



Control or eradication of IAS predators and competitors to the Jamaican Iguana

Invasive alien species represent the greatest threat to the critically endangered Jamaican Iguana at its only natural habitat in Hellshire Hills. These IAS include dogs, feral cats, the mongoose, wild pigs and the European rats that prey on the eggs or hatchlings of the Iguana. Feral goats also compete with the Iguana for food. Through the assistance of the MTIASIC Project, work is being done to exclude predators and competitors from the Iguana's primary nesting site through fencing, trapping and other removal methods. In addition a special school and community based sensitization programme is being implemented within the Portland Bight Protected Area to raise the level of awareness among residents

Pilot activities are conducted by the Department of Life Sciences, UWI in tandem with the Jamaica Iguana Recovery Group and the Urban Development Corporation.

Control of the Lionfish Population in Jamaica

The Lionfish (*Pterois volitans* and *Pterois miles*), identified in the country since 2006, causes deterioration of the marine environment in which it is present. One Lionfish may eat up to 20 juvenile fish per day feeding on a variety of marine species including the parrot fish, snappers, wrasses, damsel fish, crabs, shrimps and other crustaceans.



Control of the Lionfish Population in Jamaica

The Project works with the Discovery Bay Marine Laboratory (DBML) a division of the University of the West Indies Mona, to conduct population tracking; prey preference studies; development of a passive trapping mechanism and development and dissemination of a training module on safe handling of the Lionfish. Other partners of this pilot include Ministry of Agriculture and Fisheries, Food for the Poor Jamaica, The Nature Conservancy (TNC), and Portland Environment Protection Association (PEPA).

Jamaicans are being encouraged to exercise caution while handling the Lionfish when they are caught for consumption. Eating the Lionfish will help to deplete the quantities along our shores.

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
Tel: (876) 754-7540 Ext. 2319
www.nepa.gov.jm/projects
www.ciasnet.org



National Environment and Planning Agency

University of the West Indies Mona



The Melaleuca Leaves



The Wild Ginger

Mitigating the Threats of Invasive Alien Species in the Insular Caribbean



The Lionfish
Courtesy of D. Baldo

The MTIASIC Project in Jamaica



The Small Indian Mongoose



Invasive Alien Species

What are Invasive Alien Species (IAS)

Invasive Alien Species are plants, animals, or microorganisms which are introduced deliberately or unintentionally into areas where they do not occur naturally, and whose introduction and/or spread threatens biological diversity.

How they enter the Island

Humans are primarily responsible for the introduction of these species, intentionally or unintentionally.

Intentional Introductions

- Smuggling
- Species used for biological control
- Trade for agriculture, horticulture and pet trades.

Unintentional Introductions

- Transportation of species within a country during natural activities such as flooding
- Trade and transportation between countries via trains, airplanes, ships, and packaging materials.

Invasive Alien Species (IAS) are a major threat to the vulnerable marine, freshwater and terrestrial biodiversity of Caribbean Islands and to the people depending on this biodiversity for their livelihoods.

The MTIASIC Project in Jamaica

This is a Caribbean wide four (4) year project funded by the Global Environment Facility (GEF). The implementing agencies are the United Nations Environmental Programme (UNEP) and the Centre for Agriculture Bioscience International (CABI).

Goals & Objectives

The overall aim of the project is to broaden the approach to dealing with IAS, while conserving globally important ecosystems, the species, and genetic diversity within the Caribbean. The objective is to mitigate the threat to local biodiversity and economy from IAS in the Caribbean including terrestrial, freshwater and marine ecosystems.

Initiatives

- Development of a National IAS Strategy to inform and develop policies, legislation, regulations and management of IAS.
- Establishment of Caribbean-wide cooperation and strategy through the development of the Caribbean Invasive Alien Species (CIAS) Strategy and adoption of the strategy by the Wider Caribbean.
- Knowledge generation, management and dissemination.
- Capacity building to detect, respond, control and manage impact of IAS. This is being implemented through a series of Pilot Projects.

Pilot Projects in Jamaica

Protection of biodiversity within the Black River Lower Morass from two invasive freshwater plants

The **Black River Lower Morass (Ramsar Site)** is currently the largest freshwater wetland in Jamaica, and one of the largest in the Caribbean. The Project targets two invasive species found in this area:



- **Paperbark Tree (*Melaleuca quinquenervia*)**

Melaleuca is native to Australia and is an aggressive and highly invasive plant. The infestation of this plant results in the degradation of ecosystem structure and function; it also reduces native species biodiversity.

Project activities include testing methodologies to eradicate this invasive from the Lower Morass.



- **Wild Ginger (*Alpinia allughas*)**

Wild Ginger has been steadily spreading, replacing and disturbing the ecological balance of the internationally significant biodiversity found within the Lower Morass. Through the assistance of the MTIASIC Project research is being conducted in the Lower Morass by the Department of Life Sciences, UWI to develop methodologies to control the growth and spread of the Wild Ginger.