

Drifter Newsletter #10

August 2012

Experiments on the eco-friendly “Dan Drifter”

Thanks to Dan Palance, a summer student at the NOAA lab in Woods Hole, a more eco-friendly drifter has been developed and tested. The “Dan Drifter” is much like the “Eddie Drifter” except it has wooden dowel spars and canvas cloth sails. It also uses a wooden-handled scrub brush as a extension of the mast and transmitter platform. While this new design has not yet proven itself, more deployments are currently underway. If interested, email james.manning@noaa.gov for the latest construction manual. We have also conducted some experiments on other alternatives including drogued drifters.

New transmitter options

There are a variety of new transmitter options from multiple companies. We have investigated a few and even tested some but have not found any that surpass the advantages of the TrackPack. Depending on your application, however, some of these new devices might be more cost effective for you. We tested the “FoxTrax cell phone” option, for example, that sells for a little more than \$200 but the batteries only last for about 700 hits and the monthly subscription of near \$20 is charged whether you use the unit or not. The advantage is the more frequent fixes for deployments within cell phone range.

Results of 2012 deployments thus far

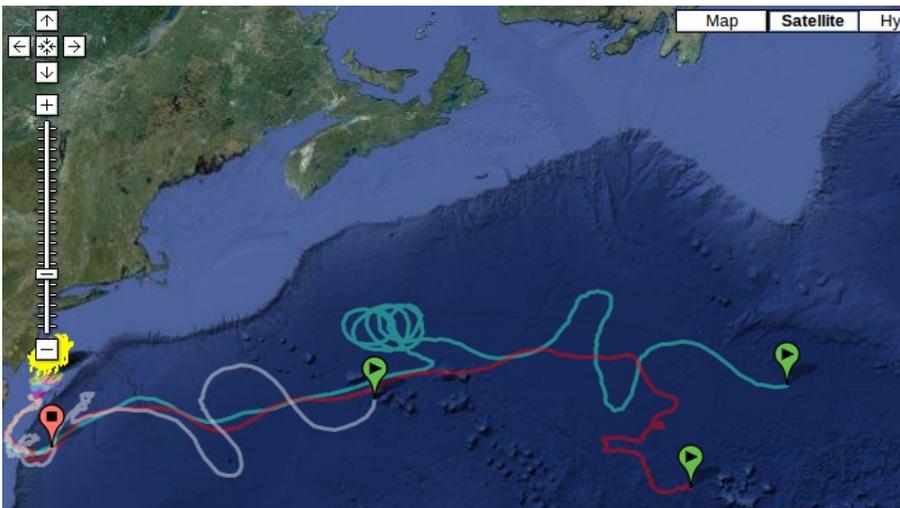


Figure 1. Track of drifters built by NOAA's Teacher at Sea Alumni.

A total of 49 drifters have been deployed thus far in 2012. One of the most interesting tracks is that of the unit deployed near a set of tagged turtles off Delaware in late May. After a few weeks on the shelf, it was entrained in the Gulf Stream with a few others but then got caught in a big warm core ring (see Figure 1). To follow the path of these drifters and other as they head towards the Azores visit

http://www.nefsc.noaa.gov/drifter/drift_tas_2012_1.html. As shown on the main drifter page, there are several other interesting tracks such as those from Dick Baldwin's unmanned sailboats. Just in the last few days, we watched a few of them come ashore on the southeast corner of Newfoundland after more than 8000 kilometers of travel. He also has a few in the Gulf Stream headed towards the Azores.

New drifter deployers welcomed:

- Bill Geppert at the Cape Henlopen High School who is working with the University of Delaware oceanographers
- Scott Kendall (MATE participant) from the Grand Valley State University on Lake Michigan,
- Mark Neary who works with Neal Pettigrew at UMaine Orono,
- Jochen Schroer at New Brunswick's NATECH Environmental Services Inc. of Canada.

Refurbishing old TrackPack transmitters

We have devise a method to refurbish old TrackPack transmitters by breaking open their housing, inserting a new battery pack (ordered from Hong Kong), and then rehousing them inside a “Otterbox 2000”. It works! If you would like us to do the job, send in your old TrackPacks that no longer work so we can try to get them going again.

The importance of “decommissioning” old transmitters

It is important that your old transmitters be “decommissioned” if they have either been a) lost or sea, b) water damaged, or c) you do not expect to use them within a year. Otherwise, the satellite company charges \$2.65 dollars per month per unit for what they call a “maintenance fee”. You can always recommission them with a \$30 “reprovisioning fee”.

Drifter-building presentations this fall

We have three presentations scheduled: Umass Boston (29 Sep), Massasoit Community College in Massachusetts (2 Oct) and URI Bay Campus (2 Nov). The URI event is part of the New England Ocean Science Education Collaboratives “Ocean Literacy” Workshop. All will be brief introductions to the program. We are looking for funding to conduct more extensive day-long workshops where participants actually build units to take home with them.

Future Plans

As mentioned in the last “newsletter”, we continue to look for funding for more drifter-building workshops and satellite time. We are working with the tracker manufacturer and service provider to minimize the cost to the schools involved. We continue to reduce the cost down within the range of a typical mini-grant proposal but, ideally we hope to someday secure a large gov't grant. This would supply the various schools with the raw material they need to construct these units and to have them connect with their local fishermen for routine deployments offshore. If you have ideas, please email james.manning@noaa.gov. We now have a collection of proposals that can be reworked to fit your plans.

We encourage those who participated in a MATE drifter building session last year to contact us for help getting started with building and deploying.