HB 2320
RELATING TO ANGUILLA

Statement for
House Committee on
Agriculture
Public Hearing – January 31, 1990

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

HB 2320 proposes to amend HRS 150A-5 to permit the introduction of the eels Anguilla rostrata and Anguilla japonica, for research purposes under conditions to be determined by the Board of Agriculture.

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

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 almost identical bills, we have called attention to the need for an unbiased institution of the state or University to undertake a neutral, 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. 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.

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.

As we pointed out in our previous statements on similar bills, the possible penalty of deferral of action on this legislation can, at the most, be a deferral of potential economic benefit, whereas the possible penalty of a decision to allow the introduction of anguilla eels includes the certainty for permanent and irreversible environmental damage and economic losses to the aquaculture industry.