



# Atlantic States Marine Fisheries Commission

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*Healthy, self-sustaining populations for all Atlantic coast fish species or successful restoration well in progress by the year 2015*

## MEMORANDUM

October 23, 2013

**TO: Horseshoe Crab Management Board**

**FROM: Horseshoe Crab Technical Committee**

**SUBJECT: Proposed Listing of Red Knots Under the Endangered Species Act**

The United States Fish and Wildlife Service (FWS) recently published a Proposed Rule to list red knots (*Calidris canutus rufa*) as a threatened species under the Endangered Species Act (attached). Red knots depend on horseshoe crab eggs as fuel for their annual migration from South America to the Arctic. Because horseshoe crabs are managed to account for the dietary needs of shorebirds, the Horseshoe Crab Technical Committee (TC) discussed potential impacts and concerns with the Proposed Rule. The TC provides the following recommendations to the Horseshoe Crab Management Board:

***There were several aspects of the proposed rule that raised concern or required clarification. The TC recommends that the Board submit a public comment letter outlining these issues to the FWS.***

- The proposed rule expresses concern over the uncertainty of the future availability of horseshoe crab eggs. The TC feels that singling out the uncertainty in horseshoe crab eggs is inconsistent since the uncertainty of anything over the next 5-10 years is uncertain. The TC asserts that because the horseshoe crab stock is not being overharvested, there is some certainty that horseshoe crab eggs will be available in the future. In addition, the ARM Framework's purpose is to ensure that horseshoe crabs are not a limiting factor in the recovery of the red knot.
- The proposed rule expresses concern over the future of the Adaptive Resource Management (ARM) Framework due to insufficient funding for horseshoe crab surveys. While the TC has stated the Benthic Trawl survey is the best survey to support the ARM, a sound strategy has been developed to use the Northeast Area Monitoring and Assessment Program (NEAMAP) data for the 2014 modeling efforts for the 2015 fishery (due to a lack of funds to conduct the 2013 Benthic Trawl Survey). The ARM Working Group anticipates the continued use of the ARM Framework for management and is exploring the best available data sources (e.g. Benthic Trawl Survey, NEAMAP, state trawl surveys) for future use that does not jeopardize the model utility.
- The decline in horseshoe crab abundance is outlined as a factor which contributed to the red knots decline. However, the evidence put forth ("that commercial harvests caused horseshoe crab population declines in recent decades comes primarily from a strong temporal correlation between harvest levels and population levels") is based on the assumption that historical population data are adequate to characterize the range of historical population sizes. The TC recognizes that horseshoe crab harvest has contributed to overall lower abundance but the magnitude of this contribution is hard to define given uncertainty over the limitations of the historical crab population data.

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- Female horseshoe crab harvest in the Delaware Bay bait fishery has been prohibited since 2006. However, the proposed rule does not make this clear in discussions of egg availability or harvest pressure.
- Several assertions in the proposed rule are based on personal communications not supported by published data. The individuals who perform the Delaware Bay Egg Survey were not consulted, however comments evaluating survey data trends are provided in the document.
- Table 9 in the proposed rule does not outline the conversion between pounds and numbers of horseshoe crabs harvested. The TC, as well as other reviewers, will need to see those conversions to provide meaningful comment on the data.

***Apart from the above concerns, the TC agrees that listing the red knot is a positive action which will contribute to recovery of the red knot population and allow for increased funding to study the interactions between horseshoe crabs and red knots.***