

Research Priorities and Recommendations to Support Interjurisdictional Fisheries Management

SPOTTED SEATROUT

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Fishery-Dependent Priorities

High

- Collect data on the size and age of spotted seatrout released alive by anglers and the size and age of commercial discards.
- Increase observer coverage in states that have a commercial fishery for spotted seatrout.
- Expand the MRIP to assure adequate data collection for catch and effort data, increase intercepts, and include state add-ons of social and economic data needs.

Moderate

- Collection of commercial and recreational landings data should be continued and expanded.
- Improve precision of effort reporting through commercial trip ticket programs.

Fishery-Independent Priorities

High

- Develop state-specific juvenile abundance indices.
- Initiate fishery-independent surveys of spotted seatrout.
- Emphasis should be placed on collecting the necessary biological data to be able to conduct stock assessments and to assist in drafting fishery management plans.

Modeling / Quantitative Priorities

High

- Utilize age structure analyses by sex in stock assessments.
- Conduct state specific stock assessments to determine the status of stocks relative to the plan objective of maintaining a spawning potential of at least 20%.
- Provide state specific batch fecundity estimates for use in stock assessments.¹

Life History, Biological, and Habitat Priorities

High

- Identify essential habitat requirements.
- Evaluate effects of environmental factors, especially cold winters, on spawning frequency and stock density.
- Continue work to examine the stock structure of spotted seatrout on a regional basis, with particular emphasis on advanced tagging and molecular techniques.²

¹ South Carolina fecundity information available in Roumillat and Brouwer (2002).

- Conduct telemetry tagging surveys to provide precise estimates of mortality attributed to winter kills.³

Management, Law Enforcement, and Socioeconomic Priorities

High

- Initiate collection of social and economic aspects of the spotted seatrout fishery.

² Masters project in progress examining the genetic structure of spotted seatrout along the Atlantic coast and the effects of winter conditions on genetic diversity of spotted seatrout.

³ Masters project in progress examining lethal temperature thresholds of spotted seatrout.