



SIMON FRASER
UNIVERSITY



Lionfish Quickfacts

Invasion history

- Two visually identical species of lionfish were introduced into the Atlantic via the US aquarium trade beginning in 1980's
- Lionfish invaded range is NC to South America including the Gulf of Mexico
- Lionfish have established throughout most of the Caribbean in less than 3 years (first reports outside of the Bahamas in 2007)

Biology

- Lionfish may live longer than 15 years reaching sizes exceeding 47cm (~20 in.)
- Lionfish inhabit all marine habitat types and depths (shoreline to over 600')
- Lionfish possess venomous spines capable of deterring predators and inflicting serious stings and reactions in humans
- Lionfish become sexually mature in less than 1-year and spawn in pairs
- In the Caribbean a single female lionfish can spawn over ~2 million eggs/year
- Reproduction occurs throughout the year about every 4 days
- Lionfish eggs are held together in a gelatinous mass and are dispersed at the ocean's surface by currents, where their larval duration is ~30 days

Ecology

- Lionfish can reach densities over 200 adults per acre
- Lionfish are generalist carnivores that consume >56 species of fish and many invertebrate species, with prey exceeding half the lionfish's body size
- Many lionfish prey are commercially, recreationally, and ecologically important
- Lionfish populations can consume > 2.1 kg (4.5 lb) of prey/ hectare/day
- On heavily invaded sites, lionfish have reduced their fish prey by up to 90% and continue to consume native fishes at unsustainable rates
- Native predators exhibit avoidance for lionfish
- Lionfish have very few parasites compared to native species
- Lionfish exhibit site fidelity

Control

- Lionfish are edible and considered a delicacy
- Local removal efforts can significantly reduce lionfish densities