Participating Towns & Parks

Asbury Park Atlantic Highlands Atlantic City Avalon Avon-By-the-Sea Barnegat **Bay Head** Belmar **Bradley Beach** Brick **Brigantine** Cape May **Cape May Point** Deal Elberon **Glen Ridge** Harvey Cedars Highlands Island Beach St. Pk. Keansburg Keyport Lakewood Lavallette Leonardo Long Branch Lonaport Manasquan Mantoloking Margate Monmouth Beach Normandy Beach **North Middletown** North Wildwood **Ocean City Ocean Gate** Ocean Grove Ortley Beach **Pine Beach** Port Monmouth Pt. Pleasant Pt. Pleasant Beach Sandy Hook Sea Bright Sea Girt Sea Isle City **Seaside Heights Seaside Park** South Amboy South Seaside Park Spring Lake Stone Harbor Strathmere **Tinton Falls** Tuckerton Union Beach Ventnor



BEACH SWEEPS AND WATERWAY CLEANUP Annual Report - 2007

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, COA launched the region's first Beach Sweeps program to rid beaches of unsightly and harmful debris. 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 4,937 volunteers at 116 sites in 2007.

COA hosted the 22nd Annual Spring and Fall Beach Sweeps in 2007 in New Jersey. 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, which is presented in this report and is used to advance federal, state, and local programs to reduce litter.



Volunteers from Atlantic City Electric clean the beach

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 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 that are introduced into animals' bloodstreams.

Moreover, plastic litter takes a few years to several hundred years to break down, thereby threatening wildlife for decades. 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.

You are the Solution

The goal of the Beach Sweeps is to reduce and eliminate sources of litter. The Beach Sweeps events are more than people picking-up

trash from beaches. This program builds community support for solutions, as well as raises awareness about the negative

The goal is to reduce and eliminate sources of litter.

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.

2007 Spring & Fall Beach Sweeps Totals

- 4,937 volunteers at 116 sites
- 3,445 bags of trash removed
- 304,342 items collected
- Nearly 22 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 and to learn how to be the solution to ocean pollution, go to www.CleanOceanAction.org.

WHAT'S INSIDE: - Sponsors & Highlights (pg. 2) - NJ's Dirty Dozen & Roster of the Ridiculous (pg. 3) - Data & Trash That Lasts (pg. 4-5) - Corporate Beach Sweeps (pg. 6)

Sponsors

Statewide Lead Sponsors:







Site Sponsors:

Atlantic City Electric – Atlantic City, Brigantine, Cape May, and Sea Isle City Adventure Aquarium – Ventnor

Keyport Business Alliance – Keyport

Lower Cape May Regional Education Association – Cape May Monmouth County Association of Realtors – Sea Bright Panasonic, Panera Bread Bakery Cafes – Sandy Hook Surfrider Foundation Jersey Shore Chapter,

in memory of Daniel Clune – Point Pleasant Beach Starbucks Coffee Company – Belmar

United Teletech Financial – Monmouth County

Support Provided By: Brookdale Community College Culinary Arts Dept.; Divers Two, Inc.; Dunkin' Donuts; Gateway National Recreation Area - Sandy Hook Unit; Harter Equipment; Island Beach State Park; International House of Pancakes, Jenkinson's Aquarium; Jersey Shore Coffee Roasters; Lower Cape May Regional H.S.; Marine Academy of Science & Technology; NJ Community Water Watch; The Ocean Conservancy; and Turning Point Cafe.



(above) COA's Cindy Zipf (pictured right) and employees of Monmouth County Beach Sweeps Sponsor United Teletech Financial (below) Rotary Interact #7510 provides volunteers and food for all at Sandy Hook



Monmouth/Middlesex Counties

SPRING:

- Leonardo Students from Navesink School, Middletown South High School, and Leonardo Grade School, along with Long Branch Knights of Columbus, picked-up 1,000 pounds of trash
- Sandy Hook 15 schools and children of all ages and 11 clubs collected 334 bags of trash
- South Amboy Girl Scout Troop #1816 covered a one-mile area and discovered the plastic liner from the inside of a pick-up truck

FALL:

- Ocean Grove Volunteers observed a bird and small fish both entangled in ribbon
- Sea Bright 297 volunteers collected 2,250 pounds of garbage



Highlights

Ocean County



SPRING:

- Point Pleasant Beach On the beach by Jenkinson's Aquarium, 110 volunteers picked-up 120 bags of trash, including a sink and 1,389 food wrappers and bags
- **Tuckerton** Volunteers covered a two and a half-mile area and found the inside of a washing machine, telescope, and TV set

FALL:

Brick – Volunteers found false teeth! **Mantoloking** – 15 volunteers collected

180 pounds of trash including 232 plastic forks, knives, & spoons Seaside Heights – Montseignor

Donovan High School and MATES students found nose hair clippers, a woman's high heeled shoe, and a large metal sign in the mix of debris on the beach

South Jersey SPRING:

- Atlantic City Atlantic City Electric and students from Richard Stockton College of New Jersey picked-up 564 pieces of foam plastic from the beach
- Cape May Lower Cape May Regional High School's Student Council removed 150 pounds of trash
- Ocean City 435 volunteers found 321 nails and 149 lumber pieces

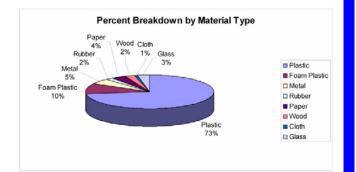


FALL:

- Ventnor Volunteers from Adventure Aquarium, Oak Knoll School, and Chelsea Heights School found bizarre items such as a Petri dish and park bench
- **Cape May Point** Of the 30 pounds of garbage collected, volunteers found 49 rubber balloons with ribbon attached to each one

Snapshot of Results

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. 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, especially plastics, in the marine environment:

- 1) do not litter,
- 2) dispose of trash and recyclables in proper receptacles,
- 3) practice the three "**R**'s": Reduce, **R**euse, **R**ecycle.

New Jersey's Dirty Dozen

	Item	2007 Ranking	2006 Ranking	2005 Ranking
38,019	Cigarette Filters	1	3	3
33,724	Plastic Caps & Lids	2	1	1
30,221	Plastic Food Wrappers/Bags	3	2	2
	Plastic Pieces	4	5	5
21,787	Plastic Straws & Stirrers	5	6	4
16,016	Foam Plastic Pieces	6	7	7
12,316	Plastic Beverage/ Soda Bottles	7	4	6
6,786	Plastic Cigar Tips	8	12	*
6,033	Plastic Fork, Knives & Spoons	9	9	8
5,507	Other Plastic	10	*	*
5,378	Paper Pieces	11	*	*
5,283	Plastic Cap Rings (from bottles) 12	10	*
204,229 Total 67% of Total Items Collected				

*Did not qualify for "Dirty Dozen"

The "Dirty Dozen" are the top 12 items most frequently collected and recorded. These items accounted for 67 percent of the debris collected. Overall, plastic items still top the list, and cigarette filters reclaimed the number one spot. This increase may be due to more people smoking outdoors and a lack of proper receptacles to dispose filters.

"Volunteers commented how great it was to be able to do something good for the environment while having fun with friends." Helen Edwards, Beach Captain, Cape May

Roster of the Ridiculous

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

2 basketballs television pregnancy test ladder shopping cart 3 toilet seats 3 cell phones microwave cell phone charger bike 3 bags of dog poop rocking chair leg suitcase 3 bouquets of fake flowers 2 pairs of scissors 2 pairs of underwear tennis racquet doll head paint roller

8-track tape 2 pairs of glasses EZ pass bike helmet bobble head doll broom high heel shoe car keys light bulb paint can doctor's mask police caution tape ice cube tray baby car seat hair extension car bumper half of a Barbie Doll hair curlers



An array of unusual items were among the debris collected by volunteers in Keyport

"The beach cleanup was very successful. Some of the participants were just coming to the beach to take a walk and they felt it was a great idea and joined us." - Scott & Jeanne Hulse, Beach Captains, Mantoloking

Clean Ocean Action's 2007 Beach Sweeps Results & Data*



A pile of debris collected from Sea Bright beach

	PLA	STIC		
:	Spring	Fall	Total	Percent
				of Total
6-Pack Holders	206	165	371	0.12%
Food Wrappers/Bags	17,750	12,471	30,221	9.93%
Store/Shopping Bags	2,907	1,983	4,890	1.61%
Trash Bags	1,236	686	1,922	0.63%
Other Bags	2,310	1,503	3,813	1.25%
Beverage/Soda Bottles	s 7,972	4,344	12,316	4.05%
Bleach/Cleaner Bottles	s 282	112	394	0.13%
Milk/Water Bottles	934	285	1,219	0.4%
Motor Oil/Lube Bottles	281	109	390	0.13%
Tan Oil/Lotion Bottles	1,041	175	1,216	0.4%
Other Bottles	920	511	1,431	0.47%
Buckets/Crates/Bins	642	123	765	0.25%
Caps/Lids	19,047	14,677	33,724	11.08%
Cap Rings	3,484	1,799	5,283	1.74%
Cigarette Filters	13,816	24,203	38,019	12.49%
Cigarette Lighters	1,129	537	1,666	0.55%
Cigarette Packaging	1,190	925	2,115	0.69%
Cigar Tips	3,615	3,171	6,786	2.23%
Cups	2,265	1,814	4,079	1.34%
Diapers	70	98	168	0.06%
Fish Bait Bags/Cont.	263	276	539	0.18%
Fishing Line	446	596	1,042	0.34%
Fishing Lures, Floats	1,126	420	1,546	0.51%
Fishing Nets (small)	94	77	171	0.06%
Fishing Nets (large)	21	10	31	0.01%
Fork, Knives, Spoons	3,300	2,733	6,033	1.98%
Light Sticks	204	163	367	0.12%
Pieces of Plastic	14,665	8,494	23,159	7.61%
Ribbon/Tape (no balloon		986	1,695	0.56%
Rope (short)	532	554	1,086	0.36%
Rope (long)	145	108	253	0.08%
Sheeting & Tarps	126	46	172	0.06%
Shotgun Shells	493	277	770	0.25%
Strapping Bands	295	463	758	0.25%
Straws & Stirrers	10,607	11,180	21,787	7.16%
Syringes	191	96	287	0.09%
Tampon Applicators	1,743	1,371	3,114	1.02%
Toys	2,010	759	2,769	0.91%
Vegetable Sacks	151	60	211	0.07%
Other Plastic	2,942	2,565	5,507	1.81%
PLASTIC TOTAL	121,160	100,925	222,085	72.97%

F	OAM P	LASTIC		
	Spring	Fall	Total	Percent
				of Total
Building Materials	899	144	1,043	0.34%
Buoys & Floats	414	179	593	0.19%
Cups	2,846	1,617	4,463	1.47%
Egg Cartons	62	44	106	0.03%
Fast Food Containers	692	430	1,122	0.37%
Meat Trays	216	105	321	0.11%
Packaging Material	1,098	839	2,747	0.90%
Pieces of Foam Plastic	11,037	4,979	16,016	5.26%
Plates	535	247	782	0.26%
Other Foam Plastic	2,160	675	2,835	0.93%
FOAM TOTAL	20,769	9,259	30,028	9.87%
	ME	TAL		
	Spring	Fall	Total	Percent
				of Total
Appliances	14	20	34	0.01%
Batteries (car)	20	19	39	0.01%
Batteries (other)	63	202	265	0.09%
Bottle Caps	2,148	1,616	3,764	1.24%
Cans - Aerosol	210	116	326	0.11%
Cans - Beverage	2,681	2,410	5,091	1.67%
Cans - Food	242	54	296	0.1%
Cans - Other	173	132	305	0.1%

58

34

22

7

94

28

404

596

297

201

267

42

19

6

6

57

28

838

411

230

176

219

100

53

28

13

56

151

1,242

1,007

527

377

486

0.03%

0.02%

0.01%

0.05%

0.02%

0.41%

0.33%

0.17%

0.12%

0.16%

0.0%

Other Metal	184	143	327	0.11%
METAL TOTAL	7,743	6,744	14,487	4.76%
RUBBER				
	Spring	Fall	Total	Percent
				of Total
Mylar Balloons (only)	352	415	767	0.25%
Mylar Balloons (w/string)	221	273	494	0.16%
Rubber Balloons (only)	573	871	1,444	0.47%
Rubber Balloons (w/string) 275	734	1,009	0.33%
Condoms	265	235	500	0.16%
Gloves	208	143	351	0.12%
Tires (part)	85	58	143	0.05%
Tires (whole)	80	21	101	0.03%
Other Rubber	427	366	793	0.26%
RUBBER TOTAL	2,486	3,116	5,602	1.84%

Car Parts

Foil

Nails

Wire

Crab/Fish Traps

Fishing Hooks

Fishing Sinkers

Pieces of Metal

Pull & Pop Tabs

55 Gallon Drums (old)

55 Gallon Drums (new)

Clean Ocean Action's 2007 Beach Sweeps Results & Data*

Clean O	cean	Actio	n's 2	2007 E
	GLAS	S		
9	Spring	Fall	Total	Percent
				of Total
Beverage Bottles	2,612	2,144	4,756	1.56%
Food Jars	123	40	163	0.05%
Light Bulbs	59	43	102	0.03%
Light Tubes - Fluorescer		7	10	0.0%
Pieces of Glass Pieces of Tile & Ceramic	1,775 c 122	1,646 152	3,421 274	1.12% 0.09%
Other Bottles/Jars	268	124	392	0.09%
Other Glass	397	88	485	0.16%
GLASS TOTAL	5,359	4,244	9,603	3.16%
	PAPE		-,	
Sr	oring	Fall	Total	Percent
				of Total
Bags	479	379	858	0.28%
Cardboard	498	478	976	0.32%
Cartons/Boxes	261	214	475	0.16%
Cups	1,099	677	1,776	0.58%
Newspapers/Magazines		482	1,183	0.39%
Pieces of Paper	2,695	2,683	5,378	1.77%
Plates	272	218	490	0.16%
Other Paper PAPER TOTAL	594	327	921	0.3%
PAPERIUIAL	6,599	5,458	12,057	3.96%
	WOO			
	Spring	Fall	Total	Percent
Onah // alaatan Trans	07	04	F 4	of Total
Crab/Lobster Traps Crates & Baskets	27 34	24 39	51 73	0.02% 0.02%
Ice Cream Spoons/Stick		432	795	0.02%
Lumber Pieces	3,228	1,580	4,808	1.58%
Pallets	69	52	121	0.04%
Other Wood	969	333	1,302	0.43%
WOOD TOTAL	4,690	2,460	7,150	2.35%
	CLOT	ГН	· ·	
	Spring	Fall	Total	Percent
				of Total
Blankets/Sheets/Towels	186	167	353	0.12%
Clothing	373	286	659	0.22%
Shoes & Sandals	352	245	597	0.2%
String	548	562	1,110	0.36%
Other Cloth	397	214	611	0.2%
CLOTH TOTAL	1,8 <mark>56</mark>	1,474	3,330	1.09%
GRA	ND T	OTAL	S	
	Spring	Fa	II	Total
Items	170,662	133,68	0 30	04,342
Volunteers	2,606	2,33	1	4,937
Items Collected				
Per Person	66	5	7	123

"I wish we could mail these data sheets to every household within a mile from the beach and give them a week to walk the beach. The garbage is ongoing and people don't realize the importance of the data." Marilyn Schlossbach, Beach Captain, Normandy Beach



TRASH THAT LASTS...

It takes weeks, decades, and generations for litter to break-down in the ocean, harming marine life and polluting our oceans and beaches.



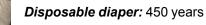
Newspaper: 6 weeks

Plastic bag: 10-20 years

Cigarette filter: 1-5 years

Foam plastic cup: 50 years

Aluminum can: 80-200 years



Plastic bottle: 450 years

Fis

Fishing line: 600 years

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

*Hundreds of additional volunteers picked-up debris without completing and returning COA's data cards. Therefore, the numbers in this report are considered conservative.

12

10

Tons of Debris Removed

22

Printed on 100% post-consumer, acid-free, and chlorine-free recycled paper with water-based ink.



Visit COA at www.CleanOceanAction.org

AOJ6-627 (603) 🗙

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Companies Invest in a Clean Ocean with Sweat Equity

What do 6,855 bottle caps, 4,448 cigarette filters, and a pair of dentures have in common? They were all collected at COA's **Corporate Beach Sweeps Program** in Summer 2007. Through the dog days of summer, corporations in New Jersey and New York invested in a cleaner ocean by sending their employees to Sandy Hook to become part of the solution to ocean pollution. Over 630 employees from Goldman, Sachs & Co., iCIMS, and Fuji Film USA cleaned over ten miles of Sandy Hook bay and ocean beaches.

The Corporate Beach Sweeps program is an activity that provides awareness, knowledge, and hands-on experience. Like the bi-annual, statewide Beach Sweeps program, employee teams collect harmful and unsightly litter from beaches and record information about the debris using data cards*.

The program provides worthy "take-home" lessons, including how people can be good environmental stewards. Many participants learn ways to reduce the amount of trash they produce, and proper ways to dispose waste, including recycling. Further, they are reminded that litter and other pollutants in streets and parking lots miles away from the beach make their way to the ocean with every rainfall.

For information about the program, contact COA's Emily Hackett at 732-872-0111 or programs@cleanoceanaction.org.

*Data from the Corporate Beach Sweeps is not included in the printed Beach Sweeps totals for 2007 (pages 4-5)

2007 Corporate Beach Sweeps Top Three Items:

6,855 plastic bottle caps and lids 4,751 plastic food and candy wrappers 4,448 cigarette filters



Employees of iCIMS gather after a long morning of beach cleaning as part of the 2007 Corporate Beach Sweeps

WAVES OF THANKS IN 2007 TO: Beach Sweeps Sponsors & Contributors Nearly 70 Beach Sweeps Captains 56 New Jersey Towns and Parks Thousands of Dedicated Volunteers