

1996

*International
Coastal
Cleanup*

RESULTS



CENTER FOR
MARINE
CONSERVATION

Produced by **Seba Sheavly** with special contributions by **Ruth Bizot** (writing) and **Richard Randall** (data compilation and analysis). Edited and designed by **Rose Bierce**

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INTERNATIONAL COASTAL CLEANUP
RESULTS

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The Center for Marine Conservation (CMC), established in 1972, is a nonprofit organization committed to protecting ocean environments and conserving the global abundance and diversity of marine life. Through science-based advocacy, research, and public education, CMC promotes informed citizen participation to reverse the degradation of our oceans.

The **International Coastal Cleanup**, part of CMC's Citizen Outreach and Monitoring Program and Clean Ocean Campaign, is supported by CMC's 120,000 members and special contributions from the following:

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Colum Muccio (Guatemala)
Sarah Muscat (Malta)
Charmaine Nathaniel (St. Lucia)
Quint Newcomer (Costa Rica)
Maris Paju (Estonia)
Daysi Patino (Ecuador)
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Daniel Roller (Argentina)
Kevin Rose (Indonesia)
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Andrew Simmons
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Gabrielle Springer (Barbados)
Ricky Taylor (South Africa)
Kate Thome (Singapore)
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Gina Wharwood
(Trinidad and Tobago)
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Ray Williams (Jamaica)
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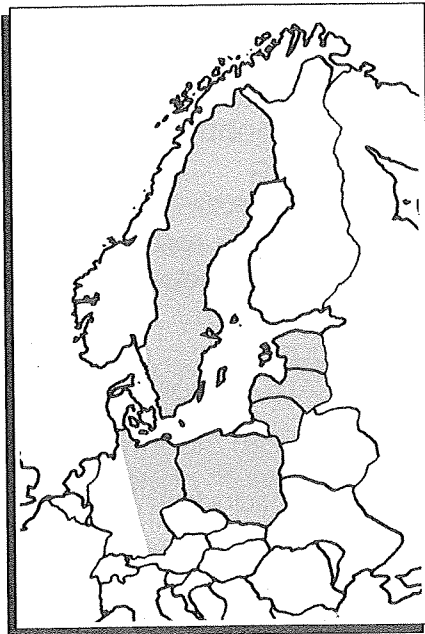


British Virgin Islands

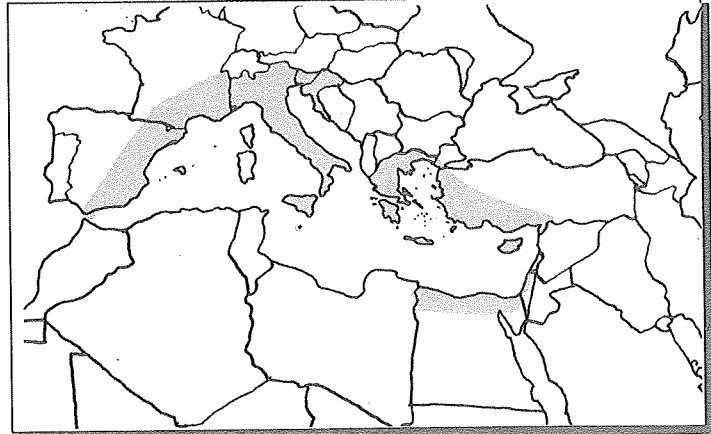
“Everyone is keen
on the cleanup. ..very
exhilarating to be
a part of it.”

cleanup volunteer, Saudi Arabia

REGIONAL GROUPING PARTICIPATING IN THE



Baltic Sea: Sweden, Latvia, Lithuania, Estonia, Poland, Germany



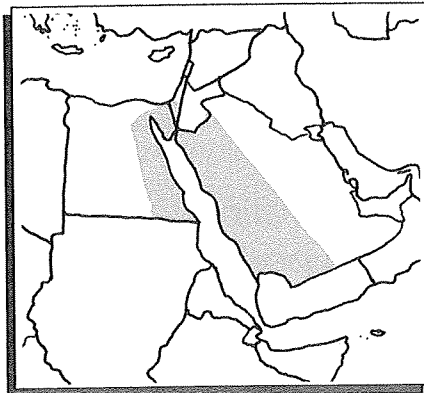
Mediterranean Sea: Gibraltar, Spain, France, Italy, Slovenia, Croatia, Greece, Turkey, Cyprus, Israel, Egypt, Tunisia, Malta



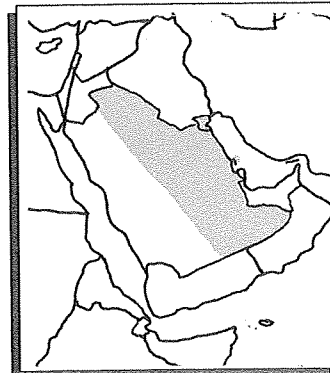
Central Europe: Switzerland, Austria



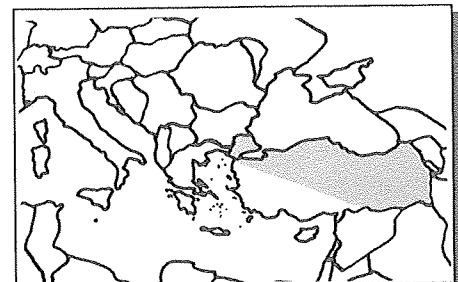
North Sea: United Kingdom, France, Belgium, The Netherlands, Germany, Norway



Red Sea: Egypt, Israel, Saudi Arabia

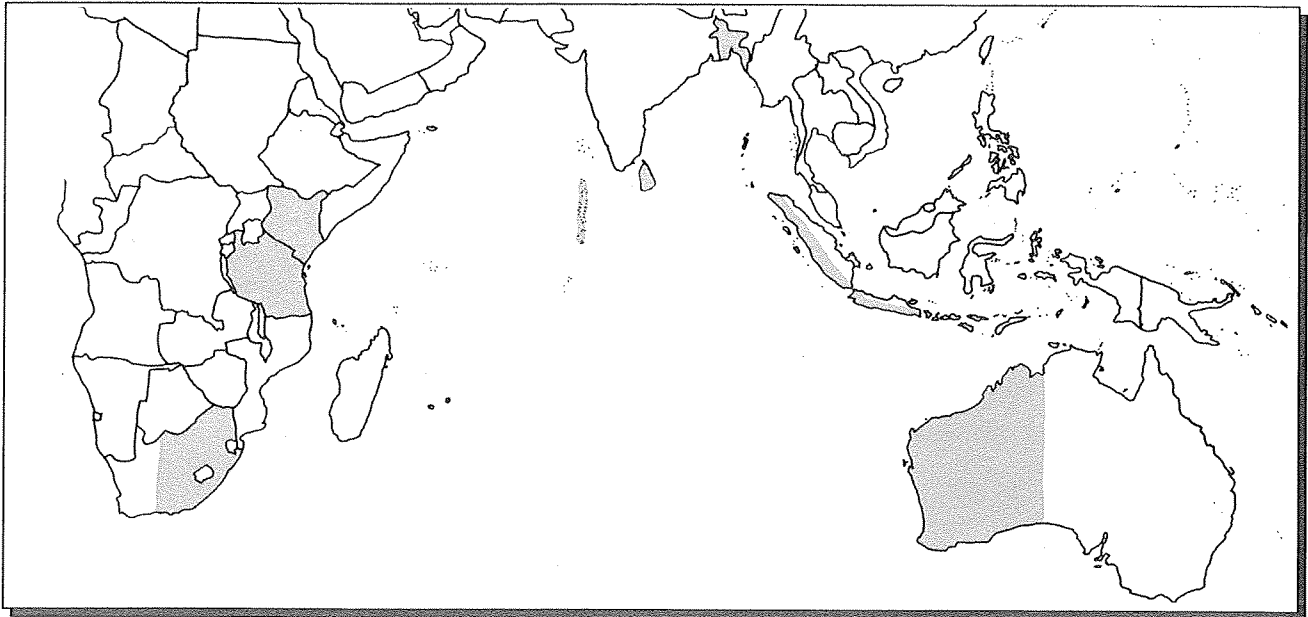


Arabian Gulf: Kuwait, Bahrain, Saudi Arabia



Black Sea: Turkey (including Bosphorus Strait)

OF COUNTRIES 1996 COASTAL CLEANUP



Indian Ocean: South Africa, Tanzania, Kenya, The Maldives, Sri Lanka, Bangladesh, Indonesia, Australia



Pacific Ocean: Canada, United States, Mexico, Guatemala, El Salvador, Costa Rica, Panama, Colombia, Ecuador, Peru, Chile, Japan, Taiwan, Hong Kong, Thailand, Malaysia, Singapore, Indonesia, Philippines, Palau, Micronesia, Australia, New Zealand, Fiji, Tonga, Kiribati

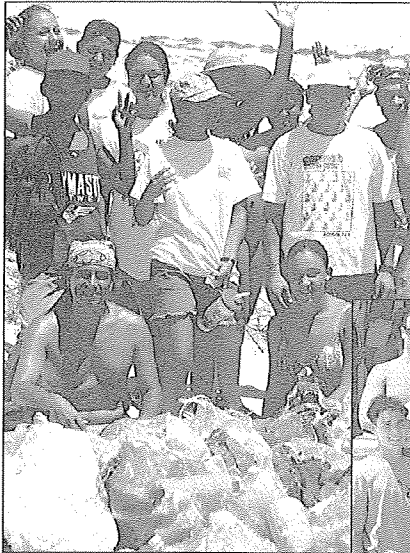


Atlantic Ocean: Canada, United States, Bermuda, Brazil, Uruguay, Argentina, Ireland, United Kingdom, France, Spain, Portugal, Ivory Coast, Benin, Nigeria, Cameroon, South Africa



Wider Caribbean: Bahamas, Cuba, Cayman Islands, Jamaica, Haiti, Dominican Republic, Turks and Caicos, British Virgin Islands, St. Kitts and Nevis, Montserrat, Dominica, St. Lucia, Barbados, St. Vincent and the Grenadines, Grenada, Trinidad and Tobago, Guyana, Venezuela, Netherlands Antilles, Colombia, Panama, Costa Rica, Guatemala, Belize, Mexico, United States

This report is dedicated to the 277,710 individuals around the world whose spirit of volunteerism and commitment to clean water and healthy rivers, lakes, and oceans made the 1996 International Coastal Cleanup possible.



Mexico



Australia



Poland



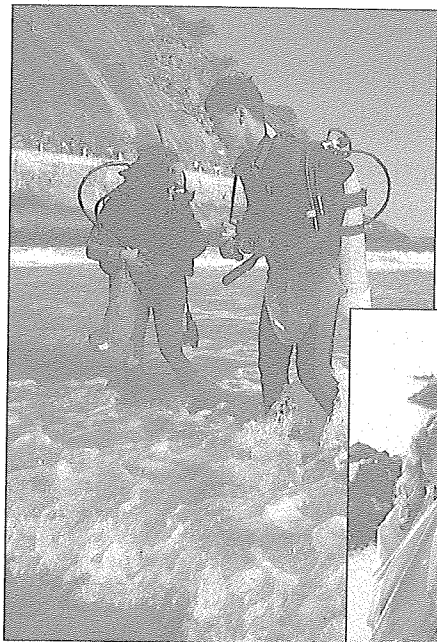
Saudi Arabia



Greece

British Virgin Islands

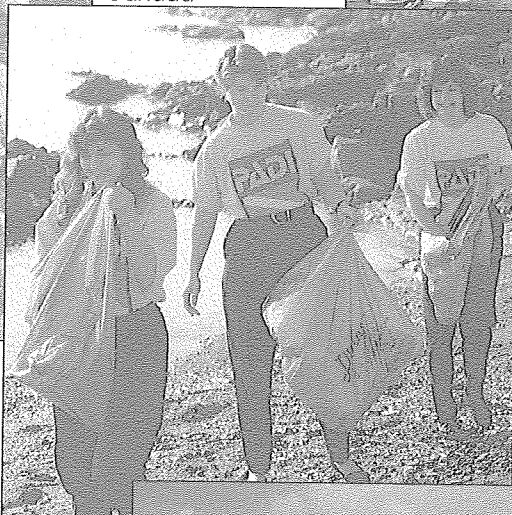




Canada



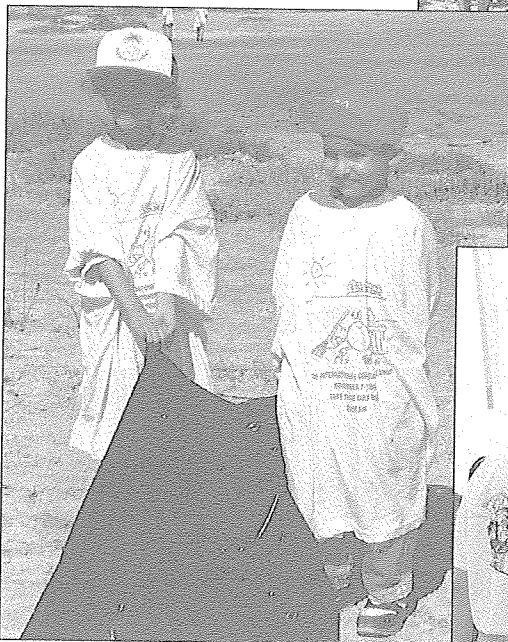
Colombia



Brazil



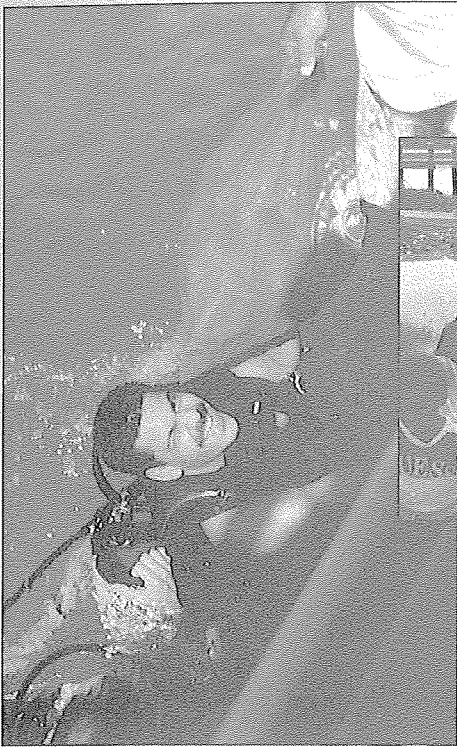
Turks and Caicos



Bahrain

Singapore





Kuwait

Bahamas

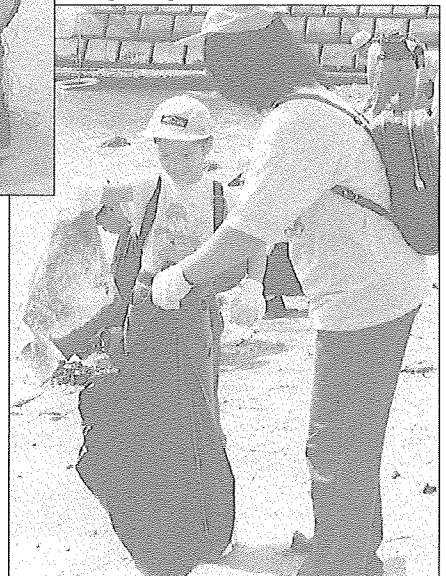


Benin

Chile

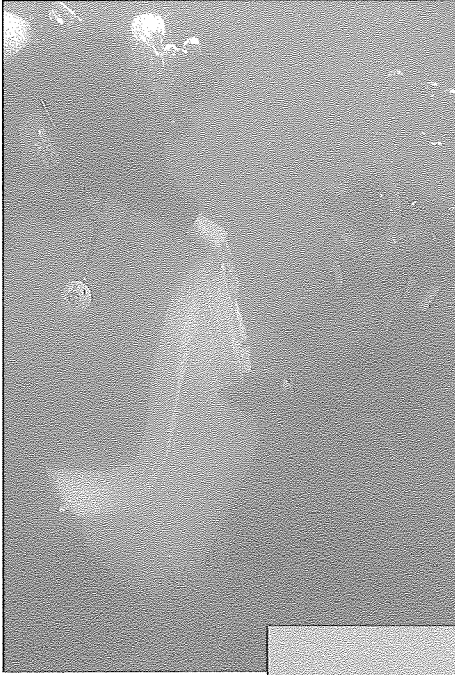


Hong Kong

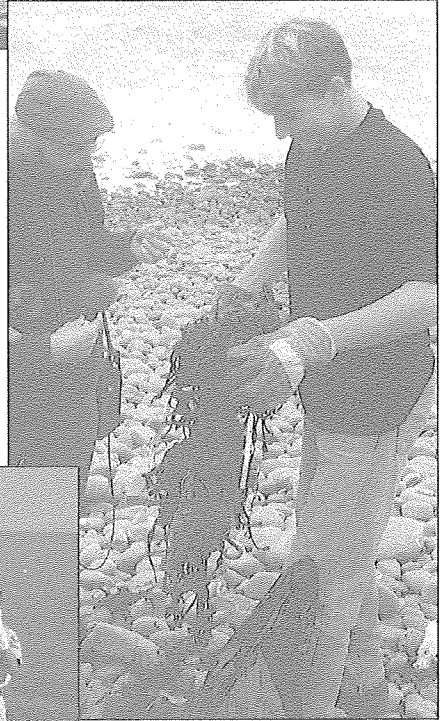
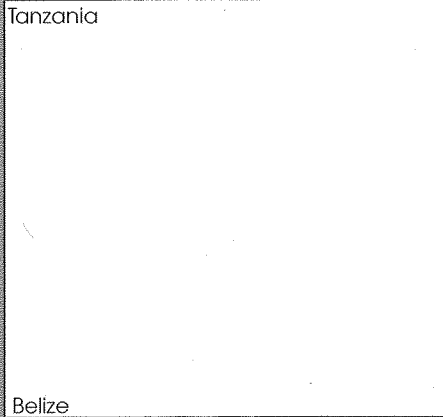


St. Kitts and Nevis

Spain



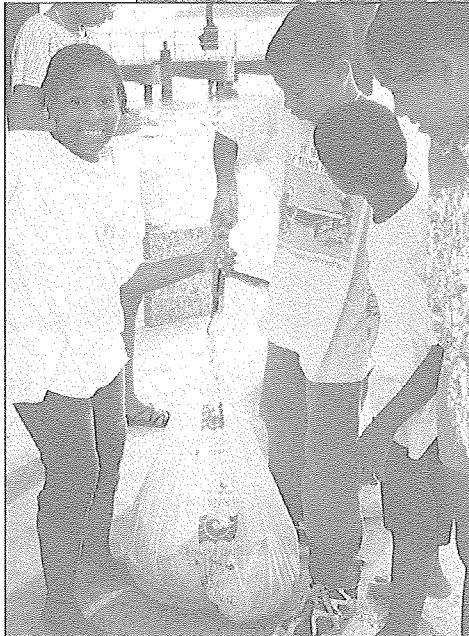
Tanzania



Belize



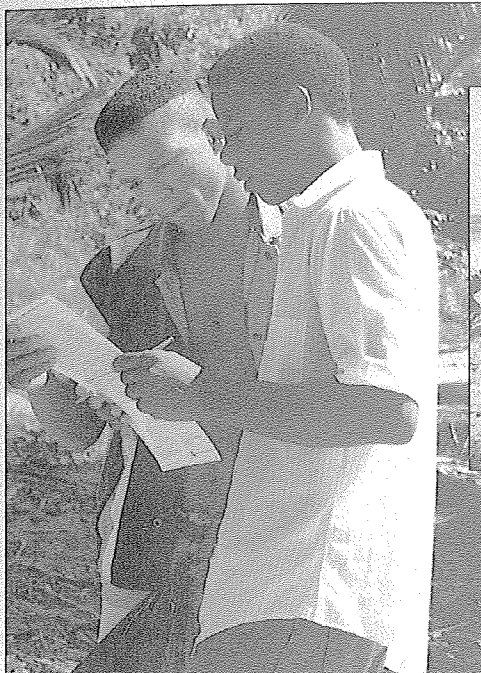
United Kingdom



Netherlands Antilles

Nigeria

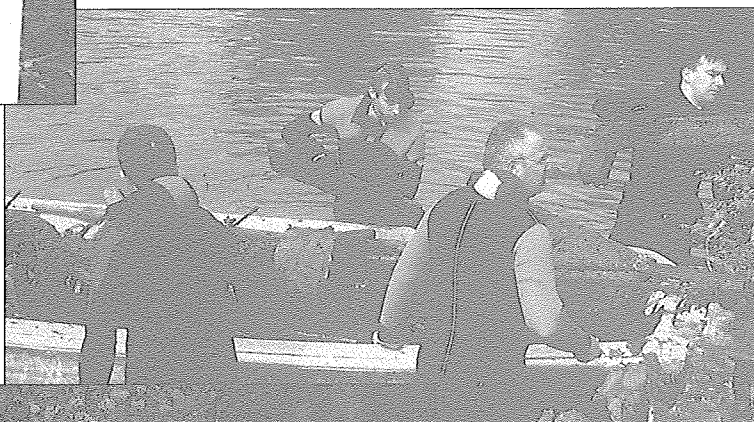




Dominican Republic



Lithuania



Italy

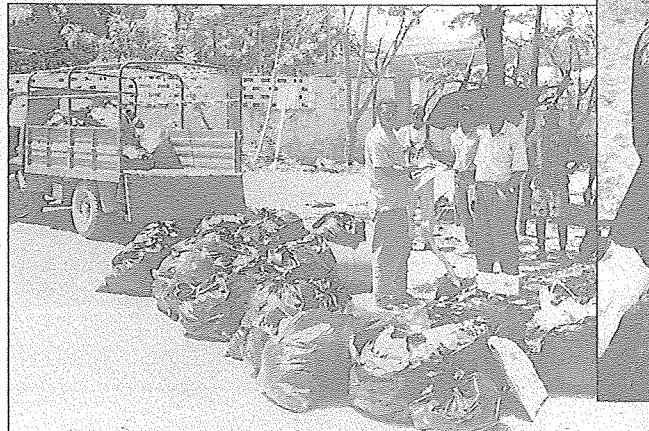


Belgium

El Salvador



Kenya

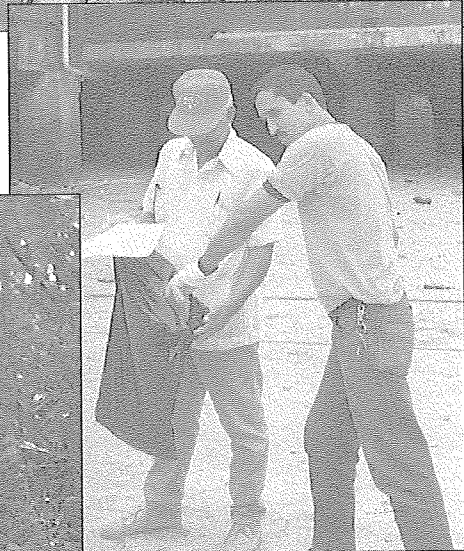




Egypt



Cuba



Panama
Croatia



The Maldives



United States



INTRODUCTION

For more than 10 years, the **Center for Marine Conservation** has been the leading advocate to stop marine debris at its many sources. In 1996 the Center for Marine Conservation sponsored its first coastal cleanup, when 2,800 volunteers collected 124 tons of trash from 122 miles of Texas shoreline. In 1988, the first U.S. nationwide cleanup took place, just months before Annex V of the MARPOL Treaty took effect.¹ The Cleanup became international the next year when Mexico and Canada joined in. Since 1989, more than a million volunteers from 94 countries bordering every major body of water on our planet have taken part in the Cleanup (Appendix 1). But the International Coastal Cleanup is not about trash. It's about the compelling need for a clean ocean and clean waterways. At its heart, the Cleanup is about people, acting cooperatively and in partnership to create solutions.

As the Cleanup has grown, it has moved inland from the coasts to include streams, rivers, lakes, and other waterways, all of which wind their way eventually to the ocean itself. Moving inland is, in many ways, moving closer to the source of marine debris, much of which originates far from the coasts where it ends up. In recent years the Cleanup has also expanded into significant underwater efforts with strong support from the dive community. Even with all this effort, and the millions of pounds of trash that has been removed over the years, the Cleanup is still just a snapshot, a brief glimpse of the total problem of marine debris.

Historically, the ocean has been a common dumping ground for human-made debris. Any manufactured material thrown, dumped, or allowed into waterways and the ocean counts as marine debris. Prevailing winds and currents carry these materials all over the world. The deleterious effects of marine debris are manifold: negative economic and aesthetic impacts, harm and risk to human health and safety, death and injury to animals through entanglement and ingestion, and habitat destruction.

Established in 1973, the international protocol known as MARPOL 73/78 prohibits dumping at sea. The treaty has been in effect in the United States only since December 31, 1988, following ratification by Congress in 1987. MARPOL 73/78 regulates numerous materials known to be dumped at sea. Solid wastes, such as garbage and plastics, are covered in Annex V of the Treaty. Although 83 countries had ratified Annex V as of July 1997, the problem of marine debris has not gone away, as the Cleanup reveals. Ratification, unfortunately, is not the same as compliance.

The data in this and previous Cleanup reports documents the extent of the marine debris problem. The information contained here can be a highly effective tool for citizens and policy makers seeking to deal effectively with this pollution issue. It can help evaluate progress as well as highlight areas of special concern. Since the first Cleanup, significant strides have been made to reduce the problem of marine debris and improve the effective, responsible handling of solid waste. But as this report clearly shows, we still—every one of us—have much work to do before this problem is solved.

As one cleanup volunteer in Malaysia noted, “People were looking at what we were doing and throwing their empty soda cans [on the ground].”

¹The International Convention for the Prevention of Pollution from Ships is commonly referred to as MARPOL (MARine POLLution) 73/78. Ocean dumping of any ship-generated garbage, especially plastics, has been prohibited since Annex V went into effect on December 31, 1988. These restrictions apply to those countries and their territorial waters that have ratified this portion of the Treaty. As of July 1997, 83 countries have ratified MARPOL 73/78 Annex V. For a complete listing of International Coastal Cleanup participants that are signatory to MARPOL 73/78, see Appendix 2.

1996 INTERNATIONAL COASTAL CLEANUP RESULTS

OVERVIEW

The 1996 International Coastal Cleanup marked the 11th year that the Center for Marine Conservation has been working to clean beaches, shorelines, and waterways. Its annual cleanup efforts have been part of a comprehensive campaign to define, publicize, and solve the problem of marine debris. More than 90 countries were scheduled to participate in the 1996 Cleanup, but not all were able to submit their data in time to be processed for this report. This year's Cleanup comprised locally supported, locally organized cleanups at 4,781 sites in 75 countries and sovereign territories (Table 1). More than 300 of these sites were underwater. Among participating countries, 21 conducted land-only cleanups, 12 conducted underwater-only cleanups, and 42 countries conducted both types of cleanups. Of the 75 countries participating, 64 returned their data for tabulation in this report.

Labor for this worldwide effort was supplied by 277,710 volunteers who, working sometimes under adverse weather conditions, willingly removed 4,890,914 pounds of trash from 9,128 miles of shoreline, both above and below the water. At an average of 17.61 pounds per person, that's an awful lot of cigarette butts, the Cleanup's most numerous debris item. Of course, some items were slightly heavier, from the entire railway sleeper car retrieved in Scotland to the stacks of bricks, concrete, and construction materials that turned up in Malaysia. In all, 5,944,999 debris items were removed, including 171,945 from underwater sites (Table 2).

1996 was a banner year all around. Volunteer participation jumped 29% over the previous year. The United States accounted for nearly 55% of the volunteers with 151,988 people, followed by the Philippines (52,152) and Venezuela (18,691). Other countries with hefty volunteer forces included Japan (7,811), Panama (6,746), Mexico (3,951), the United Kingdom (3,437) and Singapore (2,771). Though the number of total items dropped, nearly 30% more debris, by weight, was removed this year than last year. Miles of shore cleaned (both above and below the water) also increased by 30%.

But truly, it's the heart of the effort, not the size, that counts most. We're just as proud of those six willing Bangladeshi volunteers and the four people who conducted a cleanup in France. All change, in the end, comes only from the individual efforts of individual people. We all count, and we all can make a difference.

Each cleanup had its own flavor. Volunteers in St. Kitts and Nevis nearly became debris items themselves. Recent storms had turned sections of the beach into quicksand, temporarily trapping three workers, two to their knees and one to her waist. Every country in the United Kingdom participated in the Cleanup, from Northern Ireland to Cornwall, Wales, England, and Scotland. Divers in New Zealand were frustrated by the cleanliness of the beach they had selected for their cleanup. "Next time," they said, "we will try somewhere not as tidy."

The Netherlands Antilles cleanup team made a video of their day's work, and gave a copy afterwards to all their sponsors, as a thank-you gift. At the end of one of Costa Rica's local cleanups, bags of recyclable plastics and aluminum were flown back to San Jose for recycling. Volunteers in the Bahamas staged a parade, wearing hats fashioned from "the natural and unnatural" things they found on their beach.

Comparison of cleanup statistics from country to country must be made carefully. Because each local effort is volunteer-based, and because of differences in geography and resources, no two cleanups are alike. Natural forces frequently influence the results of an event.

Information in this report is organized largely by region, in order to bring perspective to the comprehensive problem of marine debris, as well as point the way to innovative regional solutions (see maps pp. vi and vii). The eleven regions are the Atlantic Ocean, Arabian Gulf, Baltic Sea, Black Sea, Central Europe, Indian Ocean, Mediterranean Sea, North Sea, Pacific Ocean, Red Sea and Wider Caribbean. The results from several countries are divided among more than one region, to more accurately reflect the debris situation. For example, The United States' results are split between the Atlantic, Pacific, and Caribbean regions. Canada appears in both the Atlantic and Pacific; the United Kingdom in Atlantic and North Sea.

People are the cause of marine debris. People are also the solution. Over and over, volunteers wrote on their data cards about the need for more cleanups, more dumpsters, and more education. "It is hard work," one Philippine worker said, "but it's okay, because it is our responsibility to keep our town and country clean and green"— and our ocean and our planet.

(text continues on page 13)



Japan

"Everyone was surprised at the amount of rubbish we found, they thought it would be a lot less."

cleanup volunteer, New Zealand



Panama

TABLE 1a. 1996 International Coastal Cleanup: Who, How Much, and How Far (Land and Underwater)

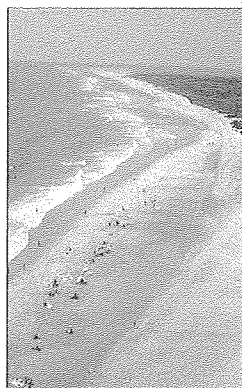
Country	Volunteers	Pound / Kilograms Collected		Miles / Kilometers Cleaned	
Argentina	67	1,320	600	1.1	0.7
Australia	205	2,384	1,084	9.6	6.0
Austria	284	10,716	4,871	n/r	n/r
Bahamas	471	15,105	6,866	31.1	19.3
Bahrain	1,847	58,287	26,494	3.7	2.3
Bangladesh	6	75	34	1	0.6
Barbados	397	29,887	13,585	9.9	6.1
Belgium	58	616	280	n/r	n/r
Belize	463	3,598	1,635	18.3	11.3
Bermuda	172	17,600	8,000	0.3	0.2
Brazil	384	3,548	1,613	3.8	2.4
British Virgin Islands	160	2,934	1,334	1.6	1.0
Cameroon	149	16,328	7,422	1.2	0.7
Canada	290	7,696	3,498	27.6	17.1
Colombia	100	26,400	12,000	3.7	2.3
Costa Rica	865	1,158	526	86	53.3
Croatia	1,119	34,047	15,476	34.2	21.2
Cuba	25	374	170	0.2	0.1
Cyprus	68	1,419	645	3.9	2.4
Dominican Republic	1,175	17,203	7,820	15.6	9.7
Ecuador	1,062	18,731	8,514	19.8	12.3
Egypt	429	47,036	21,380	26.4	16.4
El Salvador	137	1,300	591	4	2.5
France	4	66	30	n/r	n/r
Germany	921	14,016	6,371	n/r	n/r
Greece	969	10,723	4,874	24.5	15.2
Guatemala	229	5,990	2,723	5.3	3.3
Haiti	14	271	123	0.3	0.2
Hong Kong	141	4,154	1,888	0.8	0.5
Israel	635	15,400	7,000	10.9	6.8
Italy	671	32,976	14,989	n/r	n/r
Ivory Coast	220	5,005	2,275	1.4	0.9
Jamaica	1,145	20	9	7.9	4.9
Japan	7,811	46,231	21,014	26.7	16.6
Kenya	1,934	23,844	10,838	54.4	33.7
Kuwait	440	7,036	3,198	n/r	nr/
Latvia	132	6,128	2,785	8.2	5.1
Lithuania	419	8,558	3,890	5.9	3.7
Malaysia	320	2,280	1,036	2.1	1.3
Maldives	101	968	440	n/r	n/r
Malta	45	1,188	540	0.2	0.1
Mexico	3,951	88,823	40,374	58	36.0
Micronesia	29	1,050	477	0.6	0.4
Netherlands	2,332	20,508	9,322	n/r	n/r
Netherlands Antilles	1,443	33,870	15,395	1,781.90	1,104.8

Country	Volunteers	Pound / Kilograms Collected		Miles / Kilometers Cleaned	
New Zealand	486	35	6	n/r	nr/
Nigeria	388	3,121	1,419	2.5	1.6
Norway	18	81	37	1.6	1.0
Palau	14	1,750	795	n/r	n/r
Panama	6,746	n/r	n/r	83.3	51.6
Philippines	52,152	1,132,090	514,586	325	201.5
Poland	4,021	17,600	8,000	195.3	121.1
Portugal	557	35,768	16,258	13.8	8.6
Saudi Arabia	184	11,550	5,250	5	3.1
Singapore	2,771	182	83	15.8	9.8
Slovenia	97	594	270	n/r	n/r
South Africa	460	9,005	4,093	33.5	20.8
Spain	512	27,667	12,576	n/r	n/r
Sri Lanka	420	4,851	2,205	2	1.2
St. Kitts & Nevis	264	8,575	3,898	20.5	12.7
St. Vincent & Grenadines	148	n/r	n/r	n/r	n/r
Switzerland	154	11,370	5,168	n/r	n/r
Taiwan	127	990	450	2.2	1.4
Tanzania	72	8,360	3,800	0.3	0.1
Thailand	424	2,275	1,034	8.1	5.0
Turkey	32	132	60	n/r	n/r
Turks and Caicos Islands	114	1,981	900	5.9	3.7
United Arab Emirates	38	220	100	0.6	0.4
United Kingdom	3,437	38,502	17,501	121.6	75.4
United States	151,502	2,919,730	1,327,150	5,929.8	3,676.5
Uruguay	42	600	273	n/r	n/r
Venezuela	18,691	7,020	3,191	69	42.8
Grand Totals	277,710	4,890,914	2,223,143	9,127.9	5,659.3

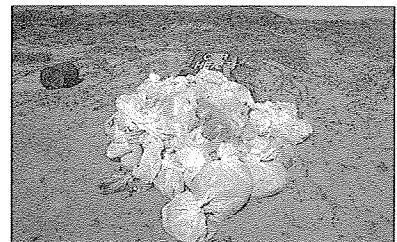
n/r = not reported



277,710 Volunteers



9,128 Miles



4,890,914 Pounds

TABLE 1b. 1996 International Coastal Cleanup: Who, How Much, and How Far (Land Only)

Country	Volunteers	Pounds / Kilograms Collected		Miles / Kilometers Cleaned	
Argentina	17	132	60	0.7	0.4
Australia	74	508	231	2.2	1.4
Bahamas	426	11,081	5,037	28.1	17.4
Bahrain	1,847	58,287	26,494	3.7	2.3
Bangladesh	6	75	34	1.0	0.6
Barbados	332	24,805	11,275	n/r	n/r
Belize	463	3,598	1,635	18.3	11.3
Bermuda	153	15,400	7,000	n/r	n/r
Brazil	351	3,170	1,441	3.7	2.3
British Virgin Islands	120	2,854	1,297	1.6	1.0
Cameroon	149	16,328	7,422	1.2	0.7
Canada	290	7,696	3,498	27.6	17.1
Colombia	100	26,400	12,000	3.7	2.3
Costa Rica	865	1,158	526	86.0	53.3
Croatia	1,068	24,081	10,946	33.0	20.5
Cuba	25	374	170	0.2	0.1
Cyprus	50	1,067	485	3.0	1.9
Dominican Republic	1,122	16,678	7,581	12.9	8.0
Ecuador	1,062	18,731	8,514	19.8	12.3
Egypt	310	43,560	19,800	22.9	14.2
El Salvador	20	n/r	n/r	n/r	n/r
Greece	954	10,613	4,824	24.5	15.2
Guatemala	185	1,691	769	4.7	2.9
Haiti	14	271	123	0.3	0.2
Hong Kong	126	4,154	1,888	0.3	0.2
Israel	500	15,400	7,000	9.3	5.8
Ivory Coast	220	5,005	2,275	1.4	0.9
Jamaica	1,130	n/r	n/r	7.9	4.9
Japan	7,673	45,380	20,627	26.0	16.1
Kenya	1,924	23,734	10,788	53.9	33.4
Kuwait	260	436	198	n/r	n/r
Latvia	132	6,128	2,785	8.2	5.1
Lithuania	419	8,558	3,890	5.9	3.7
Malaysia	225	1,708	776	1.7	1.1
Malta	20	616	280	0.1	0.0
Mexico	3,834	85,805	39,002	54.1	33.5
Micronesia	7	100	45	0.3	0.2
Netherlands Antilles	1,110	30,778	13,990	1,655.5	1,026.4
New Zealand	326	35	16	n/r	n/r
Nigeria	388	3,121	1,419	2.5	1.6
Norway	10	55	25	0.9	0.6
Palau	14	1,750	795	n/r	n/r
Panama	6,740	n/r	n/r	83.2	51.6
Philippines	51,187	1,121,457	509,753	312.7	193.9
Poland	4,021	17,600	8,000	195.3	121.1

Country	Volunteers	Pounds / Kilograms Collected		Miles / Kilometers Cleaned	
		Pounds	Kilograms	Miles	Kilometers
Portugal	442	33,660	15,300	12.4	7.7
Saudi Arabia	122	11,242	5,110	3.5	2.2
Singapore	2,700	n/r	n/r	14.2	8.8
South Africa	455	8,998	4,090	33.2	20.6
Sri Lanka	420	4,851	2,205	2.0	1.2
St. Kitts & Nevis	257	8,561	3,891	20.5	12.7
St. Vincent & Grenadines	148	n/r	n/r	n/r	n/r
Taiwan	70	660	300	2.0	1.2
Tanzania	72	8,360	3,800	0.3	0.1
Thailand	303	1,960	891	7.9	4.9
Turks and Caicos Islands	105	1,581	719	5.8	3.6
United Kingdom	3,352	37,781	17,173	121.6	75.4
United States	144,627	2,792,864	1,269,484	5,797.8	3,594.6
Uruguay	15	n/r	n/r	n/r	n/r
Venezuela	18,102	5,060	2,300	68.5	42.5
Grand Totals	261,459	4,575,954	2,079,979	8,808.0	5,461.0

n/r = not reported



261,459 Volunteers



8,808 Miles



4,575,954 Pounds

TABLE 1c. 1996 International Coastal Cleanup: Who, How Much, and How Far
(Underwater Only)

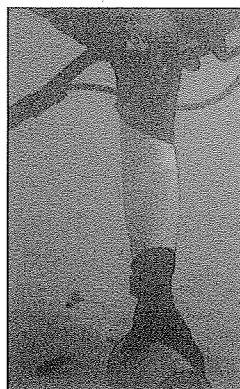
Country	Volunteers	Pounds/Kilograms Collected		Miles/Kilometers Cleaned	
Argentina	50	1,188	540	0.5	0.3
Australia	131	1,876	853	7.4	4.6
Austria	284	10,716	4,871	n/r	n/r
Bahamas	45	4,024	1,829	3.1	1.9
Barbados	65	5,082	2,310	9.9	6.1
Belgium	58	616	280	n/r	n/r
Bermuda	19	2,200	1,000	0.3	0.2
Brazil	33	378	172	n/r	n/r
British Virgin Islands	40	80	36	n/r	n/r
Croatia	51	9,966	4,530	1.2	0.7
Cyprus	18	352	160	0.9	0.6
Dominican Republic	53	525	239	2.7	1.7
Egypt	119	3,476	1,580	3.4	2.1
El Salvador	117	1,300	591	4.0	2.5
France	4	66	30	n/r	n/r
Germany	921	14,016	6,371	n/r	n/r
Greece	15	110	50	n/r	n/r
Guatemala	44	4,299	1,954	0.5	0.3
Hong Kong	15	n/r	n/r	0.5	0.3
Israel	135	n/r	n/r	1.6	1.0
Italy	671	32,976	14,989	n/r	n/r
Jamaica	15	20	9	n/r	n/r
Japan	138	851	387	0.7	0.4
Kenya	10	110	50	0.4	0.2
Kuwait	180	6,600	3,000	n/r	n/r
Malaysia	95	572	260	0.4	0.2
Maldives	101	968	440	n/r	n/r
Malta	25	572	260	0.1	0.0
Mexico	117	3,019	1,372	3.9	2.4
Micronesia	22	950	432	0.3	0.2
Netherlands	2,332	20,508	9,322	n/r	n/r
Netherlands Antilles	333	3,092	1,405	126.4	78.4
New Zealand	160	n/r	n/r	n/r	n/r
Norway	8	26	12	0.6	0.4

Country	Volunteers	Pounds/Kilograms Collected		Miles/Kilometers Cleaned	
Panama	6	n/r	n/r	0.1	0.0
Philippines	965	10,633	4,833	12.3	7.6
Portugal	115	2,108	958	1.4	0.9
Saudi Arabia	62	308	140	1.5	0.9
Singapore	71	182	83	1.6	1.0
Slovenia	97	594	270	n/r	n/r
South Africa	5	7	3	0.3	0.2
Spain	512	27,667	12,576	n/r	n/r
St. Kitts & Nevis	7	14	6	n/r	n/r
Switzerland	154	11,370	5,168	n/r	n/r
Taiwan	57	330	150	0.2	0.1
Thailand	121	315	143	0.2	0.1
Turkey	32	132	60	n/r	n/r
Turks and Caicos Islands	9	400	182	0.1	0.0
United Arab Emirates	38	220	100	0.6	0.4
United Kingdom	85	722	328	n/r	n/r
United States	6,875	126,866	57,666	132.1	81.9
Uruguay	27	600	273	n/r	n/r
Venezuela	589	1,960	891	0.5	0.3
Grand Totals	16,251	314,960	143,164	319.9	198.3

n/r = not reported



16,251 Volunteers



320 Miles



314,960 Pounds

TABLE 2. Total Numbers of Debris Items Collected
During 1996 International Coastal Cleanups

Debris Items	Totals	Land Only	Underwater
PLASTIC: Food Bags/Wrappers	319,771	311,958	7,813
Salt Bags	8,227	8,125	102
Trash Bags	80,375	77,999	2,376
Other Bags	115,365	112,577	2,788
Plastic Beverage Bottles	202,737	194,454	8,283
Bleach Bottles	32,417	30,929	1,488
Milk/Water Gallon Jugs	47,323	45,600	1,723
Oil/Lube Bottles	31,744	30,527	1,217
Other Plastic Bottles	69,292	67,006	2,286
Buckets	17,524	16,835	689
Caps/Lids	254,809	250,470	4,339
Cigarette Butts	786,997	767,063	19,934
Cigarette Lighters	33,924	33,159	765
Cups/Utensils	126,542	122,369	4,173
Diapers	17,887	17,053	834
Fishing Line	39,638	37,966	1,672
Fishing Floats/Lures	16,472	15,501	971
Fishing Nets	18,327	17,981	346
Hard Hats	2,063	2,047	16
Light Sticks	18,796	18,294	502
Plastic Pieces	361,765	357,094	4,671
Pipe Thread Protectors	7,064	6,788	276
Rope	110,049	108,591	1,458
Long Sheeting	9,337	8,940	397
Short Sheeting	13,161	12,857	304
Six-Pack Holders	29,188	28,272	916
Strapping Bands	24,648	23,862	786
Straws	187,892	185,276	2,616
Syringes	7,424	7,188	236
Tampon Applicators	20,321	19,820	501
Toys	26,840	26,107	733
Vegetable Sacks	11,625	11,113	512
Write Protection Rings	8,773	8,212	561
Other Plastic	173,110	167,989	5,121
FOAMED PLASTIC: Buoys	21,213	20,978	235
Foamed Cups	126,563	123,997	2,566
Egg Cartons	6,975	6,823	152
Fast Food Containers	42,213	40,690	1,523
Meat Trays	24,565	24,134	431
Packaging Materials	64,831	63,257	1,574
Foamed Pieces	273,793	269,731	4,062
Foamed Plates	32,775	31,974	801
Other Foamed Plastic	33,848	33,206	642

Debris Items	Totals	Land Only	Underwater
GLASS: Beverage Bottles	196,097	179,718	16,379
Food Jars	32,701	30,193	2,508
Other Glass Bottles/Jars	42,112	40,344	1,768
Fluorescent Light Tubes	3,936	3,876	60
Light Bulbs	10,015	9,844	171
Glass Pieces	228,282	222,397	5,885
Other Glass	24,598	23,493	1,105
RUBBER: Balloons	29,510	29,106	404
Condoms	9,637	9,474	163
Rubber Gloves	15,646	15,301	345
Tires	16,351	15,169	1,182
Other Rubber	52,984	51,624	1,360
METAL: Bottle Caps	147,575	143,807	3,768
Aerosol Cans	18,812	17,330	1,482
Beverage Cans	199,094	186,905	12,189
Food Cans	27,229	23,892	3,337
Other Cans	16,059	15,272	787
Metal Crab/Lobster Traps	5,418	5,032	386
55 Gallon Rusty Drums	6,837	6,481	356
55 Gallon New Drums	1,194	1,173	21
Metal Pieces	66,949	63,956	2,993
Pull Tabs	41,193	40,018	1,175
Wire	23,096	22,003	1,093
Other Metal	58,686	55,500	3,186
PAPER: Bags	64,882	63,642	1,240
Cardboard	42,134	41,426	708
Cartons	36,857	35,602	1,255
Paper Cups	55,474	54,457	1,017
Newspapers/Magazines	35,726	34,975	751
Paper Pieces	217,241	214,479	2,762
Paper Plates	22,043	21,670	373
Other Paper	59,690	57,217	2,473
WOOD: Crab/Lobster Traps	3,494	3,452	42
Crates	4,009	3,850	159
Lumber Pieces	115,095	113,241	1,854
Pallets	20,122	19,604	518
Other Wood	51,710	50,959	751
CLOTH: Clothing/Pieces	84,308	81,760	2,548

GRAND TOTALS	5,944,999	5,773,054	171,945
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1996 CLEANUP HIGHLIGHTS

There's only one thing to say about the mountains of trash retrieved by volunteers in the 1996 International Cleanup: **It could fill a house.** Rather, there **was** a house—found by U.S. volunteers in Louisiana. And across the globe volunteers found enough furnishings to outfit an entire neighborhood. Selected household *accouterments* include:

Chairs, tables, stereos, and computers. Mattresses, boxsprings, and alarm clocks. Telephones and toilets. Lamps and lightbulbs. Washing machines, water heaters, refrigerators and ovens — the accumulated debris offered something for every room in the house. And if the house itself didn't suit you, there was a handyman's array of do-it-yourself tools, including a hacksaw, screwdrivers, bolt cutters, grease tubes, and paint brushes.



Egypt

From the ridiculous to the sublime, this year's Cleanup had something for everyone.

- **Animal bones showed up everywhere:** chicken bones, cow bones, fish bones. "Sadly, pieces of turtle shell," one crew captain in Bahrain reported. Reptile bones and snake bones. A snakeskin in the Philippines. Whale vertebrae in Brazil. Numerous bird bones, including the "bones of a yellow-shafted flicker" listed by a conscientious Canadian volunteer. Even human bones.
- **Life in the fast lane is guaranteed,** with a vehicle for every use, from a railway sleeper car in Scotland and a Singapore trolley car to an aluminum dinghy, motorcycle and, in St. Kitts and Nevis, an electricity department truck. There was even a brand new bicycle found among the debris, as well as part of an airplane propeller. And there were plenty of traffic cones to guide the "traffic."
- **War is hell:** Volunteers tagged and bagged countless shell casings, bullets, and at least one live artillery round, along with a spent mortar bomb, and an ammunition case and .50 caliber machine gun, both from World War II.

Unusual items included the "orange snake charmer flute" reported by Singapore volunteers and the "metal shower tray hanging on a tree" in Japan. Election flyers turned up in South Africa. Kind-hearted Kenyan crew members reported "a jacket, jeans, blouse, shirt, sock, canvas life jacket — nobody inside them all, thankfully."

Other items taxed the volunteers' ability to describe them, from "entangled messy stuff" and "an unidentifiable electric device" to a "piece of rubber, not sure what it was." And while we don't know if the bridge retrieved in the Netherlands Antilles was orthodontic or architectural, we do know that it — like all debris — has no place in our ocean.

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

The International Coastal Cleanup does much more than just pick up trash. By using detailed, standardized data cards developed by the Center for Marine Conservation, volunteers accumulate valuable information about the types and sources of debris collected. Analyzed and tracked year by year, this information serves as a powerful tool for educating the public, influencing public policy, and effecting positive behavioral change on the part of individuals, organizations, and communities.

The CMC data card lists 81 debris items in eight major categories: plastic, foamed plastic, glass, rubber, metal, paper, wood, and cloth (Appendix 3). These cards are used to record debris from both shoreline and underwater cleanups. The type of debris varies from region to region, country to country, and even site to site. The reports from individual countries and sovereign territories will provide greater detail about the composition of each area's debris.

It is important to note that every single item found during land-based cleanups also turned up underwater. The numbers and proportions differed, of course, but every item was there, from hardhats and new 55-gallon drums to diapers, light bulbs, and cigarette butts.

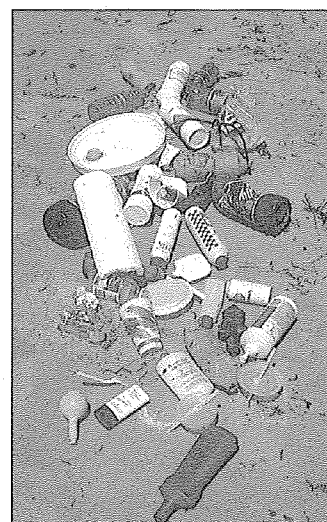
Plastic (including foamed plastic) continues to be the most prevalent type of marine debris collected, as it has ever since the cleanup began. In 1996 plastic accounted for 59.54% of all debris collected worldwide, making it five times more prevalent than the next most abundant item, metal (11.87%). Glass and paper tied roughly for third place among types of debris, with 10.43% and 10.35% respectively (Figure 1).

The 1996 percentage of plastic represents a continued upward trend from 1995's 58.82% and 1994's 56.97%. This evidence strongly demonstrates that plastic waste disposal is still not being handled correctly, despite strict regulations in MARPOL Annex V prohibiting the dumping of plastics into our waterways. Further, these figures are testimony to the longevity of plastic in the environment. Plastic trash collected in 1996 could easily have been floating around for years or even decades.

Not all plastic floats, however. Underwater, plastic accounted for a smaller percentage (48.32%) of debris collected, but was still the largest category. This percentage marks a 3.75% increase over 1995 (44.57%), the first year for which underwater data was tallied separately. Metal (20.24%) was again the number two category underwater, down from 23.49% in 1995. In contrast to the composite results, glass (18.34%) was more than twice as prevalent underwater as paper (6.96%).

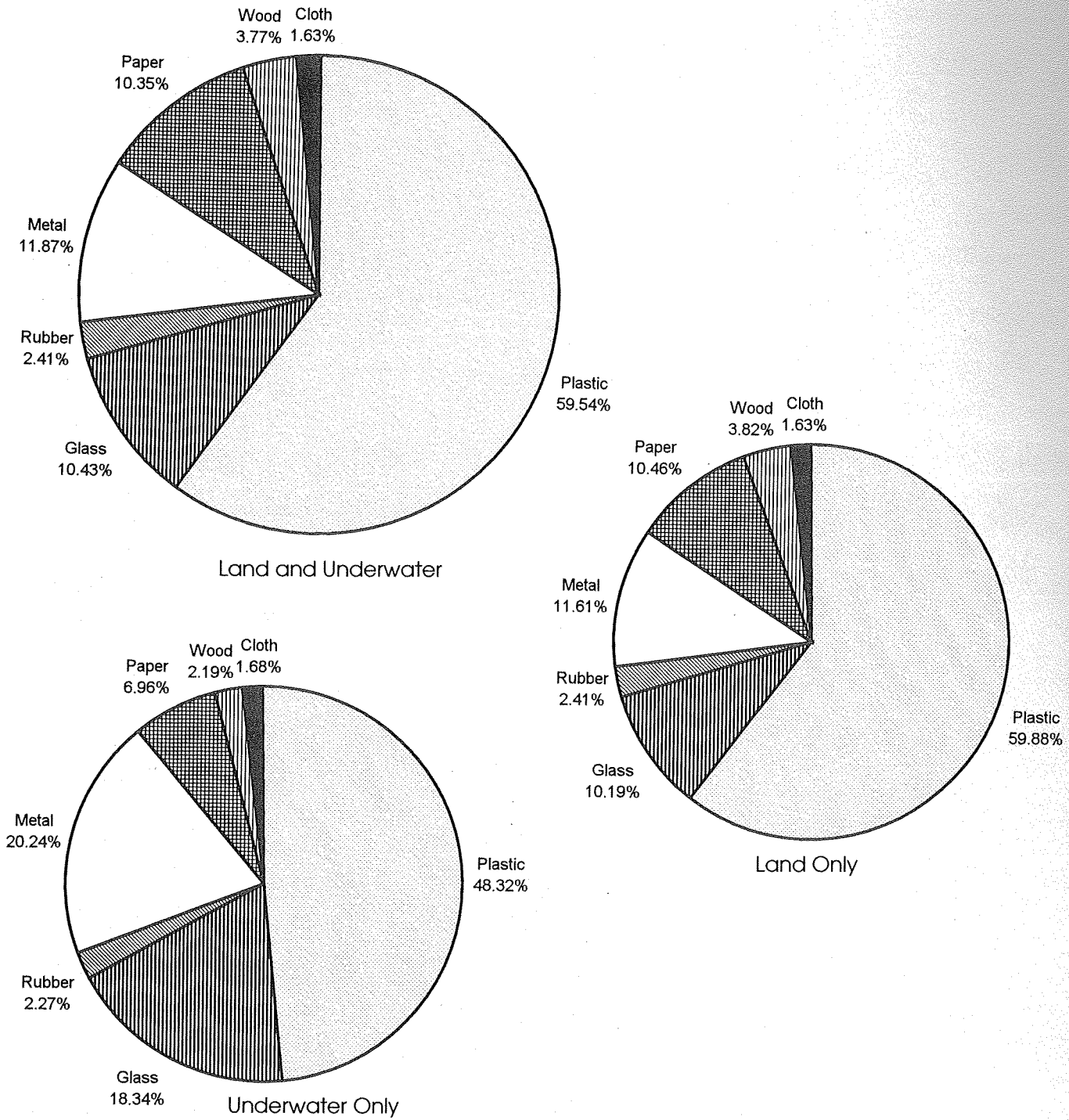
Four of the 11 regions reported plastic levels higher than the international average: North Sea 67.17%, Indian Ocean 57.69%, and Atlantic 54.72%. Central Europe had the lowest percentage with 6.24%. It should be noted that Switzerland was the only country reporting in Central Europe this year, and that its cleanup was conducted solely underwater, where metal cans and glass bottles were the dominant type of debris.

Of the 64 countries submitting cleanup data for analysis in the 1996 Cleanup, 23 exceeded the international average for plastic, including nine with more than 70%. Hong Kong (96.87%) and Haiti (95.90%)



Plastic continues to be the most prevalent material collected as debris.

FIGURE 1. Percent Composition of Material Types of Debris Reported During 1996 International Coastal Cleanups



NOTE: The 81 debris items are arranged by type. The "Plastic" and "Foamed Plastic" categories are combined. The chart includes all debris reported, minus cigarette butts, which are so numerous their inclusion would distort data interpretation.

were the highest, followed by Benin (81.42%) and Guatemala (79.41%), all of which conducted land-only cleanups (Figure 2). The other five countries with more than 70% plastic debris were the United Kingdom, Colombia, Maldives, Costa Rica, and Singapore. Interestingly, the Maldives cleanup was all underwater. As mentioned above, Switzerland reported the lowest level of plastic (6.24%), followed by Micronesia (16.83%) and Turkey (19.18%).

The 1996 International Dirty Dozen

Taken as a whole, the twelve items most frequently found on the world's shorelines, waterways, and underwater accounted for 56.79% of all debris collected—virtually unchanged from 56.47% in 1995. In 1996 these twelve items were:

	Debris Item	Total Number Reported	Percent of Total Debris Collected
1.	Cigarette Butts	754,646	13.14%
2.	Plastic Pieces	356,651	6.21%
3.	Plastic Food Bags/Wrappers	310,528	5.41%
4.	Foamed Plastic Pieces	269,580	4.69%
5.	Plastic Caps/Lids	249,112	4.34%
6.	Glass Pieces	221,838	3.86%
7.	Paper Pieces	213,620	3.72%
8.	Plastic Beverage Bottles	193,327	3.37%
9.	Metal Beverage Cans	185,872	3.24%
10.	Plastic Straws	183,497	3.20%
11.	Glass Beverage Bottles	179,425	3.12%
12.	Metal Bottle Caps	142,713	2.49%
	Total Dirty Dozen	3,260,809	54.85%

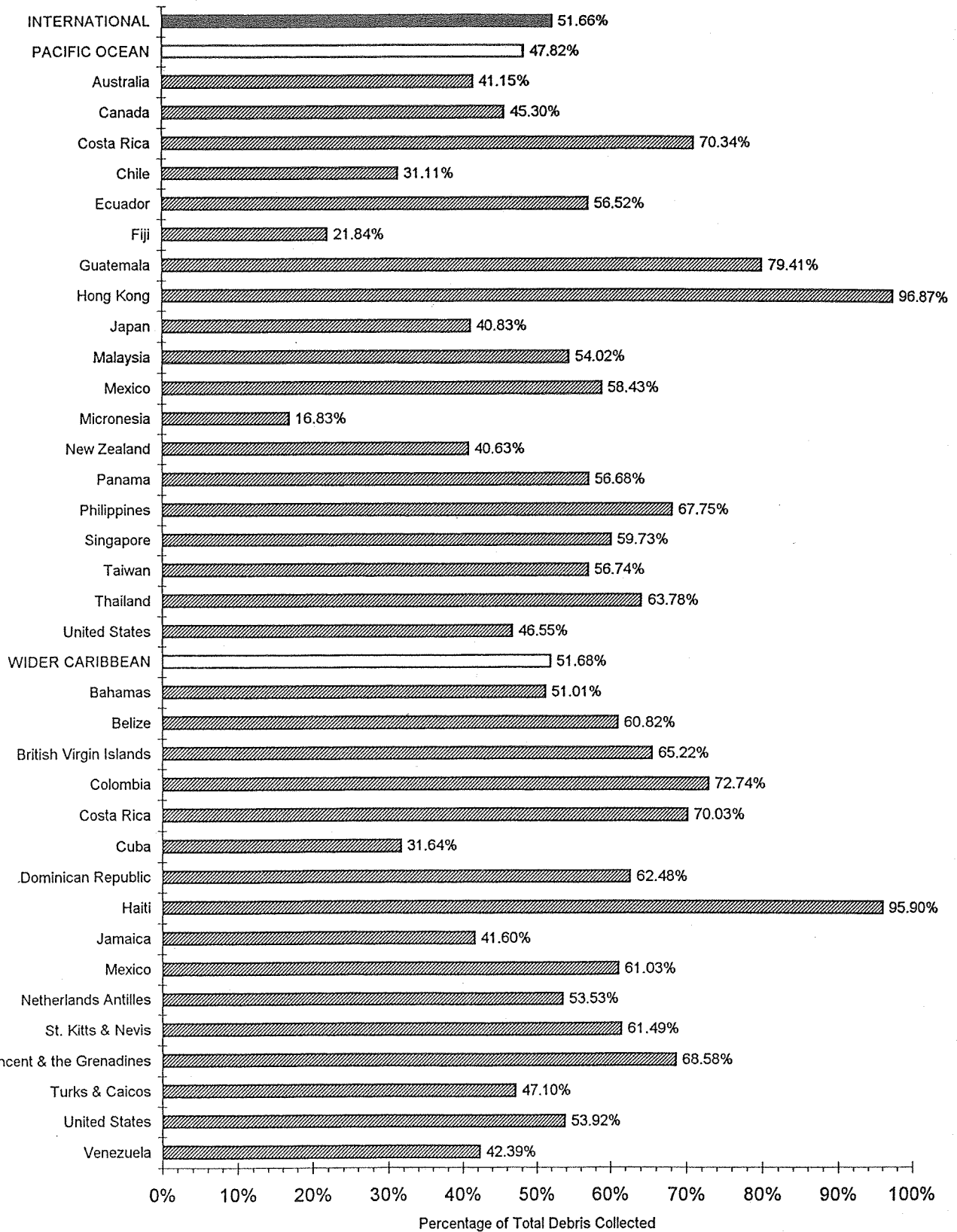
These are the same twelve items that appeared in last year's Dirty Dozen, and the first four are in the same order. Cigarette butts retained their dubious distinction of first place for the sixth year in a row, but dropped to 13.24% of total items collected, from 1995's 16.20% and 19.72% in 1994. Finding a cigarette butt on a beach was more than twice as likely as finding the next most frequent item, plastic pieces. The Dirty Dozen listings for land-only and underwater cleanups are presented in Appendices 4 and 5.

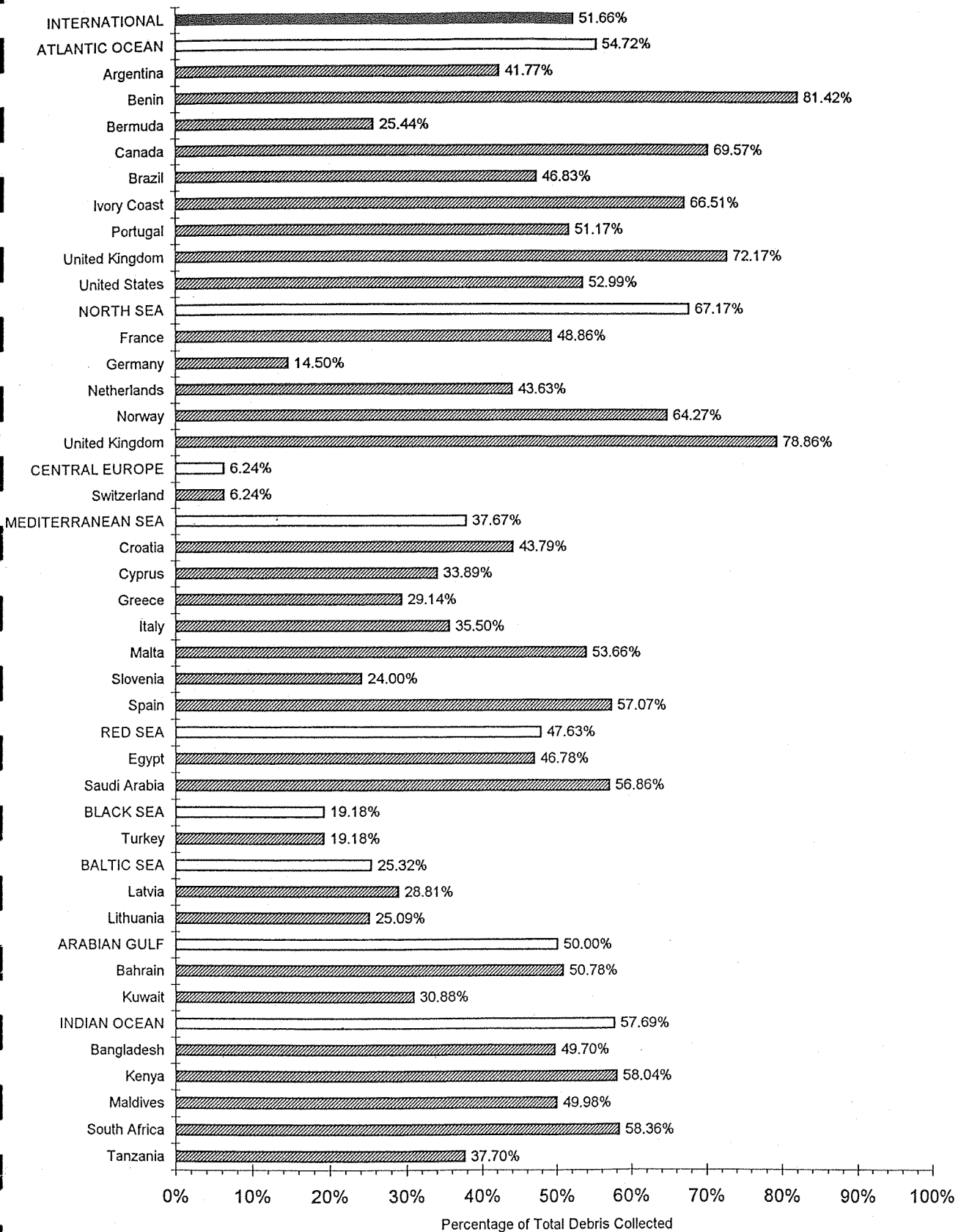
Cigarette butts (11.59%) were number one underwater also, up from third place (7.27%) in 1995. Glass beverage bottles (9.53%) held on to second place, while metal beverage cans (7.09%) dropped from first to third place underwater.

The following items complete the list of the Top 20 debris items in the 1996 Cleanup:

	Debris Item	Total Number Reported	Percent of Total Debris Collected
13.	Foamed Plastic Cups	123,842	2.16%
14.	Plastic Cups/Utensils	121,811	2.12%
15.	Lumber Pieces	113,184	1.97%
16.	Other Plastic Bags	112,276	1.96%
17.	Plastic Rope	108,555	1.89%
18.	Clothing/Pieces	81,579	1.42%
19.	Plastic Trash Bags	77,926	1.36%
20.	Other Plastic Bottles	66,831	1.16%
	Total Top Twenty	4,066,813	68.41%

FIGURE 2. Plastic Debris Reported from 1996 International Coastal Cleanups





Overall, this year's Top 20 items are the same as last year, but the composition changed somewhat underwater. Plastic straws, not even in the 1995 underwater Top 20, jumped in at 16th place. Metal food cans, metal pieces, and glass food jars/bottles also made the underwater Top 20 for the first time. Foamed plastic pieces moved from 17th to 10th place, while miscellaneous glass bottles, plastic rope, metal aerosol cans, and plastic fishing line dropped off the underwater Top 20 altogether.

Country-by-country results varied. Cigarette butts were the number one item in 12 countries: Argentina, Bangladesh, Croatia, Cyprus, Germany, Greece, Japan, Kuwait, Maldives, South Africa, Singapore, and the United States. In 1995, butts were also number one in 12 countries but only four of the countries were the same as 1996. Plastic food bags and wrappers were number one in 11 countries and plastic beverage bottles in seven countries. Altogether, 19 different debris items were number one in at least one country, including lumber in Bahrain, rubber pieces in Kenya, paper bags in Lithuania, fishing line in Thailand, and plastic straws in both Malta and Belize.

Cigarette Butts

Cigarette butts were not even a line item in the early years of the Cleanup. In 1990 they were officially added to the data card in response to the large number of "write-in votes" by volunteers. These ubiquitous pieces of plastic have been the number one item ever since they were added to the list.

Composed of cellulose acetate, a synthetic polymer, cigarette butts can persist in the environment as long as other forms of plastic. Many, no doubt, are left in the sand by beachgoers. Others, apparently, are tossed casually overboard or out a car window and washed into waterways from parking lots and streets via stormwater overflow systems. More than just an aesthetic nuisance, butts are ingested by birds, whales, and other marine creatures who mistake them for food.



Encouragement may be found in the decline in cigarette butts collected in 1996, both numerically (754,646 in 1996; 912,771 in 1995) and as a percentage of total debris (13.14% in 1996; 14.72 in 1995 and 18.58% in 1994). These figures give hope that public awareness campaigns, including programs supported by cigarette manufacturers, may be having a positive influence in reducing the number of cigarette butts discarded into the environment.

It is important to note that the U.S. results account for 63% of all debris collected worldwide, and 77.35% (608,759 by count) of all cigarette butts collected. This percentage is down from last year, however, when 87.66% of all cigarette butts were collected in the United States.

Because of their huge numbers, cigarette butts present interpretation problems when analyzing the debris database as a whole. Rather than have the results skewed, we have intentionally removed cigarette butts when calculating the percent composition of debris types (Figure 1). Totals for cigarette butts are included in all other calculations.

Bottles and Associated Goods

The Cleanup analyzes six items collectively as “bottles and associated goods.” These six items are glass and plastic beverage bottles, metal beverage cans, metal bottle caps, metal pull tabs, and plastic six-pack holders. Worldwide, bottles and associated goods accounted for 13.72% of total debris (Figure 3), higher than both 1995’s 12.97% and 13.45% in 1994.

As might be expected because of their weight, bottles and associated goods represented a higher percentage (24.84%) of underwater debris, though significantly less than the 30.1% reported in 1995.



It is important to note, as with all areas of the International report, that the U.S. figures, because of their sheer volume, tend to mask the results from the rest of the world. The U.S. percentage for bottles and associated goods is 13.33%, nearly the same as the international average. If the U.S. results were not included, the worldwide percentage of bottles and associated goods would be far higher.

Of the 64 countries that submitted data cards for analysis in the 1996 Cleanup, 37—more than half—exceeded the international average in this category. Five countries reported rates of more than 71%: Taiwan (82.98%), Switzerland (81.76%), Haiti (79.39%), Micronesia (76.02%), and Turkey (71.15%). Note that these countries represent a diverse demography, from inland, Old-World Switzerland to islands—Haiti in the Caribbean, and Micronesia and Taiwan in the Pacific.

Five out of 11 regions exceeded the international average for bottles and associated goods. Central Europe (81.76%) and Black Sea (71.15%) each include figures from only one country, Switzerland and Turkey, respectively. The Red Sea region reported 16.86%; the Mediterranean, 15.55%.

The debris associated with beverages is nearly all potentially recyclable. The presence of this type of debris in any area suggests that recycling has not yet become habitual. Just think of the enormous reduction in debris that would occur in these countries if comprehensive recycling programs were implemented and followed. Change is so very possible, if people will just take action.

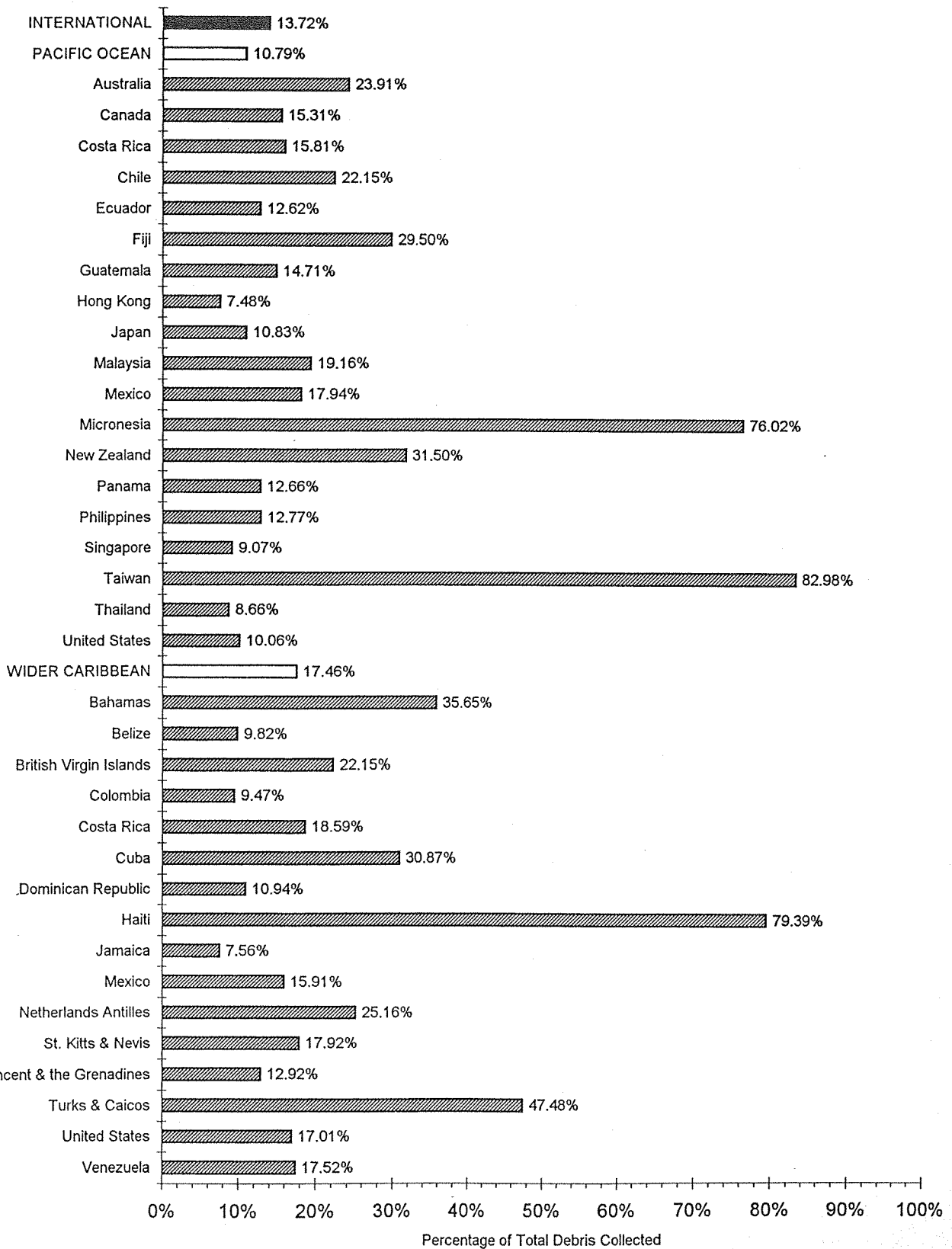
“the place is extremely dirty, full of cigarette butts and bottle caps.”

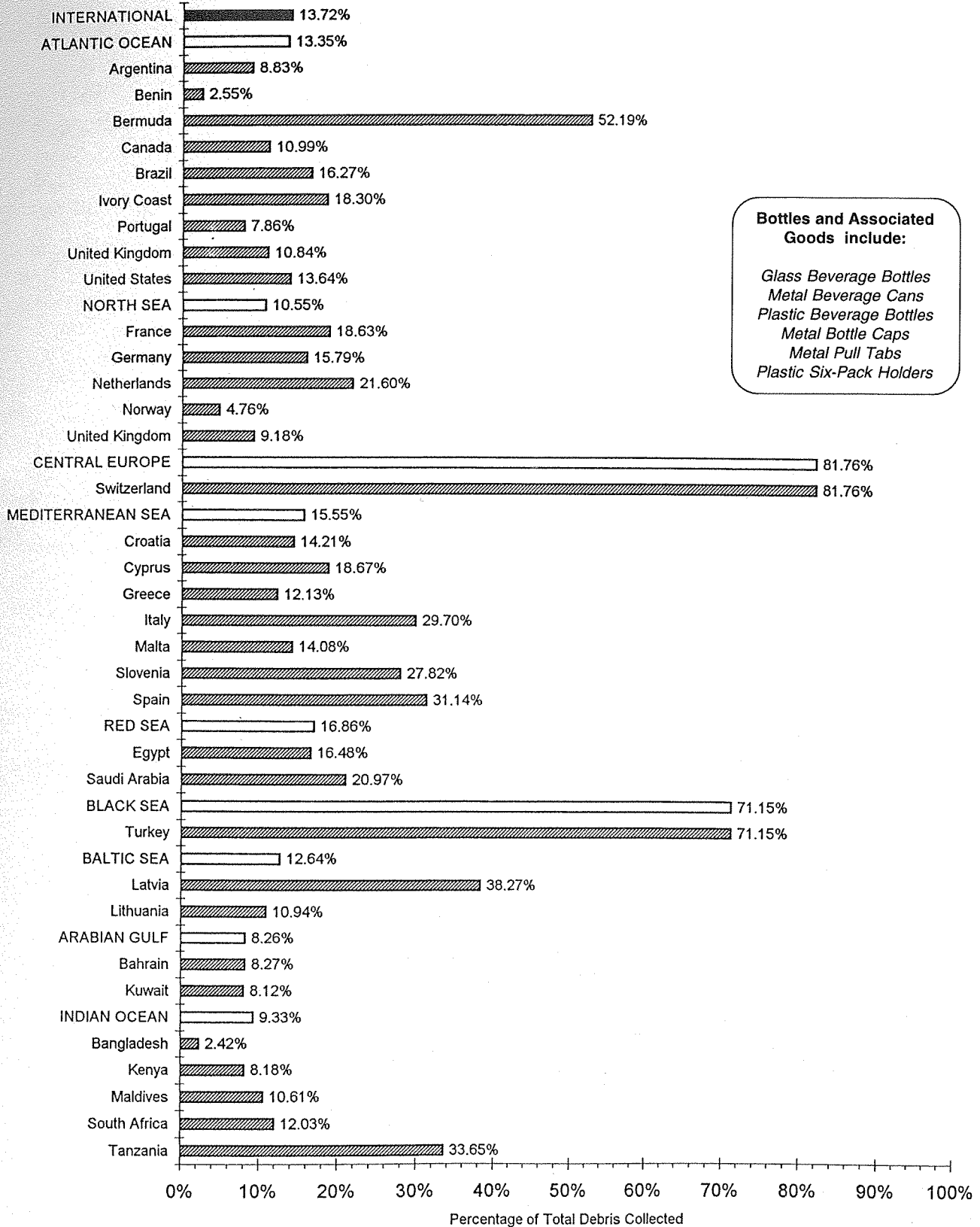
cleanup volunteer, Singapore

“We need more room on the card to record all the cigarette butts, plastic cups and straws.”

cleanup volunteer, Brazil

FIGURE 3. Bottles and Associated Goods, 1996 International Coastal Cleanups





THE IMPACTS OF MARINE DEBRIS ON WILDLIFE

Let loose in the marine environment, debris can be a serious threat to birds and marine animals. Debris such as plastic bags, nets, and monofilament line is known to have caused death and injury to at least 267 marine species, including mammals, seabirds, sea turtles, fish, and shellfish.



Debris that entangles a living creature can hamper its mobility, prevent it from eating, or suffocate it. Some types of debris can inflict cuts and wounds. Ingested debris can lead to strangulation or digestive problems. Some entanglement incidents happen above the waterline; others, below.

Many marine and aquatic animals cannot distinguish inedible human-made debris from natural food sources. Transparent plastics, virtually invisible underwater, lie in wait for unsuspecting swimming and diving creatures. These animals cannot protect themselves from the problems we have forced upon them. It is our responsibility, and ours alone, to keep their environment clean and free from our dangerous discards.

According to an annual survey released in 1996 by the U.S. Marine Mammal Commission, the debris items found to most threaten marine life are net fragments and monofilament fishing line from commercial and recreational fishing boats, rope, and strapping bands (Table 4). Plastic pellets and small pieces of processed plastic are the debris items most frequently found in the stomachs of birds. Sea turtles, toothed whales, and manatees have been found to have ingested plastic bags and small plastic pieces.

In the 1995 Cleanup, the incidence of wildlife entanglements was alarming: 125 incidents involving 179 animals, or one incident for every 49,610 debris items collected. The 1996 results are even worse (Table 3). Volunteers in 14 countries reported 208 incidents involving more than 220 creatures. That's one animal entanglement for every 27,022 debris items collected. Keep in mind that the Cleanup happens only one day a year, in one three-hour period, and represents just a tiny fraction of all the debris that's out there. Even conservative extrapolation of these results indicates an entanglement problem of mammoth proportion.

Most of the entanglements proved fatal. Only 19 of the entangled creatures were found alive and able to be released, including one sea lion pup that was freed from monofilament fishing line. The other 201 died, caught by fishing line, rope, and string, snared in lost or abandoned nets and traps, and strangled by plastic strapping bands and rings.

Entangled bird species this year included snowy egret, blue heron, pelican, herring gull, duck, loon, and swan, as well as several unidentified species. Underwater species included grouper, puffer fish, spade fish, crayfish, shark, catfish, blowfish, bowfin, large mouth bass, crappie, moray eel, squid, octopus, skate, jellyfish, starfish, lobster, and shrimp. Spider, rock, horseshoe, and blue crabs were all represented, as were red-eared turtles, and green and loggerhead sea turtles. Mammals included dolphins, seals (harbor and gray), sea lions, and mice.

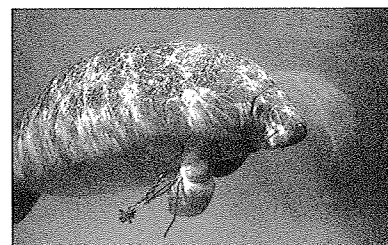
In at least 60% of these 208 incidents, plastic was specifically identified as the entangling debris. Fishing line, sometimes with lures and hooks attached, was involved in the most incidents (93 in number, 44.7% of total incidents), followed by plastic bags (25) and fishing nets and gear (24). Seven incidents involved six-

pack rings, all in the United States. Other materials that proved hazardous to wildlife included ribbons and string, rope, wire, metal cans, abandoned crab and lobster traps, and glass bottles. Mattresses, cardboard, lumber, and tires were also involved.

In addition to these entanglements, volunteers around the world also reported at least 188 more incidents involving more than 370 dead animals on beaches, shores, and underwater. Since no specific item of entangling debris was recorded, they are not included in the entanglement totals, but it is likely that at least some of them were entanglements. At least two dolphins and two birds, all dead, were reported covered in oil. All of these incidents attest to the deadly impact of human-made debris on wildlife.

Monofilament Fishing Line: Marine Debris and Animal Entanglements

The introduction of plastics marked a significant technological advance for the fishing industry. Plastic nets and lines are lighter and easier to handle. They're also stronger, more durable, and more economical than traditional materials such as hemp and cotton.



But when plastic fishing gear enters the waste stream, it advances the problem of marine debris as well. Fishing gear can be deliberately discarded. It can be abandoned into the marine environment through vandalism. It can also be lost to bottom snags, bad weather, ship collisions, gear failure, and unintentional human error.

Lost monofilament line can be lethal to marine mammals, sea turtles, birds, fish, and other animals. In most cases, the animals are unable to free themselves once entangled. Eventually, they become exhausted and drown, or die from starvation. Thin yet strong, monofilament line can also cause abrasions that become infected. Entanglements often prevent ensnared creatures from moving about freely to catch food and avoid predators. Fishing line can also be caught on branches, power lines, and submerged structures. Stationary creatures such as coral, sponges, and sea fans can be damaged or dislodged as a result of entanglements.

In the 1996 Cleanup, monofilament fishing line was the largest single cause (37.98%) of all wildlife entanglements reported (Figure 4). Since 1989, 786 incidents of specific wildlife entanglement in marine debris have been reported. In 293 of these incidents (37.28%), monofilament line has been the culprit (Figure 5).

The problem is critical and needs to be addressed immediately. The responsibility lies with manufacturers, distributors, and users of monofilament line, who must all take action to decrease the number of animal entanglements in fishing line. Manufacturer-sponsored programs can be particularly effective, such as drop-off collection bins for used line which can then be recycled into new line. The development of degradable line is another potential solution. And, above all, there is the need for increased consumer education and response.

Table 3. Wildlife/Debris Incidents, 1996 International Coastal Cleanups

Argentina

fish plastic bag

Australia

bat fish fishing hook & line

seagull fishing hook & line

Bahrain

2 crabs plastic

crab rope--entangled, alive

Belize

sting ray metal trap

Bermuda

puffer fish fishing line

Brazil

grouper fishing net

fish shoe--inside, alive

Canada

crow crab trap

Japan

fish fishing line

Kuwait

fishes fish traps

Mexico

sealion pup fishing line--entangled, alive

fish fish traps

Saudi Arabia

fish fishing hook & line--alive

Singapore

2 fishes rope

bird wire

fish plastic piece

sea slug plastic bag

United Kingdom

bird fishing line

United States

bass plastic bag

bird miscellaneous debris
(plastic, glass, foam, metal)

birds (6) net

birds (2) wire

birds (5) fishing line

birds (2) six-pack ring

birds (6) string

blowfish fishing line & hook

blue crab (2) fishing line

blue heron fishing line

bowfin fishing net

catfish fishing line & hook

catfish fishing net--entangled,
released

catfish six-pack ring

catfish tire--entangled, released

catfish (2) fishing line

crab fishing gear

crab metal can--inside, released

crab metal trap

crab plastic

crabs (2) string

crabs (7) fishing line

crabs (2) plastic bands

crabs (2) plastic tarp

crabs (4) vegetable sack

crabs (7) plastic bag

crappie fishing line

crayfish glass bottle

crayfish mattress

crayfish metal can

crayfish (3) fishing line

duck gill net

fish fishing line

fish fishing line & hook--released

fish fishing line & wood

fish metal can

fish miscellaneous debris
(cardboard, plastic)

fish (6) plastic bag

fish (3) six-pack ring

United States, cont.

fish (12)	fishing line
fish (5)	fishing line & hook
fish (3)	wire
fish (11)	nets
harbor seal	rope
herring gull	fishing line
herring gull	fishing net
horseshoe crab	string
horseshoe crabs (3)	nylon rope
horseshoe crabs (3)	plastic bag
jellyfish	fishing line
jellyfish	plastic sheet
large mouth bass (2)	fishing line
lobster	broken wooden trap trapped, released
lobsters (2)	fishing line
loggerhead sea turtle	fishing line--entangled, released
loon	fishing line
moray eel	fishing line
mouse	fishing line
pelicans (2)	fishing line
pelican	fishing line--freed, taken to rehab center
pelican	plastic bag
pelican	plastic debris
red-eared turtle	fishing line
rock crabs (6)	fishing line
sea turtle	rope
seagull	fishing line & weight
seagulls (3)	fishing line--entangled, released
seagull	kite string
seagulls (2)	net
seagull	nylon rope
seagull	plastic bag
seagull	six-pack ring
seagulls (13)	fishing line
shark	fishing line--entangled, released
shark	ribbon & balloons

United States, cont.

shark	rope
shrimp	plastic bag
snowy egret	fishing line
spade fish	plastic bag
spider crabs (2)	fishing line
spotted moray eel	fishing line & hook
squid	plastic netting
starfish	plastic
swan	fishing line
turtle	plastic bag
turtle	six-pack ring
turtle	trash bag

TABLE 4. Number and Percentage of Marine Species Worldwide with Documented Marine Debris Entanglement and Ingestion Records, by Species Group (1996)

Species	Total No. of Species Worldwide	Species with Entanglement Records No. (%)	Species with Ingestion Records No. (%)	Species with One or Both Types of Records No. (%)
Sea Turtles	7	6 (86%)	6 (86%)	6 (86%)
Seabirds	312	51 (16%)	111 (36%)	138 (44%)
Penguins	16	6 (38%)	1 (6%)	6 (38%)
Grebes	19	2 (10%)	0 (0%)	2 (10%)
Albatrosses, Petrels, Shearwaters	99	10 (10%)	62 (63%)	63 (64%)
Pelicans, Boobies, Gannets, Cormorants, Frigatebirds, Tropicbirds	51	11 (22%)	8 (16%)	17 (33%)
Shorebirds, Skuas, Gulls, Terns, Auks	122	22 (18%)	40 (33%)	50 (41%)
Other Birds	—	5	0	5
Marine Mammals	115	32 (28%)	26 (23%)	49 (43%)
Baleen Whales	10	6 (60%)	2 (20%)	6 (60%)
Toothed Whales	65	5 (8%)	21 (32%)	22 (3%)
Fur Seals, Sea Lions	14	11 (79%)	1 (7%)	11 (79%)
True Seals	19	8 (42%)	1 (5%)	8 (42%)
Manatees, Dugongs	4	1 (25%)	1 (25%)	1 (25%)
Sea Otter	1	1 (100%)	0 (0%)	1 (100%)
Fish	—	34	33	60
Crustaceans	—	8	0	8
Squid	—	0	1	1
SPECIES TOTAL	—	136	177	267

from Marine Mammal Commission 1996 Annual Report, January 31, 1997. D.W. Laist.

Figure 4. Entangling Forms of Debris in the 1996 International Coastal Cleanup

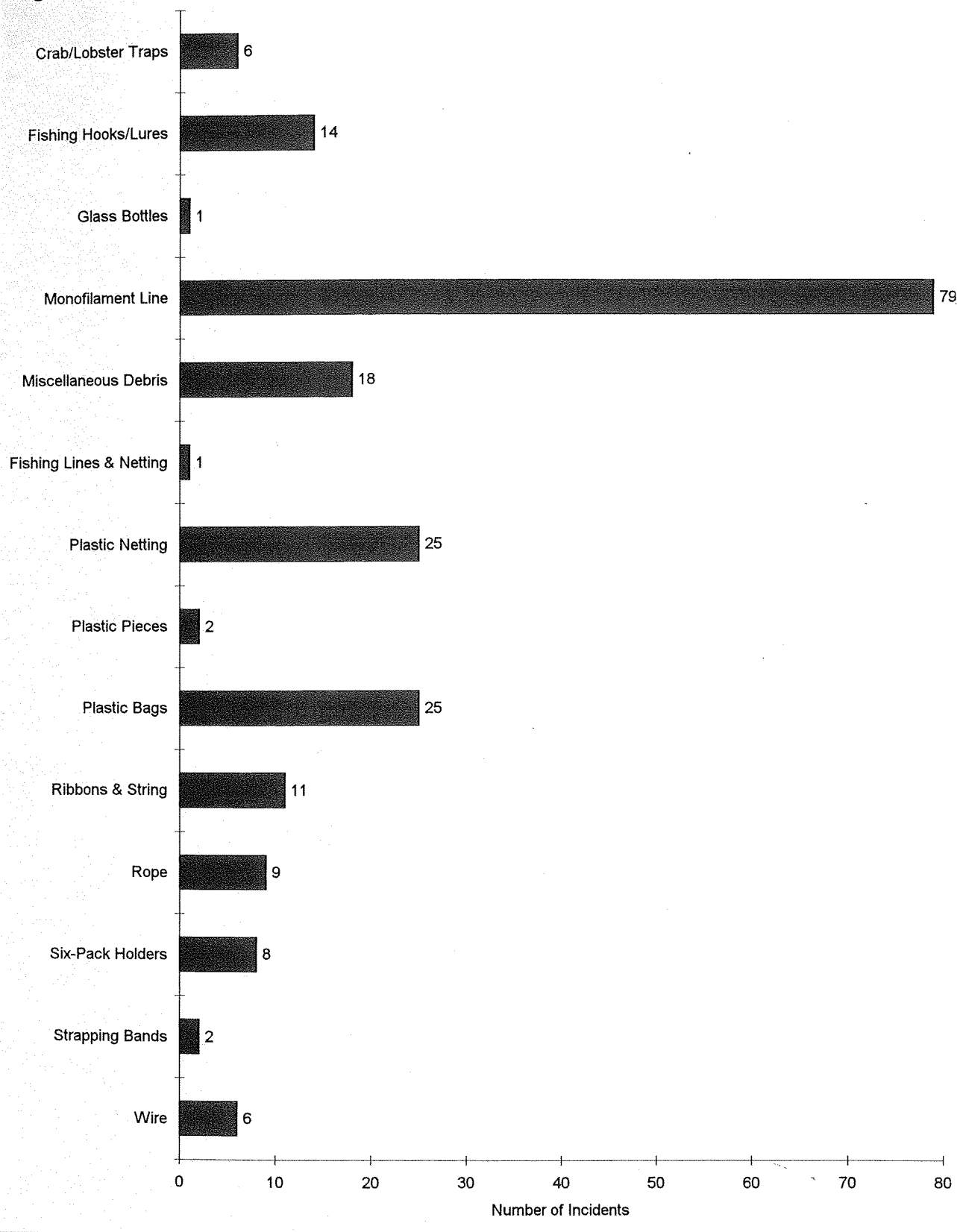
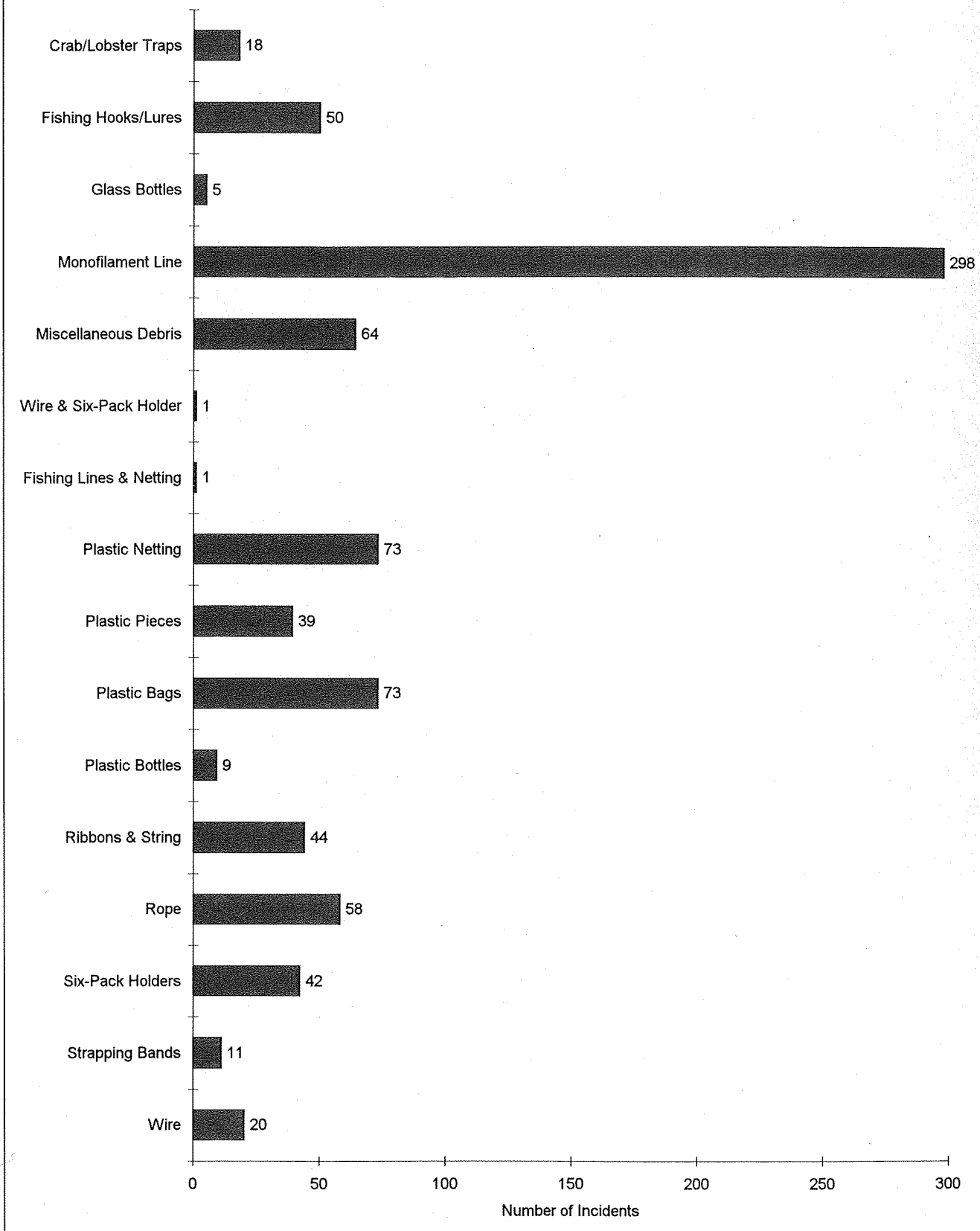


Figure 5. Entangling Forms of Debris, 1988-1996



SOURCES OF MARINE DEBRIS

Around the world, from sultry swamps and inland riverways to barrier islands and rocky seacoasts, virtually every aquatic habitat is affected—adversely—by debris. The sources of debris are traditionally classified into two broad categories: ocean-based and land-based. Because most materials have a broad range of uses, positively identifying the source of any individual debris item is difficult. The Center for Marine Conservation has developed a set of 28 indicator items to help trace the origin of marine debris (Table 5 and Figure 6). The items correspond to various ocean-based and land-based activities.

Sources of ocean-based debris have been identified as recreational fishing and boating wastes, commercial fishing wastes, operational wastes, and galley wastes. From small pleasure craft to super-sized container ships, fresh water and ocean-going vessels alike are identified as sources of ocean-based marine debris, as are offshore drilling platforms for oil and gas. Internationally, galley wastes are the most common type of ocean-based debris, closely followed by commercial fishing wastes.

Land-based debris is carried into waterways and into the ocean through storm drains, sewers, creeks, streams, and rivers. Sewage-associated wastes and medical wastes have been identified as sources of land-based debris. Beach-goers are another significant source of land-based debris, leaving behind in the sand discarded evidence of their visit.

It's not the boat, the sewer, or the storm drain that's the real problem, of course. People are. Some person tossed that trash overboard, dropped it on the beach or on the sidewalk, or flushed it down the toilet.

A piece of debris can take many routes before winding up on a shoreline, in a river, a lake, or the ocean. But no matter where waste begins, people have the power to keep it from ending up in the marine environment. Proper waste management and disposal are the key to solving the marine debris problem. Citizen awareness is also essential. The more we appreciate our bountiful, beautiful aquatic environments, the less debris we will release into them.

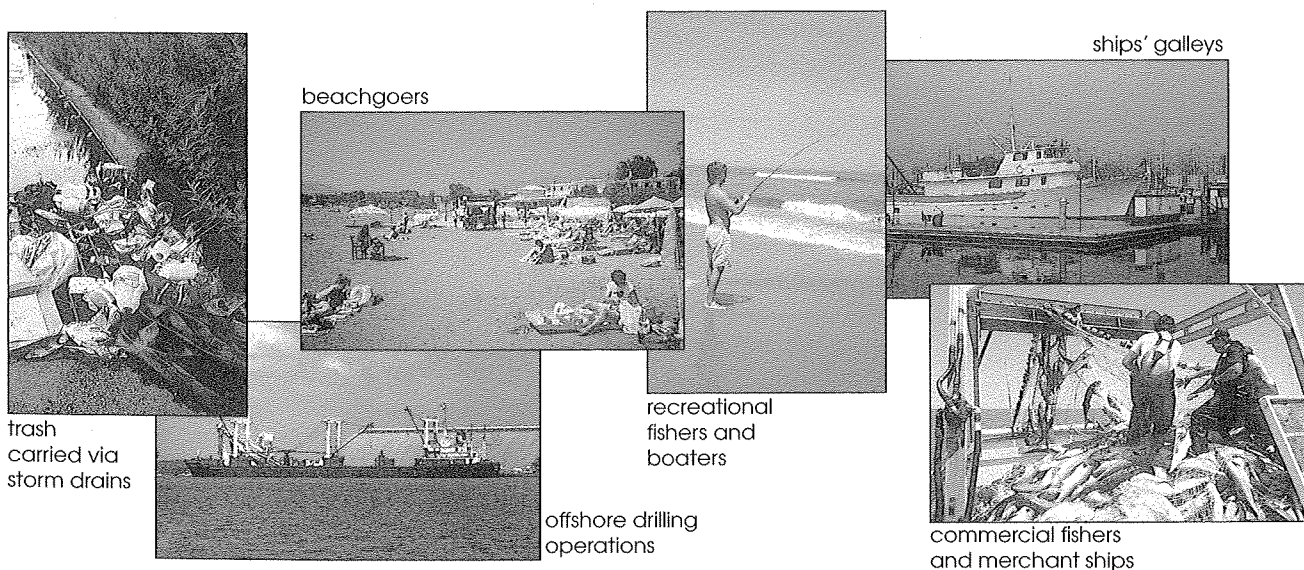
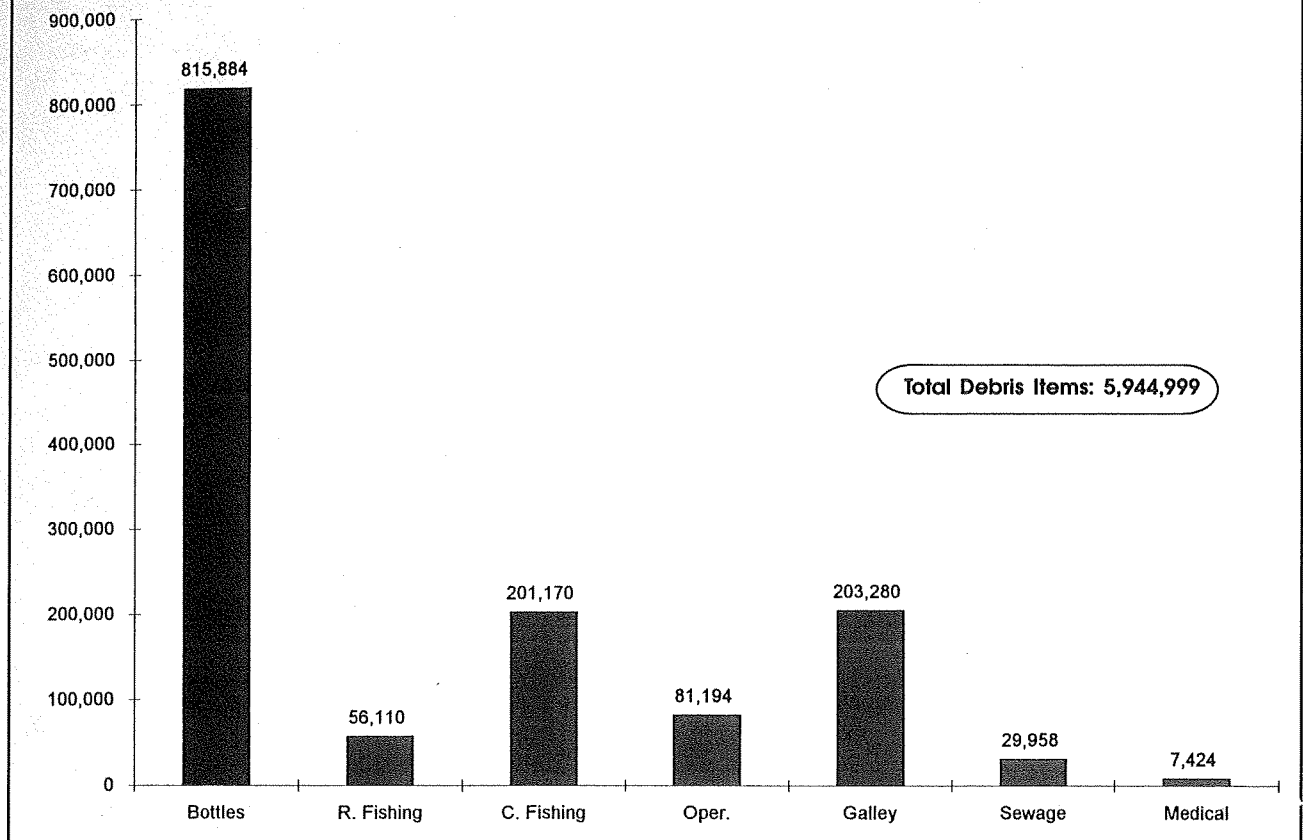


Table 5. Categories and Quantities of Indicator Items Reported During 1996 International Coastal Cleanups

Category	Indicator Items	Total Number Reported	(% of Total Debris Collected)
<i>Recreational Fishing and Boating Wastes</i>	Plastic Fishing Line	39,638	
	Plastic Fishing Floats/Lures	16,472	
	Subtotal	56,110	(0.94%)
<i>Commercial Fishing Wastes</i>	Plastic Salt Bags	8,227	
	Plastic Fishing Nets	18,327	
	Plastic Light Sticks	18,796	
	Plastic Rope	110,049	
	Foamed Plastic Buoys	21,213	
	Rubber Gloves	15,646	
	Metal Crab/Lobster Traps	5,418	
	Wood Crab/Lobster Traps	3,494	
Subtotal	201,170	(3.38%)	
<i>Operational Wastes</i>	Plastic Hard Hats	2,063	
	Plastic Pipe Thread Protectors	7,064	
	Plastic sheeting longer than 2 feet	9,337	
	Plastic Strapping Bands	24,648	
	Plastic Write Protection Rings	8,773	
	Glass Fluorescent Light Tubes	3,936	
	Glass Light Bulbs	10,015	
	Wooden Crates	4,009	
	Wooden Pallets	20,122	
Subtotal	89,967	(1.51%)	
<i>Galley Wastes</i>	Plastic Trash Bags	80,375	
	Plastic Bleach Bottles	32,417	
	Plastic Milk/Water Gallon Jugs	47,323	
	Plastic Vegetable Sacks	11,625	
	Foamed Plastic Egg Cartons	6,975	
	Foamed Plastic Meat Trays	24,565	
	Subtotal	203,280	(3.42%)
<i>Sewage-Associated Wastes</i>	Plastic Tampon Applicators	20,321	
	Rubber Condoms	9,637	
	Subtotal	29,958	(0.50%)
<i>Medical Waste</i>	Plastic Syringes	7,424	(0.12%)
Total Number of Indicator Items		1,168,394	(19.65%)

FIGURE 6. Number of Items from 1996 International Coastal Cleanups Associated with Identifiable Types and Sources of Debris



Ocean-Based Sources of Debris

- **Recreational Fishing and Boating Wastes**

Disposable items, from fast food wrappers to bait and tackle supplies, are popular among recreational fishers and boaters. Unfortunately, not all of these enthusiasts are aware that MARPOL regulations prohibit the disposal of plastics in the ocean as well as all types of garbage in rivers, lakes, and bays. And even among those who know, compliance far from complete.

The two specific indicator items used to identify recreational fishers who violate the law are plastic (monofilament) fishing line and plastic floats and lures. While some line is lost accidentally, much of it is discarded intentionally. Blatant dumping overboard of these materials is a MARPOL violation. Enforcement plays a major role in how well these regulations are obeyed.

In the 1996 Cleanup, 0.94% (56,110 items) of all debris collected worldwide was attributed to recreational fishing and boating wastes, up slightly from 0.87% in the 1995 Cleanup and 0.72% in 1994 (Figure 7). The percentage of such wastes was slightly higher underwater, at 1.54%.



Three regions exceeded the international average: Indian Ocean 1.84% (2.10% in 1995), North Sea 1.12% (2.20% in 1995), and Atlantic 1.05% (0.93% in 1995). The lowest level was reported in the Baltic (0.04%). Second-lowest was the inland Central Europe region (0.31%).

Of the 64 reporting countries, 21 reported levels higher than the international average. Thailand's high of 27.56% needs to be viewed in perspective: only 127 total items were collected in the cleanup, of which 35 were fishing line, and the Thai cleanup was conducted only underwater. France (5.63%), Hong Kong (4.35%), and Saudi Arabia (4.50%) reported the next highest percentages in this category. No recreational fishing and boating waste was reported in Bangladesh, Benin, Fiji, Haiti, Jamaica, or Tanzania, all of which had land-only cleanups, nor in Taiwan, which collected only underwater.

Even as a low percentage of total debris, monofilament line is one of the most dangerous of all marine debris items. Either in strands or combined with lures and floats, it can be deadly to birds, fish, turtles, and mammals. It can also endanger people by wrapping around boat propellers.

• Commercial Fishing Wastes

The indicator items used to track commercial fishing wastes are plastic rope, plastic (cyalume) light sticks, foamed plastic buoys, rubber gloves, plastic fishing nets, plastic salt bags, metal crab or fish traps, and wooden crab or lobster traps.

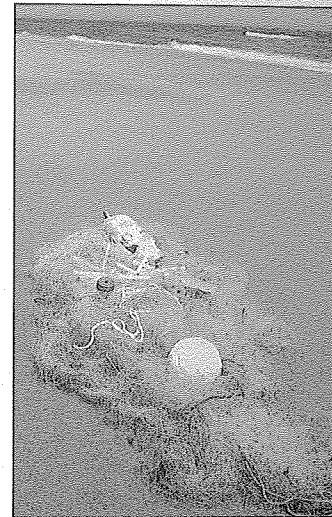
Different items represent different activities by crews aboard commercial fishing vessels. Plastic rope may be tossed or lost overboard. Old traps and nets may be abandoned instead of being retrieved and disposed of properly. Some traps and buoys, of course, are destroyed by storms or other boaters and cannot be retrieved. Plastic light sticks suggest longline fishers. Rubber gloves and salt bags may be discarded after the catch is sorted and stored. No matter how each item enters the water, once there, it becomes a hazard.

Worldwide, wastes from commercial fishing represented 3.38% of the total debris collected in 1996, up from 3.07% in 1995 and 2.86% in 1994 (Figure 8). That's 201,170 items, including 110,049 pieces of rope, 18,327 nets, and nearly 9,000 metal or wooden traps. Underwater, commercial fishing wastes accounted for 1.99% of total debris.

Four regions reported percentages higher than the international average, led by the North Sea with 10.33% (6.12% in 1995), Arabian Gulf with 8.68% (7.73% in 1995), and Indian Ocean with 6.45% (6.70% in 1995). As might be expected, the lowest rates were reported inland, in Central Europe (0.30%).

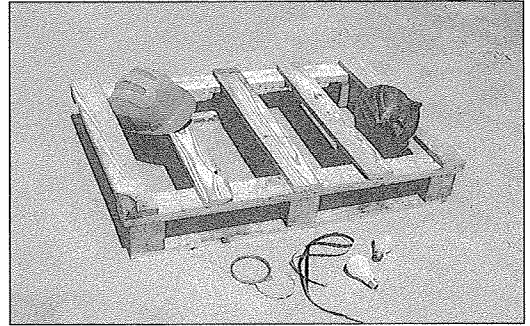
Twenty-six countries exceeded the international average, including five with rates of 10% or more. Thailand reported 22.83%; however, as mentioned above, this was a small underwater cleanup, which collected 21 pieces of rope and 8 nets. Bangladesh, which reported the 1995 high of 17.05%, followed with 13.33%. Hong Kong (10.78%), United Kingdom (10.38%), and British Virgin Islands (10.00%) finished out the top five countries in this category.

No commercial fishing waste was reported in Bermuda, Fiji, or Guatemala, all of which conducted land-only cleanups.



- **Operational Wastes**

Space is at a premium onboard ships and drilling platforms. Traditionally, anything that was no longer needed, such as packaging and broken materials, was bundled, weighted, and dumped overboard. This old method of waste disposal, although outlawed by MARPOL Annex V, is still practiced by many vessels, as the results of the 1996 Cleanup show.



Debris from offshore operations, including drilling activities and cargo transport, is indicated by wooden pallets, plastic strapping bands, glass (incandescent) light bulbs, fluorescent light tubes, write-protection rings (from computer tape reels), plastic pipe thread protectors, plastic sheeting (longer than two feet), plastic hard hats, and wooden crates.

In the 1996 Cleanup, operational wastes accounted for 1.51% (89,967 items) of total debris, down slightly from 1.74% (107,889 items) in 1995 (Figure 9). This apparently small percentage included 24,648 strapping bands, 20,122 wooden pallets, 10,015 light bulbs, and 8,773 write-protect rings, among other items. Underwater results were similar, where operational wastes made up 1.71% of total debris.

Operational wastes is another category in which inclusion of the U.S. figures tends to skew the results. The United States accounts for 63% of total debris collected, but less than 40% of operational wastes, indicating that the international average would be even higher if U.S. figures were not included. In certain items, the difference is even more pronounced: the 3,317 wooden pallets collected in the United States represent only 16% of pallets collected worldwide.

Three regions exceeded the international average, led by the Arabian Gulf (3.67%) and Indian Ocean (2.43%). Interestingly, individual levels for the five countries represented in the Indian Ocean ranged from 4.55% in Maldives to no operational wastes reported in Tanzania. Central Europe reported the lowest regional rate of 0.13%.

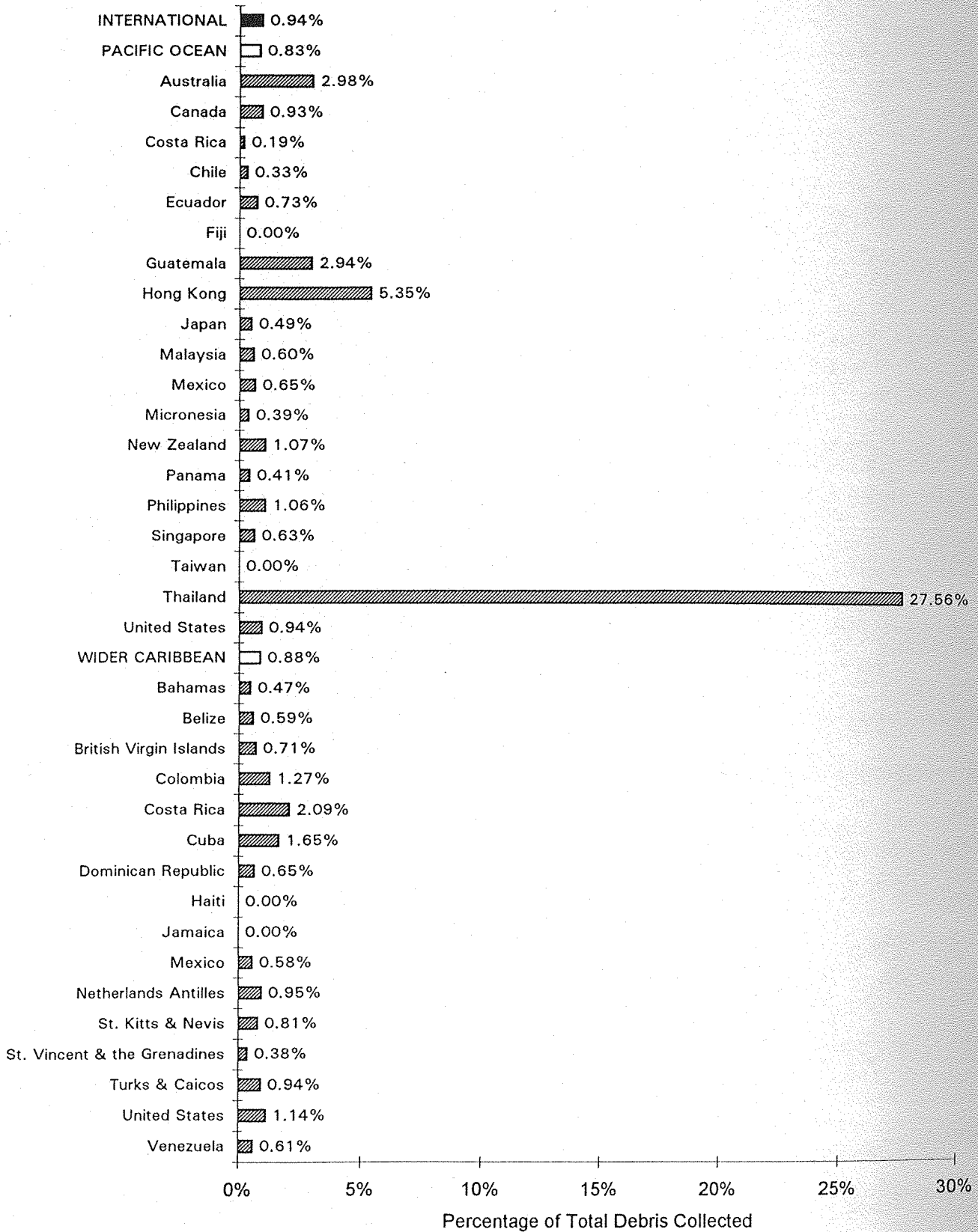
Nearly half (31) of the 64 countries reported levels of operational wastes higher than the international average. The level in Portugal (11.37%) was two-and-one-half times higher than that reported in Cuba (4.63%), the country with the next highest level. Note that Portugal's cleanup was underwater only. Eight countries reported no operational wastes among the debris collected: Bermuda, Fiji, Guatemala, Haiti, Jamaica, Taiwan, Tanzania, and Thailand.

(text continues on page 40)

“We found lots of crabbing/fishing related gear
near the dock...the closest garbage can was 150 feet away.”

cleanup volunteer, Canada

FIGURE 7. Recreational Fishing and Boating Wastes, 1996 International Cleanups



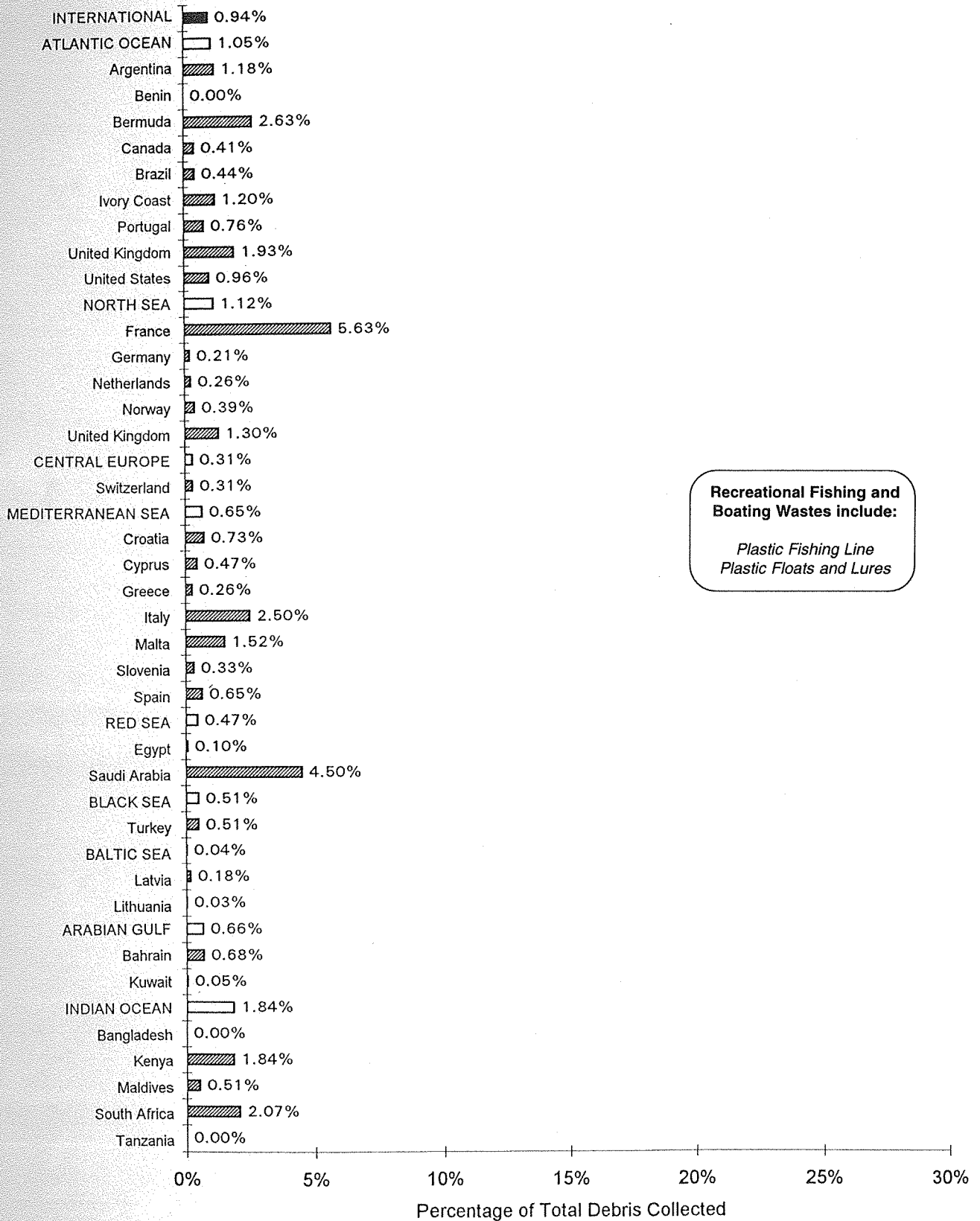
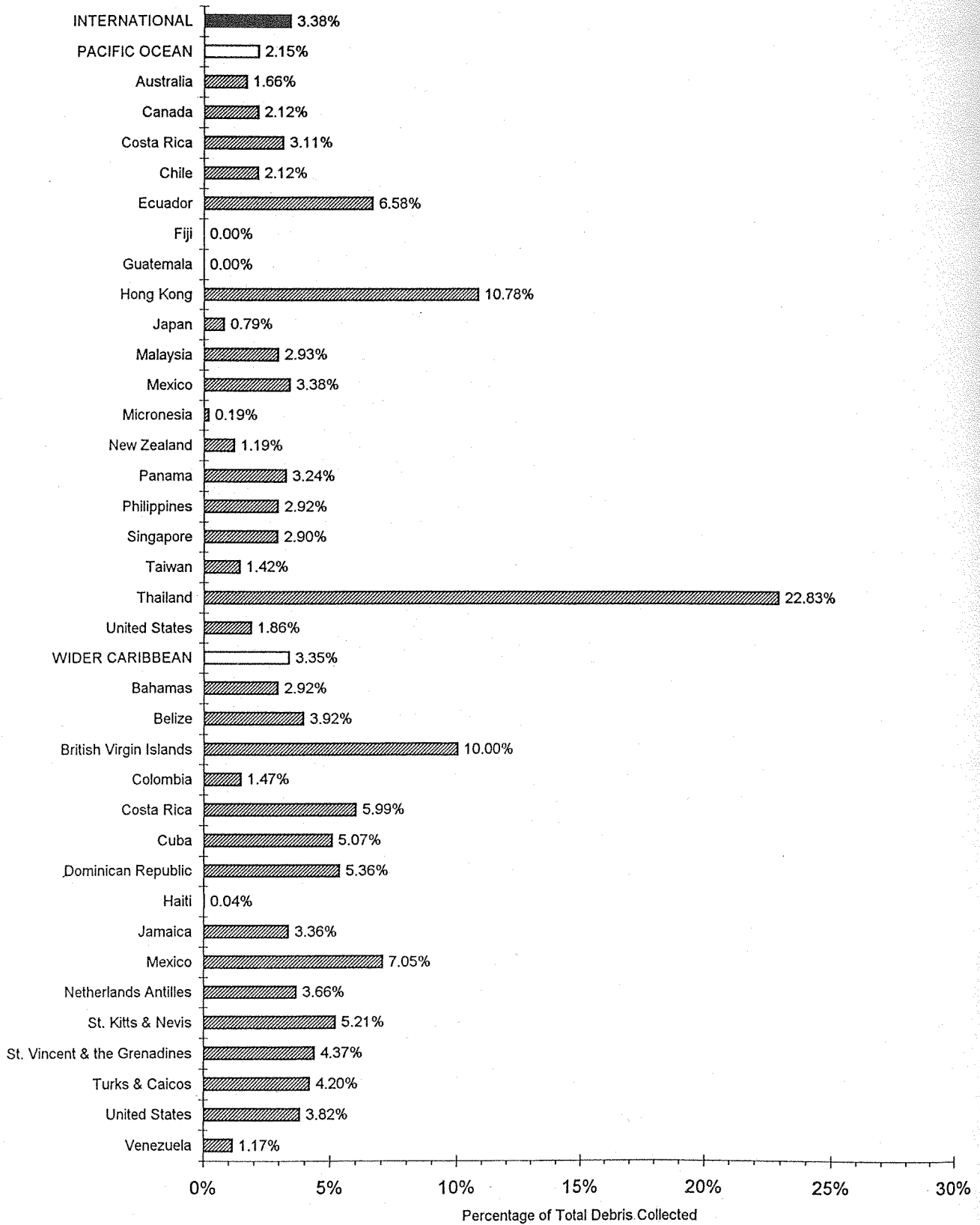


FIGURE 8. Commercial Fishing Wastes, 1996 International Coastal Cleanups



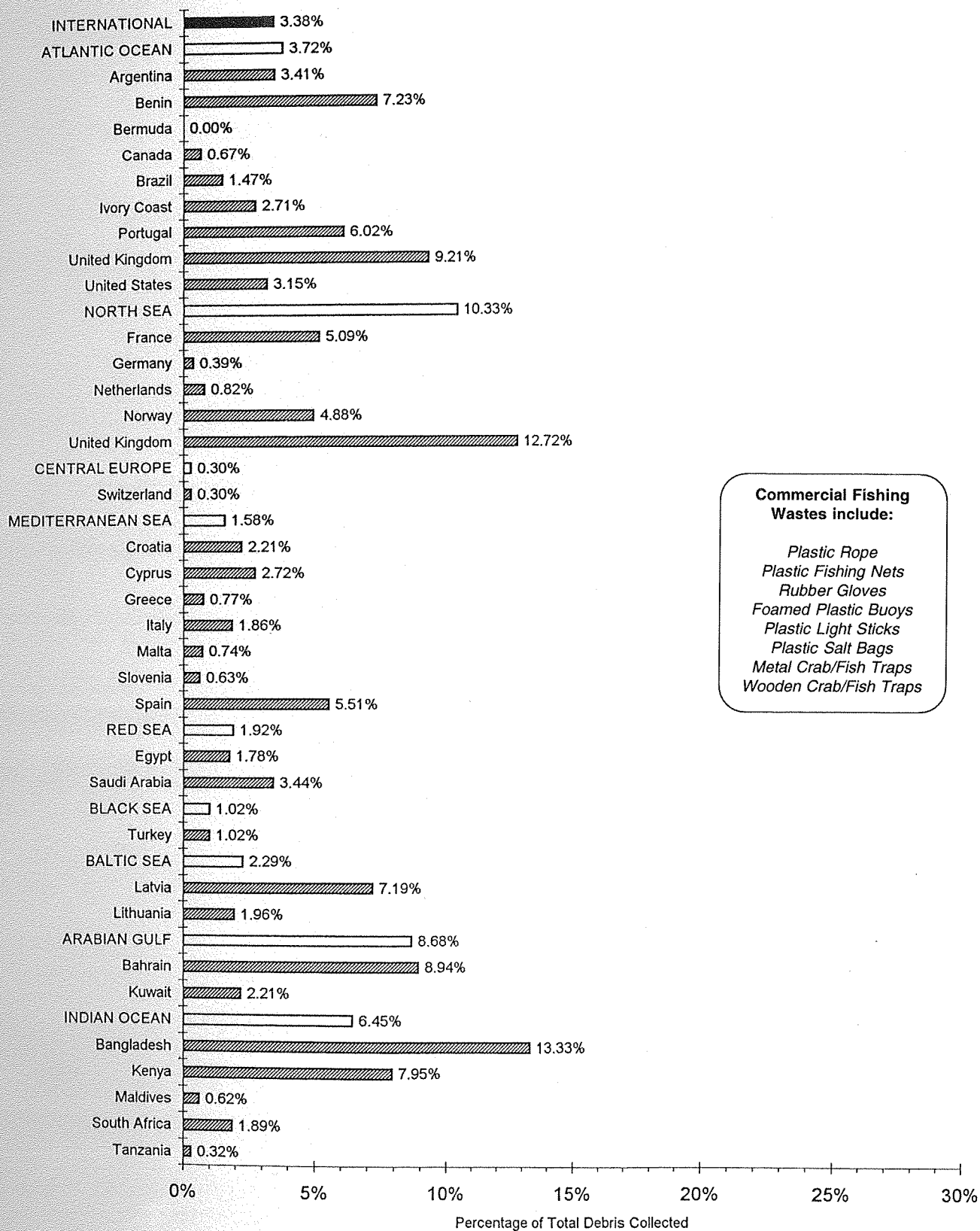
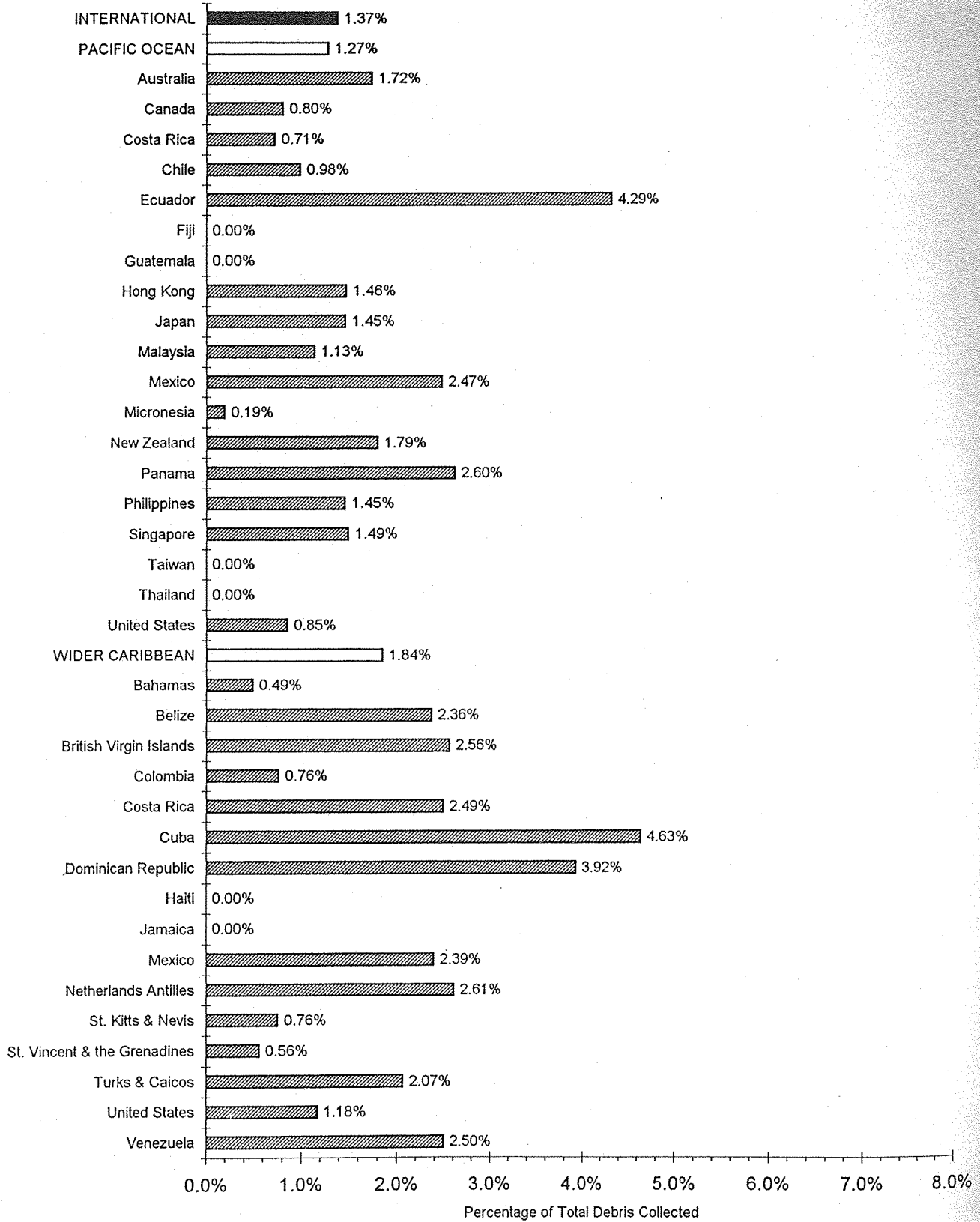
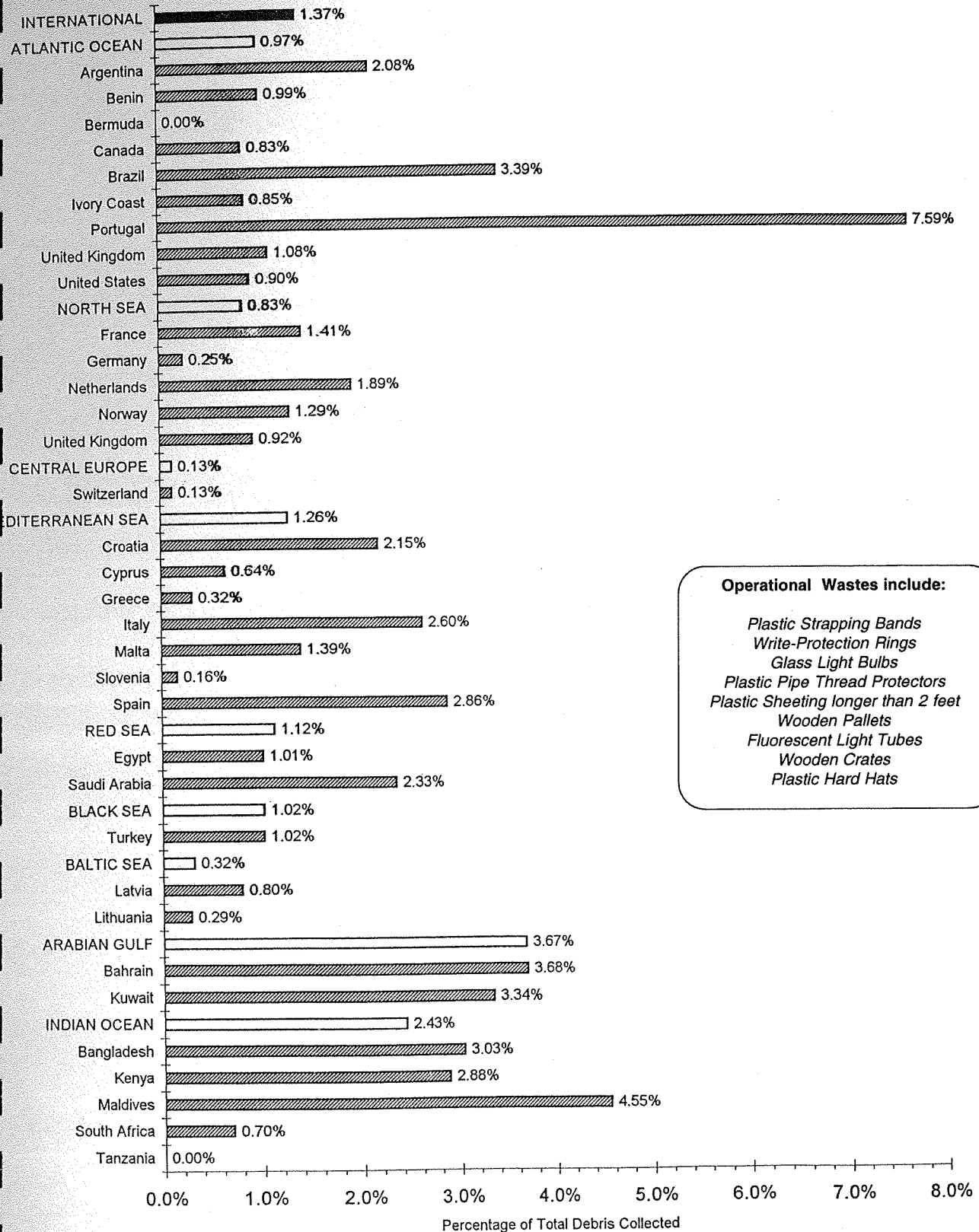


FIGURE 9. Operational Wastes Reported from 1996 International Coastal Cleanups





• Galley-Type Wastes

Ships' galleys, like any kitchen, make regular use of items such as plastic trash bags and plastic milk or water jugs. Once these items become trash, they compete for valuable storage space with other materials more useful to the crew. Other indicator items for galley-type wastes are plastic bleach and cleaner bottles, plastic vegetable sacks, and foamed plastic meat trays and egg cartons.

Annex V of the MARPOL Treaty prohibits overboard disposal of this type of trash. As with other types of waste, enforcement is a key element in compliance. Enforcement and compliance practices vary from country to country. In U.S. waters, the U.S. Coast Guard includes in its ship inspections a review of how a ship handles its garbage. Any ship that's been at sea for a few days is going to produce garbage, and it better still be there when it pulls into port. U.S. vessels are required to maintain a log of waste handling procedures. If a ship has no such log and no appreciable amount of trash, the Coast Guard can and will cite the captain, crew, or owner of the vessel for MARPOL violations. Stiff fines up to \$500,000 accompany such violations, along with up to five years in jail.



But not every ship can be watched every minute, and many violations occur. Galley-type wastes accounted for 3.42% of total debris in the 1996 Cleanup, including 80,375 trash bags, 47,323 gallon milk or water jugs, 32,417 bleach or cleaner bottles, 24,565 foamed plastic meat trays, 11,625 plastic vegetable sacks and 6,975 foamed plastic egg cartons. The 1995 international average was 3.21%. Among the indicator items, the biggest increases occurred in foamed plastic meat trays, which jumped by nearly 42%, and foamed plastic egg cartons, up nearly 24%, over 1995 (Figure 10).

Underwater, galley-type wastes represented 3.89% of total debris.

Again, the U.S. results represented a disproportionately small amount (48%) of all galley-type wastes collected around the world.

Five regions exceeded the international average. The Red Sea (14.66%) reported levels more than twice as high as the next highest region, the Black Sea (6.81%). The Red Sea includes Egypt, which reported the second-highest level among countries, 15.52%. In Benin, which had the highest level (22.98%), only two of the six indicator items were present: 62 trash bags and 100 gallon jugs, out of the 705 total debris items collected. The third-highest level, 13.87% reported in St. Vincent and the Grenadines, is unusual because that cleanup was conducted only underwater. Of the 37 countries that exceeded the international average, six had levels higher than 10%.

Central Europe reported the lowest level (0.04%) followed by the North Sea (0.32%). No galley-type wastes were reported in Bermuda or Thailand.

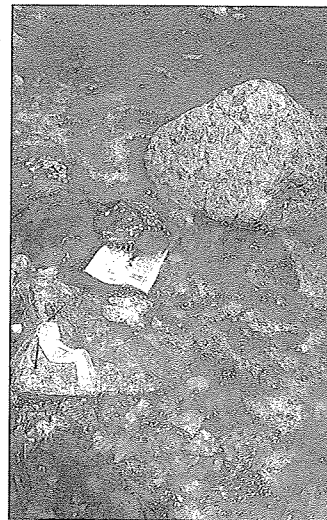
Land-Based Sources of Debris

Creeks, streams, rivers, and stormwater systems carry land-based trash to shorelines, coastal areas, and on into the ocean itself. Outdated sewage systems, inadequate solid waste disposal systems, landfills, and careless citizens who litter or intentionally dump their garbage together introduce a huge amount of debris into the water.

- **Sewage-Associated Wastes**

Sewage-associated wastes are indicated by tampon applicators and rubber condoms, typically flushed down toilets. What happens next creates debris. Many older sewage systems use the same pipes to carry both stormwater runoff and sewage destined for treatment facilities. Called combined sewers, such systems become overloaded by increased water flow during heavy storms. During overflows, raw, untreated sewage is shunted directly into the nearest waterway along with street runoff. Other types of stormwater systems, though not connected directly to sewage pipes, also drain into waterways that lead eventually to the sea.

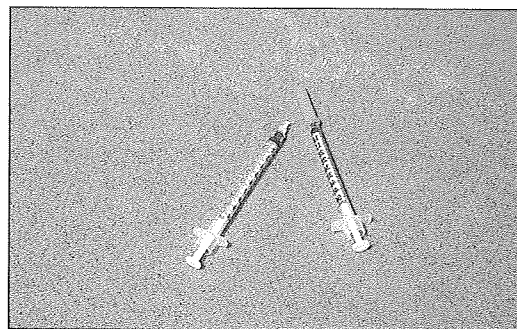
In countries with less-developed sanitation systems, raw sewage may be disposed of directly into the streets or deposited in pits dug outside of town. Dry river beds may be used as dump sites. When it rains, flooding carries the garbage into the sea. The indicator items for sewage-associated wastes are visible flags of invisible, but far more dangerous, contaminants in the water. If tampon applicators and condoms show up on a beach, the presence of raw, untreated sewage in the water is a near certainty.



In the 1996 Cleanup, sewage-associated wastes made up 0.50% of total debris, up from 0.45% in 1995 and 0.42% the year before (Figure 11). That's 20,321 plastic tampon applicators and 9,637 rubber condoms. The underwater rate was 0.39%. Only one region, the Atlantic, exceeded the international average, with 0.66%. The lowest level of sewage-associated waste was reported in the Baltic (0.0038%). Sixteen countries reported higher than average levels, including three with levels over 1.75%: Dominican Republic (1.99%), (Panama 1.85%), and Italy (1.76%). Fifteen countries reported no sewage wastes.

- **Medical Wastes**

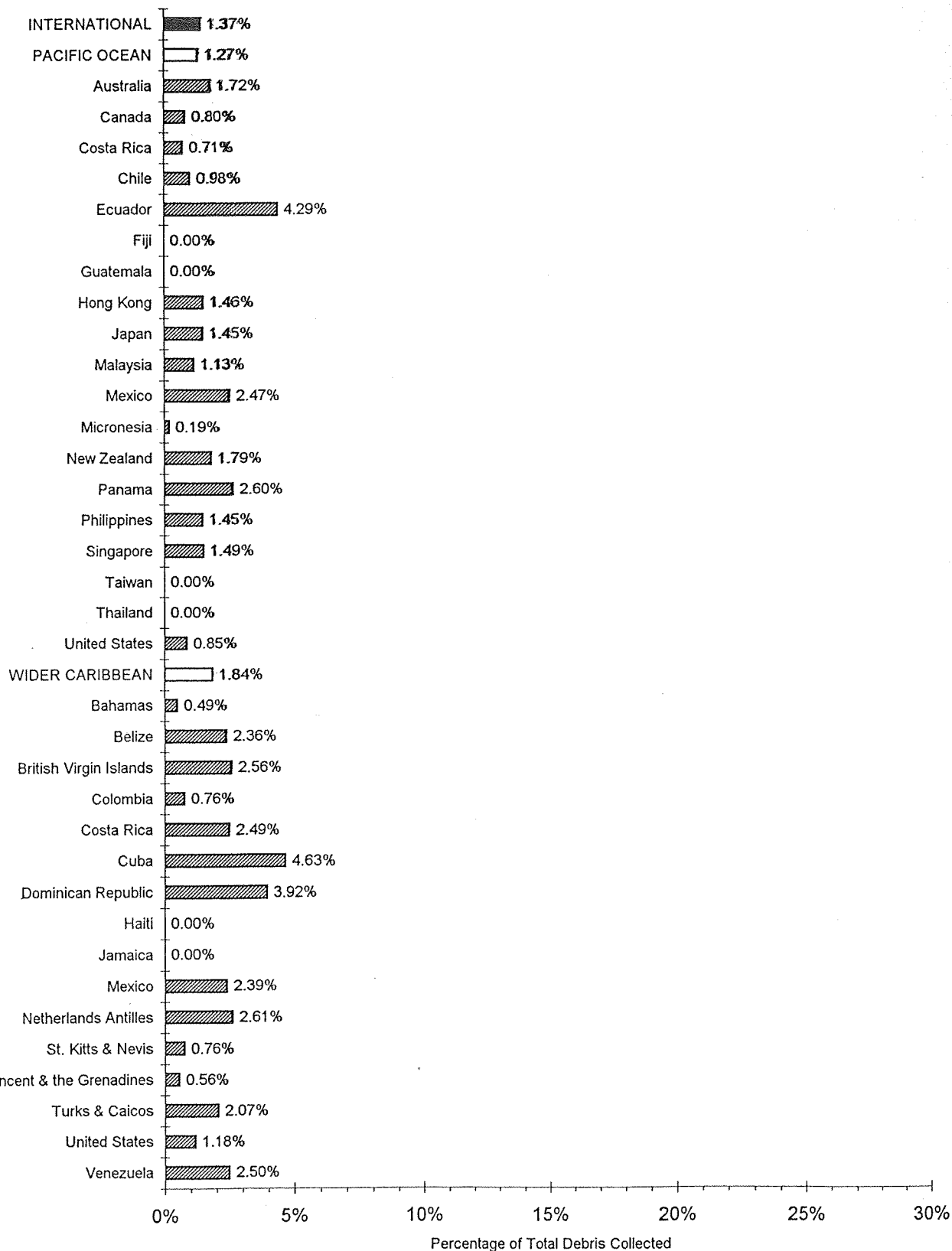
Plastic syringes are the only debris item used to indicate medical wastes. Syringes have many sources: doctors' offices, hospitals, patients using them for prescribed medical treatment, and addicts of illegal drugs. Legal syringes enter the waste stream primarily through municipal sewage systems, as described above for sewage-associated wastes. Illegally-used syringes, carelessly tossed, can wash from gutters into drains and on into the marine environment. Bags of medical debris can also wind up on beaches as the result of illegal dumping.



The 1996 Cleanup collected 7,424 syringes on beaches and shorelines around the world (Figure 12). This represented 0.12% of total debris (compared to 0.13% in 1995). The percentage was 0.14% underwater. Three regions reported higher than average levels of medical wastes: Indian Ocean (0.31%), Red Sea (0.20%), and Wider Caribbean (0.18%). The lowest levels were reported in Central Europe (no medical wastes) and the Mediterranean (0.04%). Twenty-four countries had levels that exceeded the international average, led by Guatemala (1.47%), Tanzania (1.01%), Benin (0.85%), and Dominican Republic (0.79%). No medical wastes were reported in 15 countries.

(text continues on page 48)

FIGURE 10. Galley Wastes Reported from 1996 International Coastal Cleanups



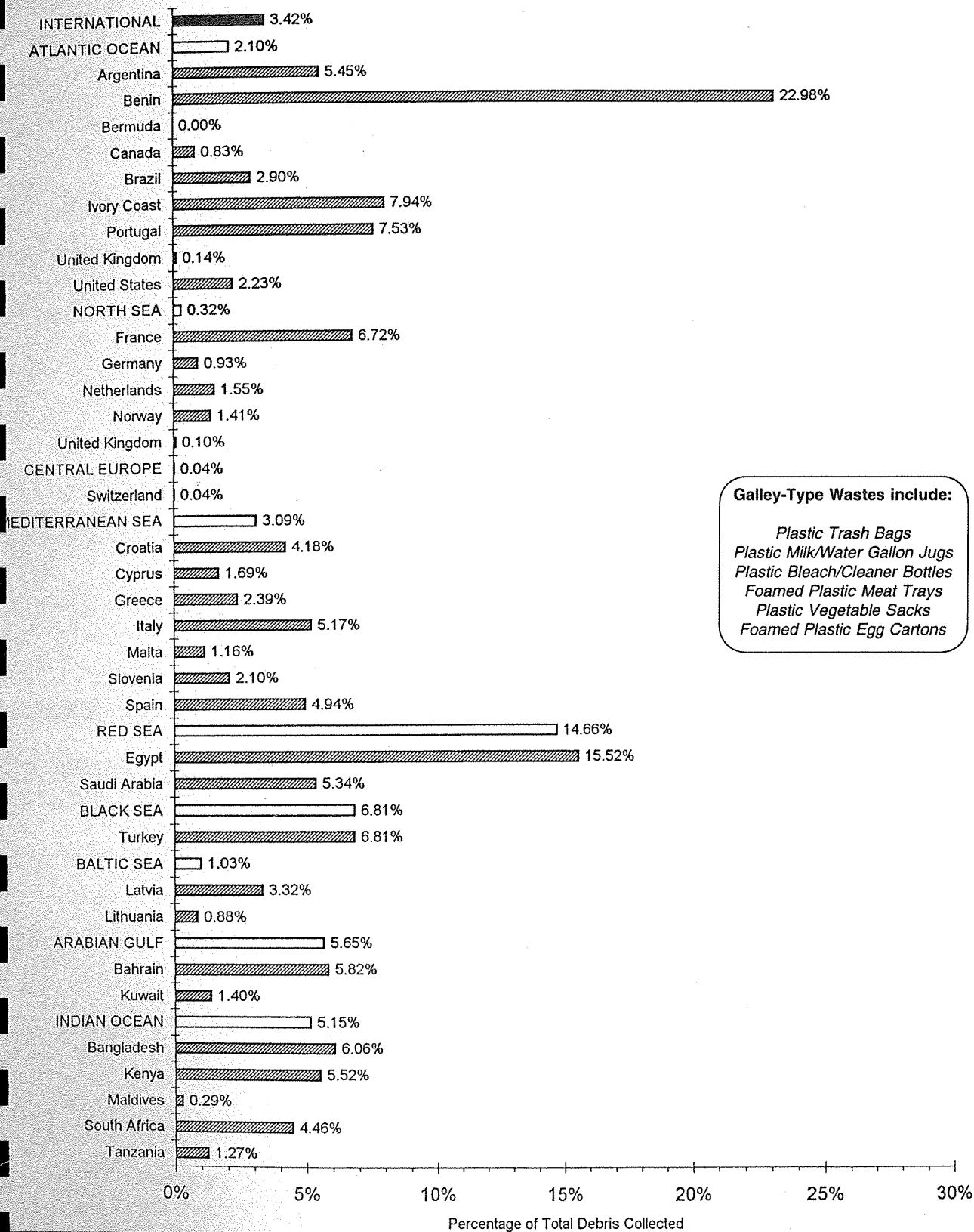
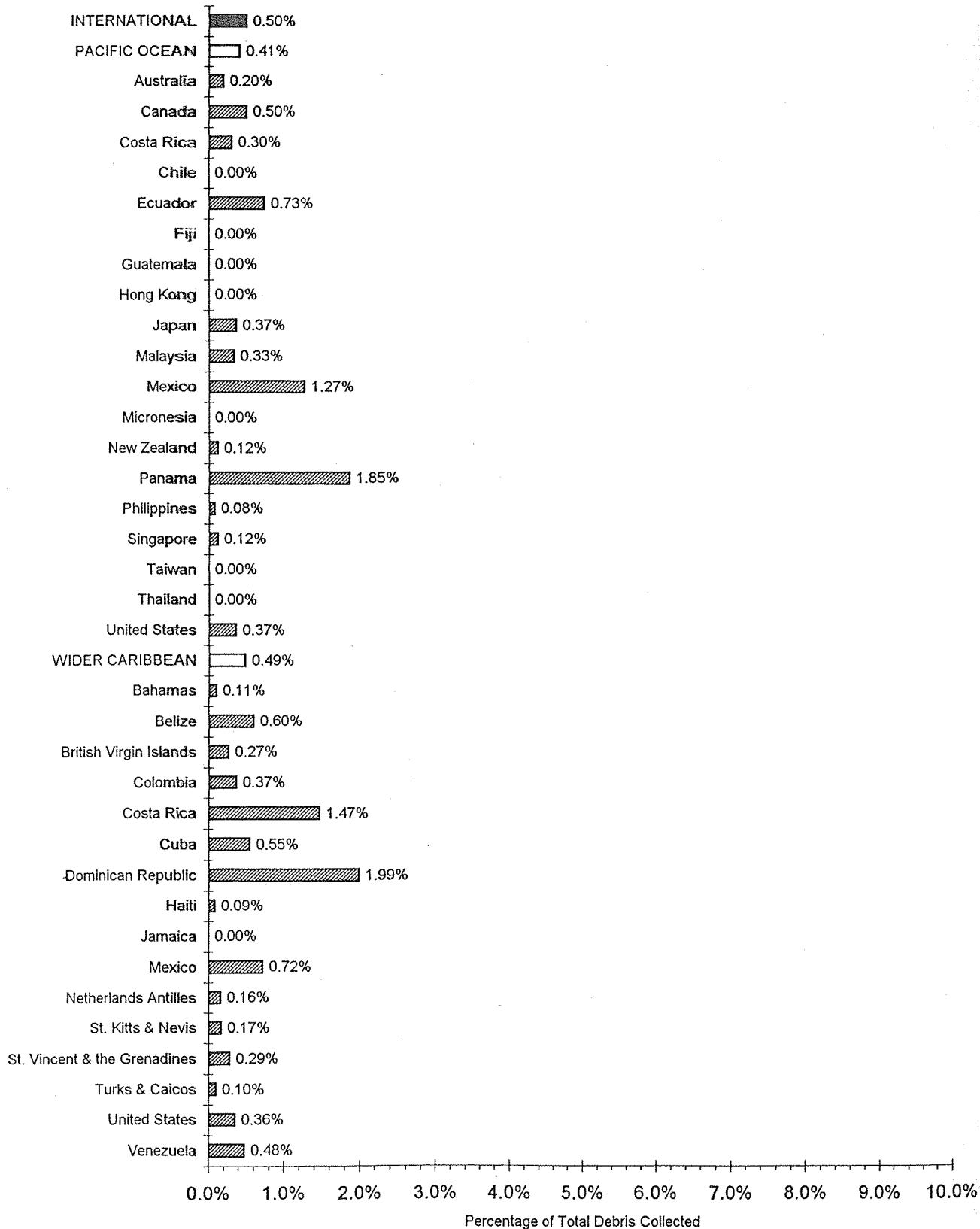


FIGURE 11. Sewage Wastes Reported from 1996 International Coastal Cleanups



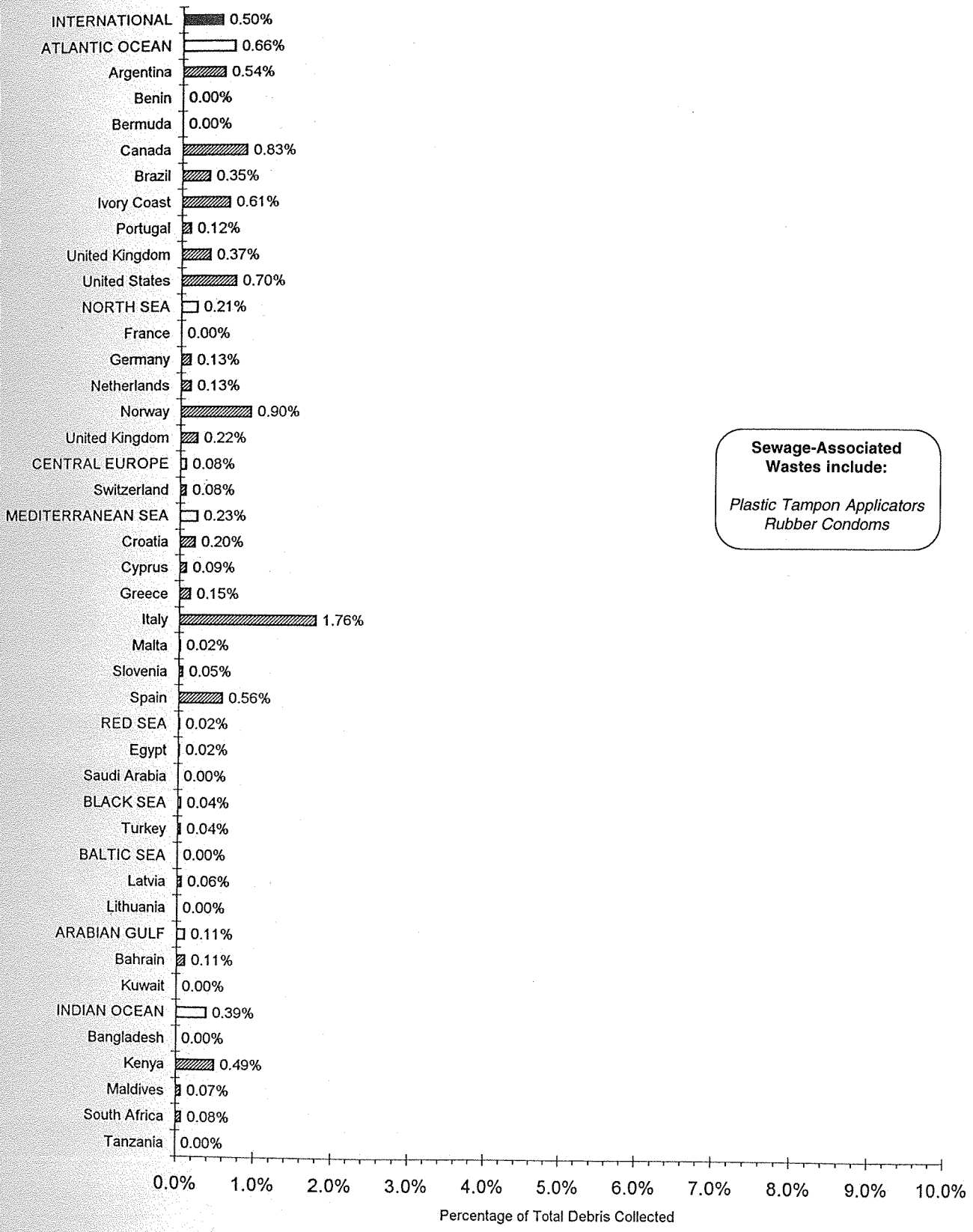
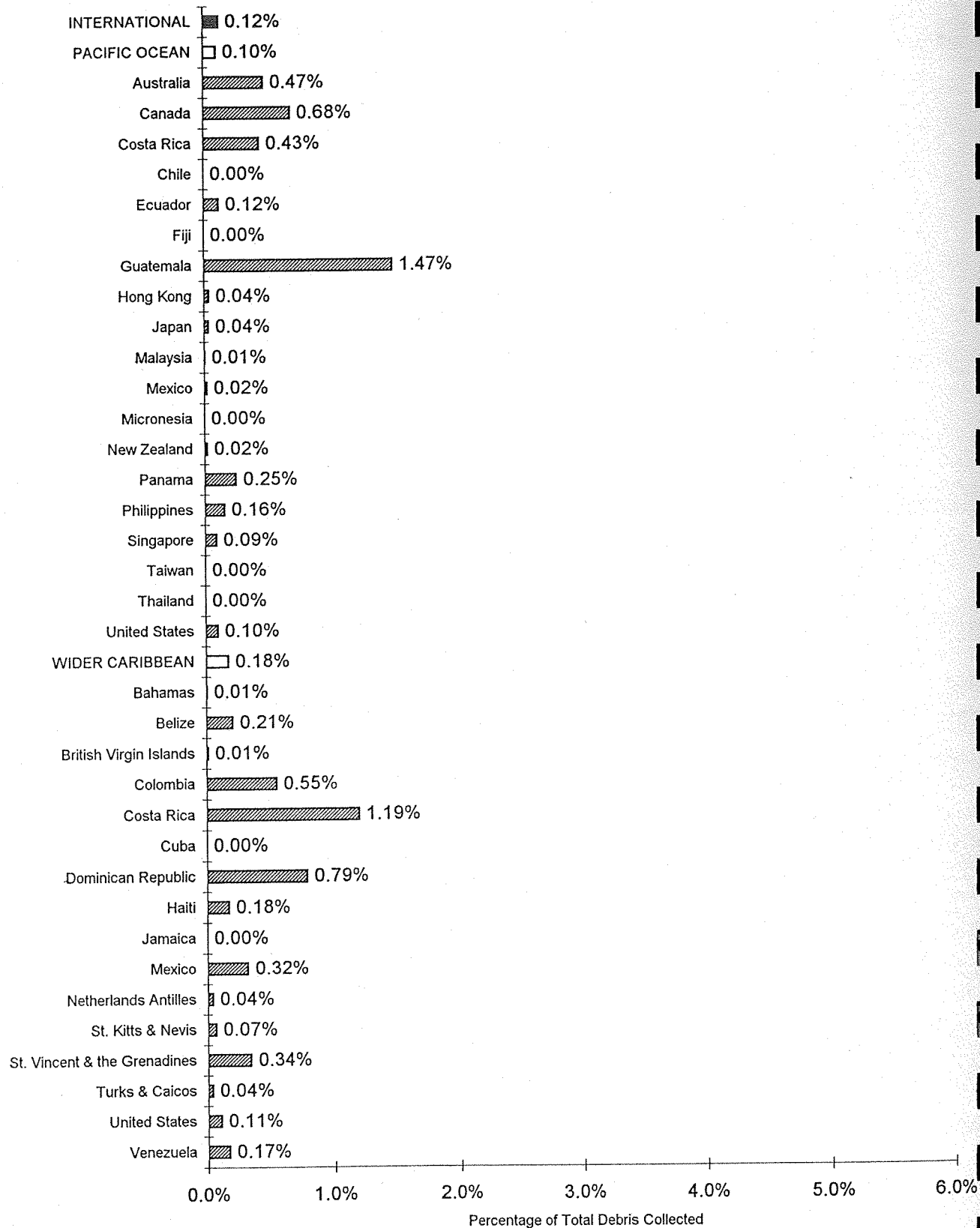
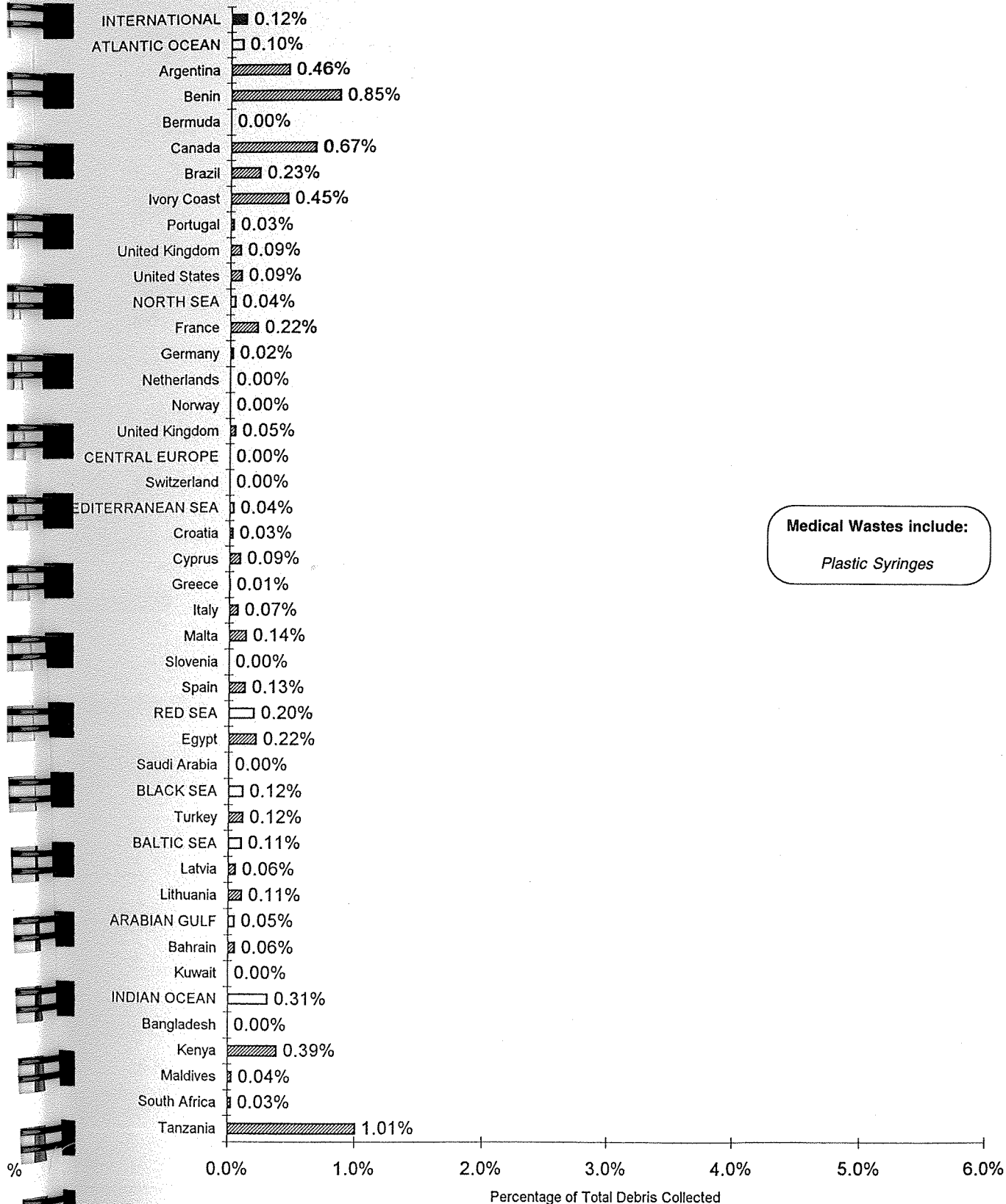


FIGURE 12. Medical Wastes Reported from 1996 International Coastal Cleanups





Foreign Sources of Marine Debris

Oceans do not recognize political, cultural, or geographic boundaries. Neither does marine debris. It travels wherever the winds and currents carry it after someone has put it into the water.

While foreign related debris (identified by labels) was found in almost every coastal region worldwide in the 1996 International Coastal Cleanup, it was reported primarily in the regions along the Pacific Northwest, Gulf of Mexico, and Gulf of Maine of the United States and the United Kingdom in the Western Atlantic and North Sea coasts. Most of the reported debris was fishing related materials carrying identification tags from Canada, Germany, Ireland, Japan, Mexico, Norway, and the United States.

Some of the other foreign debris could have been carried by boats offshore, but judging from its makeup—largely personal care products or food and beverage containers—it is also highly possible that these “foreign” debris items were instead purchased locally and improperly discarded, like the majority of other debris.

Even so, Annex V of the MARPOL Treaty, which regulates the dumping of debris from ships, including fishing vessels, can do a great deal to prevent the occurrence of foreign debris on the world’s beaches and waterways. Ships from countries that are signatory to MARPOL 73/78 and have ratified Annex V are prohibited from dumping their plastic wastes into any waterway, anywhere in the world. Further, ships entering a signatory’s waters, even if from a non-signatory country, are prohibited from dumping their wastes into the signatory country’s waters. To date 83 countries have signed onto Annex V. Clearly, many more countries must be persuaded to sign Annex V, to keep all our beaches and waterways clean. On July 1, 1997, new regulations modeled after the U.S. law went into effect, requiring the international shipping community to post placards about MARPOL’s regulations and maintain waste management logbooks. Hopefully, these regulations will aid in the enforcement and compliance with the MARPOL Treaty.

A coordinated, global effort, where all countries are working together to stop ocean dumping, is essential to reduce the amount of debris that enters the world’s oceans. If one country works to control its solid wastes but its neighbors are not conducting similar practices, progress will be set back by the winds and currents that travel the planet. Global cooperation is essential to solve the problems of marine debris.



“Most debris found appeared to be ship discards. Our coastline is directly adjacent to shipping lanes...”

cleanup volunteer, Bahamas

CONCLUSION

Individuals, municipalities, civic organizations, environmental groups, industrial representatives, and government agencies are all part of the broad collaborative effort that makes up the annual International Coastal Cleanup. Much has been accomplished in the last eleven years. Public awareness of the marine debris problem has been greatly expanded. Knowledge of the types, sources, and patterns of debris has increased substantially. From this foundation, solutions are already being built. But as this report shows, we are still facing a serious situation regarding human-made debris and its impact on the lakes, rivers, bays, and oceans of the world. Debris is a highly visible type of pollution in our waterways and ocean. It is also one of the most solvable.

Plastic persists as the most abundant form of debris found in the marine environment, as well as the longest lasting. The international Dirty Dozen continues to read like a picnic inventory, underscoring the truth that individual people—not governments, industries, or manufacturers—are the real source of the problem.

Recycling has been around for years and has become increasingly sophisticated, yet bottles and associated goods turn up in steady numbers in debris reports. The impact of debris on wildlife is documented dramatically by this year's report. Rather than improving, the problem seems to be getting worse.

A regional examination of the debris collected during the 1996 International Coastal Cleanup again highlights ocean-based activities of fishing and boating where seven of the eleven regions showed significant presence of wastes associated with recreational boating and fishing, commercial fishing, operational wastes and galley wastes (Table 6). The Arabian Gulf and Indian Ocean both displayed high levels of ocean-based related debris. "Hot Spots" for land-based sources of debris were prominent in the Atlantic Ocean, Wider Caribbean, and Red Sea areas.

Many regulations are already in place to mandate responsible solid waste disposal, but by themselves they are not enough. Willing compliance is necessary, and that only comes from increased public awareness and education. Enforcement is needed as well. And for some marine debris issues, solutions have yet to be developed.

The primary goal of this year's Cleanup, as it has been every year since it began, has been to stop debris at its source so that future cleanups will not be necessary. Only through continued emphasis on the need for clean water and environmental stewardship will this problem be solved.

"It was dirty but we did our best and got it sparkling clean."

cleanup volunteer, Kenya

Table 6. Regional Overview of Marine Debris - "Hot Spots"

REGION	R. FISH	C. FISH	OPER.	GALLEY	SEWAGE	MEDICAL
ARABIAN GULF		X	X	X		
ATLANTIC OCEAN	X	X			X	
BALTIC SEA						
BLACK SEA				X		
CENTRAL EUROPE						
INDIAN OCEAN	X	X	X	X		X
MEDITERRANEAN SEA						
NORTH SEA	X	X				
PACIFIC OCEAN						
RED SEA				X		X
WIDER CARIBBEAN			X	X		X

Xs indicate region's debris in that category was equal to or above the international percentage.

APPENDICES



Bahrain

"The Cleanup was fantastic
and we really enjoyed it."

cleanup volunteer, Kenya



United Kingdom

APPENDIX 1. Countries Participating in the International Coastal Cleanup, 1989-1996

COUNTRY	1989	1990	1991	1992	1993	1994	1995	1996
Anguilla (UK)					X	X		
Antigua & Barbuda				X				
Argentina				X	X	X	X	X
Aruba					X			
Australia				X				X
Austria							X*	X*
Bahamas							X*	X
Bahrain					X	X	X	X
Bangladesh						X	X	X
Barbados				X	X	X	X	X
Belgium							X*	X*
Belize				X	X	X	X	X
Benin								X
Bermuda					X	X	X	X
Brazil					X	X		X
British Virgin Islands (UK)			X	X	X	X	X	X
Cameroon						X	X	X
Canada	X	X	X	X		X	X	X
Cayman Islands (UK)						X	X	
Chile								X
Colombia						X	X	X
Costa Rica						X	X	X
Croatia						X	X	X
Cuba			X	X	X			X
Cyprus			X	X				X
Denmark				X				
Dominican Republic				X	X	X	X	X
Ecuador					X	X	X	X
Egypt						X	X	X
El Salvador						X		X
Estonia						X		
Federated States of Micronesia					X	X		X
Fiji								X
Finland				X				
France							X*	X*
Germany							X*	X*
Gibraltar (UK)						X	X*	
Greece			X	X	X	X	X	X
Grenada				X	X	X	X	
Guatemala		X			X	X	X	X
Guyana							X	
Haiti								X
Hong Kong				X		X	X	X
Indonesia				X	X	X		
Israel			X	X	X	X	X	
Italy					X	X	X*	X*
Ivory Coast					X	X	X	X

APPENDIX 1. Countries Participating in the International Coastal Cleanup, 1989-1996, cont.

COUNTRY	1989	1990	1991	1992	1993	1994	1995	1996
Jamaica					X	X	X	X
Japan		X	X	X	X	X	X	X
Kenya					X	X	X	X
Kuwait								X
Latvia						X	X	X
Lithuania					X	X	X	X
Malaysia				X		X	X	X
Maldives							X*	X*
Malta						X	X	X
Mexico	X	X	X	X	X	X	X	X
Montserrat (UK)						X		
Netherlands							X*	X*
Netherlands Antilles			X	X	X	X	X	X
New Zealand				X	X		X	X
Nigeria				X		X	X	X
Norway				X		X	X	X
Pakistan				X				
Palau						X	X	X
Panama				X	X	X	X	X
Peru						X		
Philippines						X	X	X
Poland					X	X	X	X
Portugal						X	X	X
St. Kitts and Nevis				X	X	X		X
St. Lucia							X	
St. Vincent and the Grenadines						X	X	X
Saudi Arabia								X
Singapore				X	X	X	X	X
Slovenia							X*	X*
South Africa								X
South Korea				X	X			
Spain					X	X	X	X*
Sri Lanka								X
Sweden								X*
Switzerland								X*
Taiwan								X
Tanzania								X
Thailand						X		X
Kingdom of Tonga						X		
Trinidad and Tobago						X	X	
Turkey					X		X	X
Turks and Caicos (UK)						X	X	X
United Arab Emirates								X
United Kingdom			X	X	X	X	X	X
United States	X	X	X	X	X	X	X	X
Venezuela			X	X	X	X	X	X

*countries that participated with PADI Europe

APPENDIX 2. MARPOL Signatory Countries that Participated in the 1996 International Coastal Cleanup

Each country that signs onto the MARPOL Treaty automatically agrees to the provisions of Annexes I and II, which cover oil and noxious liquid substances. Annexes III, IV, and V are Optional Annexes—a signatory may or may not sign on and thus be bound by its provisions. Annex III covers packaged hazardous substances, Annex IV covers sewage, and Annex V covers ship-generated solid wastes.

Country/Territory	Annex I & II	Annex III	Annex IV	Annex V
Argentina	X	X	X	X
Austria	X	X	X	X
Bahamas	X	X		X
Barbados	X	X		X
Belgium	X	X	X	X
Belize	X	X	X	X
Brazil	X			
Canada	X			
Colombia	X	X	X	X
Croatia	X	X	X	X
Cyprus	X			X
Ecuador	X	X	X	X
Egypt	X	X	X	X
France	X	X	X	X
Germany	X	X	X	X
Greece	X	X	X	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
Lithuania	X	X	X	X
Malaysia	X			X
Malta	X			
Mexico	X			
Netherlands/Netherlands Antilles	X	X		X
Norway	X	X		X
Panama	X	X	X	X
Poland	X	X	X	X

Country/Territory	Annex I & II	Annex III	Annex IV	Annex V
Portugal	X	X	X	X
St. Vincent & the Grenadines	X	X	X	X
Singapore	X	X		
Slovenia	X	X	X	X
Spain	X	X	X	X
Sri Lanka	X			X
Sweden	X	X	X	X
Switzerland	X	X		X
Turkey	X			X
United Kingdom				
British Virgin Islands *				
Cayman Islands	X	X		X
Gibraltar	X	X		X
Hong Kong	X	X		X
Turks & Caicos *				
United States	X	X		X
Venezuela	X	X	X	X

* Indicates British Crown Colonies that have not yet petitioned the United Kingdom for the adoption of MARPOL.

APPENDIX 3. Data Card Used by Cleanup Volunteers, English (front)

ITEMS COLLECTED

You may find it helpful to work with a buddy as you clean the area, 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 cups ||||| TOTAL

PLASTIC

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

FOAMED PLASTIC

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

FOLD ALONG THIS LINE

GLASS

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

RUBBER

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

METAL

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

PAPER

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

WOOD

(leave driftwood on the beach)

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

CLOTH

clothing/pieces	<input type="text"/>		<input type="text"/>
-----------------	----------------------	--	----------------------

Remember to turn the card over and fill out your name and address and to record sources and entangled wildlife!

APPENDIX 3. Data Card Used by Cleanup Volunteers, English (back)

INTERNATIONAL COASTAL CLEANUP DATA CARD

Thank you for participating in the International Coastal Cleanup and completing this data card. This form is designed for international use, therefore, not all listings may apply to your area. Data collected since 1986 by the Center for Marine Conservation (CMC) has been used in CMC's International Marine Debris Database and annual Cleanup Reports to help develop solutions and stop the dumping of trash into marine/aquatic areas. By completing the section below, you will be able to receive this and other information on citizen activities on marine conservation. Complete the following information and return this card to your area coordinator or mail it to CMC at the address at the bottom of this card.

Type of cleanup: Shoreline/Beach or Underwater

Zone Name/Location Cleaned _____ Nearest City/County _____

Today's Date: Month _____ Day _____ Year _____ Name of Coordinator _____

Name _____ Affiliation _____

Address _____ Phone (____) _____ Age _____

City _____ State _____ Country _____ Zip Code _____

Do you currently receive the International Coastal Cleanup newsletter, Coastal Connection? Yes No
If not, would you like to be placed on the mailing list? Yes (please list address above) No

Would you like to receive information on the Center for Marine Conservation and other ways to help protect our oceans and waterways? Yes No

Number of people working together on this card _____ Estimated distance of area cleaned _____

Number of trash bags filled _____ Total estimated weight _____

SAFETY TIPS

1. Do not go near any large barrels or drums.
2. Be careful with sharp objects and syringes.
3. Wear gloves and closed-toe shoes.
4. Stay out of the dunes and natural areas.
5. Watch out for wildlife.
6. Don't lift anything too heavy.

WE WANT YOU TO BE SAFE

ENTANGLED ANIMALS (Dead or Alive) *Be as specific as you can.*

Type of Animal	Form of Entangling Debris	Comments

FOREIGN LABELS: Please list all items with foreign labels or other markings to help us identify the item's origin such as cruiseline names, military identification or debris with names and/or address of shipping, fishing, or oil/gas exploration companies. Please do not list items that are common to your local area, i.e. imported water or beer.

Label or other markings	Type of item
Example: ABC Shipping Company	plastic strapping band

What was the most peculiar item you collected? _____

Comments/Observations during the cleanup _____

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

U.S. Environmental Protection Agency

IUCN — The World Conservation Union

Intergovernmental Oceanographic Commission (IOC)
of the United Nations' Educational, Scientific, and
Cultural Organization (UNESCO)

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

CENTER FOR MARINE CONSERVATION
Atlantic Regional Office
306 A Buckroe Ave.
Hampton, VA 23664
USA



Center for Marine Conservation

APPENDIX 3. Data Card Used by Cleanup Volunteers, Spanish (front)

ARTÍCULOS RECOGIDOS

Al limpiar el área costera u orilla tal vez le será útil trabajar con un compañero, así uno recoge los desperdicios y el otro toma apuntes. Una manera fácil de llevar la cuenta de los artículos que encuentren es la de marcarlos con una señal. El recuadro es para el número total de artículos recogidos; vea la muestra abajo.

Ejemplo: cartones para huevos 1111-1111-1111 1 TOTAL 16 copas 1111-1111-1111-1111 11 TOTAL 22

DE PLÁSTICO

	Número total de artículos		Número total de artículos
aplicadores de tampones	<input type="text"/>	flejes, bandas de embalaje	<input type="text"/>
aros para sujetar	<input type="text"/>	jeringas (jeringuillas)	<input type="text"/>
bebidas enlatadas	<input type="text"/>	juguetes	<input type="text"/>
aros de protección para cintas de computadoras	<input type="text"/>	lámina de plástico	<input type="text"/>
bolsas:		más de 2 pies (60 cm)	<input type="text"/>
basura	<input type="text"/>	66 cm o menos	<input type="text"/>
comida/envolturas, chucherías	<input type="text"/>	línea (cuerda) de pescar	<input type="text"/>
sal	<input type="text"/>	pañales	<input type="text"/>
otro tipo	<input type="text"/>	pedazos	<input type="text"/>
botellas:		popotes, pitillos, sorbetos, pajitas	<input type="text"/>
aceite, lubricante	<input type="text"/>	protectores de rosca de tubería	<input type="text"/>
bebidas gaseosas	<input type="text"/>	redes de pesca	<input type="text"/>
cloro, limpiadores, detergentes	<input type="text"/>	sacos/costales de malla	<input type="text"/>
leche, para agua	<input type="text"/>	señuelos, flotadores, carnada	<input type="text"/>
otras botellas	<input type="text"/>	cascos	<input type="text"/>
cubetas, baldes	<input type="text"/>	tapas, chapas	<input type="text"/>
cuerda, soga	<input type="text"/>	varillas luminosas, varas de luz	<input type="text"/>
encendedores	<input type="text"/>	vasos, utensilios	<input type="text"/>
filtros de cigarrillos (cigarillos)	<input type="text"/>	otros plásticos (especifique)	<input type="text"/>

HULE ESPUMA
(u otro tipo de plástico espuma)

boyas y/o flotadores	<input type="text"/>	materiales de empaque	<input type="text"/>
cartones para huevos	<input type="text"/>	pedazos	<input type="text"/>
charolas (bandejas) para carne o verduras	<input type="text"/>	platos	<input type="text"/>
envases de comida para llevar (comidas rápidas)	<input type="text"/>	vasos	<input type="text"/>
		otro tipo	<input type="text"/>

VIDRIO
DOBLESE AQUÍ

botellas, frascos:		focos, bombillas	<input type="text"/>
bebidas	<input type="text"/>	tubos de luz fluorescente	<input type="text"/>
tarros de comida	<input type="text"/>	pedazos	<input type="text"/>
otras botellas o frascos	<input type="text"/>	otro tipo (especifique)	<input type="text"/>

HULE O GOMA

condones (profilácticos)	<input type="text"/>	llantas, gomas de carro	<input type="text"/>
globos	<input type="text"/>	otro tipo (especifique)	<input type="text"/>
guantes	<input type="text"/>		

METAL

alambre	<input type="text"/>	barriles de 55 galones (200 litros)	<input type="text"/>
latas:		nuevos	<input type="text"/>
aerosol	<input type="text"/>	oxidados	<input type="text"/>
bebidas	<input type="text"/>	tapas, chapas de botellas, corcholatas	<input type="text"/>
comidas	<input type="text"/>	tapas de latas, lenguetas de metal	<input type="text"/>
otro tipo	<input type="text"/>	trampas para cangrejos/peces	<input type="text"/>
pedazos	<input type="text"/>	otro tipo (especifique)	<input type="text"/>

PAPEL

bolsas	<input type="text"/>	periódico, revistas	<input type="text"/>
cajas de cartón	<input type="text"/>	platos	<input type="text"/>
cartones	<input type="text"/>	vasos	<input type="text"/>
pedazos	<input type="text"/>	otro tipo (especifique)	<input type="text"/>

MADERA
(deje la madera flotante en la playa)

cajas	<input type="text"/>	trampas para cangrejos y langostas	<input type="text"/>
pedazos	<input type="text"/>	otro tipo (especifique)	<input type="text"/>
tablas o paletas	<input type="text"/>		

TELA (TRAPO)

ropa/pedazos

APPENDIX 3. Data Card Used by Cleanup Volunteers, Spanish (back)

TARJETA DE DATOS PARA LA LIMPIEZA INTERNACIONAL DE COSTAS

Gracias por su participación en la Limpieza Internacional de Costas y por completar esta tarjeta de datos. La misma está diseñada para ser utilizada en limpiezas internacionales, sin embargo puede que algunos de los artículos no se encuentren o no apliquen a su área. Los datos informados desde 1986 y analizados por el Centro para la Conservación Marina (CMC) han sido utilizados en la Sede Internacional de Datos sobre Desperdicios Marinos. Con estos datos, el CMC produce informes anuales sobre la Limpieza que ayudan a formular soluciones para poner fin al desecho de basura en el ambiente marino y otros cuerpos de agua. Para recibir información adicional sobre la Limpieza Internacional de Costas y otras actividades sobre la conservación de los recursos marinos, complete este formulario y devuelva esta tarjeta al coordinador de su área o envíela a la dirección al final de la misma.

Tipo de limpieza: Costa/Orilla/Playa Subacuática

Nombre de la zona o localidad limpiada _____ Ciudad más próxima _____

La fecha de hoy: Mes _____ Día _____ Año _____ Nombre del Coordinador(a) _____

Nombre _____ Afiliación _____

Dirección _____ Teléfono _____ Edad _____

Ciudad _____ Estado _____ País _____ Zona/Código postal _____

¿Recibe usted la hoja informativa oficial sobre la Limpieza Internacional de Costas, *Coastal Connection*? Sí No

Si no, ¿desea que pongamos su nombre en un listado para recibirla? Sí (por favor, escriba su dirección en el espacio de arriba) No

¿Quiere recibir información sobre el Centro para la Conservación Marina y sobre otras maneras de como puede ayudar en la protección de nuestros océanos y cuerpos de agua? Sí No

Número de personas trabajando juntas en esta tarjeta de datos _____ Distancia aproximada del área limpiada _____

Número de bolsas que se llenaron _____ Peso total estimado _____

CONSEJOS DE PRECAUCIÓN

1. No se acerque a ningún barril o tambor de tamaño grande.
2. Tenga cuidado con objetos afilados y jeringas (jeringuillas).
3. Use guantes y zapatos.
4. Manténgase fuera de dunas y otras áreas naturales.
5. Tenga cuidado con la vida silvestre.
6. No levante nada demasiado pesado.

¡QUEREMOS QUE USTED ESTÉ A SALVO!

ANIMALES ENREDADOS (muerto o vivo) (Sea lo más específico posible)

Tipo de Animal _____ Forma de Desperdicio Enredando el Animal _____ Comentario _____

ETIQUETAS EXTRANJERAS: Por favor, haga una lista de todos los productos con etiquetas extranjeras y marcas de identificación que indiquen el lugar de origen, tales como líneas de cruceros, buques mercantes y pesqueros, compañías de petróleo, etc.

ORIGEN	ARTICULO RECOGIDO
Ejemplo: <i>Compañía de Carga ABC</i>	<i>botella de plástico</i>

¿Cuál fue el artículo más raro que se recogió? _____

Comentarios sobre la Limpieza _____

Las siguientes organizaciones nacionales e internacionales respaldan y/o apoyan la Limpieza Internacional de Costas:

Agencia de Protección Ambiental Federal de los Estados Unidos (USAPA)

UICN - Unión Mundial para la Naturaleza

Comisión Oceanográfica Intergubernamental (COI) de la Organización de Naciones Unidas para la Educación, la Ciencia, y la Cultura (UNESCO)

Por favor devuelva esta tarjeta al coordinador de su área o envíela a:

CENTER FOR MARINE CONSERVATION

Atlantic Regional Office

306 A Buckrobs Ave.

Hampton, VA 23664

USA



APPENDIX 4. The 1996 International Dirty Dozen, Land Only

	Debris Item	Total Number Reported	Percent of Total Debris Collected
1.	Cigarette Butts	767,063	13.29%
2.	Plastic Pieces	357,094	6.19%
3.	Plastic Food Bags/Wrappers	311,958	5.40%
4.	Foamed Plastic Pieces	269,731	4.67%
5.	Plastic Caps/Lids	250,470	4.34%
6.	Glass Pieces	222,397	3.85%
7.	Paper Pieces	214,479	3.72%
8.	Plastic Beverage Bottles	194,454	3.37%
9.	Metal Beverage Cans	186,905	3.24%
10.	Plastic Straws	185,276	3.21%
11.	Glass Beverage Bottles	179,718	3.11%
12.	Metal Bottle Caps	143,807	2.49%
	Total Dirty Dozen	3,283,352	56.87%
13.	Foamed Plastic Cups	123,997	2.15%
14.	Plastic Cups/Utensils	122,369	2.12%
15.	Lumber Pieces	113,241	1.96%
16.	Other Plastic Bags	112,577	1.95%
17.	Plastic Rope	108,591	1.88%
18.	Clothing/Pieces	81,760	1.42%
19.	Plastic Trash Bags	77,999	1.35%
20.	Other Plastic Bottles	67,006	1.16%
	Total Top Twenty	4,090,892	70.86%

APPENDIX 5. The 1996 International Dirty Dozen, Underwater Only

	Debris Item	Total Number Reported	Percent of Total Debris Collected
1.	Cigarette Butts	19,934	11.59%
2.	Glass Beverage Bottles	16,379	9.53%
3.	Metal Beverage Cans	12,189	7.09%
4.	Plastic Beverage Bottles	8,283	4.82%
5.	Plastic Food Bags/Wrappers	7,813	4.54%
6.	Glass Pieces	5,885	3.42%
7.	Plastic Pieces	4,671	2.72%
8.	Plastic Caps/Lids	4,339	2.52%
9.	Plastic Cups/Utensils	4,173	2.43%
10.	Foamed Plastic Pieces	4,062	2.36%
11.	Metal Bottles Caps	3,768	2.19%
12.	Metal Food Cans	3,337	1.94%
	Total Dirty Dozen	94,833	55.15%
13.	Metal Pieces	2,993	1.74%
14.	Other Plastic Bags	2,788	1.62%
15.	Paper Pieces	2,762	1.61%
16.	Plastic Straws	2,616	1.52%
17.	Foamed Plastic Cups	2,566	1.49%
18.	Clothing/Pieces	2,548	1.48%
19.	Glass Food Jars	2,508	1.46%
20.	Plastic Trash Bags	2,376	1.38%
	Total Top Twenty	115,990	67.46%

APPENDIX 6. 1996 International Marine Debris Raw Data Summary

DEBRIS ITEMS	Argentina	Australia	Bahamas	Bahrain	Bangladesh	Belize	Benin	Bermuda	Brazil	British Virgin Islands	Canada
PLASTIC: Food Bags/Wrappers	1040	552	717	4,376	8	920	100	0	601	131	1290
Salt Bags	2	0	5	179	17	110	0	0	0	20	11
Trash Bags	417	75	155	1,671	2	379	62	0	208	83	187
Other Bags	183	97	406	3,184	16	749	48	0	388	71	243
Plastic Beverage Bottles	359	343	2006	1,202	0	355	16	9	397	444	465
Bleach Bottles	45	5	275	269	0	118	0	0	172	280	45
Milk/Water Gallon Jugs	46	31	194	703	6	268	100	0	2	120	66
Oil/Lube Bottles	109	7	446	319	3	388	0	0	68	267	76
Other Plastic Bottles	32	79	526	717	0	580	0	0	197	236	155
Buckets	6	10	99	146	0	80	0	3	28	101	73
Caps/Lids	252	155	848	979	6	468	44	22	770	381	654
Cigarette Butts	1513	366	271	635	27	136	7	0	748	39	945
Cigarette Lighters	32	133	253	191	0	58	0	0	49	65	52
Cups/Utensils	84	54	2,225	569	0	627	0	14	708	182	396
Diapers	34	33	187	82	0	80	0	0	28	4	37
Fishing Line	94	101	90	227	0	53	0	1	43	15	115
Fishing Floats/Lures	22	110	56	142	0	40	0	5	15	33	42
Fishing Nets	5	30	57	248	0	49	0	0	23	126	13
Hard Hats	0	2	3	84	0	3	0	0	1	1	0
Light Sticks	0	4	64	314	0	148	0	0	0	22	7
Plastic Pieces	243	203	1341	3291	0	302	0	0	809	335	1133
Pipe Thread Protectors	124	80	11	157	0	51	0	0	0	27	16
Rope	292	69	414	2866	3	154	25	0	87	471	267
Long Sheeting	0	2	5	162	0	23	0	0	15	18	33
Short Sheeting	0	7	24	233	0	35	0	0	107	5	70
Six-Pack Holders	128	37	284	42	0	136	0	0	83	79	64
Strapping Bands	28	21	26	126	0	37	0	0	0	0	0
Straws	222	200	446	539	3	937	38	0	663	134	412
Syringes	45	33	2	30	0	33	6	0	31	1	122
Tampon Applicators	47	4	17	24	0	28	0	0	9	2	62
Toys	30	9	40	87	6	102	14	0	139	16	56
Vegetable Sacks	5	6	25	375	0	74	0	0	0	5	24
Write Protection Rings	3	26	73	28	0	18	0	0	0	3	13
Other Plastic	62	71	514	486	0	329	12	4	238	259	239
FOAMED PLASTIC: Buoys	34	4	113	223	0	82	26	0	54	26	22
Foamed Cups	27	85	1377	559	4	544	0	0	109	34	746
Egg Cartons	0	4	37	78	2	37	0	0	3	6	22
Fast Food Containers	24	97	173	287	0	124	0	0	6	105	207
Meat Trays	22	7	53	59	0	86	0	0	0	9	32
Packaging Materials	0	39	591	588	0	123	11	0	6	84	306
Foamed Pieces	4	82	404	1425	0	444	72	0	142	158	680
Foamed Plates	0	10	1352	260	6	357	0	0	13	19	49
Other Foamed Plastic	0	0	0	0	0	0	0	0	0	0	0
GLASS: Beverage Bottles	108	385	2440	1295	0	412	0	58	209	437	581
Food Jars	23	47	219	324	3	122	0	3	34	38	56

APPENDIX 6. 1996 International Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	Argentina	Australia	Bahamas	Bahrain	Bangladesh	Belize	Benin	Bermuda	Brazil	British Virgin Islands	Canada
Other Glass Bottles/Jars	58	178	454	559	0	1654	7	7	58	70	110
Fluorescent Light Tubes	8	0	19	92	0	70	0	0	2	3	0
Light Bulbs	14	9	79	240	4	300	0	0	7	9	10
Glass Pieces	1239	617	1023	3087	6	41310	14	14	300	187	1947
Other Glass	4	27	36	487	0	224	0	0	4	10	424
RUBBER: Balloons	69	4	24	94	15	1290	0	0	40	0	208
Condoms	6	10	16	37	0	660	0	0	38	16	35
Rubber Gloves	1	4	35	444	0	520	0	0	9	6	26
Tires	6	39	35	192	2	860	4	4	16	41	46
Other Rubber	46	57	226	572	0	10826	0	0	230	87	192
METAL: Bottles Caps	42	314	1179	553	2	4382	23	23	768	115	434
Aerosol Cans	90	79	104	131	1	672	0	0	12	51	37
Beverage Cans	218	588	4997	1177	2	1620	29	29	692	479	797
Food Cans	77	49	90	162	2	534	0	0	65	12	246
Other Cans	16	96	269	246	1	440	0	0	50	21	63
Metal Crab/Lobster Traps	0	5	187	133	0	60	0	0	10	1	8
55 Gallon Rusty Drums	0	6	27	242	0	820	1	1	25	34	33
55 Gallon New Drums	0	4	4	21	0	120	0	0	8	2	1
Metal Pieces	44	154	197	470	0	740	0	0	205	38	317
Pull Tabs	12	28	230	213	0	360	0	0	92	8	265
Wire	29	24	25	317	2	611	0	0	23	19	211
Other Metal	11	186	212	311	0	770	31	31	172	37	259
PAPER: Bags	96	111	250	541	1	3554	0	0	292	84	180
Cardboard	77	72	240	402	0	1260	0	0	111	46	169
Cartons	151	53	128	1253	2	2303	0	0	379	21	172
Paper Cups	26	41	247	372	5	3630	0	0	120	32	250
Newspapers/Magazines	70	86	123	255	0	22610	0	0	381	18	119
Paper Pieces	1215	224	341	1020	0	49025	0	0	671	29	469
Paper Plates	14	23	424	127	2	2330	0	0	12	12	58
Other Paper	51	67	61	479	0	16215	0	0	61	25	138
WOOD: Crab/Lobster Traps	1	2	36	439	2	130	0	0	12	0	0
Crates	0	3	4	354	0	1150	0	0	25	11	8
Lumber Pieces	245	49	327	5649	0	3310	0	0	570	170	134
Pallets	30	5	6	782	1	1047	0	0	317	24	13
Other Wood	14	70	117	2145	0	2052	0	0	97	24	57
CLOTH: Clothing/Pieces	95	90	602	828	3	3265	0	0	189	82	370
GRAND TOTALS	9,821	7,089	31,238	54,207	165	15,668	705	228	13,266	6,722	18,023
GRAND TOTALS, w/o Butts	8,308	6,723	30,967	53,572	138	15,532	698	228	12,518	6,683	17,078

APPENDIX 6. 1996 International Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	Chile	Colombia	Costa Rica	Croatia	Cuba	Cyprus	Dominican Republic	Ecuador	Egypt	Fiji	France	Germany
PLASTIC: Food Bags/Wrappers	3	1090	1740	522	15	62	1042	3153	2893	8	29	433
Salt Bags	0	86	42	133	0	3	420	536	0	0	9	20
Trash Bags	24	743	587	366	30	24	2957	5307	286	0	25	22
Other Bags	0	272	660	120	10	30	845	1946	4	0	13	305
Plastic Beverage Bottles	44	185	1494	1376	10	101	1141	4497	1264	2	41	595
Bleach Bottles	4	138	648	260	5	15	1149	1388	14	0	15	28
Milk/Water Gallon Jugs	2	167	689	118	0	16	807	1475	8224	0	20	52
Oil/Lube Bottles	22	94	678	257	8	1	1467	2842	91	0	9	23
Other Plastic Bottles	16	249	1068	730	15	30	1544	2021	6	0	8	44
Buckets	2	21	143	49	0	1	482	380	108	0	19	34
Caps/Lids	0	896	1387	1004	11	324	1479	3078	2908	2	14	84
Cigarette Butts	0	20	444	1712	3	1023	1056	3678	4979	35	20	11325
Cigarette Lighters	0	22	120	86	0	3	113	203	890	0	3	91
Cups/Utensils	2	747	974	191	3	17	3789	4241	1375	0	31	180
Diapers	0	82	137	76	2	1	652	712	243	0	1	34
Fishing Line	0	34	130	132	15	10	238	682	44	0	18	11
Fishing Floats/Lures	2	103	66	54	0	6	163	125	12	0	34	32
Fishing Nets	6	18	45	49	0	0	328	711	541	0	11	0
Hard Hats	0	0	13	12	0	0	191	221	0	0	0	0
Light Sticks	0	1	118	110	0	1	73	161	0	0	0	8
Plastic Pieces	5	672	1039	1336	12	22	1561	5427	2845	0	7	147
Pipe Thread Protectors	0	23	60	16	0	9	162	168	283	0	0	0
Rope	5	14	473	119	30	20	797	3423	223	0	26	45
Long Sheeting	3	0	12	117	0	0	456	728	21	0	9	5
Short Sheeting	0	0	204	31	0	1	288	346	45	0	5	55
Six-Pack Holders	5	58	308	54	20	0	1118	1915	0	0	0	0
Strapping Bands	0	6	102	190	5	11	309	361	159	0	0	13
Straws	0	673	685	98	0	116	776	2494	925	15	0	24
Syringes	0	59	165	7	0	3	484	132	126	0	2	5
Tampon Applicators	0	4	147	29	0	1	905	678	7	0	0	20
Toys	0	67	481	141	0	8	952	411	0	0	15	122
Vegetable Sacks	0	15	47	213	10	3	350	920	4	3	0	78
Write Protection Rings	0	0	41	4	0	42	151	124	395	0	0	0
Other Plastic	3	272	157	1024	3	44	1432	2886	72	7	25	40
FOAMED PLASTIC: Buoys	0	5	262	12	13	50	1255	2283	169	0	0	0
Foamed Cups	3	269	199	161	13	74	2099	1620	418	0	1	202
Egg Cartons	0	12	24	48	7	0	428	229	213	0	0	6
Fast Food Containers	0	4	83	130	5	20	772	577	794	0	1	73
Meat Trays	2	69	24	59	3	0	504	164	236	0	2	6
Packaging Materials	0	12	466	424	8	14	365	334	262	0	7	101
Foamed Pieces	35	352	837	1234	25	77	2055	2382	422	20	50	15
Foamed Plates	3	212	140	51	7	0	1536	748	529	0	1	26
Other Foamed Plastic	0	69	206	0	2	0	661	622	0	0	0	0
GLASS: Beverage Bottles	83	310	779	386	5	20	2252	3359	2319	73	45	1565
Food Jars	2	60	166	86	3	1	484	750	242	0	8	29

APPENDIX 6. 1996 International Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	Chile	Colombia	Costa Rica	Croatia	Cuba	Cyprus	Dominican Republic	Ecuador	Egypt	Fiji	France	Germany
Other Glass Bottles/Jars	33	133	495	326	20	48	887	1675	83	0	8	36
Fluorescent Light Tubes	0	4	12	68	0	0	150	49	0	0	0	2
Light Bulbs	0	8	61	84	2	0	411	385	78	0	0	10
Glass Pieces	197	129	370	1264	20	56	1469	3624	2733	43	80	152
Other Glass	4	1	22	1273	0	3	365	481	0	0	1	7
RUBBER: Balloons	0	13	40	14	0	4	247	124	2	0	2	0
Condoms	0	36	19	21	5	2	313	135	3	0	0	6
Rubber Gloves	0	34	26	83	2	19	243	90	17	0	0	7
Tires	8	2	47	453	11	4	428	421	63	0	4	26
Other Rubber	17	188	101	359	10	0	887	880	509	14	3	22
METAL: Bottles Caps	0	273	390	1263	20	197	645	1327	2926	1	42	576
Aerosol Cans	1	1	396	455	1	0	445	385	457	0	28	468
Beverage Cans	4	131	976	523	200	211	1033	2200	1572	1	32	127
Food Cans	2	55	319	201	15	1	408	824	733	14	10	1821
Other Cans	4	22	104	303	15	0	324	411	160	0	5	30
Metal Crab/Lobster Traps	2	0	6	16	1	0	88	76	82	0	1	0
55 Gallon Rusty Drums	0	36	44	34	7	0	323	933	359	1	1	23
55 Gallon New Drums	0	0	3	7	0	0	58	60	26	0	0	0
Metal Pieces	35	10	310	1108	22	5	616	1183	345	2	6	40
Pull Tabs	0	61	78	14	25	110	519	686	1449	0	12	380
Wire	1	5	41	117	3	4	529	969	339	3	54	50
Other Metal	8	1	75	595	0	27	144	461	19	6	0	56
PAPER: Bags	0	39	103	326	7	35	973	1168	3082	0	9	32
Cardboard	0	259	124	307	25	8	489	1450	400	1	0	98
Cartons	0	18	273	205	28	17	560	1562	578	0	7	162
Paper Cups	0	35	150	77	0	34	913	681	89	0	2	134
Newspapers/Magazines	0	27	58	88	30	7	493	2073	255	0	51	163
Paper Pieces	0	47	264	1047	5	208	919	4049	2305	3	15	59
Paper Plates	0	75	153	87	0	10	638	449	7	0	2	1
Other Paper	0	4	16	547	0	36	266	892	2919	0	0	27
WOOD: Crab/Lobster Traps	0	0	5	40	0	0	80	14	0	0	0	0
Crates	0	13	19	14	0	0	260	135	0	0	0	0
Lumber Pieces	9	722	341	37	55	33	878	4938	1033	2	3	19
Pallets	3	28	34	47	35	2	465	2712	41	0	1	2
Other Wood	1	2	43	399	0	119	193	755	15	3	0	17
CLOTH: Clothing/Pieces	9	128	254	319	45	19	1550	2150	556	2	13	82
GRAND TOTALS	614	10,747	24,062	25,448	907	3,423	61,297	110,845	57,826	261	923	20,541
GRAND TOTALS, w/o Butts	614	10,727	23,618	23,736	904	2,400	60,241	107,167	52,847	226	903	9,216

APPENDIX 6. 1996 International Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	Greece	Guatemala	Haiti	Hong Kong	Italy	Ivory Coast	Jamaica	Japan	Kenya	Kuwait	Latvia	Lithuania
PLASTIC: Food Bags/Wrappers	866	0	0	637	136	738	3	12236	4650	36	12	1052
Salt Bags	3	0	0	0	0	50	0	6	860	0	0	112
Trash Bags	50	6	0	38	42	66	4	1661	1438	15	12	46
Other Bags	130	0	18	107	3	415	0	7918	3036	18	12	778
Plastic Beverage Bottles	1079	8	1792	166	174	396	0	3240	2724	29	247	777
Bleach Bottles	71	2	0	96	28	121	1	502	1194	0	0	7
Milk/Water Gallon Jugs	342	0	12	28	35	106	4	380	1854	11	0	121
Oil/Lube Bottles	53	2	17	67	21	15	0	262	1647	0	0	11
Other Plastic Bottles	175	7	16	153	1	16	0	1228	2446	17	23	63
Buckets	6	2	3	15	18	23	0	439	877	2	0	0
Caps/Lids	1268	0	0	167	19	50	10	6975	3518	89	0	348
Cigarette Butts	12088	0	14	0	250	45	0	72911	2621	629	105	0
Cigarette Lighters	71	0	74	4	10	1	0	2239	929	38	5	0
Cups/Utensils	447	0	0	40	142	14	0	1202	1244	11	7	88
Diapers	9	0	0	0	49	1	2	96	262	5	0	0
Fishing Line	48	0	0	50	22	18	0	675	1114	1	1	0
Fishing Floats/Lures	20	2	0	78	49	27	0	594	757	0	2	8
Fishing Nets	91	0	0	41	2	13	2	324	1166	1	1	7
Hard Hats	1	0	0	2	0	0	0	11	280	0	0	5
Light Sticks	5	0	0	3	0	23	0	56	1310	41	18	52
Plastic Pieces	358	0	89	58	1	55	25	23843	4139	26	15	271
Pipe Thread Protectors	9	0	0	5	0	8	0	4	397	1	0	10
Rope	53	0	1	201	28	0	3	537	2905	5	2	192
Long Sheeting	3	0	0	9	0	5	0	341	232	1	3	0
Short Sheeting	1	0	0	13	0	13	0	704	420	0	4	14
Six-Pack Holders	24	1	0	10	0	1	0	1059	56	0	0	0
Strapping Bands	31	0	0	12	1	3	0	2311	447	8	2	0
Straws	1471	0	31	192	0	24	6	3684	2325	220	8	300
Syringes	2	1	4	1	2	17	0	94	394	0	1	27
Tampon Applicators	10	0	0	0	30	0	0	788	108	0	0	0
Toys	13	2	1	10	5	10	0	714	395	5	1	43
Vegetable Sacks	153	0	0	2	27	0	0	94	573	0	36	18
Write Protection Rings	134	0	0	0	0	2	0	111	121	0	0	0
Other Plastic	158	12	74	45	2	56	2	23296	3172	13	4	1078
FOAMED PLASTIC: Buoys	7	0	0	1	0	9	0	337	1409	0	0	1
Foamed Cups	230	0	9	17	80	7	7	943	1078	8	0	0
Egg Cartons	9	0	3	2	15	5	0	6	399	5	0	11
Fast Food Containers	44	0	10	0	0	1	4	580	1214	12	2	239
Meat Trays	0	0	0	0	0	1	0	2474	158	0	2	13
Packaging Materials	116	2	0	33	0	15	4	850	2269	1	27	144
Foamed Pieces	20	7	21	9	53	176	20	1031	4721	57	16	277
Foamed Plates	50	0	3	7	15	2	2	1515	763	9	2	67
Other Foamed Plastic	0	0	0	0	0	0	0	0	0	0	0	0
GLASS: Beverage Bottles	418	1	0	3	481	25	18	4794	2183	105	38	504
Food Jars	47	2	0	1	35	1	0	4693	638	2	105	0

APPENDIX 6. 1996 International Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	Greece	Guatemala	Haiti	Hong Kong	Italy	Ivory Coast	Jamaica	Japan	Kenya	Kuwait	Latvia	Lithuania
Other Glass Bottles/Jars	19	0	48	4	53	0	12	749	1065	29	17	612
Fluorescent Light Tubes	0	0	0	0	0	0	0	34	297	48	2	0
Light Bulbs	13	0	0	6	10	8	0	140	298	7	4	17
Glass Pieces	452	0	6	0	41	36	6	9473	1726	121	9	96
Other Glass	36	4	0	0	4	5	0	605	667	52	44	4857
RUBBER: Balloons	5	0	0	0	0	11	0	502	305	1	2	102
Condoms	28	0	2	0	20	22	0	158	395	0	1	0
Rubber Gloves	42	0	0	9	19	3	0	80	164	2	3	44
Tires	48	0	0	2	117	4	0	77	1312	1	31	11
Other Rubber	82	4	0	4	21	6	0	1459	5333	19	0	636
METAL: Bottles Caps	732	0	5	0	23	59	0	2518	1748	41	118	1013
Aerosol Cans	35	3	4	0	220	61	0	797	718	4	105	53
Beverage Cans	831	0	6	0	120	43	0	15005	1467	5	220	237
Food Cans	155	0	2	0	20	35	30	214	770	22	18	89
Other Cans	35	0	1	0	43	51	0	466	410	9	78	99
Metal Crab/Lobster Traps	1	0	0	0	4	3	1	134	83	0	79	0
55 Gallon Rusty Drums	14	0	0	0	15	2	0	7	838	7	3	0
55 Gallon New Drums	1	0	0	0	0	1	0	0	179	0	0	0
Metal Pieces	133	0	0	0	6	175	0	1527	748	7	16	0
Pull Tabs	93	0	0	0	47	165	0	1342	139	0	0	165
Wire	91	0	0	0	13	0	2	251	885	9	2	0
Other Metal	120	0	2	1	13	20	2	4074	828	19	4	474
PAPER: Bags	478	0	0	0	6	138	0	1295	1917	24	12	6133
Cardboard	32	0	0	0	0	4	30	262	761	30	16	158
Cartons	236	0	0	0	23	22	0	431	1166	6	13	225
Paper Cups	46	0	0	0	0	0	6	916	542	19	4	95
Newspapers/Magazines	436	0	0	0	7	42	0	778	1405	28	7	152
Paper Pieces	663	0	0	1	9	148	17	8669	2482	68	27	77
Paper Plates	26	0	0	0	13	6	0	266	444	14	6	15
Other Paper	462	0	0	0	100	0	0	3499	1066	56	0	890
WOOD: Crab/Lobster Traps	0	0	0	3	0	1	2	573	182	0	14	76
Crates	18	0	0	0	63	3	0	165	92	5	0	39
Lumber Pieces	68	0	3	18	7	13	7	1911	1449	29	50	188
Pallets	9	0	0	1	0	5	0	738	887	4	2	1
Other Wood	416	0	0	4	5	80	0	7158	2199	68	0	1395
CLOTH: Clothing/Pieces	143	0	0	18	26	19	6	4023	2250	43	4	0
GRAND TOTALS	26,183	68	2,271	2,394	2,845	3,765	238	258,054	101,660	2,218	1,628	24,633
GRAND TOTALS, w/o Butts	14,095	68	2,257	2,394	2,595	3,720	238	185,143	99,039	1,589	1,523	24,633

APPENDIX 6. 1996 International Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	Malaysia	Maldives	Malta	Mexico	Micronesia	Netherlands	Netherlands Antilles	New Zealand	Nigeria	Norway
PLASTIC: Food Bags/Wrappers	1068	51	329	7320	16	339	812	323	1684	57
Salt Bags	59	0	0	792	0	0	3	0	148	1
Trash Bags	243	0	9	7314	1	31	375	56	731	6
Other Bags	325	82	87	3185	12	37	463	87	777	63
Plastic Beverage Bottles	892	91	300	6516	12	21	5222	254	311	8
Bleach Bottles	111	2	13	2698	1	0	770	0	170	2
Milk/Water Gallon Jugs	248	3	22	2854	0	5	349	34	439	2
Oil/Lube Bottles	116	11	5	4016	0	18	598	11	102	1
Other Plastic Bottles	340	59	18	3706	6	20	468	208	379	7
Buckets	142	1	4	484	0	31	175	1	98	0
Caps/Lids	260	43	89	7009	1	9	989	263	363	56
Cigarette Butts	957	853	247	4460	0	2	352	392	933	7
Cigarette Lighters	123	1	11	702	1	4	238	13	295	2
Cups/Utensils	175	6	312	4341	2	13	1514	17	295	9
Diapers	48	0	26	2086	2	0	89	4	73	0
Fishing Line	45	14	66	578	0	6	304	45	125	1
Fishing Floats/Lures	43	0	22	329	2	0	78	7	223	2
Fishing Nets	32	0	5	847	0	6	171	3	320	1
Hard Hats	3	0	0	312	0	1	10	0	138	0
Light Sticks	39	0	0	5128	0	2	176	2	670	0
Plastic Pieces	85	22	323	5312	0	120	1685	142	440	104
Pipe Thread Protectors	16	71	0	249	1	12	47	1	84	0
Rope	171	6	15	2744	0	11	868	46	257	29
Long Sheeting	7	41	20	256	0	0	27	8	49	0
Short Sheeting	15	20	18	176	0	0	37	10	28	0
Six-Pack Holders	42	3	21	2608	0	20	110	17	41	1
Strapping Bands	30	8	24	480	0	0	88	19	68	5
Straws	800	33	584	5186	0	0	509	133	995	21
Syringes	1	1	8	502	0	0	18	1	41	0
Tampon Applicators	18	1	0	809	0	0	4	4	34	6
Toys	14	1	16	898	0	10	96	2	131	2
Vegetable Sacks	89	3	6	656	0	0	26	6	281	0
Write Protection Rings	130	0	0	331	0	0	21	0	50	2
Other Plastic	293	701	184	2549	22	77	983	51	315	16
FOAMED PLASTIC: Buoys	40	0	3	1005	0	0	146	1	165	1
Foamed Cups	139	0	144	2596	4	28	519	29	270	6
Egg Cartons	134	0	9	464	0	0	43	0	172	0
Fast Food Containers	806	0	66	987	2	113	443	25	495	4
Meat Trays	54	0	8	476	0	0	147	10	109	1
Packaging Materials	239	13	208	925	0	69	323	38	506	36
Foamed Pieces	403	73	84	3714	2	10	2005	100	518	46
Foamed Plates	78	0	30	1704	0	1	528	5	180	2
Other Foamed Plastic	0	0	10	648	0	0	0	0	0	0
GLASS: Beverage Bottles	447	25	212	7148	20	218	1850	578	309	16
Food Jars	162	0	30	687	7	4	258	51	259	1

APPENDIX 6. 1996 International Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	Malaysia	Maldives	Maita	Mexico	Micronesia	Netherlands	Netherlands Antilles	New Zealand	Nigeria	Norway
Other Glass Bottles/Jars	118	13	16	2701	12	45	482	38	302	8
Fluorescent Light Tubes	22	0	0	526	0	0	18	0	125	2
Light Bulbs	29	4	6	522	0	0	688	59	157	2
Glass Pieces	177	0	153	5236	1	26	3778	265	400	124
Other Glass	84	2	2	560	0	10	332	13	104	0
RUBBER: Balloons	44	0	2	390	0	4	32	6	278	0
Condoms	31	1	1	321	0	3	62	2	151	1
Rubber Gloves	73	4	12	331	0	0	50	5	199	6
Tires	41	3	11	486	1	131	243	28	320	2
Other Rubber	111	44	33	1069	1	15	1216	25	690	6
METAL: Bottles Caps	478	30	48	4984	0	48	1501	162	1007	6
Aerosol Cans	105	8	12	856	0	4	419	26	203	1
Beverage Cans	798	138	226	2306	361	194	1376	392	271	3
Food Cans	346	13	100	1177	12	11	243	25	329	2
Other Cans	241	39	17	460	0	0	294	13	150	2
Metal Crab/Lobster Traps	2	7	1	97	0	0	39	1	68	0
55 Gallon Rusty Drums	21	1	4	236	0	2	76	6	334	0
55 Gallon New Drums	10	0	2	15	0	0	28	0	89	0
Metal Pieces	41	14	29	1053	0	80	704	17	275	6
Pull Tabs	151	2	6	1335	0	1	35	129	61	3
Wire	47	19	39	864	0	31	100	22	161	4
Other Metal	248	7	326	358	0	113	306	33	183	11
PAPER: Bags	269	0	70	2269	0	0	493	88	469	1
Cardboard	138	7	130	2632	1	8	294	37	458	5
Cartons	161	15	220	1590	0	52	270	25	523	6
Paper Cups	221	0	310	1476	3	8	371	2	289	1
Newspapers/Magazines	164	5	41	1783	2	15	54	46	1089	6
Paper Pieces	216	0	155	3361	0	122	441	187	1532	11
Paper Plates	36	20	33	1203	1	0	106	11	200	0
Other Paper	181	1	18	643	5	0	114	71	419	1
WOOD: Crab/Lobster Traps	13	0	7	88	1	0	17	0	210	0
Crates	23	0	11	326	0	1	80	0	98	1
Lumber Pieces	125	15	37	2836	0	87	672	28	709	13
Pallets	36	0	19	1072	0	30	90	0	325	0
Other Wood	215	25	18	375	0	20	218	25	998	18
CLOTH: Clothing/Pieces	156	47	72	3135	2	25	944	80	509	2
GRAND TOTALS	14,654	2,723	5,775	156,457	517	2,324	40,123	4,864	27,756	778
GRAND TOTALS, w/o Butts	13,697	1,870	5,528	151,997	517	2,322	39,771	4,472	26,823	771

APPENDIX 6. 1996 International Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	Panama	Philippines	Portugal	Saudi Arabia	Singapore	Slovenia	South Africa	Spain	St. Kitts & Nevis
PLASTIC: Food Bags/Wrappers	920	2428	581	185	8169	30	2033	323	189
Salt Bags	205	29	0	27	101	1	40	0	34
Trash Bags	1629	249	0	134	1597	7	385	14	74
Other Bags	678	567	0	110	2991	37	972	71	73
Plastic Beverage Bottles	929	444	236	444	2942	227	755	363	410
Bleach Bottles	635	213	108	30	561	9	163	39	211
Milk/Water Gallon Jugs	242	55	637	96	707	35	463	60	106
Oil/Lube Bottles	1036	115	176	23	373	42	110	0	226
Other Plastic Bottles	906	340	0	185	1650	68	573	9	111
Buckets	216	16	44	7	169	24	145	16	32
Caps/Lids	806	258	185	94	2476	32	2426	92	453
Cigarette Butts	133	171	0	200	13736	100	3861	275	35
Cigarette Lighters	45	74	20	33	600	13	31	8	13
Cups/Utensils	856	195	124	127	1352	143	114	4	180
Diapers	46	28	20	53	163	0	34	2	9
Fishing Line	81	89	42	171	385	0	465	13	26
Fishing Floats/Lures	40	20	36	70	204	12	115	2	21
Fishing Nets	128	97	48	22	189	1	22	12	59
Hard Hats	48	7	0	0	23	0	4	0	2
Light Sticks	46	42	0	71	304	0	114	0	4
Plastic Pieces	1100	139	0	132	5803	1	3504	40	226
Pipe Thread Protectors	58	5	0	2	139	0	22	20	5
Rope	272	89	370	35	1502	3	324	105	184
Long Sheeting	72	9	0	12	180	4	19	46	0
Short Sheeting	89	41	0	2	267	0	51	0	1
Six-Pack Holders	766	58	0	3	62	0	106	9	2
Strapping Bands	74	48	418	67	415	0	80	0	12
Straws	210	186	0	90	5557	0	843	0	49
Syringes	73	16	3	0	86	0	9	3	4
Tampon Applicators	508	1	0	0	32	0	6	2	6
Toys	328	60	19	12	582	12	58	32	14
Vegetable Sacks	160	33	24	6	149	24	144	0	2
Write Protection Rings	113	4	386	0	108	0	120	0	0
Other Plastic	1187	224	1235	62	1650	0	451	8	161
FOAMED PLASTIC: Buoys	179	22	37	11	199	4	4	5	11
Foamed Cups	598	219	24	193	932	80	282	4	131
Egg Cartons	72	9	0	4	72	2	28	0	13
Fast Food Containers	93	119	78	134	1053	0	330	5	20
Meat Trays	85	19	0	16	155	0	68	1	5
Packaging Materials	199	90	0	56	2838	7	157	4	178
Foamed Pieces	505	254	349	155	7546	62	732	0	277
Foamed Plates	324	35	25	171	1574	0	52	4	44
Other Foamed Plastic	155	0	0	0	0	0	0	0	0
GLASS: Beverage Bottles	593	350	0	290	1014	242	783	88	396
Food Jars	198	154	596	53	176	263	38	0	26

APPENDIX 6. 1996 International Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	Panama	Philippines	Portugal	Saudi Arabia	Singapore	Slovenia	South Africa	Spain	St. Kitts & Nevis
Other Glass Bottles/Jars	619	138	0	127	482	3	172	17	73
Fluorescent Light Tubes	27	32	9	2	65	0	24	0	7
Light Bulbs	68	21	0	8	219	1	23	0	13
Glass Pieces	1175	112	0	129	2913	398	1169	24	85
Other Glass	87	63	235	2	497	0	18	15	3
RUBBER: Balloons	47	21	12	2	295	0	18	0	6
Condoms	38	7	12	0	83	2	16	11	4
Rubber Gloves	79	8	101	9	285	9	17	0	5
Tires	126	21	29	11	167	3	41	33	58
Other Rubber	325	191	91	11	1217	0	222	3	96
METAL: Bottles Caps	504	255	276	115	1221	31	689	121	81
Aerosol Cans	195	101	26	11	249	105	70	3	33
Beverage Cans	715	202	291	245	2157	503	976	137	153
Food Cans	373	110	0	11	346	75	86	11	38
Other Cans	146	67	0	13	203	0	77	0	28
Metal Crab/Lobster Traps	32	10	51	9	66	5	7	5	2
55 Gallon Rusty Drums	94	37	28	25	76	4	15	30	69
55 Gallon New Drums	19	4	0	0	48	0	0	3	4
Metal Pieces	413	50	0	26	538	768	231	53	45
Pull Tabs	225	0	0	26	1090	17	63	0	1
Wire	288	60	51	27	332	18	81	13	38
Other Metal	113	139	206	178	602	77	119	13	57
PAPER: Bags	288	57	127	119	260	7	72	15	22
Cardboard	670	37	134	32	363	2	150	0	45
Cartons	554	56	323	41	445	8	366	2	24
Paper Cups	636	77	29	110	432	29	71	6	16
Newspapers/Magazines	293	54	111	49	640	37	167	10	8
Paper Pieces	692	68	0	66	1777	35	962	0	60
Paper Plates	448	33	12	83	213	0	39	2	9
Other Paper	118	5	1591	0	852	0	236	0	96
WOOD: Crab/Lobster Traps	14	2	8	0	69	0	2	0	4
Crates	140	11	46	17	125	1	8	0	5
Lumber Pieces	671	145	0	130	1897	0	294	0	265
Pallets	281	16	302	17	223	0	17	0	0
Other Wood	108	127	206	11	1132	0	103	8	152
CLOTH: Clothing/Pieces	1226	295	84	105	1168	44	365	92	179
GRAND TOTALS	29,483	10,253	10,212	5,355	93,510	3,667	28,022	2,306	5,819
GRAND TOTALS, w/o Butts	29,350	10,082	10,212	5,155	79,774	3,567	24,161	2,031	5,784

APPENDIX 6. 1996 International Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	St. Vincent & the Grenadines	Switzerland	Taiwan	Tanzania	Thailand	Turkey	Turks & Caicos	United Kingdom
PLASTIC: Food Bags/Wrappers	699	56	0	100	5	0	135	21087
Salt Bags	0	0	0	0	0	2	1	0
Trash Bags	489	1	0	0	0	76	49	0
Other Bags	347	11	0	312	6	0	8	7043
Plastic Beverage Bottles	497	82	73	53	0	140	386	15565
Bleach Bottles	464	0	1	0	0	5	107	0
Milk/Water Gallon Jugs	177	2	0	20	0	83	69	0
Oil/Lube Bottles	523	4	2	0	0	15	96	0
Other Plastic Bottles	423	0	0	17	2	15	51	0
Buckets	51	8	0	0	0	17	17	0
Caps/Lids	453	3	0	0	0	32	154	17198
Cigarette Butts	70	5	0	0	0	0	43	9640
Cigarette Lighters	31	42	0	0	0	2	15	753
Cups/Utensils	209	84	0	21	0	0	82	2222
Diapers	58	0	0	0	0	1	3	238
Fishing Line	11	2	0	0	35	8	21	4621
Fishing Floats/Lures	23	22	0	0	0	5	24	460
Fishing Nets	1	0	2	0	8	10	42	2792
Hard Hats	0	0	0	0	0	0	4	0
Light Sticks	267	4	0	0	0	4	18	0
Plastic Pieces	159	62	0	0	0	0	186	33383
Pipe Thread Protectors	0	0	0	0	0	9	4	0
Rope	98	2	0	0	21	7	77	26664
Long Sheeting	2	3	0	0	0	3	2	0
Short Sheeting	0	1	0	0	2	1	10	0
Six-Pack Holders	3	0	0	1	0	0	29	731
Strapping Bands	18	0	0	0	0	0	33	2318
Straws	161	0	0	0	0	10	11	8669
Syringes	31	0	0	16	0	3	2	214
Tampon Applicators	0	6	0	0	0	1	3	727
Toys	34	30	0	0	0	2	5	1255
Vegetable Sacks	32	0	0	0	0	2	1	369
Write Protection Rings	30	0	0	0	0	0	0	0
Other Plastic	284	40	0	2	2	1	102	42485
FOAMED PLASTIC: Buoys	6	0	0	0	0	0	55	960
Foamed Cups	113	10	0	0	0	10	44	12801
Egg Cartons	41	0	0	0	0	0	3	0
Fast Food Containers	146	0	0	0	0	0	15	1538
Meat Trays	53	0	0	0	0	8	5	0
Packaging Materials	100	10	0	4	0	3	25	1573
Foamed Pieces	79	0	0	50	0	0	340	12801
Foamed Plates	97	2	2	0	0	15	19	0
Other Foamed Plastic	0	0	0	0	0	0	0	1254
GLASS: Beverage Bottles	248	5655	7	57	6	636	846	3205
Food Jars	79	42	1	0	2	43	34	0

APPENDIX 6. 1996 International Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	St. Vincent & the Grenadines	Switzerland	Taiwan	Tanzania	Thailand	Turkey	Turks & Caicos	United Kingdom
Other Glass Bottles/Jars	112	20	0	0	3	52	30	0
Fluorescent Light Tubes	3	0	0	0	0	11	22	0
Light Bulbs	27	7	0	0	0	3	26	550
Glass Pieces	99	407	0	200	0	3	74	11554
Other Glass	49	11	0	56	0	6	1	0
RUBBER: Balloons	0	0	0	0	0	0	6	349
Condoms	26	0	0	0	0	0	2	211
Rubber Gloves	24	0	0	5	0	3	7	182
Tires	81	32	0	1	2	29	8	631
Other Rubber	266	15	0	2	4	7	15	4519
METAL: Bottles Caps	208	17	0	0	0	22	193	2560
Aerosol Cans	90	14	0	7	0	81	90	945
Beverage Cans	214	570	37	421	5	1020	817	8299
Food Cans	136	52	0	55	3	23	23	495
Other Cans	105	14	0	0	0	65	4	0
Metal Crab/Lobster Traps	0	21	0	0	0	0	1	0
55 Gallon Rusty Drums	5	26	0	0	0	0	0	129
55 Gallon New Drums	1	1	0	0	0	0	0	50
Metal Pieces	76	139	0	90	0	16	34	2873
Pull Tabs	0	7	0	0	0	0	0	0
Wire	78	19	0	6	0	12	9	1336
Other Metal	40	148	0	74	12	1	10	1453
PAPER: Bags	146	0	0	0	0	0	18	1138
Cardboard	66	1	0	0	0	0	21	820
Cartons	34	0	0	0	0	0	27	1461
Paper Cups	68	0	0	0	0	13	12	322
Newspapers/Magazines	22	0	0	0	0	2	2	595
Paper Pieces	45	17	0	0	4	0	23	8190
Paper Plates	29	0	0	0	0	9	7	0
Other Paper	25	3	0	1	2	0	16	1328
WOOD: Crab/Lobster Traps	0	0	0	0	0	0	0	57
Crates	0	0	0	0	0	0	0	173
Lumber Pieces	108	1	0	0	0	0	19	3910
Pallets	1	0	0	0	0	0	8	0
Other Wood	27	0	0	5	0	0	24	3568
CLOTH: Clothing/Pieces	238	16	16	5	3	8	58	5020
GRAND TOTALS	9,055	7,743	141	1,581	127	2,555	4,783	295,284
GRAND TOTALS, w/o Butts	8,985	7,738	141	1,581	127	2,555	4,740	285,644

APPENDIX 6. 1996 International Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	United States	Venezuela	Totals
PLASTIC: Food Bags/Wrappers	205762	23979	319,771
Salt Bags	3841	319	8,227
Trash Bags	41220	8697	80,375
Other Bags	61810	13186	115,365
Plastic Beverage Bottles	121703	16883	202,737
Bleach Bottles	12065	7144	32,417
Milk/Water Gallon Jugs	24616	0	47,323
Oil/Lube Bottles	14855	0	31,744
Other Plastic Bottles	37708	9625	69,292
Buckets	7998	4658	17,524
Caps/Lids	179103	13750	254,809
Cigarette Butts	608759	24121	786,997
Cigarette Lighters	23997	1122	33,924
Cups/Utensils	75336	19205	126,542
Diapers	7783	4272	17,887
Fishing Line	25925	2577	39,638
Fishing Floats/Lures	11486	627	16,472
Fishing Nets	7597	2004	18,327
Hard Hats	681	0	2,063
Light Sticks	8944	426	18,796
Plastic Pieces	240820	18367	361,765
Pipe Thread Protectors	3950	748	7,064
Rope	62179	220	110,049
Long Sheeting	3944	2430	9,337
Short Sheeting	7708	2059	13,161
Six-Pack Holders	14500	4662	29,188
Strapping Bands	15120	888	24,648
Straws	131602	14582	187,892
Syringes	3657	906	7,424
Tampon Applicators	13294	1938	20,321
Toys	17147	2185	26,840
Vegetable Sacks	6552	0	11,625
Write Protection Rings	6011	178	8,773
Other Plastic	77286	6648	173,110
FOAMED PLASTIC: Buoys	10486	1476	21,213
Foamed Cups	96394	70	126,563
Egg Cartons	3852	442	6,975
Fast Food Containers	27762	2391	42,213
Meat Trays	9282	10078	24,565
Packaging Materials	48738	1290	64,831
Foamed Pieces	206890	19475	273,793
Foamed Plates	19781	348	32,775
Other Foamed Plastic	28801	1420	33,848
GLASS: Beverage Bottles	127633	17534	196,097
Food Jars	11022	10291	32,701

APPENDIX 6. 1996 International Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	United States	Venezuela	Totals
Other Glass Bottles/Jars	17895	10639	42,112
Fluorescent Light Tubes	2017	227	3,936
Light Bulbs	4928	710	10,015
Glass Pieces	140667	28167	228,282
Other Glass	11850	1149	24,598
RUBBER: Balloons	25351	690	29,510
Condoms	6671	591	9,637
Rubber Gloves	12176	592	15,646
Tires	8474	1801	16,351
Other Rubber	27092	3600	52,984
METAL: Bottles Caps	84876	30355	147,575
Aerosol Cans	9947	0	18,812
Beverage Cans	130134	12048	199,094
Food Cans	10541	6075	27,229
Other Cans	6778	3967	16,059
Metal Crab/Lobster Traps	3020	1047	5,418
55 Gallon Rusty Drums	2314	208	6,837
55 Gallon New Drums	414	120	1,194
Metal Pieces	32464	19121	66,949
Pull Tabs	21877	9995	41,193
Wire	12953	2408	23,096
Other Metal	34092	11522	58,686
PAPER: Bags	29779	11484	64,882
Cardboard	26490	3896	42,134
Cartons	17612	5118	36,857
Paper Cups	37539	8234	55,474
Newspapers/Magazines	20382	2761	35,726
Paper Pieces	158957	14754	217,241
Paper Plates	13400	3032	22,043
Other Paper	36483	5642	59,690
WOOD: Crab/Lobster Traps	1507	0	3,494
Crates	1575	0	4,009
Lumber Pieces	62892	20960	115,095
Pallets	3317	8062	20,122
Other Wood	20814	7910	51,710
CLOTH: Clothing/Pieces	44245	11920	84,308
GRAND TOTALS	3,757,123	522,026	5,944,999
GRAND TOTALS, w/o Butts	3,148,364	497,905	5,158,002

Appendix 7. Items Identified as "Most Peculiar" by 1996 International Coastal Cleanup Volunteers

COUNTRY/ ZONE	PECULIAR ITEMS
AUSTRALIA	
Bundury	mobile phone
Geelong	artillery round, shell casing, lp record
Granites Island	bullet, small pair of girl's underwear
Groote Eylandt	dumbbell, golf ball, fishing rod
Hideaway Island	3kg. piece of ship's anchor, ship railing, crane parts, toilet seat
Langford Island	snorkeling fins
Lee Breakwater	shopping cart
Newcastle	radio
Palm Beach	electric pump, cable ties, jewelry box, sunglasses, witch's hat
BAHAMAS	
Old Free Town, W.	ship's engine
Zanadu Canal	airplane propeller, 2 bottles with messages, bathing suit top, flag staff, underwear, 7 patio chairs
BAHRAIN	
Bahrain	12-gauge shotgun shell, dead baby dolphin covered in oil, huge rice bag, large carpet, new pair of sneakers, box of pills, boxer shorts, ladies' underwear, foam mattress, shell casings
BELIZE	
Bufferhole & Belizean	Reebok tennis shoe
Caye Caulker	gas tank, tennis ball
Corozal Bay	engine piece, radio speaker, rusty machete
Hanes-Texaco Punta	bracelet
BERMUDA	
Bermuda	motorcycle
BRAZIL	
Copacabana	leather sandal, \$5 bill, toothbrush, food processor lid, toilet
Do Frade	broken saint image
Leme	4 candles, 1 grocery cart, 2 lipsticks, 1 drum of paint
Mucuri	whale vertebra
BRITISH VIRGIN ISLANDS	
Haulover Bay	aluminum dingy
Wickham's Cay	car battery, plastic chair
CANADA	
Alberta Wheat Pool	coveralls, gas cap
Maplewood Flats	1 marble, door mat, shoe, engine fan belt, round metal plate
Shell Canada	new bicycle, anchor
West Vancouver	propane tank

Appendix 7. Items Identified as "Most Peculiar" by 1996 International Coastal Cleanup Volunteers, cont.

COUNTRY/ ZONE	PECULIAR ITEMS
COSTA RICA	
Cobano	anchor
Golfo Dulce	bag of blood, car door, Barbie doll parts, hospital things
Pacífico Central	plastic toilet, bicycle seat, lottery ticket, baking sheet, refrigerator, sofa, rubber stamp from local school
CROATIA	
Shoreline	cars
Underwater	chairs, batteries, televisions
CYPRUS	
Protaras	bath brush, battery, wooden cigarette holders, torn shirts
DOMINICAN REPUBLIC	
Las Terrenas	aerosol can
ECUADOR	
Pt. Ayora	bicycle inner tube
EGYPT	
Dahab Bay	mattress
Elmakhroum	shell casings
Taba	toilet, car jack
FIJI	
Castaway Island	battery, potatoes, toilet
GREECE	
Kalithea	very old style anchor head
Varikiza Attika	high heeled shoe, plastic pump
JAPAN	
Chatan City	car bumper, helmet
Maeda Beach	spare tire
Toguchi Beach	stove top, metal shower, sock, strange screw
KENYA	
Mombasa	bottle of body lotion, clothes, flip flop, plasma bag, ladies underwear, surfboard fin
Watamu	55-gallon drum of kerosene, denture plate, clothing, 6 toothbrushes, toy gun
KUWAIT	
Kuwait	wheelbarrow
LATVIA	
Bulduriz Dzintari	slipper

Appendix 7. Items Identified as "Most Peculiar" by 1996 International Coastal Cleanup Volunteers, cont.

COUNTRY/ ZONE	PECULIAR ITEMS
MALAYSIA	
Tioman Island	big flowerpot, engine block, wheelbarrow
MALTA	
Cirkewwa (Underwater)	party popper
MEXICO	
Cancun	car parts, 18 pair underwear
Puerto Vallarta	boat oil filter, baby pacifier
NETHERLANDS ANTILLES	
Fort Bay	bridge
Gallows Bay Shoreline	full oxyacetylene bottle
Holiday Beach	oven & refrigerator in 20 ft. water, saucepan, outboard motor cover
Klein Bonaire	toilet brush, toilet seat, unopened can of sardines
Philipsburg	frying pan, beach chair, car batteries, mirror, "Welcome" mat
NEW ZEALAND	
Albany Underwater	alarm clock
Auckland	sandals
Blue H21	solid 40 kg. of lead with a ring in it
Blue H23	old anchors
Island Bay Divers	gas burner, lipstick, large pair of bolt cutters, plastic bag full of ash
Pilot Bay	car keys, shotgun shell, clock, bike frame
Stirlings Sports Nel	boat rudder, weight belt
NIGERIA	
Bar Beach	clothes, candle wax
NORWAY	
Hellesoy Island	fighting dogs
PANAMA	
Playa Moanagre	leg of a doll
Playa San Carlos	high tension power line insulator
PHILIPPINES	
Batangas, Anilao	thermos, underwear
Boracay Island	spare engine parts
Cebu	tons of coconut shells
SAUDI ARABIA	
Jeddah	broken thermos
Jeddah U/W	beach umbrella

Appendix 7. Items Identified as "Most Peculiar" by 1996 International Coastal Cleanup Volunteers, cont.

COUNTRY/ ZONE	PECULIAR ITEMS
SINGAPORE	
Divers Underwater East Zone	umbrella broom, calculator, moth ball, map, metal tongs, trolley, bra, car mirror, jeans, license plate, football, panty hose, plastic spatula, slippers, toothpaste, underwear, watch
Off Shore South Zone	knife, fuel cartridge, camera, poncho, school bag, slippers, telephone half of a kayak, underwear, shell casings
SOUTH AFRICA	
Ballito Area	toothbrush, knife, unfired bullet, wax pieces
Central Beach	false teeth
Munster	election flyers from '96 election
Oudekrall	boat, oil pump, t-shirt
St. Lucia Beach	car battery
Umgeni Estuary	toupee, arm of a leather jacket
Umkomaas Beach	sandal, woman's shoe
Umlalazi Beach	gas cylinder, plastic chair, tool box, bath mat
Vetche's Pier	golf balls, spark plug, boogy board fin
Westbrook Stream	photograph, freezer basket
ST. KITTS & NEVIS	
Bath Village	steering wheel, gear box
Black Bay	paint brush, refrigerator, shoe polish
Hurricane Beach	Electricity Dept. truck
Indian Castle	electric curler & outlet, shaving cream
TURKEY	
English Harbor	World War II British ammunition, 2 chairs
TURKS & CAICOS	
East Bay	shoes, piece of an airplane
Nookie Hill Beach	water heater, football helmet, eyeglasses
UNITED KINGDOM	
Anglesey	party popper
Co. Antrim	mud flap, windshield wiper blade, hat
Cornwall	car exhaust pipes, hub cap, wheelbarrow
Denbighshire	2 lipsticks, vacuum cleaner hose
Devon	full 5-gallon oil drum, washing machine
Dorset	toilet seat, fridge, traffic cone, hacksaw
Essex	toothbrush, 2 paintbrushes
Grampian	spent mortar bomb, signal flare
Guernsey	full 5-gallon oil drum, cassette tape, hub cap, full can of lager
Gwynedd	screwdriver, golf ball
Merseyside	36 toilet freshener holders
S. Glamorgan	whole railway sleeper
W. Glamorgan	computer board
Yorkshire	trailer load of crab pots, fishing nets, rope

Appendix 7. Items Identified as "Most Peculiar" by 1996 International Coastal Cleanup Volunteers, cont.

COUNTRY/ ZONE	PECULIAR ITEMS
UNITED STATES	
Alaska	toy hovercraft, auto generator, tent w/gear
Alabama	ceramic dragon statuette, underwear, lawn sprinkler, boat wheelhouse, Christmas garland, Mardi Gras mask, lawnmower cover, metal bed frame, chimney, knife, car engine, door knob, muffler, car bumper brace, large plastic kitchen sink, boat rudder, arrow, car door liner (inside), doormat, birthday candle, smelling salt ampule (ammonia sniffer), shotgun shell, spark plug, bikini bottom, cymbal from drum set, toothbrush, TV antenna, dishwasher, large carpet, lawn chair
Arkansas	fan belt, truck inner tube, sunglasses, spark plug wires
Arizona	full size pool, umbrella, boat anchors, boat ladder, \$1 bill, movie filmstrip, 1 dozen lemons (6 cut), car engine, TV, radio, carpet, hub cap, jeep roll bar, abandoned shoes-like new, map of Sweden, car seat, beeper, gas can, very old pair of leather boots, CD case, full beer bottle-unopened, sleeping bag, 50' barbed wire, living room chairs & sofa, car window, ladies' panties, 2 boxer shorts, glasses, bike rims, toilet seat cover, spark plugs, screwdrivers, umbrella, canned peas, shopping cart
California	boomerang, plastic bird, earplug, men's underwear, sleeping bag, message in wine bottle "Kim loves Bill 9/17/96", pillow, car seat cushion, license plate, car horn, computer chip, bike seat, mattress, kitchen cabinet, drawer, golf balls, Gucci perfume bottle, 2 wallets, cash, car light, construction sign, night light, necktie, business card, metal spare tire cover, lawn chair, teddy bear, shell casings, suitcase, hubcap, earrings, money from Fiji Islands, Roto-matic Power Team vacuum cleaner, Halloween mask, electric drill, washcloth, car bumper, pantyhose, car sunvisor, food stamps, manhole cover, dried fruit, pants, 50 lb. slab of latex, car frame, car bench seat, truck bumper, giant ice chest, side of B&B toilet stall, plastic earplug, shell casings, underwear, propane tank, bedding (foam pad), old burnt out stove, bandages, backpack full of old clothes, 6' metal sink, 30 gal. water heater, bag of bullets, wood cutting board, folded his & her underwear, hockey puck, magic padlock, shell casings, plastic flowers, surfboard leash, 18 wheeler mud flap, spark plug, spark plug wires, full cup of salsa, eye liner, boat decal license, bikini bottoms, boat transom, car brake reflector, bungee cord, back of TV set, lap top computer, 10 speed bike, red pills in camera film box, clothing in sand, frying pan, hair piece, 13" metal guard rail, power of attorney papers, water fountain, ticket to Disneyland, 4 dead mice in a wine cooler bottle, 2 recycling buckets, couch pillow, fake nose, fake money, glow-in-the-dark worm, Koosh ball, Florida driver's license, BBQ grill, Visa card, golf ball, car mirror, bike pedal, book, computer disk, large rubber tubing from oil plant, toothbrush, guitar, Nerf football, plastic wreath, bottle w/letter in it from New York, trash can lid, IV bag, sheet, halogen lamp, calculator, car battery, bag w/ alumin sulfat, vase, cans of shaving cream, box w/ 6 cans of dirty motor oil, combs, 2 hangers, 2 shopping carts, 2 unopened beer cans (Miller Lite & Bud), plastic Easter egg, leather purse, mouse in a bottle with water, Safeway shopping cart, 25 lb. bag doughnut mix, plastic gun, shell casing, surf wax ("Sex Wax" brand) - wrapped in silk underwear,

Appendix 7. Items Identified as "Most Peculiar" by 1996 International Coastal Cleanup Volunteers, cont.

COUNTRY/ ZONE	PECULIAR ITEMS
California, cont.	<p>2 caulking guns, bracelet, respirator (diving) mask, swim fin, engine, men's boxer shorts, screwdriver, piece of window frame, credit card, wooden dock signs, "Rumba" underwear, trailer hitch, flashlight, car battery, jar of mayonnaise, women's pants & panties, hospital ID bracelet, Christmas tree, pick ax, brake pad, parts of flight helmet, bike chain, shopping carts, carpet, mattress, big bag of pills, bike seat, carpet, shovel, bed frame, steering linkage, door knob, telephone cord, couches, car & trailer, old battery, dipstick, glass goblet, underwear, jean jacket, sprinkler hose, hair brush, plastic apron, cooking pots, ear plugs, teddy bear, tent stake, wire hanger, 2 underwear, women's bathing suit, car seat, blanket, prescription glasses, 3 hospital ID bracelets, large boat rudder, 72 shotgun shells, shovel, 2 batteries, bumper, 3 shopping carts, "One Way" sign, Monopoly money, car pieces, toothbrush, sleeping bags, sponge, luggage, doormat, BBQ grill, sofa pillows, spark plug, fan belt, mouthguard, rubber finger tip, head light, toothbrush, dirty socks, 2 eyeglasses, bilge pump, boat drive shaft, tractor, toilet paper, coconut, propane tank, bikini bottoms, toenail scissors, lawn edger, double metal sink, toilet, fishing license, shotgun shells, scuba fin, propane tank, tequila bottle, seat cushion with nails, bra, knife, men's underwear, broken watch, seat cushion, car seat, bike seat, dental retainer, 5-gal. propane tank, car grill, 6 CO₂ cartridges, car fender, bed springs, shop ping cart, shotgun shell, fuel pump, carburetor, vacuum cleaner, bumper, underwear, sleeping bags, circuit board, 78 speed records, VHS tape, spell checker, wallet, baseball glove, toilet seat, car engine, bike, car door, vacuum cleaner, automobile seat, suitcase, shopping cart, car bumper, shell casings, motorcycle helmet, radio, boat, headlight, paint roller, chair, knife, hub caps, sunglasses, barbell weight, empty back pack, car door, TV set, Garfield underwear, rear end of car, desk & chair, wine glass, play money, lawn chair, stereo, sleeping bag, TV, paint bucket, ¾ full cup of coffee, shopping cart, stroller, toilet paper, skateboard, wallet full of credit cards, umbrella, metal tea kettle, 1992 paycheck, food stamps, car bumper, outboard motor</p>
Colorado	antique tin Cracker Jack box, twisty tie, 1 pair tennis shoes, bottom of a bucket
Connecticut	kids' raft made from trunks lashed with wire, open umbrella, ½ of bikini top, comb, men's underwear, whole beverage cooler, baby bottle, fishing rod and reel, shell casings, license plate, socks, beer can, children's medicine spoon, rubber doormat, shoes, shotgun shells, film
District of Columbia	whole salad dressing bottle
Delaware	shotgun shells, door chain, bike, carpet, sponges, car seat, toilet seat, lawn mower handle, radio, underwear, house siding, shingles, tent, black pantyhose, 2 Christmas wreaths, air conditioner, letter in bottle, muffler, boot & jeans, sled, bank "No Parking" sign, swing seat, key ring, 4 wild animal tags, Tupperware containers, pizza shop sign, mattress, backboard, fence post, shopping cart, life jacket, note in a sealed bottle from Easton, PA, bed sheet, foreign medicine bottle, shotgun shells, hair scrunchie, snow fence, gas BBQ grill, anchor, underwear, 3 toothbrushes, vampire teeth, metal spoon, sink stopper,

Appendix 7. Items Identified as "Most Peculiar" by 1996 International Coastal Cleanup Volunteers, cont.

COUNTRY/ ZONE

Florida

PECULIAR ITEMS

fire extinguisher, carpet, Zantac pill, ice skate protector, battery, 5-gal. water bottle, package of bologna, knife, lawn chair, commercial fish net, CO₂ cartridge, ½ full tub of butter, trailer hitch ball, underwear, 3 parking tickets, umbrella, bike, car mirror, Walkman, shopping cart, chaise lounge, hair weave, duffel bag, toothbrush, lollipops, car bumper, Ruffenal pill, sprinkler head, metal fork, T-shirt, sprinkler head, boat battery, jockey shorts, lawn chair, Charlotte sanitation recycling bin, nail clippers, annual state park pass worth \$60, shotgun shell, muffler, car battery, small knife, 2 lawn mowers, 3 boats, Pacman video arcade game, boat chair, TV antenna, voodoo doll, couch cushion, toilet floater ball, propane tank, umbrellas, stool, skimboard, fuse box, pig's foot, shell casing, wine glass, Bell Money Machine lid, flipper, sheet, motor cycle helmet, boat paddle, spark plugs, pillow, toilet, couch cushion, floor tiles, environmental notebook, chairs, automobile alternator, Tyrec suits, 3 hospital ID bracelets, scissors, set of keys, toilet seat with a tree growing in it., lawn chair, a Santeria chicken in a cloth bag, IV bag (full), squash racket, mobile phone, T-shirts, pepper, asthma inhaler, 1974 Cuban work permit, 5-gal. gas can, vacuum cleaner, fire extinguisher, turkey baster, 2 plastic chairs, shotgun shells, bedspread, car fender, stove, blue recycling bin, freezer, car hood, rug, dead baby sea turtle, dungarees, toothbrush, men's underwear, hair curler, political campaign sign, hot water heater, plastic swimming pools, pair of jeans, mattresses, living room chair, teddy bear, piggy bank, circular air filter, underwear, chair, bathing suit, pantyhose, propane cylinder, crime tape, \$20 bill, carpet, washing machine, license plate, teddy bear, queen size comforter, Nissan bumper, ladies' underwear, cut up credit card, rubber raft, medicine cabinet, stove top, car headlight, car seat, 2 shopping carts, bed, couch frame, counter top & sink, dental floss with teeth, shotgun shell, fender, fence, boat prop, anchor, acrylic fingernail w/nail polish, shotglass "Yukon Jack", boat battery, Cuban cigar, ½ surfboard, ladder, BBQ grills, boat seat, underwear, battery, small plastic figurine of weight lifter, golf ball, old raincoat, shotgun shells, propane tank, lawn mower, shotgun shells, 9 table cloths, bike speedometer, big cotton rug, antique Pepsi can, underwear, twin mattress, small toy dinosaur, hatch cover for boat, name badge for hotel, oil filter from a large engine, 2 chicken eggs, Walkman, headlight, full Heineken beer, boarding pass London/Orlando, "salesman of the month" metal plaque, car hood, plastic Black Power fist, TV tube, ashtray, pantyhose, lawn chair, wooden door off boat, life preserver, bra, BBQ grill, croquet stake, pocket knife, purse, lotto card, carpeting, 2 car exhaust systems, truck muffler, toothbrush, alternator shaft, boat cushion, toilet seat, foam mattress, shovel, T-shirt, carton of milk from Lithuania, men's underwear, whole bag of dried up shrimp, metal off-road tracking for military vehicles, lawn chair, seat cushion for sofa, box spring and mattress, necklace, book marker, 300 lbs tire, headlight, new locked padlock, curler, sunglasses, toothbrushes, shell casing, clothes hanger, large wooden cable spool, 9" high foamed plastic Buddha statuette, plastic snowflake, beach chair, shaving cream can, couch, wood drawer,

Appendix 7. Items Identified as "Most Peculiar" by 1996 International Coastal Cleanup Volunteers, cont.

COUNTRY/ ZONE	PECULIAR ITEMS
Florida, cont.	religious medallion, mattress, stove, recliner, vacuum cleaner, bedpan, arrow, refrigerator, bathroom scale, boat paddles, plastic hand grenade, boat light, drill press, Christmas wreath, luggage, windshield wiper, 2 checkbooks and address books, unopened beer bottle, truck hood, gold earring, diaphragm, tape measure, shotgun shells, BBQ grill, Dura-Flame log (2-hour), car jack, car mat, motorcycle helmet, flashlight, shower curtain, exhaust pipe, car air breather, lounge chair pad, TV antenna, foreign car filter, hummingbird feeder, flippers, stove, kitchen chair, 2 spear guns, beach chair, traffic court papers, flowered bra, 2 trash containers, "surfer dude stuff", sword sheath, banana, bathing suit, rock with plastic tube "growing" out of it, matching underwear, rug, flashlight, Coca Cola crate, marble slab, \$5 bill, surfboard wax, shotgun shell, wet blanket, TV set, car door, lipstick, 4 fishing licenses in Ziplock bag, stove top, chunk of recycling bin, propane tank, old record, pulley, oil filter, refrigerator door, battery box, net bag full of garbage, knife case, spark plug
Georgia	engine starter, onion, mattress, underwear, softball, washing machine, kitchen sink, BBQ grill, rubber bottle nipple, dollar bills, underwear, fire hose, toilet seat, 2 TV remote controls (1 Sony, 1 Sanyo), bedding, top of CD player, underwear, \$32, \$5 bill - torn in half
Guam	car parts, chair, kitchen sink, 2 large "impellers", probably from large steamship, Birkenstock sandal, wrecked air conditioner, 2 car batteries, gas BBQ grill, rusted curling iron, rusty wrench, couches, refrigerator, wild boar mandible, miniature toilet, air filter, diapers with a surprise!, steering drive column, stereo speaker, 52 pieces of car engine
Hawaii	stick with an egg beater attached, socks, teddy bear, stereo equipment, car seat, seat belt clip, pens, ice holders, dish soap containers, auto body molding, projector screen, 300 lb. cargo net - no ID, underwear, light switch, 2 fishing reels, hot dog bun w/ no hot dog, lead pipes, face mask, insulation foam, underwear, bed, desk, car batteries, shopping carts, underwear, whole series of photos at 50' intervals along the road, old metal tripod (broken), large quartz crystal (not native to Hawaii), egg shells, rubber flip flops, jock strap, sandwich wrapped in foil, shell casing, Christmas tree, bed, couch, pillow, car door, house door, TV, 2 car batteries, car front end, metal spoon, CO ₂ cartridge, bike tire, propane tank, underwear, railroad spike, comb, plastic flower pot, bed quilt, bike seat, metal hatch cover w/ heavy metal shackles, golf balls, spark plug, quart of motor oil, switchblade comb, girl's underwear, ladies lingerie, umbrella frame, steering wheel, car antenna, long piece of braided human hair, hot pink water bottle, beach ball, wooden spoon, broken Hobie cat hulls - buried in sand, toothbrush, carpet, shish kabobs w/only onions left, bag of 20 coconuts, VCR, boxing glove, bowling ball, tarot cards, bar of soap, golf club, Ford Tempo (FX B411) boomerang, tangled boat sail, including wires & cables, cassette tapes, rugs

Appendix 7. Items Identified as "Most Peculiar" by 1996 International Coastal Cleanup Volunteers, cont.

COUNTRY/ ZONE	PECULIAR ITEMS
Iowa	car muffler, 2 scuba masks
Idaho	arrows, lawnmower, canning jar, golf balls
Kansas	boat oar, credit card, coin changer, knives, Incredible Hulk doll, ski binding
Louisiana	car parts, swimming pool, CB radio, toothbrush, boat for boat, 12 volt headlight, book (A Brief History of Time by Stephen Hawking), boat cushion, door, metal acetylene welding tank, kazoo, door handle, railroad spikes, sleeping bag, hub cap, shopping cart, patio umbrella, 2 baseball caps, shawl, jock strap, toilet, lawnmower handle, Visa credit card - not expired, stroller, car muffler, camper windows, broken TV set, car battery
Massachusetts	woman's bathing suit, 1933 railroad tie date nails, plastic sled, teddy bear, bike, oar, pen, rear view mirror, dashboard panels, shotgun shells, a plane part, lounge chair, bag with clothes in it, pull tabs (from very old cans), bike, radio, woman's coin purse (red velvet, c.a. 1950's, under wear, 2 halves of stolen cars, audio tape, shotgun shells, clothespin, tropical helmet, full bottle of Sam Adams beer, bed sheets, 1 cranberry, toilet float, basketball, gun barrel, safe door, 3 ft. plastic Santa, mattress, engine, snow blower, couch, stereo turntable, motorcycle, unopened can of Bud Light, fireman's hose, TV back panel, long kitchen knife, pregnancy test, radio, margarine, knee brace, message in a Coke bottle - "Hooks", really chunky milk, a cigarette holder, Massachusetts Coastal Zone Management Badge, lawn chair, boat transom, lottery ticket, 1200 lbs of asphalt roof shingles, dog brush, toothbrush, rubber boot full of motor oil, gas cap, refrigerator, car seat, red fender, Winnie the Pooh head, riding lawnmower, cast iron bathtub, bike, medical bracelet, shotgun shells, TV antenna, pipe cleaner, chair, traffic reflectors, dining room chair, bottle with a note inside, hair gel, lampshade
Maryland	baby stroller, TV remote controller, 2 sterile water containers
Maine	men's underwear, women's underwear, shotgun shells, hot water heater, mail box, pot pie dish, 3 watches, golf tee, plastic bottle of Russian suntan lotion, bed sheet, wheelbarrow, hockey stick, deodorant stick, manhole cover, stove, bike seat, shotgun shells, bra, life jacket, message in a bottle, lawnmowers, exhaust pipe, motorcycle license plate frame, emergency outboard motor in original storage case, CO ₂ cartridge, truck sunvisor, car motor, \$5 bill, beach chair, cooking pot, compass, 2 entire rolls of toilet paper, rotary lawnmower, a plastic lemon & a "plastic woman", sewing needles, wet suit, underwear, 1 Cub Scout (live, unentangled), whole onion, wet suit bootie, lawn chairs, boat antenna, sign from park in Warren, mast or flagpole, 35mm camera, broom, bookcase, mooring chain, Quebec fish tag, gas can, an Iron, boat seat, life jacket with flashlight, For Sale sign from CHR Realty, mallard decoy, Frisbee, bottle of HCl acid, toilet bowl, 17 th Century pipestem, collapsed cabin, kerosene heater, sleeping bag and tent, 1/2 a boat, bike, muffler, Canadian lobster tag, engine, toilet, shotgun shells, boat transom, razor knife, D.O.T. sign

Appendix 7. Items Identified as "Most Peculiar" by 1996 International Coastal Cleanup Volunteers, cont.

COUNTRY/ ZONE	PECULIAR ITEMS
Michigan	orthodontic bit plate, center board from sailboat, chair, outboard motor, pole digging shovel, Chevy V-8 engine, electric wrench, BBQ grill, bike, sun roof, shotgun shell, hymnal, hood of cab, snow fence, pantyhose, small metal shovel, printed paper strip, "Go on! Ya bunch of buzzards.", Polaroid camera cartridge, Nerf football, NO ₂ cartridge, car battery, cat collar, couch, pillows, car seats, mattresses, filing cabinet, mailbox door, diver's mask, shotgun shells, burnt chair, ship's door, plastic sled bottom, plastic air horn
Missouri Mississippi	car door explosive covering, keychain, spark plug, full package of chicken, bra, panties, wedding ring, garden hoe, note in a bottle, radio, spark plugs, shingles, fork, broken TV, shock absorber, roofing vent, carpet, water hose, tape deck, bottle of BBQ sauce, golf tee, hair weave, Gaffisosa County sign, car bumper, hub cap, tarot cards, golf ball, men's under wear, antenna, Rubic's Cube, hub cap, champagne cork, LA oyster tag from Oyster Boy LA, 6 unopened beers, panties, socks, sofa cushion, 2 grease guns, egg, onion, zucchini, badminton birdie, fingernail, shotgun shell, box spring, box of detergent, muffler, BBQ grill burner, paint brush, refrigerator, carpet, swimming pool, mattress, swimming pad
Montana	cordless power drill & kit, dice, golf club, new golf ball (this was a high mountain lake)
North Carolina	house shingles, anchor & rope, crisper drawer for refrigerator, kitchen sink, fake flowers, toilet seat cover, aluminum porch screen, eyeglasses, motel key, men's underwear, money (\$2), bread, Odor Eaters, stereo, door, dryer duct, JC Penney charge card, lamp shade, vacuum cleaner, truck muffler, car door, bathroom sink, shell casing, hammer, Ninja Turtle Underoos, door to a safe, plastic bird bath, silk flowers, shotgun shell, credit card, driver's license, gas tank, boom box, hubcap, truck liner, toilet tank, old telephone receiver, TV, shotgun shell, weather monitoring equipment, pink tarp, propane tank, bike, tricycle, picnic table, 3' tall ash tray, tail light, entertainment center, mattress, folding chair, car air filter cover, many washers and dryers, refrigerator, toilet, washing machine, microwave, hub cap, exhaust pipe, 8-track tape, life jacket, shopping cart, space heater, shell casing, air conditioner compressor, 2 trucks (rusting away), toilet, refrigerator, 2 lawn chairs, water heater, couch, volley ball, plastic boat, street sign, car speaker, hubcap, underwear, portable TV, hand cuffs, carousel horse, knife, Christmas lights, muffler, Freon tank (DuPont, DE), pantyhose, hubcaps, men's underwear, "No Parking" sign, longjohns, hubcap, shopping cart, "old fashioned metal bicycle", telephone, screen door, snow shovel, bowling ball bag, stop sign, boat trailer, child's scooter, shotgun shells, lounge chair, washer, dryer, stove, dishwasher, live ammunition, toothbrush, hubcaps, pantyhose, spark plug, DDT signs, old bicycles, charcoal, plates, tennis ball, roofing paper, 3 live shotgun shells, Weedeater, couch, 2 grills, Volkswagen seats, lawnmower, bookcase, blinking road marker, couch springs, neck brace, 45 RPM record, handle bars, wind shield wipers, sled, hubcap, man's wallet, Epson copier, cell phone & case (with a brick inside the case), pink flamingo,

Appendix 7. Items Identified as "Most Peculiar" by 1996 International Coastal Cleanup Volunteers, cont.

COUNTRY/ ZONE	PECULIAR ITEMS
North Carolina, cont.	bottle, rug, 2 shotgun shells, hair weave, floor mat, garbage can lid, gas grill, kitchen sink, bike, 2 car batteries, bed roll
North Dakota	spool of barbed wire, purple panties
Nebraska	refrigerator door, fiber-filled vest
New Hampshire	shotgun shells, carpet, soap, plastic salamander, underwear, fence, mauve colored rug, hotel keys, car doors, lawn chair, 24' bike rack, cash register case, bike helmet, football, fishing pole, rubber raft, wallet with warrant papers (turned into police), car hood, toilet seat, 14 ft. boat hook, cook pot, flashlight, tire in tree, Christmas lights, sandpaper, 3 pennies, lottery ticket stubs, mailbox, license plate, glue stick, TV, rubber bumper, car air cleaner, paint tray, car parts, spark plugs, asthma inhaler, sock, flip flops, bloody surgical glove, bikini, video tape head cleaner, kitchen knife, shotgun shell, beach chair, video camera battery pack, surfer's wax, underwear, bottle of vodka
New Jersey	roofing and insulation, 2 shell casings, tin measuring cup set, "bomb bag", coal, large oil filter with oil in it, hose nozzle, soda bottle with coins in it, dental retainer, full can of soda, unopened container of sour cream, shotgun shell, knife case, "several pair of socks", toothpaste, contact lens solution, shell casing, seat cushion, Nerf football -"But we kept it", toothbrush, 2 "giant pieces of coal", full pack of soggy cigarettes, car battery, eyeglasses frame, birthday candle, hair curler, abandoned vehicle on beach "G NJ JV792F", radiator cap, garters, car seat, piece of fake cheese with a fake mouse on it, hospital ID bracelet, ladder, wine cork, whistle, chimney, boat seat, underwear, cabinet door, garment bag, plastic cow, plastic plant holder, gallon paint can, full deodorant, coconut, troll doll, car bumper, car console, toothpaste & tooth brush, car visor, 2 shell casings, phone, license plate frame, umbrella, towel, \$10 bill, underwear, possible piece of Flight 800, shingles, men's T-shirt, 1/2 a surfboard, balloon from Channel 17 Philadelphia
New Mexico	fishing reel, engine block, Dacor SCUBA mask, anchor, TV antenna, car battery, primer pump for boat motor, boat motor cover
Nevada	2 occupied burial urns (reburied in deeper water), boat windshield
New York	shotgun shells, 1996 Atlanta Olympic cap, bike seat, boat dock, BBQ grill, red refrigerator door, refrigerator compressor, TV set, toilet bowl, fender, whole jar of dill pickles, plastic flower, 6' tractor tire, snowmobile frame, dog tag from 1972, NO ₂ canister, Christmas tree lights, cookie cutter, Hawaiian lei, sock, chair, pen, ceramic insulator, car muffler, underwear, handlebar, metal table top, wooden shoe, toilet, 30 shell casings, car bumper, boat, license plate, sign post, air conditioner filter, Oldsmobile car insignia, 18" high plastic owl, dishwasher, bed post, crib rails, enema kit, brand new Nike sneaker, spark plug, oil pump, running watch, soccer ball, boxer shorts, water faucet, shopping cart, Toyota Tercel trim pieces, fence, plastic boat & raft, cooking grill, bowling ball, eyeglasses, wallet, mouse trap, hospital ID bracelet, scissors, valid driver's license, hubcap, shotgun shells, work boots, gas tank, muffler, car floor mat, Christmas holly, "Natural Spring Water" bottle, Lynbrook town beach pass, coveralls, shopping cart, steering column from a jet ski, knife handle, toothbrush, hula hoop, brush,

Appendix 7. Items Identified as "Most Peculiar" by 1996 International Coastal Cleanup Volunteers, cont.

COUNTRY/ ZONE	PECULIAR ITEMS
New York, cont.	<p>pair of socks, roller blade, watermelon, bra, Santa's sled lawn ornament, 2 car bucket seats, sunfish sailboat, contact lens case, car battery, pocket book, working portable cassette player, 4 unopened cans of Bud, boat oar, car bumper, luggage, comforter, wallet with Lord and Taylor credit car, TV, refrigerator, kitchen sink, fire extinguisher, car radio, metal table, toothbrush, boomerang (wood, "In perfect shape!"), ladies undies, bicycle wheel, heavy small wheel-could be landing gear wheel, boat refrigerator, plastic toupee, jet ski, boiler, hockey stick, expired car registration, car bumper, girl's underwear, bikini top, whistle, caulk tube, gas tank, bottle with a note from Centerport, Long Island, Crash Test Dummy doll, shotgun shells, intact tool kit with rusted ratchets, 6 kitchen trash bags of cat litter, wallet, roofing shingles, fan belt, bike seat, dish pan, electrical box, boat gas tank, plastic Christmas holly, piece of coal, toothbrush, clay pigeons, anchor, gas tank cap, back to TV, remote control boat, hair extension, bike, metal cooking pan, headphones, silk boxer shorts, jacket, car seat, road sign, beeper, flash light, beach umbrella, deSoto hubcap, model T tire tube, full roll of toilet paper, umbrella, flare gun, kitchen sink, swing set, water heater, crankcase, bumpers, wheelbarrow, muffler, tailpipes, table, radio vacuum tube, fire extinguisher, mattress, onion, zippers, Ping Pong ball</p>
Ohio	bottle rocket, shotgun shells, Christmas tree, beeper
Oklahoma	couch, working watch, oar, bikini top
Oregon	<p>12' fishing gaff, shotgun shells, whipped cream, door knob, radiator cover, toothbrush, leather doll pants, car bumper, kitchen sink, rubber boat bumper, navy blue pair of men's Hanes underwear, tobacco pipe, mall discount card from 1992, garbage can, fire hose, canvas bumper guard from dock, disposable camera, dog license, Christmas tree light bulb, bikini top, boat, oar, pantyhose, shotgun wad, underwear, wallet with \$6, hockey glove, toilet, sleeping bag, toothbrush, Christmas wreath, car parts (engine, axle, muffler), orange highway marker, twin mattress, part of a duck blind, bath towel, hockey glove, plastic mini boogie board, brass barometer, underwear, baseball</p>
Pennsylvania	hackey sack, bathing suit, 30-gal. garbage can, underwear, snow ski, beeper
Puerto Rico	<p>baby crib, electric fan, underwear, spark plugs, underwear, car fuse, belt, 11 gallons of lard, 3 piles of trash bags (50 bags each)</p>
Rhode Island	<p>dummy test bomb, skateboard, pitch fork, auto mirror, luggage cart, BBQ grill, barbell set, bicycle pump, golf ball, sock, plastic flowers, underwear, short pants, full jar of sauerkraut, 2 pillows, gold lamé belt, badminton shuttlecock, toilet paper roll, muffler, tailpipe, shotgun shells, boat, motorcycle gas tank, shell casing, cracked windshield, coal</p>
South Carolina	<p>curling iron, unopened 6-pack of Corona beer, TV, GMC truck fender, lawn chair, surfboard, wooden boat door, shotgun shells, broom, propane tank, insulin bottle, nutcracker, golf club, whole window frame, tin roof, license plate, underwear, shower curtain, snorkel mask, message in a bottle, washing machine, swim suit bottoms, flare gun kit, mini hand-held fan, pair of socks, plastic chair, pen, T-shirt, coal, 2 movies from Blockbuster, 14 boxes with UPS shipper's address, 2 engine blocks, door jam, IV bottle, set of brake drums, screen door,</p>

Appendix 7. Items Identified as "Most Peculiar" by 1996 International Coastal Cleanup Volunteers, cont.

COUNTRY/ ZONE

PECULIAR ITEMS

South Carolina, cont.

door knob, bedspread, toothbrush, studded/spiked dog collar, shingles, pacifiers, panties, wallet with ID and credit cards, horse riding helmets, mouse trap, unopened beer can, razor, stink bomb, glasses case, full bottle of Tylenol PM, electric cord, Christmas tree light, water spigot, sunglasses, grill top, shingles, airplane propeller, knife, towel, battery cable, fiberglass insulation, house siding, wallpaper, antenna, pantyhose, pacifier, eyeglasses, pair of socks, car mat, pair men's shorts, drain pipe, full booze bottle, swimming towels, bathroom tiling, kite, shell casing, plastic teeth, golf ball, bricks, toilet paper, windshield wiper blade, Dr. Sholls innersole, hair ties, comb, paintbrush, camcorder piece, sheet of tar paper, pacifier, broken surfboard, bag of Gummy Bears, pen, full can of Red Dog beer, found 1 dog, returned it to its home, sailboat, golf ball, kitchen sink, water heater, \$5 bill, 2 bottle rockets, large fuel tank (200-gal.), sea anchor, 150 lbs Styrofoam block, 2 coolers full of beer & ice, orange cone, foam mattress, disposable razor, hub cap, boy's underwear, highway cones, plastic trash can, Christmas lights, nail clippers, air filter, pillow, fanny pack, hatched turtle eggs, Beach Sweep '89 pencil, stove top, belt, alarm clock, cabinet door, bedspread, folding chairs, Canadian \$1 bill ". . . that I kept", whole watermelon, gutter screen, bicycle handlebar, bed sheet

Tennessee

underwear

Texas

deodorant, car seat, car fender, mud flap, man's underpants, suitcase, transmission, squashed sunglasses, toilet, gas grill, butane tank, lawn chair, toothbrush, shotgun shell, fuel pump, plastic air pump, 2 bed room slippers, 1968 Ford pickup hood, part of a motorcycle frame, box spring, pencil sharpener, shell casings, TV, refrigerator shelves, plastic Santa Claus, glue stick, \$1 bill, burned CD, shell casing, cassette player head, razor, golf tee, tent with blankets, clothes, makeup, etc., shotgun shells, padded bra, door knob, smoke bomb, metal bumper, small radio controlled motorcycle toy, air conditioner motor, allen wrench, 1/2 a microwave, refrigerator, fireman's hat, suitcase, washing machine, baby toilet, marine ID card, inside of a car door, women's underwear, door knob, truck tailgate, car speaker, outboard motor top, sailboat sail, propane tank for stove, dentures, shower mat, ear plug, fan blade, U.S. Army dog tag, toilet bowl cleaner, 1/2 of fiberglass boat hull, shark fin, oil filter, shell casing, woofer (speaker), scrub brush, windshield wiper, Mexican deodorant, sunglasses, 15' hose, toilet, bike seat, car door, dog skeleton in plastic bag, lawn chair, foam mattress, part of Christmas tree, plastic sword, oil filter, cushion seat, ski rope, pantyhose, under wear, pair of socks, mattress, fiberglass insulation, large orange shag rug 6'x12', toothbrush, dime, rug, wallet, badminton racket, baby outfit, football helmet, toilet seat, car door, propane tank, sweater, full trash bag from previous year, gallon of paint, ballot box from Mexico, bottle of talcum powder, Polaroid camera

Utah

painted tire

Appendix 7. Items Identified as "Most Peculiar" by 1996 International Coastal Cleanup Volunteers, cont.

COUNTRY/ ZONE	PECULIAR ITEMS
Virginia	keys, sunglasses, hospital urinal, table top, plastic video cover, laundry basket, shotgun shells, lawn chair, camera lens cap, 2 aircraft pieces given to Coast Guard, unopened gallon jug of milk, basketball, orange traffic barrel, weather balloon with chem lights attached, 1 gal. automatic bilge cleaner, vacuum cleaner, 14 shotgun shells, insulin bottle, guard rail, bank card, boat roof, 10 dog collars with tags, message in a bottle from Brunswick, MD in 1984, fake fingernail, fake nose, com forter, BBQ grill top, foam mattress, screen door, croquet ball, life preserver, purse, marble column, shell casing, Coleman stove, street sign pole, door hinge, bike frame, briefcase, ice skate, necklace, boat seat, IV bag, sleeping bag, carpet, brake shaft for car, tricycle pedals, bathroom sink, manhole cover, small refrigerator, sleeping bag in carrying case, toilet tank cover, shopping cart, tennis ball, hubcap
U. S. Virgin Islands Washington	piece of luggage, mast from a boat, inside of vehicle's door, 2 car batteries working sun shower from a boat, toilet plunger, padlock, golf ball, BBQ grill, microwave oven, plastic showercap
Wisconsin	\$95.00, soda dispenser, pair of underwear, lawn chair, men's watch, golf balls, hair bands, leg brace with shoe, 1 gal. motor oil in ice cream bucket, plastic bunny, vacuum

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by Country, cont.**

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Cartagena

IOCARIBE

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Scout de Colombia

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CODESECOS
Club Ecológico Yiski
EARTH
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Asociación Pro-Mejoras Playa Tamarindo
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Sansa Airlines
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APPENDIX 9. Sponsors of the 1996 International Coastal Cleanup, by Country, cont.

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Acqua Sub, Rijeka
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3.Maj Shipbuilding Industry, Rijeka
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Baraka
Best Tours, Best Egypt
Camel Dive Club
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Sharm El Sheikh Movenpick Jolie Ville
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Tropicana Hotel

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Monell Industries
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APPENDIX 9. Sponsors of the 1996 International Coastal Cleanup, by Country, cont.

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ITE (International Travel Expo Hong Kong Ltd.)
KHKC (The Keep Hong Kong Clean Campaign, funded by the KHKC Activities Funding Scheme)
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The Ministry of the Environment (provided buses, garbage bags, T-shirts, stickers and flyers.)
Inspectors of the Marine and Coastal Division (accompanied all the cleanup operations.)

IVORY COAST

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JAPAN

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ESSO
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JAPAN, cont.

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Japan Environmental Council
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Okinawa Electric and Power Company
Okinawa University Area Research Department
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Ryufu Kai (Ryukyu Wind Network)
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Okinawa Prefecture Government:
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Onna Town Hall
Yomitan Town Hall
Kaori Sunagawa

APPENDIX 9. Sponsors of the 1996 International Coastal Cleanup, by Country, cont.

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KUWAIT, cont.

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 Professional Investment Consultants
 Radisson SAS Hotel
 Safir Hotel
 Top 2 Toe
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 DHL
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 Riad Sultan
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 Western Atlas

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 TAKATS Ltd
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 Keep Latvia Tidy Foundation

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MEXICO

Puerto Vallarta

Vallarta Lifestyles Magazine
Club Regina
Administración Portuaria Integral
Opequimar
Princesa Cruises
Proyecto Punta Mita
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Betanzos
Bora Bora Cruises
Brock Squire
Casa Maya
First Choice Holidays
Hard Rock
Harris Tours
Holiday Inn
Hotel Marriott Casa Magna
Le Kliff Restaurant
Lloyds
Marely Travel
Mes Boat International
Miller Travel Services
Pipi's
Planet Hollywood
Qualton Hotel

MEXICO, Puerto Vallarta, cont.

Steve Wood
Tukari
Vallarta Beach Hotel and Resort
Velas Vallarta
Alaska Airlines
Café des Artistes
Casas y Condos
Casual Boutique
Daquiri Dick's
Delta Airlines Employees
Diamond Hotels Nuevo Vallarta
Dulce Vida
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Hotel Presidente Intercontinental
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Revista Puerto Vallarta Lifestyles
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Tukari
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 La Palapa Restaurant
 The Blue Elephant Restaurant
 Archie's Wok Restaurant
 Pipi's Restaurant
 Tequila Restaurant
 Paradise Village
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 Puerco Azul
 Hikuri Impresiones

MEXICO, Puerto Vallarta, cont.

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 Las Iguanas Racquet Club
 Ric's Jewelers
 Valenciana
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 El Torito's Restaurant
 Kim Cawood
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 Casa Mexicana
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 Majolica
 Galeria Pacifico
 Alfredo's Restaurant

Quintana Roo

Kukulcan Plaza
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 Club de Playa Colony
 Hotel Continental puerto Aventuras
 Hotel Oasis Puerto Aventuras
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NETHERLANDS ANTILLES

Coca-Cola
 Amstel Brouwerij
 Atlantis Diving
 Citro
 Fundashon Marie Pampoen

**APPENDIX 9. Sponsors of the 1996 International Coastal Cleanup,
by Country, cont.**

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Rabobank Curacao, N.V. A
Reflective Images
Ritz
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Department of Geography, University of
Auckland

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Polish National Environment Protection and
Water Management Fund
Ministry of Environment Protection
Natural Resources and Forestry
Provincial Environment Protection Fund
in Szczecin
Provincial Environment Protection Fund
in Koszalin
Provincial Environment Protection Fund in Slupsk
Centre of Environmental Education in Elblag

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Coca-Cola Co.
Snapple
Alfao Superstore

SINGAPORE

Land Cleanup

Caltex Group of Companies in Singapore
Rotary Club of Singapore
Nature Society (Singapore)

Underwater Cleanup

Marine Conservation Group, Nature Society
(Singapore)
Raffles Marina

TANZANIA

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Department of Environment, Zanzibar
Zanzibar Marine
Institute of Marine Sciences, Zanzibar
Municipal Council, Zanzibar
Local pressure groups (Sheha)

TURKS AND CAICOS ISLANDS

Operation Restore Hope

UNITED KINGDOM

Reader's Digest

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ITW Hi-Cone
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Ocean Spray Cranberries, Inc.
Sea World
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earth preserv
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Lony

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Pequiven

Golden Cup

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1996

International Coastal Cleanup

U.S. RESULTS



CENTER FOR
MARINE
CONSERVATION

Produced by **Seba Sheavly** with special contributions by **Ruth Bizot** (writing) and **Richard Randall** (data compilation and analysis). Edited and designed by **Rose Bierce**

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1996
INTERNATIONAL COASTAL CLEANUP
U.S. RESULTS

Published by
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Washington, DC 20036

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The Center for Marine Conservation (CMC), established in 1972, is a nonprofit organization committed to protecting ocean environments and conserving the global abundance and diversity of marine life. Through science-based advocacy, research, and public education, CMC promotes informed citizen participation to reverse the degradation of our oceans.

The **International Coastal Cleanup**, part of CMC's Citizen Outreach and Monitoring Program and Clean Ocean Campaign, is supported by CMC's 120,000 members and special contributions from the following:

Benefactors

Anheuser-Busch Corporation
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The Center for Marine Conservation's International Coastal Cleanup is pleased to have the endorsement of The World Conservation Union—IUCN and the Intergovernmental Oceanographic Commission (IOC) of the United Nations' Education, Scientific, and Cultural Organization (UNESCO).

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Acknowledgments

As part of CMC's Clean Ocean Campaign, the International Coastal Cleanup is the world's largest grassroots effort devoted to conservation of the marine environment. The International Coastal Cleanup, celebrating its eleventh year, is a phenomenon that continues to exist only because of the dedication of the tens of thousands of volunteers, supporters, and sponsors who give of their time, resources, and energies to organize, promote, and conduct this event.

The Center for Marine Conservation would especially like to recognize the following Cleanup Coordinators and other supporters who worked so hard to make the 1996 Cleanup possible. They are:

Alliance for a Living Ocean (NJ)
Scott Barker (ID)
Tom Beery (MN)
Rhonda and Kent Berklund (AK)
Tom Blindt (KS)
Alissa Block (MO)
Judy Bolin (NC)
Tanya Cabala (MI)
Philippe Caterino (NV)
Kim Chen (SC)
Clean Ocean Action (NJ)
Barbara Cohen (NY)
Paul Dest (ME)
Anne Donovan (MA)
Gwendolyn Emick (LA)
Liz England (MI)
Dawn Failing (DE)
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Ivan Vining (AK)
LTJG Scott Wetter (Guam)
Christine Woolaway (HI)
Julie Wright (NM)
Marie Youngs (MD)



Montana



Puerto Rico

"The beach looked clean until we started
cleaning, then you realize how much
litter was there."

cleanup volunteer, Delaware

THE WHITE HOUSE

WASHINGTON

June 24, 1997

I am delighted to join the Center for Marine Conservation in commending the more than 275,000 volunteers from America and around the world who participated in the 1996 International Coastal Cleanup.

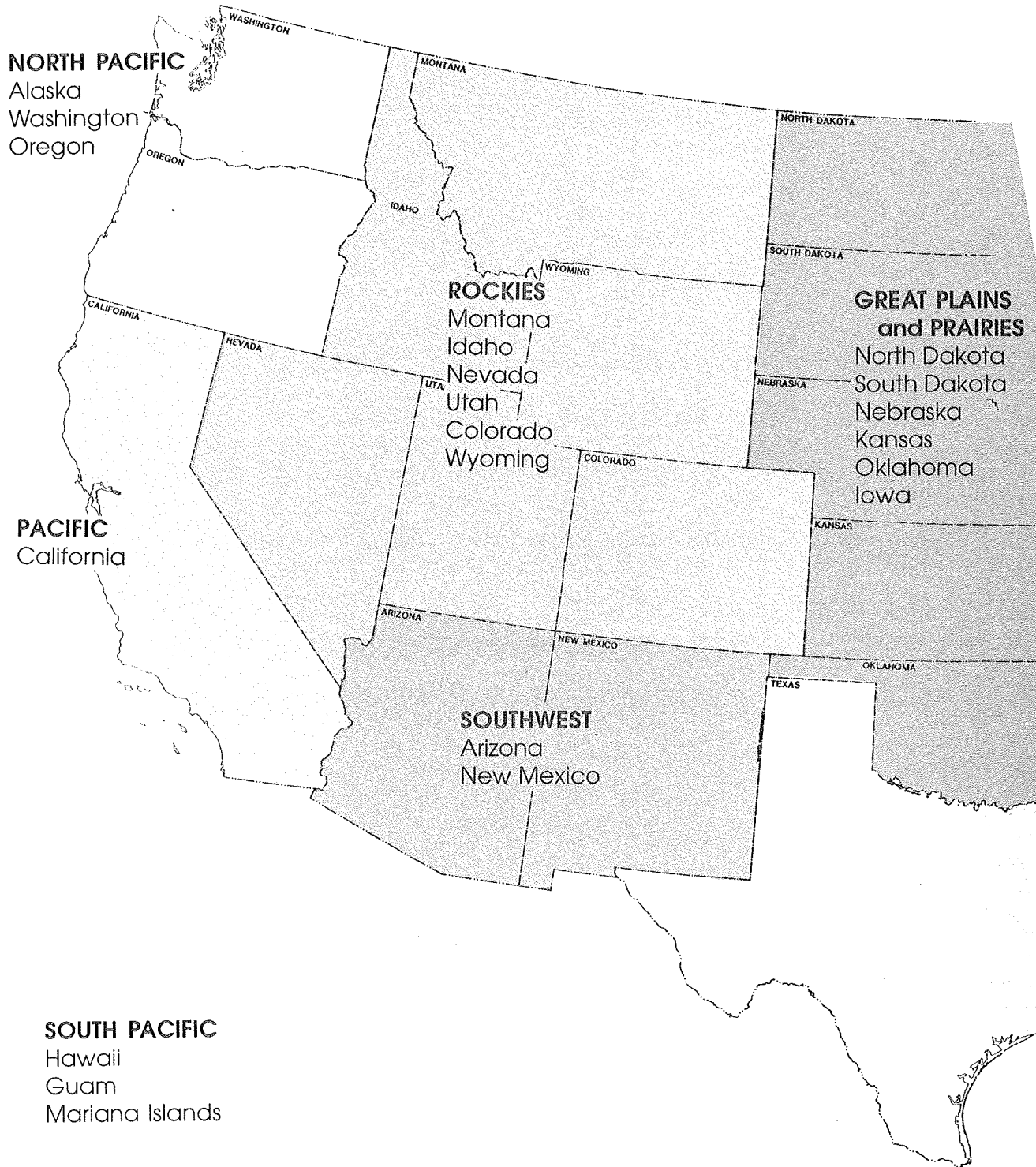
As we prepare for the 21st century, we must renew our commitment to protecting our planet. No longer can we assume that our ocean, coastal, and water resources are limitless in their ability to absorb the waste disposal and other stress we cause. We must work together to ensure that our global environment is clean, healthy, and safe.

For more than a decade, the dedicated volunteers of the International Coastal Cleanup have taken a leadership role in the stewardship of the environment. By identifying and removing debris that endangers wildlife and threatens the prosperity of coastal communities dependent on clean, safe shores, you have helped build a better future for this planet and its inhabitants.

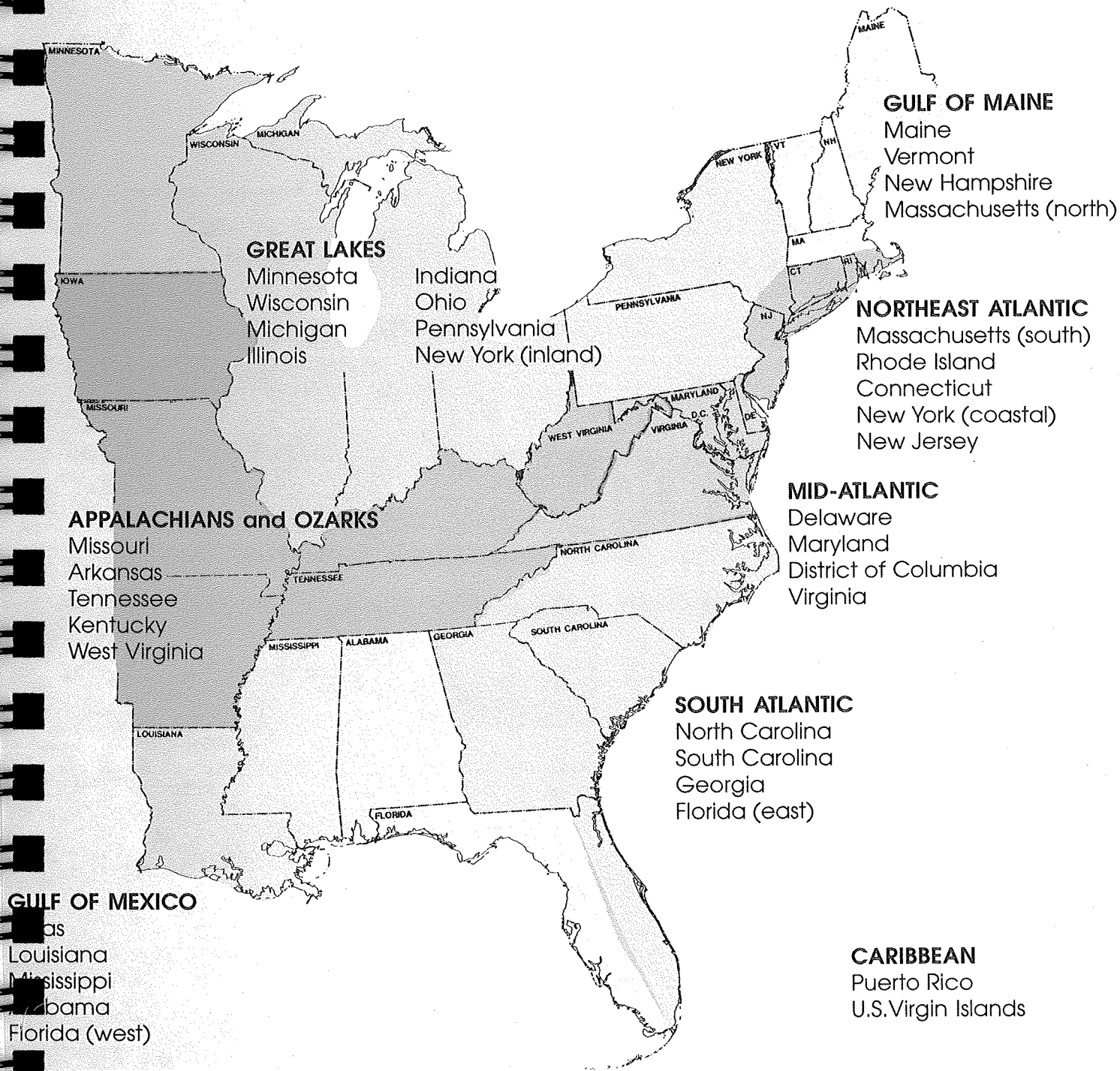
I salute you for your service and hope you will continue to stay involved.

Bill Clinton

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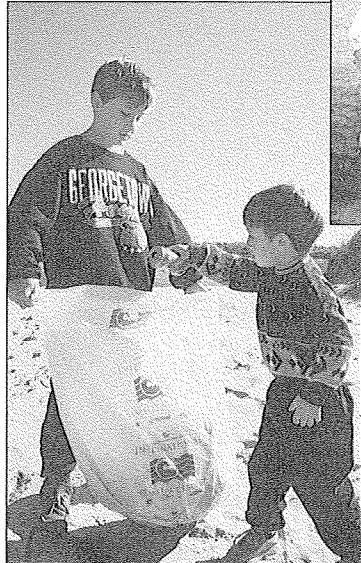


This report is dedicated to the 151,502 Americans whose spirit of volunteerism and commitment to clean water and healthy rivers, lakes, and oceans made the 1996 U.S. Coastal Cleanup possible.

Michigan



Maine



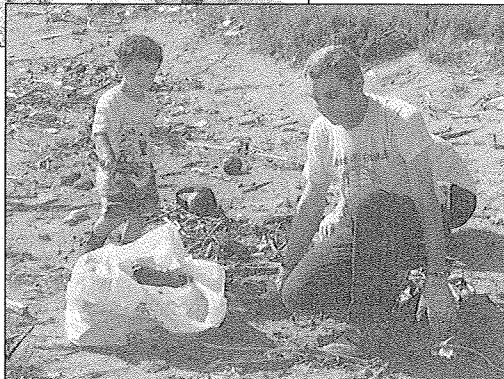
Ohio



New Jersey

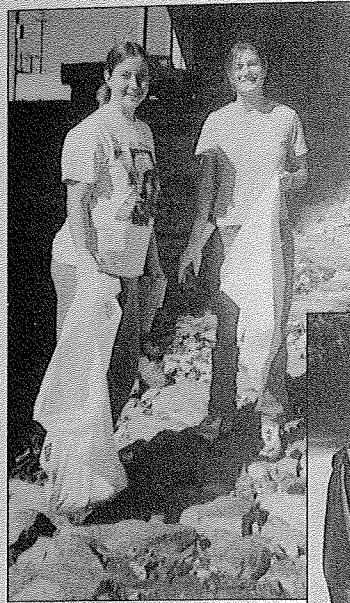


Florida



Delaware

Puerto Rico



Missouri



New Hampshire

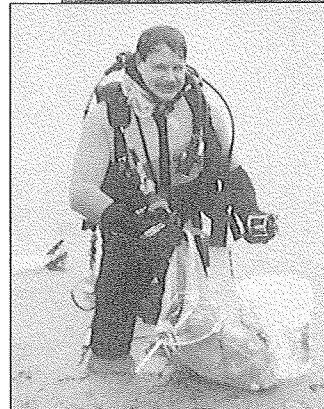


Rhode Island



South Carolina

Wisconsin



South Dakota



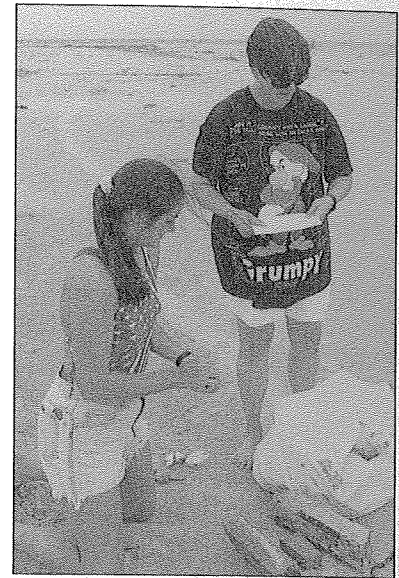
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Oklahoma



Mississippi



Guam

U.S. Virgin Islands



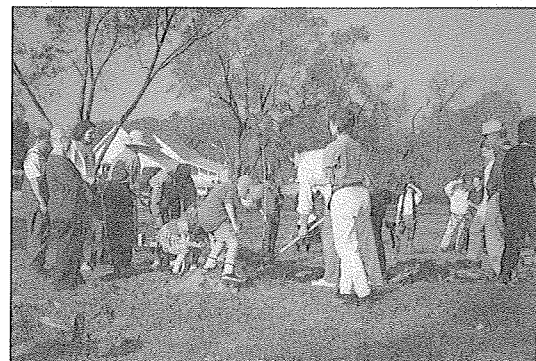
Montana



Pennsylvania



Texas



Cleanup volunteers in North Carolina also conducted tree plantings, to repair some of the damage from Hurricane Fran.

INTRODUCTION

For more than ten years, the **Center for Marine Conservation** has been the leading advocate to stop marine debris at its many sources. In 1986 the Center sponsored its first beach cleanup, when 2,800 volunteers collected 124 tons of trash along 122 miles of Texas shoreline. Since that time, national participation in the Cleanup has grown to include 55 states and territories. The 1996 Cleanup was CMC's 11th campaign. CMC also now coordinates the COASTWEEKS celebration, during which the Cleanup takes place every autumn. The International Coastal Cleanup is not about trash. It's about the compelling need for a clean ocean and clean waterways. At its heart, the Cleanup is about people, acting cooperatively and in partnership to create solutions.

As the Cleanup has grown, it has moved inland from the coasts to include streams, rivers, lakes, and other waterways, all of which wind their way eventually to the ocean itself. Moving inland is, in many ways, moving closer to the primary source of marine debris, much of which originates far from the coasts where it ends up. In recent years the Cleanup has also expanded into significant underwater efforts with strong support from the dive community. Even with all this effort, and the 25 million pounds of trash that have been removed over the years, the Cleanup is still just a snapshot, a brief glimpse of the total problem of marine debris.

Historically, the ocean has been a common dumping ground for human-made debris. Any manufactured materials thrown, dumped, or allowed into waterways and the ocean counts as marine debris. Prevailing winds and currents carry these materials all over the world. The effects of marine debris include economic and aesthetic impacts, human health and safety, animal entanglement and ingestion, and habitat destruction.

Established in 1973, the international protocol known as MARPOL 73/78 prohibits dumping at sea. The treaty has been in effect in the United States only since December 31, 1988, following ratification by Congress in 1987.¹ MARPOL 73/78 regulates numerous materials known to be dumped at sea. Solid wastes, such as garbage and plastics, are covered in Annex V of the Treaty. Although 83 countries had ratified Annex V as of July 1997, the problem of marine debris has not gone away, as the Cleanup reveals. Ratification, unfortunately, does not necessarily mean compliance.

The data in this and previous Cleanup reports documents the extent of the marine debris problem. The information contained here can be a highly effective tool for citizens and policy makers seeking to solve this pollution issue. It can help evaluate progress as well as highlight areas of special concern. Since the first Cleanup, significant strides have been made to reduce the problem of marine debris and improve the effective, responsible handling of solid waste. But as this report clearly shows, we still—every one of us—have much work to do before this problem is solved.

As one North Carolina team captain said, at the end of the cleanup, "It was ... as always, a reminder that this job will be never ending unless we can stop the trashing through public awareness and education."

¹The International Convention for the Prevention of Pollution from Ships is commonly referred to as MARPOL (MARine POLLution) 73/78.

1996 INTERNATIONAL COASTAL CLEANUP

U.S. RESULTS

OVERVIEW

For eleven years the Center for Marine Conservation has been working to clean this country's beaches, shorelines, and waterways. Its annual cleanup efforts have been part of a comprehensive campaign to define, publicize, and solve the problem of marine debris. The 1996 U.S. Cleanup comprised locally supported and organized cleanups at 3,163 sites in 50 states, the District of Columbia, and the territories of Guam, Mariana Islands, Puerto Rico, and the U.S. Virgin Islands.

Labor for this country-wide effort was provided by 151,502 volunteers, the second-highest number in the history of the Cleanup. Working sometimes under adverse weather conditions, these willing workers removed 2,919,730 pounds of trash from 5,930 miles of shoreline, both above and below the water (Table 1). At an average of 19.27 pounds per person, that's an awful lot of cigarette butts, the Cleanup's most numerous debris item. Of course, some items were slightly heavier, such as the entire house retrieved (piece by piece) by Louisiana volunteers! In all, 3,757,123 debris items were removed, including 55,414 from underwater sites (Table 2).

Nineteen ninety-six was a banner year for volunteers. Participation jumped 9.82% over the previous year. California and Florida continued to lead the parade with 41,743 and 28,970 volunteers, respectively. That's a 17% increase for the "Golden Gate" state and a whopping 22% increase for the "Gators." The Florida figures are even more impressive on the heels of its 35% increase the previous year. North Carolina mustered 12,680 volunteers, about the same as 1995, and 11,115 Texans turned out, 12% more than the year before.

But truly, it's the heart of the effort, not the size, that counts most. We're just as proud of those nine divers and two on-shore assistants who conducted Wyoming's cleanup. The same goes for the Vermont divers whose efforts were included in the New Hampshire report because that's where the sponsoring dive center was located. Even Kentucky, the only state not completing a cleanup this year, had one organized and scheduled. Hostile weather forced its cancellation, but we count on seeing the Blue Grass state next year for certain.

Each cleanup had its own flavor. The forward-thinking Mississippi team, for instance, gave each volunteer a refrigerator magnet with the cleanup dates for the next five years. One Florida zone offered prizes for the "most disgusting" and "most useful" items collected. Colorado volunteers wound up a good day's work with a "Crustacean Rodeo" and "Crayfish Boil." Hurricane Fran forced some North Carolina cleanups to be postponed, but it was not the winds or rain that posed the problem; they had to wait until snakes driven out by high water returned to their natural habitat. Our "Necessity is the Mother...." award goes to the Tybee Island, Georgia team faced with more volunteers than they had data cards. Ever resourceful, they cut the sample data card illustration off publicity posters and kept on cleaning.

Comparison of cleanup statistics from state to state must be made carefully. (For purposes of this report, we use the word "state" to include both states and territories.) Because each local effort is volunteer-based, and because of differences in geography and resources, no two cleanups are alike. Natural forces frequently influence the results of an event. Information in this report is organized largely by region, in order to bring perspective to the comprehensive problem of marine debris, as well as point the way to innovative regional solutions (see map pp. viii and ix).

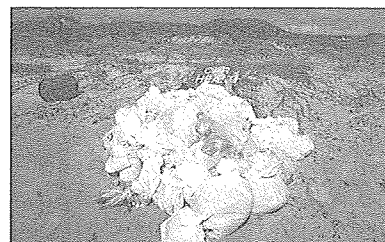
TABLE 1a. Total Number of People, Pounds, and Miles Involved in 1996 U.S. Coastal Cleanups (Land and Underwater)

State/Territory	People	Pounds	Miles
Alabama	1,962	30,412	95.8
Alaska	574	3,890	1.7
Arizona	92	3,171	2.0
Arkansas	308	160	514.0
California	41,743	664,924	518.9
Colorado	42	2,725	20.5
Connecticut	470	3,465	29.0
Delaware	1,924	42,745	52.7
District of Columbia	159	3,565	3.3
Florida	28,970	345,052	833.5
Georgia	39	3,008	2.5
Guam	827	14,560	6.7
Hawaii	3,785	161,661	423.4
Illinois	909	6,988	46.4
Indiana	573	6,650	19.1
Iowa	66	750	3.5
Kansas	35	650	1.5
Louisiana	5,557	202,700	207.8
Maine	3,167	30,906	249.1
Mariana Islands (CNMI)	62	1,400	1.5
Maryland	51	4,300	n/r
Massachusetts	5,086	53,733	248.0
Michigan	1,119	71,854	111.0
Minnesota	553	3,740	38.1
Mississippi	2,735	46,440	105.2
Missouri	59	3,050	1.6
Nevada	40	600	1.5
New Hampshire	804	15,701	20.5
New Jersey	922	744	23.5
New Mexico	38	4,100	4.0
New York	6,590	165,105	222.2
North Carolina	12,680	365,699	1,027.0
Ohio	445	36,651	14.2
Oklahoma	82	3,506	17.0
Oregon	5,000	44,400	362.0
Pennsylvania	55	225	7.5
Puerto Rico	231	3,352	13.8
Rhode Island	1,643	13,800	62.0
South Carolina	7,256	141,560	200.8
South Dakota	18	235	2.0
Tennessee	115	1,375	0.6
Texas	11,115	272,140	167.5
Utah	77	13,000	7.8
Virgin Islands	967	14,550	11.5
Virginia	1,399	64,022	94.8
Washington	1,102	45,020	66.3
Wisconsin	45	1,446	64.8
Wyoming	11	n/r	2.0
Totals	151,502	2,919,730	5,930.0

n/r = not reported



15,502 volunteers



2,919,730 pounds of debris



5,930 miles

TABLE 1b. People, Pounds, and Miles Involved in 1996 U.S. Coastal Cleanups, (Land Only)

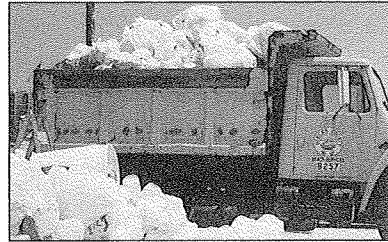
State/Territory	People	Pounds	Miles
Alabama	1,862	26,901	94.8
Alaska	560	590	1.5
Arizona	50	975	1.3
Arkansas	156	10	501.0
California	41,583	660,624	508.8
Colorado	10	330	3.5
Connecticut	427	3,303	27.5
Delaware	1,880	40,875	52.5
District of Columbia	159	3,565	3.3
Florida	24,816	344,011	828.5
Georgia	19	3,007	2.3
Guam	618	11,890	5.8
Hawaii	3,646	155,431	421.6
Illinois	814	6,853	37.2
Indiana	509	4,800	17.0
Iowa	18	150	1.0
Kansas	15	150	1.0
Louisiana	5,557	202,700	207.8
Maine	3,155	30,886	245.9
Mariana Islands (CNMI)	n/r	1,000	1.0
Maryland	22	700	n/r
Massachusetts	5,023	50,893	247.0
Michigan	1,058	38,379	109.4
Minnesota	547	3,720	38.1
Mississippi	2,703	46,160	105.0
Missouri	36	1,050	0.6
Nevada	12	100	0.5
New Hampshire	795	15,204	20.0
New Jersey	743	694	21.8
New Mexico	20	4,000	3.0
New York	6,327	160,140	221.2
North Carolina	12,646	361,019	1,026.5
Ohio	309	20,410	12.4
Oklahoma	41	2,336	12.3
Oregon	5,000	44,400	362.0
Pennsylvania	55	225	7.5
Puerto Rico	211	2,947	8.8
Rhode Island	1,600	13,750	58.0
South Carolina	7,205	140,550	198.5
South Dakota	2	60	1.0
Tennessee	45	705	0.3
Texas	11,019	266,935	165.1
Utah	35	1,300	5.0
Virgin Islands	818	9,100	9.3
Virginia	1,399	64,022	94.8
Washington	1,084	45,020	66.0
Wisconsin	16	994	40.1
Wyoming	2	n/r	1.0
Totals	144,627	2,792,864	5,799.0

n/r = not reported

pg. 4



144,627 volunteers



2,792,864 pounds of debris



5,799 miles

TABLE 1c. People, Pounds, and Miles Involved in 1996 U.S. Coastal Cleanups, (Underwater Only)

State/Territory	People	Pounds	Miles
Alabama	100	3,511	1.0
Alaska	14	3,300	0.2
Arizona	42	2,196	0.8
Arkansas	152	150	13.0
California	160	4,300	10.1
Colorado	32	2,395	17.0
Connecticut	43	162	1.6
Delaware	44	1,870	0.3
Florida	4,154	1,041	5.0
Georgia	20	1	0.3
Guam	209	2,670	1.0
Hawaii	139	6,230	1.9
Illinois	95	135	9.2
Indiana	64	1,850	2.1
Iowa	48	600	2.5
Kansas	20	500	0.5
Maine	12	20	3.3
Mariana Islands (CNMI)	62	400	0.5
Maryland	29	3,600	n/r
Massachusetts	63	2,840	1.0
Michigan	61	33,475	1.7
Minnesota	6	20	0.1
Mississippi	32	280	0.2
Missouri	23	2,000	1.0
Nevada	28	500	1.0
New Hampshire	9	497	0.5
New Jersey	179	50	1.8
New Mexico	18	100	1.0
New York	263	4,965	1.0
North Carolina	34	4,680	0.5
Ohio	136	16,241	1.8
Oklahoma	41	1,170	4.8
Puerto Rico	20	405	5.0
Rhode Island	43	50	4.0
South Carolina	51	1,010	2.3
South Dakota	16	175	1.0
Tennessee	70	670	0.2
Texas	96	5,205	2.5
Utah	42	11,700	2.8
Virgin Islands	149	5,450	2.3
Washington	18	n/r	0.3
Wisconsin	29	452	24.7
Wyoming	9	n/r	1.0
Totals	6,875	126,866	133.0

n/r = not reported



6,875 volunteers



126,866 pounds of debris



133 miles

TABLE 2. Total Numbers of Debris Items Collected During 1996 U.S. Coastal Cleanups

Debris Items	Total	Land	Underwater
PLASTIC:			
Food Bags/Wrappers	205,762	204,056	1,706
Salt Bags	3,841	3,830	11
Trash Bags	41,220	40,664	559
Other Bags	61,810	61,253	557
Plastic Beverage Bottles	121,703	119,329	2,570
Bleach Bottles	12,065	12,030	69
Milk/Water Gallon Jugs	24,616	24,359	295
Oil/Lube Bottles	14,855	14,842	135
Other Plastic Bottles	37,708	37,504	327
Buckets	7,998	7,835	165
Caps/Lids	179,103	176,876	2,327
Cigarette Butts	608,759	603,186	5,573
Cigarette Lighters	23,997	23,655	343
Cups/Utensils	75,336	73,467	1,869
Diapers	7,783	7,642	141
Fishing Line	25,925	25,195	730
Fishing Floats/Lures	11,486	11,013	475
Fishing Nets	7,597	7,467	130
Hard Hats	681	680	1
Light Sticks	8,944	8,863	82
Plastic Pieces	240,820	238,329	2,494
Pipe Thread Protectors	3,950	3,900	50
Rope	62,179	61,788	392
Long Sheeting	3,944	3,889	55
Short Sheeting	7,708	7,601	107
Six-Pack Holders	14,500	13,990	510
Strapping Bands	15,120	15,004	116
Straws	131,602	130,198	1,404
Syringes	3,657	3,619	38
Tampon Applicators	13,294	12,982	312
Toys	17,147	16,902	252
Vegetable Sacks	6,552	6,361	191
Write Protection Rings	6,011	5,958	53
Other Plastic	77,286	76,361	1,045
FOAMED PLASTIC:			
Buoys	10,486	10,346	140
Foamed Cups	96,394	95,062	1,370
Egg Cartons	3,852	3,834	18
Fast Food Containers	27,762	27,381	384
Meat Trays	9,282	9,077	206
Packaging Materials	48,738	47,727	1,011
Foamed Pieces	206,890	204,653	2,239
Foamed Plates	19,781	19,559	222
Other Foamed Plastic	28,801	28,405	396

Debris Items	Total	Land	Underwater
GLASS:			
Beverage Bottles	127,633	123,659	4,097
Food Jars	11,022	10,608	491
Other Glass Bottles/Jars	17,895	17,425	527
Fluorescent Light Tubes	2,017	2,006	11
Light Bulbs	4,928	4,991	12
Glass Pieces	140,667	138,747	1,982
Other Glass	11,850	11,576	276
RUBBER:			
Balloons	25,351	25,116	235
Condoms	6,671	6,640	31
Rubber Gloves	12,176	12,084	92
Tires	8,474	8,063	438
Other Rubber	27,092	26,674	421
METAL:			
Bottles Caps	84,876	84,031	945
Aerosol Cans	9,947	9,837	164
Beverage Cans	130,134	124,267	5,891
Food Cans	10,541	10,162	404
Other Cans	6,778	6,712	66
Metal Crab/Lobster Traps	3,020	2,966	54
55 Gallon Rusty Drums	2,314	2,204	110
55 Gallon New Drums	414	413	1
Metal Pieces	32,464	31,603	861
Pull Tabs	21,877	21,453	427
Wire	12,953	12,497	468
Other Metal	34,092	33,168	925
PAPER:			
Bags	29,779	29,380	399
Cardboard	26,490	26,287	203
Cartons	17,612	17,430	182
Paper Cups	37,539	37,135	404
Newspapers/Magazines	20,382	20,174	208
Paper Pieces	158,957	157,480	1,477
Paper Plates	13,400	13,257	143
Other Paper	36,483	36,299	184
WOOD:			
Crab/Lobster Traps	1,507	1,478	29
Crates	1,575	1,565	10
Lumber Pieces	62,892	61,988	904
Pallets	3,317	3,265	52
Other Wood	20,814	20,661	153
CLOTH:			
Clothing/Pieces	44,245	43,178	1,067

GRAND TOTALS	3,757,123	3,703,151	55,414
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1996 CLEANUP HIGHLIGHTS

There's only one thing to say about the mountains of trash retrieved by U.S. volunteers in the 1996 Cleanup: **it could fill a house**. Rather, there **was** a house—found by Louisiana volunteers in Shreveport's Cross Lake. And across the country volunteers found enough furnishings to outfit an entire neighborhood, including:

12 sofas, 11 sleeping bags, 10 refrigerators, 9 toilets, 8 washing machines, 7 vacuum cleaners, 6 geese a-laying (oops, make that 6 water heaters), 5 stoves, 4 TV antennas, 3 stereos, 2 microwaves, and a VCR with a remote control.

From the ridiculous to the sublime, this year's cleanup had something for everyone.

- **Haute couture à la marine debris:** Volunteers found a stunning array of lingerie, from Garfield and Ninja Turtle underwear to silk boxer shorts and one undergarment described only as "torn." This season's swimwear included assorted bikini tops, bottoms, and one complete suit. The "Shore Line" of clothing featured jeans, T-shirts, boots, and sandals, but only one belt and one tie.
- **Life in the fast lane** is guaranteed, with four entire cars reported. Assorted parts ranged from 3 spark plugs, 2 fuel pumps, and a shock absorber to 8 engines, an axle, and a steering column, not to mention floor mats, a sunvisor, 4 license plates, and your very own crash-test dummy. And with a map of Sweden turned in by Arizona volunteers, finding your way should be a breeze.
- **Fun in the Sun?** Volunteers found an assortment of beach balls and umbrellas, plastic pools, lawn chairs, lawn sprinklers, riding mowers, and barbecue grills.
- **Shop till you drop** with charge cards from Lord & Taylor, J. C. Penny's, MasterCard, and VISA, as well as currency from Fiji, Canada, and more than \$200 US. Not to mention the checkbook and piggy bank, 4 purses, and a dozen wallets. And to carry your bargains home? The 19 shopping carts should more than suffice.
- **Vintage Americana:** Volunteers reported finding a Rubic's cube, Troll doll, hula hoop, some old 45- and 78-rpm records, beer can pull tabs, and a classic DeSoto hubcap.
- **And here's food for thought:** Cleanup crews found unopened jars of mayonnaise, salad dressing, dill pickles, and sauerkraut; 2 eggs, a dozen lemons, onions, a package of bologna, a bag of 14 coconuts, a full gallon of milk, and an 11-gallon container of lard.

On a more somber note, two dead bodies were recovered in this year's cleanup, one in Michigan's Rouge River, the other in North Carolina. Respectful divers in Nevada returned two burial urns to a deeper part of Lake Mead, with proper ceremony. There was good news from Hancock County, Maine, whose team reported finding "one Cub Scout, live, unentangled." And South Carolina volunteers listed "one dog, returned it to its home" on their data cards.

P.S. We're glad "Kim loves Bill 9/17/96," but could you bottle-message folks give e-mail a try instead? Your country's shorelines and waterways will thank you.

People are the cause of marine debris. People are also the solution. Much of the Cleanup's enthusiasm comes from its youngest participants. Brooklyn, New York second graders used kitchen colanders and strawberry baskets to sift the sand for cigarette butts and other small debris items. Middle schoolers in Barrington, Rhode Island won the state's annual volunteer award. Disgusted by the cigarette butts they collected during the cleanup, they successfully petitioned the town council to have smoking at the beach limited to one designated area.

Children often see problems with the clearest vision. "I like the shells," a Texas elementary school student pointed out. "What I don't like, there's so much trash. Tell the people not to throw trash."

THE MOST PREVALENT TYPE OF DEBRIS ON U.S. BEACHES AND WATERWAYS

The International Coastal Cleanup does much more than just remove trash. By using detailed, standardized data cards developed by the Center for Marine Conservation, volunteers accumulate valuable information about the types and sources of debris collected. Analyzed and tracked year by year, this information serves as a powerful tool for educating the public, influencing public policy, and effecting positive behavioral change on the part of individuals, organizations, and communities.

The CMC data card lists 81 debris items in eight major categories: plastic, foamed plastic, glass, rubber, metal, paper, wood, and cloth (Appendix 1). These cards are used to record debris from both shoreline and underwater cleanups. The type of debris varies from region to region, state to state, and even site to site.

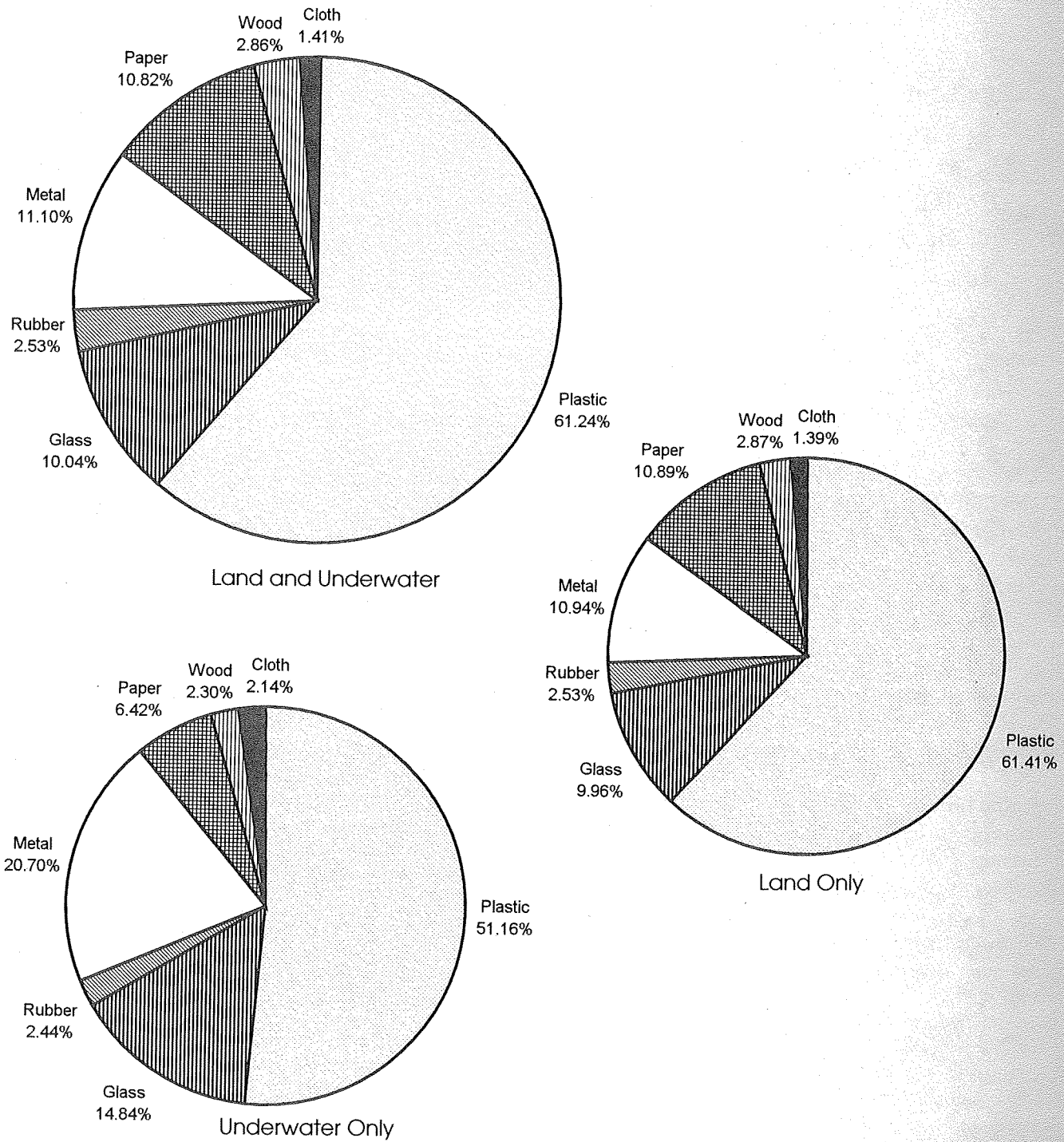
It is important to note that every single item found during land-based cleanups also turned up underwater. The numbers and proportions differed, of course, but every item was there, from hardhats and new 55-gallon drums to diapers, light bulbs, and cigarette butts.

Plastic (including foamed plastic) continues to be the most prevalent type of marine debris collected, as it has ever since the cleanup began. In 1996 plastic accounted for 61.24% (Figure 1) of all debris collected, making it five times more prevalent than the next most abundant item, metal (11.10%). This year's percentage of plastic represents a minimal increase from 1995's 61.05%, and is the highest percentage since 1990's all-time high of 63.98%. This evidence strongly demonstrates that plastic waste is still not being disposed of correctly, despite strict regulations in MARPOL Annex V prohibiting the dumping of plastics into our waterways and nationwide plastics recycling programs. Further, these figures are testimony to the longevity of plastic in the environment. Plastic trash collected this year could easily have been floating around for years or even decades.

Not all plastic floats, however. Underwater, plastic accounted for a smaller percentage (51.16%) of debris collected, but it was still the largest category. This percentage marks a 15% increase over last year (44.57%), the first time for which underwater data was tallied separately. Metal (20.70%) was again the second largest category underwater, down from 23.49% last year.



FIGURE 1. Percent Composition of Material Types of Debris Reported During 1996 U.S. Coastal Cleanups



NOTE: The 81 debris items are arranged by type. The "Plastic" and "Foamed Plastic" categories are combined. The chart includes all debris reported, minus cigarette butts, which are so numerous their inclusion would distort data interpretation.

Plastic was the number one debris type in every state that conducted land-only cleanups, as well as number one in the composite figures for all states that conducted both types of cleanup. Underwater, metal was the most prevalent type of debris in nine states. Glass was the most prevalent in the underwater cleanups in Illinois, North Carolina, and Puerto Rico. In Arkansas, while plastic was number one underwater, cloth was an unusual number two.

In 16 states, composite plastic percentages were higher than the national average (Figure 2), led by Michigan (76.82%), New Jersey (73.54%), and Oregon (70.09%). The lowest plastic percentages were reported in Oklahoma (36.23%) and Missouri (39.23%).

Underwater, 11 states exceeded the national average for percent of plastic. Results ranged from lows in Rhode Island (11.28%) and Missouri (16.46%) to highs in Louisiana (85.71%) and California (69.42%). Four states (California, Louisiana, Michigan, and Minnesota) actually had higher percentages of underwater plastics than the national average for composite data. Perhaps even more surprisingly, five states (California, Louisiana, Maryland, Minnesota, and Mississippi) had higher percentages of plastic underwater than they did overall.

Regionally, the prevalence of plastic ranged from 44.94% in the Great Plains and Prairies to 69.52% in the North Pacific region.

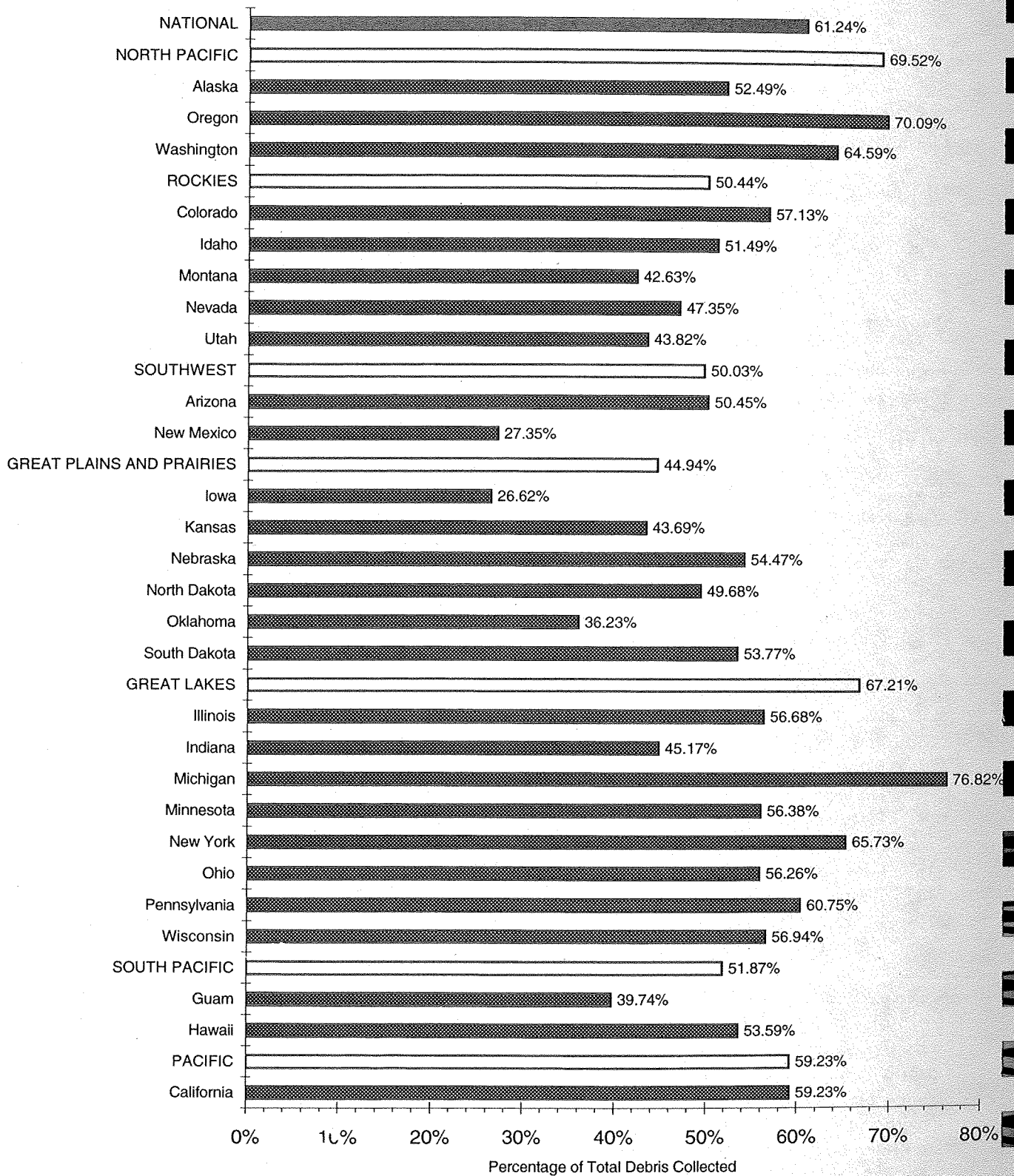
THE 1996 NATIONAL DIRTY DOZEN

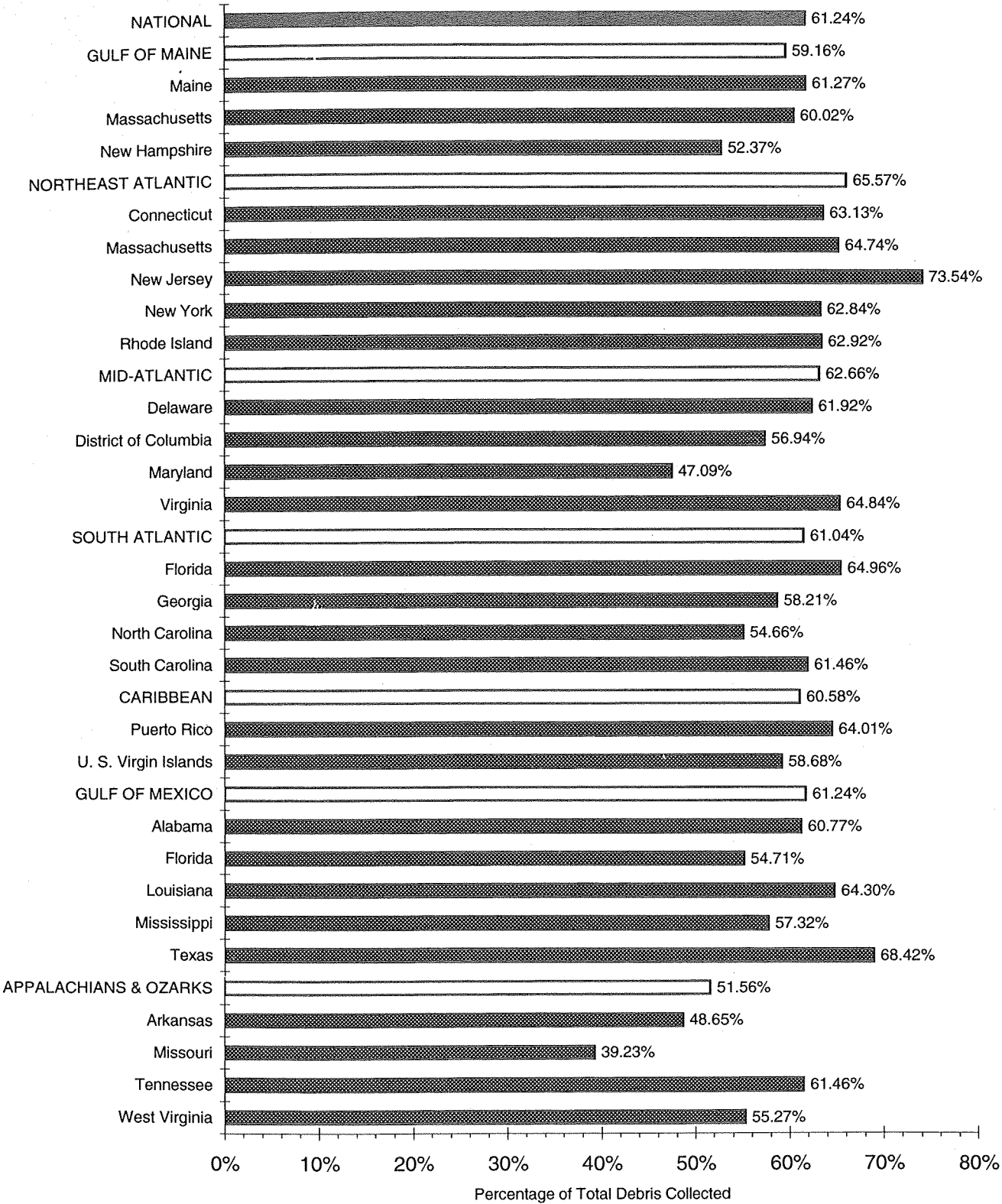
Taken as a whole, the twelve items most frequently found on U.S. shorelines, waterways, and underwater accounted for 62.51% of all debris collected, down slightly from 63.95% last year. In 1996 these twelve items, compiled from all cleanups, were:

Debris Items	Total Number Reported	Percent of Total Debris Collected
1. Cigarette Butts	608,759	16.20%
2. Plastic Pieces	240,820	6.41%
3. Foamed Plastic Pieces	206,890	5.51%
4. Plastic Food Bags/Wrappers	205,762	5.48%
5. Plastic Caps/Lids	179,103	4.77%
6. Paper Pieces	158,957	4.23%
7. Glass Pieces	140,667	3.74%
8. Plastic Straws	131,602	3.50%
9. Metal Beverage Cans	130,134	3.46%
10. Glass Beverage Bottles	127,633	3.40%
11. Plastic Beverage Bottles	121,703	3.24%
12. Foamed Plastic Cups	96,394	2.57%
Total Dirty Dozen	2,348,424	62.51%

Cigarette butts retained their dubious distinction of first place for the seventh year in a row, but dropped to 16.20% of total items collected, from last year's 19.72%. The odds of finding a cigarette butt on a beach were five to two over finding the next most frequent item, plastic pieces. (The term "pieces" is used to identify items that are no longer intact enough to be identified. For example, a "piece" of foamed plastic from a plate or cup could look the same.) This year's Dirty Dozen is composed of the same twelve items, in virtually the same order, as last year's. The Dirty Dozen listings for land-only and underwater cleanups are presented in Appendices 2 and 3.

FIGURE 2. Plastic Debris Reported from 1996 U.S. Coastal Cleanups





RESULTS

Underwater, metal beverage cans (10.63%) were number one, followed closely by cigarette butts (10.06%). The composition of this year's Underwater Dirty Dozen changed somewhat. Plastic straws, not even in last year's Top 20, jumped in at 12th place. Foamed plastic pieces were also new to this year's underwater list. The 1996 Underwater Dirty Dozen represents nearly 61% of all debris collected underwater, up from 54% last year.

State-by-state results varied. Cigarette butts were the number one item in 28 states, including two that conducted only underwater cleanups. Metal beverage cans were number one in seven states. In underwater cleanups, eleven other items came in at number one, including fishing line in Tennessee, cloth in Arkansas, and plastic food bags and wrappers in Washington. Plastic cups and utensils came in first in both Puerto Rico and the U.S. Virgin Islands, perhaps reflecting the region's large tourist industry.

The following items complete the list of the top 20 debris items most frequently reported in the 1996 Cleanup.

Debris Items	Total Number Reported	Percent of Total Debris Collected
13. Metal Bottles Caps	84,876	2.26%
14. Plastic Cups/Utensils	75,336	2.01%
15. Lumber Pieces	62,892	1.67%
16. Plastic Rope	62,179	1.65%
17. Other Plastic Bags	61,810	1.65%
18. Foamed Plastic Packaging	48,738	1.30%
19. Clothing/Pieces	44,245	1.18%
20. Plastic Trash Bags	41,220	1.10%
Totals	2,829,720	75.32%

CIGARETTE BUTTS

Cigarette butts were not even a line item in the early years of the Cleanup. In 1990 they were officially added to the data card in response to the large number of "write-in votes" by volunteers. These ubiquitous pieces of plastic have been the number one item ever since they were added to the list.

Composed of cellulose acetate, a synthetic polymer and a form of plastic, cigarette butts can persist in the environment as long as other forms of plastic. Many, no doubt, are left in the sand by beachgoers who consider the beach to be the world's largest ashtray. Others, apparently, are tossed casually overboard or out a car window and washed into waterways from parking lots and streets via stormwater overflow systems. More than just an aesthetic nuisance, butts can be ingested by birds, whales, and other marine creatures who mistake them for food.



Encouragement may be found in the significant decline in cigarette butts collected this year, both numerically (608,759 in 1996 compared to 800,358 in 1995) and as a percentage of total debris (16.20% in 1996; 19.72% in 1995). These figures give hope that public awareness campaigns, including programs supported by cigarette manufacturers, may be having a positive influence in reducing the number of cigarette butts discarded into the environment.

South Carolina reported the highest percentage of cigarette butts (33.99%), followed by Michigan (30.44%) and North Dakota (23.65%), all significantly lower than last year's high of 66.27% in Nevada. Four states counted no butts among their debris items, including two (Arkansas and South Dakota) that conducted only underwater cleanups. The other two were Oklahoma and West Virginia.

Because of their large numbers, cigarette butts present interpretation problems when analyzing the debris database as a whole. Rather than have the results skewed, we have intentionally removed cigarette butts when calculating the percent composition of debris types (Figure 1). Totals for cigarette butts are included in all other calculations.

BOTTLES AND ASSOCIATED GOODS

The Cleanup analyzes six items collectively as "bottles and associated goods" which represent packaging of consumable beverages. These six items are glass and plastic beverage bottles, metal beverage cans, metal bottle caps, metal pull tabs, and plastic six-pack holders. Nationally, bottles and associated goods accounted for 13.33% of total debris, up slightly from last year's 12.66% (Figure 3).



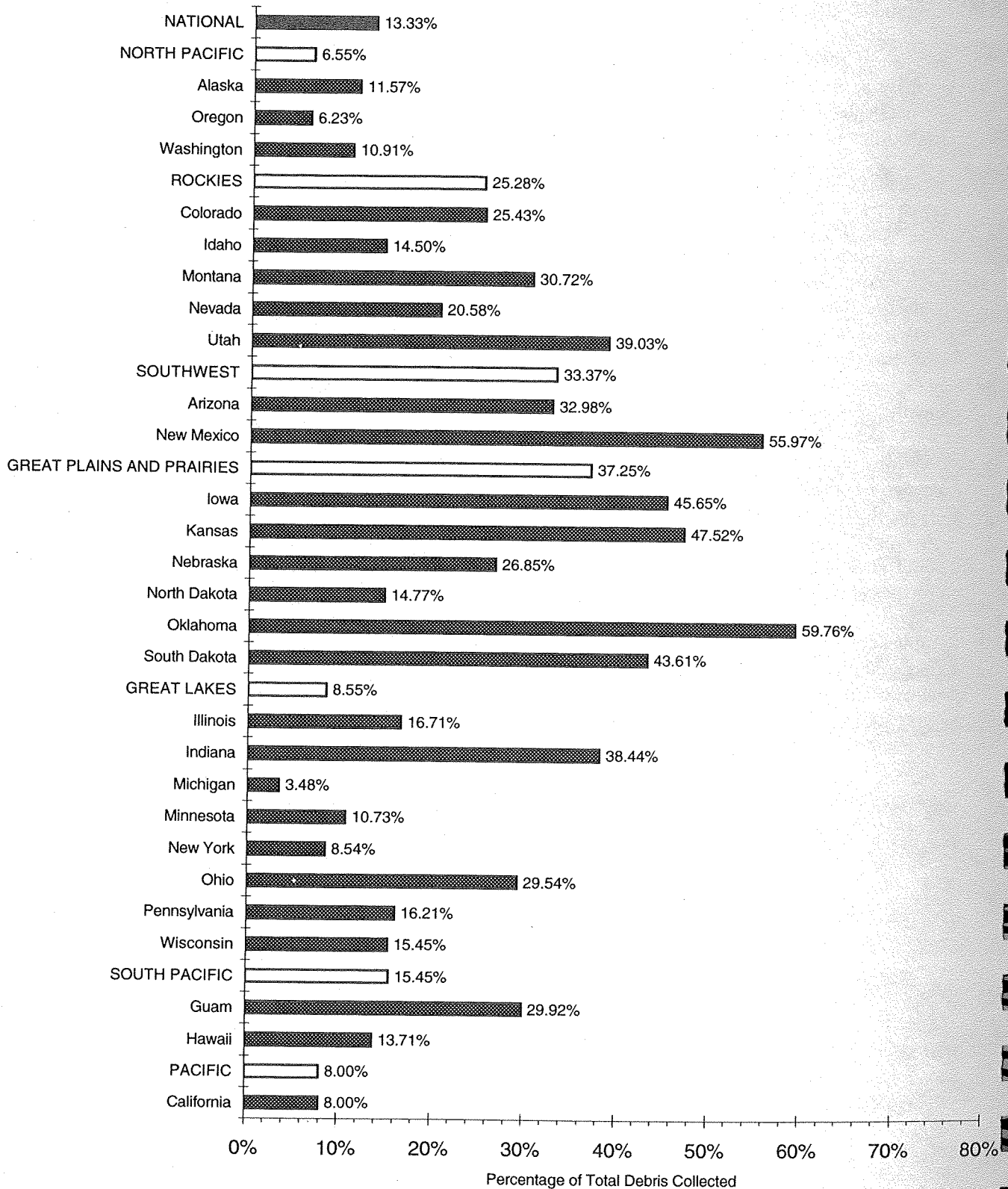
Nine of the fourteen designated regions exceeded the national average for this category, led by the Great Plains and Prairies (37.25%), Southwest (33.37%), and Rockies (24.86%). The lowest percentage was reported in the North Pacific (6.55%). Three of the five states with the highest percentages conducted only underwater cleanups—New Mexico (55.97%), Iowa (45.65%), and South Dakota (43.61%). The other two were Oklahoma (59.76%) and Kansas (47.52%). The lowest percentages were reported in Michigan (3.48%), Oregon (6.23%), and the District of Columbia (7.68%).

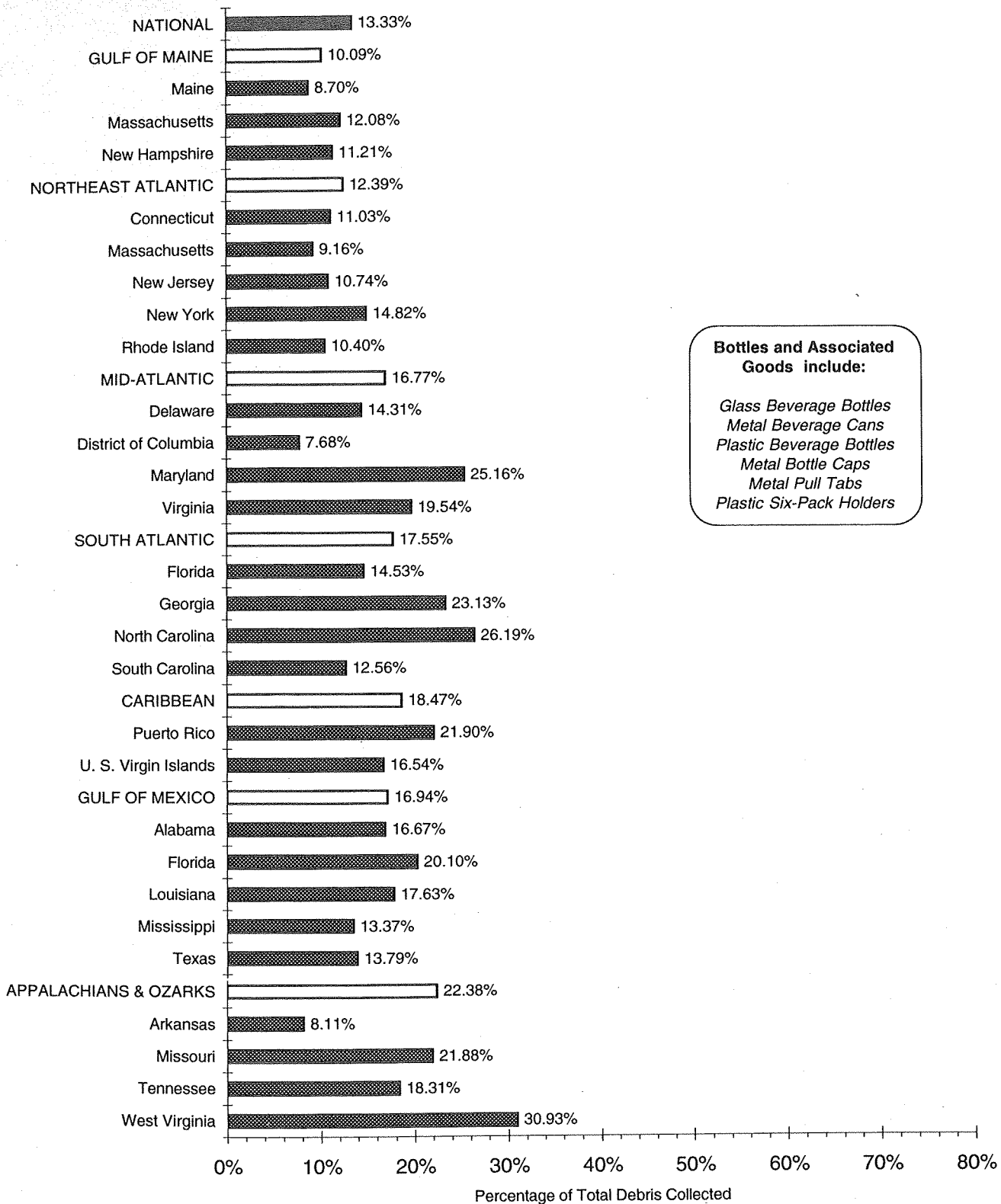
Bottles and associated goods are among the most easily recycled materials in most communities, yet year after year they make up a sizable portion of Cleanup debris. The 1996 Cleanup data do not show a significant decline in the amount of bottles and associated goods in states where programs such as recycling or beverage container deposit legislation are in place. Clearly, additional efforts are needed to educate and encourage the public to properly dispose of these items.

"This beautiful beach is gone, (due) to beer bottles and trash."

cleanup volunteer, South Carolina

FIGURE 3. Bottles and Associated Goods Reported from 1996 U.S. Coastal Cleanups





THE IMPACTS OF MARINE DEBRIS ON WILDLIFE

Carelessly or intentionally discarded into the marine environment, debris can be a serious threat to birds and marine/aquatic animals. Debris such as plastic bags, nets, and monofilament line have been known to have caused death and injury to at least 267 marine species, including mammals, seabirds, sea turtles, fish, and shellfish.



Debris that entangles a living creature can hamper its mobility, prevent it from eating, or suffocate it. Some types of debris can inflict cuts and wounds. Ingested, debris can lead to strangulation or digestive problems. Some entanglement incidents happen above the waterline; others, below.

Many marine and aquatic animals cannot distinguish inedible human-made debris from natural food sources. Transparent plastics, virtually invisible underwater, lie in wait for unsuspecting swimming and diving creatures. These animals cannot protect themselves from the problems we have forced upon them. It is our responsibility, and ours alone, to keep their environment clean and free from our dangerous discards.

In the 1995 Cleanup, the incidence of wildlife entanglements was alarming: 111 incidents (double that of the year before) representing one entanglement for every 36,556 debris items collected. The 1996 results are even worse. Volunteers in 20 states reported 132 incidents involving 187 creatures (Tables 3 and 4). Keep in mind that the Cleanup happens only one day a year in one three-hour period, and represents just a small fraction of all the debris that's out there. Even conservative extrapolation of these results indicates an entanglement problem of mammoth proportion.

Most of this year's entanglements proved fatal. Only 11 of the entangled creatures were found alive and able to be released, including one injured pelican that was taken in for rehabilitation. The other 176 died, caught by fishing line, ropes and string, snared in lost or abandoned fishing nets and traps, and strangled by plastic strapping bands and rings.

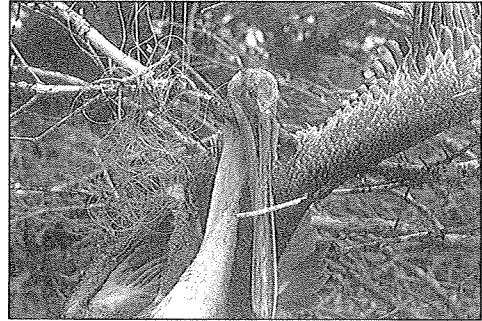
Entangled bird species this year included snowy egret, blue heron, pelican, herring gull, duck, loon, and swan, as well as several unidentified species. Underwater species included spade fish, crayfish, shark, catfish, blowfish, bowfin, large mouth bass, crappie, moray eel, squid, jellyfish, starfish, lobster, and shrimp. Spider-, rock-, horseshoe and blue crabs were all represented, as were red-eared turtles and logger-head sea turtles. Mammals included a mouse and a harbor seal.

In at least 74% of these 132 incidents, entanglement was caused by various forms of plastic. Fishing line, sometimes with lures and hooks attached, was involved in the most incidents (56 in number, 42% of total incidents), followed by plastic bags (18) and fishing nets and gear (17). Seven incidents involved six-pack rings. Other materials that proved hazardous to wildlife included ribbons and string, rope, wire, metal cans, abandoned crab and lobster traps, and glass bottles. Mattresses, cardboard, and tires were also involved.

According to an extensive study released in 1996 by the U.S. Marine Mammal Commission, the debris items found to most threaten marine life are net fragments and monofilament fishing line from commercial and recreational fishing boats, rope, and strapping bands. Plastic pellets and small pieces of processed plastic are the debris items most frequently found in the stomachs of birds. Sea turtles, toothed whales, and manatees have been found to have ingested plastic bags and small plastic pieces (Table 5).

Monofilament Fishing Line: Marine Debris and Animal Entanglements

The introduction of plastics marked a significant technological advance for the fishing industry. Plastic nets and lines are lighter and easier to handle. They're also stronger, more durable and more economical than traditional materials such as hemp and cotton.



But when plastic fishing gear enters the waste stream, it advances the problem of marine debris as well. Fishing gear can be deliberately discarded. It can be abandoned into the marine environment through vandalism. It can also be lost to bottom snags, bad weather, ship collisions, gear failure, and unintentional human error.

Lost monofilament line can be lethal to marine mammals, sea turtles, birds, fish, and other animals. In most cases, such animals are unable to free themselves once entangled. Eventually, they become exhausted and drown or die from starvation. Thin yet strong, monofilament line can also cause abrasions that become infected. Entanglements often prevent ensnared creatures from moving about freely to catch food and avoid predators. Fishing line can also be caught on branches, power lines, and submerged structures. Stationary creatures such as coral, sponges, and sea fans can be damaged or dislodged as a result of entanglements.

In the 1996 Cleanup, monofilament fishing line (with and without hooks, lures, and weights) was the largest single cause (46%) of all wildlife entanglements reported, involving a total of 86 animals.

The problem is critical and needs to be addressed immediately. The responsibility lies with manufacturers, distributors, and users of monofilament line, who must all take action to decrease the number of animal entanglements in fishing line. A model recycling program created by Berkley, a leading U.S. fishing line manufacturer, is one such action. This program provides drop-off collection bins for used line, which can then be recycled into new line. Comparable programs are needed everywhere. The development of degradable line is another potential part of the solution. And, above all, there is the need for increased consumer education and response.

"This is an incomplete list (but) by far
the biggest item was fishing line..."

cleanup volunteer, Delaware

Table 3. Wildlife/Debris Incidents, 1996 U.S. Coastal Cleanups

ALABAMA

fish	plastic bag
pelican	fishing line
shrimp	plastic bag
spade fish	plastic bag

ARIZONA

fish (2)	fishing line
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CALIFORNIA

bird	fishing net & sinker
bird	fishing line
birds (2)	fishing net
birds (2)	six-pack ring
crabs (2)	plastic bands
crabs (6)	plastic bag
crayfish	glass bottle
fish	six-pack rings
seagull	fishing line
seagull	fishing line & weight
seagull	nylon rope
shark	fishing line, released
turtle	trash bag

COLORADO

crayfish	fishing line
crayfish	metal can
fish (3)	fishing line

CONNECTICUT

seagull	fishing line, released
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FLORIDA

bird	miscellaneous debris plastic, glass, foam, metal)
bird	wire
bird	twine
bird (2)	fishing line
catfish	fishing line & hook
catfish (2)	fishing line
crab	fishing gear
crab	fishing line
crab	plastic
crab	plastic bag
crab	string
blue crab (2)	fishing line
horseshoe crabs (3)	plastic bag
snowy egret	fishing line

FLORIDA, cont.

fish	fishing line & wood
fish	plastic bag
fish	metal can
fish	wire
fish	fishing net
fish (2)	fishing line & hook
fish (4)	fishing line
blue heron	fishing line
jellyfish	fishing line
lobster	fishing line
loon	fishing line
mouse	fishing line
pelican	fishing line, freed and taken to a rehab center
pelican	plastic bag
pelican	fishing line
pelican	plastic debris
seagulls (2)	fishing line, released
starfish	plastic

HAWAII

crab	fishing line
fish	fishing line
fish	net
blowfish	fishing line & hook

MASSACHUSETTS

crab	fishing line
crab	metal can, released
duck	gill net
fish	miscellaneous debris (cardboard, plastic)
herring gull	fishing line
lobster	fishing line
seagull	net
seagull	plastic bag
seagulls (2)	fishing line
harbor seal	rope

MICHIGAN

catfish	fishing net, released
crayfish (2)	fishing line
fish	fishing net
herring gull	fishing net

NEW HAMPSHIRE

fish	plastic bag
lobster	broken, wooden trap, released
seagull	fishing line

NEW YORK

bird	wire
bird	string
crab	string
crabs (2)	fishing line
horseshoe crab	string
horseshoe crabs (3)	nylon rope
rock crabs (6)	fishing line
spider crabs (2)	fishing line
fish	fishing net
fish	fishing line
fish	plastic bag
fish	six-pack ring
fish (3)	fishing line & hook
seagull	fishing net
seagulls (3)	fishing line
seagull	kite string
squid	plastic netting
swan	fishing line
turtle	plastic bag

NORTH CAROLINA

bowfin	fishing net
catfish	tire, released
crayfish	mattress
fish	fishing line
fish	fishing line & hook, released
seagull	fishing line
turtle	six-pack ring
loggerhead sea turtle	fishing line, released

OKLAHOMA

large mouth bass (2)	fishing line
crappie	fishing line
red-eared turtle	fishing line

OREGON

birds (2)	nets
birds (2)	kite strings

PUERTO RICO

moray eel	fishing line
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RHODE ISLAND

bird	fishing line
seagulls (3)	fishing line

SOUTH CAROLINA

bird	fishing line
fish	plastic bag
seagull	six-pack ring
seagulls (2)	fishing line

SOUTH DAKOTA

bass	plastic bag
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TEXAS

bird	net
birds (2)	string
catfish	six-pack ring
crabs (2)	fishing line
crabs (2)	plastic tarp
crabs (4)	vegetable sack
jellyfish	plastic sheet
fish	fishing line
fish	plastic bag
fish	six-pack ring
fish (2)	wire
fish (7)	nets
shark	rope
shark	ribbon & balloons
sea turtle	rope

U.S. VIRGIN ISLANDS

crab	metal trap
spotted moray eel	fishing line & hook

Table 4. Debris Involved in Animal Entanglements, 1996 U.S. Coastal Cleanup

DEBRIS FORMS	ANIMALS					TOTAL
	<i>Invertebrates</i>	<i>Fish</i>	<i>Reptiles</i>	<i>Birds</i>	<i>Mammals</i>	
crab/lobster traps	2					2
fishing line & hooks, lures, or weights	1	9		1		11
fishing nets/gear	1	13		10		24
glass bottles	1					1
metal cans	2	1				3
monofilament fishing line	25	18	2	29	1	75
other: miscellaneous debris forms (plastic, glass, foam, metal, cardboard, mattress, tire)	7	1		3		11
plastic bags	11	8	2	2		23
plastic bands	2					2
plastic netting	1					1
plastic sheeting/tarp	3					3
ribbons/string	3	1		7		11
rope	3	1	1	1	1	7
six-pack rings		4	1	3		8
wire		3		2		5
TOTAL	62	59	6	58	2	187

132 incidents involving 187 animals

“...fishing area on Cove Island has too many
cut wires and lines...(we need) signs
to tell people of the hazards...”

cleanup volunteer, Connecticut

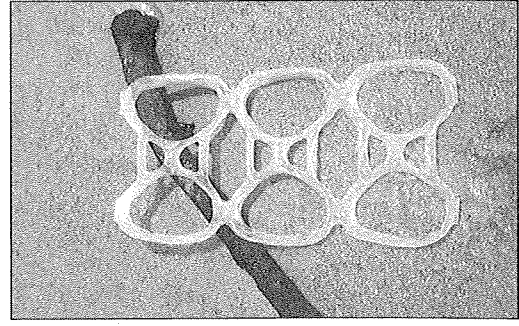
TABLE 5. Number and Percentage of Marine Species Worldwide with Documented Marine Debris Entanglement and Ingestion Records, by Species Group (1996)

Species	Total No. of Species Worldwide	Species with Entanglement Records No. (%)	Species with Ingestion Records No.(%)	Species with One or Both Types of Records No. (%)
Sea Turtles	7	6 (86%)	6 (86%)	6 (86%)
Seabirds	312	51 (16%)	111 (36%)	138 (44%)
Penguins	16	6 (38%)	1 (6%)	6 (38%)
Grebes	19	2 (10%)	0 (0%)	2 (10%)
Albatrosses, Petrels, Shearwaters	99	10 (10%)	62 (63%)	63 (64%)
Pelicans, Boobies, Gannets, Cormorants, Frigatebirds, Tropicbirds	51	11 (22%)	8 (16%)	17 (33%)
Shorebirds, Skuas, Gulls, Terns, Auks	122	22 (18%)	40 (33%)	50 (41%)
Other Birds	—	5	0	5
Marine Mammals	115	32 (28%)	26 (23%)	49 (43%)
Baleen Whales	10	6 (60%)	2 (20%)	6 (60%)
Toothed Whales	65	5 (8%)	21 (32%)	22 (3%)
Fur Seals, Sea Lions	14	11 (79%)	1 (7%)	11 (79%)
True Seals	19	8 (42%)	1 (5%)	8 (42%)
Manatees, Dugongs	4	1 (25%)	1 (25%)	1 (25%)
Sea Otter	1	1 (100%)	0 (0%)	1 (100%)
Fish	—	34	33	60
Crustaceans	—	8	0	8
Squid	—	0	1	1
SPECIES TOTAL	—	136	177	267

from Marine Mammal Commission 1996 Annual Report, January 31, 1997. D.W. Laist.

Six-Pack Holders

Six-pack holders, or recyclable ring carriers as they are sometimes called, have been shown to be harmful to many species of marine wildlife when littered. Fish, birds, and marine mammals can become entangled in their loops, sometimes suffocating as a result or suffering other injuries. Many land-dwelling species are also at risk from encounters with this common packaging form. Proper disposal of these holders is essential to mitigate its potential for harm.



Volunteers collected 14,500 six-pack holders in the 1996 Cleanup, representing 0.39% of all debris. Last year, the 19,569 holders collected made up 0.48% of the total. Colorado reported the highest percentage of holders (5.1%), followed by Nevada (3.7%). Five other states had percentages greater than 1.0%. No six-pack holders were reported in Arkansas, New Mexico, or South Dakota, which conducted only underwater cleanups, or in North Dakota or West Virginia, which conducted land-based cleanups only.

In 1988 Congress passed a law requiring all six-pack rings sold in the United States to be degradable. Also in 1988, but prior to the federal mandate, ITW Hi-Cone, the world's inventor of six-pack rings, developed a photodegradable plastic ring carrier. A six-pack holder will photodegrade in three to four weeks in the summer, three to four months in the winter. While this is an improvement, it is not by itself a complete solution. The real need is to educate and persuade consumers to dispose of the rings properly and keep them out of the marine environment in the first place.

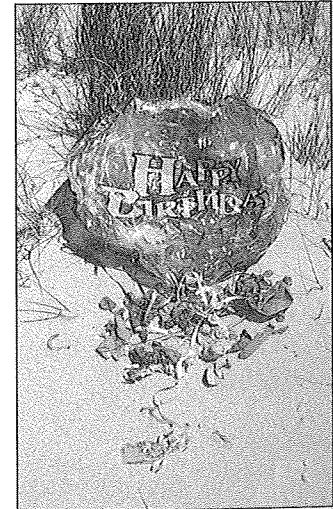
As part of its "Ring Leader" program, ITW Hi-Cone invited all 1996 cleanup coordinators to send their collected six-pack holders to ITW's headquarters in Itasca, Illinois. "Ring Leader" is a closed-loop recycling campaign to recover six-pack holders, both to remove them from the waste stream and to reduce the need for new raw materials for production. This six-year-old educational campaign has been adopted by more than 10,000 schools as well as soft drink bottlers, third party vendors, businesses, and curbside recycling programs, and has resulted in more than 750 tons of rings being recycled.

In addition to recycling or disposing of ring holders correctly, consumers can also assist by pulling the tear tabs or cutting the loops apart before discarding them, thus reducing their danger to wildlife if littered. Responsible behavior by individuals, combined with continued compliance and cooperation from manufacturers, can, we hope, eventually lead to a permanent decline in the number of six-pack rings adrift in the marine environment.

Balloons

Though balloons represent only a small fraction (0.67%) of total debris, they deserve special attention because of the hazard they pose to wildlife. Balloons collected in this year's Cleanup decreased slightly from the previous year, both by count (25,351 in 1996 compared to 28,774 in 1995) and by percentage (0.71% in 1995).

In five states, balloons made up more than 1.0% of total debris, including Illinois (2.3%), Virginia (2.0%), and Michigan (1.4%). Last year's high was 2.44% in Minnesota. Eleven states reported finding no balloons.



Across the country, as well as around the world, numerous incidents of balloon ingestion by wildlife have been documented. Mistaking the deflated balloons for food, unwary animals are sometimes strangled or starved by their indigestible dinners. One such incident was reported in the 1996 Cleanup: a dead shark found entangled with balloons and ribbon.

Legislation prohibits or restricts the release of helium-filled, latex, and/or mylar balloons into the atmosphere in six states—California, Connecticut, Florida, New York, Tennessee, and Virginia. But air currents, like those in the water below, know no boundaries. Swept along by winds and weather systems until they lose their buoyancy, balloons can return to Earth hundreds of miles from where they were released. Solutions to the balloon problem will not come state by state. Cooperative efforts across regions and perhaps the continent are required.

The 235 balloons found underwater accounted for 0.42% of all underwater debris. Thirteen of the 43 states conducting underwater cleanups reported finding one or more balloons. California's 118 balloons made up 1.1% of its total underwater debris. Maryland and Nevada had lower counts but higher percentages underwater, 2.0% and 1.3% respectively.

In the 1996 Cleanup, balloons were found bearing the names of the U.S. Navy, a television station, a church, a corporation, and five other organizations or businesses (Table 6). CMC will attempt to notify these organizations and businesses that their names were "dropped" and collected by cleanup volunteers. CMC will use the opportunity to explain the potential consequences of balloons as debris.

TABLE 6. Identifiable Balloons Reported During 1996 U.S. Coastal Cleanups

State	Zone	Source Identified
California	Orange	Intercuenta Express (Mexico)
California	San Diego	Chrysler Corporation
California	San Luis Obispo	Berkley
Delaware	Kent County	U. S. Naval Station - Annapolis
Florida	Volusia	Health Core Line
Michigan	Grand Haven	D.A.R.E. drug program
		Living Hope Lutheran Church
New Jersey	Ocean County	Tequilaville
		Channel 17 (Philadelphia)

"The bag full of balloons with ribbons attached were all tangled in seaweed and close to the water line..."

cleanup volunteer, New Jersey

SOURCES OF MARINE DEBRIS

From sultry swamps and inland riverways to barrier islands and rocky seacoasts, virtually every aquatic habitat is affected—adversely—by debris. The sources of debris are traditionally classified into two broad categories: ocean-based and land-based. Because most materials have a broad range of uses, positively identifying the source of any individual debris item is difficult. The Center for Marine Conservation has developed a set of 28 indicator items to help trace the origin of marine debris (Table 7 and Figure 4). The items correspond to various ocean-based and land-based activities.

Sources of ocean-based debris have been identified as recreational fishing and boating wastes, commercial fishing wastes, operational wastes, and galley wastes. From small pleasure craft to super-sized container ships, freshwater and ocean-going vessels alike are identified as sources of ocean-based marine debris, as are offshore drilling platforms for oil and gas.

Land-based debris is carried into waterways and into the ocean through storm drains, sewers, creeks, streams, and rivers. Sewage-associated wastes and medical wastes have been identified as sources of land-based debris. Beach-goers are another significant source of land-based debris, leaving behind in the sand discarded evidence of their visit.

Among the six types of indicator items, commercial fishing wastes have been most numerous every year since the Cleanup began, followed by galley-type wastes. (The two categories tied in 1993.) Underwater, it's a slightly different story, where recreational fishing and boating wastes are a strong number one. Sewage-associated wastes outnumber operational wastes underwater, while on land operational wastes are typically twice as prevalent as sewage wastes.

Of course, boats, sewers, and storm drains are not the real problem. People are. Some person tossed that trash overboard, dropped it on the beach or on the sidewalk, or flushed it down the toilet.

A piece of debris can take many routes before winding up on a shoreline, in a river, a lake, or the ocean. But no matter where waste begins, people have the power to keep it from ending up in the marine environment. Proper waste management and disposal are the key to solving the marine debris problem. Citizen awareness is also essential. The more we appreciate our bountiful, beautiful aquatic environments, the less debris we will release into them.

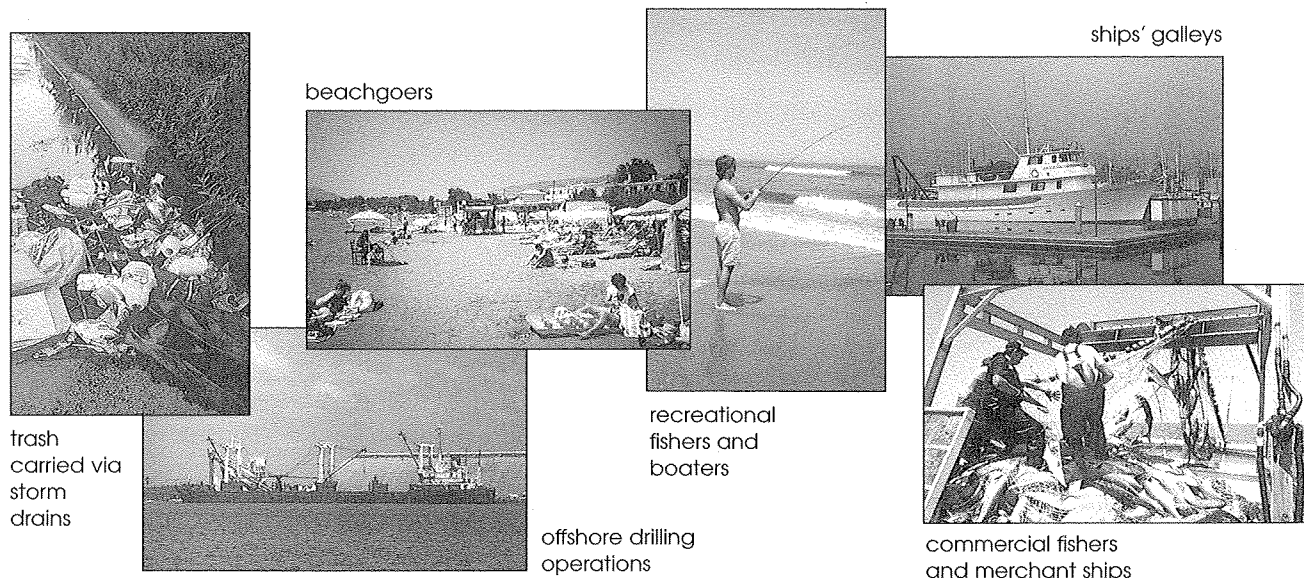
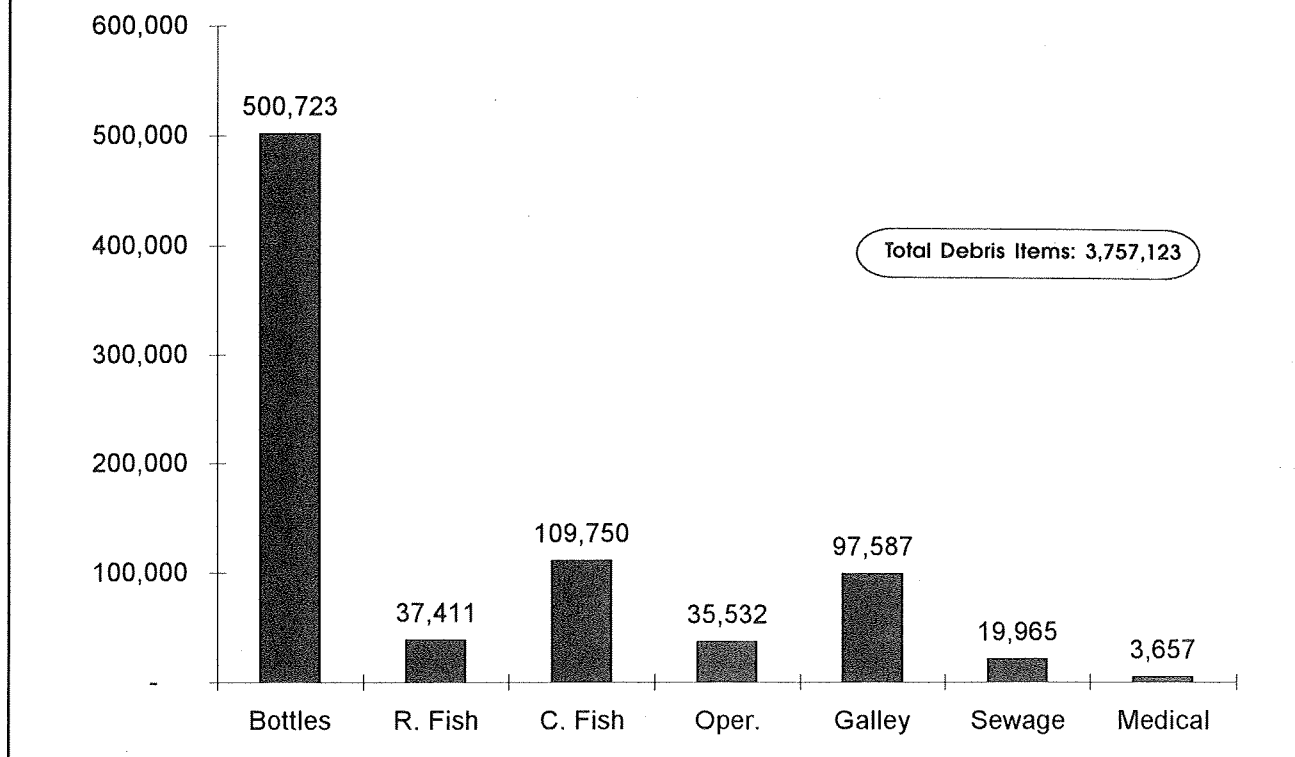


Table 7. Categories and Quantities of Indicator Items Reported During 1996 U.S. Coastal Cleanups

Category	Indicator Items	Total Number Reported	(% of Total Debris Collected)
<i>Recreational Fishing and Boating Wastes</i>	Plastic Fishing Line	25,925	
	Plastic Fishing Floats/Lures	11,486	
	Subtotal	37,411	(1.00%)
<i>Commercial Fishing Wastes</i>	Plastic Salt Bags	3,841	
	Plastic Fishing Nets	7,597	
	Plastic Light Sticks	8,944	
	Plastic Rope	62,179	
	Foamed Plastic Buoys	10,486	
	Rubber Gloves	12,176	
	Metal Crab/Lobster Traps	3,020	
	Wood Crab/Lobster Traps	1,507	
Subtotal	109,750	(2.92%)	
<i>Operational Wastes</i>	Plastic Hard Hats	681	
	Plastic Pipe Thread Protectors	3,950	
	Plastic Sheeting longer than 2 feet	3,944	
	Plastic Strapping Bands	15,120	
	Plastic Write Protection Rings	6,011	
	Glass Fluorescent Light Tubes	2,017	
	Glass Light Bulbs	4,928	
	Wooden Crates	1,575	
	Wooden Pallets	3,317	
Subtotal	41,543	(1.11%)	
<i>Galley Wastes</i>	Plastic Trash Bags	41,220	
	Plastic Bleach Bottles	12,065	
	Plastic Milk/Water Gallon Jugs	24,616	
	Plastic Vegetable Sacks	6,552	
	Foamed Plastic Egg Cartons	3,852	
	Foamed Plastic Meat Trays	9,282	
	Subtotal	97,587	(2.60%)
<i>Sewage-Associated Wastes</i>	Plastic Tampon Applicators	13,294	
	Rubber Condoms	6,671	
	Subtotal	19,965	(0.53%)
<i>Medical Waste</i>	Plastic Syringes	3,657	(0.10%)
Total Number of Indicator Items		309,913	(8.25%)

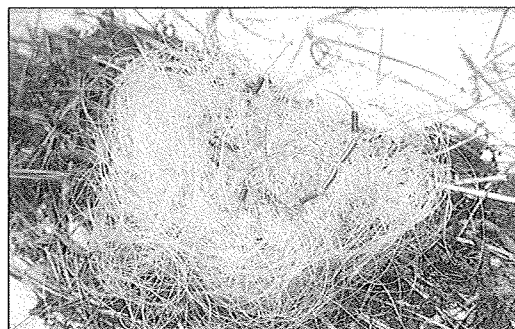
FIGURE 4. Number of Items from U.S. Coastal Cleanups Associated with Identifiable Types and Sources of Debris



Ocean-Based Sources of Debris

● Recreational Fishing and Boating Wastes

Disposable items, from fast food wrappers to bait and tackle supplies, are popular among recreational fishers and boaters. Unfortunately, not all of these enthusiasts are aware that MARPOL regulations prohibit the disposal of plastics in the ocean and all types of garbage in rivers, lakes, and bays. And even among those who know, compliance is far from complete. The two specific indicator items used to identify recreational fishers who violate the law are plastic (monofilament) fishing line and plastic floats and lures. While some line is lost accidentally, much of it is discarded intentionally. Blatant dumping overboard of these materials is a MARPOL violation. Enforcement plays a major role in how well these regulations are obeyed.



In the 1996 Cleanup, 1.0% (37,411 items) of all debris collected was attributed to recreational fishing and boating wastes, roughly the same as the 0.98% in the 1995 Cleanup. Nine regions exceeded the national average (Figure 5), led by the Appalachians and Ozarks (5.43%), Rockies (4.29%), and Great Plains and Prairies (4.22%). The Caribbean reported the lowest percentage (0.64%), followed closely by the Gulf of Maine (0.67%).

In Idaho, recreational fishing and boating wastes accounted for 38.93% of total debris collected. However, it should be noted that the Idaho cleanup was conducted only underwater and at only one site. Of the 262 debris items collected, 100 were fishing line and two were fishing lures. The second-highest percentage was reported in Arkansas (24.32%), which also conducted only underwater cleanups. Other states with high percentages included Alaska (14.90%), Tennessee (11.58%) and Oklahoma (9.76%). The District of Columbia reported no indicator items for recreational fishing and boating waste, nor did Utah, which conducted only underwater cleanups.

Among underwater cleanups overall, recreational fishing and boating wastes accounted for 2.17% of the total.

Even as a low percentage of total debris, monofilament line is one of the most dangerous of all marine debris items. Either in strands or combined with lures and floats, it can be deadly to birds, fish, turtles, and mammals. It can also endanger people by wrapping around boat propellers. (See discussion page 19.)

● Commercial Fishing Wastes

The indicator items used to track commercial fishing wastes are plastic rope, plastic (cyalume) light sticks, foamed plastic buoys, rubber gloves, plastic fishing nets, plastic salt bags, metal crab or fish traps, and wooden crab or lobster traps.

Different items represent different activities by crews aboard commercial fishing vessels. Plastic rope may be tossed or lost overboard. Old traps and nets may be abandoned instead of retrieved and disposed of properly. Some traps and buoys, of course, are destroyed by storms or other boaters and cannot be retrieved. Plastic light sticks suggest longline fishers. Rubber gloves and salt bags may be discarded once the catch is sorted and stored. No matter how each item enters the water, once there, it becomes a hazard.

Nationally, wastes from commercial fishing represented 2.92% of total debris collected in 1996 (Figure 6), not much changed from 2.86% in 1995. Five regions reported percentages higher than this national average, led by the Gulf of Maine (7.38%) and the North Pacific (5.1%), both major commercial fishing regions. Four of the five states with highest percentages were located in these regions. Maine reported 8.79%, followed by Massachusetts (8.09%), Mississippi (7.25%), New Hampshire (7.02%), and Washington (6.02%).

As might be expected, the lowest rates were reported inland. The Appalachians and Ozarks reported 0.35%, followed by the Great Plains and Prairies (0.43%) and Great Lakes (0.89%). Four states, Arkansas, Idaho, Iowa, and South Dakota, all of which conducted only underwater cleanups, reported finding no commercial fishing wastes.

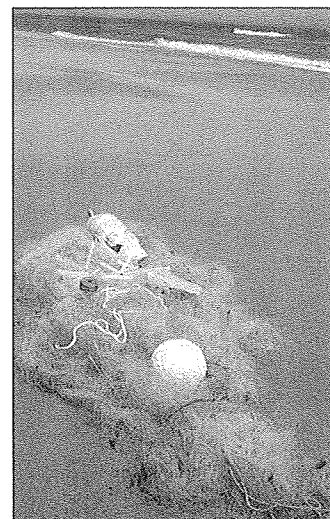
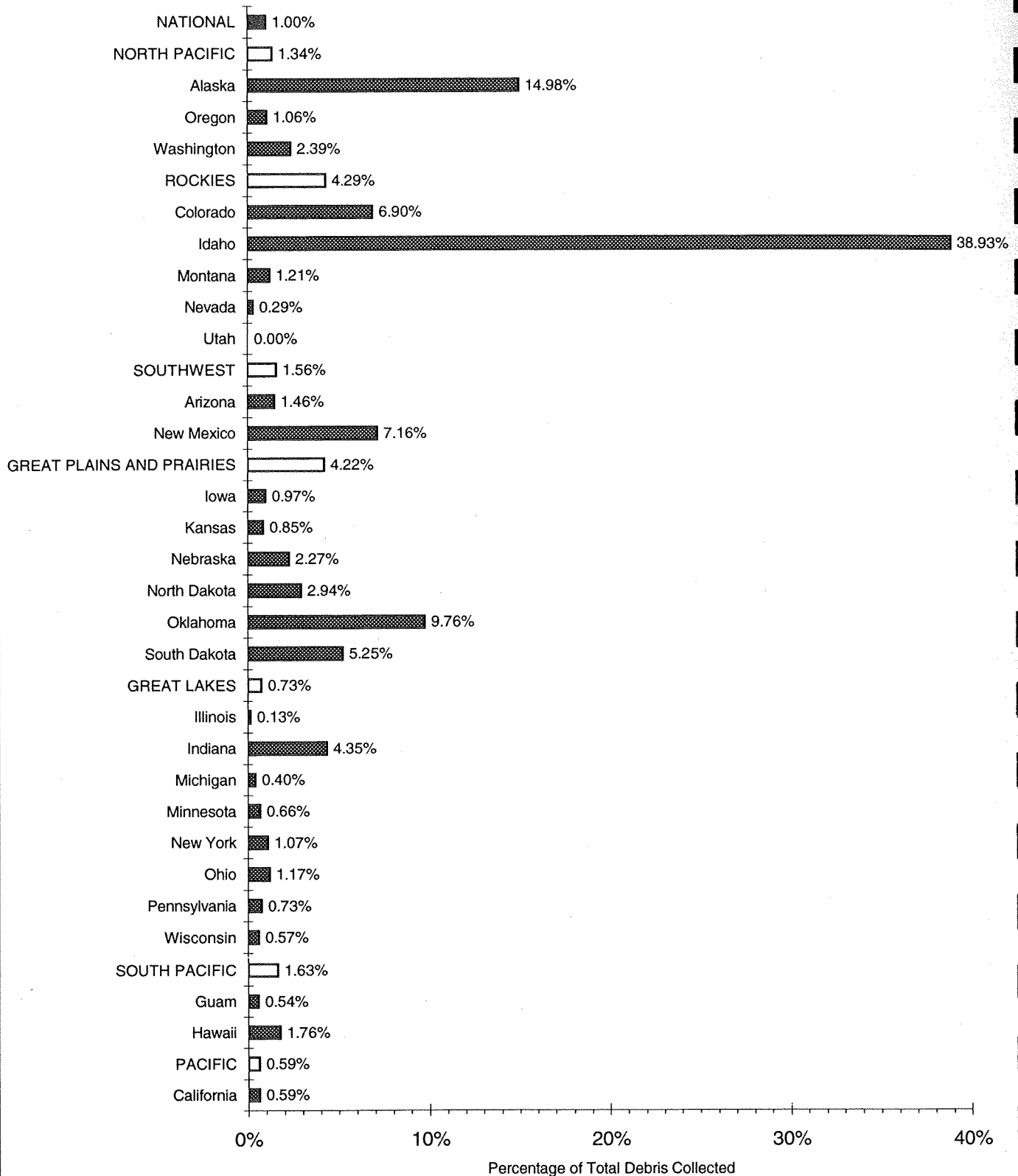


FIGURE 5. Recreational Fishing and Boating Wastes Reported from 1996 U.S. Coastal Cleanups



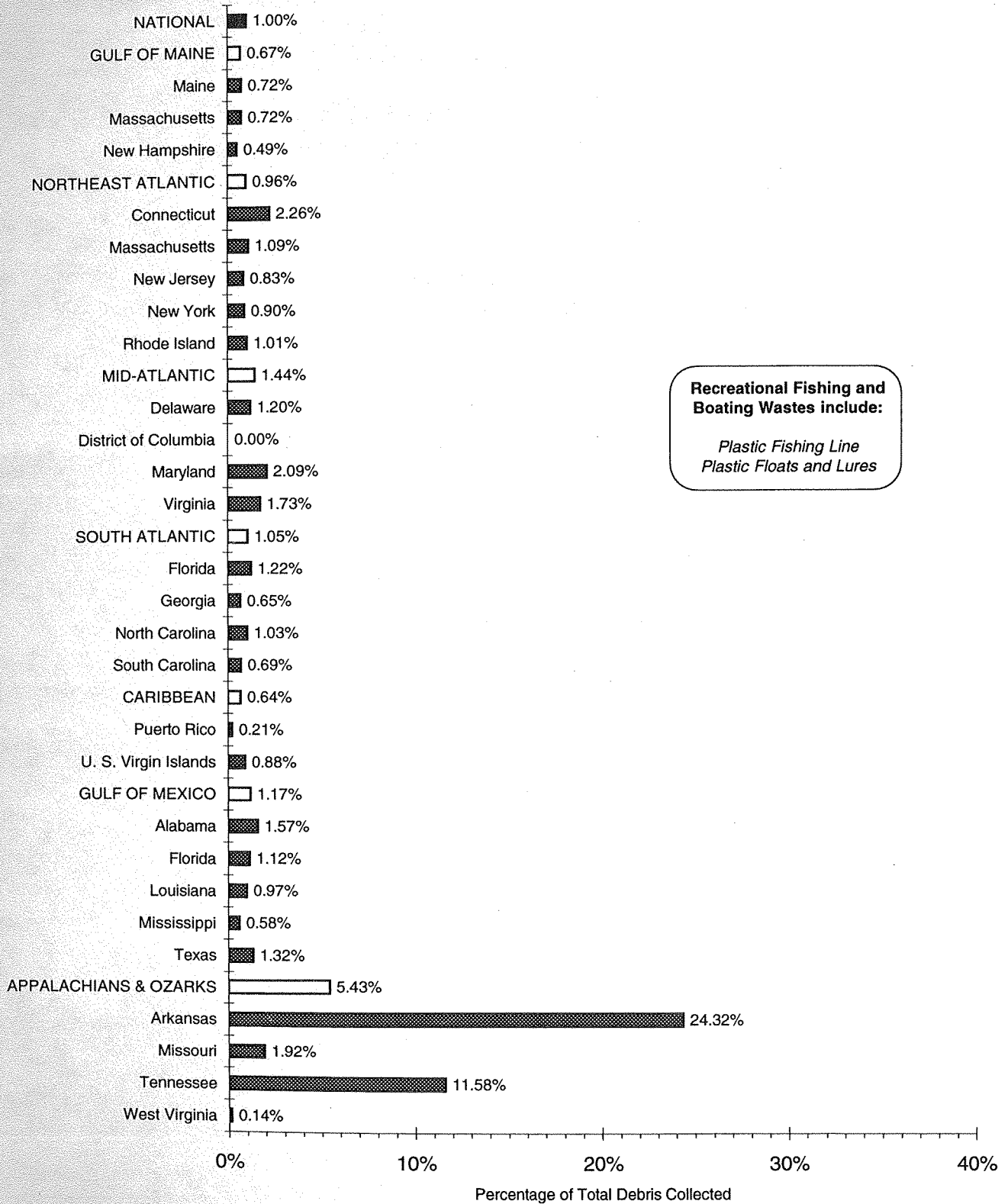
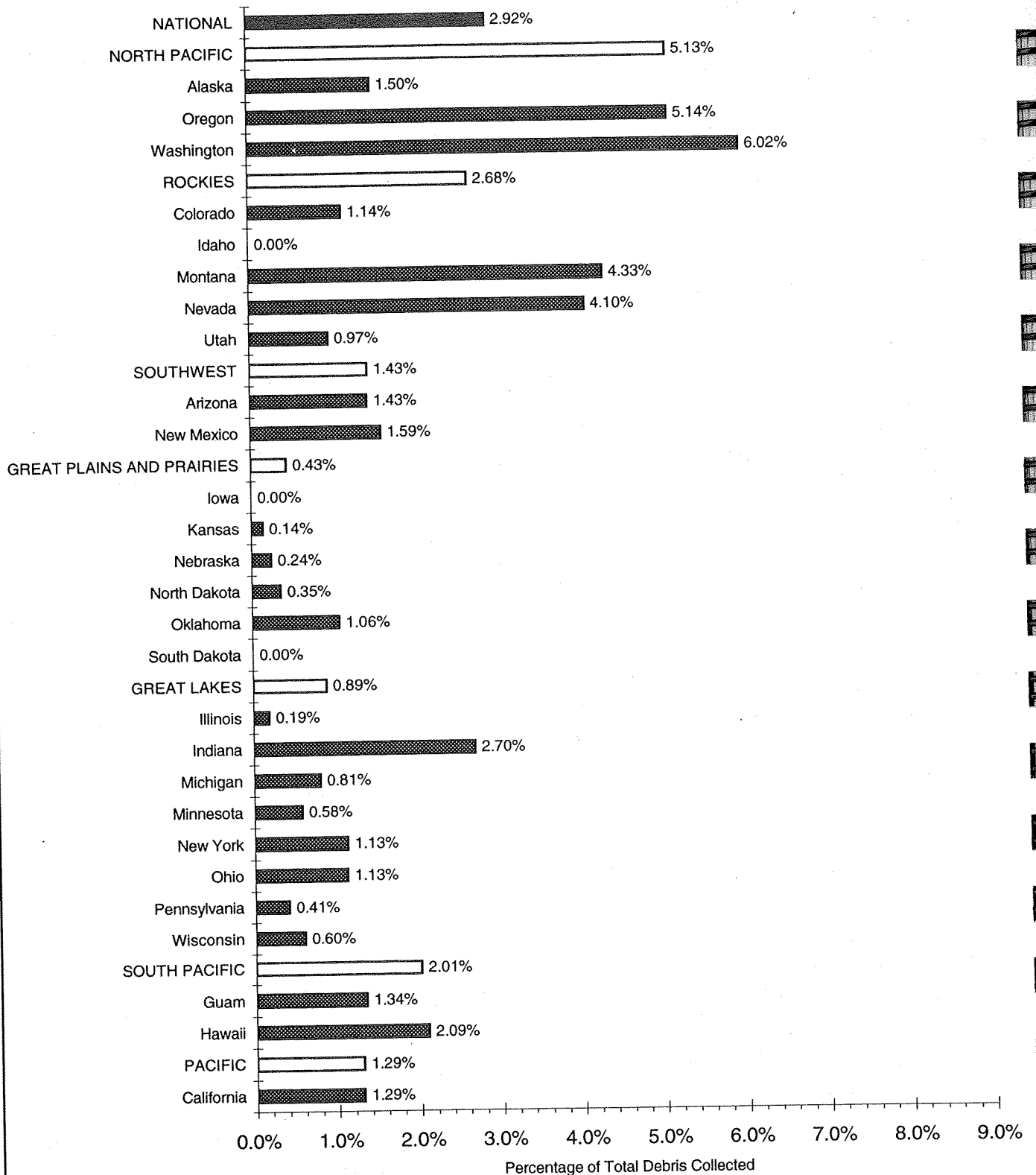
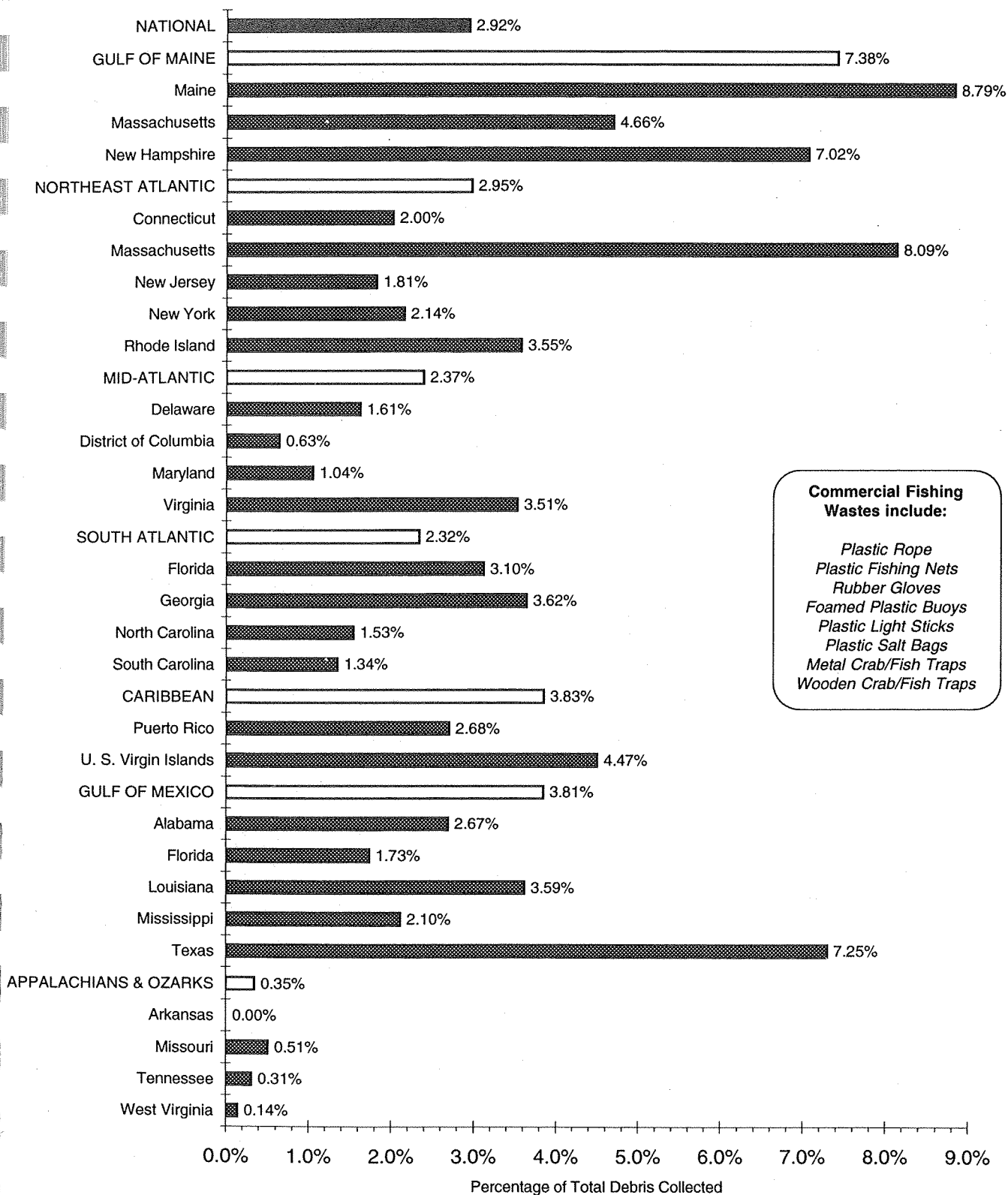


FIGURE 6. Commercial Fishing Wastes Reported from 1996 U.S. Coastal Cleanups

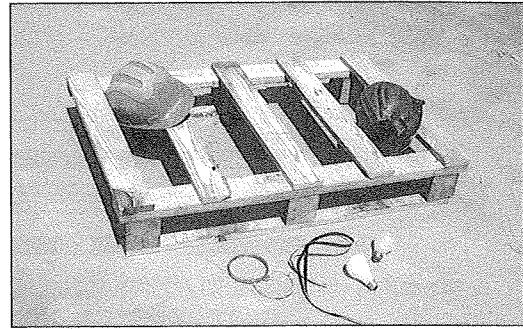




RESULTS

● Operational Wastes

Space is at a premium onboard ships and drilling platforms. Traditionally, anything that was no longer needed, such as packaging and broken materials, was bundled, weighted, and dumped overboard. This old method of waste disposal, though outlawed by MARPOL Annex V, is still practiced by many vessels, as the results of the 1996 Cleanup show.



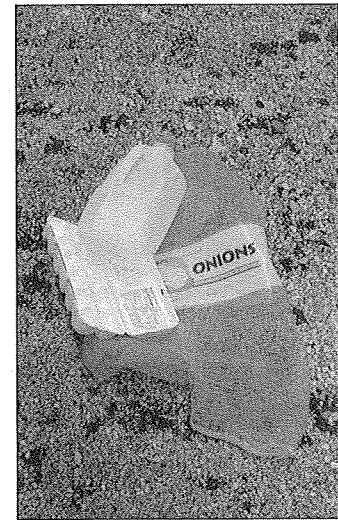
Debris from offshore operations, including drilling activities and cargo transport, is indicated by wooden pallets, plastic strapping bands, glass (incandescent) light bulbs, fluorescent light tubes, write-protection rings (from computer tape reels), plastic pipe thread protectors, plastic sheeting (longer than two feet), plastic hard hats, and wooden crates.

In the 1996 Cleanup, operational wastes accounted for 0.95% of total debris (Figure 7), down slightly from 1.11% in 1995. This apparently small percentage included 15,120 strapping bands, 6,011 write-protection rings, 4,928 light bulbs, and 3,317 pallets, among other items.

The North Pacific region reported the highest percentage of operational wastes (1.51%), followed by the Appalachians and Ozarks with 1.44%. The high figure for the Appalachians and Ozarks can be explained by West Virginia's percentage of 5.20%, which consisted entirely of glass light bulbs and clearly did not indicate offshore operations. After West Virginia, Washington reported the second-highest percentage (2.97%). Eight states, mostly inland, reported finding no operational wastes.

● Galley-Type Wastes

Ships' galleys, like any kitchen, make regular use of items such as plastic trash bags and milk or water jugs. Once they become trash, they compete for valuable storage space with other items more useful to the crew. Other indicator items for galley-type wastes are plastic bleach and cleaner bottles, plastic vegetable sacks, and foamed plastic meat trays and egg cartons. Annex V of the MARPOL Treaty prohibits overboard disposal of this type of trash. As with other types of waste, enforcement is a key element to compliance.



Any ship that's been at sea for a few days is going to produce garbage, and it better still be there when it pulls into port. The U.S. Coast Guard includes in its ship inspections a review of how a ship handles its garbage. U.S. vessels are required to maintain a log of waste handling procedures. If a ship has no such log and no appreciable amount of trash, the Coast Guard can and will cite the captain, crew, or owner of the vessel for MARPOL violations. Stiff fines up to \$500,000 accompany such violations, along with up to five years in jail.

But not every ship can be watched every minute, and violations do occur. Galley-type wastes accounted for 2.60% of total debris in the 1996 Cleanup (Figure 8), including 41,220 trash bags, 24,616 gallon jugs, 9,282 foamed plastic meat trays, 6,552 plastic vegetable sacks, and 3,852 foamed plastic egg cartons. Last year's national average was 2.51%.

Six regions exceeded the 1996 national average, led by the Caribbean (4.60%) and the Rockies (4.59%). The high level of galley-type trash in an inland area such as the Rockies demonstrates how many different sources there can be for individual debris items. Such items can enter the waste stream through illegal dumping of trash onshore as well as offshore.

Washington (7.99%) reported the highest incidence of galley-type wastes, followed by Puerto Rico (6.65%), Colorado (6.13%), and Texas (6.06%). Three states, Idaho, New Mexico, and Arkansas, all of which conducted underwater cleanups only, reported no galley-type wastes.

● Cruise Ship Debris

Debris from the cruise ship industry has been reduced, in most cases, due to restrictions, enforcement, and compliance with the MARPOL Treaty and a new level of corporate responsibility, as plans for handling shipboard garbage and training new crew and passengers are developed and implemented. Cruise lines are also using new packaging for their disposable products. This packaging is made of cardboard and often does not carry the insignia or name of the cruise line. Although no traceable cruise ship debris was recorded in the U.S. during the 1996 Cleanup, debris from cruise ships is still washing up on our beaches.

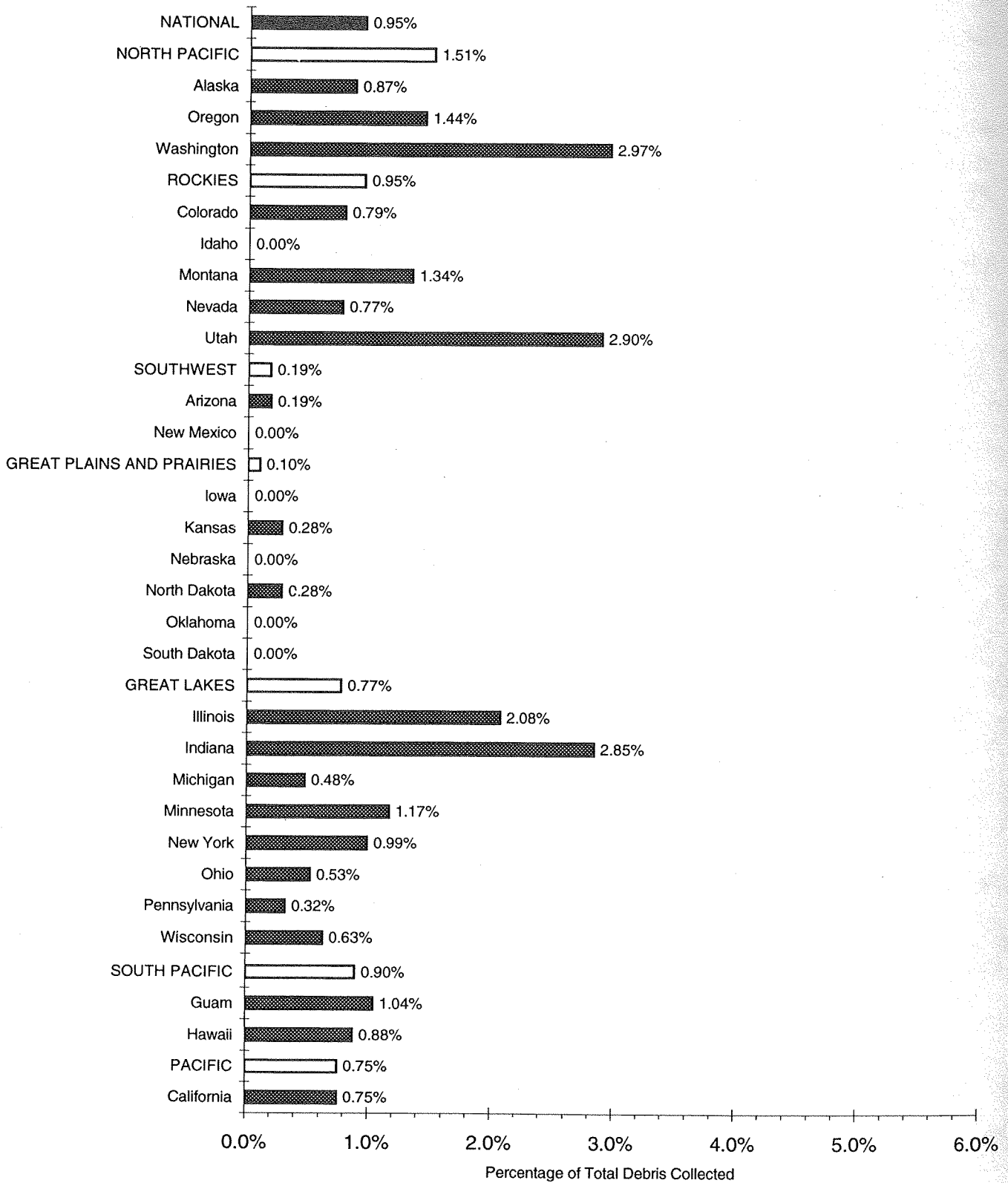


A particular region of concern is the Wider Caribbean which is the world's leading cruise ship destination, attracting millions of tourists annually. The region, which contains the Gulf of Mexico, southern Florida, Puerto Rico, and the U.S. Virgin Islands, is particularly sensitive to pollution because its waterbodies are surrounded by land and islands; thus there is little flushing of waters with the open ocean, and the pollutants concentrate and persist, affecting residents' livelihoods, visitors' recreation and enjoyment, and wildlife's survival.

"...(we found) lots of styrofoam, cups, floats, glass beer bottles,
and plastic bottles (oil, drink, etc.) ..."

cleanup volunteer, Florida

FIGURE 7. Operational Wastes Reported from 1996 U.S. Coastal Cleanups



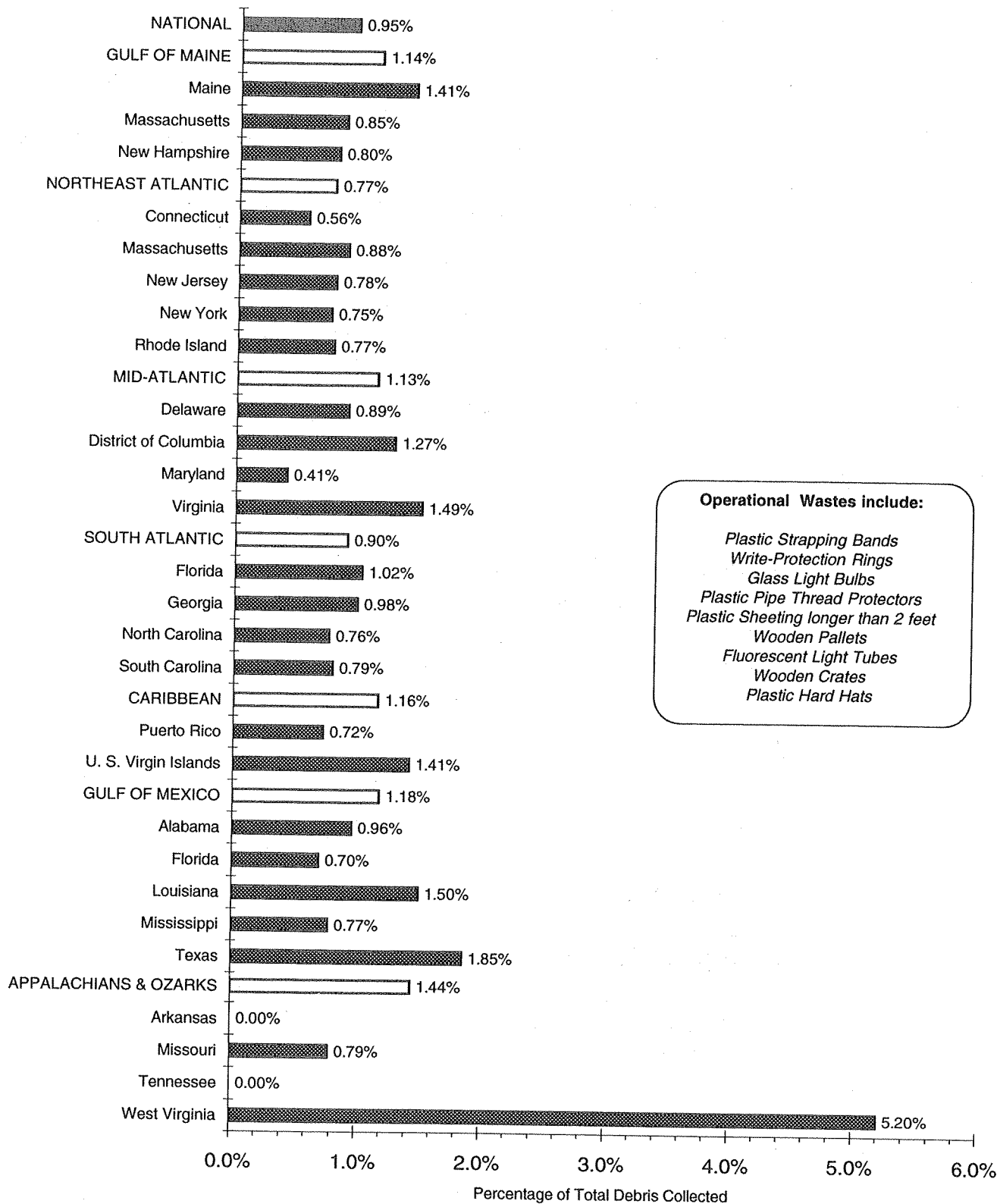
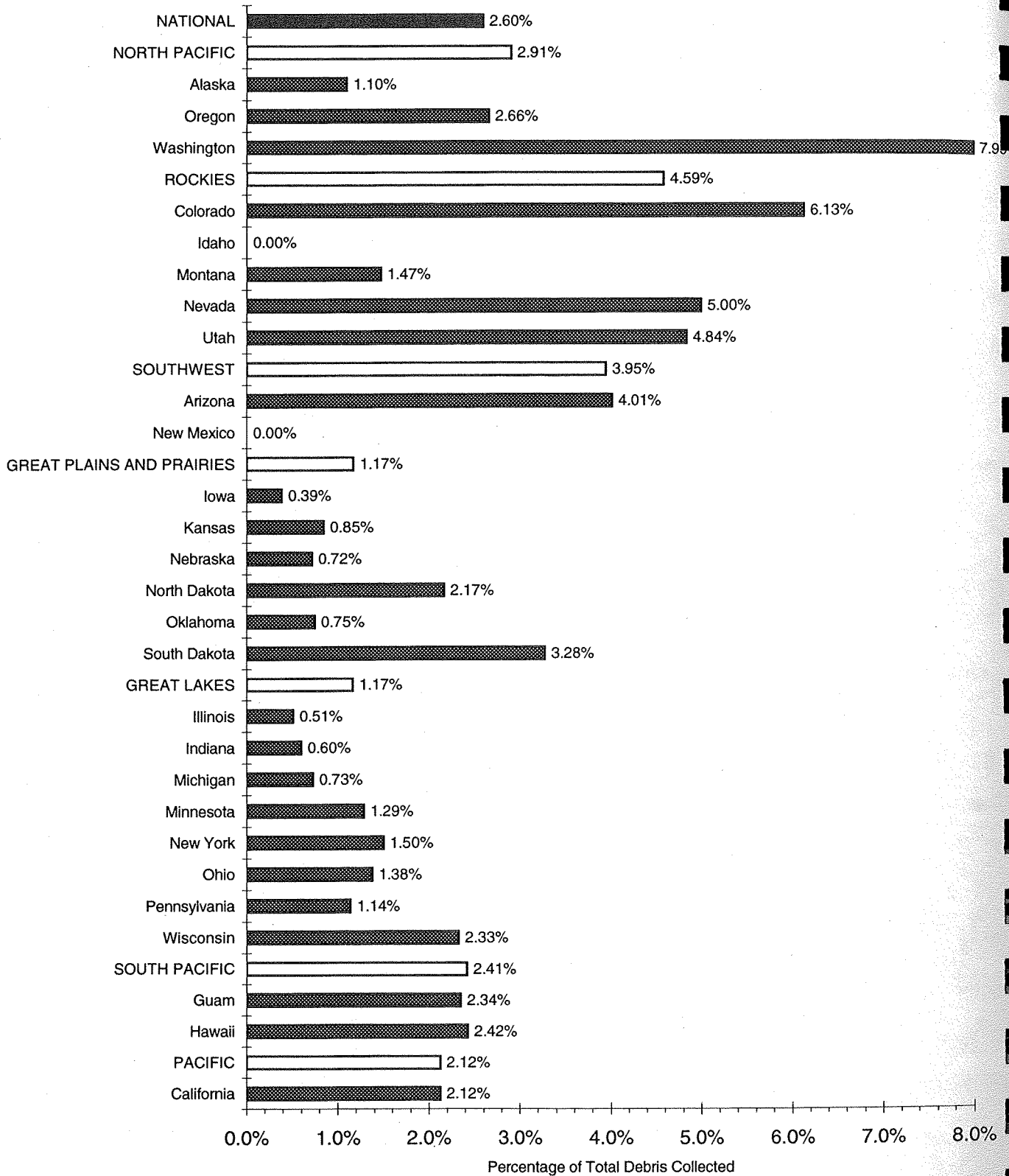
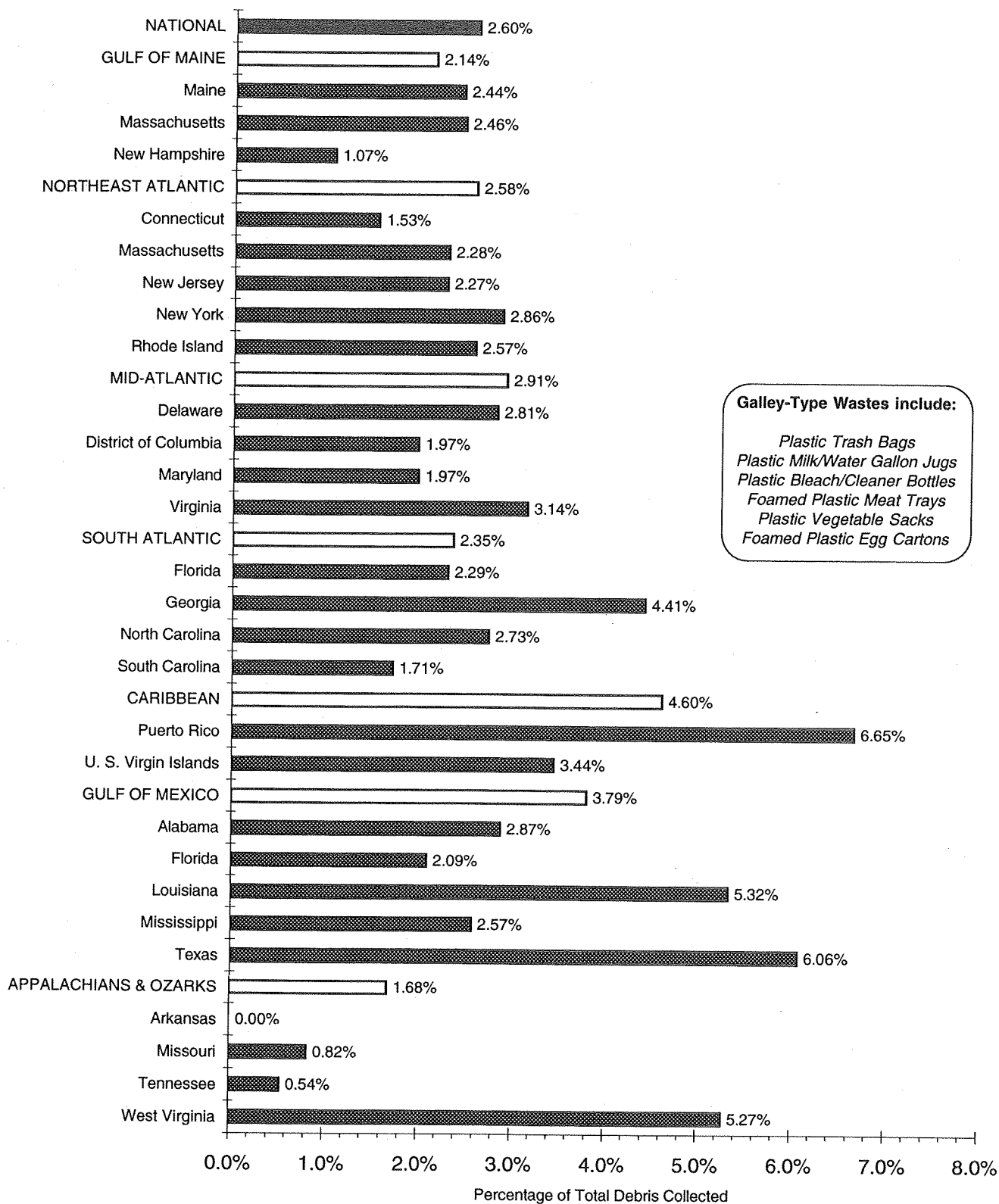


FIGURE 8. Galley Wastes Reported from 1996 U.S. Coastal Cleanups





Land-Based Sources of Debris

Creeks, streams, rivers, and stormwater systems carry land-based trash to shorelines, coastal areas, and on into the ocean itself. Outdated sewage systems, inadequate solid waste disposal systems, landfills, and careless citizens who litter or intentionally dump their garbage all introduce a huge amount of debris into the water.

● Sewage-Associated Wastes

Sewage-associated wastes are indicated by tampon applicators and rubber condoms, typically flushed down toilets. What happens next creates marine debris. Many older sewage systems use the same pipes to carry both stormwater runoff and sewage destined for treatment facilities. Called combined sewers, such systems become overloaded by increased water flow during heavy storms. During overflows, raw, untreated sewage is shunted directly into the nearest waterway along with street runoff. These antiquated systems are most common in the Northeast and Great Lakes regions.

Other types of stormwater systems, though not connected directly to sewage pipes, also drain into waterways that lead eventually to the sea. A soda can tossed into a roadside ditch in the Midwest, for instance, can easily turn up in coastal waters off the Gulf of Mexico. The indicator items for sewage-associated wastes are visible flags of invisible, but far more dangerous, contaminants in the water. If tampon applicators and condoms show up on a beach, the presence of raw, untreated sewage in the water is a near certainty.



In the 1996 Cleanup, sewage-associated wastes made up 0.53% of total debris (Figure 9) up from 0.44% last year and 0.42% the year before. That's 13,294 plastic tampon applicators and 6,671 rubber condoms. The Northeast Atlantic and Great Lakes reported percentages at more than double the national average (1.18% for both regions). The three states reporting the highest levels of sewage-associated wastes all lie in the Great Lakes region—Illinois (2.24%), Ohio (1.96%), and the Great Lakes portion of New York (1.94%). Twelve states reported finding no sewage-associated wastes.

● Medical Wastes

Plastic syringes are the only debris item used to indicate medical wastes. Syringes have many sources: doctors' offices, hospitals, patients who use them for prescribed medical treatment, and addicts of illegal drugs. Legal syringes enter the waste stream primarily through municipal sewage systems, as described above for sewage-associated wastes. Illegally-used syringes, carelessly tossed, can wash from gutters into drains and on into the marine environment. Bags of medical debris can also wind up on beaches as the result of illegal trash dumping.



The 1996 Cleanup collected 3,657 syringes on beaches and shorelines across the country. This represented 0.10% of total debris (0.09% in 1995, 0.08% in 1994). Six regions exceeded the national average this year (Figure 10), in contrast to only two in 1995. The Appalachians and Ozarks reported 0.27% medical wastes, followed by the North Pacific (0.16%). Among individual states, Missouri reported 0.71%, twice last year's high of 0.35% in Maryland. New York, Louisiana, and Texas all reported levels of 0.20% or higher. Eighteen states reported no medical wastes.

Foreign Sources of Marine Debris

Oceans do not recognize political, cultural, or geographic boundaries. Neither does marine debris. It travels wherever the winds and currents carry it after someone has put it into the water.

While foreign related debris (identified by labels) was found in every coastal region of the United States in the 1996 Coastal Cleanup, it tended to concentrate in three regions—the Pacific Northwest, the Gulf of Mexico, and the Gulf of Maine—and most of this was fishing industry related. In the Pacific Northwest the debris appeared to be mainly fishing gear from Japan; in the Gulf of Maine it was primarily Canadian fishing gear (lobster); and in the Gulf of Mexico it was largely Clarisol bleach bottles, reported to be used by Mexican fishermen.

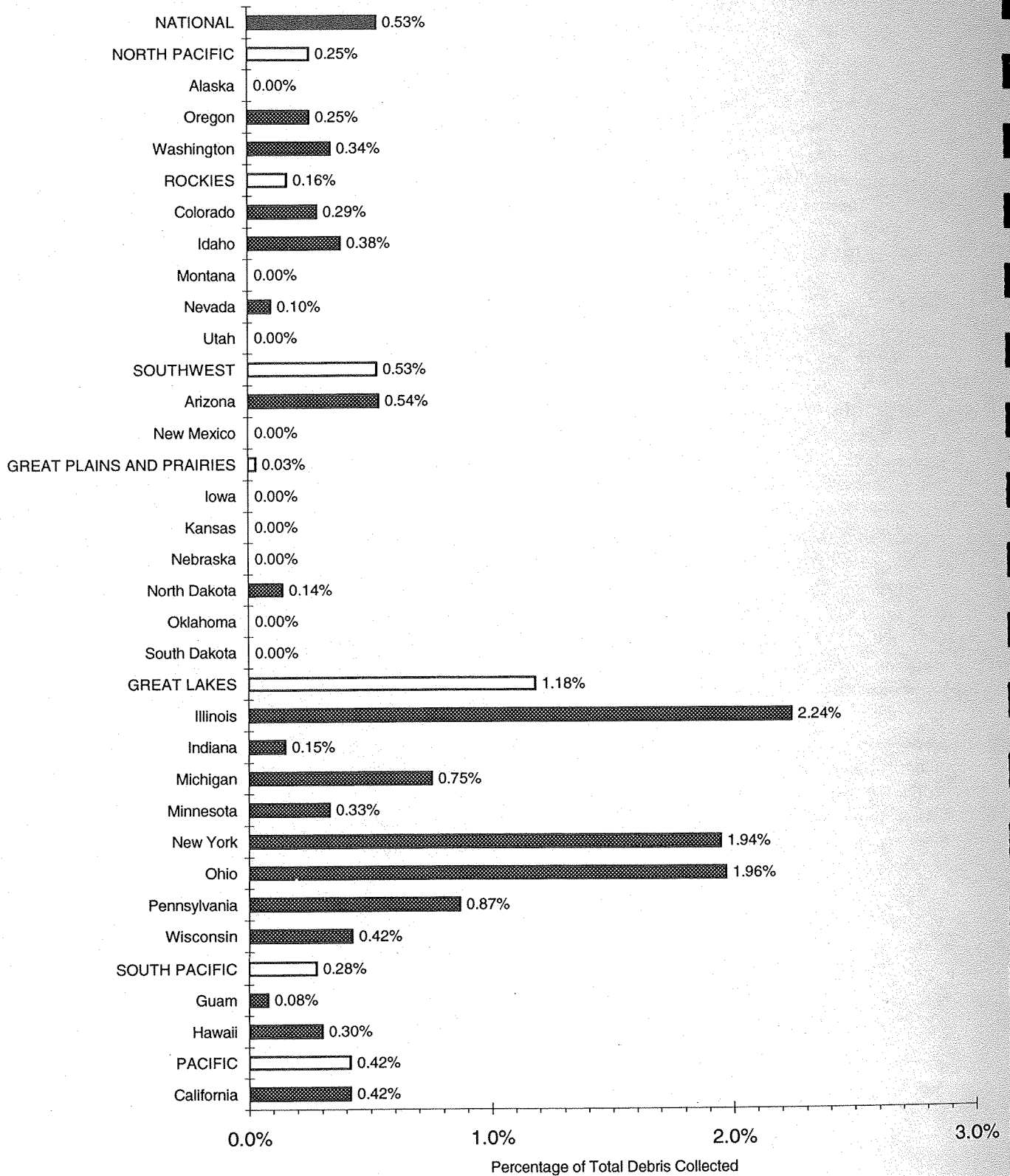
Some of the other foreign debris could have been carried by boats offshore (particularly since no foreign debris was found in the interior regions), but judging from its makeup—largely personal care products or food and beverage containers—it is also highly possible that these “foreign” debris items were instead purchased in the United States and improperly discarded, like so much of the other debris.

Even so, Annex V of the MARPOL Treaty, which regulates the dumping of debris from ships, including fishing vessels, can do a great deal to prevent the occurrence of foreign debris on our beaches. Ships from countries that are signatory to MARPOL 73/78 and have ratified Annex V are prohibited from dumping their plastic wastes into any waterway, anywhere in the world. Further, ships entering a signatory’s waters, even if from a non-signatory country, are prohibited from dumping their wastes into the signatory’s country’s waters. To date 83 countries have signed onto Annex V. Clearly, many more countries must be persuaded to sign Annex V, not only to keep U.S. beaches cleaner, but their own as well. On July 1, 1997, new regulations modeled after the U.S. law went into effect, requiring the international shipping community to post placards about MARPOL’s regulations and maintain waste management logbooks. Hopefully, these regulations will aid in the enforcement and compliance with the MARPOL Treaty.

A coordinated, global effort, where all countries are working together to stop ocean dumping, is essential to reduce the amount of debris that enters the world’s oceans. If one country works to control its solid wastes but its neighbors are not conducting similar practices, progress will be set back by the winds and currents that travel over the planet. Global cooperation is essential to solve the problems of marine debris.



FIGURE 9. Sewage Wastes Reported from 1996 U.S. Coastal Cleanups



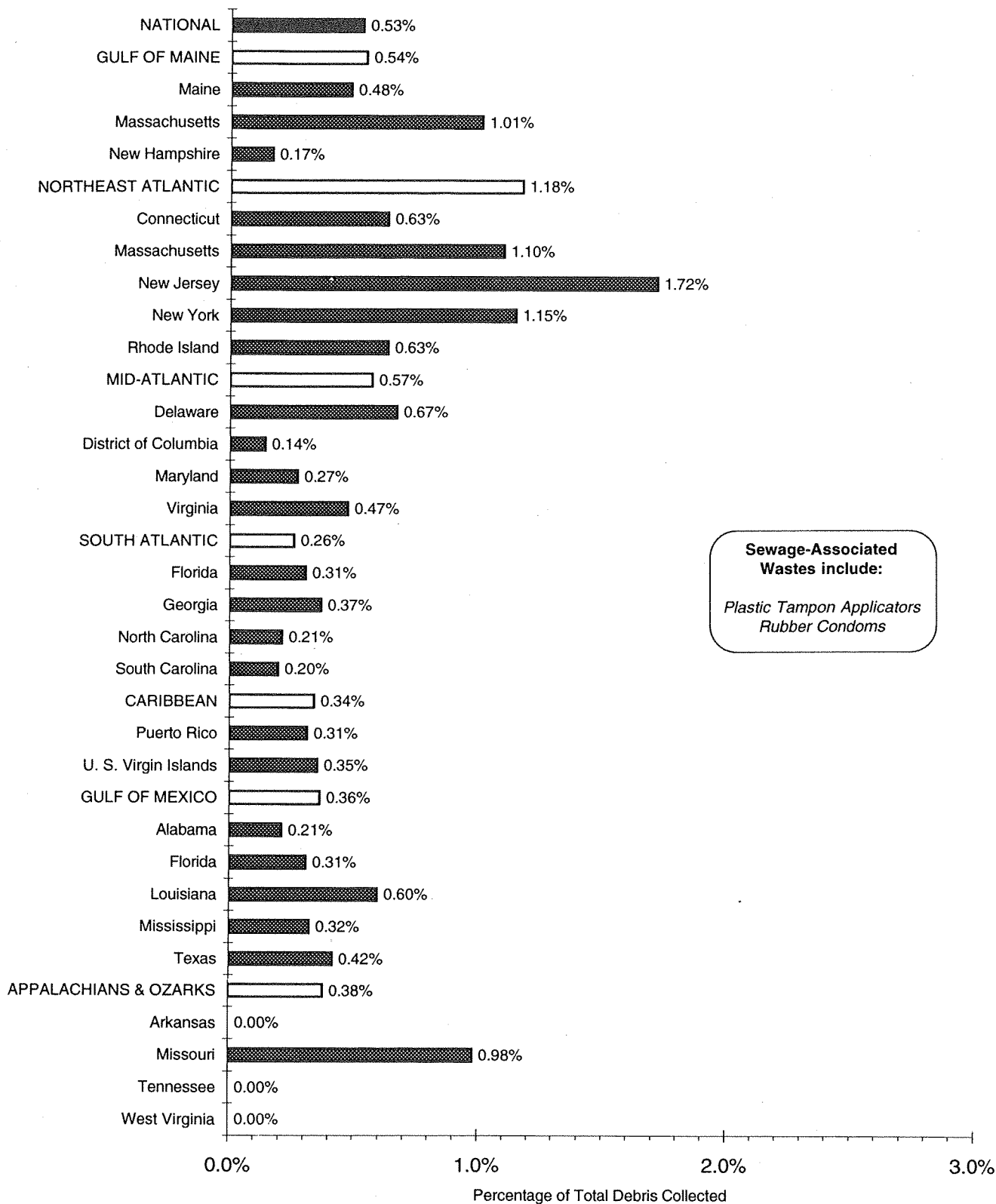
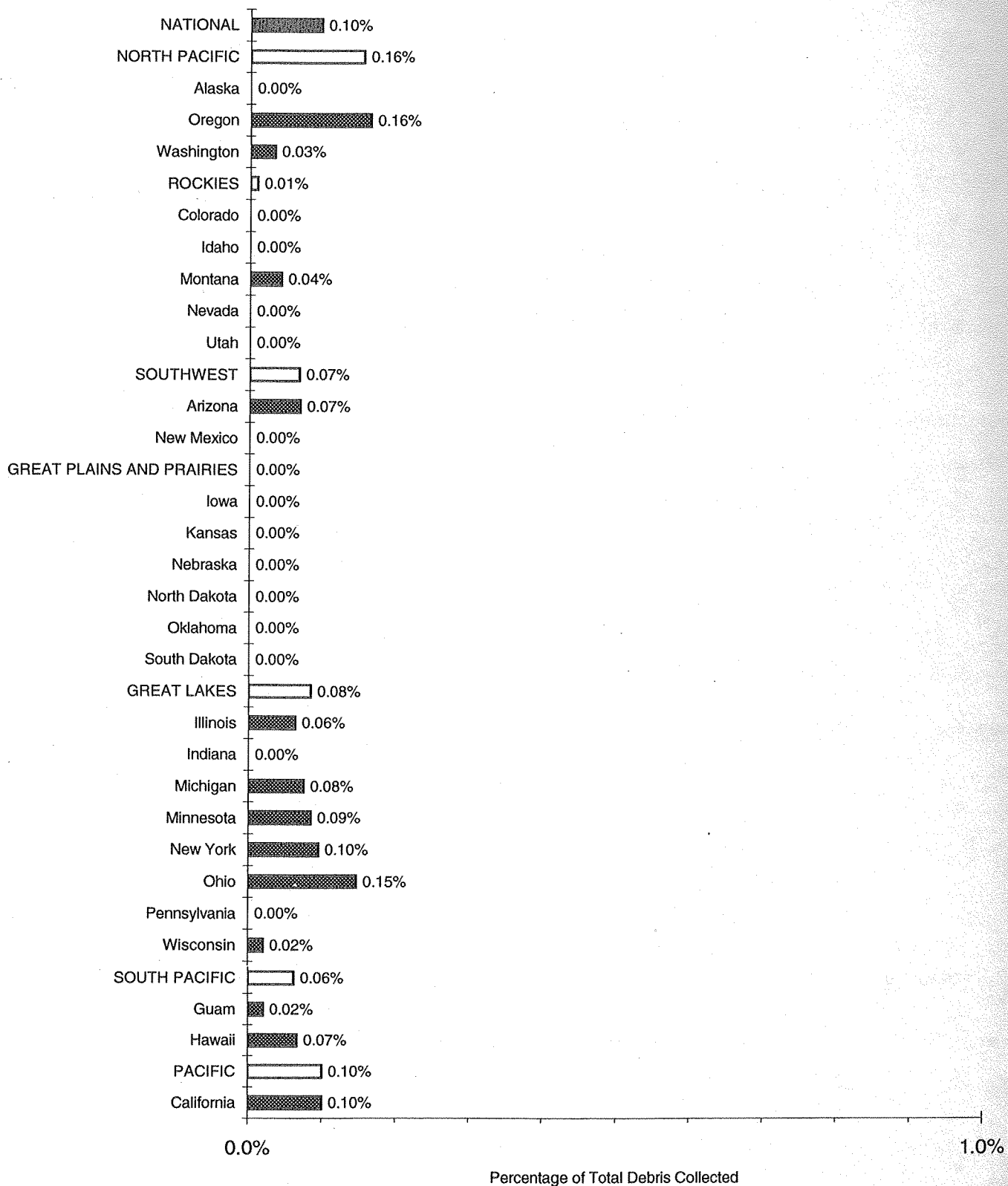
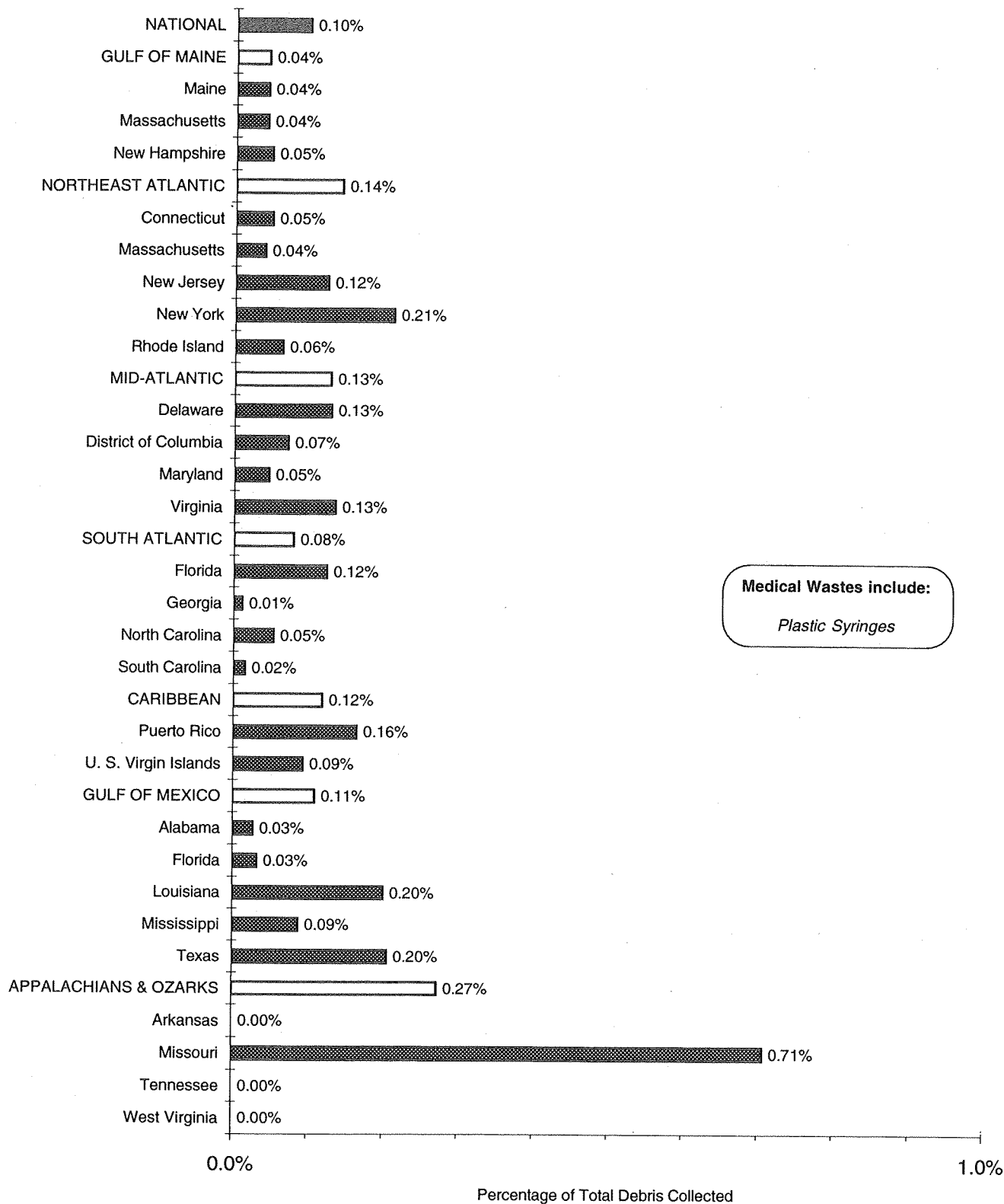


FIGURE 10. Medical Wastes Reported from 1996 U.S. Coastal Cleanups





CONCLUSION

Individuals, municipalities, civic organizations, environmental groups, industry representatives, and government agencies are all part of the broad collaborative effort that makes up the annual International Coastal Cleanup. Much has been accomplished in the last eleven years. Public awareness of the marine debris problem has been greatly expanded. Knowledge of the types, sources, and patterns of debris has increased substantially. From this foundation, solutions are already being built. But, as this report shows, we are still facing a serious situation regarding human-made debris and its impact on our lakes, rivers, bays, and the ocean. Debris represents a visible form of pollution in our waterways and ocean. It is also one of the most solvable forms of pollution plaguing our planet.

Plastic persists as the largest type of debris found in the marine environment, as well as the longest lasting. The Dirty Dozen continues to read like a picnic inventory, underscoring the truth that individual people—not governments, industries, or manufacturers—are the real source of the problem.

Recycling has been around for years and has become increasingly sophisticated, yet bottles and associated goods turn up in steady numbers in debris reports. The impact of debris on wildlife is documented dramatically by this year's report. Rather than improving, the problem seems to be getting worse.

A regional examination of the debris collected during the 1996 Cleanup again highlights ocean-based activities of fishing and boating where 50% of the regions showed a significant presence of wastes associated with recreational fishing (Table 8). Debris from commercial fishing activities were again dominant in traditional fishing grounds of the Gulf of Maine and Gulf of Mexico, but not in the North Pacific. The "Hot Spots" for sewage associated wastes were again urban areas with dense populations and antiquated sewage treatment systems.

Many regulations are already in place to mandate responsible solid waste disposal, but by themselves they are not enough. Willing compliance is necessary, and that only comes from increased public awareness and education. Enforcement is needed as well. And for some marine debris issues, solutions have yet to be developed.

The primary goal of this year's Cleanup, as it has been every year since it began, has been to stop debris at its source so that future cleanups will not be necessary. Only through continued emphasis on the need for clean water and environmental stewardship will this pollution problem be solved.

"(The cleanup) was, as always, a reminder that this job will be never-ending unless we can stop the trashing through public awareness and education."

Cleanup team captain, North Carolina

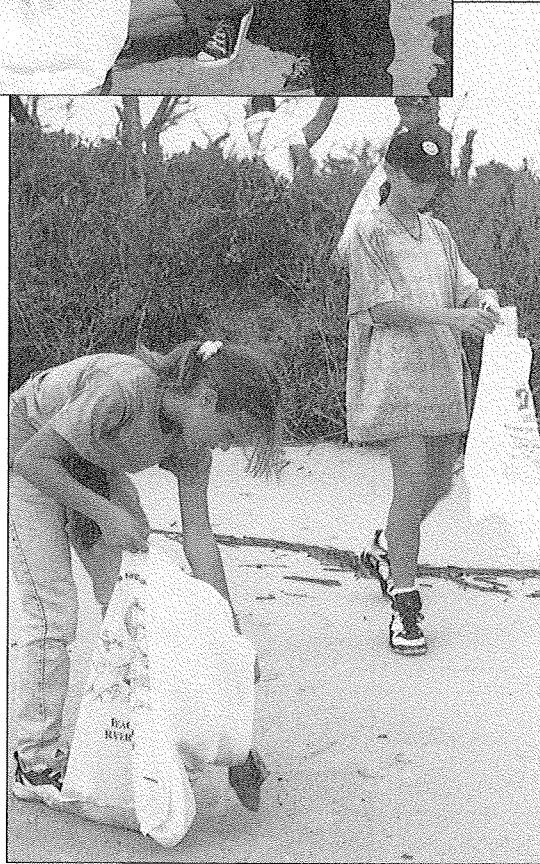
Table 8. Regional Overview of Marine Debris: Debris "Hot Spots"						
REGION	R. FISHING	C. FISHING	OPER.	GALLEY	SEWAGE	MEDICAL
GULF OF MAINE (MA, ME, NH)		X	X		X	
NORTHEAST ATLANTIC (CT, MA, NJ, NY, RI)		X			X	X
MID-ATLANTIC (DC, DE, MD, VA)	X			X	X	X
SOUTH ATLANTIC (FL, GA, NC, SC)						
CARIBBEAN (PR, VI)			X	X		X
GULF OF MEXICO (AL, FL, LA, MS, TX)	X	X	X	X		X
SOUTH PACIFIC (GU, HI)	X	X				
PACIFIC (CA)						X
NORTH PACIFIC (AK, OR, WA)	X	X	X	X		X
ROCKIES (CO, ID, MT, NV, UT)	X		X	X		
SOUTHWEST (AZ, NM)	X			X		
GREAT PLAINS AND PRAIRIES (IA, KS, ND, NE, OK, SD)	X					
GREAT LAKES (IL, IN, MI, MN, NY, OH, PA, WI)					X	
APPALACHIANS & OZARKS (AR, MO, TN, WV)	X		X			X

Xs indicate region's debris in that category was equal to or above the national percentage



New York

"We enjoyed cleaning the beach but we're appalled at how much trash we found."
*cleanup volunteers,
Mississippi*



South Carolina

NATIONAL TRENDS 1988-1996

Standardized data collection and tabulation lies at the core of the International Coastal Cleanup. Although the Cleanup does not employ a scientific protocol, the data is nonetheless quantifiable with regard to debris composition and abundance over time. First-hand observations of marine debris also provide valuable information.

In 1986, the Center for Marine Conservation coordinated the first beach cleanup with data collection in Texas. Since 1988, data has been compiled on a national level and used to monitor patterns in debris composition and regional trends. Valid interpretation of these results depends on maintaining consistent and appropriate standards of comparison at all levels. National percentages are determined from total debris collected. Regional figures are computed from compiled state/territory records. Detailed state/territory analyses reflect direct tabulations of debris reported by volunteers.

TRENDS IN PEOPLE, POUNDS, AND MILES

If data collection is the core of the Cleanup, volunteers are its heart. Without their energy, time, resources, and devotion, the Cleanup would not exist. The number of participating volunteers has grown over the years from the first 2,800 who took part in 1986. In 1996, the number of volunteers was 151,502, second only to a record high of 158,257 in 1993 (Figure 11). Sometimes natural forces prevent even the most willing of volunteers from participating. As in other years, hurricanes on the east coast and bad weather inland hampered, postponed, and even canceled a significant number of scheduled cleanups.

Being volunteer-based, each cleanup team puts its individual stamp on how debris is collected. The amount of debris collected at each site is also influenced by the type of debris present (cigarette butts versus mattresses, for example) and by the type of cleanup site. Isolated beaches, industrial riverfronts, dunes, and coral reefs all present vastly different challenges to cleanup crews. Several different methods can be used for weight estimates, depending on which is most appropriate to the situation. Actual scales, pound-per-bag conversion formulas, or calculations from known weights of items such as tires and appliances are all used. Large bulk items may not even be included in weight estimates, making the estimates quite conservative. Even so, since 1986 more than 25 million pounds of garbage have been removed from the marine environment thanks to this volunteer effort, with 2,919,730 pounds removed in 1996 (Figure 12).

Each year, the Cleanup has grown in the number of sites cleaned and number of communities involved. Focusing at first on coastal areas, the Cleanup has gradually moved inland, first to neighboring towns and more recently to inland states and waterways. The number of miles cleaned has been a consistently upward trend, complicated by the addition of underwater cleanups, which require volume as well as distance measurements. The 1996 effort cleaned 5,930 miles, a slight increase over last year's record high of 5,870 miles (Figure 13).

FIGURE 11. Participation in U.S. Coastal Cleanups, 1988-1996

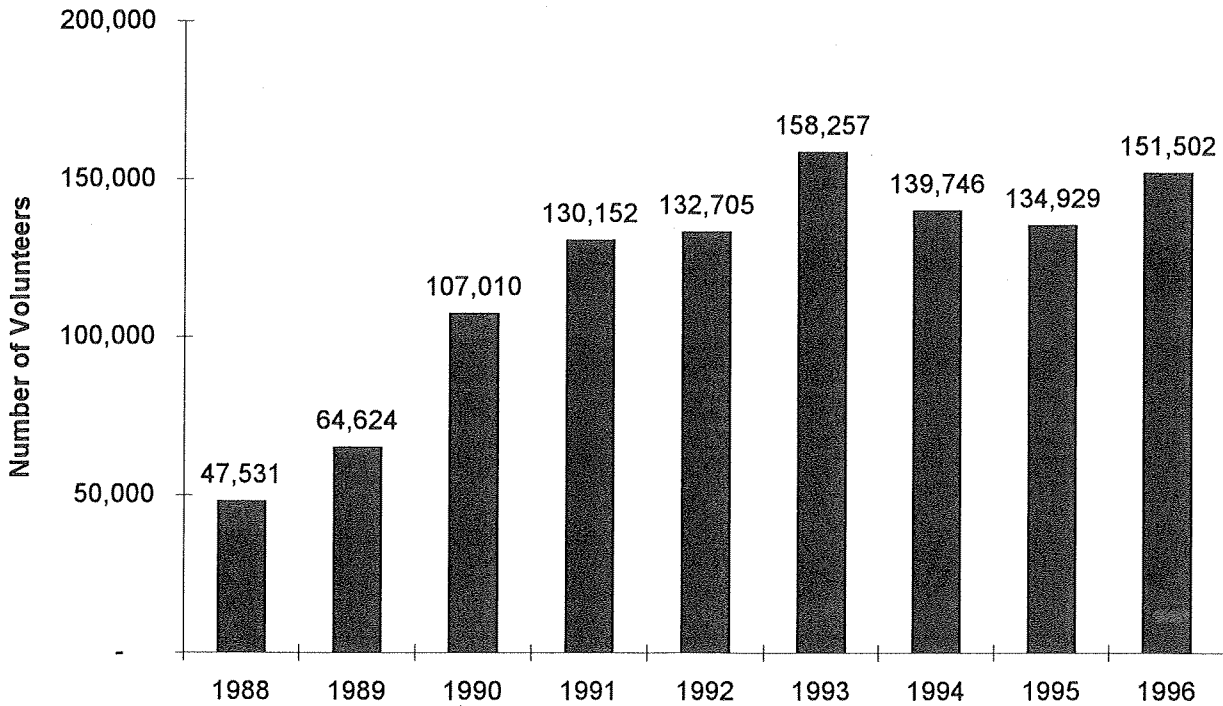


FIGURE 12. Pounds Collected in U.S. Coastal Cleanups, 1988-1996

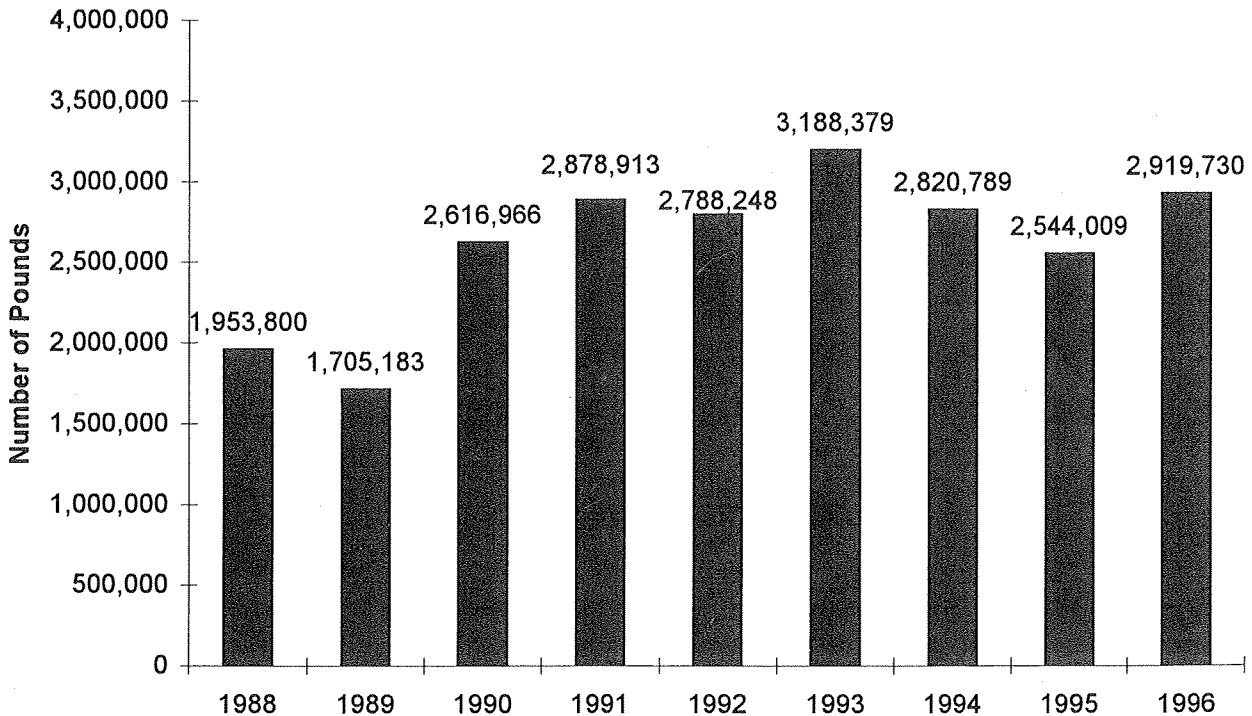
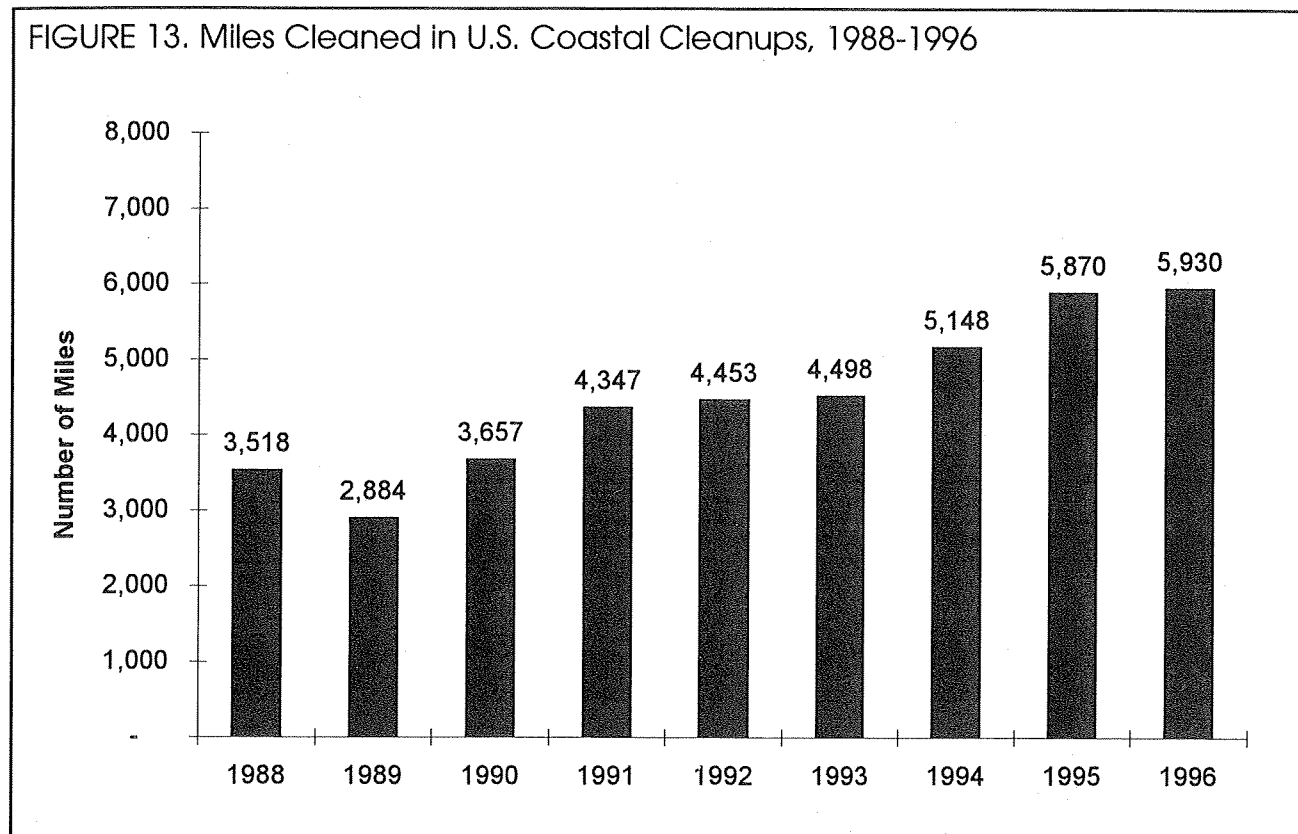


FIGURE 13. Miles Cleaned in U.S. Coastal Cleanups, 1988-1996



TRENDS IN THE MOST PREVALENT TYPE OF DEBRIS

Plastic has no competitor as the most pervasive form of debris. In every Cleanup it has consistently ranked as the most abundant type of debris collected. The range of plastic composition has ranged from an all-time high of 64.54% in 1988 to 1993's low of 53.91%. The 61.24% recorded in 1996 marks the fourth year in a row that the percent of plastic has increased (Figure 14).

TRENDS IN THE DIRTY DOZEN

The twelve most numerous debris items—the Dirty Dozen—have remained reasonably stable over the years, both in specific order and in relative ranking. Cigarette butts have been number one since they were added to the data card in 1990. In 1996, they accounted for 16.20% of total debris (Table 9), the lowest percentage since 1991. This is the third year in a row that the percentage of cigarette butts has declined, from an all-time high of 23.69% in 1993. Before cigarette butts were added to the data card, hard plastic pieces and foamed plastic pieces were the top debris items. Since then, they have consistently ranked second and third, except in 1993 when paper edged them out for second place.

Since the beginning of the Cleanup, the Dirty Dozen items have accounted for at least 56% of total debris collected. The 1996 Dirty Dozen represents more than 75% of the total. It also includes the same 12 items as 1995, in virtually the same order. Since 1988, nine of the top twelve items have been the same every year: cigarette butts, plastic pieces, foamed plastic pieces, paper pieces, glass pieces, plastic caps and lids, glass beverage bottles, metal beverage cans, and plastic straws. Our beaches, riverbanks, and waterways would be at least 50% cleaner if serious steps were taken to eliminate just these nine items, all easily identified and just as easily disposed of properly.

FIGURE 14. Plastic Debris Reported in U.S. Coastal Cleanups, 1988-1996

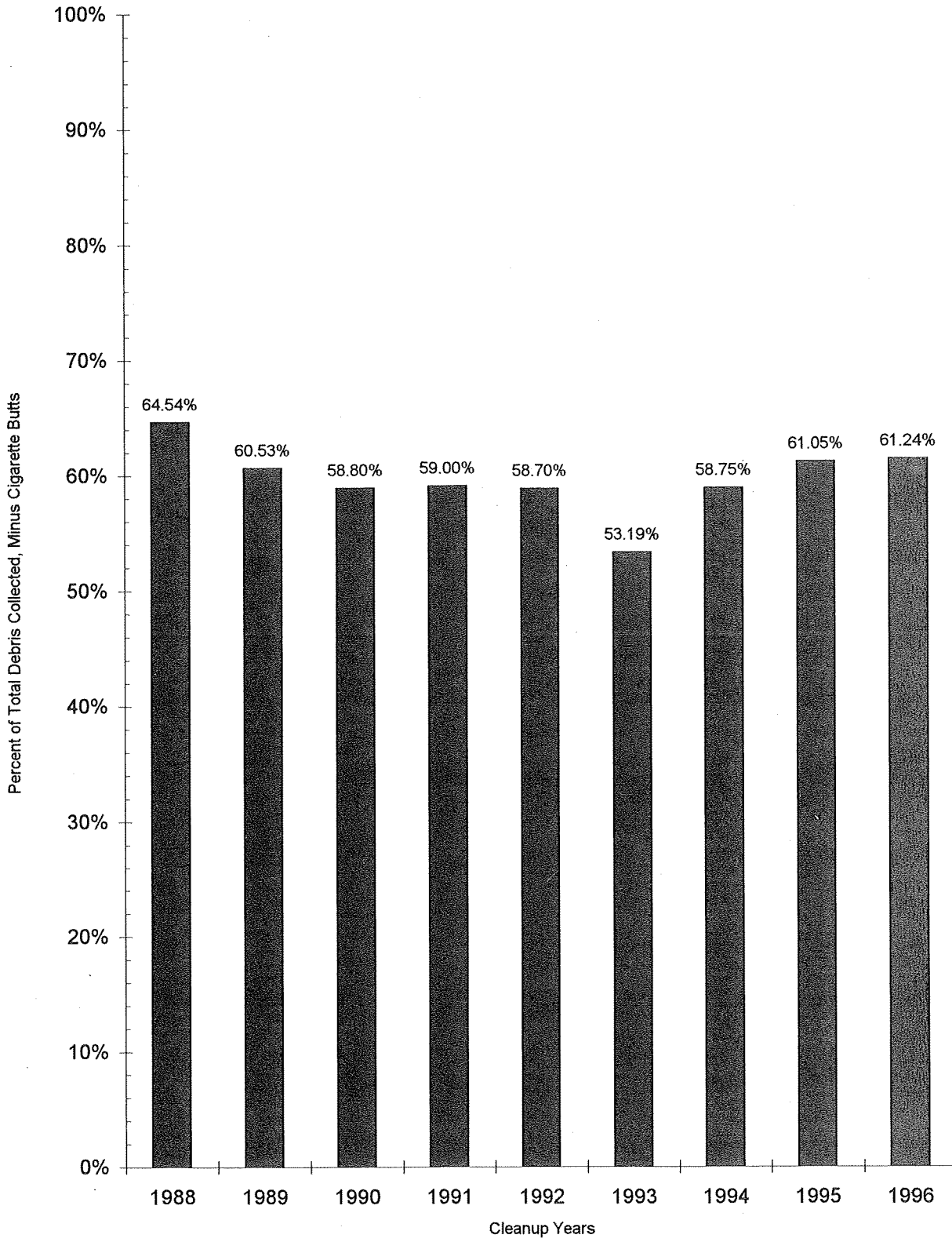


TABLE 9. Debris Items Consistently Appearing in the Dirty Dozen, 1988-1996 (as a Percentage of Total Debris)

Debris Items	1988	1989	1990	1991	1992	1993	1994	1995	1996
Cigarette Butts	*	*	12.58%	18.08%	16.80%	23.69%	22.78%	19.72%	16.20%
Plastic Pieces	6.82%	8.03%	6.77%	6.62%	6.81%	5.84%	6.29%	6.09%	6.41%
Foamed Plastic Pieces	6.37%	6.55%	5.93%	5.57%	5.43%	4.78%	5.36%	5.40%	5.51%
Paper Pieces	4.35%	4.72%	4.70%	4.33%	4.77%	7.31%	4.34%	4.26%	4.23%
Glass Pieces	3.33%	5.56%	4.57%	4.22%	4.25%	4.70%	4.30%	3.49%	3.74%
Plastic Caps/Lids	4.61%	4.84%	3.91%	4.09%	4.02%	3.64%	3.83%	4.29%	4.77%
Glass Beverage Bottles	4.81%	4.49%	4.01%	3.65%	3.42%	2.57%	3.47%	3.35%	3.40%
Metal Beverage Cans	5.06%	4.16%	3.99%	3.64%	3.76%	2.87%	3.25%	3.34%	3.46%
Plastic Straws	5.7%*	5.67%*	3.33%	3.68%	3.36%	2.77%	3.19%	3.24%	3.50%

* Not recorded as a separate debris item for these years. Figures derived from "write-in" lists provided by volunteers.

TRENDS IN BOTTLES AND ASSOCIATED GOODS

Bottles and associated goods declined from 1988 (16.73%) to 1993 (10.71%). In 1996, however, this category accounted for 13.33%, up from 12.66% in 1995, and the third consecutive year of increase (Figure 15). The data do not reveal any trends that suggest long-term improvement in reducing improper disposal of bottles and associated goods, nor do they suggest that any particular strategy for reducing such waste has been successful. Clearly, additional efforts are needed to educate and encourage the public to properly dispose of these items. Recycling, reduction in packaging, beverage container deposit legislation, and proper use and disposal strategies all are options being explored in numerous communities. Appendix 9 provides a more detailed, state-by-state analysis of recycling and waste disposal efforts.

TRENDS IN SIX-PACK HOLDERS

The percentage of six-pack holders declined from 1988 to 1993, then increased through 1995. This year, six-pack holders represented 0.39% of total debris, a slight decrease from 1995's 0.48% (Figure 16). Texas reported the highest percentages in the first years of the Cleanup, but that figure has shown a steady decline since 1991, with 0.80% reported in 1996. Colorado's percentage jumped to 5.1% this year, from previous levels of 0.49% in 1993 and 0.12% in 1994. Nevada also increased significantly, from 1.27% in 1995 to 3.7% this year. West Virginia, on the other hand, dropped from 3.36% last year to 0.74% in 1996.

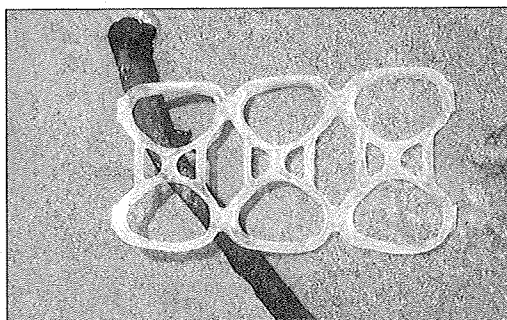


FIGURE 15. Bottles and Associated Goods Reported in U.S. Coastal Cleanups, 1988-1996

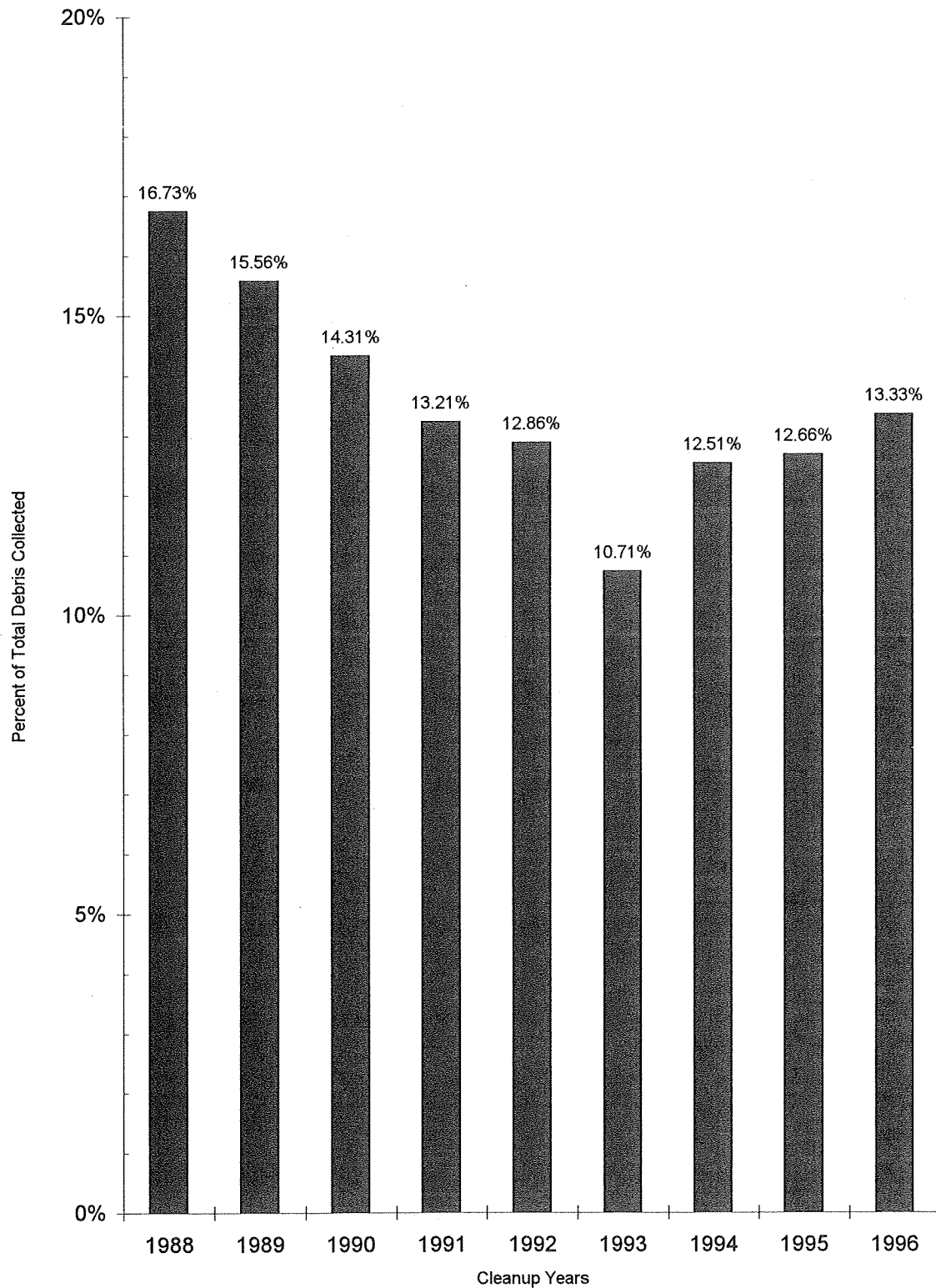
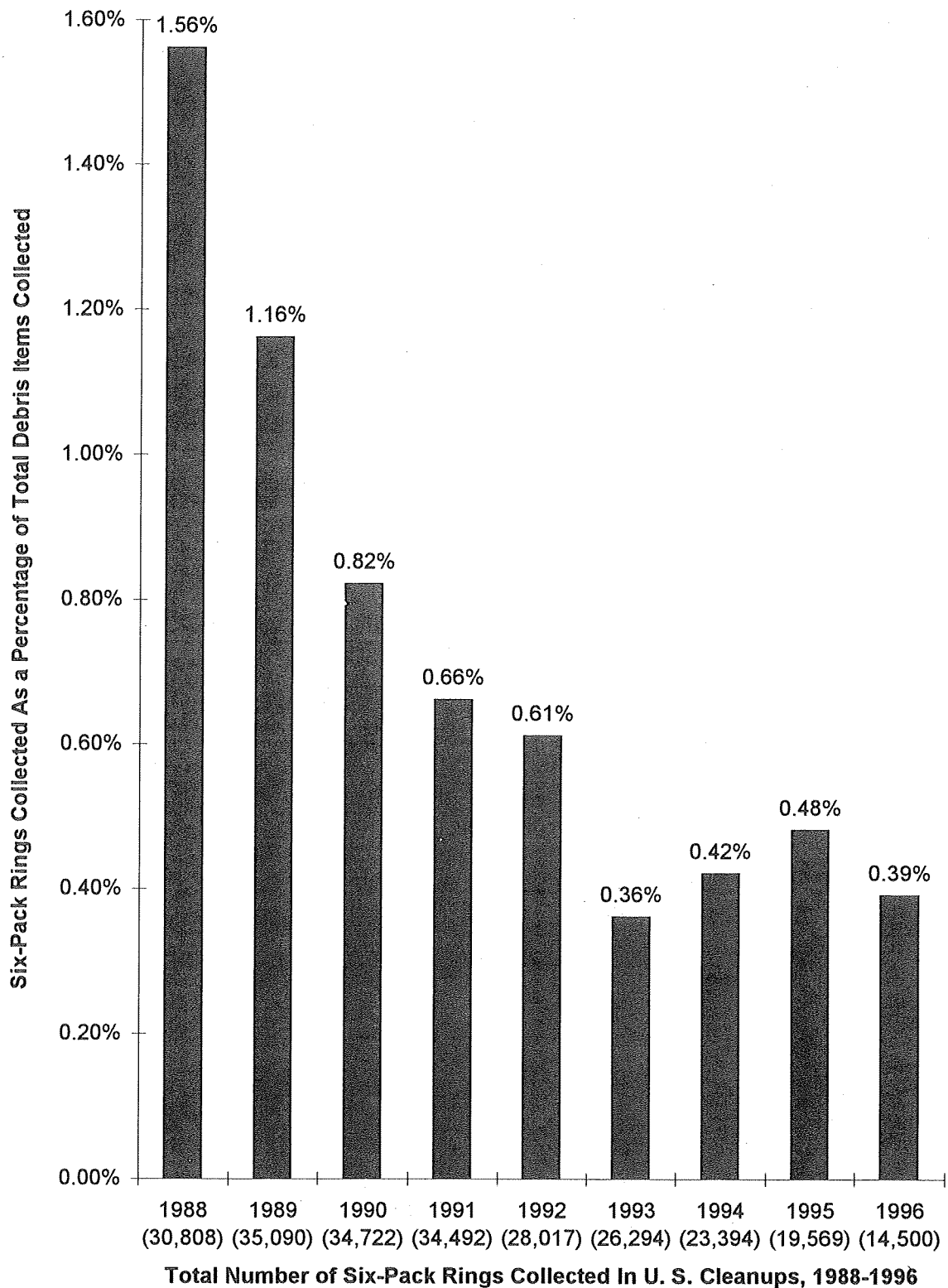


FIGURE 16. Six-Pack Holders: Number Collected and Percent of Total Debris, 1988-1996



TRENDS IN SOURCES OF MARINE DEBRIS

Ocean-based Sources of Debris

● Trends in Recreational Fishing and Boating Wastes

Nationally, recreational fishing and boating wastes held nearly steady in 1996 with 1.0%, compared to 0.98% in 1995 (Figure 17 and Table 10). Monofilament line continues to be the number one item involved in animal entanglements. Nearly 26,000 pieces of line were recovered in the 1996 Cleanup.

● Trends in Commercial Fishing Wastes

Commercial fishing wastes make up a significant portion of ocean-based debris. In 1996 they increased to 2.92% of total debris (Figure 17 and Table 10), up from 2.86% in 1995 and 2.57% in 1994. The North Pacific, Gulf of Maine, and Gulf of Mexico regions, all centers for major fishing industries, continue to report the highest concentrations of commercial fishing wastes.

● Trends in Galley-Type Wastes

The lowest level of galley-type wastes was reported in 1993 (1.96%). Since then, the percentage has increased slightly each year, reaching 2.60% in the 1996 Cleanup (Figure 17 and Table 10).

● Trends in Operational Wastes

In 1996, the percentage of operational wastes dropped to an all-time low of 0.95% (Figure 17 and Table 10), from 1.11% in 1995 and 0.99% in 1994.

TABLE 10. Percentages for Ocean-Based Sources of Marine Debris in U.S. Coastal Cleanups, 1988-1996

Type/Source of Debris	1988	1989	1990	1991	1992	1993	1994	1995	1996
Comm. Fishing Wastes	4.32%	4.85%	3.62%	3.24%	2.99%	1.95%	2.57%	2.86%	2.92%
Rec. Fish./Boating Wastes	1.14%	1.03%	1.06%	0.95%	1.14%	0.88%	0.85%	0.98%	1.00%
Galley-Type Wastes	7.83%	6.09%	3.33%	2.40%	2.52%	1.96%	2.14%	2.51%	2.60%
Operational Wastes	2.02%	1.60%	1.41%	1.38%	1.25%	1.51%	0.99%	1.11%	.95%

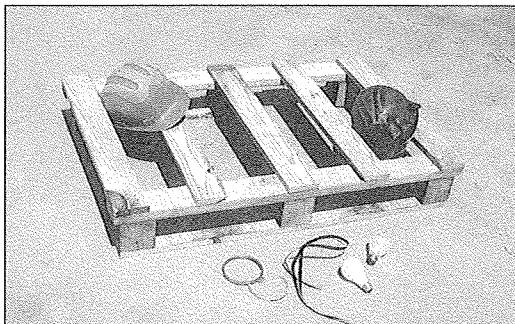
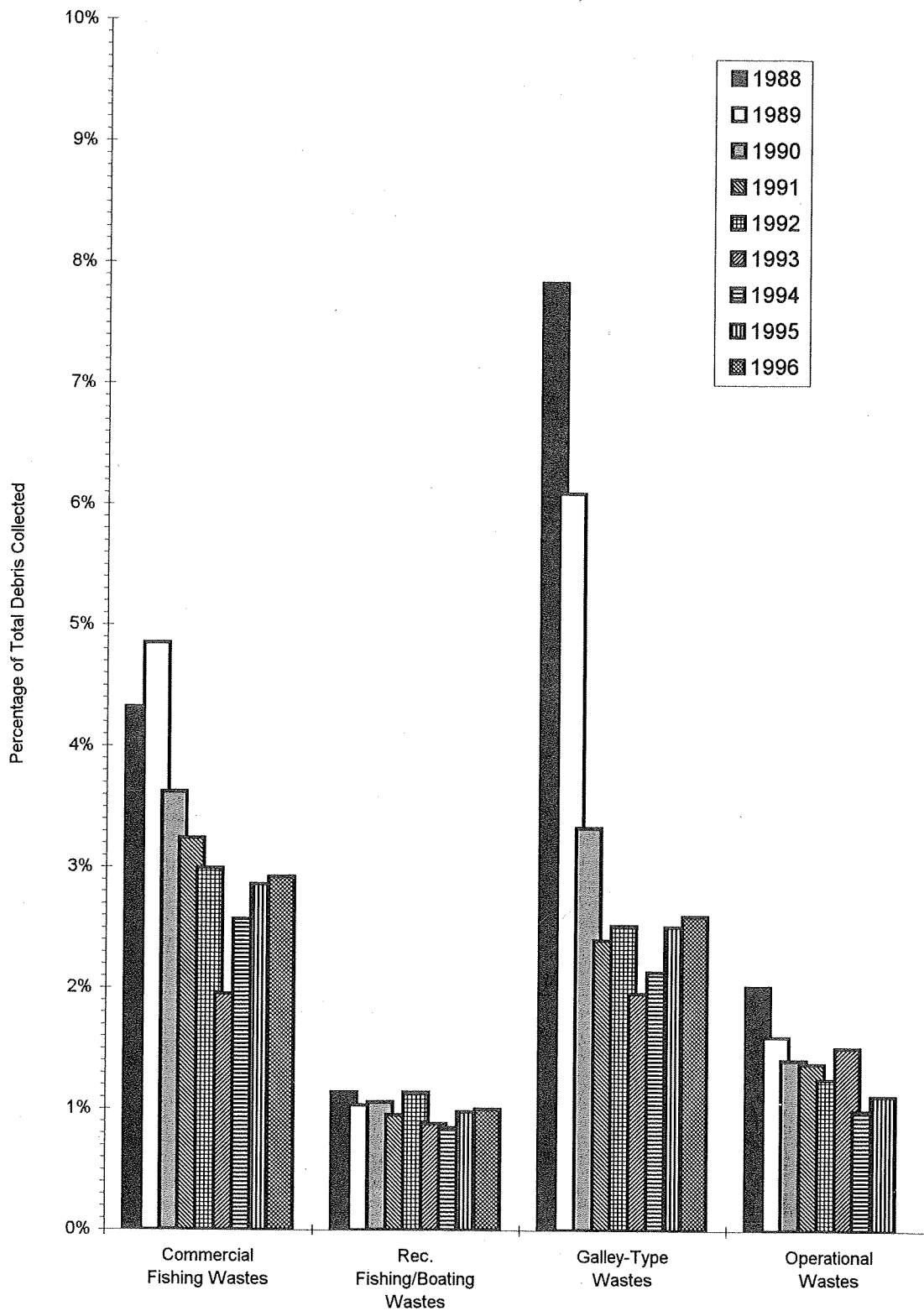


FIGURE 17. Ocean-Based Sources of Debris Reported from U.S. Coastal Cleanups, 1988-1996



Land-based Sources of Debris

● Trends in Sewage-Associated Wastes

Sewage-associated wastes have hovered steadily around the 0.50% mark since the Cleanup began. The 1996 result of 0.53% is a slight increase over 0.44% in 1995 and 0.42% in 1994 (Figure 18 and Table 11). The lowest percentage (0.39%) was reported in 1993.

● Trends in Medical Wastes

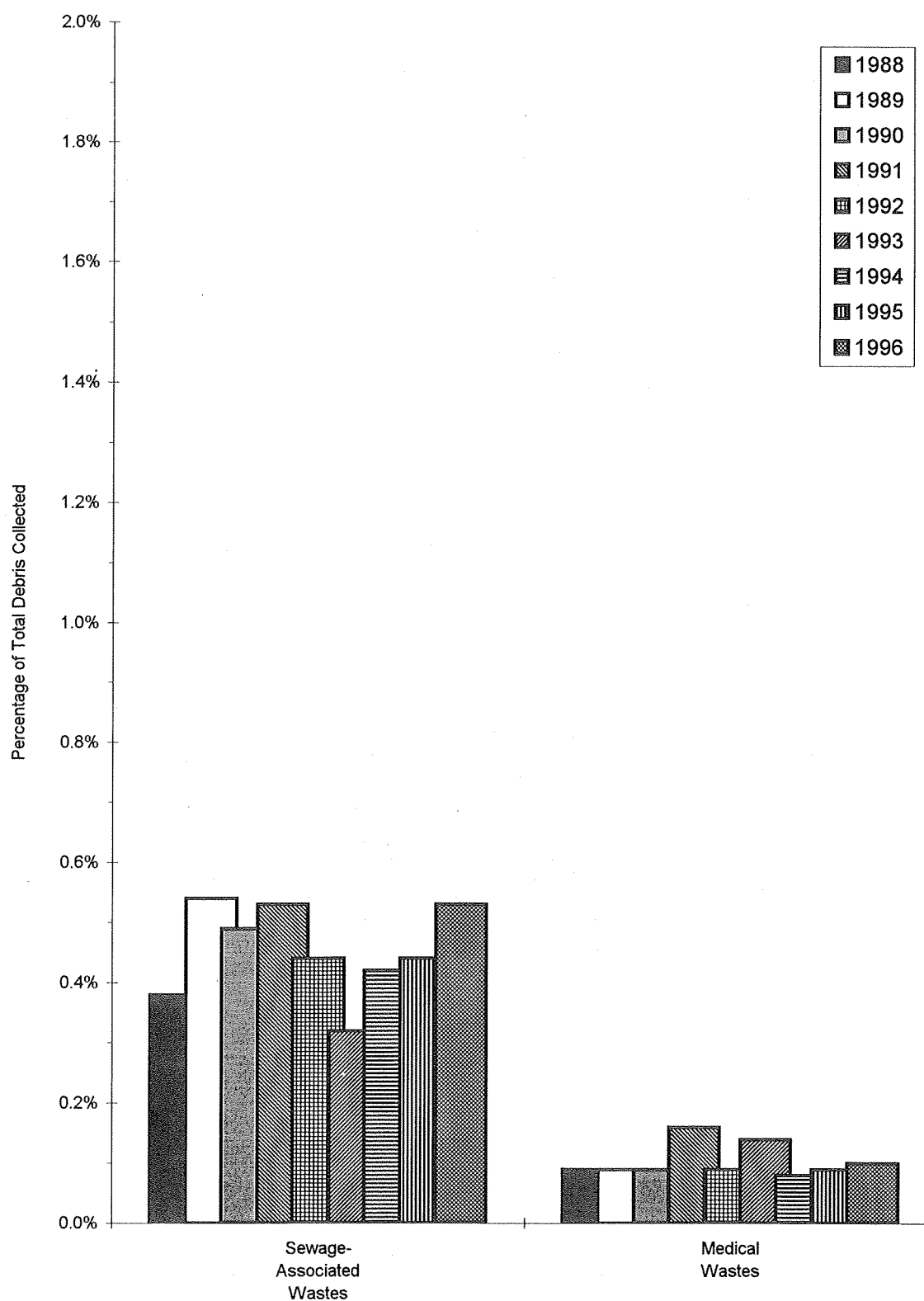
Though small as a percentage of total debris, medical wastes present a great risk of potential harm to human health and safety. The percentage has held relatively steady over the years, with 0.10% in 1996 (Figure 18 and Table 11), 0.09% in 1995 and 0.08% (lowest overall) in 1994. The highest level was 0.16% in 1991.

TABLE 11. Percentages for Land-Based Sources of Marine Debris in U.S. Coastal Cleanups, 1988-1996

Type/Source of Debris	1988	1989	1990	1991	1992	1993	1994	1995	1996
Sewage-Assoc. Wastes	0.38%	0.54%	0.49%	0.53%	0.44%	0.32%	0.42%	0.44%	0.53%
Medical Wastes	0.09%	0.09%	0.09%	0.16%	0.09%	0.14%	0.08%	0.09%	0.10%



FIGURE 18. Land-Based Sources of Debris Reported from U.S. Coastal Cleanups, 1988-1996



Foreign Sources of Marine Debris

Oceans do not recognize political, cultural, or geographic boundaries. Neither does marine debris. It travels wherever the winds and currents carry it after someone has put it into the water. Traditionally, the primary types of marine debris in the United States have been Clarisol bleach bottles from Mexico, and fishing gear from Japan and Canada. (Cleanup volunteers identify foreign debris through labels or other markings.)

Some of the other foreign debris collected over the years could have been carried by boats offshore, but judging from its makeup—largely personal care products or food and beverage containers—it is also highly possible that these “foreign” debris items were instead purchased in the United States and improperly discarded, like so much of the other debris.

Nevertheless, the presence of foreign trash is an important illustration of the global nature of the marine debris problem.

TRENDS IN THE IMPACTS OF MARINE DEBRIS ON WILDLIFE

In 1996, volunteers in 20 states reported an all-time high of 132 incidents involving 187 animals entangled by marine debris (Table 12). This continues the dramatic 1995 increase of 111 over 54 in 1994. Monofilament line is by far the most dangerous debris item encountered by wildlife, and has been the single most prevalent debris item in entanglements since 1988, accounting for 266 (more than 36%) of 730 total incidents. Rope, plastic bags, plastic netting, plastic pieces, fishing hooks/lures, six-pack rings, and ribbons/string account for an additional 47.8% of all incidents (Table 13 and Figure 19).



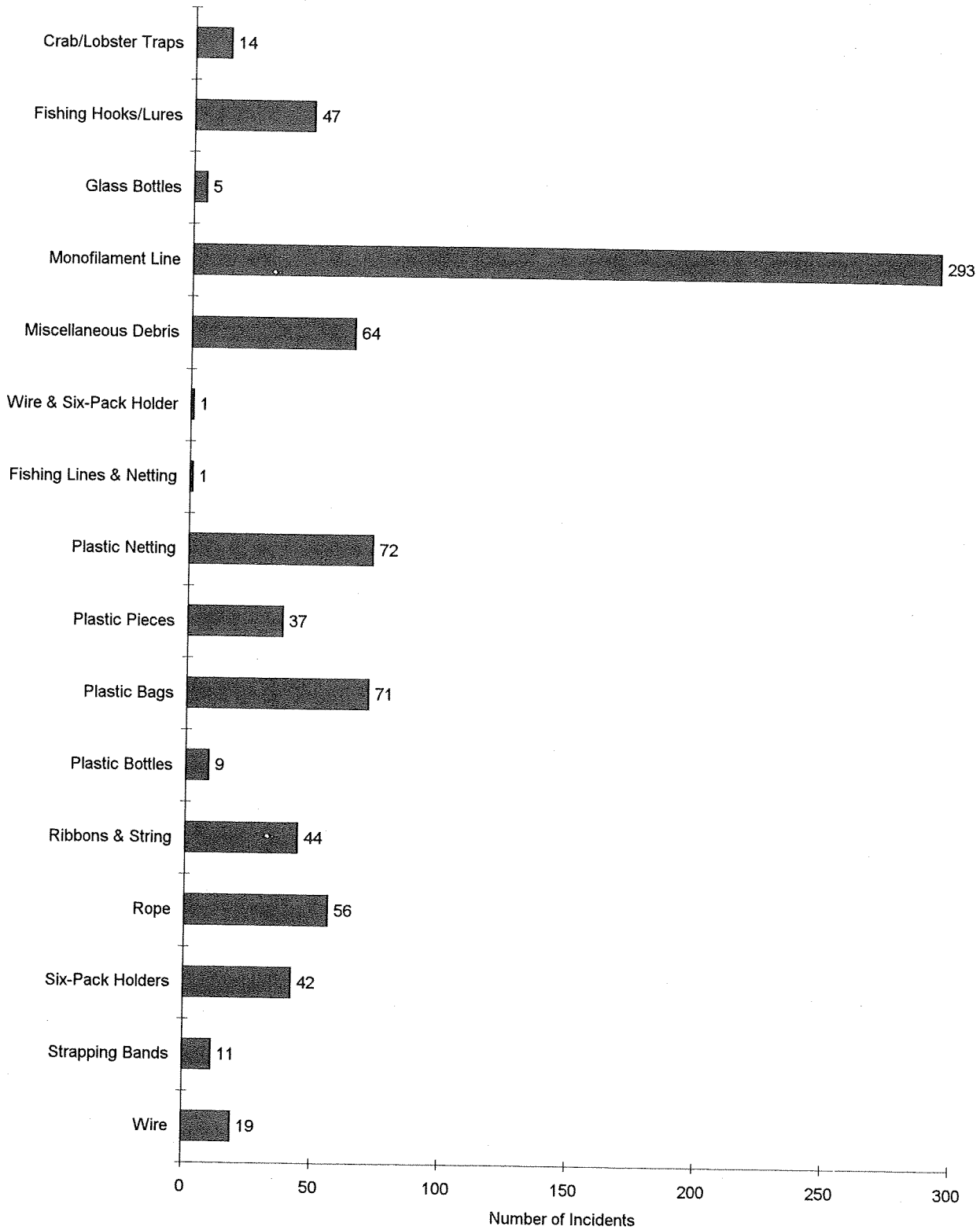
TABLE 12. Entanglement Incidents and Debris Items, 1988-1996

	1988	1989	1990	1991	1992	1993	1994	1995	1996
Number of Incidents	39	60	116	114	59	46	54	111	132
Number of States Reporting	12	14	20	24	19	18	16	22	20

TABLE 13. Entanglement Incidents and Debris Items, 1988-1996

Entanglement Item	1988	1989	1990	1991	1992	1993	1994	1995	1996	Total
Crab/Lobster Traps	2		4	4			1	1	2	14
Fishing Hooks/Lures	1	4	8	15	2	1		5	7	43
Glass Bottles			2	1		1			1	5
Monofilament Line	20	20	37	34	24	22	25	36	51	269
Miscellaneous Debris		4	13	8	6	2	3	11	7	54
Wire & Six-Pack Holders								1		1
Fishing Nets/Gear								1	1	2
Plastic Bags	3	4	9	9	3	4	5	11	16	64
Plastic Bands		1	1	4	3				1	10
Plastic Netting	1	4	11	9	6	2	4	10	15	62
Plastic Pieces	2	6	9	9	1	2	4	4	6	43
Plastic Bottles		3	3	1				2		9
Ribbons/String	3	4	2	6	2	2	3	11	9	42
Rope	3	5	7	11	3	5	6	9	5	54
Six-Pack Holders	3	3	5	3	7	5	3	5	7	41
Wire	1	2	5		2			4	4	18
TOTAL	39	60	116	114	59	46	54	111	132	731

FIGURE 19. Entangling Forms of Debris, 1988-1996



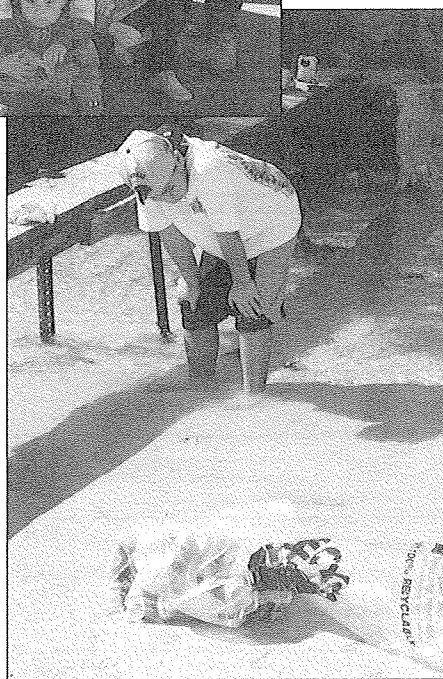
APPENDICES



Maine

"I wish there would be more people helping because it is a big job."

cleanup volunteer, Texas



Puerto Rico

APPENDIX 1. Data Card Used by Cleanup Volunteers (front)

ITEMS COLLECTED

You may find it helpful to work with a buddy as you clean the area, 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	<input type="checkbox"/>
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"/>		<input type="checkbox"/>

FOAMED PLASTIC

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 foamed plastic (specify)	<input type="checkbox"/>
meat trays	<input type="checkbox"/>		<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"/>		<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 woods (specify)	<input type="checkbox"/>
lumber pieces	<input type="checkbox"/>		<input type="checkbox"/>

CLOTH

clothing/pieces

Remember to turn the card over and fill out your name and address and to record sources and entangled wildlife!

APPENDIX 1. Data Card Used by Cleanup Volunteers (back)

INTERNATIONAL COASTAL CLEANUP DATA CARD

Thank you for participating in the International Coastal Cleanup and completing this data card. This form is designed for international use, therefore, not all listings may apply to your area. Data collected since 1986 by the Center for Marine Conservation (CMC) has been used in CMC's International Marine Debris Database and annual Cleanup Reports to help develop solutions and stop the dumping of trash into marine/aquatic areas. By completing the section below, you will be able to receive this and other information on citizen activities on marine conservation. Complete the following information and return this card to your area coordinator or mail it to CMC at the address at the bottom of this card.

Type of cleanup: Shoreline/Beach or Underwater

Zone Name/Location Cleaned _____ Nearest City/County _____

Today's Date: Month _____ Day _____ Year _____ Name of Coordinator _____

Name _____ Affiliation _____

Address _____ Phone (____) _____ Age _____

City _____ State _____ Country _____ Zip Code _____

Do you currently receive the International Coastal Cleanup newsletter, Coastal Connection? Yes No
 If not, would you like to be placed on the mailing list? Yes (please list address above) No

Would you like to receive information on the Center for Marine Conservation and other ways to help protect our oceans and waterways? Yes No

Number of people working together on this card _____ Estimated distance of area cleaned _____

Number of trash bags filled _____ Total estimated weight _____

SAFETY TIPS

1. Do not go near any large barrels or drums.
2. Be careful with sharp objects and syringes.
3. Wear gloves and closed-toe shoes.
4. Stay out of the dunes and natural areas.
5. Watch out for wildlife.
6. Don't lift anything too heavy.

WE WANT YOU TO BE SAFE

ENTANGLED ANIMALS (Dead or Alive) *Be as specific as you can.*

Type of Animal	Form of Entangling Debris	Comments

FOREIGN LABELS: Please list all items with foreign labels or other markings to help us identify the item's origin such as cruise line names, military identification or debris with names and/or address of shipping, fishing, or oil/gas exploration companies. Please do not list items that are common to your local area, i.e. imported water or beer.

Label or other markings	Type of item
Example: ABC Shipping Company	plastic strapping band

What was the most peculiar item you collected? _____

Comments/Observations during the cleanup _____

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

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

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

CENTER FOR MARINE CONSERVATION
 Atlantic Regional Office
 306 A Buckroe Ave.
 Hampton, VA 23664
 USA



APPENDIX 2. U.S. Dirty Dozen, Land Cleanups

Debris Items	Total Number Reported	Percent of Total Debris Collected
1. Cigarette Butts	603,186	16.29%
2. Plastic Pieces	238,326	6.44%
3. Foamed Plastic Pieces	204,651	5.53%
4. Plastic Food Bags/Wrappers	204,056	5.51%
5. Plastic Caps/Lids	176,776	4.78%
6. Paper Pieces	157,480	4.25%
7. Glass Pieces	138,685	3.75%
8. Plastic Straws	130,198	3.52%
9. Metal Beverage Cans	124,243	3.36%
10. Glass Beverage Bottles	123,536	3.34%
11. Plastic Beverage Bottles	119,133	3.22%
12. Foamed Plastic Cups	95,024	2.57%
Total Dirty Dozen	2,315,294	62.55%
13. Metal Bottles Caps	83,931	2.27%
14. Plastic Cups/Utensils	73,467	1.98%
15. Lumber Pieces	61,988	1.67%
16. Plastic Rope	61,787	1.67%
17. Other Plastic Bags	61,253	1.65%
18. Foamed Plastic Packaging	47,727	1.29%
19. Clothing/Pieces	43,178	1.17%
20. Plastic Trash Bags	40,661	1.10%
Totals	2,789,286	75.35%

APPENDIX 3. U.S. Dirty Dozen, Underwater Cleanups

Debris Items	Total Number Reported	Percent of Total Debris Collected
1. Metal Beverage Cans	5,891	10.63%
2. Cigarette Butts	5,573	10.06%
3. Glass Beverage Bottles	4,097	7.39%
4. Plastic Beverage Bottles	2,570	4.64%
5. Plastic Pieces	2,494	4.50%
6. Plastic Caps/Lids	2,327	4.20%
7. Foamed Plastic Pieces	2,239	4.04%
8. Glass Pieces	1,982	3.58%
9. Plastic Cups/Utensils	1,869	3.37%
10. Plastic Food Bags/Wrappers	1,706	3.08%
11. Paper Pieces	1,477	2.67%
12. Plastic Straws	1,404	2.53%
Total Dirty Dozen	33,629	60.69%
13. Foamed Plastic Cups	1,370	2.47%
14. Clothing/Pieces	1,067	1.93%
15. Foamed Plastic Packaging	1,011	1.82%
16. Metal Bottles Caps	945	1.71%
17. Lumber Pieces	904	1.63%
18. Metal Pieces	861	1.55%
19. Fishing Line	730	1.32%
20. Plastic Trash Bags	559	1.01%
Total	41,076	74.13%

APPENDIX 4. 1996 U.S. Marine Debris Raw Data Summary

DEBRIS ITEMS	AK	AL	AR	AZ	CA	CO	CT	DC	DE	FL	GA	GU	HI	IA	ID	IL
PLASTIC: Food Bags/Wrappers	56	3,457	0	393	41937	184	411	162	3812	32211	710	963	10062	0	0	0
Salt Bags	0	40	0	84	911	0	0	2	21	514	6	25	518	0	0	0
Trash Bags	6	635	0	273	8530	103	124	9	622	6454	132	226	1751	0	0	3
Other Bags	14	874	0	368	10000	182	170	55	1275	8801	155	261	3155	0	0	0
Plastic Beverage Bottles	28	2,903	1	1436	11375	231	332	11	3445	21461	839	792	4955	31	5	167
Bleach Bottles	1	206	0	11	816	5	12	4	290	1428	157	42	446	0	0	0
Milk/Water Gallon Jugs	0	647	0	217	2252	11	27	11	746	3321	266	148	1019	2	0	5
Oil/Lube Bottles	1	382	0	29	1752	37	11	0	477	1733	121	40	359	8	0	2
Other Plastic Bottles	3	603	0	305	4146	33	93	9	1007	6242	335	130	1920	0	0	0
Buckets	1	143	1	9	1089	6	44	13	218	1225	53	50	351	0	0	0
Caps/Lids	16	3,634	0	1030	30011	54	604	74	4347	30669	725	288	5864	26	0	163
Cigarette Butts	443	10,923	0	1745	153983	656	2511	8	8638	111422	2393	1478	40709	100	27	315
Cigarette Lighters	6	440	0	91	5376	127	83	15	659	4200	235	92	1268	1	0	5
Cups/Utensils	16	1,246	0	658	10344	25	348	3	2045	13908	365	698	3693	0	0	70
Diapers	0	123	5	324	1155	123	6	0	83	1128	90	192	608	1	0	3
Fishing Line	226	742	1	265	3163	212	254	0	487	5318	50	83	2763	4	100	1
Fishing Floats/Lures	33	320	8	54	1056	102	24	0	369	2113	65	48	747	1	2	3
Fishing Nets	1	83	0	5	424	46	15	0	93	1062	34	40	526	0	0	0
Hard Hats	0	6	0	1	38	0	0	0	9	73	2	3	39	0	0	0
Light Sticks	0	163	0	3	1320	0	0	0	154	2057	11	87	442	0	0	0
Plastic Pieces	27	3,608	0	268	44720	66	780	114	5153	34087	711	1119	10551	0	0	182
Pipe Thread Protectors	0	70	0	4	503	0	22	0	56	502	5	18	314	0	0	0
Rope	20	832	0	207	3618	1	123	0	652	7630	318	101	1927	0	0	3
Long Sheeting	2	67	0	14	323	0	4	10	72	422	19	3	183	0	0	0
Short Sheeting	0	121	0	20	864	15	30	0	118	922	37	17	436	0	0	0
Six-Pack Holders	2	253	0	287	2040	231	21	6	280	2617	17	298	1057	3	1	7
Strapping Bands	13	223	0	15	2725	29	31	1	296	2504	31	37	552	0	0	63
Straws	20	2,591	0	692	23045	27	661	22	2727	29619	1000	146	4929	0	2	203
Syringes	0	18	0	15	720	0	6	1	91	491	2	5	134	0	0	2
Tampon Applicators	0	88	0	55	1154	13	62	0	379	763	15	8	243	0	0	62
Toys	4	308	0	22	2543	0	51	10	469	2413	56	98	576	0	0	18
Vegetable Sacks	4	96	0	49	1681	142	12	0	92	841	29	25	407	0	0	2
Write Protection Rings	1	41	0	10	1167	0	9	0	109	1284	22	10	66	0	0	0
Other Plastic	65	1,278	0	105	10711	11	426	37	1690	11935	308	393	3052	33	0	103
FOAMED PLASTIC: Buoys	1	246	0	1	718	3	80	0	92	2146	140	33	232	0	0	0
FOAMED PLASTIC: Cups	25	1,851	1	854	17915	15	304	10	1535	17641	524	556	4559	0	7	139
Egg Cartons	1	95	0	8	474	13	0	0	25	569	70	31	158	0	0	0
Fast Food Containers	6	499	0	335	5761	92	57	6	391	4852	93	213	2339	0	4	27
Meat Trays	7	262	0	316	1410	5	14	4	225	1262	126	92	1053	0	0	6
Packaging Materials	23	492	0	123	14406	46	116	15	614	7594	122	130	1887	0	0	147
Foamed Pieces	37	3,766	1	448	50502	37	761	191	2806	29552	761	857	7067	1	0	209
Foamed Plates	9	431	0	701	2797	0	68	9	240	3042	155	408	1984	0	0	0
Other Foamed Plastic	0	538	0	0	6634	0	0	0	416	5846	0	166	935	0	0	0

APPENDIX 4. 1996 U.S. Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	AK	AL	AR	AZ	CA	CO	CT	DC	DE	FL	GA	GU	HI	IA	ID	IL
GLASS: Beverage Bottles	35	2,761	1	1,886	14,220	125	289	91	2,206	32,497	746	1,674	6,884	43	8	155
Food Jars	2	225	1	144	1,326	65	34	8	99	1,934	92	160	567	0	2	2
Other Glass Bottles/Jars	4	249	0	82	2,086	166	16	11	330	31,477	104	260	1,124	0	0	37
Fluorescent Light Tubes	0	27	0	1	146	0	1	1	10	369	5	125	88	0	0	0
Light Bulbs	0	201	0	4	868	0	3	3	49	699	95	28	355	0	0	2
Glass Pieces	74	1,476	0	738	30,871	182	389	5	35,688	133,228	162	2,620	9,122	87	0	126
Other Glass	0	94	0	71	2,361	10	70	0	217	1,441	23	97	917	2	0	14
RUBBER: Balloons	1	584	0	55	5,836	0	98	1	619	32,477	151	14	781	0	0	73
Condoms	0	55	0	62	1,819	0	16	2	98	1,180	50	11	359	0	1	8
Rubber Gloves	1	339	0	11	1,893	1	20	7	99	15,222	68	19	454	0	0	2
Tires	5	84	1	23	1,024	6	5	2	294	10,734	49	87	420	0	2	1
Other Rubber	18	379	2	47	5,329	4	90	4	465	40,134	94	302	1,947	3	0	43
METAL: Bottles Caps	25	1,320	0	1,268	15,930	159	161	0	993	20,983	473	367	5,670	36	7	55
Aerosol Cans	3	208	0	38	1,093	33	5	0	378	12,659	188	180	559	0	0	13
Beverage Cans	101	3,619	1	1,589	10,627	295	459	0	3,004	27,688	1,822	3,967	6,618	100	17	136
Food Cans	8	200	0	94	1,531	1	43	0	295	15,277	87	139	739	0	3	9
Other Cans	3	145	0	26	977	8	14	0	91	12,066	41	85	311	1	0	1
Metal Crab/Lobster Traps	3	88	0	0	205	1	6	0	13	225	56	5	35	0	0	0
55 Gallon Rusty Drums	0	37	1	0	304	2	1	6	28	182	11	55	135	0	3	1
55 Gallon New Drums	0	2	0	2	49	0	0	15	13	34	1	5	17	0	0	0
Metal Pieces	50	547	0	84	5,751	38	81	6	579	42,767	74	423	1,707	0	53	86
Pull Tabs	9	408	0	715	2,972	117	98	1	245	4,228	198	99	2,165	23	0	3
Wire	25	300	0	45	2,526	93	19	0	180	18,011	39	138	802	0	1	41
Other Metal	52	458	0	57	8,793	37	121	11	401	44,944	144	324	1,591	3	10	52
PAPER: Bags	5	346	0	267	6,620	52	116	12	686	48,611	115	88	2,044	0	0	5
Cardboard	8	479	0	151	4,599	4	98	7	507	45,811	88	206	1,783	0	0	11
Cartons	2	187	0	157	2,665	3	39	16	372	38,244	40	162	1,245	4	0	0
Paper Cups	19	667	0	485	6,436	41	142	0	645	65,866	112	193	2,872	0	3	17
Newspapers/Magazines	12	133	0	325	6,082	48	36	175	310	34,277	70	69	1,887	0	0	2
Paper Plates	62	2,373	1	578	48,743	72	629	3	3,567	225,734	349	570	10,557	0	0	116
Paper Plats	1	170	0	372	2,474	37	17	6	214	17,399	34	124	1,692	0	0	2
Other Paper	15	720	0	53	8,637	1	68	11	577	52,883	167	200	2,649	0	0	153
WOOD: Crab/Lobster Traps	0	16	0	0	154	0	3	0	22	166	7	12	29	0	0	1
Crates	0	16	0	1	209	3	0	0	80	275	11	6	65	0	0	0
Lumber Pieces	17	2,051	0	98	10,966	31	162	3	1,305	123,111	315	224	20,592	2	1	24
Pallets	0	37	0	1	568	4	8	3	63	593	6	31	156	0	0	0
Other Wood	3	366	0	10	4,746	4	97	182	364	3,222	109	69	693	0	0	2
CLOTH: Clothing/Pieces	48	854	11	385	7,186	28	164	16	802	75,104	202	468	2,619	2	3	26
GRAND TOTALS	1,729	67,565	37	21,775	714,731	4,554	12,325	1,420	71,113	633,178	17,703	24,056	199,553	517	262	3,129
GRAND TOTALS, w/o Bufts	1,286	56,642	37	20,030	560,748	3,898	9,814	1,412	62,475	521,756	15,310	22,578	158,844	417	235	2,814

APPENDIX 4. 1996 U.S. Marine Debris Raw Data Summary, cont.

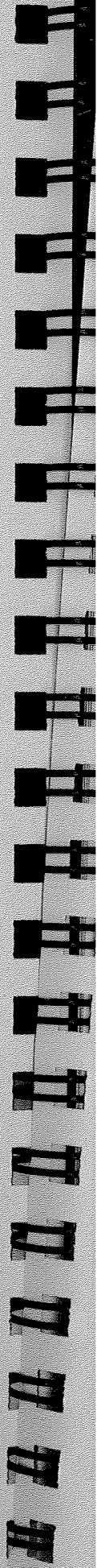
DEBRIS ITEMS	IN	KS	LA	MA	MD	ME	MI	MN	MO	MS	MT	NC	ND	NE	NH
PLASTIC: Food Bags/Wrappers	0	0	3030	8404	304	9444	4236	1386	0	3095	59	9895	0	0	3,295
Salt Bags	9	0	41	117	0	188	22	25	1	32	0	151	0	0	11
Trash Bags	0	1	912	1048	15	1368	260	275	6	766	21	1943	21	1	363
Other Bags	5	1	991	1731	44	3054	511	532	17	913	24	3143	14	89	657
Plastic Beverage Bottles	41	68	3605	4104	244	4102	1049	871	56	1770	97	14756	38	153	1,611
Bleach Bottles	2	0	507	657	28	896	78	35	7	104	1	689	0	0	86
Milk/Water Gallon Jugs	0	5	1564	1004	17	1238	304	95	4	399	9	1388	0	3	204
Oil/Lube Bottles	0	0	558	480	38	1354	78	46	6	218	5	1339	0	2	148
Other Plastic Bottles	2	11	1373	1229	56	1032	426	184	8	507	48	2770	14	36	289
Buckets	9	25	186	214	6	438	184	49	1	128	5	603	0	3	78
Caps/Lids	28	41	4646	7063	106	6420	5752	1346	68	3332	94	6589	51	114	1,939
Cigarette Butts	4	73	4281	16642	584	22478	33787	8383	145	12631	361	16137	338	150	16,441
Cigarette Lighters	9	1	481	604	17	950	338	202	14	474	10	939	1	6	195
Cups/Utensils	51	40	1843	2732	65	2558	1250	354	21	1234	44	3816	3	13	791
Diapers	0	0	170	155	36	146	111	36	0	74	11	586	0	10	34
Fishing Line	7	6	320	796	46	838	255	108	43	209	15	964	23	18	272
Fishing Floats/Lures	22	0	369	383	46	422	190	131	6	167	13	866	19	20	88
Fishing Nets	0	0	109	933	4	1110	53	15	1	80	28	176	0	0	225
Hard Hats	0	0	170	15	0	8	8	7	0	6	0	20	0	0	7
Light Sticks	1	0	423	195	5	204	138	8	0	170	0	171	0	0	50
Plastic Pieces	39	3	4534	8229	114	10652	12978	2774	85	4494	25	7217	199	51	4,698
Pipe Thread Protectors	1	1	40	76	7	244	57	19	1	60	0	67	1	0	81
Rope	7	0	1344	5181	16	9380	525	114	11	681	72	1493	5	2	3,692
Long Sheeting	2	0	51	185	1	382	33	43	4	41	2	212	0	0	67
Short Sheeting	0	0	180	298	0	598	66	56	1	62	5	408	0	2	139
Six-Pack Holders	12	1	382	278	12	336	202	62	16	347	8	615	0	30	96
Strapping Bands	10	1	243	619	10	1398	311	319	9	152	29	407	3	0	317
Straws	3	1	2694	4287	78	1866	5071	865	129	2389	40	2541	12	14	961
Syringes	0	0	141	54	2	74	84	31	18	57	1	93	0	0	35
Tampon Applicators	1	0	164	1118	3	612	770	84	22	96	0	200	2	0	72
Toys	0	4	336	771	18	590	636	69	11	165	8	616	7	3	224
Vegetable Sacks	0	0	90	266	5	350	48	26	2	121	0	167	0	1	29
Write Protection Rings	0	0	84	481	5	254	209	40	10	66	31	100	7	2	48
Other Plastic	13	12	1708	3055	34	4534	4601	742	42	1138	50	2122	0	45	1,378
FOAMED PLASTIC: Buoys	1	1	273	683	14	2170	26	16	0	153	0	330	0	0	293
Foamed Cups	2	47	2312	3258	159	4774	1233	1309	57	1588	32	6995	50	170	1,290
Egg Cartons	0	0	264	64	8	124	30	6	0	74	1	226	0	0	14
Fast Food Containers	0	2	665	969	40	1028	398	301	6	497	16	2158	3	22	331
Meat Trays	2	0	429	143	14	296	90	29	2	214	2	440	10	7	83
Packaging Materials	0	0	542	1372	53	2904	1343	888	41	474	3	1827	1	0	688
Foamed Pieces	20	5	3668	7478	120	12348	14219	2137	213	3412	16	6400	41	2	3,952
Foamed Plates	0	0	427	430	12	912	460	55	3	246	5	1258	17	10	101
Other Foamed Plastic	0	0	911	1088	0	1904	680	0	0	0	0	1483	0	0	708

APPENDIX 4. 1996 U.S. Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	IN	KS	LA	MA	MD	ME	MI	MN	MO	MS	MT	NC	ND	NE	NH
GLASS: Beverage Bottles	64	66	2153	3856	323	3762	607	661	237	1876	93	14284	0	121	1,900
Food Jars	0	5	330	443	21	430	49	65	2	110	46	1259	0	6	85
Other Glass Bottles/Jars	2	7	598	671	66	736	84	57	16	233	20	1983	1	15	162
Fluorescent Light Tubes	0	0	122	25	0	32	9	2	1	24	0	207	0	0	5
Light Bulbs	1	0	352	79	0	114	71	19	2	186	0	293	0	0	16
Glass Pieces	6	2	1488	7258	242	11944	1599	1534	448	3107	80	4928	2	7	4,292
Other Glass	3	0	186	386	0	1038	191	54	4	246	6	618	0	2	253
RUBBER: Balloons	5	0	270	1456	14	882	1543	155	0	285	3	668	1	4	244
Condoms	0	0	258	275	9	236	63	36	3	115	0	175	0	0	51
Rubber Gloves	0	0	307	390	5	1332	130	30	0	222	0	231	0	2	204
Tires	6	5	210	347	111	646	129	84	9	112	5	911	0	2	308
Other Rubber	22	3	426	876	9	2784	537	174	20	291	25	787	26	2	1,167
METAL: Bottles Caps	47	6	2344	2296	165	2088	915	537	75	2196	76	3663	54	33	642
Aerosol Cans	0	1	422	304	27	348	93	62	2	142	0	1054	3	78	124
Beverage Cans	92	193	3404	3847	280	4262	879	1622	152	1874	411	11726	101	100	3,730
Food Cans	2	2	178	269	35	460	62	88	3	147	44	1338	1	14	116
Other Cans	0	0	144	157	3	346	71	126	1	119	3	501	0	1	329
Metal Crab/Lobster Traps	0	0	28	328	1	674	4	1	0	24	0	125	0	0	532
55 Gallon Rusty Drums	0	0	28	98	2	216	16	16	1	25	0	155	0	12	60
55 Gallon New Drums	0	0	3	10	0	14	1	15	0	17	0	63	0	0	6
Metal Pieces	43	3	693	1496	16	2096	592	498	64	571	20	1638	43	12	1,464
Pull Tabs	0	2	595	580	86	678	209	131	21	668	24	1435	18	12	212
Wire	0	3	216	327	12	980	168	292	18	209	13	656	3	13	356
Other Metal	0	4	390	1474	28	2150	644	517	43	630	23	1291	17	19	673
PAPER: Bags	0	7	712	886	34	1264	345	299	8	755	6	2087	1	30	370
Cardboard	0	6	385	981	47	1104	319	353	10	683	4	1416	8	7	923
Cartons	0	1	319	674	11	602	189	246	26	316	11	975	1	11	315
Paper Cups	0	13	941	1571	49	1590	381	451	134	748	6	2512	13	23	571
Newspapers/Magazines	3	0	317	637	24	578	209	201	4	290	17	667	0	23	259
Paper Pieces	16	6	2531	5605	195	5832	4795	2115	67	3195	59	7403	239	51	3,631
Paper Plates	0	0	210	478	12	492	127	117	0	177	0	1104	0	7	134
Other Paper	20	11	551	1310	39	1866	1204	853	22	544	16	1457	0	56	815
WOOD: Crab/Lobster Traps	0	0	19	146	1	326	0	1	0	9	0	33	0	0	122
Crates	0	0	43	31	0	154	8	2	2	13	0	57	0	0	16
Lumber Pieces	16	1	1345	2590	59	3676	611	196	20	1071	35	2284	1	2	1,192
Pallets	5	0	38	120	0	134	34	13	1	24	0	83	0	0	72
Other Wood	5	0	364	816	2	948	370	118	5	547	11	855	2	7	492
CLOTH: Clothing/Pieces	5	10	834	1755	97	2286	640	399	38	686	60	2211	14	21	1,114
GRAND TOTALS	666	707	70,815	133,737	4,411	175,078	110,998	36,213	2,546	65,322	2,308	177,449	1,429	1,672	73,038
GRAND TOTALS, w/o Buifs	662	634	66,534	117,095	3,827	152,600	77,211	27,830	2,401	52,691	1,947	161,312	1,091	1,522	56,597

APPENDIX 4. 1996 U.S. Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	NJ	NM	NV	NY	OH	OK	OR	PA	PR	RI	SD	SC	TN	TX	USVI
PLASTIC: Food Bags/Wrappers	7,412	3	0	19,219	498	4	6,536	0	386	6,401	20	6,346	194	16,150	940
Salt Bags	31	0	0	268	1	0	68	0	59	42	0	124	0	430	48
Trash Bags	1,209	0	64	3,498	26	6	1,775	25	321	633	0	1,346	2	5,315	313
Other Bags	2,064	0	10	5,291	74	2	1,462	116	126	1,693	0	2,191	104	9,704	462
Plastic Beverage Bottles	4,120	22	120	12,145	624	232	1,534	210	723	2,295	16	3,974	172	10,713	630
Bleach Bottles	242	0	1	874	16	0	258	3	175	629	0	138	1	2,719	127
Milk/Water Gallon Jugs	799	0	38	1,947	120	6	295	21	259	565	0	300	10	4,278	285
Oil/Lube Bottles	363	1	36	1,761	47	0	117	17	212	321	0	248	3	1,706	116
Other Plastic Bottles	1,490	0	15	3,823	98	0	715	37	204	754	0	775	32	5,574	276
Buckets	148	0	16	706	42	0	145	21	48	116	1	260	21	957	72
Caps/Lids	9,267	7	108	17,991	917	50	4,802	318	966	4,129	26	5,057	95	16,113	1,056
Cigarette Butts	12,088	4	100	33,327	1,235	0	21,506	790	422	10,118	0	45,291	123	11,295	555
Cigarette Lighters	697	0	16	2,018	48	10	672	34	29	391	4	1,153	7	1,437	203
Cups/Utensils	3,712	18	123	8,447	610	70	1,191	101	1,054	1,452	30	2,771	61	4,473	1,709
Diapers	101	0	4	651	15	0	95	8	81	69	0	206	0	1,049	168
Fishing Line	602	18	2	2,192	125	101	663	24	17	585	6	558	275	2,388	156
Fishing Floats/Lures	309	9	7	763	64	55	471	8	10	233	10	365	24	910	46
Fishing Nets	207	2	0	459	16	2	363	0	42	208	0	132	0	760	205
Hard Hats	12	0	0	69	1	0	9	0	3	4	0	24	0	126	1
Light Sticks	69	0	24	374	4	0	204	0	7	97	0	310	0	2,107	16
Plastic Pieces	8,924	0	3	22,584	1,468	0	11,156	414	753	6,343	0	6,173	9	20,401	1,473
Pipe Thread Protectors	93	0	0	279	5	0	276	0	24	123	0	219	0	716	14
Rope	1,307	2	4	2,822	124	9	4,173	7	208	1,970	0	669	5	10,738	654
Long Sheeting	70	0	12	285	11	0	157	2	8	70	0	108	0	836	75
Short Sheeting	209	1	15	457	15	0	361	9	41	135	0	164	0	1,500	123
Six-Pack Holders	386	0	115	1,122	66	20	141	18	86	167	0	274	1	2,001	165
Strapping Bands	427	0	0	1,043	59	0	808	9	18	274	0	237	0	1,317	172
Straws	10,501	1	130	14,802	870	0	1,533	192	418	3,910	0	5,086	16	50,799	949
Syringes	135	0	0	546	24	0	176	0	21	51	0	20	0	511	21
Tampon Applicators	1,611	0	3	3,747	304	0	165	37	34	397	0	142	0	5,979	16
Toys	932	0	20	2,131	96	7	542	41	70	493	0	795	0	14,739	41
Vegetable Sacks	81	0	0	390	44	0	277	1	2	158	0	124	0	844	19
Write Protection Rings	270	0	0	541	20	0	123	23	5	197	0	175	0	495	29
Other Plastic	2,645	7	101	8,559	345	5	3,126	89	382	1,862	0	2,646	247	5,491	610
FOAMED PLASTIC: Buoys	173	0	100	737	16	0	434	5	20	217	0	178	2	624	39
Foamed Cups	2,277	5	140	8,137	593	0	1,227	104	120	1,875	20	3,073	102	6,372	546
Egg Cartons	56	0	3	245	7	0	36	0	11	31	0	91	1	1,009	17
Fast Food Containers	556	1	20	2,036	120	0	526	55	76	216	10	685	21	1,439	275
Meat Trays	112	0	50	671	10	0	210	0	85	62	10	277	0	998	26
Packaging Materials	1,522	1	20	3,627	274	0	1,720	35	60	506	7	1,252	21	2,041	210
Foamed Pieces	5,790	4	100	15,448	473	0	9,523	166	483	3,939	0	5,047	83	8,594	351
Foamed Plates	361	0	10	1,372	57	0	571	33	238	158	4	343	3	2,071	432
Other Foamed Plastic	818	0	0	2,573	66	0	1,450	0	51	645	0	0	0	1,413	0



APPENDIX 4. 1996 U.S. Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	NJ	NM	NV	NY	OH	OK	OR	PA	PR	RI	SD	SC	TN	TX	USVI
GLASS: Beverage Bottles	2,325	32	157	9,789	815	408	1,550	131	1020	1757	7	3476	95	7615	1142
Food Jars	224	4	93	1,104	86	7	153	3	21	101	0	213	0	1081	101
Other Glass Bottles/Jars	332	0	21	1,848	43	10	245	5	385	189	2	411	18	1635	90
Fluorescent Light Tubes	9	0	3	247	1	0	67	0	1	4	0	128	0	309	6
Light Bulbs	56	0	2	242	2	0	82	0	13	29	0	123	0	693	17
Glass Pieces	2,493	0	200	16,683	254	0	3,521	126	224	4749	0	1821	52	8261	969
Other Glass	309	0	0	1,357	60	18	234	12	10	350	0	197	108	582	143
RUBBER: Balloons	1,003	0	40	3,125	61	0	457	26	11	595	0	633	3	1178	27
Condoms	284	0	0	571	14	0	106	1	6	114	0	119	0	444	65
Rubber Gloves	102	0	0	812	22	6	229	6	2	206	0	225	1	3075	53
Tires	136	23	20	922	16	30	121	6	125	133	2	98	5	417	73
Other Rubber	567	7	8	1,896	65	6	577	11	66	622	0	685	6	1744	163
METAL: Bottles Caps	1,666	1	20	8,291	820	0	1,572	64	352	839	0	2185	4	4618	994
Aerosol Cans	193	1	21	949	40	0	111	10	82	161	0	309	0	929	83
Beverage Cans	3,156	154	200	6,878	1998	295	1,320	258	472	3011	100	6169	164	8285	764
Food Cans	177	10	41	887	35	0	227	6	107	216	8	208	27	808	91
Other Cans	79	2	0	685	8	0	124	4	15	99	0	212	5	642	46
Metal Crab/Lobster Traps	72	2	0	138	0	0	36	0	3	70	0	86	0	223	4
55 Gallon Rusty Drums	37	3	1	318	2	0	27	0	0	91	0	39	1	333	29
55 Gallon New Drums	9	0	0	52	0	0	7	0	0	19	0	8	0	49	1
Metal Pieces	541	2	100	3,552	153	4	785	27	64	943	0	754	4	1557	350
Pull Tabs	181	2	30	1,945	459	0	566	30	155	325	10	655	37	1284	86
Wire	232	5	105	952	26	30	271	3	13	207	2	275	16	1182	133
Other Metal	384	15	102	3,218	125	18	1,512	14	135	872	0	622	58	1694	285
PAPER: Bags	562	1	44	2,659	172	0	606	35	76	491	0	769	38	1792	224
Cardboard	645	0	23	2,039	25	2	634	26	118	452	0	641	8	2157	261
Cartons	468	0	4	1,368	25	0	279	24	176	314	0	526	35	1409	187
Paper Cups	1,363	0	10	3,091	159	0	620	58	149	941	0	1160	17	1883	287
Newspapers/Magazines	386	0	5	1,258	79	4	993	11	25	295	0	339	11	859	123
Paper Pieces	3,211	1	100	9,675	304	25	4,237	342	132	3131	0	4430	80	4899	774
Paper Plates	282	1	18	1,057	68	9	164	39	46	187	0	363	1	1085	256
Other Paper	695	1	0	2,976	40	0	990	49	165	1161	0	974	75	1230	325
WOOD: Crab/Lobster Traps	30	0	0	95	0	0	8	0	3	54	0	58	0	183	2
Crates	52	0	2	141	1	0	31	1	2	42	0	71	0	162	13
Lumber Pieces	2,105	0	115	4,272	230	15	1,270	7	120	1583	0	2653	8	5977	425
Pallets	140	0	5	245	5	0	117	2	23	74	0	141	0	473	24
Other Wood	458	1	2	1,717	66	4	490	3	8	573	0	856	3	1489	187
CLOTH: Clothing/Pieces	980	3	98	3,713	261	128	1,300	71	137	1172	10	1267	68	3210	413
GRAND TOTALS	110,142	377	3,120	310,844	16,188	1,598	107,231	4,385	12,820	80,706	305	133,246	2,583	250,209	22,857
GRAND TOTALS, w/o Butts	98,054	373	3,020	277,517	14,953	1,598	85,725	3,595	12,398	70,588	305	87,955	2,460	238,914	22,302

APPENDIX 4. 1996 U.S. Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	UT	VA	WA	WI	WV	Totals
PLASTIC: Food Bags/Wrappers	18	3171	508	450	0	205,762
Salt Bags	0	48	4	0	0	3,841
Trash Bags	7	564	133	115	3	41,220
Other Bags	3	1041	188	243	0	61,810
Plastic Beverage Bottles	24	3137	159	276	196	121,703
Bleach Bottles	0	309	38	27	34	12,065
Milk/Water Gallon Jugs	8	528	177	74	38	24,616
Oil/Lube Bottles	0	616	37	31	122	14,855
Other Plastic Bottles	6	903	90	105	123	37,708
Buckets	0	209	39	65	2	7,998
Caps/Lids	27	2429	295	356	100	179,103
Cigarette Butts	43	2764	301	1011	0	608,759
Cigarette Lighters	0	371	25	43	1	23,997
Cups/Utensils	9	1022	77	172	0	75,336
Diapers	0	49	49	28	0	7,783
Fishing Line	0	544	61	19	0	25,925
Fishing Floats/Lures	0	400	79	36	2	11,486
Fishing Nets	0	109	23	6	0	7,597
Hard Hats	0	17	3	0	0	681
Light Sticks	0	124	4	2	1	8,944
Plastic Pieces	0	2464	257	820	3	240,820
Pipe Thread Protectors	0	38	8	6	0	3,950
Rope	3	1232	259	38	1	62,179
Long Sheeting	0	126	35	7	0	3,944
Short Sheeting	0	186	76	21	0	7,708
Six-Pack Holders	1	365	22	33	0	14,500
Strapping Bands	0	303	72	33	0	15,120
Straws	5	1195	86	194	0	131,602
Syringes	0	73	2	2	0	3,657
Tampon Applicators	0	205	16	34	0	13,294
Toys	4	383	33	60	7	17,147
Vegetable Sacks	0	76	43	8	0	6,552
Write Protection Rings	0	65	6	7	0	6,011
Other Plastic	0	1152	83	315	120	77,286
FOAMED PLASTIC: Buoys	0	255	30	4	0	10,486
Foamed Cups	2	2068	176	345	38	96,394
Egg Cartons	0	72	18	0	0	3,852
Fast Food Containers	0	412	104	98	3	27,762
Meat Trays	0	166	60	2	1	9,282
Packaging Materials	0	1393	56	142	0	48,738
Foamed Pieces	0	4988	156	718	2	206,890
Foamed Plates	0	324	9	15	0	19,781
Other Foamed Plastic	0	476	0	0	0	28,801

APPENDIX 4. 1996 U.S. Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	UT	VA	WA	WI	WV	Totals
GLASS: Beverage Bottles	30	3076	195	389	123	127,633
Food Jars	0	261	39	19	77	11,022
Other Glass Bottles/Jars	0	313	56	25	57	17,895
Fluorescent Light Tubes	0	24	16	2	0	2,017
Light Bulbs	0	195	23	11	75	4,928
Glass Pieces	0	1078	184	367	62	140,667
Other Glass	0	74	10	82	2	11,850
RUBBER: Balloons	0	1086	26	91	0	25,351
Condoms	0	54	4	7	0	6,671
Rubber Gloves	0	107	33	8	0	12,176
Tires	1	358	13	14	27	8,474
Other Rubber	0	697	42	41	3	27,092
METAL: Bottles Caps	27	699	70	70	100	84,876
Aerosol Cans	0	374	24	33	54	9,947
Beverage Cans	39	3260	188	707	24	130,134
Food Cans	0	107	33	118	25	10,541
Other Cans	0	117	1	29	0	6,778
Metal Crab/Lobster Traps	0	32	0	0	0	3,020
55 Gallon Rusty Drums	0	35	1	2	0	2,314
55 Gallon New Drums	0	2	0	0	0	414
Metal Pieces	0	402	59	163	0	32,464
Pull Tabs	0	130	6	24	3	21,877
Wire	0	173	9	43	12	12,953
Other Metal	0	422	46	119	1	34,092
PAPER: Bags	8	221	22	48	0	29,779
Cardboard	0	344	222	125	0	26,490
Cartons	0	281	39	64	0	17,612
Paper Cups	11	401	45	123	0	37,539
Newspapers/Magazines	0	113	37	39	0	20,382
Paper Pieces	0	951	150	582	0	158,957
Paper Plates	0	65	6	13	0	13,400
Other Paper	0	259	146	99	0	36,483
WOOD: Crab/Lobster Traps	0	7	0	0	0	1,507
Crates	0	60	5	0	0	1,575
Lumber Pieces	13	1266	74	91	0	62,892
Pallets	9	51	12	2	0	3,317
Other Wood	0	453	42	53	0	20,814
CLOTH: Clothing/Pieces	12	673	94	141	0	44,245
GRAND TOTALS	310	54,593	5,868	9,705	1,442	3,757,123
GRAND TOTALS, w/o Buflis	267	51,829	5,567	8,694	1,442	3,148,364

APPENDIX 5. State/Territory Coordinators of the 1996 U.S. Coastal Cleanup

Alabama

Cathy Schimmel
AL Dept. of Econ. & Comm. Affairs,

Alaska

Rhonda and Kent Berklund

Ivan Vining

Alaska Department of Fish and Game

American Samoa

Lance S. Tauoa
American Samoa Government
Economic Development Planning Office

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Arizona Clean and Beautiful

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Lake Michigan Federation

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Grand Cal Task Force

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CSSD-KA-LV, U.S. Army Kwajalein Atoll

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Assateague Coastal Trust

Massachusetts

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Massachusetts Coastal Zone Management

APPENDIX 5. State/Territory Coordinators of the 1996 U.S. Coastal Cleanup, cont.

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Liz England
Lake Michigan Federation

Minnesota

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Lake Superior Center

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Division of Natural Resources

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Toni Schoen
Lake Michigan Federation

PADI Worldwide

Kristin Valette
PADI Worldwide

APPENDIX 6. Local Sponsors of the 1996 U.S. Coastal Cleanup, as provided by cleanup coordinators

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APPENDIX 6. Local Sponsors of the 1996 U.S. Coastal Cleanup, cont.**DELAWARE, cont.**

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 U.S. Coast Guard
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 Quantrek Outdoor Club, Young Harris College

HAWAII

The Governor's Committee on Ending Litter
 The University of Hawaii Sea Grant Program
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 The City and County of Honolulu Public Works
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APPENDIX 6. Local Sponsors of the 1996 U.S. Coastal Cleanup, cont.

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APPENDIX 6. Local Sponsors of the 1996 U.S. Coastal Cleanup, cont.**MISSISSIPPI, cont.**

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APPENDIX 6. Local Sponsors of the 1996 U.S. Coastal Cleanup, cont.

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 North Rockland High School
 Conference House Park
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APPENDIX 6. Local Sponsors of the 1996 U.S. Coastal Cleanup, cont.

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APPENDIX 6. Local Sponsors of the 1996 U.S. Coastal Cleanup, cont.**RHODE ISLAND, cont.**

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 High Plains Diving Club

TEXAS

American Plastics Council
 Angleton Coca Cola
 Ansell Edmont
 Browning Ferris Industries
 BFI Central Texas Landfill in San Antonio
 BFI in Corpus Christi
 Bolivar Peninsula Chamber of Commerce
 Brazoria County Recycling Center
 Brownsville Medical Center
 Coca Cola Bottling Company of Corpus Christi
 Coca Cola Special Events in Houston
 Columbia Valley Regional Hospital
 Diamond Shamrock in Richmond
 Dow Chemical Company

TEXAS, cont.

Frito Lay in Crystal Beach
 GMS Waste Disposal
 GSD&M Advertising Agency
 Gulf Coast Market in Crystal Beach
 Levi Strauss & Company in Brownsville
 Miller Brewing Company
 Milts Seaford in Port Bolivar
 Oshman's SuperSports USA
 Padre Island Park Company in Corpus Christi
 Peninsula Septic Service in Crystal Beach
 Philip Morris
 Quintana Town Council
 Ryans Steakhouse in Lake Jackson
 Save our Beach Association in Surfside
 Sharky's in Crystal Beach
 Southwest Airlines
 Stingaree Restaurant and Marina in Crystal Beach
 USA Waste in Clute

VIRGINIA

Arlingtonians for a Clean Environment (ACE)
 Bell Atlantic
 Browning-Ferris Industries Waste Systems
 Bluefish Graphic Design, Arlington
 Boy Scouts of America
 U.S. Environmental Protection Agency
 Friends of Four Mile Run
 Friends of the Shenandoah
 Girl Scouts of America
 Hyatt Hotels
 Mobil Chemical Company
 U.S. National Park Service
 U.S. Coast Guard
 U.S. Fish and Wildlife Service
 VA Department of Environmental Quality
 VA Department of Recreation and Conservation

WASHINGTON

Pacific Northwest 4-Wheel Drive Association
 Washington State Parks & Recreation
 Commission
 Washington State Dept. of Ecology

APPENDIX 7. Items Identified as "Most Peculiar" by 1996 U.S. Coastal Cleanup Volunteers

STATE AND ZONE	PECULIAR ITEMS
ALABAMA	
Calhoun County	ceramic dragon statuette
Daphne	underwear
Dauphin Island	lawn sprinkler, boat wheelhouse, Christmas garland, Mardi Gras mask, lawnmower cover, metal bed frame, chimney, knife, car engine, torn underwear, door knob, muffler, car bumper brace
Fairhope	large plastic kitchen sink
Fort Morgan Penin.	boat rudder, arrow, car door liner (inside), doormat, birthday candle
Gulf shores	smelling salt ampule (ammonia sniffer), shotgun shell, spark plug, toothbrush
Orange Beach	bikini bottom
Smith Lake	cymbal from drum set
Weeks Bay	toothbrush, TV antenna, dishwasher, large carpet, lawn chair
ALASKA	
Seward	toy hovercraft, auto generator, tent w/gear
ARIZONA	
Mesa	full size pool, umbrella, boat anchors, boat ladder, \$1 bill, movie filmstrip, 1 dozen lemons (6 cut), car engine, TV, radio, carpet, hub cap, Jeep roll bar, abandoned shoe-like new, map of Sweden, car seat, beeper, gas can, very old pair of leather boots, CD case, full beer bottle (unopened), sleeping bag, 50' barbed wire, living room chairs & sofa, car window, ladies panties, 2 boxer shorts, glasses, bike rims, toilet seat cover, spark plugs, screwdrivers, umbrella, canned peas, shopping cart
ARKANSAS	
Tenkiller State Park	fan belt, truck inner tube, sunglasses, spark plug wires
CALIFORNIA	
Alameda	boomerang, plastic bird, earplug, men's underwear, sleeping bag, message in wine bottle "Kim loves Bill 9/17/96", pillow, car seat cushion, license plate, car horn, computer chip, bike seat, mattress, kitchen cabinet, drawer, golf balls, Gucci perfume bottle, 2 wallets, cash, car light, construction sign, night light, necktie, business card, metal spare tire cover, lawn chair, teddy bear, shell casings, suitcase, hubcap, earrings, money from Fiji Islands, Roto-matic Power Team vacuum cleaner, Halloween mask
Del Norte	electric drill
El Dorado/Placer	washcloth, car bumper, pantyhose, car sunvisor, food stamps, manhole cover, dried fruit, pants
Humboldt	50 lbs slab of Latex, car frame, car bench seat, truck bumper, giant ice chest, side of B&B toilet stall, plastic earplug, shell casings, underwear, propane tank, bedding (foam pad), old burnt out stove, bandages, backpack full of old clothes

APPENDIX 7. "Most Peculiar" Items, cont.

CALIFORNIA, cont.

Los Angeles

6' metal sink, 30 gal. water heater, bag of bullets, wood cutting board, folded his & her underwear, hockey puck, magic padlock, shell casings, plastic flowers, surfboard leash, 18 wheeler mud flap, spark plug, spark plug wires, full cup of salsa, eye liner, boat decal license, bikini bottoms, boat transom, car brake reflector, bungee cord, back of TV set, lap top computer, 10 speed bike, red pills in camera film box, clothing in sand, frying pan, hair piece, 13" metal guard rail, power of attorney papers, water fountain, ticket to Disneyland

Marin

4 dead mice in a wine cooler bottle, 2 recycling buckets, couch pillow, fake nose, fake money, glow in the dark worm, Koosh ball, Florida driver's license, BBQ grill, Visa card, golf ball, car mirror, bike pedal, book, computer disk, large rubber tubing from oil plant, toothbrush, guitar, Nerf football, plastic wreath, bottle w/letter in it from New York, trash can lid, IV bag, sheet, halogen lamp, calculator, car battery, bag w/ aluminum sulfate, vase, cans of shaving cream, box w/ 6 cans of dirty motor oil, combs, 2 hangers, 2 shopping carts, 2 unopened beer cans (Miller Lite & Bud), plastic Easter egg, leather purse, mouse in a bottle with water

Monterey

Safeway shopping cart

Orange

25 lbs bag doughnut mix, plastic gun, shell casing, surf wax wrapped in silk underwear, 2 caulking guns, bracelet, respirator (diving) mask, swim fin, engine, men's boxer shorts, screwdriver, piece of window frame, credit card

Sacramento

wooden dock signs, "Rumba" underwear, trailer hitch, flashlight, car battery, jar of mayonnaise, women's pants & panties, hospital ID bracelet, Christmas tree, pick axe

San Diego

brake pad, parts of flight helmet, bike chain, shopping carts, carpet, mattress, big bag of pills, bike seat, carpet, shovel, bed frame, steering linkage, door knob, telephone cord, couches, car & trailer, old battery, dipstick, glass goblet, underwear, jean jacket, sprinkler hose, hair brush, plastic apron, cooking pots, ear plugs, teddy bear, tent stake, wire hanger

San Francisco

2 underwear, women's bathing suit, car seat, blanket, prescription glasses, 3 hospital ID bracelets, large boat rudder, 72 shotgun shells, shovel, 2 batteries, bumper, 3 shopping carts, "One Way" sign, Monopoly money, car pieces, toothbrush, sleeping bags, sponge, luggage, doormat, BBQ grill, sofa pillows, spark plug, fan belt, mouthguard, rubber finger tip, head light, toothbrush, dirty socks, 2 eyeglasses, bilge pump, boat drive shaft, tractor, toilet paper, coconut, propane tank, bikini bottoms, toe nail scissors

San Luis Obispo

lawn edger, double metal sink, toilet, fishing license, shotgun shells, scuba fin, propane tank, tequila bottle, seat cushion with nails, bra, knife

San Mateo

men's underwear, broken watch, seat cushion, car seat, bike seat, dental retainer, 5-gal. propane tank, car grill, 6 CO₂ cartridges, car fender, bed springs

Santa Barbara

shopping cart, shotgun shell, fuel pump, carburetor, vacuum cleaner, bumper, underwear

APPENDIX 7. "Most Peculiar" Items, cont.

CALIFORNIA, cont.

Santa Clara	sleeping bags, circuit board, 78 speed records, VHS tape, spell checker, wallet, baseball glove, toilet seat, car engine, bike, car door, vacuum cleaner, automobile seat, suitcase, shopping cart, car bumper, shell casings, motorcycle helmet, radio, boat, headlight, paint roller, chair, knife, hub caps, sunglasses, barbell weight, empty backpack, car door, TV set, Garfield underwear, rear end of car, desk & chair, wine glass, play money, lawn chair, stereo, sleeping bag, TV
Solano	paint bucket, $\frac{3}{4}$ full cup of coffee, shopping cart, stroller, toilet paper, skateboard, wallet full of credit cards, umbrella, metal tea kettle, 1992 paycheck, food stamps
Ventura	car bumper, outboard motor

COLORADO

Englewood	antique tin Cracker Jack box, twisty tie, 1 pair tennis shoes
Grand Junction	bottom of a bucket

CONNECTICUT

Avalonia Land Cons.	kids' raft made from trunks lashed with wire
Brookfield Marina	open umbrella
East Lyme	$\frac{1}{2}$ of bikini top
Greenwich area	comb
Groton, Bluff Point	men's underwear, whole beverage cooler, baby bottle, fishing rod and reel, shell casings
Madison, Hammonasset	license plate
Milford	socks, beer can
Old Lyme	children's medicine spoon, rubber doormat, shoes
Stamford	shotgun shells, film

DELAWARE

Kent County	shotgun shells, door chain, bike, carpet, sponges, car seat, toilet seat, lawn mower handle, radio, underwear, house siding, shingles, tent, black pantyhose, 2 Christmas wreaths, air conditioner, letter in bottle, muffler, boot & jeans, sled
New Castle	bank "No Parking" sign, swing seat, key ring, 4 wild animal tags, Tupperware containers, pizza shop sign, mattress, backboard, fence post, shopping cart, life jacket, note in a sealed bottle from Easton, PA
Sussex County	bed sheet, foreign medicine bottle, shotgun shells, hair scrunchie, snow fence, gas BBQ grill, anchor, underwear, 3 toothbrushes, vampire teeth, metal spoon, sink stopper, 5-gal. can of solvent, thermos, radiator cap, golf tees, spark plug wire, steak knife, tailpipe, panties & towel, oil filter

DISTRICT OF COLUMBIA Whole salad dressing bottle

FLORIDA

Bay	fire extinguisher
Brevard	carpet, Zantac pill, ice skate protector, battery, 5 gal water bottle, package of bologna, knife, lawn chair, commercial fish net, CO ₂ cartridge, $\frac{1}{2}$ full tub of butter, trailer hitch ball, underwear

APPENDIX 7. "Most Peculiar" Items, cont.

FLORIDA, cont.

Broward	3 parking tickets, umbrella, bike, car mirror, Walkman, shopping cart, chaise lounge, hair weave, duffel bag, toothbrush, lollipops, car bumper, Ruffenal pill, sprinkler head, metal fork, T-shirt
Charlotte	sprinkler head, boat battery, jockey shorts, lawn chair, Charlotte sanitation recycling bin
Collier	nail clippers, annual state park pass worth \$60, shotgun shell, muffler, car battery, small knife, 2 lawn mowers, 3 boats, Pacman video arcade game, boat chair, TV antenna, voodoo doll, couch cushion, toilet floater ball, propane tank
Dade	umbrellas, stool, skimboard, fuse box, pig's foot, shell casing, wine glass, Bell Money Machine lid, flipper, sheet, motorcycle helmet, boat paddle, spark plugs, pillow, toilet, couch cushion, floor tiles, environmental notebook, chairs, automobile alternator, Tyrec suits, 3 hospital ID bracelets, scissors, set of keys, toilet seat with a tree growing in it, lawn chair, a Santeria chicken in a cloth bag, IV bag (full)-Laboratorios Baxter Cali, Colombia, squash racket, mobile phone, T-shirts, pepper, asthma inhaler, 1974 Cuban work permit, 5-gal. gas can, vacuum cleaner, fire extinguisher, turkey baster
Duval/NAS	2 plastic chairs, shotgun shells, bedspread, car fender, stove, blue recycling bin, freezer, car hood, rug
Flagler	dead baby sea turtle, dungarees, toothbrush
Franklin	men's underwear, hair curler, fire extinguisher, political campaign sign, hot water heater, plastic swimming pools, pair of jeans
Glades	mattress
Gulf	2 mattresses, living room chair, teddy bear, piggy bank
Highlands	circular air filter
Hillsborough	underwear, chair, bathing suit, pantyhose, propane cylinder, crime tape, \$20 bill, carpet, washing machine, license plate, teddy bear, queen size comforter, Nissan bumper, ladies' underwear, cut up credit card, rubber raft, medicine cabinet, stove top, car headlight, car seat, 2 shopping carts, bed, couch frame, counter top & sink, dental floss with teeth, shotgun shell, fender, fence
Indian River	boat prop, anchor, acrylic fingernail w/nail polish, shotglass "Yukon Jack", boat battery, Cuban cigar, 1/2 surfboard, ladder, BBQ grills, boat seat, underwear, battery, small plastic figurine of weight lifter, golf ball
Jefferson	old raincoat, shotgun shells
Lee	propane tank, lawn mower, shotgun shells, 9 table cloths, bike speedometer, big cotton rug, antique Pepsi can, underwear, twin mattress, small toy dinosaur, hatch cover for boat, name badge for hotel, oil filter from a large engine, \$1 bill, 2 chicken eggs, Walkman, headlight, full Heineken beer, boarding pass London/Orlando
Manatee	"salesman of the month" metal plaque, car hood, plastic Black Power fist, TV tube, ashtray, pantyhose, lawn chair, wooden door off boat, life preserver, bra, BBQ grill, croquet stake, pocket knife, purse, lotto card, carpeting, 2 car exhaust systems, truck muffler
Martin	toothbrush, alternator shaft, boat cushion
Monroe	toilet seat, foam mattress, shovel, T-shirt, carton of milk from Lithuania, men's underwear, whole bag of dried up shrimp, propane bottle

APPENDIX 7. "Most Peculiar" Items, cont.

FLORIDA, cont.

Okaloosa	metal off-road tracking for military vehicles, lawn chair, seat cushion for sofa, box spring and mattress
Palm Beach	necklace, book marker, 300-lb. tire, headlight, new locked padlock, curler, sunglasses, toothbrushes, shell casing, clothes hanger, large wooden cable spool, 9" high foamed plastic Buddha statuette, plastic snowflake, beach chair
Pasco	shaving cream can, couch, wood drawer, religious medallion, mattress, stove, recliner, vacuum cleaner, underwear, bedpan, arrow, refrigerator, bathroom scale
Pinellas/Beaches	boat paddles
Pinellas/Tampa Bay	plastic hand grenade, boat light, drill press, Christmas wreath, luggage, windshield wiper, 2 checkbooks and address books
Putnam	unopened beer bottle, truck hood
Santa Rosa/Escambia	gold earring, diaphragm, tape measure, shotgun shells, BBQ grill, Dura-Flame log (2-hour)
Sarasota	car jack, car mat, motorcycle helmet, flashlight, shower curtain, exhaust pipe, car air breather
St. Lucie	lounge chair pad
Taylor	TV antenna, foreign car filter, hummingbird feeder, flippers, stove, kitchen chair, 2 spear guns
Volusia	beach chair, traffic court papers, flowered bra, 2 trash containers, "surfer dude stuff", sword sheath, banana, bathing suit, rock with plastic tube "growing" out of it, matching underwear, rug, flashlight, Coca Cola crate, marble slab, \$5 bill, surfboard wax, shotgun shell, wet blanket, TV set, car door
Wakulla	lipstick, 4 fishing licenses in Ziplock bag, stove top, chunk of recycling bin, propane tank, old record, pulley, oil filter, refrigerator door, battery box, net bag full of garbage
Walton	knife case, spark plug

GEORGIA

Cumberland	engine starter
Ossabaw	onion, mattress
Sapelo Island	underwear, softball, washing machine, kitchen sink
SSI Pier	BBQ grill, rubber bottle nipple, dollar bills, underwear, fire hose, toilet seat
Tybee	2 TV remote controls (1 Sony, 1 Sanyo), bedding, top of CD player, underwear, \$32, \$5 bill torn in half

GUAM

Agat	car parts, chair, kitchen sink
Dog Leg Reef	2 large "impellers", probably from large steamship
Dungca's Beach	one Birkenstock sandal, wrecked air conditioner
Family Beach	2 car batteries
Seaplane Ramp	gas BBQ grill
Ylig Bay	rusted curling iron, rusty wrench, couches, refrigerator, wild boar mandible, miniature toilet, air filter, diapers with a surprise!, steering drive column, stereo speaker, 52 pieces of car engine

APPENDIX 7. "Most Peculiar" Items, cont.

HAWAII

Hawaii—east	stick with an egg beater attached, socks, teddy bear, stereo equipment, car seat, seat belt clip, pens, ice holders, dish soap containers, auto body molding, projector screen
Hawaii—west	300-lb. cargo net--no ID, underwear, light switch
Kauai	2 fishing reels, hot dog bun w/ no hot dog, lead pipes, face mask, insulation foam
Maui	underwear, bed, desk, car batteries, shopping carts, underwear, whole series of photos at 50' intervals along the road
Oahu	old metal tripod (broken), large quartz crystal (not native to Hawaii), egg shells, rubber flip flops, sandwich wrapped in foil, shell casing, Christmas tree, bed, couch, pillow, car door, house door, TV, 2 car batteries, car front end, metal spoon, CO ₂ cartridge, bike tire, propane tank, underwear, railroad spike, comb, plastic flower pot, bed quilt, bike seat, metal hatch cover w/ heavy metal shackles, golf balls, spark plug, quart of motor oil, switchblade comb, girl's underwear, ladies' lingerie, "Shoes, shoes, shoes, and shoes!", umbrella frame, steering wheel, car antenna, long piece of braided human hair, hot pink water bottle, beach ball, wooden spoon, broken Hobie cat hulls buried in sand, toothbrush, carpet, shish kabobs w/only onions left, bag of 20 coconuts, VCR, boxing glove, bowling ball, tarot cards, bar of soap, golf club, Ford Tempo (FX B411) totally trashed, boomerang, tangled boat sail, including wires & cables, cassette tapes, rugs

IDAHO

American Falls	arrows, lawnmower, canning jar, golf balls
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IOWA

Logan	car muffler, 2 scuba masks
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KANSAS

Lake Shawnee	boat oar, credit card, coin changer, knives, Incredible Hulk doll, ski binding
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LOUISIANA

Bonnet Carre Spillway	car parts
Cameron	swimming pool, CB radio, toothbrush
Grand Isle	boat for boat
Lake Charles	12 volt headlight
Lake Pontchartrain	book (A Brief History of Time by Stephen Hawking), boat cushion, door, metal acetylene welding tank, kazoo, door handle, railroad spikes, sleeping bag, hub cap, shopping cart, patio umbrella, 2 baseball caps, shawl, jock strap, toilet
Ouachita	lawnmower handle
Red River	VISA credit card--not expired
Timbalier	stroller, car muffler, camper windows, broken TV set, car battery

APPENDIX 7. "Most Peculiar" Items, cont.

MAINE

- Cumberland County men's underwear, women's underwear, shotgun shells, hot water heater, mail box, pot pie dish, 3 watches, golf tee, plastic bottle of Russian suntan lotion, bed sheet, wheelbarrow, hockey stick, deodorant stick, manhole cover, stove, bike seat, shotgun shells, bra, life jacket, message in a bottle, lawnmowers, exhaust pipe, motorcycle license plate frame, emergency outboard motor in original storage case, CO₂ cartridge, truck sunvisor
- Hancock County car motor, \$5 bill, beach chair, cooking pot, compass, 2 entire rolls of toilet paper, rotary lawnmower, a plastic lemon & a "plastic woman", sewing needles, wet suit, underwear, 1 Cub Scout (live, unentangled), whole onion, wet suit bootie
- Knox County lawn chairs, boat antenna, sign from park in Warren, mast or flagpole, 35mm camera
- Lincoln broom, bookcase, mooring chain
- Sagadahoc County Quebec fish tag, gas can, an Iron, boat seat, life jacket with flashlight, For Sale sign from CHR Realty, mallard decoy, Frisbee, bottle of HCl acid, toilet bowl, 17th Century pipestem, collapsed cabin
- Waldo County kerosene heater, sleeping bag and tent, 1/2 a boat, bike
- Washington County muffler, Canadian lobster tag
- York County engine, toilet, shotgun shells, boat transom, razor knife, D.O.T. sign

MARYLAND

- WicomicoRiver baby stroller, TV remote controller, 2 sterile water containers

MASSACHUSETTS

- Boston Harbor woman's bathing suit, 1933 railroad tie date nails, plastic sled, teddy bear, bike, oar, pen, rear view mirror, dashboard panels, shotgun shells, a plane part, lounge chair, bag with clothes in it
- Cape Cod pull tabs (from very old cans), bike, radio, woman's coin purse (red velvet, c.a. 1950s), underwear, 2 halves of stolen cars, audio tape, shotgun shells, clothespin, tropical helmet, full bottle of Sam Adams beer, bed sheets, 1 cranberry on beach
- North Shore toilet float, basketball, gun barrel, safe door, 3 ft. plastic Santa, mattress, engine, snow blower, couch, stereo turntable, motorcycle, unopened can of Bud Light, fireman's hose, TV back panel, long kitchen knife, pregnancy test, radio, margarine, knee brace, message in a Coke bottle-- "Hooks", really chunky milk, a cigarette holder, Massachusetts Coastal Zone Management Badge, lawn chair, boat transom, lottery ticket, 1200 lbs of asphalt roof shingles, dog brush, toothbrush, rubber boot full of motor oil, gas cap, refrigerator, car seat, red fender, Winnie the Pooh head, riding lawnmower, cast iron bathtub, bike
- South Coastal medical bracelet, shotgun shells, TV antenna, pipe cleaner, chair, traffic reflectors, dining room chair, bottle with a note inside, hair gel, lampshade

MICHIGAN

- Benen County orthodontic bit plate, center board from sailboat
- Eastern Michigan chair, outboard motor, pole digging shovel, Chevy V-8 engine, electric wrench, BBQ grill, bike, sun roof
- Grand Haven shotgun shell, hymnal

APPENDIX 7. "Most Peculiar" Items, cont.

MICHIGAN, cont.

Manistique	hood of cab
Muskegon County	snow fence, pantyhose, small metal shovel, printed paper strip, "Go on! Ya bunch of buzzards.", Polaroid camera cartridge, Nerf football, NO ₂ cartridge, car battery
Ontenagon	cat collar
Rouge River	couch, pillows, car seats, mattresses, filing cabinet
Saginaw Bay	mailbox door, diver's mask, shotgun shells
Sante Ste. Marie	burnt chair
Tunnel Park	ship's door, plastic sled bottom
Van Buren County	plastic air horn

MISSISSIPPI

Barrier Islands	explosive covering
Bay St. Louis	keychain, spark plug, full package of chicken
Biloxi area	bra, panties, wedding ring, garden hoe, note in a bottle, radio, spark plugs, shingles, fork, broken TV, shock absorber, roofing vent, carpet, water hose, tape deck, bottle of BBQ sauce, golf tee, hair weave, Gaffisosa County sign, car bumper, hub cap, tarot cards, golf ball, men's underwear, antenna
Gulfport	Rubic's cube, hub cap, champagne cork, LA oyster tag from Oyster Boy LA, 6 unopened beers, panties, socks, sofa cushion, 2 grease guns, egg, onion, zucchini, badminton birdie, fingernail, shotgun shell
Pascagoula	box spring, box of detergent, muffler, BBQ grill burner, paint brush, refrigerator, carpet, swimming pool, mattress, swimming pad

MISSOURI

Mississippi River	car door
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MONTANA

Canyon Ferry Lewis	cordless power drill & kit, dice, golf club
Wadelake	new golf ball (this was a high mountain lake)

NEBRASKA

L.E. Ray Lake	refrigerator door
Stage Coach Lake	fiber filled vest

NEVADA

Lake Mead	2 occupied burial urns (reburied in deeper water), boat windshield, ladies' panties
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NEW HAMPSHIRE

Great Bay	shotgun shells
Hancock	carpet, soap, plastic salamander
Hillsborough	underwear, fence, mauve colored rug, hotel keys, car doors, lawn chair, 24' bike rack, cash register case, bike helmet, football, fishing pole, rubber raft, wallet with warrant papers (turned into police), car hood, toilet seat
Rocky Shoreline	14-ft. boat hook, cook pot, flashlight, tire in tree, Christmas lights, sandpaper, 3 pennies, lottery ticket stubs, mailbox, license plate, glue stick, TV, rubber bumper, car air cleaner, paint tray

APPENDIX 7. "Most Peculiar" Items, cont.

NEW HAMPSHIRE, cont.

Sandy Beach

car parts, spark plugs, asthma inhaler, sock, flip flops, bloody surgical glove, bikini, video tape head cleaner, kitchen knife, shotgun shell, beach chair, video camera battery pack, surfer's wax, underwear, bottle of vodka

NEW JERSEY

Atlantic County

roofing and insulation, 2 shell casings, tin measuring cup set

Cape May County

"Bomb bag", coal, large oil filter with oil in it

Inner Harbor

hose nozzle

Long Beach Island

soda bottle with coins in it, dental retainer, full can of soda, unopened container of sour cream, shotgun shell

Monmouth County

knife case, "several pair of socks", toothpaste, contact lens solution, shell casing, seat cushion, Nerf football -"But we kept it", toothbrush, 2 "giant pieces of coal", full pack of soggy cigarettes, car battery, eyeglasses frame, birthday candle, hair curler, abandoned vehicle on beach "G NJ JV792F", radiator cap, garters, car seat, piece of fake cheese with a fake mouse on it, hospital ID bracelet, ladder, wine cork, whistle, chimney, boat seat, underwear, cabinet door, garment bag, plastic cow, plastic plant holder, gallon paint can, full deodorant, coconut, troll doll, car bumper, car console, toothpaste & tooth brush, car visor

Ocean County

2 shell casings, phone, license plate frame, umbrella, towel, \$10 bill, underwear, possible piece of Flight 800, shingles, men's T-shirt, 1/2 a surfboard, balloon from Channel 17 Philadelphia

Raritan Bayshore

handle to briefcase

NEW MEXICO

Tucumcari

fishing reel, engine block, Dacor SCUBA mask, anchor, TV antenna, car battery, primer pump for boat motor, boat motor cover

NEW YORK

Great Lakes Region

shotgun shells, 1996 Atlanta Olympic cap, bike seat, boat dock, BBQ grill, red refrigerator door, refrigerator compressor, TV set, toilet bowl, fender, whole jar of dill pickles, plastic flower, 6' tractor tire, snowmobile frame, dog tag from 1972, NO₂ canister, Christmas tree lights, cookie cutter, Hawaiian lei, sock, chair, pen, ceramic insulator, car muffler, underwear, handlebar, metal table top, wooden shoe, toilet, 30 shell casings, car bumper, boat, license plate, sign post, air conditioner filter, Oldsmobile car insignia, 18" high plastic owl, dishwasher, bed post, crib rails, enema kit, brand new Nike sneaker, spark plug, oil pump, running watch, soccer ball, boxer shorts, water faucet, shopping cart, Toyota Tercel trim pieces, fence, plastic boat & raft, cooking grill, bowling ball, eyeglasses, wallet, mouse trap, hospital ID bracelet, scissors, valid driver's license

Nassau County

hubcap, shotgun shells, work boots, gas tank, muffler, car floor mat, Christmas holly, "Natural Spring Water" bottle, Lynbrook town beach pass

New York City

coveralls, shopping cart, steering column from a jet ski, knife handle, toothbrush, hula hoop, brush, blue underwear, pair of socks, roller blade, watermelon, bra, Santa's sled lawn ornament, 2 car bucket seats, sunfish sailboat, contact lens case, car battery, pocketbook, working portable cassette player, 4 unopened cans of Bud, boat oar, car bumper,

APPENDIX 7. "Most Peculiar" Items, cont.

NEW YORK, cont.

New York City, cont.

luggage, comforter, wallet with Lord and Taylor credit card, TV, refrigerator, kitchen sink, fire extinguisher, car radio, metal table, toothbrush, boomerang (wood, "In perfect shape!"), ladies' undies, bicycle wheel, heavy small wheel--could be landing gear wheel, boat refrigerator, plastic toupee, jet ski, boiler, hockey stick, expired car registration, car bumper

Suffolk County

girl's underwear, bikini top, whistle, caulk tube, gas tank, bottle with a note from Centerport, Long Island, Crash Test Dummy doll, shotgun shells, intact tool kit with rusted ratchets, 6 kitchen trash bags of cat litter, wallet, roofing shingles, fan belt, bike seat, dish pan, electrical box, boat gas tank, plastic Christmas holly, piece of coal, toothbrush, clay pigeons, anchor, gas tank cap, back to TV

Upstate Counties

remote control boat, hair extension, bike, metal cooking pan, headphones, silk boxer shorts, jacket, car seat, road sign, beeper, flashlight, beach umbrella, deSoto hubcap, model T tire tube, full roll of toilet paper

Westchester County

umbrella, flare gun, kitchen sink, swing set, water heater, crankcase, bumpers, wheelbarrow, muffler, tailpipes, table, radio vacuum tube, fire extinguisher, mattress, onion, zippers, Ping Pong ball

NORTH CAROLINA

Bladen

house shingles

Brunswick

anchor & rope, crisper drawer for refrigerator, kitchen sink, fake flowers, toilet seat cover, aluminum porch screen, eyeglasses, motel key, men's underwear, money (\$2), bread, Odor Eaters, stereo, door, dryer duct, JC Penney charge card, lamp shade

Cabarrus

vacuum cleaner, truck muffler, car door, bathroom sink

Carteret

shell casing

Catawba

hammer, Ninja Turtle Underoos, door to a safe

Columbus

plastic bird bath, silk flowers

Craven

shotgun shell

Cumberland

credit card, driver's license, gas tank, boom box, hubcap, truck liner, toilet tank

Dare

old telephone receiver, TV, shotgun shell, weather monitoring equipment, pink tarp, propane tank

Durham

bike, tricycle, picnic table, 3' tall ash tray, tail light

Edgecombe

entertainment center, mattress, folding chair, car air filter cover, many washers and dryers

Gaston

refrigerator, toilet, washing machine

Guilford

microwave, hub cap, exhaust pipe

Haywood

8-track tape, life jacket

Hyde

shopping cart

Jones

space heater

Lee

shell casing

Macon

air conditioner compressor, 2 trucks (rusting away)

McDowell

toilet, refrigerator, 2 lawn chairs, water heater, couch

Mecklenburg

volley ball, plastic boat, street sign, car speaker, hubcap, underwear, portable TV, hand cuffs, carousel horse, knife

Nash

Christmas lights, muffler, freon tank (DuPont, DE), pantyhose, hubcaps, men's underwear, "No Parking" sign

Orange

longjohns, hubcap, shopping cart, "old fashioned metal bicycle", telephone, screen door, snow shovel, bowling ball bag

APPENDIX 7. "Most Peculiar" Items, cont.

NORH CAROLINA, cont.

Pamlico	stop sign, boat trailer, child's scooter, shotgun shells, lounge chair
Pender	washer, dryer, stove, dishwasher, live ammunition, toothbrush, hubcaps
Perquimans	pantyhose, spark plug
Pitt	DDT signs, old bicycles, charcoal, plates, tennis ball, roofing paper, 3 live shotgun shells
Randolph	weed eater, couch, 2 grills
Rockingham	Volkswagen seats, lawnmower, bookcase, blinking road marker
Rowan	couch springs, neck brace
Scotland	45 RPM record, handle bars, windshield wipers
Stokes	sled, hubcap, man's wallet, Epson copier, cell phone & case (with a brick inside the case), pink flamingo, "Safe Lived Kidney Cure" bottle
Tyrell	rug
Washington	2 shotgun shells, hair weave, floor mat
Yancey	garbage can lid, gas grill, kitchen sink, bike, 2 car batteries, bed roll

NORTH DAKOTA

Grand Forks	spool of barbed wire, purple panties
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OHIO

Lake Erie	bottle rocket, shotgun shells, Christmas tree, beeper
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OKLAHOMA

Pensacola Dam	couch, working watch, oar, bikini top
---------------	---------------------------------------

OREGON

Arch Cape	12' fishing gaff
Barview Park	shotgun shells, whipped cream, door knob, radiator cover, toothbrush, leather doll pants
Cape Perpetua	shotgun shells, car bumper, kitchen sink, rubber boat bumper, navy blue pair of men's Hanes underwear
Cascade Head	tobacco pipe, mall discount card from 1992, garbage can, fire hose, canvas bumper guard from dock, disposable camera, dog license, Christmas tree light bulb, bikini top, boat
Columbia River	oar
Necanicum River	pantyhose, shotgun wad, underwear, wallet with \$6, hockey glove, shotgun shells, toilet
Ophir	sleeping bag, toothbrush, Christmas wreath
Seal Rock	shotgun shells, car part: engine, axle, muffler
Siltcoos Outlet	orange highway marker
Sixes River	shotgun shells
Umpqua River	shotgun shells, twin mattress, part of a duck blind
Yaquina Head	bath towel, hockey glove, plastic mini boogie board, brass barometer, shotgun shell, underwear, baseball

PENNSYLVANIA

Claysburg	Hackey sack
Presque Isle	bathing suit, 30 gal. garbage can, underwear, snow ski
Susquehanna River	beeper

APPENDIX 7. "Most Peculiar" Items, cont.

PUERTO RICO

Bahia Sucia baby crib, electric fan, underwear, spark plugs
 Crash Boat underwear, car fuse, belt
 Icacos 11 gallons of lard, 3 piles of trash bags (50 bags each)

RHODE ISLAND

East Bay dummy test bomb, skateboard, pitch fork, auto mirror, luggage cart
 Inland River BBQ grill, barbell set
 Salt Pond bicycle pump, golf ball, sock, plastic flowers, underwear, short pants
 South Coast full jar of sauerkraut, 2 pillows, gold lamé belt, badminton shuttlecock,
 toilet paper roll
 South Islands muffler, tailpipe, shotgun shells, boat
 Upper Bay motorcycle gas tank
 West Bay shell casing, cracked windshield
 West Coast coal

SOUTH CAROLINA

Beaufort County curling iron, unopened 6-pack of Corona beer, TV, GMC truck fender,
 lawn chair
 Dewees Island surfboard
 Edisto Beach wooden boat door, shotgun shells, broom, propane tank
 Folly Beach insulin bottle, nut cracker, golf club, whole window frame, tin roof,
 license plate
 Georgetown County underwear, shotgun shell, shower curtain, snorkel mask, message in a
 bottle, washing machine, swim suit bottoms, flare gun kit, mini
 hand-held fan, pair of socks, plastic chair, pen
 Hilton Head/Bluffton T-shirt, coal, shotgun shells, 2 movies from Blockbuster
 Horry County 14 boxes with UPS shipper's address, 2 engine blocks, door jam, IV bottle,
 set of brake drums, screen door, door knob, bedspread, toothbrush,
 studded/spiked dog collar, shingles, pacifiers, panties, wallet with ID
 and credit cards, horse riding helmets, mouse trap, unopened beer can,
 razor, stink bomb, glasses case, full bottle of Tylenol PM, electric cord,
 Christmas tree light, water spigot, sunglasses, grill top, shingles, airplane
 propeller, knife, towel, battery cable, fiberglass insulation, house siding,
 wallpaper, antenna, pantyhose, pacifier, eyeglasses, pair of socks, car
 mat, pair men's shorts, drain pipe, full booze bottle, swimming towels,
 bathroom tiling, kite, shell casing, plastic teeth, golf ball, bricks, toilet
 paper, windshield wiper blade, Dr. Sholl's innersole, hair ties, comb,
 paintbrush, camcorder piece, sheet of tar paper
 Isle of Palms shotgun shell, pacifier, broken surfboard, bag of Gummy Bears, pen, full
 can of Red Dog beer, found 1 dog, returned it to its home, sailboat, golf
 ball, kitchen sink, underwear, water heater, \$5 bill, 2 bottle rockets
 Kiawah Island large fuel tank (200 gal.), sea anchor, 150 lbs Styrofoam block
 Mt. Pleasant 2 coolers full of beer & ice, orange cone, foam mattress, disposable razor
 S/Divers-Charleston hub cap, boy's underwear, highway cones, plastic trash can, Christmas
 lights, nail clippers, air filter, pillow, fanny pack
 Sullivan's Island underwear, hatched turtle eggs, Beach Sweep '89 pencil, stove top, belt,
 alarm clock, cabinet door, bedspread, folding chairs, Canadian \$1 bill
 ". . . that I kept", whole watermelon, gutter screen, bicycle handlebar,
 bed sheet

APPENDIX 7. "Most Peculiar" Items, cont.

TENNESSEE

Norris Lake underwear

TEXAS

Boca Chica deodorant, 3 pair underwear, car seat, car fender, mud flap
 Bolivar Peninsula man's underpants, suitcase, transmission, squashed sunglasses, toilet, gas grill, butane tank, lawn chair, toothbrush, shotgun shell, fuel pump, plastic air pump, 2 bedroom slippers, 1968 Ford pickup hood
 Kleeburg County part of a motorcycle frame, box spring, pencil sharpener, shell casings, TV, refrigerator shelves, plastic Santa Claus
 Magnolia Beach glue stick, \$1 bill, burned CD, shell casing, cassette player head, razor, golf tee, tent with blankets, clothes, makeup, etc., shotgun shells, padded bra, door knob, smoke bomb, metal bumper, small radio controlled motorcycle toy, air conditioner motor, allen wrench
 Matagorda Beach shotgun shells, men's underwear, 1/2 a microwave, refrigerator, fireman's hat, suitcase, washing machine, baby toilet, marine ID card, inside of a car door, women's underwear, door knob, truck tailgate, car speaker
 McFaddin Beach underwear, outboard motor top, shotgun shells
 Mustang Island sailboat sail, propane tank for stove, dentures, shower mat, ear plug, fan blade, U.S. Army dog tag, toilet bowl cleaner
 Port Aransas 1/2 of fiberglass boat hull
 Quintana shark fin, oil filter, shell casing, woofer (speaker), scrub brush, windshield wiper, Mexican deodorant, sunglasses, 15' hose, toilet, bike seat, car door, dog skeleton in plastic bag, lawn chair, foam mattress
 Rockport part of Christmas tree, plastic sword
 Sea Rim State Park oil filter, cushion seat, ski rope, shotgun shells
 South Padre Island pantyhose, underwear, pair of socks, mattress, fiberglass insulation, large orange shag rug 6'x12', toothbrush, dime, rug, wallet, badminton racket, baby outfit, football helmet, toilet seat, car door, propane tank, sweater, full trash bag from previous year, gallon of paint, ballot box from Mexico, bottle of talcum powder
 Surfside Beach Polaroid camera

UTAH

Bluelake painted tire

VIRGINIA

Atlantic Coast keys, sunglasses, hospital urinal, table top, plastic video cover, laundry basket, shotgun shells, lawn chair, camera lens cap, 2 aircraft pieces given to Coast Guard, unopened gallon jug of milk, basketball, orange traffic barrel, weather balloon with chem lights attached, 1-gal. automatic bilge cleaner, vacuum cleaner
 Chesapeake Bay Coast 14 shotgun shells, insulin bottle, guard rail, bank card, boat roof, 10 dog collars with tags
 Lower Potomac River message in a bottle from Brunswick, MD in 1984, fake fingernail, fake nose, comforter, BBQ grill top, foam mattress, screen door, croquet ball, life preserver, purse, marble column, shell casing, Coleman stove, street sign pole, door hinge, bike frame, briefcase, ice skate, necklace, boat seat, IV bag, sleeping bag, carpet, brake shaft for car, tricycle pedals, bathroom sink, manhole cover, small refrigerator

APPENDIX 7. "Most Peculiar" Items, cont.

VIRGINIA, cont.

Shenandoah River sleeping bag in carrying case, toilet tank cover, shopping cart
Tidal James River tennis ball, hubcap, electric window fan

U. S. VIRGIN ISLANDS

Altona Lagoon piece of luggage
Mary's Creek mast from a boat, inside of vehicle's door
Vessup Bay Beach 2 car batteries

WASHINGTON

Long Beach working sun shower from a boat, toilet plunger, padlock, golf ball, BBQ grill
Ocean Park microwave oven
Ocean Shores plastic showercap

WISCONSIN

Amnicon River area \$95.00
Barker's Island Soda dispenser, pair of underwear, lawn chair
Elkhart Lake men's watch, golf balls, hair bands, underwear
Sheboygan Quarry leg brace with shoe
Wisconsin Point 1-gal. motor oil in ice cream bucket, plastic bunny, vacuum, women's underwear

APPENDIX 8. Traceable Debris Reported During the 1996 U.S. Coastal Cleanup

State/Territory	Debris Item	Source Indicated
ALABAMA	plastic label plastic label	Pete's Seafood Southern Foods (Hopedale, LA)
CALIFORNIA	sign sign balloon balloon balloon	City of Levine Continental Yachts Intercuenta Express (Mexico) Chrysler Corporation Berkeley
CONNECTICUT	leak detector for oxygen systems #850001862963	US Gov't, possibly Navy
DELAWARE	balloon	US Naval Station-Annapolis
FLORIDA	metal drum balloon	Texaco Health Core Line
MASSACHUSETTS	2 lobster straps two 5-gal. barrels of juice concentrate	Quebec Aquaculture (Canada) Industria Argentina (Argentina)
MAINE	strapping band plastic band	Quebec Lavaculture 453150(Canada) Heritage Salmon Company
MICHIGAN	balloons balloons	D.A.R.E. drug program Living Hope Lutheran Church
NORTH CAROLINA	road warning marker	City of Eden
NEW HAMPSHIRE	lobster trap	Rick Lockel
NEW JERSEY	balloon balloon	Tequilaville Channel 17 (Philadelphia)
NEW YORK	plastic band metal rods plastic strapping band huge plastic drum	Cliffstar Corp. 46572 Cruz Construction CO Atlantic Silver Co-op Ltd. 1239119 Pit Plastics Almelo (Holland)
OREGON	plastic label plastic pallet	Coast Pacific Export, Inc Bakery Australia
RHODE ISLAND	label	Ocean Horizons (St. George, New Brunswick, Canada)
TEXAS	rusty crab trap	Texas Parks and Wildlife Department
VIRGINIA	charge receipt plastic band plastic strapping band	Indian Embassy Atlantic Silver Co-op Ltd. 1052860 Office Depot 0376178
WASHINGTON	3 foot plastic bumper	Johnsons Fisheries

APPENDIX 9. State-by-State Analysis of Recycling Efforts and Disposal Practices

State	Solid Waste			
	(tons/yr)	Recycled	Incinerated	Landfilled
Alabama	5,471,000	20%	5%	75%
Alaska	500,000	7%	15%	78%
Arizona	4,886,000	14%	0%	86%
Arkansas	2,154,000	36%	1%	63%
California	44,000,000	26%	2%	72%
Colorado	2,811,000	17%	0%	83%
Connecticut*	2,951,000	23%	60%	17%
Delaware*	987,000	21%	23%	56%
District of Columbia	237,000	8%	92%	0%
Florida	24,312,000	40%	22%	38%
Georgia	9,872,000	33%	1%	66%
Hawaii	2,130,000	23%	28%	49%
Idaho	886,000	n/a	n/a	n/a
Illinois	13,400,000	23%	1%	76%
Indiana	5,800,000	23%	8%	69%
Iowa*	3,237,000	30%	0%	70%
Kansas	4,250,000	11%	0%	89%
Kentucky	3,580,000	18%	0%	82%
Louisiana	4,700,000	15%	0%	85%
Maine*	1,293,000	33%	39%	28%
Maryland	5,124,000	27%	19%	54%
Massachusetts*	7,160,000	33%	45%	22%
Michigan*	13,500,000	25%	10%	65%
Minnesota	4,600,000	46%	29%	25%
Mississippi	2,400,000	12%	3%	85%
Missouri	7,661,000	26%	0%	74%
Montana	900,000	5%	2%	93%
Nebraska	2,000,000	26%	0%	74%
Nevada	3,267,000	12%	0%	88%
New Hampshire	1,245,000	20%	30%	50%
New Jersey	9,320,000	43%	23%	34%
New Mexico	1,396,000	12%	0%	88%
New York*	26,800,000	32%	16%	52%
North Carolina	9,929,000	22%	2%	76%
North Dakota	502,000	27%	0%	73%
Ohio	11,449,000	15%	2%	83%
Oklahoma	2,500,000	12%	10%	78%
Oregon*	3,624,000	29%	11%	60%
Pennsylvania	9,575,000	20%	14%	66%
Rhode Island	484,000	23%	0%	77%
South Carolina	7,897,000	27%	2%	71%
South Dakota	842,000	38%	0%	62%
Tennessee	9,117,000	40%	1%	59%
Texas	21,859,000	n/a	n/a	n/a
Utah	2,996,000	19%	8%	73%
Vermont*	600,000	30%	30%	40%
Virginia	8,649,000	35%	18%	47%
Washington	6,643,000	39%	6%	55%
West Virginia	2,000,000	13%	0%	87%
Wisconsin	5,434,000	40%	4%	56%
Wyoming	530,000	4%	0%	96%
Total	327,460,000	28%	10%	62%

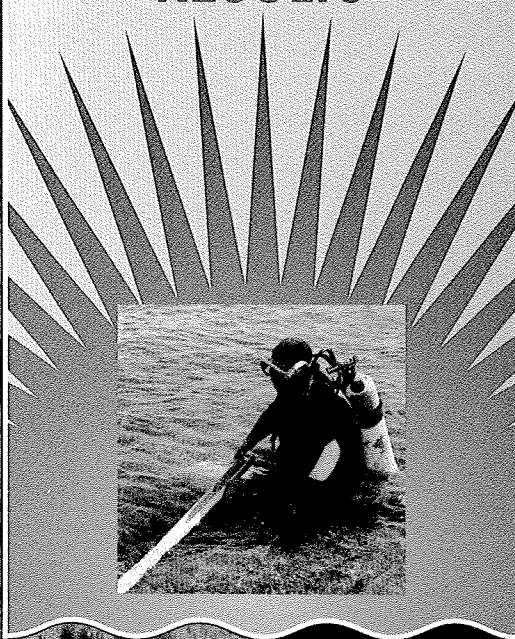
* States with beverage container deposit legislation.

Source: BioCycle, May 1997, "The State of Garbage in America."

1996

*International
Coastal
Cleanup*

**UNDERWATER
RESULTS**



CENTER FOR
MARINE
CONSERVATION

Produced by **Seba Sheavly** with special contributions by **Ruth Bizot** (writing) and **Richard Randall** (data compilation and analysis). Edited and designed by **Rose Bierce**

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1996
INTERNATIONAL COASTAL CLEANUP
UNDERWATER RESULTS

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The Center for Marine Conservation (CMC), established in 1972, is a nonprofit organization committed to protecting ocean environments and conserving the global abundance and diversity of marine life. Through science-based advocacy, research, and public education, CMC promotes informed citizen participation to reverse the degradation of our oceans.

The **International Coastal Cleanup** and the **International Underwater Cleanup** are part of CMC's Citizen Outreach and Monitoring Program and Clean Ocean Campaign. They are supported by CMC's 120,000 members and special contributions from the following:

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This report is dedicated to the 16,251 divers around the world whose spirit of volunteerism and commitment to clean water and healthy rivers, lakes, and oceans made the 1996 International Underwater Cleanup possible.

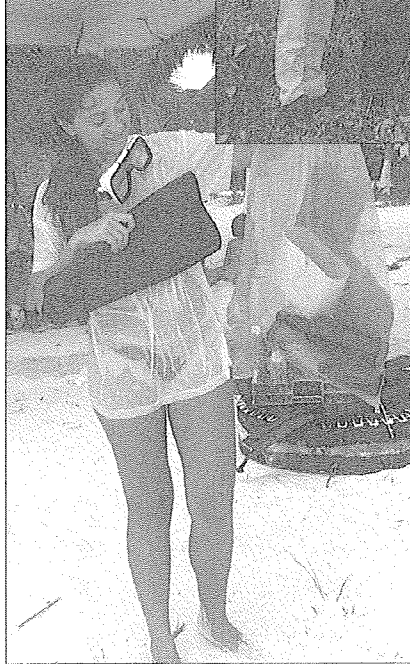
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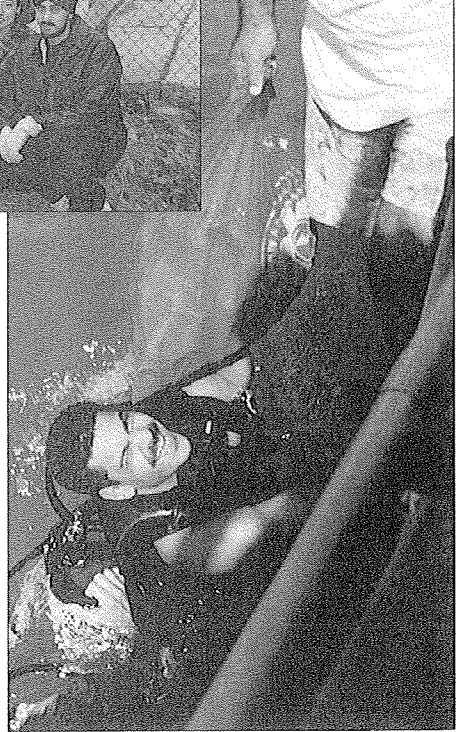
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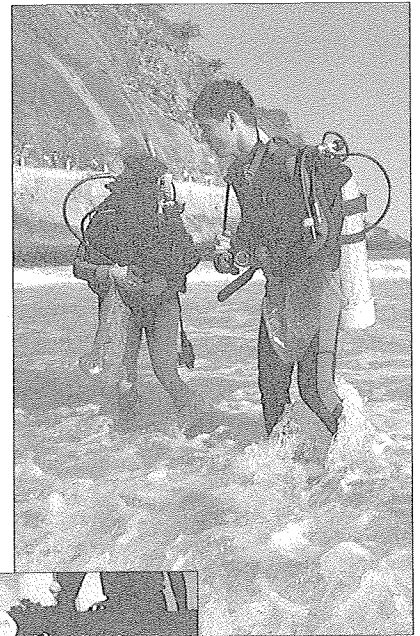
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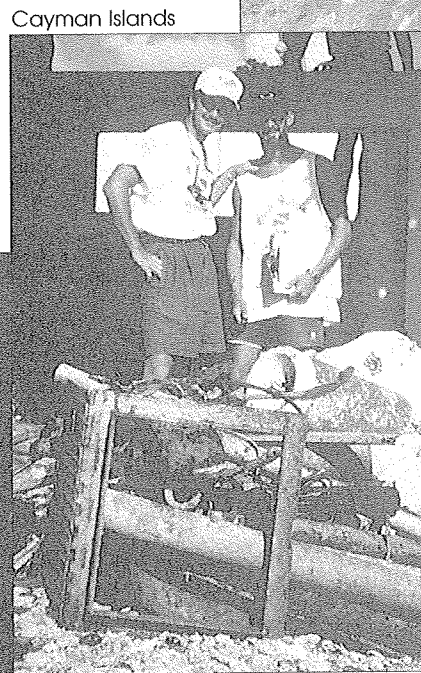
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Australia



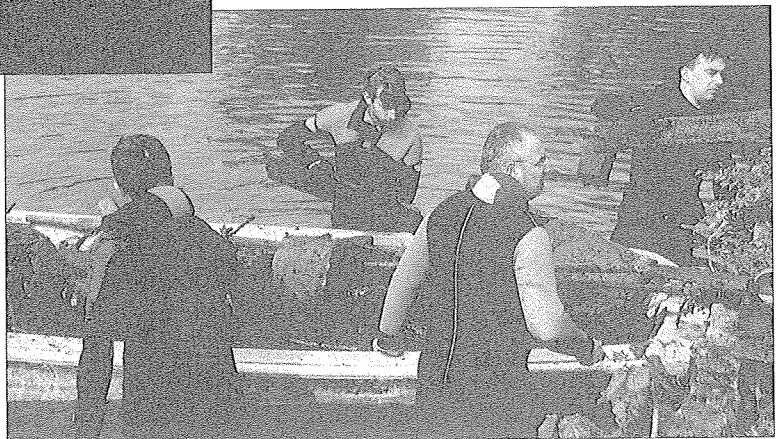
Cayman Islands



Spain



El Salvador



Belgium

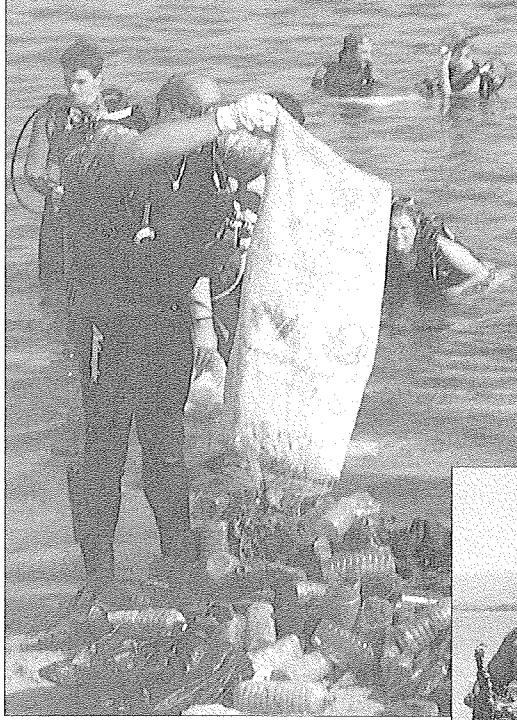
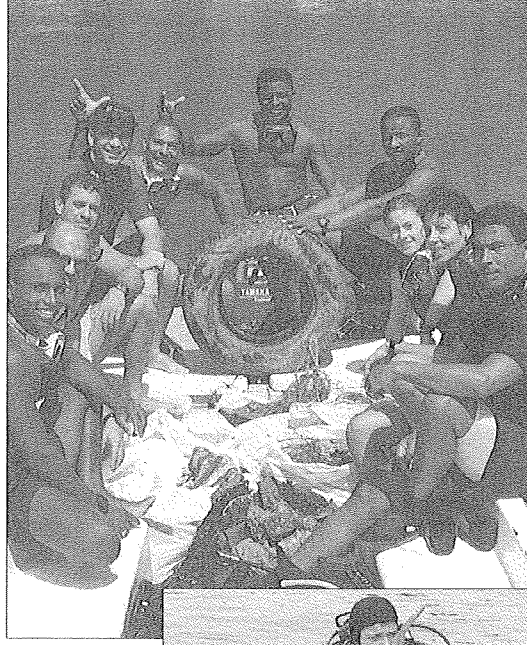


Greece



Philippines

Dominican Republic



Egypt

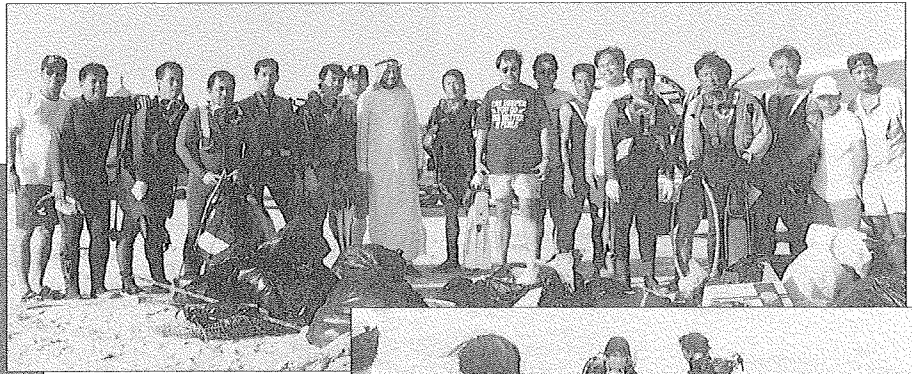
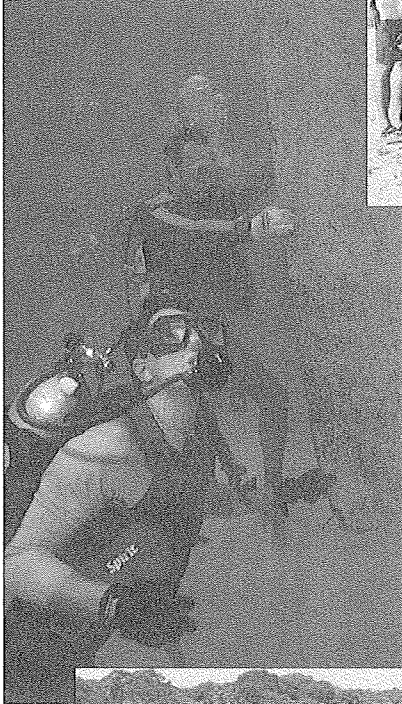


Switzerland



New Zealand

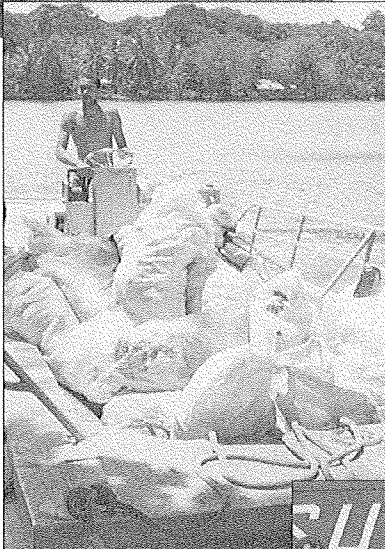
Bahamas



Saudi Arabia



Hong Kong



Costa Rica



Canada



Italy

United States



Montana

Washington



New York

Michigan





South Dakota



Puerto Rico



Maine

Oklahoma



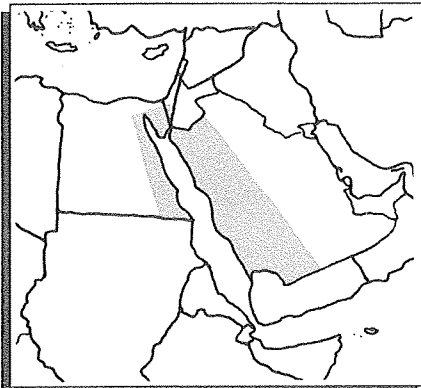
REGIONAL GROUPING PARTICIPATING IN THE 1996



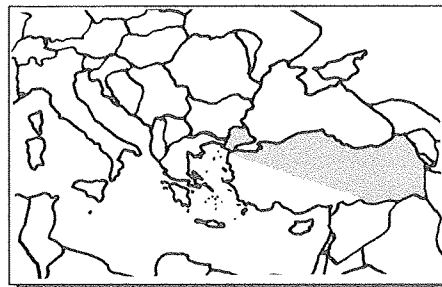
Central Europe: Switzerland, Austria



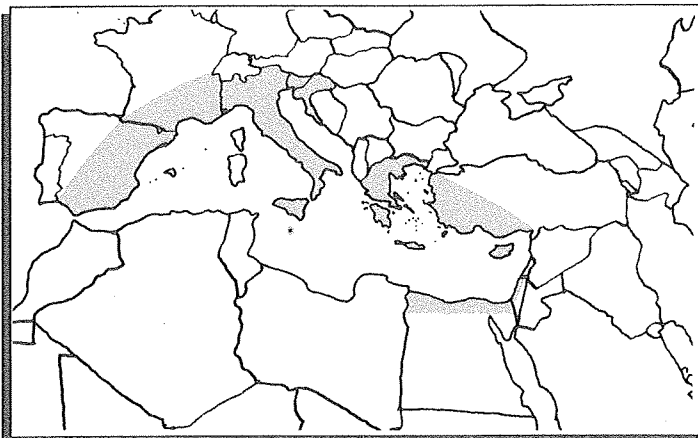
North Sea: United Kingdom, France, Belgium, the Netherlands, Germany, Norway



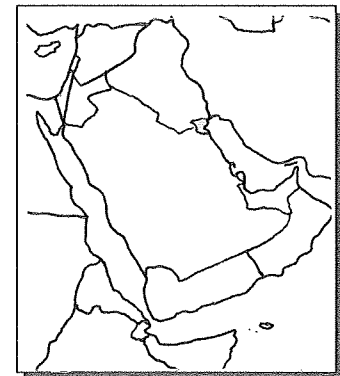
Red Sea: Egypt, Israel, Saudi Arabia



Black Sea: Turkey (including Bosphorus Strait)

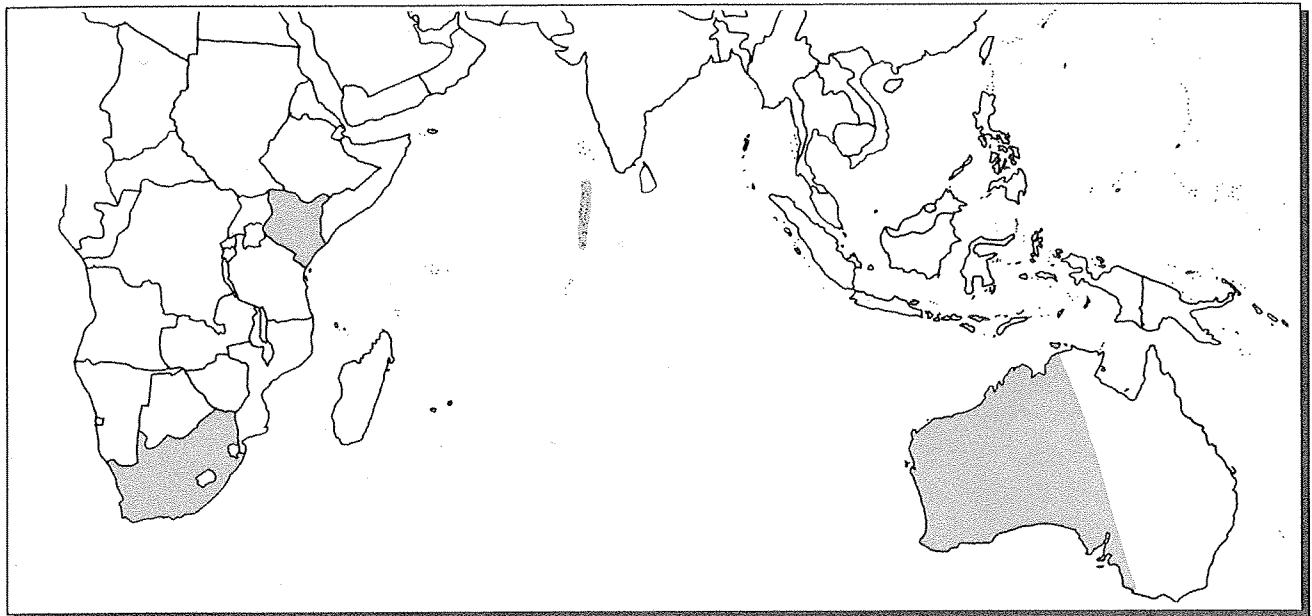


Mediterranean Sea: Spain, France, Italy, Slovenia, Croatia, Greece, Turkey, Cyprus, Israel, Egypt, Malta



Arabian Gulf: Kuwait

OF COUNTRIES UNDERWATER CLEANUP



Indian Ocean: South Africa, Kenya, Maldives, Australia



Pacific Ocean: Canada, United States, Mexico, Guatemala, El Salvador, Panama, Chile, Japan, Taiwan, Hong Kong, Thailand, Malaysia, Singapore, Philippines, Micronesia, Australia, New Zealand



Atlantic Ocean: United States, Bermuda, Brazil, Uruguay, Argentina, United Kingdom, Portugal, South Africa



Wider Caribbean: Bahamas, Cayman Islands, Jamaica, Haiti, Dominican Republic, Turks and Caicos, British Virgin Islands, Barbados, St. Vincent and the Grenadines, Grenada, Venezuela, Netherlands Antilles, Panama, Guatemala, Mexico, United States

INTRODUCTION

Marine debris is significant even though it cannot be seen below the water. Under the water's surface, plastics and other kinds of trash threaten fish and other wildlife, oyster beds, coral reefs, and other submerged habitats, as well as swimming and diving areas.

Historically, the ocean has been a dumping ground for human-made debris. Any manufactured material thrown, dumped, or allowed into waterways and the ocean counts as marine debris. Prevailing winds and currents carry these materials throughout the waters of the world. The deleterious effects of marine debris are manifold: habitat destruction, negative economic and aesthetic impacts, harm and risk to human health and safety, and death and injury to animals that ingest or become entangled in debris.

The International Coastal Cleanup is not just about trash. It's about the compelling need for a clean ocean, clean water, and clean waterways. At its heart, the Cleanup is about people, acting cooperatively and in partnership to create solutions.

In 1986 the **Center for Marine Conservation** sponsored its first beach cleanup, when 2,800 volunteers collected 124 tons of trash from 122 miles of Texas shoreline. The Cleanup became national in 1988, then international in 1989. Since then, more than a million volunteers from more than 94 countries bordering every major body of water on our planet have taken part in the Cleanup.

Over the years, thousands of dedicated divers have added their energy and expertise to the International Coastal Cleanup. In 1995 CMC began tracking and reporting underwater cleanup data separately in order to expand the usefulness of the information collected. In just two years, 60 countries and 50 U.S. states and territories have taken part in underwater cleanup events.

In partnership with the dive community and federal agencies, CMC also created the **Underwater Cleanup and Conservation Monitoring Program (UCCMP)**. Dive industry partners include the 55,000-member Professional Association of Dive Instructors (PADI) and its Project A.W.A.R.E. (Aquatic World Awareness Responsibility and Education), the Diving Equipment and Marketing Association (DEMA), Ocean Futures and the Ocean Futures Foundation (its ocean conservancy education organization), and *Skin Diver Magazine*. The U.S. Environmental Protection Agency (EPA), National Oceanic and Atmospheric Administration (NOAA), and the U.S. Coast Guard are the federal government partners in the UCCMP.

The purpose of the UCCMP is threefold:

1. to involve the dive community in identifying and removing underwater debris;
2. to educate the public about what is found; and
3. to influence policy decisions concerning the handling of human-made debris that affects the underwater world.

The data in this report illustrate the underwater marine debris problem. The information contained here can be a highly effective tool for citizens and policymakers seeking to deal effectively with this pollution issue. It can help evaluate progress as well as pinpoint areas of special concern.

Since the first Cleanup, significant strides have been made to reduce the problem of marine debris and to improve the effective, responsible handling of solid waste. But as this report clearly shows, we still—every one of us—have much work to do.

1996 UNDERWATER CLEANUP RESULTS

OVERVIEW

The Center for Marine Conservation has been working to clean beaches, shorelines, and waterways for more than 11 years. Its annual cleanup efforts are part of a comprehensive campaign to define, publicize, and solve the problem of marine debris.

Nineteen ninety-six marked the second year in which data from underwater cleanup activities were presented separately from shoreline activities. It was a banner year below the surface: the number of underwater sites increased to 521 from approximately 300 the year before, and more than 50 countries and sovereign territories as well as 44 U.S. states and territories organized and sponsored underwater cleanup events. Because of reporting delays and differences in recording data, not all countries' results could be included in this report. Therefore, this document analyzes results from 35 of the participating countries.

Labor for the 1996 underwater cleanup was provided by 12,651 divers and diving support volunteers who, sometimes working under adverse conditions, removed 314,960 pounds of trash from 320 underwater miles—more than three-and-a-half times the weight of trash removed in 1995 (Table 1). In all, 172,002 debris items were collected, an 86% increase over 1995 (Table 2).

Volunteer participation more than doubled over the previous year. The United States accounted for 43% of the underwater volunteers with 3,275 people, followed by the Netherlands with 2,332. Other countries with substantial dive teams included the Philippines (965) and Germany (921). U.S. cleanup activities collected 40% of all debris by weight (126,866 pounds), followed by the 32,976 pounds gathered by Italy's 671 divers.

But it is truly the heart of the cleanup, not its size, that counts most. We're just as proud of those four divers in France and the six people in Panama who conducted their countries' underwater cleanups. In the end, all change comes from individual efforts of individual people. Each and all of us make a difference.

Each cleanup had its own story. The Singapore volunteers included two hearing-impaired divers. One Netherlands Antilles underwater team videotaped their day's work, and gave a copy afterward to sponsors, as a "thank you" gift. In Thailand, cleanup activities were preceded by an environmental awareness talk.

Divers in Saudi Arabia reported extensive reef damage, largely due to dumped construction materials and abandoned anchors from nearby resorts and marinas. Australian crews were appalled by the amount of fishing line entangled around local wrecks. On Boracay Island, nearly every dive shop joined in to help the Philippines cleanup. Strong winds and rain hampered but did not discourage dedicated Croatian divers.

Turkey's English Harbor, one diver reported, was cleaner than it had been 10 years ago. Even so, another team member added, cleaning up was "harder than it looks." Divers in one New Zealand zone were frustrated by the cleanliness of their site. "Next time," they said, "we will try somewhere not as tidy." Divers off Australia's Hideaway Island, on the other hand, hauled in more debris this year than last year. "Second time around, there was still more," the zone captain explained, "because we knew what to look for now."

Comparison of cleanup statistics from country to country must be made carefully. Because each local effort is volunteer-based, and because of differences in geography and resources, no two cleanups are alike.

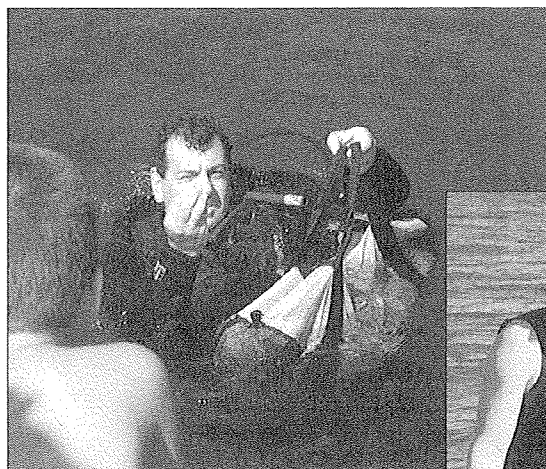
Natural forces also frequently influence the results. For further study, detailed country analyses are available from the Center for Marine Conservation or local cleanup coordinators.

Information in this report is organized largely by region (see maps pp. x-xii), in order to bring perspective to the problem of marine debris, and to reveal possible innovative regional solutions. Underwater cleanups were conducted in 10 of the 11 world regions of the International Coastal Cleanup: the Atlantic Ocean, Arabian Gulf, Black Sea, Central Europe, Indian Ocean, Mediterranean Sea, North Sea, Pacific Ocean, Red Sea, and Wider Caribbean. Four of these regions include results from only one country: the Maldives in the Indian Ocean, Saudi Arabia in the Red Sea, Switzerland in Central Europe, and Turkey in the Black Sea. (Unfortunately, Kuwait, the only country representing the Arabian Gulf, did not send results in time for inclusion in this report; thus the data report only on the other nine world regions.)

Underwater results from three countries are listed in more than one region, to more accurately reflect the debris situation from ocean to ocean. The United States' results are split between the Atlantic, Pacific, and Wider Caribbean regions; the United Kingdom appears in both the Atlantic and North Sea; and Mexico is listed in both the Pacific and Wider Caribbean regions.

People are the cause of marine debris. Over and over, volunteers wrote on their data cards about the need for more cleanups, more dumpsters, and more education. People, as the volunteers themselves demonstrate, are also the solution. "The people worked perfectly together to clean up the bay where I live," a Malaysian volunteer reported. "Everybody was willing to sacrifice their free time."

text continues on page 7



Brazil

New Zealand



TABLE 1. 1996 International Underwater Cleanup: Who, How Much, and How Far

Country	Volunteers	Pounds / Kilograms Collected		Miles / Kilometers Cleaned	
Argentina	50	1,188	540	0.5	0.3
Australia	131	1,876	853	7.4	4.6
Austria	284	10,716	4,871	n/r	n/r
Bahamas	45	4,024	1,829	3.1	1.9
Barbados	65	5,082	2,310	9.9	6.1
Belgium	58	616	280	n/r	n/r
Bermuda	19	2,200	1,000	0.3	0.2
Brazil	33	378	172	n/r	n/r
British Virgin Islands	40	80	36	n/r	n/r
Croatia	51	9,966	4,530	1.2	0.7
Cyprus	18	352	160	0.9	0.6
Dominican Republic	53	525	239	2.7	1.7
Egypt	119	3,476	1,580	3.4	2.1
El Salvador	117	1,300	591	4.0	2.5
France	4	66	30	n/r	n/r
Germany	921	14,016	6,371	n/r	n/r
Greece	15	110	50	n/r	n/r
Guatemala	44	4,299	1,954	0.5	0.3
Hong Kong	15	n/r	n/r	0.5	0.3
Israel	135	n/r	n/r	1.6	1.0
Italy	671	32,976	14,989	n/r	n/r
Jamaica	15	20	9	n/r	n/r
Japan	138	851	387	0.7	0.4
Kenya	10	110	50	0.4	0.2
Kuwait	180	6,600	3,000	n/r	n/r
Malaysia	95	572	260	0.4	0.2
Maldives	101	968	440	n/r	n/r
Malta	25	572	260	0.1	0.0
Mexico	117	3,019	1,372	3.9	2.4
Micronesia	22	950	432	0.3	0.2
Netherlands	2,332	20,508	9,322	n/r	n/r
Netherlands Antilles	333	3,092	1,405	126.4	78.4
New Zealand	160	n/r	n/r	n/r	n/r
Norway	8	26	12	0.6	0.4
Panama	6	n/r	n/r	0.1	0.0
Philippines	965	10,633	4,833	12.3	7.6
Portugal	115	2,108	958	1.4	0.9

Country	Volunteers	Pounds / Kilograms Collected		Miles / Kilometers Cleaned	
Saudi Arabia	62	308	140	1.5	0.9
Singapore	71	182	83	1.6	1.0
Slovenia	97	594	270	n/r	n/r
South Africa	5	7	3	0.3	0.2
Spain	512	27,667	12,576	n/r	n/r
St. Vincent & Grenadines	7	14	6	n/r	n/r
Switzerland	154	11,370	5,168	n/r	n/r
Taiwan	57	330	150	0.2	0.1
Thailand	121	315	143	0.2	0.1
Turkey	32	132	60	n/r	n/r
Turks and Caicos Islands	9	400	182	0.1	0.0
United Arab Emirates	38	220	100	0.6	0.4
United Kingdom	85	722	328	n/r	n/r
United States	3,275	126,866	57,666	132.1	81.9
Uruguay	27	600	273	n/r	n/r
Venezuela	589	1,960	891	0.5	0.3
Grand Totals	12,651	314,960	143,164	319.9	198.3

*n/r = not reported



12,651 Volunteers



320 Miles



314,960 Pounds

TABLE 2. Total Numbers of Debris Items Collected During 1996 International Underwater Cleanups

PLASTIC:		GLASS:	
Food Bags/Wrappers	7,813	Beverage Bottles	16,381
Salt Bags	102	Food Jars	2,508
Trash Bags	2,376	Other Glass Bottles/Jars	1,768
Other Bags	2,788	Fluorescent Light Tubes	60
Plastic Beverage Bottles	8,293	Light Bulbs	171
Bleach Bottles	1,492	Glass Pieces	5,885
Milk/Water Gallon Jugs	1,723	Other Glass	1,105
Oil/Lube Bottles	1,219	RUBBER:	
Other Plastic Bottles	2,286	Balloons	404
Buckets	690	Condoms	163
Caps/Lids	4,339	Rubber Gloves	345
Cigarette Butts	19,934	Tires	1,182
Cigarette Lighters	765	Other Rubber	1,362
Cups/Utensils	4,181	METAL:	
Diapers	834	Bottles Caps	3,768
Fishing Line	1,674	Aerosol Cans	1,484
Fishing Floats/Lures	971	Beverage Cans	12,189
Fishing Nets	349	Food Cans	3,337
Hard Hats	16	Other Cans	787
Light Sticks	502	Metal Crab/Lobster Traps	387
Plastic Pieces	4,671	55-Gallon Drums, rusty	356
Pipe Thread Protectors	276	55-Gallon Drums, new	21
Rope	1,460	Metal Pieces	2,993
Long Sheeting	397	Pull Tabs	1,175
Short Sheeting	304	Wire	1,093
Six-Pack Holders	916	Other Metal	3,203
Strapping Bands	786	PAPER:	
Straws	2,616	Bags	1,240
Syringes	236	Cardboard	708
Tampon Applicators	501	Cartons	1,255
Toys	733	Paper Cups	1,017
Vegetable Sacks	512	Newspapers/Magazines	751
Write-protection Rings	561	Paper Pieces	2,762
Other Plastic	5,121	Paper Plates	373
FOAMED PLASTIC:		Other Paper	2,473
Buoys	235	WOOD:	
Foamed Cups	2,566	Crab/Lobster Traps	43
Egg Cartons	152	Crates	159
Fast Food Containers	1,523	Lumber Pieces	1,854
Meat Trays	431	Pallets	518
Packaging Materials	1,574	Other Wood	751
Foamed Pieces	4,062	CLOTH:	
Foamed Plates	801	Clothing/Pieces	2,548
Other Foamed Plastic	642		
GRAND TOTAL:		172,002	

1996 Underwater Cleanup Highlights

What goes out, often goes down, as the 1996 Underwater Cleanup clearly demonstrated. Nothing made by human hands, it seems, is too big, too small, too silly, or too important to wind up as submerged trash.

- ◆ Divers around the world found something for every room in the house, from stoves, refrigerators, and dishwashers to carpet, chairs, and steel bed frames; from saucepans, chopsticks, and a high chair to alarm clocks, a stereo, television, radio, and mobile phone. And a handy person could build a house with all the bricks, boards, concrete, and construction debris collected underwater. There were beach umbrellas, patio chairs, garden hose, wheel barrows, sunglasses, and a cooler. There were golf balls and skateboards, a champagne bucket and silk underwear—not to mention the new bicycle hauled ashore by Canadian volunteers.
- ◆ Divers in North Carolina's cleanup rescued a loggerhead sea turtle from entangling debris and set it free. And divers in Nevada's Lake Mead found two occupied burial urns. They returned the urns, with proper ceremony, to a deeper part of the lake.
- ◆ Lost and abandoned anchors were reported in many cleanups, including an antique one in Greece. Other marine items included a boat rotor, outboard engine and cover, fishing rod, snorkel, fins, and weight belt.
- ◆ Taiwan divers restored a lost wallet to its grateful owner, complete with credit cards, checks, and cash equivalent to \$20 in U.S. funds.
- ◆ Evidence of warfare ranged from a World War II ammunition case in Turkey to artillery rounds in Australia and shotgun shells in New Zealand.

As the examples above indicate, underwater trash knows no boundaries. People put it in the water. Only people can pull it out or, better yet, keep it out in the first place.



Belgium

THE MOST PREVALENT TYPE OF DEBRIS UNDERWATER

The Cleanup does much more than just collect and remove trash. By using detailed, standardized data cards developed by the Center for Marine Conservation, volunteers accumulate valuable information about the types and sources of debris collected underwater. Analyzed and tracked year by year, this information serves as a powerful tool for educating the public, influencing public policy, and effecting positive behavioral changes in individuals, organizations, and communities.

The CMC data card lists 81 debris items in eight major categories: plastic, foamed plastic, glass, rubber, metal, paper, wood, and cloth. The cards are used to record debris from both shoreline and underwater cleanups. The type of debris varies from region to region, country to country, and even site to site. The reports from individual countries and sovereign territories provide greater detail about the composition of each cleanup area's debris.

It is important to note that every single item found during land-based cleanups also were found underwater. The numbers and proportions differed, of course, but every item was there, from hardhats and new 55-gallon drums to diapers, light bulbs, and cigarette butts.

Contrary to popular notion, not all plastic floats. Plastic (including foamed plastic) was again the most prevalent form of marine debris collected underwater, accounting for 48.33% of the total, up from 44.57% in 1995 (Figure 1). This evidence strongly demonstrates that plastic waste is still not being disposed of correctly, despite strict regulations in MARPOL Annex V¹ prohibiting the dumping of plastics into our waterways. Further, these figures testify to the longevity of plastic in the environment. Plastic trash collected this year could easily have been floating around for years or even decades.

Five of the nine regions reported underwater plastic levels higher than the international average: Indian Ocean (the Maldives only), 72.78%; Red Sea (Saudi Arabia only), 63.88%; Pacific, 54.50%; Wider Caribbean, 55.39%; and Atlantic Ocean, 48.85%. Central Europe (Switzerland only) had the lowest percentage with 6.24%, followed by the Black Sea (Turkey only) with 22.06% (Figure 2).

Of the 35 countries reporting in the 1996 Underwater Cleanup, more than half (20) exceeded the international average for plastic. They included the Maldives (72.78%), the Philippines (70.20%), St. Vincent and the Grenadines (69.12%), and the Dominican Republic (69.02%). The United Kingdom reported 65.24% plastic overall, and 100% in its Atlantic Ocean portion. After Switzerland, Micronesia reported the second-lowest level of underwater plastic (15.44%).

Plastic was the primary debris item collected in seven of the nine regions reporting. In Central Europe glass was number one (79.37%), followed by metal (13.29%). Metal was number one in the Black Sea (45.50%), followed by glass (29.41%).



Plastic continues to be the most prevalent material collected as debris.

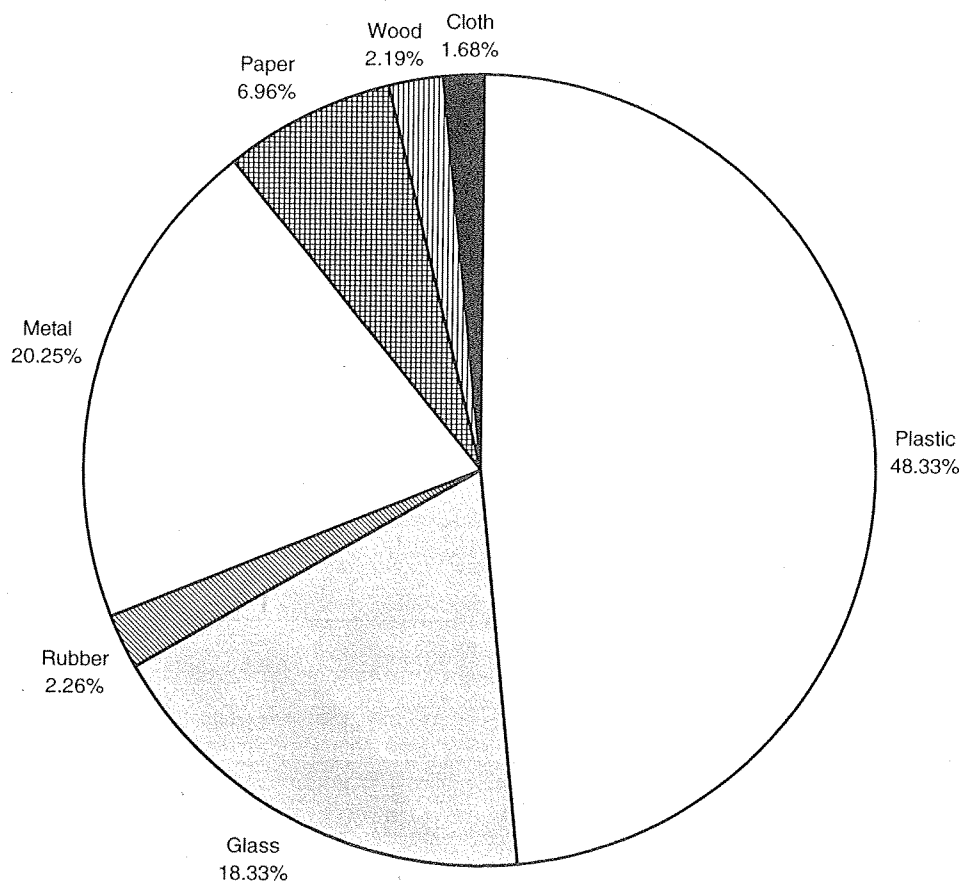
¹Established in 1973, the International Convention for the Prevention of Pollution from Ships prohibits dumping at sea. This international protocol is commonly known as MARPOL 73/78, and has been in effect in the United States only since December 31, 1988, following ratification by Congress in 1987. Solid wastes such as garbage and plastics are covered in Annex V of the treaty.

Metal, the second most abundant underwater item, made up 20.25% of the total debris collected, a decrease of nearly 14% from 23.49% in 1995. In third place, glass (18.33%) represented about the same percentage as 1995 (18.24%).

Because of the size of the U.S. cleanup, international results must be reviewed carefully to avoid misinterpreting the data. In 1995, the United States accounted for 37% (by count) of all debris collected underwater. In 1996, U.S. volunteers collected 32.2% by count and 40.3% by weight of all underwater trash.

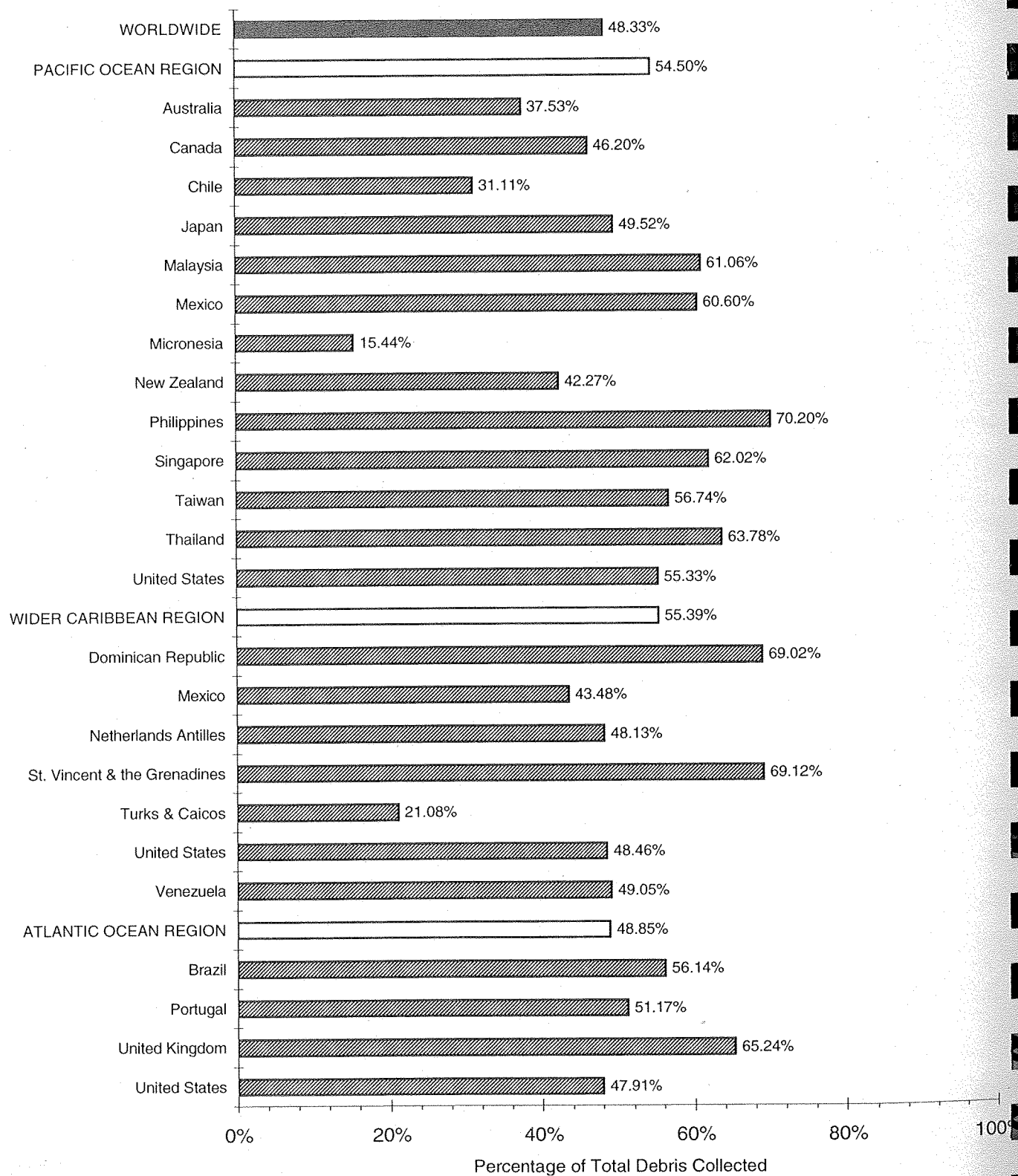
For 13 of the 81 debris items, the United States accounted for more than 50% of the total, including wooden crab and lobster traps (69%), foamed packaging materials (64.2%), and tampon applicators (62.3%). Other items found predominantly in the U.S. cleanup include six-pack holders, plastic straws, foamed plastic cups, and rubber balloons. U.S. results made up less than 10% of the total for seven items, including new 55-gallon drums (4.8%), hardhats (6%), wooden crates (6.3%), incandescent light bulbs (7%), and write-protection rings (9%).

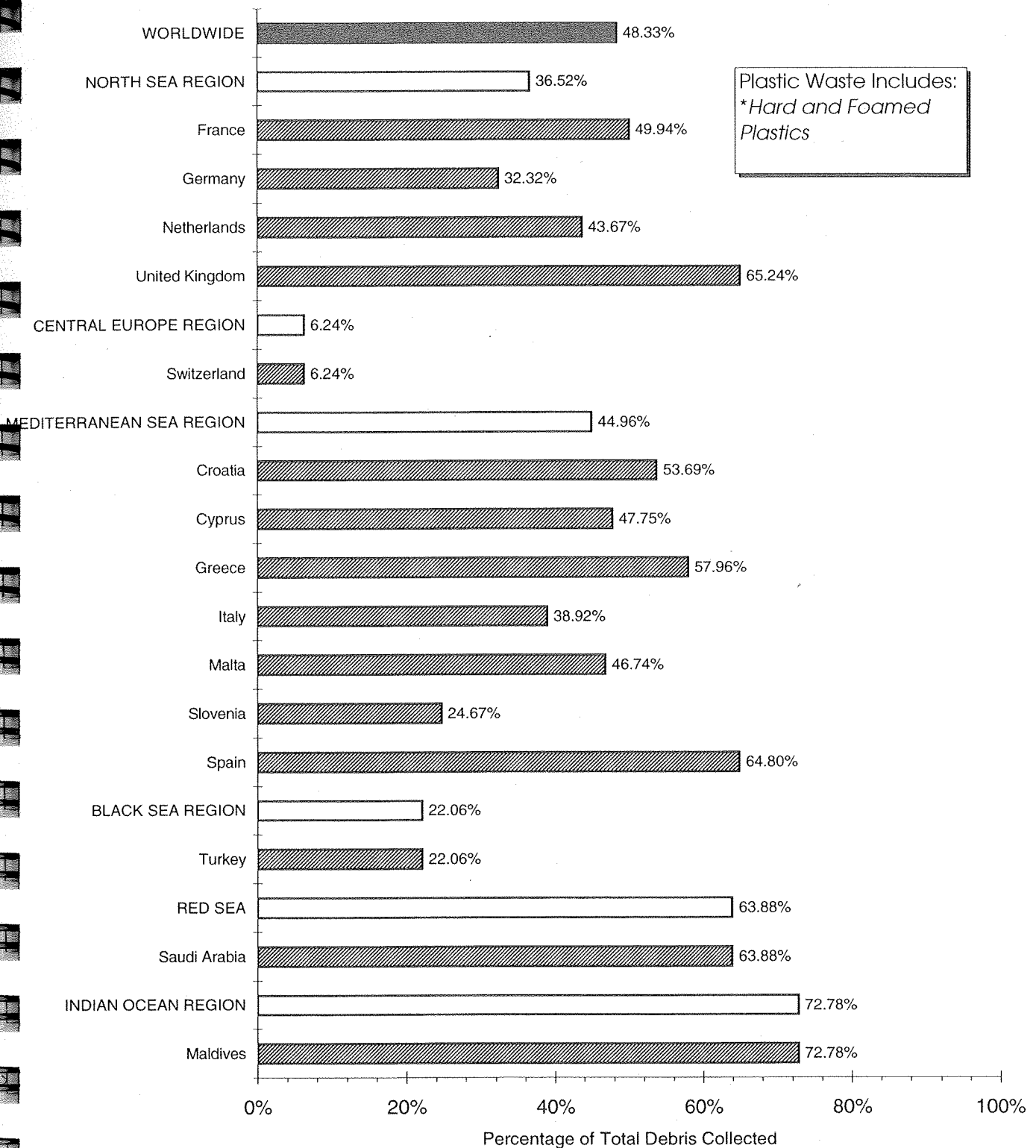
FIGURE 1. Percent Composition of Material Types of Debris Reported During 1996 International Underwater Cleanups



NOTE: The 81 debris items are arranged by type. The "Plastic" and "Foamed Plastic" categories are combined. The chart includes all underwater debris reported, minus cigarette butts, which are so numerous that their inclusion would distort data interpretation.

FIGURE 2. Plastic Debris Reported from 1996 International Underwater Cleanups





Regional data is determined by the total debris items from the countries listed under each region. There are countries that are part of two regions and their percentages are calculated according to the region, not the country total.

The 1996 International Underwater Dirty Dozen

The 12 items most frequently found underwater accounted for 55.14% of all debris collected, up from 54.41% in 1995. In 1996 they were:

	Debris Items	Total Number Reported	Percent of Total Debris Collected
1.	Cigarette Butts	19,934	11.59%
2.	Glass Beverage Bottles	16,379	9.52%
3.	Metal Beverage Cans	12,189	7.09%
4.	Plastic Beverage Bottles	8,283	4.82%
5.	Plastic Food Bags/Wrappers	7,813	4.54%
6.	Glass Pieces	5,885	3.42%
7.	Plastic Pieces	4,671	2.72%
8.	Plastic Caps/Lids	4,339	2.52%
9.	Plastic Cups/Utensils	4,173	2.43%
10.	Foamed Plastic Pieces	4,062	2.36%
11.	Metal Bottle Caps	3,768	2.19%
12.	Metal Food Cans	3,337	1.94%
	Total Dirty Dozen	94,833	55.14%

Cigarette butts (11.59%) moved into first place, up from third place in 1995 (7.27%). Glass beverage bottles held onto second place at 9.52% (9.49% in 1995), while metal beverage cans dropped from first to third place underwater at 7.09% (9.93% in 1995). The following items complete the list of the Top 20 debris items in the 1996 Underwater Cleanup.

	Debris Items	Total Number Reported	Percent of Total Debris Collected
13.	Metal Pieces	2,993	1.74%
14.	Other Plastic Bags	2,788	1.62%
15.	Paper Pieces	2,762	1.61%
16.	Plastic Straws	2,616	1.52%
17.	Foamed Plastic Cups	2,566	1.49%
18.	Clothing/Pieces	2,548	1.48%
19.	Glass Food Jars	2,508	1.46%
20.	Plastic Trash Bags	2,376	1.38%
	Top 20 Total	115,990	67.44%

Plastic straws, not even included in 1995's underwater Top 20, appeared in 16th place. Metal food cans, metal pieces, and glass food jars/bottles also made the underwater Top 20 list for the first time. Foamed plastic pieces moved from 17th to 10th place, while miscellaneous glass bottles, plastic rope, metal aerosol cans, and plastic fishing line dropped off the Top 20 altogether.

Regional and country-by-country results varied. Cigarette butts were the number one debris item underwater in the Indian Ocean (the Maldives only), Pacific Ocean, and North Sea regions, as well as in German waters. Glass beverage bottles were the number one item reported by more countries (seven) than any other debris item. Plastic beverage bottles placed first in six countries' waters, as well as in the Red Sea and Mediterranean Sea regions. Plastic food bags and wrappers were number one in six countries; metal beverage cans were number one in five countries. Altogether, 12 different debris items were number one underwater in at least one country, including fishing line in Thailand, foamed plastic cups in Greece, metal pieces in Slovenia, plastic pieces in Mexico, and glass pieces in France, Chile, and Japan.

Cigarette Butts

Composed of cellulose acetate, a synthetic polymer, cigarette butts can persist in the environment as long as other forms of plastic. Many, no doubt, are left in the sand by beachgoers. Others, apparently, are tossed casually overboard or out a car window and washed into waterways from parking lots and streets via stormwater overflow systems. More than just an aesthetic nuisance, butts are ingested by birds, whales, and other marine creatures who mistake them for food.

The 19,934 cigarette butts collected in the 1996 Underwater Cleanup represent nearly three times the number collected in 1995 (6,700). The U.S. results account for 27.9% (5,573 butts) of cigarette butts worldwide, slightly less than its proportional share of total underwater debris.

Because of their large numbers, cigarette butts present interpretation problems when analyzing the debris database as a whole. Rather than have the results skewed, we have intentionally removed cigarette butts when calculating the percent composition of debris types (Figure 1). Totals for cigarette butts are included in all other calculations.



Bottles and Associated Goods

The Cleanup analyzes six items collectively as “bottles and associated goods.” These six items are glass and plastic beverage bottles, metal beverage cans, metal bottle caps, metal pull tabs, and plastic six-pack holders. Worldwide, bottles and associated goods accounted for 24.84% of total underwater debris, down from 30.1% in 1995 (Figure 3). Four regions exceeded the international average, led by Central Europe (Switzerland only) with 81.76% and the Black Sea (Turkey only) with 68.29%. The Mediterranean (29.54%) and Red Sea

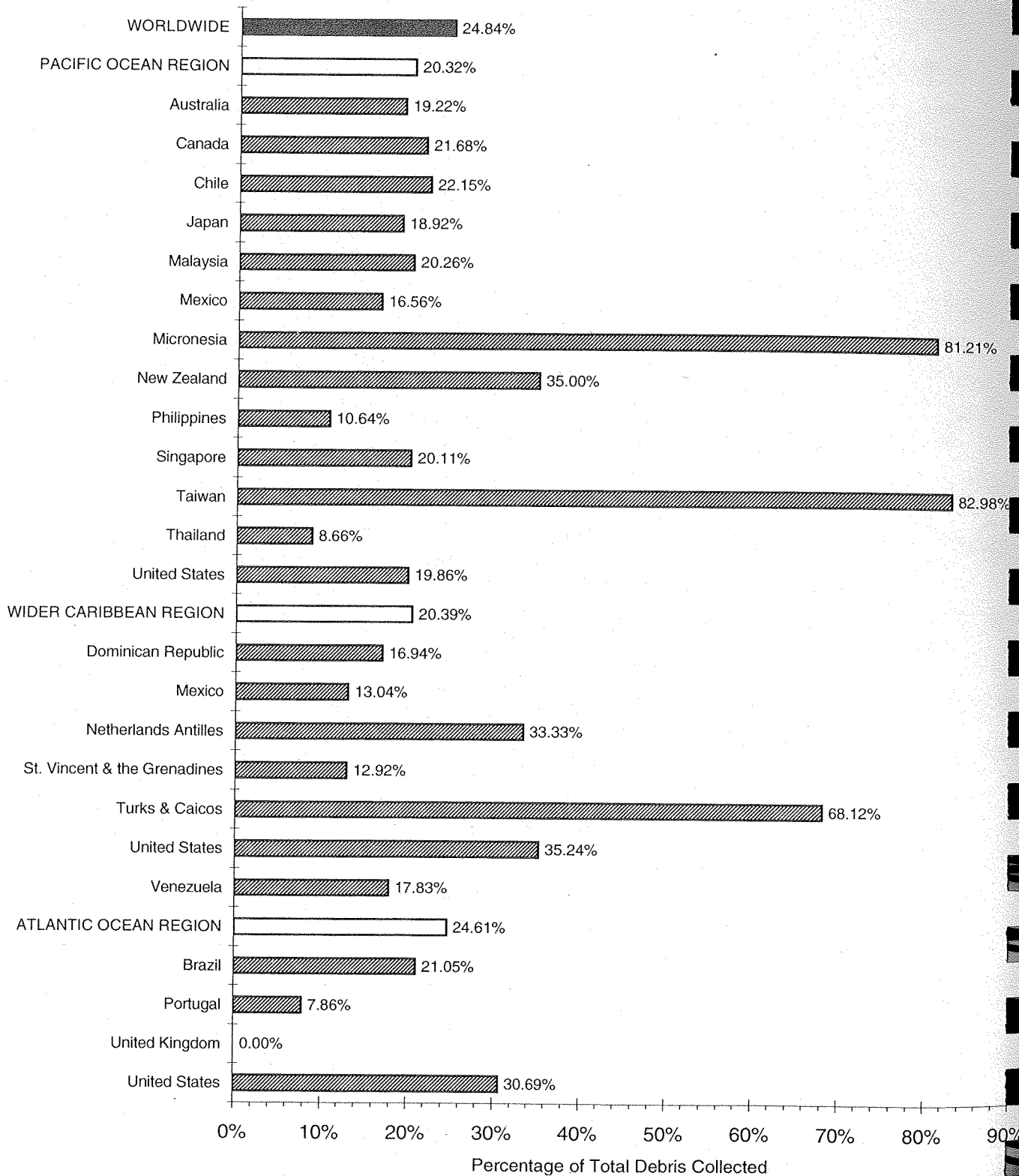


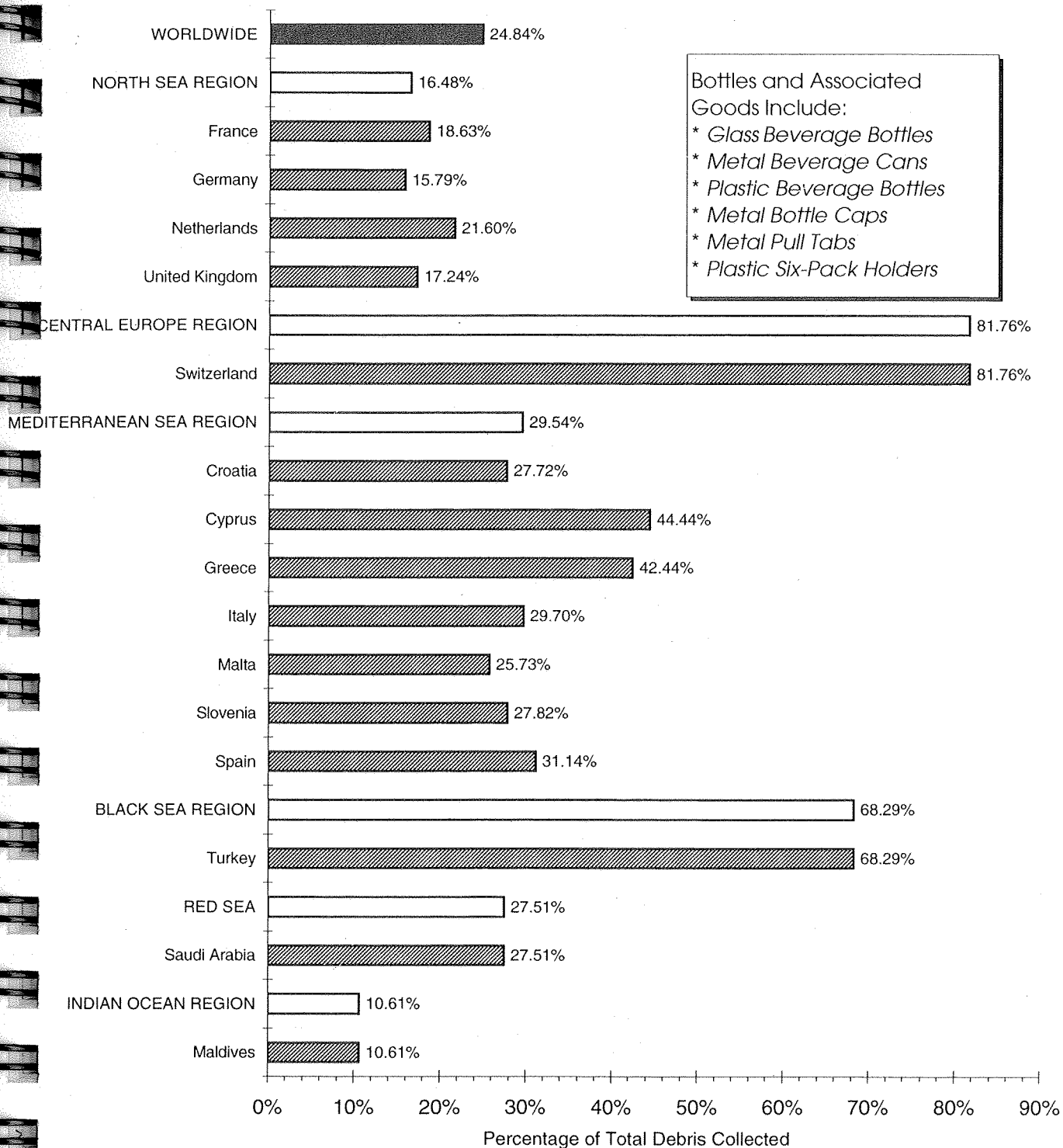
(Saudi Arabia only, with 27.51%) also exceeded the worldwide percentage. The Indian Ocean (the Maldives only, with 10.61%) reported the lowest regional level of bottles and associated goods.

Other countries reporting high levels in this category include Taiwan (82.98%), Micronesia (81.21%), and Turks and Caicos Islands (68.12%). Portugal reported the lowest level (7.86%), followed by Thailand (8.66%).

The debris associated with beverages is nearly all potentially recyclable. Its presence in any environment suggests that recycling has not yet become habitual. Imagine the enormous debris reduction that would result if comprehensive recycling programs were implemented and followed. Change is so very possible, if people will only take action.

FIGURE 3. Bottles and Associated Goods, 1996 International Underwater Cleanups



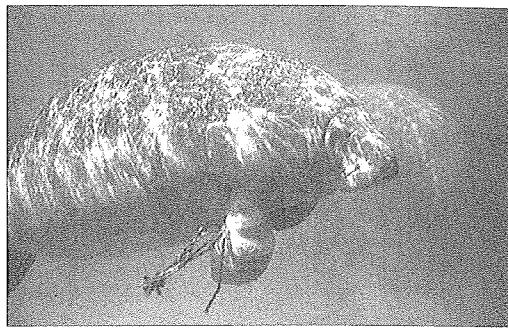


Regional data is determined by the total debris items from the countries listed under each region. There are countries that are part of two regions and their percentages are calculated according to the region, not the country total.

THE IMPACTS OF MARINE DEBRIS ON WILDLIFE

Marine debris is a serious threat to birds and marine animals. Such items as plastic bags, nets, and monofilament line are known to have caused injury or death to at least 267 species, including mammals, seabirds, sea turtles, fish, and shellfish.

Debris that entangles an animal can hamper its mobility, prevent it from eating, or suffocate it. Some types of debris can inflict cuts and wounds. If eaten, debris can lead to strangulation or digestive problems. Some entanglement incidents happen above the waterline, others below.



Many aquatic animals cannot distinguish inedible human-made debris from natural foods. Virtually invisible underwater, transparent plastics lie in wait for unsuspecting swimming and diving creatures, which cannot protect themselves from our dangerous discards. It is our responsibility, and ours alone, to keep their environment safe and clean.

Cleanup volunteers in six countries reported 24 incidents of underwater entanglement, involving more than 34 creatures (Tables 3 and 4). That is approximately one incident for every 7,167 items of debris collected. Animals found entangled underwater in the 1996 Cleanup included a seagull, sea lion, octopus, sea slug, loggerhead sea turtle, grouper, and bat fish. The Cleanup occurs only once a year for three hours, and what is collected represents a tiny fraction of the world's underwater debris. Even conservative extrapolation of these results indicates an immense entanglement problem.

Most of the 1996 entanglements proved fatal. A sea lion pup, two fish, and two spider crabs were found alive. North Carolina divers successfully rescued a nesting female loggerhead sea turtle from entangling debris, and a lobster was freed from an abandoned trap in New Hampshire. The others died, tangled in fishing line, smothered by plastic bags, trapped in bottles and nets and discarded traps. All of these incidents attest to the deadly impact of human-made debris on wildlife.

According to an extensive study released in 1996 by the U.S. Marine Mammal Commission, the debris items found to most threaten marine life are net fragments, rope, strapping bands, and monofilament fishing line from commercial and recreational fishing boats. Plastic pellets and small pieces of processed plastic are the debris items most frequently found in the birds' stomachs. Sea turtles, toothed whales, and manatees have been found to have ingested plastic bags and small plastic pieces (Table 5).

Monofilament Fishing Line: Marine Debris and Animal Entanglements

The introduction of plastics marked a significant technological advance for the fishing industry. Plastic nets and lines are lighter and easier to handle. They're also stronger, more durable, and more economical than traditional materials such as hemp and cotton.

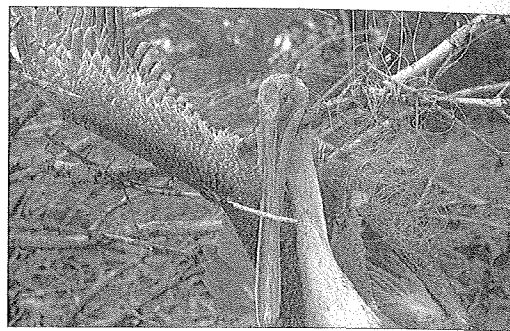
Plastic fishing gear has further advanced the marine debris problem. Some gear is deliberately discarded; some is through vandalism. It can also be lost to bottom snags, bad weather, ship collisions, gear failure, and human error.

Lost monofilament line can be lethal to marine mammals, sea turtles, birds, fish, and other animals. Once entangled, these animals usually are unable to free themselves. Eventually, they become exhausted and

TABLE 3. Wildlife/Debris Incidents, 1996 International Underwater Cleanups

COUNTRY/ZONE	ANIMAL	DEBRIS	COMMENTS
Australia			
Langford Island	Bat Fish	Fishing Hook & Line	
Sydney	Seagull	Fishing Hook & Line	
Brazil			
Brazil	6 Octopuses	Glasses/Bottles	
	Grouper	Fishing Net	
Mexico			
Puerto Vallarta	Sea Lion Pup	Fishing Line	Alive
Saudi Arabia			
Jeddah	Fish	Fishing Hook & Line	Alive
Singapore			
Divers	Sea Slug	Plastic Bag	
United States			
Colorado	3 Fish	Fishing Line	
	2 Crayfish	Fishing Line	
	Crayfish	Metal Beverage Can	
Michigan	Crayfish	Fishing Line	
	Baby Catfish	Fishing Net	Released
	Fish	Abandoned Fishing Net	
North Carolina	Nesting Female Loggerhead Turtle	Fishing Line	Released
New Hampshire	Lobster	Abandoned Crab/Fish Trap	Released
New Jersey	2 Spider Crabs	Crab Trap	Alive
New Mexico	Shad	Fishing Line	
Nevada	Large Mouth Bass	Fishing Line	
	Catfish	Fishing Line	
Oklahoma	Large Mouth Bass	Fishing Line	
	Crappie	Fishing Line	
South Dakota	Small Bass	In Plastic Bag	
Virgin Islands	Spotted Moray Eel	Fishing Line and Hook	
	2 Sponges	Wire & Fishing Line	

drown, or die from starvation. Thin, yet strong, monofilament line can also inflict abrasions that become infected. Animals entangled in the line are often unable to move about freely to catch food and avoid predators. Fishing line can also be caught on branches, power lines, and submerged structures, putting birds and marine life at further risk of entanglement. In addition, entanglements can damage or dislodge stationary creatures such as coral, sponges, and sea fans.



In the 1996 Underwater Cleanup, monofilament fishing line was the largest single cause of all wildlife entanglements reported.

This critical problem needs to be addressed immediately. Those responsible—manufacturers, distributors, and users of monofilament line—must take action to decrease the number of animal entanglements. Manufacturer-sponsored programs can be particularly effective, such as drop-off collection bins for used line that can be recycled. Developing degradable line is another potential solution. Above all, increased consumer education and action is essential.

TABLE 4. Debris involved in Animal Entanglements, 1996 International Underwater Cleanups

DEBRIS FORMS	ANIMALS					TOTAL
	<i>Invertebrates</i>	<i>Fish</i>	<i>Reptiles</i>	<i>Birds</i>	<i>Mammals</i>	
Crab/Lobster Traps	3					3
Monofilament Fishing Line	3	8	1		1	13
Monofilament Fishing Line & Hooks		3		1		4
Monofilament Fishing Line & Wire	2					2
Fishing Nets		3				3
Glass Bottles	6					6
Metal Cans	1					1
Plastic Bags	1	1				2
TOTAL	16	15	1	1	1	34

24 incidents involving 34 animals

TABLE 5. Number and Percentage of Marine Species Recorded Worldwide for Ingestion of or Entanglement in Marine Debris (1996)

Species	Total No. of Species Worldwide	Species with Entanglement Records No. (%)	Species with Ingestion Records No. (%)	Species with One or Both Types of Records No. (%)
Sea Turtles	7	6 (86%)	6 (86%)	6 (86%)
Seabirds	312	51 (16%)	111 (36%)	138 (44%)
Penguins	16	6 (38%)	1 (6%)	6 (38%)
Grebes	19	2 (10%)	0 (0%)	2 (10%)
Albatrosses, Petrels, Shearwaters	99	10 (10%)	62 (63%)	63 (64%)
Pelicans, Boobies, Gannets, Cormorants, Frigatebirds, Tropicbirds	51	11 (22%)	8 (16%)	17 (33%)
Shorebirds, Skuas, Gulls, Terns, Auks	122	22 (18%)	40 (33%)	50 (41%)
Other Birds	—	5	0	5
Marine Mammals	115	32 (28%)	26 (23%)	49 (43%)
Baleen Whales	10	6 (60%)	2 (20%)	6 (60%)
Toothed Whales	65	5 (8%)	21 (32%)	22 (3%)
Fur Seals, Sea Lions	14	11 (79%)	1 (7%)	11 (79%)
True Seals	19	8 (42%)	1 (5%)	8 (42%)
Manatees, Dugongs	4	1 (25%)	1 (25%)	1 (25%)
Sea Otter	1	1 (100%)	0 (0%)	1 (100%)
Fish	—	34	33	60
Crustaceans	—	8	0	8
Squid	—	0	1	1
SPECIES TOTAL	—	136	177	267

from *Marine Mammal Commission 1996 Annual Report, January 31, 1997*. D.W. Laist.

THE SOURCES OF MARINE DEBRIS

Around the world, from tropical coral reefs and submerged shoals to harbor bottoms and riverbeds, virtually every underwater habitat is affected—adversely—by debris. The sources of debris are traditionally classified into two broad categories: ocean-based and land-based. Because most materials have a broad range of uses, positively identifying the source of any individual debris item is difficult. The Center for Marine Conservation has developed a set of 28 indicator items to help trace the origin of marine debris (Table 6 and Figure 4). The items correspond to various ocean-based and land-based activities.

Sources of ocean-based debris have been identified as recreational fishing and boating wastes, commercial fishing wastes, operational wastes, and galley wastes. From small pleasure craft to super-sized container ships, freshwater and ocean-going vessels alike are identified as sources of ocean-based marine debris, as are offshore drilling platforms for oil and gas.

Land-based debris is carried into waterways and into the ocean through storm drains, sewers, creeks, streams, and rivers. Sewage-associated wastes and medical wastes have been identified as sources of land-based debris. Beachgoers, who are another significant source of land-based debris, leave behind discarded evidence of their visit.

Of course, boats, sewers, and storm drains are not the real problem. People are. Some man or woman tossed that trash overboard, dropped it on the beach or sidewalk, or flushed it down the toilet.

Debris can take many routes before winding up on the bottom of a lake, river, or the ocean. No matter where underwater waste begins, however, people have the power to stop it from becoming marine waste. Proper waste management and disposal are the key to solving the underwater marine debris problem, as is citizen awareness. The more we appreciate our beautiful, bountiful underwater environments, the less trash we will release into them.

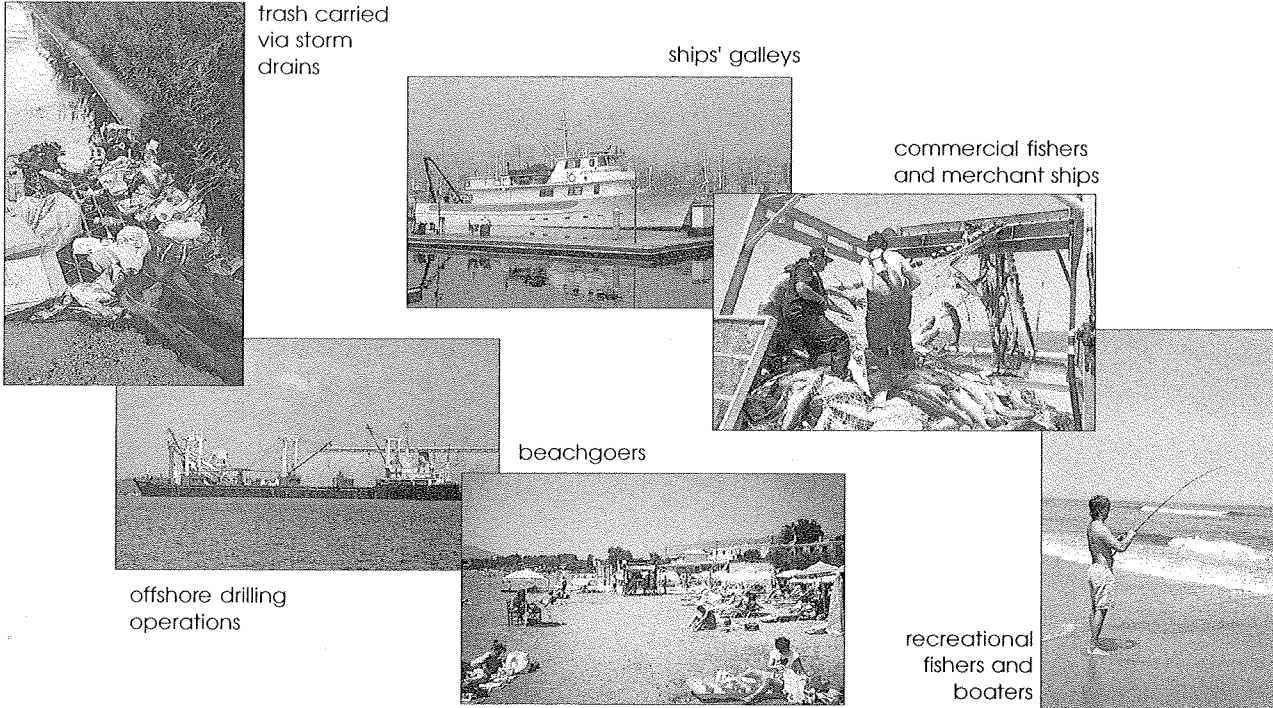
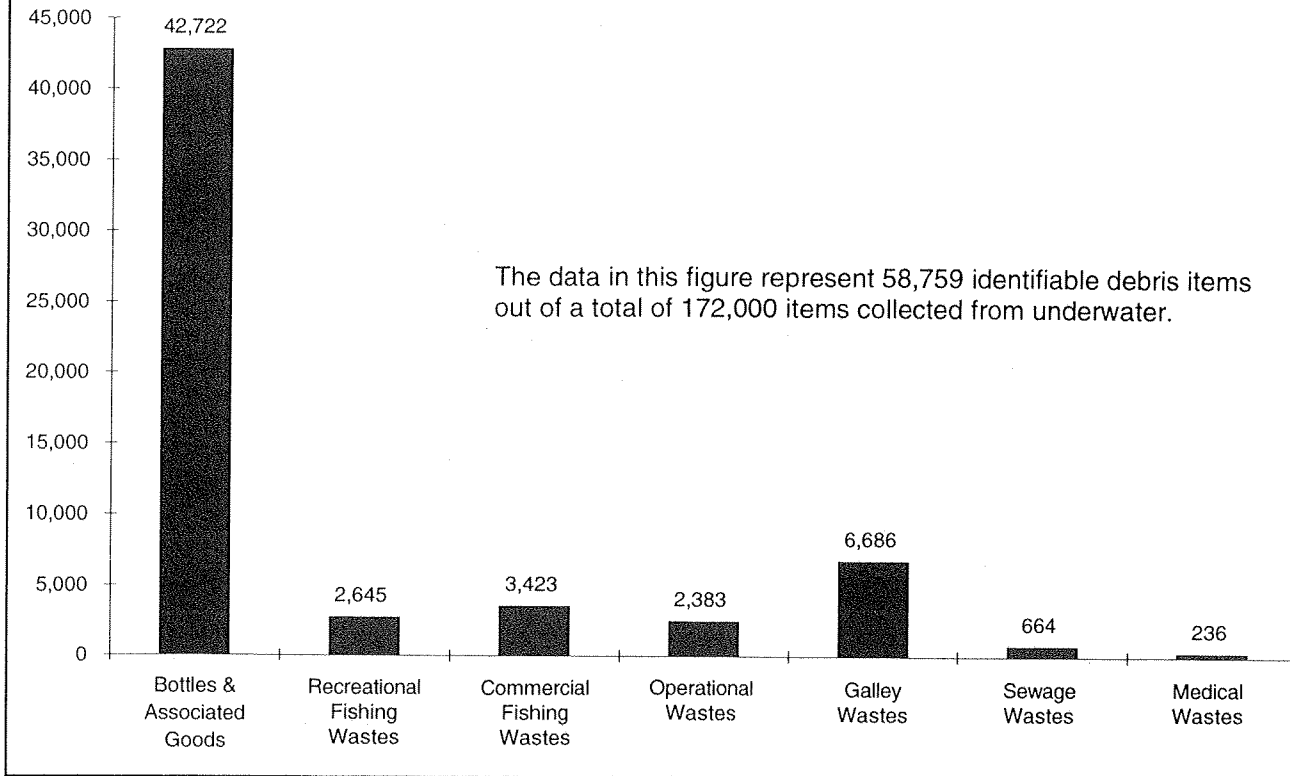


Table 6. Categories and Quantities of Indicator Items Reported During 1996 International Underwater Cleanups

Category	Indicator Items	Total Number Reported	(% of Total Debris Collected)
<i>Recreational Fishing and Boating Wastes</i>	Plastic Fishing Line	1,674	
	Plastic Fishing Floats/Lures	971	
	Subtotal	2,645	(1.54%)
<i>Commercial Fishing Wastes</i>	Plastic Salt Bags	102	
	Plastic Fishing Nets	349	
	Plastic Light Sticks	502	
	Plastic Rope	1,460	
	Foamed Plastic Buoys	235	
	Rubber Gloves	345	
	Metal Crab/Lobster Traps	387	
	Wood Crab/Lobster Traps	43	
Subtotal	3,423	(1.99%)	
<i>Operational Wastes</i>	Plastic Hard Hats	16	
	Plastic Pipe Thread Protectors	276	
	Plastic Sheeting, longer than 2 feet	397	
	Plastic Strapping Bands	786	
	Plastic Write Protection Rings	561	
	Glass Fluorescent Light Tubes	60	
	Glass Light Bulbs	171	
	Wooden Crates	159	
	Wooden Pallets	518	
Subtotal	2,944	(1.71%)	
<i>Galley Wastes</i>	Plastic Trash Bags	2,376	
	Plastic Bleach Bottles	1,492	
	Plastic Milk/Water Gallon Jugs	1,723	
	Plastic Vegetable Sacks	512	
	Foamed Plastic Egg Cartons	152	
	Foamed Plastic Meat Trays	431	
Subtotal	6,534	(3.80%)	
<i>Sewage-Associated Wastes</i>	Plastic Tampon Applicators	501	
	Rubber Condoms	163	
Subtotal	664	(0.39%)	
<i>Medical Waste</i>	Plastic Syringes	236	(0.14%)
Total Number of Indicator Items		16,446	(9.56%)

FIGURE 4. Number of Items from 1996 International Underwater Cleanups Associated with Identifiable Types and Sources of Debris



Ocean-based Sources of Debris

• Recreational Fishing and Boating Wastes

Disposable items, from fast food wrappers to bait and tackle supplies, are popular among recreational fishers and boaters. Unfortunately, not all of these enthusiasts are aware that MARPOL regulations prohibit the disposal of plastics in the ocean and of all types of garbage in rivers, lakes, and bays. And even among those who know, compliance is far from complete.



The two specific indicator items used to identify recreational fishers who violate the law are plastic (monofilament) fishing line and plastic floats and lures. Although some line is lost accidentally, much of it is discarded intentionally. Blatant dumping overboard of these materials is a MARPOL violation. Enforcement plays a major role in how well these regulations are obeyed.

In the 1996 Cleanup, 1.54% of all underwater debris collected worldwide was attributed to recreational fishing and boating wastes (Figure 5). Four regions exceeded the international average, led by the Red Sea

(Saudi Arabia only) with 15.28%. The Atlantic (1.87%), Pacific (1.76%), and Wider Caribbean (1.61%) regions also reported levels higher than average. The lowest levels were reported in Central Europe (Switzerland only, 0.31%), Indian Ocean (the Maldives only, 0.51%), and North Sea (0.55%).

Other countries reporting high levels of recreational fishing and boating wastes include Thailand (27.56%), United Kingdom (9.12%), and Mexico (8.31%). No waste of this type was reported in Taiwan or Cyprus.

Even as a low percentage of total debris, monofilament line is one of the most dangerous of all marine debris items. Occurring either in strands or combined with lures and floats, it can be deadly to birds, fish, turtles, and mammals. It can also endanger people by wrapping around boat propellers.

• Commercial Fishing Wastes

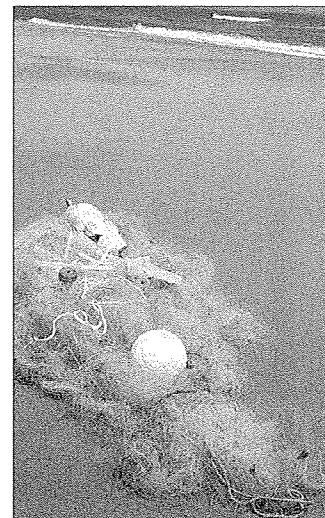
The indicator debris items used to track commercial fishing wastes are plastic rope, plastic (cylume) light sticks, foamed plastic buoys, rubber gloves, plastic fishing nets, plastic salt bags, metal crab or fish traps, and wooden crab or lobster traps.

Commercial fishing crews may toss or lose plastic rope overboard. Old traps and nets may be abandoned instead of being retrieved and disposed of properly. Of course, some traps and buoys are destroyed by storms or other boaters and cannot be retrieved. Plastic light sticks suggest longline fishers. Rubber gloves and salt bags may be discarded once the catch is sorted and stored. No matter how each item enters the water, once there, it becomes a hazard.

Worldwide, wastes from commercial fishing represented 1.99% of all underwater debris collected in 1996 (Figure 6). Though small as a percentage, that figure represents 1,460 pieces of rope, 502 light sticks, 387 metal traps, 349 nets, 345 rubber gloves, and 235 foamed plastic buoys, among other items.

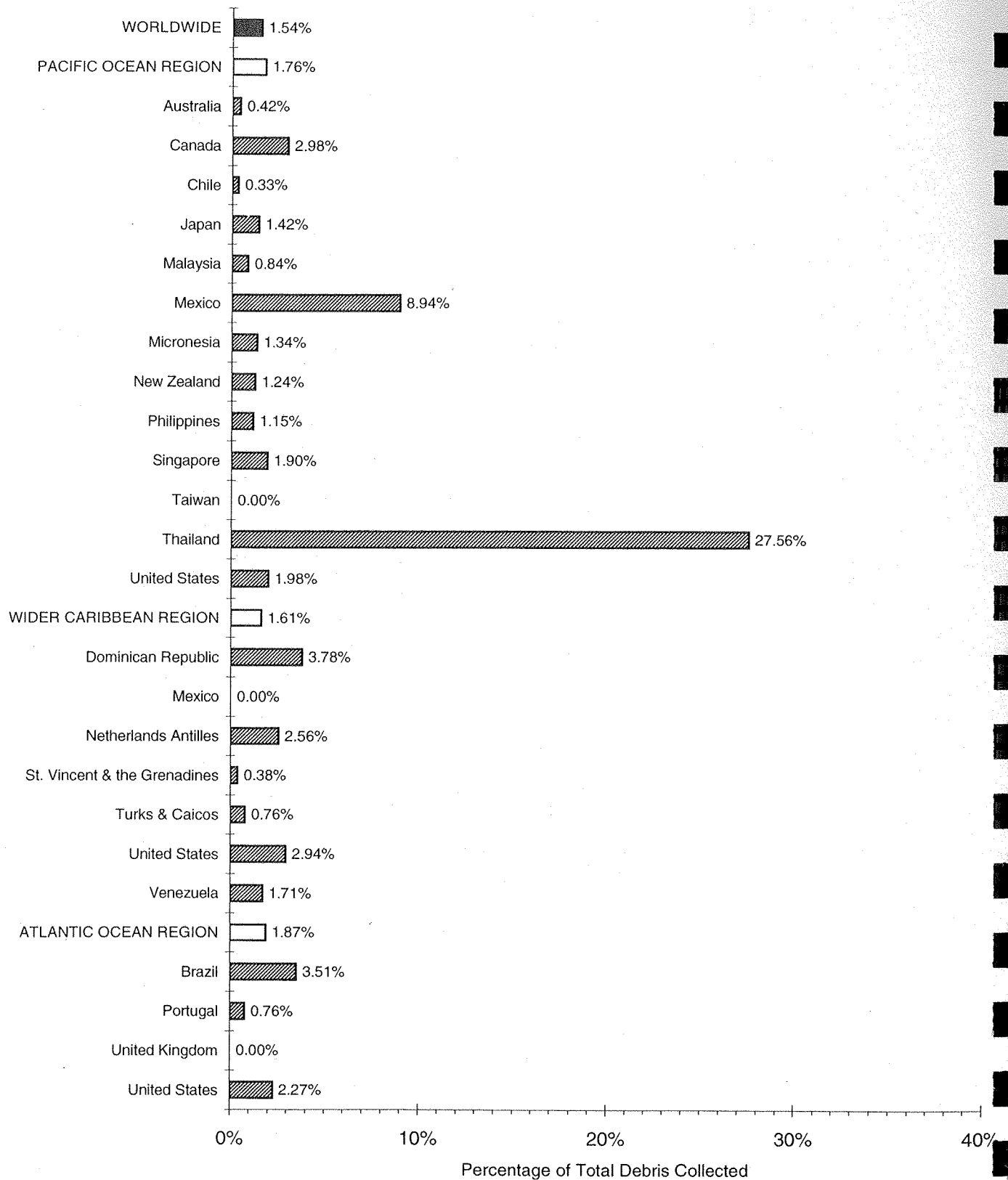
Three regions reported percentages higher than the international average: the Red Sea (Saudi Arabia only, 6.47%), Wider Caribbean (2.79%), and Atlantic (2.75%). Central Europe (Switzerland only, 0.30%) reported the lowest level, followed by the Indian Ocean (the Maldives only, 0.62%) and North Sea (0.65%).

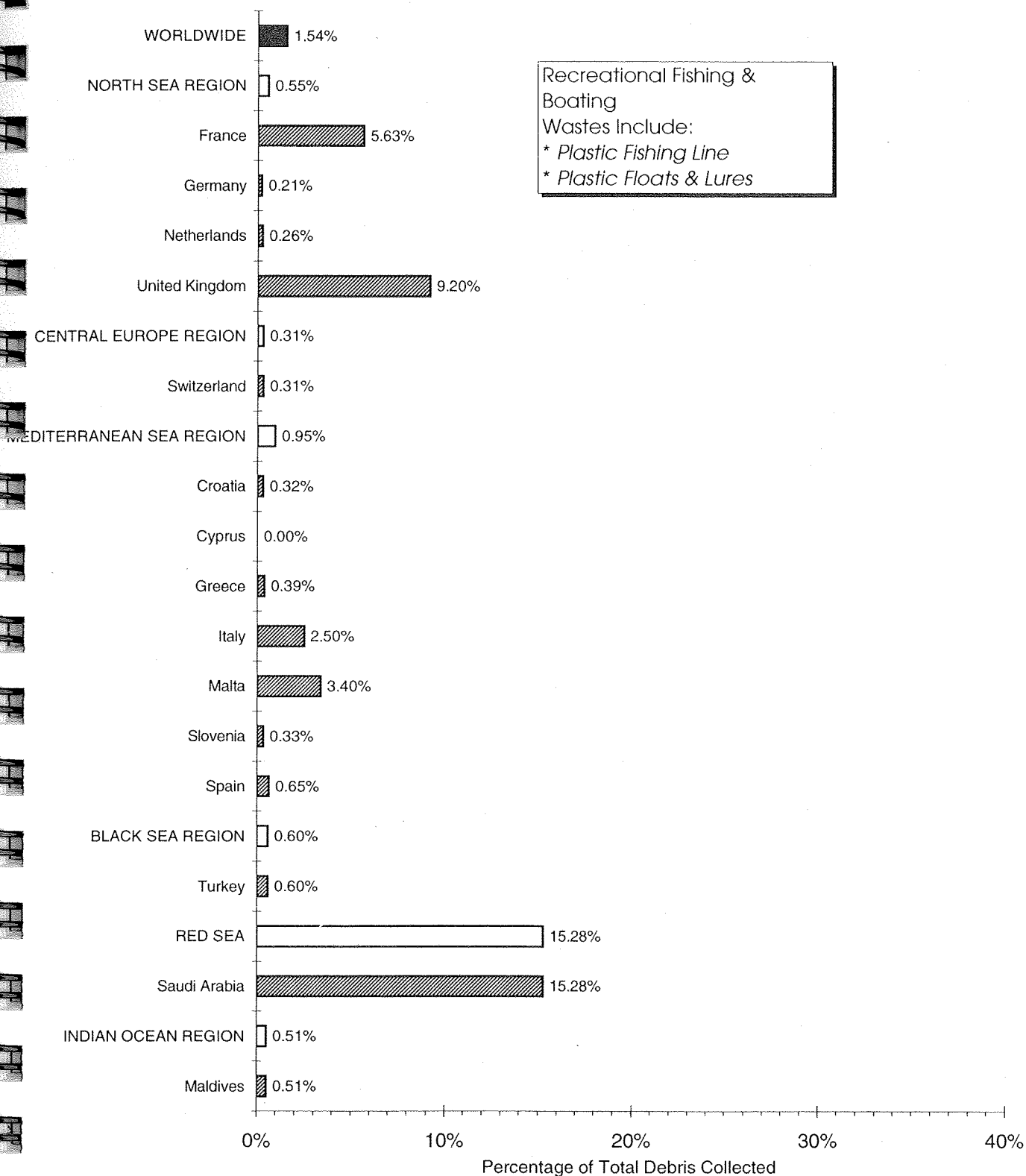
Other countries reporting high underwater levels of commercial fishing wastes included Thailand (22.83%), Brazil (12.28%), Mexico (8.28%), and Portugal (6.02%). In Essex, United Kingdom, commercial fishing waste, which consisted of three fishing nets, was the only type of debris found. Eight countries reported less than 1% of commercial fishing wastes, including Micronesia (no such wastes reported), Japan (0.26%), and Malta (0.36%).



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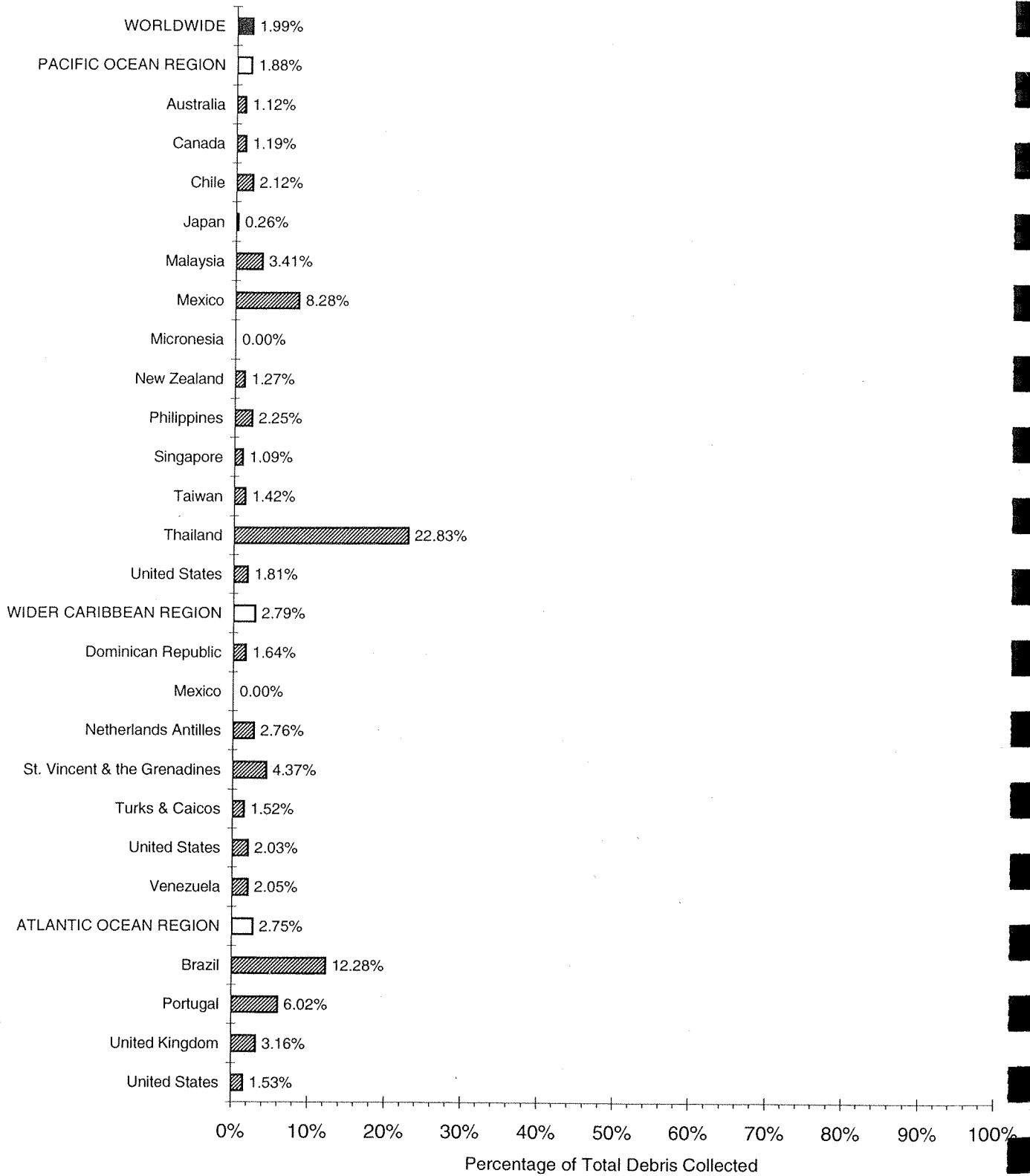
FIGURE 5. Recreational Fishing and Boating Wastes, 1996 Underwater Cleanups

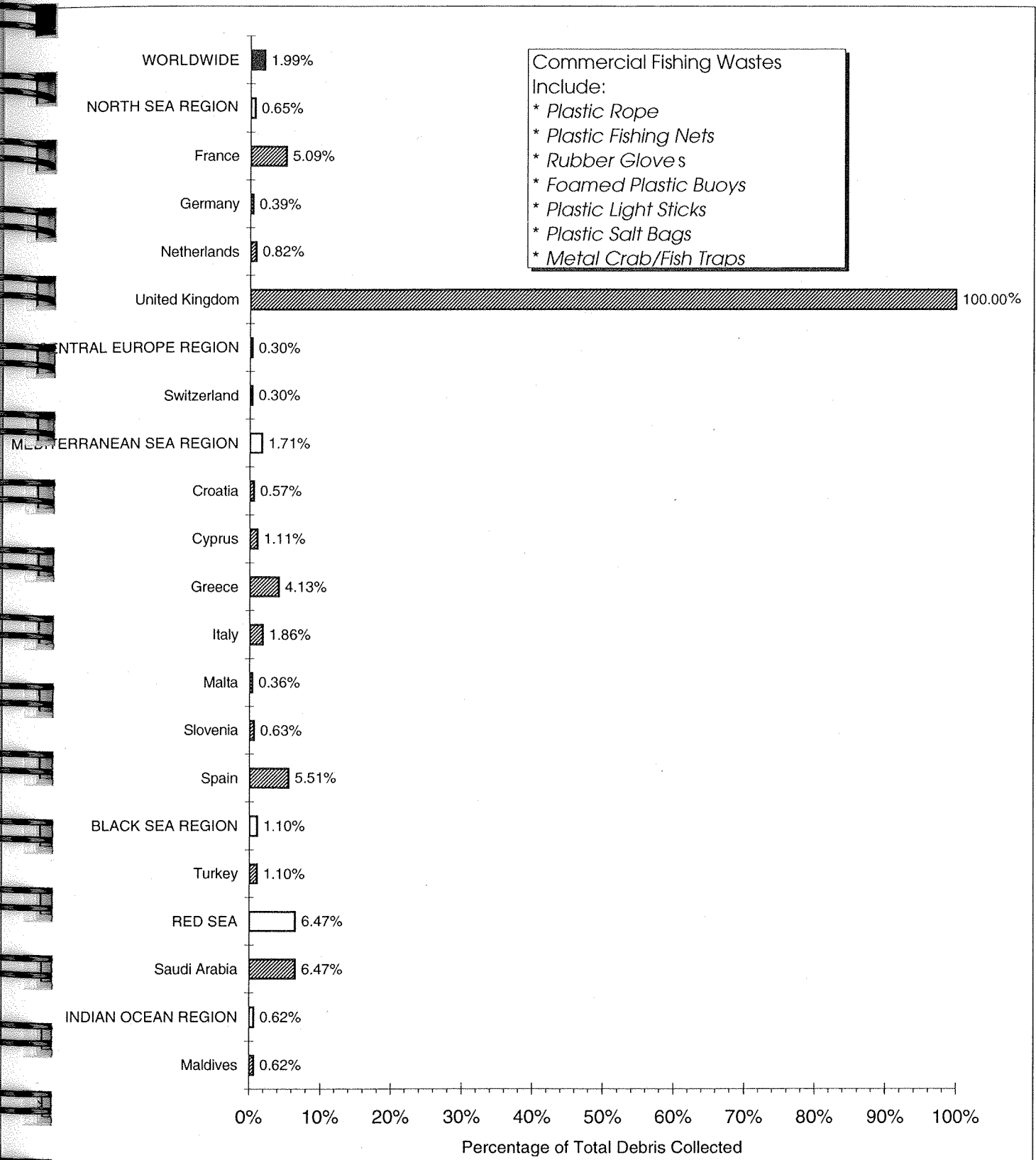




Regional data is determined by the total debris items from the countries listed under each region. There are countries that are part of two regions and their percentages are calculated according to the region, not the country total.

FIGURE 6. Commercial Fishing Wastes, 1996 International Underwater Cleanups

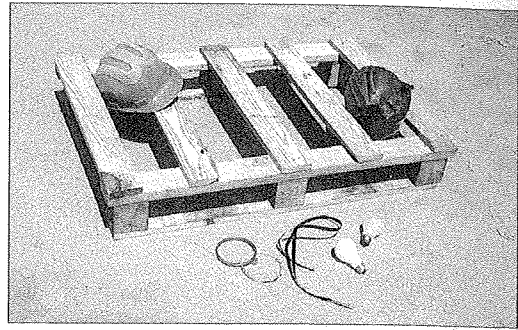




Regional data is determined by the total debris items from the countries listed under each region. There are countries that are part of two regions and their percentages are calculated according to the region, not the country total.

• Operational Wastes

Space is limited onboard ships and oil and gas drilling platforms. Traditionally, anything that was no longer needed, such as packaging and broken materials, was bundled, weighted, and dumped overboard. Although outlawed by MARPOL Annex V, this old method of waste disposal is still practiced aboard many vessels, as the results of the 1996 Underwater Cleanup show.



Debris from offshore operations, including drilling activities and cargo transport, is indicated by wooden pallets, plastic strapping bands, glass (incandescent) light bulbs, fluorescent light tubes, write-protection rings (from computer tape reels), plastic pipe thread protectors, plastic sheeting (longer than two feet), plastic hard hats, and wooden crates.

In the 1996 Cleanup, operational wastes accounted for 1.39% of total underwater debris collected (Figure 7). This apparently small percentage includes 786 strapping bands, 561 write-protection rings, 518 wooden pallets, 276 pipe protectors, and 171 incandescent light bulbs, among other items.

Three regions exceeded the international average in this category, led by the Indian Ocean (the Maldives only, 4.55%) and Atlantic (2.41%). Central Europe (Switzerland only) reported the lowest regional rate of 0.13%, while the North Sea, known for its offshore operations, reported the second-lowest level of 0.46%.

Operational wastes accounted for 13.04% of Mexico's total underwater debris, and 11.37% of Portugal's. No such wastes were reported in Taiwan, Thailand, or Greece.

• Galley-Type Wastes

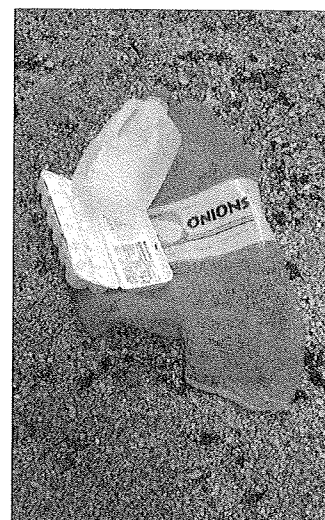
Ships' galleys, like all kitchens, make regular use of items such as plastic trash bags and plastic milk or water jugs. Other indicator items for galley-type wastes are plastic bleach and cleaning agent bottles, plastic vegetable sacks, and foamed plastic meat trays and egg cartons. When these items become trash, they compete for valuable storage space with other materials more useful to the crew.

Annex V of the MARPOL Treaty prohibits overboard disposal of such trash. As with other waste materials, enforcement is a key element in compliance, and enforcement and compliance practices vary from country to country. In U.S. waters, Coast Guard inspections include a review of how ships handle their garbage. Any ship that has been at sea produces garbage, which must still be onboard when the ship docks. U.S. vessels are required to maintain a log of waste handling procedures. If a ship has no such log and no appreciable amount of trash, the Coast Guard can and will cite the captain, crew, or owner of the vessel for MARPOL violations. Stiff fines up to \$500,000 accompany such violations, along with up to five years in jail.

But all ships at sea cannot be monitored around the clock, so many violations occur. Galley-type wastes accounted for 3.89% of total underwater debris in the 1996 Cleanup, including 2,376 trash bags, 1,723 milk or water gallon jugs, and 1,492 bleach or cleaning agent bottles (Figure 8).

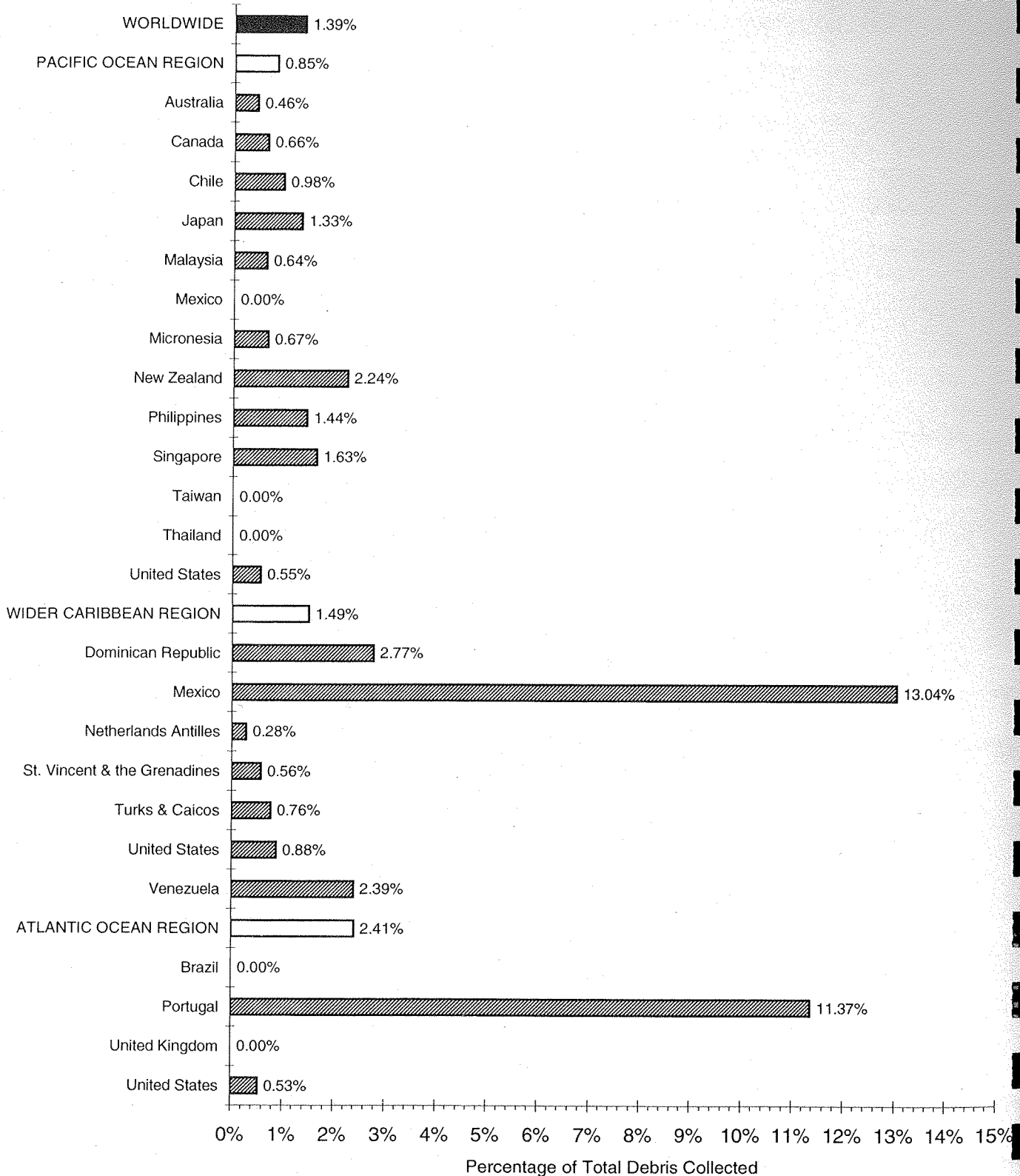
Three regions exceeded the international average for galley-type wastes, led by the Wider Caribbean (8.46%) and Black Sea (Turkey only, 7.95%). Central Europe (Switzerland only) reported the lowest level with 0.04%, followed by the Indian Ocean (the Maldives only) with 0.29%.

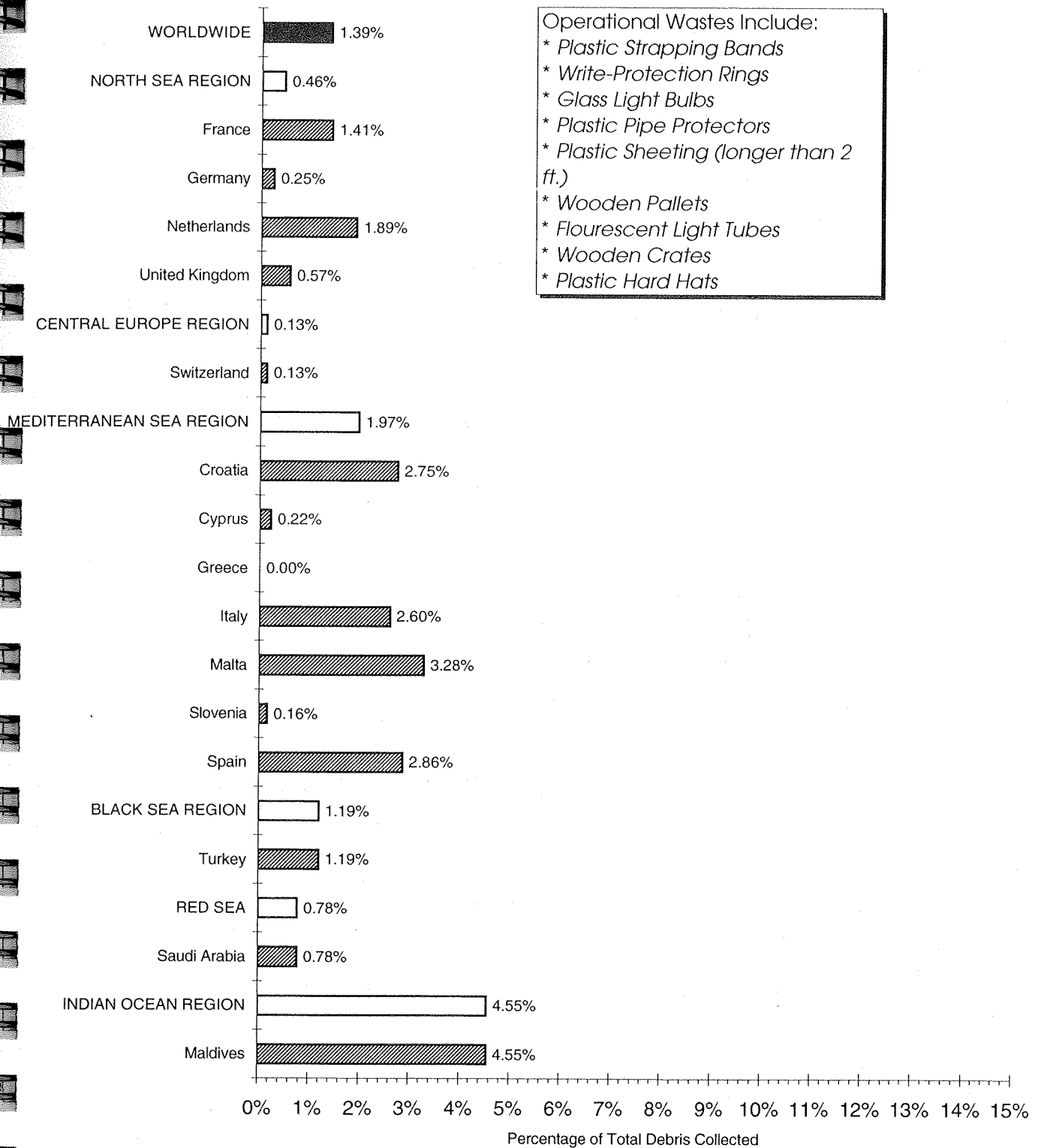
Other countries with high levels included St. Vincent and the Grenadines (13.87%) and the Dominican Republic (12.78%). No galley-type wastes were reported in Greece, Malta, Micronesia, or Thailand.



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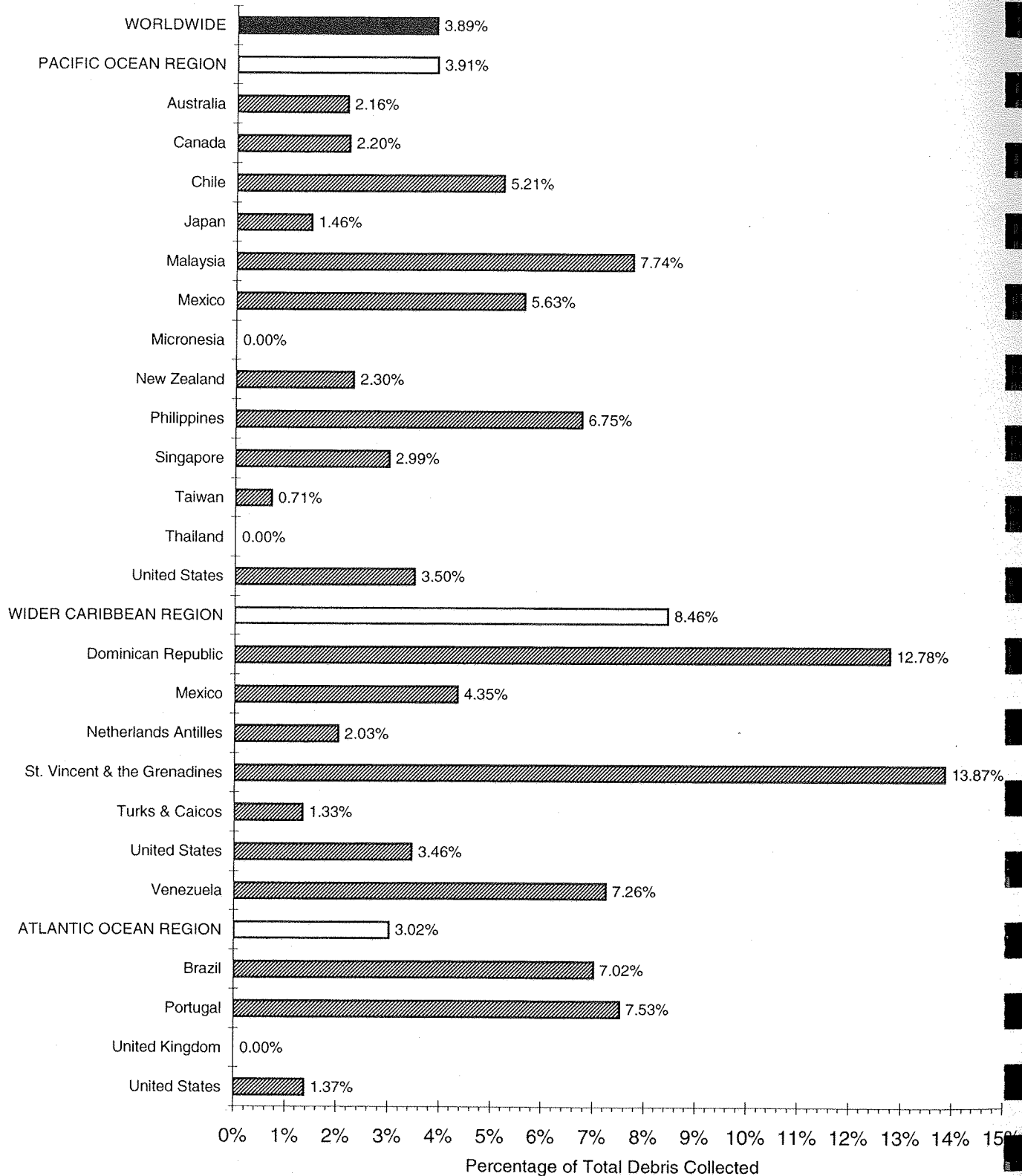
FIGURE 7. Operational Wastes Reported During 1996 Underwater Cleanups

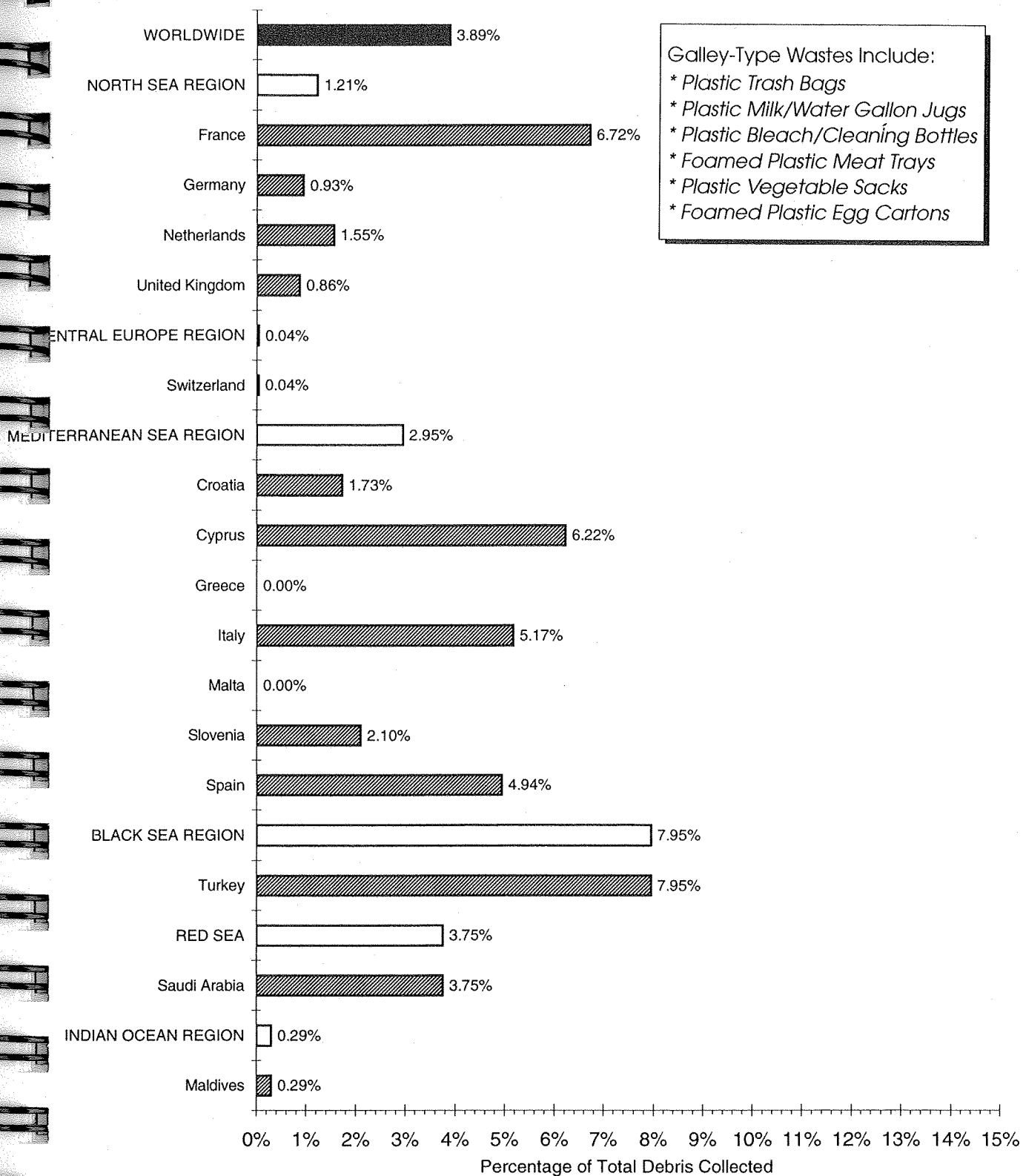




Regional data is determined by the total debris items from the countries listed under each region. There are countries that are part of two regions and their percentages are calculated according to the region, not the country total.

FIGURE 8. Galley Wastes Reported During 1996 International Underwater Cleanups





Regional data is determined by the total debris items from the countries listed under each region. There are countries that are part of two regions and their percentages are calculated according to the region, not the country total.

Land-based Sources of Debris

Creeks, streams, rivers, and stormwater systems carry land-based trash to shorelines, coastal areas, and into the ocean itself. Altogether, outdated sewage systems, inadequate solid waste disposal systems, landfills, and people who litter or dump garbage anywhere introduce huge amounts of debris into the world's waters.

• Sewage-Associated Wastes

The presence of raw, untreated sewage in water is indicated by tampon applicators and rubber condoms, typically flushed down toilets. Regrettably, many older sewage systems use the same pipes to carry both stormwater runoff and sewage to treatment facilities. Called combined sewers, such systems become overloaded when water flow increases during heavy storms. During overflows, untreated sewage is shunted directly into the nearest waterway along with street runoff. Other types of stormwater systems, though not connected directly to sewage pipes, drain into waterways that eventually lead to the sea.

In countries with less-developed sanitation systems, raw sewage may be directly disposed of into the streets or deposited in pits dug outside of town. Dry river beds may be used as dump sites, so that flood-induced rains carry the garbage to the sea.

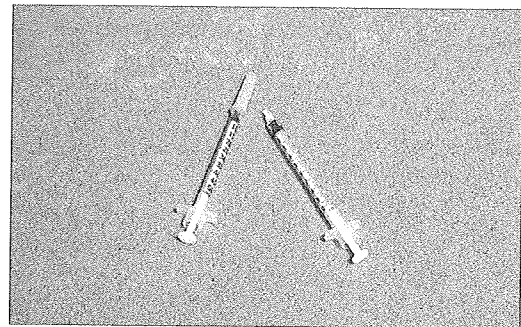


In the 1996 Cleanup, sewage-associated wastes made up 0.39% of total underwater debris (Figure 9). That translates into 501 plastic tampon applicators and 163 rubber condoms collected in one brief three-hour period.

Three regions exceeded the worldwide average: the Atlantic (0.80%), Wider Caribbean (0.52%), and Mediterranean (0.44%). Lower than average levels of sewage-associated wastes were reported in the Black Sea (Turkey only, 0.05%), Indian Ocean (the Maldives only, 0.07%), and Central Europe (Switzerland only, 0.08%). Among individual countries, the Dominican Republic reported 2.39% and Italy 1.76%. Fourteen countries reported no sewage-associated wastes.

• Medical Wastes

The only debris item used to indicate medical wastes, plastic syringes have many sources, including doctors' offices, hospitals, prescribed medical treatments, and illegal drug use. Legal syringes enter the waste stream primarily through municipal sewage systems, as described above for sewage-associated wastes. Illegally used syringes, carelessly tossed, can wash from gutters into drains and into marine environments. Bags of medical debris can also be washed to sea via illegal dumping.



The 1996 Underwater Cleanup collected 236 syringes. This represented 0.14% of all underwater debris (Figure 10). The regional high was reported in the Pacific (0.29%). No medical wastes were reported in the Red Sea or Central Europe regions. Two countries reported levels greater than 1.0%: Canada (3.20%) and the Dominican Republic (1.07%). Sixteen countries reported finding no medical wastes in their underwater cleanups.

Foreign Sources of Marine Debris

Like the oceans they pollute, marine debris does not recognize political, cultural, or geographic boundaries. It travels wherever the winds and currents carry it.

Although foreign related debris (identified by its labels) was found in almost every coastal region worldwide in the 1996 International Coastal Cleanup, it was reported primarily on the shorelines of the Pacific Northwest, Gulf of Mexico, and Gulf of Maine of the United States and on the western Atlantic and North Sea coasts of the United Kingdom. Most of this debris was fishing-related materials from Canada, Germany, Ireland, Japan, Mexico, Norway, and the United States.

Some of the other foreign debris could have been carried by boats offshore. However, since most of the items were personal care products or food and beverage containers, it is also highly possible that this "foreign" debris was instead purchased locally and improperly discarded, like the majority of other debris.

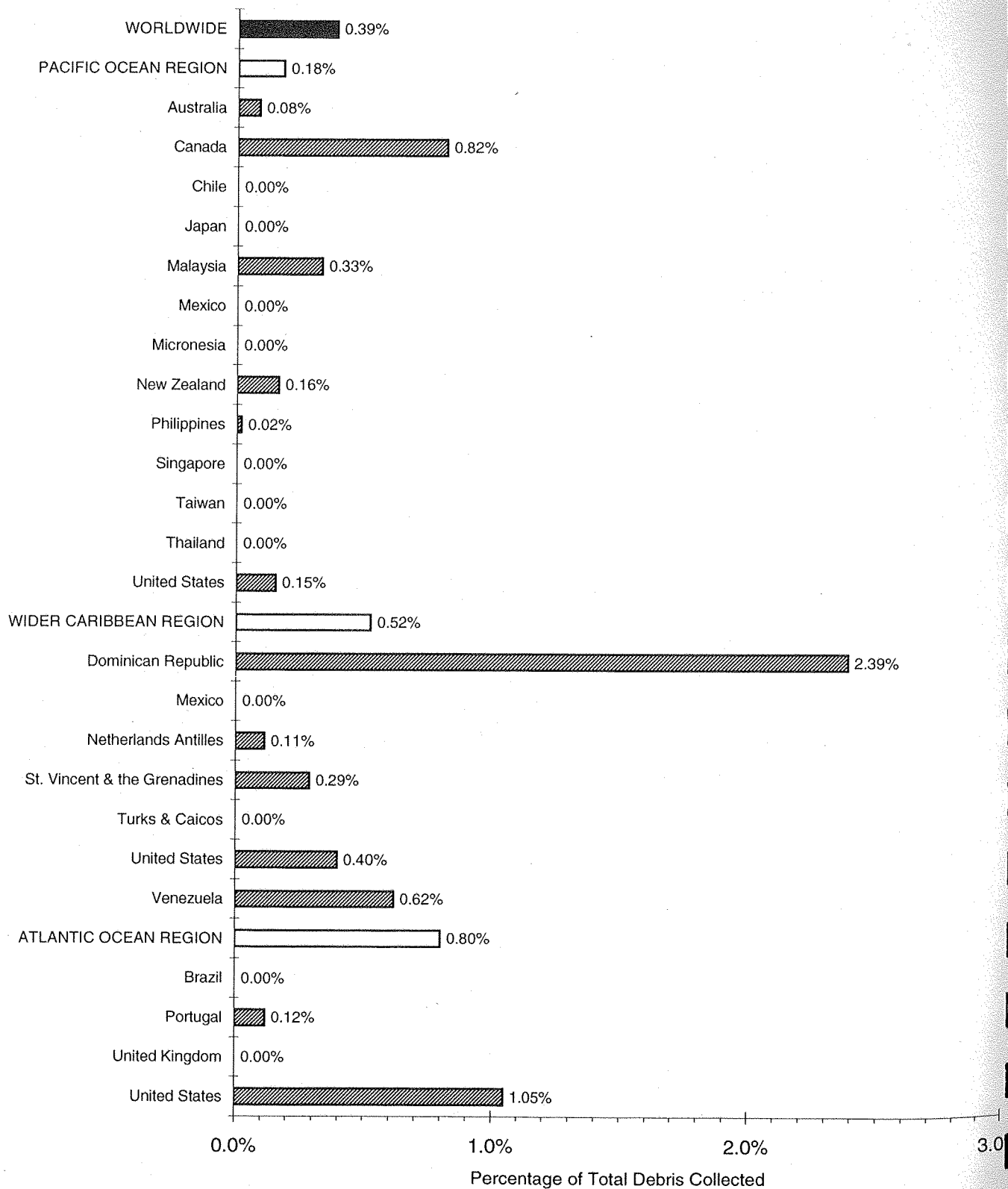
Nevertheless, Annex V of the MARPOL Treaty, which regulates the dumping of debris from ships, including fishing vessels, can do a great deal to prevent the occurrence of foreign debris in the world's waterways. Ships from countries that are signatory to MARPOL 73/78 and have ratified Annex V are prohibited from dumping their plastic wastes into any waterway, anywhere in the world. Further, ships entering a signatory's waters, even if from a nonsignatory country, are prohibited from dumping their wastes into the signatory country's waters. To date, 83 countries have signed onto Annex V. Clearly, many more countries must be persuaded to sign, to keep all the world's beaches and waterways clean. On July 1, 1997, new regulations modeled after the U.S. law went into effect that require the international shipping community to post placards about MARPOL's regulations and maintain waste management logbooks. These regulations should aid in the enforcement and compliance with the MARPOL Treaty.

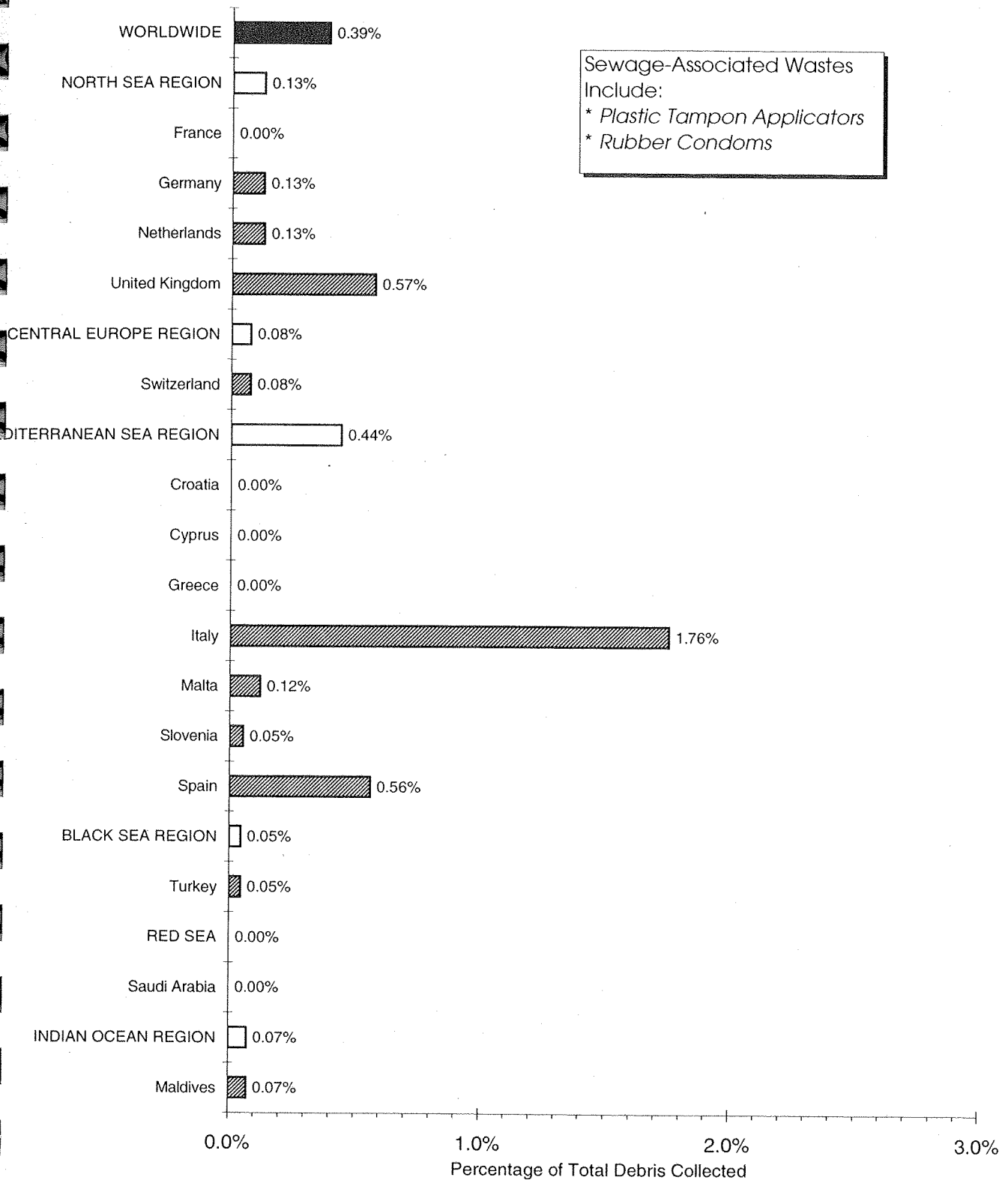
A coordinated, global effort, in which all countries are working together to stop ocean dumping, is essential to reduce the amount of debris that enters the world's oceans. If one country works to control its solid wastes but its neighbors are not doing the same, progress will be set back by the winds and currents that travel over the planet. Global cooperation is essential to solve the problem of marine debris.



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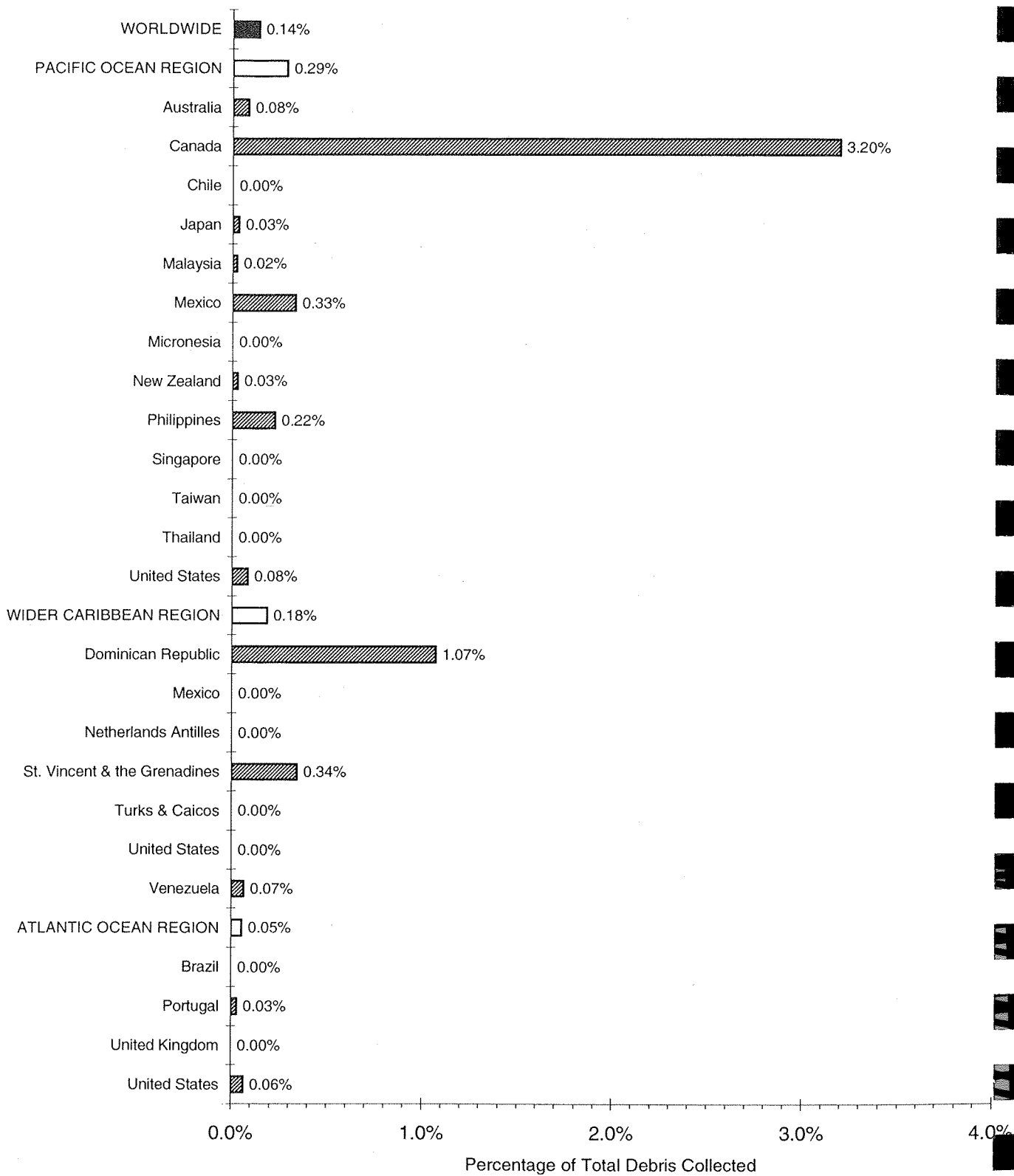
FIGURE 9. Sewage Wastes Reported During 1996 International Underwater Cleanups

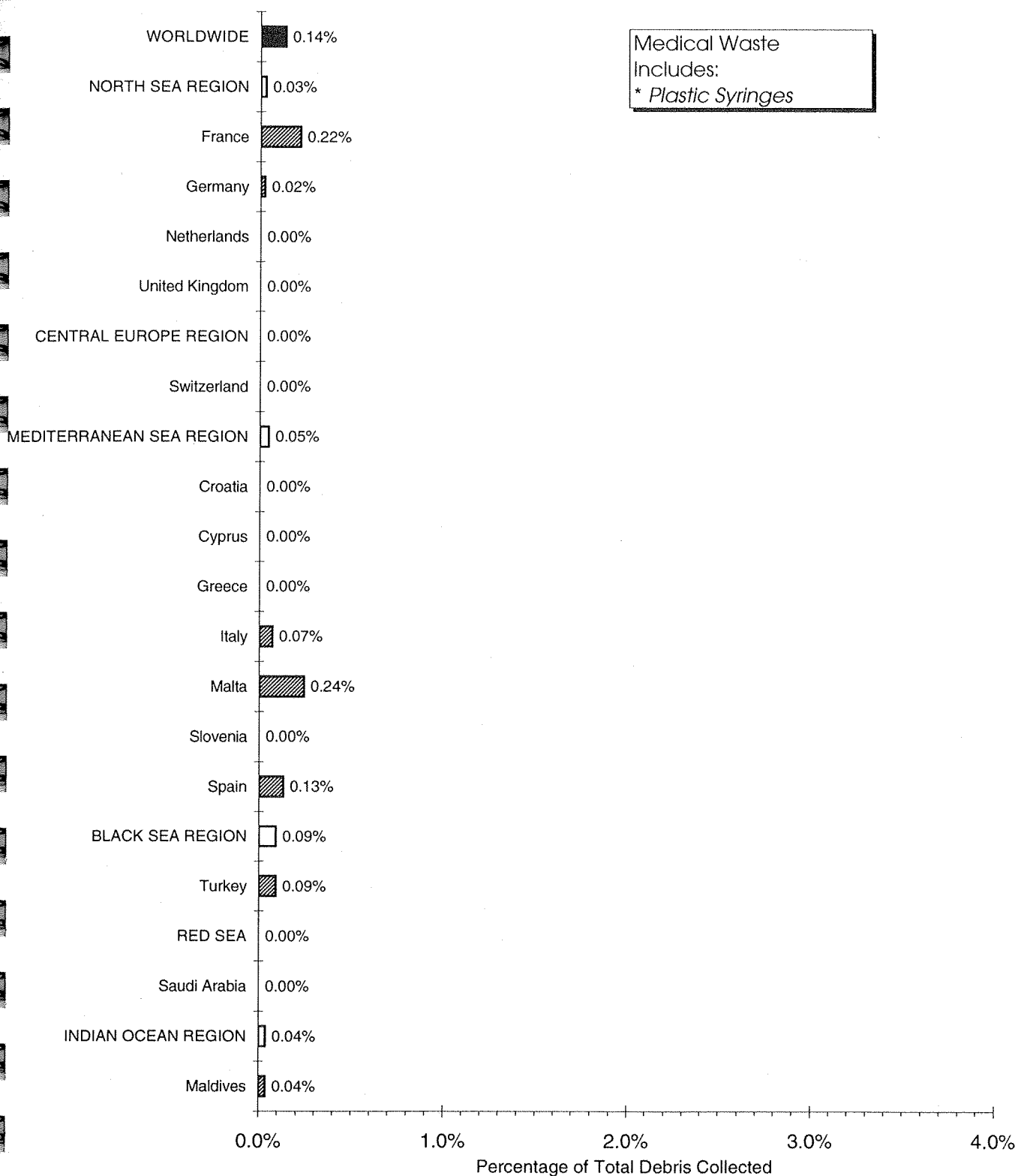




Regional data is determined by the total debris items from the countries listed under each region. There are countries that are part of two regions and their percentages are calculated according to the region, not the country total.

FIGURE 10. Medical Wastes Reported During 1996 Underwater Cleanups





Regional data is determined by the total debris items from the countries listed under each region. There are countries that are part of two regions and their percentages are calculated according to the region, not the country total.

CONCLUSION

Individuals, municipalities, civic organizations, environmental groups, industrial representatives, and government agencies are all part of the broad collaborative effort that makes up the Center for Marine Conservation's annual International Coastal Cleanup. Much has been accomplished in the last 11 years. Public awareness of the marine debris problem has been greatly expanded, and knowledge of the types, sources, and patterns of debris has increased substantially. From this foundation, solutions are already being shaped. As this report shows, however, we still face a serious situation regarding human-made debris and its impact on the world's lakes, rivers, bays, and oceans. Among the most visible forms of pollution in our waterways and oceans, debris is also one of the most solvable problems.

Plastic persists as the longest lasting and most abundant form of debris found in the marine environment. The Dirty Dozen list continues to read like a picnic inventory, underscoring the truth that people—not governments, industries, or manufacturers—are the real source of the problem.

Although recycling has been in effect for years and has become increasingly sophisticated, bottles and associated goods turn up in steady numbers in debris reports. The impact of debris on wildlife is documented dramatically by this report. Rather than improving, the problem seems to be worsening.

A regional examination of the debris collected during the 1996 International Underwater Coastal Cleanup highlights ocean-based activities, in which seven of the nine regions showed a significant presence of wastes associated with recreational boating and fishing, commercial fishing, operational wastes, and galley wastes (Table 7). The Atlantic Ocean and Caribbean both displayed high levels of ocean-based sources of debris. "Hot spots" for land-based sources of debris are the Atlantic and Pacific Oceans, the Mediterranean, and the Wider Caribbean.

Many regulations are already in place to mandate responsible solid waste disposal, but by themselves they are not enough. Willing compliance is necessary, which comes only from increased public awareness and education. Enforcement is needed as well. And for some marine debris issues, solutions have yet to be developed.

The primary goal of the 1996 International Underwater Cleanup was to stop debris at its source so that future cleanups would not be necessary. Only through continued emphasis on the critical need for clean water and environmental stewardship will this be achieved.

Table 7. Overview of Marine Debris, Listed by Region and Source— Underwater “Hot Spots”

	Recreational Fishing Wastes	Commercial Fishing Wastes	Operational Wastes	Galley Wastes	Sewage Wastes	Medical Wastes
ATLANTIC OCEAN	X	X	X		X	
BLACK SEA				X		
CENTRAL EUROPE						
INDIAN OCEAN			X			
MEDITERRANEAN SEA			X		X	
NORTH SEA						
PACIFIC OCEAN	X			X		X
RED SEA	X	X				
WIDER CARIBBEAN		X	X	X	X	X

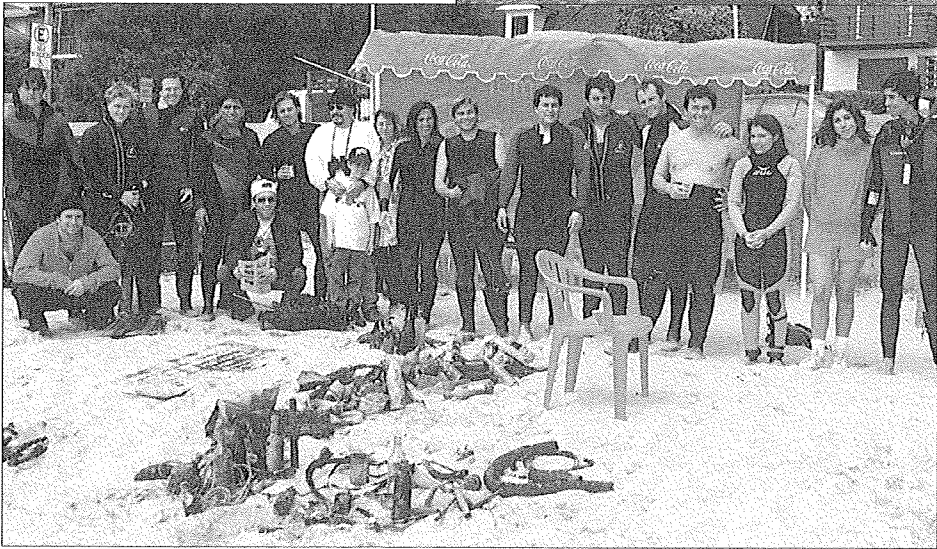
Xs indicate regions where a particular category of identifiable debris is a significant problem because it is equal to or above the worldwide percentage.

APPENDICES

Bahamas



Chile



APPENDIX 1. Data Card Used by Cleanup Volunteers, English (front)

ITEMS COLLECTED

You may find it helpful to work with a buddy as you clean the area, 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	<input type="checkbox"/>
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"/>		

FOAMED PLASTIC

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 foamed plastic (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 woods (specify)	<input type="checkbox"/>
lumber pieces	<input type="checkbox"/>		

CLOTH

clothing/pieces

Remember to turn the card over and fill out your name and address and to record sources and entangled wildlife!

APPENDIX 1. Data Card Used by Cleanup Volunteers, English (back)

INTERNATIONAL COASTAL CLEANUP DATA CARD

Thank you for participating in the International Coastal Cleanup and completing this data card. This form is designed for international use, therefore, not all listings may apply to your area. Data collected since 1986 by the Center for Marine Conservation (CMC) has been used in CMC's International Marine Debris Database and annual Cleanup Reports to help develop solutions and stop the dumping of trash into marine/aquatic areas. By completing the section below, you will be able to receive this and other information on citizen activities on marine conservation. Complete the following information and return this card to your area coordinator or mail it to CMC at the address at the bottom of this card.

Type of cleanup: Shoreline/Beach or Underwater

Zone Name/Location Cleaned _____ Nearest City/County _____

Today's Date: Month _____ Day _____ Year _____ Name of Coordinator _____

Name _____ Affiliation _____

Address _____ Phone (____) _____ Age _____

City _____ State _____ Country _____ Zip Code _____

Do you currently receive the International Coastal Cleanup newsletter, Coastal Connection? Yes No
If not, would you like to be placed on the mailing list? Yes (please list address above) No

Would you like to receive information on the Center for Marine Conservation and other ways to help protect our oceans and waterways? Yes No

Number of people working together on this card _____ Estimated distance of area cleaned _____
Number of trash bags filled _____ Total estimated weight _____

SAFETY TIPS	
1. Do not go near any large barrels or drums.	4. Stay out of the dunes and natural areas.
2. Be careful with sharp objects and syringes.	5. Watch out for wildlife.
3. Wear gloves and closed-toe shoes.	6. Don't lift anything too heavy.
WE WANT YOU TO BE SAFE	

ENTANGLED ANIMALS (Dead or Alive) *Be as specific as you can.*

Type of Animal	Form of Entangling Debris	Comments

FOREIGN LABELS: Please list all items with foreign labels or other markings to help us identify the item's origin such as cruise line names, military identification or debris with names and/or address of shipping, fishing, or oil/gas exploration companies. Please do not list items that are common to your local area, i.e. imported water or beer.

Label or other markings	Type of item
Example: ABC Shipping Company	plastic strapping band

What was the most peculiar item you collected? _____

Comments/Observations during the cleanup _____

The following national and international organizations endorse and/or support the International Coastal Cleanup:
 U.S. Environmental Protection Agency
 IUCN — The World Conservation Union
 Intergovernmental Oceanographic Commission (IOC) of the United Nations' Educational, Scientific, and Cultural Organization (UNESCO)

Please return this card to your area coordinator or mail it to:
CENTER FOR MARINE CONSERVATION
 Atlantic Regional Office
 306 A Buckroe Ave.
 Hampton, VA 23664
 USA



APPENDIX 1. Data Card Used by Cleanup Volunteers, Spanish (front)

ARTÍCULOS RECOGIDOS

Al limpiar el área costera u orilla tal vez le será útil trabajar con un compañero, así uno recoge los desperdicios y el otro toma apuntes. Una manera fácil de llevar la cuenta de los artículos que encuentren es la de marcarlos con una señal. El recuadro es para el número total de artículos recogidos; vea la muestra abajo.

Ejemplo: cartones para huevos 1111-1111-1111-1 **TOTAL** 16 copas 1111-1111-1111-11 **TOTAL** 22

DE PLÁSTICO

	Número total de artículos		Número total de artículos
aplicadores de tampones	<input type="checkbox"/>	flejes, bandas de embalaje	<input type="checkbox"/>
aros para sujetar	<input type="checkbox"/>	jeringas (jeringuillas)	<input type="checkbox"/>
bebidas enlatadas	<input type="checkbox"/>	juguets	<input type="checkbox"/>
aros de protección para cintas de computadoras	<input type="checkbox"/>	lámina de plástico	<input type="checkbox"/>
bolsas:		más de 2 pies (60 cm)	<input type="checkbox"/>
basura	<input type="checkbox"/>	66 cm o menos	<input type="checkbox"/>
comida/envolturas, chucherías	<input type="checkbox"/>	línea (cuerda) de pescar	<input type="checkbox"/>
sol	<input type="checkbox"/>	pañales	<input type="checkbox"/>
otro tipo	<input type="checkbox"/>	pedazos	<input type="checkbox"/>
botellas:		popotes, pitillos, sorbetes, pajitas	<input type="checkbox"/>
aceite, lubricante	<input type="checkbox"/>	protectores de rosca de tubería	<input type="checkbox"/>
bebidas, gaseosas	<input type="checkbox"/>	redes de pesca	<input type="checkbox"/>
cloro, limpiadores, detergentes	<input type="checkbox"/>	sacos/costales de malla	<input type="checkbox"/>
leche, para agua	<input type="checkbox"/>	señuelos, flotadores, carnada	<input type="checkbox"/>
otras botellas	<input type="checkbox"/>	cascos	<input type="checkbox"/>
cubetas, baldes	<input type="checkbox"/>	tapas, chapas	<input type="checkbox"/>
cuerda, sogá	<input type="checkbox"/>	varillas luminosas, varas de luz	<input type="checkbox"/>
encendedores	<input type="checkbox"/>	vasos, utensilios	<input type="checkbox"/>
filtros de cigarrillos (cigarillos)	<input type="checkbox"/>	otros plásticos (especifique)	<input type="checkbox"/>

HULE ESPUMA

(u otro tipo de plástico espuma)

boyas y/o flotadores	<input type="checkbox"/>	materiales de empaque	<input type="checkbox"/>
cartones para huevos	<input type="checkbox"/>	pedazos	<input type="checkbox"/>
charolas (bandejas) para carne o verduras	<input type="checkbox"/>	platos	<input type="checkbox"/>
envases de comida para llevar (comidas rápidas)	<input type="checkbox"/>	vasos	<input type="checkbox"/>
		otro tipo	<input type="checkbox"/>

DOBLESE AQUI

VIDRIO

botellas, frascos:		focos, bombillas	<input type="checkbox"/>
bebidas	<input type="checkbox"/>	tubos de luz fluorescente	<input type="checkbox"/>
tarros de comida	<input type="checkbox"/>	pedazos	<input type="checkbox"/>
otras botellas o frascos	<input type="checkbox"/>	otro tipo (especifique)	<input type="checkbox"/>

HULE O GOMA

condones (profilácticos)	<input type="checkbox"/>	lentas, gomas de carro	<input type="checkbox"/>
globos	<input type="checkbox"/>	otro tipo (especifique)	<input type="checkbox"/>
guantes	<input type="checkbox"/>		

METAL

alambre	<input type="checkbox"/>	barriles de 55 galones (200 litros)	
latas:		nuevos	<input type="checkbox"/>
aerosol	<input type="checkbox"/>	oxidados	<input type="checkbox"/>
bebidas	<input type="checkbox"/>	tapas, chapas de botellas, corcholatas	<input type="checkbox"/>
comidas	<input type="checkbox"/>	tapas de latas, lenguetas de metal	<input type="checkbox"/>
otro tipo	<input type="checkbox"/>	trampas para cangrejos/peces	<input type="checkbox"/>
pedazos	<input type="checkbox"/>	otro tipo (especifique)	<input type="checkbox"/>

PAPEL

bolsas	<input type="checkbox"/>	periódico, revistas	<input type="checkbox"/>
cajas de cartón	<input type="checkbox"/>	platos	<input type="checkbox"/>
cartones	<input type="checkbox"/>	vasos	<input type="checkbox"/>
pedazos	<input type="checkbox"/>	otro tipo (especifique)	<input type="checkbox"/>

MADERA

(deje la madera flotante en la playa)

cajas	<input type="checkbox"/>	trampas para cangrejos y langostas	<input type="checkbox"/>
pedazos	<input type="checkbox"/>	otro tipo (especifique)	<input type="checkbox"/>
tablas o paletas	<input type="checkbox"/>		

TELA (TRAPO)

ropa/pedazos

APPENDIX 1. Data Card Used by Cleanup Volunteers, Spanish (back)

TARJETA DE DATOS PARA LA LIMPIEZA INTERNACIONAL DE COSTAS

Gracias por su participación en la Limpieza Internacional de Costas y por completar esta tarjeta de datos. La misma está diseñada para ser utilizada en limpiezas internacionales, sin embargo puede que algunos de los artículos no se encuentren o no apliquen a su área. Los datos informados desde 1986 y analizados por el Centro para la Conservación Marina (CMC) han sido utilizados en la Sede Internacional de Datos sobre Desperdicios Marinos. Con estos datos, el CMC produce informes anuales sobre la Limpieza que ayudan a formular soluciones para poner fin al desecho de basura en el ambiente marino y otros cuerpos de agua. Para recibir información adicional sobre la Limpieza Internacional de Costas y otras actividades sobre la conservación de los recursos marinos, complete este formulario y devuelva esta tarjeta al coordinador de su área o envíela a la dirección al final de la misma.

Tipo de limpieza: Costa/Orilla/Playa Subacuática

Nombre de la zona o localidad limpiada _____ Ciudad más próxima _____

La fecha de hoy: Mes _____ Día _____ Año _____ Nombre del Coordinador(a) _____

Nombre _____ Afiliación _____

Dirección _____ Teléfono _____ Edad _____

Ciudad _____ Estado _____ País _____ Zona/Código postal _____

¿Recibe usted la hoja informativa oficial sobre la Limpieza Internacional de Costas, *Coastal Connection*? Sí No

Si no, ¿desea que pongamos su nombre en un listado para recibirla? Sí (por favor, escriba su dirección en el espacio de arriba) No

¿Quiere recibir información sobre el Centro para la Conservación Marina y sobre otras maneras de como puede ayudar en la protección de nuestros océanos y cuerpos de agua? Sí No

Número de personas trabajando juntas en esta tarjeta de datos _____ Distancia aproximada del área limpiada _____

Número de bolsas que se llenaron _____ Peso total estimado _____

CONSEJOS DE PRECAUCIÓN

1. No se acerque a ningún barril o tambor de tamaño grande. 4. Manténgase fuera de dunas y otras áreas naturales.
 2. Tenga cuidado con objetos afilados y jeringas (jeringuillas). 5. Tenga cuidado con la vida silvestre.
 3. Use guantes y zapatos. 6. No levante nada demasiado pesado.

¡QUEREMOS QUE USTED ESTÉ A SALVO!

ANIMALES ENREDADOS (muerto o vivo) (Sea lo más específico posible)

Tipo de Animal	Forma de Desperdicio Enredando el Animal	Comentario

ETIQUETAS EXTRANJERAS: Por favor, haga una lista de todos los productos con etiquetas extranjeras y marcas de identificación que indiquen el lugar de origen, tales como líneas de cruceros, buques mercantes y pesqueros, compañías de petróleo, etc.

ORIGEN	ARTICULO RECOGIDO
Ejemplo: <i>Compañía de carga ABC</i>	<i>botella de plástico</i>

¿Cuál fue el artículo más raro que se recogió? _____

Comentarios sobre la Limpieza _____

Las siguientes organizaciones nacionales e internacionales respaldan y/o apoyan la Limpieza Internacional de Costas:

Agencia de Protección Ambiental Federal de los Estados Unidos (USAPA)

UICN - Unión Mundial para la Naturaleza

Comisión Oceanográfica Intergubernamental (COI) de la Organización de Naciones Unidas para la Educación, la Ciencia, y la Cultura (UNESCO)

Por favor devuelva esta tarjeta al coordinador de su área o envíela a:

CENTER FOR MARINE CONSERVATION
 Atlantic Regional Office
 306 A Buckroo Ave.
 Hampton, VA 23664
 USA



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APPENDIX 2. 1996 Underwater Marine Debris Raw Data Summary

DEBRIS ITEMS	Australia	Brazil	Canada	Chile	Croatia	Cyprus	Dominican Republic	France	Germany	Greece	Italy	Japan	Malaysia
PLASTIC: Food Bags/Wrappers	153	0	175	3	92	5	14	29	433	4	136	150	248
Salt Bags	0	0	0	0	7	0	2	9	0	0	0	0	20
Trash Bags	31	0	19	24	12	20	16	25	22	0	42	20	110
Other Bags	26	0	14	0	3	5	6	13	305	0	3	128	77
Plastic Beverage Bottles	80	10	106	44	812	40	67	41	595	40	174	20	382
Bleach Bottles	1	4	6	4	47	0	39	15	28	0	28	4	62
Milk/Water Gallon Jugs	11	0	17	2	0	6	47	20	52	0	35	0	101
Oil/Lube Bottles	3	2	10	22	14	0	23	9	23	0	21	1	27
Other Plastic Bottles	8	0	26	16	218	20	39	8	44	0	1	13	170
Buckets	8	1	7	2	13	0	1	19	34	0	18	3	109
Caps/Lids	41	0	190	0	122	4	17	14	84	30	19	23	55
Cigarette Butts	134	0	111	0	0	6	3	20	11325	0	250	67	314
Cigarette Lighters	8	0	5	0	0	0	7	3	91	0	10	10	74
Cups/Utensils	19	8	144	2	42	0	189	31	180	0	142	8	32
Diapers	2	0	14	0	0	0	63	1	34	0	49	0	6
Fishing Line	7	2	64	0	14	0	35	18	11	2	22	41	25
Fishing Floats/Lures	3	0	31	2	0	0	25	34	32	0	49	3	13
Fishing Nets	0	3	2	6	8	0	14	11	0	4	2	3	19
Hard Hats	0	0	0	0	0	0	11	0	0	0	0	0	2
Light Sticks	2	0	3	0	0	0	3	0	8	0	0	0	0
Plastic Pieces	160	0	7	5	418	0	0	7	147	0	1	157	0
Pipe Thread Protectors	1	0	0	0	2	0	25	0	0	0	0	0	6
Rope	25	2	17	5	0	5	0	26	45	10	28	2	84
Long Sheeting	1	0	6	3	21	0	0	9	5	0	0	0	5
Short Sheeting	0	0	2	0	18	1	0	5	55	0	0	25	0
Six-Pack Holders	5	0	48	5	0	0	43	0	0	16	0	0	40
Strapping Bands	2	0	8	0	79	0	8	0	13	0	1	15	2
Straws	100	0	75	0	0	10	0	0	24	80	0	16	166
Syringes	2	0	102	0	0	0	17	2	5	0	2	1	1
Tampon Applicators	0	0	15	0	0	0	24	0	20	0	30	0	0
Toys	1	0	6	0	0	2	15	15	122	0	5	9	8
Vegetable Sacks	3	0	12	0	0	0	10	0	78	0	27	0	58
Write Protection Rings	8	0	0	0	0	0	0	0	0	0	0	0	80
Other Plastic	38	0	32	3	212	4	100	25	40	0	2	678	127
FOAMED PLASTIC: Buoys	0	0	2	0	0	0	5	0	0	7	0	0	5
Foamed Cups	20	0	91	3	15	60	32	1	202	100	80	4	7
Egg Cartons	2	0	9	0	7	0	24	0	6	0	15	0	20
Fast Food Containers	22	0	106	0	13	15	66	1	73	2	0	0	256
Meat Trays	4	0	7	2	10	0	67	2	6	0	0	21	1
Packaging Materials	24	0	7	0	26	0	10	7	101	0	0	1	50
Foamed Pieces	31	0	17	35	131	15	3	50	15	0	53	141	136
Foamed Plates	0	0	19	3	7	0	27	1	26	0	15	1	0
Other Foamed Plastic	0	0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX 2. 1996 Underwater Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	Australia	Brazil	Canada	Chile	Croatia	Cyprus	Dominican Republic	France	Germany	Greece	Italy	Japan	Malaysia
GLASS: Beverage Bottles	88	2	151	83	267	0	5645		1565	60	481	163	226
Food Jars	8	0	23	2	42	0	218		29	0	35	0	47
Other Glass Bottles/Jars	18	0	12	33	113	40	338		36	0	53	14	56
Fluorescent Light Tubes	0	0	0	0	14	0	00		2	0	0	0	1
Light Bulbs	6	0	0	0	3	0	00		10	0	10	4	12
Glass Pieces	296	0	145	197	146	0	080		152	0	41	606	35
Other Glass	23	0	7	4	312	0	11		7	0	4	8	51
RUBBER: Balloons	0	0	100	0	0	0	52		0	0	0	0	27
Condoms	2	0	11	0	0	0	140		6	0	20	0	15
Rubber Gloves	0	0	7	0	7	0	20		7	0	19	2	27
Tires	7	0	16	8	42	0	94		26	8	117	1	27
Other Rubber	21	2	22	17	57	0	03		22	0	21	42	38
METAL: Bottles Caps	63	0	134	0	129	60	742		576	0	23	34	58
Aerosol Cans	56	2	4	1	46	0	2128		468	0	220	5	36
Beverage Cans	202	0	211	4	12	100	9632		127	100	120	362	198
Food Cans	7	0	172	2	7	0	6110		1821	30	20	0	130
Other Cans	24	0	30	4	5	0	05		30	0	43	0	35
Metal Crab/Lobster Traps	0	1	7	2	2	0	01		0	0	4	1	0
55 Gallon Rusty Drums	2	0	16	0	17	0	01		23	2	15	0	20
55 Gallon New Drums	2	0	1	0	4	0	00		0	0	1	0	0
Metal Pieces	67	0	28	35	395	0	656		40	0	6	33	0
Pull Tabs	24	0	41	0	0	0	012		380	0	47	6	17
Wire	9	0	30	1	46	0	154		50	0	13	11	22
Other Metal	79	17	70	8	211	1	00		56	4	13	77	210
PAPER: Bags	42	0	79	0	14	20	149		32	0	6	2	51
Cardboard	44	0	23	0	3	0	140		98	0	0	0	7
Cartons	33	0	55	0	7	3	47		162	0	23	2	40
Paper Cups	27	0	67	0	21	0	32		134	0	0	3	36
Newspapers/Magazines	11	0	18	0	12	0	451		163	0	7	0	18
Paper Pieces	119	0	53	0	34	0	2615		59	0	9	34	10
Paper Plates	1	0	22	0	3	0	62		1	0	13	0	0
Other Paper	51	0	41	0	46	0	00		27	0	100	22	36
WOOD: Crab/Lobster Traps	0	1	0	0	1	0	00		0	0	0	0	0
Crates	0	0	0	0	0	0	03		19	0	63	1	0
Lumber Pieces	30	0	12	9	3	2	07		8	10	7	9	58
Pallets	1	0	7	3	2	1	01		2	0	0	21	1
Other Wood	34	0	9	1	8	0	00		17	0	5	49	44
CLOTH: Clothing/Pieces	21	0	31	9	7	5	2813		82	0	26	15	59
GRAND TOTALS	2,404	57	3,187	614	4,401	450	1,588	923	20,541	509	2,845	3,092	4,546
GRAND TOTALS, w/o Butts	2,270	57	3,076	614	4,401	444	1,585	903	9,216	509	2,595	3,025	4,232

APPENDIX 2. 1996 Underwater Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	Maldives	Malta	Mexico	Micronesia	Netherlands	Netherlands Antilles	New Zealand	Philippines	Portugal	Saudi Arabia
PLASTIC: Food Bags/Wrappers	51	37	0	11	339	117	182	1651	581	34
Salt Bags	0	0	0	0	0	0	0	29	0	0
Trash Bags	0	0	0	0	31	3	40	181	0	15
Other Bags	82	19	0	0	37	11	71	315	0	47
Plastic Beverage Bottles	91	15	15	0	21	314	226	163	236	169
Bleach Bottles	2	0	6	0	0	25	0	139	108	1
Milk/Water Gallon Jugs	3	0	12	0	5	15	34	20	637	41
Oil/Lube Bottles	11	0	14	0	18	45	11	56	176	7
Other Plastic Bottles	59	0	7	2	20	0	205	207	0	100
Buckets	1	0	0	0	31	14	1	4	44	2
Caps/Lids	43	0	9	0	9	22	132	184	185	17
Cigarette Butts	853	11	0	0	2	187	225	85	0	0
Cigarette Lighters	1	3	2	0	4	13	12	34	20	1
Cups/Utensils	6	35	1	0	13	193	15	116	124	40
Diapers	0	0	0	2	0	3	1	13	20	3
Fishing Line	14	22	16	0	6	85	40	49	42	167
Fishing Floats/Lures	0	6	11	2	0	6	6	18	36	69
Fishing Nets	0	1	0	0	6	3	3	27	48	18
Hard Hats	0	0	0	0	1	0	0	1	0	0
Light Sticks	0	0	0	0	2	0	2	18	0	43
Plastic Pieces	22	21	60	0	120	18	133	80	0	16
Pipe Thread Protectors	71	0	0	1	12	0	1	3	0	0
Rope	6	0	19	0	11	59	35	47	370	18
Long Sheetting	41	0	0	0	0	0	8	9	0	0
Short Sheetting	20	0	0	0	0	0	6	41	0	1
Six-Pack Holders	3	10	0	0	20	6	13	39	0	2
Strapping Bands	8	22	0	0	0	4	15	40	418	7
Straws	33	50	0	0	0	86	65	107	0	17
Syringes	1	2	1	0	0	0	1	13	3	0
Tampon Applicators	1	0	0	0	0	2	4	0	0	0
Toys	1	3	0	0	10	6	2	34	19	4
Vegetable Sacks	3	0	0	0	0	10	6	27	24	0
Write Protection Rings	0	0	0	0	0	0	0	4	386	0
Other Plastic	701	44	6	2	77	5	34	89	1235	2
FOAMED PLASTIC: Buoys	0	1	4	0	0	3	1	2	37	10
Foamed Cups	0	21	2	0	28	109	18	106	24	32
Egg Cartons	0	0	0	0	0	0	0	7	0	1
Fast Food Containers	0	18	0	2	113	81	17	20	78	27
Meat Trays	0	0	0	0	0	19	5	19	0	0
Packaging Materials	13	19	1	0	69	21	33	32	0	11
Foamed Pieces	73	21	3	1	10	74	87	68	349	6
Foamed Plates	0	0	0	0	1	249	5	18	25	59
Other Foamed Plastic	0	10	4	0	0	0	0	0	0	0

APPENDIX 2. 1996 Underwater Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	Maldives	Malta	Mexico	Micronesia	Netherlands	Netherlands Antilles	New Zealand	Philippines	Portugal	Saudi Arabia
GLASS: Beverage Bottles	25	92	14	15	218	355	540	219	0	116
Food Jars	0	0	0	2	4	2	51	104	596	31
Other Glass Bottles/Jars	13	0	0	0	45	22	38	83	0	58
Fluorescent Light Tubes	0	0	0	0	0	0	0	0	9	2
Light Bulbs	4	0	0	0	0	0	59	11	0	0
Glass Pieces	0	46	0	1	26	314	120	61	0	34
Other Glass	2	0	1	0	10	0	4	60	235	0
RUBBER: Balloons	0	2	0	0	4	0	6	6	12	0
Condoms	1	1	0	0	3	2	2	1	12	0
Rubber Gloves	4	1	1	0	0	18	5	8	101	2
Tires	3	3	2	0	131	28	28	20	29	5
Other Rubber	44	24	11	1	15	17	22	100	91	3
METAL: Bottles Caps	30	10	1	0	48	318	102	133	276	10
Aerosol Cans	8	2	0	0	4	19	26	50	26	8
Beverage Cans	138	85	22	106	194	192	350	66	291	120
Food Cans	13	11	2	0	11	8	19	77	0	0
Other Cans	39	0	0	0	0	8	13	57	0	4
Metal Crab/Lobster Traps	7	0	1	0	0	11	1	0	51	9
55 Gallon Rusty Drums	1	2	7	0	2	1	6	25	28	0
55 Gallon New Drums	0	0	0	0	0	0	0	3	0	0
Metal Pieces	14	11	27	0	80	41	15	48	0	0
Pull Tabs	2	0	1	0	1	0	65	0	0	8
Wire	19	10	0	0	31	9	16	42	51	5
Other Metal	7	68	3	0	113	31	33	136	206	78
PAPER: Bags	0	4	0	0	0	11	78	42	127	2
Cardboard	7	2	0	1	8	34	15	33	134	0
Cartons	15	8	0	0	52	12	22	34	323	6
Paper Cups	0	11	0	0	8	80	0	13	29	0
Newspapers/Magazines	5	1	0	0	15	7	38	9	111	0
Paper Pieces	0	2	3	0	122	0	160	58	0	0
Paper Plates	20	0	0	0	0	16	9	18	12	0
Other Paper	1	4	0	0	0	9	63	0	1591	0
WOOD: Crab/Lobster Traps	0	0	0	0	0	4	0	0	8	0
Crates	0	5	0	0	1	4	0	6	46	0
Lumber Pieces	15	6	14	0	87	74	27	79	0	51
Pallets	0	0	3	0	30	2	0	8	302	3
Other Wood	25	5	1	0	20	3	12	2	206	0
CLOTH: Clothing/Pieces	47	17	18	0	25	95	63	93	84	3
GRAND TOTALS	2,723	824	325	149	2,324	3,555	3,703	5,826	10,212	1,545
GRAND TOTALS, w/o Bufts	1,870	813	325	149	2,322	3,368	3,478	5,741	10,212	1,545

APPENDIX 2. 1996 Underwater Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	Singapore	Slovenia	Spain	St. Vincent & the Grenadines	Switzerland	Taiwan	Thailand	Turkey	Turks & Caicos
PLASTIC: Food Bags/Wrappers	82	30	323	699	56	0	5	0	4
Salt Bags	0	1	0	0	0	0	0	2	1
Trash Bags	1	7	14	489	1	0	0	76	3
Other Bags	21	37	71	347	11	0	6	0	6
Plastic Beverage Bottles	9	227	363	497	82	73	0	136	1
Bleach Bottles	0	9	39	464	0	1	0	5	0
Milk/Water Gallon Jugs	9	35	60	177	2	0	0	83	4
Oil/Lube Bottles	2	42	0	523	4	2	0	14	4
Other Plastic Bottles	3	68	9	423	0	0	2	15	1
Buckets	0	24	16	51	8	0	0	16	1
Caps/Lids	3	32	92	453	3	0	0	32	1
Cigarette Butts	2	100	275	70	5	0	0	0	10
Cigarette Lighters	1	13	8	31	42	0	0	2	0
Cups/Utensils	10	143	4	209	84	0	0	0	15
Diapers	0	0	2	58	0	0	0	0	0
Fishing Line	6	0	13	11	2	0	35	8	3
Fishing Floats/Lures	1	12	2	23	22	0	0	5	1
Fishing Nets	0	1	12	1	0	2	8	10	1
Hard Hats	0	0	0	0	0	0	0	0	0
Light Sticks	0	0	0	267	0	0	0	4	0
Plastic Pieces	21	1	40	159	62	0	0	0	8
Pipe Thread Protectors	1	0	20	0	0	0	0	9	3
Rope	3	3	105	98	2	0	21	7	4
Long Sheeting	3	4	46	2	3	0	0	3	0
Short Sheeting	5	0	0	0	1	0	2	1	0
Six-Pack Holders	0	0	9	3	0	0	0	0	18
Strapping Bands	2	0	0	18	0	0	0	0	0
Straws	17	0	0	161	0	0	0	10	1
Syringes	0	0	3	31	0	0	0	2	0
Tampon Applicators	0	0	2	0	6	0	0	1	0
Toys	0	12	32	34	30	0	0	1	0
Vegetable Sacks	1	24	0	32	0	0	0	1	0
Write Protection Rings	0	0	0	30	0	0	0	0	0
Other Plastic	7	0	8	284	40	0	2	1	6
FOAMED PLASTIC: Buoys	0	4	5	6	0	0	0	0	1
Foamed Cups	0	80	4	113	10	0	0	10	2
Egg Cartons	0	2	0	41	0	0	0	0	0
Fast Food Containers	5	0	5	146	0	0	0	0	4
Meat Trays	0	0	1	53	0	0	0	8	0
Packaging Materials	5	7	4	100	10	0	0	3	0
Foamed Pieces	9	62	0	79	0	0	0	0	13
Foamed Plates	0	0	4	97	2	2	0	15	3
Other Foamed Plastic	0	0	0	0	0	0	0	0	0

APPENDIX 2. 1996 Underwater Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	Singapore	Slovenia	Spain	St. Vincent & the Grenadines	Switzerland	Taiwan	Thailand	Turkey	Turks & Caicos
GLASS: Beverage Bottles	2	242	88	248	5655	7	6	522	200
Food Jars	0	263	0	79	42	1	2	43	2
Other Glass Bottles/Jars	1	3	17	112	20	0	3	52	0
Fluorescent Light Tubes	0	0	0	3	0	0	0	11	0
Light Bulbs	0	1	0	27	7	0	0	3	1
Glass Pieces	12	398	24	99	407	0	0	3	4
Other Glass	0	0	15	49	11	0	0	6	0
RUBBER: Balloons	0	0	0	0	0	0	0	0	0
Condoms	0	2	11	26	0	0	0	0	0
Rubber Gloves	1	9	0	24	0	0	0	1	0
Tires	2	3	33	81	32	0	2	26	0
Other Rubber	3	0	3	266	15	0	4	7	1
METAL: Bottles Caps	0	31	121	208	17	0	0	22	40
Aerosol Cans	0	105	3	90	14	0	0	76	0
Beverage Cans	63	503	137	214	570	37	5	806	100
Food Cans	1	75	11	136	52	0	3	23	1
Other Cans	0	0	0	105	14	0	0	34	0
Metal Crab/Lobster Traps	0	5	5	0	21	0	0	0	1
55 Gallon Rusty Drums	0	4	30	5	26	0	0	0	0
55 Gallon New Drums	0	0	3	0	1	0	0	0	0
Metal Pieces	3	768	53	76	139	0	0	16	3
Pull Tabs	0	17	0	0	7	0	0	0	0
Wire	7	18	13	78	19	0	0	12	3
Other Metal	5	77	13	40	148	0	12	1	3
PAPER: Bags	0	7	15	146	0	0	0	0	4
Cardboard	1	2	0	66	1	0	0	0	7
Cartons	9	8	2	34	0	0	0	0	3
Paper Cups	1	29	6	68	0	0	0	13	0
Newspapers/Magazines	0	37	10	22	0	0	0	2	2
Paper Plates	4	35	0	45	17	0	4	0	11
Paper Plates	1	0	2	29	0	0	0	9	1
Other Paper	1	0	0	25	3	0	2	0	0
WOOD: Crab/Lobster Traps	0	0	0	0	0	0	0	0	0
Crates	0	1	0	0	0	0	0	0	0
Lumber Pieces	7	0	0	108	1	0	0	0	8
Pallets	0	0	0	1	0	0	0	0	0
Other Wood	2	0	8	27	0	0	0	0	4
CLOTH: Clothing/Pieces	13	44	92	238	16	16	3	8	9
GRAND TOTALS	368	3,667	2,306	9,055	7,743	141	127	2,176	527
GRAND TOTALS, w/o Bufts	366	3,567	2,031	8,985	7,738	141	127	2,176	517

APPENDIX 2. 1996 Underwater Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	United Kingdom	United States	Venezuela	Totals
PLASTIC: Food Bags/Wrappers	37	1706	426	7,813
Salt Bags	0	11	0	102
Trash Bags	0	559	615	2,376
Other Bags	25	557	545	2,788
Plastic Beverage Bottles	15	2570	659	8,293
Bleach Bottles	0	69	386	1,492
Milk/Water Gallon Jugs	0	295	0	1,723
Oil/Lube Bottles	0	135	0	1,219
Other Plastic Bottles	0	327	275	2,286
Buckets	0	165	97	690
Caps/Lids	10	2327	186	4,339
Cigarette Butts	0	5573	306	19,934
Cigarette Lighters	1	343	26	765
Cups/Utensils	1	1869	506	4,181
Diapers	0	141	422	834
Fishing Line	28	730	156	1,674
Fishing Floats/Lures	4	475	80	971
Fishing Nets	3	130	3	349
Hard Hats	0	1	0	16
Light Sticks	0	82	68	502
Plastic Pieces	5	2494	509	4,671
Pipe Thread Protectors	0	50	71	276
Rope	11	392	0	1,460
Long Sheeting	0	55	173	397
Short Sheeting	0	107	14	304
Six-Pack Holders	0	510	126	916
Strapping Bands	2	116	6	786
Straws	8	1404	186	2,616
Syringes	0	38	9	236
Tampon Applicators	0	312	84	501
Toys	0	252	112	733
Vegetable Sacks	3	191	0	512
Write Protection Rings	0	53	0	561
Other Plastic	22	1045	250	5,121
FOAMED PLASTIC: Buoys	0	140	2	235
Foamed Cups	22	1370	0	2,566
Egg Cartons	0	18	0	152
Fast Food Containers	3	384	66	1,523
Meat Trays	0	206	0	431
Packaging Materials	7	1011	2	1,574
Foamed Pieces	22	2239	319	4,062
Foamed Plates	0	222	0	801
Other Foamed Plastic	0	396	232	642

APPENDIX 2. 1996 Underwater Marine Debris Raw Data Summary, cont.

DEBRIS ITEMS	United Kingdom	United States	Venezuela	Totals
GLASS: Beverage Bottles	6	4097	527	16,381
Food Jars	0	491	580	2,508
Other Glass Bottles/Jars	0	527	358	1,768
Fluorescent Light Tubes	0	11	1	60
Light Bulbs	0	12	1	171
Glass Pieces	5	1982	651	5,885
Other Glass	0	276	18	1,105
RUBBER: Balloons	4	235	1	404
Condoms	2	31	1	163
Rubber Gloves	0	92	7	345
Tires	2	438	49	1,182
Other Rubber	6	421	63	1,362
METAL: Bottles Caps	3	945	327	3,768
Aerosol Cans	2	164	0	1,484
Beverage Cans	36	5891	699	12,189
Food Cans	0	404	230	3,337
Other Cans	0	66	271	787
Metal Crab/Lobster Traps	0	54	203	387
55 Gallon Rusty Drums	0	110	13	356
55 Gallon New Drums	0	1	5	21
Metal Pieces	4	861	159	2,993
Pull Tabs	0	427	120	1,175
Wire	2	468	53	1,093
Other Metal	17	925	541	3,203
PAPER: Bags	1	399	135	1,240
Cardboard	3	203	2	708
Cartons	0	182	209	1,255
Paper Cups	1	404	61	1,017
Newspapers/Magazines	0	208	0	751
Paper Pieces	9	1477	456	2,762
Paper Plates	0	143	65	373
Other Paper	2	184	265	2,473
WOOD: Crab/Lobster Traps	0	29	0	43
Crates	0	10	0	159
Lumber Pieces	8	904	310	1,854
Pallets	0	52	78	518
Other Wood	1	153	115	751
CLOTH: Clothing/Pieces	8	1067	293	2,548
GRAND TOTALS	351	55,414	13,784	172,002
GRAND TOTALS, w/o Bufts	351	49,841	13,478	152,068

APPENDIX 3. State/Country Coordinators of the 1996 International Coastal and Underwater Cleanups

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Tips
Top Team
Tropicana Hotel

GREECE

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APPENDIX 4. Sponsors of the 1996 International Coastal and Underwater Cleanups, by Country, cont.

HAITI, cont.

Pinson, S.A.
 Eau Minérale Naturelle Valvert
 A&B Hardware, S.A.
 Union School
 Dollar Rent A Car
 Maison Cassis et Fils
 J² Communication
 GoldStar
 Pharmastore
 SuperGraph
 Chatelain Tours
 SEMA
 Consulat d'Israel
 K-dis
 A.C.M. Mufflers
 Pepsi

HONG KONG

RSD (Regional Services' Department of Hong Kong Government)
 ITE (International Travel Expo Hong Kong Ltd.)
 KHKC (The Keep Hong Kong Clean Campaign, funded by the KHKC Activities Funding Scheme)
 Pro Cam-fis Outfitters Ltd.

ISRAEL

The Ministry of the Environment (provided buses, garbage bags, T-shirts, stickers and flyers)
 Inspectors of the Marine and Coastal Division (accompanied all the cleanup operations)

IVORY COAST

Coca-Cola
 Ash International Company
 Fraternité Matin

JAPAN

Circle K Japan Co., Ltd.
 Dunlop Home Products Ltd.
 Earth Environment Found
 ESSO
 Kanagawa Beach Cleaning Foundation
 NEC
 Sapporo Beer

JAPAN, cont.

The 1st Asahi Sea Cultural Award
 (MYCAL CORPORATION)
 WWF-Japan
North Zone Sponsors
 Ebara Corporation
 Sapporo Beer Tohoku Branch
 Sony Corporation-Sendai Technology Center
 Sendai Coca-Cola Bottling, Co., Ltd.

Kansai Zone Sponsors

Kirin Brewery Co., Ltd.
 Kinki Coca-Cola Bottling Co., Ltd.
 Sanyo Electric Co., Ltd.
 The Yasuda Fine & Marine Insurance Co., Ltd.
 Coop Kobe

Okinawa Zone Sponsors

Bluetry Dive Shop
 Coconut Moon Beach Bar
 DARC (Okinawa Drug and Alcohol Rehabilitation Center)
 Japan Ad Council
 Japan Environmental Council
 Japan Tobacco Association
 Malibu Beach Resort
 Meiji Dairy Company
 OCEAN (Okinawa Culture and Environmental Action Network)
 Okinawa Electric and Power Company
 Okinawa University Area Research Department
 Radio Okinawa
 Ryufu Kai (Ryukyu Wind Network)
 Ryukyu Broadcasting Company
 Service Creation Company (JAL Group)
 Taishi Communications Company (Gevent)
 Okinawa Prefecture Government:
 Department of Environment and Health
 Tourism and Culture Division
 Okinawa Convention and Visitors' Bureau
 Ishikawa City Public Welfare Center
 Onna Town Hall
 Yomitan Town Hall
 Kaori Sunagawa

APPENDIX 4. Sponsors of the 1996 International Coastal and Underwater Cleanups, by Country, cont.

KENYA

Safari Beach Hotel
 Jadini Beach Hotel
 Africana Sea Lodge
 Alliance Hotels
 Nomad Beach Hotel Ltd.
 Carslake Nominees Ltd.
 Southern Palms Beach Resort
 Two Fishes Hotel
 Diani Reef Grand Hotel
 Lagoon Reef Hotel
 Holiday Resorts Limited
 Golden Beach Hotel
 Leopard Beach Hotel
 Robinson Club Baobab
 Wildlife Clubs of Kenya
 Severin Sea Lodge
 Barclays
 Kenya Wildlife Service
 Coastal Bottlers Limited
 Whispering Palms Hotel Limited
 Coast Development Authority
 Nomad Seafood Restaurant Beach Bar & Bandas
 Sun N' Sand Beach Hotel Ltd.
 Turtle Bay Beach Club
 Travellers Beach Hotel
 Serena Beach Hotel
 Kenya Ports Authority
 Bamburi Cement
 Baobab Farm Limited

KUWAIT

AlMulla Environmental Systems
 Al-Sabih Marine Equipment Co.
 Arab Food Services
 Atlas Pools
 BMC (Al-Bait Al Ma'mour Trading Company)
 Bader Sultan & Brothers Co.
 Behbehani Motors Company(VW, Audi, Porsche)
 DHL
 Holiday Inn
 Khiran Resort/Touristic Enterprises
 Kuwait Oil Company
 Mercedes(Abdul Albisher & Zaid Alkazemi)
 Messilah Beach Hotel

KUWAIT, cont.

National Panasonic (Easa Husain Al-Yousifi Est.)
 Professional Investment Consultants
 Radisson SAS Hotel
 Safir Hotel
 Top 2 Toe
 Yamaha Marine
 Kuwait Development and Trading Company
Boats and Divers from:
 Atlas Pools
 DHL
 Fahad Sultan Sons & Company W.L.L.
 Gulf divers
 Kuwait Mantas
 Lufthansa German Airlines
 Qabazard Marine
 Riad Sultan
 Triton Marine
 Western Atlas

LATVIA

MAN-TESS Ltd.
 TAKATS Ltd
 Latvian Topper Club
 Keep Latvia Tidy Foundation

LITHUANIA

Klaipéda Vytouetas Didysés Gymnasium
 Klaipéda and Palauga Local Administration
 Joint-Stock company (Ltd.) "Coastal Beaches"

MALDIVES

Cleanwell Services Ltd.
 DiveShack Scuba School
 E.Calleja & Sons Ltd
 Federation for Underwater Activities
 Former Secretariat for the Environment
 International Animal Rescue (Malta)
 Maltagua Diving School
 Matthew Micallef-Silhouette Photography
 Nixxiegha Kulturali
 Sharks Diving Club
 Sign-it Ltd.
 Sub-way Scuba Diving School
 Waldonet Ltd.
 Xerox Copy Centre

APPENDIX 4. Sponsors of the 1996 International Coastal and Underwater Cleanups, by Country, cont.

MALTA

Cleanwell Services Ltd.
 DiveShack Scuba School
 E. Calleja & Sons Ltd.
 Federation for Underwater Activities
 Former Secretariat for the Environment
 International Animal Rescue (Malta)
 Maltaqua Diving School
 Matthew Micallef-Silhouette Photography
 Nixxiegha Kulturali
 Sharks Diving Club
 Sign-It Ltd.
 Sub-way Scuba Diving School
 Waldonet Ltd.
 Xerox Copy Centre

MEXICO

Puerto Vallarta

Vallarta Lifestyles Magazine
 Club Regina
 Administración Portuaria Integral
 Opequimar
 Princesa Cruises
 Proyecto Punta Mita
 Acapulco HEAT
 Adobe Café
 AltaPlus Vitalia
 Anheuser-Busch Mexico
 Betanzos
 Bora Bora Cruises
 Brock Squire
 Casa Maya
 First Choice Holidays
 Hard Rock
 Harris Tours
 Holiday Inn
 Hotel Marriott Casa Magna
 Le Kliff Restaurant
 Lloyds
 Marely Travel
 Mes Boat International
 Miller Travel Services
 Pipi's
 Planet Hollywood
 Qualton Hotel

MEXICO, Puerto Vallarta, cont.

Steve Wood
 Tukari
 Vallarta Beach Hotel and Resort
 Velas Vallarta
 Alaska Airlines
 Café des Artistes
 Casas y Condos
 Casual Boutique
 Daquiri Dick's
 Delta Airlines Employees
 Diamond Hotels Nuevo Vallarta
 Dulce Vida
 Finca Sol
 Hotel Camino Real
 Hotel Plaza Iguana
 Hotel Presidente Intercontinental
 InterMar Vallarta
 Judith Ewing
 Larry Mar
 Merrill Burton
 Neptuno Realtors
 Palmar Gonzalez
 Restaurant Las Palomas
 Servicios Medicos
 Sheraton Hotel
 Club Regina
 Revista Puerto Vallarta Lifestyles
 D.I.F.
 Prepa. Niños Heroes
 Esc. Tec. #132 - Coapinole
 Clubs Rotarios
 XII Zona Naval Militar
 Hotel Marriott
 Hotel Krystal
 Hotel Holiday Inn
 Tukari
 Grupo de la Setujal del Programa Cultura Turista
 Esc. USA
 American School Senior Class
 American School Student Council
 Esc. Josefina Chavez
 Prepa. Niños Heroes
 MontessoriCasa Bambini
 Choco Banana

APPENDIX 4. Sponsors of the 1996 International Coastal and Underwater Cleanups, by Country, cont.

MEXICO, Puerta Vallarta, cont.

Sistecozome
 Hotel Costa Vida
 Medina Transporte
 Hotel Fiesta Americana
 ISPAC School
 British American Academy
 Hotel Regina
 Hotel Mismaloya
 Gino Llamas
 Gabrielle Percastre
 H. Ayuntamiento de Puerto Vallarta
 - Regidora de Ecología, Martha Elsa Vellegas
 - Jefe, Dept. de Ecología, Rafael Girón Botello
 XII Zona Militar, Tnt. Maria de la
 Luz Avelarde
 LCM Productions
 Impessoras Copy Gama
 Impressora del Puerto
 Lola's Hair Salon
 Allegre Cruises
 La Iguana Mexican Fiesta
 Café Olé Restaurant
 La Taberna Restaurant
 Tsunami Restaurant
 Angela's Restaurant
 Mario Alberto Beauty Salon
 Los Pibes Restaurant
 Pasta Fresca
 Roberto's Puerto Nuevo Restaurant
 Mi Rueda
 Balam's Restaurant
 Porto Bello Restaurant
 Abadia Basso Restaurant
 Mi Collection Arte Mexicano
 La Palapa Restaurant
 The Blue Elephant Restaurant
 Archie's Wok Restaurant
 Pipi's Restaurant
 Tequila Restaurant
 Paradise Village
 Kid's Only
 Galleria Dante
 Puerco Azul
 Hikuri Impresiones

MEXICO, Puerta Vallarta, cont.

Casa de la Rosa Crystal
 Las Iguanas Racquet Club
 Ric's Jewelers
 Valenciana
 Shepes
 Hotel Krystal
 La Terraza Restaurant
 Time Changers Restaurant
 Café de Olla
 El Torito's Restaurant
 Kim Cawood
 Tucan Tours
 Casa Mexicana
 Lucy's Cu Cu Cabana
 Lucy's Cu Cu Cabana II
 Majolica
 Galeria Pacifico
 Alfredo's Restaurant

Quintana Roo

Kukulcan Plaza
 Restaurant 100% Natural
 Omega Corporación Fotografica
 Coca-Cola Co.
 Cancun FM
 Cruz Roja
 Accion Cancun AC
 Cerveceria Cuahutemoc
 SEMARNAP
 Dirección de Ecología Municipal
 Museo de la Isla de Cozumel
 Tortugranja Isla Mujeres
 Fideicomiso Puerto Aventuras
 Club de Playa Colony
 Hotel Continental Puerto Aventuras
 Hotel Oasis Puerto Aventuras
 Super Coxana

NETHERLANDS ANTILLES

Coca-Cola
 Amstel Brouwerij
 Atlantis Diving
 Citro
 Fundashon Marie Pampoen

APPENDIX 4. Sponsors of the 1996 International Coastal and Underwater Cleanups, by Country, cont.

NETHERLANDS ANTILLES, cont.

Koninklijke Marine
 Korps Mariniers
 Limpiesa Martina
 Princess Beach Hotel
 Princess Divers
 Rabobank Curaçao, N.V.A
 Reflective Images
 Ritz
 Aqua Diving
 Eden Roc Dive Center

Bonaire

Samurians
 Sunset Beach Dive Center
 David Hickey
 Black Durgeon
 Al Catafumo
 Playa Grandi
 SGB Chess Club
 Serapio Pop
 Hisa Buta
 Marion Wilson

Saba Marine Park

Big Rock Market
 Eskay Hardware
 Captain's Quarters
 Juliana's
 Scout's Place
 Caribake Bakery
 My Store
 Cranston's
 Hassell Enterprises N.V.
 Utilities Saba N.V.
 In Too Deep Bar/Restaurant
 Pop's Place
 Nivac Imports N.V.
 Saba Cable

NEW ZEALAND

Adhesif Prints, Auckland Regional Council
 Department of Conservation
 Department of Geography, University of
 Auckland

NEW ZEALAND, cont.

Fullers Gulf Ferries, NationalPak Ltd.
 PDQ Print, Plan and Print
 Suburban Newspapers, Waste Management Inc.
 Volunteers from the Auckland community

PADI EUROPE

German Airline LTU
 Swiss Watch manufacturer of MEMOTIME

PANAMA

HOPSA
 Productos del Hogar
 Industrias Velarde, S.A.
 Seguros Donando, S.A.
 Agenicas Tropicales, S.A.
 OTISSA
 Productos de Prestigio
 Llantas y Lonas Panamá
 EL REY
 Distribuidora y Servicios IZMAR
 Ismael Zeallos
 RAPIMPRESOS
 IZTRACTIONS
 LA PRENSA
 X-COPY
 Club de Yates y Pesca
 Seaboard Marine
 Suplimedic

POLAND

Polish National Environment Protection and
 Water Management Fund
 Ministry of Environment Protection
 Natural Resources and Forestry
 Provincial Environment Protection Fund
 in Szczecin
 Provincial Environment Protection Fund
 in Koszalin
 Provincial Environment Protection Fund in Slupsk
 Centre of Environmental Education in Elblag

APPENDIX 4. Sponsors of the 1996 International Coastal and Underwater Cleanups, by Country, cont.

SAUDI ARABIA

Al Bilad Hotel Movenpick
 New Red Sea Divers (S - 1903)
 Pepsi Cola Co.
 Coca-Cola Co.
 Snapple
 Alfao Superstore

SINGAPORE

Land Cleanup

Caltex Group of Companies in Singapore
 Rotary Club of Singapore
 Nature Society (Singapore)

Underwater Cleanup

Marine Conservation Group, Nature Society
 (Singapore)
 Raffles Marina

TANZANIA

"One Ocean," PADI Dive Centre S-7839, Zanzibar
 Department of Environment, Zanzibar
 Zanzibar Marine Institute of Marine Sciences
 Municipal Council, Zanzibar
 Local pressure groups (Sheha)

TURKS AND CAICOS ISLANDS

Operation Restore Hope

UNITED KINGDOM

Reader's Digest

UNITED STATES

Benefactors

Anheuser Busch Corporation
 The Brita Products Co.
 Dow Chemical Corporation
 ITW Hi-Cone
 National Oceanic and Atmospheric
 Administration (NOAA)
 Ocean Spray Cranberries, Inc.
 Sea World
 U.S. Environmental Protection Agency (EPA)

UNITED STATES, cont.

Patrons

American Plastics Council
 AT&T Foundation
 The Coca-Cola Company
 earth preserv
 The Society of the Plastics Industry

Sponsors

ARCO Foundation
 BellSouth
 Brunswick Corporation
 Chevron Corporation
 Dive Equipment & Marketing Association
 (DEMA)
 Florida Aquarium, Inc.
 Foley's
 Hawley Family Foundation
 Jantzen
 Ocean Futures
 Plastic Bag Association
 Professional Association of Dive Instructors
 (PADI)
 PADI Project A.W.A.R.E. Foundation
 Procter & Gamble Fund
 Publix Supermarkets Charities
 Rockwell Fund
 Rollpak
 Sanford Corporation
 Shell Oil Company Foundation
Skin Diver Magazine
 WMX Technologies, Inc.

Associates

Ashland-Drew Marine Division
 Ruth McLean Bowman Bowers Foundation
 Penn Fishing Tackle Manufacturing Co.
 Nationsbank
 Trull Foundation

VENEZUELA

National Sponsors

Corpoven
 Parmalat
 Telcel
 Coca-Cola
 Lony

APPENDIX 4. Sponsors of the 1996 International Coastal and Underwater Cleanups, by Country, cont.

VENEZUELA, cont.

Maltin Polar

Gatorade

Pasteleria Danubio

Toyota Motors

Casa Hellmund

MRW

Aerotuy

Xeros

Sabenpe

Copertone

National Co-sponsors

Pequiven

Golden Cup

Proctor & Gamble

Fundacion Zumaque

Metro de Caracas

International Sponsors

Embajada del Reino de los Paises Bajos

APPENDIX 5. Items Identified as "Most Peculiar" by 1996 International Underwater Cleanup Volunteers

COUNTRY/ZONE	PECULIAR DEBRIS ITEMS
Australia	
Bundury	mobile phone
Geelong	artillery round, LP record, .303 rifle round
Groote Eylandt	dumbbell, golf ball, fishing rod
Hideaway Island	piece of ship's anchor (3 kg), ship's railing, crane parts
Langford Island	fins, snorkel
Lee Breakwater	shopping cart
Melbourne	drop net
Newcastle	radio
Palm Beach	sunglasses
Canada	
Shell Canada	new bicycle, anchor with chain, sailboat
Chile	
Al Garrobo	shoe
Greece	
Kalitheia	anchor head of very old style anchor
Malaysia	
Tioman Island	engine block, water pump, wheel barrow, old metal chair, toothbrushes
Mexico	
Puerto Vallarta	14' x 2' x 2" piece of wood, oil filters for boats
Netherlands Antilles	
Gallows Bay Shoreline	full oxyacetylene bottle
Holiday Beach	an oven and refrigerator in 20' of water, saucepan, outboard motor cover
New Zealand	
Albany Underwater CE	alarm clock
Auckland	sandals
Blue H21	solid 40-kg piece of lead with a ring in it
Blue H23	old anchors
Blue H24	strip of carpet
Island Bay Divers	gas burner, lipstick, pair of large bolt cutters, plastic bag full of ash
Pilot Bay	car keys, shotgun shell, clock, bike frame, tractor tire
Stirlings Sports Nel	boat rudder, weight belt
Philippines	
Boracay Island	engine spare parts, snakeskin
Saudi Arabia	
Jeddah Underwater	beach umbrella
Singapore	
Divers Underwater	diesel container, umbrella

APPENDIX 5. Items Identified as "Most Peculiar" by 1996 International Underwater Cleanup Volunteers, cont.

COUNTRY/ZONE	PECULIAR DEBRIS ITEMS
Turkey	
English Harbor	ammunition case dropped by British boats during WWII, plastic chair, metal chair
United States	
Alabama	ceramic dragon statuette, cymbal from drum set
Arkansas	fan belt, sunglasses, spark plug wires
Arizona	boxer shorts, full size pool, umbrella, boat anchors, boat ladder, \$1 bill, movie filmstrip, ladies' panties, radio, shoes, glasses, shopping cart, toilet seat cover
California	10 speed bicycle, electric drill, bag of bullets, disposable razor, diving mask, laptop computer, outboard motor, shopping cart, swim fin, weighted plastic box with cremated remains—"returned to the sea"
Colorado	antique tin "Cracker Jack" box
Connecticut	men's underwear, oil can, open umbrella
Florida	boat prop, 2 anchors, mobile phone, 3 fishing poles, squash racket, T-shirts, 2 spear guns
Guam	2 car batteries, gas BBQ grill, 2 large "impellers"—"probably from a large steamship"
Hawaii	electrical wiring with light fixture attached, 2 fishing reels, men's underwear, shopping carts
Idaho	arrows, scooter wheel, lawnmower, canning jar, golf balls
Indiana	bowling ball, shopping cart
Iowa	car muffler, 2 SCUBA masks
Kansas	boat oar, fishing poles, credit card, coin changer, knives, drums, Hulk doll, ski binding, boat float
Maryland	2 sterile water medical containers
Massachusetts	a gun, woman's coin purse with a rock inside (red velvet, ca. 1950), bicycle, radio, shoe
Michigan	snow fence, bicycle, sun roof, Chevy V-8 engine, fence post, ½ of a 55-gal. drum, BBQ grill, pole digging shovel, electric wrench
Mississippi	door to a boat cabin, note in a bottle
Montana	cordless power drill & kit, dice, golf ball
Nebraska	fiber-filled vest, refrigerator door
Nevada	2 burial urns (reburied in deeper water), boat windshield, ladies' panties
New Hampshire	14-ft. boat hook, cook pot, flashlight
New Mexico	car battery, Dacor SCUBA mask, anchor, engine block, fishing reel, primer pump for boat motor, boat motor cover, metal ramp/walkway, shoe, TV antenna
New York	bowling ball, clay pigeons, DeSoto hub cap, Model-T tire tube, large sign, mattress, remote control boat
North Carolina	live ammunition, toothbrush, hubcaps, washer, dryer, stove, dishwasher
Ohio	beeper, Christmas tree
Oklahoma	sofa, working watch
Rhode Island	dummy aerial test bomb, skateboard
Tennessee	underwear
Texas	sunglasses, toilet

APPENDIX 5. Items Identified as "Most Peculiar" by 1996 International Underwater Cleanup Volunteers, cont.

COUNTRY/ZONE	PECULIAR DEBRIS ITEMS
United States, cont.	
Virginia	bank card, boat roof, guard rail and large steel spikes, "lots of shoes," piece of travel trailer, sleeping bag in carrying case, shopping cart, toilet tank cover
Virgin Islands	piece of fiberglass labeled "Keep this compartment dry"
Wisconsin	leg brace with shoe, men's watch, radio, golf balls, hair bands, shoes, underwear

“

*This was a most
enlightening experience.*

Cleanup volunteer, Belize

*It was dirty but we did
our best and got it
sparkling clean.*

Cleanup volunteer, Kenya

*It was very joyful
and instructive.*

Cleanup volunteer, Turkey

”



CENTER FOR
MARINE
CONSERVATION

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Website: cmc-ocean.org