## UNCW professor awarded \$10,000 to study living marine fossils

Most people think of shrimp, crab and lobster as appetizing entrees in a seafood restaurant. For UNCW Biology Professor Robert George, however, these crustaceans are the subjects of a research project in the Indian Ocean. Phase one of the two-phase "Agassiz Project: Studies on Living Marine Fossils and Giant Crustaceans" is expected to begin in the fall of 1988.

George has been awarded \$10,000 by the Griffis Foundation, with expected support from the Fulbright Foundation, to study the feeding habits and behaviors of living marine fossils and giant crustaceans. Specifically, the study will focus upon the biology of the giant isopod *Batbynomus* in the Bay of Bengal and the living fossil crustacean *Pbreatoicus* in the lakes of Tasmania.

With more diversity and variation within the species than any of the other crustaceans, the isopod is considered a dominant form of the crustacean family. The isopod's body is composed of seven body segments each bearing a similar set of legs. Normally about the size of the typical backyard variety of rolly polly, also an isopod, *Batbynomus* have reached sizes as large as 12 inches in the deep seas of the Indian Ocean and other world seas.

Many fossils of the nearly extinct *Bathynomus* evolved from the Eocene Period which dates back approximately 50 million years. Some living fossils have recently been discovered in the Indian Ocean and the Sea of Japan.

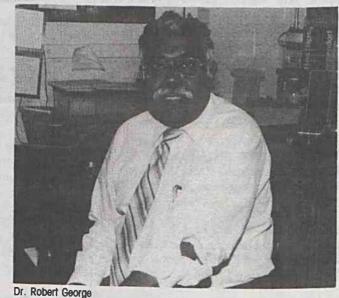
In another part of his research, George will observe a second type of crustacean, the *Phreatoicus*. The *Phreatoicus* is a cross between an isopod and an amphipod. Half of its body is laterally flat, like the shrimp, while the other half of its body is horizontally flat, like the *Bathynomus*. George calls this crustacean a primitive isopod because its appearance is in the formative stages of the isopod.

Other crustaceans to be studied are the spider crab, golden crab, and the giant crab from the Great Barrier Reef.

George will use sophisticated computer equipment to monitor the movements and feeding habits of these crustaceans to determine if there are any patterns which might explain their unusual size. He also hopes to bring back an embryo so that the growth patterns of the crustacean can be observed.

Assisting George in his research will be Professor M. K. Chandrashekaran and graduate students from Madurai Kamaraj University in South India. Chandrashekaran and George have worked together on projects funded by the Fulbright Foundation. In addition, George hosted Chandrashekaran at UNCW in 1984.

The Agassiz Project received its name in honor of Louis and Alexander Agassiz, 19th century deep sea researchers



from Harvard University and founders of American deep sea oceanography.

Phase II of the project will focus on similar information on isopods from the Atlantic region, in comparison to George's findings in the Indian Ocean. This phase is expected to begin in the fall of 1990.

> — Ray Cockrell UNCW News Bureau Intern

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