



Flower Garden Banks National Marine Sanctuary 2019 Lionfish Invitational Research Expeditions



Diving for Research

June 9–13, 2019



Aug 25–29, 2019

Project Description

The invasion of lionfish in the Gulf of Mexico is a situation of rapidly increasing magnitude. This invasive species, known for its voracious appetite, venomous spines and rapid reproduction, is significantly affecting native marine species throughout the western Atlantic Ocean, including the Gulf of Mexico and Caribbean Sea. Complete lionfish eradication is not an option with current technology, given the species' broad depth tolerance (1,000 feet) and habitat distribution. However, control on a local scale has proven successful. Building on these successes, NOAA's Flower Garden Banks National Marine Sanctuary (FGBNMS) is partnering with Texas Lionfish Control Unit (TLCU), with support from Ripley's Aquarium, the National Marine Sanctuary Foundation (NMSF), and Fling Charters, to allow trained divers to help conduct research and remove invasive lionfish within FGBNMS. Collection permits will be issued for two separate four-day lionfish research cruises on board the recreational dive charter vessel *M/V Fling*.

The goals and objectives of the project are to:

- I. Conduct research to increase the knowledge of invasive lionfish distribution and predator/prey relationships in coral communities at FGBNMS.
- II. Reduce the impact of lionfish on reef habitats and native fish populations by removing lionfish from the upper 100 feet of FGBNMS.
- III. Assess effectiveness of diver removal efforts on lionfish populations and native fish communities.
- IV. Increase public awareness of invasive lionfish impacts, and provide training in safe and effective lionfish collection and handling techniques.

About Flower Garden Banks National Marine Sanctuary

Located in the northwestern Gulf of Mexico, FGBNMS includes three separate areas known as East Flower Garden Bank, West Flower Garden Bank, and Stetson Bank. The banks are perched atop underwater hills formed by rising domes of ancient salt, and these northernmost coral reefs in the continental United States are a diver's paradise.

Lionfish were introduced into the Western Atlantic in the late 1980s, and most likely entered the Gulf of Mexico by means of larval transport. In the fall of 2010, lionfish were observed at Sonnier Bank and nearby oil and gas platforms. In July of 2011, lionfish were observed on all three banks of FGBNMS. For more information, go to <https://flowergarden.noaa.gov>

Eligibility Requirements

To apply, each diver must:

- be at least 18 years of age;
- be able to swim;
- be a certified advanced open water scuba diver, or higher certification level (must present a valid diver certification card);
- be a Nitrox certified diver;
- have conducted a minimum of 25 dives in the past 12 months; or provide the total number of dives logged since becoming a diver
- have DAN or other dive-specific insurance; and
- have experience collecting lionfish.

Participant Benefits

Participants will:

- participate in one of the 4-day research cruises at FGBNMS on board the *M/V Fling*;
- learn about invasive lionfish, research, and field techniques through a TLCU lionfish collecting and handling course;
- build relationships with FGBNMS, TLCU, and others interested in invasive lionfish control and research;
- be immersed in field activities that raise awareness of invasive lionfish and ocean conservation;
- gain hands on experience that can be utilized in future lionfish control efforts; and
- assist with marine sanctuary resource protection efforts.

Provided to Divers

All divers will receive:

- four days of diving, including Nitrox;
- meals and dorm-style live-aboard accommodations;
- workshop training in lionfish collecting and handling;
- use of lionfish collecting/handling equipment and materials; and
- educational resources and materials from TLCU and FGBNMS.

Participation Requirements

Selected divers will be required to:

- travel to and from Freeport, TX;
- attend the TLCU lionfish handling course to be held at 5 p.m. in Freeport, TX on Sunday, June 9th (June cruise) or Sunday, Aug. 25th (August cruise) before leaving the dock;
- room with other divers in bunk-style accommodations;
- scuba dive at FGBNMS using safe scuba diving techniques;
- conduct themselves in a responsible manner as volunteers representing TLCU and FGBNMS;
- remove only lionfish using approved gear;
- assist with data collection and lionfish processing;
- complete and sign all applications, liability waivers and releases; and
- pay the \$625-\$725 fee to cover vessel and fuel costs (final cost has not yet been determined).

How to Apply

1. Download the application.
2. Complete all sections of the application, including which cruise(s) (June and/or August) you are available to participate in.
3. Email the completed application, a copy of your C-Card, and a copy of your DAN (or other) insurance card to flowergardens@texaslionfish.org by March 15, 2019.
4. Applicants will be selected and notified no later than March 22, 2019.

Additional Questions?

Please contact:

Michelle A. Johnston, Ph.D.
Flower Garden Banks National Marine Sanctuary
Michelle.A.Johnston@noaa.gov
Tel: 409-356-0392

OR

Brady Hale
Texas Lionfish Control Unit
Brady@texaslionfish.org
Tel: 469-387-4940

APPLICATION
Flower Garden Banks NMS 2019 Lionfish Invitational Research Expeditions

SECTION I — CONTACT INFORMATION

Name: _____
Email (non-government): _____
Mailing Address: _____
City: _____ State: _____ Zip: _____
Country: _____ Phone: _____

SECTION II — EXPERIENCE

Check the date(s) you would like to participate: June 9-13, 2019 August 25-29, 2019

Highest Dive Certification (Level and Year certified): _____

NITROX Certification (Year certified): _____

DAN (or other) Insurance Expiration Date: _____

Number of total ocean dives: _____ in the past 12 months: _____

Number of live-aboard dive trips: _____

Have you been diving in FGBNMS before? Yes No

Have you participated in a lionfish trip before? Yes No

Describe your experience collecting lionfish: _____

Total Collected: 0-100 101-500 501-1,000 1,001+

Collection Habitats: Natural Reef Artificial Reef Wrecks

Have you ever assisted with scientific diving/research? Yes No

Explain: _____

SECTION III - PERSONAL INFORMATION

Date of Birth: _____

Gender: Male Female

Dietary Restriction(s): _____

Medical Consideration(s): _____

Have you ever been stung by a lionfish (include reaction, treatment)?

Emergency Contact Name: _____

Relationship: _____

Phone: _____ Alternate Phone: _____

Email: _____

Hobbies

Tell us about yourself. What are your interests and hobbies? _____

SECTION IV — SIGNATURES

Statement of Intent, Waiver, and Release

I have read the program description and to the best of my understanding I am able to participate. I acknowledge that if I am selected to participate in the Lionfish Invitational, I will be expected to attend the entire 4-day cruise; be willing to dive to achieve project goals; am responsible for using safe diving and lionfish handling techniques; and am responsible for conducting myself in a manner that supports the goals and mission of TLCU and NOAA’s Flower Garden Banks National Marine Sanctuary mission. I recognize that participation in this event may involve certain hazards. I understand that I should not participate unless medically able. I assume the risks associated with involvement but not limited to SCUBA diving, vessel operations, inclement weather, seasickness, and handling venomous lionfish, these risks being unknown and appreciated by me. Having read this release and considering the acceptance of my application, I for myself and anyone entitled to act on my behalf, waive and release NOAA, TLCU, the National Marine Sanctuary Foundation, and Fling Charters, all partners, sponsors, and hosts and their representatives and successors from any claim of liability arising from my involvement in this project. I do hereby consent to the use of my name and/or photograph in connection with publicity about the project.

Applicant Signature: _____ Date: _____