Litter is harmful to animals that mistake it for food, and/or become entangled; it also negatively affects tourism and the coastal economy. In response, for almost 35 years, thousands of dedicated volunteers — the tall and small — gather in the Spring and in the Fall for Beach Sweeps. As a result, beaches and waterways are safer for wildlife and people.

Marine debris is a human caused, human solved issue. The goal of Clean Ocean Action’s (COA) Beach Sweeps is to reduce and eliminate sources of litter by engaging people in volunteer efforts to clean beaches in New Jersey. During the bi-annual event, volunteers pick up and remove debris, and record and tally data about the debris.

The data collected provides a legacy of information that can be used to identify sources of pollution, monitor trends, and discover solutions. Every October, COA submits the Fall Beach Sweeps data to Ocean Conservancy in Washington D.C., to be included in their International Coastal Cleanup (ICC) Report.

The Beach Sweeps are held in the Spring and Fall, when the beaches are not being cleaned by local municipalities, resulting in a true snapshot of pollution. The goal is to have naturally clean beaches where “clean-ups” are history.

During Clean Ocean Action’s 33rd Annual Beach Sweeps, a record-breaking 10,148 volunteers removed 454,365 pieces of debris from over 60 sites in 53 municipalities and parks along the Atlantic Ocean coast, bayshores, inland rivers, lakes, and streams.

The value of volunteer time in 2018, as calculated by Independent Sector is $751,662. Since 1985, over 6,742,941 items have been removed by 133,390 volunteers!

Highlights from 2018 includes using COA’s Beach Sweep data to help pass a statewide smoking ban on New Jersey’s beaches, urge Governor Murphy to veto and fix the state-wide Bag Fee Bill, and support 15 municipalities who passed local ordinances to ban single use products. See pages 2 and 3 for details.

As in recent years, the most frequently collected items were plastic. Of the items collected, 81.77% were plastic or foam plastic.

The “Dirty Dozen” resembles previous years, with persistent and harmful plastic dominating the list. The Dirty Dozen accounts for 72% of trash removed.

The “Roster of the Ridiculous” continues to illustrate that one can find just about everything on the beaches, including the kitchen sink.

The greatest success of the Beach Sweeps are the take-home lessons: citizens taking responsibility for the environment, making a difference, teamwork, and commitment. The Beach Sweeps are a day of service in the Spring and Fall that provide a lifetime of data to help make a difference for the ocean.

60 New Jersey Sites in 2018

Since 1985 Cumulative Numbers:
- 6,742,941 pieces of trash removed
- 133,390 volunteers donated 800,340 hours

2018 Debris Record Highlights:
- 81.77% of debris was plastic including foam, a slight decrease from last year
- 5,470 balloons (mylar and rubber) were collected, excess the previous record from 2011 by 31.52%

Dirty Dozen Highlights:
- 93% of Dirty Dozen debris is plastic
- Plastic pieces and foam pieces account for nearly 31% of items in Dirty Dozen
- Glass pieces returned to the Dirty Dozen after doubling from the previous year

Seasonal Changes Between Spring and Fall:
- Overall 32.6% more trash was collected in spring than fall — due in part to more volunteers
- Number of straws/stirrers are 10.25% higher in fall than spring — reflecting high summer use

Comparative numbers: 2018 data results to 2017

<table>
<thead>
<tr>
<th>Item</th>
<th>Increased by:</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Plastic Pieces</td>
<td>+35.05%</td>
<td>75,899 up from 56,201</td>
<td></td>
</tr>
<tr>
<td>*Plastic Bottles</td>
<td>+38.99%</td>
<td>20,366 up from 14,653</td>
<td></td>
</tr>
<tr>
<td>Condoms</td>
<td>+56.51%</td>
<td>565 up from 361</td>
<td></td>
</tr>
<tr>
<td>Foam Building Materials</td>
<td>+71.25%</td>
<td>1,394 up from 814</td>
<td></td>
</tr>
<tr>
<td>Diapers</td>
<td>+78.00%</td>
<td>267 up from 150</td>
<td></td>
</tr>
<tr>
<td>Glass Pieces</td>
<td>+143.82%</td>
<td>14,078 up from 5,774</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Decreased by:</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Cigarette Filters</td>
<td>-24.17%</td>
<td>21,998 down from 29,008</td>
<td></td>
</tr>
<tr>
<td>Tires: Whole</td>
<td>-21.82%</td>
<td>43 down from 55</td>
<td></td>
</tr>
<tr>
<td>Metal Fishing Sinkers</td>
<td>-39.51%</td>
<td>49 down from 81</td>
<td></td>
</tr>
<tr>
<td>55 Gallon Drums (old and new)</td>
<td>-67.44%</td>
<td>14 down from 43</td>
<td></td>
</tr>
</tbody>
</table>

Balloons Higher than Ever:
- Total balloons were 47% higher in fall than in spring
- Total balloons including ribbon/tape were 63.20% higher in fall than in spring
- Total balloons increased by 32.16% from 2017

Led Statewide Efforts to Reduce Single Use Plastics
- In 2018 COA urged Governor Murphy to veto and fix the Bag Fee Bill, citing Beach Sweeps data as evidence to rebuild the bill with actions that truly make a difference, such as completely phasing out plastic bags by 2021 and protecting towns that want to have stronger laws. The focus now is on legislation that would ban single use plastics.
- Clean Ocean Action’s Beach Sweeps data was used to support 15 municipalities that passed local ordinances to ban single use products in 2018, including Monmouth Beach’s ban of bags, straws and containers—the most comprehensive plastic ban in the nation!
ROSTER OF RIDICULOUS

Almost everything, including the kitchen sink!

Sweeps for Dollars: $10 bill, 1930s Philadelphia rail token, counterfeit $100 bill, credit card

Believe It or Not: ashtray, barbed wire, bird whistle, bottle of urine aka “trucker bomb”, bottle rocket cone, cloth diaper, comb, door from a safe, flower bouquet, full dog food tray, glass smoking pipe, hair pick, homemade bow, Japanese candy wrapper, large piece of coal, lottery ticket, lubricant, mercury from thermometer, metal knife, pepper spray, pillar candle, police caution tape, Porta Potty door, railroad tie, rat trap, religious statue, shoe with a bottle of hot sauce in it, shotgun shells, telescope pole, tortoise shell, toy (adult), vaping mouthpiece, vaping pipe, vintage bottles, wire cage

Happy Holidays: Christmas garland, Christmas ball, Christmas tree, Christmas wreaths, Easter egg, Spanish American club festival banner

Fun in the Sun: AMC movie ticket, Asbury Park 2015 admission tag, candle, dice, dog chew toy, firework, medicine ball, marble, matchbox car, plastic drum rim, plastic sword, pom poms, runners tags, snorkel, starfish toy, Tiki torch, Trivial Pursuit cards, toucan pool float, yoga mat

All Dolled Up: Army men figures, baby doll arm, Barbie doll, Barbie doll legs, Barbie lipstick, Cookie Monster, doll arm, doll foot, elephant toy, My Little Pony toy, Ken doll, plastic horse, plastic pig

The Comforts of Home: AC unit, carpet, chair, couch, dustpan, electronic part of TV, laundry basket, leather seat, light socket, planter, siding and roofing, sink, toilet, toilet lid, trash can, welcome mat, vacuum cleaner

What’s Cooking: 2 cases of beer, bag of fresh lemons, beer barrel, coconut, filet knife with leather case, grill, grill brush, hamburger, kitchen knife, loaf baking pan, loaf of bread, package of Chow Mein noodles, propane tank, six pack, shopping cart, stove top burner, strainer, turkey baster, whipped cream can

Handy and Sandy: 4 foot fiberglass rod, 8 inch PVC pipe, asphalt shingles, bricks, can of epoxy resin, drill bit, dust mask, electrical plug, floor tiles, hard hat, house electrical wiring, hose, hose nozzle, insulation, paint bucket, plastic rake, plumbing parts, PVC pipe, roof shingles, shovel, steel pipe, steel poles, tape measure, tires, window frame, wire fence, wire brush, whole roll of electrical wire, wood with nails

On the Road: bicycle handle, car antenna, car bumpers, car parts, bike reflector, bike wheel, gas can, no-parking sign, old street sign, old stop sign, tail light, tire rim, traffic cone, wheel axle

Ship Ahoy: boat anchor, boat rail, boat siding, broken fishing knife, buoy, canvas fishing hat, crab trap, fishing gear and hooks, fishing rod, floating dock, lobster trap, oar, oyster crates, scuba mask

Awash in Apparel: ankle band, boxes, cuff link shaped like a crow, dog vest, flip flop, high heel, Nirvana t-shirt, sandals, scarf, underwear

Doctor’s Orders: bed pan, contact lenses, doctor’s tape, hospital name tag, hospital wrist tag, pregnancy test, surgical masks, upper dentures

*Note: items are identified by volunteers

Beach Sweeps Data Used to Enact NJ Law Prohibiting Smoking on Public Beaches and Parks

On Friday, July 20, 2018 NJ Governor Murphy signed a bill that banned smoking on NJ beaches. At the press conference in Long Branch, Governor Murphy highlighted COA’s Beach Sweeps data which included 29,008 cigarette filters found on NJ beaches in just six hours.

E-cigarettes also seem to be a growing fad as more and more are found each year on NJ beaches and are often noted in the “Roster of the Ridiculous”, unusual finds section of the data card. TerraCycle, an innovative NJ based recycling company is one of the few companies to accept e-cigarettes for recycling.
NOTES FOR USING BEACH SWEEPS DATA:
The Annual Beach Sweeps Report can be used to study and understand marine debris. When analyzing 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.

Volunteer filling out data card at the Sea Bright Beach Sweeps site in April 2018

2018 RESULTS

Record-Breaking 10,148 volunteers participated in 2018 Beach Sweeps!
PERCENT BREAKDOWN
BY CATEGORY/DEBRIS TYPE

<table>
<thead>
<tr>
<th>Breakdown by Category/Debris Type</th>
<th>2018 Totals</th>
<th>Spring</th>
<th>Fall</th>
<th>Total</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic</td>
<td>183,417</td>
<td>152,414</td>
<td>335,831</td>
<td>73.91%</td>
<td></td>
</tr>
<tr>
<td>Foam Plastic</td>
<td>23,725</td>
<td>12,006</td>
<td>35,731</td>
<td>7.86%</td>
<td></td>
</tr>
<tr>
<td>Glass</td>
<td>15,493</td>
<td>7,042</td>
<td>22,535</td>
<td>4.96%</td>
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</tr>
<tr>
<td>Rubber</td>
<td>4,491</td>
<td>5,098</td>
<td>9,589</td>
<td>2.11%</td>
<td></td>
</tr>
<tr>
<td>Metal</td>
<td>11,077</td>
<td>7,061</td>
<td>18,138</td>
<td>3.99%</td>
<td></td>
</tr>
<tr>
<td>Paper</td>
<td>9,256</td>
<td>5,314</td>
<td>14,570</td>
<td>3.21%</td>
<td></td>
</tr>
<tr>
<td>Wood</td>
<td>8,705</td>
<td>3,736</td>
<td>12,441</td>
<td>2.74%</td>
<td></td>
</tr>
<tr>
<td>Cloth</td>
<td>2,874</td>
<td>2,656</td>
<td>5,530</td>
<td>1.22%</td>
<td></td>
</tr>
<tr>
<td><strong>Pieces of Debris</strong></td>
<td><strong>259,038</strong></td>
<td><strong>195,327</strong></td>
<td><strong>454,365</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Volunteers</strong></td>
<td><strong>6,129</strong></td>
<td><strong>4,019</strong></td>
<td><strong>10,148</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Plastic: 81.77%

DIRTY DOZEN  The most commonly collected pieces of debris

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Plastic Pieces</td>
<td>75,899</td>
<td></td>
<td>56,201</td>
<td>1</td>
<td>28,885</td>
<td>1</td>
<td>42,793</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Plastic Caps/Lids</td>
<td>61,358</td>
<td></td>
<td>50,881</td>
<td>2</td>
<td>23,643</td>
<td>2</td>
<td>34,426</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Food, Candy Wrappers/Bags</td>
<td>40,780</td>
<td></td>
<td>40,227</td>
<td>3</td>
<td>20,979</td>
<td>3</td>
<td>33,405</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Straws/Stirrers</td>
<td>36,156</td>
<td></td>
<td>31,167</td>
<td>4</td>
<td>12,073</td>
<td>6</td>
<td>19,633</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Foam Pieces</td>
<td>24,127</td>
<td></td>
<td>21,117</td>
<td>6</td>
<td>14,513</td>
<td>5</td>
<td>12,841</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Cigarette Filters</td>
<td>21,998</td>
<td></td>
<td>29,008</td>
<td>5</td>
<td>20,219</td>
<td>4</td>
<td>28,041</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Plastic Beverage/Soda Bottles</td>
<td>16,358</td>
<td></td>
<td>12,114</td>
<td>7</td>
<td>8,204</td>
<td>7</td>
<td>12,100</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Glass Pieces</td>
<td>14,078</td>
<td></td>
<td>5,774</td>
<td>*</td>
<td>3,103</td>
<td>*</td>
<td>8,733</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Plastic Store/Shopping Bags</td>
<td>11,180</td>
<td></td>
<td>9,052</td>
<td>9</td>
<td>5,564</td>
<td>8</td>
<td>10,808</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Lumber Pieces</td>
<td>8,861</td>
<td></td>
<td>5,949</td>
<td>12</td>
<td>5,274</td>
<td>9</td>
<td>9,426</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Cigar Tips</td>
<td>7,437</td>
<td></td>
<td>7,172</td>
<td>10</td>
<td>3,581</td>
<td>11</td>
<td>4,846</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Other Plastic Bags</td>
<td>7,088</td>
<td></td>
<td>5,978</td>
<td>12</td>
<td>3,141</td>
<td>*</td>
<td>4,717</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td><strong>Total Dirty Dozen</strong></td>
<td>325,320</td>
<td>276,560</td>
<td>150,566</td>
<td>224,273</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Percent of Total Debris</strong></td>
<td>72%</td>
<td>74%</td>
<td>69%</td>
<td>68%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of Volunteers</strong></td>
<td>10,148</td>
<td>7,416</td>
<td>3,990</td>
<td>6,658</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* moved up in rank  moved down in rank  new to the Dirty Dozen  no change in rank

*did not make rank for indicated year
The success of the Beach Sweeps is rooted in the Ocean Wavemakers who contribute time, effort, resources, donations, and funds.


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Hamlet the Mini Pig at the Ortley Beach Sweep site in October 2018

Junior Beach Captain Kendall Soto and her Sweepers at the Belmar Beach Sweep site in April 2018. Thanks to funding from OceanFirst Foundation, the Junior Beach Captain program doubled in one year.

Red Bank Regional High School Environmental Club at the Sandy Hook Beach Sweep site in October 2018

Rutgers University Students at the Sandy Hook Beach Sweep site in April 2018

PRE/ELEMENTARY/MIDDLE SCHOOLS (66): Alexander Batcho Intermediate, Hamilton Elementary, Antrim Elementary, Bayshore Middle, Beer Street Elementary, Brigantine North Middle, Buzz Aldrin Middle, Cape Trinity Grade, Carl Sandburg Middle, Central Regional Middle: Student Council, Peer Leader Group, Cliffordwood Elementary, Crawford-Rodriguez Elementary, Deal, Deane Porter Elementary, Dwight Eisenhower Middle, Episcopal Academy, Eugene A. Tigue: Surfside Club, Forrestdale Middle: Environmental Club, Goetz Middle: Builders Club, Green Brook Middle: Global Scholar Club, Henry Hudson, Hillview Elementary, Hoboken Catholic Academy, Holy Cross, Howell Middle, Jordan Road School: Science Club, Keyport Central Middle, Keyport Grammar: Ecology Club, Lavellette Elementary, Linden Avenue Elementary, Lloyd Road Elementary, Long Branch Elementary, Maple School, Matawan Aberdeen Middle, Memorial Middle, Middletown Thompson Middle, Middletown Village Elementary, Monmouth Beach: Student Council, National Junior Honor Society, Mount Saint Dominic Academy, Nellie Bennett Elementary, Neptune Middle: Softball Team, Environmental Club, New Moomon Middle, Nut Swamp Elementary, Oakwood, Ocean Avenue Elementary, Park Middle, Pleasantville Middle, Port Monmouth Elementary, Red Bank Charter, Ridgewood Avenue Elementary, Rumson Country Day, Shrewsbury Borough School, Stern Academy-East,  Strathmore Elementary, The Scandinavian School of Jersey City, Theodore Roosevelt, Thome Middle, Tinton Falls Middle, Toms River Intermediate North, Veterans Memorial Middle: National Junior Honor Society, Wanamassa Elementary, West Windsor Community Middle, Westfield Friends, Wildwood Middle: ROOTS, William Satz Middle


COLLEGES (24): Arcadia University: Field Hockey, Brookdale Community College: Culinary Arts, Environmental Club, Phi Theta kappa, European College, Brookdale Carees, RLA, Hudson County Community College: Compass USA, Delaware Valley University: Project Earth, Drew University, Evergreen Centenary University, Keen University, Kutztown University, Middlesex County College, Monmouth University: Women’s Soccer, Montclair State University: Alpha Phi Omega Nu Psi, Delta Xi Delta Sorority, Mount Saint Mary: Alumni Association, New Jersey Institute of Technology: Lambda Tau Omega Sorority, Ocean County College: Athletics: STEM Department, Penn State University, Princeton University: Alumni Association, Raritan Valley Community College, Rider University: Alpha Phi Omega, Office of Sustainability, Zeta Tau Omega, Honors Scholars, Rowan College: Environmental Club, Rutgers University: Oceanography Club, Preparatory School Los Gardineros, Chinese Student Organization, SEED, Alpha Phi Omega, Seton Hall University: Alpha Sigma Tau, Delta Upsilon, Alpha Phi Omega, Stevens Institute of Technology: Alpha Phi Omega, Chi Phi, Kappa Sigma, SAVE Club, Society of Hispanic Professional Engineers, Stockton University: Marine Science Club, William Paterson University: Lambda Tau Omega


SPECIAL CELEBRATIONS (2): In Memory of Michael Monastero, The Lay Family

Note: Ocean Wave makers are taken from completed data cards. Please let us know if you have inadvertently omitted your group.
The following have contributed important resources:
Atlantic Bagel, Bloomberg LP, Can’dAid Foundation, CBD for Life, D'Alessio's Bagel Express, Gateway National Recreation Area Sandy Hook Unit, Island Beach State Park, Marine Academy of Science & Technology, Middlesex County Parks System, Monmouth County Parks System, NJ Clean Communities Council, Ocean Conservancy, Rotary Club Interact, and Water Witch Coffee.

SPECIAL THANKS

Team building Corporate Beach Sweeps program had a record year in 2018 with 21 companies and 635 employees removing 52,822 pieces of debris. To learn more contact Spencer at smunson@cleanoceanaction.org

History of COA’s Beach Sweeps
In 1985, Clean Ocean Action gathered 75 volunteers at Sandy Hook for the first Beach Sweeps, with plans to rid the beaches of unsightly and harmful debris. Thirty-four years later the program has expanded to include a record-breaking 10,148 volunteers in 2018 at 60 NJ locations along the coastline as well as inland rivers, lakes, bayshores, and streams.

In addition to bringing 200-300 high school volunteers from northern New Jersey every year to the Sandy Hook Beach Sweep location, Rotary International District 7540 Interact Club provides lunch to the Sandy Hook Beach Sweepers.

Delaware Beach Sweeps
In 2018 Clean Ocean Action engaged local groups in 6 cleanups at 3 hot spots of highly littered areas along the Delaware River, removing 7,125 items, including 1,688 bottles and 1,926 foam pieces. COA’s Delaware Sweeps program, initiated in 2016, continues to target litter accumulation “hot-spots” along the tidal portions of the Delaware River in an effort to reduce land-based sources of pollution. Marine debris often starts out as inland litter that makes its way through waterways to the beach. Compared to average Beach Sweeps data, these sites often have much higher percentages of plastic.

Delaware Beach Sweep locations include:
- Lamberton Rd, Hamilton
- Taylor Wildlife Preserve, Cinnaminson
- Rivergate Boat Ramp, West Deptford
- Red Bank Battlefield Park, National Park

At the cleanup held in June along the Delaware, 13 volunteers removed 2,525 pieces of debris, over 96% of which was comprised of plastic. Volunteers also uncovered more unusual items including a gas tank, cable box, bike pedal, and lawn mower.

Clean Ocean Action is a coalition of 115 organizations dedicated to improve and protect the waters off the NJ and NY coast. For information about Beach Sweeps and sponsorship opportunities, and for past Annual Beach Sweep Reports:

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Highlands, NJ 07732
CleanOceanAction.org
info@CleanOceanAction.org
(732) 872-0111

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