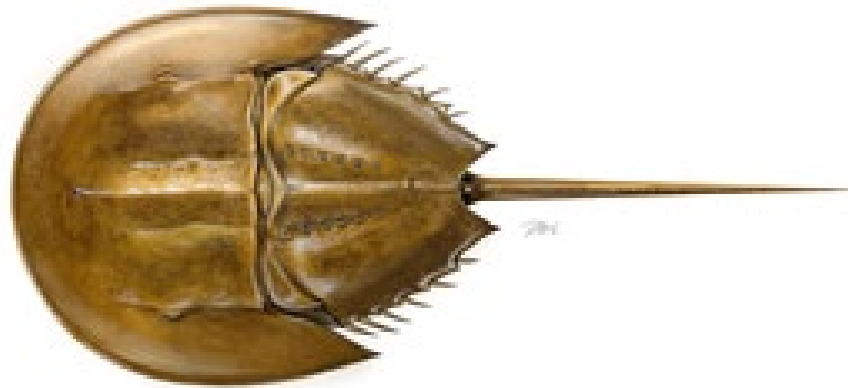


Draft Addendum IX on Multi-Year Specifications for Male-only Harvest in the Delaware Bay Region *for Board Consideration For Public Comment*



Horseshoe Crab Management Board
February 4, 2025

Outline



1. Background
2. Statement of the Problem
3. Proposed Action Timeline
4. Proposed Management Options
5. Next Steps
6. Board Action

Background



- 2021 ARM Framework Revision was adopted for management use in 2022 through Addendum VIII
 - Concern about female horseshoe crab harvest
- July 2024 Stakeholder workshop to generate recommendations for HSC management
 - **Consensus recommendation: pause female harvest while additional recommendations are addressed**

Statement of the Problem



- Board initiated Addendum IX to consider adding a specifications tool for the Delaware Bay region allowing the Board to set specifications for male-only harvest for multiple years.
 - Interim solution for no female harvest while other recommendations are addressed
 - Uses ARM Framework, but removes management decision about female harvest every year
 - Reduces committee workload to allow work on ARM Framework changes

Proposed Action Timeline



Date	Action
October 2024	Board initiated Draft Addendum IX
December 2024 -January 2025	PDT met to develop draft addendum
February 2025	Board meeting to consider Draft Addendum IX for Public Comment
<i>March 2025</i>	<i>Public hearings and comment period</i>
<i>May 2025</i>	<i>Board meeting to consider final approval of Draft Addendum VIII</i>

Issues Considered



Addendum addresses two issues:

1. Multi-year specifications for male-only harvest in the Delaware Bay region
2. Seasonal harvest restrictions in the Delaware Bay region

Issue 1: Draft Proposed Options



1. Multi-year specifications for male-only harvest in the Delaware Bay region
 - **Option A:** Status quo
 - **Option B:** Allow multi-year specifications for male-only harvest (maximum 3 years at a time)
 - **Sub-option B1:** No additional change
 - **Sub-option B2:** Reduce male harvest based on spawning sex ratio

Option A



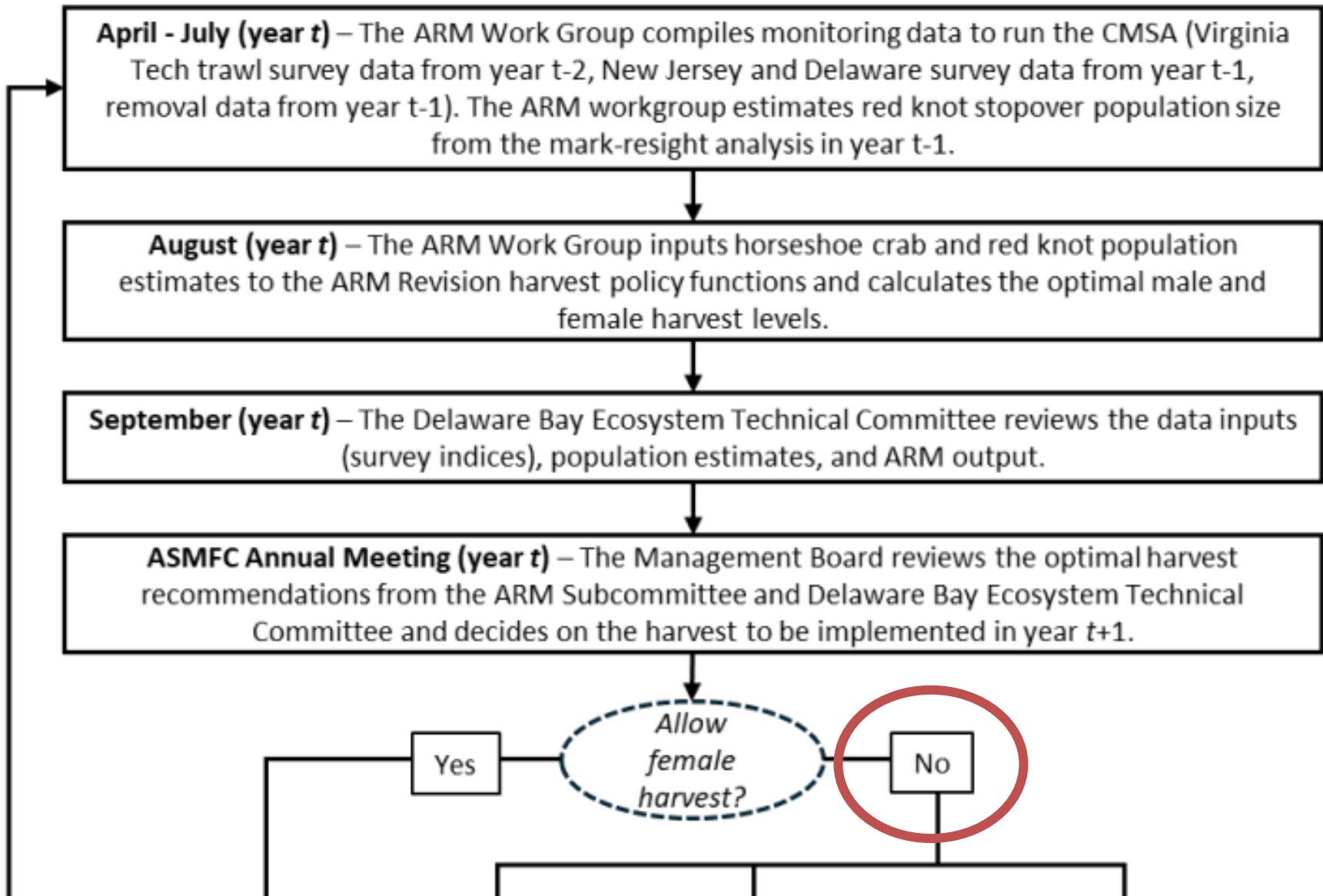
- **Status Quo:** maintain process for setting Delaware Bay harvest specifications established in Addendum VIII
 - Annually set specifications based on the ARM Framework output

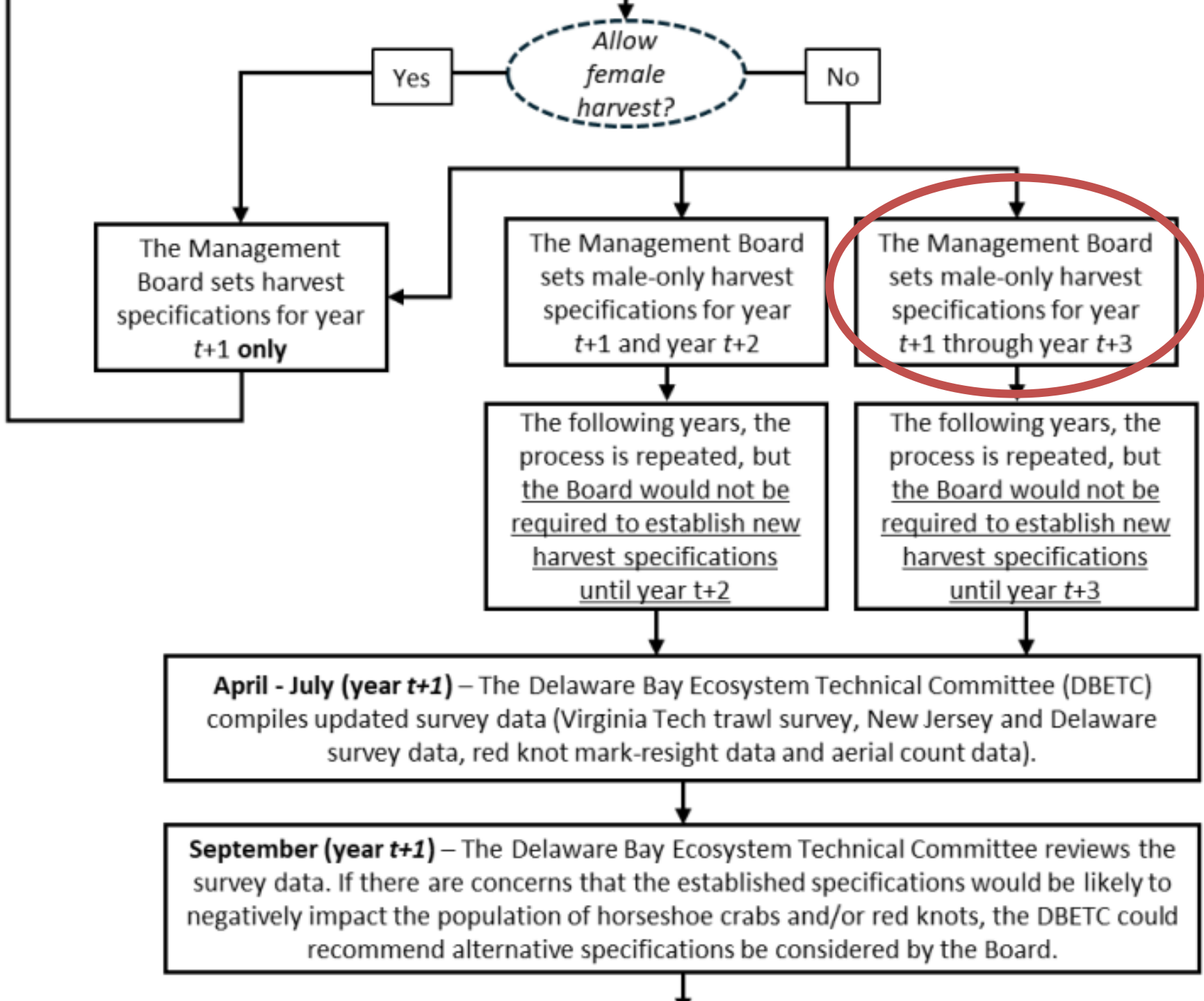
Option B



- **Allow multi-year specifications for male-only bait harvest for horseshoe crabs of Delaware Bay-origin**
 - The Board could choose to set male-only harvest at the same level for multiple years
 - Up to three years at a time
 - First year of multi-year harvest specifications would consider ARM Framework output
 - Different process in interim years
 - Would sunset after 2031

Option B Specifications Process





April - July (year $t+1$) – The Delaware Bay Ecosystem Technical Committee (DBETC) compiles updated survey data (Virginia Tech trawl survey, New Jersey and Delaware survey data, red knot mark-resight data and aerial count data).

September (year $t+1$) – The Delaware Bay Ecosystem Technical Committee reviews the survey data. If there are concerns that the established specifications would be likely to negatively impact the population of horseshoe crabs and/or red knots, the DBETC could recommend alternative specifications be considered by the Board.

ASMFC Annual Meeting (year $t+1$) – The Management Board reviews updated survey data and DBETC recommendations. If necessary, the Board can consider changing the harvest limits to be implemented in year $t+2$.



Yes

No

The Management Board sets harvest specifications for year $t+2$ **only**

The following year, the Board would review updated survey data, but not be required to establish new harvest specifications until year $t+3$

Draft Proposed Sub-options



1. Multi-year specifications for male-only harvest in the Delaware Bay region
 - **Option A:** Status quo
 - **Option B:** Allow multi-year specifications for male-only harvest (maximum 3 years at a time)
 - **Sub-option B1:** No additional change
 - **Sub-option B2:** Reduce male harvest based on spawning sex ratio

Draft Proposed Sub-options



Sub-option B1: No additional change to Option B

Draft Proposed Sub-options



Sub-option B2: Reduce male harvest based on spawning sex ratio

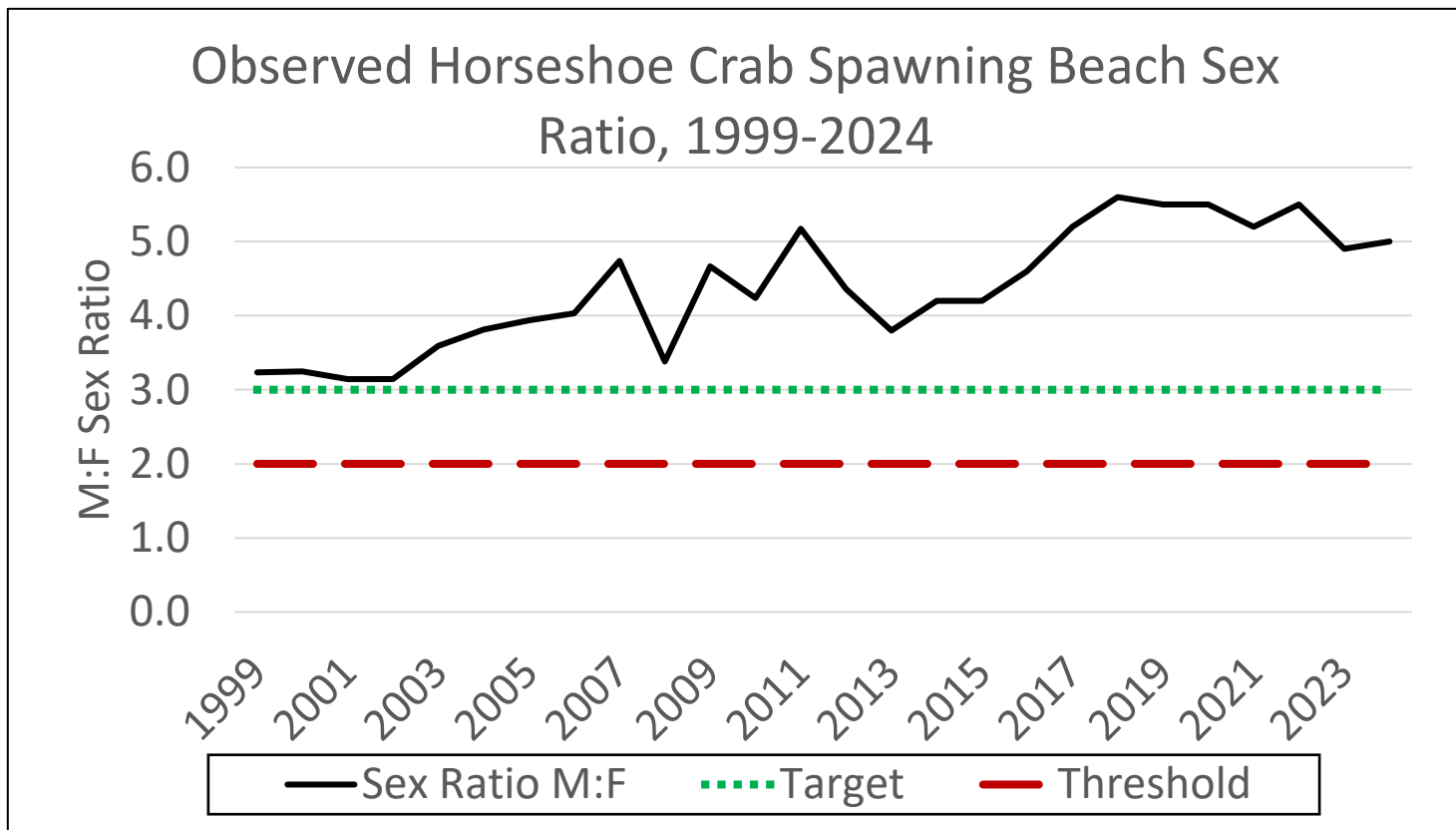
- Male harvest would be reduced if spawning sex ratio falls below 3:1 male:female
- Sex ratio is based on annual spawning beach surveys in Delaware Bay region
- Gradual decreases to maximum male harvest below 3:1 ratio

M:F Sex Ratio	Maximum Allowable Male Harvest
≥3.0 : 1	500,000
2.9 : 1	450,000
2.8 : 1	400,000
2.7 : 1	350,000
2.6 : 1	300,000
2.5 : 1	250,000
2.4 : 1	200,000
2.3 : 1	150,000
2.2 : 1	100,000
2.1 : 1	50,000
≤2.0 : 1	0

Sub-option B2



- Males do not limit horseshoe crab reproduction unless there are less than two males per female
 - 3:1 ratio is conservative and lower than the whole time series



Issue 2: Draft Management Options



2. Seasonal harvest restrictions in the Delaware Bay region

- **Option A: Status quo**
 - Maintains current season closure for Delaware Bay from Addendum III
- **Option B: Reestablish seasonal harvest restrictions of Addendum IV-VI**
 - Season closure inadvertently omitted from Addendum VII and VIII

Issue 2: Seasonal harvest restrictions



- Addendum III (2004):
 - New Jersey, Delaware and Maryland shall prohibit the harvest and landing of horseshoe crabs for bait from **May 1 through June 7, inclusive.**
- Addendum IV-VI (2006-2012):
 - prohibits directed harvest and landing of all horseshoe crabs **from January 1 through June 7** in New Jersey and Delaware, Maryland, and Virginia from federal waters
 - Sunset date of April 30, 2013
- Season inadvertently omitted from Addendum VII (2012) and VIII
 - Reverted to Addendum III

Option A



- **Status Quo: maintain current season closure**
 - Seasonal closure of Addendum IV-VI expired
 - Seasonal closure was not included in Addenda VII and VIII due to an oversight
 - Delaware Bay season closure reverted to Addendum III:
 - *New Jersey, Delaware and Maryland shall prohibit the harvest and landing of horseshoe crabs for bait from May 1 through June 7, inclusive.*

Option B



- **Reestablish seasonal harvest restrictions of Addendum IV-VI**
 - If adopted, this option would prohibit directed harvest and landing of all horseshoe crabs in New Jersey, Delaware, and Maryland from January 1 through June 7. It would also prohibit the landing of horseshoe crabs in Virginia from federal waters from January 1 through June 7.
 - Consistent with Board intent for Addendum VII

Next Steps



Date	Action
October 2024	Board initiated Draft Addendum IX
December 2024 -January 2025	PDT met to develop draft addendum
February 2025	Board meeting to consider Draft Addendum IX for Public Comment
<i>March 2025</i>	<i>Public hearings and comment period</i>
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Board Action

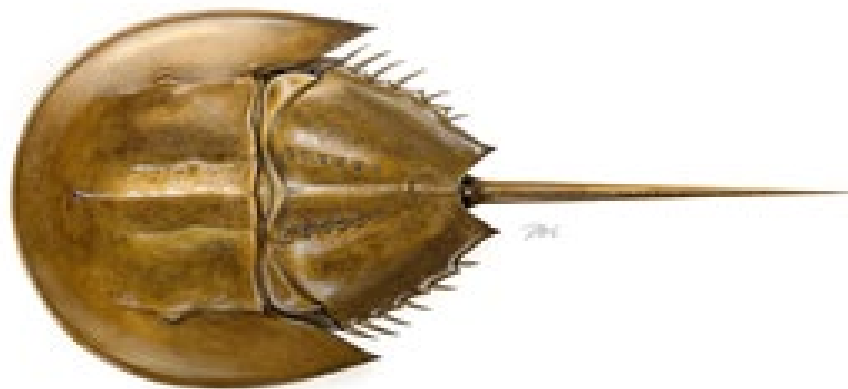


- Specify any changes to Draft Addendum IX for Public Comment
- Consider approval of Draft Addendum IX for public comment

Questions?



Horseshoe Crab Advisory Panel



Background



- July 2024 workshop on Delaware Bay management objectives
- Consensus recommendation:
 - Evaluate Horseshoe Crab Advisory Panel (AP) to determine if it has adequate representation across stakeholder groups. This may require adding seats to the panel for non-traditional stakeholders.

Current Composition



- State seats
 - 5 commercial harvesters (+4 vacant seats)
 - 5 biomedical industry
 - 1 processor/dealer
 - 2 conservation
- 2 non-traditional seats
 - Habitat
 - Conservation

Current Composition



State	Seat 1	Seat 2	Seat 3
MA	Commercial trawl	Biomedical	
RI	Vacancy (commercial)		
CT	None		
NY	Vacancy (commercial)	Conservation	
NJ	Commercial	Biomedical	
DE	Commercial pot	Conservation	
MD	Commercial trawl	Commercial trawl	Biomedical
VA	Processor/dealer	Biomedical	Vacancy (commercial)
NC	None		
SC	Biomedical	Vacancy (commercial)	
GA	None		
FL	None		
Non-traditional	Jeff Shenot (habitat)	Walker Golder (conservation)	

Recommendations



- Goal of approximately 5 commercial, 5 biomedical, 5 conservation seats
- Two non-traditional/conservation seats for Delaware Bay
 - Intent to have a Delaware Bay sub-group meet for Delaware Bay-specific issues
- States reach out to current appointees and evaluate membership
 - Provide nominations by end of March
- Once states establish memberships, staff can fill gaps via open solicitation process



Questions and Discussion