

## SITES

Asbury Park  
Atlantic Highlands  
Atlantic City  
Avalon  
Avon  
Barnegat  
Bay Head  
Belmar  
Bordentown  
Bradley Beach  
Brick  
Brigantine  
Cape May  
Cape May Ct. House  
Cape May Point  
Deal  
Elberon  
Galloway Township  
Glen Ridge  
Highlands  
Island Beach St. Park  
Keansburg  
Keyport  
Lakewood  
Lavallette  
Leonardo  
Long Branch  
Manasquan  
Mantoloking  
Margate  
Monmouth Beach  
Normandy Beach  
North Middletown  
North Wildwood  
Ocean City  
Ocean Gate  
Ocean Grove  
Ortley Beach  
Pennsauken  
Perth Amboy  
Port Monmouth  
Pt. Pleasant  
Pt. Pleasant Beach  
Red Bank  
Sandy Hook  
Sea Bright  
Sea Girt  
Sea Isle City  
Seaside Heights  
Seaside Park  
South Amboy  
Spring Lake  
Stone Harbor  
Strathmere  
Tinton Falls  
Tuckerton  
Union Beach  
Ventnor  
Villas  
Wildwood  
Wildwood Crest



# BEACH SWEEPS AND WATERWAY CLEANUP Annual Report - 2006

## *"Sweeping" Toward a Clean Ocean*

**Clean Ocean Action (COA)** is a coalition of 125 organizations working to improve and protect the waters off the New Jersey and New York coasts. In 1985, to rid beaches of unsightly and harmful debris, COA launched the region's first Beach Sweeps program. The program is one of the longest running cleanups of its kind in the United States and has grown from 75 people at one site in 1985, to 4,367 volunteers at 123 sites in 2006.

COA hosted the 21<sup>st</sup> Annual New Jersey Spring and Fall Beach Sweeps in 2006. Tall and small volunteers gathered from Raritan to Delaware Bays and along the ocean to clean beaches and waterways. They joined as groups (community, school, business, and organization), families, or individuals. Participants collected and recorded valuable data about debris. The data is presented in this report and is used to advance federal, state, and local programs to reduce litter.

## *Litter is Harmful, Unsightly, & Costly*

Fish, whales, birds, and other animals often mistake litter for food. As a result, animals get entangled in or ingest items, such as plastic bags, cigarette filters, and fishing line, with deadly results. Cigarette filters mimic small fish and have been found in the stomachs of birds and larger fish, blocking and affecting their digestion. Also, the filters are made of plastic fibers and trap carcinogenic (cancer-causing) chemicals, which are introduced into the animals' bloodstream.

Moreover, plastic litter takes a few years to several hundred years to break down, thereby threatening wildlife for decades to come. Litter in waterways can also foul boat motors and propellers resulting in costly repairs.

Finally, littered beaches can ruin a day at the beach. Garbage slicks and wash-ups close beaches to swimming and are detrimental to tourism and the coastal economy.



*Employees of Atlantic City Electric, a site sponsor of the 2006 Beach Sweeps, cleaned Atlantic City's beaches*



*Sandy Hook is the largest Beach Sweeps site*

## *You are the Solution:*

The goal is to eliminate the need for Beach Sweeps by ending sources of litter. To reach this goal, citizens must be educated about marine debris and taught that they are both the sources of and the solutions to ocean pollution.

The Beach Sweeps events are more than people picking-up trash from beaches. The program builds community support for solutions, as well as raise awareness about the negative impacts of litter on wildlife and the ocean. Citizens learn about the types and quantities of debris found along the coast and the shorelines of rivers, lakes, and streams.

## *2006 Spring & Fall Beach Sweeps*

- 4,367 volunteers at 123 sites
- 2,160 bags of trash removed
- 259,053 items collected
- Nearly 40 tons of debris removed

## *A Legacy for Action:*

Most importantly, the data collected during the Beach Sweeps turns a one-day event into a legacy of information to combat litter and other sources of pollution by identifying and monitoring trends. The information helps find solutions to keep beaches clean and healthy for citizens and marine life. Indeed, the data has been used to help create federal, state, and local programs and laws to reduce litter in the environment.

Finally, the data from the COA Fall Beach Sweeps is submitted to the Ocean Conservancy in Washington, DC, as part of its international database on marine debris and worldwide campaign against ocean pollution.

For more information about marine debris and being the solution to ocean pollution, visit COA's website at [www.CleanOceanAction.org](http://www.CleanOceanAction.org).

# Sponsors

## Lead Sponsors:



(L to R) COA's Executive Director Cindy Zipf, Tim Vogel of Wakefern/ShopRite, US Senator Robert Menendez, and National Park Service, Sandy Hook Unit's Lou Venuto

## Site Sponsors:

**Adventure Aquarium of Camden:** Ventnor

**Atlantic City Electric:** Atlantic City, Brigantine, Cape May, and Sea Isle City

**Keyport Business Alliance:** Keyport

**The Mary Holder Agency Realtors:** Bay Head, Bradley Beach, and Spring Lake

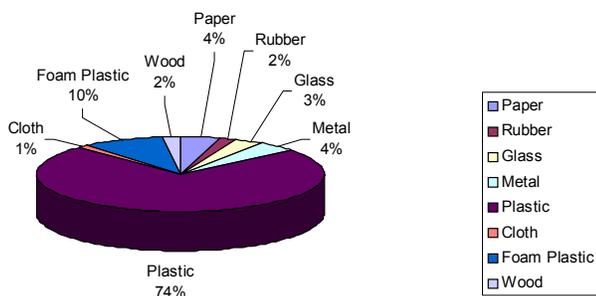
**United Teletech Financial, Panasonic, and Rotary District #7510 – Interact:** Sandy Hook

**Surfrider Foundation – Jersey Shore Chapter in memory of Daniel Clune:** Point Pleasant Beach

**Additional Support Provided By:** Brookdale Community College Culinary Arts Department; Divers Two, Inc.; Belmar Fishing Club; Gateway National Recreation Area - Sandy Hook Unit; Island Beach State Park; Jenkinson's Aquarium; Lower Cape May Regional High School; Marine Academy of Science & Technology; NJ Community Water Watch; The Ocean Conservancy; and Turning Point Cafe.

# New Jersey's Marine Debris - 2006

## Percent Breakdown by Material Type



The most prevalent type of debris found on New Jersey's beaches and in our waterways is plastic. The major reasons are: **1)** excess packaging in consumer products; **2)** disposable plastic materials found in nearly all consumer products; and **3)** the longevity of plastic, taking many decades to several hundred years to break down. Due to the strength of the material and its ability to last a long time, plastic items cause the most needless deaths of marine animals, and litter our waterways and beaches.

Three simple changes in life-styles can help reduce litter in the marine environment:

- 1) do not litter,
- 2) dispose of trash in a proper method so that it cannot be reintroduced into the environment,
- 3) practice the three "R's": **Reduce, Reuse, Recycle.**

## New Jersey's Dirty Dozen

Item	2006 Ranking	2005 Ranking	2004 Ranking
32,328 Plastic Caps & Lids	1	1	1
27,147 Plastic Food, Candy Wrappers/Bags	2	2	2
22,838 Cigarette Filters	3	3	3
15,373 Plastic Beverage/ Soda Bottles	4	6	7
14,479 Plastic Pieces	5	5	4
14,326 Plastic Straws & Stirrers	6	4	5
13,286 Foam Plastic Pieces	7	7	6
6,349 Plastic Store/Shopping Bags*	8	10	15
5,902 Plastic Fork, Knives & Spoons*	9	8	11
5,673 Plastic Cap Rings (from bottles)	10	**	**
5,330 Plastic Buckets/Crates/Bins	11	**	**
4,245 Plastic Cigar Tips	12	**	**
<b>167,276 Total</b>			
	<b>65% of Total Cleanup</b>		

\*New category in 2003  
\*\*Did not qualify for "Dirty Dozen"

The "Dirty Dozen" are the top 12 items most frequently collected and recorded. These 12 items accounted for 65 percent of the debris collected at the 2005 beach cleanups. Overall, the items collected from beaches remained fairly consistent in their ranking for the past 13 years with slight variations.

For the second consecutive year, plastic caps and lids topped the Dirty Dozen list. In recent years, caps and lids of all sizes and colors have become more noticeable and frequent on beaches. Perhaps caps and lids litter our shores due to the increase in people's consumption of beverages in plastic bottles, increasing the likelihood that caps are tossed into the environment.

# “Roster of the Ridiculous”

While all the debris collected from our beaches should be considered unusual or unnatural, the items below are some that were specifically listed by the volunteers as the most unusual found on the beach:

plunger  
play pen  
phone book  
2 shopping carts  
paint brush  
plastic pumpkin  
2 children's car seats  
library card  
AAA card  
cell phone  
Barbie Doll

bouquet of fake flowers  
3 bicycles  
3 Television sets  
3 windshield wipers  
5 pairs of underwear  
cutting board  
baseball bat  
car hood  
2 air conditioners  
license plate  
pillow

calculator  
can of shoe polish  
4 plastic Easter eggs  
vacuum cleaner brush  
bed spring  
fan  
3 toothbrushes  
2 propane tanks  
dresser drawer  
coat hanger  
golf club



Beach Captain Ted Jermansen displays a Barbie Doll and bouquet of fake flowers found at Midway Beach in Seaside Park

## Highlights

### Monmouth & Middlesex Counties



#### SPRING:

**Middletown (Port Monmouth)** – Over 40 volunteers collected 30 bags of trash.

**Perth Amboy** – About 30 volunteers from ages 8 to 87 picked up more than 16 bags of garbage.

**Sandy Hook** – Over 500 volunteers, collected: 4,762 plastic food wrappers/bags; 3,547 plastic forks, knives, spoons; and 1,757 plastic beverage bottles.

#### FALL:

**Bradley Beach** – 35 Volunteers picked up 614 plastic caps/lids and 378 plastic straws/stirrers.

**Highlands** – Students from Rumson-Fair Haven Regional High School Environmental Club led 28 volunteers in a cleanup that netted 30 bags of trash and recyclables, weighing approximately 150 pounds.

### Ocean County



#### SPRING:

**Island Beach State Park** – 32 volunteers picked up 44 Mylar balloons and 39 rubber balloons, as well as a dead gull entangled in string with a balloon.

**Pt. Pleasant Beach at Jenkinson's Aquarium** – Over 60 volunteers found a lobster trap, a large entangled fishing net, and a tire among the debris on the beach.

#### FALL:

**Ocean Gate** – More than 30 volunteers collected 755 cigarette filters along the Toms River.

**Seaside Park** – On Midway Beach, 11 volunteers collected 13 bags of trash, including a bouquet of artificial roses and a headless Barbie Doll.

### South Jersey



#### SPRING:

**Strathmere** – 120 people picked up 1,302 cigarette filters among the debris on the beach.

**Ocean City** – 57 volunteers removed 10 bags of trash, including a golf club and a window.

**Ventnor** – 20 volunteers collected 30 bags of trash and recyclables and a television set.

#### FALL:

**Longport** – The Science Club and Future Acts students collected several dozen bags of trash and a beach chair that had seen better days in the sun.

**South Jersey** – Students from the Lower Cape May Regional School District swept the beaches clean in Avalon, North Wildwood, Stone Harbor, Wildwood, and Wildwood Crest.

# Clean Ocean Action's 2006 Beach Sweeps Results & Data\*

*"By taking responsibility for our actions, such as not littering, reducing use, and reusing more, we have the power to greatly reduce our impact on the environment," said Cindy Zipf, Executive Director of Clean Ocean Action.*



(L-R) Volunteers make a difference at Midway Beach and Ortleby Beach

## PLASTIC

	Spring	Fall	Total	Percent of Total
6-Pack Holders	152	142	294	0.1%
Food Wrappers/Bags	18,876	8,271	27,147	10.5%
Store/Shopping Bags	4,172	2,177	6,349	2.5%
Trash Bags	1,169	967	2,136	0.8%
Other Bags	2,397	1,524	3,921	1.51%
Beverage/Soda Bottles	7,731	7,642	15,373	5.9%
Bleach/Cleaner Bottles	309	282	591	0.2%
Milk/Water Bottles	835	579	1,414	0.5%
Motor Oil/Lube Bottles	278	217	495	0.2%
Tan Oil/Lotion Bottles	316	244	560	0.2%
Other Bottles	1,005	522	1,527	0.6%
Buckets/Crates/Bins	1,948	3,382	5,330	2.0%
Caps/Lids	18,244	14,184	32,328	12.5%
Cap Rings	3,092	2,581	5,673	2.2%
Cigarette Filters	16,259	6,579	22,838	8.8%
Cigarette Lighters	816	605	1,421	0.5%
Cigarette Packaging	926	957	1,883	0.7%
Cigar Tips	2,850	1,395	4,245	1.6%
Cups	2,387	1,495	3,882	1.5%
Diapers	509	140	649	0.3%
Fish Bait Bags/Cont.	197	285	482	0.2%
Fishing Line	291	283	574	0.2%
Fishing Lures, Floats	211	205	416	0.2%
Fishing Nets (small)	99	495	594	0.2%
Fishing Nets (large)	62	44	106	0.1%
Fork, Knives, Spoons	2,242	3,660	5,902	2.3%
Light Sticks	194	158	352	0.1%
Pieces of Plastic	8,901	5,578	14,479	5.6%
Ribbon/Tape (no balloon)	806	564	1,370	0.5%
Rope (short)	569	400	969	0.4%
Rope (long)	104	127	231	0.1%
Sheeting & Tarps	58	82	140	0.1%
Shotgun Shells	246	3,149	3,395	1.3%
Strapping Bands	290	277	567	0.2%
Straws & Stirrers	7,912	6,414	14,326	5.5%
Syringes	115	335	450	0.2%
Tampon Applicators	1,076	1,120	2,196	0.8%
Toys	775	1,211	1,986	0.8%
Vegetable Sacks	50	26	76	0.1%
Other Plastic	2,115	1,717	3,832	1.5%
<b>PLASTIC TOTAL</b>	<b>110,854</b>	<b>80,015</b>	<b>190,499</b>	<b>73.5%</b>

## FOAM PLASTIC

	Spring	Fall	Total	Percent of Total
Building Materials	438	279	717	0.3%
Buoys & Floats	311	491	802	0.3%
Cups	1,616	1,365	2,981	1.2%
Egg Cartons	51	109	160	0.1%
Fast Food Containers	565	347	912	0.4%
Meat Trays	158	226	384	0.1%
Packaging Material	1,303	1,691	2,994	1.2%
Pieces of Foam Plastic	6,777	6,509	13,286	5.1%
Plates	299	362	661	0.3%
Other Foam Plastic	1,015	618	1,633	0.6%
<b>FOAM TOTAL</b>	<b>12,533</b>	<b>11,997</b>	<b>24,530</b>	<b>9.5%</b>

## METAL

	Spring	Fall	Total	Percent of Total
Appliances	0	10	10	0.1%
Batteries (car)	134	76	210	0.1%
Batteries (other)	255	102	357	0.1%
Bottle Caps	1,054	1,143	2,197	0.8%
Cans - Aerosol	143	182	325	0.1%
Cans - Beverage	2,214	1,843	4,057	1.5%
Cans - Food	121	328	449	0.2%
Cans - Other	131	160	291	0.1%
Car Parts	50	25	75	0.1%
Crab/Fish Traps	26	6	32	0.1%
55 Gallon Drums (old)	15	2	17	0.1%
55 Gallon Drums (new)	5	4	9	0.1%
Fishing Hooks	88	80	168	0.1%
Fishing Sinkers	61	32	93	0.1%
Foil	390	243	633	0.2%
Nails	577	442	1,019	0.4%
Pieces of Metal	233	148	381	0.1%
Pull & Pop Tabs	150	121	271	0.1%
Wire	187	151	338	0.1%
Other Metal	256	185	441	0.2%
<b>METAL TOTAL</b>	<b>6,090</b>	<b>5,283</b>	<b>11,373</b>	<b>4.4%</b>

# Clean Ocean Action's 2006 Beach Sweeps Results & Data\*



Debris pile collected by volunteers at Sandy Hook

## RUBBER

	Spring	Fall	Total	Percent of Total
Mylar Balloons (only)	476	236	712	0.3%
Mylar Balloons (w/string)	356	266	622	0.2%
Rubber Balloons (only)	570	488	1,058	0.4%
Rubber Balloons (w/string)	702	417	1,119	0.4%
Condoms	180	145	325	0.1%
Gloves	178	174	352	0.1%
Tires (part)	237	71	308	0.1%
Tires (whole)	73	54	127	0.1%
Other Rubber	392	264	656	0.3%
<b>RUBBER TOTAL</b>	<b>3,164</b>	<b>2,115</b>	<b>5,279</b>	<b>2.0%</b>

(w/string - with string or ribbon)

## GLASS

	Spring	Fall	Total	Percent of Total
Beverage Bottles	2,285	1,046	3,331	1.3%
Food Jars	128	123	251	0.1%
Light Bulbs	227	47	274	0.1%
Light Tubes - Fluorescent	44	85	129	0.1%
Pieces of Glass	2,208	1,404	3,612	1.4%
Pieces of Tile & Ceramic	124	138	262	0.1%
Other Bottles/Jars	219	167	386	0.1%
Other Glass	326	151	477	0.2%
<b>GLASS TOTAL</b>	<b>5,561</b>	<b>3,161</b>	<b>8,722</b>	<b>3.4%</b>



Volunteers in Point Pleasant Beach collected tires and fishing traps from the beach

## PAPER

	Spring	Fall	Total	Percent of Total
Bags	426	283	709	0.3%
Cardboard	778	386	1,164	0.4%
Cartons/Boxes	400	210	610	0.2%
Cups	805	666	1,471	0.6%
Newspapers/Magazines	1,075	520	1,595	0.6%
Pieces of Paper	2,642	1,477	4,119	1.6%
Plates	217	327	544	0.2%
Other Paper	617	734	1,351	0.5%
<b>PAPER TOTAL</b>	<b>6,960</b>	<b>4,603</b>	<b>11,563</b>	<b>4.5%</b>

## WOOD

	Spring	Fall	Total	Percent of Total
Crab/Lobster Traps	27	9	36	0.1%
Crates & Baskets	170	88	258	0.1%
Ice Cream Spoons/Sticks	627	231	858	0.3%
Lumber Pieces	1,974	1,438	3,412	1.3%
Pallets	44	123	167	0.1%
Other Wood	367	188	555	0.2%
<b>WOOD TOTAL</b>	<b>3,209</b>	<b>2,077</b>	<b>5,286</b>	<b>2.0%</b>



It's all about teamwork! Port Monmouth (left) and Union Beach (right)

## CLOTH

	Spring	Fall	Total	Percent of Total
Blankets/Sheets/Towels	131	90	221	0.1%
Clothing	357	290	647	0.2%
Shoes & Sandals	320	308	628	0.2%
String	491	411	902	0.3%
Other Cloth	278	288	566	0.2%
<b>CLOTH TOTAL</b>	<b>1,577</b>	<b>1,387</b>	<b>2,964</b>	<b>1.1%</b>

## GRAND TOTALS

	Spring	Fall	Total
Items	160,591	98,462	259,053
Volunteers	2,515	1,852	4,367
Items Collected Per Person	64	53	117
Tons of Debris Removed	22	18	40

\*Hundreds of additional volunteers picked-up debris without completing and returning COA's data cards. Therefore, the numbers in this report are considered conservative. Also, percents are rounded to nearest tenth; sums may be more/less than 100%.

## 2006 Beach Sweeps Report



Visit COA at [www.CleanOceanAction.org](http://www.CleanOceanAction.org)

(609) 729-9COA  
Wildwood@CleanOceanAction.org

18 Hartschorn Drive, Suite 2, Highlands, N.J. 07732  
(732) 872-0111  
SandyHook@CleanOceanAction.org

### Offices



### TRASH THAT LASTS...

How long does it take for trash to break-down in the ocean?



**Newspaper:** 6 weeks



**Plastic bag:** 10-20 years



**Cigarette filter:** 1-5 years



**Foam plastic cup:** 50 years



**Aluminum can:** 80-200 years



**Disposable diaper:** 450 years



**Plastic bottle:** 450 years



**Fishing line:** 600 years

Source: Pocket Guide to Marine Debris, The Ocean Conservancy © 2003.

### THE 2006 BEACH SWEEPS WERE MADE POSSIBLE BY:

**Beach Sweeps Sponsors & Contributors**  
**Over 50 Beach Captains**  
**61 New Jersey Municipalities**  
**Thousands of Dedicated Volunteers**



#### 2006 Staff of Clean Ocean Action:

**Barbara Bennett**, PROJECTS COORDINATOR, VOLUNTEER  
**Anne Grimes & Holly Jantz**, EDUCATION COORDINATOR  
**Kari Jermansen**, POLICY COMMUNICATIONS DIRECTOR  
**Keith Rella**, POLICY ADVOCATE  
**Jennifer Samson, Ph.D.**, PRINCIPAL SCIENTIST  
**Jennifer Smiga**, EVENTS/DEVELOPMENT DIRECTOR  
**C. Nicole Simmons**, WATER POLICY ANALYST  
**Mary-Beth Thompson**, OPERATIONS DIRECTOR  
**Anthony A. Totah, Jr.**, SOUTH JERSEY COORDINATOR  
**Cindy Zipf**, EXECUTIVE DIRECTOR

### PROTECT YOUR OCEAN...RIDE THE WAVE

Join COA's email action alert system, "The Wave," to receive information about critical ocean pollution issues. To sign up, visit [www.cleanoceanaction.org](http://www.cleanoceanaction.org) and click "Email List Sign-Up" on the left menu.