

STUDY TITLE: Boating Uses, Economic Significance, and Information Inventory for North Carolina's Offshore Area, "The Point."

REPORT TITLE: Boating Uses, Economic Significance, and Information for North Carolina's Offshore Area "The Point." Volume I: Characterization of Recreational and Commercial Fisheries at "The Point"- Offshore North Carolina

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BACKGROUND: North Carolina's position on the east coast, along with the shape and structure of its coastline, and its extensive estuarine system create a diversity of fishing opportunities for the state's fishers. Geographically, North Carolina's coastline is unique compared to other east coast states. Three "capess" (Cape Hatteras, Cape Lookout and Cape Fear) protrude from the mainland. A "bay" or scalloped feature in the coastline (Figure 1) separates each of these capes and sandy shoals extend into the Atlantic for about 20 miles off each cape. The shoals provide shallow-water habitat far offshore and affect coastal currents. These shallow shoals are partly responsible for North Carolina's reputation as the "Graveyard of the Atlantic." The many shipwrecks, artificial reefs, natural rock formations and live bottoms that exist offshore, provide habitat for invertebrates and fishes. Fishers seeking bottomfish and structure orienting pelagics often target these areas.

The northern-most cape, Cape Hatteras, projects eastward into the Atlantic Ocean making it the land-mass closest to the Gulf Stream anywhere north of Florida. This

proximity to the Gulf Stream supports large recreational and commercial fisheries for highly desirable pelagic species. A growing offshore charter boat industry has operated on the outer banks since 1937 (Cleveland, 1984), targeting bluewater gamefish such as billfish, tunas, wahoo and dolphin. An ever-growing private boat fleet also seeks the same species.

North of Cape Hatteras, approximately 30 miles east of the town of Salvo, exists a steeply sloping bathymetric feature known as *The Point*. In this area, the southward flowing coldwater Labrador Current meets the northward flowing, warmwater Gulf Stream. The Gulf Stream, one of the largest and most powerful ocean currents, originates in the Gulf of Mexico and generally tracks the 100 fathom (183 m) curve along the east coast of the United States until it reaches the Cape Hatteras area off North Carolina, where it begins a northeastward flow across the Atlantic Ocean. Although the Gulf Stream meanders unpredictably, this northeastward bend generally occurs in the vicinity of *The Point*.

OBJECTIVES: The purpose of this study was to determine the geographic extent of the area known as *The Point*; to identify and characterize the primary users of *The Point*, and to determine the extent of, and seasonality of their use.

DESCRIPTION: To accomplish the objectives of this study, a four pronged approach was chosen. First, the likely users of the area were determined by contacting resource agencies and fishers who were known to use the area extensively. Recreational and commercial fishers were identified as the primary user groups. Second, a directed survey was designed to define the area and estimate the use and seasonality of use by commercial fishers and charter boat captains. Thirdly, data from the National Marine Fisheries Service (NMFS), Marine Recreational Fishing Statistics Survey (MRFSS) were obtained to augment the charter boat survey and to characterize the use by private boaters. And fourth, data from the N.C. Division of Marine Fisheries' Trip Ticket Program (TTP) were obtained to augment the survey of commercial fishers. A large portion of the commercial and recreational offshore fishing effort on North Carolina's northern outer banks takes place near *The Point*. For reasons that are not totally understood, this area aggregates and holds a diverse assemblage of fish for a large part of the year. Commercially, these fishes tend to be species of high value like tunas, dolphin, king mackerel, swordfish, and sharks and Dare County commercial catches of offshore species dominate the state's landings. Many of these same species, along with billfish, are highly prized by recreational anglers for their size, strength and food value and catches from Manteo area charter and private boats also dominate the State's recreational landings.

SIGNIFICANT CONCLUSIONS: Although our knowledge of the region called *The Point* needs to be more complete, we now have a good idea of the geographical extent of this area used so extensively by recreational and commercial fishers. We have determined that *The Point* is effectively a large area defined perhaps by the interaction of poorly understood biological and oceanographic parameters. We also have a better idea of the extent and timing of the fisher's use. And we know what species of fishes attract

fishers to the area. With the appropriate economic data, we may now be able to estimate the impact that recreational fishing at *The Point* has on the outer bank's economy.

STUDY RESULTS: A large portion of the commercial and recreational offshore fishing effort on North Carolina's northern outer banks takes place near *The Point*. For reasons that are not totally understood, this area aggregates and holds a diverse assemblage of fish for a large part of the year. Commercially, these fishes tend to be species of high value like tunas, dolphin, king mackerel, swordfish, and sharks and Dare County commercial catches of offshore species dominate the state's landings. Many of these same species, along with billfish, are highly prized by recreational anglers for their size, strength and food value and catches from Manteo area charter and private boats also dominate the state's recreational landings.

Other research has clearly documented the uniqueness of the oceanography, geology and biology, especially on the bottom near the proposed exploratory well. Evidence suggests that this region could contain one of the most productive sections of water-column along the U.S. east coast. *The Point's* productivity and uniqueness need to be more explicitly verified and quantified and we need to better understand how and what mechanisms control the dynamic biological activity at *The Point*.

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