









# Invasion Status



# Strategies and Plans

## LIONFISH RESPONSE MANAGEMENT PLAN US VIRGIN ISLANDS

US Virgin Islands October 2009

Prepared by: Dr. Barbara Kojis Funded by: Virgin Islands EPSCoR



#### Department of Planning and Natural Resources

Division of Fish and Wildlife
Coastal Zone Management Program
CZM/ St. Croix East End Marine Park
The Nature Conservancy
Reef Environmental Education
Foundation

St. Croix Environmental Association

#### Dive Experience Joe Gulli

University of the Virgin Islands Center for Marine and Environmental Studies/VIMAS

Virgin Islands EPSCoR National Park Service on St. Croix and St. John

## Goal

The goal is to prevent lionfish from negatively impacting local fisheries and marine ecosystems, and endangering public safety.

## **Objective**

The objective is to achieve a sustained reduction of lionfish throughout the USVI through:

education, outreach, and training, opportunistic and targeted detection and removal of lionfish, monitoring and data gathering, data analysis and reporting



## WANTED: DEA

Long pectoral



#### The Indo-Pacific "Lionfish" -

Bluestriped Lizardfish

Redspotted Hawkfish

These are some native fish that are sometime







Spotted Scorpionfish



WW.FACEBOOK.COM/CRAZYFROGS



## DIVERS

WENEED YOU!

# LIONFISH THE THREAT IS REAL

### THE FACTS:

IN A 5 WEEK PERIOD 85% OF THE FISH ON A BAHAMIAN REEF WERE EATEN BY LIONFISH. LIONFISH WILL EAT EVERYTHING; FISH, INVERTEBRATES LIKE LOBSTER, CRABS, ETC. LIONFISH ARE HERE ON ST. CROIX.

HERE IS YOUR CHANCE TO BE PART OF THE SOLUTION. CRAZY FROG'S WILL BE NETWORKING DIVERS TO HELP WITH THE USVI LIONFISH RESPONSE PROGRAM IN ELIMINATING LIONFISH HERE ON STX. WITH THE HELP OF LOCAL DIVE SHOPS: DIVE EXPERIENCE, S.C.U.B.A. AND CANE BAY DIVE CENTER WE WILL BE SENDING OUT DIVE TEAMS 3 TIMES A MONTH TO HUNT FOR AND REMOVE LIONFISH AROUND ST. CROIX. IF YOU HAVE GOOD DIVING SKILLS AND ARE INTERESTED IN HELPING AND PRESERVING OUR. BEAUTIFUL MARINE LIFE HERE ON ST. CROIX, THEN CONTACT US.

> SEND AN E-MAIL TO NOLIONFISHSTX@YAHOO.COM IN THE SUBJECT LINE TYPE "NO LIONFISH"

IN THE BODY OF THE TEXT INCLUDE YOUR NAME, E-MAIL ADDRESS AND PHONE NUMBER, AS WELL AS THE APPROXIMATE AMOUNT OF DIVES YOU HAVE LOGGED.

> NOT ONLY WILL THIS BE AN OPPORTUNITY FOR YOU TO HELP. BUT A CHANCE TO SEE AND EXPERIENCE SOME INCREDIBLE DIVING YOU

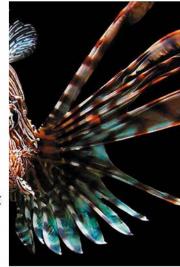
NORMALLY WOULD NOT GET A CHANCE TO DO.

JOIN THE TEAM THE ST. CROIX LION SLAYERS



**ASIVE** C LIONFISH

miles complex



wn Predator fish Response Diver 1-Problem



NO PRISONERS

Dyahoo.com



# Challenges



Initially
Education and Awareness
Local Scientists/Managers
Wider Community
Funding

Long-Term
Lionfish Behavior
(Atlantic/Caribbean)
Messaging (Quality Control)
Response/Removal Capacity
Keeping the Ball Rolling

# Funding

Amount	Funding Organization	Purpose/Activity
\$5,000.00	VI-EPSCoR	Development of the Lionfish Response Management Plan (USVI)
\$5,000.00	VI-EPSCoR	MESA Summer Academy Lionfish Program
\$33,000.00	NPS	Buck Island National Monument Detection and Removal Program
\$10,000.00	Joe Guilli – CORE	Targeted Searches, Removal, Education/Outreach
\$103,000.00*	NOAA	SEA – Implementation of the Lionfish Response Management Plan (USVI)
\$2,000.00	CRABBS	Targeted Searches, Removal, Education/Outreach

<sup>\*</sup> Total of a 1 to 1 Match Grant

DFW and TNC Funds for Lionfish Response through Salary and Facilitation of Planning

# Needs

US Virgin Islands
Dedicated Response Teams/Networks
More Research
More Realists

Regionally
More Research
Frequent Regional Dialogue/Exchanges

# Conclusions

US Virgin Islands

From Outreach to Changing Behavior
Heading in the Right Direction
Making Good Progress
Small-Scale Regional Approach (PR/BVI)
Alternatives to Targeted Searches

Regionally
Sharing is Caring (unless you're sharing Lionfish)

\*\*recipes are okay\*\*

# Acknowledgements

## US Virgin Islands

William Coles (DFW), Joe Guilli (CORE), Jeanne Brown (TNC), Ian Lundgren (NPS), Rafe Boulon (NPS), VI-EPSCoR, SEA, Dive Experience, N2 the Blue, CRABBS.

Workshop Organizers/Sponsors
ICRI, SERMANAT, NOAA, REEF, Comision
Nacional de Areas Naturales Protegidas