Research Priorities and Recommendations to Support Interjurisdictional Fisheries Management

BLUEFISH

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Fishery-Dependent Priorities

High
- Evaluate magnitude and length frequency of discards from the commercial and recreational fisheries.
- Collect size and age composition of the fisheries by gear type and statistical area.\(^1\)
- Target commercial (especially in the northeast region) and recreational landings for biological data collection when possible.\(^4\)
- Initiate fisheries-dependent sampling of offshore populations of bluefish during the winter months.

Fishery-Independent Priorities

High
- Increase sampling frequencies when bluefish are encountered, especially when medium size fish are encountered.\(^4\)
- Evaluate fishery-independent surveys to determine if the state surveys can be combined or coordinated to yield broader temporal and spatial representation of the stock.\(^2\)
- Initiate fisheries-independent sampling of offshore populations of bluefish during the winter months.

Low
- Initiate a coastal surf-zone seine study to provide more complete indices of juvenile abundance.

Modeling / Quantitative Priorities

High
- Test the sensitivity of the bluefish assessment to assumptions concerning age varying M, level of age 0 discards, and selection patterns.
- Evaluate measures of CPUE under different assumptions of effective effort to allow evaluation of sensitivity of results.

\(^1\) A biological sampling program has been implemented for states that accounted for >5% of the coast wide bluefish harvest between 1998-2008. See Addendum 1 to Amendment 1 of the ASMFC Bluefish FMP.

Low
• Explore alternative methods for assessing bluefish, such as length based and modified DeLury models.

Life History, Biological, and Habitat Priorities
High
• Conduct research on oceanographic influences on bluefish recruitment, including information on migratory pathways of larval bluefish.

Moderate
• Study tag mortality and retention rates for American Littoral Society dorsal loop and other tags used for bluefish.
• Conduct studies on interactive effects of pH, other environmental variables, and contaminants on various biological and sociological parameters such as reproductive capability, survival, genetic changes, and suitability for human consumption.
• Initiate research on species interactions and predator-prey relationships.

Low
• Continue work on catch and release mortality.³

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