SB 730
MAKING AN APPROPRIATION FOR ANGUILLA
RESEARCH AND DEVELOPMENT FACILITY

Statement for
Senate Committee on
Agriculture and Environmental Protection
Public Hearing - February 12, 1991

By
Jacquelin Miller, Environmental Center
James Parrish, Hawaii Cooperative Fisheries Research Unit
Richard Brock, Hawaii Institute of Marine Biology
Sheila Conant, General Science
Robert Kinzie, Zoology
Leonard Freed, Zoology

SB 730 would appropriate funds for a technical and economic feasibility study of cultivating anguilla eels at the University of Hawaii at Hilo experimental farm in Panaewa.

Our statement on this bill does not represent an institutional position of the University of Hawaii.

SB 730 is identical to Sb 3063 introduced in 1990 and on which the Environmental Center submitted comments. We re-iterate here the substance of our previous statement.

The introduction of eels, Anguilla, for commercial aquaculture purposes has been proposed numerous times over the past several years. Proponents of such introductions have argued that the eels would provide a new and economically attractive aquaculture species. Opponents have called attention to the unavoidable and irreversible environmental consequences of their introduction. In our previous statements on many related bills, we have called attention to the need for an unbiased, neutral, third party to undertake a comprehensive study of the economic aspects of the prospective eel industry. We have also suggested that a comprehensive evaluation of the factual knowledge, scientific opinions and subjective judgements involved with the environmental risks associated with the proposed importation of eels be similarly compiled.
To our knowledge, these evaluations have not been undertaken, or if undertaken have not been made available for review. The lack of follow through on these studies suggests that there is insufficient economic interest or that the environmental risks are recognized to be so great as to preclude any reasonable consideration of the eel industry.

At the present time, it is our understanding that serious questions remain regarding the potential economic benefits of raising eels. Thus, the proposed study, as long as importation of eels was not included, would provide this information. The funds requested, however, are far in excess to what would be needed for such a "paper" analysis. Hence we suggest that they be reduced to better reflect the cost of a cost/benefit/environmental risk assessment study.

As for the potential risk to the environment some facts are known:

1. The eels are voracious feeders, they literally eat everything! Besides feeding on almost every group of aquatic animals they contact, including shrimp and prawns such as are found in the present aquaculture farms, they have also been reported to feed on ducklings. Hence they would pose a significant threat not only to our stream fauna, but also to our existing aquaculture industry and to our four species of endangered water birds.

2. They have a long life span. Reports in the literature cite life spans of up to 80 years in captivity. The more expected life span in the wild is quoted as 20 to 30 years.

3. They are known to travel from pond to pond over land. In fact, they have been reported to cross open fields wet with dew. This characteristic should be of particular concern to residents of the Hilo area with its notorious rainfall.

4. They cannot be introduced, even for scientific research, without a high risk for introduction to the native environment through unplanned escapes. (The New Zealand species was imported to Japan for aquaculture, it escaped and is now found in the wild.) They pose a significant risk to all native stream faunas including such species as the oopu, Lentipes concolor, presently under consideration for endangered species status, and the fauna of our anchialine pools that are critical habitat to other endemic species.