

What The GOA Is Doing

The Government of Anguilla, through the Department of Fisheries and Marine Resources, has developed a long-term Lionfish Response Plan to deal with the social, economic, and ecological impacts of the invasion of the lionfish into Anguilla's waters. The Plan includes:

- Developing and implementing invasive species policies.
- Collecting and managing information about the lionfish in Anguilla's waters.
- Controlling lionfish populations through active management.
- Developing and implementing public outreach as well as education materials and initiatives, directed at those fishing commercially, dive operators, and the general public.

What You Can Do

You can also help.

- Spread the message about the lionfish.
- Use a GPS unit to record all of your lionfish sightings and report them to the Department of Fisheries and Marine Resources, Government of Anguilla.

Department of Fisheries and Marine Resources contact information:

Tel. 264 497 2871 or 264 497 8705
Fax. 264 497 8567
E-mail. fisheriesmr@gov.ai

What To Do If You Are Stung

If you are stung by a lionfish, SEEK MEDICAL ATTENTION AS SOON AS POSSIBLE!

Lionfish are venomous and while their stings are very painful, they are not believed to be lethal. However, medical attention is necessary because if left untreated, other medical complications could arise.

To pre-treat a lionfish sting:

- Check for any pieces of the spine left in the wound.
- Apply heat to the wound to prevent the venom from spreading. Heat can be in the form of hot water (as hot as you can bear). Hot water should be applied to the wound for 15 to 20 minutes.
- Repeat the process should pain return.
- Over-the-counter painkillers can also be taken to relieve some of the pain.
- If offshore, hot water can be taken from the jet of the outboard engine. Dependent on boat design, this may be a difficult procedure and is attempted at your own risk.



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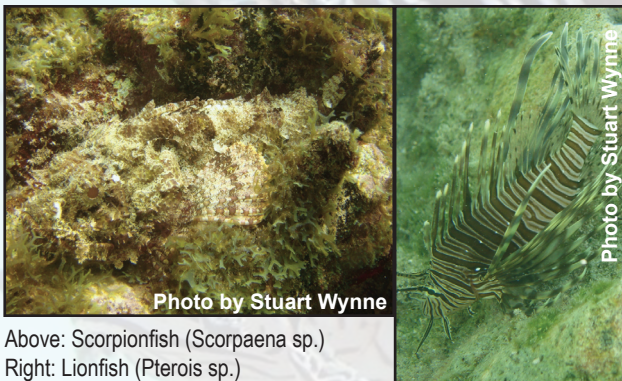


Photo by Ned Deloach

Lionfish Response Plan Anguilla, BWI

A Quick Look At The Lionfish

- Lionfish are native to the Indo-Pacific region.
- Lionfish are solitary and defend their home ranges against other lionfish.
- Groups of lionfish are typically only found during mating.
- During mating, females release a balloon of eggs which are externally fertilised.
- Scientists know that the eggs float out into the open water column, but little else is known about the lionfish's early life history.
- Adult lionfish are voracious feeders and eat a variety of small fish, shrimp, and crabs.
- In the Indo-Pacific, lionfish are in the upper levels of the food chain, with few predators.
- Here in the Caribbean, lionfish are invasive species and have no known predators.
- It is believed that lionfish were accidentally introduced to the Atlantic when, in 1992, they escaped from an aquarium in Florida after Hurricane Andrew.
- Aside from the waters by Florida, over the last 15 years, they have also been sighted around Bermuda, the Bahamas, Puerto Rico, and the US Virgin Islands.
- Lionfish are best known for their venomous spines.
- The lionfish (*Pterois* sp.) is a different species to the fish locally known in Anguilla as the "lionfish."
- The locally known species is actually a scorpionfish (*Scorpaena* sp.) which is native to the Caribbean.



Above: Scorpionfish (*Scorpaena* sp.)
Right: Lionfish (*Pterois* sp.)

Why The Lionfish Is Harmful

Environmental Concerns

- Lionfish are voracious hunters - they usually eat over 5% of their body weight per day.
- Prey species include juvenile parrotfish, wrasse, grunts, damselfish, and perhaps juvenile spiny lobsters.
- The lionfish is not perceived as a threat by other native fish species of the Caribbean and it has no natural predators here to control their population - their numbers could easily get out of control.
- Lionfish will most likely have a detrimental effect on reef areas in the Caribbean, including Anguilla.
- They may also impact local commercial fish stocks.
- Some of the fish eaten by the Lionfish are grazing species - fish that help to control algae levels on the reef. A reduction in these grazers could negatively affect coral growth.
- With no known predators and prey that easily allows itself to be eaten, the voracious lionfish may well successfully outcompete native species for food.
- A reduction in the amount of fish in Anguilla's waters will likely affect species targeted by those fishing commercially - resulting in reduced catch and a potential loss of revenue.

Public Health Concerns

- All of the spines on the lionfish, except for those on its tail fin, are venomous.
- Each of these spines has a venom gland at its base which releases venom when its tip is pressed against another object.
- As the spines are sharp, they easily puncture human skin and release venom into the wound.
- The venom causes intense and acute pain around the puncture wound. This pain is often followed by redness and swelling and, in extreme cases, vomiting, seizures, chills, or cramps. If left untreated, abdominal pain and paralysis may occur along with respiratory and heart complications.
- Stings will likely be more severe in small children, the elderly, or those with certain health problems.



Lionfish Identification

COLOUR: Maroon, red, brown, or orange with white or black stripes around the body and fins.

SIZE: Between 11 and 15 inches in length (adult lionfish).

SPINES: Located at the tips of the elegant dorsal, anal, and pelvic fins, the sharp slender spines deliver venom from specialised glands.

HABITATS: Lionfish are found in a wide range of habitats, ranging from coral and patch reefs, hard bottoms with ledges and holes, isolated coral heads, and artificial reefs (including shipwrecks and docks).

SYMPTOMS FROM STING: A severe, throbbing pain is felt immediately after being stung. The intense pain may be followed by redness and swelling. Tingling sensations may be felt around the wound for days or weeks. Additional symptoms include: headaches, sweating and blistering, vomiting, seizures, chills, or cramps. Left untreated, abdominal pain and paralysis may occur along with respiratory and heart complications.