Summary

AFS Policy Statement #22:
Commercial Aquaculture
(Abbreviated)

Recent successful commercial culture of channel catfish, salmonids, and crayfish has led researchers and entrepreneurs to investigate and invest in a wide array of potential finfish, crustacean, and molluscan candidates for commercial rearing. Commercial production is essential in meeting increasing demands for food fish and for sport fishing, the provision of aquarium fishes and bait fish, and the local production of fish to replace imports. Such rapid expansion of the industry, however, has raised many AFS concerns. Use conflicts in both inland and coastal waters can be expected to intensify as aquaculturists, recreationalists of all types, developers, environmentalists, and commercial fishers contend for use of the same bodies of water.

Disease problems, genetic pollution, escape of exotic and introduced species, and eutrophication are areas of greatest concern. There is the possibility of amplifying pathogenic organisms in an intensive culture system which might be released with or without fish into wild populations. All states and provinces should have fish health programs, but because of the diverse nature of these programs, only the federal government may be able to consistently apply equal standards throughout the country.

Biotechnologies are now providing mechanisms to genetically manipulate organisms to promote economic advantages through increased growth rates, sex reversal, etc. However, the effects of the escape or release of these genetically altered organisms into the natural environment are not known. It is imperative that aquaculturists understand the need for and that governmental agencies enforce regulations to safeguard wild populations from escaped aquaculture species, whether genetically altered or exotic.

Successful commercial aquaculture usually implies a highly intensive management system that often results in nutrient-rich effluents. Since many factors (ratio of volume of receiving water to effluent, frequency of discharge, nutrient load, geographic location, etc.) are involved in each aquaculture operation, acceptable standards should be set and enforced by regulatory agencies to avoid eutrophication of receiving waters.

In supporting the orderly development of aquaculture, and to protect the integrity of native aquatic communities, the AFS advocates the following principles:

1. Federal, state, and provincial agencies should cooperate to ensure the health of aquatic organisms, control the transfer and introduction of aquatic organisms, and inspect processing plants and fish and fish products to safeguard human health.

2. Use of organisms native to each facility's region is strongly encouraged.

3. When commercially cultured fish are considered for stocking, every consideration should be given to protecting the genetic integrity of native fishes.

4. Aquaculture facilities should meet prevailing environmental standards.

Aquaculture is a form of agriculture. The principle responsibility for development of aquaculture is in the private sector. Government should support these initiatives directly through research and development, fish inspection, and fish health certification, and indirectly by reducing unnecessary regulatory constraints, mediating in resource user conflicts, and coordinating the involvement of a diversity of government departments.

Summary

The AFS policy regarding commercial aquaculture advocates:

1. Interagency cooperation and coordination of state, provincial, and federal fisheries and aquaculture programs.

2. Passage of aquaculture legislation which creates coherent federal, state, and provincial aquaculture programs and appropriation of funds to implement the legislation.

3. Passage or amendment of food safety legislation to establish fish inspection programs to ensure the safety and quality of aquacultural products.

4. Continued development of regional and provincial aquaculture research and extension centers.

5. Development of federal, state, and provincial centers to compile and disseminate aquaculture information.

6. Improved joint programs of the federal, provincial, state, and private sectors to facilitate the use of commercially grown fish--with proper safeguards--for fisheries enhancement and mitigation, and the provision of recreational fisheries.

7. Secondary school curricula and college and university programs to train students for future employment in all aspects of aquaculture.