

## Mariculture Committee (F)

Chair: Tony Calabrese (USA)  
Rapporteur: David Bengtson (USA)

The Mariculture Committee met on Tuesday, September 25, 2001, from 09:30 to 13:00 and on Friday, September 28, 2001, from 16:00 to 18:00.

David A. Bengtson (USA) was proposed as Rapporteur and accepted by the Committee. Sixteen participants attended the meeting.

### Opening and approval of agenda

The Chair reviewed the agenda for the two scheduled meetings and noted that none of the Working Group Chairs would be attending to present their reports, so that the agenda would be modified accordingly, with substitute presenters standing in where possible. Volunteers were sought to serve on the Awards Committee to judge best paper, best poster, etc. for the 2001 Annual Science Conference (ASC) and Scott Campbell offered to serve. The Committee was co-sponsoring one Theme Session at this year's ASC (Sustainable Development and Conservation of Natural Resources of the Coastal Zone). Another Theme Session had been accepted but was cancelled due to an insufficient number of papers (Factors Affecting the Viability of Recirculation Systems for Commercial Production in Saltwater Aquaculture).

### Committee business

#### Joint session on salmon

The Chair reminded members about a joint meeting with the Living Resources and Resource Management Committees on Tuesday, September 25, to discuss the issue of how to place salmon fisheries issues in ICES. There was a Salmon (ANACAT) Committee in the past, but there has been a big reduction in the number of salmon people coming to ICES since its dissolution. After some discussion of possible reasons for the reduction in participation of salmon biologists at ICES, the Committee decided that it was not the appropriate Committee to place a group of salmon biologists interested in management of wild salmon populations and that this is an issue that must be resolved in another way.

#### Participation of mariculturists in ICES

The discussion on salmon led to the observation that the low level of participation by mariculturists at both the ASC and the Committee meetings was a cause for concern. Reasons for the low numbers were again discussed. It seemed that the main reasons are that aquaculturists with limited budgets go to meetings primarily devoted to aquaculture (e.g., World Aquaculture Society, European Aquaculture Society) and

also that ICES does not "advertise" itself sufficiently to the aquaculture community. It was pointed out that the Committee has to meet during the ICES Statutory Meetings every year, but that the Working Groups are free to meet in association with meetings of other societies if that would help to boost attendance. An important question was raised about whether the Groups should exist primarily to give advice based on today's knowledge or to create the research agenda for tomorrow. The answer seemed to be that they need to do both. The top-down approach involves higher committees requesting advice and information based on present knowledge, but that a bottom-up approach from the Working Group members is most likely to provide the agenda for future research. One member proposed separating the questions about participation into a) how to attract more people to the ASC, and b) how to attract more people to the Mariculture Committee and the Working Groups. Basically, sessions at the ASC need to be made more attractive and need to be advertised better. Another suggestion was to split the ASC and Statutory meetings so that the meetings do not last so long (i.e., > 1 week).

### Preparation of Committee Action Plan

The Chair introduced the draft of the proposed Action Plan for the Committee. He requested additional input from the Working Group Chairs, which must be finalized in January in time for the meeting of the Consultative Committee. Discussion centred round Work Plan item 1 on reviewing the Working Groups. The idea is to have a two-phase process: 1) review of the annual Working Group reports (following a precedent of the Oceanography Committee), and 2) an evaluation of all the Working Groups to be sure they are needed and are properly focused. It was recognized that these two processes are interdependent.

### Working Group Reports

#### Working Group on Marine Fish Culture (WGMAFC)

David Bengtson (USA) presented the report (Doc. F:04) on behalf of the Chair, John Castell (Canada), who was unable to attend. The Working Group worked by correspondence during 2001. Because of this, some of the terms of reference were not fulfilled and the Group decided it would prefer to meet on an annual, rather than biennial, basis in order to ensure that the work gets accomplished. In general, the Working Group would like to keep pace with the industrialization of marine fish culture. The vision is for increased production in land-based systems with selectively bred fish, rather than in ocean-based systems with impacts on the environment. It was suggested that the Working Group might take up the

question of genetically modified organisms, both the farmed organisms themselves and ingredients in their feed, to provide unbiased scientific advice on this controversial issue. The traceability of escaped farmed fish in the environment was another potential issue for the Group.

#### **Working Group on Pathology and Diseases of Marine Organisms (WGPDMO)**

In the absence of a representative from this Group, Doc. F:02 was not presented.

#### **Working Group on Applications of Genetics in Fisheries and Mariculture (WGAGFM)**

Tony Calabrese (USA) presented the report on behalf of the Chair, Michael Møller Hansen (Denmark), who was unable to attend, based on material that Dr Møller Hansen had provided. The Working Group noted in its report (Doc. F: 03) that it included only one person with a background in quantitative genetics, that the majority work with wild populations, and that only a handful work in aquaculture. It was pointed out that the Committee really needs advice in the area of genetics and aquaculture and that members should encourage such specialists in their countries to get involved in this Working Group and for the Working Group to then respond to the needs of the Committee.

#### **Working Group on Environmental Interactions of Mariculture (WGEIM)**

The Working Group did not meet as scheduled due to the illness of the Chair, Ian Davies (UK), who has stepped down. A couple of members had indicated a willingness to serve as Chair and Ed Black (Canada) was selected. It is now planned that the Group meet next spring at ICES Headquarters. It was noted that the Committee should make sure the WG is newly and properly focused before it meets.

#### **Working Group on Introductions and Transfers of Marine Organisms (WGITMO).**

Jacqueline Doyle (Ireland) presented a report on the 23<sup>rd</sup> meeting of this Group (Doc. ACME:08) which had attracted 16 participants. There is concern that the Code of Practice is not being applied, as ICES has received no requests for advice in quite some time, yet introductions are clearly going on. In addition, the development of a trade in live seafood has meant that live organisms are being moved around trade zones (e.g., within Europe). The top priority for the Working Group, based on a recommendation from ACME, is to update the Code of Practice. It was also pointed out that this Group only deals with planned or accidental introductions, not with ballast water introductions (separate Study Group),

species range extensions due to climate change, or genetically modified organisms.

#### **Approval of Working Group Terms of Reference**

Terms of reference for all Working Groups were approved subject to a few changes being made prior to submission to the Consultative Committee.

#### **Proposals for Theme Sessions for 2002 and beyond**

Proposals were received for two theme sessions in 2002:

1. Improvements in Quality of Cultured Juvenile Fish, and
2. Immunomodulators and Probiotics: Alternatives to Chemotherapeutics

The co-convenors announced their intention to actively recruit presenters for these theme sessions and to advertise them widely to the aquaculture community. In addition, Ole Torissen (Norway) suggested a theme session on interactions of wild and cultured salmon. He was able to propose a third theme session entitled "Salmon: Is Mariculture the Major Threat to Wild Stocks?" with J. Doyle (Ireland), A. Isaksson (Iceland), and T. Svasand (Norway) as possible co-convenors. While it was recognized that it might be difficult to schedule three theme sessions from the Committee, it was recognised that three separate mariculture sessions would enhance the marketing of the ASC to the aquaculture community and, hopefully, increase participation in Committees by both the mariculturists and the salmonid community. The Chair asked members to develop ideas for theme sessions for future ASCs.

#### **Consideration of Symposium**

There has been some preliminary discussion in WGMAFC about hosting a theme session on cod culture in 2003 and perhaps an ICES symposium on the subject in 2004 or 2005. The Committee voiced considerable support for holding a symposium on gadoid culture (not just cod) and pointed out that the advance time needed for planning a symposium meant that the earliest time was likely to be 2004. A Draft Resolution was subsequently developed for an ICES Symposium on "Gadoid Mariculture: Development and Future Challenges" to be held in Bergen, Norway in 2004. The Committee endorsed this Draft Resolution.

#### **Consultative Committee and ACME referrals**

There were no referrals to consider at this time.