

Research Priorities and Recommendations to Support Interjurisdictional Fisheries Management

BLACK DRUM

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Fishery-Dependent Priorities

High

- Obtain better estimates of harvest from the black drum recreational fishery, especially in states with short seasons. Obtain better coverage of shore and nighttime anglers.¹
- Conduct studies to estimate catch and release mortality estimates.
- Increase spatial and temporal coverage of age samples collected regularly in fishery-dependent sources.
- Conduct a high reward tagging program to obtain improved return rates.

Moderate

- Obtain better estimates of bycatch of black drum in other fisheries, especially juvenile fish in South Atlantic states.

Fishery-Independent Priorities

High

- Increase spatial and temporal coverage of age samples collected regularly in fishery-independent sources.
- Prioritize collection of adult age data from fishery-independent sources in states where maximum size regulations preclude the collection of adequate adult ages.
- Expand existing fishery-independent surveys temporally and spatially to better cover black drum habitats, especially adult fish.
- Continue to collect and analyze current life history data from fishery-independent programs, including full size, age, maturity, histology workups and information on spawning season timing and duration. Any additional data that can be collected on adult black drum would be highly beneficial.

Modeling / Quantitative Priorities

High

- Obtain estimates of selectivity-at-age for black drum through observer programs or tagging studies.

¹ Nighttime sampling of anglers implemented in the Marine Recreational Information Program (MRIP) beginning in 2013.

Life History, Biological, and Habitat Priorities

High

- Conduct studies to estimate fecundity-at-age coastwide and to estimate batch fecundity, especially for adults in South Atlantic.
- Analyze existing otoliths that have been collected but not aged.
- Conduct otolith microchemistry studies to identify regional recruitment contributions.
- Continue and expand current tagging programs to obtain mortality and growth information and movement-at-size data.
- Conduct new and expand existing acoustic tagging programs to help identify spawning and juvenile habitat use and regional recruitment sources.
- Collect genetic material (i.e., create “genetic tags”) over long time span to obtain information on movement and population structure and potentially estimate population size.