

**DRAFT SCOPING DOCUMENT
AMENDMENT 10
TO THE SPINY LOBSTER FISHERY MANGEMENT PLAN**

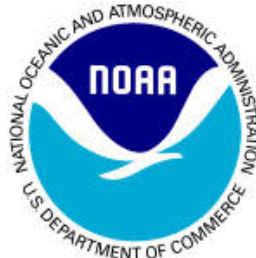
**JOINT AMENDMENT FOR THE GULF OF MEXICO AND
SOUTH ATLANTIC FISHERY MANAGEMENT COUNCILS**

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ABBREVIATIONS USED IN THIS DOCUMENT

ABC	Allowable biological catch
ACL	Annual catch limit
ACT	Annual catch target
AM	Accountability measure
EC	Ecosystem component species
EEZ	Exclusive economic zone
ESA	Endangered Species Act
F	Fishing mortality
FCZ	Fishery Conservation Zone
FMP	Fishery management plan
FMU	Fishery management unit
FWC	Florida Fish and Wildlife Conservation Commission
GMFMC	Gulf of Mexico Fishery Management Council
MFMT	Maximum fishing mortality threshold (overfishing threshold)
MRFSS	Marine Recreational Fisheries Statistics Survey
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
MSST	Minimum stock size threshold (overfished threshold)
MSY	Maximum sustainable yield
NMFS	NOAA's National Marine Fisheries Service
NS1	National Standard 1 (in the Magnuson-Stevens Act)
OFL	Overfishing limit
OY	Optimum yield
SAFMC	South Atlantic Fishery Management Council
SDC	Status determination criteria
SPR	Spawning potential ratio
SSB	Spawning stock biomass
SSC	Scientific and Statistical Committee
TAC	Total allowable catch

1.0 INTRODUCTION

1.1 Background

Explanation of Requirements to Meet National Standard 1 Guidelines

In 2006 the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) was re-authorized and included a number of changes to improve conservation of managed fishery resources. The goals require that conservation and management measures “shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry”. Included in these changes are requirements that the Regional Councils must establish both a mechanism for specifying annual catch limits (ACLs) at a level such that overfishing does not occur in the fishery and accountability measures (AMs) to correct if overages occur. Accountability measures are management controls to prevent the ACLs from being exceeded and to correct by either in-season or post-season measures if they do occur.

The ACL is set by the Council, but begins with specifying an overfishing limit (OFL), which is the yield, above which overfishing occurs. Once an OFL is specified, an acceptable biological catch (ABC) level is recommended by the Council’s Scientific and Statistical Committee (SSC). The ABC is based on the OFL and takes into consideration scientific uncertainty. The OFL and ABC are set by scientists, whereas the next two reference points, ACL and annual catch target (ACT) are set by managers. The ACT is not required to be specified, but if used should be set at a level that takes into account management uncertainty and provides a low probability of the ACL being exceeded. These measures must be implemented by 2010 for all stocks experiencing overfishing and 2011 for all others. The Councils determined that to meet the National Standard 1 guidelines (NS1) by implementing these measures that the amendment must be completed, submitted for formal review, and have implemented regulations during the August 6, 2011 through March 31, 2012 fishing year.

There are some exceptions for the development of ACLs; for example, when a species can be considered an ecosystem component species and species with annual life cycles. Stocks listed in the Fishery Management Unit (FMU) are classified as either “in the fishery” or as an “ecosystem component”. By default, stocks are considered to be “in the fishery” unless declared ecosystem component species. Ecosystem component (EC) species are exempt from the requirement for ACLs. In addition, EC species may, but are not required to be included in a Fishery Management Plan (FMP) for any of the following reasons: data collection purposes; ecosystem considerations related to specification of optimum yield (OY) for the associated fishery; as considerations in the development of conservation and management measures for the associated fishery; and/or to address other ecosystem issues.

To be considered for possible classification as an EC species, the species should:

- (A) Be a non-target species or non-target stock;
- (B) Not subject to overfishing, approaching overfished, or overfished;
- (C) Not likely to become subject to overfishing or overfished, according to the best available information, in the absence of conservation and management measures; and
- (D) Not generally be retained for sale or personal use.

Amendment 1 to the Fishery Management Plan for Spiny Lobster in the Gulf of Mexico and South Atlantic consisted of the Caribbean spiny lobster, *Panulirus argus*, and other incidental species of spiny lobster (i.e., spotted spiny lobster, *Panulirus guttatus*; smoothtail spiny lobster, *Panulirus laevicauda*; Spanish slipper lobster, *Scyllarides aequinoctialis*, and ridged slipper lobster, *Scyllarides nodifer*) which inhabit or migrate through coastal waters and the fishery conservation zone (FCZ) now named the exclusive economic zone (EEZ) of the Gulf of Mexico and the South Atlantic (GMFMC-SAFMC 1986). Only two of the species, Caribbean spiny lobster and ridged slipper lobster are listed under the FMU. The other species in the FMP (i.e., spotted spiny lobster, smoothtail spiny lobster, and Spanish slipper lobster) may fall under the ecosystem component species.

An ACL for a given stock or stock complex can be established in several ways, either a single ACL for the entire fishery, divided into sector ACLs (e.g., recreational and commercial sectors), or divided into state-federal ACLs. In any of these cases, the sum of the ACLs cannot exceed the ABC.

Current regulations on the lobster fishery of the Gulf of Mexico and South Atlantic include seasons, harvest limitations, gear and diving restrictions, bag/possession limits, and closed areas. These regulations are specified for ridged slipper lobster, *Scyllarides nodifer* and Caribbean spiny lobster, *Panulirus argus* in 50 CFR 640.2. The common name Slipper (Spanish) lobster as *Scyllarides nodifer* in the regulations (i.e., 50 CFR 640.2) is not the correct common name according to Williams et al. (1988) and FAO Fisheries Synopsis (1991) authorities on the correct common names of invertebrate species.

1.2 Purpose and Need for Action

The Councils are developing potential actions for setting ACLs and AMs for Caribbean spiny lobster and other lobster species in the FMP to be compatible with the National Standard 1 Guidelines. All species in the Joint Spiny Lobster FMP, unless considered as EC species, must have ACLs and AMs implemented by 2011.

One action under consideration is whether to repeal federal management for the Joint Spiny Lobster FMP. The Caribbean spiny lobster fishery occurs mainly off the state of Florida. The commercial fishery for Caribbean spiny lobster landed 59% of their catch from state waters, 6% of their catch from Gulf federal waters, and 35% from Atlantic federal waters from 1999 through 2008 [Florida Fish and Wildlife Conservation Commission (Florida FWC) Marine Fisheries Information System 2009]. Recreational landings are not recorded based on state or federal waters by coast. However, a majority of landings in the state of Florida were documented in Monroe County. For example, during the 1999 through 2008 fishing season 89% of the commercial Caribbean spiny lobster landings and 57% of the recreational landings were documented in Monroe County. If federal management was repealed, lobster fishers would only be under one management body and not three as is currently the case. Florida FWC would then be responsible for management of Caribbean spiny lobster and other species in the Joint Spiny Lobster FMP, and the National Standard Guidelines would no longer apply. Other species of lobster specified in the regulations and within the Joint Spiny Lobster FMP are the ridged

slipper lobster, *Scyllarides nodifer*; a large majority of these landings recorded as slipper lobsters (i.e., ridged and Spanish slipper lobster) also occur in federal waters along the west coast of Florida and are landed primarily in trawls as bycatch from the shrimp fishery. Even though the slipper lobster species may be harvested from federal waters in the Gulf, the Florida FWC keeps records of these landings and could regulate these species as well as Caribbean spiny lobster if the Joint Spiny Lobster FMP was repealed.

One aspect that should be considered before removing the Joint Spiny Lobster FMP from federal management is the newly implemented Joint Amendment 4 and 8 which prohibits importation of undersized Caribbean spiny lobsters into the U.S. [February 11, 2009; 73 FR 1148].

Another action under consideration is delegating some regulations (e.g., bag/possession limits and size limits) to the Florida FWC. If the Joint Spiny Lobster FMP were delegated to Florida FWC, the federal management plan would stay in place and still have to meet the MSFCMA. If the Joint Spiny Lobster FMP is not or cannot be delegated to the Florida FWC, other management actions are considered in this document such as withdrawal of some of the lesser targeted species or determining if they meet the EC criteria. Landings information is not available on the other two species of spiny lobster (i.e., smoothtail spiny lobster and spotted spiny lobster) listed in the Joint Spiny Lobster FMP. It is probable that a low number of these species may be landed as Caribbean spiny lobster in either the commercial or recreational sector depending on coast and depth, but there are no records to evaluate at this time.

1.3 Distribution and Habitat Information

Family Palinuridae

Caribbean spiny lobster, *Panulirus argus*, are widely distributed throughout the western Atlantic Ocean as far north as North Carolina to as far south as Brazil including Bermuda, the Bahamas, Caribbean, and Central America (Herrnkind 1980; Figure 1). Analyses of DNA indicate a single stock structure for the Caribbean spiny lobster throughout its range (Lipcius and Cobb 1994; Silberman and Walsh 1994). This species inhabits shallow waters, occasionally as deep as 90 m, possibly even deeper. Caribbean spiny lobster can be found among rocks, on reefs, in grass beds or in any habitat that provides protection. The species is gregarious and migratory. Maximum total body length recorded is 45 cm, but the average total body length for this species is 20 cm (FAO Fisheries Synopsis 1991).



Figure 1. Distribution of Caribbean spiny lobster (Source: FAO Fisheries Synopsis 1991; Joint CFMC-GMFMC-SAFMC Amendment 8 2008).

Spotted spiny lobster, *Panulirus guttatus*, range includes the western Atlantic, Bermuda, Bahamas, South Florida, Belize, Panama, and Venezuela, as well as the Caribbean from Cuba to Trinidad, Curacao, and Bonaire (Figure 2). This species prefers shallow water and inhabits rocky areas, mainly in crevices. Maximum total body length recorded is 20 cm, but the average total body length for this species is 15 cm (FAO Fisheries Synopsis 1991). This species is occasionally caught in traps, typically set for other species, such as the Caribbean spiny lobster (FAO Fisheries Synopsis 1991).

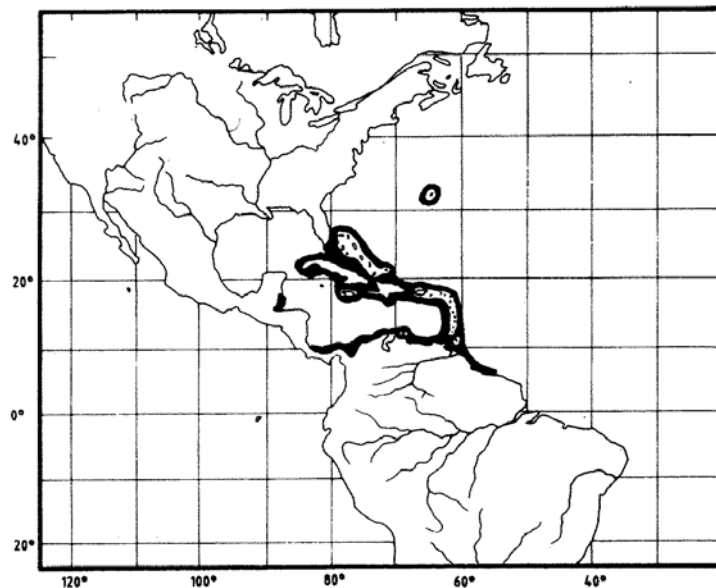


Figure 2. Distribution of spotted spiny lobster, *Panulirus guttatus* (Source: FAO Fisheries Synopsis 1991).

Smoothtail spiny lobster, *Panulirus laeviscauda*, range includes the western Atlantic, Bermuda, South Florida, down into Brazil, as well as Central America, and the Caribbean (Figure 3). This species is found in coastal waters, as deep as 50 m and prefers rock or coral reef substrate as habitat. Maximum total body length recorded is 31 cm, but the average total body length for this species is 20 cm. Sometimes smoothtail spiny lobsters are taken together with Caribbean spiny lobster. The largest yield for this species is in Brazil (FAO Fisheries Synopsis 1991).

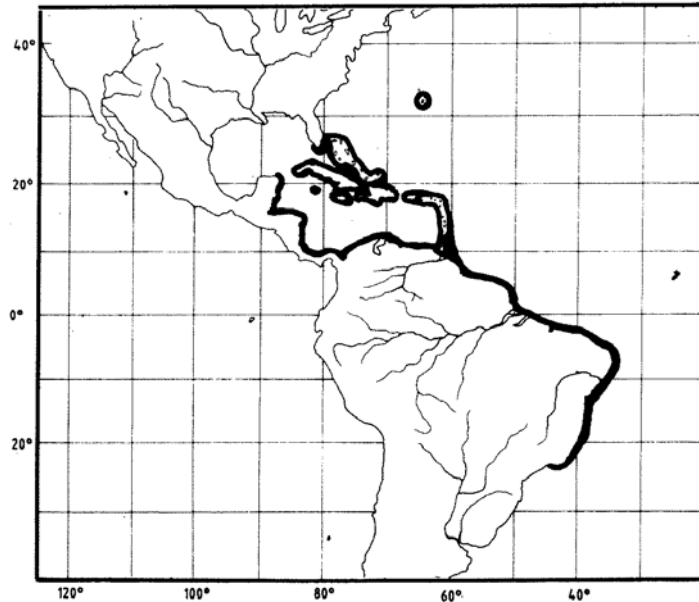


Figure 3. Distribution of smoothtail spiny lobster, *Panulirus laeviscauda* (Source: FAO Fisheries Synopsis 1991).



Photograph 1. From left to right the following species are: Caribbean spiny lobster, smoothtail spiny lobster, spotted spiny lobster (Photograph from Florida FWC website).

Family Scyllaridae

Spanish slipper lobsters, *Scyllarides aequinoctialis*, are distributed in the western Atlantic Ocean, as far north as South Carolina down to Brazil including Bermuda, the Gulf of Mexico, and the Caribbean. This species depth distribution ranges from 0.6 to 180 m, usually between 0.6 and 64 m. This species preferred habitat is sand or rocks, often on high-relief coral reefs in crevices (FAO Fisheries Synopsis 1991; Sharp et al. 2007). The animals are sluggish and nocturnal and feed on algae and detritus. They bury themselves in the sand. Maximum total body length recorded is 30 cm, but average carapace length is 12 cm (FAO Fisheries Synopsis 1991; Sharp et al. 2007).



Figure 4. Distribution and photograph of Spanish slipper lobster, *Scyllarides aequinoctialis* (Source: FAO Fisheries Synopsis 1991; Photograph by J. Hunt 2009).

Ridged slipper lobster, *Scyllarides nodifer*, are distributed throughout the western Atlantic Ocean, south of Cape Lookout, North Carolina, Bermuda, and the entire Gulf of Mexico (Figure 5). This species is typically found in the Florida Keys and Dry Tortugas (FAO Fisheries Synopsis 1991). Ridged slipper lobster depth distribution ranges between 2 and 91 m and prefer sandy substrate, sometimes mixed with mud, shell, or corals. They are often found on low-relief coral reefs and bury themselves in sediments during daylight hours (Sharp et al. 2007). Maximum total body length recorded is 35 cm, but average carapace length is 11 cm (FAO Fisheries Synopsis 1991; Sharp et al. 2007).

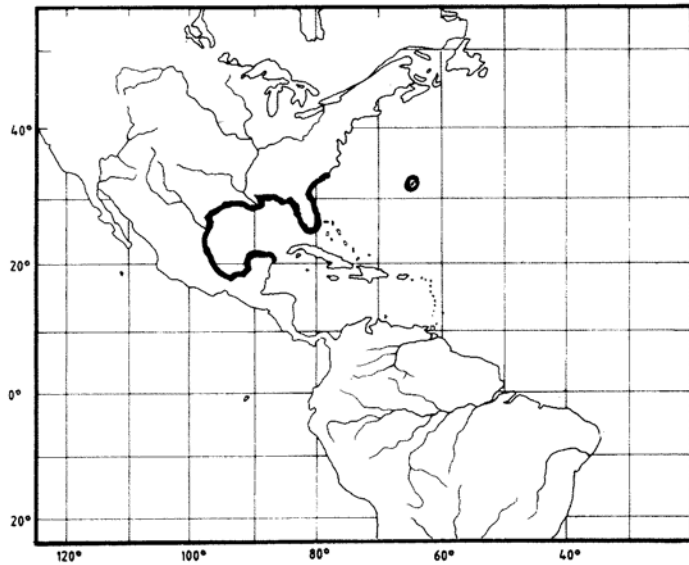


Figure 5. Distribution and photograph of ridged slipper lobster (Source: FAO Fisheries Synopsis 1991; Photograph by J. Hunt 2009).

1.4 Landings Information

Family Palinuridae-spiny lobster species

Caribbean spiny lobsters are an economically valuable commercial fishery to the state of Florida (Figure 6). The commercial fishery in the state of Florida from 1999 to 2008 landed 1.7 million pounds annually on average valued at \$8.8 million annually (Table 1). The recreational fishery is also valuable to the state of Florida. The recreational sector landed annually an average of 1.3 million lobsters, with an average whole animal weight of 1.4 million pounds from 1999 to 2008 (Florida FWC mail survey results 2009). During those same years the annual average for both sectors combined in the state of Florida was 6.1 million pounds of whole animal weight (Florida Fish and Wildlife Commission mail survey results 2009). A majority of the state of Florida landings are documented in Monroe County, Florida. During the 1999 through 2008 fishing season 89% of the commercial Caribbean spiny lobster landings and 57% of the recreational landings were documented in Monroe County, Florida (Figure 7).

Table 1. Average commercial landings of Caribbean spiny lobsters from 1999 through 2008 for Gulf federal waters, South Atlantic federal waters, and state of Florida landings combined for both coasts. Average pounds landed are live whole animal weight (Source: Florida Fish and Wildlife Conservation Commission, Marine Fisheries Information System 2009).

Caribbean Spiny Lobsters	Gulf federal	Atlantic federal	Florida state waters
Average Pounds	164,912	998,218	1,709,646
Average # Trips	413	2,976	8,903
Average \$ Value	\$828,149	\$4,878,155	\$8,827,990

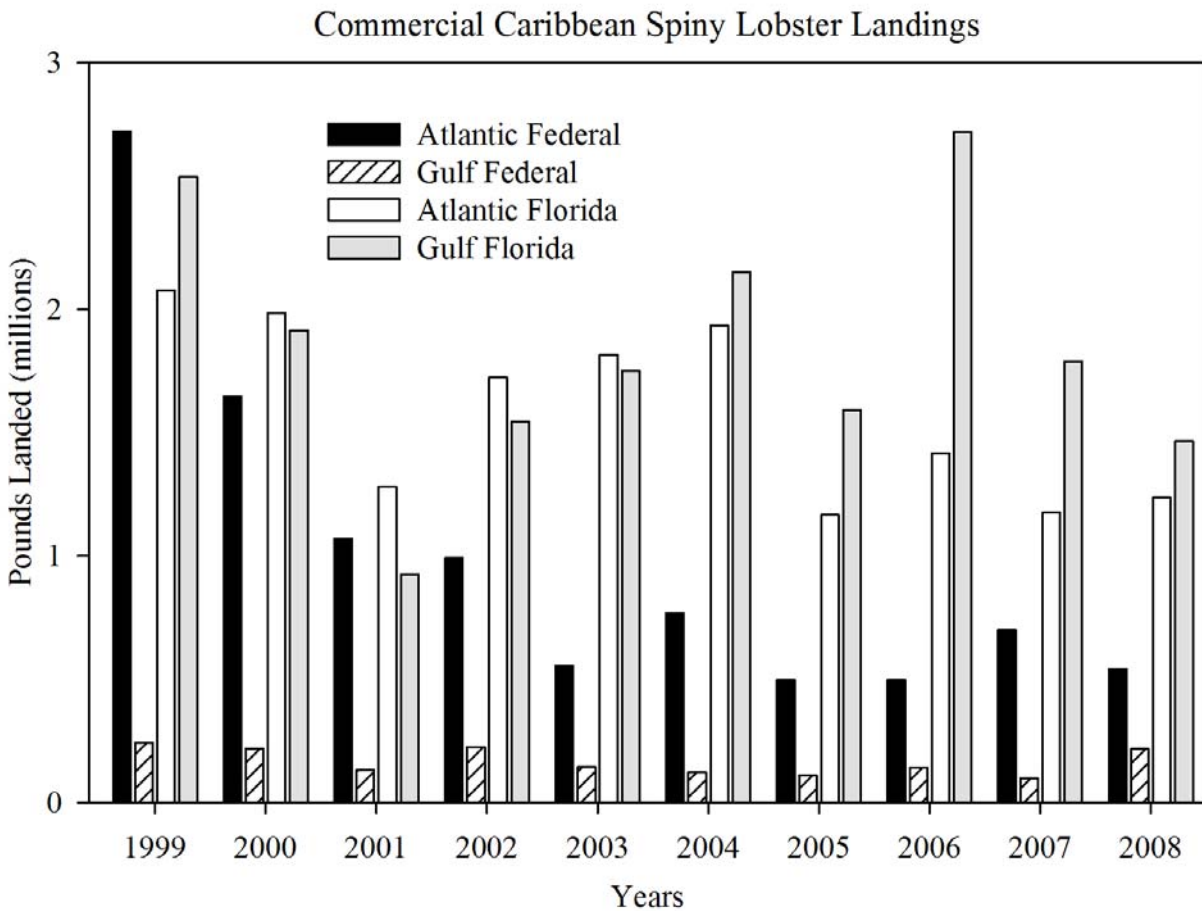


Figure 6. Commercial Caribbean spiny lobster landings from 1999 through 2008 by coast in federal and state of Florida waters (Source: Florida Fish and Wildlife Conservation Commission, Marine Fisheries Information System 2009).

Florida Statewide Recreational Landings with Monroe County Landings

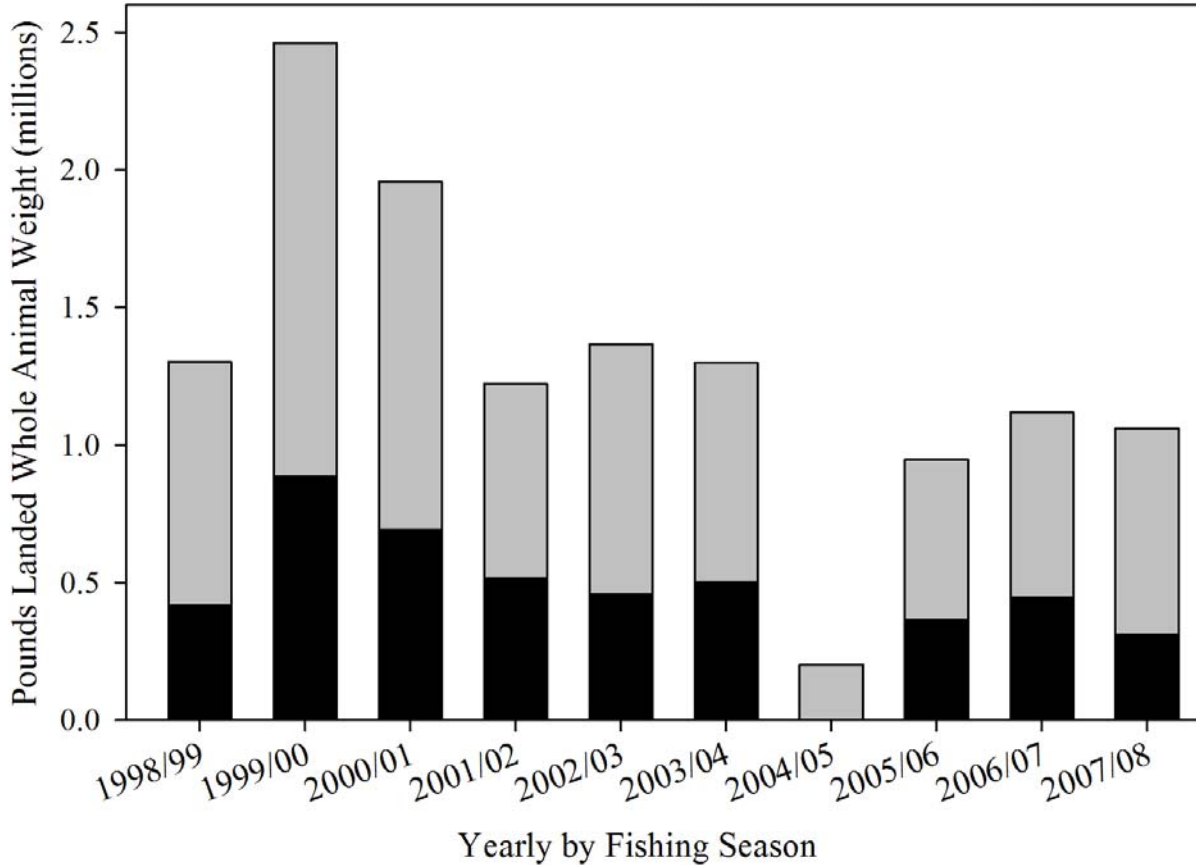


Figure 7. Statewide recreational landings of Caribbean spiny lobster in whole animal weight (millions) by fishing season. Black bars represent total statewide landings and the gray bars represent Monroe County landings. The low landings in 2004/05 were due to heavy hurricane activity (Source: Florida Fish and Wildlife Commission mail survey results 2009).

Family Scyllaridae-slipper lobster species

In contrast to Caribbean spiny lobsters, slipper lobster species constitute a minor fraction of Florida’s lobster landings, with annual average landings since 1980 of 17 tons, and ex-vessel value of \$82,000 (Sharp et al. 2007). A large majority of Florida’s slipper lobster landings occur along the west coast of Florida in federal waters and are landed primarily in trawls as bycatch from the shrimp trawl fishery. In the Florida Keys, slipper lobster species are bycatch in traps for Caribbean spiny lobster. Even though they are not identified to species level when landed they are primarily composed of ridged slipper lobster, *Scyllarides nodifer*, because it is the only species that commonly occurs in the Florida Keys and attains a size sufficient to be exploited for the industry (Sharp et al. 2007).

The majority of the commercial landings for slipper lobsters, both the Spanish and ridged slipper lobsters occur in federal waters off the Gulf coast (Figure 8). The annual average landings in pounds of whole animal weight was 6,527 over the 1999 through 2008 fishing years, with an annual average value of \$26,500 in federal waters off the Gulf coast (Table 2). The gear types used to harvest these species by trips were 56% by trawl, 23% by diving, and 19% by traps, which was fairly consistent over the 9 year period.

Recreational landings for this species are not recorded because the Florida FWC only documents Caribbean spiny lobster landings and Marine Recreational Fisheries Statistics Survey (MRFSS) only captures recreational finfish landings. However, due to the intense recreational fishery for Caribbean spiny lobster it is suggested that some fishers will harvest slipper lobster species if observed (Sharp et al. 2007). After inspection of intensive creel surveys, which were conducted for Caribbean spiny lobster during the peak season, there was no indication that slipper lobsters are targeted by recreational fishers in the state of Florida and due to their cryptic nature it is unlikely that a substantial recreational fishery would develop (Sharp et al. 2007). It should also be noted that due to the lack of data on slipper lobster species life history, growth rates, and reproductive biology, conducting an effective stock assessment would be difficult (Sharp et al. 2007).

Table 2. Average commercial landings of slipper lobsters in the family Scyllaridae from 1999 through 2008 for Gulf federal waters, South Atlantic federal waters, and state of Florida landings combined for both coasts. Average pounds landed are live whole animal weight (Source: Florida Fish and Wildlife Conservation Commission, Marine Fisheries Information System 2009).

Slipper Lobsters	Gulf federal	Atlantic federal	Florida state waters
Average Pounds	6,527	996	839
Average # Trips	69	26	11
Average \$ Value	\$26,580	\$4,080	\$3,197

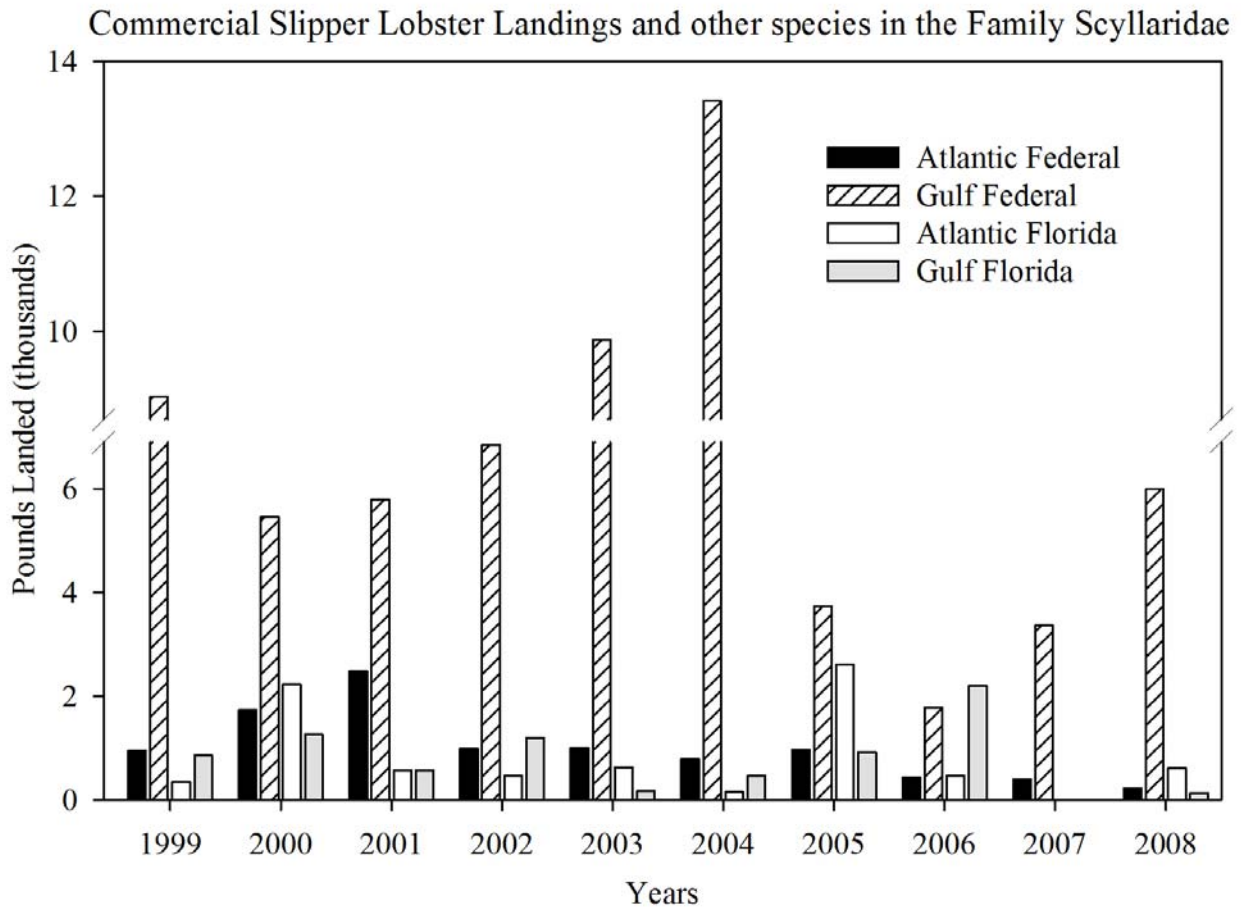


Figure 8. Commercial slipper lobster landings and other species in the family Scyllaridae from 1999 through 2008 by coast in federal and state of Florida waters. (Source: Florida Fish and Wildlife Conservation Commission, Marine Fisheries Information System 2009).

Gulf of Mexico States

Alabama

There were no reported commercial landings of spiny lobster species. But there were reported landings of 10,000 pounds or less whole animal weight of slipper lobsters during the 1999-2008 period. Landings records indicate that these species were incidentally caught from shrimp trawls fishing in federal waters off the coast of Florida (C. Denson, Alabama Marine Resources Division, Alabama Department of Conservation and Natural Resources, personal communication).

Mississippi, Louisiana, and Texas

There were no reported landings for spiny or slipper lobster species (Source: http://www.st.nmfs.noaa.gov/st1/commercial/landings/annual_landings.html)

South Atlantic States

Georgia

There were no reported commercial landings of spiny lobster species or slipper lobster species in Georgia from either state or federal waters for the years 1999-2008 (J. Califf, Commercial Fisheries Statistics Coordinator, Coastal Resources Division, Georgia Department of Natural Resources, personal communication).

South Carolina

In the state waters of South Carolina there were no recorded landings of spiny lobster species or the slipper lobster species. In federal waters, commercial landings between 1991 and 2003, there was one year in which 6 pounds were reported, and between 2004 and 2008, there was one year in which 15 pounds were landed by commercial divers (G. Steele, Biological Statistician, South Carolina Department of Natural Resources, personal communication).

North Carolina

In the state waters of North Carolina there were no recorded landings of spiny lobster species or the slipper lobsters. In 1999, 2000, 2002, and 2005 commercial landings for those species were not recorded by the North Carolina Division of Marine Fisheries (NCDMF). Low landings for Caribbean spiny lobster from federal waters were recorded in 2001, 2003, 2004, 2006, 2007, and 2008. The average landings were 100 pounds live whole animal weight or less by commercial divers. The ex-vessel value for Caribbean spiny lobster species during this time period (i.e., 1999-2008) ranged from \$50 to \$3,500 (A. Bianchi, Trip Ticket Coordinator, North Carolina Division of Marine Fisheries, personal communication).

Caribbean spiny lobsters are hand harvested, as the use of spears or gigs is illegal in federal waters on both coasts (SAFMC-GMFMC commercial fishing regulations 2009). The Marine Recreational Fisheries Statistics Survey (MRFSS) only collects data on finfish, so recreational take of lobster species in Alabama, Georgia, South Carolina, or North Carolina is not well documented.

1.5 Potential Actions for Scoping

1. Should separate state and federal ACLs, AMs, and optional ACT be set for lobster species in the Joint Spiny Lobster FMP?

Beginning January 1, 2011 the Councils must specify annual catch limits and accountability measures that will prevent overfishing for species in the Joint Spiny Lobster FMP. The ACLs can be separated by state and federal limits as long as the total ACL does not exceed the ABC. This must be done in conjunction with the Florida FWC.

2. Should separate sector (i.e., recreational, commercial diving, bully netting, and commercial trapping) ACLs, AMs, and optional ACTs be set for lobster species in the Joint Spiny Lobster FMP?

Beginning January 1, 2011 the Councils must specify annual catch limits and accountability measures that will prevent overfishing for species in the Joint Spiny Lobster FMP. The ACLs

can be separated by recreational, commercial diving, bully netting, and commercial trapping as long as the total sector ACLs do not exceed the ABC. This must be done in conjunction with the Florida FWC.

3. Should the Joint Spiny Lobster FMP be repealed?

If the Councils choose to repeal federal management for the Joint Spiny Lobster FMP, fishers would only be under one management body and not three as is currently the case; the Federal National Standards would no longer apply. A majority of the commercial and recreational landings for Caribbean spiny lobster occur in the waters off Monroe County, Florida. Most of the federal regulations already follow the Florida FWC regulations.

One issue for consideration, if the Joint Spiny Lobster FMP were to be repealed from federal management is the newly implemented Joint Amendment 4 and 8 which prohibits undersized Caribbean spiny lobsters from being imported into the U.S. [February 11, 2009; 73 FR 1148].

The South Atlantic is also interested in considering removing the Joint Spiny Lobster FMP in federal waters off Florida and the Gulf of Mexico, leaving the South Atlantic Council with the task of federal management of species in the FMP off the following states: North Carolina, South Carolina, and Georgia.

4. Should certain operational aspects of the Joint Spiny Lobster FMP be delegated to the Florida FWC with the agreement of the Gulf and South Atlantic Fishery Management Councils and Florida FWC?

If certain aspects of the Joint Spiny Lobster FMP are delegated to Florida FWC, then the federal FMP would still stay in place and would still need to meet the MSFCMA requirements. For example, instead of removing the federal FMP completely, it may be possible to delegate certain aspects of the framework procedure to allow the Florida FWC to modify some regulations.

Examples of items could include:

1. Numerical specification of ACL and breakdown into sector-specific ACLs based on the definitions included in the amendment to the Spiny Lobster FMP.
2. Commercial quotas and recreational allocations based on the allocations specified in the amendment to the Spiny Lobster FMP
3. Size limits
4. Bag limits
5. Trip limits
6. Permit endorsements
7. Modifications to the length of the season
8. Application of the AMs, including closing the fishery when a sector reaches its quota and/or allocation
9. Rules and regulations for possession of traps, including gear marking, tagging, etc.
10. Data collection and reporting requirements
11. Closed areas – this may be difficult to maintain for law enforcement and Florida FWC might need to have NOAAs National Marine Fisheries Service (NMFS) prepare an Environmental Assessment.

5. Should any of the follow species be withdrawn from the Joint Spiny Lobster FMP?

- Smoothtail spiny lobster, *Panulirus laevicauda*
- Spotted spiny lobster, *Panulirus guttatus*
- Spanish slipper lobster, *Scyllarides aequinoctialis*
- Ridged slipper lobster, *Scyllarides nodifer*

The lesser targeted species (i.e., smoothtail spiny lobster, spotted spiny lobster, and Spanish slipper lobster) should be considered for withdrawal from the Joint Spiny Lobster FMP. Most of these species are not targeted, but if landed by recreational or commercial fishers are not documented because commercial logbooks and Florida FWC invertebrate surveys do not capture landings other than the Caribbean spiny lobster, *Panulirus argus*, and the two slipper lobster species. Additionally, the native range of some species, such as the smoothtail spiny lobster and spotted spiny lobster, only includes south Florida as areas that are managed by the Councils.

The regulations define slipper lobster as *Scyllarides nodifer* and spiny lobster as *Panulirus argus* and prohibit any harvest and/or retention of berried (i.e., egg-bearing) lobsters.

6. Should any of the following lesser targeted species (i.e., spotted spiny lobster, smoothtail spiny lobster, Spanish slipper lobster, and ridged slipper lobster) qualify as ecosystem component species?

All of the other species mentioned above have very low landings compared to the Caribbean spiny lobster. They are not targeted stocks, nor are they determined to be or likely to become subject to overfishing, approaching overfished, or overfished. If these species could be classified as ecosystem component species, ACLs and AMs parameters would not be required under the National Standard 1 Guidelines.

1.6 Other Issues for Consideration

1. Should the current tailing requirements for recreational and commercial vessels with a tailing permit be modified so that all Caribbean spiny lobster landed are landed all “whole” or all “tailed”?

The tailing permit allows Caribbean spiny lobster tails to be landed separate from the body (i.e., carapace) on board fishing vessels that make multi-day trips (i.e. 48 hours or more) and had a federal tail-separation permit specified in 50 CFR 640.4 (a)(2). If the tailing requirements were modified for those with a permit to land all “whole” or all “tailed” Caribbean spiny lobster the loophole would close for misuse of the tailing permit to circumvent the three inch carapace minimum size length requirements.

2. Should the regulations regarding possession and handling of short lobsters “undersized attractant” be modified and/or prohibit possession and use of shorts as attractants?

Current regulations allow up to 50 spiny lobsters or one per trap aboard the vessel, whichever is greater that are under the minimum size limit to be retained aboard a vessel provided they are held in a live well. When in a trap such juveniles or “short” lobsters, are used to attract other

lobsters for harvest. Allowing “undersize attractants” potentially increases the probably of the fishing mortality on juvenile lobsters and may facilitate illegal activities (50 CFR 640.21).

3. Should the Joint Spiny Lobster FMP management protocol be updated to track changes in Florida FWC’s management process?

The Spiny Lobster FMP contains a process for the Florida FWC to propose modifications to regulations. This process is now outdated and needs to be updated.

4. Should use of lobster traps be limited to certain areas to address concerns for staghorn coral, *Acropora cervicornis*, and elkhorn corals, *Acropora palmata* on the Endangered Species Act (ESA)?

Further information from the Florida FWC is needed to determine the incidents of lobster traps damaging endangered corals. However, this issue is more of a concern for the South Atlantic Council due to the shorter jurisdiction of 3 nautical miles versus the Gulf of Mexico 9 nautical mile state jurisdiction.

2.0 REFERENCES

- Bianchi, A. 2009. Trip Ticket Coordinator, North Carolina Division of Marine Fisheries, personal communication.
- Califf, J. 2009. Commercial Fisheries Statistics Coordinator, Coastal Resources Division, Georgia Department of Natural Resources, personal communication.
- Denson, C. 2009. Alabama Marine Resources Division, Alabama Department of Conservation and Natural Resources, personal communication.
- Food and Agricultural Organization of the United Nations (FAO Fisheries Synopsis). 1991. L.B., Holthuis, editor. Marine lobsters of the world. An annotated and illustrated catalogue of species of interest to fisheries known to date. 13(125): 292.
- GMFMC-SAFMC 1986. Amendment 1 for the Fishery Management Plan for Spiny Lobster in the Gulf of Mexico and South Atlantic. Gulf of Mexico Fishery Management Council, Tampa, Florida and South Atlantic Fishery Management Council, Charleston, South Carolina. 103 p.
- GMFMC-SAFMC 2008. Amendment 4 to the Fishery Management Plan for the spiny lobster fishery of Puerto Rico and the U.S. Virgin Islands and Amendment 8 to the spiny lobster fishery management plan of the Gulf of Mexico and South Atlantic. Gulf of Mexico Fishery Management Council, Tampa, Florida and South Atlantic Fishery Management Council, Charleston, South Carolina 154 p.
- Herrnkind, W F. 1980. Spiny lobsters: patterns of movement. Pages 349-407 in J. S. Cobb and B.F. Phillips, editors. The Biology and Management of Lobsters. New York.
- Lipicus, R.N., and J.S. Cobb. 1994. Introduction: Ecology and fishery biology of spiny lobsters. In: Spiny Lobster Management, pp. 1-30. B.F. Phillips, J.S. Cobb and J.K. Kittaka, Eds. Oxford: Blackwell Scientific Publications.
- Sharp, W.C., J.H. Hunt, and W.H. Teehan. 2007. Observation on the Ecology of *Scyllarides aequinoctialis*, *Scyllarides nodifer*, and *Parribacus antarcticus* and a description of the Florida Scyllarid Lobster Fishery. Pages 231-242 in K.L. Lavalli and E. Spanier, editors. The Biology and Fisheries of the Slipper Lobster. Boca Raton, Florida.
- Silberman, J. D., and P. J. Walsh. 1994. Population genetics of the spiny lobster *Panulirus argus*. Bulletin Marine Science 54:1084.
- Steele, G. 2009. Biological Statistician, South Carolina Department of Natural Resources, personal communication.
- Williams, A.B., L.G. Abele, D.L. Felder, H.H. Hobbs Jr., R.B. Manning, P.A. McLaughlin, and I Perez Farfante. 1988. Common and scientific names of aquatic invertebrates from the United State and Canada: decapods crustaceans. American Fisheries Society Special Publication 17.