



A Regional Approach Fighting the Invasive Lionfish

Prepared by Public Education and Corporate Communication Branch, NEPA, Jamaica.

Since its first sighting in the Caribbean in the 1990s, regional leaders have developed a number of programs to combat the impact of the beautiful but dreaded Invasive Lionfish, scientifically known as *Pterois volitans* and *Pterois miles*.



Photo Credit: Denise Chin, MTIAS Project, Jamaica

The marine predator spreads at an alarming rate, laying some 2 million eggs within a year, and preys on a wide variety of juvenile marine species including finfish, crabs, shrimps, and other crustaceans. The Lionfish was first identified in The Bahamas in

2005. The archipelago has been the hardest hit of all Caribbean territories having one of the highest density of Lionfish in the invaded range of the Atlantic. In fact, The Bahamas has higher densities of *Pterois volitans* than in the Indo-Pacific, which is the native range of the species.

Just a year later in 2006, the fish was seen in Jamaica. It is present right around the island and has posed significant challenges to the island's fisherfolk who have found it increasingly difficult to catch other species.

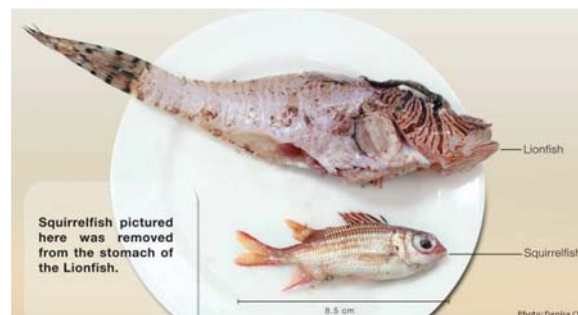


Photo Credit: Denise Chin, MTIAS Project, Jamaica

The Dominican Republic and Mexico made their discovery of the Lionfish in 2007.

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Trinidad and Tobago has only recently had to contend with the marine predator. In 2012, a private diver encountered the aquatic creature off the coast of Tobago.

To combat the impact of the Lionfish, each affected country has implemented a diverse range of strategies including public awareness and community outreach programmes, and promoting consumption of the fish.



Photo Credit: Nicola Smith, MTIASIC Bahamas

The islands of The Bahamas have conducted a number of research examining the extent of its colonization, and its impact on mangroves, coral reefs, beaches and marinas. The country is actively studying the socio economic impact of the fish, and examining management options for controlling its population in these habitats. Importantly too, The Bahamas has placed emphasis on reducing the threat of the Lionfish invasion (whether real or perceived) to human health in recreational areas.

In Jamaica, population density surveys have been conducted and a passive capturing mechanism has been developed to remove and study the fish. Partnerships have also been established with a number of private companies in the financial and hospitality sectors to fund activities and increase public awareness.

The Dominican Republic team has engaged its universities and colleges allowing them to utilize the fish as part of their income generating activities. And for Trinidad and Tobago, the country has been building on the experiences and strategies employed in the wider Caribbean, to formulate its own action plan.

These individual state efforts are all part of a regional response strategy under a four year project funded by the Global Environment Facility (GEF). The project, known as *Mitigating the Threat of Invasive Alien Species in the Insular Caribbean*, has been implemented by the United Nations Environment Programme (UNEP), and the Centre for Agriculture Bioscience International (CABI). The project tracks the population, prey preference, utilizes passive trapping mechanisms and develops and disseminates information for the safe handling of Lionfish.

With invasive species being the main reason for the loss of biodiversity in island territories, this approach is without a doubt vital to protecting our waters.



Photo Credit: Dr. Dayne Buddo, UWI Mona