

Lionfish

Pterois miles

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Pathway

• Aquariums - discard of individuals from home aquariums and during large imports for aquarium trade

Impacts



Biodiversity

Outcompete and eat a variety of species leading to a reduction in diversity of native coral reef fish populations and the subsequent degradation of the ecosystem.



Human Health

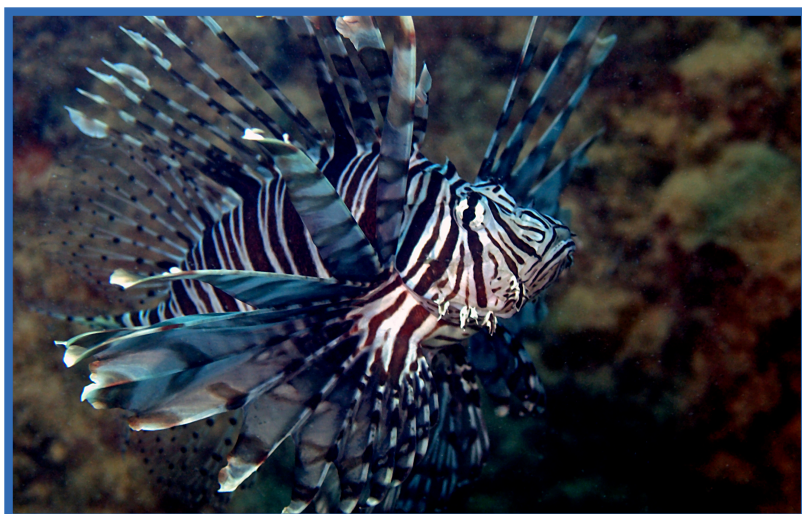
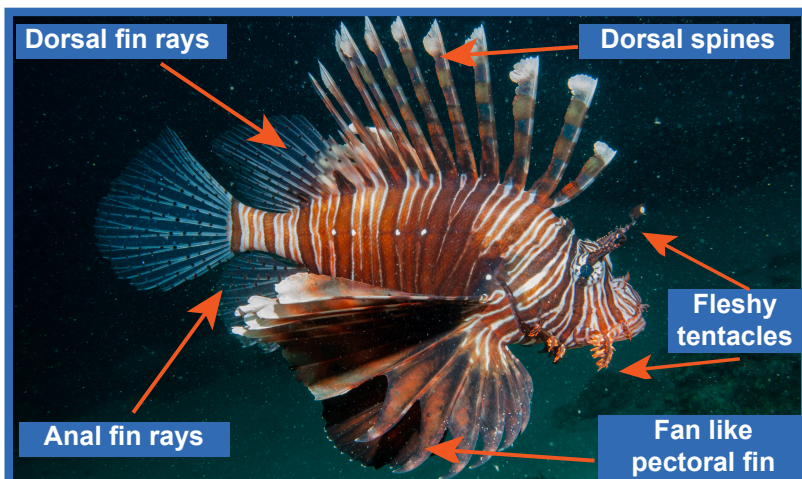
Spines that deliver a venomous sting that can last for days and cause extreme pain, sweating, respiratory distress, and even paralysis.



Economy

Reduction in landings of commercially important fish and a decrease in dive/snorkel tourism due to reduced marine biodiversity.

Key ID Features



Description

Fan-like pectoral fins. Fleshy tentacles are present below the mouth and above the eyes. Up to 18 long needle-like spines along their back. Ten dorsal fin rays along its back and six anal fin rays on its underside.

Size

6 – 45 cm.

Colour

White/cream coloured body with distinctive red to brown coloured vertical stripes covering the entirety of the head and body. This pattern resembles red-brown and white zebra stripes.

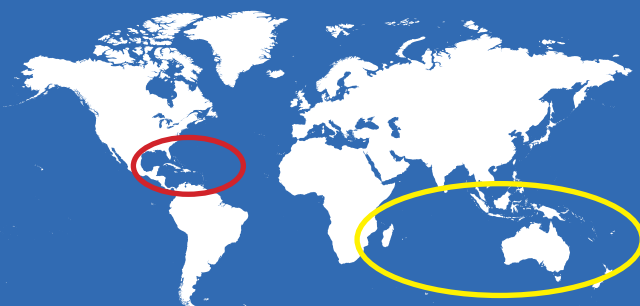
*Note: Images not to scale



Distribution

Native range: South Pacific and Indian Oceans.

Non-native range: Found throughout the Bahamas and the Caribbean, also the Gulf of Mexico.



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Habitat and Ecology

Habitat: Found in most warm marine habitat types, such as mangroves, seagrass, coral, hard bottoms and wrecks. Depth range between 0 - 300 m. Conspicuous and slow-moving and therefore use their uncommon colouration and fins to discourage potential predators. Move through the water column by slowly undulating the soft rays of both the dorsal and anal fins.

Diet: Typically nocturnal hunters, remaining relatively inactive during the day. Juveniles mostly consume invertebrates whilst adults will consume both small fish and invertebrates.

Reproduction: Females will release up to 30,000 eggs every four days per spawn and can spawn up to three times per month. Juveniles usually live in small groups whilst adults are characteristically found alone. Rapid growth rate, reaching full adult size at approximately two years. Capable of reproduction in less than a year.

Confusion with similar species

The lionfish have fewer dorsal and anal fin rays (ten and six respectively) compared to the 11 dorsal and seven anal fin rays of the closely related and nearly identical looking red lionfish *Pterois volitans* (pictured below) which is also invasive throughout the Caribbean.



Images

Front: Top © Bernard Picton / Bottom © Ron Lucas
Reverse: © Abadonian



Special Precautions

Lionfish have long needle-like dorsal, pelvic and anal spines which contain venomous glands. Stings by these spines can cause serious pain, numbness, swelling and temporary paralysis. It is recommended that the puncture wound is immersed in hot (but not scalding) water for 30-90 minutes and medical attention sought as soon as possible. The Poison Help hotline is available all day every day on 800222-1222.

If you think you have seen this species, please contact the person below who will confirm its identity.

Please also refer to the mitigation strategies guidance document, provided as part of the Marine Biosecurity Toolkit.

Further Information

- <http://lionfish.gcfi.org/lionfish-factsheet>
- https://ypte.org.uk/factsheets/lionfish/print?hide_donation_prompt=1
- <https://oceanservice.noaa.gov/facts/lionfish-facts.html>