

1945. Studies on marine fishes of Texas. Pub. Inst. Marine Science. (Univ. Texas). 1(1): 1-190.
1950. Seasonal population changes and distributions as related to salinity, of certain invertebrates of the Texas coast, including the commercial shrimp. *Ibid.* 1(2): 7-51.
- HEEGAARD, P. E.  
1953. Observations on spawning and larval history of the shrimp, *Penaeus setiferus* (L). *Ibid.* 3(1): 73-105.
- IDYLL, C. P.  
1950. A new fishery for grooved shrimp in southern Florida. *Comm. Fish. Rev.* 12(3): 10-16.
- PEARSON, J. C.  
1939. The early life history of some American Penaeidae, chiefly the commercial shrimp, *Penaeus setiferus* (L). *Bull. Bur. Fisheries*, 49: 1-73.
- SPRAGUE, V.  
1950. Notes on three microsporidian parasites of decapod Crustacea of Louisiana coastal waters. *Octc. Pap. Marine Lab. (La. State Univ.)* No. 5: 1-8.
- SPRINGER, S. AND H. R. BULLIS  
1954. Exploratory shrimp fishing in the Gulf of Mexico, Summary Report for 1952-54. *Comm. Fish. Rev.* 16(10): 1-16.
- VIOSCA, P. (IN E. A. TULIAN)  
1920. Louisiana greatest in the production of shrimp, *Penaeus setiferus*. Fourth Bienn. Rep't. Dept. Conservation, Louisiana, pp. 106-114.
- WILLIAMS, H. B.  
1955. A contribution to the life histories of commercial shrimps (*Penaeidae*) in North Carolina. *Bull. Mar. Sci. Gulf and Caribbean.* 5(2): 116-146.

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## International Law and the Fisheries

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THE EXPLOITATION OF FISHES in the high seas—the backbone of the world's commercial fishing industries—has become a matter of serious international concern, commanding the attention of the General Assembly of the United Nations.

This was the subject of study at the United Nations International Technical Conference on the Conservation of the Living Resources of the Sea, held at Rome, April 18th to May 10th, 1955.

The 1955 Rome Fisheries Conference had its genesis long before the General Assembly resolution which convoked it. It was made necessary by four things. The first of these is man. From the time man began fishing many eons ago, we have had the rudiments of a fishery conservation problem. It was only a question of time until the forces of nature pitted man's hunger against the capacity of the fish populations to satisfy it. That time has come with respect to a number of species of fish. Last year alone the world's population of over two

and one half billion was increased by 35,000,000 souls. These must be fed and much of that food will be fish.

The second circumstance contributing to the Rome Fisheries Conference is the doctrine of the freedom of the high seas. That doctrine, simply put, means that those vast reaches of ocean seaward of territorial waters belong, at once, to all and to none. That is to say, they are encumbered by no proprietary right, being free for enjoyment and use by vessels of all flags in their lawful pursuits. The body of law applicable to this regime is known as international law, that system of rules by which nations govern their relations with one another, and international law recognizes that freedom of fishing appertains to the high seas. This doctrine of the freedom of the high seas has a long and turbulent history, fluctuating between the extremes of claims affecting entire oceans on one hand, to sovereignty over a fixed, narrow, marginal belt on the other, such claims having been related to protection of shipping from piracy, or to providing a basis for taxation, or even to the control of fisheries. Beginning as early as the thirteenth century paramount rights in wide sea areas were being asserted by the maritime powers of that day. As long ago as the early part of the seventeenth century the Dutch and English were knocking heads together over prior rights to fish for herring off the British and Irish coasts. From that particular dispute emerged Grotius' celebrated work *mare liberum*, the foundation of the free seas principle which has promoted commercial intercourse benefiting the world as a whole.

Now, it follows that no matter how hungry a man gets and no matter how liberal his rights to take fish from the oceans, unless the fisherman is able to capture fish in quantity there still is no conservation problem. That brings us to the third factor responsible for our present problem; namely technological development and progress. Man's capacity for creating efficient fishing vessels and gear, and for devising efficient fishing methods, is of a high order, so that he can deplete some fishery resources at the expense of posterity.

Finally, we have the consideration of man's relationship with man, or to be more specific, a fisherman's relationship with a foreign fisherman. Irrespective of nationality, the fisherman's object is to get food, and from a source open equally to all.

Thus there is created a fisheries conservation problem, real or potential. This brings about the necessity of devising a scheme whereby sovereign nations might work together for a solution and this puts the remedy on the plane of cooperative international action.

The General Assembly of the United Nations realizes this, for at its Fourth Session, in 1949, it charged its committee of legal experts, known as the International Law Commission, with responsibility for study and recommendations on various aspects of international law, with a view to their eventual codification. Among these was the Regime of the High Seas, which included the topic "Resources of the Sea." By the time of the General Assembly's Eighth Session in 1953 the International Law Commission had come up with a set of recommended general principles for the protection of high seas fisheries, but in doing so admitted that much of this subject was of a technical character and, as such, was outside the competence of the Commission. The General Assembly decided to table consideration of this subject until the Commission's work was completed, at which time it would be considered as a body. Then, during its Ninth Session, in 1954, the General Assembly entertained favorably a resolution, co-sponsored by the United States and nine other countries, calling for

a conference to be convened at Rome on April 18, 1955 to be known as the International Technical Conference on the Conservation of the Living Resources of the Sea. The function of this Conference was to consider the problem of high seas fisheries conservation on a scientific, technical, and practical basis with a view to advising the International Law Commission that it might be better able to draft a set of suitable articles on the subject for consideration by the General Assembly. Meanwhile, the General Assembly had decided that the work of the International Law Commission on the Regime of the High Seas should be completed in time for General Assembly action at its Eleventh Session in the Fall of 1956. This explains why the Rome Conference was convoked only four months after its authorization by the United Nations. The United States played a leading role in getting this resolution approved, as well as at the Conference itself, because of its experience in this field involving eight conventions to which it was then a party (they now number nine), with twenty different countries.

This brings us to the Rome Conference itself. The governments of forty-five countries sent representatives, and the governments of six countries sent observers. In addition, the Food and Agriculture Organization and the United Nations Educational, Scientific and Cultural Organization, together with eleven international fishery organizations from all over the World, such as the International Pacific Halibut Commission and the Indo-Pacific Fisheries Council, had observers present. It was a representative group, and it was able to accomplish a great deal. A tremendous aid in getting the discussions and deliberations under way was the series of technical background papers prepared by an advisory committee of experts to the Secretariat of the Conference, by international fishery organizations and by fishery experts. These are listed in the appendix.

The Conference, under the Chairmanship of Klaus Sunnanaa of Norway, did its basic work through three drafting sub-committees. One dealt with the definition of the objectives of fishery conservation—a fundamental matter. Another considered the types of scientific information required for a fishery conservation program, reviewing for this purpose such topics as:

- (a) Extent of separation of the fishery resource into independent or semi-independent populations, known as conservation management units;
- (b) Magnitude and geographical range of the population constituting the resource;
- (c) Pertinent facts respecting the life history, ecology and behaviour of the species constituting the resource;
- (d) Effects of intensity and kind of exploitation on the resource; and
- (e) Relationships of the resource to other species being exploited simultaneously.

This same sub-committee also gave attention to the types of conservation measures applicable in a conservation program. The third subcommittee was concerned mainly with measures that are currently being used to overcome or prevent fishery conservation problems and their applicability to similar problems and situations in other areas. The work of this latter committee afforded an opportunity to review the work, progress, and success of all the major international fishery commissions of the world, which would include those to which the United States is a party and which we regard so highly.

There were two particularly spirited moments during the Conference. The first of these derived from a definition of the objectives of conservation, in

connection with which there was a move to include in the definition: "that when formulating conservation programs, account should be taken of the special interests of the coastal State in maintaining the productivity of the resources of the high seas near to its coast." Many delegates felt this bordered on the subject of rights and therefore a legal matter outside the competence of the Conference. It was put to a vote, however, and passed by a vote of 18 in favor, 17 against, with 8 absentions. The United States Delegation supported the principle but believed it had no place in a definition of the objectives of conservation, and felt compelled to vote against it on that ground.

The second interesting moment concerned a motion to give a coastal State certain rights to take unilateral action with respect to fisheries off its coast. There was a large body of opposition to this on the "competence" grounds, and the conference decided by a vote of 21 for and 20 against that the Conference was not competent to consider it. The United States Delegation voted with the majority. The general conclusions of the Conference are contained in the following paragraphs, which are quoted verbatim.

"Conservation is essential in the development of a rational exploitation of the living resources of the seas. Consequently, conservation measures should be applied when scientific evidence shows that fishing activity adversely affects the magnitude and composition of the resources or that such effects are likely.

"The immediate aim of conservation of living marine resources is to conduct fishing activities so as to increase, or at least to maintain, the average sustainable yield of products in desirable form. At the same time, wherever possible, scientifically sound positive measures should be taken to improve the resources.

"The principal objective of conservation of the living resources of the seas is to obtain the optimum sustainable yield so as to secure a maximum supply of food and other marine products. When formulating conservation programs, account should be taken of the special interests of the coastal State in maintaining the productivity of the resources of the high seas near to its coast."

This definition makes three main points:

- (1) It recognizes the essentiality of fisheries conservation in the world today;
- (2) It breaks down the objectives of fishery conservation into immediate objectives and principal objectives, the former being related to maintenance of at least the average sustainable yield, and the latter, the long-range objective, being concerned with maintenance of the optimum sustainable yield so as to secure a maximum supply of food and other marine products; and
- (3) It recognizes that a coastal State, by virtue of being a coastal State, has a special interest in the condition of the fish stocks in the high seas near to its coast.

"The Conference notes with satisfaction conservation measures already carried out in certain regions and for certain species at the national and international level. International cooperation in research (including statistical investigation) and regulation in the conservation of living resources of the high seas is essential. The conference considers that wherever necessary further conventions for these purposes should be negotiated."

This conclusion endorses the principle of international cooperation in re-

search and regulation for high seas fisheries conservation purposes, and the use of conventions to that end.

"The present system of international fishery regulation (conservation measures) is generally based on the geographical and biological distribution of the marine populations with which individual agreements are concerned. From the scientific and technical point of view this seems, in general, to be the best way to handle these problems. This system is based upon conventions signed by the nations concerned."

This conclusion embraces the idea that the best approach to the conservation of fishery resources is the "stocks-of-fish" approach, rather than the fixed area thesis, obviously taking account of the fact that fish are not in the habit of respecting imaginary lines drawn by States to encompass specific areas of ocean.

"From the desire expressed during this Conference by all participating nations to cooperate in research, and from the guidance given by existing conventions, it appears that there are good prospects of establishing further conservation measures where and when necessary. Having regard to these considerations and the existing principles dealt with under Section V; "Principles of International Conservation Organizations," the Conference considers that the following should be taken as the guiding principles in formulating conventions:

- (a) A convention should cover either:
  - (i) One or more stocks of marine animals capable of separate identification and regulation; or
  - (ii) A defined area, taking into account scientific and technical factors, where, because of intermingling of stocks or for other reasons, research on and regulation of specific stocks as defined in (i) is impracticable;
- (b) All States fishing the resource, and adjacent coastal States should have the opportunity of joining the convention and of participating in the consideration and discussion of regulatory measures;
- (c) Conservation regulations introduced under a convention should be based on scientific research and investigation;
- (d) All signatory States should so far as practicable participate directly or through the support of a joint research staff in scientific research and investigation carried out for purposes of the convention;
- (e) All conventions should have clear rules regarding the rights and duties of member nations, and clear operating procedures;
- (f) Conventions should clearly specify the kinds or types of measures which may be used in order to achieve their objectives;
- (g) Conventions should provide for effective enforcement."

This decision of the Conference should be given particular attention, for it sets up guiding principles in formulating Conventions, mentioning specifically that:

- (1) The stocks-of-fish approach should be used, except where factors prevent this, such as the intermingling of stocks;
- (2) The Conventions should be open-ended so that other interested States may adhere and participate in the program;
- (3) The Conventions should be implemented through a joint research agency whenever practicable, rather than through disconnected research bodies.

- (4) They should express in clear terms the rights and duties of the parties, the operating procedures, and the types of measures contemplated; and that
- (5) They should provide for proper enforcement of conservation regulations against the fishermen concerned so as to prevent the convention's defeat by loose or non-compliance.

"Nothing in these guiding principles is intended to limit the opportunity of States to make agreements on such other fishery matters as they may wish, or to limit the authority or responsibilities of a State to regulate its fisheries on the high seas when its nationals alone are involved."

This is another way of saying that the guiding principles set forth in these conclusions are not intended to have any limiting effect beyond their obvious scope.

"The Conference considers that conventions, and the regulatory measures taken thereunder, should be adopted by agreement among all interested countries. The Conference draws attention, however, to the problems arising from disagreements among States as to scientific and technical matters relating to fishery conservation. Such disagreements may arise to:

- (a) The need for conservation measures or the nature of any measures to be taken; and
- (b) The need to prevent regulatory measures already adopted by one State or by agreement among certain States from being nullified by refusal on the part of other States, including those newly participating in the fishery concerned, to observe such measures.

"A solution to such problems might be found through:

- (a) Agreement among States to refer such disagreements to the findings of suitably qualified and impartial experts chosen for the special case by the parties concerned, with the subsequent transmittal of the findings, if necessary, for the approval of the parties concerned, and
- (b) Agreement by all States fishing a stock of fish to accept the responsibility to cooperate with other States concerned in adequate programmes of conservation research and regulation."

The two foregoing paragraphs merely take cognizance of possible disagreement between interested States and suggest ways of resolving them. The International Law Commission has taken note of this aspect of the problem, as is reflected in a series of draft recommendations, one of them relating to arbitration, which it developed at its session at Geneva last spring.

"The Conference recognizes that a problem is created when the intensive exploitation of offshore waters adjoining heavily fished inshore waters, by a new fishing operation initiated by another State, considerably affects the abundance of fish in the inshore waters. This conservation problem is taken care of when the entire area is included in a conservation system involving the concerned States, and is subject to conservation regulations adequate to maintain the maximum sustainable yield. However, when no such system exists, overfishing may occur before suitable arrangements and regulations can be developed. Opinion in the Conference was more or less evenly divided as to the responsibility of the coastal State under such circumstances to institute a conservation programme for the fisheries concerned, pending negotiations of suitable arrangements. This problem requires further study."

This conclusion likewise recognizes a specific kind of problem that could evolve from a situation where the stock of fish in question lies both inside and

outside of territorial waters and the concerned states fail to agree on a common conservation program. The International Law Commission has likewise taken special account of this in its present consideration of high seas fisheries by providing for unilateral action under very strict conditions.

"It was the consensus of the Conference that it was not competent to express any opinion as to the appropriate extent of the territorial sea, the extent of the jurisdiction of the coastal State over fisheries, or the legal status of the superjacent waters of the continental shelf."

The Delegations of Chile, Ecuador and Peru filed the only reservations to these general conclusions. The results of the work at Rome were carried to Geneva within a matter of hours and placed in the hands of the International Law Commission, which was then in session. New draft articles on high seas fisheries resulted, and are presently being circulated by the International Law Commission for comment by members of the United Nations.

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## **DISCUSSION**

### **Biological Session**

Discussion Leader: PAUL THOMPSON

Discussion Panel: ERNEST MITTS,  
PETER LARKEN, W. W. ANDERSON

### **International Waters and the Fisheries**

FREDERICK TAYLOR

- Q. Anderson: In setting up international regulations on any fishery, would the seaward jurisdiction claimed by any nation or perhaps state be recognized in promulgating those regulations?
- A. Fred. Taylor: There is a difference of opinion between many states in the world as to the legitimate extent of the sovereign territory. There have been claims advanced to as far as 200 miles from the coast in the name of sovereignty and for the stated purpose of preserving the fishery resources of those waters. In the United States there is a three mile belt of territorial waters which is maintained. It comes into direct conflict with the 200 mile claims, particularly in respect to enforcement for conservation of fisheries in these waters. Sovereign nations are loath to relinquish the jurisdiction to prosecute a violator of conservation regulations to a foreign state if they feel the violation occurred in their own waters. It resolves into who is going to enforce the regulations and who is going to try violations. The United States will not relinquish the jurisdiction to prosecute internationals of a foreign state when the violation occurs in waters as yet regarded as high seas. That difference of national position on territorial waters enters into the conservation picture.