



This document summarizes a final rule 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 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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# 2012 Executive Order

## Purpose

- Facilitate harvest of lionfish by divers
  - Invasive lionfish are disruptive to native ecosystems
  - Diving-based removals are most effective method of harvest



Photo: FWG.

## Provisions

- Recreational fishing license requirement waived for divers using hand held net, pole spear, Hawaiian sling, 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**

Executive Order (E.O.) number 12-12 was signed into effect on Aug. 3, 2012. This E.O. was enacted to facilitate the removal of lionfish from the state waters off Florida by divers. Lionfish are extremely disruptive to native ecosystems, damaging reefs by preying upon fish important to the health of corals, and preying upon and competing with commercially important reef fish.

E.O. 12-12 increased opportunities for divers to harvest lionfish by waiving the recreational fishing license requirement when harvesting lionfish using a hand held net, pole spear, Hawaiian sling, 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 Rule

### 68B-5.006 Lionfish

- *Recreational fishing license not required for lionfish harvest by divers using the following gears: hand held net, pole spear, Hawaiian sling, 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 rule amendment would incorporate the provisions of the E.O. into rule, so that they will not expire. This rule amendment 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: hand held net, pole spear, Hawaiian sling, or other spearing device specifically designed and marketed exclusively for lionfish. In addition, the proposed 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 established bag limits.

## Staff Recommendation

### Approve the proposed final rule

- No recreational license requirement for specified dive gears
  - No recreational or commercial bag limits
  - 100 pounds not considered a commercial quantity
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- If approved, make rule effective Aug. 3, 2013



Staff recommends approving the proposed final rule 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, state that there is no recreational or commercial bag limit, and clarify that lionfish are not subject to 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 making the rule effective Aug. 3, 2013. Staff has evaluated the rule under the standards of 68-1.004, FAC, and found it to be in compliance.

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



## 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 affect recruitment of these small fish to patch reefs. They also prey upon herbivorous fish that are essential in keeping algae in coral reef systems from overgrowing the coral. In addition to predation, they also compete with larger snapper and grouper for food resources.

## 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



Photo: REEF



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 affect 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.

## Agency Lionfish Efforts

- Lionfish team: internal agency group with statewide representation
  - Bimonthly conference calls on lionfish activity
- Plans for a Lionfish Summit in fall 2013
- Lionfish contest on social media throughout April
  - 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 fall 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.

A lionfish harvesting contest through social media networks to encourage stakeholders to remove lionfish is currently underway and is taking place throughout the month of April. 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.