ASMFC Overview of American Eel Management

American Eel Symposium
Portland, Maine
October 25, 2015

Vision: Sustainably Managing Atlantic Coastal Fisheries
Overview

- Atlantic States Marine Fisheries Commission
- American Eel U.S. Atlantic Fishery
- U.S. Atlantic Stock Status
- Management Plan
- Future Directions
Who is ASMFC?

• Compact of all the Atlantic States
• Atlantic Coastal Fisheries Cooperative Management Act (1993)
• Jurisdiction in state waters 0-3 miles; rivers for diadromous species
• Management Board
  – 15 member states and two federal partners
• 3 Commissioners represent each state
Who is ASMFC?
Who is ASMFC?

• Technical Committees (17 members)

• Advisory Panels (17 members)

• Law Enforcement Committee (17 members)
ASMFC Process

Stock Assessment by Eel Technical Committee

Initiate Management by Eel Management Board

Eel AP and LEC Input

Public Input

Eel Management Board Decides Final Measures

States Implement Management Measures

ASMFC Checks States for FMP Compliance
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Eel Fishery

The graph shows the trend of landings and ex-vessel value of eel from 1950 to 2013. Landings are represented by green bars, while the ex-vessel value is shown by a black line. The landings exhibit a peak around 1977, followed by a decline and then a fluctuation until the late 2000s. The ex-vessel value follows a similar trend, with peaks around 1989 and 1998.
Eel Fishery

Average eel harvest 2010-2014 = 1.01 million lbs (459 MT)
## Glass Eel Fishery

<table>
<thead>
<tr>
<th>Year</th>
<th>Maine</th>
<th>South Carolina</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Landings</td>
<td>Value</td>
</tr>
<tr>
<td>2007</td>
<td>3,713</td>
<td>$1,287,485</td>
</tr>
<tr>
<td>2008</td>
<td>6,951</td>
<td>$1,486,355</td>
</tr>
<tr>
<td>2009</td>
<td>5,119</td>
<td>$519,559</td>
</tr>
<tr>
<td>2010</td>
<td>3,158</td>
<td>$584,850</td>
</tr>
<tr>
<td>2011</td>
<td>8,584</td>
<td>$7,653,331</td>
</tr>
<tr>
<td>2012</td>
<td>20,764</td>
<td>$38,760,490</td>
</tr>
<tr>
<td>2013</td>
<td>18,076</td>
<td>$32,926,991</td>
</tr>
<tr>
<td>2014</td>
<td>9,690</td>
<td></td>
</tr>
</tbody>
</table>

- Only ME and SC have fisheries. SC data confidential
- Gears are dip nets and fyke nets
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2012 Stock Assessment

- Composite Relative Index of Abundance for Yellow Eels
2012 Stock Assessment

- Depletion Based Stock Reduction Analysis
2012 Stock Assessment

- Based on trend analysis and DB-SRA, American eel stock status is depleted.
- Assessment Passed External Peer Review
- Recommendation to reduce fishing mortality on all life stages
- Management Board initiates Addendum III and Addendum IV
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American Eel Fishery Management

- Fishery Management Plan (2000)
- Addendum I (2006)
- Addendum II (2008)
- Addendum III (2014)
- Addendum IV (2015)
Glass Eel Fishery Regulations

- All states must implement YOY survey (2000)
- Only glass eel fisheries allowed in ME and SC (2000)
- Max of 25 pigmented eels in one pound of glass eels. Use 1/8” mesh to grade eels (2014)
- Maine self imposed voluntary quota of 11,479 lbs (2014)
- Maine glass eel quota of 9,688 lbs w. payback (2015)
- Maine implements swipe card monitoring program for daily reporting (2014/2015):
  - Harvester to dealer
  - Dealer to dealer
  - Export out of state
- Maine required to implement life cycle survey (2015)
Fishery Management Plan

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Results of Annual Compliance Review for 2014:

**Maine and South Carolina in Compliance**
Yellow Eel Fishery Regulations (both Com and Rec)

- All states must maintain regulations (2000)
- Increase in minimum size to 9” (2014)
- ½” x ½” min mesh size for yellow eel pots
- Allowance of 4x4” escape panel of ½” x ½” mesh
- Recreational 25 fish bag limit per day per angler
- Crew and Captain allowed 50 fish bag limit per day
- Coastwide harvest cap of 907,671 which is 1998-2010 average harvest (2015)
- State by State allocation triggered if quota exceeded by 10% in one year or by any amount for two years.
- State by state quota requires payback and allows transfers
Fishery Management Plan

Yellow Eel Fishery Regulations (both Com and Rec)

- All states must maintain regulations (2000)
- Increase in minimum size to 9” (2014)
- ½” x ½” min mesh size for yellow eel pots
- Allowance of 4 x 4” escape panel of ½” x ½” mesh
- Recreational 25 fish bag limit per day per angler
- Crew and Captain allowed 50 fish bag limit per day
- Coastwide harvest cap of 907,671 which is 1998-2010 average harvest (2015)
- State by State allocation triggered if quota exceeded by 10% in one year or by any amount for two years.
- State by state quota requires payback and allows transfers

Results of Annual Compliance Review for 2014:

- Delaware out of Compliance 😞
- All others in Compliance 😊

Delaware out of Compliance

All others in Compliance
Yellow Eel Fishery Regulations (both Com and Rec)

- All states must maintain regulations (2000)
- Increase in minimum size to 9” (2014)
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- State by State allocation triggered if quota exceeded by 10% in one year or by any amount for two years.
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Out of Compliance Process

- Report inconsistencies to Management Board
- Board finds state out of compliance
- ASMFC submits letters to DOC and DOI within 10 days
- DOC/DOI review whether management measures were necessary to the conservation of the resource within 30 days
- DOC agreed that DE was out of compliance
- Moratorium in DE waters starting March 18, 2016 unless demonstrate compliance prior to
Silver Eel Fishery Regulations

- All states must maintain regulations (2000)
- Seasonal closure from Sept 1 – Dec 31, no take except from baited pots/traps and spears (2014)
- One year exemption for weir fishery in Delaware River and its tributaries in NY (2014)
- NY weir fishery exemption continued, but restricted to 9 permits that may be transferred (2015)
Silver Eel Fishery Regulations

- All states must maintain regulations (2000)
- Seasonal closure from Sept 1 – Dec 31, no take except from baited pots/traps and spears (2014)
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Results of Annual Compliance Review for 2014:

All in Compliance 😊
Fishery Management Plan

Other Management Measures

• Trip level reporting by both harvesters and dealers at least monthly

• Sustainable fishery management plans:
  – Fishing Mortality Plan
  – Transfer Plan quota from yellow to glass
  – Aquaculture Plan: 200 pounds of glass eels if can demonstrate watershed contributes minimally to spawning stock

• All plans must scientifically demonstrate that they will not increase overall fishing mortality
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Future Directions

- Monitoring potential CITES appendix II listing
- Monitoring state compliance with FMP
- Implementation and review of Maine Life Cycle Survey
- 5 year trigger for stock assessment in 2017