

**JIMAR, PFRP ANNUAL PROGRESS REPORT
FY 2002**

P.I. Name: Richard E. Young

Project Proposal Title: The ecology of the red squid *Ommastrephes bartramii*.

Funding Agency: Pelagic Fisheries Research Program

1. Purpose of the project and indicative results.

The purpose of this project is to gather information on the ecology of the red squid, *Ommastrephes bartramii*. This squid has been an important fishery species in the past and was presumed to be targeted again in the future. This in fact has occurred and a small fishing fleet has begun to target this species. Understanding the ecology of this animal will allow for a more informed management of this fishery as well as other fisheries (such as the swordfish fishery) that rely on this squid as a food source.

The red squid feeds mainly on fishes and squids with very little other material found in its stomachs. The red squid appears to be a generalist feeder, feeding on a wide array of prey species of teleost fish and cephalopods. Most groups of prey were fed on at moderate intensity, with no one species accounting for a majority of prey items. The red squid appears to occupy a fairly high trophic level, according to the stable isotope analyses that have been done.

2. Progress during FY 2002. Provide a thorough discussion of accomplishments and problems.

All samples of *O. bartramii* have been analyzed using stomach contents analyses to determine feeding habit. Stable isotope analyses have been performed on the mantle tissue of all squids collected since 1998, and analyses have been run on the eyes, blood, and gladii of selected individuals. Samples of tuna, mahi mahi, DOM, zooplankton, and representative prey items of red squid have also been analyzed in an attempt to categorize the ecosystem and their relative roles within it. There were no problems during the FY 2002.

3. Plans for the next fiscal year.

The funding for this project ran out on June 30, 2002. The data for this project will be analyzed and collated.

4. List of papers published in refereed journals during FY 2002.

NA

5. Other papers, technical reports, meeting presentations, etc.
NA

6. Names of students graduating with MS or Ph.D. degrees during FY 2002. Include title of thesis or dissertation.

Matthew Parry, M.Sc.- presumed date of graduation, Dec. 2002

Title: The trophic ecology of two oceanic squids in Hawaiian waters.

7. For multi-year projects, provide budget for the next year on a separate page.