

trip is appropriate for the recreational shark fishery. This alternative could reduce recreational harvest levels by the 80–85 percent required under the rebuilding plan in Amendment 1 if angler compliance increases. NMFS analyzed other alternatives in Amendment 1 that would have allowed the retention of additional LCS, SCS, and pelagic sharks. However, because the 2002 LCS stock assessment indicates that the LCS complex needs a reduction in fishing mortality and many recreational anglers cannot correctly identify sharks, those alternatives would not achieve the level of reduction needed to rebuild LCS. With regard to discards and mortality in the recreational fishery, NMFS urges anglers to comply with size and retention limits and release sharks in a manner that maximizes their survival. NMFS may adjust size and retention limits in the future based on the results of future stock assessments.

Comment 2: NMFS received several comments regarding methods of increasing compliance within the recreational fishery, including: Any non-compliance by the recreational sector is due to confusion with the current regulations and, to a lesser extent, the proper identification of different shark species. NMFS can solve these problems by increasing angler education and outreach. Compliance and enforcement is not strong in Federal waters. NMFS should increase outreach by using the internet, linking the HMS regulations to the NOAA weather page, and printing flyers for marinas, Sea Grant, port agents, and states.

Response: Compliance in the recreational fishery, outreach, and the availability of educational materials needs to be increased. NMFS will distribute a revised Atlantic shark recreational fishery brochure after the final rule for Amendment 1 is published. It will contain information regarding HMS Angling category permits, HMS Charter/Headboat permits, bag limits and minimum sizes, release information, landing restrictions, the no sale provision, HMS tournament registration, tagging information, as well as species that may be retained, and species that must be released. Additional brochures on other HMS fisheries are available. NMFS is also currently producing an identification guide for sharks, tunas, and billfishes of the Atlantic and Gulf of Mexico that should be available shortly. Further, NMFS received public comment in favor of mandatory educational workshops for anglers and commercial fishermen discussing species identification, release techniques, and

regulations. NMFS intends to move forward with requiring participation in mandatory workshops in a future rulemaking and will attempt to make voluntary workshops available to the public in the interim.

Comment 3: The one-shark per boat limit is not a problem except in tournaments where anglers may be forced to decide between keeping an eligible shark or taking a chance on catching a larger one. The difference between allowing one or two recreationally caught sharks would be minuscule on an annual basis, in comparison with what a longliner could kill during the same time period.

Response: Allowing recreational anglers an additional shark each would not have minor impacts compared to the commercial fleet. Currently, recreational fishermen take more sharks than commercial fishermen (142,000 LCS in 2001 versus 99,200 LCS in the commercial fishery). Additionally, recreational fishermen catch smaller sharks than commercial fishermen (average size of approximately 10 pounds versus 36 pounds in the commercial fishery). This information, combined with the facts that most anglers cannot correctly identify sharks and the LCS stock assessment recommended protecting juvenile LCS, provides support for the one shark limit. Further, the vast numbers of recreational anglers could lead to large numbers of LCS being taken. NMFS analyzed an alternative that would have allowed vessels with HMS Angling category permits participating in registered tournaments, or HMS CHB permit holders on for hire trips, to retain one shark per person, up to two sharks per vessel, per trip, as well as one Atlantic sharpnose and one bonnethead per person per trip. This alternative would have resulted in mortality levels greater than those expected from some of the other alternatives considered and is not consistent with the 2002 LCS stock assessment which indicates that the LCS complex needs a reduction in fishing mortality. Additionally, without more information regarding the status of pelagic sharks, this alternative could have been detrimental to pelagic sharks. However, this alternative could be combined with other fishing controls (e.g., increased minimum sizes) so that overall mortality is not increased. NMFS may consider this approach in the future.

Comment 4: Many tournaments have restricted eligible species only to makos and threshers in order to avoid the waste of sharks not normally taken for food.

Response: NMFS appreciates and encourages conservation efforts by anglers and tournament organizers.

B. Minimum Size Restrictions

Comment 1: NMFS received a range of comments regarding the recreational minimum size, including: We support the proposed alternative because a minimum size helps to promote the live release of young sharks. The number of recreational fishermen who fish for sharks from Maine to Texas could number in the millions, which could significantly affect the mortality of juvenile sharks especially if there is no minimum size. South Carolina has already taken this proposed measure; most recreational anglers support a minimum size larger than is being proposed. Because many fish are killed before they are measured, particularly if they are dangerous, we cannot support a recreational minimum size. An exception to the minimum size for blacknose sharks should be added, because they are not overfished and do not reach the proposed minimum size.

Response: A 4.5 foot fork length for all sharks and no size limit for Atlantic sharpnose and bonnethead sharks is appropriate for the recreational shark fishery. Sharks caught in recreational fisheries are thought to have low post-release mortality rates and the preferred 4.5 foot fork length minimum size limit should minimize fishing mortality on the stages that contribute the most to population growth by maintaining catch-and-release fishing on juvenile and subadult sharks. The allowances for the retention of Atlantic sharpnose and bonnethead sharks without a minimum size were preferred because these species are easily identified, not overfished or experiencing overfishing, do not commonly reach the current 4.5 foot fork length minimum size limit, and are important recreational catches in some regions. Exceptions for other SCS species were not analyzed in Amendment 1 because of difficulties with identification (e.g., blacknose sharks) or because they are currently experiencing overfishing (e.g., finetooth sharks).

Concerning the safety of anglers who are required to measure live sharks in order to retain them, NMFS recommends that anglers mark areas on the outside of fishing vessel hulls (e.g., at the waterline or boot stripe) with the minimum size. If a shark is smaller than this measurement or if it is a prohibited species, it should be released.

Comment 2: Information on proper release techniques and equipment should be made available to the recreational sector.