

28<sup>th</sup> Annual 2013 Report

Clean Ocean Action (COA) is a coalition of 135 organizations dedicated to improve and protect the waters off the New Jersey and New York coasts, also known as the "NY/NJ Bight."

Participating Towns & Parks: Aberdeen, Allenhurst, Asbury Park, Atlantic City, Atlantic Highlands, Avalon, Avon-By-The-Sea, Barnegat, Bay Head, Belmar, Berkeley, Bradley Beach, Brigantine, Cape May, Deal, Del Haven, Forsythe Wildlife Refuge, Gateway National Park at Sandy Hook, Galloway, Glen Ridge, Highlands, Island Beach State Park, Keansburg, Keyport, Lakewood, Lavallette, Loch Arbor, Long Branch, Longport, Manasquan, Margate, Middlesex County Park System, Middletown, Monmouth County Park System, Normandy Beach, North Wildwood, Ortley Beach, Point Pleasant, Point Pleasant Beach, Red Bank, Sea Bright, Sea Girt, Seaside Heights, Seaside Park, South Amboy, Spring Lake, Stone Harbor, Toms River, Union Beach, Ventnor, West Long Branch, Wildwood

In 1985, Clean Ocean Action (COA) gathered with 75 volunteers at Sandy Hook for the first *Beach Sweeps* with hopes to rid the beaches of unsightly and harmful debris. Twenty-eight years later, the *Beach Sweeps* program has expanded to 72 locations along NJ's coastline, as well as inland rivers, lakes, bayshores, and streams with thousands of citizens from many diverse groups and businesses (see pages 2-3).

Importantly, the *Beach Sweeps* are held in the Spring and Fall (when the beaches are not being cleaned daily by local municipalities) resulting in a true snapshot of pollution.

Jersey Pride The success of the Beach Sweeps program illustrates the public's support for a clean ocean as well as the power of citizen action. The goal is naturally clean beaches where "clean-up" events are no longer needed.

Marine Debris is people-generated litter in a waterway. Approximately 80% of marine debris comes from land-based sources through runoff. (See page 5)

**Citizen Scientists** Every *Beach Sweeper* becomes a "citizen scientist" as they

record each piece of debris collected on our *Beach Sweeps* data cards. The data collection turns a one-day event into a legacy of information that can be used to identify sources of pollution and monitor trends. This research helps us <u>discover</u> solutions to keep beaches clean and healthy, <u>create</u> federal, state, and local programs to reduce litter in the environment, and <u>protect</u> the public and the environment. (See pages 6-7)



**Waves of Thanks for Waves of Action** 

On October 29, 2012, Superstorm Sandy made landfall on the New Jersey coastline forever leaving its mark. In response to Superstorm Sandy, Clean Ocean Action launched the monthly *Waves of Action For the Shore* program to help in the recovery of the marine environment. For 30 years, COA has built strong, long-standing relationships with coastal communities, citizens, businesses, groups, and elected

leaders along the New Jersey and New York shore, and beyond. These critical bonds of trust and awareness were essential to the implementation of recovery efforts. COA's professional staff has knowledge and skills that enhance the opportunity to implement a greener, bluer future. Combined, this vibrant network was uniquely qualified and ready to meet challenges facing the shore on the long journey to recovery.

In 2013, some communities needed help digging out, others needed help designing a greener future, and others needed help bringing back coastal economies. COA's 2013 "Waves of Action" program supported these needs with volunteers and resources to help improve and protect the marine environment.

Throughout 2013, COA engaged its network of organizations, businesses, citizens, and municipalities to help coastal communities, resulting in 13,825 volunteers and 125 organizations who connected with nearly 281 project sites in 70 towns in New York and New Jersey.

For more information about available resources, visit www.FortheShore.org

### **Special Thanks to COA's Ocean Wavemakers**

**2013 Beach Captains:** Adrianna Zito-Livingston, Anita Zalom, Ann Abate, Ann Commarato, Barbara Granda, Beth Kwart, Bill and Cookie Cleary, Bill Shultz, Bob Thibault, Bonnie and John Peterson, Brett Thompson, Brian DiStefano, Carole Hart, Christina and Mark Palmieri, Colleen McGrath, Damon Noe, Dan McLaughlin, Danni Logue, Demaris McManus, Denise Bruschi, Derek Riddle, Diane Prendimano, Eric Gehring, Fran and Peter Donnelly, Frank Huza, Franz Adler, Gretchen Whitman, Jeff Martin, Jesse Beutell, Jessica and Kyle Mumford, Joe Mairo, Joe Reynolds, Joe, Kari, and Astri Martin, John Bonino, John Wnek, Kathleen and Leo Gascienica, Kathryn Sellers, Krissy Halkes, Laura Bagwell, Leah Savia, Lisa Cordova, Mandy Wheeler, Margo Pellegrino, Margot Ferricola, Marianne Grant, Marissa Magura, Mark Woldseth, Matt Schmidt, Mayor Paul Kennedy, Michael Rohal, Mike Palmisano, Patricia Doyle, Ralph and Tara Carloni, Ray Cann, Ron Dente, Sage Mitchell, Sarah Maldonado, Serena Sedlacek, Shelley Haas Kirk, Ted Jermansen, Tina Marie Walling, Tyler Ahlf, Tyler Bawden, Tyler Thompson

Faith Based Groups: All Saint's Church, Faith Reformed Church, First Union United Methodist Church of Toms River, Holy Trinity Lutheran Church, Monmouth Community Christian Church, Our Lady of Fatima Church, St. Denis CCD, St. John's Helping Hands, St. Luke's Church, St. Martha's Church, St. Mary's Church, St. Mary's Youth Group, St. Bartholomew's Confirmation, St. Veronica Youth Group, Trinity Presbyterian Church, Unfailing Love Ministries, United Fellowship Baptist Church, Visitation Church

**Government Agencies & Environmental Commissions:** Aberdeen Environmental and Shade Tree Advisory Board, Borough of Glen Ridge, Borough of Longport, Borough of Wildwood Crest D. P.W., Manasquan Environmental Commission, the Mayor and Council of Seaside Park, National Park Service, Red Bank Environmental Commission, Spring Lake Environmental Commission



**Barenaked Ladies Band at Atlantic City** 

Businesses: 1st Bank of Sea Isle City, Academy of Law and Public Safety, Adventure Aquarium, AIG, AmEc Environmental and Infrastructure, Anheuser-Busch, AT&T, Atlantic City Electric, ATT Pioneers, Aveda, Baine Contracting, Banana Republic, Bank of America, Bayshore Hospital, Bayshore Recycling, Becton Dickinson, Bee Bold Apiaries, BNY Mellon, Caldwell Banker Realtors of Spring Lake and Wall, Cape Bank, Cape Counseling, Caring Kids Group, Comcast, Comcast Cares, Dead Dog Saloon (Sea Isle), Enterprise Rent-a-Car, ERM, Exelon, Fair Mountain Coffee Roasters, Felis Fitness, Freda Real Estate, Giles and Ransome International, Gleeson's Audio/Video, Gloria Nilson & Co. Real Estate, Horizon Blue Cross Blue Shield, IST Gas, Jersey Cares, Kohls Cares, Labrador Lounge, Lavallette Business Association, MBIA, MCAR Public Relations committee, Meridian Finance, Meridian Health, Midway Beach Condo Association, Monmouth County Association of Realtors, Morgan Stanley, NJ Hope and Healing, Ocean City Home Bank, Ocean Medical Center, People to People, Pine Haven Crew, Plymouth Rock Assurance, Prudential, Ray Catena Motor Corp, Red Bank Environmental Commission, ReMax, Reverb, Ricoh America's Corp, Saul Energy Group, Seabrook Village, Shoprite Green Team, South Jersey Industries, Stone Harbor Police Department, Surfrider, Target, TD Bank, Timberland LLC, Tinton Falls Rotary, United Teletech Financial, Urban Outfitters of New Jersey, Viridian Energy, Wayside Technical Group, Wetlands Institute, Whole Foods Market Middletown



deal Beach

**Cub Scout Packs**: 31, 36, 38, 47, 71, 76, 79, 82, 127, 131, 158, 204, 261, 331 **Boy Scout Troops**: 76, 82, 97, 101, 131, 136, 219, 242, 634; **Daisy Troops**: 147, 302, 499, 814, 834, 1173, 1218; **Brownies**: 90, 345, 512, 748, 50078, 50286; **Girl Scout Troops**: 6, 73, 78, 85, 108, 141, 142, 163, 170, 302, 314, 392, 476, 512, 604, 641, 646, 688, 770, 860, 901, 1153, 1161, 1163, 1231, 1619, 1765, 1841, 25405, 42049, 61578, 80398, 80474.



Local volunteers at Atlantic City



Local volunteers at Sea Girt Elementary Schools: Henry Hudson Regional, River Plaza, Bay Head, Bayville, Ben Franklin, Bradley Beach, Cedar Grove, Citta, Cliffwood, Deane-Porter, Englewood Academy, Forrestdale, G.H. Antrim, Harmony, Holy Cross, Hooper Avenue, Jordan Road, Lavallette, Lewis School of Princeton, Long Pond, Monmouth Beach, New Monmouth, Oak Knoll, Ocean Avenue, Our Lady of Mercy Academy, Ocean Avenue, Our Lady of Mercy Academy, Red Bank Primary, Rumson Country Day, Rutgers Prep., Spring Lake Heights, White Hall





Monmouth University Softball Team at Pier Village

VERSITY

Middle Schools: Absegami, Atlantic Christian, Forrestdale, Hillsborough, Holy Cross, Jackson-Goetz, Knollwood, Long Valley, Matawan-Aberdeen, Neptune, Park, Pingry, Point Pleasant, Rose, Rumson Country Day, Terrill, Middletown, Thorne, Tinton Falls, Toms River

**High Schools:** Absegami, Academy of Notre Dame de Namur, Allentown, Atlantic City, Barnegat, Bellhaven School, Linwood, Bishop George, Bound Brook, Brick Township, Calvary Academy, Central Regional, Cherokee, Communications, Edison, Elizabeth, Essex County, Freehold, Glen Ridge, Governor Livingston, Henry Hudson Regional, Howell,

Hunterdon Country Polytech, Keyport, Linden, Lower Cape May Regional, Manasquan, Marine Academy of Science and Technology, Matawan, Middle Township, Middletown, Monsignor Donovan, Newark, Oakcrest, Old Bridge, Palisades Park, Paramus Catholic, Point Boro, Point Pleasant, Point Pleasant Beach, Ranney Lower School, Raritan, Red Bank, Rumson/Fair Haven, Rutgers Prep., Saint Rose, Toms River, Upper Academy, Wall, West Belmar, Wildwood

Colleges & Universities: Bergen Community College, Brookdale College, Drew University, Kean University, Mercer County Community College, Middlesex County College, Monmouth University, Montclair State University, Ocean County College, Ramapo College, Raritan Valley Community College, Richard Stockton College of NJ, Seton Hall, Susquehanna University

Civic Groups & Organizations: 2nd Avenue Sitters,
Adopt-A-Beach, Alpha Phi Omega, AmeriCorps Watershed
Ambassadors, Atlantic Highlands LEO Groups, Banai Youth,
Bayshore Regional Watershed Council, Beach Buggy Association,
BNY Mellon Corp, Brick Memorial, Brookdale Epicurean Club,
Cape Atlantic Marine Corps, C.R. Bard Inc., CFG, Coastal Jersey
Parrot Head Club, Country Critters 4-H Club, Donations of Love,

East Coast Diving, Economics 4-H Club, Gold Elks Pop Warner Cheer,

Golden Association Inc., Green Party, Happy Helpers, Howell Woman's Club, Ideal Beach Community Association, Jersey Cares, Jersey Law, Keansburg Boardwalk Kids, Keyport Environmental Commission, Lavallette Business Association, Lavallette Republican Club, Margate Student Council, MIA Cares-NJ Cares, Monmouth Association of Realtors, Motts Creek Residents, Navesink Swimming River Groups, National Resource Committee, New Jersey Beach Buggy Association, NJROTC, NJSBA Young Lawyers Division, Noah's Ark 4-H, OAK, Ocean City Charity Chicks Community Service, PaddleOut.org, Pass It Along, Pomora Gunning Club, Red Bank Humanists, Regular Republican Club of Lavallette, Sea Bright Rising, Sea Coast Dancers, Sea Shepherd, Sierra Club, Sigma Kappa, Showcase Freedom, SHPOA Wetlands, South Jersey Surfrider, Sportsman Service League, Surfers Environmental Alliance, Surf Life Saving, Surfrider, The Nature Conservancy, Tommy Kraemer Memorial, Veterans of Foreign Wars, Wayside Technology Group, Woman's Club of Spring Lake

(\*\*\*Please let us know if we have inadvertently omitted your group.)



Bayshore Recycling representatives gather at Sandy Hook

> Local volunteers at Pt. Pleasant Beach site



# NON-POINT SOURCE PEOPLE POLLUTION

**Nonpoint source pollution** (NPSP) is "people pollution." When rain or melted snow travels over the ground it picks up and moves pollution as it flows into a waterway and ultimately into the ocean, see below. Runoff includes litter, fertilizers, pesticides, soil, and animal waste. This polluted runoff is referred to as "stormwater". NPSP can be harmful - negatively affecting the beauty and health of waterways for people and wildlife.

Want to learn how to minimize your contribution to the problem of non-point source pollution? Check out

#### COA's 10-Tip Series for:

- Anglers
- Kids
- Beach Goers
- The Kitchen
- ° Boaters
- Lawn &
- ° Cleaning/
- Garden
- Laundry
- Pet Owners
- Daily Living
- Daily Living
- Sea Level Rise
- <sup>o</sup> Drivers
- Smokers

For more information visit www.cleanoceanaction.org/10tipcards



Toms River stormdrain

### What's your watershed address?

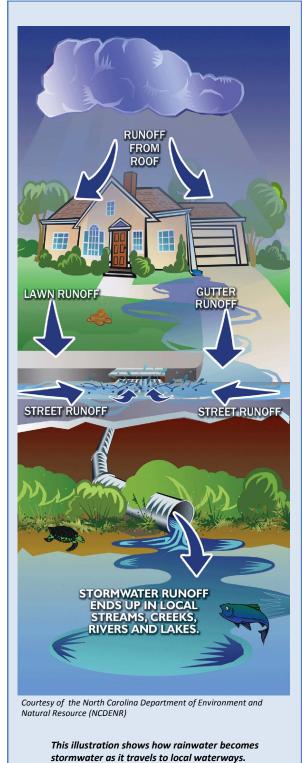
A watershed is an area of land that drains into a particular body of water. When trash accumulates on streets and sidewalks, precipitation will float those items to the nearest body of water, eventually connecting with and depositing in the ocean. Oil, grease, pet waste, fertilizer, pesticides, bacteria, trash, and other pollutants end-up in our waterways and ultimately, into our ocean, usually untreated. *Do you know your watershed address?* 

Follow water as it flows from your street or lake to the ocean - for more information on your specific watershed, you can 'Surf Your Watershed' at http://cfpub.epa.gov/surf/locate/index.cfm

#### What are the Solutions to Pollution?

- Eliminate combined sewer overflows (CSOs), reduce impervious surfaces, infiltrate, and harvest rain
- Invest in green infrastructure and repair sewage infrastructure
- Protect and restore natural areas and river/stream/bay buffers
- Enforce litter laws, stormwater rules and permits
- Improve trash management keep a lid on cans and dumpsters
- Reduce, reuse and recycle especially packaging
- Support cleanups and environmental stewardship!

For more information about how to reduce non-point source (people) pollution visit http://www.cleanoceanaction.org/nonpointsourcepollution



# **OMNIPRESENT PLASTICS**



Microplastics in a lab

#### Plastics in personal care products!

You may be surprised to learn that you could be washing tiny pieces of plastic down the drain every time you wash your face or brush your teeth. Several types of common personal care products, such as facial scrubs and toothpastes, contain microplastic ingredients known as "microbeads," which act as exfoliants or scrubbers. When you rinse these products down a bathroom sink, the microbeads often bypass wastewater treatment filtration systems due to their small size and are discharged to our waterways and ultimately, the ocean. How do you know if your personal care products contain microbeads? Check product ingredient lists for polyethylene, which is by far the most commonly used plastic type in personal care products. And next time you go shopping, consider buying products that are made with natural exfoliants, such as ground fruit pits or nut shells.



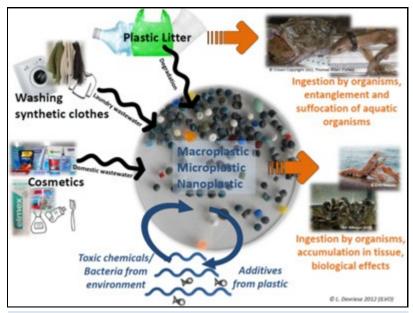
For a list of companies that have pledged to stop using microbeads in their products, visit COA's website: www.CleanOceanAction.org.

#### **Plastics**

Plastics are synthetic, long-lasting materials derived from petroleum (crude oil). Single use disposable plastics symbolize a society of convenience that unfortunately comes with a cost - to the environment. As debris, plastics impact recreation, transportation, water quality, and wildlife. It is also ugly - littered beaches can cause economic harm to coastal communities.

In the process of degradation, these plastics release toxic chemicals into the sea, such as Bisphenol A (BPA) and styrene trimer (a liquid hydrocarbon). Plastics have also been known to host a group of pollutants called *persistent organic pollutants*, or POPs. POPs include PCB, dioxins, and petroleum based chemicals. The POPs gravitate toward all shapes and sizes of plastics in the seawater, which are then absorbed by the marine life that accidentally eat plastic pieces. Tragically, marine life ingest these toxic-tainted plastics as food. Plastics can also entangle marine life causing death by strangulation or drowning. More studies need to be conducted on the effects (whether adverse or not) once consumed by the marine life, but their presence speaks volumes.

Plastics do not biodegrade - they photodegrade, breaking down into smaller and smaller pieces. Once plastic is introduced into the environment, it will thrive for hundreds of years (check out the MOTE Marine Labs marine debris degradation chart at www.mote.org). Smaller plastics, commonly called microplastics (that is, plastic < 5 mm in size), are present in the marine environment due to the photodegradation of larger pieces, but are also found in cosmetics and synthetic clothes. These tiny plastic fragments are oftentimes too small for wastewater treatment plant filtration systems to intercept, and as such, end-up in our waterways and ultimately the ocean. They can have potentially serious health implications for a variety of marine species, which have been documented to mistake microplastics for food (see below).



Microplastics can be found in cosmetics or result from the photo-degradation of plastic litter and the washing of synthetic clothes. These particles can be host to toxic chemicals and bacteria that can enter into the food chain through ingestion by larger organisms.

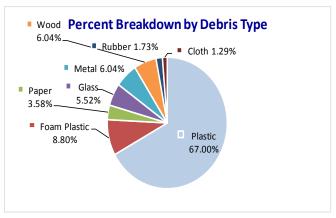


# 2013 DATA

Store/Shopping Bags		Items	Spring Total	Fall Total	2013 Totals	% of Total
Store/Shopping Bags		Plastic Food/Candy Wrappers	18727	12217 30944		9.52%
Trash Bags						2.57%
Other Bags		11 0 0		677		0.80%
Beverages/Soda Bottles 6389 3585 9974 3.07% Bleach/Cleaner Bottles 512 112 624 0.19% Other Bottles 1367 778 2145 0.66% Buckets/Crates/Bins 478 143 621 0.19% Cap/Lids 10085 22557 32642 10.04 Cap Rings 1469 1403 2872 0.88% Cigarette Filters 9862 22441 32303 9.93% Cigarette Lighters 473 520 993 0.31% Cigarette Packaging 845 716 1561 0.48% Cigar Tips 2077 2765 4842 1.49% Fishing Bait Bags/Containers 299 191 490 0.15% Fishing Line 474 1086 1560 0.48% Fishing Lures, Floats 194 215 409 0.13% Fishing Nets - Small 165 79 244 0.08% Fishing Nets - Small 165 79 244 0.08% Fishing Nets - Large 44 29 73 0.02% Cups 1566 1531 3097 0.95% Diapers 108 80 188 0.06% Fork, Knives, Spoons 2142 1463 3605 1.11% Light Sticks 446 110 556 0.17% Plastic Pieces 17836 21648 39484 12.14 Pens 545 236 781 0.24% Ribbon/Tape (no balloons) 1141 837 1978 0.61% Rope 1017 716 1733 0.53% 6-Pack Holders 183 60 243 0.07% Sheeting Tarps 215 45 260 0.08% Strapping Bands 397 363 760 0.23% Strapping Bands 397 363 760 0.23% Straws/Stirrers 9146 9015 18161 5.59% Syringes 119 107 226 0.07% Tampon Applicators 1170 1253 2423 0.75% Toys 952 1198 2150 0.66% Vegtable Mesh Sacks 45 42 87 0.03% Other Plastics 2528 1813 4341 1.34% Building Materials 2627 622 3249 1.00%						1.21%
Bleach/Cleaner Bottles		·				
Other Bottles						0.19%
Buckets/Crates/Bins						
Cap/Lids		Buckets/Crates/Bins			621	0.19%
Cap Rings		Cap/Lids				10.04%
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Fishing Nets - Large         44         29         73         0.02%           Cups         1566         1531         3097         0.95%           Diapers         108         80         188         0.06%           Fork, Knives, Spoons         2142         1463         3605         1.11%           Light Sticks         446         110         556         0.17%           Plastic Pieces         17836         21648         39484         12.14           Pens         545         236         781         0.24%           Ribbon/Tape (no balloons)         1141         837         1978         0.61%           Rope         1017         716         1733         0.53%           6-Pack Holders         183         60         243         0.07%           Sheeting Tarps         215         45         260         0.08%           Shotgun Shells         335         235         570         0.18%           Strapping Bands         397         363         760         0.23%           Straws/Stirrers         9146         9015         18161         5.59%           Syringes         119         107         226         0.07%     <	<b>7</b>					
Cups         1566         1531         3097         0.95%           Diapers         108         80         188         0.06%           Fork, Knives, Spoons         2142         1463         3605         1.11%           Light Sticks         446         110         556         0.17%           Plastic Pieces         17836         21648         39484         12.14           Pens         545         236         781         0.24%           Ribbon/Tape (no balloons)         1141         837         1978         0.61%           Rope         1017         716         1733         0.53%           6-Pack Holders         183         60         243         0.07%           Sheeting Tarps         215         45         260         0.08%           Shotgun Shells         335         235         570         0.18%           Strapping Bands         397         363         760         0.23%           Straws/Stirrers         9146         9015         18161         5.59%           Syringes         119         107         226         0.07%           Tampon Applicators         1170         1253         2423         0.75%						
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Fork, Knives, Spoons         2142         1463         3605         1.11%           Light Sticks         446         110         556         0.17%           Plastic Pieces         17836         21648         39484         12.14           Pens         545         236         781         0.24%           Ribbon/Tape (no balloons)         1141         837         1978         0.61%           Rope         1017         716         1733         0.53%           6-Pack Holders         183         60         243         0.07%           Sheeting Tarps         215         45         260         0.08%           Shotgun Shells         335         235         570         0.18%           Strapping Bands         397         363         760         0.23%           Straws/Stirrers         9146         9015         18161         5.59%           Syringes         119         107         226         0.07%           Tampon Applicators         1170         1253         2423         0.75%           Toys         952         1198         2150         0.66%           Vegtable Mesh Sacks         45         42         87         0.0		•				
Light Sticks       446       110       556       0.17%         Plastic Pieces       17836       21648       39484       12.14         Pens       545       236       781       0.24%         Ribbon/Tape (no balloons)       1141       837       1978       0.61%         Rope       1017       716       1733       0.53%         6-Pack Holders       183       60       243       0.07%         Sheeting Tarps       215       45       260       0.08%         Shotgun Shells       335       235       570       0.18%         Strapping Bands       397       363       760       0.23%         Straws/Stirrers       9146       9015       18161       5.59%         Syringes       119       107       226       0.07%         Tampon Applicators       1170       1253       2423       0.75%         Toys       952       1198       2150       0.66%         Vegtable Mesh Sacks       45       42       87       0.03%         Other Plastics       2528       1813       4341       1.34%         Building Materials       2627       622       3249       1.00%     <						
Plastic Pieces         17836         21648         39484         12.14           Pens         545         236         781         0.24%           Ribbon/Tape (no balloons)         1141         837         1978         0.61%           Rope         1017         716         1733         0.53%           6-Pack Holders         183         60         243         0.07%           Sheeting Tarps         215         45         260         0.08%           Shotgun Shells         335         235         570         0.18%           Strapping Bands         397         363         760         0.23%           Straws/Stirrers         9146         9015         18161         5.59%           Syringes         119         107         226         0.07%           Tampon Applicators         1170         1253         2423         0.75%           Toys         952         1198         2150         0.66%           Vegtable Mesh Sacks         45         42         87         0.03%           Other Plastics         2528         1813         4341         1.34%           Building Materials         2627         622         3249         1		•				
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Ribbon/Tape (no balloons)       1141       837       1978       0.61%         Rope       1017       716       1733       0.53%         6-Pack Holders       183       60       243       0.07%         Sheeting Tarps       215       45       260       0.08%         Shotgun Shells       335       235       570       0.18%         Strapping Bands       397       363       760       0.23%         Straws/Stirrers       9146       9015       18161       5.59%         Syringes       119       107       226       0.07%         Tampon Applicators       1170       1253       2423       0.75%         Toys       952       1198       2150       0.66%         Vegtable Mesh Sacks       45       42       87       0.03%         Other Plastics       2528       1813       4341       1.34%         Building Materials       2627       622       3249       1.00%			545	236	781	0.24%
Rope         1017         716         1733         0.53%           6-Pack Holders         183         60         243         0.07%           Sheeting Tarps         215         45         260         0.08%           Shotgun Shells         335         235         570         0.18%           Strapping Bands         397         363         760         0.23%           Straws/Stirrers         9146         9015         18161         5.59%           Syringes         119         107         226         0.07%           Tampon Applicators         1170         1253         2423         0.75%           Toys         952         1198         2150         0.66%           Vegtable Mesh Sacks         45         42         87         0.03%           Other Plastics         2528         1813         4341         1.34%           Building Materials         2627         622         3249         1.00%		Ribbon/Tape (no balloons)	1141		1978	0.61%
6-Pack Holders 183 60 243 0.07% Sheeting Tarps 215 45 260 0.08% Shotgun Shells 335 235 570 0.18% Strapping Bands 397 363 760 0.23% Straws/Stirrers 9146 9015 18161 5.59% Syringes 119 107 226 0.07% Tampon Applicators 1170 1253 2423 0.75% Toys 952 1198 2150 0.66% Vegtable Mesh Sacks 45 42 87 0.03% Other Plastics 2528 1813 4341 1.34% Building Materials 2627 622 3249 1.00%						0.53%
Sheeting Tarps       215       45       260       0.08%         Shotgun Shells       335       235       570       0.18%         Strapping Bands       397       363       760       0.23%         Straws/Stirrers       9146       9015       18161       5.59%         Syringes       119       107       226       0.07%         Tampon Applicators       1170       1253       2423       0.75%         Toys       952       1198       2150       0.66%         Vegtable Mesh Sacks       45       42       87       0.03%         Other Plastics       2528       1813       4341       1.34%         Building Materials       2627       622       3249       1.00%		- '	183	60	243	0.07%
Shotgun Shells         335         235         570         0.18%           Strapping Bands         397         363         760         0.23%           Straws/Stirrers         9146         9015         18161         5.59%           Syringes         119         107         226         0.07%           Tampon Applicators         1170         1253         2423         0.75%           Toys         952         1198         2150         0.66%           Vegtable Mesh Sacks         45         42         87         0.03%           Other Plastics         2528         1813         4341         1.34%           Building Materials         2627         622         3249         1.00%			215	45	260	0.08%
Strapping Bands       397       363       760       0.23%         Straws/Stirrers       9146       9015       18161       5.59%         Syringes       119       107       226       0.07%         Tampon Applicators       1170       1253       2423       0.75%         Toys       952       1198       2150       0.66%         Vegtable Mesh Sacks       45       42       87       0.03%         Other Plastics       2528       1813       4341       1.34%         Building Materials       2627       622       3249       1.00%			335	235		0.18%
Syringes         119         107         226         0.07%           Tampon Applicators         1170         1253         2423         0.75%           Toys         952         1198         2150         0.66%           Vegtable Mesh Sacks         45         42         87         0.03%           Other Plastics         2528         1813         4341         1.34%           Building Materials         2627         622         3249         1.00%			397	363	760	0.23%
Tampon Applicators     1170     1253     2423     0.75%       Toys     952     1198     2150     0.66%       Vegtable Mesh Sacks     45     42     87     0.03%       Other Plastics     2528     1813     4341     1.34%       Building Materials     2627     622     3249     1.00%		Straws/Stirrers	9146	9015	18161	5.59%
Tampon Applicators     1170     1253     2423     0.75%       Toys     952     1198     2150     0.66%       Vegtable Mesh Sacks     45     42     87     0.03%       Other Plastics     2528     1813     4341     1.34%       Building Materials     2627     622     3249     1.00%		Syringes	119	107	226	0.07%
Toys       952       1198       2150       0.66%         Vegtable Mesh Sacks       45       42       87       0.03%         Other Plastics       2528       1813       4341       1.34%         Building Materials       2627       622       3249       1.00%			1170	1253	2423	0.75%
Vegtable Mesh Sacks         45         42         87         0.03%           Other Plastics         2528         1813         4341         1.34%           Building Materials         2627         622         3249         1.00%			952	1198	2150	0.66%
Other Plastics         2528         1813         4341         1.34%           Building Materials         2627         622         3249         1.00%		1	45	42	87	0.03%
Building Materials 2627 622 3249 1.00%			2528	1813	4341	1.34%
Buoys/Floats 162 81 243 0.07% Fast Food Containers 589 417 1006 0.31% Cups 1810 1067 2877 0.88% Packaging Materials 1191 482 1673 0.51% Foam Pieces 9761 5931 15692 4.83% Plates 550 297 847 0.26%	<u>ပ</u>	Building Materials	2627	622	3249	1.00%
Fast Food Containers 589 417 1006 0.31%  Cups 1810 1067 2877 0.88%  Packaging Materials 1191 482 1673 0.51%  Foam Pieces 9761 5931 15692 4.83%  Plates 550 297 847 0.26%		Buoys/Floats	162	81	243	0.07%
Cups         1810         1067         2877         0.88%           Packaging Materials         1191         482         1673         0.51%           Foam Pieces         9761         5931         15692         4.83%           Plates         550         297         847         0.26%	St	Fast Food Containers	589	417	1006	0.31%
Packaging Materials         1191         482         1673         0.51%           Foam Pieces         9761         5931         15692         4.83%           Plates         550         297         847         0.26%	Pla	Cups	1810	1067	2877	0.88%
Foam Pieces 9761 5931 15692 4.83% Plates 550 297 847 0.26%		Packaging Materials	1191	482	1673	0.51%
Plates 550 297 847 0.26%	a					4.83%
	Ö					0.26%
	-					0.93%

	Items	Spring Total	Fall Total	2013 Totals	% of Total
	Beverage Bottles	4561	1448	6009	1.85%
	Food Jars		212		0.20%
S	Lights: Bulbs		_ · <u>_</u> 27		0.03%
Glass		14	14		
9	Lights: Fluorescent Tubes	5635			0.01% 2.35%
	Glass Pieces Other Glass	1334	2018 2198	7653 3532	2.35% 1.09%
	Balloons - Mylar/Plastic	609	405		0.31%
	With String/Ribbon	494	187		0.21%
	Balloons - Rubber	289	544		0.26%
Rubber	With String/Ribbon	214	419		0.19%
음	Condoms/Rubber Bands	307	234		0.17%
œ	Gloves		219		0.20%
	Tires: Part	192	73		0.08%
	Tires: Whole	60 30			0.03%
	Other Rubber	536	388		0.28%
	Appliances	75	31		0.03%
	Batteries: Car	23	16		0.01%
	Batteries: Other	53	27		0.02%
	Bottles Caps	1554	1936	3490	1.07%
	Aerosol Cans	240	49	289	0.09%
	Beverages Cans	3052	1753	4805	1.48%
a	Other Cans	246	99	345	0.11%
Meta	Car Parts	118	42	160	0.05%
2	Crab/Fish Traps	48	18	66	0.02%
	55 Gallon Drums: Old	14	2.5	16.5	0.01%
	55 Gallon Drums: New	12	0	12	0.00%
	Fishing: Hooks	60	29	89	0.03%
	Fishing: Sinkers	31	7	38	0.01%
	Foil	468	322	790	0.24%
	Nails	2715	450	3165	0.97%
	Pieces	1390	1316	2706	0.83%
	Pull/Pop Tabs	227	76		0.09%
	Wire	1350	414	1764	0.54%
	Other Metal	1006	360		0.42%
	Paper Bags		299		0.33%
_	Cardboard	1037	496		0.47%
)e	Cartons/Boxes	290	135		0.13%
Paper	Cups	1019	571		0.49%
<u> </u>	Newspaper/Magazines	517	301		0.25%
	Paper Pieces	2505 155	2112	4617 260	1.42%
	Plates Other Paper	530	205 696	360 1226	0.11% 0.38%
	Опет гарег	550	090	1220	0.30 /6
ठ	Crab/Lobster Traps	43	43	86	0.03%
2	Crates/Baskets	39	19	58	0.02%
Wood	Ice Cream Sticks/Spoons	401	184	585	0.18%
	Lumber Pieces	10393	3391	13784	4.24%
	Pallets	371	159	530	0.16%
	Other Wood	4018	583	4601	1.41%
Cloth	Blankets/Sheets/Towels	276	198	474	0.15%
	Clothing	466	359	825	0.25%
	Shoes/Sandals	392	246	638	0.20%
	String (No Balloon)	596	489	1085	0.33%
	Other Cloth	692	469	1161	0.36%
	2013 Totals	174827	150335.5	325163	100.0%
	2010 10000	17-1027	200000.0	320100	100.070

2013 Totals	Spring	Fall	Total	% of Total	
2013 10tais	Spring	Ган	TOLAT		
Plastic	103733	114139	217872	67.00%	
Foam Plastic	18740	9878	28618	8.80%	
Paper	6814	4815	11629	3.58%	
Glass	12043	5917	17960	5.52%	
Metal	12682	6947.5	19629.5	6.04%	
Wood	15265	4379	19644	6.04%	
Rubber	3128	2499	5627	1.73%	
Cloth	2422	1761	4183	1.29%	
Pieces of Debris	174827	150336	325163	100.0%	
Volunteers	4,769	1,889	6,658		





Sweep Reports (available at www.CleanOceanAction.org) can be used to study and understand marine debris in New Jersey. When analyzing this data, whether annually or over time for trends, it is important to note that the amount of debris collected depends on a variety of factors such as weather, tides, participants, and accuracy of data collections.

NOTES FOR USING BEACH SWEEP DATA: The Annual Beach

LOCAL DATA, GLOBAL NETWORK: Every October, COA submits the Fall *Beach Sweeps* data to Ocean Conservancy to be included in their International Coastal Cleanup (ICC) Report. The ICC is an annual, global event held in over 100 countries and territories bordering every major body of water on Earth. COA's data and advocacy are part of this international database on marine debris and global campaigns against ocean pollution.

# 2013 Dirty Dozen

The most commonly collected pieces of debris

2013				2012		2011		
Rank	Debris Items	2013	2012	Rank	2011	Rank	2010	2010 Rank
1	Plastic Pieces	39484	43777	2	63117	1	51279	2
2	Cap/Lids	32642	38349	3	58612	2	61895	1
3	Cigarette Filters	32303	49362	1	33633	5	45903	3
4	Plastic Food, Candy Wrappers/Bags	30944	33162	4	45757	3	43113	4
5	Straws/Stirrers	18161	22308	5	35640	4	39029	5
6	Foam Pieces	15692	22094	6	21834	6	22099	6
7	Lumber Pieces	13784	6713	11	8130	11	10384	8
8	Beverages/Soda Bottles	9974	9715	7	17981	7	18212	7
9	Store/Shopping Bags	8371	6585	12	8245	9	8619	10
10	Glass Pieces	7653	8155	9	8993	8	7723	12
11	Glass Beverage Bottles	6009	4017	-	6261	-	6069	-
12	Cigar Tips	4842	8621	8	7700	-	10328	9
	Number of Volunteers	6658	6926		7575		8372	

# 2013 Roster of the Ridiculous

The Road and the Radio: headphones, vinyl records, car transmission, front panel of a car, metal scooter, car fender.

**Home Improvements:** picket fencing, window, paint roller, shingles, bathroom tiles, propane heater, oven, broken mirror, kitchen counter, couch, toilet seat, welcome mat, curtain, bedding.

**See Food:** grill top, ketchup containers, pasta strainer, hamburgers, full size refrigerator, small ceramic turkey.

The Land of Misfit Toys: rubber ducks, legos, stuffed animal prizes, toy saxophone, rubber snake, Barbie, rubber alligator, steering wheel for go-cart.

The Unexplainable: chain saw lubricant bottle, grave marker, dog jaw skeleton with teeth, cash register drawer, denture cream, Port-A-Potty, 20 lb. dumbbell, face of Getty gasoline pump, glowsticks, googly eyes, printer, pool pump, hospital bed, human feces, concrete weight on a rope, telephone cord, dentures.



# **2013 STATEWIDE SPONSORS**









# **2013 COUNTY SPONSORS**











### COMCAST NBCUNIVERSAL

**Site Sponsors:** Adventure Aquarium, Baine Contracting, Brookdale Community College, Enterprise Rent-a-Car, Montecalvo Material Recovery Facility, NJ Natural Gas, and Surfrider Foundation South Jersey Chapter

# SPECIAL THANKS

#### The following have contributed important resources:

Barefoot Wine, Barenaked Ladies Band, Dunkin Donuts,
Gateway National Recreation Area Sandy Hook Unit, Island
Beach State Park, Jersey Printing, Marine Academy of Science
& Technology, Marine Equipment and Supply Co., Monmouth
County Park System, Middlesex County Park System, NJ Clean
Communities Council, Ocean Conservancy, Reverb, Rotary
Club Interact #7540, and St. Georges-by-the-River.



For more information about sponsorship opportunities, reducing pollution, and to check out COA's past Annual Beach Sweep Reports, please contact Clean Ocean Action.



Clean Ocean Action 18 Hartshorne Drive, Suite 2 Highlands, NJ 07732 CleanOceanAction.org info@CleanOceanAction.org (732) 872—0111





### Clean Ocean Action's

### ~ 10 Tips for the Beach ~



### 1. Leave only footprints in the sand.

Dispose of your waste properly - use trash and recycling receptacles or take it home (carry in, carry out). Use your beach pail at the end of the day to collect litter. After enjoying the beach, organize family and friends for a cleanup, or join volunteers at COA's Spring and Fall Beach Sweeps (See tip #7).

#### 2. Reduce, Reuse, Recycle.

Reduce your consumption of single-use disposable plastic, such as bags, water bottles, straws, and utensils. Buy only reusable or recyclable products. Recycling reduces solid waste and saves resources. If your beach does not have recycling bins, take your items home for proper disposal and contact the town to suggest the need for these bins.

#### 3. Litter is lethal to marine life.

Avoid bringing disposable plastics to the beach. Plastics do not biodegrade and can kill fish, birds, whales, seals, turtles, and other animals through entanglement and ingestion. If you see an animal entangled, injured, or in danger, contact a lifeguard, local health department, or wildlife refuge center.

#### 4. The beach is not an ashtray.

Never leave cigarette filters in the sand. They do not biodegrade and are highly toxic to marine animals that mistake them for food.

#### 5. Hold the line and never let it go.

Keep all fishing line for recycling and send to: Pure Fishing America, Attn: Recycling, 1900 18th St, Spirit Lake, IA 51360-1099. If not possible bring to your local tackle shop or marina, or cut into small pieces and put in a trash can.

#### 6. Report pollution.

Report any unusual beach conditions (garbage slicks, brown or red tides, fish-kills) to the appropriate state and federal agencies. In New Jersey contact the Department of Environmental Protection by calling 1-877-WARN-DEP and contact COA. Take photos of the incident.

#### 7. Conduct local beach clean-ups.

Visit the COA website (<a href="www.cleanoceanaction.org">www.cleanoceanaction.org</a>) for details on how to organize a beach clean-up or join other volunteers at COA's Annual Spring and Fall Beach Sweeps. Visit the website for dates.

#### 8. Look, listen, and learn.

Observe wildlife from a distance. Do not frighten or disturb beach critters. Beachcomb for shells, listen for birdcalls, and look for plants. Identify what you find with a field guide.

#### 9. Carpool, walk, bike, or use mass transit to the beach.

Cars are a leading source of air and water pollution. Turn off your car if idling for more than 30 seconds; this will conserve fuel, save money and reduce pollution.

### 10. Lead by example.

Pass tips along to other beach-goers. Together, we are the solution to ocean pollution!