

THE NATIONAL LIONFISH PROJECT

The National Lionfish Project is a Pilot Project within a larger Regional Project entitled Mitigating the Threat of Invasive Alien Species in the Insular Caribbean (MTIASIC) funded by the Global Environment Facility (GEF) and the United Nations Environment Programme (UNEP). The Lionfish Pilot Project in Jamaica is led by the University of the West Indies- Discovery Bay Marine Lab (UWI-DBML) and National Environment and Planning Agency (NEPA). It seeks to strengthen partnerships among government and non-governmental agencies in Jamaica, as well as to promote regional cooperation.

It is very unlikely that the lionfish will be totally eradicated from Jamaica or the region, and therefore it is increasingly important to learn how to manage this species effectively. The Pilot takes a research based approach to developing a management strategy for Lionfish in Jamaica. Under the National Lionfish Project, the following are elements of Research being done:

- Population-tracking Island-wide
- Analyses of prey consumed by the lionfish
- Design of special traps for lionfish
- Analyses of the genetics of the population
- Biology and Ecology of the lionfish larvae
- Impacts of the lionfish on artificial reefs
- Impacts on local potfishing
- Formulation of Management Plans

Contact Information:

Dr. Dayne Buddo

Discovery Bay Marine Laboratory and Field Station

University of the West Indies

Tel: (876) 973-2241

(876) 973-2946

Email: dayne.buddo@uwimona.edu.jm

For additional information on the **MTIASIC Project in Jamaica** and invasive alien species, contact:

GEF/UNEP/CABI MTIASIC Project

The National Environment & Planning Agency,

10 Caledonia Avenue, Kingston 5

Telephone : 754 - 7540 ext. 2319

www.nepa.gov.jm

Other Partners:



THE INVASIVE LIONFISH IN JAMAICA



“Let’s Eat It to Beat It”



Photo Credits: Dayne Buddo
Omar Spence

WHAT IS A LIONFISH?

The Lionfish (*Pterois volitans* and *Pterois miles*) belongs to a group of venomous fishes and is related to the scorpionfish which are found regularly in Jamaica. It is a “sit-and-wait” predator, capable of consuming large quantities of fish and shellfish daily and can negatively impact the fish stocks in a country. Its venomous spines protect itself from becoming prey for other fish, and these spines are also capable of inflicting a very painful sting to humans.

HOW DID IT GET HERE?

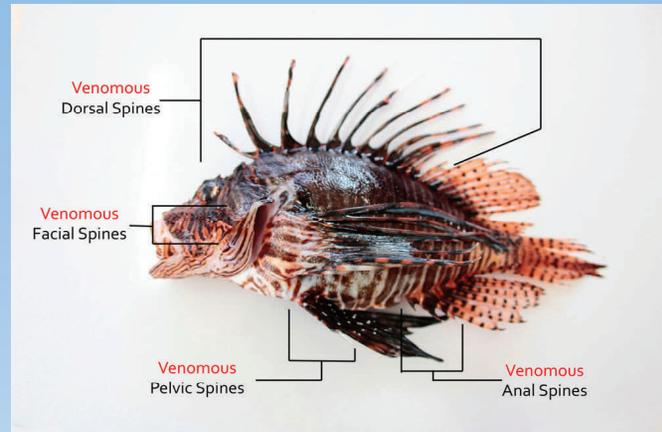
The Lionfish is native to the Indian and Pacific Oceans. In the late ‘80s and early ‘90s, marine aquaria enthusiasts mainly in the USA imported these fish for their homes and offices. However, for many reasons, these fish were released into the canals and seas, and “set free”. Since then, they have made their way along the east coast of the USA, the Bahamas, Hispaniola, Cuba, Jamaica, and many other countries throughout the Caribbean.

WHAT IS THE IMPACT OF THE LIONFISH?

The Lionfish preys on juvenile fish and shellfish. Many countries have reported staggering numbers of lionfish on their reefs and other marine environments. The lionfish reproduces all-year round in the Caribbean (every 4 days). A female lionfish is capable of producing 2 million eggs each year. Lionfish in Jamaica have been found in very shallow seagrass areas to areas 335m (1100ft) deep below the surface. They have been recorded in Jamaica to lengths of 51cm (20 inches).

The lionfish has been described as highly invasive in the Caribbean, due to its negative impacts on the reef ecology, economy and public health.

HOW TO HANDLE & CLEAN A LIONFISH



- Wearing heavy gloves, hold for manoeuvring in the mouth.
- Remove all the spines cutting above or into the flesh along each side
- Cut from the tail to the head with scissors.
- Scale and gut fish.
- You can remove head and fillet the Lionfish.
- Dispose of spines carefully by storing or wrapping in **thick** layers of paper!
- Incinerate in an isolated container (e.g. Metal bin) then crushing the spines.
- Cook in the normal fashion at high temperatures

SIGNS & SYMPTOMS OF A LIONFISH STING

The range of the effects of the sting varies widely and is dependent on the victim and the amount of venom that was injected. The victim may experience:

- **Extreme** pain
- Puncture wounds/ laceration
- Bruising/ purple-black discolouration, redness, swelling, numbness/ tingling, tissue shedding at the wound site
- Nausea, vomiting, abdominal cramps
- Hypotension, shortness of breath, changes in heart rate
- Tremors, weakness, fainting, seizures
- Shock, respiratory/ cardiac arrest

FIRST AID TREATMENT

- Carefully remove any visible spines/ foreign material from wound
- Immerse in water which is as hot as the victim can tolerate for 30-90mins (45°C/113°Fmax).
- Repeat this step, if necessary, for pain control. If at sea, hot water from the jet on the outboard of engine of boat can be used on your way to land
- Scrub with soap and water
- Vigorously irrigate with fresh water
- Antihistamines/ analgesics may be given, if available, prior to seeking medical attention.
- **ALL injuries should be referred to a physician for medical attention.**