

Global Ocean Drifter

Tracking the ocean currents, one drifter at a time





The drifter team consists of (back, left to right) Adajean, Ben, Larkin, Madi, Lexi, Bella, Liz. (Front, left to right) Austin, Parry, Richie, Jaden, Nina, Petra, and Mitchell. Not pictured: Anthony. Barely pictured: Riley.

The background of the image is a dark, high-contrast photograph of ocean water. The surface is covered in small, dark, choppy waves, creating a textured and somewhat turbulent appearance. The lighting is low, emphasizing the dark tones of the water.

Mission Statement:
The purpose of our drifter is to
track the ocean currents.

What is a drifter?

A drifter is a device that floats in the ocean. It is used to track ocean currents.



The Three Types Of Drifters

The Bucket Drifter: measures the tidal currents in shallow water

The Surface Drifter: measures surface ocean currents

The Drogue Drifter: measures deep ocean currents

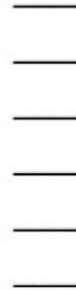
1. Bucket Drifter



2. Surface Drifter



3. Drogue Drifter



Building the Drifter



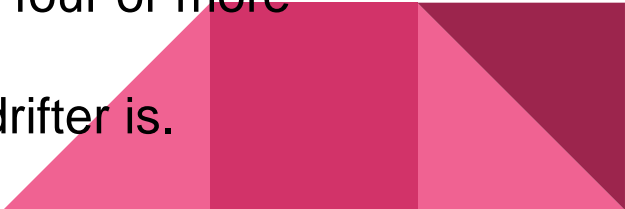
Our team was split up into three groups to build the three different parts of the drifter. The three parts of the drifter we worked on were the mast, sails, and the buoy.

The Launch

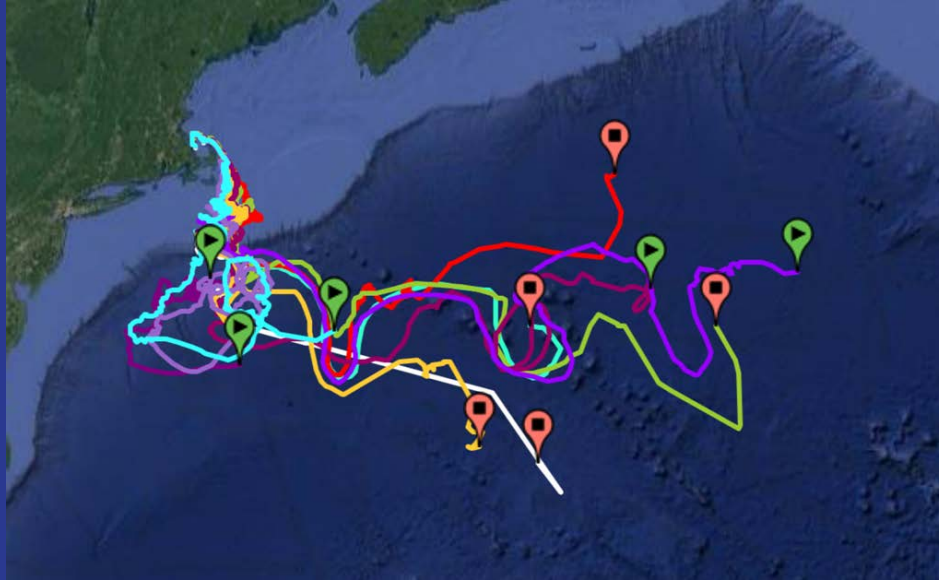


We were at Cape Cod Bay when we launched the drifter into the water. There were 9 other schools who launched drifters.

How The GPS Works:

- Made of three main parts: satellites, ground stations, and receivers.
 - The ground stations use radar to find the satellite signals.
 - Once the signals are received from the satellites, the receivers figure out how far it is from the signals.
 - After the receiver has found signal distances from four or more satellites, they can figure out exactly where your drifter is.
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Our Launch Results



http://www.nefsc.noaa.gov/drifter/drift_ssnc_2016_2.html



What's next?

The next step of our drifter experiment is to communicate our results to the public.

Citizen Science

What is Citizen Science?

Citizen science is the collection of data that relates to most people. In our case, the people we are aiming at are the people who need and live off the ocean, NOAA & Stellwagen Bank included. NOAA stands for National Oceanic and Atmospheric Administration. This organization studies the oceans and atmosphere, and works to predict climate changes. They share this information with the public, in hopes to conserve and manage coastal resources and ecosystems.

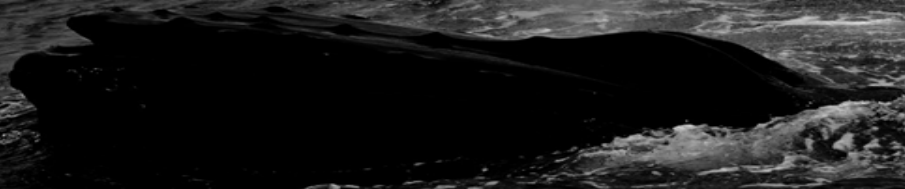
Citizen Science

Why do citizen science?

The drifters will help us to track ocean currents...but why is this important? This can help many different groups of people like fisherman so we don't overfish and decrease the population of the keystone species in the ocean.

Whale Watch

An added bonus!







The End

Thanks for watching!