



Atlantic States Marine Fisheries Commission

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MEMORANDUM

TO: Horseshoe Crab Management Board
FROM: Horseshoe Crab Advisory Panel
DATE: October 21, 2022
SUBJECT: Advisory Panel Input on Draft Addendum VIII

Background

The Advisory Panel (AP) met on October 13, 2022 to review Draft Addendum VIII for public comment and the public input that has been submitted during the comment period. The AP members also provided input to the Board on the proposed management options. This memo contains the opinions of individual advisors and does not represent a consensus opinion.

Advisory Panel Attendance: Brett Hoffmeister (Associates of Cape Cod Inc.), Allen Bergeson (Lonza), Nora Blair (Charles River Laboratories), David Meservey (Fisherman/Dealer), Christina Lecker (Fuji-Wako), Benjie Swan (Limuli Labs), George Topping (Fisherman)

Public: Sarah Blick (Associates of Cape Cod Inc.)

AP Comments Draft Addendum VIII

Staff reviewed Draft Addendum VIII and then presented metrics regarding public comment. The majority of the public comment was determined to be against moving forward with Addendum VIII and was largely compromised of eight separate form letters, though there were other individual comments.

The letters contained generalized statements about horseshoe crab and red knot populations such as “has not recovered” and “continued decline.” Some presented data that are not consistent with data presented by the ASMFC regarding red knot and horseshoe crab populations. Egg density and achieving the thresholds set in Addendum VII were also mentioned in more than one letter. Though one could argue the accuracy of the statements and data in the letters, the spirit of the letters was clear, reflecting a desire to protect female horseshoe crabs for the benefit of the crabs, the ecosystem and the red knot.

The attending members of the AP pointed out that this goal is consistent with that of the original ARM and that of the revised ARM. Reverting back to Addendum VI would not prohibit female harvest, in fact it would allow it in Maryland. Additionally, the original harvest packages were based on data that is over 10 years old and does not represent a science based, structured decision-making process that is utilized for species under management of the ASMFC. AP members expressed that the ARM was useful since inception, has provided protection of female crabs, and should continue to evolve as new technology, data and science presents itself.

Therefore, there was unanimous support among the advisors on the call for Option B to implement the 2021 ARM Revision for setting harvest specifications for Delaware Bay-origin crabs. Each of the bullets below summarizes the input of individual advisors.

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- The Board should adopt the revised ARM because it is science-based management and the best we have, and the science should not be ignored. Reverting back to Addendum VI would be going backward because we have so much more information now. Both options give the states similar amounts of harvest, just spread out a little differently. Sub-option B1 seems more reasonable and there is no need to round the optimal harvest output down by 50,000 crabs. It should be noted that reverting back to Addendum VI would also allow female harvest in Maryland.
- As someone who fishes for horseshoe crabs for biomedical and some for bait, it would be fine to open up a small amount female harvest for bait, but that it does not need to increase by a lot. 10,000-12,000 females for Maryland would not be a problem and would not harm the progress we have made. There have been large increases in the population in recent years; it is not in danger or being overfished but management should be cautious with it. Harvesting fewer females is working for the population and will keep it sustainable.
- Based on the data, supports Option B. Option A for no action would reduce bait harvest unnecessarily from current levels.
- Support for Option B, with no strong preference for either of the sub-options.
- Supports Option B to use the revised ARM to maintain sustainable harvest by using the best science. As a bait dealer in the northeast, this advisor sees demand for bait in the south. If the horseshoe crab harvest in the Delaware Bay region is cut back it will increase demand in the northeast, and he does not want to see that additional pressure on those populations.
- Although Addendum VIII is overwhelmingly unpopular with the public comments, this advisor thinks the ARM model has to be updated and the method for calculating the harvest specifications needs to evolve, therefore Option B is the most sensible. It could be helpful to limit the amount of female crabs harvested for bait because males are more abundant, but ultimately management should follow the science.
- The Board should not throw away the ARM Framework. Acknowledging the overwhelming opposition to the upgrade to the ARM from the public comments, this advisor has faith in the ARM and the science behind it and supports Option B. He is also concerned about the balloon effect on bait demand that the dealer mentioned if Delaware Bay bait harvest is reduced further. He was not opposed to the Board limiting females a bit more to be conservative, but at some point modest harvest is allowable based on the science. He also noted that reverting to Addendum VI would take quota off the table compared to current harvest, especially for Delaware and Maryland.

General Comments

Several advisors raised concerns about the weight carried by the form letters submitted as part of the public comments. They were concerned that the signatories did not actually have to understand what they were advocating for, they just had to sign and send the pre-written message. The process is much more complex than it is often described, and this oversimplification is not an accurate description of the model.

It was noted that states still have the ability to limit harvest in their respective waters, and can be more conservative than the Commission's management plan.

Several advisors agreed that population trends for horseshoe crabs appear to be favorable since the original ARM was implemented.

One advisor said they would like to see the Virginia Tech trawl survey run nighttime tows earlier in the year (late May – July) because they are seeing large numbers of juveniles at those times. They are everywhere, not just off Maryland, and that should be recorded by the survey.

This advisor also noted that more and more human development is being built on the beaches, and that means less access for birds and crabs on the beaches for foraging and spawning. Red knots do not like people around. The whole east coast is being developed on waterfronts, and that is taking up habitat. For this reason, we cannot only blame the horseshoe crab numbers for the red knots declines in these areas.

Two other advisors agreed with this comment, and added that when the red knot was listed as threatened, horseshoe crab egg availability was only one contributing factor, not the only contributing factor for the red knot status. Other threats, like disturbances to the birds while feeding, were also included.

One advisor who could not attend the meeting provided the following input by email:

The comments provided are interesting and highlight the potential nuances that could be considered for recommending Option B (e.g., what might be a scientifically reasonable number for settling on the amount of the female harvest; how best to manage regional shifts in demand for bait, etc). It is clear the ARM model has to be updated and the method for calculating the harvest specifications needs to evolve, and therefore unanimous AP support for Option B is not surprising and seems most sensible. But it is not clear how best to achieve that goal.

It is true there are multiple stressors on red knot populations, and the AP comments are spot on about this. There are additional key aspects of red knot decline such as the disturbance to birds and habitat from relentless coastal development. That must be kept in mind when discussing horseshoe crab harvest impacts and supporting management recommendations.

This advisor also strongly recommended there be a discussion about how to communicate and explain the gap between public opinion and that of the AP on Draft Addendum VIII, stating that it seems the biggest problem here is communication.