	-----		
Other		55	-----		



Cozumel's volunteers prepare for their first beach cleanup in Mexico.

## COZUMEL, MEXICO

---

September 23, 1989  
100 Volunteers  
0.5 Miles Cleaned  
4,000 Pounds of Debris Collected  
6,774 Debris Items Reported

Germain Mendez  
P.O. Box 396  
Cozumel, Quintana Roo  
Mexico 77600  
011-529-872-1232

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On September 23, 1989, on the island of Cozumel 100 children, teenagers, and adults cleaned four beaches on one kilometer of the east coast. They collected 160 bags of trash.

The name of the cleanup was 'Cozumel for Mexico.' Group captains were from the Center of Applied Oceanography.

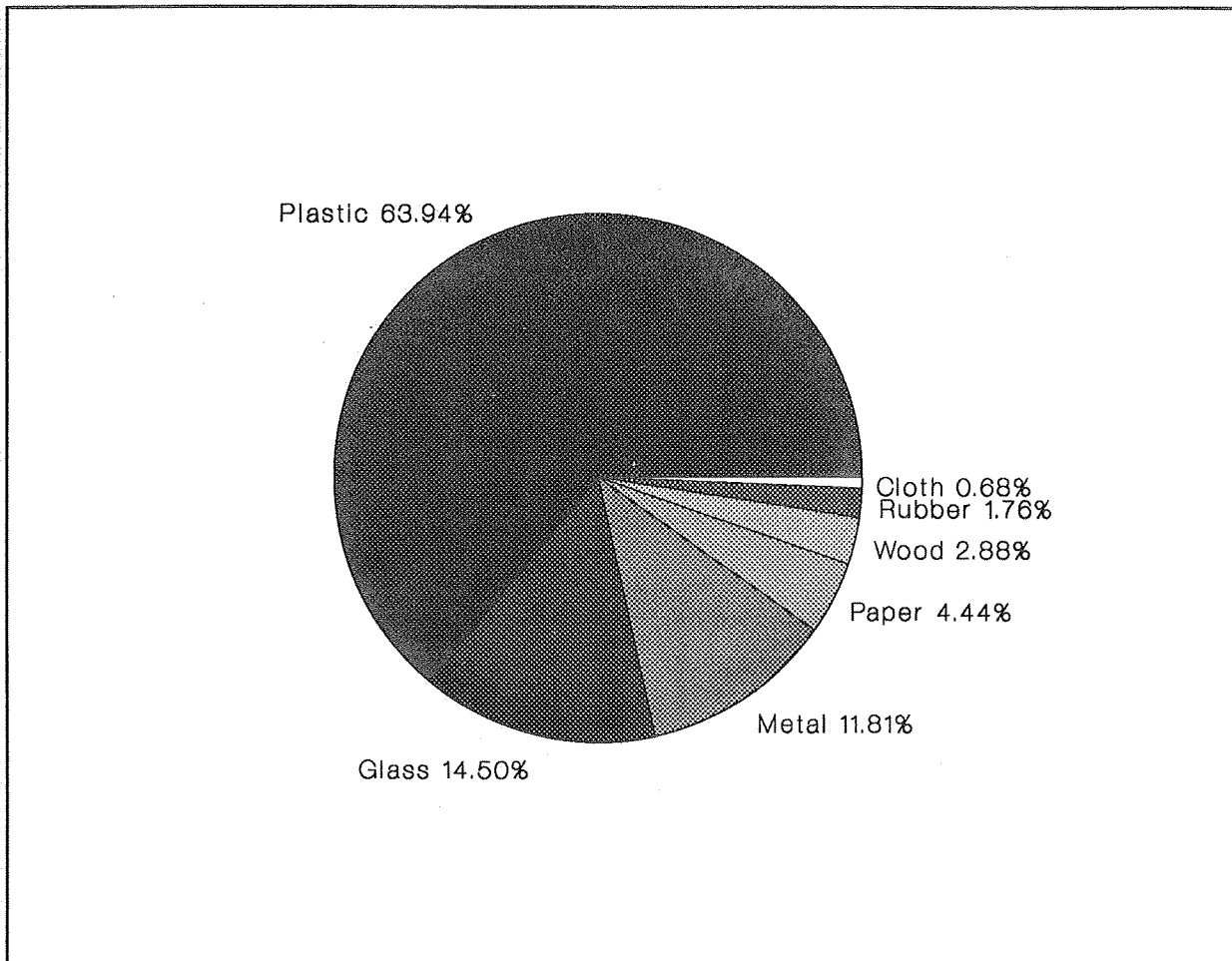
The cleanup was from 8 a.m. to noon. Following the cleanup, which was held on a rainy day, the volunteers celebrated their efforts by releasing more than 400 sea turtle hatchlings into the ocean from a local hatchery project.

This was a very successful cleanup. Spanish data cards and guides were provided to the cleanup organizers by the Center for Marine Conservation. The Red Cross volunteered to set up a first aid station, but fortunately no one was hurt.

Due to the success of this first cleanup in Cozumel, other beach cleanups have been held on the island.

Germain Mendez

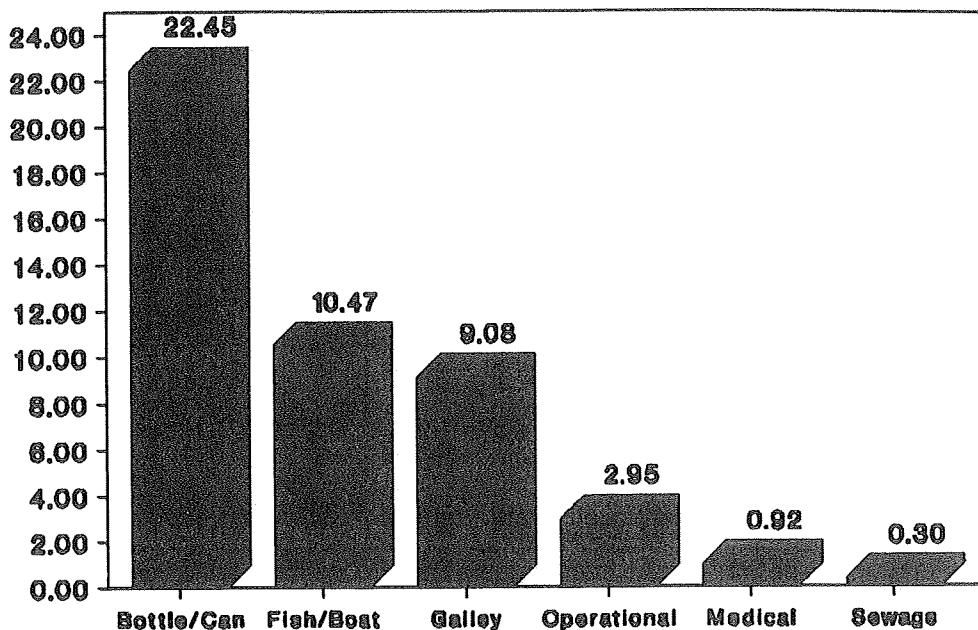
**PERCENT COMPOSITION OF COZUMEL'S BEACH DEBRIS:**



**COZUMEL'S 1989 DIRTY DOZEN:**

	Total Number Reported	Percent of Total Debris Collected
1. plastic pieces	913	13.48
2. glass beverage bottles	633	9.34
3. plastic beverage bottles	379	5.59
4. plastic caps, lids	264	3.90
5. plastic cups, spoons, forks, straws	246	3.63
6. miscellaneous plastic bottles	235	3.47
7. miscellaneous plastic bags	234	3.45
8. metal beverage cans	230	3.40
9. plastic trash bags	202	2.98
10. plastic oil, lube bottles	191	2.82
11. glass pieces	188	2.78
12. plastic bleach, cleaner bottles	187	2.76
<b>TOTAL</b>	<b>3,902</b>	<b>57.60</b>

**MAJOR TYPES AND SOURCES OF COZUMEL'S BEACH DEBRIS:**



**MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:**

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Punta Chiquero	65.42	plastic pieces
Mezcalitos	67.30	plastic pieces
Chen Rio	48.00	glass beverage bottles

**STRANDED AND/OR ENTANGLED WILDLIFE REPORTED:**

None reported.

**MOST PECULIAR DEBRIS ITEMS REPORTED:**

Punta Chiquero	ballet slipper, bar of soap, binoculars, douche bottle, pacifier, liquor bottle, pink plastic pipe, television, enema bottle, toilet seat, ceramic head of a duck, baby formula
Mezcalitos	catheter, umbrella, pills in a bottle, plastic fingernail, ping-pong ball, unexploded firecracker, power cable, axe, ironing board
Chen Rio	whiskey bottle (full), mattress, radio tube, jockey shorts, bra, syrup bottle, ear plugs

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**FOR INFORMATION ON COZUMEL'S 1990 BEACH CLEANUP CONTACT:**

Germain Mendez  
P.O. Box 396  
Cozumel, Quintana Roo  
Mexico 77600  
011-529-872-1232

**CLEANUP DATE: COASTWEEKS 1990 (September 16 - October 8)**

1989 National Beach Cleanup COZUMEL, MEXICO  
Raw Data Summary

Mezcalitos  
Punta Chiquero Chen Rio TOTAL

PLASTIC-----					DE PLASTICO	
Bags	Trash	93	78	31	202	Bolsas De basura
	Salt	25	64	0	89	De sal
	Other	49	105	80	234	De otro tipo
Bottles	Beverage	162	157	60	379	Botellas De bebidas, de gaseosas
	Bleach	91	91	5	187	De lejia, de limpiador
	Oil	77	99	15	191	De aceite, de lubricante
	Other	52	174	9	235	De otro tipo
Buckets		77	5	0	82	Cubetas
Caps/lids		93	146	25	264	Tapas, chapas
Cigarette butts		0	0	0	0	Cigarillo
Cups/straws		104	117	25	246	Copas, cucharas, tenedores, popotes
Diapers		19	22	14	55	Panales
Lighters		8	20	0	28	Encendedores desechables
Fishing line		42	41	1	84	Cuerda de pesca
Net	Long	15	1	2	18	Red de pesca Larga
	Short	14	10	6	30	Corta
Floats, lures		13	22	0	35	Corchos y espejuelos para pescar
Hardhats		10	8	0	18	Cascos duros
Lightsticks		26	36	0	62	Varos (palos) de luz
Milk/water jugs		109	54	3	166	Botellones de leche, de agua
Pieces		380	432	101	913	Pedazos (de plastico)
Pipe thread		13	10	1	24	Cintas de goma (gomas)
Rope	Long	41	30	2	73	Cuerda Larga
	Short	8	75	5	88	Corta
Sheeting	Long	2	1	0	3	Chapa de plastico larga
	Short	3	5	0	8	Chapa de plastico corta
6-pack holders		34	46	15	95	Aros asideros para sujeter bebidas
Syringes		36	26	0	62	Jeringas
Tampon app.		19	1	0	20	Aplicadores de "tampones"
Toys		28	23	21	72	Jugetas
Vegetable sacks		20	12	0	32	Sacos/costales de red
Write protector		22	14	0	36	Aros de proteccion a lo escrito
Other		87	24	2	113	Otro tipo
GLASS-----					DE VIDRIO	
Bottles	Beverage	219	293	121	633	Botellas De bebidas
	Food	40	22	5	67	De comidas
	Other	4	14	3	21	De otro tipo
Light tubes		12	18	2	32	Bombillas/tubos de luz fluorescente
Light bulbs		4	23	14	41	Bombillas
Pieces		87	77	24	188	Pedazos de vidrio
Other		0	0	0	0	Otro tipo
STYROFOAM-----					GOMESPUMA	
Buoys		19	9	5	33	Boyas
Cups		7	5	0	12	Copas
Egg Cartons		9	5	0	14	Envases de huevos de carton
Fast-food		17	0	0	17	Envases de comidas tipo norteamericano
Meat trays		11	3	0	14	Bandejas de carne
Pieces	Large	10	11	3	24	Pedazos Largo
	Small	16	15	2	33	Corta
Other		14	26	0	40	Otro tipo

Mezcalitos  
Punta Chiquero Chen Rio TOTAL

RUBBER-----GOMAS						
Balloons	0	0	0	0	Globos	
Gloves	0	3	0	3	Guantes	
Tires	1	0	8	9	Llantas	
Other	22	85	0	107	Otro tipo	
METAL-----METAL						
Bottle caps	50	29	83	162	Tapas de botella	
Cans	Aerosol	31	63	61	155	Latas De aerosol
	Beverage	94	96	40	230	De bebidas
	Food	13	32	37	82	De comidas
	Other	2	16	0	18	Otro tipo
Crab/fish traps		2	0	1	3	Trampas de cangrejos/peces
Drums	Rusty	8	0	0	8	Tambores de 55 galones - enmohecidos
	New	8	0	0	8	Tambores de 55 galones - nuevos
Pieces		61	13	9	83	Pedazos de metal
Pull tabs		6	16	0	22	Lenguetas de latas
Wire		16	10	0	26	Alambre
Other		2	1	0	3	Otro tipo
PAPER-----PAPEL						
Bags		56	27	0	83	Bolsas
Cardboard		32	27	7	66	Cajas de carton
Cartons		36	7	30	73	Carton
Cups		5	0	0	5	Copas
Newspaper		0	5	1	6	Periodico
Pieces		42	20	5	67	Pedazos de papel
Other		0	1	0	1	Otro tipo
WOOD-----MADERA						
Crab/lobster traps		0	0	0	0	Trampas de cangrejo y langosta
Crates		19	0	0	19	Cajones de madera
Pallets		26	1	0	27	Paletas
Pieces		81	47	5	133	Pedazos de madera
Other		2	14	0	16	Otro tipo
CLOTH-----TELA (TRAPO)						
Clothing		10	23	13	46	Ropa/piezas de trapo
<b>TOTAL ITEMS/ZONE</b>		<b>2866</b>	<b>3006</b>	<b>902</b>	<b>6774</b>	<b>TOTALES</b>



## Appendix 1.

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### Major Sponsors of 1989 Beach Cleanups

#### ALABAMA

City of Gulf Shores  
Town of Dauphin Island  
Baldwin County  
Bon Secour National Wildlife Refuge  
Scott Paper Company  
Browning-Ferris Industries, Inc.  
Waste Management, Inc.

Buffalo Rock-Pepsi Cola Bottling Company  
Coca-Cola Bottling Company  
Gulf Coast Conservation Association  
Mobil Oil Company  
Exxon Oil Company  
Shell Oil Company

#### ALASKA

Alaska Coastal Management Program  
Alaska Distributors  
Alaskans for Litter Prevention and Recycling  
Alaska Sea Grant College Program

Carrs Shopping Centers  
Conoco, Inc.  
Safeway Stores  
USDA Forest Service

#### CALIFORNIA

Center for Marine Conservation  
Department of Conservation, Division of Recycling  
California State Parks Foundation  
Harry and Grace Steel Foundation  
The Society of the Plastics Industry, Inc.  
Oceanic Society, San Francisco Bay Chapter

San Francisco Federal Savings  
Safeway Stores  
Lucky Stores  
San Francisco Foundation  
Browning-Ferris Industries, Inc.

#### CONNECTICUT

First Constitution Bank  
Coastal Savings Bank  
Tom Romano, CRT Associates, Old Saybrook  
Coca-Cola Bottling Company  
The Whole Donut  
Domino's Pizza

The Subway, Groton  
McDonald's  
Mystic Kite Shop  
SoundWaters  
WJAC Radio, Greenwich

#### DELAWARE

Mobil Chemical Corporation  
Browning-Ferris Industries, Inc.  
Playtex Incorporated

Southland Corporation  
Trophy Hut

#### FLORIDA

Florida Department of Environmental Regulation  
Coastal Zone Management  
The Knight Foundation  
Elizabeth Ordway Dunn Foundation  
The Curtis and Edith Munson Foundation, Inc.  
General Development Corporation  
Cowles Charitable Trust  
Mrs. Howard F. Whitney, Jr.

Dunspaugh-Dalton Foundation  
Mrs. Allen F. Manning  
Southern Bell  
The National Association for Plastics Container Recovery  
Anheuser-Busch Companies Inc.  
The Society of the Plastics Industry, Inc.  
Publix Super Markets, Inc.  
First Brands Corporation, Inc.

#### HAWAII

Governor's Advisory Committee on Litter Control

## Appendix 1 (continued).

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### Major Sponsors of 1989 Beach Cleanups

#### MAINE

Carter Rice Paper  
Image Set Design  
Loring Short & Harmon  
D.F. Munroe Company  
Atkins Printing Service  
Mercer Paper Tube Corporation  
WCHS-TV, Portland  
Maine Printing Exchange

Arnold Printing Co., Inc.  
Forms By Design  
Central Maine Power  
Sonoco Products Company  
Hannaford Brothers  
Shaws, Inc.  
Spectrum Printing  
Prelude Designs

#### MARYLAND

Assateague Island National Seashore  
Assateague State Park

Chincoteague National Wildlife Refuge

#### MASSACHUSETTS

Sonoco Products  
Mobil Chemical  
Samuel Perkins Medical Supply Company  
Damon Clinical Laboratories

Waste Management of North America  
WBZ-TV, Boston  
WLNE-TV, New Bedford-Providence

#### MISSISSIPPI

Chevron USA, Inc.  
Friends of the Islands  
Mobil Exploration and Producing US, Inc.  
McDonald's, Gautler  
Hardee's, Gautler  
Singing River Ice Company  
Pass Christian Chamber of Commerce  
Mississippi Power Company  
Colle Towing  
Biloxi Hilton  
Blom's Creative Signs  
Coca-Cola Bottling Company of Ocean Springs  
Coca-Cola Bottling Company of Gulfport

Pan Isles, Inc.  
Eastern National Parks and Monument Association  
Browning-Ferris Industries, Inc.  
Waste Management of Mississippi, Inc.  
Gulf Coast Waste & Disposal, Inc.  
Chevron Exploration and Production, Southeast Region  
Lil Ray's, Waveland  
Merchants Bank and Trust Company  
Hancock Bank  
Peoples Bank  
Moss Point Glove Company  
U.S. Coast Guard, Pascagoula and Gulf Stations  
Sailfish Harbor and Shrimping Tour

#### NEW JERSEY - Asbury Park Press

#### NEW YORK

We Care About New York  
New York State Office of Parks, Recreation  
and Historic Preservation

U.S. Environmental Protection Agency

#### NORTH CAROLINA

Telecom-USA  
NC Corn Growers Association  
Webster Industries  
BB&T Bank  
Gold Bond Building Products  
Texasgulf, Inc.  
Hatteras Yachts  
Budweiser Distributors

NC Aquarium Society  
Highland Press  
Southern Golf Distributors  
Weyerhaeuser Co.  
Alliance for Balanced Coastal Management  
NC Wildlife Resources Commission  
Carolina Power and Light  
Miller Brewing Distributors

#### OREGON

Oregon Department of Fish and Wildlife  
Oregon Telephone Pioneers  
Oregon Sanitary Service Institute  
Oregon Stop Oregon Litter and Vandalism

Oregon Parks and Recreation Department  
Mail Handler's Local #315  
United Grocers  
Amour Foods

## Appendix 1 (continued).

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### Major Sponsors of 1989 Beach Cleanups

#### PENNSYLVANIA

McDonald's  
Putt-Putt Golf and Games

#### PUERTO RICO

University of Puerto Rico, Dept. of Marine Science  
Club Nautico de Boqueron  
Rio Piedras Heights High School

Dr. Gilberto Concepcion de Gracia High School  
A.D.T. Lajas High School

#### RHODE ISLAND

WLNE-TV, New Bedford-Providence  
Rhode Island Hospital Trust National Bank

Rhode Island Department of Environmental Management  
Audubon Society of Rhode Island

#### SOUTH CAROLINA

Governor's Task Force on Litter  
SC State Development Board  
Kiawah Resorts Associates  
Post and Courier Foundation  
Amoco Chemical Company  
Amoco Foam Products Company  
SC State Ports Authority  
Macalloy Corporation  
Tomlinson Golf Construction, Inc.  
Fairfield Ocean Ridge, Inc.  
Toler's Cove Marina  
Sea-Land Service, Inc.  
CSI Group, Inc.  
SC Electric and Gas Company  
Capes Shipping Agencies, Inc.  
Debordieu Colony Community Association, Inc.  
Lockheed Aeronautical Systems Company  
Beach Cove Resort  
Waccamaw Audubon Society  
Sail Sports

SC Wildlife Federation  
Planters LifeSavers Company  
Dataw Island Alcoa SC, Inc.  
Burger King Corporation  
Sonoco Products Company  
Oneita Industries Corporation  
Furlong Printing  
Butler Paper  
Image Network  
Waste Management of South Carolina  
SC Broadcasters Association  
WCSC-TV, Charleston  
International Paper  
SCDHEC-Trident Health District  
Sunbelt Coca-Cola Bottling  
Patricia Gregory  
Mary Wiltshire  
Piggly Wiggly  
Westvaco

#### TEXAS

Boating Trades Association of Texas  
Browning-Ferris Industries  
Chevron  
Dow Chemical  
Exxon Chemical  
Fondren Foundation  
Keep Texas Beautiful, Incorporated  
Kwik-Kopy (Medical Parkway, Austin)  
Lewis Plastics, Incorporated  
Lower Colorado River Authority  
Maryland Coffee Club  
Mobil Exploration and Producing, U.S., Incorporated

Moody Foundation  
Monsanto  
SANDOZ Crop Protection Corporation  
Sea-Arama Marineworld  
Shell Chemical  
Shell Oil  
Tenneco  
Texas Hotel and Motel Association  
Texas Olefins  
Texas State Aquarium  
The Society of the Plastics Industry  
Trull Foundation

VIRGINIA (Ocean Beaches) - Archer-Daniel Midland

#### NEW BRUNSWICK, CANADA

City of Saint John  
Fundy Guild, Alma

Tim Horton's Donuts Limited

NOVA SCOTIA, CANADA - Atlantic Wholesalers

## Appendix 2.

### Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks
Alabama	Belgium <sup>1</sup>	1 metal can	syrup
	Canada (Ontario)	1 plastic bottle	sealant
	China	1 plastic bottle	medicine
	Greece	1 plastic bottle	
	Japan	1 metal aerosol can	
	Mexico	1 plastic tub	
	Turkey	1 milk carton	
	Viet Nam	1 plastic bottle	spiced chili sauce
		1 plastic bottle	garlic sauce
Alaska	Japan	1 plastic tube	lotion or gel
	"Oriental"	1 newspaper	
California	Argentina	1 container	deodorant
	"Asia"	1 paper label	
		1 crate	
	Canada	1 metal can	beer
	China	1 plastic label	"Rainmakers"
		1 plastic bag	
		1 piece of newspaper	
	El Salvador	Passport and papers	
	France	1 plastic bag	"Rail Welding"
	Germany	1 plastic bottle	formaldehyde
		1 glass bottle	
		1 plastic package	
		1 container	sunscreen
	Greece	1 box	gum
	India	1 container	drink, "Soyabean"
	Italy	1 plastic bottle	"Aqua Mineral"
	Japan	3 pieces of packaging	film
		1 cardboard box	drink, "Vitasoy"
		1 plastic wrapper	"Flower Kiss Candy"
		1 beverage lid	"Saharu"
		1 metal can	"Sacsac"
		1 styrofoam bag	
		1 plastic packet	
	1 plastic wrapper	cookie	
	1 plastic bag	rice crackers	
	1 light bulb		
	1 glass bottle	liquor	
	1 glass bottle	medicine	
	1 glass jar with aluminum lid		
	1 metal can	soda	
	1 paper strip		
	1 piece of newspaper		
Korea	1 tea bag		

<sup>1</sup>All sources are listed as indicated by volunteers. In some cases the sovereign state could not be determined.

## Appendix 2 (continued).

### Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks	
California (continued)	Mexico	2 bottle caps		
		2 glass bottles	liquor	
		1 cardboard container	juice, "Jandaia Maracuja"	
		1 glass bottle	"Tipp"	
		1 metal can	"Tecate"	
		1 plastic bottle	"Colorama"	
		1 metal can	chili peanuts, "La Abeja"	
		1 container	cheese, "Jalisco"	
		1 aerosol can		
		1 piece of glass		
		1 plastic bottle	detergent	
		1 glass bottle	7-Up	
		1 piece of newspaper		
		1 comic book		
		1 wrapper	candy	
		1 plastic packet	food	
		Netherlands (Holland)	Philippines	1 metal can
1 glass bottle	beer, "Pale Pilsen"			
Spain		1 glass bottle	beer	
		1 wine bottle cork		
Connecticut	Puerto Rico	1 plastic bucket/container	"Marco el Marranito"	
Delaware	Brazil	1 milk carton		
				Canada
	France	1 plastic cap	1 milk carton	
	Japan	1 plastic container	1 cellophane package	food
	Mexico	1 aerosol can	1 plastic label	bug spray, "Baygon"
	Netherlands (Holland)	1 plastic label	1 carton	orange juice
	Norway	1 plastic sheet with writing	1 milk carton	
	Spain	1 glass bottle	1 metal can	mercurochrome
	United Arab Emirates (Sharja)	7 light bulbs	1 aerosol can	hair spray
	"West Indies"	1 glass bottle	1 milk carton	
United Kingdom (Scotland)				
Florida	"Arabia"	1 plastic canister		
				Argentina

## Appendix 2 (continued).

### Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks
Florida (continued)	"Asia"	1 crate	
	Bahamas	1 plastic bottle	"Marine"
		1 balloon	from "Bimini"
	Brazil	1 plastic bottle	"Tally Ho"
		1 plastic 5 gal. bucket lid	
		1 plastic bottle	"Aqua Lavandiha"
		1 container	medicine
		1 bottle	disinfectant
	Bulgaria	1 can	bug repellent
	Canada	1 plastic bucket	
		1 plastic bottle	
		1 bottle	shampoo
		1 aquaculture salmon tag	
	Chile (Santiago)	1 plastic bottle	"Chlorex"
	China	1 glass bottle	clear
		1 shoe	
		1 glass bottle	
		1 bottle	hot pepper sauce
		1 plastic bottle	dish soap
		1 top	coffee, "Nestle"
		1 can	"Coca Cola"
	Colombia (Bogota)	2 plastic bottles	
		1 plastic banner	
		1 can	"Materva"
	Cuba	1 bottle	
		1 spray container	medicine, "Salbul"
		1 aerosol can	bug spray
		1 plastic bottle	"Cloralax"
		1 tobacco wrapper	
	Czechoslovakia	1 metal can	
	Dominican Republic	1 plastic bottle	"El Manicro"
		1 plastic bottle	
		1 plastic bottle	"Aga Destilada"
	"Far East"	1 plastic bottle	"Aqua purificator"
	Finland	1 glass bottle	liquor
	France	2 plastic bottles	medication, "Paxom 20mg. Dipancoride"
		2 cans	"Fabulan Hair spray"
		2 plastic bottle	
		2 cans	whip cream
		2 metal aerosol cans	
	1 plastic lid		
	1 glass bottle		
	1 plastic bottle	toilet bowl cleaner	
	1 can	mousse	
	1 bottle	hair conditioner	
	1 cardboard box	"Parapoux Aerosolcan"	
	1 crate		
	1 cardboard box		
	1 aerosol can	"Para Poux"	
	1 plastic bottle	perfume, "Jocond"	

Appendix 2 (continued).

Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks	
Florida (continued)		1 plastic bottle	perfume, "Jomoco"	
		1 plastic bottle	"Clarel"	
		1 container	perfume (Paris)	
		1 container	"Vaselene"	
		1 plastic bottle	motor oil	
		1 bottle	liquor	
		1 bottle		
		1 bottle	water	
		1 bottle	milk	
		1 plastic bottle	"Des Petroles"	
		1 plastic bottle	milk	
	Germany		2 fuses	"20-80W 120V"
			2 metal cans	paint thinner
			2 plastic bottles	deodorant
			1 plastic bottle	"Nevea"
			1 can	hair spray
			1 bottle	shampoo
			1 plastic bottle	"like Draino"
			1 plastic bottle	cleaner
			1 glue stick	
			1 plastic top	
			1 plastic bottle	
			1 light bulb	
			1 metal can	hair mousse
			1 container	glass cleaner
	Greece		1 plastic bottle	detergent, "Forte"
			1 bottle	soap
		1 plastic bottle	window cleaner	
		1 glass bottle		
		1 plastic bottle	shampoo	
Indonesia		1 cigarette wrapper		
Israel		1 plastic bottle	blue	
Italy		2 plastic bottles	"WC2000"	
Jamaica		1 plastic lid	"Thermoco"	
Japan		1 wrapper		
		2 oil filters		
		1 plastic cap		
		1 plastic bottle	bleach	
		1 plastic bottle	with eye dropper	
		1 plastic bag	food	
		1 plastic tube	toothpaste	
		1 plastic bottle		
		1 glass bottle	wine	
		1 glass bottle		
	Korea		1 plastic wrapper	
Mexico		4 plastic bottles		
		2 bottle caps		
		2 plastic bottles	deodorant	
		2 plastic bottles	"Juna"	
		1 plastic bottle	detergent	
		1 aerosol can		

## Appendix 2 (continued).

### Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks
Florida (continued)		1 container	food
		1 container	medicine
		1 plastic bottle	bleach
		1 plastic bottle	toilet cleaner
		1 plastic bottle	"Sunlight"
		1 plastic bottle	"Electrolito-[Sevia]-Tel37-54-09 from Heco en Mexico
		1 plastic bottle	motor oil
		1 glass bottle	alcohol
		1 container	baby powder
		1 glass bottle	with skull and crossbones, "Veneno"
		1 glass bottle	"Coro Cruno"
		1 plastic bottle	"Clarisol"
		1 glass bottle	wine
		1 plastic bottle	tanning lotion, "Hotel Beach Club Cancun"
		1 metal can	bath powder
		1 plastic bottle	cleanser, "Ajax"
		1 bottle	medicine, "Kaomycin"
		1 plastic bottle	"Edial de Vanila"
		1 plastic bottle	"Maestro"
		1 glass bottle	
	1 can		
	1 plastic bottle	cleanser	
	1 plastic bottle	shampoo	
	Netherlands (Holland)	3 plastic bottles	
		2 glass bottle	liquor
		1 plastic bottle	"Bio eternal hand cream"
		1 metal container	tobacco
		1 glass bottle	
		1 paper container	powdered milk (Woerdan)
	New Zealand	2 plastic containers	butter
	Nicaragua	1 bottle	
	Norway	1 drinking water bag	"Seven Oceans FINIZ"
	"Oriental"	2 plastic bottles	toilet cleaner, "Harpie"
		2 containers	hand cleaner, "Woo Yang"
		1 paper carton with straw	beverage
		1 plastic container	
	Pakistan	1 glass bottle	from "Hamdard"
	Portugal	2 plastic bottles	"Primor Vinagre"
	Romania	2 aerosol cans	"Deo"
	Spain	1 plastic bottle	disinfectant
		1 plastic bottle	deodorant (Barcelona)
		1 container	skin cream
		1 plastic bottle	
	Trinidad and Tobago	1 glass bottle	carbonated water, "Solo"
	United Kingdom (Britain, England, Scotland)	1 container	"Draino"
		1 cigarette pack	
		1 plastic ping-pong ball	
		1 metal spray can	"Lariel"

Appendix 2 (continued).

Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks
Florida (continued)	USSR (Russia)	1 plastic bottle	
		1 glass bottle	
		1 container	foot powder, "Schell"
		4 light bulbs	
	Venezuela	1 container	suntan lotion, "Kapo"
		1 aerosol can	insect repellent
		1 plastic crate	
		1 plastic bottle	shampoo, "Shutan Bolito"
	Unknown	1 metal can	beer, "Polar"
		1 glass bottle	beer, "Polar"
		2 glass bottles	"Kein Pfand"
		1 glass bottle	coffee, "um Produto Cacique"
Georgia	"Asia"	1 glass bottle	food-related
	Greece	1 plastic container	"Maloni"
	Thailand	1 plastic container	food
Hawaii	China ("Shanghai")	1 paper wrapper	"White Rabbit"
		1 plastic cap	
		1 plastic toy	
	Japan	6 fishing floats	
		5 plastic bottles	detergent
		2 glass bottles	
		2 plastic bottles	
		2 piece of plastic	
		1 plastic package	
		1 plastic container	
		1 wrapper	candy, "Mikakuto"
		1 golf ball	
		1 5 gal. container	
		1 bottle	suntan lotion
		1 plastic bottle	dish soap
		1 cigarette butt	
		1 price tag	
		1 film carton	
		1 battery	
		1 wrapper	video tape
		1 - 1"x3" plastic sheet	
		1 bottle cap	
	1 packet	"Shoyu"	
	1 cardboard piece		
	1 bottle cap		
	1 plastic bottle	mineral water	
1 glass bottle	"Suntory"		
1 soda case			
1 rubber slipper			
1 plastic bottle	suntan lotion		
1 plastic bottle	beverage		
Korea	1 plastic crate		
	1 aerosol gas cartridge		
	1 wrapper	candy, "Ginsinei"	

## Appendix 2 (continued).

### Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks
Hawaii (continued)	Malaysia	1 plastic bag	
	New Zealand	2 glass bottles	beer
	Norway	1 plastic luggage tag	"Brothers Ltd."
	"Oriental"	2 band-aids	
Louisiana	"Arabia"	1 aerosol can	bug spray
	"Asia"	1 glass bottle	
	Belgium	1 pen	
	China	2 plastic bottles	
		2 glass bottles	whiskey
		1 bag	
		1 can	soybean drink mix, "Yeos"
		1 can	soda
		1 paper carton	
		1 can	crackers
		1 container	chrysanthemum tea
	Cuba	1 bottle	
	Czechoslovakia	1 1-gal. metal container	dried milk
	France	2 cartons	wine
		1 plastic bottle	"Renovateur Plastiques"
		1 plastic bottle	"Dinor"
		1 bottle	disinfectant
		1 cardboard box	pineapple juice
		1 plastic bottle	
		1 bottle	water
	Germany	1 cigarette lighter	
		1 paper carton	"Orange Nektar"
	Italy	1 plastic bottle	hydrogen peroxide
		1 pipe support	
		1 electronic resistor	
	Japan	1 box	tea
		1 bottle	drink
1 container		muscle balm	
1 can		hair spray	
	1 plastic bottle		
	1 metal jug		
	1 plastic bottle	toilet cleanser	
Mexico	6 plastic bottles		
	2 glass bottles	"Tequila"	
	1 plastic bottle	mineral water	
	1 plastic container	"Creame"	
	1 plastic bottle	"Lobo"	
	1 plastic bottle	water	
	1 plastic bottle	deodorant	
	1 bottle	"Barcelo"	
	1 plastic bottle	medicine	
	1 plastic bottle	bleach	
	1 bottle	fruit juice	
	1 bottle	drink	
	1 plastic bottle	"Cloratex"	
1 plastic bottle	"Frutsi Bebida de Fruta"		

## Appendix 2 (continued).

### Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks
Louisiana (continued)		1 cap	"Los Brios"
		1 plastic bottle	"Clarisol"
		1 5 gal. metal container	
		1 styrofoam cup	"Cozumel"
		1 aerosol can	deodorant
		1 plastic container	
		1 plastic bottle	cleanser
		1 metal tube	"Pharmico"
		1 plastic package	"Seven Oceans Drinking Water"
		1 ration box	
	Norway "Oriental"	1 container	soybean
		1 glass bottle	food
		1 plastic cap	
		2 paper boxes	tea
		2 cans	drink
	Singapore	1 container	soybean beverage
		1 container	beverage
		1 aluminum can	drink
		1 wine bottle	"Arehucas"
		1 metal can	from Barcelona
	"South America" Spain	1 aerosol container	
		1 plastic bottle	"Heva DePreorina"
		1 plastic bag	food
1 glass bottle		"Young Coconut Juice"	
1 package		noodles	
Thailand	1 plastic bottle		
	1 aluminum can	drink	
United Kingdom (Scotland)	1 aerosol bottle	oven cleaner, "Sandmax"	
	1 glass bottle		
USSR (Russia)	1 plastic bottle	"Aqua Oxigena"	
Venezuela	1 plastic brush		
	1 kerosene container		
Viet Nam	1 plastic jar	chili garlic sauce	
	1 plastic bottle	"Javel"	
Maine	Canada	7 salmon bands	2 from New Brunswick
		3 lobster crate bands	
		1 plastic bottle	
		1 plastic strap	
		1 plastic bottle	antifreeze
		1 plastic bag	salt
		1 plastic bag	for B.V.D.
		1 shopping bag	from "Zeller's"
		1 metal	beer
		1 can	Sterno
	France	1 tube	food
		1 bottle filter	"Furamo"
	Italy	1 rubber glove	
	Japan		
	Korea		

## Appendix 2 (continued).

### Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks	
Maryland	Belgium (Brussels)	1 tube	toothpaste, "Colgate"	
	Brazil	1 plastic bag	rice, "Tupinamba"	
	China	1 plastic bag	food	
	France	1 aerosol can	"Airwick"	
	Greece	1 plastic drum	"Parhal"	
	Iceland	1 glass bottle	vodka	
	Italy	1 aerosol can		
	Japan	1 glass bottle		
			1 plastic bottle	
	Mexico	1 plastic bag		"Coca Cola"
			1 glass bottle	beer
	Netherlands (Holland)	1 glass bottle		t-shirt
	"Orient"	1 plastic bag		food
	Spain	1 container		
	United Kingdom (England)	1 plastic bottle		"Beefeater Dry Martini"
Massachusetts	Austria (Vienna)	1 plastic bottle	suntan lotion	
	Canada	8 plastic bands		
		1 glass bottle	whiskey	
		1 plastic strap		
		1 milk carton		
	Germany	1 bottle	beer	
		1 metal bottle	hair spray	
	Iceland	1 buoy		
	Italy	1 metal cap	"Colavita"	
		1 plastic bottle		
	Japan	1 plastic bottle	toilet cleaner	
Korea	1 rope bag			
Mexico	1 plastic lid	from scallops		
Mississippi	Canada	1 glass bottle	whiskey	
	China	1 can	from Hong Kong	
		1 tea bag	"Jasmine"	
	Cuba	1 metal can	soda	
	Germany	1 bottle	aftershave	
		1 plastic tube		
	Japan	1 glass bottle	"Saki"	
		1 metal can	beer	
		1 metal can		
		1 rice stick		
		1 aluminum can	drink, "Pennywort"	
	Mexico	1 freezer bag		
		1 glass bottle	"Clarisol"	
	"Orient"	4 glass bottles	wine	
		1 bottle	sauce	
		1 plastic bottle	soy sauce	
	1 glass bottle			
Philippines	2 metal cans	"Yeos Soybean Drink"		
Portugal	1 can	"Soya Bean Drink"		

## Appendix 2 (continued).

### Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks
Mississippi (continued)	Singapore	3 cans	soybean drink
		2 container	soft drink
		1 can	fruit drink
		1 plastic carton	
		1 container	bamboo shoot extract
	Spain	1 aluminum can	bran drink
		1 bottle	vegetable oil
	Thailand	2 plastic bags	rice
		1 metal can	"Pennuert"
	Viet Nam	1 bag	
2 cans		drink, "Soya"	
Unknown	1 glass bottle	whiskey	
	1 glass bottle		
	1 can	soybean soda	
New Hampshire	Canada	2 pieces of plastic	
		1 salmon tag	
		1 lobster strapping tape	
New Jersey	none reported		
New York	Canada	1 bottle	beer
	Japan	1 plastic bag	
North Carolina	Brazil	1 plastic sandal	
		1 plastic bottle	hair rinse
	Canada	1 plastic bottle	deodorant, "Tres Brutt"
		1 plastic bottle	
	Chile	1 aerosol bottle	"Bang Insecticide"
	China	1 plastic bottle	cleanser
		1 tea bag	
	Colombia	1 glass bottle	
		1 plastic bottle	mousse
	"Far East"	1 plastic bottle	1 pint
	France	1 plastic bottle	milk, "Lait"
	Germany	1 plastic container	margarine
		1 container	"Palmolive Shaving Cream"
	Greece	1 fluorescent light ballast	"Osram"
		1 metal can	deodorant, "Rexona"
	Israel	1 plastic bottle	"AINO"
	Italy	1 plastic bottle	
	Japan	1 plastic tube	seltzer
	Mexico	1 sandal	
		1 metal can	sunscreen oil
1 plastic bottle		"El Rendidor"	
Norway	1 can	smoking tobacco	
	1 plastic container	"Regina Spul Fix"	

Appendix 2 (continued).

Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks
North Carolina (continued)	"Oriental"	1 bottle	oil
		1 plastic bottle	1 pint
		1 plastic bottle	
		1 plastic bottle	toilet cleaner
	Portugal		
	United Kingdom (England)	1 thermos bottle	
	USSR (Russia)	1 aerosol bottle	hair spray
		1 plastic bottle	
	Virgin Islands (St. Croix)	1 plastic bottle	bleach
	Unknown	1 plastic bottle	"Forte Anpaive Suvayn"
Oregon	"Asia"	1 plastic container	noodles
		1 plastic container	popsicles
	Canada	2 containers	sour cream
		1 plastic container	
		1 plastic bag	bait
		1 glass bottle	
		1 piece of plastic bucket	from Vancouver, B.C.
		1 plastic container	cottage cheese
		1 aerosol can	oven cleaner
	China	3 plastic bags	
		1 plastic container	sauce
		1 spark plug holder	
		1 bag	chicken
	Finland	1 milk carton	
	France	1 bottle	hair grower
		5 milk cartons	
		1 carton	powdered milk
		1 aerosol can	deodorant
		1 plastic bottle	disinfectant
	Germany	1 plastic bottle	"Trois Etoiles"
		1 plastic tube	grease, "Esso"
		1 container	hair care product
	Greece	1 container	grapefruit juice
	Japan	1 plastic bottle	blue, with pills
		2 yellow strapping bands	
		1 plastic bottle	toilet bowl cleaner
		1 1/2 gal. milk carton	
		1 piece of paper	
		1 plastic bottle	cleaning fluid
		1 food package	
1 plastic bottle			
1 pen			
1 plastic container		food	
1 plastic wrapper		food	
1 package		noodles	
1 bottle		medicine	
1 wrapper			
1 plastic bag	t-shirt		
1 piece of plastic			

Appendix 2 (continued).

Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks
Oregon (continued)		1 plastic bag	
		1 fisherman's cap	
		1 glass bottle	whiskey, "Nikki"
		1 tube	toothpaste
		1 plastic bottle	protein
		1 light bulb	
		1 plastic bottle	suntan oil
		1 container	cooking oil
		1 2" x 8" tube	
		1 bag	rice
		1 bag	food
		1 tube	caulk
		1 plastic lid	
		1 foil bag	food
		1 styrofoam container	
		1 foil packet	
		1 plastic bag	
		2 plastic containers	juice
		1 plastic bottle	shampoo, "Wella-Balsam"
		1 container	juice
	1 plastic bag	rice	
	1 metal-lined carton		
	1 waxed paper/foil box	juice	
	1 container	apple juice	
	1 milk carton		
	1 container	milk, "Lait-demi"	
	1 plastic container	milk	
	1 metal aerosol can	"Armaclean"	
	1 plastic container		
Pennsylvania	none reported		
Rhode Island	none reported		
Puerto Rico	none reported		
Texas	Antilles	1 salt bag	from Bon Aire
		1 plastic aerosol bottle	hair mousse, from Trinidad
	"Arabia"	1 plastic packet	sauce
		1 glass bottle	with two bulls on it
		1 plastic packet	oil/food
		1 plastic piece	"Pasta & Producto Argentina"
		1 plastic bag	
		1 plastic carton	
		1 plastic bottle	toilet cleaner
		1 plastic bottle	deodorant
		1 plastic bottle	shampoo, "Polmolive"
		1 paper milk carton	
	1 cardboard carton	"Long Vida"	

Appendix 2 (continued).

Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks
Texas (continued)	China	1 plastic cap	blue
		1 plastic bottle	"Johnson & Johnson"
		1 plastic thread protector	"MW"
		2 glass bottles	
		2 paper container	drink
		2 plastic container	food
		2 plastic bags	
		2 metal cans	
		2 plastic bottles	
		1 container	suntan lotion
		1 plastic bottle	hand lotion
		1 glass bottle	liquor, "Nhan Hieu Cau Chung"
		1 plastic bottle	toilet bowl cleaner
		1 paper label	
		1 light bulb	Hong Kong
	1 paper milk carton		
	1 wrapper	food	
	1 plastic container	silica gel	
	Colombia	2 plastic bottles	from Bogota
		1 glass bottle	
		1 glass bottle	sealed
	Cuba	1 plastic bottle	"Quantel"
		1 plastic bottle	
	Denmark	1 plastic bag	Copenhagen
	Ecuador	1 plastic bottle	"Ajax"
	El Salvador	1 plastic bottle	bleach
	France	1 plastic bottle	disinfectant
		5 plastic bottles	
		5 plastic bottles	sterilized milk, "Bridel"
		3 plastic bottles	aspirin
		2 plastic bottles	disinfectant
		2 plastic bottles	"Recif"
2 metal aerosol cans			
1 plastic bottle		"Mobil"	
1 paper milk carton			
1 plastic bag			
1 plastic bottle		"Spiral 66"	
1 plastic bottle		"Pierval"	
1 plastic bottle		yogurt, "Chambouray"	
1 piece of paper		conversion instructions	
1 plastic bottle		water	
1 glass bottle	food		
1 paper container	food		
1 paper carton			
1 plastic bottle	"La Croix"		
1 glass bottle	wine		
1 syringe			
1 plastic bottle	spot remover		

## Appendix 2 (continued).

### Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks
Texas (continued)	Germany	1 glass bottle	"De Danske Spritfbrikker"
		1 metal can	shaving cream
		1 plastic bottle	drinking water, "Trinkwasser"
		1 plastic container	oil
		1 glass bottle	liquor
		1 metal container	gas, 49 oz., "Isobuthane"
		1 plastic bottle	"Schauinal Schwarzkof"
		1 paper product	
		1 glass container	mayonnaise
		1 plastic bottle	toilet bowl cleaner
		1 plastic bottle cap	
		1 metal can	
		1 plastic tube	insect spray
		1 plastic bottle	antibiotic salve, Hamburg
		1 plastic bottle	shoe polish
	1 glass bottle	dish washing liquid, "Forte"	
	Greece	1 metal aerosol can	
		1 milk carton	
		1 plastic bottle	"Tic Tak"
	Guatemala	2 vegetable sacks	
	Italy	3 round tubes	blue, "Alliaieria Tubificio Arvedi Sepia Cremona"
	Japan	2 metal aerosol cans	
		2 wrappers	food
		1 spray can	"Roach Kill"
		1 plastic bottle	"Vim"
		1 glass bottle	wine
		1 light bulb	
		1 plastic bottle	"Harpil"
		1 plastic envelope	"Sweet Flour"
		1 plastic cap	"Bayer"
		1 plastic bottle	
		1 glass bottle	liquor
		1 plastic bottle	toilet bowl cleaner
1 glass bottle			
1 plastic lid			
1 plastic tube		"Yamato"	
1 plastic bottle		"Zhuanyong Xijiejing"	
1 plastic package		food	
1 soup packet			
1 plastic bag			
1 plastic bottle		"Soybean"	
1 plastic bottle		shampoo, "Koure Lovelong"	
1 paper tea bag			
1 plastic bottle	beverage		
1 polyethylene wrapper			
1 metal can	cola		
1 plastic packet	survival food		
1 plastic bottle	cleanser		

## Appendix 2 (continued).

### Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks	
Texas (continued)	Korea	2 glass bottles	liquor	
		1 can	soup	
		1 wrapper	food	
	Malaysia	Mexico	1 burlap bag	
			1 plastic bottle	water, (phone <0357>32-4419)
			1 plastic bag	
			1 plastic bottle	cleaner
			206 plastic bottles	"Clarasol/Clarisol"
			113 plastic bottles	
			55 plastic bottles	motor oil
			54 plastic bottles	bleach
			50 plastic bottles	cleaner, "El Pinador"
			37 plastic bottles	motor oil, "Veedol"
			21 plastic caps	water bottle
			17 plastic bottles	"Cloralex"
			16 glass bottles	"Carta Blanca"
			14 plastic bottles	"Valenciana"
			13 plastic bottles	"Muriatic Aceido"
			12 glass bottles	"Coke"
			11 milk cartons	"Leche, Alpura", "Ultra Lala"
			11 plastic bottles	shampoo
			9 plastic bottles	oil, "Mobil"
			9 plastic bottles	detergent, "Suvitel"
			9 plastic bottles	"Frutsi Bebida De Fruta"
			9 plastic bottles	water
			8 plastic bottles	medicine, aspirin, pills
			7 plastic bottles	oil, "Elf"
			7 glass bottles	
			7 plastic caps/lids	
			6 cardboard cartons	fruit drink
			6 plastic bottles	soap
			5 plastic bottles	"El Rendidor"
			5 plastic bottles	talcum powder
			4 plastic bottles	disinfectant
			4 plastic bottle	baby talc, "Nivea"
			4 plastic wrappers	food
		4 burlap sacks		
		3 plastic bottles	lotion	
		3 plastic bottles	"El Nevado"	
		3 plastic bottles	alcohol, hydrogen peroxide, liniment	
		3 plastic bottles	suntan lotion	
		3 plastic bottles	drink	
		3 plastic bottles	deodorant	
		3 plastic bags		
		3 plastic bottles	ammonia	
		2 metal aerosol cans	deodorant	
		2 glass bottles	vodka, wine	
		2 plastic packets	shampoo	
		2 aerosol can	roach spray, "Bay gon Insecticide"	
		2 bottles	perfume	
		2 plastic bottles	detergent	

Appendix 2 (continued).

Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks
Texas (continued)		2 plastic bottles	"Sueve"
		2 plastic bottles	medicine, "Solutina"
		2 plastic bottles	"Pegasolito Pegamento Escolar"
		2 plastic bottles	"Blanqueador"
		2 plastic bottles	"Atrix"
		2 metal caps/lids	
		2 BBQ brushes	
		1 plastic bottle	"Araso"
		1 plastic bottle	"Asol Blengara"
		1 cigarette package	
		1 plastic bottle	antifreeze
		1 plastic bottle	liquid paper
		1 plastic bottle	"Oxigena
		1 container	plasma
		1 cardboard container	margarine
		1 plastic cap	"Dri"
		1 metal can	oil, "Mobil"
		1 plastic lid	"Clarisol"
		1 plastic container	"Cafinco"
		1 plastic bottle	"Avasol"
		1 plastic bottle	"Lobo"
		1 plastic bottle	"Fonkin"
		1 plastic bottle	"Bleace Neustra"
		1 plastic bottle	"Lavax Las"
		1 plastic bottle	"Jumex"
		1 plastic bottle	"Lajo"
		1 plastic bottle	"Avecvo Emulsion"
		1 plastic bottle	"Floo"
		1 plastic bottle	"Faceido"
		1 plastic bottle	"Pinol"
		1 plastic bottle	"Helca agua mineral"
		1 plastic cap	"Hale por las asas"
		1 plastic bottle	"Silkience"
		1 plastic jar	with metal lid
		1 plastic bottle	"Sulfatizor"
		1 plastic bottle	"Polvo"
		1 glass bottle	mineral water
		1 plastic bottle	"Mennen Talco"
		1 plastic bottle	"Los Lirlios"
		1 plastic jar	yogurt, "Cremoso"
	1 plastic bottle	"Funior-Servistol"	
	1 plastic bottle	white paste	
	1 glass bottle	"Viejo Vergel"	
	1 plastic bottle	"24"	
	1 plastic bottle	lens solution	
	1 plastic cap	"Del Golfo, Agua Purificada"	
	1 plastic bottle	battery acid	
	1 plastic bottle	"Petroleum distillate"	
	1 plastic bottle	"Saturno"	
	1 plastic bottle	"Poni"	
	1 glass jar	"Meyonasa Kraft"	

Appendix 2 (continued).

Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks
Texas (continued)		1 plastic bottle	"Mecal Mel"
		1 plastic bottle	deodorant, "Lady Ossart Bol Rol"
		1 plastic bag	paper towels, "Regio"
		1 plastic spool	fishing line
		1 plastic bottle	"Gutanga en powdre"
		1 plastic bottle	"Mariselle"
		1 plastic bottle	small, "Amber"
		1 plastic bottle	"Merida Yuc Mex"
		1 plastic bottle	"Optabon"
		1 plastic bottle	"Sodima"
		1 plastic bottle	"Venasula"
		1 plastic bottle	"Letro"
		1 plastic bottle	"Blanqueader para ropa"
		1 plastic bottle	"Lampara Aquita Negra"
		1 plastic bottle	"Pino Artisa"
		1 plastic bottle	"Citronella"
		1 glass jar	jelly, "Cajeta"
		1 plastic bottle	cream rinse, "Alberto Balsam"
		1 plastic bottle	lotion, "Careya Palvo"
		1 strapping band	
		1 plastic bottle	"Servis Juniors"
		1 plastic lid	"Penx Oil Co."
		1 plastic bag	chemical
		1 paper carton	wine
		1 plastic bottle	"Jitomate Sante"
		1 plastic bottle	"Lavicol"
		1 plastic bottle	"Bagatelle"
		1 plastic bottle	"Profienzi"
		1 glass bottle	"Barrilitos"
		1 plastic bottle	make-up
		1 plastic bottle	hand cleaner
		1 plastic bottle	body lotion, "Avon"
		1 plastic bottle	acid
		1 plastic diaper	
		1 plastic bottle	chemical
		1 plastic bottle	solution, "Kura"
		1 plastic bottle	"Lapiz Adhesivo"
		1 plastic wrapper	medicine, "Cimetedira"
		1 plastic lid	"Agua Carmelita"
		1 plastic lid	"Cafinco"
	1 plastic bottle	"Indicaciones"	
	1 plastic bottle	"Coci-ero"	
	1 plastic bottle	chili	
	1 plastic bottle	"Loreal"	
	1 plastic bottle	"Limpiador Liauido"	
	1 plastic bottle	"San Benedetto Water"	
	1 plastic bottle	"Kavli Ekte Majones"	
	1 newspaper		
	1 glass bottle	"Nescafe"	
	1 plastic container	oil, "Super B+A"	
	1 package	cookies	

## Appendix 2 (continued).

### Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks	
Texas (continued)		1 plastic sack	"Lavandaria"	
		1 plastic bottle	"Johnson's Baby Powder"	
		1 glass bottle	"Barsilla"	
		1 plastic bottle	"Isopto Carpina"	
		1 plastic bottle	"Nobla"	
		1 paper wrapper	candy, "Salimon"	
		1 plastic container	margarine, "Anderson Clayton"	
		1 paper carton	"La Campesina"	
		1 plastic bottle	"Chlorodare"	
		1 plastic bottle	"Ponds of Mex"	
		1 plastic bottle	"Polifix"	
		1 metal can	paint	
		1 plastic container	food	
		1 metal can	refrigerant	
		1 plastic bottle	"Verde Cruz"	
		1 plastic bottle	battery fluid, "Jasja"	
	Netherlands (Holland)	2	paper containers	grapefruit juice
	New Zealand	1	metal aerosol can	whip cream
	Norway	1	sardine tin	
		1	metal aerosol can	
		1	buoy	size of a Volkswagen
		1	buoy	2' x 4'
	Oman	1	plastic bottle	salt, "Sultanaleg"
	"Orient"	5	plastic bags	food
		1	styrofoam container	
		1	plastic bag	detergent powder
		1	plastic spray bottle	"G Rapid Molycote"
	1	plastic bottle	green	
	1	glass bottle		
	1	wrapper	food	
	1	paper container	fruit juice	
	1	metal can	shaving cream	
Philippines	1	plastic bottle	deodorant	
	1	glass bottle	liquor	
Poland	1	plastic bottle	oil	
Portugal	1	plastic container	"VCAL"	
Puerto Rico	1	plastic container	milk	
	1	plastic bottle	"Carabik Sun"	
	1	plastic bottle	"Pepsi"	
Singapore	1	plastic container	orange juice	
	1	plastic bottle	"Harpie"	
	1	metal can	"Soya Bean"	
	1	paper carton	"Longan Drink"	
	1	metal can	soda	
	1	glass bottle		
"South America"	4	plastic bottles	"Cloralex"	
	1	plastic bottle	"Blanqueador"	
	1	plastic bottle	"El Oso"	
Spain	1	plastic bottle	nose spray	
	1	plastic bottle	eye drops	
	1	milk carton		

## Appendix 2 (continued).

### Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks	
Texas (continued)		1 glass bottle	liquor	
		1 net float		
		1 plastic container	lip protection	
		Sweden	1 metal can	"Gillette" Foamy (Stockholm)
			1 plastic bottle	
			1 plastic tube	"Abu"
		Taiwan	1 plastic bag	cookies
		Thailand	2 plastic bags	
			1 plastic bottle	"Xapion"
			1 plastic bottle	
			1 paper box	
			1 metal can	
			1 vegetable sack	
			1 plastic container	food
			1 plastic wrapper	food, "Chicken Soup"
		Turkey (Istanbul)	1 piece of plastic carton	
		United Kingdom (England)	2 glass bottles	liquor
			1 metal aerosol can	"Keen Ant & Roach Killer"
			1 metal can	paint, "Interlac"
			1 piece of paper	
			1 glass bottle	beer
			1 plastic piece	
			1 plastic bottle	mineral water
			1 plastic bottle	bleach
			1 plastic bottle	
			1 glass bottle	salad dressing, "Majones"
			1 paper label	from meat
	USSR (Russia)	2 plastic bottles		
		1 light bulb		
		1 glass bottle	liquor	
	Venezuela	1 plastic bottle	"San Eenendgito", from Cruze	
		1 plastic bottle	mineral water	
		1 plastic container	1/2 gallon	
		1 aluminum can	"Pepsi"	
		1 plastic bag		
		1 plastic bottle	"Lux"	
		1 plastic bottle	cleaner, "Harpie water-limp"	
		1 plastic bottle		
	Unknown	1 glass jar	"Aladino"	
		2 plastic bottles	salt, "Nezo"	
Virginia	Germany	2 milk cartons		
		1 container	fruit drink, "Maracua"	
		1 plastic bag		
	Japan	1 plastic bottle	cleaning agent	
		1 plastic container		
		1 metal can		
		1 plastic bottle	cosmetic	
	Mexico	1 plastic bottle	water, "Aqua Sanitaria"	
		1 metal dispenser	sweetener, "Hermes Edulcorantes SA Zurich Suiza"	

## Appendix 2 (continued).

### Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks
Virginia (continued)	Netherlands (Holland)	1 pipe tobacco pouch	
Virgin Islands	Brazil	1 plastic bottle	from Sao Paulo
		1 plastic tub	butter
	Costa Rica	1 plastic jar	"Lulack"
	France	1 plastic top	
		1 plastic container	hair conditioner
	Greece	1 plastic bottle	"Citrano"
		1 plastic bottle	"EYMTHTPTIKOY"
	Italy	1 plastic bottle	toilet cleaner
	Mexico	1 plastic container	yogurt
		1 glass bottle	
	Netherlands (Holland)	2 bottles	salt, "Sal"
	Puerto Rico	1 plastic bottle	
	Spain	1 plastic bottle	"Gel"
	Washington	Argentina	2 boxes with foil
Belgium		1 plastic bottle	
Canada		2 styrofoam cartons	eggs
		2 cardboard boxes	apple juice
		1 milk carton	
		1 bottle	syrup
		1 plastic wrapper	bacon
		1 glass bottle	"Sparkling Water"
China		1 plastic bag	
		1 glass bottle	beer
France		6 milk cartons	
		1 piece of paper	"Even uthentier"
		1 bottle	
		3 aerosol cans	
Italy		1 cardboard container	
Japan		2 tubes	silicone caulking
		2 bottles	beverage
		2 metal cans	
		1 light bulb	
		1 fluorescent light tube	
		1 cardboard box	drink
		1 glass bottle	liquor
		1 milk carton	
		1 wrapper	food
		Korea	1 plastic bag
Mexico		2 plastic bottles	prescription
		1 glass bottle	whiskey
		1 plastic bottle	"Baygon residual FCR"
Netherlands (Holland)		1 container	salt
Poland		1 carton	apple juice
Sweden		1 container	"volle Melk Laitentier"
USSR (Russia)		1 aerosol can	
Viet Nam	1 piece of paper		

Appendix 2 (continued).

Foreign Debris Items Reported During 1989 Beach Cleanups.

State	Sources	Type of Debris Item	Other Remarks
Canada			
(New Brunswick)			
	Mexico	1 plastic bottle	
	United States	1 balloon	from Maine
		1 plastic jug	milk, from Maine
		1 bottle	beverage
		1 metal can	beverage
		1 metal can	coffee
		1 metal tube	clear
		1 bottle	engine cleaner
		1 lunch box	
		1 gallon plastic container	spring water
		1 plastic container	milk
		1 plastic bottle	suntan lotion
		1 plastic bottle	from Florida
	USSR	1 plastic bottle	"KWPIV Klinex Plasco SA"
Canada			
(Nova Scotia)			
	Argentina	1 plastic bottle	"Comahue"
	Brazil	1 plastic lid	
	France	1 plastic bottle	toilet cleaner, "Reckett-Harpie WC"
	Germany	1 plastic bottle	"Fit"
	United States	1 5-gal. plastic jug	
		1 plastic bottle	"Clairol Nice 'n Easy"
		1 plastic gallon container	"Grant's Milk" (from Maine)
		1 feed bag	"Blue Sea" (from Massachusetts)
		1 metal	pressured cheese spread (from New Jersey)
		1 can	coconut (from New York)
		1 milk carton	
		1 flower pot	(from North Carolina)
	USSR (Russia)	1 bottle	chemical
	Yugoslavia	1 aerosol can	insecticide "Zlatodid"
Mexico			
(Cozumel)			
	Argentina	1 plastic bottle	
		1 metal can	
	Brazil	1 plastic bottle	
	China	1 plastic bottle	tanning lotion
	France	1 plastic bottle	
	Jamaica	1 plastic bottle	
	Japan	1 glass bottle	
	United States	11 plastic bottles	
		4 metal cans	
		3 aerosol cans	
		1 plastic bottle	oil
		1 plastic bottle	tanning lotion
		1 glass bottle	
		1 bottle	deodorant
	Venezuela	1 metal can	sardines
	Trinidad	1 plastic bottle	oil

# VOLUNTEERS COUNT! SEE YOU AT THE 1990 BEACH CLEANUP.



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