# Virginia Marine Resources Commission Blue Crab Management Advisory Committee Meeting VMRC Conference Room

April 30, 2007

#### **Members Present**

Hon. Rick Robins Dr. John McConaugha Tom Powers Mark Wallace (for H.M. Arnold) Pete Freeman

#### Members Absent

Jeff Crockett Louis Whittaker Paige Hogge Marshall Cox Sr. Ronald L. Jett Peter Nixon H.M. Arnold Jim Casey Chris Moore John Freeman Johnny Graham

#### VMRC Staff

Rob O'Reilly Joe Grist Mike Johnson Sonya Davis VIMS Staff

Dr. Rom Lipcius Dr. Kirk Havens

#### I. Announcements

Chairman Rick Robins called the meeting to order at 7:00 PM and noted a quorum was not present.

Mr. Robins stated that the item "Abandoned Crab Pots Report" by Dr. Kirk Havens would be presented before old business.

- **II. Approval of the minutes** Minutes were approved by members present.
- III. Old Business

## A. Data Updates

#### Presentation by Sonya Davis on Crab Pot License Transfers

Ms. Davis provided the committee a handout, which detailed the history of licenses that were granted through exemptions and transfers from 1996 to 2006. Exemtions from 1996 till 1999 allowed two individuals into the crab pot fishery who could document fishing two out of the previous five years, serving as a mate

on a vessel that crab potted two out of the previous five years or people who were granted a medical hardship. The database provided information to track the number of transfers and time between transfer of individual licesnses. Overall the turnover rate was moderate with the licenses that did change hands doing so less than 3 times in most cases.

Mr. Robins asked if there any parts of the data that Ms. Davis could give some insight into.

Ms. Davis indicated that most short-term transfers appeared to be between family members with only a few cases of "license brokers".

#### Presentation by Mr. Grist.

Mr. Grist first presented some pro's and con's of agent use and the possibility of adding them to the mandatory reporting database. Allowing people to act for people who are unable to fish their pots was one of the strongest reasons to allow the use of agents, and these agents could be almost anyone. Some of the con's listed by Mr. grist regarding agent use includes promoting effort that would normally be latent, agent use is difficult to track, a person can act as an agent for multiple licensees, the license holder is not always aware of the activity level of the agent and there are limited tools for law enforcement regarding agents. Mr. Grist then mentioned that adding agents to the mandatory reporting database would allow VMRC to track usage of agents (eg. who are the agents, how many agents there are, and how many license holders use agents). Some of the con's to adding agents to the mandatory reporting forms would have to be modified, it would be very difficult to track and audit when a given harvester failed to report use of an agent.

Mr. Powers added that use of agents can push the price down lower due to higher amounts of effort.

Mr. Robins asked why it would take two years and if we could go ahead and license agents to get the information quicker.

Mr. Grist responded that while we could license agents and get the information quicker, to change the database would require changing contracts with groups providing data entry and forms and this would be logistically difficult to do in mid-season.

Mr. Grist's presentation went on to include hard crab pot harvests. According to mandatory reporting preliminary data for 2006, the data continue to show a steady decline in harvests for hard crabs from the period 1994 thru 2006. This trend was for state-wide waters and the Chesapeake Bay. This same declining trend could also be seen for number of crab pots being fished in Virginia state-wide waters, Chesapeake Bay and all of the tributaries that feed into Chesapeake Bay (eg.

James River, York River, Rappahannock River, Potomac River tributaries and other tributaries that feed directly into Chesapeake Bay). Looking at particular license types (eg. 500 pot licenses, 300 pot licenses, peeler pots, etc.), for the period of 2003 through 2006, a declining trend is also evident for the number of licenses being actively fished and for the number of active fishing days. The number of eligible licenses is staying relatively constant which indicates there is a growing latent harvest potential for this fishery.

Mr. Robins asked if there were any areas that were contrary to the declining trends seen for pots fished.

Mr. Grist responded that we haven't noticed anything yet but we will continue to examine this data for anything of interest.

Dr. Lipcius stated that looking at the landings of hard crab data the declining catch of female crabs over the past 10 years, with the increasing exploitation rate, may indicate that Virginia is not solely to blame for the decline female crab abundances seen in indices.

Dr. McConaugha questioned if the decline in female crab harvests was statically significant.

Dr. Lipcius stated that this anecdotal evidence warranted further investigation.

Mr. O'Reilly stated we would need to look at Maryland data as well and that the trend seen may just be a function of abundance for female blue crabs.

Mr. Freeman suggested that since turnout for the committee was low for this meeting that we should send copies of the data presented to all of the committee members.

Mr. Powers asked about CPUE for the different areas presented at the meeting.

Mr. Grist responded that staff is working on this but it was difficult to attain an accurate measure of CPUE.

Mr. O'Reilly stated measuring harvest takes up a great deal of staff time but CPUE is an area where we would like to improve our statistics.

Mr. Grist's final part of the presentation involved looking at evaluating the effects of different cull ring sizes on the size of crabs retained in hard crab pots (Ruderhausen 2005, NC Seagrant Study #05-STOK-02). For the cull ring size currently fished in Virginia water, 2 5/16" roughly 50% of crabs sized 4.75" could escape. Cull rings sizes of 2 3/8", 2 ½", and 2 5/8" had 50% escapments rates for crabs sized 4.9", 5.2", and 5.5" respectively. There were slightly different

escapement rates for male and female crabs in the larger two sizes cull rings with females being on average slightly larger.

# IV. New Business

# A. 2006 VIMS Trawl Survey Report – Dr. Rom Lipcius VIMS

Dr. Lipcius presented data from the VIMS 2006 Trawl survey in the spawning grounds during the spawning season (July thru August). Numbers of mature female crabs being caught per tow continued to be low for 2006 with no real change in mature female crabs collected in the survey.

Dr. Lipcius suggested we take up the issue of a pot marking system, which may also help with derelict pot issues.

## B. Abandoned Pots Report – Dr. Kirk Havens VIMS

Using a combination of side scan sonar and GPS, researchers are able to identify and pinpoint the location of crab pots on the benthos. Overall this system was very effective at finding crab pots on the bottom. They started with a test in Sarah's Creek, which is located off of the York River. In November they were able to locate 16 derelict pots which were subsequently removed. They were able to document that these derelict pots were still capturing organisms including crabs and finfish. They went back to Sarah's Creek the following July and were able to find another 12 derelict pots. They then decided to expand their research to the lower York River in an area equal to about 34 square kilometers. This survey was performed in January and February. For this survey they located 676 derelict pots. Another group doing this same kind of survey in Maryland is actually finding higher densities then the VIMS group, possibly due to Maryland law not allowing the setting of crab pots in tributaries. They then decided to perform an experiment to determine capture rates of derelict pots. Researchers chose four areas and placed 14 pots in each of these areas. They simulated pots being lost at the end and beginning of the season and found no difference in capture rates between the two. They found a capture rate of approximately one crab every four days, or 50 crabs per season, for a derelict pot. Croakers were the most abundant finfish with about 11 per season being captured by these derelict pots. These pots were emptied each time to prevent "self-baiting". When they used pots that were simulated to be "self-baiting" by leaving a dead fish in the upper chamber the catch rate doubled. They would like to expand the research in the coming years to fish different areas of the Virginia portion of Chesapeake Bay which may have different fishing pressures. Currently it appears there is about a 30% loss rate on crab pots but they would like to test this out further. They would also like to investigate the "self-baiting" phenomenon, continue to monitor traps for periods of longer than a year to determine what their catch efficiency is over time, and look at areas with different salinity regimes since these pots degrade over time because salinity should have an important role in how fast they degrade.

They plan to submit a report to the General Assembly which includes a potential plan to pay watermen to find and remove derelict pots.

Mr. Robins asked Dr. Havens how many pots were being actively fished by commercial harvesters in Sarah's Creek during their study.

Dr. Havens asnswered there were 40 pots marked in Sarah's Creek at the time of the study. In their study area for the lower York there were approximately 900 marked pots.

Mr. Robins asked if Dr. Havens thought that different methods to mark the buoys could help with pots being lost.

Dr. Havens answered that people run pot buoys over with their boats day and night and that this would not solve the problem.

Mr. Freeman aasked if these were vinyl-coated wire pots used in the study.

Dr. Havens responded that they were.

Mr. Freeman stated these pots last a lot longer than standard wire pots.

Mr. Wallace asked if the researchers looked at escapement rates of animals from the simulated derelict pots.

Dr. Havens responded they would like to look at that for future studies.

Mr. Powers asked for them to consider studying galvanized wire pots in higher salinity areas, as not allowing vinyl coated pots to be used may be a management measure.

Mr. Freeman responded that we could use metal wire to hold the cull ring or side of a pot in place, just like in fish pots, and if the pot is lost the wire would rust out thus creating an opening to allow animals to escape.

Mr. O'Reilly briefly mentioned that as a follow up to a request by the CMAC at the last meeting, regarding leaving crab pots attended, that it was illegal to knowingly leave a pot in the water from January 1 through January 31. To prove that person knowingly left a crab pot in the water would be difficult.

Mr. Powers stated that having a period of time, during the off season for crab potting, set aside by regulation to allow the public to remove derelict pots might be a good idea.

Mr. O'Reilly informed the committee that at the last Commission meeting Mr. Robins asked the Commission for a regulatory review of the Blue Crab fishery. The Commission voted in favor of this review.

Mr. Robins elaborated on his reasons for asking to conduct this review which included that even though we have been achieving target levels of exploitation for blue crabs their abundances remain at very low level and thus are a concern for their future. He added that we need to take a step back and review existing management plans and management practices with both the scientific community and people involved in the fishery.

Mr. O'Reilly added that while this regulatory review should take precedence there a few items that the CMAC can continue to work on including agent use.

Mr. Powers stated that it is also be appropriate to continue to take up the issue of derelict crab pots.

Mr. Robins stated that over the next month a time line for review should be generated and a list of issues should be made over the next 3 to 4 months.

# V. Next Meeting Date

To be determined.

# VI. Adjournment

Meeting was adjourned at 8:51 PM.