

**MENHADEN MANAGEMENT
FOR THE ATLANTIC OCEAN
REDUCTION FISHERY
INFORMATION PAPER**

September 24, 2009

I. ISSUE

Conflict between recreational anglers, the reduction fishery, and bycatch

II. ORIGINATION

Marine Fisheries Commission

III. BACKGROUND

Omega Protein Corporation (Omega), a menhaden reduction plant located in Reedville VA, currently fishes 10 vessels in the Atlantic Ocean from New Jersey to North Carolina. North Carolina's only menhaden reduction plant, Beaufort Fisheries closed in 2004 making Omega the only plant on the Atlantic Coast. The majority of their landings are from the Chesapeake Bay and Virginia ocean waters. However, they also fish in North Carolina waters, mainly in the late fall. During 2008, Omega and North Carolina Division of Marine Fisheries (DMF) set up a contact protocol in order to keep the DMF advised on any fishing activities by Omega in North Carolina waters.

On Sunday, May 31st, Omega contacted DMF communications staff to inform the DMF they would be fishing in NC waters with five vessels. Monday morning, June 1st, DMF received a call from Omega that the captain of the F/V Tangier Island had split a net and spilled 150,000 dead fish approximately 2 miles off Cape Lookout. Marine Patrol surveyed the spill and returned to Morehead City with 10 adult red drum between 20 and 50 pounds. These red drum were considered bycatch by the DMF and were sampled for age and maturity information. Another 19 red drum were collected and sampled the following day.

Following the reported spill, the DMF was contacted by local charter fishermen who complained about the F/V Lancaster setting nets among a group of sports fishermen targeting cobia around a school of menhaden off Atlantic Beach, very close to shore. Marine Patrol responded and boarded the vessel and found no illegal fish. The five vessels filled their holds and headed back to Reedville, Virginia to off-load.

Omega was contacted about the issues concerning the conflict and bycatch that occurred during that time and proposed a written agreement with the Division Director adjusting its fishing practices in North Carolina waters and reimbursed DMF for the cost incurred for monitoring and clean up of the spill. For the remainder of the 2009 fishing season, they agreed to fish no closer than one mile from shore, from Cape Lookout and to the Virginia state line. They also agreed not to fish within state waters south and west of Cape Lookout. In addition they conducted an education program to instruct the captains and crew about the fishing regulations and the importance of avoiding user group conflicts.

IV. AUTHORITY

15A NCAC 03H .0103 Proclamation Authority of Fisheries Director
15A NCAC 03J .0301(j) User Conflict

V. DISCUSSION

There have been many concerns expressed to the Division Director and state legislators about the presence of Omega vessels in North Carolina waters. These concerns include loss of forage fish for other sport fish such as king and Spanish mackerel, wahoo, cobia and others, bycatch of red drum and striped bass, as well as conflict among Omega's vessels and sport fishermen over areas where menhaden school.

As a resource, the menhaden stock is not overfished and overfishing is not occurring. A new benchmark stock assessment will be completed in 2010. Recruitment of juvenile menhaden over the last two years has been high so there does not appear to be any stock issues to consider. Based on catch at age information, the majority of the reduction fishery landings are age 2+ fish. Typically, the bigger fish are found further offshore but will school closer to the beaches in the fall.

Bycatch of striped bass and red drum have become an issue over the last several years in the vicinity of Cape Lookout, Shackleford and Bogue Banks. A limited study by Virginia Institute of Marine Science in 1992 looked at the extent of bycatch in the menhaden fishery. Forty three at-sea samples were collected from August through November of which only eight were taken off North Carolina. Overall in the study, bycatch accounted for only 0.041% of the total catch with bluefish accounting for the majority of the bycatch, followed by Spanish mackerel and croaker. However, several false albacore were taken in the North Carolina catches and raised the question of the need for increased sampling in North Carolina waters (Austin et al. 1994).

Conflict between user groups has been sporadic over the years. Towns in Dare County complained about purse seining offshore of their townships and impacts to the tourist and recreational fishing industry have resulted in various rules. In Brunswick County there were issues surrounding fishing off the inlets and conflict with king mackerel tournaments which were also addressed by various negotiations, rules, and legislation.

The DMF has considered options that range from exclusion from all state waters to imposing no further restrictions than those already in rule. Omega has been very proactive in addressing issues in North Carolina and is interested in working on a solution to ensure their ability to fish in North Carolina waters. However, the public remains very concerned about conflict and bycatch with this fishery. In order to address the concerns of the public and continue to provide access to Omega, the DMF proposes that purse seines continue to be managed similar to the 2009 agreement. The DMF proposes to manage purse seines in waters north of Cape Lookout to the Virginia line similar to restrictions off of the towns of Southern Shores and Kitty Hawk in Dare County. From January 16th through May 14th, it is illegal to use a purse seine within 1 mile from shore. Beginning on May 15th through September 30th, purse seines have to be fished 1.5 miles from shore and from Oct 1st through December 31st purse seines have to be fished 0.5 miles or more from shore (figure 1). Purse seines will not be allowed within 3 miles of shore south of Cape Lookout to the New Hanover-Brunswick county line (figure2). These management measures can be implemented in proclamation by the Director within 48 hours. Implementing

this management strategy as a proclamation allows for flexibility that may be needed as a result of changing environmental and social conditions that may be encountered in the future. This management strategy may also be implemented by rule; however the required rule making process takes approximately two years before it is actually in place. It also eliminates the flexibility to change as conditions change.

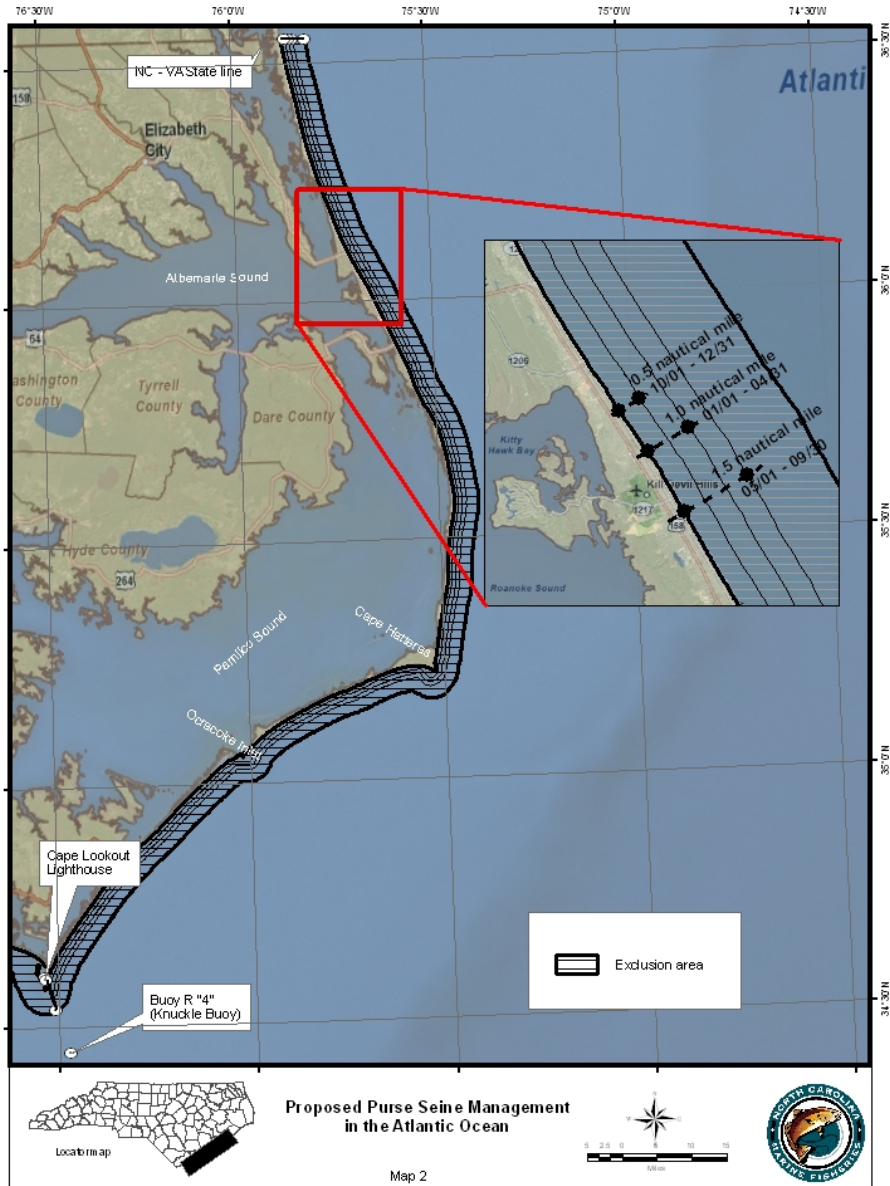


Figure 1. Proposed purse seine management, north of Cape Lookout.

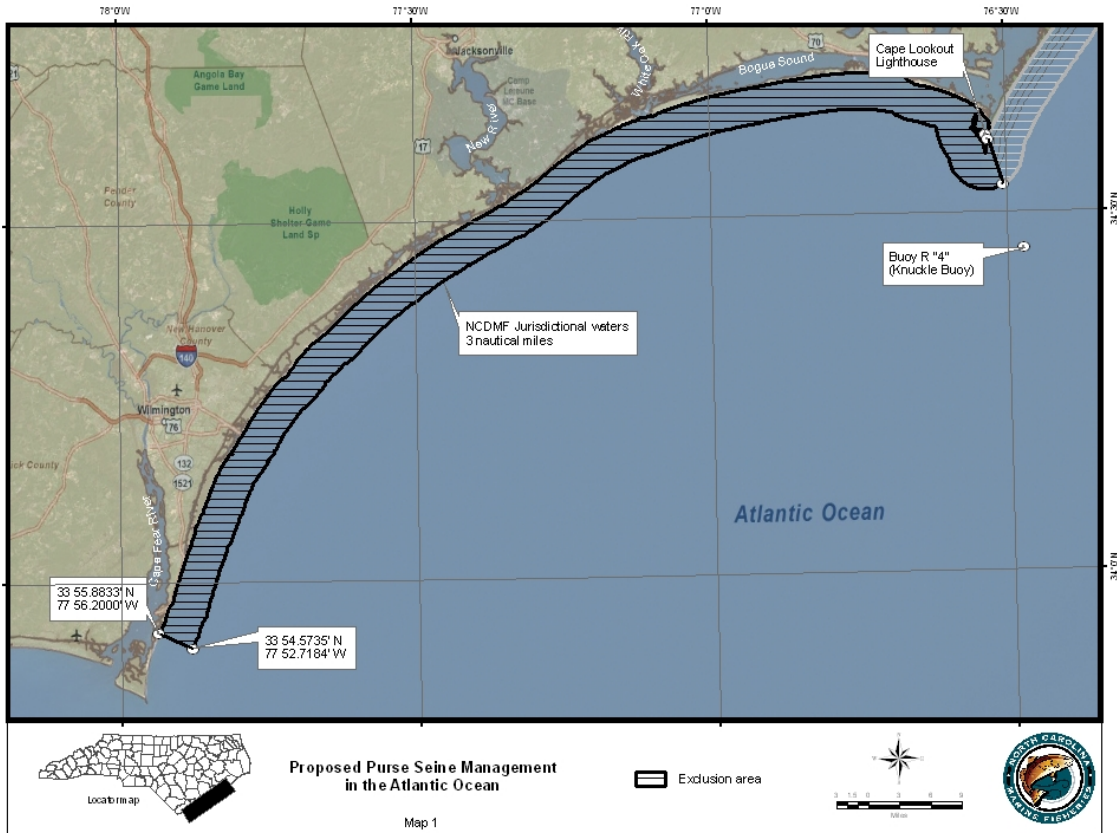


Figure 2. Proposed purse seine management south of Cape Lookout

VI. PROPOSED DRAFT PROCLAMATION

PROCLAMATION

RE: ATLANTIC MENHADEN–PURSE SEINES: ATLANTIC OCEAN

Dr. Louis B. Daniel III, Director, Division of Marine Fisheries, hereby announces that effective at **7:00 A.M., Friday, January 1, 2010** the following restrictions will apply to the harvest of Atlantic menhaden and Atlantic thread herring with purse seines in the Atlantic Ocean waters of North Carolina

I. HARVEST RESTRICTIONS

- A. It is unlawful to harvest Atlantic menhaden and Atlantic thread herring by use of a purse seine within 3 nautical miles of the Atlantic Ocean shoreline in the area west and south of a line beginning from the Cape Lookout Lighthouse running southeasterly through Buoy R “4” (Knuckle Buoy) and north and east of a line beginning at a point onshore at the border between Brunswick County and New Hanover County at 33° 55.8833’N - 77° 56.2000’W; then running southeasterly 3 nautical miles to a point offshore at 33° 54.5735’N - 77° 52.7184’W .
- B. It is unlawful to harvest Atlantic menhaden and Atlantic thread herring by use of a purse seine within 1 nautical mile of the Atlantic Ocean shoreline in the area east and north of a line beginning from the Cape Lookout Lighthouse running southeasterly to Buoy R “4” (Knuckle Buoy) to the North Carolina-Virginia boarder for a period from January 1st through April 31st.

- C. It is unlawful to harvest Atlantic menhaden and Atlantic thread herring by use of a purse seine within 1.5 nautical miles of the Atlantic Ocean shoreline in the area east and north of a line beginning from the Cape Lookout Lighthouse running southeasterly to Buoy R "4" (Knuckle Buoy) to the North Carolina-Virginia boarder for a period from May 1st through September 30th.
- D. It is unlawful to harvest Atlantic menhaden and Atlantic thread herring by use of a purse seine within 0.5 nautical miles of the Atlantic Ocean shoreline in the area east and north of a line beginning from the Cape Lookout Lighthouse running southeasterly to Buoy R "4" (knuckle Buoy) to the North Carolina-Virginia boarder for a period from October 1st through December 31st.

II. GENERAL INFORMATION

- A. This proclamation is issued under the authority of N.C.G.S. 113-170.4; 170.5; 113-182; 113-221.1; 143B-289.52; and N.C. Marine Fisheries Rules 15A NCAC 3H .0103; 3J .0105; and 3J .0301.
- B. It is unlawful to violate the provisions of any proclamation issued by the Director under his delegated authority pursuant to N.C. Marine Fisheries Rule 15A NCAC 3H .0103.
- C. The intent of this proclamation is to address conflict and bycatch in the Atlantic purse seine fishery in the Atlantic Ocean. The ocean waters off Brunswick County are regulated by Session Law 2007-320.
- D. The waters of the Atlantic Ocean, as applicable to this proclamation are defined as waters seaward of the high water mark on the Atlantic Ocean shoreline and COLREGS Demarcation Lines as indicated on National Ocean Service navigation charts for the areas to which this proclamation applies.

BY: _____
Louis B. Daniel III, Director
DIVISION OF MARINE FISHERIES

VII. RECOMMENDATION

Issue a proclamation to manage the Atlantic menhaden purse seine fishery in the Atlantic Ocean. Portions of 3J .0105 may need to be suspended.

Prepared by Trish Murphey
08/20/09

VIII. LITERATURE CITE

Austin, H.M., J. Kirkley, and J. Lucy. 1994. By-catch and the fishery for Atlantic menhaden (*Brevoortia tyrannus*) in the mid-Atlantic bight: An assessment of the nature and extent of by-catch. Virginia Sea Grant Marine Resource Advisory No. 53 VSG 94-06. 39 p.