VIMS' Ghostbusters Study Effects of Lost Fishing Gear

Crab pots are inevitably lost during storms or when accidentally cut free by boaters. Researchers in VIMS' Center for Coastal Resources Management (CCRM) are now studying to what extent these "ghost pots" continue fishing, and how that might affect the Bay.

The 1-year pilot study, to Dr. Kirk Havens, Dr. Donna Marie Bilkovic, Dave Stanhope, and fellow scientists in CCRM, is funded by the National Oceanic and Atmospheric Administration (NOAA).

"The pilot project will ascertain the best way to locate unmarked pots, what marine species are being fished by these pots, and how long the pots continue to fish," explains Havens. "This will pave the way for future larger scale projects needed to determine the impact of ghost pots."

Project scientists are locating the pots using side-scan sonar. With the crabbing season's end in early December, the team is now documenting the GPS coordinates of unclaimed pots in the lower York River. They will continue their search into February. Their findings will both provide a first estimate of the number of ghost pots in the River, and help determine the usefulness of side-scan sonar for pot identification.

VIMS researcher Kory Angstadt pulls in a ghost pot.

Havens' team examines each recovered pot to determine its catch. The early results are intriguing. So far, ghost-pot fatalities have included flounder, white perch, toad fish, muskrats, and turtles, as well as crabs.

In addition, Bilkovic is reviewing data from the Chesapeake Bay Multi-species Monitoring and Assessment Program (ChesMMAP) to compile the number of ghost pots retrieved during ChesMMAP trawl surveys, and the marine life each held. ChesMMAP began at VIMS in 2002.

"Having past information available is an obvious asset to the program," says Stanhope. "The information on location and catch throughout the Bay will greatly complement our York River study."

To verify how long ghost pots are capable of fishing, the researchers modified several crab pots by providing the option of closing access to marine animals. With this modification, they can determine, without increased impact, how long a pot remains intact in the water before corrosion provides an escape for would-be catch. To find out if pots that no longer have bait will continue to fish, the access will be opened one week each month.

"Marine scientists in other areas of the country have begun documenting the effects of detached commercial nets and other ghost fishing gear," says Havens. "In Chesapeake Bay and its tributaries, crab pots are the gear to investigate. Based on our early results, this pilot program will provide an excellent model for broader research."

-by Susan Maples

Virginia Clean Marina Program Tops 60 Members

The Virginia Clean Marina Program, a collaborative venture between the Virginia Sea Grant Program at VIMS and the Virginia Coastal Program, certified 8 new marinas during the past year. That makes a total of 29 marinas that are demonstrating their commitment to keeping Virginia waterways clean.

An additional 32 marinas have pledged to join the program. A complete list of Virginia's certified Clean Marinas is posted on the program's web site at www.virginiacleanmarina.com.

According to Pete Hall, Marina Specialist in the Sea Grant Marine Advisory Program at VIMS, "Certification as a Virginia Clean Marina rewards marinas for their efforts to implement best management practices to improve and maintain water quality and living resources."

To become certified, a marina must meet all legal and regulatory standards as well as a percentage of the best management practices as outlined in the Virginia Clean Marina (VCM) Guidebook.

Support for the VCM program is provided by the Virginia Sea Grant Marina Technical Advisory Program. Program personnel conduct annual reviews of the Clean Marinas; hold workshops to provide educational opportunities for marina owners, operators, and staff; and provide technical assistance as needed. The program advisory board includes industry as well as Virginia's departments of Health, Environmental Quality, and Conservation and Recreation.

"The VCM program has given marina owners and operators the opportunity to avoid more government regulation by voluntarily adopting and implementing best management practices and common-sense approaches," says Hall. "Becoming a certified Virginia Clean Marina is one way for marina operators to let the boating public know that they are committed to improving and maintaining water quality in Chesapeake Bay."

Hall adds that the boating public has become more environmentally conscious and looks to patronize marinas that share their view. "In a way the Clean Marina designation is a form of 'eco-labeling.' Aside from the environmental benefits, the implementation of best management practices leading to VCM certification means increased business and economic growth for marinas."

A recent survey of Virginia's certified Clean Marinas provides insight into how industry views the benefits of becoming a clean marina. The survey shows that 79% of clean marinas feel that VCM status has brought economic benefits to their marina by reducing costs and increasing revenues. The same percentage also felt that VCM status led to more "goodwill" and significantly improved relationships with regulators. The group also consistently echoed a response that "regulators are more responsive to new ways to accomplish a given end;" and "are more willing to work with us knowing that we are all working toward the same goal."

On the marketing side, VCM marinas cited increased transient traffic, increased fuel sales, and an overall perception by the customer of value added as important measures of economic benefits gained. One marina concluded "Recognition for caring for the environment brings in a higher quality clientele. They tend to take better care of their boats (business for us) and our property."

Salt Ponds Marina in Hampton is one of 29 Virginia marinas that have received the Clean Marina certification.