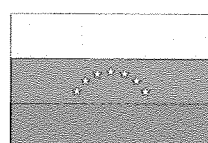
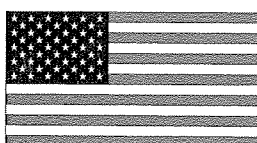
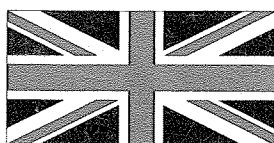
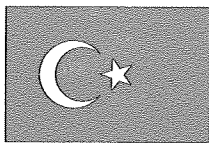
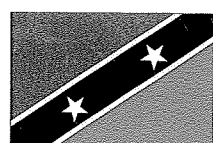
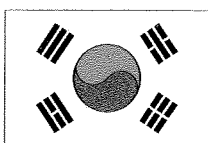
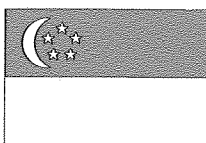
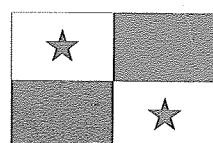
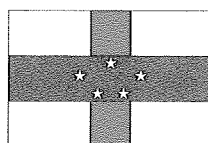
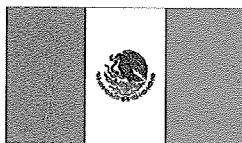
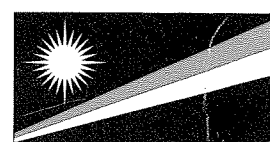
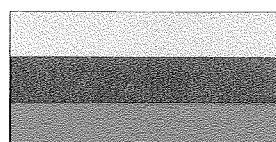
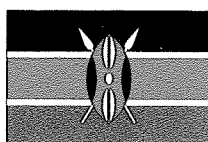
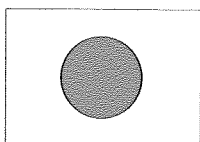
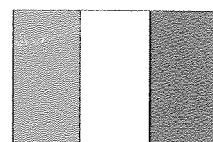
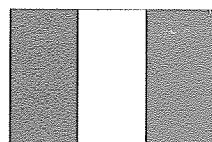
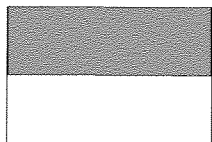
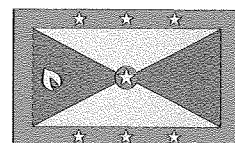
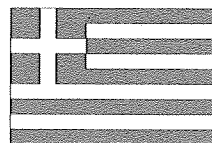
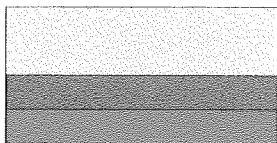
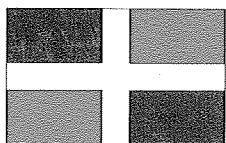
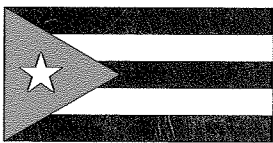
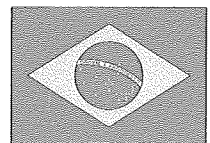
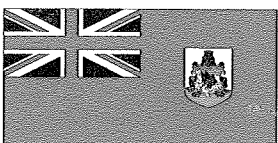
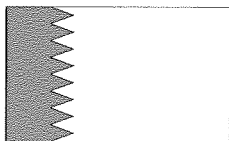
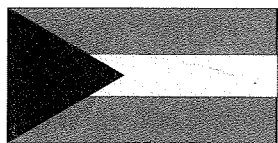
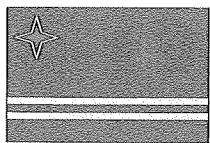
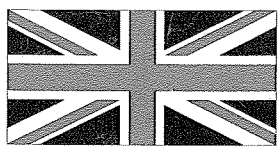


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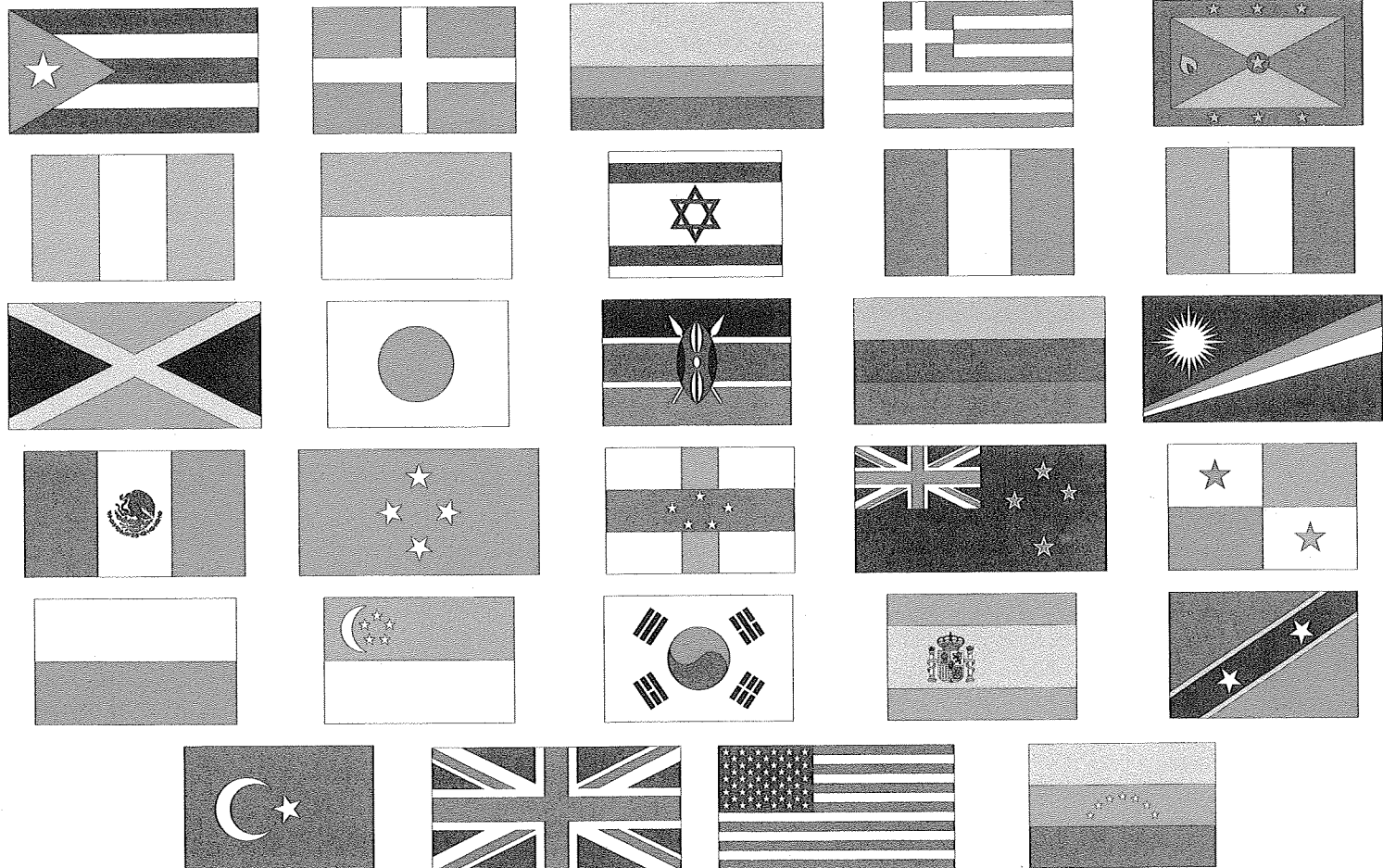
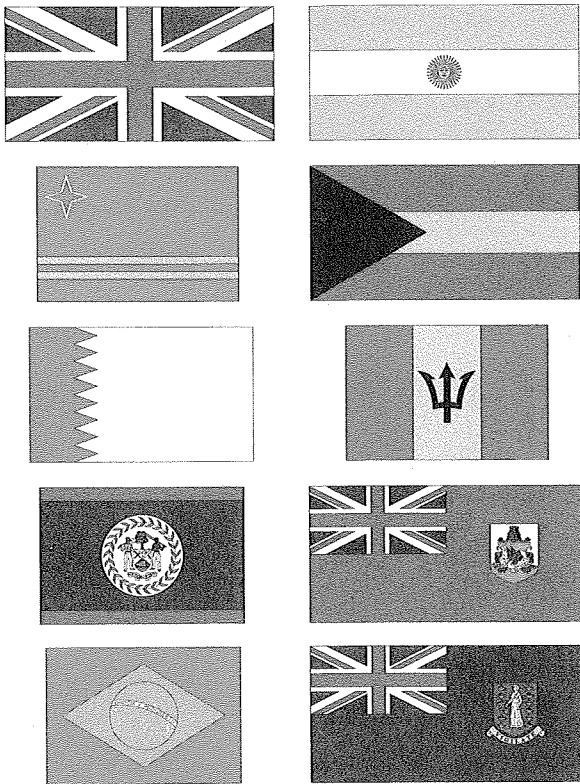
INTERNATIONAL COASTAL CLEANUP RESULTS



Center for Marine Conservation

1993

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Center for Marine Conservation

1993 INTERNATIONAL COASTAL CLEANUP RESULTS

**Compiled by
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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.

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*38 countries +
USA = 39*

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We would specifically like to thank the following individuals who worked so hard to make this report possible. They are:

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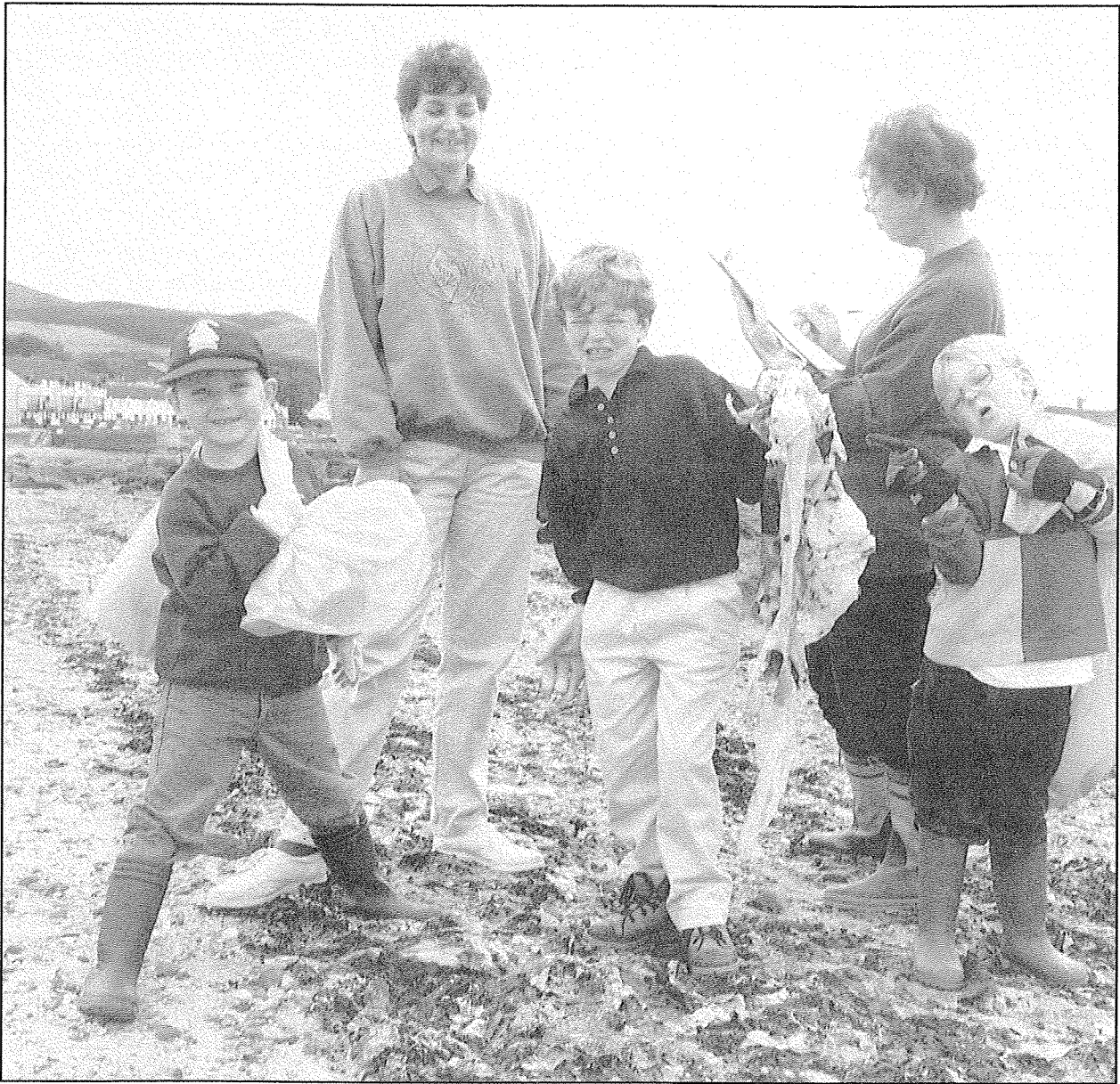
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Are we having a good time yet? These young members of England's Fairlie Action Group have mixed opinions.

INTRODUCTION

The fundamental purpose of the International Coastal Cleanup is to raise public awareness about the state of our oceans and coastlines, and to provide tools, in the form of accumulated data, with which to effect change.

This report is not about trash. It's about people—people all over the world who care about the health of our planet and who put that care into action. It's about cooperation and coalition, sometimes between the unlikeliest of groups who, setting aside their differing viewpoints, work together for a larger common goal.

This report is about the compelling desire for clean oceans.

1993 marks the eighth year that the Center for Marine Conservation (CMC) has coordinated coastal cleanups, beginning in 1986 with a statewide effort in Texas. The first nationwide cleanup took place in 1988, just four months before Annex V of the MARPOL Treaty* took effect. When Canada and Mexico joined in 1989, the Cleanup had become an international event.

The evolution from a national to a global focus is only natural. There are no legal borders on the sea. The natural world exists without clear boundaries or distinctions. There is no solid-line equator painted on the waves like a “no-passing” zone; no visible stripe separates today from tomorrow as travelers cross the international dateline.

The individual cleanups in each country, all voluntary, rely on long hours by willing, unpaid workers who put in months of planning and organization, in addition to the backbreaking work of picking up every scrap of trash on the actual cleanup day. CMC's role is one of oversight, coordination, and data analysis.

Once the trash is collected—and in many cases, recycled—the challenge lies in figuring out what it means. The data cards used in the Cleanup are “item specific”; that is, information is recorded numerically, by actual count of the items collected. The weight of the trash is determined locally, using methods that vary from site to site. All data interpretation in this report—percentages, trends and so forth—are based on item count rather than weight or volume. Measurement of the amount of debris is important because it enhances our ability to create positive change.

It should be noted that the very nature of this event—a three-hour, one-day, voluntary event, subject to varying geography, weather, organizational strategies, financial and material resources, reporting methods, and even public awareness of the problem—cannot and does not pretend to generate hard scientific data collected under controlled conditions. What the data give us, instead, is a snapshot of a moving target.

The snapshot nevertheless reveals a compelling image. Though many categories of trash can be identified, each with its own dangers, plastics overwhelmingly represent the single largest threat, of any debris, to our oceans' well being and that of its inhabitants. Light enough to float and virtually indestructible, plastic persists in the marine environment and travels around the world.

*The International Convention for the Prevention of Marine Pollution from Ships is commonly referred to as the MARPOL (MARine POLLution) Treaty. Ocean dumping of any ship-generated plastics, anywhere, has been prohibited since Annex V, an optional section of MARPOL, went into effect on December 31, 1988. The restrictions apply only to those countries—now more than 50—that have ratified this portion of the treaty. However, the restrictions apply to *all* vessels, regardless of nationality, within the territorial waters of the treaty countries. See Appendix 4 for further information.

1993 INTERNATIONAL COASTAL CLEANUP—RESULTS

OVERVIEW

This year 39 countries, including a record 15 newcomers, took part in the International Coastal Cleanup. A very special “welcome aboard” goes to volunteers in Anguilla, Aruba, Bahrain, Bermuda, Ecuador, Italy, the Ivory Coast, Jamaica, Kenya, Lithuania, the Marshall Islands, the Federated States of Micronesia (specifically Pohnpei State), Poland, Spain, and Turkey, all of which joined the Cleanup for the first time.

The 1993 International Cleanup set records in every category. Working side by side, the 222,116 volunteers cleaned 5,572 miles of ocean and inland shoreline and removing a staggering 8,518,317 pieces of marine debris. It would take more than 43 railroad cars to haul away the 2,622 tons of collected garbage.

Of the participating countries, 17 have already ratified MARPOL Annex V. Grassroots interest in marine debris in the other countries, vividly expressed by the cleanup events, can be a crucial first step toward those countries becoming signatories as well.

Participating Countries

MARPOL Signatories

Argentina	Italy	Panama*
Bahamas*	Jamaica*	Poland
Brazil	Japan	Spain
British Virgin Islands	Kenya	Turkey
Ecuador	Lithuania	United Kingdom
Greece	Marshall Islands	United States*

Others

Anguilla*	Dominican Republic*	Micronesia
Aruba*	Grenada*	Netherlands Antilles*
Bahrain	Guatemala*	New Zealand
Barbados*	Indonesia	Singapore
Belize*	Israel	South Korea
Bermuda*	Ivory Coast	St Kitts and Nevis*
Cuba*	Mexico*	Venezuela*

**Countries bordering on the Wider Caribbean Region*

After the United States, South Korea had the highest volunteer turnout, followed by Venezuela and Japan. The U.S. Cleanup mustered 71% of the volunteers, who picked up 86% of the trash by item but only 60% by weight. Straight comparisons can be misleading, however, since countries vary widely in size, population, and shoreline conditions. Careful consideration of each country's report is the best way to evaluate these results.

Every one of the volunteers, in all the countries, walked away from the Cleanup a changed person. Trash will never look the same to them, and their concerns will radiate to families and friends, expanding the circle. Pond ripples become turning ocean tides, changing forever the face of this ocean planet.

TABLE 1. 1993 International Coastal Cleanup Results, Country by Country

COUNTRY	NUMBER OF VOLUNTEERS	MILES OF BEACH CLEANED	POUNDS COLLECTED
ANGUILLA	71	2	1,710
ARGENTINA	220	5	2,381
ARUBA	1,192	15	26,455
BAHAMAS	65	2	420
BAHRAIN	350	5	16,000
BARBADOS	15	1	140
BELIZE	300	15	3,000
BERMUDA	*	*	*
BRAZIL	132	*	*
BRITISH VIRGIN ISLANDS	144	3	8,050
CUBA	14	1	1,200
DOMINICAN REPUBLIC	245	1	3,320
ECUADOR	*	*	*
GREECE	7,136	178	168,000
GRENADA	200	*	3,000
GUATEMALA	*	*	*
INDONESIA	46	1	245
ISRAEL	6,700	25	308,644
ITALY	4,458	24	19,932
IVORY COAST	47	4	*
JAMAICA	75	1	*
JAPAN			
TOKYO	8,357	167	136,000
OKINAWA	150	2	2,000
KENYA	315	10	9,290
LITHUANIA	46	2	470
MARSHALL ISLANDS	80	2	160
MEXICO			
BAJA CALIFORNIA	3,550	*	18,000
CAMPECHE	*	*	*
JALISCO	1,585	22	25,126
QUINTANA ROO	50	1	7,000
TAMAULIPAS	170	6	7,900
FEDERATED STATES OF MICRONESIA	40	1	3,450
NETHERLANDS ANTILLES			
SABA	11	1	70
ST. MAARTEN	515	6	4,085
NEW ZEALAND	400	4	*
PANAMA	1,000	47	80,000
POLAND	742	89	2,425
SINGAPORE	1,145	12	2,336
SOUTH KOREA	11,585	98	425,000
SPAIN	600	19	4,676
ST. KITTS & NEVIS	170		3,800
TURKEY	100	4	54,000
UNITED KINGDOM	1,238	125	72,000
UNITED STATES	158,257	4,498	3,188,379
VENEZUELA	10,600	176	635,000
INTERNATIONAL TOTAL	222,116	5,572	5,243,663
<i>*data not available</i>			

FIGURE 1. Data Card Used by 1993 International Coastal Cleanup Volunteers (front)

This data card has been translated into Spanish, Hebrew, Japanese and many other languages as needed by the cleanup coordinators.

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 Marine Conservation's National Marine Debris Database 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? _____
 Number of people working together on this data card _____ Estimated distance of beach cleaned _____
 Number of bags filled _____

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 wildlife.
6. Don't lift anything too heavy.

WE WANT YOU TO BE SAFE


SOURCES OF DEBRIS. Please list all items with foreign labels (such as plastic bleach bottles from Mexico) or other markings that indicate the item's origin (such as cruise line names, military identification or debris with names and/or address of shipping/freighting or fishing companies, or oil/gas exploration activities).	
SOURCE	ITEM FOUND
Example: ABC Shipping Company	plastic strapping band

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 Marine Conservation
 1725 DeSales Street, NW
 Washington, DC 20036
 A Membership Organization



CENTER FOR MARINE CONSERVATION

Formerly Center for Environmental Education, Est. 1972
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Printed on recycled paper,
 using soy-based ink.

FIGURE 1. Data Card Used by 1993 International Coastal 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.

Example: egg cartons ||||| **TOTAL** 16 cups ||||| **TOTAL** 22

PLASTIC

	Total number of items		Total number of items
bags:		fishing nets	
food bags/wrappers	<input type="checkbox"/>	hard hats	<input type="checkbox"/>
salt	<input type="checkbox"/>	light sticks	<input type="checkbox"/>
trash	<input type="checkbox"/>	pieces	<input type="checkbox"/>
other bags	<input type="checkbox"/>	pipe thread protector	<input type="checkbox"/>
bottles:		rope	<input type="checkbox"/>
beverage, soda	<input type="checkbox"/>	sheeting:	
bleach, cleaner	<input type="checkbox"/>	longer than 2 feet	<input type="checkbox"/>
milk/water gal. jugs	<input type="checkbox"/>	2 feet or shorter	<input type="checkbox"/>
oil, lube	<input type="checkbox"/>	6-pack holders	<input type="checkbox"/>
other bottles	<input type="checkbox"/>	strapping bands	<input type="checkbox"/>
buckets	<input type="checkbox"/>	straws	<input type="checkbox"/>
caps, lids	<input type="checkbox"/>	syringes	<input type="checkbox"/>
cigarette butts	<input type="checkbox"/>	tampon applicators	<input type="checkbox"/>
cigarette lighters	<input type="checkbox"/>	toys	<input type="checkbox"/>
cups, utensils	<input type="checkbox"/>	vegetable sacks	<input type="checkbox"/>
diapers	<input type="checkbox"/>	"write protection" rings	<input type="checkbox"/>
fishing line	<input type="checkbox"/>	other plastic (specify)	<input type="checkbox"/>
fishing lures, floats	<input type="checkbox"/>		

STYROFOAM®

(or other plastic foam)

buoys	<input type="checkbox"/>	packaging material	<input type="checkbox"/>
cups	<input type="checkbox"/>	pieces	<input type="checkbox"/>
egg cartons	<input type="checkbox"/>	plates	<input type="checkbox"/>
fast food containers	<input type="checkbox"/>	other Styrofoam® (specify)	<input type="checkbox"/>
meat trays	<input type="checkbox"/>		

FOLD ALONG THIS LINE

GLASS

bottles/jars:		fluorescent light tubes	<input type="checkbox"/>
beverage bottles	<input type="checkbox"/>	light bulbs	<input type="checkbox"/>
food jars	<input type="checkbox"/>	pieces	<input type="checkbox"/>
other bottles/jars	<input type="checkbox"/>	other glass (specify)	<input type="checkbox"/>

RUBBER

balloons	<input type="checkbox"/>	tires	<input type="checkbox"/>
condoms	<input type="checkbox"/>	other rubber (specify)	<input type="checkbox"/>
gloves	<input type="checkbox"/>		

METAL

bottle caps	<input type="checkbox"/>	55 gallon drums:	
cans:		rusty	<input type="checkbox"/>
aerosol	<input type="checkbox"/>	new	<input type="checkbox"/>
beverage	<input type="checkbox"/>	pieces	<input type="checkbox"/>
food	<input type="checkbox"/>	pull tabs	<input type="checkbox"/>
other	<input type="checkbox"/>	wire	<input type="checkbox"/>
crab/lobster traps	<input type="checkbox"/>	other metal (specify)	<input type="checkbox"/>

PAPER

bags	<input type="checkbox"/>	newspapers/magazines	<input type="checkbox"/>
cardboard	<input type="checkbox"/>	pieces	<input type="checkbox"/>
cartons	<input type="checkbox"/>	plates	<input type="checkbox"/>
cups	<input type="checkbox"/>	other paper (specify)	<input type="checkbox"/>

WOOD

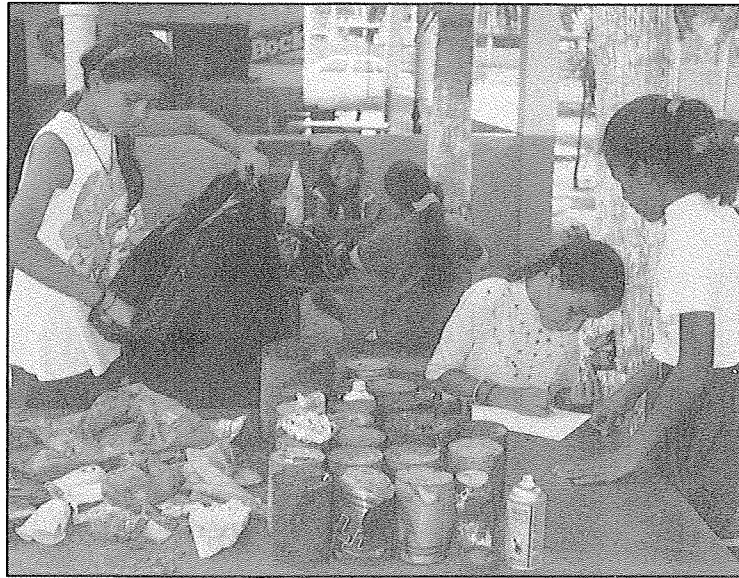
(leave driftwood on the beach)

crab/lobster traps	<input type="checkbox"/>	pallets	<input type="checkbox"/>
crates	<input type="checkbox"/>	other wood (specify)	<input type="checkbox"/>
lumber pieces	<input type="checkbox"/>		

CLOTH

clothing/pieces	<input type="checkbox"/>		
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Remember to turn the card over and fill out your name and address and to record sources and entangled wildlife!



Venezuelan volunteers take extra care to note every piece of trash on their data cards.

1993 CLEANUP HIGHLIGHTS

In April 1993, the Wider Caribbean region was designated a Special Area under the terms of MARPOL Annex V, and CMC made special efforts to encourage cleanup participation in countries bordering the Caribbean (see list above). Special areas are identified when oceanographic and environmental conditions place them at particular risk from marine debris. In special areas, vessels are prohibited from dumping any kind of waste (not just plastic) overboard, no matter what their distance from shore. These prohibitions cannot take effect, however, until the region demonstrates that proper on-shore garbage reception facilities are available, and then satisfies a one-year waiting period.

Hundreds of scuba divers took the Cleanup "in over its head" in 1993, cleaning miles of fishing line, plastic sheeting, and plastic trash bags from coral reefs, swimming areas, and shellfish habitat. Because in some cases improper removal of marine debris can do more harm than good, special training is required to avoid harming instead of helping the fragile underwater ecosystems. The Center for Marine Conservation has developed, with help from the Professional Association of Diving Instructors, instructive brochures and slideshows to ensure that underwater cleanups are safe for both the divers and the environment.

Partly because of heightened consciousness resulting from previous years' cleanups, the innovative city of Matamoros, Mexico has started charging an entrance fee for beachgoers. Half of the fee is refunded if visitors turn in a full trash bag on departure.

Sometimes it's not changing habits but sticking with the old ways that can solve the debris problem. Cleanup volunteers in Pohnpei State, one of the Federated States of Micronesia, reported finding only one plastic utensil during their cleanup, no doubt because Pohnpei citizens still adhere to traditional dining customs, using leaves for plates and fingers for forks and spoons.

The Bahamas cleanup crew, except for a handful of adult supervisors, consisted entirely of primary school children. Students and teachers were also responsible for the cleanups in Bahrain, Brazil, Indonesia and the Marshall Islands. Bahrain not only joined the Cleanup for the first time, but was the first Arabian Gulf state to do so.

Perhaps the best part of beach cleanups is the people it brings together: school children, Red Cross groups, yacht clubs, government employees, manufacturers, cultural organizations, port authority employees, hotel workers, diving clubs, and civic and community organizations. In Grenada a bottling company, brewery, plastic manufacturer, and community development agency joined forces with the local Friends of the Earth chapter to sponsor the cleanup. US Peace Corps volunteers spearheaded Lithuania's project. Generous Delaware residents sent gloves, trash bags and t-shirts to Argentina for its cleanup. Sponsors of Poland's efforts included Bank Gdanski, the Ministry of Environmental Protection, the newspaper, radio and TV stations, and a major refinery.

THE MOST PREVALENT TYPE OF DEBRIS ON THE WORLD'S BEACHES

Standardized data collection cards, provided by CMC and used during the Cleanup, list ⁸¹85 debris items in eight categories: plastic, foamed plastic, glass, rubber, metal, paper, wood, and cloth. Because local conditions vary so widely from country to country, and because the United States accounts for such a large proportion of the data, the collective international percentages for these categories may not present a true picture of debris conditions in individual countries. Detailed information can be found in the individual country summaries that begin on page 29.

Plastic (including foamed plastic) made up the largest portion of all debris collected: 63% if cigarette butts, the single most-prevalent item, are included in the totals, 54% not counting cigarette butts. Because they represent such a large portion, by count, of debris collected, cigarette butts are not included in certain statistics throughout this report (as indicated), in order to minimize potentially misleading distortion of data. The remnants of nearly 89,000 packs of cigarettes were retrieved from beaches around the world—enough to stretch more than 28 miles.

In 17 countries, the percent of plastic exceeded the international figure. Almost 90% of all trash collected in Bermuda was plastic. Barbados, the Dominican Republic, Indonesia, Anguilla, Argentina, the British Virgin Islands, and Ecuador all had percentages over 70%. The lowest rate occurred in New Zealand (38%).

FIGURE 2. Percent Composition of Debris Reported During 1993 International Coastal Cleanups

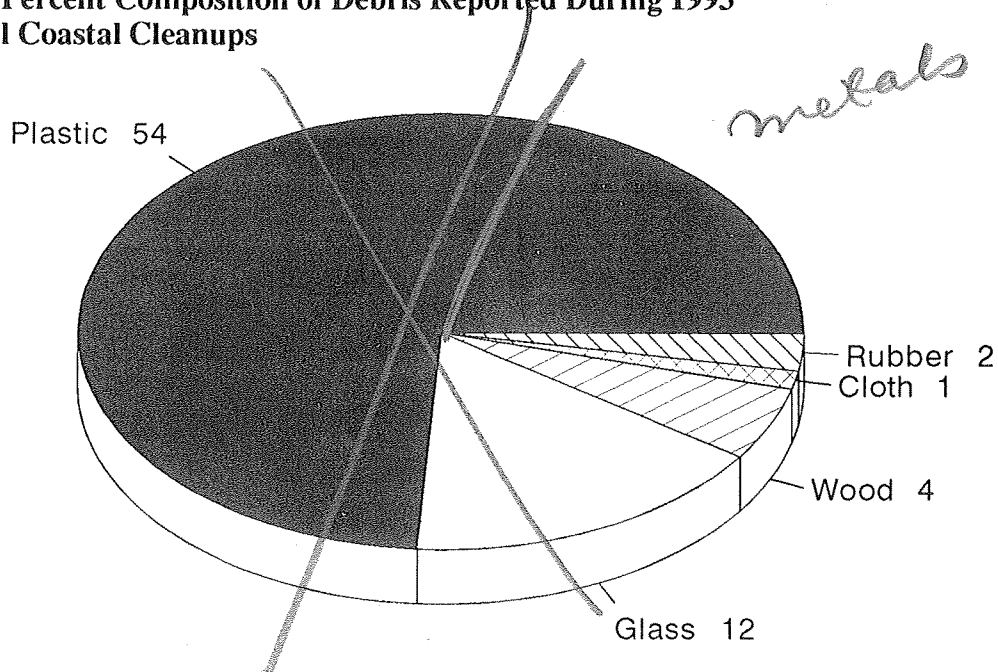
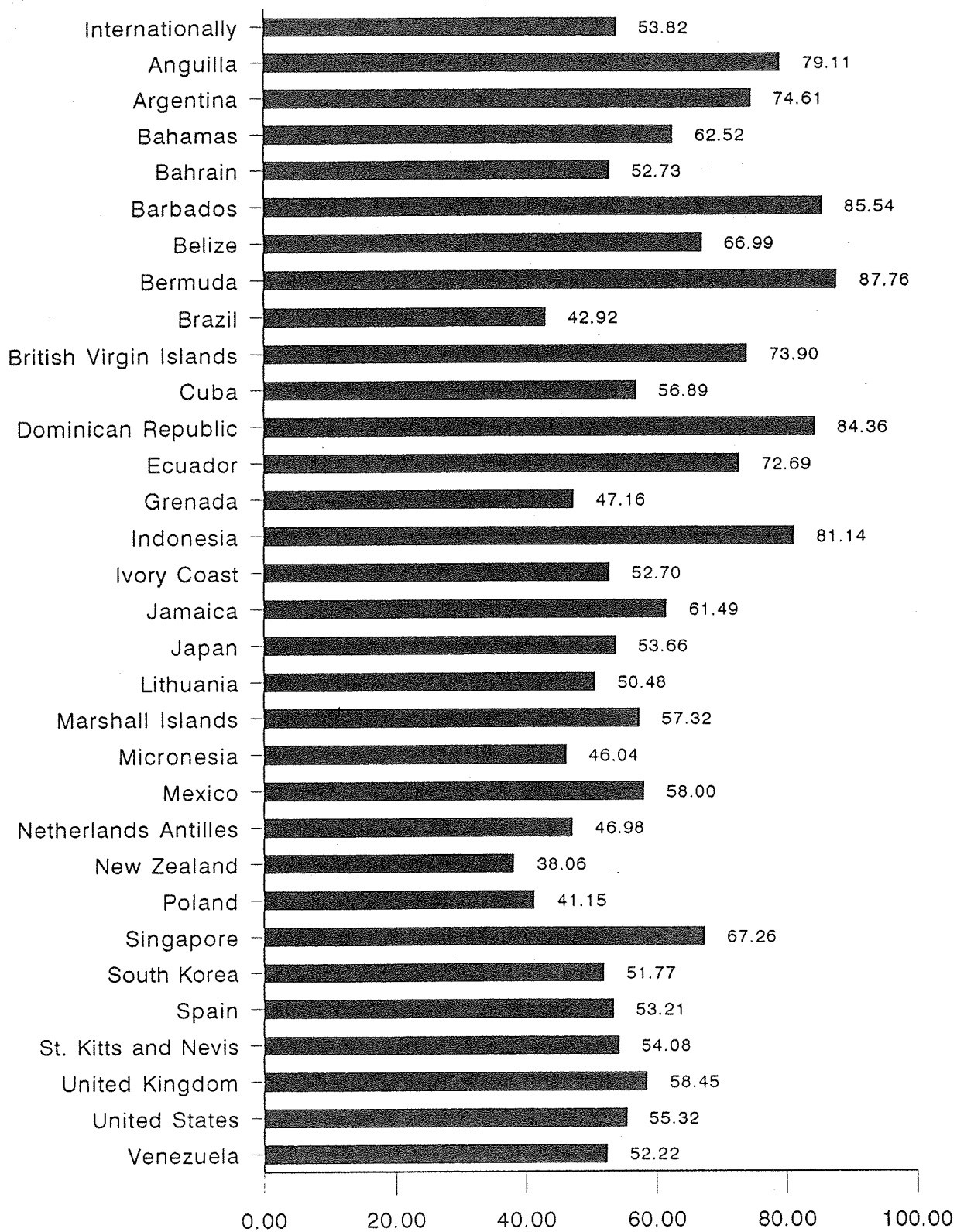


FIGURE 3. Total Number of Debris Items Collected During 1993 International Coastal Cleanups

PLASTIC		GLASS	
Bags:		Bottles:	
food	352,137	beverage	221,423
salt	11,681	food	27,804
trash	74,780	other	67,454
other	120,055	Fluorescent light tubes	14,951
Bottles:		Light bulbs	19,870
beverage	177,762	Pieces	382,380
bleach	34,315	Other	46,017
milk/water	53,445		
oil/lube	31,178	RUBBER	
other	80,620	Ballons	42,458
Buckets	16,528	Condoms	8,193
Caps/lids	320,436	Gloves	14,465
Cigarette butts	1,782,404	Tires	14,416
Cups/utensils	57,966	Other	50,268
Diapers	150,918		
Fishing line	29,253	METAL	
Fishing nets	15,738	Bottle caps	157,313
Floats/lures	49,685	Cans:	
Hard hats	18,738	aerosol	30,632
Light sticks	23,596	beverage	236,687
Pieces	2,729	food	27,662
Pipe thread protector	20,066	other	35,017
Rope	465,026	Crab/fish traps	4,418
Sheeting longer than 2 feet	12,316	55-gallon drums	
shorter than 2 feet	18,318	rusty	19,348
Six-pack holders	38,027	new	7,412
Strapping bands	35,258	Pieces	85,887
Straws	240,568	Pull tabs	97,260
Syringes	12,124	Wire	42,266
Tampon applicators	20,505	Other	102,364
Toys	30,677		
Vegetable sacks	13,765	PAPER	
Write protection rings	12,344	Bags	64,905
Other	157,287	Cardboard	49,513
		Cartons	32,331
FOAMED PLASTIC		Cups	58,023
Buoys	18,770	Newspapers	68,195
Cups	143,351	Pieces	575,341
Egg cartons	7,616	Plates	47,136
Fast food containers	44,317	Other	127,766
Meat trays	19,049		
Packaging	104,613	WOOD	
Pieces	406,070	Crab/lobster traps	3,336
Plates	43,029	Crates	3,483
Other	52,863	Lumber	108,636
		Pallets	26,766
		Other	95,407
		CLOTH	
		Clothing	93,793
		TOTAL ITEMS	8,518,317

FIGURE 4. Plastic Debris Reported From 1993 International Coastal Cleanups



THE INTERNATIONAL DIRTY DOZEN

The twelve most-frequent debris items collected accounted for just over 62% of all debris, virtually the same percent as last year. Cigarette butts increased their stranglehold on first place, representing 21% of total debris. More than one out of every five debris items collected was a cigarette butt.

It is important to note that 98% of these butts were collected in the U.S. cleanup. Only four other countries—Argentina, Brazil, Singapore, and South Korea—also reported butts as their number one debris item. Of those completing data cards, three countries—Micronesia, Poland, and the United Kingdom—reported no cigarette butts. In Belize, Cuba, Grenada, Ecuador, the Bahamas, Anguilla, and Barbados cigarette butts represented less than 1% of total debris. Individual country summaries supply details about each country's own "Dirty Dozen."

Rank	Debris Item	Total Number Reported	Percent of Total Debris Collected
1.	Cigarette butts	1,782,404	20.92%
2.	Paper pieces	575,341	6.75
3.	Plastic pieces	465,026	5.46
4.	Foamed plastic pieces	406,070	4.77
5.	Glass pieces	382,380	4.49
6.	Plastic food bags	352,137	4.13
7.	Plastic caps/lids	320,436	3.76
8.	Plastic straws	240,568	2.82
9.	Metal beverage cans	236,687	2.78
10.	Glass beverage bottles	221,423	2.60
11.	Plastic beverage bottles	177,762	2.09
12.	Metal bottle caps	157,313	1.85
	Total	3,275,622	62.42%

With the exception of metal bottle caps, all of these items appeared on last year's Dirty Dozen. The following items complete the list of the 20 most-frequently reported debris items.

13.	Plastic cups and utensils	150,918	
14.	Foamed plastic cups	143,351	(No. 11 last year)
15.	Other plastic bags	120,055	
16.	Lumber	108,636	
17.	Foamed plastic packaging	104,613	(New this year)
18.	Plastic rope	97,326	
19.	Metal pull tabs	97,260	
20.	Clothing	93,793	
	Total Top Twenty	6,233,499	73.18%

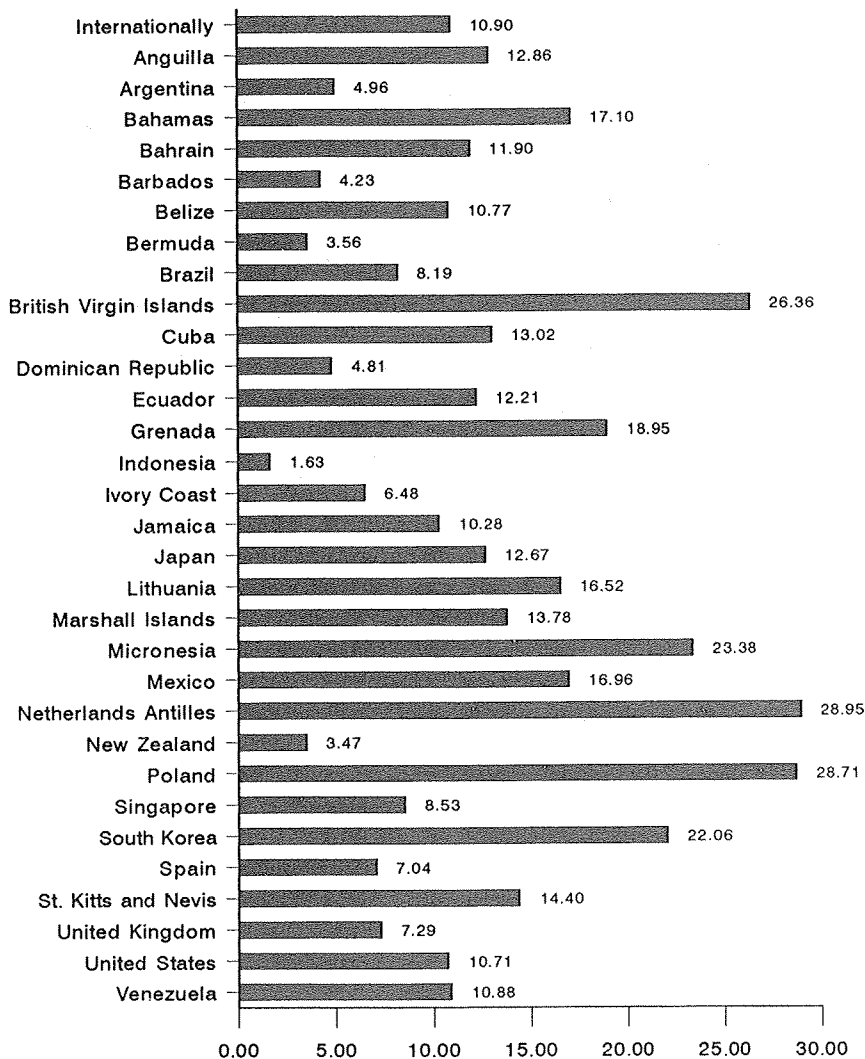
BOTTLES AND ASSOCIATED GOODS

Pop that bottle and quench your thirst. Ahhh.... But what happens when you're done?

Six items collected during the Cleanup are analyzed together as "bottles and associated goods." These items are glass and plastic beverage bottles, metal beverage cans, metal bottle caps and pull tabs, and plastic six-pack holders.

Taken as a whole, this group represents 14% of total debris reported (excluding cigarette butts), up one percentage point from last year. The highest percentage (26.36%) was reported in the British Virgin Islands. The Bahamas, Grenada, Lithuania, Micronesia, the Netherlands Antilles, Poland, and South Korea also had percentages significantly higher than the international figure.

FIGURE 5. Bottles and Associated Goods Reported From 1993 International Coastal Cleanups



SOURCES OF MARINE DEBRIS

Maybe you're a cruise ship galley hand cleaning up after dinner, or a drilling platform engineer coming off watch. Somebody drops that loaded trash bag overboard, or lets those strapping bands slide off the deck and into the water. Maybe it's you.

Some people throw trash in the water out of habit; for centuries it was the accepted way of discarding garbage at sea. Others don't know it's illegal, don't realize the environmental problems it presents. Still others know, but don't care, don't think it's their problem. "It's just one cup,"—one bottle, one net, one plastic bag, multiplied a million times.

Debris comes from everywhere. One of the main purposes of the International Coastal Cleanup is to identify sources of debris. Such information can, in turn, be used (1) to determine if existing disposal laws are being complied with (enforcement) and (2) as compelling evidence to convince those sources of the need to change their ways (education).

Overall, marine debris derives from either ocean-based or land-based sources. Sea-going vessels, from the smallest sailboat to the largest container ship, are identified as the sources of ocean-based debris, as are offshore drilling platforms for oil and gas.

Carried by creeks, rivers, and stormwater systems, land-based debris comes from inland to settle on the shore. Sometimes debris is hand-delivered by beach visitors who leave their trash behind. Overflowing sewer systems, also a source of land-based debris, carry everything that gets tossed in and flushed. You don't even have to go to the beach to pollute it.

There is, in most cases, a difference between who made the product and who put it in the water or on the beach. Many times items can be traced back to manufacturers or organizations that may not have had anything to do with their products' improper disposal. Such groups are contacted whenever possible, however, to alert them to the situation and ask them to join the campaign for clean water and clean shores.

Trash is hard to track. In order to determine the source as closely as possible, certain indicator items have been identified for each sub-category of ocean and land-based debris. A plastic fishing lure, for instance, suggests recreational fishing, while crab and lobster pots signal commercial fishing as the source of the debris.

TABLE 2. Categories and Quantities of Indicator Items Reported From 1993 International Coastal Cleanup

Category	Indicator Items	Total Number Reported	
Recreational Fishing/ Boating Wastes	plastic floats and lures	23,596	
	plastic fishing line	49,685	
		73,281	(.86%)
Commercial Fishing Wastes	plastic rope	97,326	
	plastic light sticks	20,066	
	foamed plastic buoys	18,770	
	plastic fishing nets	15,738	
	rubber gloves	14,465	
	plastic salt bags	11,681	
	metal crab/fish traps	4,418	
	wooden crab/lobster traps	3,336	
		185,800	(2.18%)
Operational Wastes	plastic strapping bands	35,258	
	wooden pallets	26,766	
	glass light bulbs	19,870	
	fluorescent light tubes	14,951	
	write protection rings	12,344	
	plastic sheeting longer than 2 feet	12,316	
	plastic pipe thread protectors	9,210	
	wooden crates	3,483	
	plastic hard hats	2,729	
		136,927	(1.61%)
Galley Wastes	plastic trash bags	74,780	
	plastic milk/water gallon jugs	53,445	
	plastic bleach/cleaner bottles	34,315	
	foamed plastic meat trays	19,049	
	vegetable sacks	13,765	
	foamed plastic egg cartons	7,616	
		202,970	(2.38%)
Sewage-Associated Wastes	plastic tampon applicators	20,505	
	rubber condoms	8,193	
		28,698	(.34%)
Medical Waste	plastic syringes	12,124	(.14%)
Total Number of Indicator Items:		639,800	(7.51%)

OCEAN-BASED SOURCES OF INTERNATIONAL MARINE DEBRIS

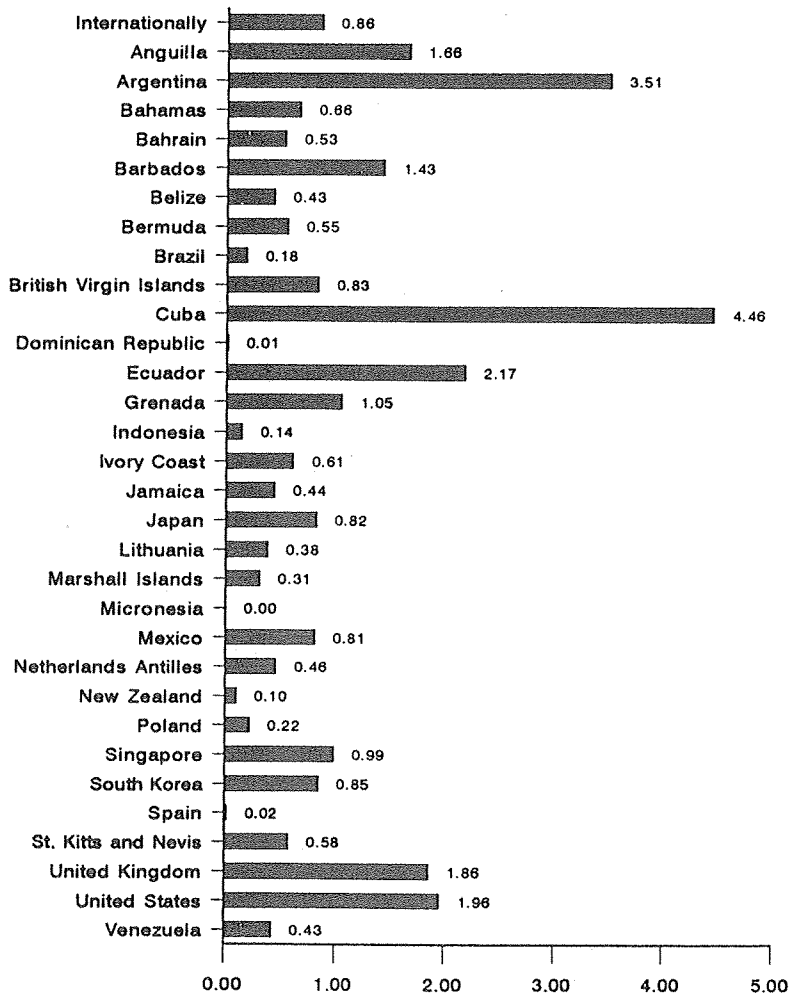
Recreational Fishing and Boating Wastes

Your line gets tangled and you cut it loose. End of problem? Hardly. Monofilament fishing line was responsible for entangling more marine animals and birds than any other item reported. Sometimes, fishing line is accidentally lost—broken on a snag, snarled underwater—despite all attempts to retrieve it.

Monofilament fishing line and plastic fishing floats and lures are used as indicators for recreational fishing and boating waste. Together they represent about 1% of total debris collected (excluding butts) in the 1993 Cleanup, the same percentage as last year. Cuba reported the highest percentage (4.46%) followed by Argentina (3.51%). Percentages reported by Anguilla, Barbados, Ecuador, the United Kingdom, and the United States also exceeded the international figure. Micronesia reported no recreational fishing and boating debris.

Though small in percentage, these items present a large danger to marine wildlife. They can also be hazardous to boaters and divers, and can foul engine propellers, causing extensive, sometimes dangerous damage.

FIGURE 6. Recreational Fishing and Boating Wastes Reported From 1993 International Coastal Cleanups



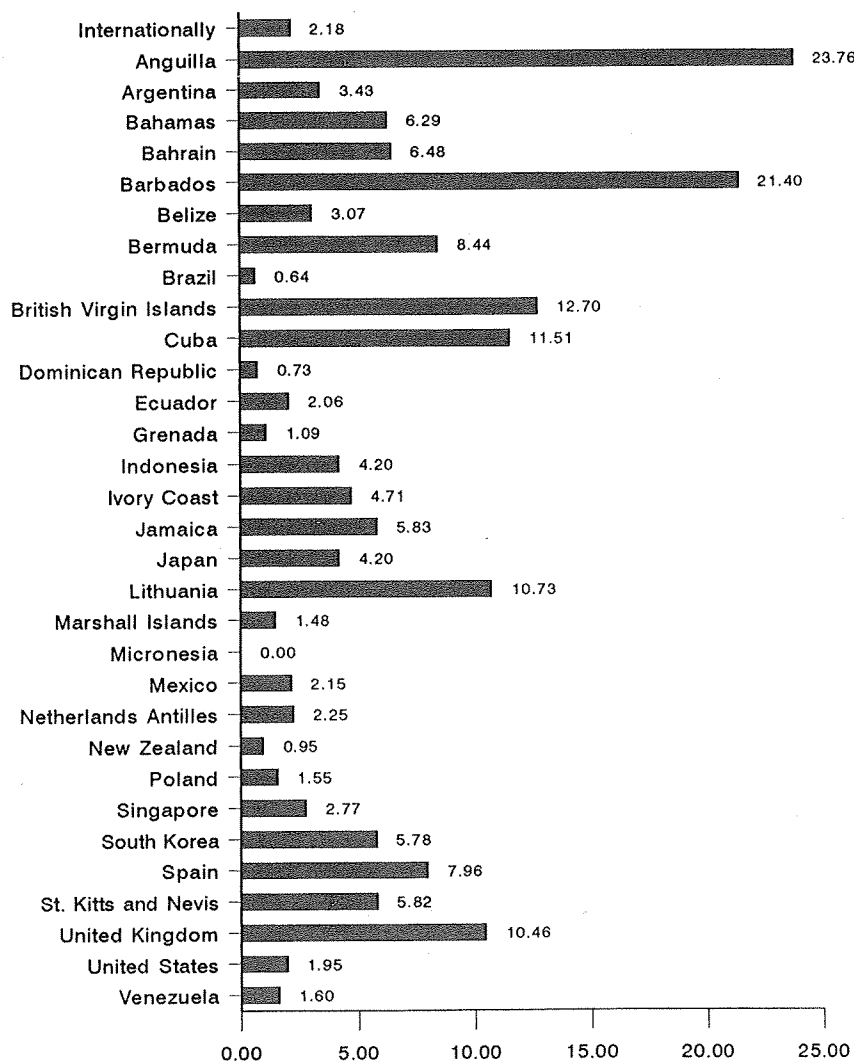
Commercial Fishing Wastes

It's been a long haul, days at sea catching shrimp and you're heading home. You're tired, and it's a lot easier to toss those empty salt bags overboard than stow them below decks and carry them back to port.

Plastic salt bags, rope, fishing net, light sticks, metal and wood crab and lobster traps, rubber gloves, and plastic buoys are the indicator items for commercial fishing debris. In 1993 these items accounted for approximately 2% of total debris (excluding cigarette butts), down about half a percent from last year.

Almost 24% of the trash collected in Anguilla was commercial fishing debris, eight times the international percentage. Plastic nets and rope, both particularly hazardous to wildlife, made up the bulk of this debris. Barbados, the British Virgin Islands, Cuba, Lithuania, and the United Kingdom also reported percentages higher than 10%. Micronesia reported no commercial fishing waste.

FIGURE 7. Commercial Fishing Wastes Reported From 1993 International Coastal Cleanups



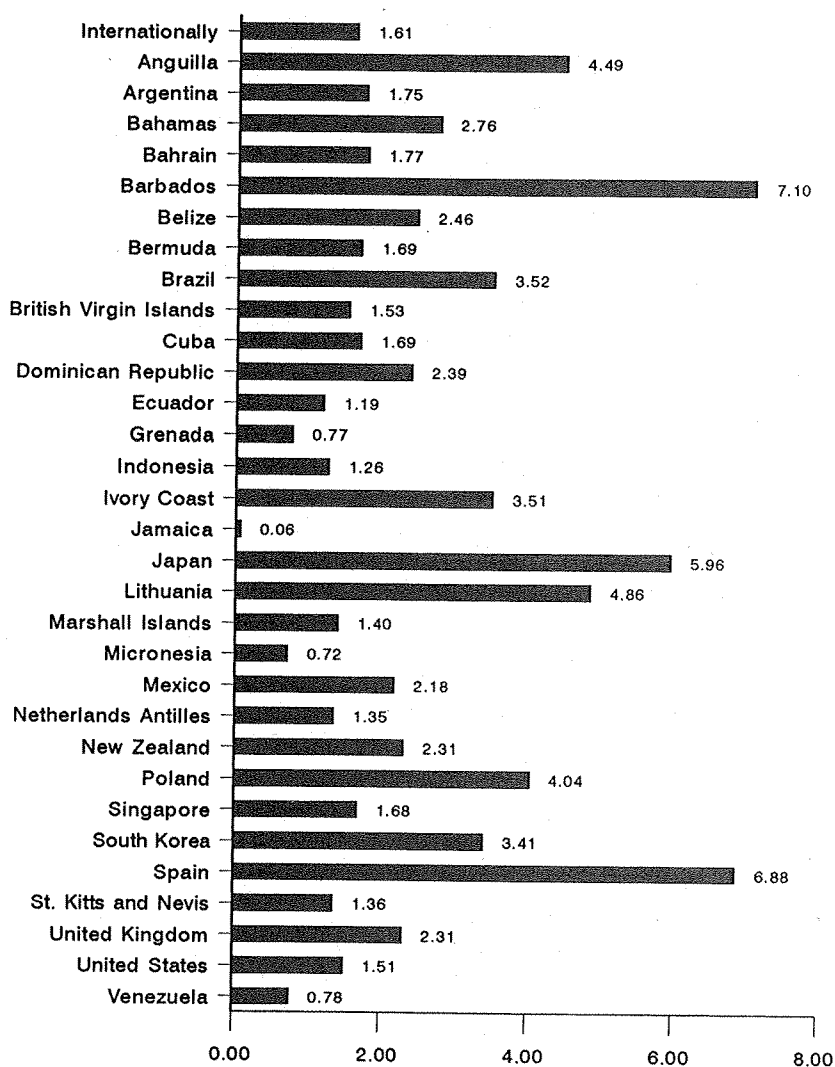
Operational Wastes

You've got the midwatch and there's a pile of crates to unpack. Cutting through the strapping band around each crate, you flip it overboard without a second thought. No big deal.

Plastic strapping bands are among the indicator items used to signal operational wastes, which includes debris from offshore petroleum activities as well as cargo ships. Most of the indicator items are plastic—sheeting two feet or more in length, pipe thread protectors, write-protection rings, and hardhats. Wooden crates and pallets, and regular and fluorescent glass light bulbs are also included in this category.

Of the total debris reported, less than 2% (excluding cigarette butts) were operational waste indicators, up slightly from last year. Volunteers in Barbados reported the highest percent (7.10%), made up predominantly of plastic strapping bands—179 in just over one mile of beach. Anguilla, Japan, Lithuania, Poland, and Spain all had percentages over 4%.

FIGURE 8. Operational Wastes Reported From 1993 International Coastal Cleanups



Galley-type Wastes

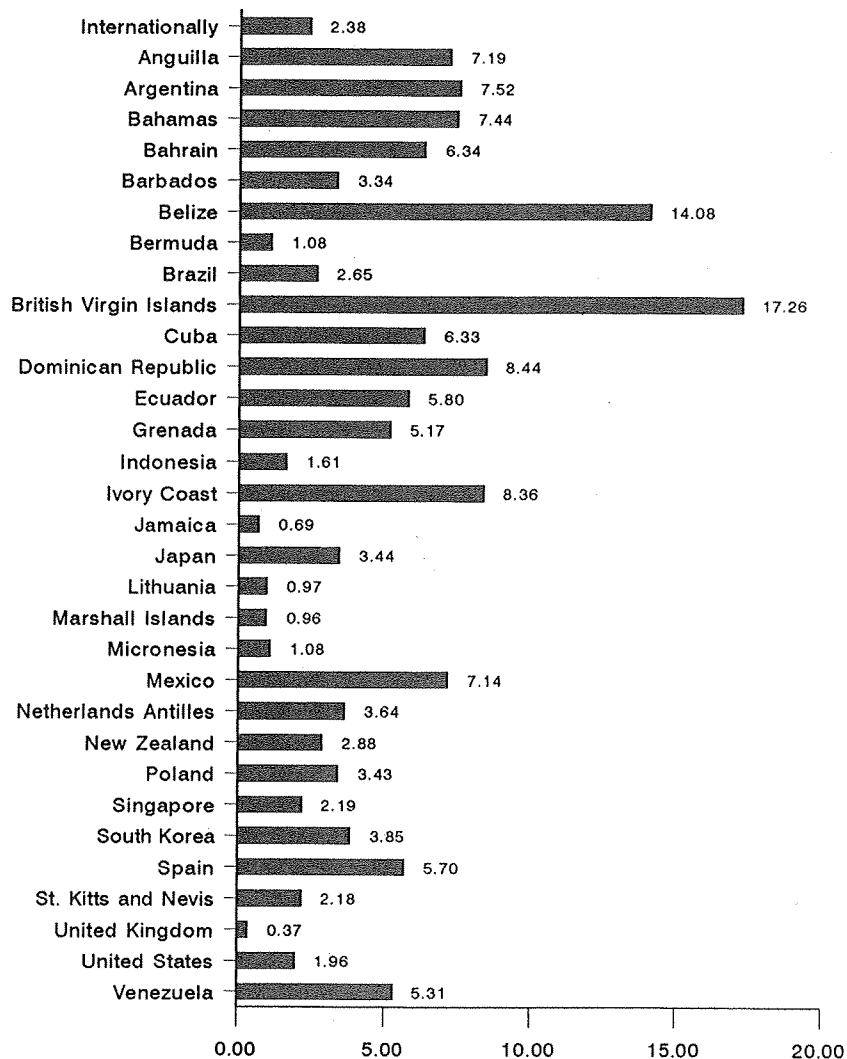
No land in sight. You've been working all day but there's more to do. Even at sea there are ordinary chores: fixing meals, getting rid of the trash. Tossing that trash bag overboard seems so easy.

Trash bags are among the indicator items for galley-type wastes, along with gallon milk and water jugs, bleach and cleaner bottles, and mesh vegetable sacks (all plastic items), as well as foamed plastic egg cartons and meat trays. More than 2% (excluding cigarette butts) of all debris collected came from galley waste indicator items. This percentage is slightly higher than last year.

In the British Virgin Islands, which led the list with 17%, gallon plastic jugs accounted for virtually all of this type of debris. Galley-type waste represented 14% of Belize's total (mostly trash bags), and Anguilla, Argentina, the Bahamas, the Ivory Coast, the Dominican Republic, and Mexico all reported over 7%.

Items such as plastic jugs, egg cartons, and trash bags are not unique to ships' galleys, of course, and can also be the result of littering or improper trash disposal onshore.

FIGURE 9. Galley-Type Wastes Reported From 1993 International Coastal Cleanups



LAND-BASED SOURCES OF INTERNATIONAL MARINE DEBRIS

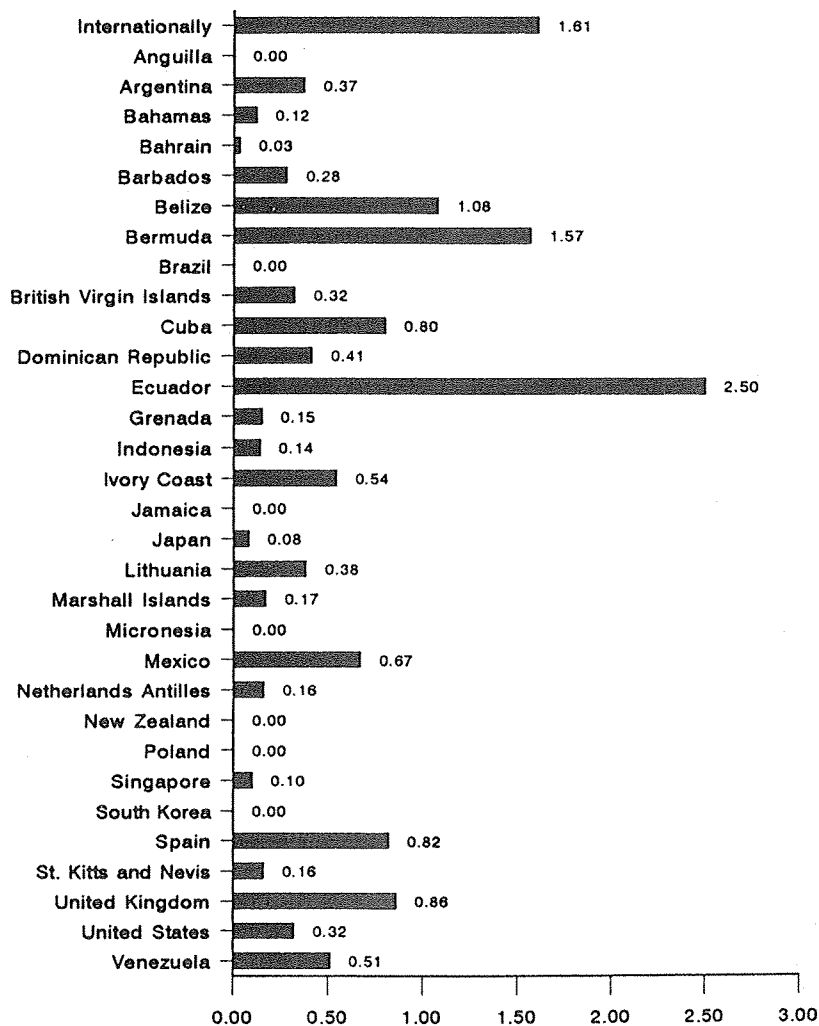
Sewage-Associated Wastes

We all use a wide range of disposable "personal hygiene" items, and the toilet is the most convenient place for them when we're finished, right?

When sewage treatment systems are inadequate or non-existent, potentially dangerous (as well as aesthetically repellant) liquid and solid wastes are carried into the water. The presence of two items—plastic tampon applicators and condoms—are used to identify the presence of the whole range of sewage-based wastes.

Worldwide, these items accounted for .43% of all debris (excluding cigarette butts), the same as last year. Ecuador had the highest percentage (2.5%); Belize and Bermuda both reported over 1%. Six other countries—Cuba, the Ivory Coast, Mexico, Spain, the United Kingdom, and Venezuela—exceeded the international percentage. Anguilla, Brazil, Jamaica, Micronesia, New Zealand, Poland, and South Korea all reported finding no sewage-waste indicators.

FIGURE 10. Sewage-Associated Wastes Reported From 1993 International Coastal Cleanups



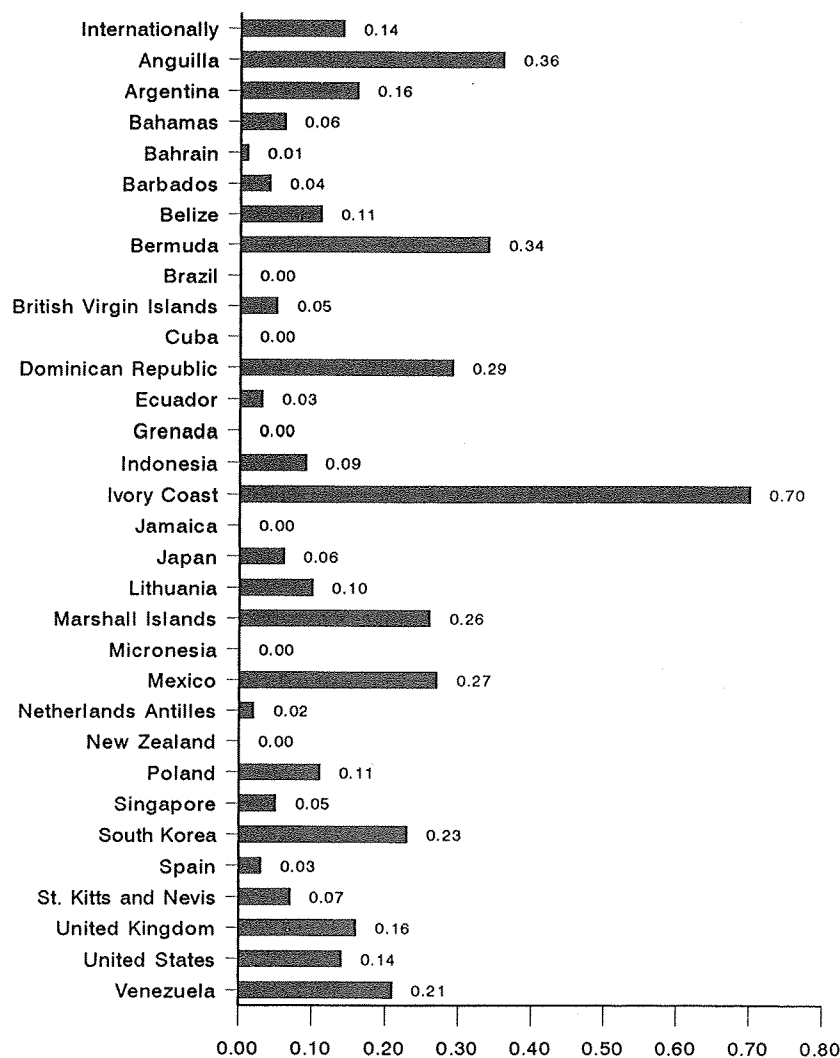
Medical Wastes

Diabetics and others must give themselves injections one or more times daily. That's a lot of syringes, and people may not realize their local sewage system may not be able to remove such debris. That syringe tossed casually in the toilet may literally come back to haunt you on your favorite swimming beach.

Plastic syringes, the only debris item used as an indicator for medical wastes, traditionally evoke the strongest public response of all debris items reported. Such wastes can reach the coast via illegal dumping, stormwater runoff, inadequate sewer systems, or direct littering in coastal areas. The 12,124 plastic syringes reported in the 1993 Cleanup represented .14% of all debris (excluding cigarette butts), twice that reported last year. Though the percentage is low compared to other items, even one syringe is one too many.

Eight countries, led by the Ivory Coast with .70%, exceeded the international figure. The other seven countries were Anguilla, Bermuda, the Dominican Republic, the Marshall Islands, Mexico, South Korea, and Venezuela. Brazil, Cuba, Grenada, Jamaica, Micronesia, and New Zealand reported no syringes.

FIGURE 11. Medical Wastes Reported From 1993 International Coastal Cleanups



FOREIGN SOURCES OF INTERNATIONAL MARINE DEBRIS

"Foreign" means "not mine."

Marine debris needs no passport. Unhindered by invisible political boundaries, it travels around the globe on winds and currents. Often it makes landfall far from its point of origin.

International Cleanup volunteers in the British Virgin Islands, the Netherlands Antilles, St. Kitts and Nevis, the United Kingdom, and the United States found debris from 31 countries that, to them, was foreign. Twenty-six of these countries are Annex V signatories, listed below.

Argentina	France	Portugal
Australia	Germany	Russia
Austria	Greece	Spain
Belgium	Italy	Sweden
Brazil	Japan	Switzerland
China	The Netherlands	Turkey
Czechoslovakia	Norway	United States
Denmark	Oman	Venezuela
Egypt	Poland	

The other five countries were Barbados, Canada, Ireland, India, and Mexico. Last year, debris from 32 countries, including 16 treaty nations, was reported. Just because a piece of debris was produced in or for a particular country does not, of course, mean that country or one of its citizens turned it into debris. Marine debris is everyone's problem; eliminating it requires everyone's cooperation.

THE IMPACTS OF MARINE DEBRIS ON THE WORLD'S WILDLIFE

Volunteers in Argentina, Bahrain, Brazil, Singapore, and the United States reported at least 57 incidents of stranded or entangled wildlife (not counting 27 dead but unentangled seagulls noted by volunteers in Maine). Monofilament line was the biggest culprit, entangling 23 of the animals. Rope, string and ribbon ensnared another nine. One crab was trapped inside a bottle, and a derelict tire caught an octopus. Half the entangled animals reported were birds, including 15 seagulls. Twelve crabs were entangled by debris.

Entangling Debris:		Entangled Animals:	
Monofilament fishing line	23	Seagulls	15
Rope, string, ribbon	9	Crabs	12
Plastic sheeting	6	Other fish	8
Six-pack holder	5	Other birds	6
Plastic bags	4	Cormorants	3
Fishing net	3	Penguins	2
One each: cage, hook, glass bottle, tire, paper, rubber band, and oil	7	Ducks	2
		Stingrays	2
		One each: lobster, snail, octopus, flounder, eel, turtle, and lizard	7
Total	57	Total	57

The significance of these numbers, collected in just one three-hour period on one day, is large and far-reaching. These animals—and uncounted more like them—weren't hunted for food or even sport; they died because humans discarded their trash without a backward glance.

CONCLUSION

Without our oceans, we're nothing but a hunk of lifeless rock.

That's the global "we." We the rooted and the branched, the winged and the finned, the four-legged and the two-legged. And yes, we the people. Without our oceans, we're history.

Narrowing our perspective for the moment, "we" the Center for Marine Conservation are in the business of putting ourselves out of business. Our job isn't organizing bigger and better cleanups of our coasts and shorelines. We'd like nothing better than to wake up one morning and find there's no need for cleanups!

Unlike oil spills or global warming, marine debris is one pollution problem that individuals can change by direct, individual action. The purpose of collecting trash is to bring it all home: the sources, the problems and, ultimately, the solutions.

People are the solution to marine debris. People are also the problem. Human hands and a human face lie behind every piece of garbage that enters the marine environment. The responsibility lies not just with shipping companies, fishing fleets, or the petroleum industry. Ultimately, some individual had to throw that trash overboard, into the street, down the toilet, or out of the car window.

The cleanups' effectiveness continues long after the last bag of trash is hauled off and the tired volunteers go home. The cleanups creates ripple effects in all directions—jolting people awake to the magnitude of the problem, triggering commitments to seek solutions, spreading interest and enthusiasm among families, friends, businesses, and communities. Many cleanups spawn recycling campaigns, public education programs, adopt-a-beach programs, litter prevention efforts, and even stormwater system overhaul and legislative reform.

"While we were dismayed at the condition of our beaches," the Kenya cleanup coordinator told us, "all who participated in cleanups regarded them as a success." From that success, others like it, and still others yet to come, people *can* make the oceans clean again.



Collecting debris at "La Playita" beach in colonial Panama City, September 1993.

FIGURE 12. 1993 International Coastal Cleanup Raw Data Summary

	Anquilla	Argentina	Bahamas	Bahrain	Barbados	Belize	Bermuda	Brazil	Cuba	Dominican Republic
PLASTIC										
Base	59	2757	57	1760	70	419	67	121	93	1190
Salt	0	10	0	87	0	47	0	0	0	88
Trash	26	1244	37	604	1	972	12	46	246	5036
Other	52	1470	27	2583	159	191	16	144	13	273
Bottles Beverage	109	387	61	549	80	207	22	56	2785	384
Bleach	110	135	6	225	69	84	28	9	267	274
Galton	48	96	44	563	17	100	8	0	3372	235
Oil/lube	111	114	15	99	32	248	6	1	831	691
Other	89	101	53	454	108	214	98	38	52	5559
Buckets	26	31	6	88	4	47	16	2	68	277
Caps/lids	202	1495	103	442	212	347	634	55	648	5092
Cigarette butts	3	5391	2	726	2	90	380	286	255	2091
Cigarette lighters	22	623	1	116	9	35	30	0	74	88
Cups/utensils	94	400	62	437	52	299	81	108	563	6306
Diapers	1	467	4	42	0	70	3	0	36	82
Fishing line	29	920	10	65	35	32	12	4	64	4
Fishing nets	493	66	0	114	186	9	28	1	1136	48
Floats/lures	22	20	2	57	4	7	14	0	129	2
Hard hats	1	0	2	0	2	7	2	0	2	28
Light sticks	10	8	7	48	17	31	118	3	56	0
Pieces	115	1612	187	1077	590	292	1660	70	565	1676
Pipe/thread-prot.	1	56	0	93	0	36	2	0	7	4
Rope	204	601	54	1315	374	58	246	3	1569	190
Sheeting Long	23	12	0	177	0	14	6	5	15	780
Sheet	30	43	0	214	0	26	6	16	46	88
Six-pack holders	5	100	3	12	1	51	6	0	61	74
Strapping bands	70	175	6	77	179	22	57	20	155	304
Syringes	32	627	4	204	19	370	102	39	300	1402
Syringes	11	43	1	3	1	10	16	0	11	194
Tampon Applicators	0	9	1	0	1	14	74	0	69	256
Toys	1	91	0	44	1	39	14	6	22	219
Vegetable sacks	12	6	1	232	0	33	4	0	37	97
Write prot. rings	5	31	0	9	0	4	4	0	10	0
Other	70	13	17	431	20	240	98	12	426	853
FOAMED PLASTIC										
Banys	20	40	10	148	4	88	7	6	162	110
Cups	21	22	60	263	0	241	20	0	140	1335
Egg cartons	9	11	9	18	0	48	0	3	40	54
Fast food cont.	13	23	36	77	6	124	2	0	700	294
Meat trays	16	520	27	44	4	40	1	0	14	40
Packaging	46	31	1	322	4	61	166	0	125	68
Pieces	137	1155	92	200	65	266	118	46	904	18936
Plates	27	0	36	94	0	314	2	0	95	2921
Other	57	31	0	286	0	279	9	0	90	36

FIGURE 12. 1993 International Coastal Cleanup Raw Data Summary (cont.)

PLASTIC													
Bottles	167	187	132	1075	26	247	79	28	2140	67	489		
Food	9	18	122	53	3	53	2	1	62	0	388		
Other	37	48	36	206	17	45	9	3	165	21	366		
Fluor. light tubes	0	2	1	10	3	27	5	0	7	4	304		
Light bulbs	33	20	6	47	8	30	2	1	110	2	60		
Pieces	31	604	17	269	145	235	38	216	179	27	655		
Other	0	26	0	45	0	36	2	8	333	0	754		
RUBBER													
Balloons	7	44	3	31	0	31	0	0	6	0	0		
Condoms	0	81	1	9	6	84	0	0	5	5	26		
Gloves	3	24	16	61	3	10	0	0	3	6	52		
Tires	13	21	1	58	3	19	2	0	55	12	88		
Other	35	25	8	667	82	115	47	7	57	0	334		
METAL													
Bottlecaps	29	180	22	266	2	202	29	34	122	39	1996		
Cans	40	28	30	105	7	52	7	3	122	1	200		
Beverage	85	217	53	1155	6	226	32	49	987	33	262		
Food	10	26	14	207	1	33	1	1	16	0	164		
Other	18	15	5	135	4	20	0	1	28	0	156		
Crab/fish traps	0	170	0	26	0	16	0	1	5	0	10		
Drums	0	35	5	45	0	23	0	1	10	3	2		
Rusty	0	3	0	0	0	4	0	0	1	0	0		
Non	0	0	0	0	0	0	0	0	0	0	0		
Pieces	10	179	36	205	8	42	24	11	79	46	302		
Pull tabs	0	56	14	142	0	44	0	12	8	0	114		
Wire	5	104	0	139	0	37	5	4	64	23	22		
Other	2	1	2	192	2	44	4	21	84	0	7		
PAPER													
Bags	1	150	8	339	0	138	29	23	44	17	226		
Cardboard	6	282	20	327	4	67	6	0	105	1	187		
Cartons	6	334	17	517	5	145	2	67	94	25	470		
Cups	3	94	30	250	0	85	4	4	67	0	300		
Newspapers	0	400	0	114	1	45	22	200	38	35	142		
Pieces	6	1241	16	802	4	105	45	227	183	56	285		
Plates	0	3	23	102	0	59	0	0	59	0	260		
Other	1	23	2	415	0	48	6	65	34	0	84		
WOOD													
Crab/lobster traps	0	0	18	33	0	39	0	0	0	0	0		
Crates	1	39	6	31	0	38	0	0	8	3	100		
Lumber	28	163	11	2681	30	135	17	200	437	32	54		
Pallets	4	133	25	84	1	45	2	51	40	0	46		
Other	5	71	0	0	2	38	12	3	72	0	2		
CLOTH													
Clothing	40	138	28	735	11	272	31	17	125	21	2369		
TOTAL ITEMS/COUNTRY	3072	26763	1667	26886	2720	9070	4775	2185	23154	1171	68967		

FIGURE 12. 1993 International Coastal Cleanup Raw Data Summary (cont.)

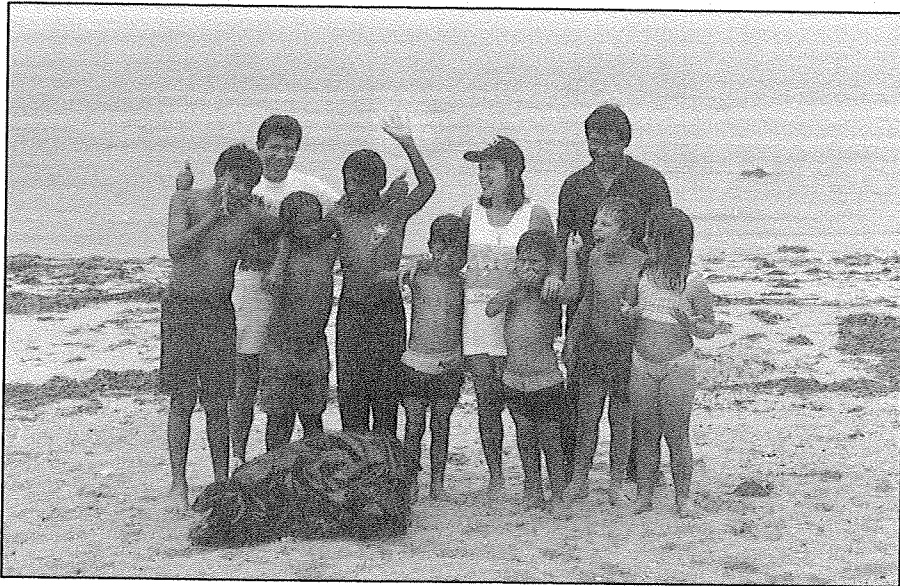
	Ecuador	Grenada	Indonesia	Ivory	Jamaica	Japan	Korea	Lithuania	Marshall	Micronesia	Mexico
PLASTIC											
Bags	1015	550	805	837	297	7238	4651	218	43	34	4577
Food	9	7	25	84	0	2577	0	2	0	0	384
Salt											
Trash	553	70	42	0	0	50	0	10	10	2	2482
Other	555	124	222	202	73	7975	1120	25	15	15	1997
Bottles	284	284	22	107	11	3154	1359	12	35	0	2801
Beverage											
Bleach	51	163	1	128	0	285	204	5	4	1	1999
Gallon	31	58	26	114	3	561	909	7	6	0	2127
Oil/lube	945	91	4	64	11	432	224	1	5	0	1941
Other	134	67	17	147	136	3039	368	7	20	2	2157
Buckets	40	29	2	58	0	511	84	0	1	1	333
Caps/lids	497	145	398	122	2	9327	357	85	134	0	4638
Cigarette butts	25	22	418	83	56	1595	3573	179	311	0	3109
Cigarette lighters	0	5	1	0	1	2064	259	19	9	12	450
Cups/utensils	882	70	69	43	3	2526	489	8	36	1	3463
Diapers	19	19	0	0	0	117	110	4	1	0	1039
Fishingline	15	42	6	14	6	686	100	10	3	0	649
Fishing nets	29	10	21	18	75	180	780	1	1	0	176
Floats/lures	11	22	0	22	1	578	318	1	4	0	213
Hard hats	3	2	0	0	0	16	32	2	0	0	56
Light sticks	2	0	12	153	0	123	353	20	0	0	175
Pieces	1650	207	594	3	268	2376	977	235	386	21	4984
Pipe thread prof.	15	3	6	0	0	86	0	1	6	0	211
Rope	863	25	113	18	18	1195	532	274	16	0	863
Sheeting	12	13	0	85	1	1741	25	55	0	1	204
Long											
Short	129	10	0	35	0	464	127	45	0	0	287
Six-pack holders	40	7	0	1	0	151	53	8	11	4	1519
Strapping bands	21	6	32	0	0	6436	869	52	6	1	219
Straws	85	54	318	2	7	3818	784	41	19	1	5540
Syringes	4	0	4	41	0	90	112	3	6	0	288
Tampon Applicators	299	4	6	8	0	29	0	6	1	0	456
Toys	9	14	62	24	0	1476	287	11	11	0	676
Vegetable sacks	57	19	0	234	8	212	0	4	1	0	284
Write prot. rings	0	5	16	45	0	29	0	3	2	0	385
Other	120	202	22	115	0	4799	432	80	53	1	1252
FOAMED PLASTIC											
Buoys	193	1	7	1	0	2011	606	7	8	0	378
Cups	2	146	11	0	6	1205	541	5	66	1	1915
Egg cartons	1	3	0	17	0	434	116	2	1	0	344
Fast food cont.	6	28	0	9	2	647	104	4	10	0	558
Meat trays	1	1	0	0	0	3792	663	0	0	0	412
Packaging	7	33	31	163	0	4200	101	20	15	0	998
Pieces	80	193	71	45	13	3918	1325	52	151	29	5260
Plates	3	73	1	26	3	458	618	1	9	1	1165
Other	5	46	174	80	2	1260	18	27	29	0	1381

FIGURE 12. 1993 International Coastal Cleanup Raw Data Summary (cont.)

GLASS											
Bottles	398	439	10	42	53	5314	1234	22	26	11	6516
Food	44	41	1	157	0	522	148	2	1	0	1030
Other	59	43	0	16	1	780	758	7	16	0	1633
Fluor. light tubes	1	0	0	0	0	32	100	1	2	0	178
Light bulbs	15	5	0	5	0	562	58	3	6	0	218
Pieces	139	421	30	30	60	2104	1197	187	132	0	2934
Other	8	404	5	40	21	1532	917	17	20	0	200
RUBBER											
Balloons	2	0	32	1	0	126	45	4	11	0	359
Combs	0	5	0	24	0	93	0	5	3	0	266
Gloves	0	21	2	4	0	148	533	7	7	0	251
Tires	15	41	0	29	14	167	99	1	4	0	318
Other	79	78	63	46	16	3939	447	19	145	5	450
METAL											
Bottle caps	29	159	25	182	77	3382	1088	419	37	14	4542
Cans - aerosol	27	51	7	48	1	757	657	7	1	0	583
Beverage	666	236	5	50	23	2815	6713	12	203	35	2747
Food	262	102	1	240	61	5693	867	14	7	6	1056
Other	52	44	5	32	12	740	180	4	16	1	569
Crab/fish traps	1	1	0	0	0	223	12	0	1	0	86
Drums	15	63	0	1	0	21	144	0	0	0	652
Rusty	0	0	0	0	0	27	60	0	0	0	71
New	0	0	0	0	0	0	0	0	0	0	0
Pieces	51	115	2	168	0	3389	276	22	33	6	1689
Pull tabs	44	25	8	0	0	4802	390	6	4	1	815
Wire	2	41	9	9	6	1363	492	22	8	0	1169
Other	20	43	3	0	23	4780	100	24	25	13	511
PAPER											
Bags	49	62	1	326	0	1278	676	48	2	8	1129
Cardboard	119	100	28	1	0	690	780	5	6	11	875
Cartons	203	64	12	43	0	670	1106	49	8	1	797
Cups	0	62	1	0	15	976	1222	3	14	0	680
Newspapers	247	17	9	258	0	1106	935	36	3	0	813
Pieces	216	101	79	213	130	9389	1440	177	29	21	2158
Plates	1	61	0	0	0	362	541	0	4	0	619
Other	14	49	3	117	11	5608	184	37	10	0	575
WOOD											
Crab/lobster traps	0	1	0	0	0	44	24	0	1	0	44
Crates	27	3	0	23	0	250	195	9	3	0	236
Lumber	267	96	48	223	4	3119	840	91	18	12	2876
Pallets	49	10	0	49	0	82	594	15	7	0	712
Other	52	2	314	147	30	1649	278	62	23	2	1346
CLOTH											
Clothing	87	189	27	167	35	1901	915	10	15	3	1959
TOTAL ITEMS/COUNTRY	11961	6668	4289	5899	1596	154896	49125	2899	2293	278	107077

FIGURE 12. 1993 International Coastal Cleanup Raw Data Summary (cont.)

GLASS										
Bottles	1968	338	138	1085	455	152	0	188142	10443	221423
Food	66	28	1	152	70	11	0	15736	9121	27804
Other	367	31	222	463	252	32	2308	44379	15142	87434
Fluor. light tubes	3	0	0	13	44	0	0	14157	53	14951
Light bulbs	55	1	5	76	142	7	192	16169	2032	19870
Pieces	385	390	1204	673	1926	131	8399	344302	14170	382380
Other	81	21	859	144	104	11	0	34859	5570	46017
RUBBER										
Balloons	37	1	0	71	205	7	209	40508	718	42458
Condensers	19	7	0	1	20	21	326	6636	550	8193
Gloves	21	0	0	160	189	16	247	12169	474	14465
Tires	43	94	0	59	59	12	284	10798	2107	14416
Other	224	161	107	182	804	40	140	36367	3579	50268
METAL										
Bottlecaps	785	299	118	1206	897	35	1753	127548	11777	157313
Cans	247	31	0	207	172	4	775	28512	0	30692
Beverage	2005	126	0	1088	1559	175	4571	210553	0	236687
Food	153	64	0	212	131	18	425	18371	0	27662
Other	85	60	349	77	74	14	0	10986	21267	35017
Crab/fish traps	21	6	0	0	41	5	0	3558	235	4418
Drums	65	5	2	13	59	11	209	15016	2948	19348
Rusty	47	1	0	3	4	25	59	6621	486	7412
New	228	71	0	267	508	43	0	75208	2869	85987
Pull tabs	19	56	36	0	1447	34	0	87280	1903	97260
Wire	40	80	45	38	218	28	644	34856	2473	42266
Other	202	109	714	85	412	37	2858	86381	5665	102364
PAPER										
Bags	175	46	69	1344	230	79	972	47501	9936	64905
Cardboard	224	64	1999	227	273	140	347	36211	7008	49513
Cartons	213	25	0	390	2103	107	772	28675	389	32331
Cups	259	44	1	594	319	65	246	52685	0	58023
Newspapers	94	7	0	220	320	98	347	57868	5055	68195
Pieces	549	271	85	1789	1673	489	2978	536601	44833	575941
Plates	109	18	0	63	104	14	0	36372	8362	47136
Other	125	44	1260	226	1312	181	8047	95874	13411	127766
WOOD										
Crab/lobster traps	13	1	0	0	15	32	64	1973	1034	3336
Crates	20	1	0	81	53	67	118	2181	0	3483
Logs	223	295	0	64	1773	950	0	91289	2660	108636
Pallets	51	8	0	84	222	389	149	24114	0	26766
Other	228	166	99	608	792	140	99	68856	20363	95407
CLOTH										
Clothing	336	207	87	0	817	63	1654	73953	5552	69793
TOTAL ITEMS/COUNTRY	19576	7304	11293	20366	70045	8707	94095	7334027	436203	8518317



Volunteers in Campeche, Mexico leave no doubt about how successful *their* cleanup was!

DETAILED COUNTRY ANALYSIS

The first step in tackling the debris problem is often taken at a regional or local level. The following detailed analysis of each country participating in the 1993 International Coastal Cleanup provides the information necessary for each country to begin targeting debris sources that are predominant in their area.

Each section begins with results of the 1993 cleanup (where supplied by cleanup coordinators), giving the number of volunteers participating, the miles of beach and waterway cleaned, and the total pounds of trash collected. Where available, a narrative description and photos of the cleanup complement these statistics. Each narrative concludes with the name, address and telephone number of the 1994 cleanup coordinator and the anticipated date of the 1994 cleanup.

The pie chart, *Percent Composition of Debris* illustrates the seven composition categories of debris and the percentage of the total debris that each type makes up. The *Dirty Dozen* lists the twelve most commonly reported items for each area's cleanup. The bar graph, *Major Types and Sources of Beach Debris*, depicts the percentage of total debris that is either a specific type of debris (e.g., bottles and associated goods) or is attributed to a specific source (e.g., commercial fishing activities). *Major Characteristics of Debris in Each Zone* gives very localized information on each zone for which data analysis was done. *Traceable Debris Reported* lists any debris with identifying markings, where this debris was found, and what the markings were. *Foreign Debris Reported* lists any debris that had markings indicating its source as a country different from the country in which it was found. The section on *Entangled Wildlife* details incidents of wildlife entanglement observed by cleanup volunteers. The *Most Peculiar Debris Items Reported* are those items that volunteers found to be the most peculiar of any they collected.

ANGUILLA

September 18, 1993
71 Volunteers
1.5 Miles Cleaned
1,710 Pounds of Debris Collected

Coordinated by: Robert D. Calvert
Rotary Club of Anguilla
Cable & Wireless (WI) LTD.
P. O. Box 77, The Valley
Anguilla, West Indies
(809) 497-3100/2650 Ext. 424

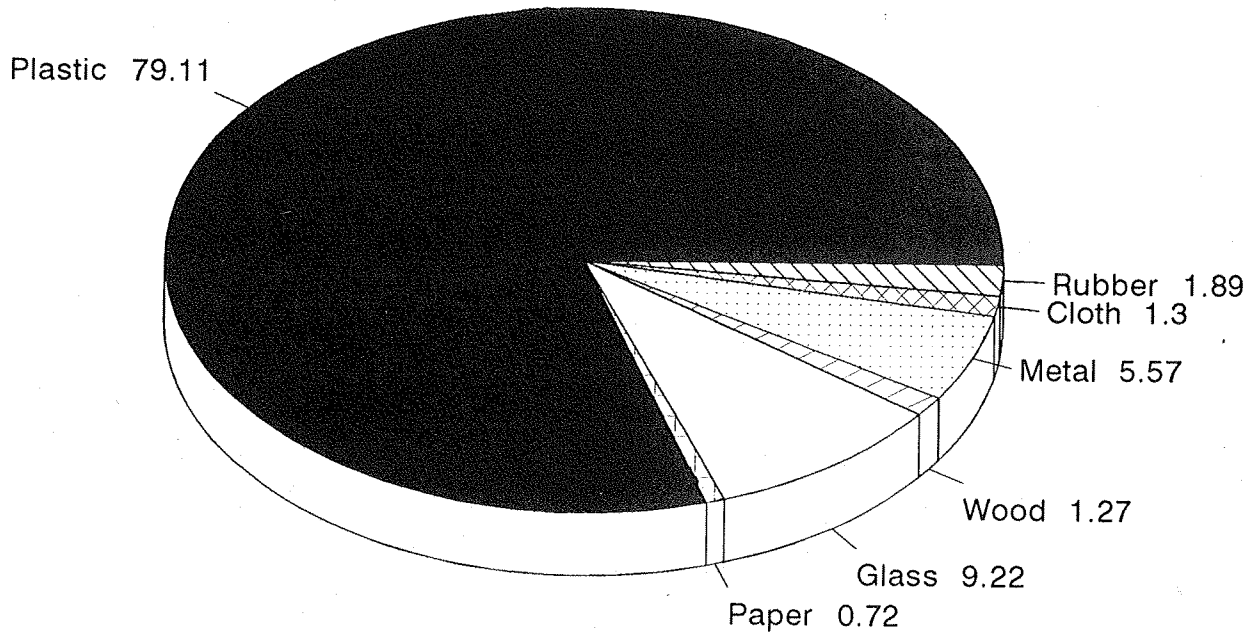
More than 70 volunteers showed up to take part in the beach cleanup. While 59 collected trash from the beach, 12 others provided support by driving truckloads of rubbish to the landfill, providing amateur radio support for overall coordination, food and lunchtime entertainment. Several organizations were responsible for making the event a successful one, including the Rotary Club, Soroptimist, Cable & Wireless Sports club, Interact, Marine Heritage Society, Amateur Radio Society, Albena Lake Hodge Comprehensive School Steel Band and the Environmental Club, and the local JCs.

Two different beaches at Savannah Bay totaling 1.5 miles of coast, were cleaned and surveyed, resulting in the collection of over 1,700 pounds of garbage. This rubbish filled 57 trash bags; however, due to some initial confusion, only 53 trash bags were accounted for on the data cards.

FOR INFORMATION ON ANGUILLA'S 1994 COASTAL CLEANUP CONTACT:

**Robert D. Calvert
Rotary Club of Anguilla
Cable & Wireless (WI) LTD.
P. O. Box 77, The Valley
Anguilla, West Indies
Telephone: 1-809-497-3100/2650 Ext. 424**

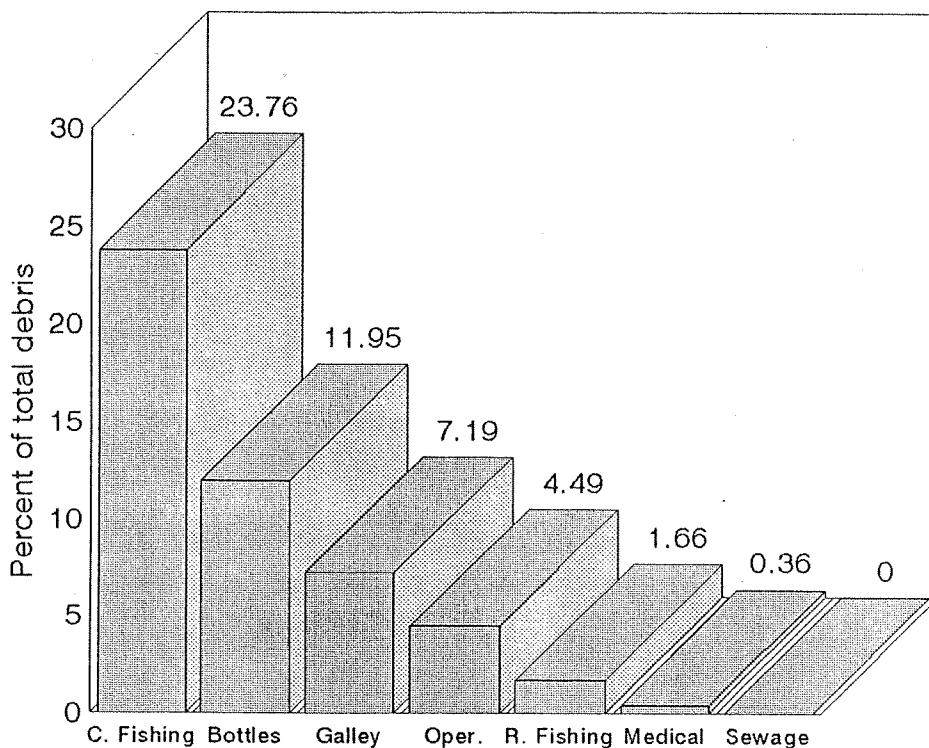
PERCENT COMPOSITION OF ANGUILLA'S BEACH DEBRIS:



ANGUILLA'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Plastic fishing nets	493	16.05
2. Plastic rope	204	6.64
3. Plastic caps/lids	202	6.58
4. Glass beverage bottles	167	5.44
5. Foamed plastic pieces	137	4.46
6. Plastic pieces	115	3.74
7. Plastic oil/lube bottles	111	3.61
8. Plastic bleach bottles	110	3.58
9. Plastic beverage bottles	109	3.55
10. Plastic cups/utensils	94	3.06
11. Miscellaneous plastic bottles	89	2.90
12. Metal beverage cans	85	2.77
Total	1,916	62.37

MAJOR TYPES AND SOURCES OF ANGUILLA'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was only collected for one zone in Savannah Bay, Anguilla.

TRACEABLE DEBRIS REPORTED:

Location	Type of Debris	Source Indicated
Savannah Bay	oil container	V.P. Ederar & Sons

FOREIGN DEBRIS ITEMS REPORTED:

Location	Source	Type of Debris
Savannah Bay	Sweden	oil container

ENTANGLED WILDLIFE REPORTED:

None

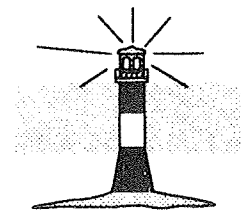
MOST PECULIAR DEBRIS ITEMS REPORTED:

None



Student volunteers in Argentina weigh their trash.

ARGENTINA



October 23, 1993
220 Volunteers
5 Miles Cleaned
2,381 Pounds of Debris Collected

Coordinated by: Daniel Rolleri, Aldo Brandani,
and Maria Rosa Gibson
Centro para el Manejo de Costas
El Salvador 4834 5L
(1414) Buenos Aires, Argentina
Telephone: (54-1) 831-6588
Fax: (54-1) 776-1100

Argentina had its second annual cleanup at the beaches of Miramar in Buenos Aires province. Again hosted by the Centro para el Manejo de Costas, the cleanup proved to be a big success, with 220 volunteers participating. Promotion of the event and the day of cleanup logistics were expanded as there was radio and television advertising, recruitment in local high schools, and a large banner on the boardwalk announcing the cleanup. Sponsors for this event included: the U.S. State of Delaware Department of Natural Research and Environmental Control, Municipality of General Alvarado, Aramacao, Miramar Firemen's Corporation, Canal 3 Video Cable De Miramar, Radio Magica 97.1, and Los Dulces De Ofelia.

One hundred and eighteen bags were filled with 23,000 pieces of trash. The most unusual item found was an old Coke bottle which contained an invitation to a cabaret in Taiwan! As with the first cleanup, we ended the event with a "Clean the Beach Party" at a local night club for teenagers, "Aramacao," where T-shirts sent by Delaware beach cleanup coordinators were raffled among volunteers, as a way to recognize their time and effort.

Our goals for next year include building a trash sculpture and linking our participating high schools with other schools around the world.

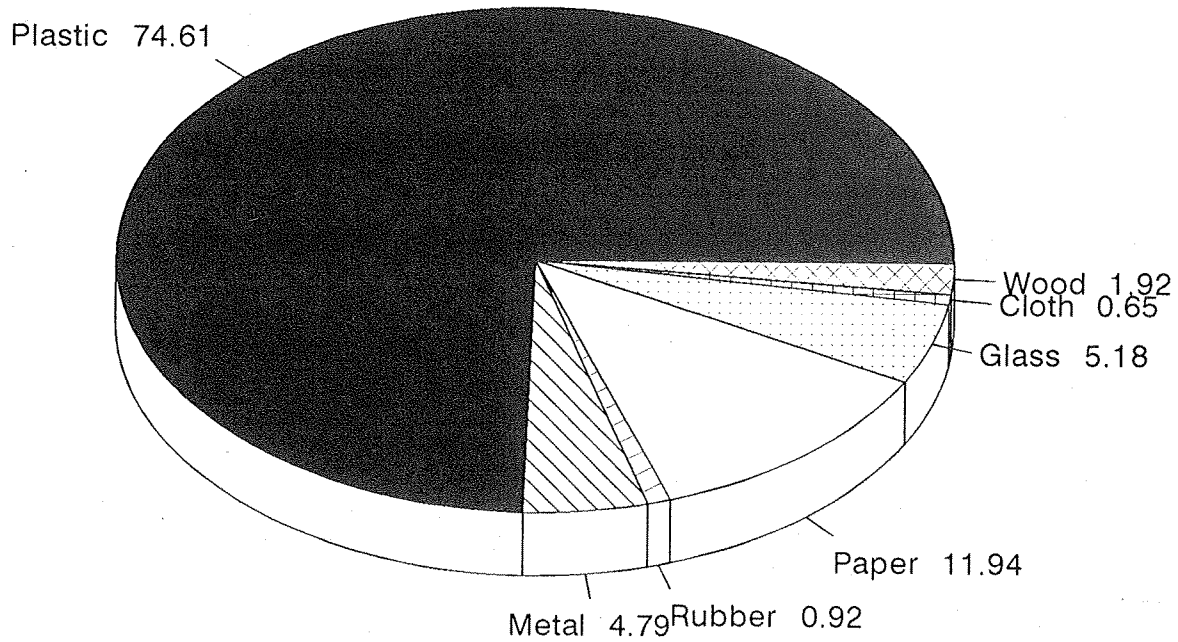
FOR INFORMATION ON ARGENTINA'S 1994 COASTAL CLEANUP CONTACT:

Maria Rosa Gibson
Calle 22 #1785
(7607) Miramar, Argentina
Telephone: (54-1) 831-6588
Fax: (54-1) 776-1100

OR

Aldo Brandani/Daniel Rolleri
Centro para el Manejo de Costas
El Salvador 4834 5L
(1414) Buenos Aires, Argentina
Telephone/Fax: (54-1) 831-6588

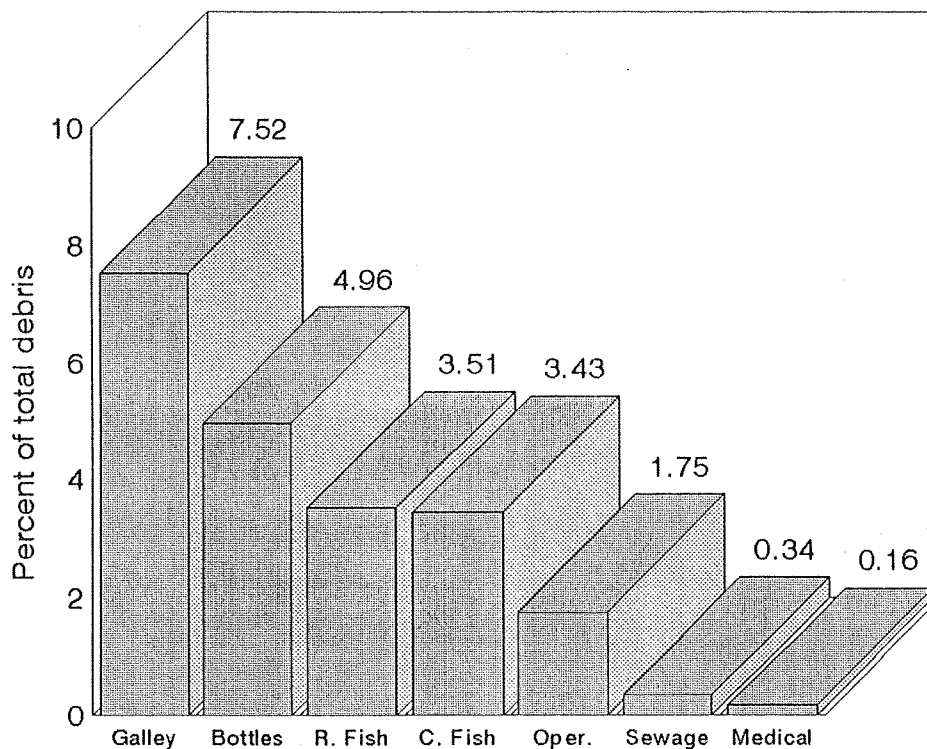
PERCENT COMPOSITION OF ARGENTINA'S BEACH DEBRIS:



ARGENTINA'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Cigarette butts	5,591	20.89
2. Plastic food bags	2,757	10.30
3. Plastic pieces	1,612	6.02
4. Plastic caps/lids	1,495	5.59
5. Miscellaneous plastic bags	1,470	5.49
6. Plastic trash bags	1,244	4.65
7. Paper pieces	1,241	4.64
8. Foamed plastic pieces	1,155	4.32
9. Fishing line	920	3.44
10. Glass pieces	804	3.00
11. Straws	627	2.34
12. Cigarette lighters	623	2.33
Total	19,539	73.01

MAJOR TYPES AND SOURCES OF ARGENTINA'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was only collected for one zone in Miramar, Argentina.

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

Penguin entangled in rope (dead)

MOST PECULIAR DEBRIS ITEMS REPORTED:

Candles with names, wine bottle

ARUBA

October 1, 1993
1,192 Volunteers
15 Miles Cleaned
26,455 Pounds of Debris Collected

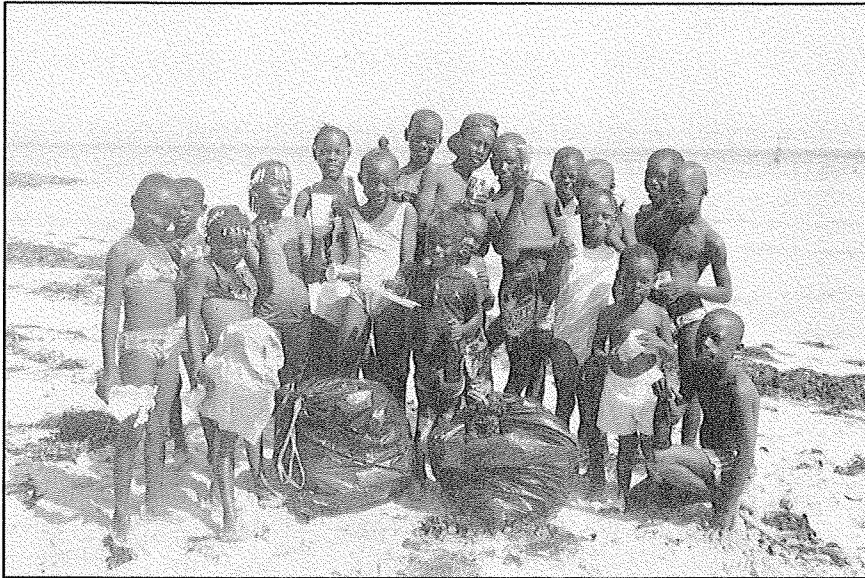
Coordinated by: Direktie Volkshuisvesting, Ruimtelijke
Ontwikkeling en Milieu
Frankrijkstraat #7
Oranjestad, Aruba
Telephone: 32345 Fax: 32342

According to Cornelius Wilson, Director of the Directorate of Housing, Physical Development and Environment, Aruba's first year participation in the International Coastal Cleanup "was a huge success and everyone intends to repeat!"

FOR INFORMATION ON ARUBA'S 1994 COASTAL CLEANUP CONTACT:

Direktie Volkshuisvesting, Ruimtelijke
Ontwikkeling en Milieu
Frankrijkstraat #7
Oranjestad, Aruba
Telephone: 32345 Fax: 32342

Editor's note: Unfortunately, we did not receive data cards for the 1993 cleanup in Aruba and so could not analyze Aruba's collected debris. However, we look forward to receiving their 1994 data for next year's report!



Gathering for a group photo, volunteers from the Bahamas are proud of their cleanup.

BAHAMAS

November 2, 1993
65 Volunteers
1.5 Miles Cleaned
420 Pounds of Debris Collected

Coordinated by: Donna Lee Crawford
Ministry of Education
Bowen Sound Primary School
Andros, Bahamas
Telephone: (809) 329-5048

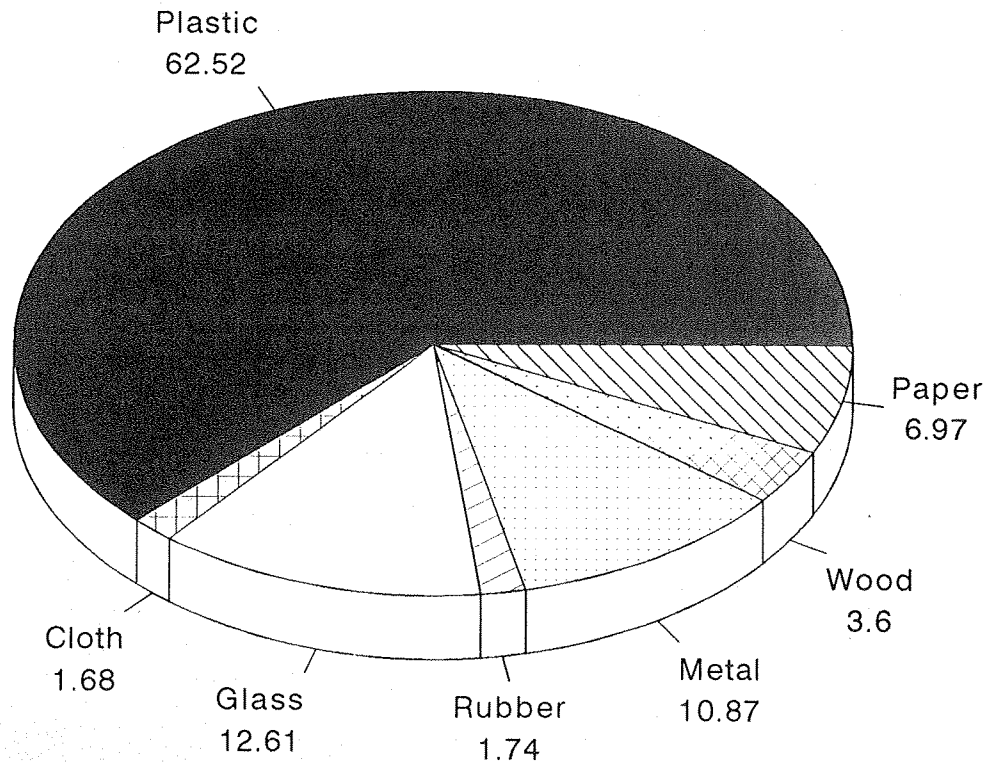
In November, 55 children and 10 adults from Bowen Sound Primary School picked up over 400 pounds of rubbish from the beach. The children from last year are becoming expert in their abilities to identify the trash, and to fill out the data cards. They also have a very, very clear understanding of why it is important not to put trash in the sea and how special they are for helping with the International Coastal Cleanup!

Donna Crawford

FOR INFORMATION ON THE BAHAMAS' 1994 COASTAL CLEANUP CONTACT:

Donna Lee Crawford
Ministry of Education
Bowen Sound Primary School
Andros, Bahamas
Telephone: (809) 329-5048

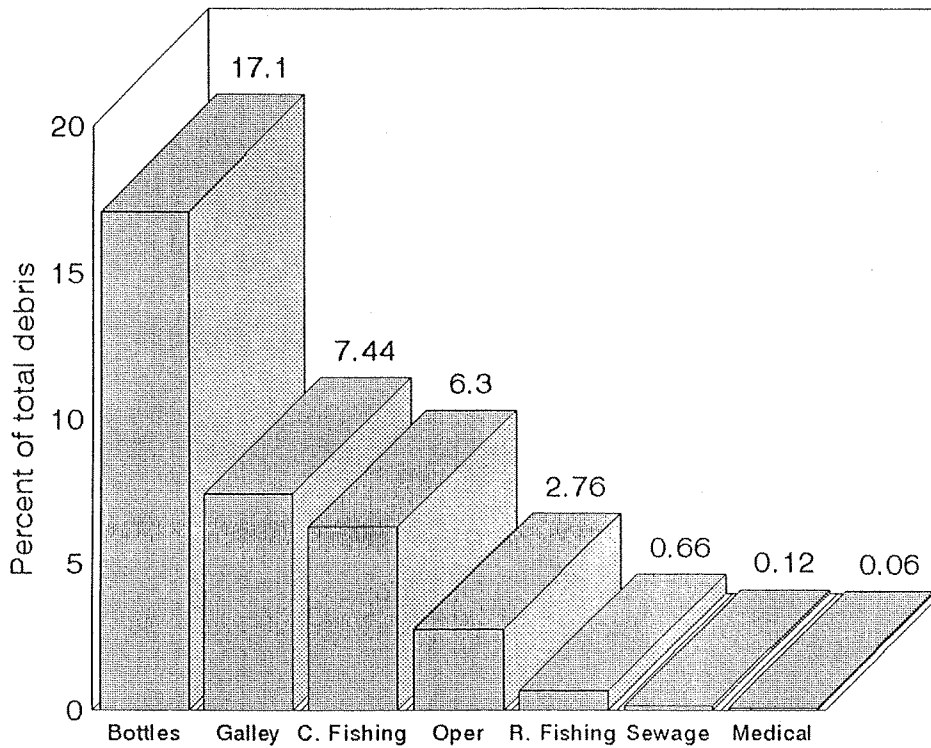
PERCENT COMPOSITION OF BAHAMAS' BEACH DEBRIS:



BAHAMAS' 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Plastic pieces	187	11.22
2. Glass beverage bottles	132	7.92
3. Plastic caps/lids	103	6.18
4. Foamed plastic pieces	92	5.52
5. Plastic cups/utensils	62	3.72
6. Plastic beverage bottles	61	3.66
7. Foamed plastic cups	60	3.60
8. Plastic food bags	57	3.42
9. Plastic rope	54	3.24
10. Miscellaneous plastic bottles/ Metal beverage cans	53	3.18
11. Plastic gallon bottles	44	2.64
Total	958	57.48

MAJOR TYPES AND SOURCES OF BAHAMAS' BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was collected for one zone at Somerset Beach, Bahamas.

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

None



Collecting data in Bahrain.

BAHRAIN

November 18, 1993
350 Volunteers
5 Miles Cleaned
16,000 Pounds of Debris Collected

Coordinated by: Dede Maher
Bahrain School Ecology Club
P. O. Box 934
Juffair
State of Bahrain
Fax: 011 973 725714

On November 18, 1993, twelve schools and organizations in Bahrain joined together to claim for the state of Bahrain the distinction of being the first Arabian Gulf country to take part in the Center for Marine Conservation's (CMC) annual International Coastal Cleanup. Some 350 students of 22 different nationalities, plus a spontaneous group of young volunteers from a nearby village who joined in with enthusiasm, worked in groups to collect and record data on almost 27,000 pieces of marine debris totaling 8 tons of rubbish found along a five mile stretch of Sitra coastline.

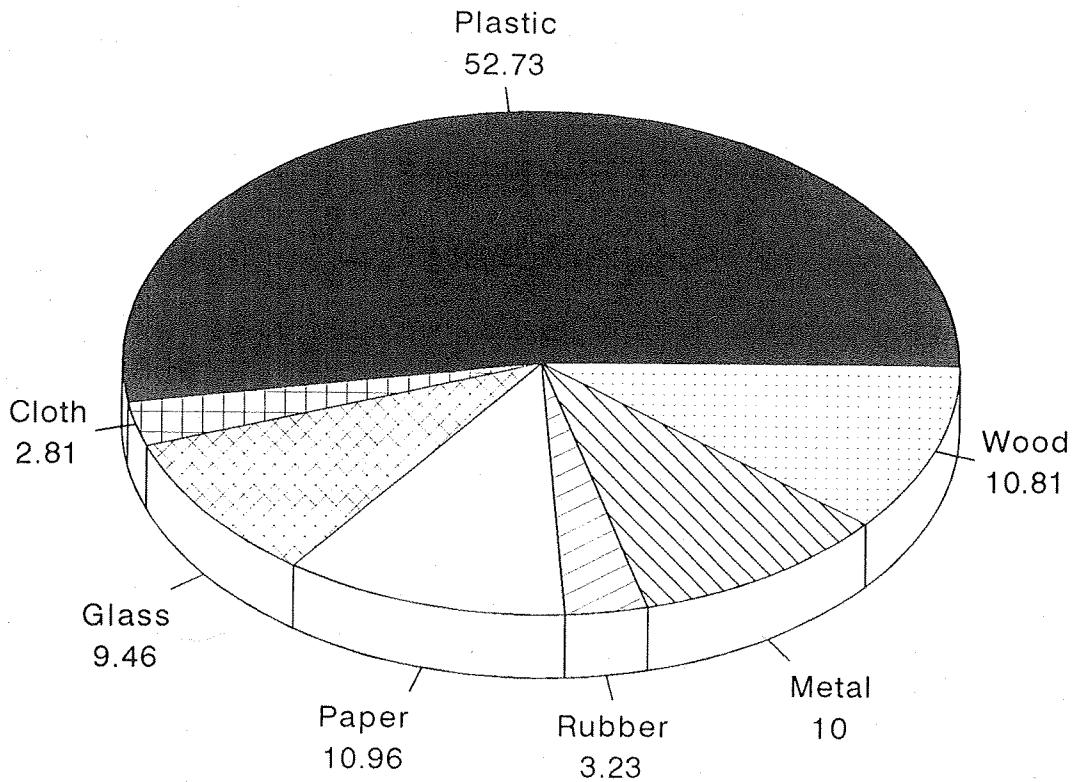
Besides sending the results to CMC, the results were also sent to the Regional Office for the Protection of the Marine Environment, a cooperative council organized by the Arabian Gulf States, to the Bahrain Environmental Protection Committee, and to the United Nations Environment Program, Bahrain.

We hope that the media coverage we received about Bahrain's participation this year will encourage other Gulf States to organize their own cleanups, thus providing more accurate information about the status of marine pollution in the Arabian Gulf.

FOR INFORMATION ON BAHRAIN'S 1994 COASTAL CLEANUP CONTACT:

**Dede Maher
Bahrain School Ecology Club
P. O. Box 934
Juffair
State of Bahrain
Fax: 011 973 725714**

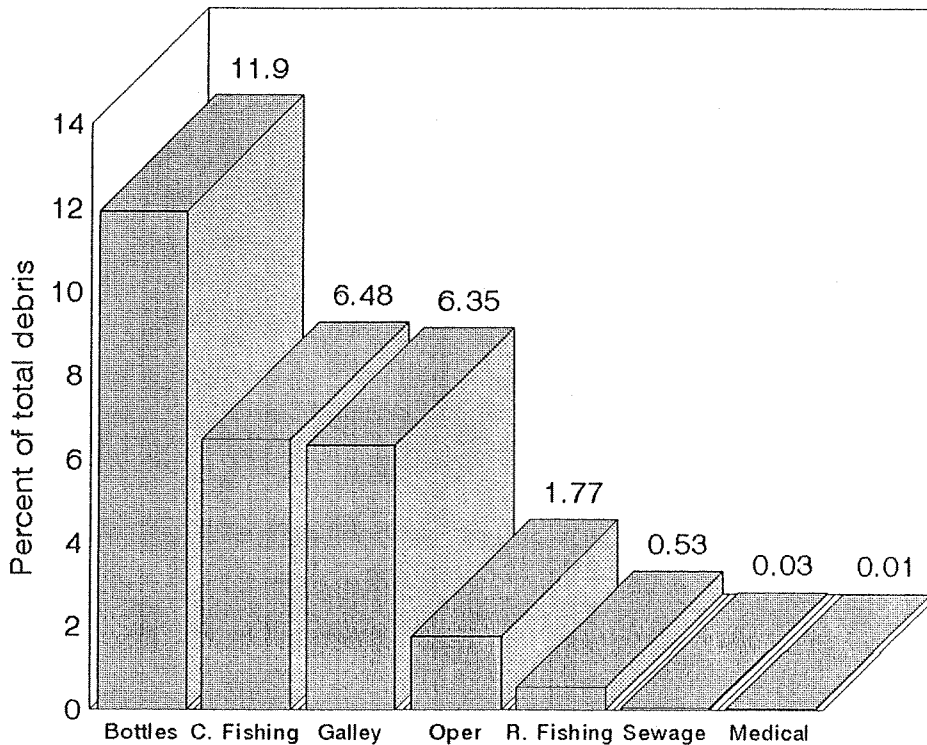
PERCENT COMPOSITION OF BAHRAIN'S BEACH DEBRIS:



BAHRAIN'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Lumber	2,681	9.97
2. Miscellaneous plastic bags	2,583	9.61
3. Plastic food bags	1,908	7.10
4. Plastic rope	1,315	4.89
5. Metal beverage cans	1,155	4.30
6. Plastic pieces	1,077	4.01
7. Glass beverage bottles	1,075	4.00
8. Glass pieces	969	3.60
9. Paper pieces	802	2.98
10. Clothing	735	2.73
11. Cigarette butts	726	2.70
12. Plastic trash bags	604	2.25
Total	15,630	58.13

MAJOR TYPES AND SOURCES OF BAHRAIN'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was collected for only one zone in Bahrain.

TRACEABLE DEBRIS REPORTED:

Location	Type of Debris	Source Indicated
Bahrain	potato chip bag flour bag	OK Crisps Factory Al Mahdi

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

Cormorant "stuck with oil"; dead bird entangled in rope; crabs entangled in string; octopus inside a tire; crab entangled in plastic; fish trapped in plastic

MOST PECULIAR DEBRIS ITEMS REPORTED:

None

BARBADOS

September 18, 1993
15 Volunteers
1 Mile Cleaned
140 Pounds of Debris Collected

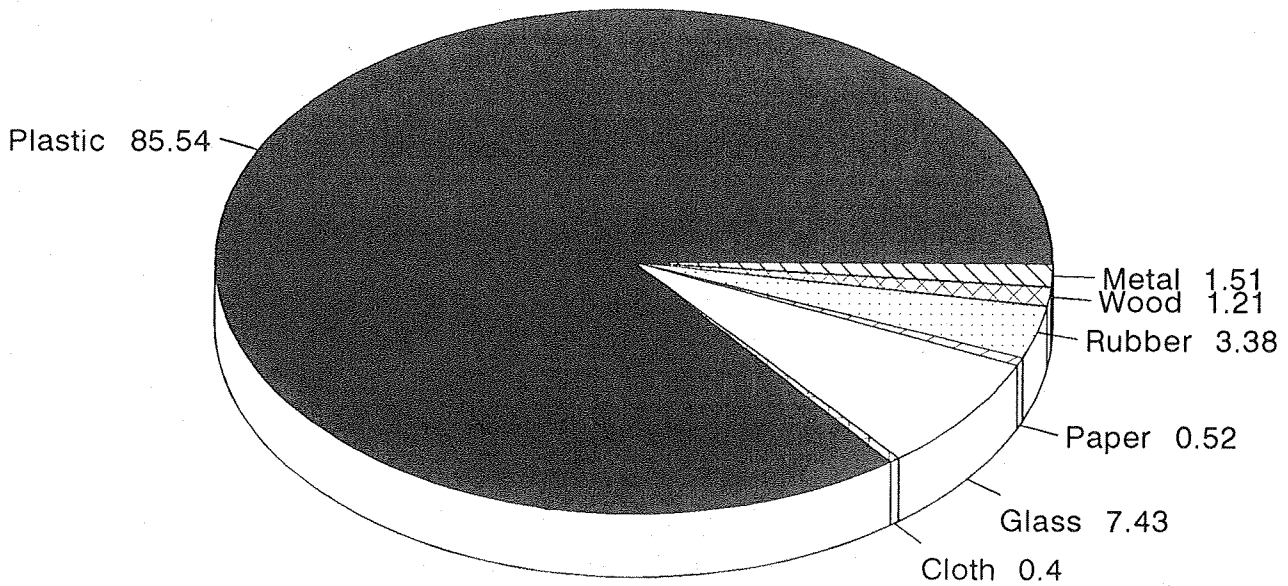
Coordinated by: Leo Brewster
Barbados Environmental Association
P. O. Box 132
Bridgetown, Barbados
Telephone: (809) 427-0619

The 15 volunteers of Barbados conducted their beach cleanup operations this year on Chancey Lane Beach on the southeast coast of the island. They collected 40 bags of garbage totaling 140 pounds.

FOR INFORMATION ON BARBADOS' 1994 COASTAL CLEANUP CONTACT:

**Sandra Prescod
Barbados Environmental Association
P. O. Box 132
Bridgetown, Barbados
Telephone: (809) 427-1540
or (809) 426-5973**

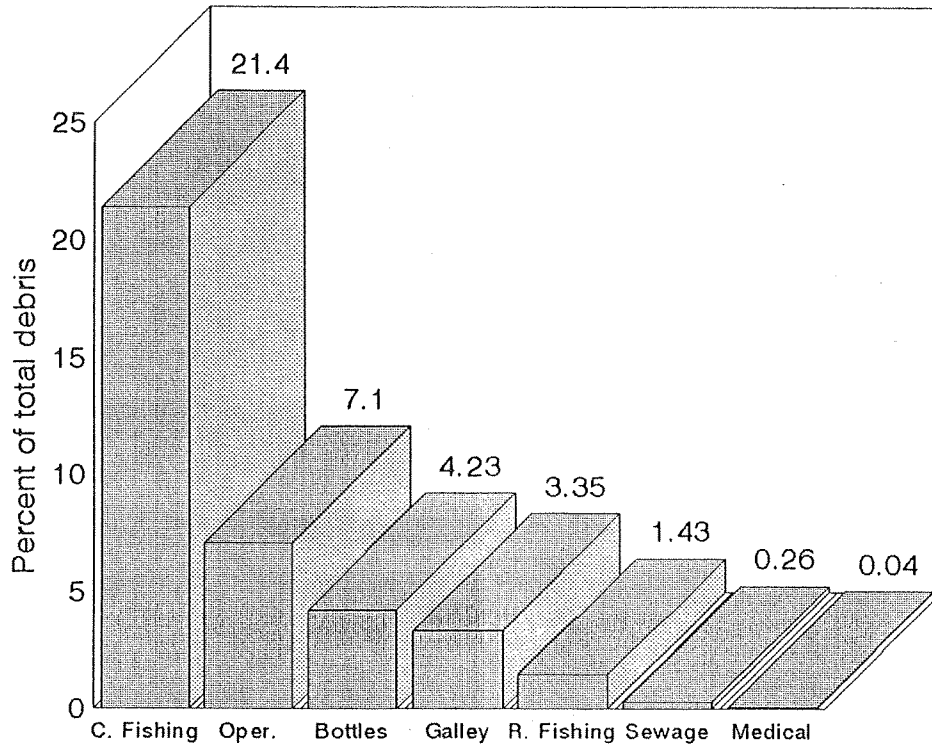
PERCENT COMPOSITION OF BARBADOS' BEACH DEBRIS:



BARBADOS' 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Plastic pieces	590	21.69
2. Plastic rope	374	13.75
3. Plastic caps/lids	212	7.79
4. Plastic fishing nets	186	6.84
5. Plastic strapping bands	179	6.58
6. Miscellaneous plastic bags	159	5.85
7. Glass pieces	145	5.33
8. Miscellaneous plastic bottles	108	3.97
9. Plastic beverage bottles	80	2.94
10. Plastic food bags	70	2.57
11. Plastic beach bottles	69	2.54
12. Foamed plastic pieces	65	2.39
Total	2,237	82.24

MAJOR TYPES AND SOURCES OF BARBADOS' BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was collected for only one zone, Chancey Lane Beach, in Barbados.

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

None

BELIZE

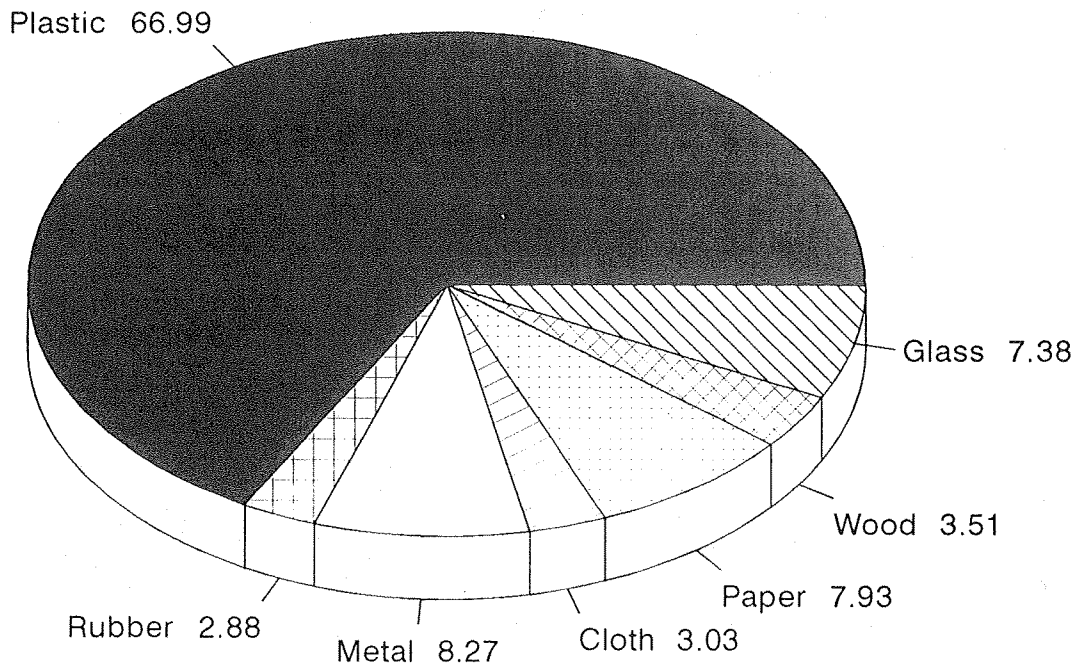
300 Volunteers
15 Miles Cleaned
3,000 Pounds of Debris Collected

Coordinated by: Hilberto B. Riverol
The Scout Association of Belize
Civic Center
Central American Boulevard
Belize City, Belize
Telephone: (501) 2-72168

FOR INFORMATION ON BELIZE'S 1994 COASTAL CLEANUP CONTACT:

**Hilberto B. Riverol
The Scout Association of Belize
Civic Center
Central American Boulevard
Belize City, Belize
Telephone: (501) 2-72168**

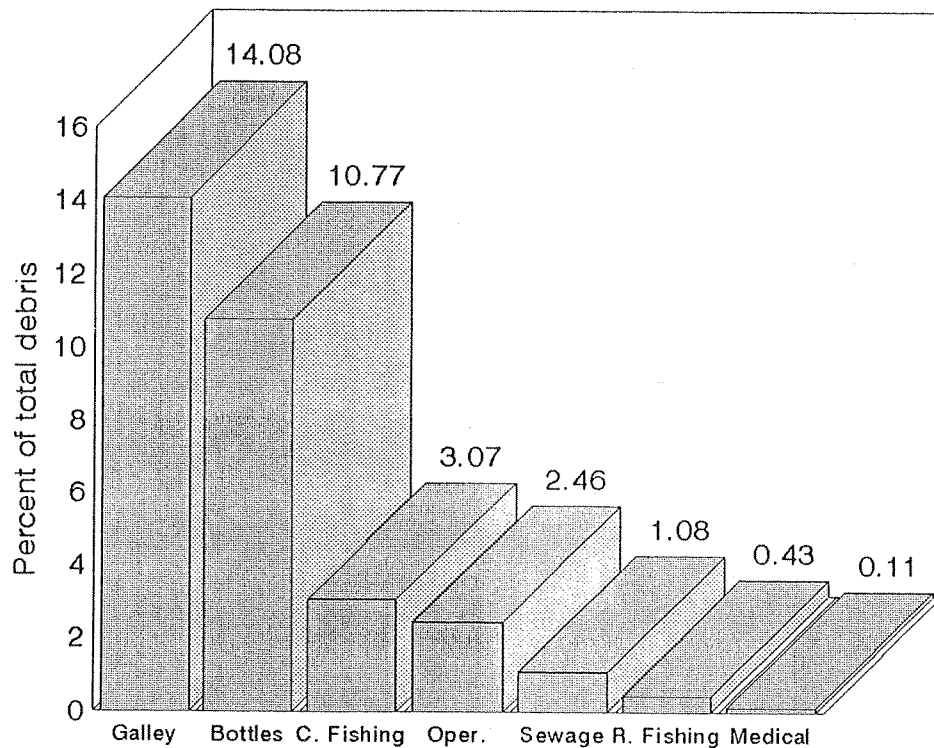
PERCENT COMPOSITION OF BELIZE'S BEACH DEBRIS:



BELIZE'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Plastic trash bags	972	10.72
2. Plastic food bags	419	4.62
3. Plastic straws	370	4.08
4. Plastic caps/lids	347	3.83
5. Foamed plastic plates	314	3.46
6. Plastic cups and utensils	299	3.30
7. Plastic pieces	292	3.22
8. Clothing	272	3.00
9. Foamed plastic pieces	266	2.93
10. Plastic oil/lube bottles	248	2.73
11. Glass beverage bottles	247	2.72
12. Foamed plastic cups	241	2.66
Total	4,287	47.27

MAJOR TYPES AND SOURCES OF BELIZE'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was collected for only one zone in Belize.

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

Wheelbarrow, iron frame, 42 foam plates

BERMUDA

September 1993

Coordinated by: Dace McCoy Ground
Bermuda Biological Station for Research, Inc.
Ferry Reach
GE 01, Bermuda
Telephone: (809) 297-1880
Fax: (809) 297-8143

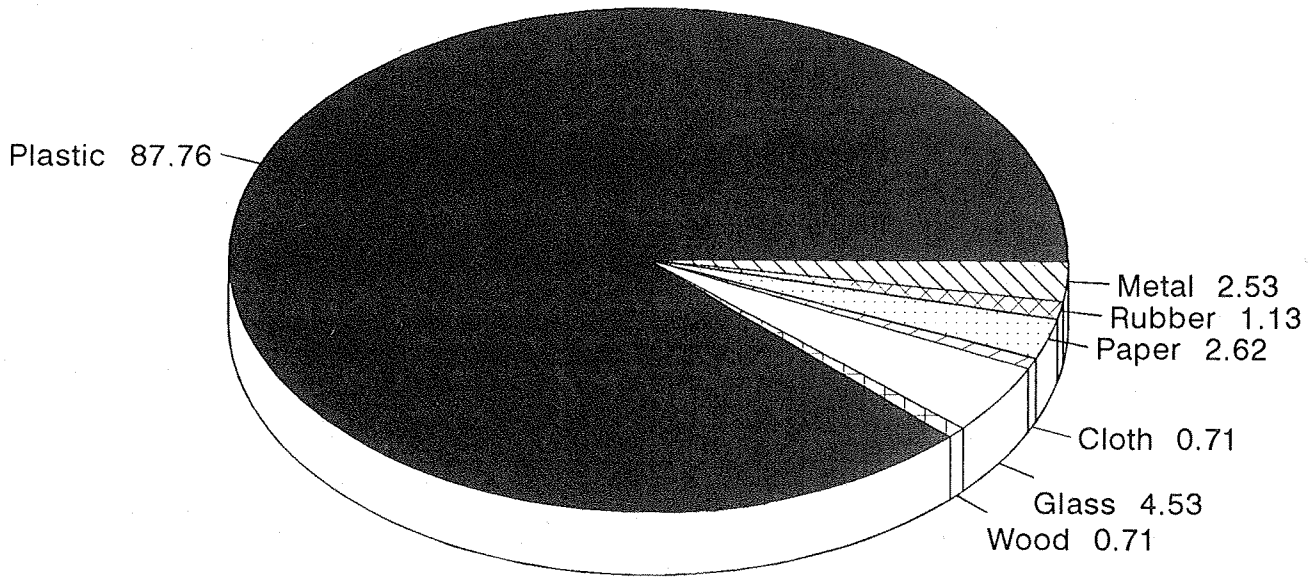
September 1993 marked the date of the first beach cleanup at the Bermuda Biological Station for Research, Inc. in Bermuda. We did our cleanup, however small, but were able to learn about data collection cards. We involved the major citizens' group, Keep Bermuda Beautiful, and they also had a chance to see how the data collection works. Keep Bermuda Beautiful are now interested in doing a major cleanup and have moved their cleanup date (originally planned for earlier in the year) to September so as to be able to be a part of the International Coastal Cleanup! We are looking forward to the 1994 International Coastal Cleanup here in Bermuda!

Dace McCoy Ground

FOR INFORMATION ON BERMUDA'S 1994 COASTAL CLEANUP CONTACT:

Dace McCoy Ground
Bermuda Biological Station for Research, Inc.
Ferry Reach
GE 01, Bermuda
Telephone: (809) 297-1880
Fax: (809) 297-8143

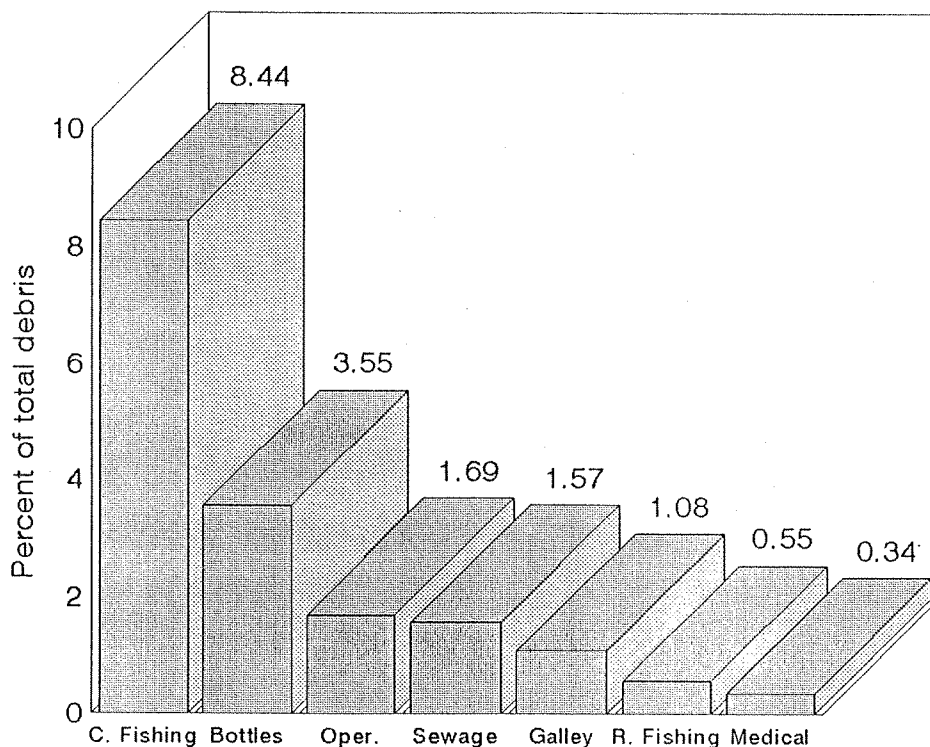
PERCENT COMPOSITION OF BERMUDA'S BEACH DEBRIS:



BERMUDA'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Plastic pieces	1,660	35.13
2. Plastic caps/lids	634	13.42
3. Cigarette butts	380	8.04
4. Plastic rope	246	5.21
5. Foamed plastic packaging	166	3.51
6. Plastic light sticks/ Foamed plastic pieces	118	2.50
7. Plastic straws	102	2.16
8. Miscellaneous plastic bottles/ Glass pieces	98	2.07
9. Plastic cups/utensils	81	1.71
10. Glass beverage bottles	79	1.67
Total	3,780	79.99

MAJOR TYPES AND SOURCES OF BERMUDA'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was collected for only one zone in Bermuda.

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

Barbeque, big chunk of rubbery material (about a 2 foot cube) weighing 150-200 lbs.

BRAZIL

November 30
132 Volunteers

Coordinated by: Dr. Sheial M. Simao
UFRRJ - P. O. Box 74544
Seropedica - Itaguaí - RJ
23851-970 - Brasil
Telephone: (021) 682-1128
Fax: (021) 682-1120

Last year, I visited Raleigh (North Carolina, USA), where I met Dr. Lundie Spence of the North Carolina Sea Grant College Program. She talked about the International Coastal Cleanup and gave me copies of materials and data cards.

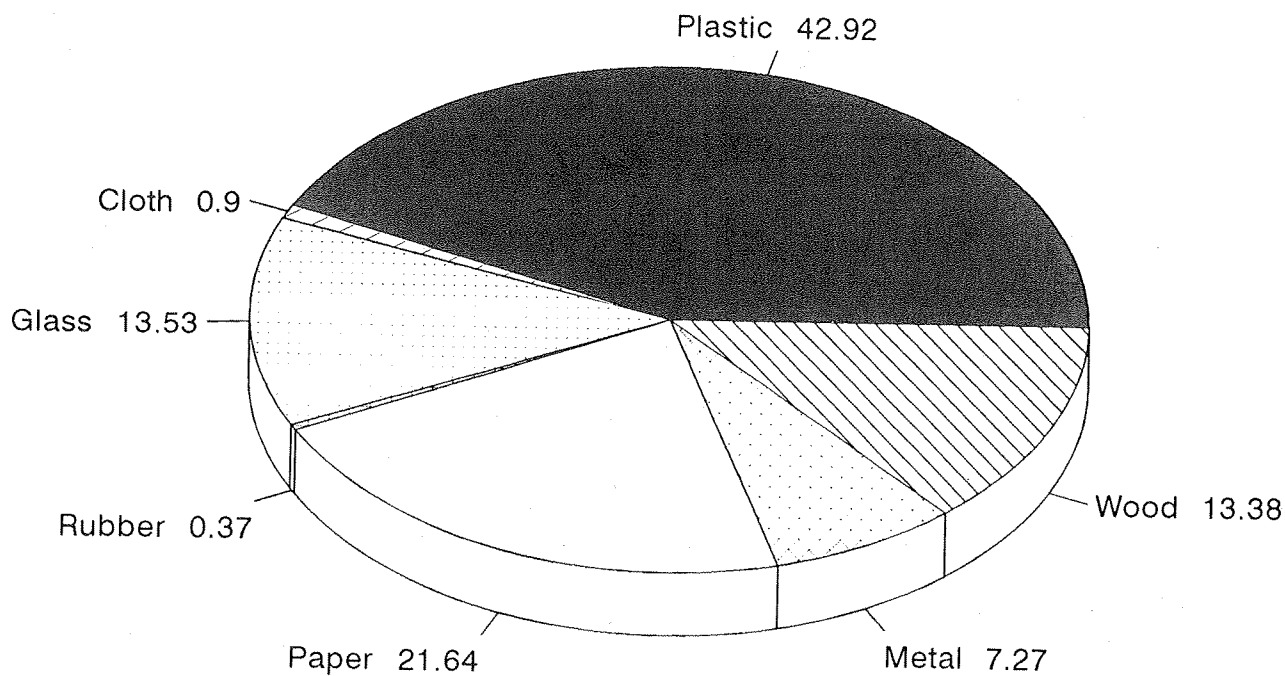
On November 30, as part of the Federal Rural University of Rio de Janeiro's (Rio de Janeiro State, Brazil) "Baia Viva" Project, an environmental education project which deals with children and adolescents of elementary and secondary public schools, we conducted our first Beach Cleanup on Ribeira Beach of Mangaratiba City with 132 students from Coronel Moreira da Silva State School and Augusta Lopes Municipal School.

Students from Kindergarten to 4th grades, as well as teachers from the two schools and faculty and students from the Federal Rural University joined together and spent all day working on one small beach.

FOR INFORMATION ON BRAZIL'S 1994 COASTAL CLEANUP CONTACT:

Dr. Sheial M. Simao
UFRRJ - P. O. Box 74544
Seropedica - Itaguaí - RJ
23851-970 - Brasil
Telephone: (021) 682-1128
Fax: (021) 682-1120

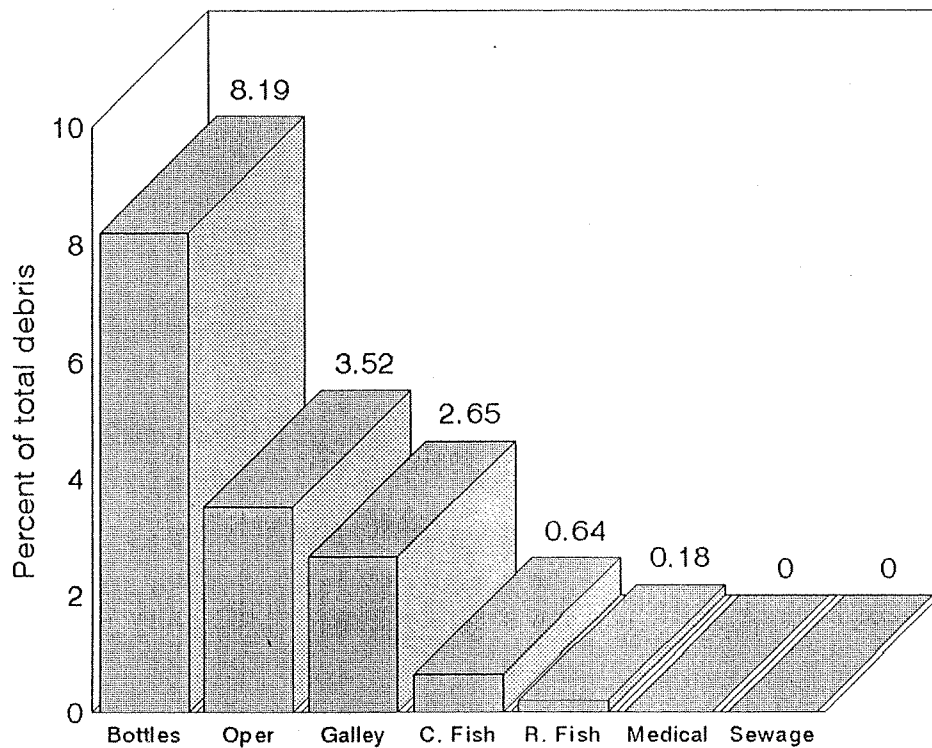
PERCENT COMPOSITION OF BRAZIL'S BEACH DEBRIS:



BRAZIL'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Cigarette butts	286	13.09
2. Paper pieces	227	10.39
3. Glass pieces	216	9.89
4. Lumber	200	9.15
5. Miscellaneous plastic bags	144	6.59
6. Plastic food bags	121	5.54
7. Plastic cups/utensils	108	4.94
8. Plastic pieces	70	3.20
9. Paper cartons	67	3.07
10. Plastic beverage bottles	56	2.56
11. Plastic caps/lids	55	2.52
12. Pallets	51	2.33
Total	1,601	73.27

MAJOR TYPES AND SOURCES OF BRAZIL'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was collected for only one zone in Brazil.

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

Fishes entangled in fishing line and plastic

MOST PECULIAR DEBRIS ITEMS REPORTED:

Birth control pill package



Young volunteers from the British Virgin Islands show off the results of their hard work.

BRITISH VIRGIN ISLANDS

September 18, 1993
144 Volunteers
3 Miles Cleaned
8,050 Pounds of Debris Collected

Coordinated by: Julie Overing
Conservation and Fisheries Department
Ministry of Natural Resources
Government of the British Virgin Islands
Fax: (809) 494-4435

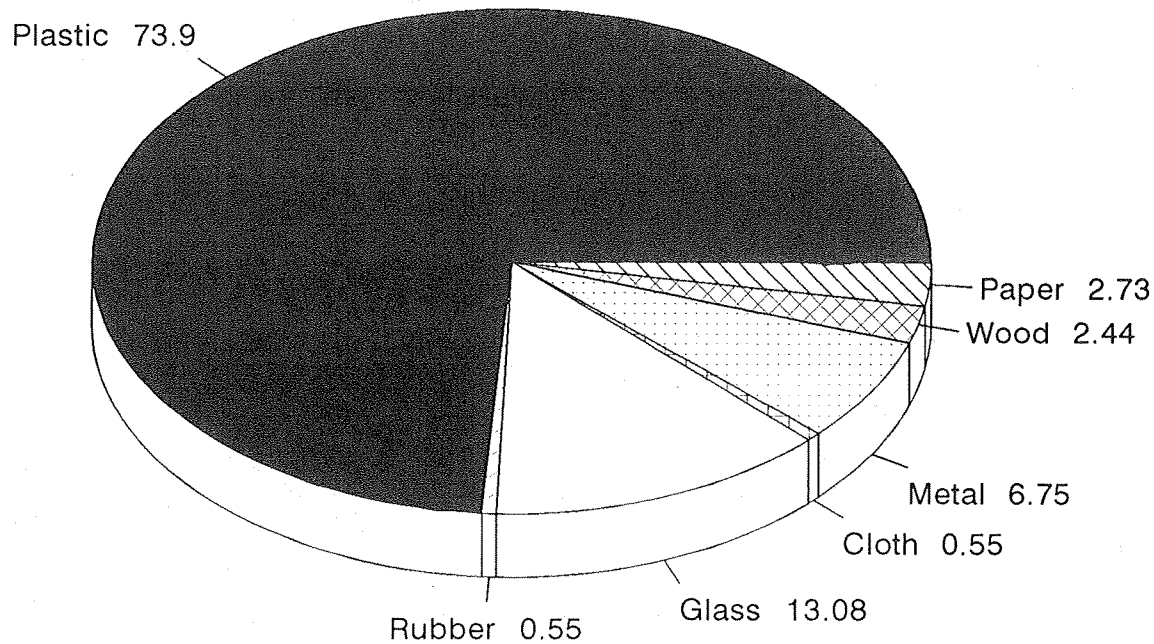
The Conservation and Fisheries Department of the Government of the British Virgin Islands sponsored the coastal cleanup. This was the third year that cleanups have been conducted in the British Virgin Islands, and proved to be the best to date! With almost three times as many volunteers this year, the group collected over 400 bags of debris weighing over 4 tons. Additionally, another 28,000 pounds of debris was identified and awaiting heavy equipment to remove.

Participants represented various organizations, including the Lion's Club, BVI Yacht Club, BVI Red Cross, Jost Van Dyke Preservation Society, and Virgin Island Search and Rescue.

FOR INFORMATION ON BRITISH VIRGIN ISLANDS' 1994 COASTAL CLEANUP CONTACT:

Julie Overing
Conservation and Fisheries Department
Ministry of Natural Resources
Government of the British Virgin Islands
Fax: (809) 494-4435

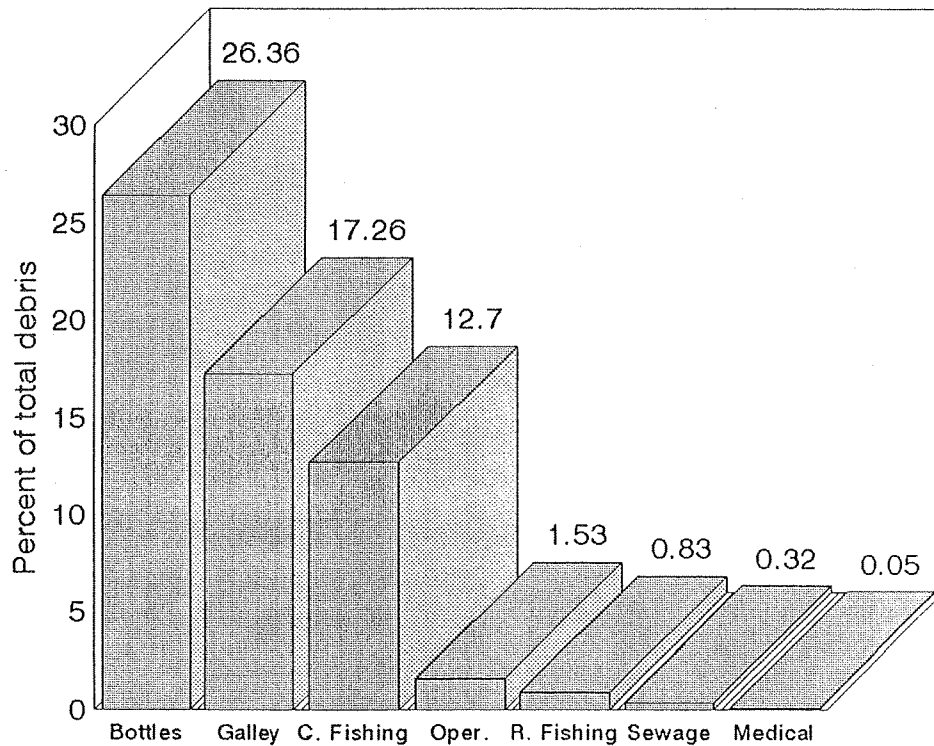
PERCENT COMPOSITION OF BRITISH VIRGIN ISLANDS' BEACH DEBRIS:



BRITISH VIRGIN ISLANDS' 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Plastic gallon jugs	3,392	14.65
2. Plastic beverage bottles	2,785	12.03
3. Glass beverage bottles	2,140	9.24
4. Plastic rope	1,569	6.78
5. Plastic fishing nets	1,136	4.91
6. Metal beverage cans	987	4.26
7. Foamed plastic pieces	904	3.90
8. Plastic oil/lube bottles	831	3.59
9. Foamed plastic fast food containers	700	3.02
10. Plastic caps/lids	648	2.80
11. Plastic pieces	565	2.44
12. Plastic cups/utensils	563	2.43
Total	16,220	70.05

MAJOR TYPES AND SOURCES OF BRITISH VIRGIN ISLANDS' BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Tortola	66.91	Plastic beverage bottles
Peter Island	82.31	Plastic rope
Virgin Gorda	53.31	Miscellaneous glass bottles
Great Thatch Island	83.61	Plastic gallon bottles
Great Camanoe	78.56	Plastic gallon bottles

TRACEABLE DEBRIS REPORTED:

Location	Type of Debris	Source Indicated
Great Camanoe	large plastic container	Supertech Products
	plastic bottle	Penzoil
	plastic fast food container	Lucky Bucket
	ice cream container	Haagen Das
	plastic container	Roberts Margarine

FOREIGN DEBRIS ITEMS REPORTED:

Location	Source	Type of Debris
Great Thatch Island	Greece	salt container
	USVI	carrier bags
Great Camanoe	La Croix	bleach container
	Barbados	plastic container
	New York	plastic bottle

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

Tortola	5 ounces of marijuana, car dashboard, hour glass, old chair, ping pong paddle
Peter Island	waterski foot pocket
Virgin Gorda	door, freshly used Pampers
Great Thatch Island	salt container from Athens
Great Camanoe	large plastic duck and astro turf

CUBA

September 19
14 Volunteers
1 Mile Cleaned
1,200 Pounds of Debris Collected

Coordinated by: Rafael Quinones Lic.
Museo Nacional de Historia Natural
Capitalio Nacional
Ciudad de la Habana, Cuba
Telephone: (537) 62-0353/63-2589

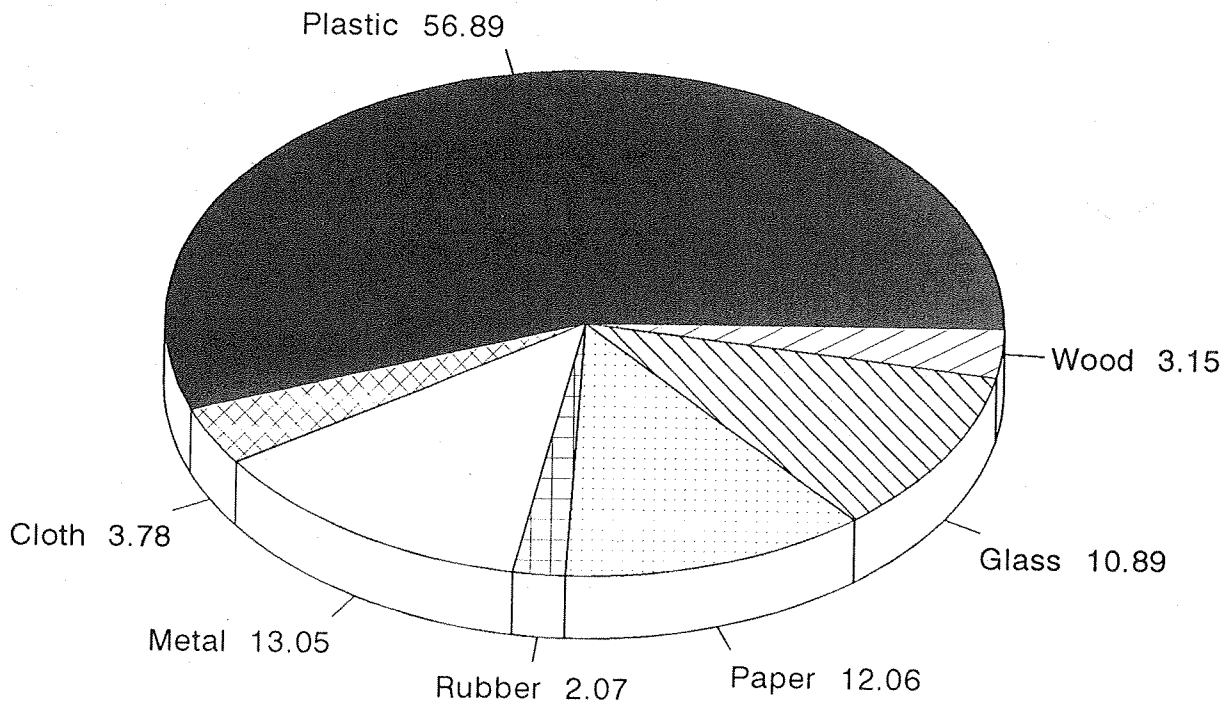
A Herculean effort by Rafael Quinones from the Museo Nacional de Historia Natural and 14 dedicated volunteers, many of them friends and family, enabled Cuba's third International Coastal Cleanup to be a great success. With many transportation difficulties, and without bags or outside support, these diligent conservationists collected 1,200 pounds of debris on the beaches of Playa Baracoa and Playa Salado. The mostly frequently found debris items were pieces of wood, glass, metal, and food remainders, indicating construction and deforestation activities along the Cuban coast as the source of much debris. Beachgoers also generate a lot of the trash.

Mr. Quinones hopes to inspire the Department of Cultural Action, at the Museo Nacional de Historia Natural, to take part in the 1994 cleanup.

FOR INFORMATION ON CUBA'S 1994 COASTAL CLEANUP CONTACT:

Rafael Quinones Lic.
Museo Nacional de Historia Natural
Capitalio Nacional
Ciudad de la Habana, Cuba
Telephone: (537) 62-0353/63-2589

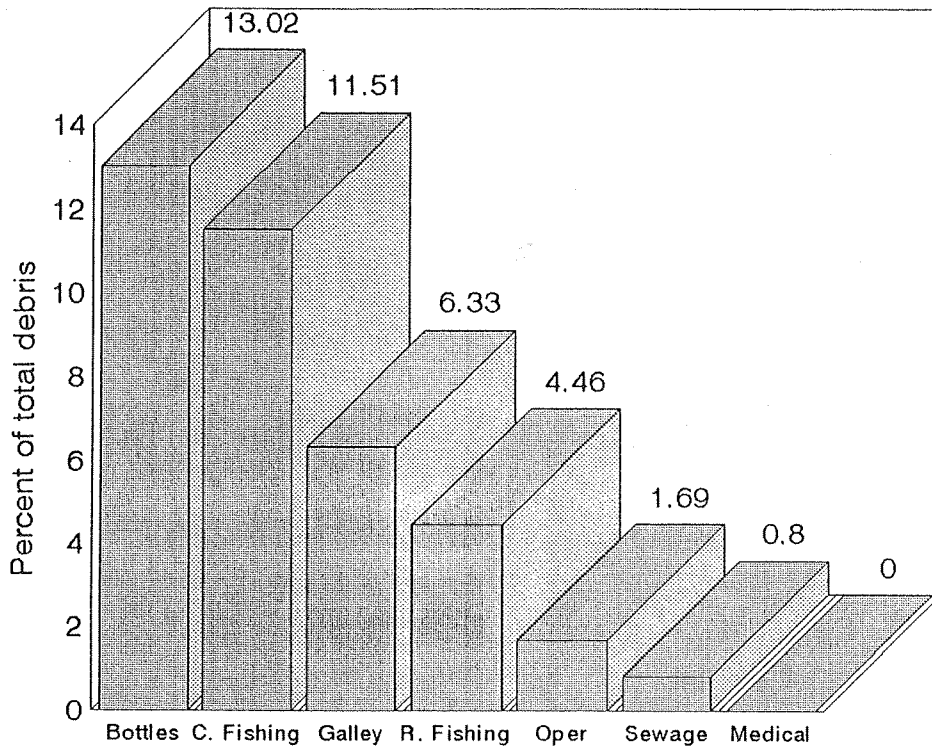
PERCENT COMPOSITION OF CUBA'S BEACH DEBRIS:



CUBA'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Foamed plastic pieces	72	6.42
2. Glass beverage bottles	67	5.98
3. Plastic pieces	61	5.44
4. Paper pieces	56	5.00
5. Plastic rope	54	4.82
6. Miscellaneous plastic bottles	52	4.64
7. Plastic fishing line	49	4.37
8. Plastic fishing nets	48	4.28
9. Plastic oil/lube bottles	46	4.10
Metal pieces		
10. Metal bottle caps	39	3.48
11. Plastic gallon bottles	35	3.12
Newspapers		
Total	614	54.75

MAJOR TYPES AND SOURCES OF CUBA'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was collected for only one zone in Cuba.

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

None

DOMINICAN REPUBLIC



September 19
245 Volunteers
3,320 Pounds of Debris Collected

Coordinated by: Miguel Silva
CEBSE
Apartado 132, Samana
Republica Dominicana
Telephone: (809) 538-2042

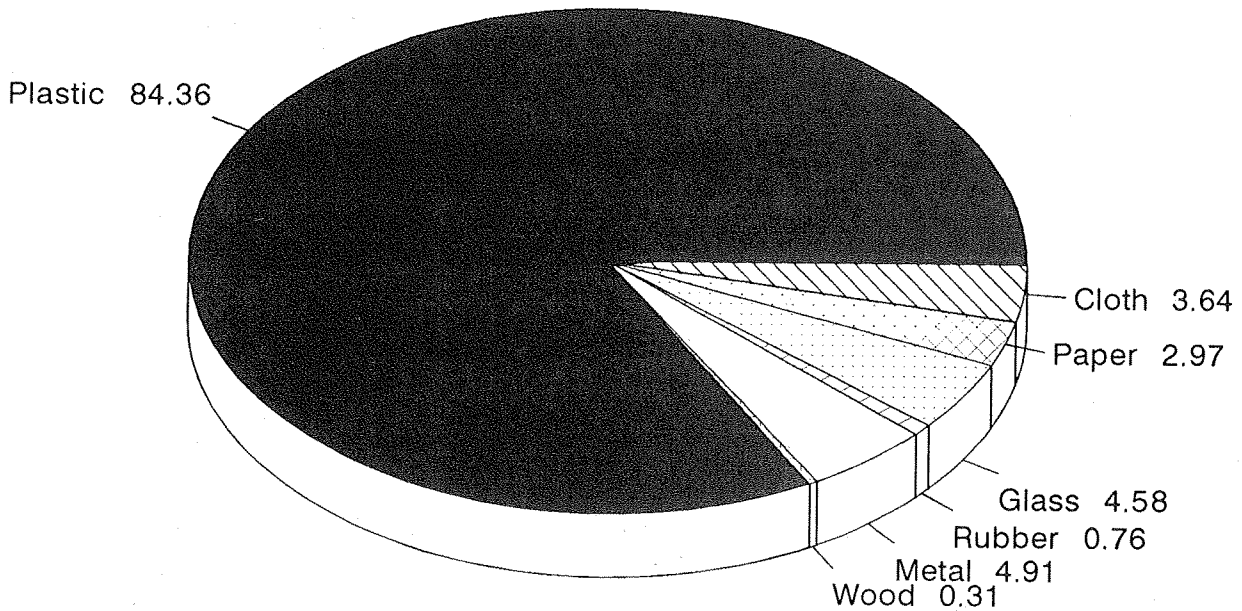
In 1993, the Samana beach cleanup became a national event. The success of last year's cleanup encouraged volunteers from different places in the country to join in the 1993 cleanup.

As with last year, the beach cleanup was organized by the non-profit civil-based organization, CEBSE (Centro para la Conservacion y Ecodesarrollo de la Bahia de Samana y su Entorno), but this time local grassroots organizations—including women's groups, young peoples' groups, and community development groups—participated enthusiastically in the activity, which is becoming more and more popular in the Dominican Republic.

FOR INFORMATION ON DOMINICAN REPUBLIC'S 1994 COASTAL CLEANUP CONTACT:

Patricia Lamelas
CEBSE
Apartado 132, Samana
Republica Dominicana
Telephone: (809) 538-2042
Fax: (809) 538-2545

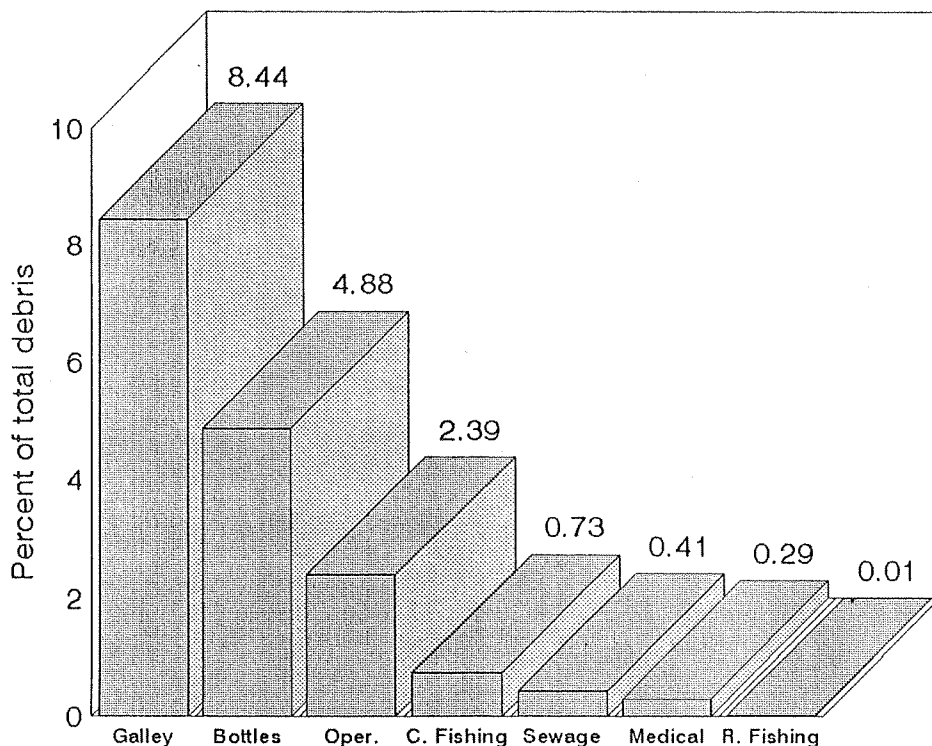
PERCENT COMPOSITION OF DOMINICAN REPUBLIC'S BEACH DEBRIS:



DOMINICAN REPUBLIC'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Foamed plastic pieces	18,936	27.86
2. Plastic cups/utensils	6,306	9.28
3. Miscellaneous beverage bottles	5,559	8.18
4. Plastic caps/lids	5,092	7.49
5. Plastic trash bags	5,036	7.41
6. Foamed plastic plates	2,921	4.30
7. Clothing	2,398	3.53
8. Cigarette butts	2,091	3.08
9. Bottle caps	1,996	2.94
10. Plastic pieces	1,676	2.47
11. Plastic straws	1,432	2.11
12. Foamed plastic cups	1,335	1.96
Total	54,778	80.59

MAJOR TYPES AND SOURCES OF DOMINICAN REPUBLIC'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Los Corozos	92.31	Foamed plastic pieces
Las Pascualas	66.26	Foamed plastic plates
Puerto Escendido	75.87	Plastic cups/utensils
Anadel	81.58	Plastic cups/utensils
Cayo Levantado	62.72	Foamed plastic pieces
Samana	61.40	Bottle caps
		Foamed plastic pieces

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

None

ECUADOR

COASTWEEKS

Coordinated by: Eduardo Amador G.
Av. 25 de julio
Facultad Ciencias Naturales
Centro Informacion Galapagos
Casilla 471 Guayaquil—Ecuador
Telephone: 395226
Fax: 306861/434270

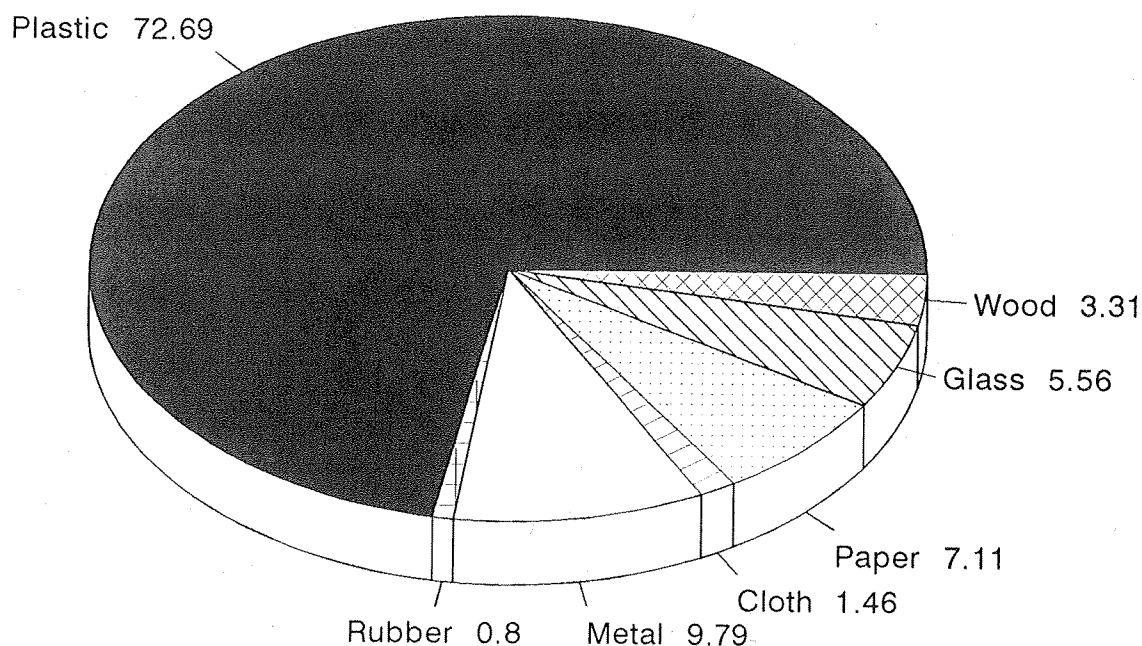
FOR INFORMATION ON ECUADOR'S 1994 COASTAL CLEANUP CONTACT:

Dr. Segundo Coello
Programa Manejo de Recursos Costeros
AV. Quito y Padre Solano
Edf. del Ministerio de Agricultura y Ganaderia, Piso 20
P.O. Box 09-01 5850
Guayaquil, Ecuador
Telephone: 395226
Fax: 306861/434270



Volunteers in Ecuador fill out their data card.

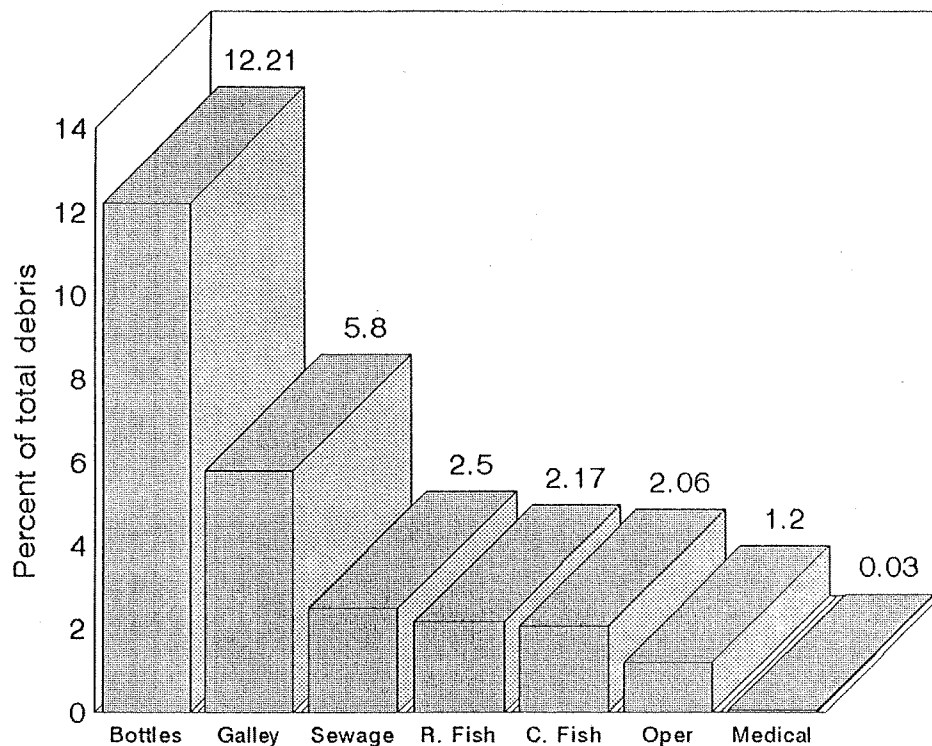
PERCENT COMPOSITION OF ECUADOR'S BEACH DEBRIS:



ECUADOR'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Plastic pieces	1,650	13.79
2. Plastic food bags	1,015	8.49
3. Plastic oil/lube bottles	945	7.90
4. Plastic cups/utensils	882	7.37
5. Plastic rope	863	7.22
6. Metal beverage cans	666	5.57
7. Miscellaneous plastic bags	555	4.64
8. Plastic trash bags	553	4.62
9. Plastic caps/lids	437	3.65
10. Glass beverage bottles	398	3.33
11. Tampon applicators	299	2.50
12. Plastic beverage bottles	284	2.37
Total	8,547	71.46

MAJOR TYPES AND SOURCES OF ECUADOR'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was collected from only one zone in Ecuador.

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

A diamond, pieces of zinc, toy car, pair of shoes



Greek volunteers fan out to cover as much ground as possible.

GREECE



•HELMEPA•

September 18, 1993
7,136 Volunteers
178 Miles Cleaned
168,000 Pounds of Debris Collected

Coordinated by: Dimitri Mitsasos
Director General/ HELMEPA
5 Pergamou Street
Nea Smyrni
171 21 Athens, Greece
Telephone: 011-30-1-934-3088

The Hellenic Marine Environment Protection Association (HELMEPA) for the third consecutive year coordinated Voluntary Beach Cleanups all over Greece. This initiative had a global character, as it took place on the same day in 40 coastal countries, six of which are in the Mediterranean basin. The aim of this initiative is to establish an "International Beach Cleanup Day."

In Greece, the volunteers came from 162 organizations, such as Ministries, Prefectures, Local Authorities, schools, hotels, boy scouts and girl guides, and environmental and cultural organizations. The contribution of the Ministry of Merchant Marine through its Port Authorities was particularly important.

More than 80 tons of debris were collected from a total coastal area of 5 square km, including sandy and rocky beaches, close to estuaries and also port and marina areas. Sea surface and bottom cleanups also took place by divers and private vessels in various areas, such as Palio and Kalamitsa in Kavala and in the Salonica Gulf.

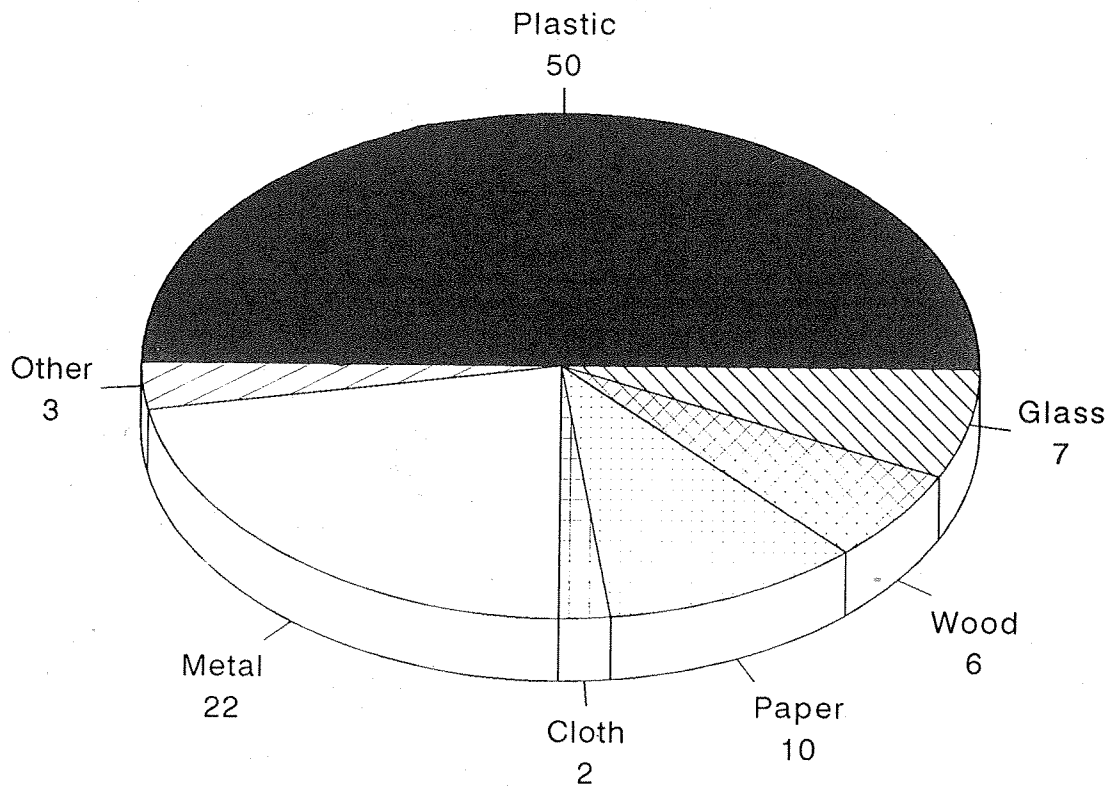
HELMEPA thanks and congratulates all those who participated and assisted in realizing this initiative and wishes that the voluntary beach cleanups cause all of us to limit the pollution of our seas and beaches, which after all threatens our very life.

FOR INFORMATION ON GREECE'S 1994 COASTAL CLEANUP CONTACT:

**Dimitri Mitsasos
Director General/ HELMEPA
5 Pergamou Street
Nea Smyrni
171 21 Athens, Greece
Telephone: 011-30-1-934-3088**

Editor's note: Although we were unable to receive data cards from Greece, HELMEPA supplied us with the following information concerning the composition of the debris found. Please note that this information was not compiled by CMC.

PERCENT COMPOSITION OF GREECE'S BEACH DEBRIS:



GRENADA

September 18, 1993
200 Volunteers
3,000 Pounds of Debris Collected

Coordinated by: Joseph Antoine, President
Friends of the Earth-Grenada
P. O. Box 521
St. George's, Grenada
Telephone: (809) 444-8838
Fax: (809) 444-2802

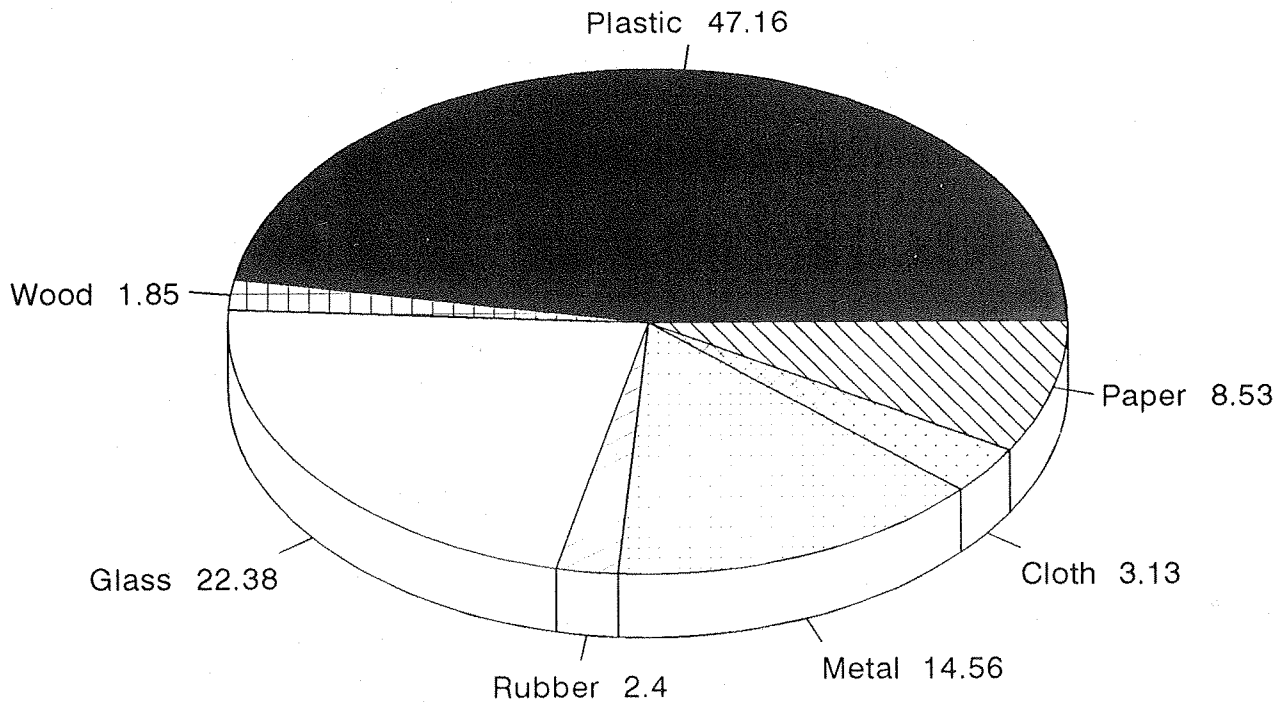
Grenadians participated for the second time in the Center for Marine Conservation's International Coastal Cleanup, coordinated by Friends of the Earth Grenada. Volunteers participating in the event gathered and categorized over 3,000 pounds of garbage. Areas cleaned during the cleanup include: Hog Island, Fontenoy, Grand Mal, Pandey Beach, Duquesne, La SaSagesse, Grenville, River Sallee—St. Mark's, Grand Roy, Gros Point, Victoria, Palmiste, Waltham, and True Blue.

Friends of the Earth Grenada wishes to thank the following organizations for their participation in the event: St. Andrew's Development Organization, St. Joseph's Convent—Grenville, First St. Dominic's Boy Scouts, Police Boy's Club, International School of Grenada, NEWLO, Canadian Crossroads International, La Poterie Seventh Day Adventist Pathfinders, Grand Roy Government School, and John Vanderwater and his group of concerned boaters. We would also like to thank the Grenada Bottling Company, Grenada Breweries Limited, Grenada Plastic and Packaging Company, Agency for Rural Transformation, the Division of Community Development, the Grenadian media, and all others who contributed to making the day a success!

FOR INFORMATION ON GRENADA'S 1994 COASTAL CLEANUP CONTACT:

Joseph Antoine, President
Friends of the Earth-Grenada
P. O. Box 521
St. George's, Grenada
Telephone: (809) 444-8838
Fax: (809) 444-2802

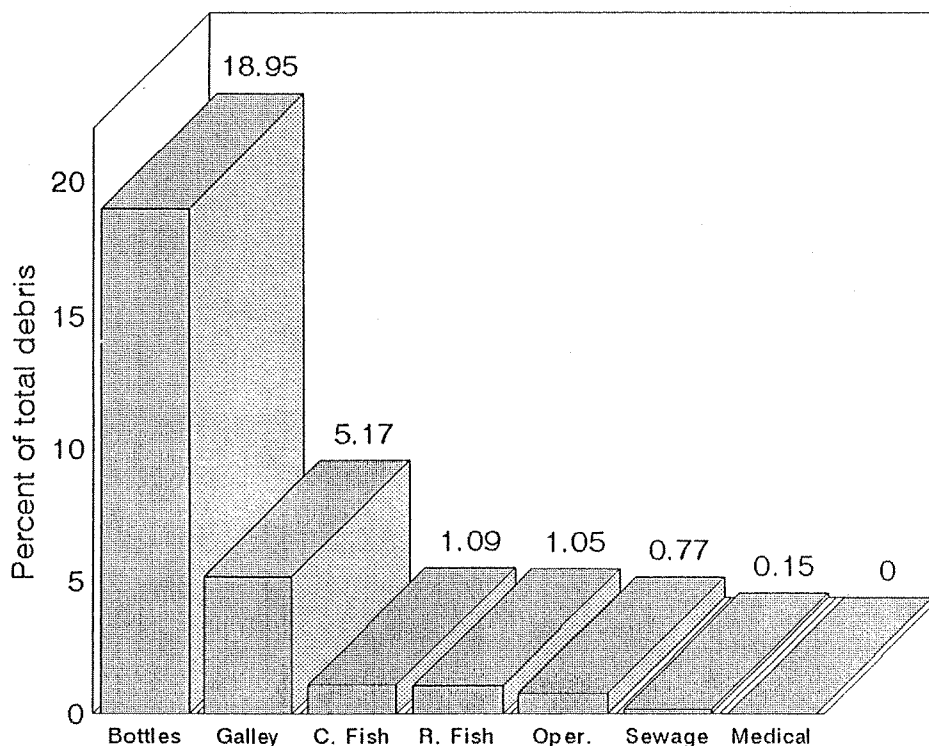
PERCENT COMPOSITION OF GRENADA'S BEACH DEBRIS:



GRENADA'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Plastic food bags	550	9.06
2. Glass beverage bottles	439	7.23
3. Glass pieces	421	6.94
4. Plastic beverage bottles	284	4.68
5. Metal beverage cans	236	3.89
6. Plastic pieces	207	3.41
7. Foamed plastic pieces	193	3.18
8. Clothing	189	3.11
9. Plastic bleach bottles	163	2.69
10. Metal bottle caps	159	2.62
11. Foamed plastic cups	146	2.41
12. Plastic caps/lids	145	2.39
Total	3,132	51.62

MAJOR TYPES AND SOURCES OF GRENADA'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was combined into one zone for Grenada.

TRACEABLE DEBRIS REPORTED:

Location	Type of Debris	Source Indicated
St. George Island	plastic bottle glass bottle paper food box	Shell Oil Company Westerhall Estate, Ltd. Kentucky Fried Chicken

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

Car engine, table model, stove, aluminum car bumper

GUATEMALA

October 4, 1993
20 km

Coordinated by:
Tulio Monterroso
ARCAS
Section 135
P.O. Box 02 5289
Miami, FL 33102-5209
502-9-500-566

Although we did not receive a written summary of Guatemala's results, the following information was taken from an article published in ARCAS' newsletter:

September 18 was the designated International Coastal Cleanup Day, but due to heavy rains and floods on that date, ARCAS rescheduled its beach cleanup on the Guatemalan Pacific Coast on October 4.

We worked with seven communities: Monterrico, Cebollito, Hawaii, Las Mananitas, El Rosario, El Chapeton, and El Dormido, covering an area of approximately 20 km of black sand beaches, mangrove wetland, and the villages themselves.

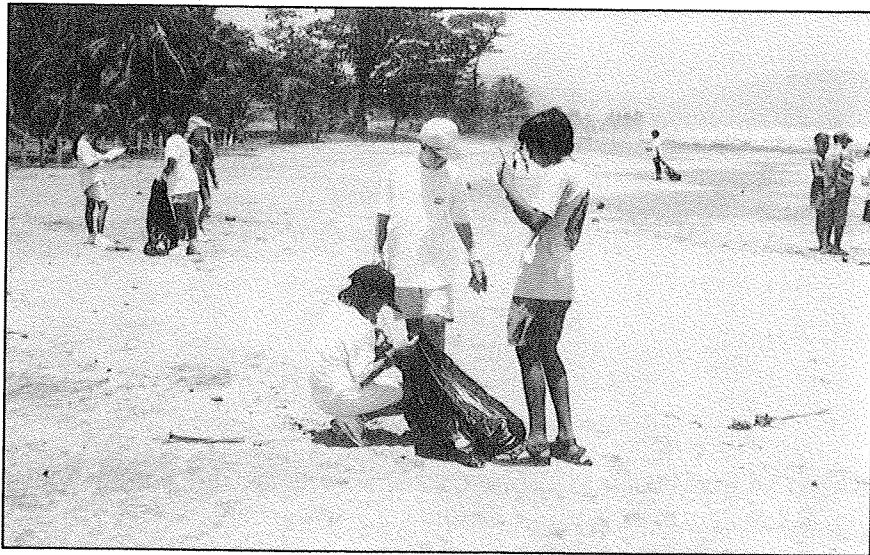
The cleanup was performed by organized groups of community members (adults and children), helped by ARCAS volunteers. At the end of the event, there was a small party for the children. They received coloring books with information on marine turtles, and crayons. Everybody who participated in the cleanup received caps and t-shirts donated by various enterprises for the occasion.

The cleanup was supported by the following: Columbus Zoo (Ohio), Guardianes Ecologicos, Guatemala City Hall, Kern's, Maderas El Alto, "Senorial" Snacks, Siglo XXI Newspaper, and the Coca-Cola Company.

FOR INFORMATION ON GUATEMALA'S 1994 COASTAL CLEANUP CONTACT:

**Tulio Monterroso
ARCAS
Section 135
P.O. Box 02 5289
Miami, FL 33102-5209
502-500-566**

Note: Unfortunately, we were unable to include Guatemala's data in this analysis. However, we look forward to receiving and analyzing their 1994 data for next year's report!



These Indonesians worked in teams of three to record their finds.

INDONESIA

October 2, 1993
46 Volunteers
1 Mile Cleaned
245 Pounds of Debris Collected

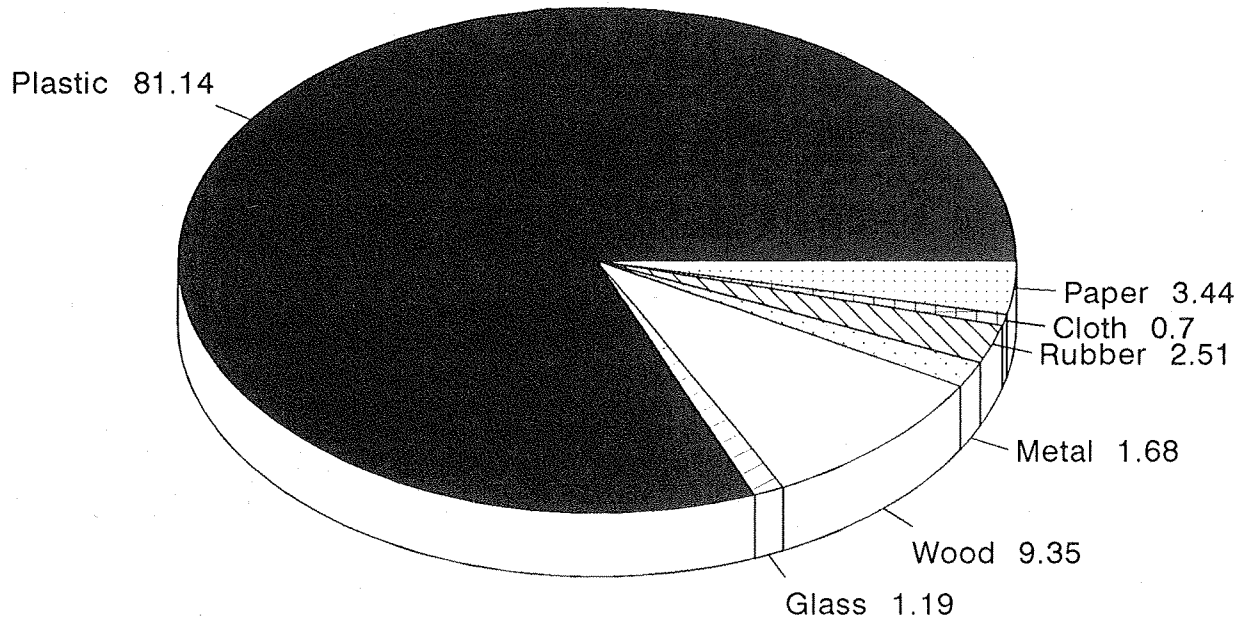
Coordinated by: Rosemary Silva
P. O. Box 1078 JKS
Jakarta, Indonesia 12010
Telephone: (6221) 769-2555 Ext. 344

The students and teachers from Jakarta International School returned to the site of the 1992 Coastal Cleanup, Kawang Hawu Beach in Southwest Java. The Cleanup for Indonesia was sponsored for the second year by the Middle School Conservation Club at JIS.

FOR INFORMATION ON INDONESIA'S 1994 COASTAL CLEANUP CONTACT:

Rosemary Silva
P. O. Box 1078 JKS
Jakarta, Indonesia 12010
Telephone: (6221) 769-2555 Ext. 344

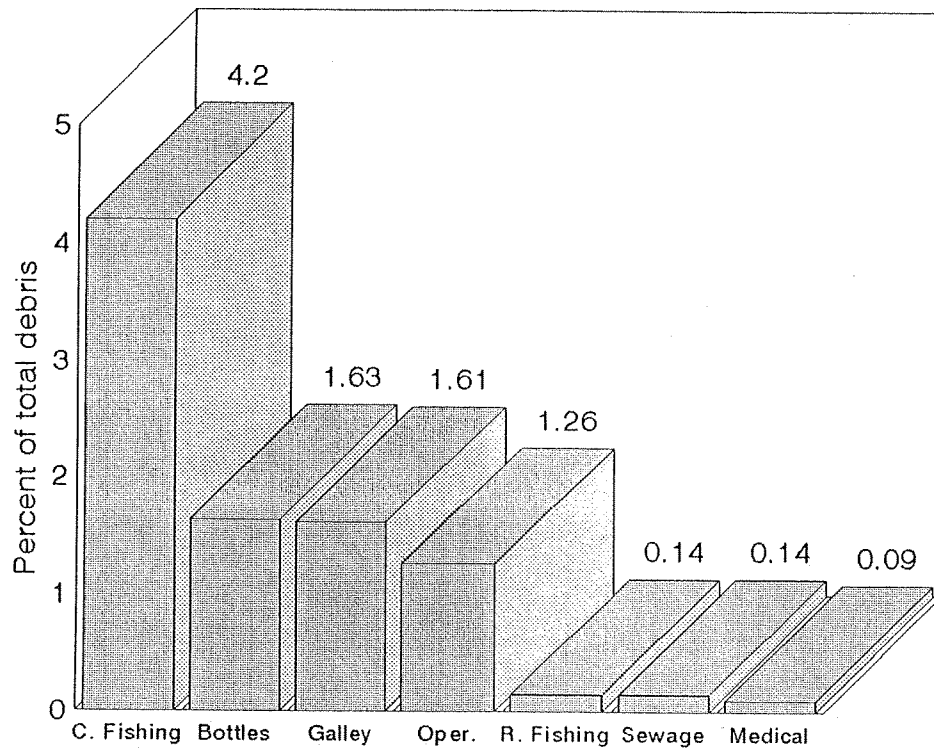
PERCENT COMPOSITION OF INDONESIA'S BEACH DEBRIS:



INDONESIA'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Plastic food bags	805	18.77
2. Plastic pieces	594	13.85
3. Cigarette butts	418	9.75
4. Plastic caps/lids	398	9.28
5. Plastic straws	318	7.41
6. Miscellaneous plastic bags	222	5.18
7. Plastic rope	113	2.63
8. Paper pieces	79	1.84
9. Foamed plastic pieces	71	1.66
10. Plastic cups/utensils	69	1.61
11. Plastic toys	62	1.45
12. Lumber	48	1.12
Total	3,197	74.54

MAJOR TYPES AND SOURCES OF INDONESIA'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was collected for only one zone in Indonesia.

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

toothbrush, buoy

ISRAEL

10 hours
time difference

June 3, 1993
6,700 Volunteers
25 Miles Cleaned
308,644 Pounds of Debris Collected

Coordinated by: Elik Adler
Head, Marine and Coastal
Environmental Division
Ministry of the Environment
P. O. Box 6234
Jerusalem, Israel 91061
Telephone: 011-972-2-701606

fax 011-972-2-
233056

The International Coastal Cleanup on June 3, 1993, marked the beginning of Israel's "Environment Week." Buses teeming with enthusiastic volunteers arrived at beaches along the Mediterranean coast. Each of the six thousand participants, ranging from high school students, soldiers, employees from the Ministry of the Environment, and members of the Society for the Protection of Nature collected more than two sacks apiece. Thirteen thousand sacks of garbage were collected in total, weighing more than one hundred tons. Sacks weighed between seven and twelve kilograms each.

The debris collected was largely composed of plastic items. Seventy percent consisted of plastic bags, food packaging, and tampons. The remaining debris consisted of 10% metal items, mostly beverage cans, 10% wood and wood products, and 10% miscellaneous materials, such as cloth, ropes, air mattresses, and paper products.

This event was highly successful. We hope that by continuing such activities we can better educate the public to protect and enjoy Israel's beaches.

Elik Adler

FOR INFORMATION ON ISRAEL'S 1994 COASTAL CLEANUP CONTACT:

Elik Adler
Head, Marine and Coastal Environmental Division
Ministry of the Environment
P. O. Box 6234
Jerusalem, Israel 91061
Telephone: 011-972-2-701606

Editor's note: Unfortunately, we were unable to receive Israel's 1993 data cards for analysis. However, we look forward to receiving their 1994 data for next year's report!

ITALY

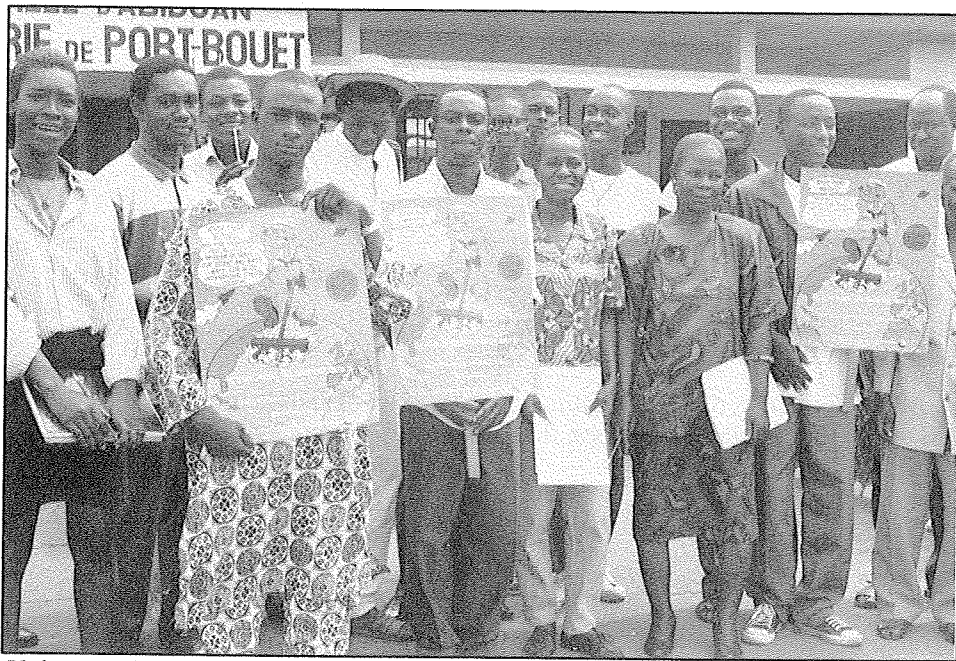
May 23, 1993
4,458 Volunteers
24 Miles Cleaned
19,932 Pounds of Debris Collected

Coordinated by: Umberto Bianchi
Istituto di Chimica Industrial
Universita Genova
16132 Genova, Italy
(39) (10) 353-8561
and
Francesco Ferrente
Lega Ambiente
Via Salaria 280
00199 Roma, Italy
(39) (6) 884-1552

FOR INFORMATION ON ITALY'S 1994 COASTAL CLEANUP CONTACT:

Umberto Bianchi
Istituto di Chimica Industrial
Universita Genova
16132 Genova, Italy
(39) (10) 353-8561
or
Francesco Ferrente
Lega Ambiente
Via Salaria 280
00199 Roma, Italy
(39) (6) 884-1552

Editors note: Unfortunately, due to the timing of the receipt of Italy's information, we were unable to include data in this report. However, we look forward to Italy's participation in the International Coastal Cleanup in September 1994.



Volunteers in the Ivory Coast take a group photo before starting their cleanup.

IVORY COAST

September 25, 1993
47 Volunteers
4 Miles Cleaned

Coordinated by: Thomas Bonebo
ESSOR
22 BP 358 ABIDJAN 22
Ivory Coast
Telephone: 23292/23794

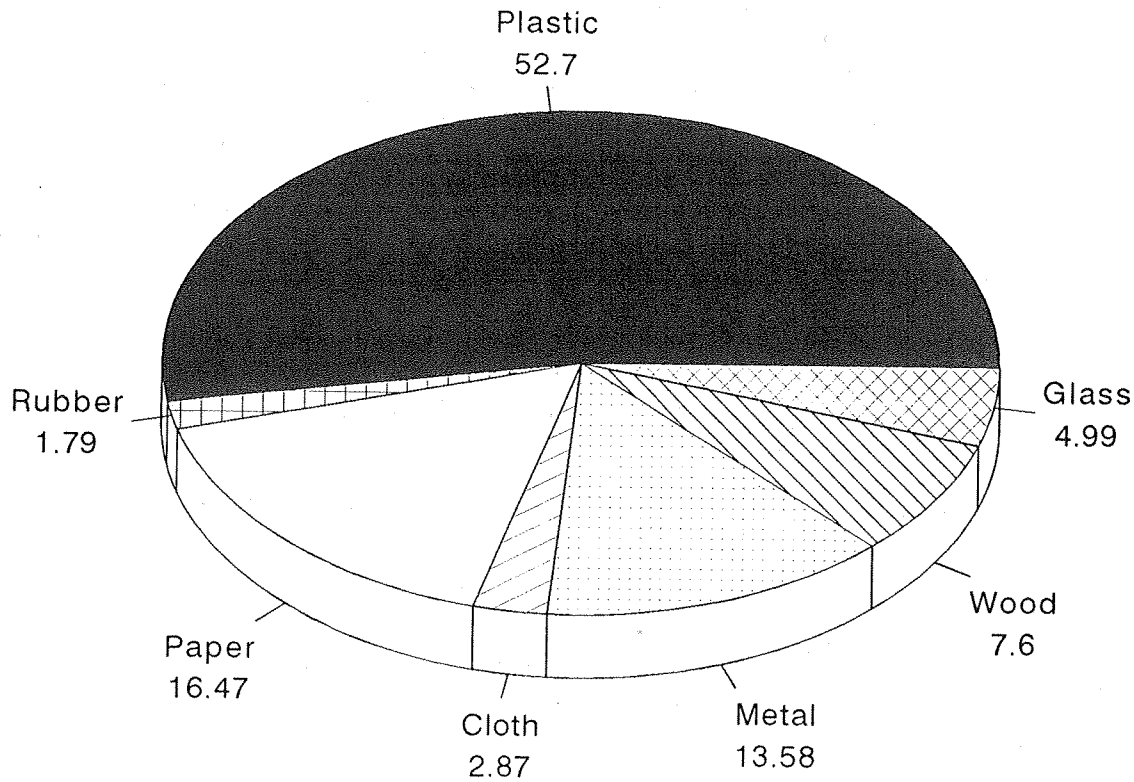
On September 25, 1993, 47 volunteers enthusiastically participated in the first National Beach Cleaning Campaign organized by the group ESSOR. Most participants were aware of the magnitude of the beach pollution; however, a few of them were shocked when they discovered the horror of a beach covered by thousands of trash pieces.

The cleanup was mainly conducted by ESSOR and some volunteers. We plan to involve local industries, government, and the general public in our further beach cleaning activities. All the 1993 beach cleanup participants have already decided to join ESSOR in its various consciousness-raising campaigns.

FOR INFORMATION ON IVORY COAST'S 1994 COASTAL CLEANUP CONTACT:

Thomas Bonebo
ESSOR
22 BP 358 ABIDJAN 22
Ivory Coast
Telephone: 23292/23794

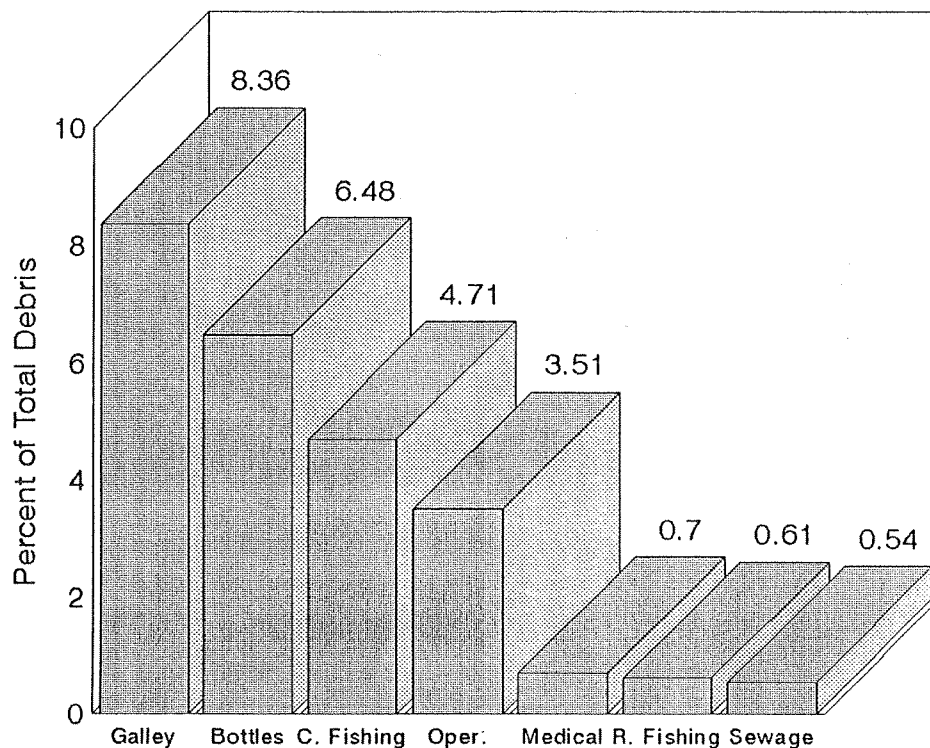
PERCENT COMPOSITION OF IVORY COAST'S BEACH DEBRIS:



IVORY COAST'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Plastic food bags	837	14.19
2. Paper bags	326	5.53
3. Newspapers	258	4.37
4. Metal food cans	240	4.07
5. Plastic vegetable sacks	234	3.97
6. Lumber	223	3.78
7. Paper pieces	213	3.61
8. Miscellaneous plastic bags	202	3.42
9. Metal bottle caps	182	3.09
10. Metal pieces	168	2.85
11. Clothing	167	2.83
12. Foamed plastic packaging	163	2.76
Total	3,213	54.47

MAJOR TYPES AND SOURCES OF IVORY COAST'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was collected for only one zone along the Ivory Coast.

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

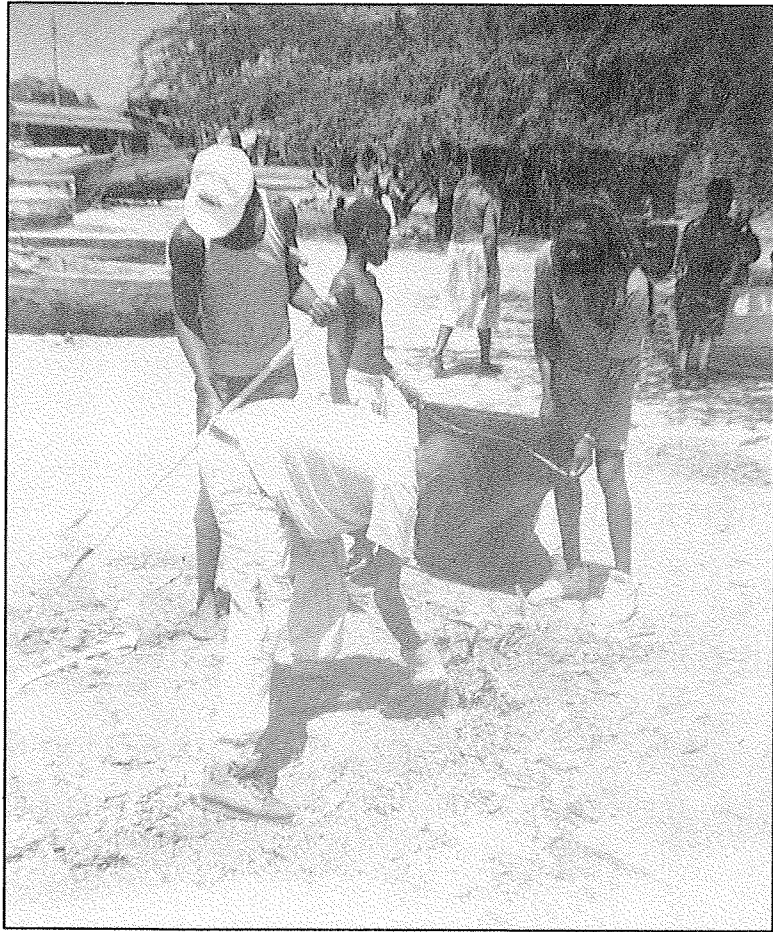
None

ENTANGLED WILDLIFE REPORTED:

None

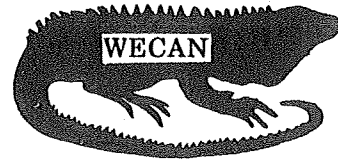
MOST PECULIAR DEBRIS ITEMS REPORTED:

None



Raking the beach debris in Jamaica.

JAMAICA



Wildlife and Environmental Conservation Action Now!

September 18, 1993
75 Volunteers
1 Mile Cleaned

Coordinated by: Shae - Tongee Stewart
W.E.C.A.N. Youth Club
Hope Zoo, Kingston 6
Telephone: (809) 927-1085

It was a lot of fun for our first attempt! Many of the volunteers were unaware that such large volumes of debris could be found on Jamaican beaches, as many had previously only visited public beaches, and this was a fishing beach.

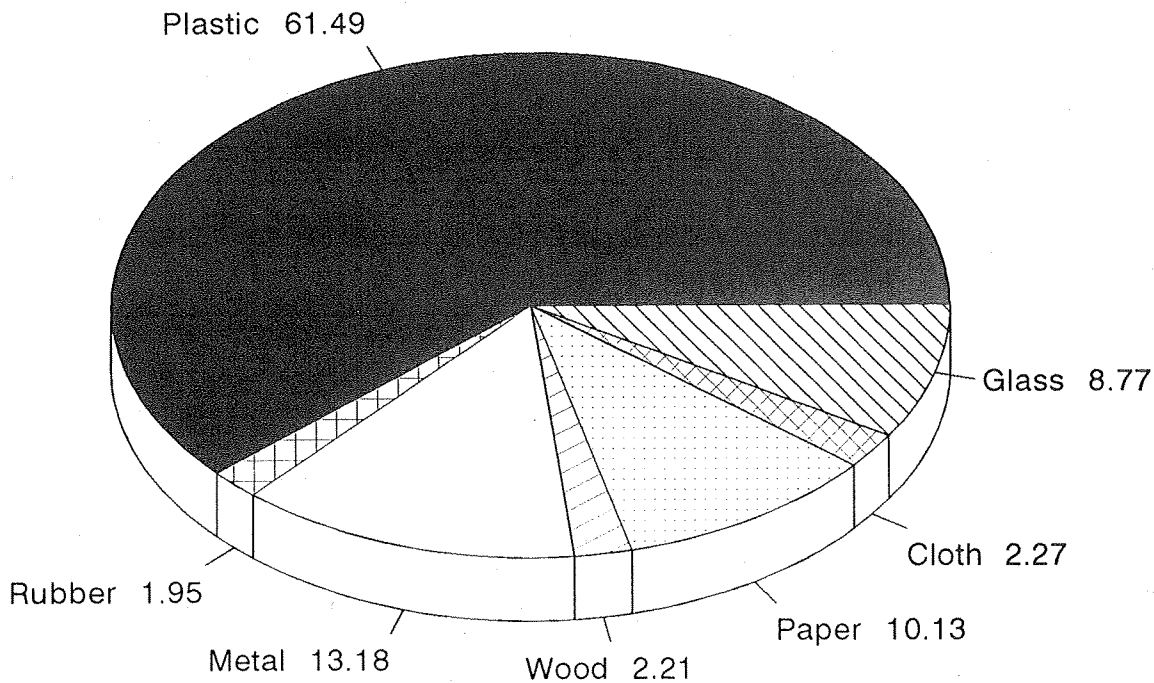
FOR INFORMATION ON JAMAICA'S 1994 COASTAL CLEANUP CONTACT:

Ray Williams
W.E.C.A.N. Youth Club
Hope Zoo, Kingston 6
Telephone: (809) 927-1085

or

Sheila Carter
c/o Janet Simoni
Country Director
U.S. Peace Corps
1A Holburn Road
Kingston 10, Jamaica

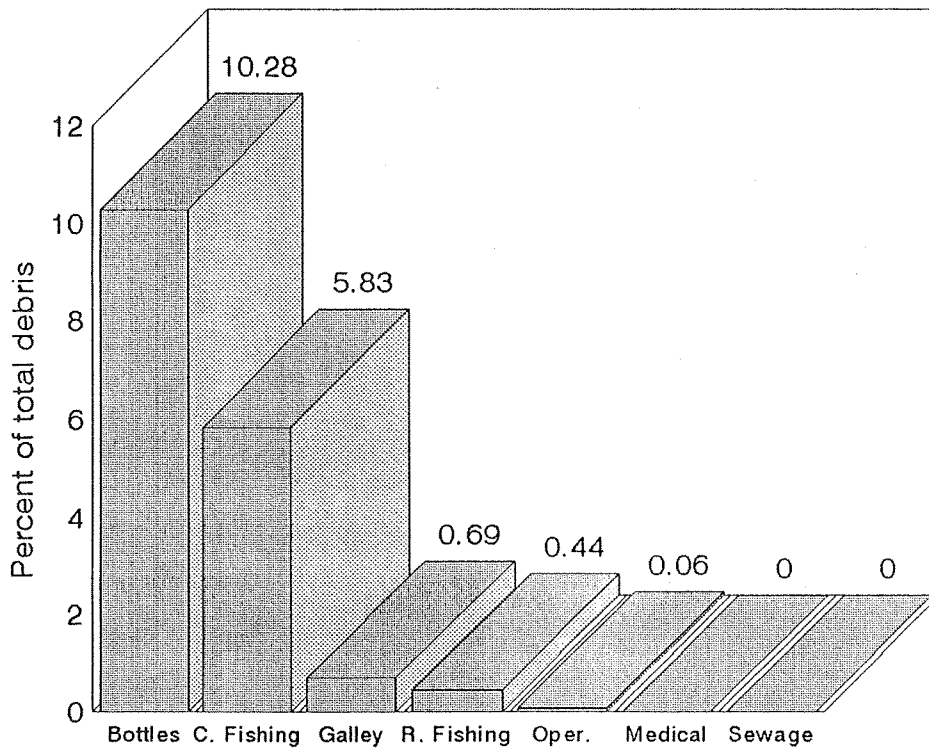
PERCENT COMPOSITION OF JAMAICA'S BEACH DEBRIS:



JAMAICA'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Plastic food bags	297	18.61
2. Plastic pieces	268	16.79
3. Miscellaneous plastic bottles	136	8.52
4. Paper pieces	130	8.15
5. Bottle caps	77	4.82
6. Plastic fishing nets	75	4.70
7. Miscellaneous plastic bags	73	4.57
8. Metal food cans	61	3.82
9. Glass pieces	60	3.76
10. Cigarette butts	56	3.51
11. Glass beverage bottles	53	3.32
12. Clothing	35	2.19
Total	1,321	82.77

MAJOR TYPES AND SOURCES OF JAMAICA'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was collected for only one zone in Jamaica.

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

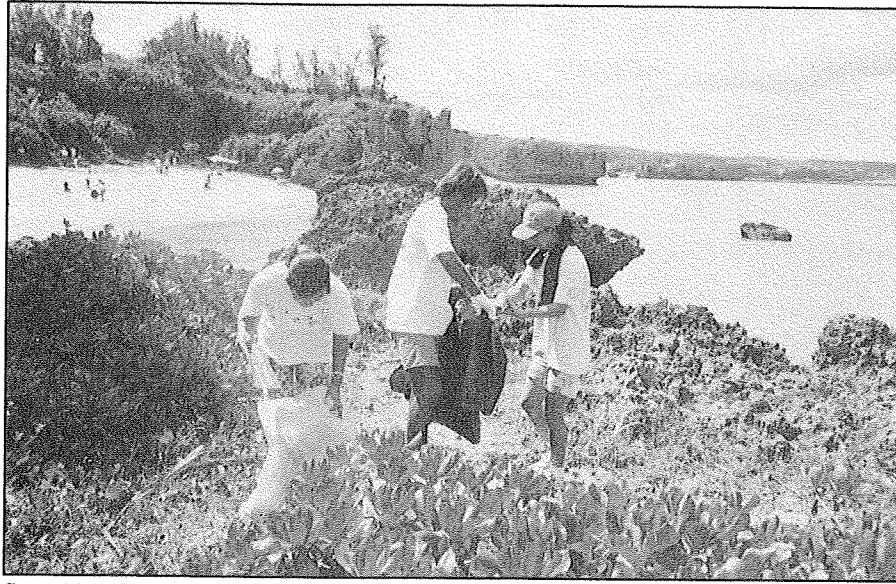
None

ENTANGLED WILDLIFE REPORTED:

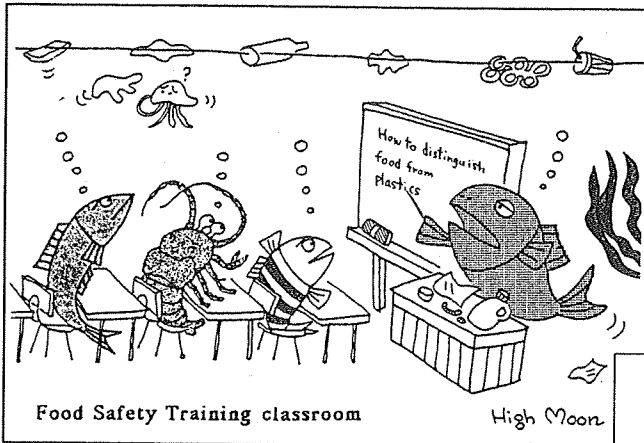
None

MOST PECULIAR DEBRIS ITEMS REPORTED:

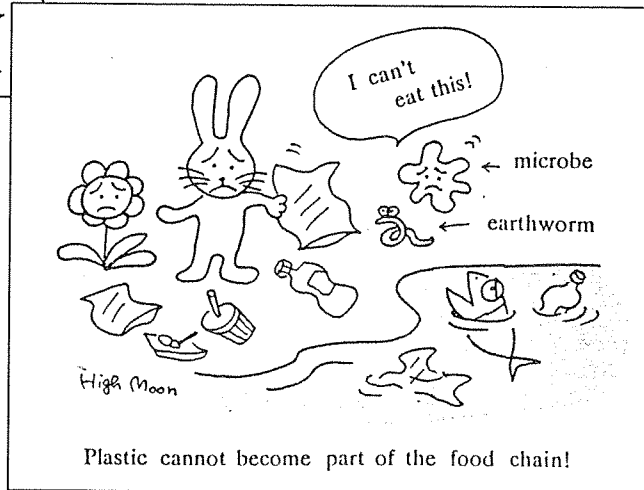
None



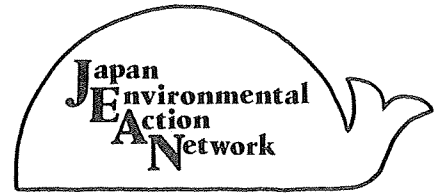
Searching for debris amid Japan's rocky, verdant coastline.



The coordinators of Japan's cleanup used cartoons to reinforce their message. These cartoons were originally published in *Picturecology*, by High Moon, published by the Japan Environmental Exchange. Translated into English by Anne Hill and Maura Hurley



JAPAN



September 15, 1993
8,507 Volunteers
169 Miles Cleaned
138,000 Pounds of Debris Collected

Coordinated by: Yumi Kikuchi
JEAN
2-21-17 Azusawa
Itabashi-ku
Tokyo 174 Japan
Telephone: 81-03-5970-0851
and
Edo Sanchez
Okinawa International Clean Beach Club
420-5 Higashionna
Ishikawa City
Okinawa, Japan 904-11
Telephone: 81-098-964-2517

Okinawa's first cleanup using CMC's data cards was a success! Okinawa's beach cleanup campaign started in 1992 after a meeting of Angry Ocean Going Friends. We started doing monthly cleanups, collecting tons of rubbish throughout the Island.

In August 1993 we finally united with the CMC International Coastal Cleanup Campaign. Thanks to Yumi Kikuchi and JEAN, we were able to get the Japanese data cards. Daniel Roller was surprised when we asked for Spanish data cards!

We would like to thank Mr. Tamanaha and Mr. Kokuma for leading us in the right direction. Also, thank you to Laura Butler for introducing to us the "Educators' Day" where we gave a very successful presentation. We would also like to thank the following sponsors: Meisi Okinawa, FM Okinawa, Sams Restaurant Group, Ryukyu Village, Takoyama, Inc., American Video.

FOR INFORMATION ON JAPAN'S 1994 COASTAL CLEANUP CONTACT:

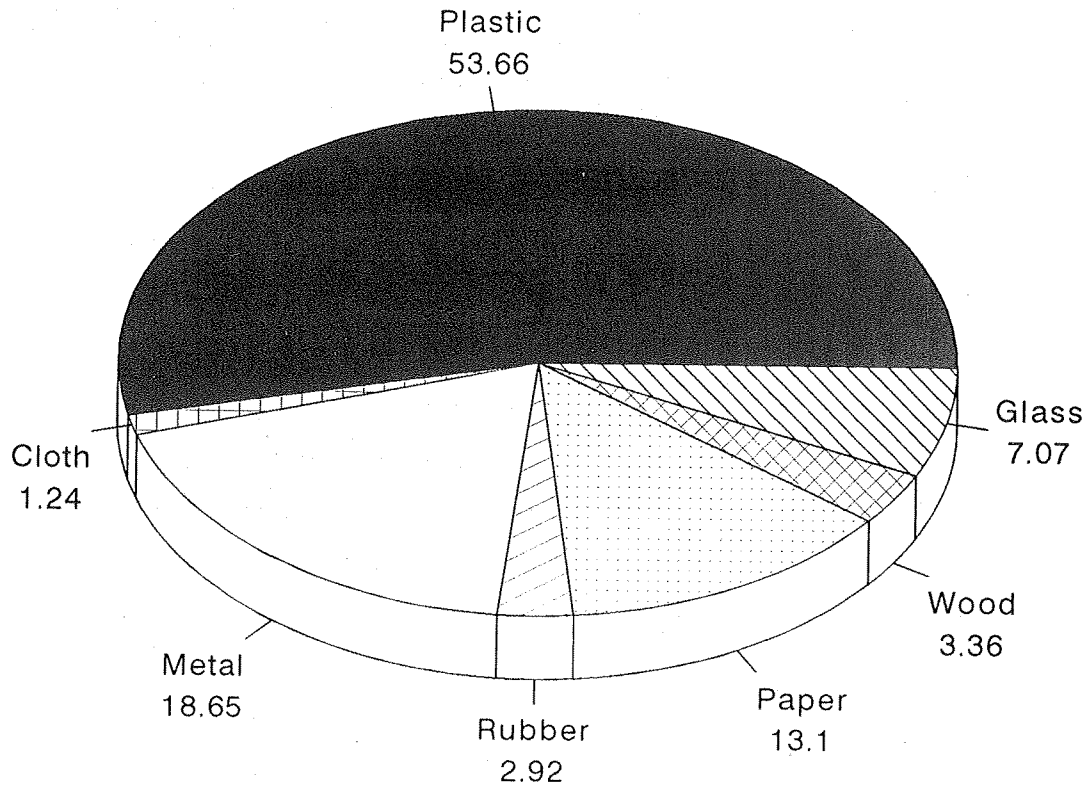
Yumi Kikuchi
JEAN
1-61-7 Denenchofu
Ohta-ku, Tokyo 145
Japan

or

Edo Sanchez / Kenneth
Okinawa International Clean Beach Club
420-5 Higashionna
Okinawa, 90411
Japan

*Missing
JEAN
writeup*

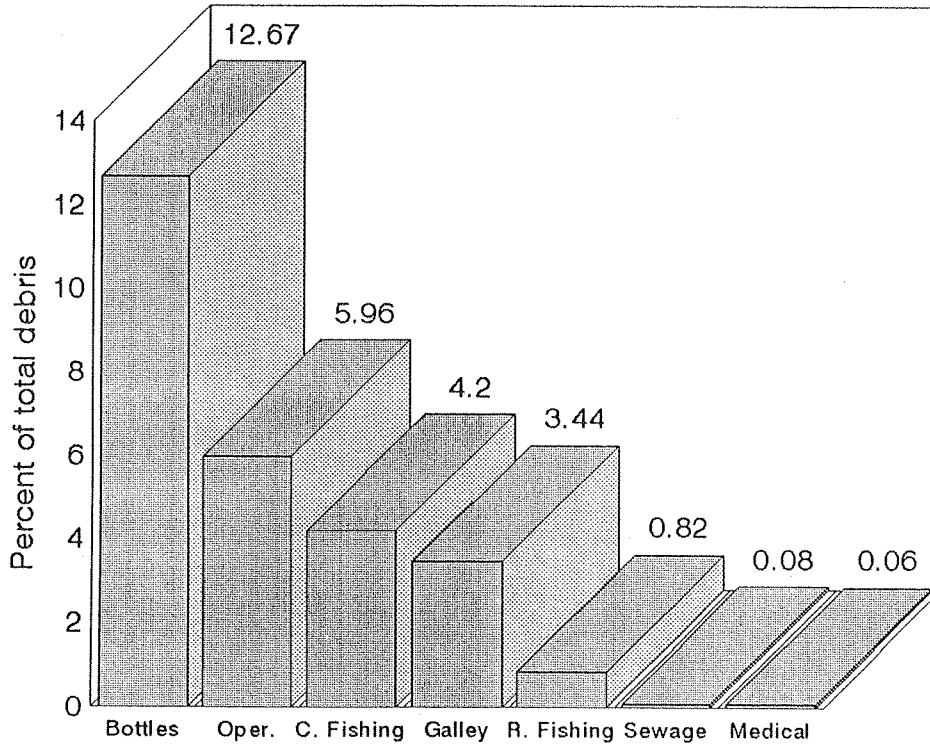
PERCENT COMPOSITION OF JAPAN'S BEACH DEBRIS:



JAPAN'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Paper pieces	9,389	6.06
2. Plastic caps/lids	9,327	6.02
3. Miscellaneous plastic bags	7,975	5.15
4. Plastic food bags	7,238	4.67
5. Plastic strapping bands	6,436	4.16
6. Metal beverage cans	5,693	3.68
7. Glass beverage bottles	5,314	3.43
8. Metal pull tabs	4,802	3.10
9. Foamed plastic packaging	4,200	2.71
10. Foamed plastic pieces	3,918	2.53
11. Plastic straws	3,818	2.46
12. Foamed plastic meat trays	3,792	2.45
Total	71,902	46.42

MAJOR TYPES AND SOURCES OF JAPAN'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Zone Name	Percent Plastic	Most Prevalent Debris Item
Okinawa	43.88	glass pieces
Tokyo	54.13	paper pieces

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

None

KENYA

September 26, 1993
315 Volunteers
10 Miles Cleaned
9,290 Pounds of Debris Collected

Coordinated by: Dr. Gary R. Mullins
P.O. Box 80147
Mombasa, Kenya
East Africa

Local volunteers joined hands in Watamu, Sunday, September 26, to stage Kenya's first ever beach cleanup. With the support of the Kenya Wildlife Service and Watamu Marine Park Warden, Dickson Waruinge, the enthusiastic volunteers spent the morning combing Watamu beach free of miscellaneous debris, filling over 100 bags and netting over 1,300 kilograms of rubbish in just three hours! Shoes, trousers, toothbrushes, and empty medicine bottles were among the more unusual pieces removed from the beach, but the overwhelming bulk of the garbage consisted of shredded plastic.

Operating under the banner, "Taking Care of Kenya," the conservation-minded volunteers extended their deep appreciation to the sponsors who had donated materials for the cleanup: Turtle Bay Hotel, Ocean Sports, Blue Bay Village, and Hemingway's. Aqua Ventures Diving was also given recognition for providing the prizes to those individuals collecting the most rubbish.

FOR INFORMATION ON KENYA'S 1994 COASTAL CLEANUP CONTACT:

Dr. Gary R. Mullins
P.O. Box 80147
Mombassa, Kenya
East Africa

Editor's note: Unfortunately, we were unable to receive data cards from the 1993 cleanup due to complications.



Does this go under “plastic bag” or “plastic pieces?” these Lithuanian volunteers wonder.

LITHUANIA

September 29, 1993
46 Volunteers
2 Miles Cleaned
470 Pounds of Debris Collected

Coordinated by: Heidi Jack McCoy Ground
Peace Corps Volunteer
P.O. Box 80
5300 Panevezys
Lithuania

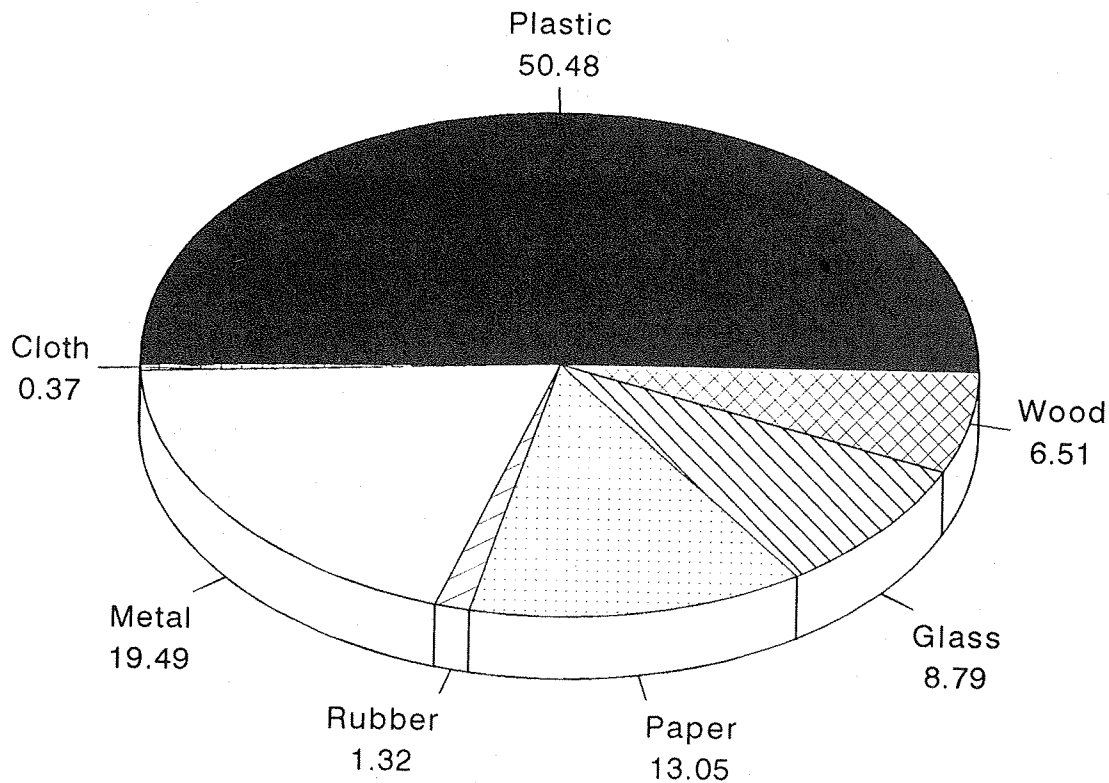
Lithuania participated in the Center for Marine Conservation's International Coastal Cleanup for the first time. Volunteers from the Philip Morris—Klaipeda Tobacco Company, students, and Peace Corps volunteers and staff picked up beach litter on approximately 3 kilometers of Smiltyne beach.

The beach cleanup was fun, and created a sense of awareness of the litter problem and the impact that an individual has on the marine environment. Our beach cleanup created a considerable amount of media coverage and we were featured on the evening news on the state TV channel.

FOR INFORMATION ON LITHUANIA'S 1994 COASTAL CLEANUP CONTACT:

Heidi Jack
Peace Corps Volunteer
P.O. Box 80
5300 Panevezys
Lithuania

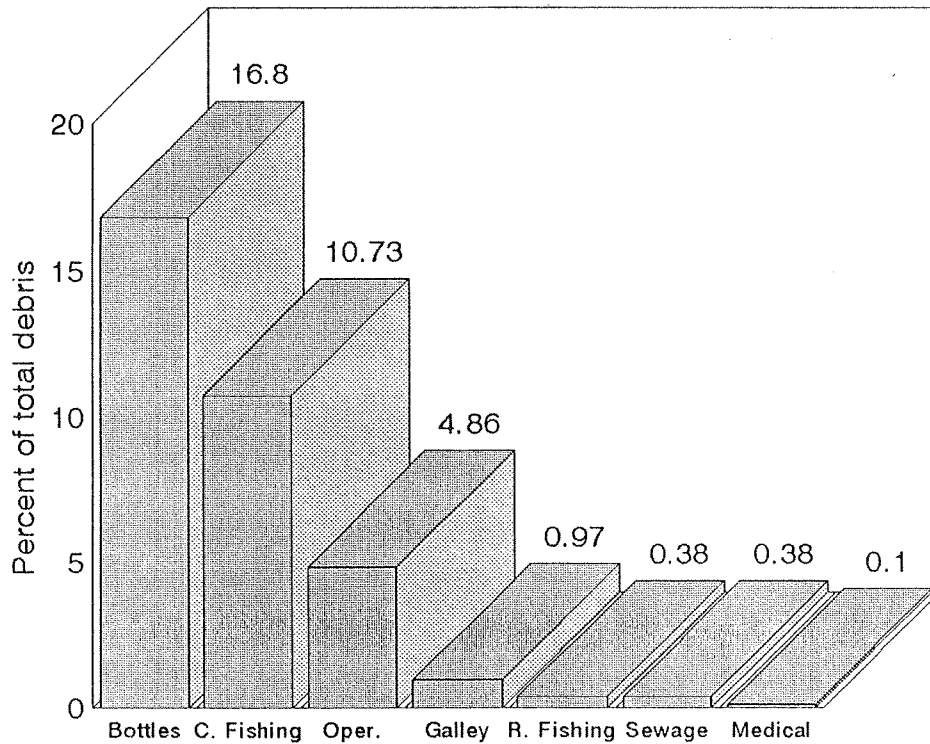
PERCENT COMPOSITION OF LITHUANIA'S BEACH DEBRIS:



LITHUANIA'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Metal bottle caps	419	14.45
2. Plastic rope	274	9.45
3. Plastic pieces	235	8.11
4. Plastic food bags	218	7.52
5. Glass pieces	187	6.45
6. Cigarette butts	179	6.17
7. Paper pieces	177	6.11
8. Lumber	91	3.14
9. Plastic caps/lids	85	2.93
10. Long pieces of plastic sheeting	55	1.90
11. Foamed plastic pieces/ Plastic strapping bands	52	1.79
Total	2,024	69.81

MAJOR TYPES AND SOURCES OF LITHUANIA'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was collected for only one zone in Lithuania.

TRACEABLE DEBRIS REPORTED:

Location	Type of Debris	Source Indicated
Smiltyne Beach	milk carton	Hand Sano
	balloon	Valojante
	carton	Gritiene
	plastic container	Zott Yogurt

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

Plastic gun shells, float, long black pants, gauze bandage

MARSHALL ISLANDS

September 18, 1993
80 Volunteers
2 Miles Cleaned
160 Pounds of Debris Collected

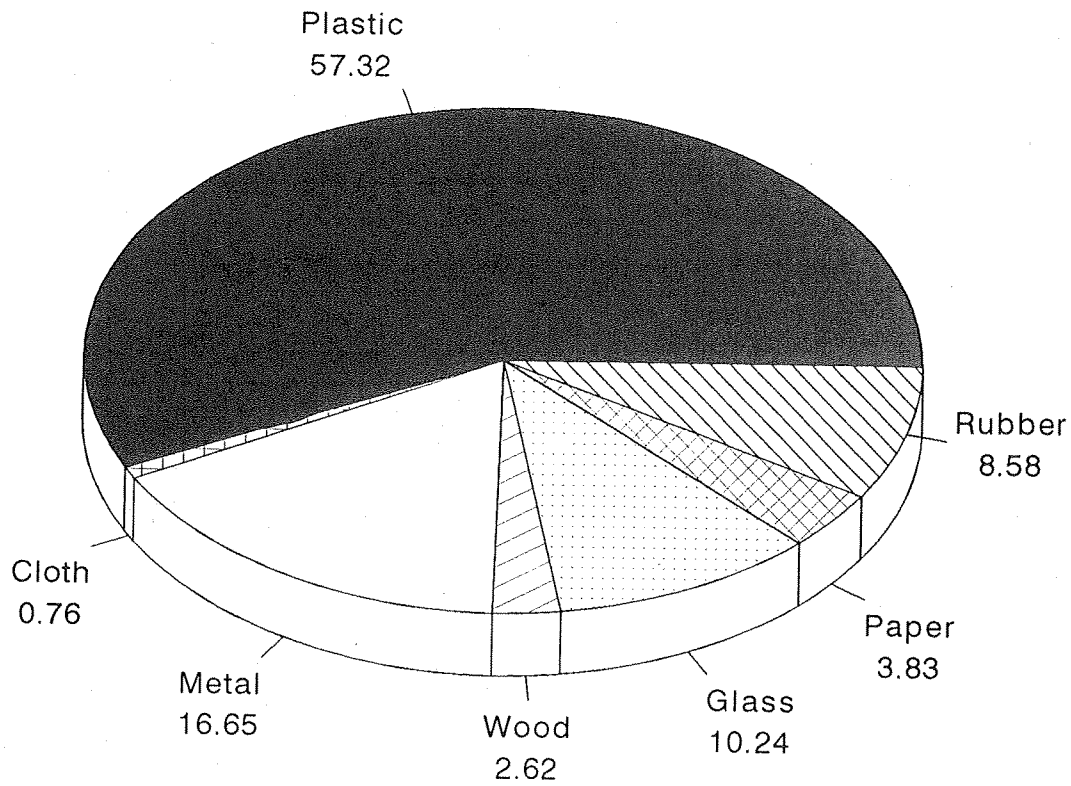
Coordinated by: Kathleen Kirkpatrick
Department of the Army
Headquarters, U.S. Army Kwajalein Atoll
Box 26, APO San Francisco 96555 USA

Approximately 75 high school students and five adult volunteers participated for the first beach cleanup of the U.S. Army Kwajalein Atoll in the Marshall Islands. The event was organized by the Republic of the Marshall Islands (RMI). In the future, the RMI hopes to cover even more coastline with volunteers.

FOR INFORMATION ON MARSHALL ISLANDS' 1994 COASTAL CLEANUP CONTACT:

**Kathleen Kirkpatrick
Department of the Army
Headquarters, U.S. Army Kwajalein Atoll
Box 26, APO San Francisco 96555
USA**

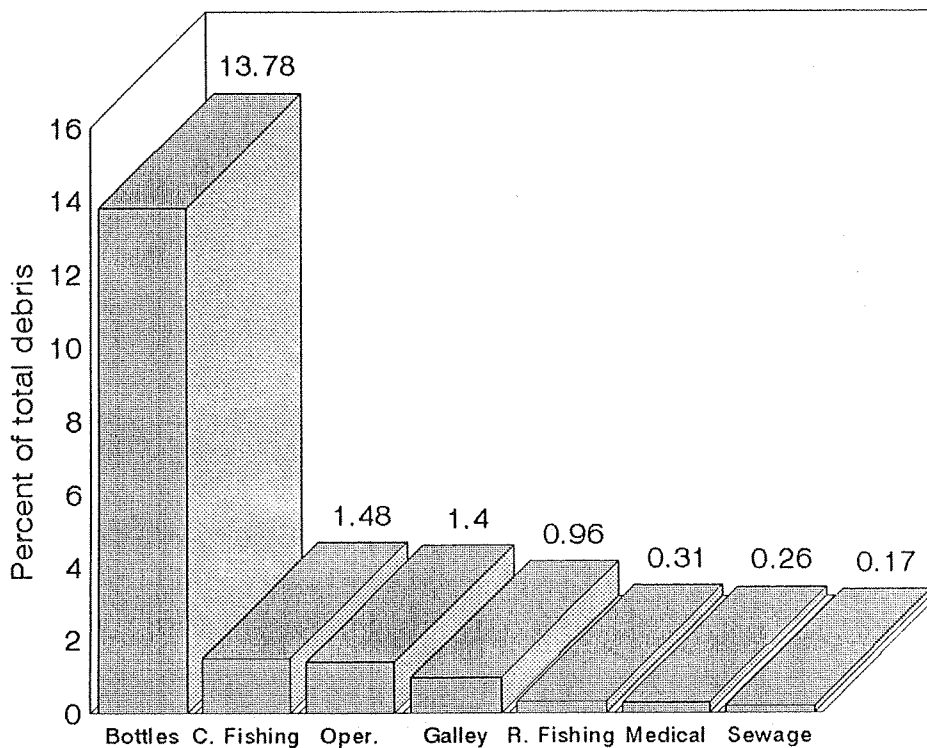
PERCENT COMPOSITION OF MARSHALL ISLANDS' BEACH DEBRIS:



MARSHALL ISLANDS' 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Plastic pieces	386	16.84
2. Cigarette butts	311	13.56
3. Metal beverage cans	203	8.85
4. Foamed plastic pieces	151	6.59
5. Plastic caps/lids	134	5.84
6. Glass pieces	132	5.76
7. Foamed plastic cups	66	2.88
8. Plastic food bags	43	1.88
9. Bottle caps	37	1.61
10. Plastic cups/utensils	36	1.57
11. Plastic beverage bottles	35	1.53
12. Metal pieces	33	1.44
Total	1,567	68.34

MAJOR TYPES AND SOURCES OF MARSHALL ISLANDS' BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was collected for only one zone in the Marshall Islands.

TRACEABLE DEBRIS REPORTED:

Location	Source	Source Indicated
Kwajalein Atoll	plastic cap	Payless Company

FOREIGN DEBRIS ITEMS REPORTED:

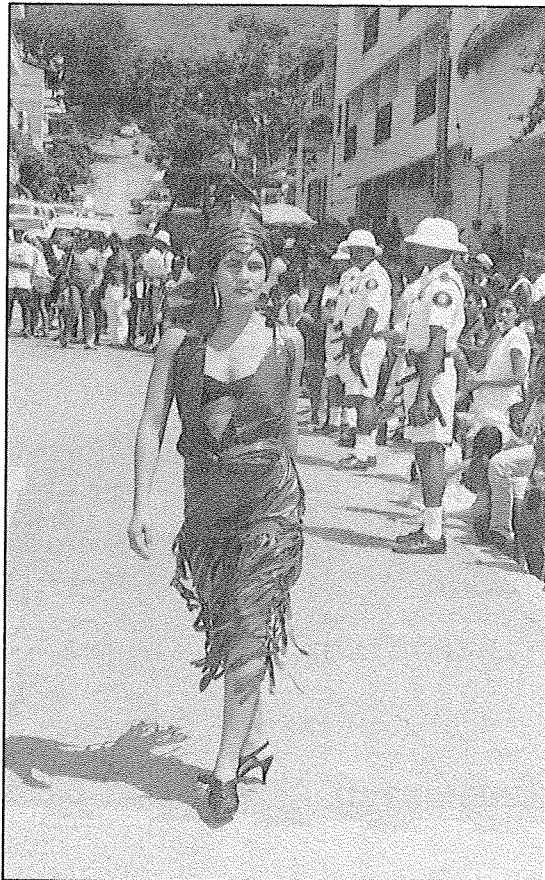
None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

None



Our own fashion show! Garbage bag models in Jalisco, Mexico.

MEXICO



September 1993
5,355 Volunteers
29 Miles Cleaned
58,026 Pounds of Debris Collected

Craig Caughlan
The Bay & Beach Cleanup Group
of Puerto Vallarta
Apartado 50-Terminal Maritima
Puerto Vallarta, Jalisco
Mexico 48321

Arq. Jose Luis de la Garza
c/o Salvador Castaneda
Brownsville, TX 78521
USA
(52) 881-33043 or 33048

German Mendez
P. O. Box 396
Cozumel, Quintana Roo
Mexico 77600
011-52-9872-1232

Coordinated by:
Dr. M.L. Lizarraga Partida
FEMA, CICESE-Ecologia
Apartado Postal 2732
Ensenada, Baja California
(52) 91-667-60761

Ana Laura Lara-Dominguez
Programa de EPOMEX
Av. Agustin Melgar y Juan de la Barrera
Apartado Postal 520
Campeche, Mexico
(52) 981-11600

Biol. Susana Rojas Glez. de C.
Direccion de Formacion y Educacion Ambiental
Secretaria de Ecologia del Gobierno del Estado
Calle 64 No. 437 x 53 y 47-A
Merida, Yucatan
C.P. 97000 MEXICO

Prof. Rosalinda Jinich Domingo
Museo de la Isla de Cozumel
Avenida Rafael Melgar
Calle 6 Norte
Cozumel, Quintana Roo
Mexico 77600
011-52-9872-1545

Fifteen hundred volunteers gathered on Playa Los Muertos in Puerto Vallarta on Saturday, September 26 for an incredibly successful beach cleanup day. The response to our requests for volunteers was overwhelming—and unexpected! Additional attention was focused on underwater cleanups. Open-water certified divers worked with donated boats and air provided by local dive shops.

Cathy Acevedo

On September 18, 1993, Matamoros held its third cleanup at Playa Bagdad. One hundred forty-eight students from local high schools and 22 adults participated in the Matamoros Rotary Club-sponsored event, which lasted from 9 a.m. until noon. The International Youth Alliance also participated with students from Mexico and the United States taking part. The Mayor of Matamoros and his wife also helped to collect trash. A trash dump discovered behind a restaurant was reported to appropriate authorities. The beach is generally much cleaner than when we first started the cleanup program here. The City of Matamoros now has a tractor which cleans every day. Also, there is a program where people pay a ten-peso entrance fee and get half of the fee back if they turn in a full trash bag upon leaving.

Janice Jacobs

For the second time since we started with the beach cleanups in Cozumel, we organized an underwater cleanup with the enthusiastic participation of local and visitor scuba divers. Divers helped us for two hours to take out trash from the bottom of the ocean that, although it is not seen by many people, it needs to be protected and cleaned.

Our Underwater Cleanup started at 3:00 p.m. and ended at 5:00 p.m. on Saturday, September 25, 1993. With the participation of the dive stores (Caribbean Argonauts, Sea and Sun Divers, Scuba Shack, Aqua Safari, and Del Mar Aquatics), we used five boats with four to 12 divers in each. We had help from the Captain of the Port and Red Cross, who sent an ambulance to be on stand-by. The local government sent trucks to collect the trash.

In general, the cleanup was a huge success!

German Mendez

Two cleanups were held in Campeche—one in the City of Campeche and one at Isla del Carmen. Coordinators had planned to postpone the cleanup in the City of Campeche because of Hurricane Gert. However, despite the strong wind and rain, 65 enthusiastic volunteers spent the morning of September 18, 1993 cleaning the beaches of Playa Novia del Mar and Playa Bonita. The adverse weather conditions restricted the cleanup to just two hours, so volunteers were only able to cover a total of three kilometers. The participants were mostly students of all ages and their professors. They received support from both the city and federal governments, the Universidad Autonoma de Campeche, and a number of local broadcasting stations. Volunteers were given complementary T-shirts, gloves, and refreshments.

Due to the persistent downpour from Hurricane Gert, cleanup participants on Isla del Carmen decided to postpone the event until September 25. A total of 403 volunteers, student groups, civil association members, and even a section of the Navy, participated. They covered the more than 43 kilometers of beach encircling the island; the outflow of the interior canal, Canal de la Caleta; the transit harbor; and the beaches of the main island of Cayo Arcas.

Thirteen civil associations, the station "El Carmen" of the Instituto de Ciencias del Mar y Limnologia of the UNAM; Asociacion Ecologista Ariete Ecologico A.C.; PEMEX Departments of Industrial and Environmental Protection; Cetus 20 High School; and the City of Carmen Navy donated their support.

Compiled from a report by
M. Sc. Ana Laura Lara-Dominguez
Chief of the Department of Ecology
and Coastal Ecosystem Management

FOR INFORMATION ON MEXICO'S 1994 COASTAL CLEANUP CONTACT:

**Dr. M.L. Lizarraga Partida
FEMA, CICESE-Ecologia
Apartado Postal 2732
Ensenada, Baja California
Mexico
52-91-667-60761**

**Ana Laura Lara-Dominguez
Programa de EPOMEX
Av. Agustin Melgar y Jaun de la Barrera
Apartado Postal 520
Campeche 24000, Mexico
52-981-11600**

**Biol. Susana Rojas Glez. de C.
Direccion de Formacion y Educacion Ambiental
Secretaria de Ecologica del Gobierno del Estado
Calle 64 No. 37 x 53 y 47-A
Merida, Yucatan
C.P. 97000
MEXICO**

**Francisco Javier Cardenas Munguia
Pro-Ecologia de Colima
Apartado Postal 29
Colima 28000
Colima, Mexico
52-331-298-10**

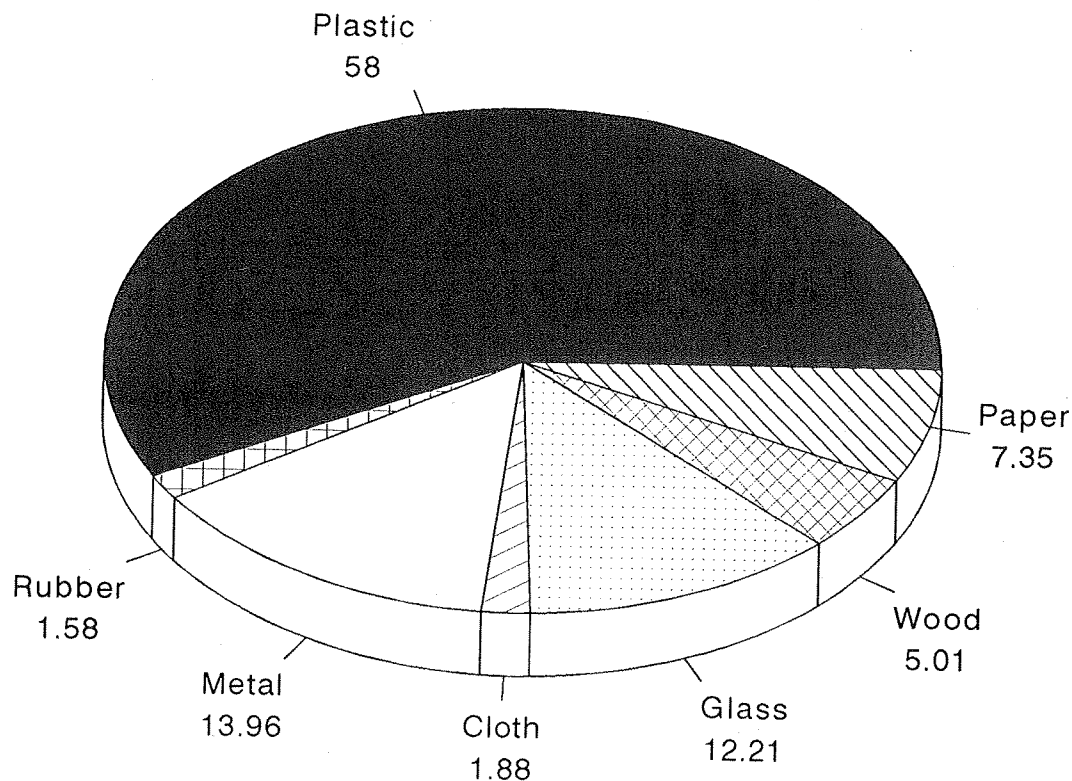
**Prof. Rosalinda Jinich Domingo
Museo de la Isla de Cozumel
Avenida Rafael Melgar
Calle 6 Norte
Cozumel, Quintana Roo
Mexico 77600
011-52-9872-1545**

**German Mendez
P.O. Box 396
Cozumel, Quintana Roo
Mexico 77000
011-52-9872-1232**

**Cathy Acevedo
Pino Suarez #382
Col. Emilio Zapata
Puerto Vallarta, Jalisco
Mexico 48380
52-322-24741**

**Janice Jacobs
c/o American Consulate and Rotarian
P.O. Box 633
Brownsville, Texas 78522-0633
USA**

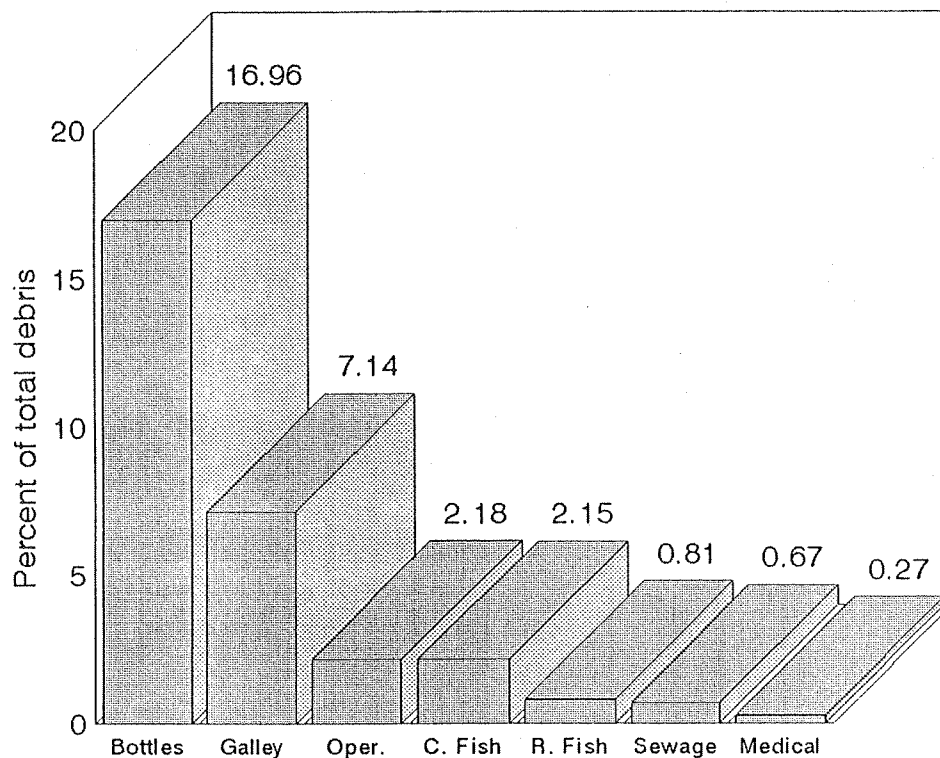
PERCENT COMPOSITION OF MEXICO'S BEACH DEBRIS:



MEXICO'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Glass beverage bottles	6,516	6.08
2. Plastic straws	5,540	5.17
3. Foamed plastic pieces	5,260	4.91
4. Plastic pieces	4,984	4.65
5. Plastic caps/lids	4,638	4.33
6. Plastic food bags	4,577	4.27
7. Bottle caps	4,562	4.26
8. Plastic cups/utensils	3,463	3.23
9. Cigarette butts	3,109	2.90
10. Glass pieces	2,934	2.74
11. Lumber	2,876	2.69
12. Metal beverage cans	2,747	2.57
Total	51,206	47.82

MAJOR TYPES AND SOURCES OF MEXICO'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Baja California	58.81	Foamed plastic pieces
Quintana Roo	58.09	Plastic pieces
Tamaulipas	50.76	Plastic pieces
Jalisco	45.17	Plastic straws

TRACEABLE DEBRIS REPORTED:

Type of Debris	Source Indicated
plastic bottle	Level Industrial Hygiene Systems

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

None

FEDERATED STATES OF MICRONESIA



Sea Grant

September 16, 1993
40 Volunteers
1 Mile Cleaned
3,450 Pounds of Debris Collected

Coordinated by: Pamela B. Baker
Sea Grant at the Community College of Micronesia
P. O. Box 159, Kolonia, Pohnpei FM 96941
Federated States of Micronesia

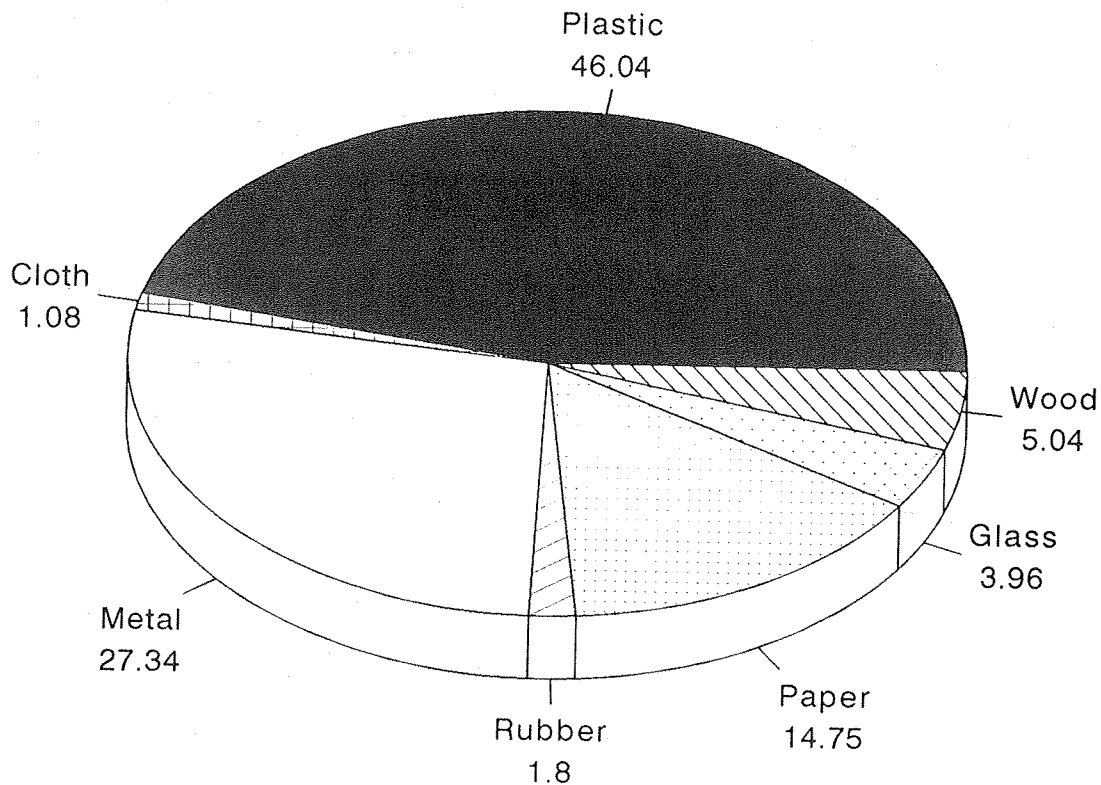
Approximately 40 volunteers organized by Micronesia Island Conservation, Inc. (MIC) gathered to clean Lenger Island, a popular picnic-swimming spot a short boat ride from the main island of Pohnpei. There were several picnicking groups there who helped to clean up the site. Snorkelers even pitched in and cleaned the shallow swimming area. After the cleanup, we grilled chicken and enjoyed a picnic and swimming. All the food, trash bags, boats and other equipment were furnished by volunteers, with MIC supplying gas for the boats.

Everyone involved was very excited about the cleanups and want to do more!

FOR INFORMATION ON MICRONESIA'S 1994 COASTAL CLEANUP CONTACT:

Pamela B. Baker
Sea Grant at the Community College of Micronesia
P. O. Box 159, Kolonia, Pohnpei FM 96941
Federated States of Micronesia

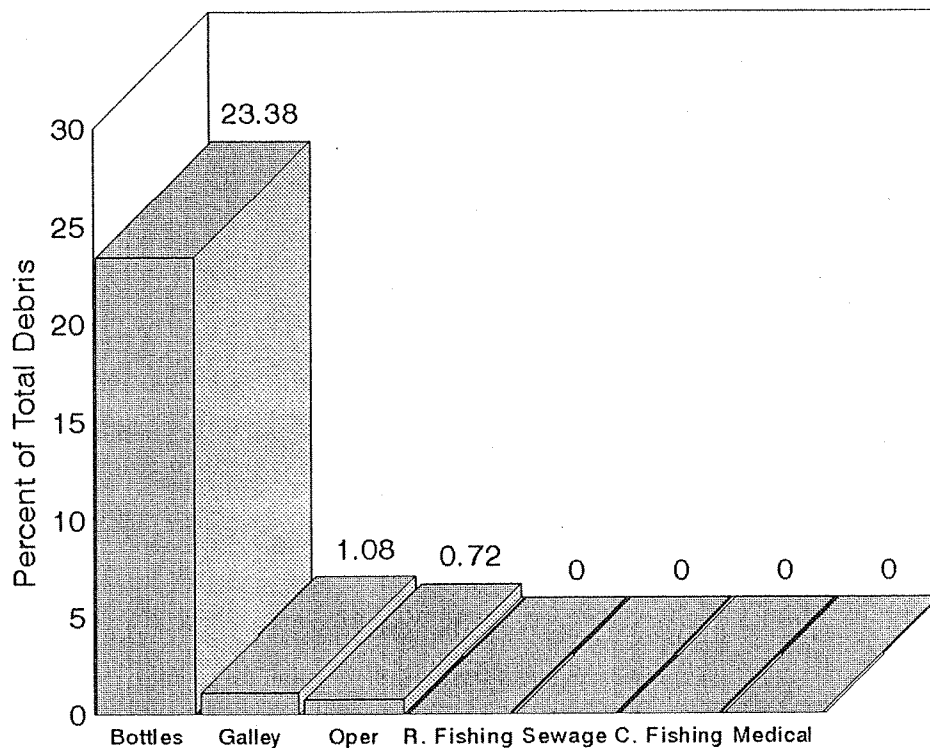
PERCENT COMPOSITION OF MICRONESIA'S BEACH DEBRIS:



MICRONESIA'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Metal beverage cans	35	12.59
2. Plastic food bags	34	12.23
3. Foamed plastic pieces	29	10.43
4. Plastic pieces/ Paper pieces	21	7.55
5. Miscellaneous plastic bags	15	5.40
6. Metal bottle caps	14	5.04
7. Cigarette lighters/ Lumber pieces	12	4.32
8. Glass beverage bottles/ Cardboard	11	3.96
9. Paper bags	8	2.88
Total	223	80.23

MAJOR TYPES AND SOURCES OF MICRONESIA'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was collected for only one zone in the Federated States of Micronesia.

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

None

NETHERLANDS ANTILLES



September 15, 1993
526 Volunteers
7 Miles Cleaned
4,155 Pounds of Debris Collected

Coordinated by: Francois Van Derhoeven
Stichting Nationale Parken Sint Maarten
Sint Maarten National Parks Foundation
P. O. Box 631 (new), Philipsburg, Sint Maarten
Telephone: 599-5 24454/23379
Fax: 24419

Saba Marine Park Manager
Fort Bay, P.O. Box 18
The Bottom, Saba
Telephone: 599-4 63295

Over 500 participants, mostly students, joined together in the sixth International Coastal Cleanup campaign on Sint Maarten. Participating school groups were from the Sister Marie Laurence School, the Sister Magda School, the Sint Dominique School, the Methodist Agogic Center, the Sister Regina School, the Milton Peters Havo, Mavo and LTS, the Leonard Connor School, the Martin Luther King School, the Sint Joseph School, the Sint Maarten Academy, the Sister Borgia School, and a group from STINAPA.

Apart from having cleaner beaches, we are sure that the participants learned much about the need for a cleaner marine environment. We thank Budget Marine and Greenfingers for their willingness to take part of the collected garbage to the city dump.

Francois van der Hoeven

For the third consecutive year, Saba, the smallest island (five square miles) in the Netherlands Antilles participated in the International Coastal Cleanup. Once again, the cleanup was organized by the Saba Marine Park. Local merchants, including Big Rock Market, Captain Quarter's Hotel, Eskay Home and Hardware, H.E.S. Home Center, In Two Deep Bar and Restaurant, My Store, Promart Utilities-Saba, Saba Drug Store, Corner Deli & Gourmet Shop, and Tropic's Cafe generously sponsored the cleanup by providing sodas, juices, and sandwich fixings.

Susan White

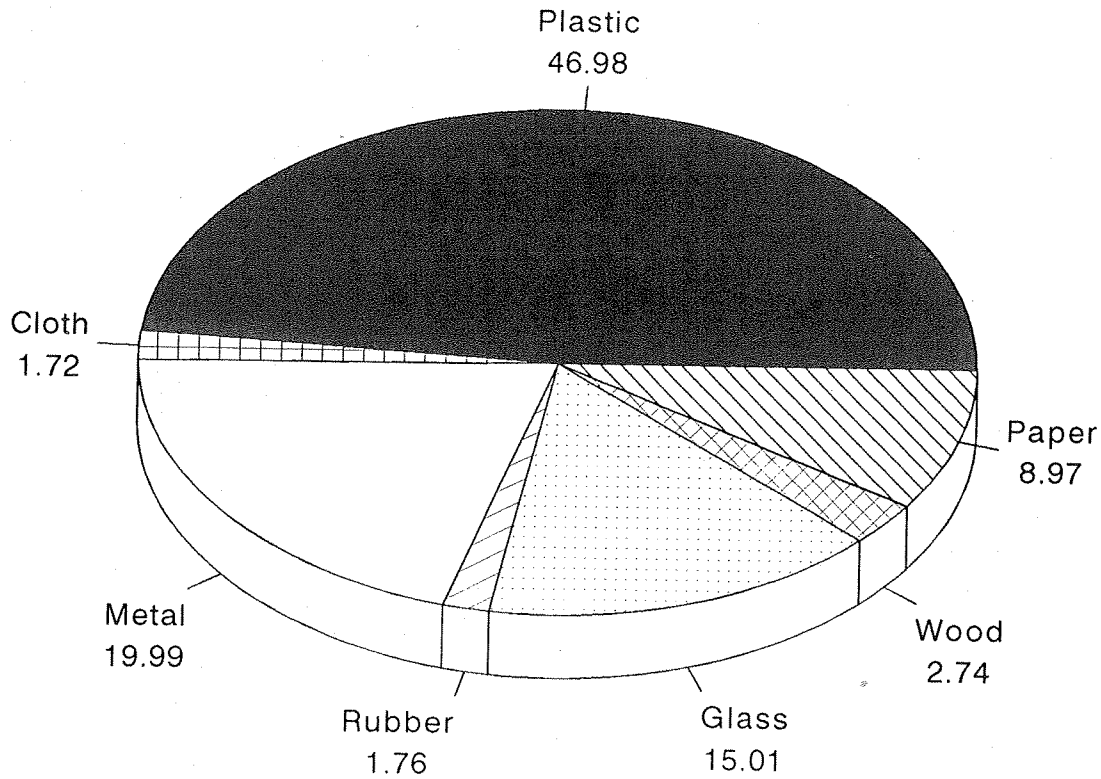
FOR INFORMATION ON NETHERLANDS ANTILLES' 1994 COASTAL CLEANUP CONTACT:

Francois Van Derhoeven
Stichting Nationale Parken Sint Maarten
Sint Maarten National Parks Foundation
P. O. Box 631 (new), Philipsburg, Sint Maarten
Telephone: (5995) 24454/23379

or

Saba Marine Park Manager
Fort Bay, P.O. Box 18
The Bottom, Saba
Telephone: 599-4 63295

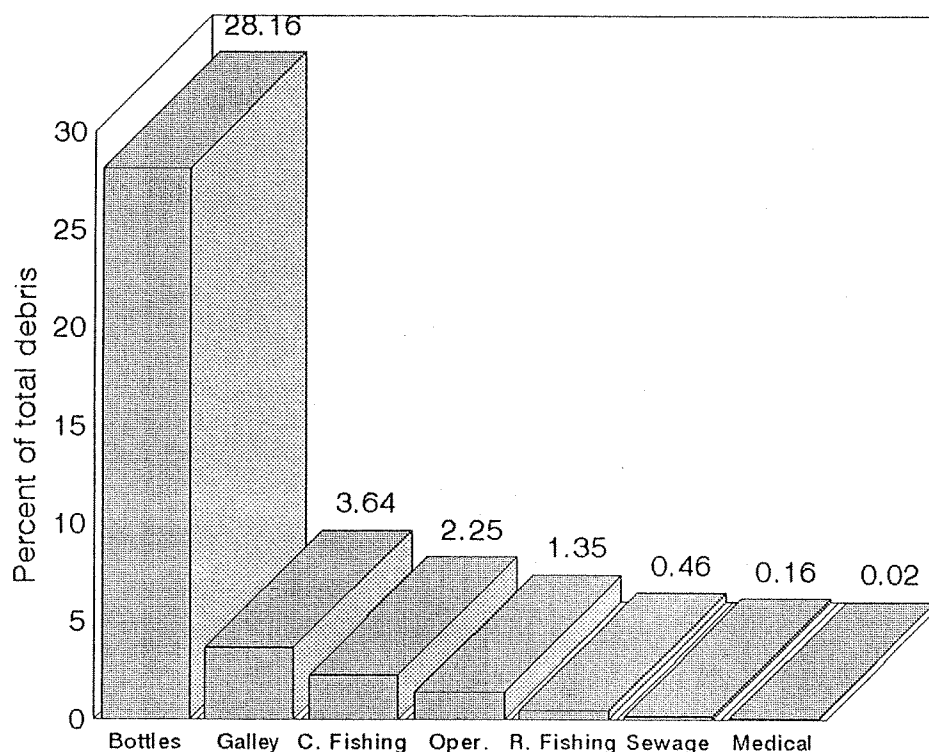
PERCENT COMPOSITION OF NETHERLANDS ANTILLES' BEACH DEBRIS:



NETHERLANDS ANTILLES' 1993 DIRTY DOZEN:

	Total Number Reported	Percent Debris Collected
1. Metal beverage cans	2,005	9.96
2. Glass beverage bottles	1,968	9.78
3. Plastic pieces	1,186	5.89
4. Foamed plastic pieces	977	4.85
5. Plastic beverage bottles	851	4.23
6. Plastic caps/lids	831	4.13
7. Metal bottle caps	785	3.90
8. Plastic caps/lids	688	3.42
9. Cigarette butts	631	3.14
10. Plastic straws	566	2.81
11. Plastic food bags	550	2.73
12. Paper pieces	549	2.73
Total	11,587	57.58

MAJOR TYPES AND SOURCES OF NETHERLANDS ANTILLES' BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Saba	71.21	Plastic pieces
St. Maarten	12.27	Metal beverage cans

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

Location	Source	Type of Debris
Cove Bay	Oman	plastic container

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

None

NEW ZEALAND

September 15, 1993
400 Volunteers
4 Miles Cleaned

Coordinated by: Gael Arnold-Johnson
Island Care
c/o University of Auckland
Private Bag 92019, Auckland
New Zealand
Telephone: 011-3737-599, Ext. 8439

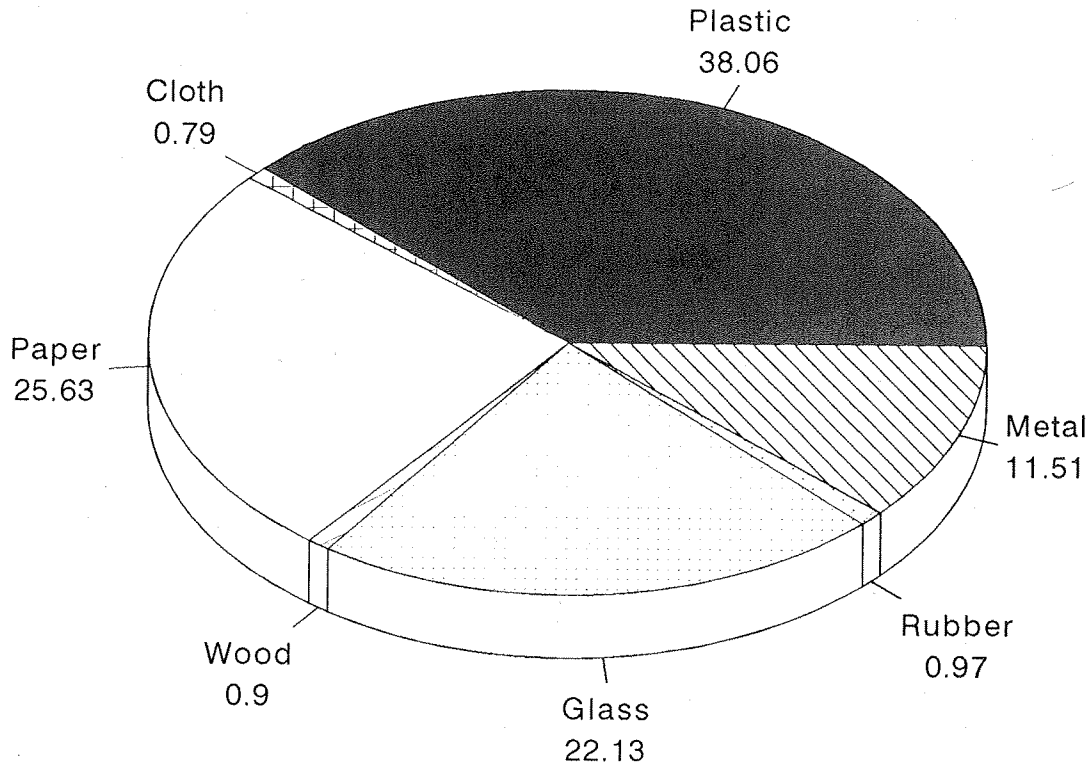
In 1993, Island Care New Zealand coordinated cleanup activities on both the North and South Islands, encompassing approximately 3.7 miles of coastline. Much of the work was accomplished by volunteers from several Brownie Packs of the Auckland Girl Guides and Marine Watch Trust (N.Z.) Inc., a non-profit organization based in Christchurch. In addition to our cleanup activities in 1993, Island Care International is coordinating the Marine Debris Network, a consultative group with participants from local and regional government, conservation organizations, and boating community groups. The Marine Debris Network meets bi-monthly to facilitate the flow of information concerning preservation and enhancement of the marine environment.

Gael Arnold-Johnson

FOR INFORMATION ON NEW ZEALAND'S 1994 COASTAL CLEANUP CONTACT:

Gael Arnold-Johnson
Island Care
c/o University of Auckland
Private Bag 92019, Auckland
New Zealand
Telephone: 011-3737-599, Ext. 8439

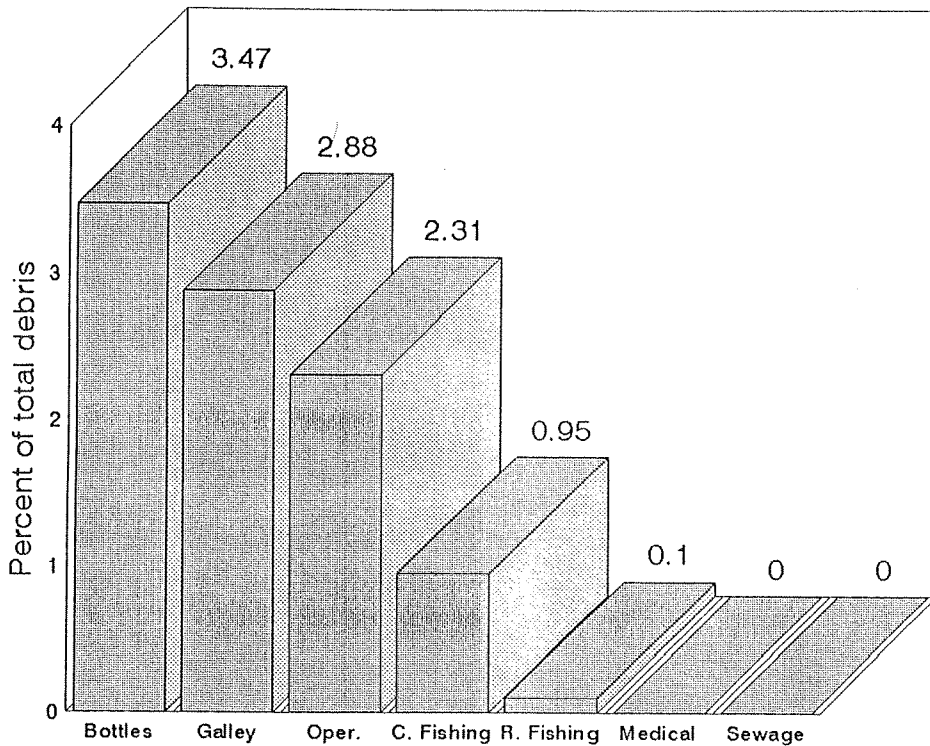
PERCENT COMPOSITION OF NEW ZEALAND'S BEACH DEBRIS:



NEW ZEALAND'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Cardboard	1,399	12.40
2. Glass pieces	1,204	10.67
3. Plastic caps/lids	488	4.33
4. Plastic pieces	437	3.87
5. Miscellaneous metal cans	349	3.09
6. Foamed plastic cups	346	3.07
7. Cigarette butts	305	2.70
8. Miscellaneous plastic bags	267	2.37
9. Foamed plastic meat trays	262	2.32
10. Miscellaneous glass bottles	222	1.97
11. Long pieces of plastic sheeting	150	1.33
12. Glass beverage bottles	138	1.22
Total	5,567	49.34

MAJOR TYPES AND SOURCES OF NEW ZEALAND'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Christchurch	36.35	Cardboard
Auckland	40.76	Glass pieces

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

None



Brave ANCON volunteers tackle tons of trash at “La Playita” beach in Panama City, Panama.

PANAMA

September 19, 1993
2,500 Volunteers
47 Miles Cleaned
80,000 Pounds of Debris Collected

Coordinated by: Marco A. Gandasegui N.
ANCON
Asociacion Nacional para la Conservacion de la Naturaleza
Apartado 1387, Panama 1, Republica de Panama
Telephone: (507) 64-8100
Fax: (507) 64-1836

Some 80,000 pounds of debris were collected by more than 1,000 volunteers on the Pacific and Caribbean coastlines. The 1993 beach cleanup gathered the highest number of people who have ever joined together in favor of a conservation initiative in Panama.

Twenty-three miles of beaches, including some in the Bay of Panama, Taboga Island and Iguana Island in the Pacific Ocean and Isla Grande Island and Bastimentos National Marine Park on the Caribbean Sea, were covered by volunteers of all ages. The most common objects collected during the cleanup were made of plastic.

Editor's note: Unfortunately, we did not receive data cards from Panama. However, we look forward to receiving them next year!

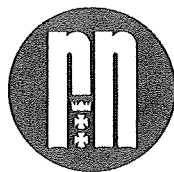
FOR INFORMATION ON PANAMA'S 1994 COASTAL CLEANUP CONTACT:

Marco A. Gandasegui N.
ANCON
Asociacion Nacional para la Conservacion de la Naturaleza
Apartado 1387, Panama 1, Republica de Panama
Telephone: (507) 64-8100
Fax: (507) 64-1836



Students from the secondary school in Rumia, Poland with a very small portion of their beach cleanup "crop."

POLAND



SOPOCKI INSTYTUT EKOLOGICZNY



SOPOT ECOLOGICAL INSTITUTE

September/October
742 Volunteers
89 Miles Cleaned
2,425 Pounds of Debris Collected

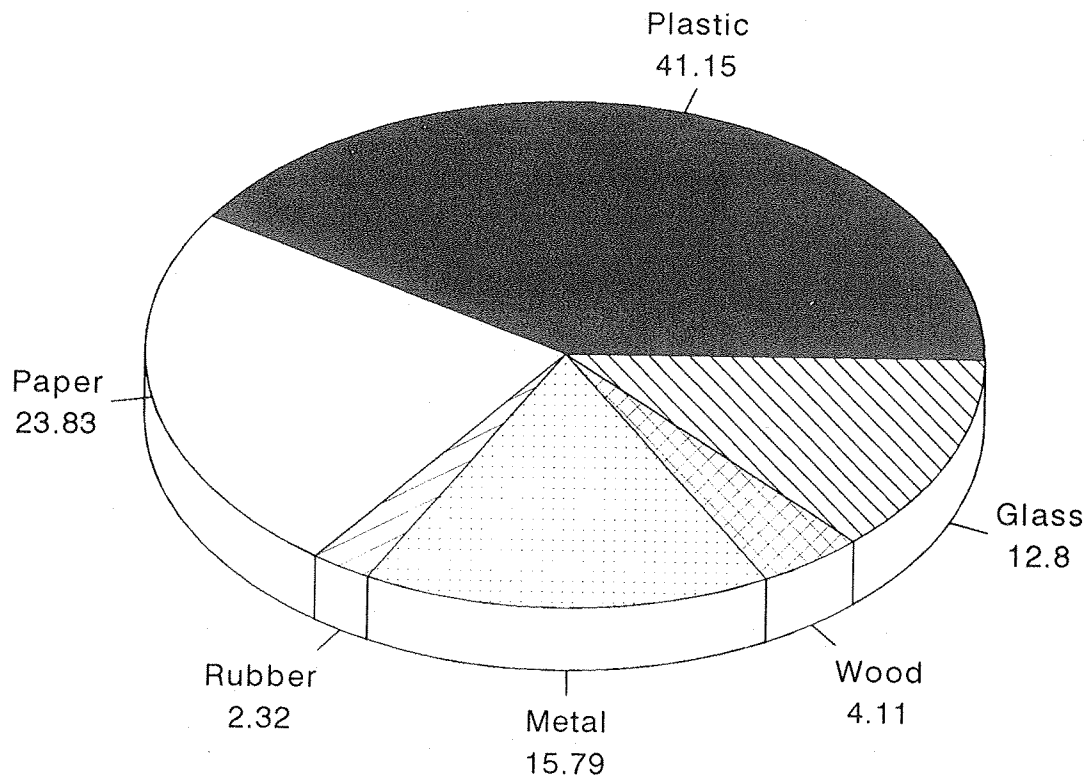
Coordinated by: Marcin Plinski/Tomasz Jozwiak
Sopot Ecological Institute
23 Marca 91b/86 Str.
81-820 Sopot, Poland
Telephone: 48-58-515694

The Coastal Cleanup was organized in Poland in 1993 for the first time. The national coordinator was the Sopot Ecological Institute. Data cards were translated into Polish, printed and mailed along with English versions to 52 elementary and secondary schools located on the Polish coast. In Poland, cleanups commenced on 25 September and concluded on 11 October. Every school chose the most convenient day from this period. As a result, 711 students from 26 schools cleaned up one fourth of the entire Polish coast (144 km out of 522 km total)! At least 1 ton of litter was collected. A short report and press statement were circulated to the Ministry of Environmental Protection and its local departments, press, radio and TV stations. Sponsors included the Polish Ministry of Environmental Protection, Rafineria Gdanska S.A., Bank Gdanski, Gazeta Wyborcza, Radio Gdansk, Radio Koszalin, Radio Szczecin, TV Gdansk.

FOR INFORMATION ON POLAND'S 1994 COASTAL CLEANUP CONTACT:

**Marcin Plinski/Tomasz Jozwiak
Sopot Ecological Institute
23 Marca 91b/86 Str.
81-820 Sopot, Poland
Telephone: 48-58-515694**

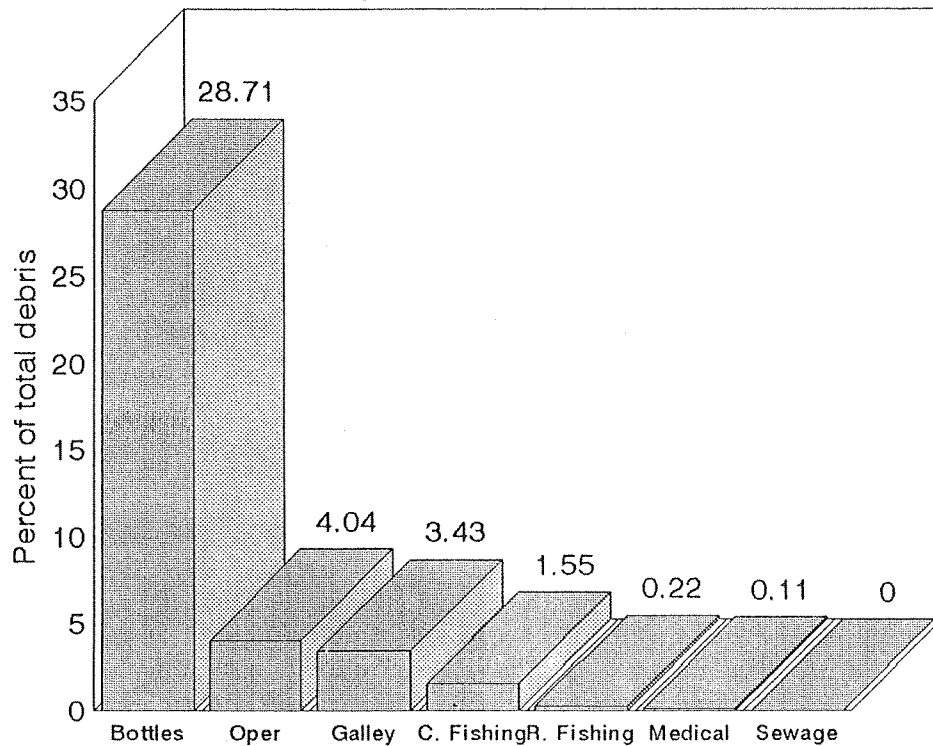
PERCENT COMPOSITION OF POLAND'S BEACH DEBRIS:



POLAND'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Plastic beverage bottles	2,202	10.81
2. Paper pieces	1,789	8.78
3. Paper bags	1,344	6.60
4. Metal bottle caps	1,206	5.92
5. Metal beverage cans	1,088	5.34
6. Glass beverage bottles	1,085	5.33
7. Short plastic sheeting	973	4.78
8. Plastic food bags	946	4.64
9. Glass pieces	673	3.30
10. Paper cups	594	2.92
11. Long plastic sheeting	505	2.48
12. Miscellaneous plastic bags	480	2.36
Total	12,885	63.27

MAJOR TYPES AND SOURCES OF POLAND'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was combined into one zone for Poland.

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

None

SINGAPORE

September 18, 1993
1,145 Volunteers
12 Miles Cleaned
2,336 Pounds of Debris Collected

Coordinated by: Kate Grace Thome
Singapore American School
Ulu Pandan Campus
60 King's Road
Singapore 1026
Telephone: 011-65-467-0022

It was a hot and steamy Saturday morning on our beaches, but the weather conditions did not discourage the commitment of over 1,000 volunteers dedicated to picking up debris. This was the second year the Nature Society (Singapore) has organized Singapore's participation in the International Coastal Cleanup.

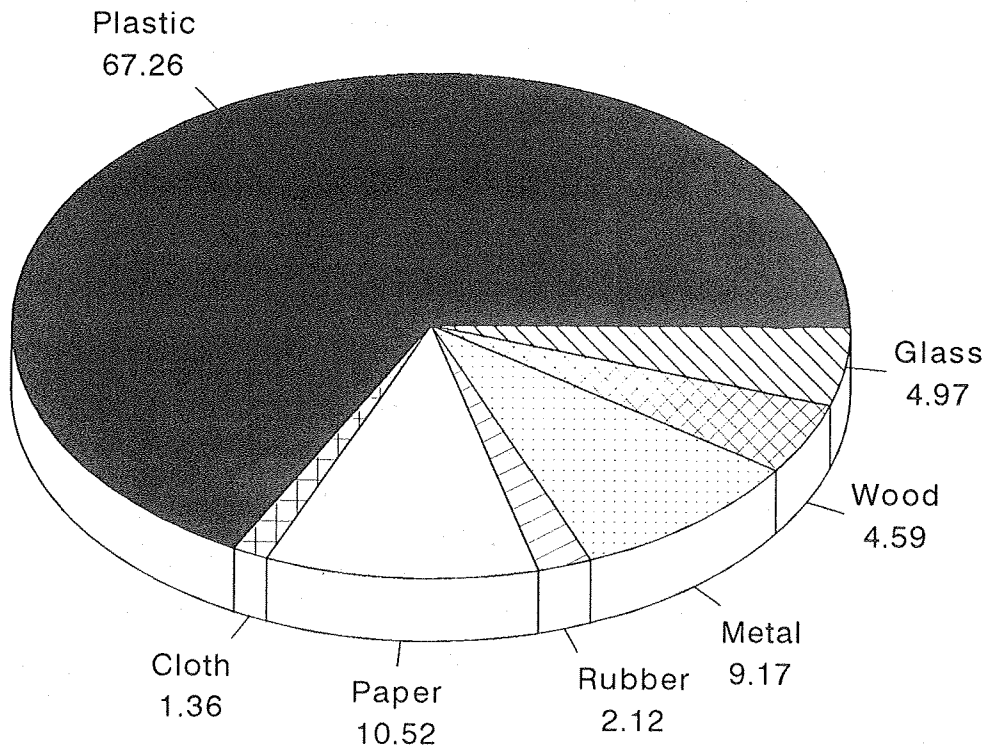
We had a good turnout this year with volunteers from 14 different schools and religious groups, including members of the Singapore Navy! Many of the school groups participated in last year's cleanup as well, and once again, our largest single group came from Raffles Girls' School, with 450 students, teachers, and administrators.

It was exciting to be part of such an event involving many countries and 35 U.S. states and territories coordinated by the Center for Marine Conservation (USA). We hope to continue to share our information and results with a wider audience locally to help combat the proliferation of debris on our beaches.

FOR INFORMATION ON SINGAPORE'S 1994 COASTAL CLEANUP CONTACT:

**Kate Grace Thome
Singapore American School
Ulu Pandan Campus
60 King's Road
Singapore 1026
Telephone: 011-65-467-0022**

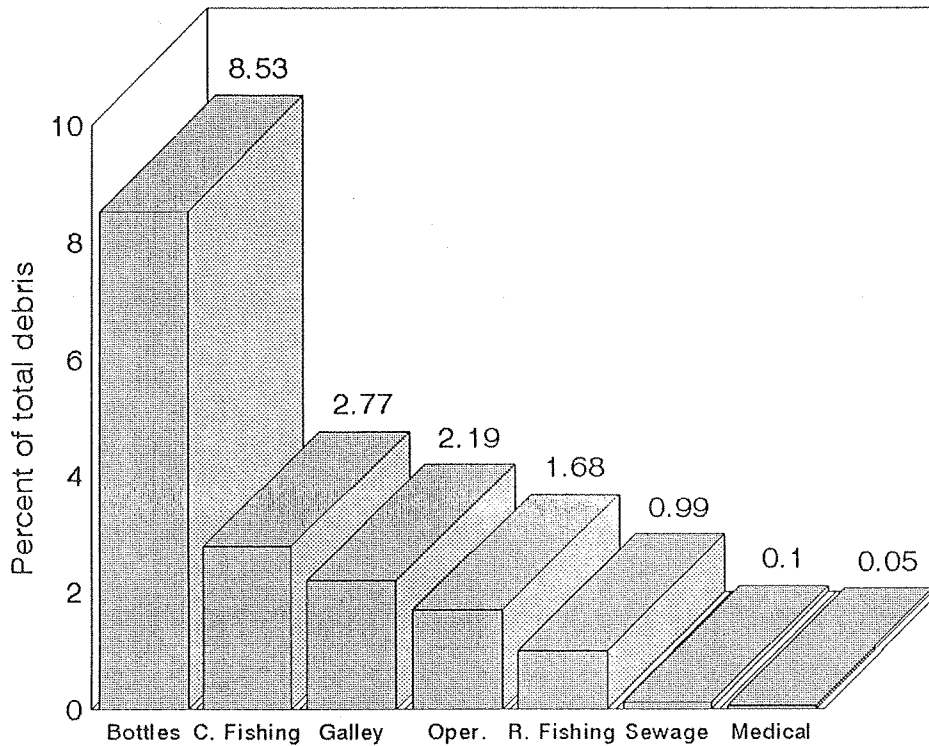
PERCENT COMPOSITION OF SINGAPORE'S BEACH DEBRIS:



SINGAPORE'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Cigarette butts	9,855	14.07
2. Foamed plastic pieces	9,741	13.91
3. Plastic food bags	4,574	6.53
4. Plastic straws	4,425	6.32
5. Plastic pieces	4,402	6.28
6. Paper cartons	2,103	3.00
7. Glass pieces	1,926	2.75
8. Lumber	1,773	2.53
9. Miscellaneous plastic bags	1,738	2.48
10. Paper pieces	1,673	2.39
11. Plastic beverage bottles	1,590	2.27
12. Metal beverage cans	1,559	2.23
Total	45,359	64.76

MAJOR TYPES AND SOURCES OF SINGAPORE'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
East Coast Park	69.31	Foamed plastic pieces
Pasir Ris Beach	55.12	Miscellaneous paper
Changi Beach	56.06	Cigarette butts
West Coast Park Beach	57.03	Plastic food bags

TRACEABLE DEBRIS REPORTED:

Location	Type of Debris	Source Indicated
East Coast Park	plastic packaging	Malayan Sugar Mfg.
	metal can	Niji Chemical Products
Changi Beach	lightstick	Starlight

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

Crab entangled in fishing line; crab entangled in paper pieces; dead fish entangled in plastic; snail entangled in netting.

MOST PECULIAR DEBRIS ITEMS REPORTED:

East Coast Park	50' x 2" hemp anchor line, computer toy, inhaler, mop, dress, white-out
Changi Beach	plastic popsicle container, "pot", metal table, pottery, glass jar with peanuts
West Coast Park Beach	foam mattress, DHL carrier bag, ship steering wheel, drums, fuel cans

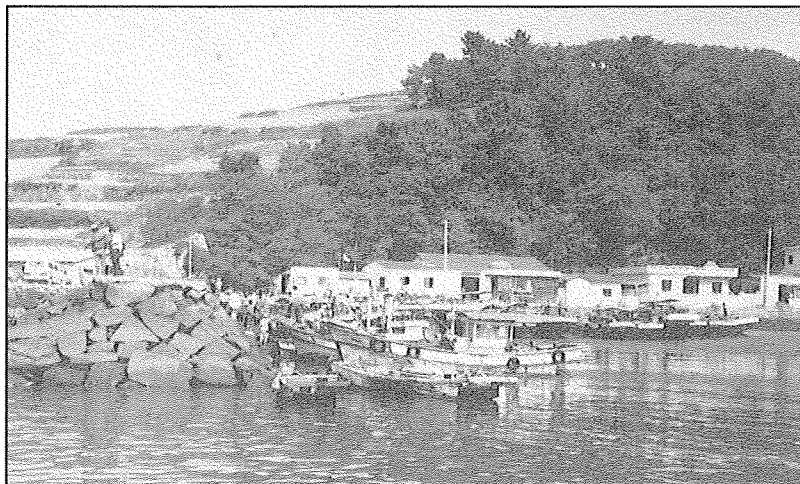
SOUTH KOREA

June 1993
11,585 Volunteers
98 Miles Cleaned
425,000 Pounds of Debris Collected

Coordinated by: Dr. Dong Beom YANG
Chemical Oceanography Lab
Korea Ocean Research and Development Institute
Ansan, P.O. Box 29
Seoul, 425-600, Korea
Telephone: 82-345-400-6160
Fax: 82-345-408-5820

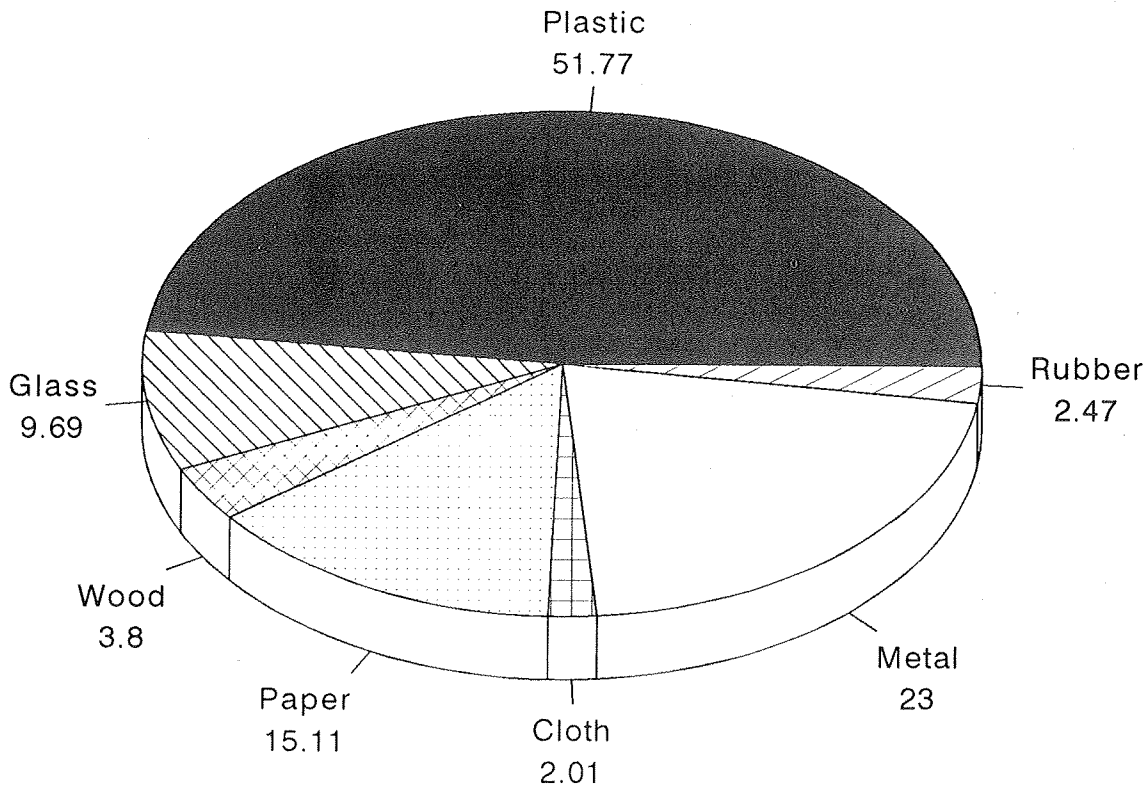
FOR INFORMATION ON SOUTH KOREA'S 1994 COASTAL CLEANUP CONTACT:

Dr. Dong Beom YANG
Chemical Oceanography Lab
Korea Ocean Research and Development Institute
Ansan, P.O. Box 29
Seoul, 425-600, Korea
Telephone: 82-345-400-6160
Fax: 82-345-408-5820



Getting ready for the cleanup in South Korea.

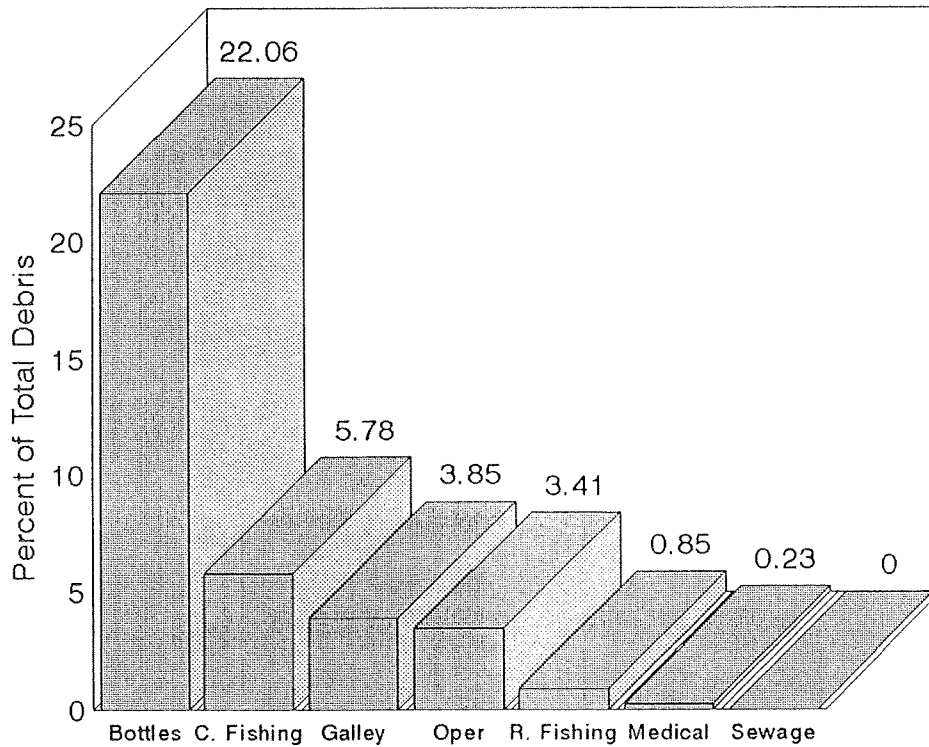
PERCENT COMPOSITION OF SOUTH KOREA'S BEACH DEBRIS:



SOUTH KOREA'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Metal beverage cans	6,713	13.67
2. Plastic food bags	4,651	9.47
3. Cigarette butts	3,573	7.27
4. Paper pieces	1,440	2.93
5. Plastic beverage bottles	1,359	2.77
6. Foamed plastic pieces	1,325	2.70
7. Glass beverage bottles	1,234	2.51
8. Paper cups	1,222	2.49
9. Glass pieces	1,197	2.44
10. Miscellaneous plastic bags	1,120	2.28
11. Paper cartons	1,106	2.25
12. Metal bottle caps	1,088	2.21
Total	26,028	52.98

MAJOR TYPES AND SOURCES OF SOUTH KOREA'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Chumurjin	27.72	Metal beverage cans
Hupo	24.18	Plastic food bags
Wando	20.67	Foamed plastic plates
Daecheon	58.00	Plastic food bags

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

None

SPAIN

September 24, 1993
600 Volunteers
19 Miles Cleaned
4,676 Pounds of Debris Collected

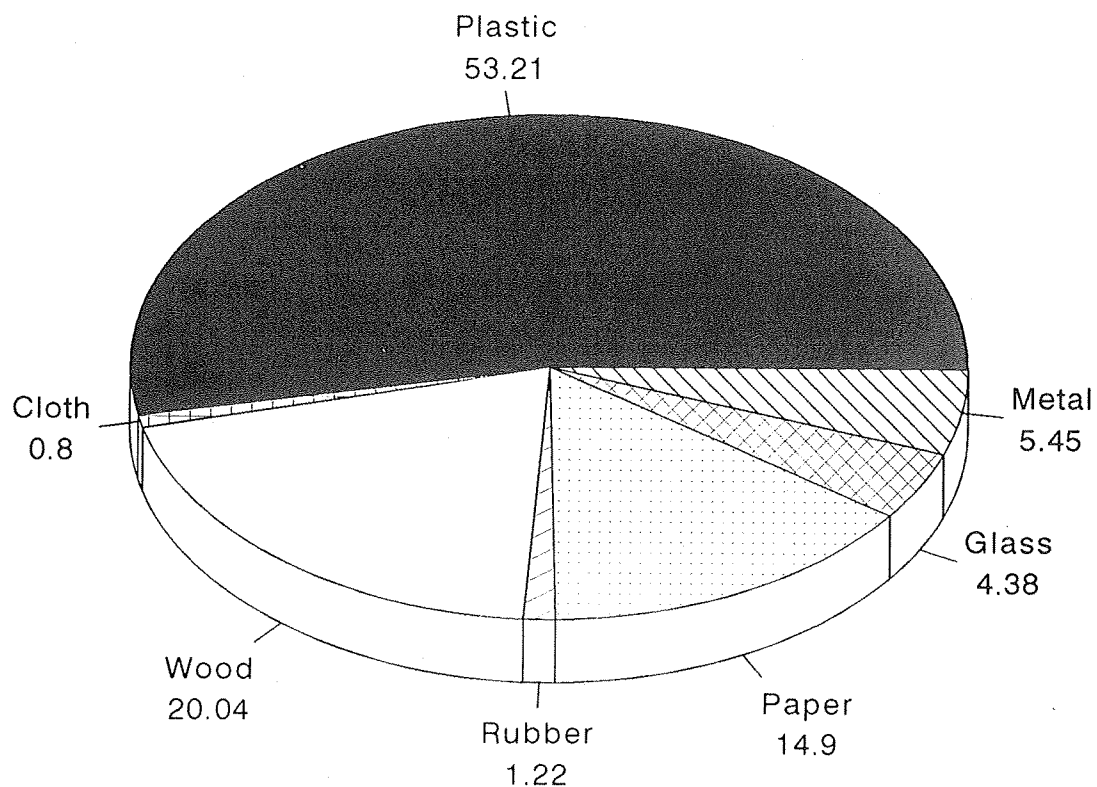
Coordinated by: Ma. Dolores Moreno Mestre
Balmes, 16
21440 LEPE
Huelva, Spain
Telephone: 34-59-380901

Spain's first year as a participating nation in the International Coastal Cleanup was a great success. Students and other citizens of Lepe and Isla Cristina, under the direction of Maria Dolores Moreno Mestre from the Escuela Taller "Marismas del Piedras," participated in the cleanup at Punta del Gato on Isla Cristina. The governments of Isla Cristina and the city of Lepe provided various services such as transportation, cleanup materials, and sports equipment for the post-cleanup activities. After the cleanup, volunteers took advantage of their time on the beach to play soccer and beach volleyball, and build sand castles.

FOR INFORMATION ON SPAIN'S 1994 COASTAL CLEANUP CONTACT:

Ma. Dolores Moreno Mestre
Balmes, 16
21440 LEPE
Huelva, Spain
Telephone: 34-59-380901

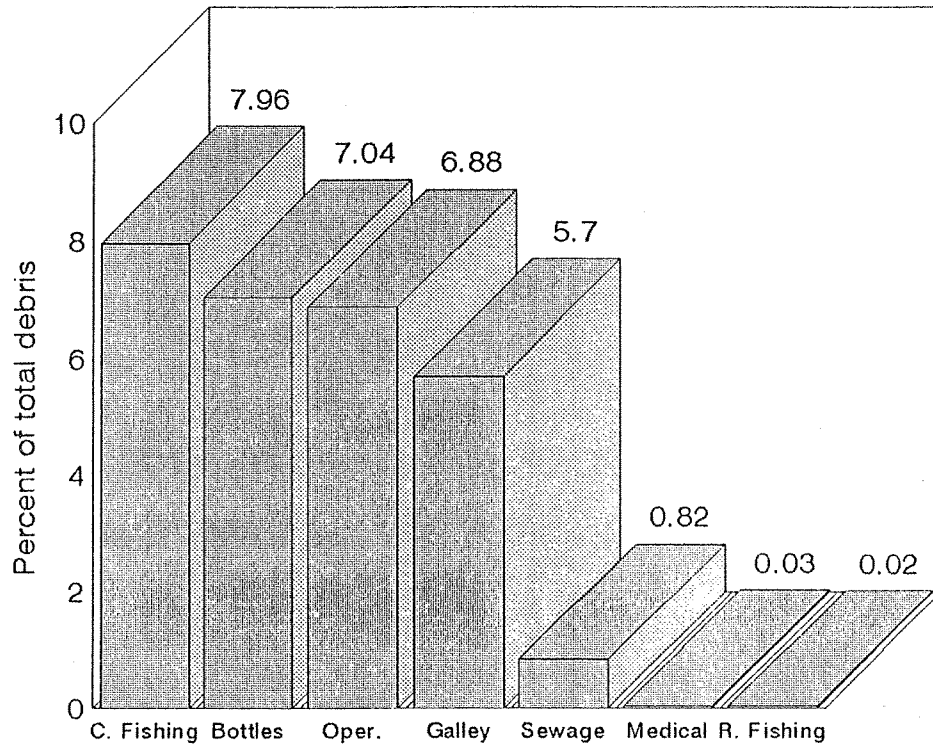
PERCENT COMPOSITION OF SPAIN'S BEACH DEBRIS:



SPAIN'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Lumber	950	10.91
2. Cigarette butts	833	9.57
3. Plastic food bags	791	9.08
4. Plastic rope	500	5.74
5. Paper pieces	489	5.62
6. Pallets	389	4.47
7. Plastic pieces	356	4.09
8. Plastic food bags	315	3.62
9. Plastic trash bags	311	3.57
10. Plastic caps/lids	185	2.12
11. Metal beverage cans	175	2.01
12. Plastic straws	156	1.79
Total	5,450	62.59

MAJOR TYPES AND SOURCES OF SPAIN'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Data was collected for only one zone in Spain.

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

None

ST. KITTS and NEVIS

September 1993
170 Miles Cleaned
3,800 Pounds of Debris Collected

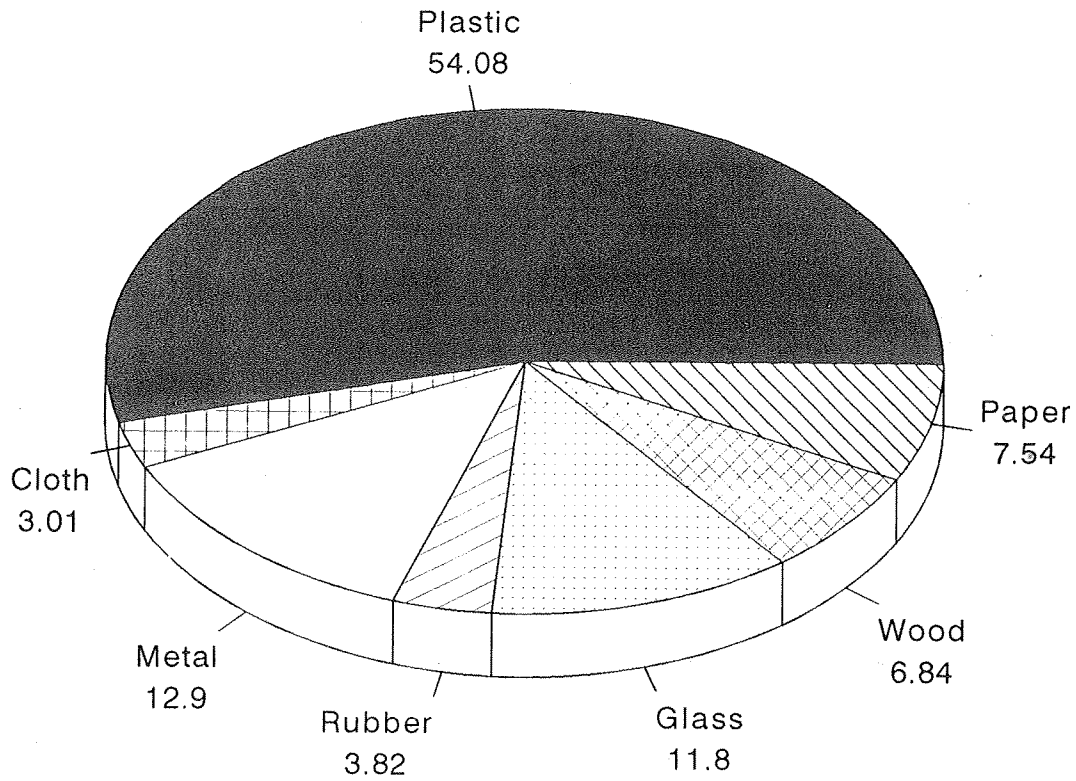
Coordinated by: Chesley Manners
Nevis Historical and Conservation Society
P. O. Box 563
Charlestown, Nevis

The Cleanup was extremely successful. The event succeeded in both cleaning up the beaches and increasing the environmental awareness of those who participated in the activity. A total of 16 community groups were involved, ranging from teacher's unions to youth groups, and several of the larger hotels had guests take part in the cleanup. Nearly 170 volunteers came out to help clean Nevis's beaches. Out of a population of 9,800, it was considered to be quite a turnout.

FOR INFORMATION ON ST. KITTS and NEVIS' 1994 COASTAL CLEANUP CONTACT:

**Chesley Manners
Nevis Historical and Conservation Society
P. O. Box 563
Charlestown, Nevis**

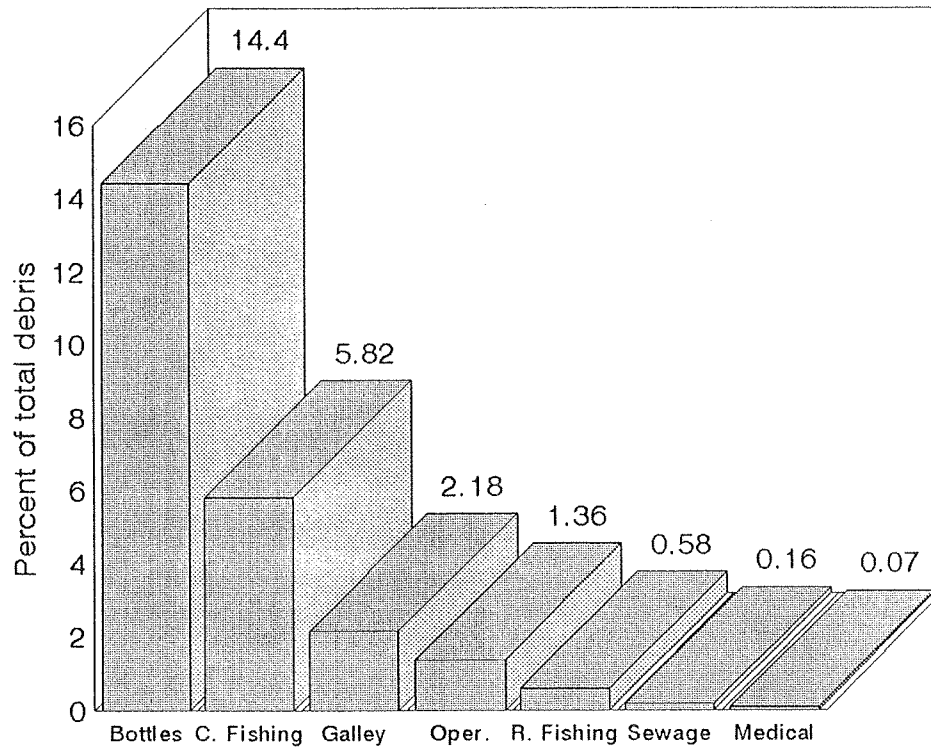
PERCENT COMPOSITION OF ST. KITTS and NEVIS' BEACH DEBRIS:



ST. KITTS and NEVIS' 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Plastic straws	478	6.54
2. Plastic caps/lids	462	6.33
3. Cigarette butts	422	5.78
4. Glass pieces	390	5.34
5. Glass beverage bottles	338	4.63
6. Foamed plastic pieces	334	4.57
7. Bottle caps	299	4.09
8. Lumber	295	4.04
9. Paper pieces	271	3.71
10. Plastic cups/utensils	267	3.66
11. Plastic food bags	250	3.42
12. Plastic beverage bottles	223	3.05
Total	4,029	55.16

MAJOR TYPES AND SOURCES OF ST. KITTS and NEVIS' BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Charlestown	51.63	Bottle caps
Almond Beach	31.67	Clothing
Frost Bay	43.40	Tires
Near Pinneys Beach	44.06	Plastic food bags
Crallows Bay	42.86	Glass pieces
Black Bay	64.46	Plastic beverage bottles
Mariners Pub	66.38	Plastic caps/lids
New Castle Beach	32.33	Bottle caps
Four Seasons	63.29	Plastic cups/utensils
Ovalie Beach	49.81	Cigarette butts
Paradise Beach	75.81	Cigarette butts
White Bay	73.09	Plastic caps/lids
Windward	70.71	Plastic caps/lids
Jessups Beach	58.42	Plastic rope

TRACEABLE DEBRIS REPORTED:

Location	Type of Debris	Source Indicated
Windward	lens cleaner bottle plastic oil container plastic beverage bottle	McNett Corporation Texaco Canada Dry
Jessups Beach	plastic oil container plastic bottle outboard oil bottle plastic bottle	Havoline Standard Petroleum Yamaha Petroleum Trinidad

FOREIGN DEBRIS ITEMS REPORTED:

Location	Source	Type of Debris
Windward	Spain France	sea salt container (plastic) plastic oil container

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

Almond Beach	stretched out jean pant
Frost Bay	panties, animal skull
Near Pinneys Beach	teddy bear
Four Seasons	canvas sleeve for mooring rope from a very large boat
Ovalie Beach	diapers
White Bay	syringe
Jessups Beach	umbrella, fish pot, motorcycle tire, old refrigerator

TURKEY

100 Volunteers
4 Miles Cleaned
54,000 Pounds of Debris Collected

Coordinated by: Ibrahim Bilik, Be & Ze
Prof. Doctor Orhan Ersek Sok. Kayaalp
Apt. 2/4
Nisantasi—Istanbul, Turkey
(90) (1) 147-7600/130-2055

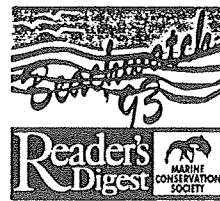
Many thanks to Ibrahim Bilik who arranged Turkey's participation in the 1993 International Coastal Cleanup. One hundred college and high school students covered 6 kilometers of beach in Istanbul, Turkey.

FOR INFORMATION ON TURKEY'S 1994 COASTAL CLEANUP CONTACT:

Ibrahim Bilik, Be & Ze
Prof. Doctor Orhan Ersek Sok. Kayaalp
Apt. 2/4
Nisantasi-Istanbul, Turkey
(90) (1) 147-7600/130-2055

Unfortunately, we were unable to include Turkey's 1993 data in this report. However, we look forward to receiving their results from the 1994 cleanup for next year's report!

UNITED KINGDOM



September 18 and 19, 1993
1,238 Volunteers
125 Miles Cleaned
72,000 Pounds of Debris Collected

Coordinated by: Frazer McGilvray
Beachwatch Officer
Marine Conservation Society
9 Gloucester Road
Ross on Wye, Herefordshire, HR9 5BU
United Kingdom
Telephone: 011-44-989-66017

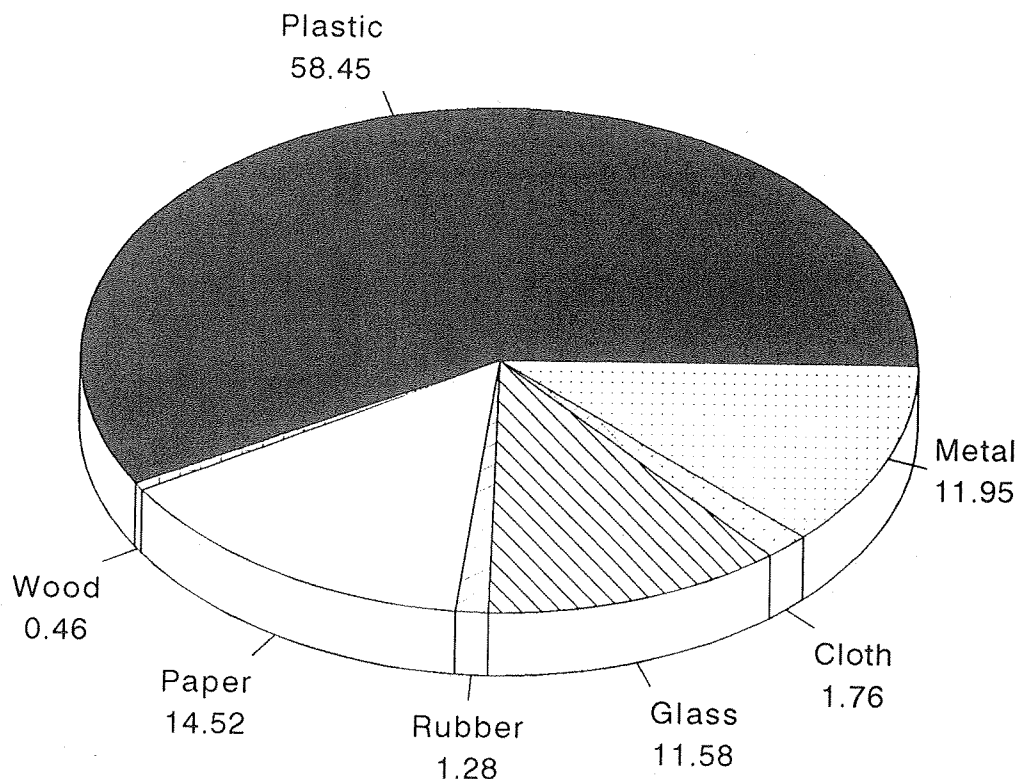
As Bill Foster promised last year, the 1993 International Coastal Cleanup in the UK really took off! The Marine Conservation Society, in association with Reader's Digest, coordinated what was to turn out as the largest beach cleaning event of its kind ever held in the UK, something we are all very proud to have been involved with. Approximately 1,238 volunteers took part in removing 72,000 pounds of debris from 121 beaches. People had a great day out and the weather, not usually the most reliable thing in Britain, stayed fine for our volunteers to blitz those beaches.

Here's to 1994: may it be bigger, better, and just as successful!!

FOR INFORMATION ON UNITED KINGDOM'S 1994 COASTAL CLEANUP CONTACT:

Frazer McGilvray or Bill Foster
Beachwatch Officer
Marine Conservation Society
9 Gloucester Road
Ross on Wye, Herefordshire, HR9 5BU
United Kingdom
Telephone: 011-44-989-66017

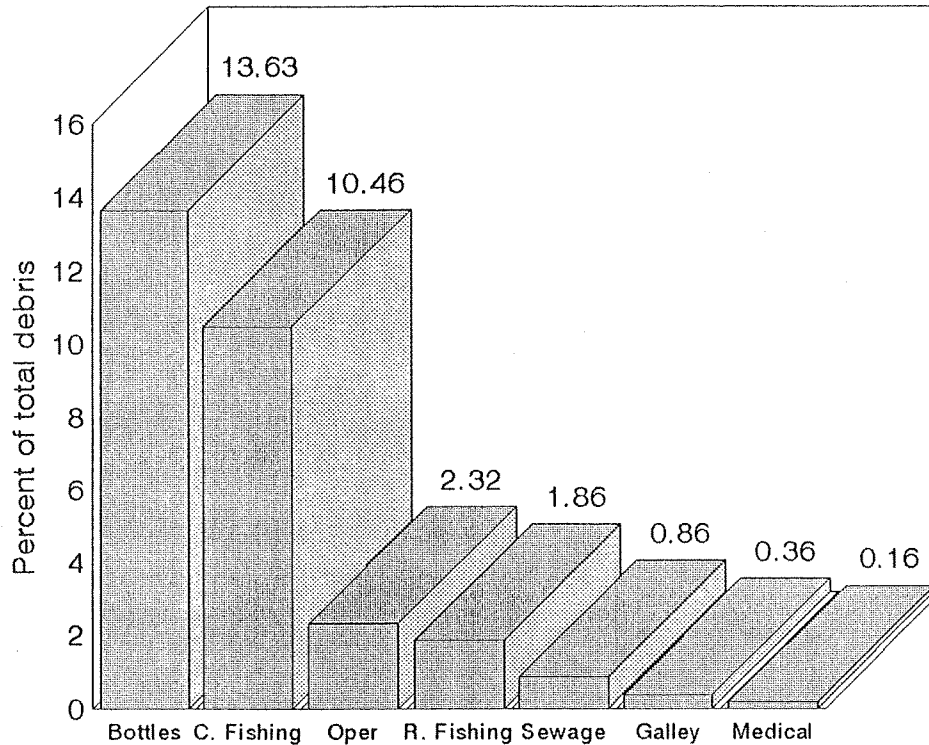
PERCENT COMPOSITION OF UNITED KINGDOM'S BEACH DEBRIS:



UNITED KINGDOM'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Miscellaneous plastic bottles	8,654	9.20
2. Glass pieces	8,399	8.93
3. Plastic rope	8,093	8.60
4. Plastic caps/lids	7,706	8.19
5. Miscellaneous plastic bags	5,962	6.34
6. Metal beverage cans	4,571	4.86
7. Foamed plastic packaging	3,040	3.23
8. Paper pieces	2,928	3.11
9. Plastic straws	2,919	3.10
10. Short pieces of plastic sheeting	2,538	2.70
11. Miscellaneous glass bottles	2,308	2.45
12. Plastic cups/utensils	1,875	1.99
Total	58,993	62.70

MAJOR TYPES AND SOURCES OF UNITED KINGDOM'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF UNITED KINGDOM'S BEACH DEBRIS:

Data was combined into one zone for the United Kingdom.

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

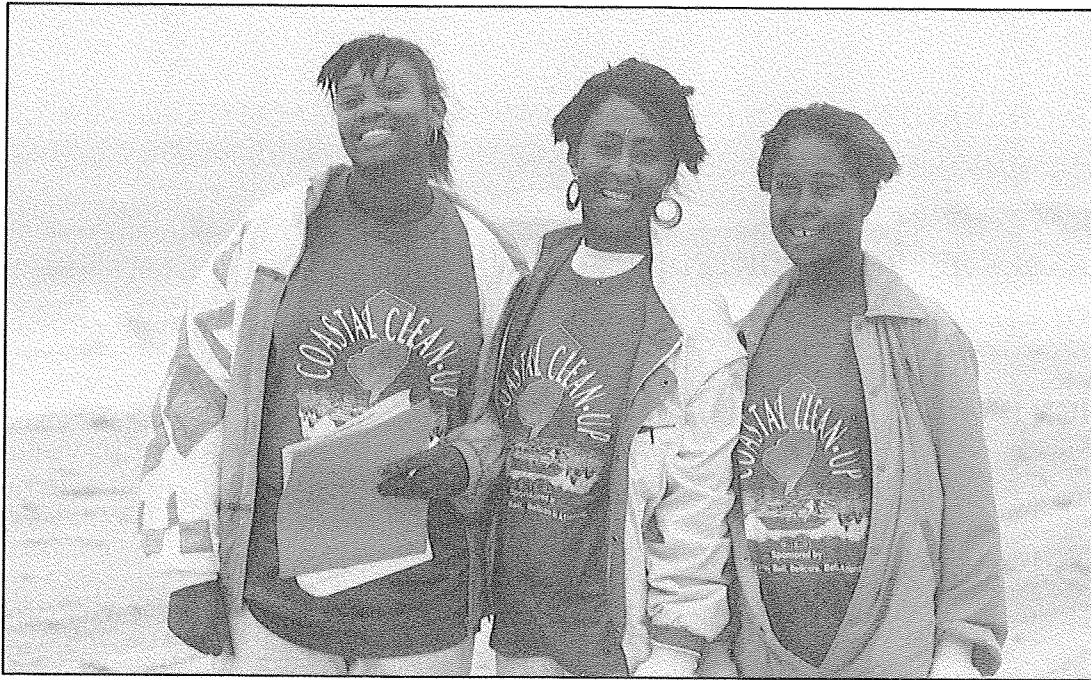
None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

None



Bell Atlantic Telephone Pioneers turned out en masse at many cleanups across the United States, including this one in New Jersey.

UNITED STATES

COASTWEEKS 1993
158,257 Volunteers
4,498 Miles Cleaned
3,188,379 Pounds of Debris Collected

Coordinated by: Center for Marine Conservation
1725 De Sales Street, Suite 500
Washington, DC 20036
Telephone: (202) 429-5609

The 1993 National Cleanup in the United States set records in every category—more people, more area covered, and more trash. Volunteers in 34 states and territories participated, including three inland states participating for the first time—Colorado, Nevada, and West Virginia. The inclusion of these inland states demonstrates just how much the Cleanup has expanded its focus from coastal beaches to inland waterways, rivers, lakes, and streams.

Even coastal states started looking further inland for trash. In California, volunteers collected more trash in bays, marshes, and streams than on the beaches. New Hampshire added two rivers to its cleanup, and Connecticut volunteers moved into tidal marshes for the first time.

More underwater cleanups took place in 1993 than in previous years. Hundreds of divers, including teams in Alabama, Colorado, Nevada, New Jersey, New York, and Ohio, cleaned miles of fishing line, plastic sheeting, and plastic bags from reefs, swimming areas, and shellfish beds.

Here are some highlights of the 1993 cleanup: One county in Florida found enough abandoned construction and household materials to build and furnish several houses. Florida volunteers also retrieved 300 pounds of tar balls from their beaches. A skeleton turned up in Mississippi, and a Studebaker hubcap in West Virginia.

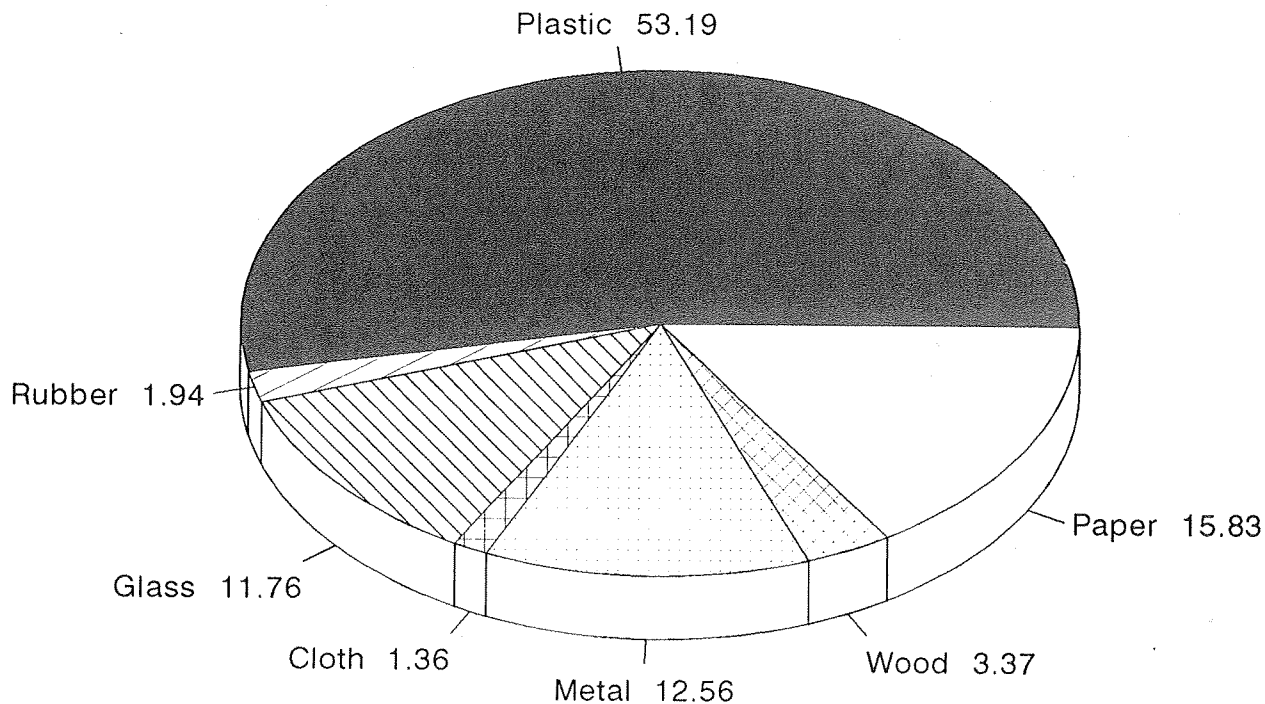
Fifty pounds of the best Oregon trash was forwarded to the Smithsonian Institution in Washington, DC where it will be made into a sculpture. Texas “beach buddies” turned up a five-pound bag of cocaine and tagged radioactive material. And a lucky Louisiana volunteer spotted a lottery ticket, scratched it off, and won two dollars!

More information on each state’s cleanup activities can be found in *1993 National Coastal Cleanup Results*, the companion volume to this book.

FOR INFORMATION ON UNITED STATES’ 1994 COASTAL CLEANUP CONTACT:

Center for Marine Conservation
1725 De Sales Street, Suite 500
Washington, DC 20036
Telephone: (202) 429-5609

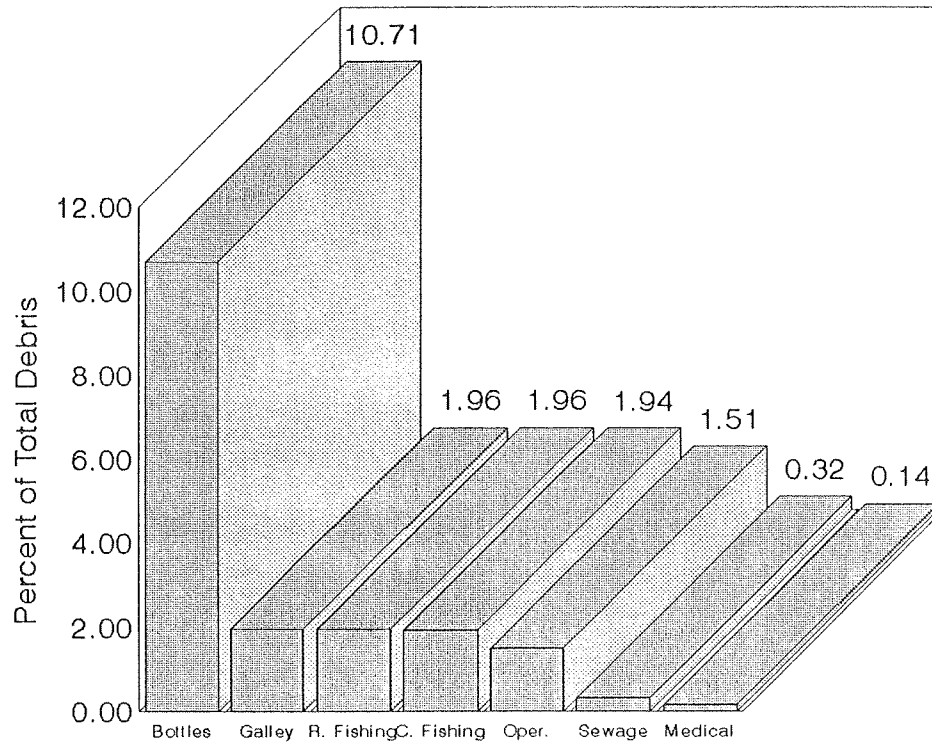
PERCENT COMPOSITION OF UNITED STATES' BEACH DEBRIS:



UNITED STATES' 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Cigarette butts	1,737,505	23.69
2. Paper pieces	536,001	7.31
3. Plastic pieces	428,522	5.84
4. Foamed plastic pieces	350,844	4.78
5. Glass pieces	344,502	4.70
6. Plastic food bags	290,808	3.97
7. Plastic caps/lids	266,959	3.64
8. Metal beverage cans	210,553	2.87
9. Plastic straws	203,330	2.77
10. Glass beverage bottles	188,142	2.57
11. Plastic beverage bottles	145,854	1.99
12. Foamed plastic cups	134,547	1.82
Total	4,837,567	65.96

MAJOR TYPES AND SOURCES OF UNITED STATES' BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Alabama	55.32	Cigarette butts
California	38.73	Cigarette butts
Colorado	52.67	Cigarette butts
Connecticut	65.12	Cigarette butts
Delaware	58.70	Cigarette butts
District of Columbia	79.73	Styrofoam pieces
Florida	60.54	Cigarette butts
Georgia	63.51	Cigarette butts
Hawaii	53.15	Cigarette butts
Illinois	48.15	Cigarette butts
Indiana	67.53	Cigarette butts
Louisiana	72.22	Metal beverage cans
Maine	54.58	Cigarette butts
Maryland	57.91	Cigarette butts
Massachusetts	62.37	Cigarette butts
Michigan	74.61	Cigarette butts
Minnesota	52.07	Cigarette butts
Mississippi	49.48	Cigarette butts

MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE (Cont.):

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
New Hampshire	43.01	Cigarette butts
New Jersey	55.63	Cigarette butts
New York	58.59	Cigarette butts
North Carolina	51.61	Cigarette butts
Ohio	55.00	Cigarette butts
Oregon	66.39	Cigarette butts
Pennsylvania	71.06	Cigarette butts
Puerto Rico	50.86	Metal aerosol cans
Rhode Island	67.68	Cigarette butts
South Carolina	61.28	Cigarette butts
Texas	68.27	Plastic pieces
Virgin Islands	57.08	Glass beverage bottles
Virginia	61.74	Cigarette butts
Washington	66.38	Cigarette butts
West Virginia	70.48	Cigarette butts
Wisconsin	60.54	Cigarette butts

TRACEABLE DEBRIS REPORTED:

Location (State)	Type of Debris	Source Indicated
Alabama	oyster tag	Louisiana Daves Oysters & Seafood
	oyster tag	Louisiana Fishery
	oyster tags	Louisiana Bayou Caddy
	oyster tag	Louisiana Melirene Seafood
California	air express tag	Delta Airlines
	plastic strapping	Johnson Oyster Company
	packing material	Lockheed Shipping
	5-gallon container	Pepsi Cola Company
	plastic	Crowley Environmental Services
	repair foam	San Diego Shipbuilding
	fish tags	H&M Landing
	fish tags	Polaris Supreme Saunts
	shampoo bottle	Princess Cruise Line
	tags	Point Loma Sports Fishing Association
glass coffee cup	Crown Cruise Line	
Connecticut	balloon	Burger King
	conditioner bottle	Best Western
	plastic cover	Flex-O-Lite
	plastic tag	Millstone Env. Lab
	balloon	McDonald's
	plastic strapping band	Atlantic Silver Co-op
Delaware	balloon	Alexandria Hospital
	glass jar	Dover AFB
	sale sign	Mikspillion Realty
	MRE	So-Pack Co Inc.
	plastic oil drum	Allen Petroleum

TRACEABLE DEBRIS REPORTED (Cont.):

Location (State)	Type of Debris	Source Indicated
District of Columbia	plastic cover	American Airlines
Florida	balloon shampoo bottle shampoo bottle sign cruise ship book pen shampoo bottle shampoo bottle bath gel place mat plastic cup shampoo bottle shampoo bottle emergency water	WLGH 103.1 FM Royal Cruise Lines Caribbean Cruise Line IBR Real Estate Island Princess Commodore Cruise Line Royal Cruise Line Crystal Cruise Line Princess Cruise Line Fantasy Cruises Fantasy Cruises Royal Caribbean Holiday American Line Canadian Coast Guard
Georgia	plastic cup balloon balloon	Emerald Princess Publix Chuck E. Cheese
Illinois	balloon balloon crate business card	Mailboxes Etc. Pancake House Alberta Crate Co. Unique Equipment
Louisiana	plastic strap	Osmose Wood Prod.
Maine	lobster band balloons balloon balloon lobster trap lobster trap sign	Canada Chenoy's Deli Davis Oil Service Green Mt. Vermont Keith Googins Dennis Violette Dunne Brothers Painting
Maryland	balloon	Phillips Seafood Restaurant
Michigan	balloon balloon balloon balloon balloon balloon balloon balloon balloon balloon balloon balloon balloon balloon plastic band	Lake Land Medical Hills Dale Hospital First Chicago Bank Spectrum Factory Fashion Outlet Sizzler Steak McDonald's 106.3 FMWJ Blockbuster Video Taco Bell Juan Del Real Account Agent Chuck E. Cheese Plaza Shell Amloid Corp.

TRACEABLE DEBRIS REPORTED (cont.):

Location (State)	Type of Debris	Source Indicated
Mississippi	thermomelt end case	Calco Industries
New Jersey	tube	ICN Pharmaceutical
Rhode Island	balloon	Valley National Bank
South Carolina	balloon balloon business card	United Way Piggly Wiggly Oink Express
Texas	acid bottle	Dominica Oil Co.
Virginia	balloon 50-gal. drum	McDonald's Chemical Research Products
Washington	crate top bucket can	Northwest Molding Products Hillyard Chemical US Navy

FOREIGN DEBRIS ITEMS REPORTED:

Location (State)	Source	Type of Debris
California	Japan Japan Mexico	herbal medicine bottle detergent bottle Pacifico beer bottle
Florida	Germany Argentina Greece Russia China France France Brazil Russia France Germany	medical tape metal toothpaste tube plastic bottle butane can shampoo bottle plastic bottle powder deodorant plastic wrapper aerosol can cap
Louisiana	Mexico China Czechoslovakia Mexico Brazil "Spanish" Trinidad	abrasive cleaner kool-aid beer can eye drop bottle water bottle plastic bottle glass bottle
Maine	Canada Canada Canada	salmon feed bag lobster pots lobster bands
Maryland	China	aerosol spray can

FOREIGN DEBRIS ITEMS REPORTED (cont.)

Location(State)	Source	Type of Debris
Michigan	Canada	gas can
New Hampshire	Canada	plastic strap
Oregon	Japan	plastic jug soap bottle
Texas	Mexico	bleach bottle silicone bottles milk containers cement bag detergent bottle shampoo bottles soap bottles plastic bag water bottle salt bag oil container rubbing alcohol bottle
	"Dutch"	bottle
	Japan	drain cleaner
	Venezuela	plastic bottle
	Argentina	can
	Japan	hair spray can
	Japan	drain cleaner
	Korea	detergent bag
Washington	Australia	fruit carton

ENTANGLED WILDLIFE REPORTED:

Location (State)	Animal	Debris	Comments
Alabama	crab	fishing line	entangled
	bird	cage	entangled
California	cormorant	plastic bag	in throat
	seagull	plastic bag	caught in
	bird	fishing line	entangled
	commorant	fish hook	in mouth
	lizard	six-pack holder	entangled
Delaware	seagull	fishing line	entangled
Florida	pelican	fishing line	entangled
	bird	fishing line	entangled
	crab	glass bottle	trapped
	seagull	string	entangled
	crab	fishing line	entangled

ENTANGLED WILDLIFE REPORTED (cont.):

Location (State)	Animal	Debris	Comments
Georgia	fish	plastic bag	
Hawaii	bird	fishing line	entangled
	lobster	fishing line	entangled
	eel	fishing line	entangled
	fish	plastic	entangled
Illinois	seagull	fishing line	entangled
	crayfish	fishing line	entangled
Louisiana	turtle	rope	entangled
Michigan	seagull	fishing line	entangled
	seagull	ribbons	entangled
Mississippi	fish	six-pack holder	entangled
	stingray	fishing line	entangled
New York	seagull	fishing line	entangled
North Carolina	seagull	fishing line	entangled
	bird	bag	
	crabs	fishing line	entangled
Oregon	seagull	rope	entangled
	duck	net	entangled
	seagull	rubber band	around neck
	seagull	six-pack holder	around neck
	seagull	net	entangled
Rhode Island	duck	fishing line	entangled
South Carolina	flounder	rope	entangled
	seagull	rope	entangled
	seagull	fishing line	entangled
	crab	fishing line	entangled
Texas	turtle	plastic	entangled
	fish	six-pack holder	entangled
	crab	six-pack holder	entangled
	sting ray	fishing line	entangled
	crab	rope	entangled
Virginia	crab	fishing line	caught
Washington	seagull	fishing line	entangled

MOST PECULIAR DEBRIS ITEMS REPORTED:

Alabama	washing machine, car muffler, bathroom sink, tv, typewriter
California	suitcase, birth control pills, water meter cover, oil filter, car mat
Colorado	social security card, slipper
Connecticut	press-on nails, shower curtain, clothes hanger, car battery
Delaware	lawn mower, metal shoe rack, alarm clock, stop sign, cookie cutters
Florida	toilet seat, telephone, electric fan, tv, suitcase
Georgia	car headlight, table, "Barney" shoe, lawn chairs, bicycle chain
Hawaii	sprinkler head, vacuum hose, seven loaves of bread, motorcycle seat, foam mattress
Illinois	VCR, microwave, parking ticket, tent, toothbrush
Indiana	scarf, couch pillow, key, shotgun shells
Louisiana	garden hose, toothbrush, scissors, Pepsi Cola display stand, ping pong ball
Maine	muffler, stereo, couch, mattress, basketball hoop
Maryland	luggage, fire extinguisher, fake fingernail, coffee pot machine, unopened mayonnaise jar
Massachusetts	Christmas tree, blanket, fire hose
Michigan	government issue tires, bomb, hunting arrow, air mattress
Minnesota	paint brush, stereo
Mississippi	fire extinguisher, muffler, mailbox, battery, dish towel
New Hampshire	car floor mat, car seat, kite, lemons, exhaust pipe
New Jersey	broomhead, Christmas light, shopping cart, park bench, lettuce
New York	car muffler, wine glass, gold watch, stroller, swing set
North Carolina	car ashtray, IV bag, propane tank, toilet, tailpipe
Oregon	vacuum hose, bed springs, garden hose, car jack, phone book
Pennsylvania	bundt pan, hair curlers, snow brush, lawn chair
Puerto Rico	television
Rhode Island	bed frame, fire extinguisher, hunting target, plastic toy frog man
South Carolina	pot holder, bar stool, ear plugs, funeral wreath, toilet
Texas	typewriter, iron, toilet, stove, sink drainer
Virginia	porta-pottie, car seat, toothpaste tube, spatula, make-up brush
Virgin Islands	car seat, ice chest, umbrella, roll of film, battery
Washington	door knob, car door, hood, Sony walkman
West Virginia	plastic plants, vacuum hose, hubcap
Wisconsin	Lazy boy chair, roofing shingle, plastic trout, car struts, "Do Not Enter" sign

VENEZUELA



September 18, 1993
10,600 Volunteers
176 Miles Cleaned
635,000 Pounds of Debris Collected

Coordinated by: Diego Diaz Martin
Fundacion para la Defensa
de la Naturaleza
Apartado 70376
Caracas 1071-A Venezuela
Telephone: 58 2 359454
Fax: 58 2 2396547

Pushing aside all previous records, thousands of volunteers swarmed the beaches of Venezuela to take part in the 1993 International Coastal Cleanup, an experience that FUDENA, the local organization responsible for carrying out this conservation initiative, considers to have been the biggest environmentalist event to take place in the history of the nation.

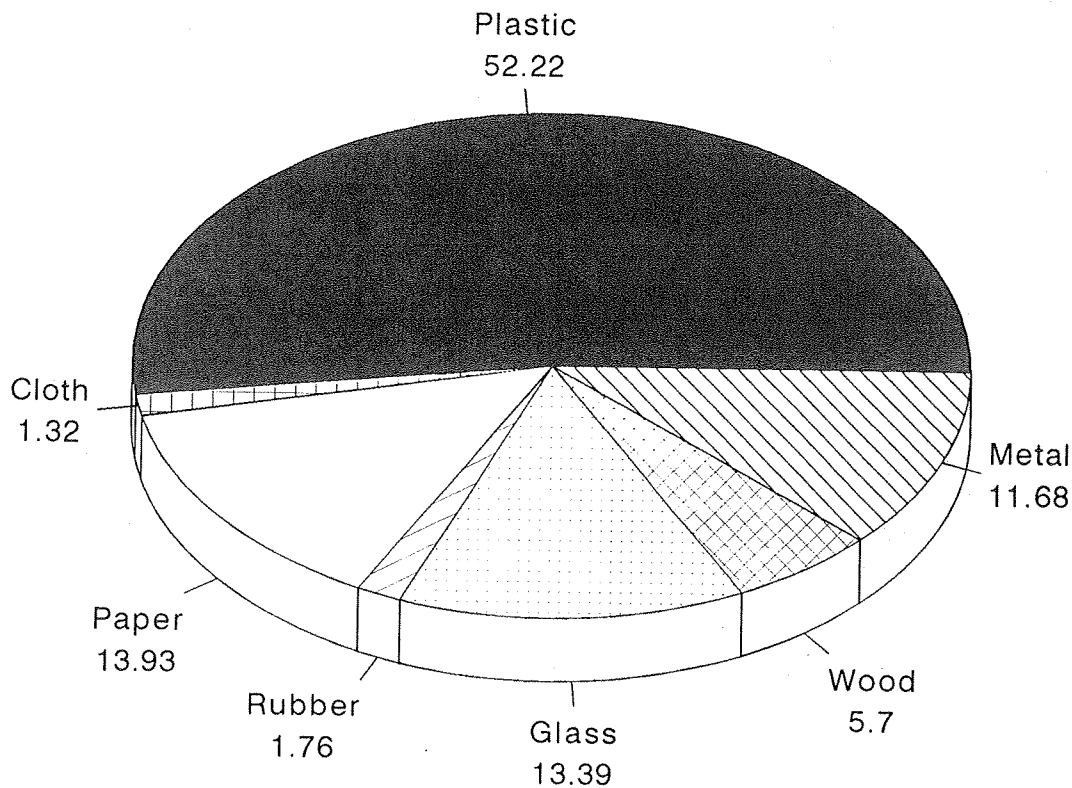
Over 10,000 volunteers gathered on beaches to perform a solid waste inventory and cleanup in different areas along the country's entire coastline. Figures for the 1993 cleanup nearly doubled those of the 1992 effort. We could hardly have hoped for better community involvement! Most of the people who participated were individual persons who got together to act in defense of Venezuela's beaches, one of the nation's most prized natural resources.

Diego Diaz-Martin

FOR INFORMATION ON VENEZUELA'S 1994 COASTAL CLEANUP CONTACT:

**Diego Diaz Martin
Fundacion para la Defensa de la Naturaleza
Piso 6, Oficina 611-a
Los Cortijos de Lourdes, Caracas
Caracas 1071-A Venezuela
Telephone: 58-2-2 38-1761/1793
Fax: 58 2 2396547**

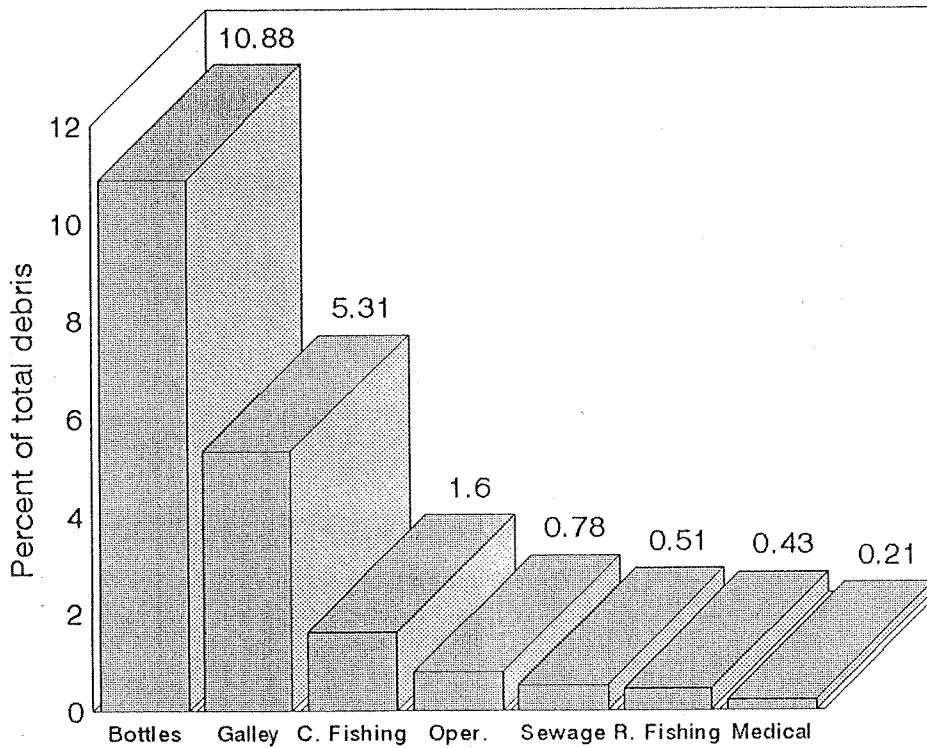
PERCENT COMPOSITION OF VENEZUELA'S BEACH DEBRIS:



VENEZUELA'S 1993 DIRTY DOZEN:

	Total Number Reported	Percent of Total Debris Collected
1. Plastic food bags	27,335	6.27
2. Miscellaneous metal cans	21,267	4.88
3. Plastic cups/utensils	20,000	4.59
4. Plastic caps/lids	17,542	4.02
5. Miscellaneous glass bottles	15,142	3.47
6. Plastic straws	14,797	3.39
7. Plastic beverage bottles	14,695	3.37
8. Paper pieces	14,633	3.35
9. Glass pieces	14,170	3.25
10. Cigarette butts	14,046	3.22
11. Metal bottle caps	11,777	2.70
12. Miscellaneous plastic bags	11,751	2.69
Total	197,155	45.20

MAJOR TYPES AND SOURCES OF VENEZUELA'S BEACH DEBRIS:



MAJOR CHARACTERISTICS OF DEBRIS IN EACH ZONE:

Zone Name	Percent Plastic	Most Prevalent Debris Item Reported
Dep. Federales	93.02	Plastic beverage bottles
Distrito Federal	48.83	Plastic food bags
Sucre	49.45	Plastic food bags
Nueva Espana	47.40	Plastic straws
Miranda	48.68	Plastic food bags
Merida	45.69	Plastic cups/utensils
Falcon	47.85	Glass pieces
Anzoategui	59.04	Plastic food bags
Carabobo	54.29	Plastic cups/utensils
Aragua	44.95	Plastic food bags
Delta Amacuro	30.11	Cigarette butts
Zulia	46.18	Miscellaneous wood
Trujillo	43.42	Miscellaneous wood

TRACEABLE DEBRIS REPORTED:

None

FOREIGN DEBRIS ITEMS REPORTED:

None

ENTANGLED WILDLIFE REPORTED:

None

MOST PECULIAR DEBRIS ITEMS REPORTED:

None

Appendix 1. Major Sponsors of the 1993 International Cleanup (lists supplied by country coordinators):

INTERNATIONAL SPONSORS

American Plastics Council
ARCO Foundation
Berkley
Chevron Corporation
James R. Dougherty Foundation
Environmental Protection Agency
Faber-Castell
Jantzen, Inc.
Kokopelli Press, Inc.
Mobil Chemical Corporation
NAPCOR
NOAA
The Pew Charitable Trusts
The Proctor & Gamble Fund
Rockwell Fund, Inc.
Society for the Plastics Industry
Strong Foundation
Trull Foundation
U.S. Navy

ARGENTINA

Municipality of General Alvarado
Aramacao
Canal 3 Video Cable de Miramar
Delaware Dept. of Nat. Res. & Env. Control
Los Dulces de Ofelia
Miramar Firemen's Corp.
Radio Magica 97.1

BAHRAIN

A.M. Yateem
Administrative Support Unit
Aeradio Technical Services
Al Ahlia Insurance Co.
Al Bandar Resort
Al Ahli Commercial Bank
American Express Company
American Womens Club
AT&T Bahrain
Bahrain Bedding Company
Bahrain Danish Dairy
Bahrain Finance Company
Bahrain School
Bahrain School P.T.S.A.
Bahrain Yachting Committee
Banagas

BAHRAIN, cont.

Banoco
BAPCO
BatelCo
Body Shop
Budget Rent a Car
Caltex Bahrain
Central Municipal Council
Chase Manhattan Bank
Coca Cola
Environmental Protection Comm.
Gulf Hotel
Gulf Star
Hassan Mansoor
Holiday Inn
Leo's Club Bahrain
Lion's Club Bahrain
Natural History Society
Ramada Hotel
Safa Hardware
Scrapmold
Unitag
Venus Public Relations
Zamil Aluminum

GRENADA

Agency for Rural Transformation
Division of Community Development
Grenada Bottling Co.
Grenada Breweries, Limited
Grenadian Media
Grenada Plastic and Packaging Company

GUATEMALA

Center for Marine Conservation
The Coca Cola Company
Columbus Zoo, Ohio
Guardianes Ecologicos
Guatemala City Hall
Kern's
Maderas el Alto
"Senorial" Snacks
Siglo XXI Newspaper

INDONESIA

Middle School Conservation Club at JIS

Appendix 1. Sponsors of the 1993 International Coastal Cleanup (Cont.):

JAPAN

American Video
Arsoa
Earth Environmental Fund
Environment Beautification Association
ESSO
FM Okinawa
Hino Green Fund
Kanagawa Beach Cleaning Foundation
NEC
Meisi Okinawa
Marubeni
Ryukyu Village
Sams Restaurnat Group
Sankus and Associates
Sapporo Beer
Takoyama, Inc.
WWF-Japan

KENYA

AquaVentures Diving
Blue Bay Village
Hemingway's
Ocean Sports
Turtle Bay Hotel

NETHERLANDS ANTILLES

Big Rock Market
Captain Quarters Hotels
Corner Deli & Gourmet Shop
Eskay Home And Hardware
H.E.S. Home Center
In Two Deep Bar and Restaurant
My Store
Promart Utilities - Saba
Saba Drug Store
Saba Marine Park
Tropic's Cafe

PANAMA

Coca Cola
Hotel Gorgona-Hayes
Hotel Taboga
Polymer
Promar
Rotary Club

POLAND

Bank Gdanski
Gazeta Wyboreza
Ministry of Environmental Protection
Radio Gdansk
Radio Koszalin
Radio Szczecin
Rafineria Gdanski S.A.
TV Gdansk

UNITED STATES

American Plastics Council
ARCO Foundation
Berkley
Chevron Corporation
James R. Dougherty Foundation
Environmental Protection Agency
Faber-Castell
Jantzen, Inc.
Kokopelli Press, Inc.
Mobil Chemical Corporation
NAPCOR
NOAA
The Pew Charitable Trusts
The Proctor & Gamble Fund
Rockwell Fund, Inc.
Society for the Plastics Industry
Strong Foundation
Trull Foundation
U.S. Navy

Appendix 2. Traceable Debris Reported During the 1993 International Coastal Cleanup

LOCATION	TYPE OF DEBRIS	SOURCE INDICATED
Anguilla	oil container	V.P. Ederar & Sons
Bahrain	potato chip bag flour bag	OK Crisps Factory Al Mahdi
British Virgin Islands	plastic container plastic bottle plastic fast food container ice cream container plastic container	Super Tech Products Pennzoil Lucky Bucket Haagen Daz Roberts Margarine
Grenada	plastic bottle glass bottle paper food box	Shell Oil Company Westerhall Estate, Ltd. Kentucky Fried Chicken
Lithuania	milk carton balloon carton plastic container	Hand Sano Valojante Gritiene Zott Yogurt
Mexico	plastic bottle	Level Industrial Hygiene Systems
Singapore	metal can plastic packaging lightstick	Niji Chemical Products Malayan Sugar Mfg. Starlight
United States		
Alabama	oyster tag oyster tag oyster tag oyster tag	Louisiana Daves Oyster & Seafood Louisiana Fishery Louisiana Bayou Caddy Louisiana Melirene Seafood
California	air express tag plastic strapping packing material -gallon container plastic repair foam fish tags fish tags shampoo bottle tags glass coffee cup	Delta Airlines Johnson Oyster Company Lockhead Shipping Pepsi Cola Company Crowley Environmental Services San Diego Shipbuilding H&M Landing Polaris Supreme Saunts Princess Cruise Line Point Loma Sports Fishing Association Crown Cruise Line
Connecticut	balloon conditioner bottle plastic cover plastic tag balloon plastic strapping band	Burger King Best Western Flex-O-Lite Millstone Env. Lab McDonald's Atlantic Silver Co-opl
District of Columbia	plastic cover	American Airlines

Appendix 2. Traceable Debris Reported During the 1993 International Coastal Cleanup (Cont.)

Delaware	balloon glass jar sale sign MRE plastic oil drum	Alexandria Hospital Dover AFB Mispillion Realty So-Pack Co. Inc. Allen Petroleum
Florida	balloon shampoo bottle shampoo bottle cruise ship book sign pen shampoo bottle shampoo bottle bath gel place mat plastic cup shampoo bottle shampoo bottle emergency water	WLGH 103.1 FM Royal Cruise Lines Caribbean Cruise Line Island Princess IBR Real Estate Commodore Cruise Line Royal Cruise Line Crystal Cruise Line Princess Cruise Line Fantasy Cruises Fantasy Cruises Royal Caribbean Holiday American Line Canadian Coast Guard
Georgia	plastic cup balloon balloon	Emerald Princess Publix Chuck E. Cheese
Illinois	balloon balloon crate business card	Mailboxes Etc. Pancake House Alberta Crate Company Unique Equipment
Louisiana	plastic strap	Osmose Wood Products
Maine	lobster band balloons balloon balloon lobster trap lobster trap sign	Canada Chenoy's Deli Davis Oil Service Green Mt. Vermont Keith Googins Dennis Violette Dunne Brothers Painting
Maryland	balloon	Phillips Seafood Restaurant
Michigan	balloon balloon balloon balloon balloon balloon balloon balloon balloon balloon	Lake Land Medical Hills Dale Hospital First Chicago Bank Spectrum Factory Fashion Outlet Sizzler Steak McDonald's 106.3 FMWJ Blockbuster Video Taco Bell

**Appendix 2. Traceable Debris Reported
During the 1993 International Coastal Cleanup (Cont.)**

Michigan (cont)	balloon balloon plastic band	Juan Del Real Account Agent Chuck E. Cheese Amloid Corp.
Mississippi	thermomelt end case	Calco Industries
New Jersey	tube	ICN Pharmaceutical
Rhode Island	balloon	Valley National Bank
South Carolina	balloon balloon business card	United Way Piggly Wiggly Oink Express
Texas	acid bottle	Dominica Oil Co.
Virginia	balloon 50-gallon drum	McDonald's Chemical Research Products
Washington	crate top bucket can	Northwest Molding Products Hillyard Chemical US Navy

Appendix 3. Foreign Debris Items Reported During the 1993 International Coastal Cleanup

LOCATION	SOURCE	TYPE OF DEBRIS
Anguilla	Sweden	oil container
British Virgin Islands	New York	plastic bottle
	Greece	salt container
	USVI	carrier bags
	Barbados	plastic container
Netherlands Antilles	Oman	plastic container
St. Kitts/Nevis	France	plastic oil container
	Spain	sea salt container (plastic)
United States California	Japan	herbal medicine bottle
	Japan	detergent bottle
	Mexico	Pacifico beer bottle
Florida	Argentina	metal toothpaste tube
	Brazil	deodorant
	China	shampoo bottle
	France	plastic bottle
	France	powder
	France	aerosol can
	Germany	medical tape
	Germany	cap
	Greece	plastic bottle
	Russia	butane can
	Russia	plastic wrapper
	Louisiana	China
Mexico		abrasive cleaner
Czechoslovakia		beer can
Mexico		eye drop bottle
Brazil		water bottle
"Spanish"		plastic bottle
Trinidad		glass bottle
Maine	Canada	salmon feed bag
	Canada	lobster pots
	Canada	lobster bands
Maryland	China	aerosol spray can
Michigan	Canada	gas can
New Hampshire	Canada	plastic strap
Oregon	Japan	plastic jug
	Japan	soap bottle
Texas	Mexico	bleach bottles
	Mexico	silicone bottles
	Mexico	milk containers
	Mexico	cement bag

**Appendix 3. Foreign Debris Items Reported
During the 1993 International Coastal Cleanup (Cont.)**

Texas (cont.)	Mexico	detergent bottle
	Mexico	plastic bag
	Mexico	salt bag
	Mexico	water bottle
	Mexico	oil container
	Mexico	rubbing alcohol bottle
	Mexico	shampoo bottles
	Mexico	soap bottles
	"Dutch"	bottle
	Japan	drain cleaner
	Venezuela	plastic bottle
	Argentina	can
	Japan	hair spray can
	Japan	drain cleaner
	Korea	detergent bag
Washington	Australia	fruit carton

Appendix 4. Countries that Have Ratified MARPOL and its Optional Annexes (as of February 1994)

Any country that signs onto MARPOL automatically adopts the first two Annexes (which deal with discharge of oil from ships and the transport of hazardous liquids, respectively). Annexes III, IV, and V are Optional Annexes, and a MARPOL signatory country can choose whether to sign on to them.

An Optional Annex comes into force only when countries representing 50 percent of the world's shipping tonnage have ratified it. Once it comes into effect, an Optional Annex does not apply to any country that has not ratified it, regardless of that country's participation in MARPOL.

As this chart shows, several MARPOL signatories have not yet ratified Annex V, which came into force December 31, 1988 and which regulates the discharge of garbage from ships. Annex III entered into force in July 1992 and regulates the transport of hazardous materials in packaged form. Annex IV, however, which governs the discharge of sewage from ships, has yet to receive the required 50 percent shipping tonnage.

State	Annexes I&II	Annex III	Annex IV	Annex V
Algeria	X	X	X	X
Antigua and Barbuda	X	X	X	X
Argentina	X	X	X	X
Australia	X			X
Austria	X	X	X	X
Bahamas	X	X		X
Belarus	X	X	X	X
Belgium	X	X		X
Brazil	X			
Brunei Darussalam	X			
Bulgaria	X	X	X	X
Canada	X			
China	X			X
Colombia	X	X	X	X
Cote d'Ivoire	X	X	X	X
Croatia	X	X	X	X
Cuba	X			
Cyprus	X			X
Czech Republic	X	X	X	X
Democratic People's Republic of Korea	X	X	X	X
Denmark	X	X	X	X
Djibouti	X			
Ecuador	X	X	X	X
Egypt	X	X	X	X
Estonia	X	X	X	X
Finland	X	X	X	X
France	X	X	X	X
Gabon	X	X	X	X
Gambia	X	X	X	X
Germany	X	X	X	X
Ghana	X			
Greece	X	X	X	X
Hungary	X	X	X	X
Iceland	X	X		X

State	Annexes I&II	Annex III	Annex IV	Annex V
India	X			
Indonesia	X			
Israel	X			
Italy	X	X	X	X
Jamaica	X	X	X	X
Japan	X	X	X	X
Kenya	X	X	X	X
Latvia	X	X	X	X
Lebanon	X	X	X	X
Liberia	X			
Lithuania	X	X	X	X
Luxembourg	X	X	X	X
Malta	X			
Marshall Islands	X	X	X	X
Mexico	X			
Monaco	X	X	X	X
Morocco	X	X	X	X
Myanmar	X			
Netherlands	X	X		X
Norway	X	X		X
Oman	X	X	X	X
Panama	X	X	X	X
Papua New Guinea	X	X	X	X
Peru	X	X	X	X
Poland	X	X	X	X
Portugal	X	X	X	X
Republic of Korea	X			
Romania	X	X	X	X
Russian Federation	X	X	X	X
St. Vincent and Grenadines	X	X	X	X
Seychelles	X			
Singapore	X			
Slovenia	X	X	X	X
South Africa	X			
Spain	X	X	X	X
Suriname	X	X	X	X
Sweden	X	X	X	X
Switzerland	X	X		X
Syrian Arab Republic	X			
Togo	X	X	X	X
Tunisia	X	X	X	X
Turkey	X			
Tuvalu	X	X	X	X
Ukraine	X	X	X	X
United Kingdom	X	X		X
United States	X	X		X
Uruguay	X	X	X	X
Vanuatu	X	X		X
Viet Nam	X			
Yugoslavia	X	X	X	X
Total Number	84	61	52	66
Percentage Tonnage	92.01%	56.42%	41.01%	66.51%

Source: International Maritime Organization, 1994.

To all of the 222,116 parents, teachers, students, scuba divers, zone captains, retirees, business workers, government officials, coordinators, business owners, donors, municipal employees, and all-around beach buddies who helped make the 1993 International Coastal Cleanup a success:

¡Gracias! Aciū! 謝謝你
Tesekkür Ederiz! Dziękuję
شكرا Terima Kasi! *Grazie!*
Merci! Dank U! 감사합니다
Obrigada! Ευχαριστώ
有難う *Asante!* תודה
Thank You!

