ICRI Ad-Hoc Committee on Caribbean Regional Response to Lionfish Invasion

Activity Report

26 ICRI General Meeting
12-15 December 2011, La Réunion
To accomplish the commitments listed in the Terms of Reference for the Ad Hoc committee, the following actions have been implemented:

1.- The Ad Hoc Committee held monthly conference calls to review progress.

2.- To facilitate information exchange, was developed a list of contacts including experts on marine invasive species, marine resource managers, fisheries experts, technicians and scientists Caribbean-wide. The list of contacts aims to comprise all individuals that are closely involved with the lionfish issue in the wider Caribbean region.

• To date, the list has more than 150 contacts and is expected to total 200 contacts in the near future.
3.- The Ad Hoc Committee drafted a Host Secretariat Advisory statement to call attention to the lionfish invasion and its threats to coral resources of the Caribbean region and urging implementation of local control measures and engagement in a regional response.

In recognition of the severity of the lionfish invasion and its impact on coral reefs and local communities, ICRI urges that immediate action be taken to control the lionfish invasion in collaboration with relevant international and regional partners and initiatives.

- The Host Secretariat Advisory statement was disseminated by the ICRI Secretariat in Spanish, French and English [www.icriforum.org/lionfish](http://www.icriforum.org/lionfish).
In order to establish coordinated actions, with technical and scientific basis, to enable a high-level work in the Caribbean both at local, national and regional levels, a Best Practices manual called, “Strategies and Practices for Invasive Lionfish Control” was developed.

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Development Process

- Concept began with the 2010 Cancun Lionfish Workshop (hosted by ICRI)
- Over 25 Caribbean countries represented
- Over 40 workshop participants
- Best practices conceived
Project team

- Writing team assembled comprising broad backgrounds
- Institutions represented included University of the West Indies in Jamaica, NOAA, REEF, SPAW-RAC, Simon Fraser University, CONANP-Mexico, and CABI.
- Writeshop was in April 2011 in Miami, FL
- Chapter authors were assigned and outlines developed
Overview of Content

• Introduction
• Education and outreach
• Monitoring
• Control
• Research
• Legal considerations
Introduction

• Invasion history, present status, and future projections
• Scale of economic and ecological impacts
• Invasion facts
Education and Outreach

• Using E&O to support control plans
• Developing communication strategies
• Developing an E&O program
  – Key messages
  – Vetting information
  – Sources of credible information
  – Outreach outlets
  – Pitfalls
Lionfish: From Sea to Table

**Capturing**
Lionfish have venomous spines along the top and underside of the body (see diagram). Take precautions and use proper equipment when attempting to capture or handle these fish. Clear vinyl collecting nets with mesh bottoms or fish spears with paralyzer tips are ideal for capturing the fish. To collect a lionfish with a net, position one vinyl net behind the fish while using a second net to maneuver the fish into the first. Lionfish can also be caught occasionally by hook and line and sometimes in fish traps.

**Handling**
Minimize the risk of stings by using puncture-proof gloves. Firmly grasp the dead lionfish by its head to avoid the venomous spines. Gloves will also protect your hands from irritation by non-venomous bones on the head.

**First Aid**
If stung, seek medical attention promptly. Check for and remove any obvious pieces of spine left in the wound. Apply hot water to the wound (as hot as one can stand without scalding) until the pain subsides. Common symptoms of most stings include pain and swelling. In extreme cases, skin necrosis and paralysis can occur.

**Cleaning**
The dorsal, anal, and pelvic spines are venomous. These spines can be removed with kitchen shears or clippers. Once the spines are removed the lionfish can be cleaned like any other fish.

**Preparation**
Lionfish is a delicious, delicately flavored fish, which can be prepared many different ways. The taste and texture has been compared to highly regarded grouper, snapper, or hogfish. Numerous recipes and preparation techniques are available on the web and in upcoming cookbook publications.
Monitoring

• Why monitor?
• What to monitor?
• Fisheries independent monitoring
• Fisheries dependent monitoring
• Monitoring for ecological impacts
• Biological monitoring
• Socio-economic monitoring
Control

• Control plan development
  – Reporting and documentation
  – Collection and handling
  – Collection strategies
    • Removal tools
    • Safety
    • Removal frequency
    • Training
    • Removal incentives
Research

• Findings to date
  – Invasion status
  – Biology and ecology
  – Ecological impacts
  – Socio-economic impacts
• Research priorities
• Research resources
Legal considerations

• Review of existing legislation, policies, and plans
  – Puerto Rico, The Bahamas, Cayman Islands, Mexico, French West Indies

• Considerations
  – Removal from no-fishing areas
  – Harvesting lionfish for the aquarium trade
  – Lionfish as a fishery resource
  – National and regional coordination
Supporters

• International Coral Reef Initiative
• NOAA International Affairs
• SPAW Regional Activity Center, the United States Department of State
• National Commission of Natural Protected Areas-Mexico.
• Reef Environmental and Education Foundation
Present Status

• Formal presentation of this Manual was done at the 64th Annual Meeting of the Gulf and Caribbean Fisheries Institute (GCFI), November 2011.

• A side event was held at the 4th ITMEMS.

• In January 2012 the manuals will be printed in English.

• The translation into Spanish will be soon in process.
First regional lionfish collecting and handling workshop

- It included the participation of 12 countries of the Wider Caribbean. The workshop content is based on the manual of best practices.
- There will be two more workshops in 2012, in the Bahamas and Florida.
Next steps

• Enhance participation in the RLC
• Develop regional response strategy for control of the lionfish
  – Distribute invitation letters asking governments to appoint participants to a drafting committee
  – Convene a workshop to discuss a draft strategy
• Distribute Manual using the ICRI, GCFI Listserv and various websites
• Develop a Lionfish Web Portal
  – Provide multi-media training tools
  – Clearinghouse for information
  – Updates on new findings
  – Regional coordination

We propose to extend the Ad Hoc Committee.
Merci beaucoup

ICRI Ad-Hoc Comité
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