

DMF proposal to extend the moratorium for an additional three years on river herring harvest, sale and possession through 2011

(322 CMR 6.17).

**MASSACHUSETTS MARINE FISHERIES ADVISORY COMMISSION
APPROVES NEW REGULATIONS (November 9, 2005)**



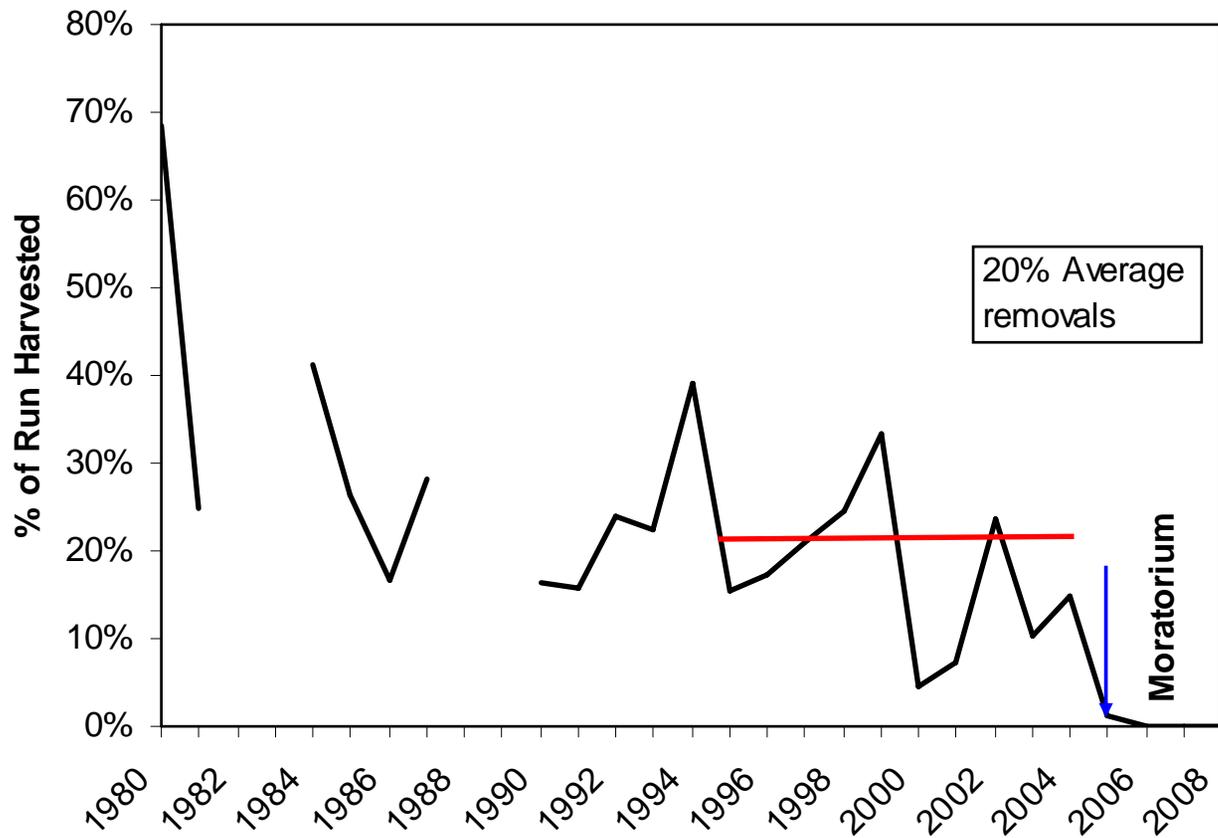
**Three-Year River Herring Moratorium on Harvest, Possession, & Sale
(322 CMR 6.17):**

In response to recent drastic declines of many river herring spawning runs, the harvest, possession or sale of river herring in the Commonwealth or in the waters under the jurisdiction of the Commonwealth by any person is prohibited through 2008.

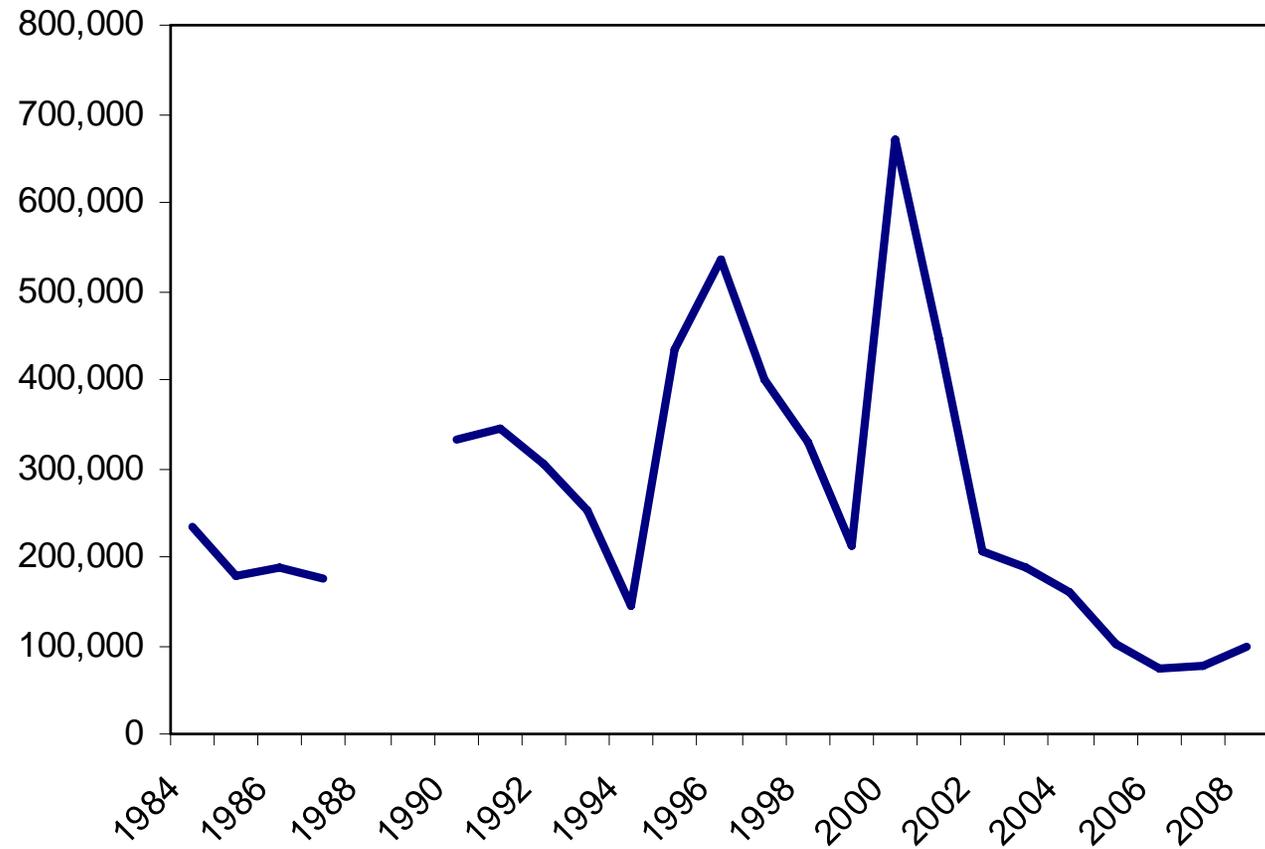
Responses to Decline

- ✓ Vigorous enforcement
- ✓ Continue monitoring run strength
- ✓ Develop video monitoring
- ✓ Biological characterization of major runs
- ✓ Monitoring and quantification of river herring by-catch in pelagic fisheries
- ✓ Conducting a Massachusetts stock assessment for river herring, and leading the coast-wide assessment
- ✓ Working with ASMFC to implement amendments (public hearings coming up Dec 1 & 2)

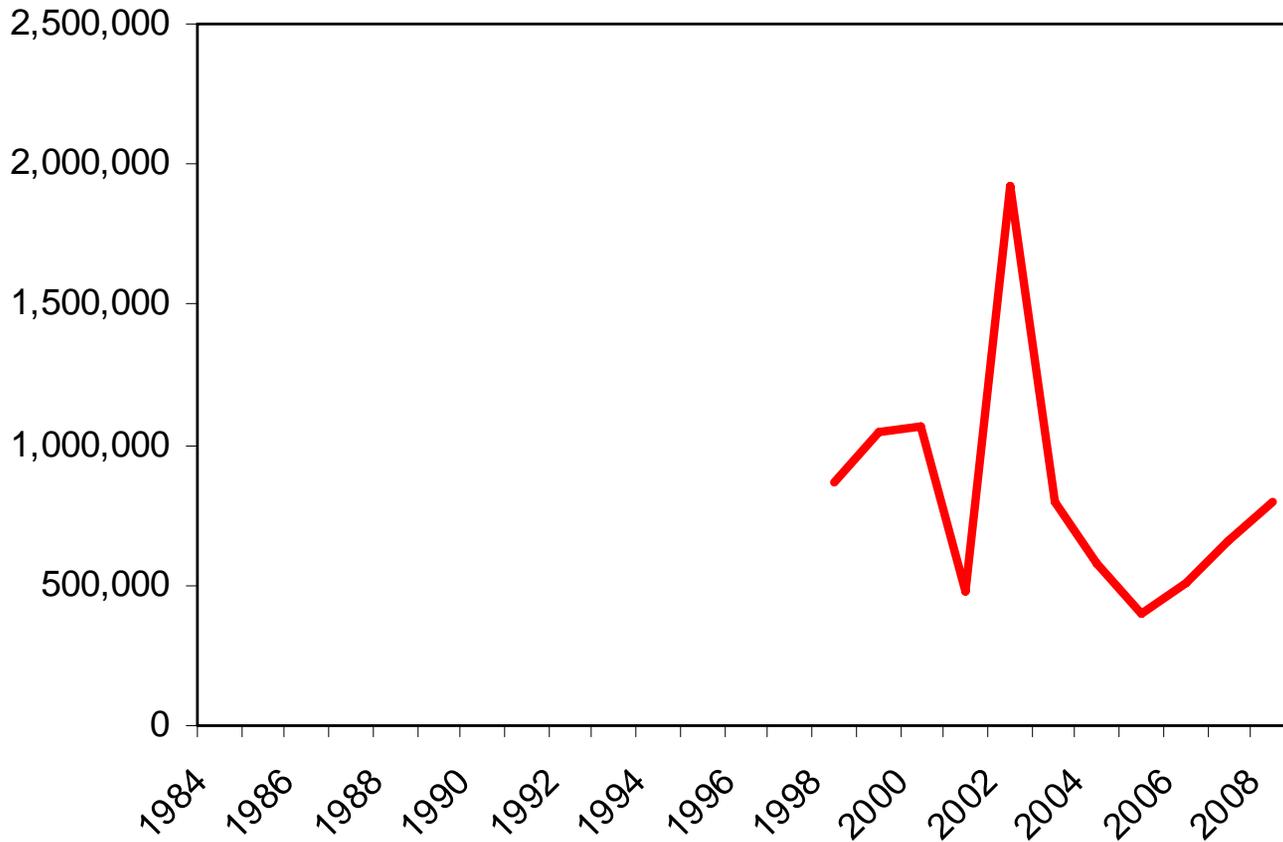
% Harvest from Monument River



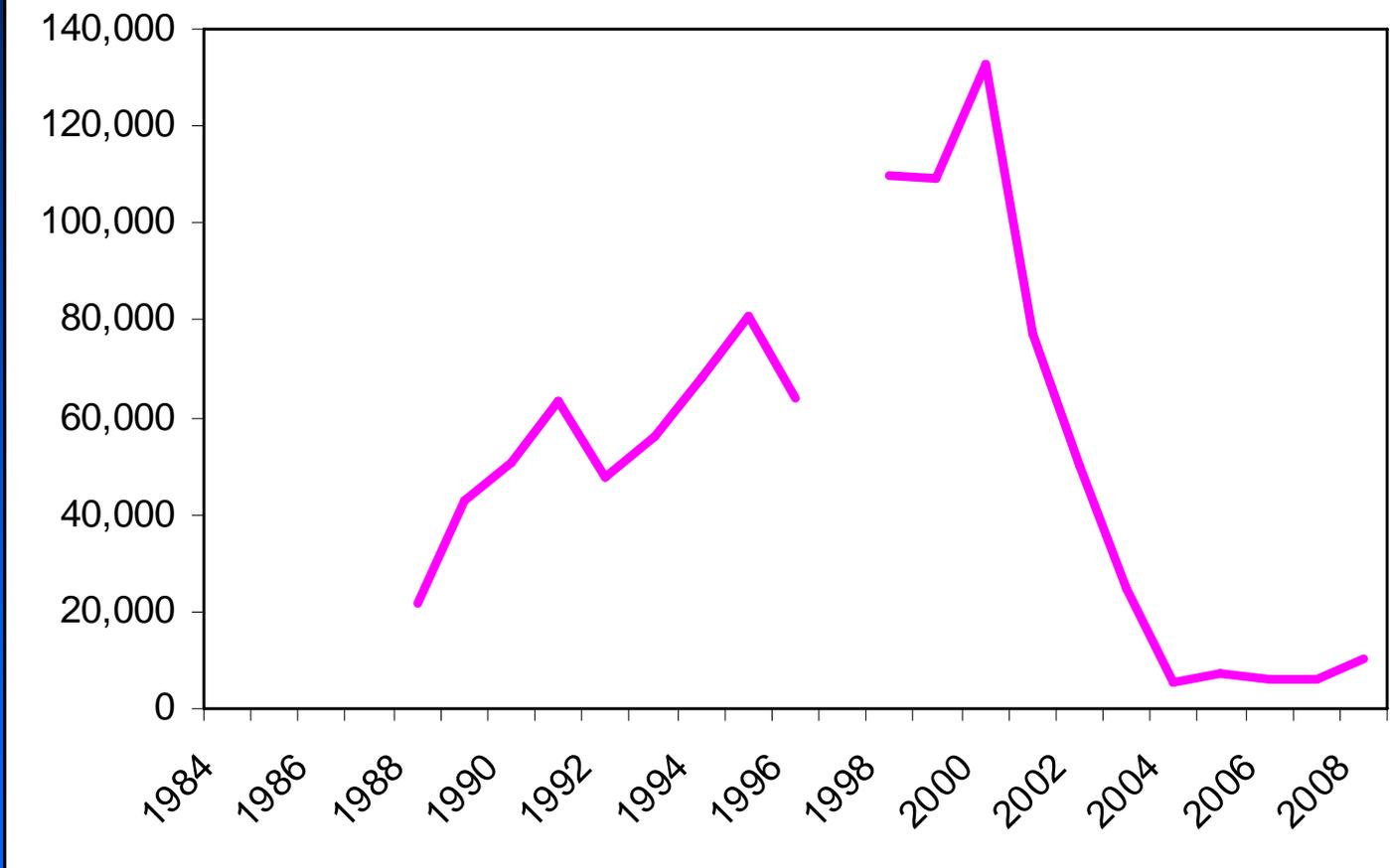
Monument River Counts



Nemasket River Counts



Mattapoisett River Counts



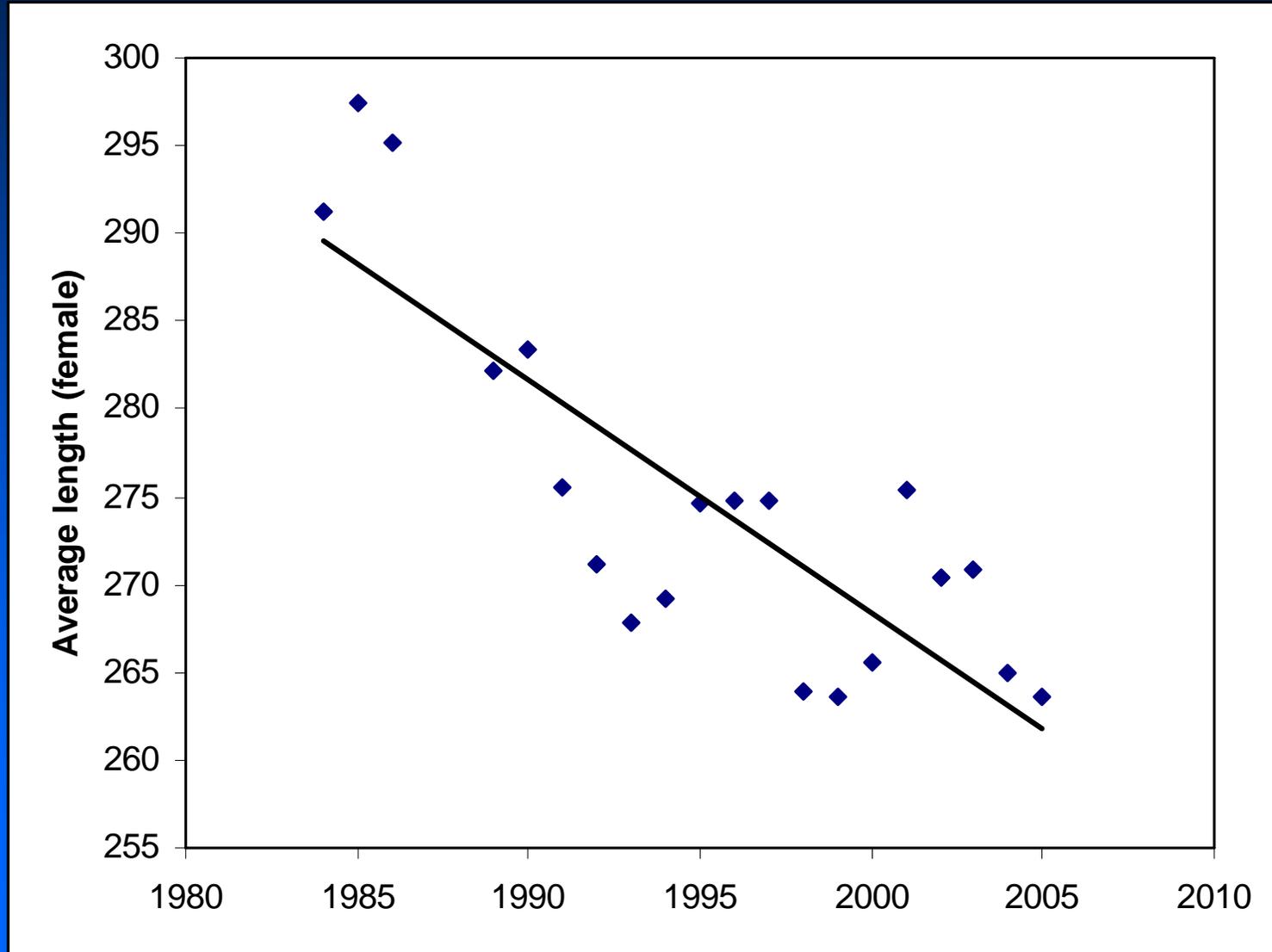
Summary of Count Data

- Declines from 2002 to 2005
- Stabilized at low levels
- Slight increases in 2008

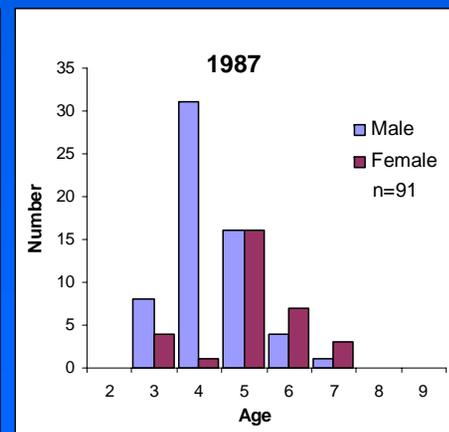
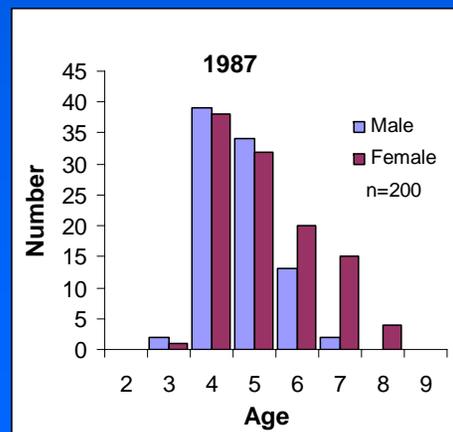
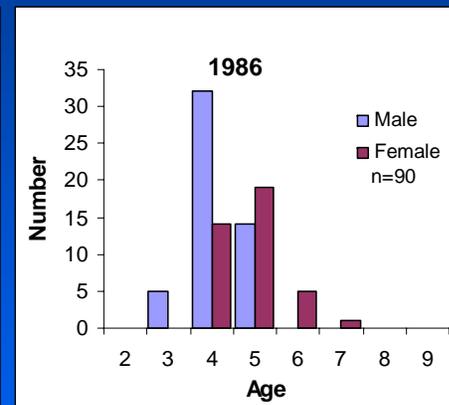
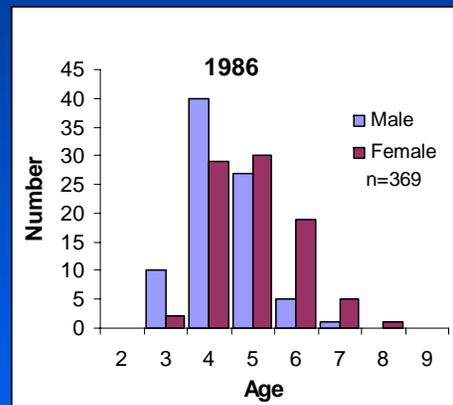
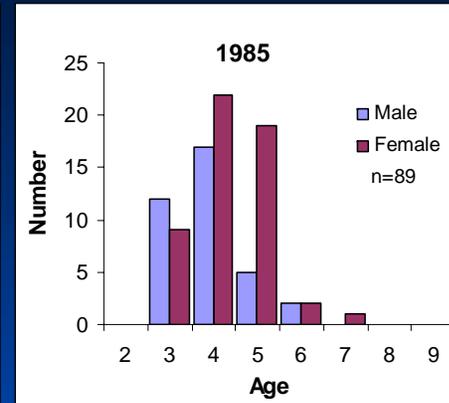
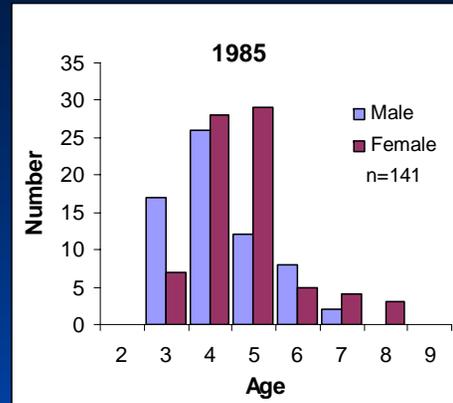
Information from Local Wardens and Resource Officers

- **Most runs remain at low levels or have shown slight increases**
- **Consensus is that runs should remain closed**

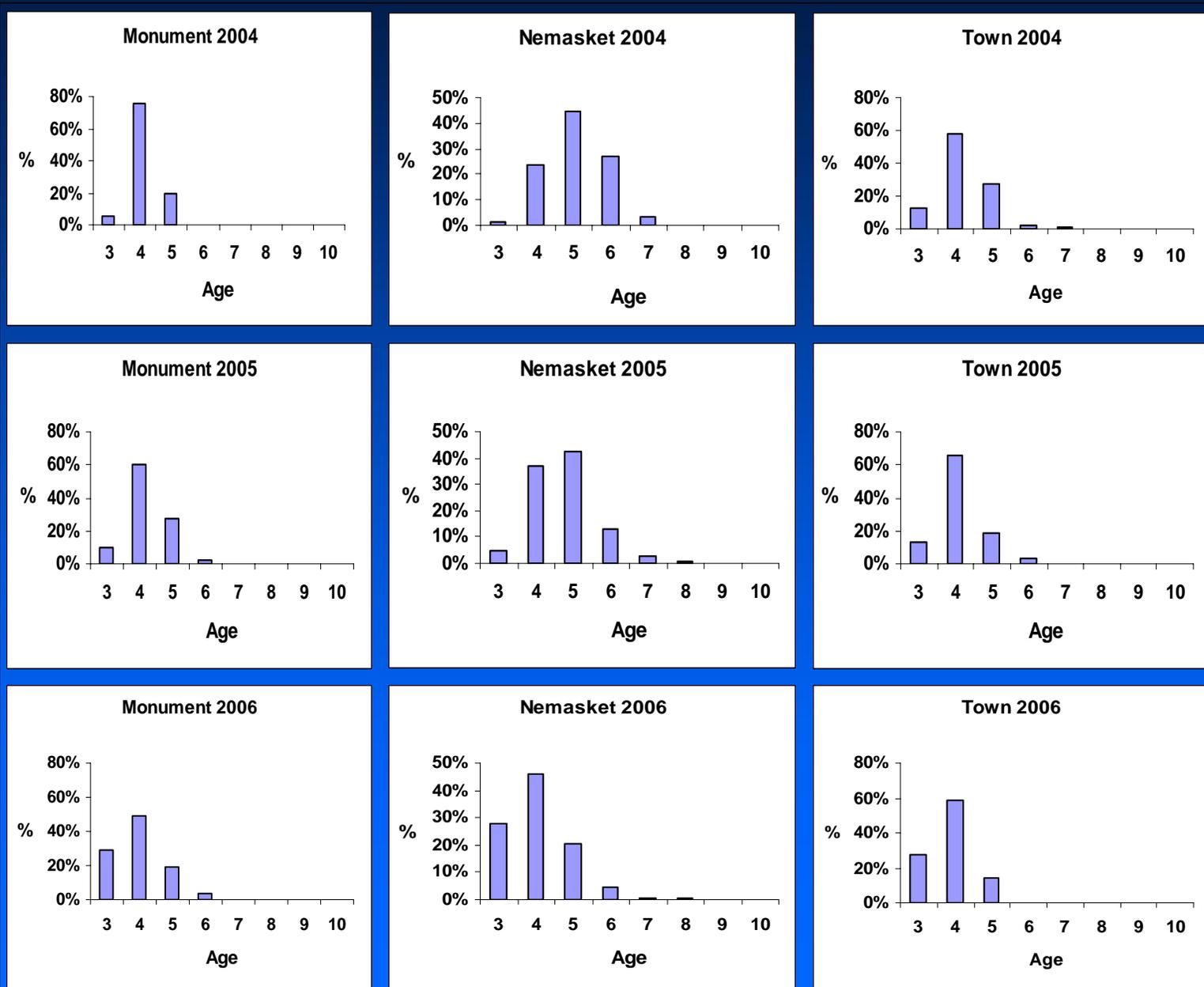
Change in Length of Monument River Alewives



Historic Age Structure of River Herring in the Monument River

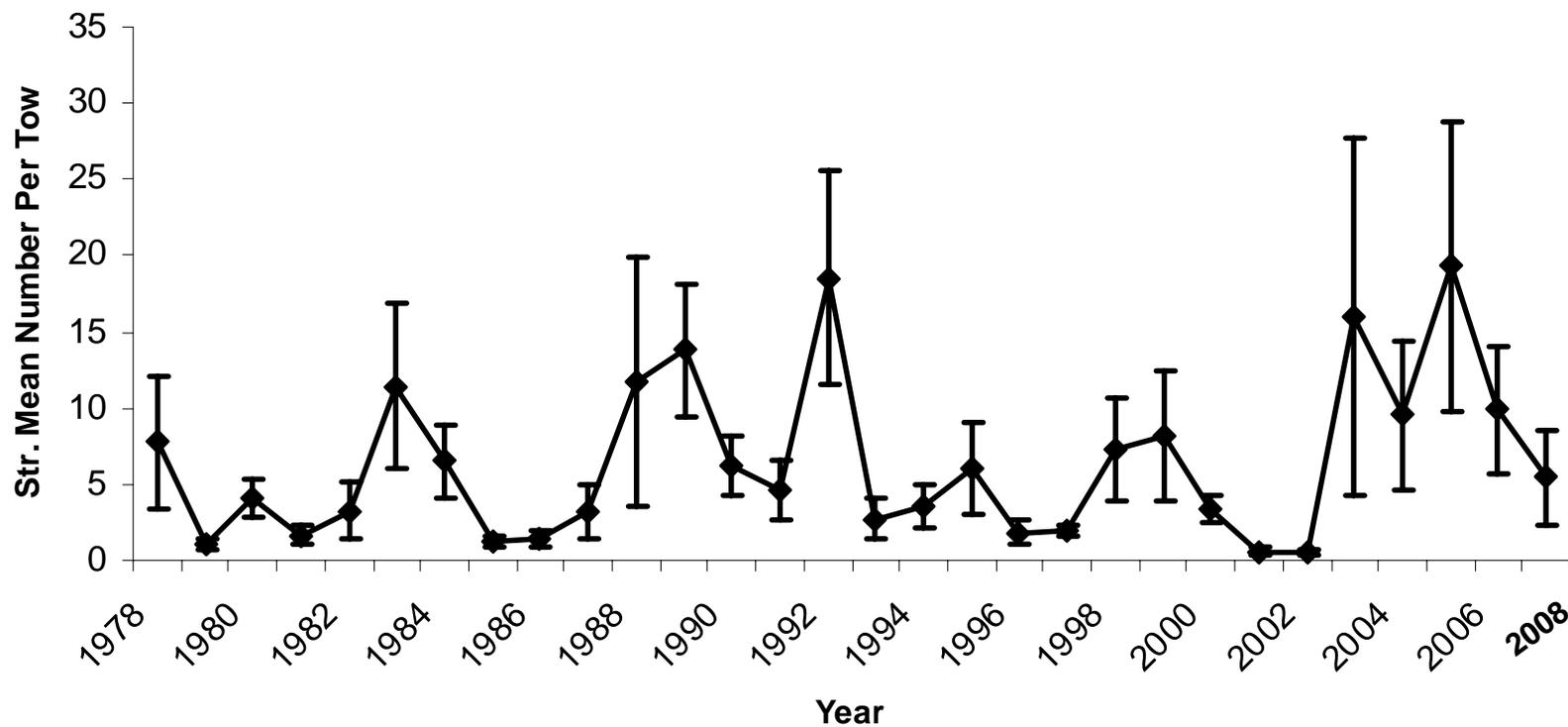


Contemporary Age Structure of Alewives in Massachusetts Rivers



Massachusetts Inshore Trawl Survey Index

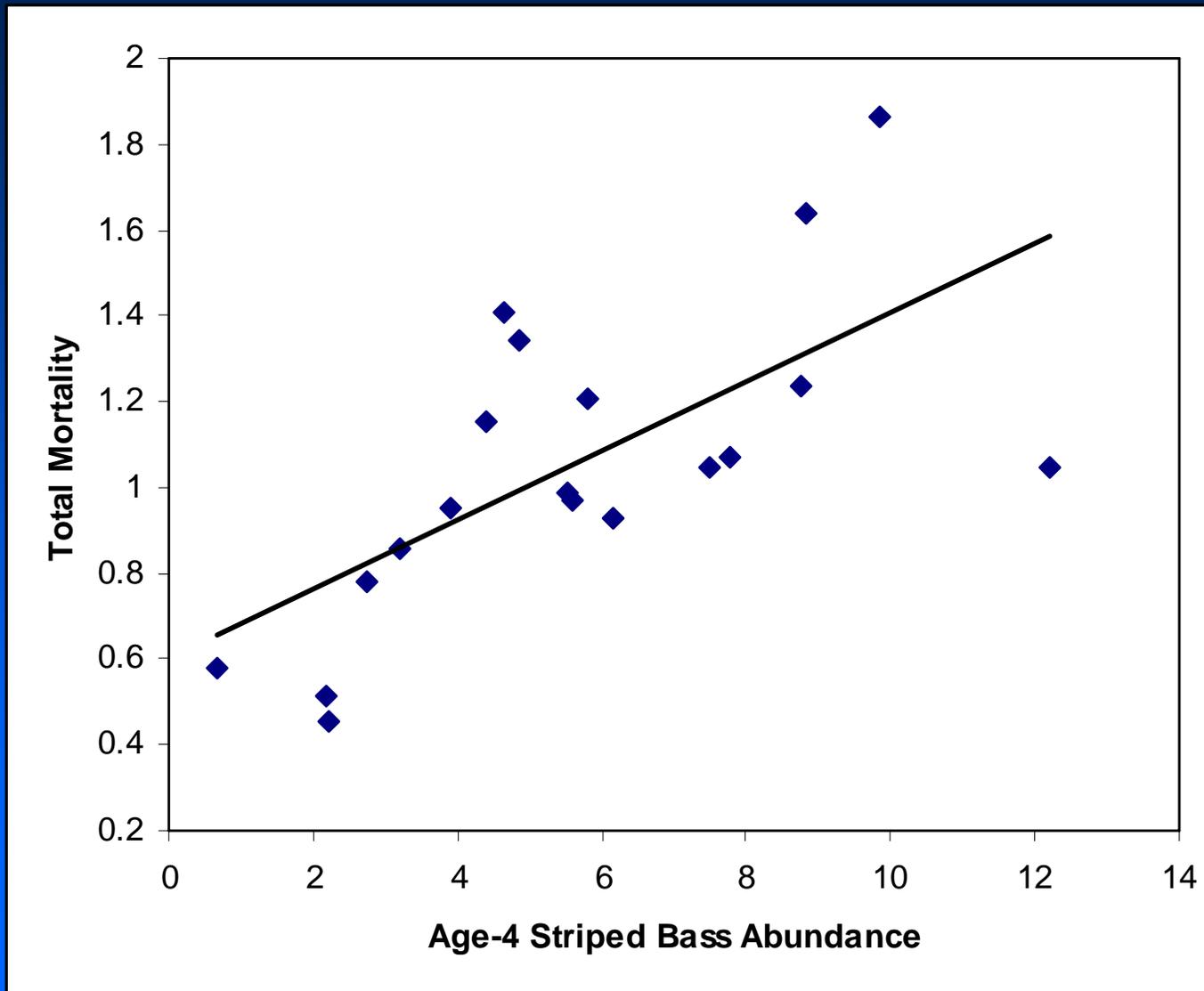
Alewife - Age 1 (8-16 cm)
North of Cape Cod



Possible Causes of the River Herring Decline

- Overfishing
 - Legal harvest
 - Poaching
 - By-catch in trawl fisheries
- Predation
 - Striped bass, seals, commorants, etc
- Spawning ground alteration
 - Water withdrawals, lack of access, eutrophication
- Unknown environmental factors affecting recruitment or growth

Alewife mortality vs. striped bass abundance



By-Catch in Pelagic Fisheries

- Report to be released to the ASMFC River Herring Stock Assessment Committee in October
- Preliminary estimates do not indicate by-catch as the sole cause of river herring decline

Recommendation

- Continue moratorium for 3 more years to allow building of spawning biomass of 4-6 year old fish