

STATEMENT BY MR. J. A. BEESLEY, REPRESENTATIVE OF CANADA  
TO THE UNITED NATIONS SEABED COMMITTEE (PREPARATORY  
COMMITTEE FOR THE THIRD LAW OF THE SEA CONFERENCE),  
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Mr. Chairman,

My Delegation is gratified at the opportunity to proceed with the work of Sub-Committee II under your wise and skillful guidance even while informal discussions continue on the list of issues.

I should explain that I am delivering this statement on behalf of Dr. A. W. H. Needler, Deputy Representative of Canada to the Sea-Bed Committee, who is our principal adviser on fishery matters. Dr. Needler had hoped to deliver this statement himself last week but did not have an opportunity to do so as the Sub-Committee did not meet during that period, and he has since had to return to Canada.

It will be recalled that in our statement to this Sub-Committee on August 6, 1971, we outlined some of the problems being faced by fishermen in Canada and other countries as a result of the ever-increasing tendency towards over-exploitation and over-capitalization of fisheries. The pressure on fish stocks continues to be intensified by the growing demand for fish products coupled with rapid advances in technology. We have reached the point where we now have the economic incentive and the technological capability to reduce fish stocks to commercial extinction. Meanwhile, the international legal framework within which fisheries are conducted remains more attuned to the freedom to fish - and overfish - than to the need and the responsibility to conserve. While various regional commissions have promoted certain conservation measures, a more effective and comprehensive approach to fisheries conservation and management is urgently needed.

Dr. Needler's statement last August also outlined in broad general terms the Canadian approach to these problems. That approach is a functional one which recognizes that different species groups require different management regimes. Some species are already managed under national regimes, for example the sedentary species. Others obviously can only be managed by an international authority by virtue of their wide-ranging migrations, for example some pelagic fish and marine mammals. The anadromous species, such as salmon, constitute a special case about which I will say more later. As regards the coastal species - that is the non-sedentary, free-swimming species

which live out their lives in nutrient-rich areas adjacent to the coast - the Canadian position is that they can be effectively managed only by a system under which the coastal state would assume responsibility for their conservation and management as custodian for the international community under internationally agreed principles.

I should now like to discuss in some detail the principles which we in Canada believe should form the basis for such a system of coastal state management of coastal species. I should make clear at this point that I am not addressing myself to the question of the limits of fisheries jurisdiction as such but rather the principles which should underlie the exercise of such jurisdiction. I should also make clear that these principles do not presuppose exclusive fishing rights by the coastal state with regard to coastal species, but rather the authority to manage those species and the right to a preferential share in their harvest as appropriate in particular circumstances.

The concept of fisheries management as we see it forms part of the broader concept of the management of the marine environment as a whole. The importance of that broader concept, and its relationship to fisheries management, was stressed at the second session of the Intergovernmental Working Group on Marine Pollution which was held in Ottawa in November, 1971. The report of that Working Group set forth the following objectives for the international community with regard to the marine environment, in the context of preparations for the Stockholm Conference on the Human Environment:

"The marine environment and all the living organisms which it supports are of vital importance to humanity, and all people have an interest in assuring that this environment is so managed that its quality and resources are not impaired. This applies especially to coastal nations, which have a particular interest in the management of coastal area resources. The capacity of the sea to assimilate wastes and render them harmless, and its ability to regenerate natural resources, is not unlimited. Proper management is required and measures to prevent and control marine pollution must be regarded as an essential element in this management of the oceans and seas and their natural resources." (UN Document A/CONF.48/IWGMP.II/5, para. 11).

The interrelationship between the prevention of the degradation of the marine environment and the conservation of its living resources was brought out in the FAO Technical Conference on Marine Pollution of

December, 1970, reported on by Dr. Needler on March 10 in Sub-Committee III. The principles I am about to outline in respect of fisheries management are founded on this interrelationship and the broader concept of management of the marine environment as a whole.

#### SPECIAL INTEREST OF THE COASTAL STATE

The coastal state has a special interest in and responsibility for the conservation of the living resources of the sea adjacent to its coast and should have the authority required to manage those resources in a manner consistent with its special interest and responsibility, as well as preferential rights in the harvest of such resources.

The special interest of the coastal state has already been granted a degree of recognition in the 1958 Convention on Fishing and Conservation of the Living Resources of the High Seas. The recognition afforded by the Convention, however, is so hedged about with limitations and restrictions that it does not afford the basis for an effective system of management by the coastal state. Further recognition and development of the principle is essential because the development of fishing operations by distant-water fishing states often undermines and even destroys the economic base of coastal communities dependent on fisheries as a source of income. In addition, the special interest of the coastal state must be further recognized and developed in light of the responsibility imposed on the coastal state by the very relationship between land and sea. The waters bordering the continents are among the richest in the world and it is the coastal environment that sustains many of the fisheries of the world. It is a well-recognized fact that production of food organisms is concentrated in areas very close to the coast. Many commercial fish stocks inhabit coastal areas seasonally or at some stage in their life history; many of these are dependent on the coast as a "nursery area" for the young stages. Moreover, production of renewable resources over much wider areas adjacent to the coast is largely the result of the interaction of land-related factors, such as drainage, estuarial mechanisms, local upwelling, exchange and regeneration in the area of the continental shelf, and so on. This interrelationship between the sea and the land imposes certain responsibilities upon the coastal state, which must protect the coastal environment in which living resources are concentrated.

As stated in the draft declaration of principles adopted by the Intergovernmental Working Group on Marine Pollution, "In addition to its responsibility for environmental protection within the limits of its territorial sea, a coastal state also has responsibility to protect adjacent areas of the environment from damage that may result from activities within its territory". The marine environment is susceptible to serious degradation from river-borne pollutants, dumping of refuse, land fill projects and direct and indirect pollution from industrial sources. The protective measures undertaken by the coastal state, sometimes at considerable cost, may benefit resource productivity in areas well outside the traditional limits of exclusive fishing rights. Hence, the coastal state should have a right to protect this investment and a right to a preferential share in the return on such investment. In other terms, responsibilities must be balanced by rights and rights by responsibilities. This balance can best be achieved, in our view, through the concepts of custodianship and delegation of powers to the coastal state.

#### BIOLOGICAL PRINCIPLES

In exercising its management authority the coastal state would have to take into account certain biological principles which are universally recognized as the very foundation for any programme to conserve living marine resources.

##### A. Management by Unit Stock

Each population or stock within a species has unique biological characteristics, and is ideally managed as a unit.

Unit stocks will normally inhabit well-defined areas, with exceptions such as large pelagic species and marine mammals. Such areas are often relatively small, even taking seasonal migrations into account.

Unit stocks cannot be managed in isolation from other stocks of the same species or indeed of other species since restrictions on fishing of one unit will tend to divert fishing effort elsewhere.

##### B. Stock and Recruitment

Ideally a fishery should be controlled so that production of new age groups or "recruits" to the fishery is at a maximum.

At the very least enough fish must be allowed to escape the fisherman to ensure the continued presence of an adequate spawning stock.

## B. Cont'd.

Otherwise stocks may be reduced to a level where it is no longer economically possible to carry on fishing, and from which recovery may be very slow.

C. Most Effective Use of Recruits

Each age group of a species, as it becomes available to fishing, should be fished at the point when additions in weight due to growth are balanced by natural losses.

If fish are taken at a small size the total yield from the age group is smaller than it could be if the fish were allowed to grow. Abundance of each age group can often be predicted several years in advance of the time when the greatest yield from the age group can be taken, thus allowing time to plan fishing strategy.

D. Environmental Quality

The quality of ocean waters inhabited by various stocks must be maintained.

This is essential in order to ensure that life processes (for example, reproduction, growth and behaviour) are not adversely affected, and that environmental contamination detrimental to other organisms in the food chain (including humanity) is controlled. In other terms, the management of fishery resources forms part of the broader question of management of the marine environment as a whole and the coastal state has a particular interest and responsibility in this field, as recognized by the Intergovernmental Working Group on Marine Pollution. As Dr. Needler pointed out in Sub-Committee III on March 10, we may have a few decades, and only a few decades, before marine pollution causes serious damage to the resources of the world ocean, assuming present trends continue.

ECONOMIC PRINCIPLES

Maximum sustainable yield in biological terms does not necessarily produce maximum yield in economic terms. Indeed, maximum economic yield or rent from the resource almost invariably occurs at some point below the maximum biological yield. Even at the higher level, however, economic facts must be taken into account.

A. Allocation of Shares

The yield from a fishery should be allocated among participants

## A. Cont'd.

in that fishery, on the basis of some appropriate formula, to permit each participant to obtain his share on the most advantageous basis.

In an unregulated competitive fishery, some participants may be able to compete more effectively than others, but everybody loses in the long term. Fisheries tend to be exploited too intensely; as a result the size of the spawning stock becomes too small for maximum production, some level of yield less than that which could be obtained on a long-term basis is taken, and costs of obtaining this yield are greater than necessary since it could be taken with less effort. Canada is gratified that some progress in the direction of allocation of shares has been made in the International Commission for the Northwest Atlantic Fisheries, which has recently recommended to its member governments share allocation for herring stocks.

B. Controlled Access

Access to a fishery should be controlled, on the basis of some appropriate formula, to ensure that no more than the maximum biological yield is taken and that it is taken without wasteful investments of capital and manpower.

Controlled access is, of course, a corollary to any system of allocation of shares. Again, in an unregulated competitive fishery there is an inexorable tendency for effort or fishing intensity to increase to the point where the cost of fishing equals or may even exceed the value of the yield. The objective of rational fishery management should be to constrain the productive capacity in a fishery - by controlling access - so that the yield is taken with no greater effort than necessary, taking into account, however, relevant social factors.

By way of example, it was estimated several years ago by a Working Group of the International Commission for the Northwest Atlantic Fisheries that catches of cod in the northwest Atlantic could be maintained at the levels then existing with substantially less fishing effort and therefore a significant reduction in the costs of fishing by the participating countries. Since that time fishing effort has continued to increase and total cod catches have declined.

## GENERAL MANAGEMENT PRINCIPLES

In order to put these biological and economic principles into effect it is necessary to establish a regime based on appropriate principles of management. The most important of these principles would be as follows:

### A. Acceptability of Management Criteria

Management must be carried out on the basis of widely recognized and internationally acceptable scientific and socio-economic criteria.

This is essential for both effectiveness and equity. Without agreement on such criteria the coastal state would have no objective guidelines for the exercise of its management authority, and other interested states and the international community as a whole would have no objective standards by which to assess the performance of the coastal state in its exercise of that authority. Hence internationally agreed criteria are essential to the very concept of custodianship.

### B. Orderly and Controlled Exploitation

Management should provide for control of the rate of expansion of fisheries.

Many of the current problems in international fisheries management are the result of rapid and uncontrolled increases in fishing; the consequences of such increases are often not apparent until the damage has been done. There are many examples where declining yields from fisheries are thought to be at least partly caused by sudden and opportunistic increases in fishing giving temporary yields which the stocks cannot maintain in the long term and which in extreme situations may seriously impair the capacity of the stocks to reproduce. Recovery of stocks under these conditions may be very slow, resulting in negligible yields over a long period of years and possible long-term imbalances in marine biological communities with consequences that are at present unforeseeable.

### C. Complete Utilization of Catches

All fish caught should be reported and utilized.

Fisheries should not be conducted so that significant amounts of the species sought, or species taken incidentally to the species sought, are discarded at sea. This practice, unfortunately, is now far too prevalent in fisheries for highly-valued species where substantial quantities of other species are caught and discarded despite the fact that these other species are valuable to other participants and may

## C. Cont'd.

themselves by subject to conservation regulations.

D. Accountability and Responsibility

Any regime for the management of an internationally-exploited fishery must be responsible and accountable to the international community.

Responsibility for resource management must carry sufficient authority to fulfill that responsibility. While the exercise of authority should be subject to review, the authority itself should not be open to challenge. The concept of custodianship, in other terms, does not imply some form of close supervision over the exercise of powers and the discharge of responsibilities by the coastal state, but rather that the exercise of its powers in accordance with internationally agreed criteria would be subject to appropriate dispute-settlement procedures.

E. Participants Must Co-operate

All countries participating in an internationally-exploited fishery should co-operate with the designated management authority.

Participants should contribute a fair share of the costs of managing the resource proportionate to their returns from that resource, and should provide the information needed for management purposes (catch, effort and biological statistics, etc.). Contributions by participants might be in the form of research programmes, for instance. It should not be expected that a few participants should bear this burden on behalf of all participants.

CONCLUSION

The various biological, economic and general management principles I have outlined for the management of coastal species by the coastal state would, in fact, be applicable to any system for the rational management of fisheries of every species. In Canada's view, however, only the coastal state can effectively implement such principles for coastal species. The coastal state has the most to lose if adjacent stocks are not soundly managed. Only the coastal state is in a position to take prompt action in response to urgent conservation needs now and in future. By reason of geography the coastal state is in the best position to assume and exercise authority. Such authority would be the natural consequence of the responsibility which the coastal state must already meet with respect to coastal species.



Certainly the present international management systems for fisheries have been found wanting. The various international fishery commissions have admittedly certain strengths. They have provided a forum for analysis of the statistical and scientific information necessary for management decisions. They have promoted collaborative research programmes and have established a number of conservation regulations based on the results of this research. On the other hand, however, the international fishery commissions suffer from very serious weaknesses. Not all member countries participate actively in data collection and research programmes. In fact not all countries participating in the fishery are necessarily members of the commission regulating that fishery. The commissions have been unable to control fishing effort. They have been unable to formulate effective regulations because rates of increase in fishing effort have often been too rapid to allow evaluation of the impact of such increases. Regulations have often been too little and too late because unanimous acceptance of scientific evaluations is difficult to obtain, especially when these result in recommendations to reduce fishing effort. In short, the commissions do not have full authority to manage. Their decisions require ratification and unanimous agreement and regulations when finally agreed are often difficult to enforce. While one commission has recently moved in the direction of allocating national quotas, agreement on this measure has been very difficult to achieve despite the fact that the measure applies to only one species in a relatively small corner of the world's oceans. Finally, the international commissions have not been responsive to the special interest and special needs of the coastal state.

Let me make clear, however, that the system of coastal state management for coastal species envisaged by Canada would not preclude a role for international fishery commissions within the context of that system. In Canada's view such commissions could have an important advisory role vis-à-vis the coastal state in its discharge of its management functions. The commissions could provide a forum for cooperation and consultation and, in particular, a most useful mechanism for the collection, presentation and analysis of the statistical and biological data required for management purposes. Management authority, however, would clearly rest with the coastal state and would not be open to challenge. The exercise of that authority would be based on internationally agreed principles, including those I have already discussed, and would be subject to review on that basis only.

In practice, the management of coastal species by the coastal state in accordance with the principles I have outlined could mean that only the nationals of the coastal state would be allowed to fish for certain species of particular socio-economic importance to the coastal population. In other cases, the system could involve simply a preferential share in the harvest of certain species. It might be envisaged that such a system could also allow a coastal state to share in the benefits from the exploitation of particular coastal stocks without actually fishing for them. This would, for instance, permit developing countries to charge a fee in respect of fishing operations by developed distant-water states and so help underwrite the costs of research and management.

Earlier in this statement I referred briefly to the special case represented by anadromous species such as salmon which spawn and start their early life in fresh water but spend some part of their life at sea. The very existence of these species is dependent on the coastal state in whose rivers they reproduce. Their continued maintenance imposes a very considerable financial burden upon the coastal state and the sacrifice of other benefits which that state could obtain from other uses of its rivers. Indeed the current value of the Canadian commercial catch (disregarding the potential value of the recreational catch) of Atlantic salmon is not equal to the amounts expended in Canada for Atlantic salmon research and management. Moreover, all salmon species can be conserved and managed effectively only if they are harvested in or near their rivers of origin when they have attained their maximum weight. For these reasons we in Canada believe that coastal states should have the sole right to harvest salmon bred in their own rivers. In effect this would represent a special application of the principle that stocks of particular socio-economic importance to the coastal population should be reserved for that population.

Mr. Chairman, the principles I have outlined in this statement would, we hope, provide the basis for internationally agreed principles of fisheries management. We hope that they will be discussed in this Sub-Committee with this view in mind. We would also suggest that consideration might be given to the desirability of convening, under appropriate sponsorship, a technical conference of fishery experts to examine and work out principles of fisheries management which would then be referred to the law of the sea conference. Such a technical meeting would provide an opportunity to concentrate on the practical and scientific aspects of world fisheries

problems and proposals for their resolution, taking into account the need for technical assistance to the developing countries and the means of providing such assistance. The Sub-Committee will recall, of course, that a very useful technical meeting on fisheries was convened by FAO prior to the 1958 Conference on the Law of the Sea. We will have more to say on this matter at a later date in the light of developments within the Seabed Committee. In the interval we should be grateful to hear comments from other delegations on the desirability of convening a technical conference along the lines I have discussed.

Mr. Chairman, we realize that some states consider that the Canadian proposal for the management of coastal species by the coastal state does not go far enough, while some other states consider it goes too far. In reply to the former group I would simply say that we believe it is necessary to find an accommodation between coastal and distant-water interests. In reply to the latter group, I would say that the only alternative to recognition of the special interest and authority of the coastal state is increased competition for declining resources and growing conflict over diminishing returns. That, we believe, is a game in which everyone will lose.

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