SB 2134 would delete anguillid eels from the list of animal species whose importation into Hawaii is specifically prohibited in HRS 150A-6. This statement on the bill has been submitted for review to the Legislative Subcommittee of the Environmental Center of the University of Hawaii. However, it does not reflect an institutional problem of the University.

The anguillid eels are typified by the "unagi", a great delicacy, raised commercially in Japan and elsewhere. Commercial rearing in Hawaii is blocked by the legal ban against their introduction here. The eels were included among the species named in the law because of fears that they would escape confinement and establish breeding populations in Hawaiian streams and that the resulting shifts in ecological balances in the streams would be very deleterious. The chances of escape and establishment, the resulting effects, and the evaluation of those effects are matters of opinion; the chances of profit, the extent of private profit, and the public value of an eel industry here are equally matters of opinion.

In several previous years, the Legislature has considered bills to delete from the law the ban on the introduction of the eels. In each session there has been testimony stressing the potential for ecological detriment and belittling the potential for commercial profit and other testimony belittling the potential for economic detriment and stressing the potential for commercial profit. As indicated in Environmental Center statements on the earlier bills the potential for detriment seems to some knowledgeable persons in the University greater than the potential for profit, but to others the balance seems the reverse. Rather than reflect again the diversity of informed opinion in the University community, it seems best this time that we comment on the nature of the issue and on the ways in which an issue of this sort may best be resolved on behalf of the public.

As all important environmental issues, the eel issue involves a combination of facts and opinions, and within the aspects that are matters of opinion, there is a range from those to which scientific judgement is highly pertinent and those that are purely subjective. Subjective judgements on an issue such as this are appropriately made on behalf of the
public by the Legislature. However, these judgements should be based on what I will term neutral-consensus scientific opinion rather than the range of opinions expressed by the individual scientists so concerned that they are induced to testify on the issue. The reason I make this statement is that, to an often very significant extent, the range of such opinions stems from biases that affect the scientific judgement concerned.

What I have referred to as a neutral-consensus scientific opinion on an issue is one that is formulated on the basis of the facts and the opinions of experts in the disciplines pertinent to the issue but formulated by neutral experts, in other words experts who have not taken adversary positions on the issue. These neutral experts must be sufficiently knowledgeable to evaluate the opinions of concerned specialists, but they need not necessarily be specialists in the same disciplines.

It is difficult for the Legislature or one of its committees during the course of one of the legislative sessions even to discriminate between the scientific aspects and the subjective aspects of an issue such as the eel one, and practically impossible for the legislature to obtain a neutral-consensus scientific opinion during a session. The Legislative Scientific Advisory Committee that was called for in HRS Chapter 23, part II was intended to provide the Legislature with neutral-consensus opinions of the kind needed. However, this committee never functioned in the way intended, and it is in any case defunct.

A couple of years ago, the Legislative Auditor's Office sponsored an investigation intended to advise the Legislature as to better means to provide itself with such neutral-consensus opinions in quasi-scientific matters. The Hawaii Chapter Society of the Sigma XI, an organization of highly qualified scientists, made a contribution to the investigation in the form of the proceedings of an extensive panel discussion specifically devoted to the topic. I understand, however, that the report resulting from the investigation has not been released. In any case, although the eel issue is an important one, it does not seem important enough to serve as the sole reason for reestablishing Legislative Scientific Advisory Committee or for establishing some new institutional means to satisfy the need, particularly because other institutions are available.

Questions as to animal species importations are within the purvue of the Department of Land and Natural Resources (DLNR), and the Department has an Animal Species Advisory Commission that should be directly concerned with such issues as the eels one. I am informed that the Commission did discuss the issue in 1979, but did not come to any conclusion. I have the impression that the failure resulted, in part, from the attempt of the Commission to grapple with the issue as a whole instead of sorting out, as I propose, the aspects of fact, scientific opinion, and subjective judgement.

If HB 507 were to be passed, and the anguillid eels were deleted from the list of species whose importation is banned, the introduction of the eels would still be subject to the permission of the DLNR. Before deciding whether to give its permission, the DLNR should seek the advice of the Animal Species Advisory Commission. (Unfortunately the law relating to the Commission was amended to make its use of the Commission optional). I suggest that the Legislature should by resolution request that the DLNR refer the eel issue to the Commission and to report back the consensus opinions of the Commission's scientist members on those aspects of the issue to which scientific opinion is pertinent.

The Animal Species Advisory Commission is probably not the best body to provide a neutral-consensus opinion as to the economics of an eel industry here. Among the aquacultural institutions of the state and the University there are surely some than can effectively be used to provide such an opinion on this aspect of the issue. I suggest that the Legislature should solicit from one of these bodies a study and report on the economic aspects of the prospective eel industry in the same way it solicits the report on the ecological aspects.
I further suggest that the Legislature defer its decision whether or not to amend HRS 150A-6 so as to allow eel introductions until it has received the two reports. I think it should be assumed that the ban on eel introductions in the present statute was based on the best information available to the Legislature at the time the statute was enacted, and I believe the ban should not be deleted from the statute except on the basis of the best information the Legislature can now obtain.

Deferral of the decision whether or not to amend HRS 150A-6 as proposed in SB 2134 may perhaps be regarded by proponents and opponents of eel introductions simply as "ducking" the issue. I hope that the Legislature will consider that, if the deferral is coupled with the resolutions of the sort suggested, it is simply a part of the process of arriving at a sound decision. Let me point out that the possible penalty of deferral can at the most be no greater than the deferral of a potential economic benefit, whereas the possible penalties of a decision to allow the introduction of anguillid eels include not only permanent environmental detriment but also permanent and significant economic detriments.