

effort is approximately 62 percent less than the reported effort in 1996. In addition, based on current and historical participation, implementation of limited access in the shark fisheries reduced the number of shark permit holders from over 2,200 before limited access to 584 in October of 2003.

Comment 11: Only one alternative addresses sea turtle bycatch by recommending that fishing vessels move one nautical mile after an interaction with a sea turtle. Dip nets and line cutters should also be required.

Response: To reduce sea turtle mortality, NMFS is implementing an alternative that will require vessels with shark bottom longline gear to use corrodible hooks, possess release equipment (line cutters, dip nets, and when approved, dehooking devices), as well as move one nautical mile after an interaction with a marine mammal or sea turtle.

Comment 12: NMFS needs to conduct experiments to determine if circle hooks are effective in reducing the number of turtles caught and the position of the hooks in captured animals.

Response: The June 14, 2001, BiOp included a recommendation that NMFS conduct a three-year experimental fishery in the northeast distant statistical reporting area (NED) to attempt to reduce the interactions between pelagic longline gear and sea turtles. In the summer and fall of 2002, tested the use of circle hooks, mackerel bait, and shortened daylight soak time to examine their usefulness in reducing the capture of sea turtles. Although NMFS did not specifically investigate the use of circle hooks to reduce interactions with sea turtles in the shark bottom longline fishery, information from the NED experiments could be transferable to or provide helpful information for other fisheries.

Comment 13: We support the preferred alternatives of line cutters, dip nets, and dehooking devices and feel they would reduce mortality by recreational fishermen as well.

Response: Release gear may be beneficial in recreational fisheries; however, requiring this equipment for anglers who generally do not use heavy monofilament line and rarely encounter protected species is not practical at this time. NMFS does support the voluntary use of release gear in recreational shark fisheries.

Comment 14: NMFS should consider a variation of the no discard alternative (retention of all sharks with no discards allowed) in order to encourage reducing regulatory discards. This is possible but not practicable in today's marketplace and would be tough to enforce. Other

portions of the regulations, such as no filleting at sea or the current trip limit, would need to be changed.

Response: NMFS analyzed the no-discard alternative and determined that it could virtually eliminate the bycatch of sharks in the commercial shark fishery and reduce fishing effort needed to reach trip limits and fill quotas, thereby reducing potential interactions with prohibited species. However, this alternative could also increase the mortality of juvenile sharks, prohibited species, and other sharks not normally retained. Fishermen may also illegally high-grade and discard less marketable species to avoid reaching the trip limit, increasing waste. If no discards were allowed, trip limits and quotas could be reached more quickly, resulting in derby fishing conditions. Derby conditions may result in depressed ex-vessel prices, reduced revenues, market gluts, and concerns for the safety of fishermen at sea. Due to ecological, social, and economic concerns, NMFS does not believe this alternative is appropriate for the commercial shark fishery at this time. NMFS may consider a variation of this alternative in a future rulemaking.

Comment 15: NMFS received several comments regarding bycatch of sharks and non-target species. The comments include: Amendment 1 does not contain a comprehensive strategy to avoid and reduce shark bycatch, as mandated by law. For years NMFS has highlighted the shrimp trawl and menhaden purse seine fisheries as problem fisheries for shark bycatch, yet NMFS has not offered any suggestion on how to address these bycatch sources. NMFS must take action to address these continual problems. The non-targeted species and sub-legal bycatch that are routinely discarded as a result of indiscriminate gillnets and longlines is disturbing and a waste of our marine resources.

Response: Bycatch of sharks in trawl, set-net, and hook and line fisheries is discussed in Amendment 1. In this rule, NMFS specifically addresses shark bycatch in HMS fisheries by implementing several measures designed to reduce bycatch and bycatch mortality including: a time/area closure, VMS requirements for shark bottom longline and gillnet vessels, requiring the use of corrodible hooks, and requiring the possession of release equipment (line cutters, dipnets, and, when approved, dehooking devices). As described above, NMFS has also issued a bycatch implementation plan.

Comment 16: NMFS needs to examine the bycatch of sharks in monk fishing gear.

Response: NMFS will investigate the bycatch of sharks in a number of

fisheries to determine if measures are needed to minimize shark bycatch and bycatch mortality.

B. Time/Area Closure

Comment 1: NMFS received several comments regarding the use of time/area closures in general. These included: NMFS should establish sanctuaries for all fish species. The entire fishery should be closed from January through July to protect pupping females and pups. NMFS should implement seasonal closures to longlines and gillnets in coastal nursery grounds to protect all shark species.

Response: The time/area closure is based on specific information from the shark bottom longline observer program that indicates a high proportion of prohibited dusky shark and juvenile sandbar sharks being caught off North Carolina from January through July. Closing the entire shark fishery from January through July is not warranted. The closure will afford some protection to all species that are caught on bottom longline gear during that time of year.

Comment 2: One commenter noted that NMFS should implement the time/area closure alternative that would close all shark nursing and pupping grounds based on EFH for neonate and juvenile sharks, in order to protect juvenile sharks from indiscriminate commercial gears. Alternatively, another commenter noted that they cannot support the blanket alternative for closing all pupping and nursery grounds because each proposal needs to be fully evaluated and based on acceptable understanding of stock status, life histories, and defined EFH for each species.

Response: NMFS considered an alternative that would close all pupping and nursery grounds, *i.e.*, nearly all coastal waters off the U.S. Atlantic coast and the Gulf of Mexico, but this final rule would implement a targeted time/area closure for a specific time period. Currently, there are insufficient data to support a closure of all EFH pupping and nursery areas. Moreover, a closure of all coastal waters would have had a severe economic impact on fishing communities.

Comment 3: Any delay in implementation of closures may undermine management objectives.

Response: Delayed effectiveness of time/area closures has been used in the past, and is a reasonable approach to allow fishermen to adjust to the regulations that affect fishing areas and to the potential economic changes incurred by a time/area closure.