APPENDIXES

This is a page from the National Science Foundation's "Citizens' Report: 2008 Summary of Performance and Financial Results":

Above: Native to the warm waters of the Pacific and Indian Oceans, the red lionfish is a beautiful creature to behold so it is easy to see why this gracious predator was scooped up by aquarium enthusiasts and brought to Florida. Unfortunately, some of these *Pterois volitans* specimens apparently escaped their glassy confines and made it into the Atlantic Ocean, where, according to new research, this lion of the shallow seas is now on a deadly rampage. Work at the coral reef research station at Lee Stocking Island in the Bahamas by Mark Hixon and his team from Oregon State University have produced shocking results. The voracious lionfish decimated almost 80 percent of the young fish in the reefs they inhabited. Coral reefs are crucial to the health of oceans. In addition to forming natural breakwaters and helping to prevent shore erosion, the reefs provide a sanctuary for thousands of species of marine plants and fish. Reefs are complex ecosystems, so the introduction of a dangerous invasive species like the red lionfish can drastically upset the balance that keeps these rainforests of the ocean healthy. Reefs are also an important source of new medicines and other compounds useful to humans. Hixon recommends ways to address the lionfish threat including maintaining protected marine reserve areas in the ocean. Such areas can support many large predatory fish native to the Atlantic that may provide a natural control of lionfish.

For more information: *www.nsf.gov/discovereis/disc_summ.jsp?cntn_id=111976&org=NSF*

Appendix 1: DESCRIPTION OF NSF DIRECTORATES AND OFFICES

The **Directorate for Biological Sciences** provides support for research to advance understanding of the underlying principles and mechanisms governing life.

The **Directorate for Computer and Information Science and Engineering** supports research on computer and information science and engineering, helps develop and maintain national computing and information infrastructure, and contributes to the education and training of the next generation of computer scientists and engineers.

The **Directorate for Education and Human Resources** supports activities that promote excellence in U.S. science, technology, engineering, and mathematics education at all levels and in all settings, both formal and informal.

The **Directorate for Engineering** supports research and education activities that provide a foundation for our nation's global leadership in technology and innovation.

The **Directorate for Geosciences** supports research in the atmospheric, earth, and ocean sciences.

The **Directorate for Mathematical and Physical Sciences** supports research and education in astronomical sciences, chemistry, materials research, mathematical sciences, and physics.

The **Directorate for Social, Behavioral, and Economic Sciences** supports research and education about human cognition, language, social behavior, and culture and on economic, legal, political, and social systems, organizations, and institutions as well as science resources studies.

The **Office of Cyberinfrastructure** coordinates and supports the acquisition, development, and provision of state-of-the-art cyberinfrastructure resources, tools, and services essential to the conduct of science and engineering research and education.

The **Office of Integrative Activities** promotes unity and alignment in support of the Foundation's mission, coordinating and overseeing cross-directorate activities and providing policy support to the Office of the Director.

The **Office of International Science and Engineering** promotes the development of an integrated, Foundation-wide international strategy and manages international programs that are innovative, catalytic, and responsive to a broad range of NSF interests.

The **Office of Polar Programs**, which includes the U.S. Polar Research Programs and U.S. Antarctic Logistical Support Activities, supports multidisciplinary research in the Arctic and Antarctic regions.

The **Office of Budget, Finance, and Award Management** is headed by the Chief Financial Officer, who has responsibility for budget, financial management, grants administration, procurement operations, and related policy.

The **Office of Information and Resource Management** provides human capital management, information technology solutions, continuous learning opportunities, and general administrative services to the NSF community of scientists, engineers, and educators.