



Flower Garden Banks National Marine Sanctuary 2023 Lionfish Invitational Research Expeditions

Diving for Research

June 11-14, 2023 July 23-26, 2023

Project Description

Invasive lionfish, known for their voracious appetites, venomous spines, and rapid reproduction, are depleting native coral reef fish and invertebrate populations at alarming rates throughout the southeastern United States, Gulf of Mexico, and Caribbean region. Complete lionfish eradication is not an option with current technology, given the species' broad depth distribution (surface to 1,000 feet) and rapidly growing populations. 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 Lionfish Invitational, Inc., with support from Moody Gardens, Texas State Aquarium, and Texas Caribbean Charters, to allow trained divers to help conduct research and remove invasive lionfish within FGBNMS. Collection permits will be issued for two separate 3-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 the knowledge and skills for individuals to be part of the solution by training volunteer divers from the local community in safe and effective collection and handling techniques.

About Flower Garden Banks National Marine Sanctuary

Located in the northwestern Gulf of Mexico, Flower Garden Banks National Marine Sanctuary is made up of 17 banks, including East Flower Garden Bank, West Flower Garden Bank, and Stetson Bank. The reef communities are perched atop underwater hills formed by rising domes of ancient salt, and the coral reefs at the Flower Garden Banks are a diver's paradise.

Lionfish were introduced to the Western Atlantic in the late 1980s, then entered the Gulf of Mexico by means of larval transport by 2009. In the fall of 2010, lionfish were observed at Sonnier Bank and nearby oil and gas platforms. In July of 2011, lionfish were observed at the Flower Garden Banks and Stetson Bank. 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 3-day research cruises at FGBNMS on board the M/V *Fling*;
- learn about invasive lionfish, research, and field techniques through a NOAA lionfish collecting and handling course;
- build relationships with peers, FGBNMS, partners, and divers from the local community;
- be immersed in classroom, lab, and 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:

- 3 days of diving, including Nitrox;
- meals and dorm-style live-aboard accommodations;
- workshop training in lionfish collecting and handling;
- use of lionfish collecting/handling and fish survey equipment and materials;
- on-board hands-on training in data gathering; and,
- educational resources and materials from FGBNMS.

Participation Requirements

Divers will be required to:

- travel to and from Freeport, TX;
- attend the lionfish handling course to be held at 5 p.m. in Freeport, TX on Sunday, June 11th (June cruise) or July 23rd (July cruise) before leaving the dock;
- room with other divers in bunk-style accommodations;
- scuba dive at FGBNMS;
- conduct themselves in a responsible manner as divers;
- remove only lionfish using approved pole spears;
- assist with fish surveys and lionfish processing; and,
- complete and sign all applications, liability waivers, and releases.

How to Apply

1. Complete all sections of the application, including which cruise date (June or July) you would prefer to participate.
2. Email the completed application, and copies of C-Card and DAN insurance card, to Rachel Bowman at lionfishinvitational@gmail.com by March 1, 2023.
3. Applicants will be selected and notified no later than March 5, 2023.

Questions?

Please contact:

Rachel Bowman

Trip Coordinator, Lionfish Invitational, Inc.

lionfishinvitational@gmail.com

Phone: 910-297-3825

APPLICATION
Flower Garden Banks National Marine Sanctuary
2023 Lionfish Invitational Research Expeditions

SECTION I — CONTACT INFORMATION

Name: _____

Email (non-government): _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Country: _____ Phone: _____

How did you hear about the Lionfish Invitational? _____

SECTION II — EXPERIENCE

Check the date you would prefer to participate: June 11-14, 2023 July 23-26, 2023

Highest Dive Certification (Level and Year certified): _____

NITROX Certification (Year certified): _____

DAN (or other) Insurance Expiration Date: _____

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

Number of live-aboard dive trips: _____

Describe your diving experience:

Have you been diving in FGBNMS before? Yes No

Have you participated in a lionfish trip before? Yes No

Describe your experience hunting lionfish:

Would you be better suited to the Hunting team or the Science (fish survey) team? _____

If a science team position interests you, please describe your fish survey experience:

SECTION III - PERSONAL INFORMATION

Date of Birth: _____

Gender: Male Female

Dietary Restriction(s): _____

Medical Consideration(s):

Have you ever been stung by a lionfish? If yes, describe reaction and 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 3-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 missions of Lionfish Invitational, Inc. and NOAA's Flower Garden Banks National Marine Sanctuary. 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, Lionfish Invitational Inc., 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: _____