



This document summarizes a draft rule amendment for the Florida Fish and Wildlife Conservation Commission’s (FWC) Chapter 68B-5, Florida Administrative Code (FAC), which contains miscellaneous marine fisheries regulations. The proposed draft rule would waive the recreational saltwater fishing license requirement for divers harvesting lionfish using specified gears and exclude lionfish from recreational and commercial bag limit requirements.

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Lionfish in Florida

Found in most FL waters

- Population explosion in recent years

Highly successful invader

- Broad range of habitat utilization
- No known natural predators in FL
- Rapid reproduction

The issue

- Disrupts ecosystem balance
 - Preys upon ecologically important native reef species
 - Competes for food with ecologically and economically important species



Photo: REEF



Lionfish sightings in Florida date back to 1985. Until recently, sightings were rare, with only a few cases each year. The first lionfish in the Florida Keys was confirmed in early 2009. Since then, their populations have exploded throughout the Keys and other Florida waters and the Caribbean, and are expanding well across the Gulf of Mexico, and as far north as Rhode Island in the Atlantic Ocean. Currently, lionfish have been found in most waters off Florida.

Lionfish are successful invaders for several reasons. They adapt to a wide variety of habitats, including shallow inshore mangroves and seagrass beds, bridge pilings, offshore wrecks, and coral reefs at depths of 1,000 ft. In addition, being native to the Indo-Pacific, lionfish have no known natural predators in this part of the world, and are protected from potential predators by 18 large venomous spines. Lionfish are also very productive, with females releasing up to 30,000 eggs per spawn, and are able to spawn several times per month, year round.

When established, lionfish disrupt the natural balance of the ecosystem being invaded. They prey on native juvenile reef fish such as snapper and grouper, and have been shown to negatively effect recruitment of these small fish to patch reefs. They also prey upon herbivorous fish that are essential to keeping the algae in coral reef systems from overgrowing the coral. In addition to predation, they also compete with larger snapper and grouper for food resources.

Agency Lionfish Efforts

- Lionfish team: internal agency group with statewide representation
 - Bimonthly conference calls on lionfish activity
- Plans for a Lionfish Summit in summer 2013
- Plans for a lionfish contest on social media
 - Harvesters post a picture of a lionfish catch and receive a lionfish t-shirt from FWC
- Providing educational literature and lionfish t-shirts to promote harvest
- Cooperating with Sea Grant, REEF, and other organizations



Division of Marine Fisheries Management (DMFM) staff, along with staff from other divisions, have been active in efforts to mitigate the effects of lionfish in Florida. There is a lionfish team made up of FWC staff that holds a bimonthly (every other month) phone call to report on lionfish events in each region of the state. In addition, a Lionfish Summit is being planned for summer of 2013 and its goal is to make all organizations and agencies working on the lionfish issue in Florida informed about each other's efforts in lionfish management. The Summit should fuel coordination between federal, state, and local agencies and other organizations to support the removal of lionfish.

There are plans to hold a lionfish harvesting contest through social media networks to encourage stakeholders to remove lionfish. Anglers who post a picture of their lionfish harvest will receive a lionfish t-shirt from FWC.

DMFM has also been providing educational literature and lionfish t-shirts to dive shops and lionfish derbies in order to educate anglers about lionfish and encourage their harvest. The lionfish brochure includes information on the ecological threat lionfish pose, methods of lionfish control, guidelines for consumption and handling, and lionfish reporting information. In addition, the FWC has been cooperating with Sea Grant, REEF, and other organizations to facilitate the removal of lionfish.

2012 Executive Order

Purpose

- To facilitate the removal of lionfish from Florida waters by divers

Provisions

- Recreational fishing license requirement waived when harvesting lionfish while diving using pole spear, Hawaiian sling, hand held net, or any other spearing device designed and marketed toward lionfish
- No bag limit for recreational or commercial harvest
- Proper license required for harvest using all other legal gears

Expires August 3, 2013



Photo: FWC

In addition to FWC's outreach and education efforts, Executive Order (E.O.) number 12-12 was signed and became effective on Aug. 3, 2012. This E.O. was enacted to facilitate the removal of lionfish by increasing opportunities for dive harvesters in the following ways: by waiving the recreational fishing license requirement using a pole spear, Hawaiian sling, hand held net, or any other spearing device designed and marketed exclusively for lionfish, and by establishing a no bag limit policy for recreational or commercial harvest. Proper licenses are still required to harvest lionfish using all other legal gears such as hook and line and as commercial bycatch. This E.O. is set to expire Aug. 3, 2013.

Proposed Draft Rule

68B-5.006 Lionfish

- *Recreational fishing license not required for lionfish harvest by divers using the following gears: pole spear, Hawaiian sling, hand held net, or other spearing device specifically designed and marketed for lionfish*
- *No bag limit for recreational and commercial harvest of lionfish*
 - *100 pounds not considered a commercial quantity*



Photo: REEF

The proposed draft rule would incorporate the provisions of the E.O. into rule, so that they will not expire. The draft rule would create a new rule, 68B-5.006, FAC, (Lionfish), that waives the requirement for a recreational fishing license for divers harvesting lionfish, provided harvest is only with the following gears: pole spear, Hawaiian sling, hand held net, or other spearing device specifically designed and marketed exclusively for lionfish. In addition, the proposed draft rule would state there is no bag limit for recreational or commercial harvest of lionfish, thus removing the 100-pound recreational daily bag limit that applies to species without explicit bag limits.

Staff Recommendation

Approve the proposed draft rule

- No recreational license requirement for specified dive gears
- No recreational or commercial bag limits
- 100 pounds not considered a commercial quantity

If directed, return for a Final
Public Hearing at the June
2013 Commission meeting



Photo: FWC



Staff recommends approving the proposed amendments to create 68B-5.006, FAC, (Lionfish), which would waive the recreational saltwater fishing license requirement for the harvest of lionfish by divers using specified gear, establish no recreational and commercial bag limit policy, and exclude lionfish from the 100-pound recreational daily bag limit. A recreational fishing license would still be required to fish for lionfish using all other legal gears. If approved, staff recommends proceeding to a final public hearing at the June Commission Meeting.

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



Lionfish Biology

- Family Scorpaenidae
- Native Range: western Pacific Ocean
- Habitat: coral reefs and mangroves
- Diet: small fish and crustaceans
- Venomous spines
- Predation: prey on juvenile reef fish and reduce recruitment
 - Lionfish have no natural predators in FL
- Reproduction: 30,000 eggs per spawn
 - Spawn several times each month, year-round



Lionfish (*Pterois volitans* and *Pterois miles*) are scorpionfish in the family Scorpaenidae. Their native range is the western Pacific Ocean, but they have spread world-wide in the past several decades. They inhabit coral reefs and have also been found in a wide variety of nearshore and offshore habitats. They are nocturnal predators and mainly eat small fish and crustaceans. They have numerous, venomous spines that protect them from predators and are harmful to humans.

Lionfish are very successful invaders and often have negative effects on their new ecosystems. Lionfish adapt well to new environments and are voracious predators. They prey on juvenile reef fish and have been shown to negatively effect recruitment of these small fish. They have no natural predators in their non-native ecosystems because of their venomous spines. In many cases, lionfish have established breeding populations in their new locations. Lionfish also have a very fast reproductive rate, with females releasing up to 30,000 eggs per spawn, and have been shown to spawn several times per month, year round.