

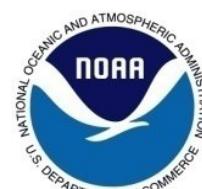
# Regional Strategy for the Control of Invasive Lionfish in the Wider Caribbean



**SEMARNAT**  
SECRETARÍA DE  
MEDIO AMBIENTE  
Y RECURSOS NATURALES



**CONANP**  
COMISIÓN NACIONAL  
DE ÁREAS NATURALES  
PROTEGIDAS



# The Regional Lionfish Committee (RLC)

The Regional Lionfish Committee, also known as Ad Hoc Committee for the Caribbean Regional Response to Lionfish Invasion, was established in November 2010 by the International Coral Reef Initiative (ICRI) in response to the growing threat caused by the invasion of the lionfish (*Pterois volitans* and *P. miles*) in the Wider Caribbean.

- United Nations Environmental Program – Caribbean Environment Program (UNEPCEP) and its Regional Activity Center for the Protocol on Specially Protected Areas and Wildlife of the Cartagena Convention (SPAW-RAC)
- Government of Mexico, National Commission on Protected Areas (CONANP)
- Government of the United States, State Department and National Oceanic and Atmospheric Administration (NOAA)
- Reef Check Dominican Republic
- Centre for Agricultural Bioscience International (CABI)
- Reef Environmental Education Foundation (REEF), and
- representative Caribbean experts



A vibrant underwater photograph showing a coral reef ecosystem. In the foreground, several lionfish with their signature red and white stripes are swimming over a bed of green seagrass and yellow coral. A large, branching sea fan is visible on the left side of the frame. The water is a clear, deep blue.

# **Regional Strategy for the Control of Invasive Lionfish in the Wider Caribbean**

# Objectives

The five objectives that form the basis of this strategy are:

- i) Facilitate **collaboration** among governments, reef-reliant industries, civil society, and academia by providing mechanisms for coordination of efforts across political and geographical boundaries,
- ii) Encourage a coordinated **research and monitoring** agenda,
- iii) Encourage governments to review and amend relevant legislation and, if necessary, develop new **regulations and policies** to control lionfish,
- iv) **Control** invasive lionfish populations where possible using regionally coordinated, effective methods, and
- v) Provide **education, information, and outreach** mechanisms to generate public support and foster stewardship in invasive lionfish programs.



This Strategy is intended to facilitate such collaboration by providing a framework to:

- i) Facilitate on-the-ground implementation of actions through regular exchanges of experiences, protocols, and tools;
- ii) Help reduce costs and avoid duplicative efforts by designing regional programs with pooled resources;
- iii) Enunciate roles and potential actions among different actors and sectors;
- iv) Guide researchers and donors by identifying projects that require action as top priority; and
- v) Ensure actions are consistent and complementary at all levels and across all sectors.



# REGIONAL FRAMEWORK FOR ACTION

## *Vision*

The effects of lionfish on ecosystem services and economic value of reef communities in the Wider Caribbean Region are reduced by coordinated control actions implemented at the regional level.

## *Mission*

Provide a framework for regional cooperation, collaboration and coordination for lionfish management and control in the Caribbean, so that best practices are used to develop local action plans to minimize negative impacts of lionfish on marine and coastal ecosystems of the Caribbean region.

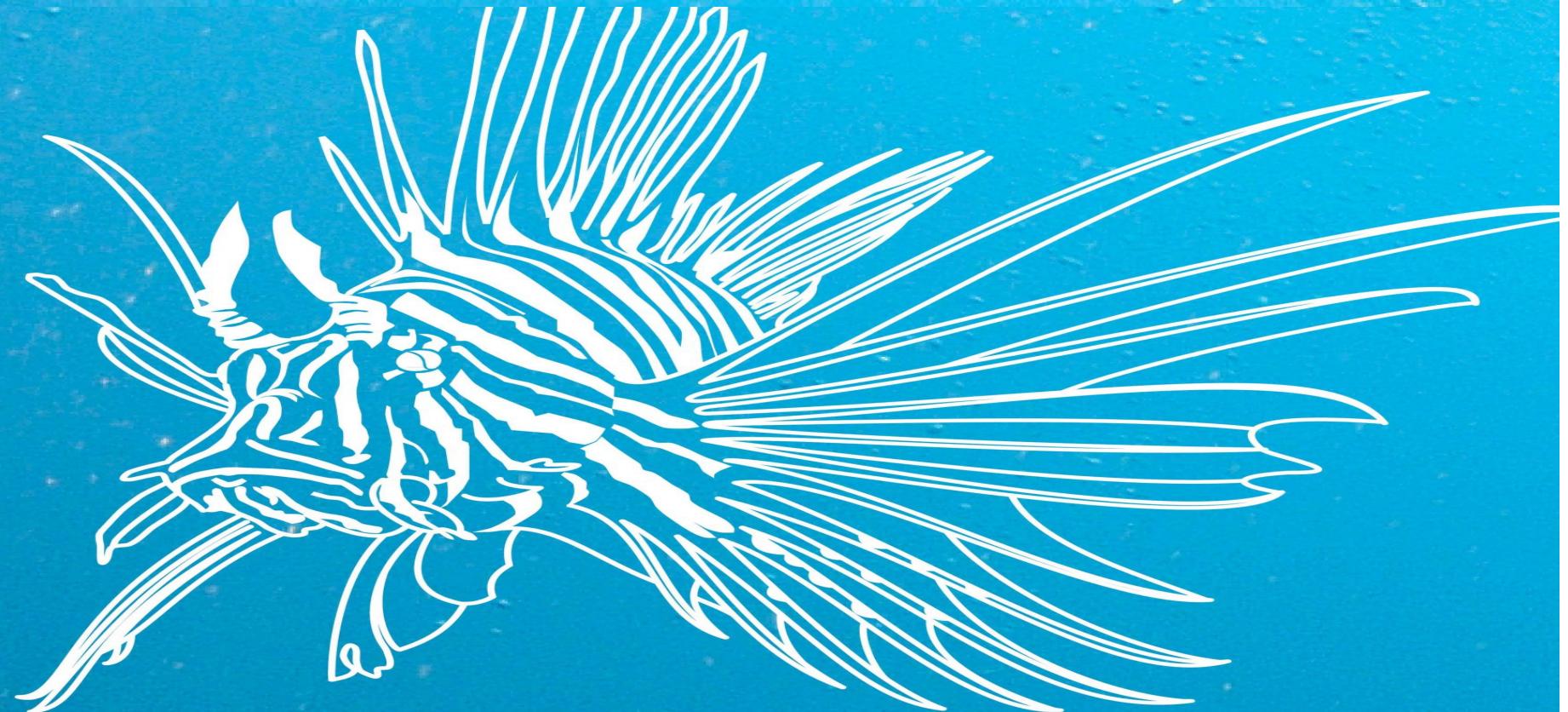




Objetivo	Fomentar un programa coordinado de investigación y monitoreo								
Estrategia	Acciones	Grupos de interesados*							Calendario
		Gob	Acad	OR /OI	MR	ONG	SP	CL	
<b>Promover un programa de investigación coordinada de manera regional</b>	Facilitar el debate entre investigadores y administradores de recursos para intercambiar información y propiciar estudios complementarios y coordinados	✓	✓	✓	✓	✓			2013-14
	Ayudar a priorizar el programa de investigación	✓	✓						2013-14
<b>Promover y apoyar la investigación para crear soluciones tecnológicas para el control del pez león</b>	Registrar y evaluar las tecnologías existentes y determinar las mejores	✓	✓	✓					ongoing
	Desarrollar nuevas tecnologías de control donde sea necesario	✓	✓	✓	✓	✓	✓		ongoing
<b>Crear mecanismos para la divulgación de información científica sobre el pez león</b>	Propiciar el uso de un portal de Internet (organizado por el GCFI con apoyo de Estados Unidos) que consolide la información disponible sobre la propagación del pez león y proporcione un foro para el intercambio de información	✓	✓	✓				✓	2013
	Apoyar la realización de conferencias donde se presenten y comparten los nuevos resultados científicos entre profesionales de la investigación y de otro tipo	✓	✓	✓					ongoing
<b>Promover estudios para garantizar la seguridad en el consumo del pez león</b>	Evaluar y elaborar estrategias de aprovechamiento seguro del pez león para su comercialización	✓	✓	✓		✓	✓	✓	2014
	Apoyar los estudios de ciguatera y otras enfermedades que pudieran derivarse el consumo del pez león	✓	✓						2013-14

# INVASIVE LIONFISH

## A Guide to Control and Management



## Chapter 1 The Lionfish Invasion: Past, Present, and Future

*James A. Morris, Jr.*

- A Rapid, Widespread Invasion
- Broad Diet and General Habitat
- Cascading Impacts
- Local Intervention Is Critical

## Chapter 2 Lionfish Research: Current Findings and Remaining Questions

*James A. Morris, Jr. and Stephanie J. Green*

- Research Findings to Date
- Remaining Questions
- Research Resources

## Chapter 3 Education and Outreach: Building Support and Expertise

*J. Lad Akins*

- The Earlier, The Better
- E&O to Support Control Plans
- Developing Communication Strategies
- Challenges
- Measuring Success





Chapter 4 Control Strategies: Tools and Techniques for Local Control

*J. Lad Akins*

Local Removals Can Be Effective

Collection and Handling

Training

Removal Incentives

Chapter 5 Monitoring: An Essential Action

*Stephanie J. Green*

Monitoring Local Lionfish Populations

Monitoring Ecological Impacts

Organismal Monitoring Through Dissection

Monitoring Socioeconomic Impacts: Fishing, Tourism, and Human Health

Chapter 6 Legal and Regulatory Considerations for Lionfish Management

*Dayne St. A. Buddo*

Consideration for Legal and Regulatory Instruments

Review of Existing Legislation, Policies, and Plans

Chapter 7 Resources, Partnerships, and Sustainable Funding

*Ricardo Gómez Lozano*

Human Resources

Financial Resources

## 50 Manuals for key partners

1. Colombia – CORALINA Elizabeth Taylor
2. Costa Rica – Universidad Helena Molina-Urena
3. Republica Dominicana – Reef Check Ruben Torres
4. Honduras – SAM-MARFUND Maria José Gonzalez
5. Venezuela – Fundación La Salle Oscar M. Lasso-Alcalá
6. México- CONANP Ricardo Gómez
7. Cuba- Acuario de Cuba Pedro Chevallier
8. Nicaragua- - WSC Kara Stevens
9. Puerto Rico - DRNA/Recursos Marinos Craig Lillyestrom

<http://lionfish.gcfi.org/manual/>

[http://www.icriforum.org/icri-documents/associated-publications/  
invasive-lionfish-guide-control-and-management](http://www.icriforum.org/icri-documents/associated-publications/invasive-lionfish-guide-control-and-management)



# Regional Lionfish Strategy

- Pre Launch .- 7th Mexican and 1th Latinoamerican Coral Congress Oct 8
- Press release Regional Strategy .- Oct 10 (ICRI, CONANP, UNEP, CARSPAW, etc)
- Formal Launch.- ICRI Belize Oct 14
- Print spanish and english versions.- Oct 16 (french soon)
- Disseminate the strategy - through key partners (CABI, CARICOM, GCFI, ICRI, CAR-SPA, CDB, etc)
- Formal presentation Regional Lionfish Strategy- Nov 6 @ GCFI

<http://www.icriforum.org/icri-documents/associated-publications/invasive-lionfish-guide-control-and-management>



## Next steps

- RLC.- move forward to Marine Invasive Species Committee!?
- Who will house the RLC (RMISC)
- RLC.- launch web portal (research, monitoring, control and management)
- RLC.- Help countries or territories to elaborate local strategies (Costa Rica)



Thanks for your support!  
Ricardo Gomez Lozano  
RLC-ICRI