



# 15th Annual Cooperative SEAMAP Winter Tagging Cruise - January 2002

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Once again, Maryland Department of Natural Resources (MD DNR) participated in the annual winter Southeast Area Monitoring and Assessment Program (SEAMAP) tagging cruise off the coast of North Carolina. For 15 years this cruise has provided a wealth of fishery-independent data for many species that inhabit the Mid-Atlantic coast. This year's cruise took place on the National Oceanic and Atmospheric Administration (NOAA) ship the OREGON II, from January 14 - 21. Participants on this year's cruise were from several state, federal and academic agencies including MD DNR, NOAA, U. S. Fish and Wildlife Service (USFWS), Atlantic States Marine Fisheries Commission (ASMFC), North Carolina Division of Marine Fisheries (NCDMF), North Carolina State University and East Carolina University (ECU).

The OREGON II employs two 65 foot long bottom trawls for 10 to 30 minute tows, beginning around Cape Lookout, NC and continuing northward to the Virginia state line in search of striped bass. The main purpose of the cruise is to capture and tag as many striped bass as possible, but over the years, data is being collected on more and more of the species that are routinely encountered during the survey. In addition to striped bass, data is now collected on Atlantic sturgeon, spiny and smooth dogfish, summer flounder, red drum, monkfish (shown above left), weakfish and horseshoe crabs. There are frequently requests from graduate students or universities for data on other species including bluefish, spot, and Atlantic croaker. This year, over 12,000 fish of 13 different species were counted, measured, weighed and/or tagged.

This year's cruise proved to be a success, with biologists tagging the third highest number of striped bass (4,100) and the most Atlantic sturgeon (22) in the survey's 15 year history. North Carolina biologist Eric Gowdy holds one of the sturgeon captured (shown right). Crews worked around the clock on six hour shifts, hauling the nets on deck a total of 226 times, in search of large schools of striped bass. The highest concentrations of stripers were encountered offshore of Kitty Hawk and Corolla, NC in 40-50 feet of water. The largest haul of fish this year consisted of 381 striped bass, which overflowed the holding tanks and left fish in one net in the water while the biologists quickly worked through the rest. Two thousand spiny dogfish were also tagged, in the fourth year of a cooperative effort between the National Marine Fisheries Service, Northeast Fisheries Science Center, ECU and the Mid-Atlantic Fishery Management Council.



Most hauls contained many small members of the drum family: croaker, spot, kingfish and seatrout. Several thousand spiny and smooth dogfish were also tagged, measured, counted and sexed throughout the survey. Various species of rays, skates, starfish, crabs, whelks and other small bottom-dwelling fish species were also encountered. Perhaps the most interesting species captured on the 2002 cruise was a small

The strangest catch had to be the unexploded World War II ordinance on January 18 (right). This delicate item required a detour into the Chesapeake Bay to deliver it safely to the Navy in Norfolk, VA. We were certain to record length and weight data first!

The striped bass tagging data from the cruise is used in a variety of ways. Recapture data provided by fishermen gives managers important information on migration patterns, growth rates, and survival estimates. The data is also used to determine general abundance, size and age distributions, length-at-age,



thresher shark (left).



weight-at-age and contribution of hatchery fish. Recently, the data has been entered into a geographic information system (GIS) database which will give a better view of travel patterns and habitat use off the coast of North Carolina. All of the data are important monitoring tools in the ASMFC Striped Bass Management Plan for the entire Atlantic coast. The tags applied to striped bass during the North Carolina survey are the same pink tags that you might encounter here in the Chesapeake Bay. If you do catch a tagged fish (left), please call the USFWS at 1-800-448-8322 and let them know the date you caught the fish, the location, if you kept or released it, and the method of capture.