Prepared by: Laura Patrick
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Maryland Blue Crab Ghost Pot Workshop: Summary Report

The workshop took place from 3p to 6:30p on the 17th of November, 2014 in the Jean Schmidt Center at the Smithsonian Environmental Research Center.

The attendees included Maryland watermen representing a wide geographic range and representatives from a variety of science and education organizations. A group of Virginia watermen and a Virginia scientist were also present at the workshop for the first hour via video conference. A full list of organizations that were represented at the workshop can be found at the end of this report.

The goals of the workshop were to learn from watermen about causes of pot loss and impacts on the industry, and to discuss possible strategies to address the ghost pot issue, including prevention of loss, pot recovery, and disarming pots. We also sought discussion of opportunities to work cooperatively to address ghost fishing.

Pot loss and Prevention

All MD watermen present explained that recreational boat traffic is the leading cause of pot loss in their area. Most times the boats cut the pot's buoy-line; sometimes they put holes directly into the pot in shallow water. MD watermen described how single-buoy pots are more susceptible to being lost than pot lines (also known as long-lines and trawls); pot lines are easier to recover than single pots.

There was a discussion about float-free channels and speculation as to why boats don't use them. It was suggested by some that boaters don't use them because they don't want to (not the fastest way from A to B). It was also suggested that boaters are not aware of the float-free channels. Additionally, there are no maps currently available to boaters showing the locations float-free channels. It was noted that float-free channel markers look like other markers (making them hard to recognize from a distance at speed), and that markers are sometimes missing; this makes it hard to know where the float-free channel is even if one is aware that it exists.

Pot loss prevention strategies:

Public education was discussed as an important solution. Types of educational materials suggested include: information on ghost fishing, prevention of pot loss, and float-free channel awareness. It was also determined that it would be valuable to improve float-free channel identification and to create and distribute maps that identify float free channels and high-density crab pot areas.

Some suggestions for distribution of educational materials and maps were as follows: Chesapeake Bay and boater magazines, a booth at the MWA Trade Expo, boat insurance policy holders, gas stations, marinas/placards, and tournaments. It was suggested that we find ways to educate sailboat, poker run, and tournament boaters about the locations of crab pots. It was also suggested that we think about trying to have input into Spur's marketing of line-cutters.

Recovery and Removals

Recovery experiences

Commercial crab pots generally cost $40-$50 each, so pot loss can represent a substantial monetary loss to watermen; most watermen drag grapples in attempt to get their pots back. Side-scan sonar (SSS) was discussed as a method to increase recovery success. VA watermen described their experience with SSS and the success they've had using it. MD watermen expressed interested in being trained to use SSS for pot retrieval. Post-workshop, VA watermen offered to help train MD watermen to use SSS and show them the techniques they use for retrieval.

Pot lines were also discussed. Many MD watermen explained that many MD crab pot fishermen are switching from single-buoy pots to pot lines. MD watermen in attendance said that 0-80% of watermen in their areas are now fishing pot lines instead of single buoy pots. The pros and cons of pot lines were discussed: pot lines are easier to retrieve (very few pots were reported lost with this method because they are easier to recover with grapples); however, there is the potential for increased gear conflict if watermen are not all laying gear similarly. Also, pot lines are labor-intensive in nature, which makes them more difficult for watermen who work alone. Even though pot lines increase pot recovery, they were not viewed as a universal solution.

Pot removal program experiences:

Many of the watermen present took part in the Maryland crab pot removal programs. The removals took place in 2010 and 2012 in late March/early April. Pots were removed from the mouths of rivers. Watermen described catching large numbers of pots (mostly just pieces) in 2010 and catching fewer in 2012. MD watermen also described seeing hardly any animals found in the ghost pots they pulled in.

The Virginia crab pot removals have taken place the past 4 years at the end of the crabbing season (in winter). VA watermen are allowed to place crab pots in tributary rivers (as compared to MD, which prohibits commercial crab potting in tributaries)—many of the removed pots come from rivers. The VA watermen described a large number of pots removed every year. They also described seeing a large number of animals caught in the ghost pots.

It was suggested that perhaps pot location (rivers vs main-stem at river mouths) could be the cause of the difference in number of animals seen in pots in VA and MD.

Disarming

Disarming methods might be a solution for pots that are not recovered from the Bay. MD watermen noted that different types of pots have different life spans due to differences in pot materials and differences in salinity in the Bay. MD watermen explained that their wire pots deteriorate within a couple of weeks after the zincs are gone, and that the rate of pot deterioration increases with decreasing salinity. Vinyl-coated pots take longer to degrade (MD watermen present explained that almost no watermen in their areas use vinyl pots but that some watermen do in the upper Bay). Disarming technologies that have been looked into take a while to degrade and may not be an appropriate solution for all types of pots.

In particular, we discussed biodegradable panels. We discussed that both the pots and the biodegradable panels take time to degrade, and that there is no benefit to the panels unless they degrade faster than the pot. Previous studies of ghost pots in the Maryland Chesapeake Bay did not investigate pot degradation of different pots in different areas of the Bay; this was noted as a gap in the data that would be prudent to address in future research. There is currently insufficient data to support any recommendation related to the use of biodegradable panels in crab pots in MD.

Conclusion:

The workshop was well-attended, and there was very good dialogue between all parties involved. Everyone was able to ask questions and listen to answers. The opportunity for MD and VA watermen to exchange information provided valuable insight into regional similarities and differences in pot loss and experiences with pot recovery efforts. Most importantly, the participants were able to identify public education and research needs that will address shared concerns, and which can be pursued collaboratively by the industry and researchers through future funding opportunities.

Organizations Represented at Workshop:

Maryland Waterman's Association

Anne Arundel County Watermen's Association

Baltimore County Waterman's Association

Charles County Watermen's Association

Calvert County Watermen's Association

Queen Anne's County Watermen's Association

St. Mary's County Watermen's Association

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NOAA Marine Debris Program

Chesapeake Bay Stock Assessment Committee

Oyster Recovery Partnership

Chesapeake Research Consortium

Smithsonian Environmental Research Center

Virginia Institute of Marine Science

Virginia Watermen