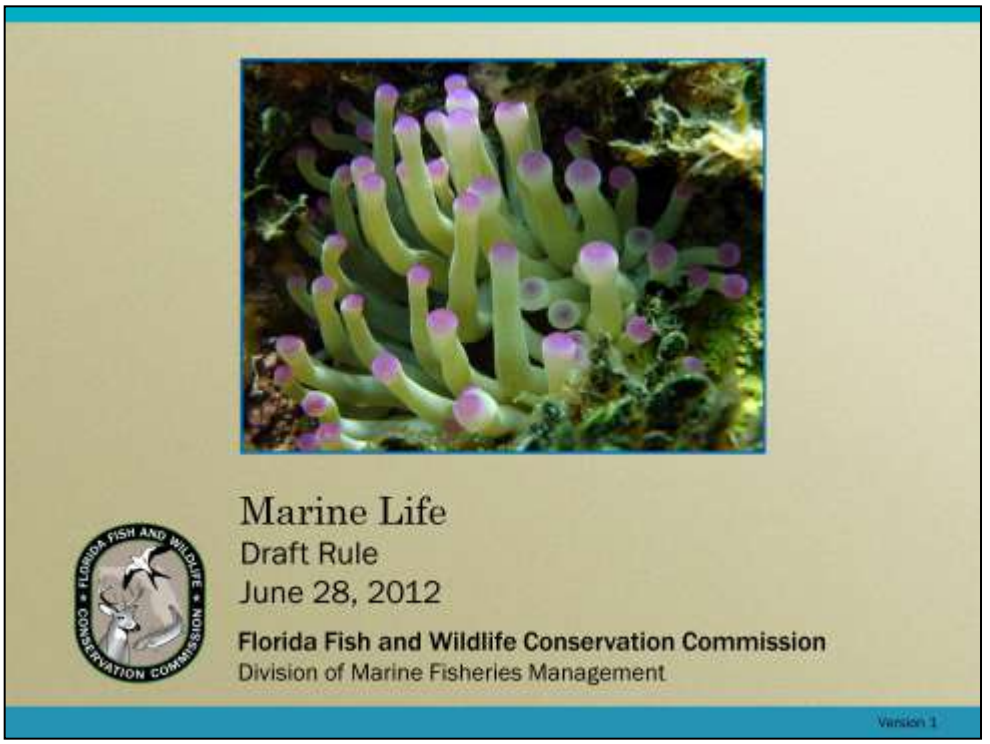

This document summarizes a draft rule amendment for the Florida Fish and Wildlife Conservation Commission's (FWC) marine life rule 68B-42, Florida Administrative Code (F.A.C.). This rule regulates the harvest of tropical ornamental species (referred to collectively as marine life), which are typically collected for live display in private and public aquaria. The proposed draft rule amendment would close recreational and commercial harvest of the giant Caribbean sea anemone in state and federal waters off Florida. Members of the marine life industry have observed a decline in the numbers of giant anemones and have requested a closure for this species to allow the population to rebuild. If passed, staff plans to return to the Commission within three years with a proposal for future management of this species. Staff also proposes to correct and clarify several other aspects of the marine life rule with this proposed amendment.

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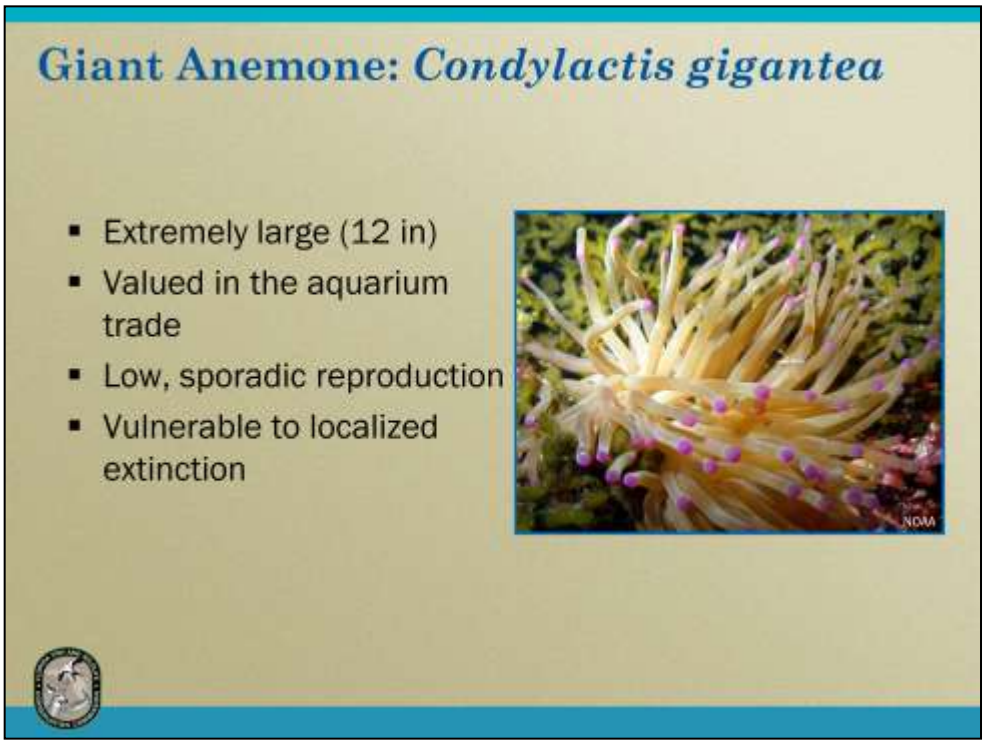


The giant Caribbean sea anemone, *Condylactis gigantea*, is known by many names, including the pink-tipped anemone and the trade name "condy," which is a shortened form of the genus name *Condylactis*. It is an extremely large anemone, reaching 30 cm (1 foot) or more across the tentacles.

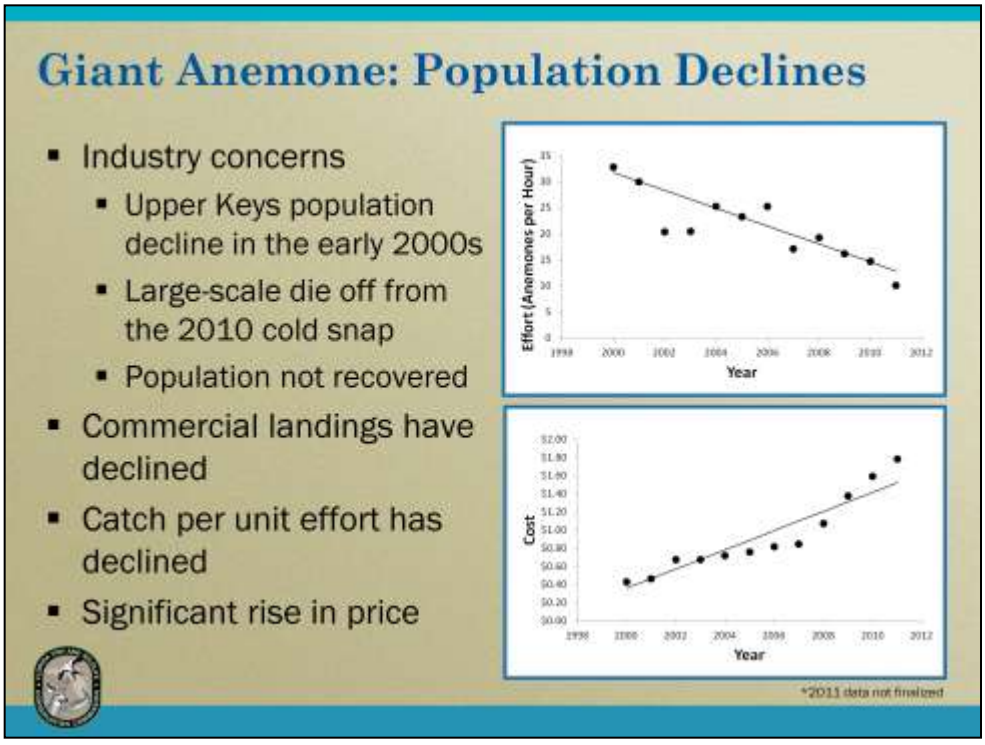
They are highly valued by saltwater aquarium enthusiasts for their large size, beauty, and because they serve as a host for symbiotic shrimp and fish.

Giant anemones are broadcast spawners, which means the males and females release their sperm and unfertilized eggs, and fertilization occurs externally in the water column. Because of this, there needs to be a sufficient number of individuals in a given area and the males and females need to be in close proximity to each other to ensure fertilization success. These factors, coupled with high juvenile mortality, lead to sporadic, low levels of larval recruitment and make the giant anemone susceptible to overharvest. Localized extinction due to harvest pressure has been documented in areas that experience moderate to heavy harvest pressure. One such case occurred off the coast of Brazil.

The giant anemone is currently open to both recreational and commercial harvest. Recreational fishing license requirements apply and recreational collectors are limited to five per day, within the 20-organism marine life aggregate.

Commercial harvest requires a Saltwater Products License (SPL) with a Restricted Species (RS) endorsement and a Marine Life (ML) tiered endorsement. Commercial harvesters have a trip limit of 200 giant anemones per ML endorsement and a vessel limit of 400, with at least two different ML endorsement numbers aboard.

Both recreational and commercial harvesters are required to transport the anemones in an aerated system and land them alive.



Members of the commercial marine life industry approached staff with concerns about an observed decline in the number of giant anemones following the 2010 cold snap. Industry participants reported there had been a sharp decline in the number of giant anemones in the Upper and Middle Keys in the early 2000s, with the remaining population adversely affected by the 2010 cold weather. At that time, staff requested the industry allow the population time to recover from the cold weather event. However, the population has failed to recover, leading industry participants to request a temporary closure.

Commercial landings data also suggest the numbers of giant anemones harvested have declined. Landings have dropped from 227,238 individuals collected commercially in 1994, to just 28,656 individuals in 2011.

Catch per unit effort (CPUE) has also declined significantly since 2000. The first graph depicts the CPUE from 2000 – 2011, shown as the number of giant anemones harvested per hour during trips that landed the species. The decline in CPUE suggests the drop in landings is due to changes in population abundance and not changes in demand.

The second graph illustrates the corresponding rise in the consumer price index (CPI) for giant anemones during the same time period. This graph represents the average dockside value for individual anemones over the last 11 years, adjusted for inflation. There has been a significant rise in the price of giant anemones while landings have declined. This rise in value likely offsets some of the cost associated with the additional effort required to locate giant anemones, which means commercial collectors are less likely to be deterred from continued harvest as the population declines.

Staff held four public workshops across South Florida, along with a statewide telephone call-in workshop in April and May in order to gather public opinion about the proposed closure for the giant anemone, as well as several other topics related to the marine life rule. In addition to anemone declines, staff solicited feedback about possible changes to sea cucumber management and a series of proposed rule clean-up items, which will be presented toward the end of this document.

Thirteen people attended the public workshops held in West Palm Beach, Key Colony Beach, Key West, and Bradenton, all of whom were commercial marine life collectors. Low attendance is likely a reflection of the relatively few number of harvesters that target giant sea anemones. In addition, many fishery participants had already expressed their support for a temporary moratorium on harvest through their participation in the Florida Marine Life Association (FMLA), which met just prior to the workshops. The FMLA is the commercial fishing organization that represents the marine life industry in Florida. The FWC received a letter from the FMLA requesting a temporary giant anemone harvest closure in order to allow the population to rebuild.

Based on the concerns brought forth by the fishery and the persistent decline in landings of giant anemones, staff recommends temporarily closing the fishery for this species. The proposed draft rule would modify 68B-42.005 and 68B-42.006, F.A.C., by reducing the commercial and recreational bag limits to zero. Staff considered less severe management measures, including continuing to allow harvest under a reduced commercial trip limit. However, based on the nature of the order-driven fishery and current low levels of catch per unit effort, staff believes the Commission would have to lower the commercial trip limit from 200 per person to less than 10 to have an impact on landings, and even that might not be effective. Staff believes a complete closure is the most appropriate measure to rebuild the population.

Staff heard from one commercial marine life collector who felt a closure was unnecessary; however, all industry personnel who attended the workshops supported a three-year closure as long as the Commission monitored the population and considered reopening the fishery within three years. Industry participants originally requested a two-year closure, but those that attended the workshops supported staff's proposal of a three-year moratorium. Staff recommends closing the fishery for three years due to the uncertain nature of recruitment in this fishery and to be consistent with the Commission's practice of allowing management measures to be in place for three years before attempting to assess any corresponding population changes.

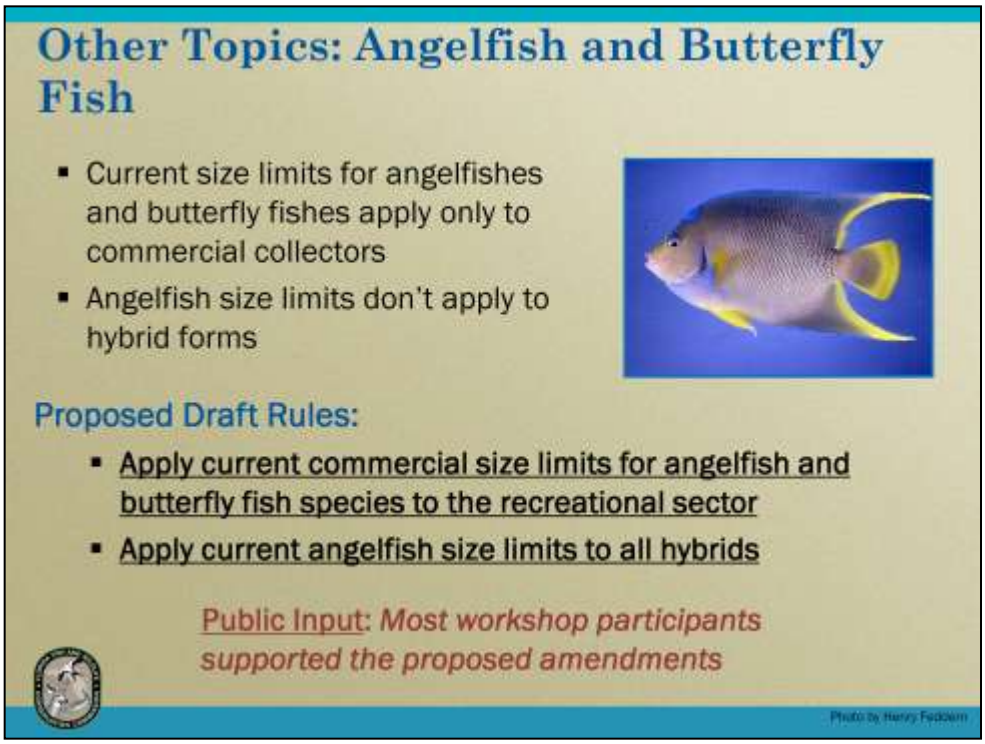
Staff also recommends monitoring the population of giant anemones during the closure and returning to the Commission with options for future management of the species within three years.

The removal of three non-marine life species from the marine life rule was also discussed at the public workshops. Many marine life species are defined according to their membership in species groups composed primarily of ornamental species. In cases where non-ornamental species occur in those groups, the rule explicitly excludes the non-ornamental species from the rule.

Sand perch, dwarf sand perch, and unicorn filefish are not ornamental species and are unlikely to be targeted by recreational or commercial marine life collectors. However, they are traditionally targeted and harvested by recreational hook-and-line fishers. Sand perch and dwarf sand perch are popular bait species, commonly used to target grouper, tarpon, amberjack, and king mackerel. In addition to being used as bait, the larger fish are kept for food. The unicorn filefish is reported to be an excellent food fish, and is occasionally targeted or kept as bycatch for its high quality meat.

The gear limitations, low bag limits and live transport and landing requirements associated with the marine life rule are unnecessarily restrictive and inappropriately applied to these species. The proposed draft rule would modify 68B-42.001, F.A.C., to exclude sand perch, dwarf sand perch, and the unicorn filefish from the definition of "marine life." Excluding these species from the definition of marine life would remove them from the rule entirely. Thus allowing their collection by anyone with a recreational fishing license or an SPL, and with no bag or size limits and no live well requirements. This would also allow harvest of these species using hook and line.

None of the industry personnel who attended the workshops reported collecting these species and most supported removing them from the rule. However, removing them from the provisions of the marine life rule would not limit the ability of marine life collectors to target or harvest these species.

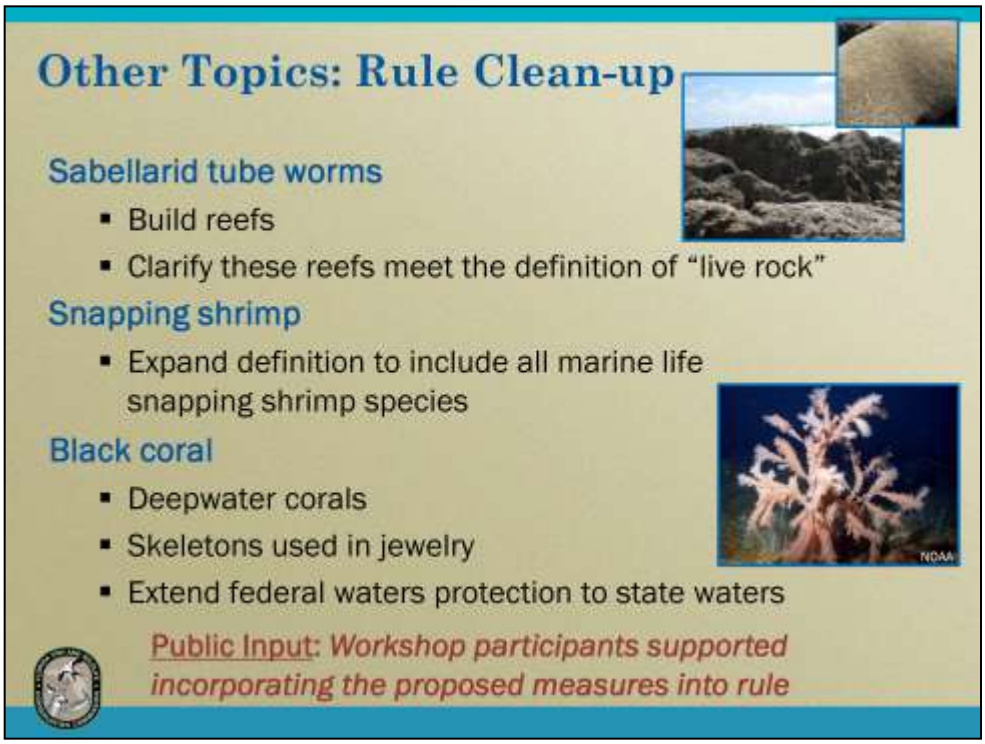


Commercial and recreational size limits for angelfishes and butterfly fishes were originally implemented in 1991. At that time, maximum size limits were established for both the commercial and recreational sectors, with minimum size limits also established for commercial collectors. During the course of subsequent revisions to those size limits, the references to the recreational size limits were inadvertently removed. As a result, the current size limits for angelfishes and butterfly fishes only apply to commercial collectors.

Closely-related angelfish species sometimes interbreed, creating hybrid forms. The Townsend angelfish, which is a cross between the blue and queen angelfishes, is one such example. When the maximum size limits for angelfishes were modified in 1995, a provision to include the hybrid forms of angelfishes was added to the rule. That provision was also inadvertently removed when the rule was later modified.

Staff recommends correcting these errors created during previous rule revisions. The proposed draft rules would modify 68B-42.004, F.A.C., by applying the current commercial size limits for all angelfish and butterfly fish species to the recreational sector and extending the existing angelfish size limits to all hybrid forms.

Most workshop participants supported applying the commercial size limits for all angelfish and butterfly fish species to the recreational sector and extending the existing angelfish size limits to all hybrid forms.

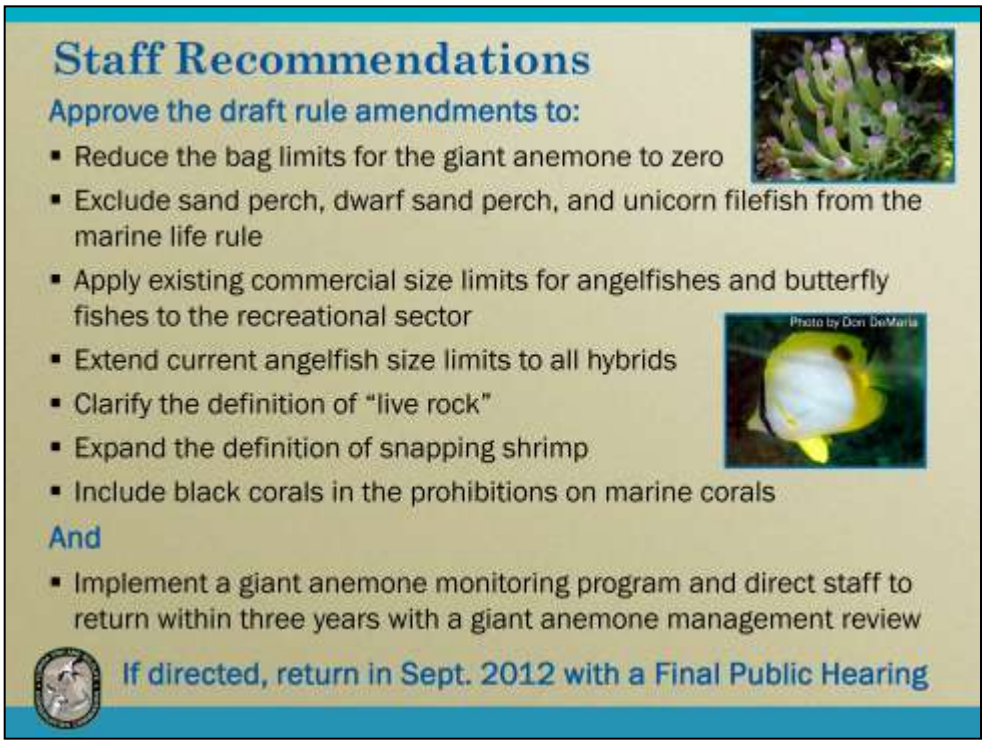


The marine life rule includes regulations for some tube worms, but it does not explicitly regulate the sabellarid tube worms found on Florida's East Coast from Cape Canaveral to Key Biscayne. These tube worms occur in subtidal and intertidal waters where they build large reefs by clumping sand. These reefs meet the current definition of "live rock," which may not be harvested. However, there is concern that collectors may erroneously believe they can harvest these reefs because the harvest of other species of tube worms is permitted under the marine life rule. The proposed draft rule would modify the definition of live rock (68B-42.002, F.A.C) in order to clarify that the harvest of reef structures built by these organisms is prohibited.

The current definition for snapping shrimp regulated under the marine life rule includes all species belonging to the genus *Alpheus*. This definition captures the majority of ornamental snapping shrimp found in the waters off Florida. However, expanding the definition from the genus level to the family level would capture all ornamental species. The proposed draft rule would expand the current definition of snapping shrimp (68B-42.001, F.A.C.) to include all species in the family Alpheidae.

Black corals are deepwater corals harvested around the world for use in jewelry. Off Florida, these species are largely limited to federal waters, where harvest is prohibited. However, these species do occasionally occur in state waters. They were not originally included in the current prohibitions on the taking, destruction, or sale of marine corals, because of their rarity in our waters. The proposed draft rule would extend the federal waters protections for black corals to state waters by adding them to the list of corals already protected under 68B-42.009, F.A.C., which currently includes stony corals, fire corals, and most sea fans.

Workshop participants supported incorporating the proposed clarifications and management measures into the marine life rule.

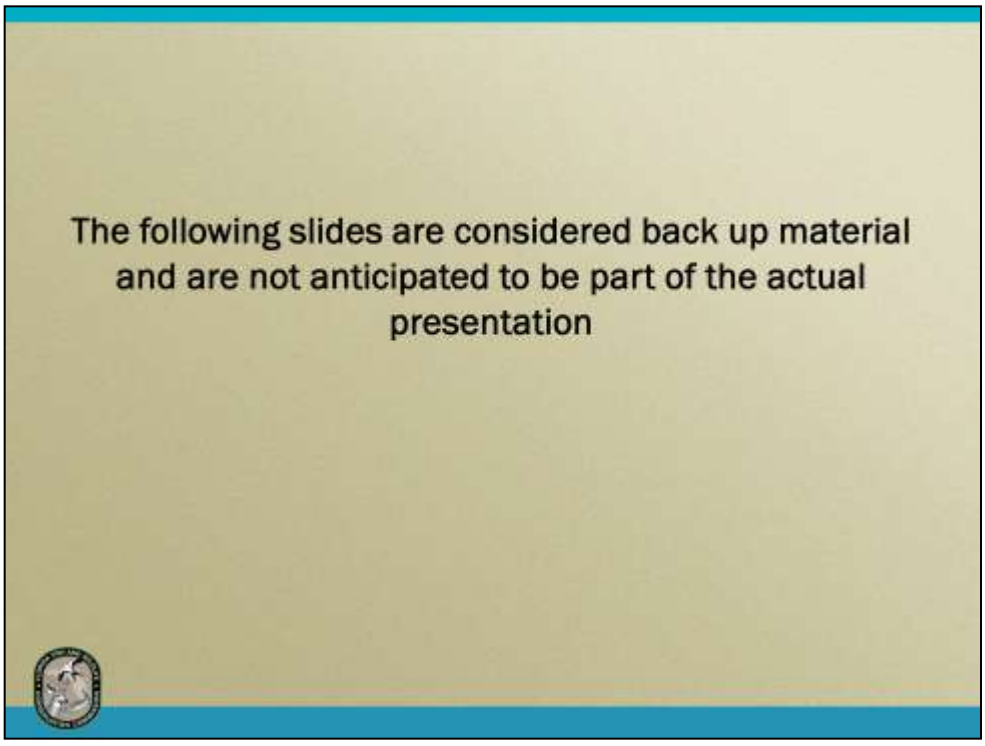


Staff recommends approving the draft rule to prohibit the harvest of the giant Caribbean sea anemone, *Condylactis gigantea*, by reducing the commercial and recreational bag limits to zero.

With respect to the rule clean-up items presented, staff recommends approving the draft rule amendments to exclude sand perch, dwarf sand perch, and unicorn filefish from the list of species defined as marine life; apply existing commercial size limits for angelfishes and butterfly fishes to the recreational sector; extend the current angelfish size limits to all hybrid angelfishes; clarify the definition of "live rock" by explicitly including the formations created by sabellarid tube worms; expand the definition of snapping shrimp to include all members of the family Alpheidae; and include black corals in the current harvest prohibitions on marine corals.

Staff also requests approval to move forward with a monitoring program for the giant anemone population in Florida and to return to the Commission with a management review of the giant anemone within three years.

If the draft rule amendments are approved, staff recommends proceeding to a Final Public Hearing at the September meeting in Tampa.



The following slides are considered back up material and are not anticipated to be part of the actual presentation

Potential changes to the FWC's management of sea cucumbers were also discussed at the public workshops. Sea cucumbers are highly valued in Asian markets where they are dried and sold for medicinal purposes and for their high nutritional content. Demand is increasing worldwide; however, sea cucumber reproduction is limited due to infrequent or low levels of recruitment and slow population turnover. Like sea anemones, their life history traits make them vulnerable to overfishing. Overexploitation and indiscriminant fishing practices for sea cucumbers have led to depletion and fishery collapse in many foreign fisheries, resulting in concerns that exporters will turn to Florida in attempts to meet the rising demand.

Industry participants in Florida report they have been approached in recent months by foreign exporters, seeking to purchase sea cucumbers harvested locally to supply the Asian markets. This fishery appears to be in the exploratory phase in Florida and it is unknown whether or not the product, available from local waters, will be desirable on the Asian market.

Florida's sea cucumbers are currently managed as a marine life species. Recreational fishing license requirements apply and recreational collectors are limited to five individuals of each species per day, which are included in the 20-organism aggregate bag limit. Like the giant anemone, commercial harvest requires an SPL with a RS and a ML tiered endorsement. However, there is no trip limit for commercial collectors who hold a ML endorsement.

As with other marine life species, both recreational and commercial harvesters are required to transport sea cucumbers in an aerated system and land them alive. These transport and landing requirements provide some limitations on the numbers that can be harvested, absent a specific commercial trip limit.

Staff solicited feedback from the industry at the recent workshops as to whether or not regulatory changes were needed to further protect Florida's sea cucumber populations from overexploitation. Industry personnel had mixed opinions as to whether or not additional management measures were appropriate at this time. Some indicated commercial trip limits of 100 – 400 per vessel should be implemented while others felt additional regulations weren't needed now, but that FWC should monitor the fishery and respond if a problem developed. Several people also indicated that the sea cucumber species desired by Asian suppliers were not the same species targeted by marine life collectors.

Staff does not recommend implementing new regulatory measures at this time. A commercial trip limit for marine life purposes is not needed at the current level of harvest, any trip limits imposed would be for a purpose that may not develop. However, staff will continue monitoring the fishery closely for any substantial increase in commercial landings. Staff would work with the industry in the future if management changes are necessary due to further development of a fishery for medicinal and nutritional purposes, or if a commercial trip limit becomes necessary for other reasons.