

Lionfish Research along the Atlantic Coast of the United States

Issue: Invasive species have been identified as a threat to almost every ecosystem on earth. However, until recently marine fish invasions have been considered rare and limited to purposeful introductions. All of this has changed with the introduction and establishment of the Indo-Pacific lionfish *Pterois volitans* along the Atlantic Coast of the United States. Lionfish is the first marine fish known to be recently introduced into the western central Atlantic and in the past 4 years, the number and spatial distribution of lionfish observations has continued to increase. To help coastal managers deal with this introduction it is important to understand the impacts of lionfish on native communities. Further, the potential health impacts need to be better described to assist coastal health officers treat lionfish stings and to inform the public as to the actual risks presented by lionfish.



Approach: Since the discovery of lionfish off North Carolina in August 2000, researchers at NOAA's Center for Fisheries and Habitat Research (CCFHR) have documented lionfish occurrences from Florida to Long Island, NY, including Bermuda. Lionfish observations have become more numerous possibly indicating an increase in lionfish abundance. Field research, supported by NOAA's Undersea Research Center in Wilmington, is scheduled from August 2 to August 20, 2004 and will be conducted in Onslow Bay North Carolina.

NOAA researchers have proposed three objectives for the lionfish research project: 1) Conduct site specific monitoring to examine lionfish recruitment and abundance over time; 2) Examine lionfish life history characteristics combined with temperature studies to predict the potential lionfish distribution along the Atlantic Coast; and 3) Encourage a pro-active public outreach policy to promote public participation in lionfish reporting and raise awareness regarding invasive species

Outcome: Ecosystem impacts on native communities is very difficult to predict due to the rarity of marine fish invasions and the general lack of information regarding the ecology of lionfish. Even without this information three possible outcomes are projected which are currently supported by the data: 1) the lionfish population will continue to grow along the southeast coast; 2) the impact on the native ecosystem and communities will become more noticeable as the population grows; and 3) people will be stung by lionfish as the number of interactions increase. For more information go to <http://shrimp.ccfhrb.noaa.gov/lionfish/>



Lionfish Research along the Atlantic Coast of the United States

Contact Information:

Lionfish Research: Paula E. Whitfield (252) 728-8714, paula.whitfield@noaa.gov

NURC technology: Andy Shepard (910) 962- 2446, sheparda@uncw.edu

NOAA Public Affairs: Jana Goldman (301) 713 – 2483 jana.goldman@noaa.gov

Additional Lionfish info: Jon Hare (252) 728-8732 jon.hare@noaa.gov