

Invasive Lionfish: An Investigation of Lionfish Distribution in Native and Non-Native Regions

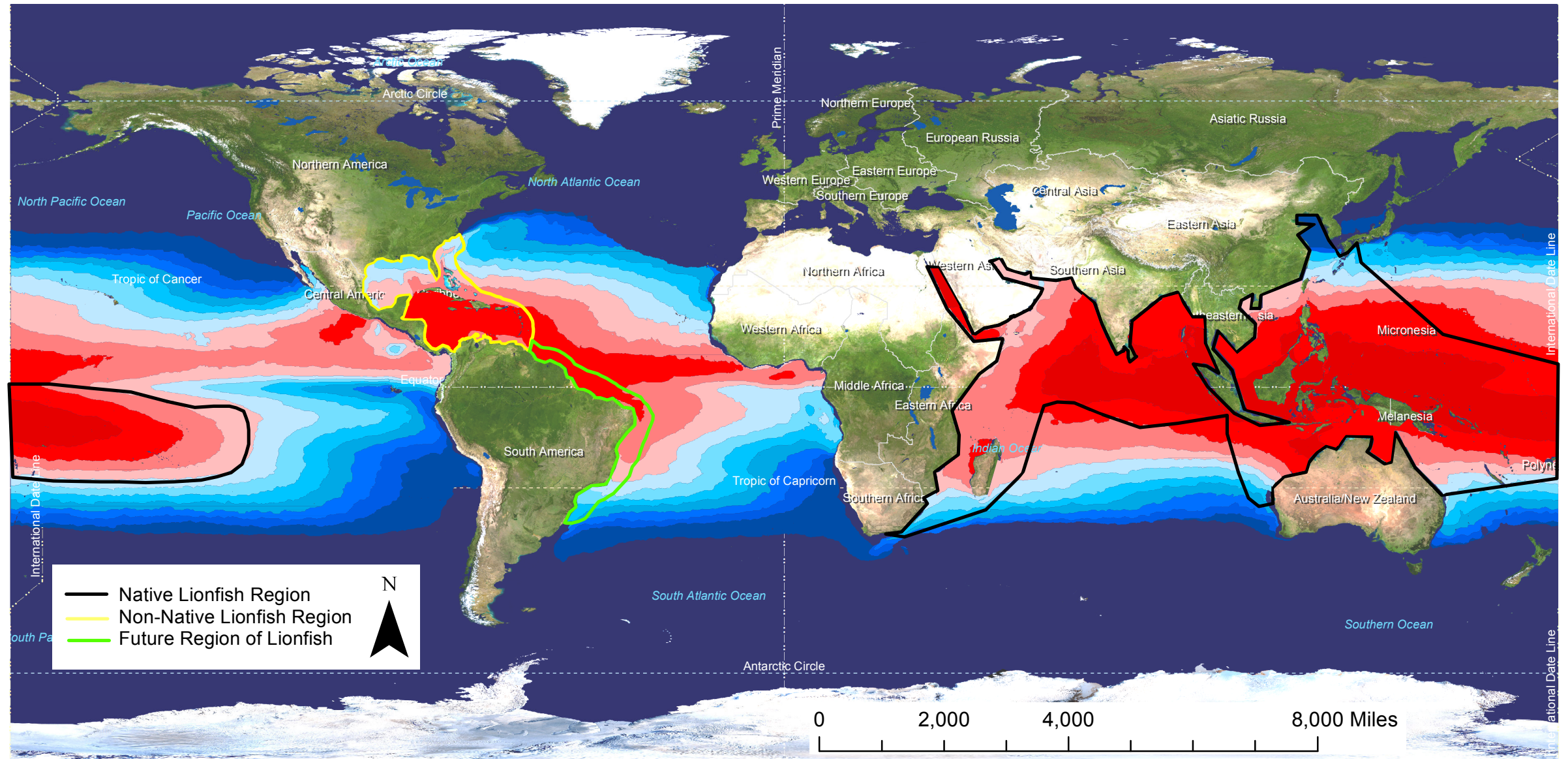
Cartographer: Justin Culman

The native region of lionfish (*Pterios volitans* and *Pterios miles*) is off of the coast of Africa, India, Southeast Asia, the Philippines, Australia, and the islands in the central Pacific Ocean (indicated by the black outline). Lionfish first appeared off of the coast of Florida in 1985. Then in 1992, lionfish appeared in larger numbers. The reason for their introduction is unclear, however there are two hypotheses. One is that a ship sunk during Hurricane Andrew in 1992 that released lionfish into the Atlantic Ocean. The other hypothesis is that an aquarium released six lionfish into the water.

From their release, lionfish have spread throughout the Atlantic Ocean, Gulf of Mexico, and the Caribbean Sea, which is known as the non-native lionfish region (indicated by the yellow outline). As the lionfish population grows, they are expected to spread down the coast line of South America (indicated by the green outline).

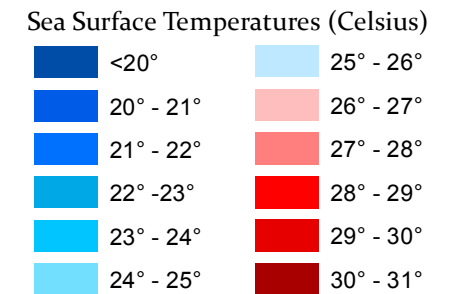
Lionfish have a large range of temperatures and depths in which they can live. Lionfish are recorded at depths over 500 feet deep. Lionfish are able to survive at temperatures as low as 10° Celsius. The sea surface temperature data on the map helps to analyze the range of temperatures that lionfish live in.

Data Resources and Acknowledgements:
Florida Fish and Wildlife Conservation Commission, USGS, REEF, Data.gov Data Catalog, UO Library Catalogs, and Sheknows.com for the lionfish photograph.

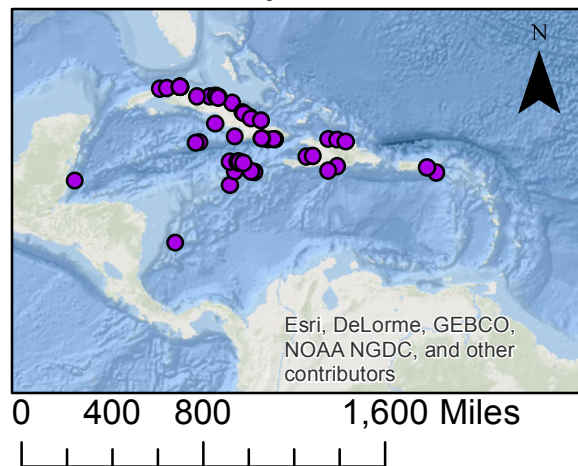


Timeline Distribution of Lionfish

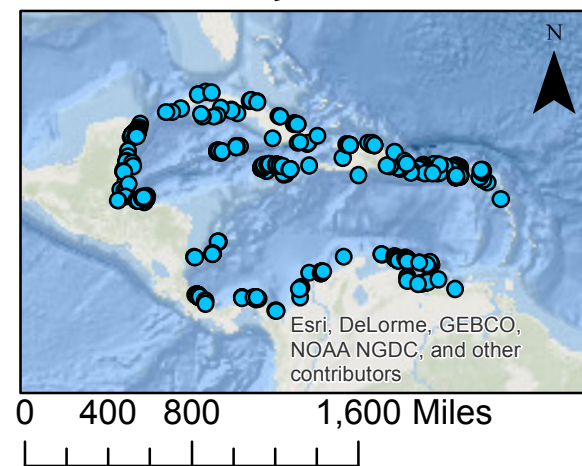
The timeline below shows the distribution of lionfish from 2007-2014. 809 individual lionfish were collected and recorded based on their location. The beginning of the timeline indicates lionfish in the northern part of the Caribbean Sea, around Jamaica, Cuba, and the Dominican Republic. Over time, the lionfish appear to migrate south and east towards the Atlantic coasts of South America. The lionfish also appear to stay close to shorelines and not in open water.



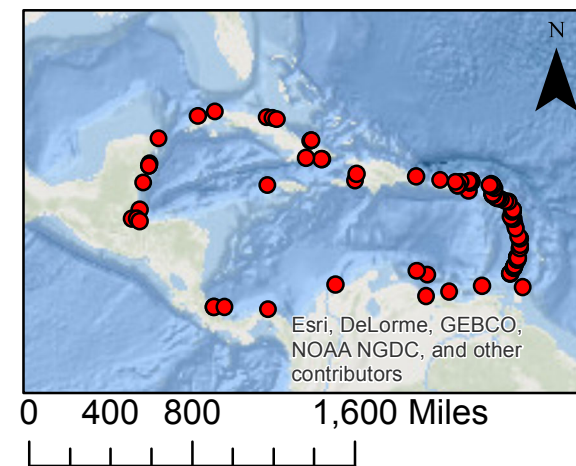
2007 - 2008



2009 - 2010



2011 - 2012



2013 - 2014

