

Enhanced Mussel Watch Phase 1: Eastern Great Lakes



Boat driver Tom Joyce was a former Great Lakes ship pilot.

Wednesday, September 9, 2009

-Cliff Cosgrove

We arrived at the dock by 7 a.m. and then unpacked and stowed enough gear to build a spaceship. Ed explained the sampling methods for collecting sediments and benthic infaunal characterization, or critters in the mud. The protocol is very specific and must be repeated at each station. A detailed description of the methods can be found [here](#). Essentially, we collect three samples using a “ponar” grab sampler, dump the muck into a sterilized plastic tub, then sieve the whole thing through an additional pre-cleaned bucket down to a plastic specimen jar the size of a grapefruit and pack them in ice. For the sediment chemistry and biotoxicity, or “biotox”, we use a Van Veen grab sampler, collecting enough of the really mucky sediments to fill three apple sized glass jars and one “whirly” pack. We collect the muck in a bucket and then, once we have enough, we stir it with a giant sized mixer and then pack them for shipping.

For collecting zebra mussels we use mainly two methods, dredging and free diving. Two new sites were established today in AOCs. The first was in the River Raisin, in Monroe, MI in and near a turning basin nestled between a coal plant, water treatment plant, dredge landfill and a marina. The second sight was in the Detroit River along Powder House Island. For the River Raisin we dredged for zebra mussels, and in the Detroit River we dove.



Ed Johnson, Tom Joyce, Cliff Cosgrove plan the next day's effort in the hotel dining room.



Getting our gear ready at Bolles Harbor near Monroe, MI.



Collecting “Zeebs” at second site on the Detroit River, with Powder Island in the background.