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# **Beach Clean-Ups**

In 2024 our Flotilla conducted 38 Beach Clean-ups, logging 67 hours, and removed an estimated 800 pounds of trash and hazardous materials. We imagine our beautiful beaches as pristine, but the reality is, they are not. Every day each tide cycle deposits harmful materials on our pristine sandy beaches. Cities, counties, and some condominiums hire "beach cleaners" to sweep the beach clean of debris. However, beach cleaner tractors with rakes turn the trash under, much as a farmer turns the soil under after a crop is harvested. Consequently, that buried trash resurfaces and is dragged back into the sea by the next high wave or storm event. It also re-emerges on the beach through wind erosion. Hazardous materials include a variety of ordinary items that are harmful to marine creatures and humans.

Common Items Encountered

- Fishing line & tackle
- Broken glass
- Rope
- Polystyrene line
- Tar
- Nails in boards
- Hard plastics
- Shards of fiberglass
- Plastic bags

Less Common Items Encountered

- Debris from wrecked boats
- Menace to navigation objects, wood boards
- Hypodermic needles
- Dangerous chemicals
- Knives
- Drugs \*Cocaine
- Discarded or lost water/fuel tanks
- Lost diving gear
- Shards of metal

### **Quiz:**



Answer: Plastic Bags

Collected by one person in 30 minutes, which category is of the most immediate concern for the health of human beings and marine life?

- Broken glass
- Rope
- Polystyrene line
- Hard plastics
- Plastic bags
- Fishing lure/hooks
- Garbage

Plastic bags break up and decompose to a molecular level (nano plastics) very quickly compared to other plastics. Research by biology professor Dr. Philip Landrigan, director of the Program for Global Public Health, shows that "Some microplastics are airborne. "If you live near the coast, microplastic particles in the ocean get kicked into the air through wave action. "So human ingestion is probably the dominant route, but inhalation is also an important route." Ultimately, microplastics and nanoplastics find their way into both human and marine animal organs and tissues.



Microplastics

Source: iStockphoto / Getty Images & CNN

#### https://www.cnn.com/2024/08/23/health/plastics-in-brain-wellness\_

A very important article - 7-minute read.

## Examples of dangerous materials we've recovered on Highland Beach.

Kilo of Cocaine

Drum of Ammonium Hydroxide

Knife



Broken Glass



Sharp Metal/Nails







Fish Hooks



