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**CARIBBEAN FOOD
CROPS SOCIETY**

47

**Forty-Seventh
Annual Meeting 2011**

**Bridgetown, Barbados
Volume XLVII – Number 1
T-STAR Invasive Species Symposium**

PROCEEDINGS
OF THE
47th ANNUAL MEETING

Caribbean Food Crops Society
47th Annual Meeting
July 3–8, 2011

Lloyd Erskine Sandiford Centre
Bridgetown, Barbados

“Assuring Caribbean food and nutrition security in the context of climate change”

**United States Department of Agriculture,
T-STAR Sponsored Invasive Species Symposium**

**Toward a Collective Safeguarding System for the Greater Caribbean Region:
Assessing Accomplishments since the first Symposium in Grenada (2003)
and Coping with Current Threats to the Region**

**Special Symposium Edition
Edited by
Edward A. Evans, Carlton G. Davis, and Fredy Ballen**

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SESSION 3: MARINE AND FRESHWATER INVASIVE SPECIES OF IMPORTANCE TO THE CARIBBEAN

THE BAHAMIAN GOVERNMENT APPROACH TO LIONFISH CONTROL

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National Invasive Species Strategy (NISS) - 2003

BEST Commission

- Article 8(h) of the Convention of Biological Diversity
- Policy
 - Prepare strategic management plans for high priority species
 - Facilitate research on occurrence, distribution and impacts
 - Monitor of IAS populations



Invasion Timeline

- 2004 →
- -2005 →
 - Major research project on fish diversity
 - Sightings in North & Central Bahamas
- 2006: Research proposals  
- 2007 →
 - Online sighting survey
 - 1st Draft of Response Plan
 - Implementation of activities
- 2008 →
 - GOB seeks funding for IAS Management
 - Response Planning workshop formalize plan
- 2009: Launch of projects to assist with lionfish management



National Lionfish Response Plan

Mission

To maintain the distinctiveness and diversity of Bahamian marine communities, protect commercially important fisheries, safeguard public health, and reduce the growth and spread of lionfish populations.

www.bahamas.gov.bs/marineresources

Components:

Stakeholder Contributions

**FUNDING, FINANCIAL SUPPORT, HUMAN
RESOURCES**

**RESEARCH, MONITORING AND DATA
MANAGEMENT**

**OUTREACH, EDUCATION, ASSESSMENT OF
PUBLIC IMPACT**

REGULATION AND MANAGEMENT

STAKEHOLDER GROUPS	
GOVERNMENT AGENCIES	Department of Marine Resources, BEST, Department of Ports, Public Health, Public Hospital Authority, Ministry of Tourism, Ministry of Education
NON-GOVERNMENT AGENCIES	Bahamas National Trust, The Nature Conservancy, BREEF,
COLLEGES AND UNIVERSITIES	College of The Bahamas, Gerace Research Centre
RELATED BUSINESSES	Bahamas Diving Association, Dive and Live Aboard Businesses (Stuart's Cove, Bahama Divers), Dolphin Encounters, Resorts and Hotels
FOREIGN RESEARCHERS AND UNIVERSITY PARTNERS	NOAA-NMFS, REEF, University of Oregon, University of British Columbia, Simon Fraser University, University of Miami
FISHERMEN and FISHING INTERESTS	Fishermen associated with different islands and settlement, Fish sellers

MANAGEMENT STRATEGIES
A) MODIFY OR AMEND existing fisheries regulations for lionfish.
B) ENCOURAGE COMMERCIAL FISHERIES based on lionfish.
C) EXPAND AND IMPROVE PROTECTION OF NATIONAL PARKS AND FISHERIES RESERVES.
D) REQUIRE THE REMOVAL OF DEBRIS and ARTIFICIAL SUBSTRATES around docks, piers and harbours that provide habitat for lionfish.
E) IMPROVE COASTAL ZONE MANAGEMENT
F) BAN LIONFISH AS AQUARIUM PESTS AND PREVENT THE POSSESSION OR TRANSPORT OF LIVE LIONFISH.
G) PROVIDE A BOUNTY FOR FISH KILLED AND TURNED IN

NLRP Workshop Results



- 41 participants, 16 organizations
- Identify components of management plans
- Develop safe handling procedures (bars/nets)
- Provide training on cleaning & handling of fish specimens
- Build capacity to manage lionfish

Pictures courtesy of Stuart Cove's Dive Bahamas

Mitigating the Threats of Invasive Alien Species in the Insular Caribbean (MTIASIC)

- Evaluate removal techniques and frequencies
- Provide training in safe capture and handling
- Conduct lionfish ecological studies to improve management
- Enhance and implement policies
- Enhance public awareness



Photo of Lionfish Task Team, Lad Akins







Building a Sustainable Network of Marine Protected Areas

- **Lionfish Component**
 - Removal frequencies within a Marine Protected Areas (MPAs)
 - Testing of ballast water as a probably contributor to lionfish invasion




Educational Tools

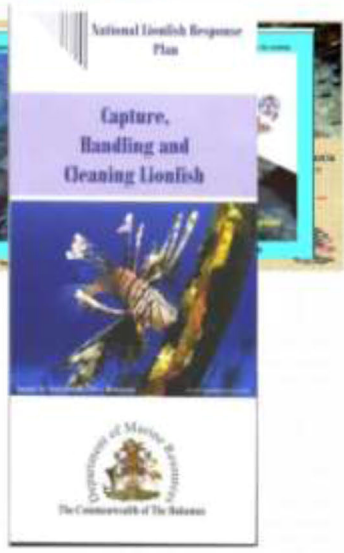


DON'T MAKE LIONFISH PETS IN THE BAHAMAS!

The Lionfish is an invasive species in The Bahamas. They have arrived from their home range in the Indian & South Pacific Oceans, survived, and are now thriving throughout the archipelago, threatening our precious marine environment. We are encouraging the public not to make a home for them as pets.



Please help support the Lionfish Action Species (LAS) program on controlling and eradicating this invasive species. The sale of lionfish as aquarium pets is strongly discouraged.



The Commonwealth of The Bahamas

Successful Outreach Initiatives

- Community Meetings
major islands
- Lionfish Culinary Demos
 - Annual festivals & Expos
 - Food shows
 - Fish landing sites
 - Tournaments
- Lionfish Tournaments
 - Initiated in 2009 (1,400)
 - Conducted 13 tourneys amongst 4 islands
 - Generate funding for education & outreach



Thank you!!

<p>Research Support</p> 	<p>Lionfish Projects</p> 	<p>Local Support</p> 
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