

Optimizing fishing regulations for New Jersey's multi-species recreational bottom fishery to improve economic outcomes and angler satisfaction

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Marine recreational fishing is a popular activity that provides significant socioeconomic benefits to coastal communities in New Jersey. Optimal management of marine fishery resources is critical for the sustainability of both these resources and the fishing industry. Currently, fishery managers in New Jersey must make management decisions with limited data about recreational anglers' preferences for different regulatory options or the economic consequences of those decisions. In New Jersey's marine recreational bottom

fishery, anglers make decisions based on (among other factors) the fishing opportunities available across a suite of species including summer flounder, black sea bass, tautog, and scup. Thus, regulations for each species in the fishery have important cumulative and interacting effects. Without a quantitative understanding of how anglers weigh these different fishing opportunities when making fishing decisions, we have little hope of achieving regulations that maximize benefits while still remaining within overall harvest limits.

The goal of this research is to improve understanding of the preferences, behaviors, and motivations of marine recreational anglers in New Jersey in order to inform harvest regulations for

the multispecies recreational bottom fishery. To this end, researchers will survey anglers using a technique called "choice experiments," in which anglers are offered a choice of hypothetical fishing trips which differ in a combination of management options (e.g., open seasons, minimum landing sizes, slot and possession limits). The use of choice experiments will allow researchers to identify angler preferences when trade-offs are inevitable. Researchers will compare anglers' stated preferences from the choice experiments with participation rates on party boats before and after the dates of key regulation changes. The results will be directly relevant to informing future fishery management decisions that promote the sustainability of both marine fishery resources and the fishing industry that depends on these resources.

