

## FISHERIES JURISDICTION SESSION

MONDAY – A.M. – OCTOBER 27, 1975

*Chairman – Clifford V. Varin, President,  
Fire Island Sea Clam Company, Inc.,  
West Sayville, New York*

### The New Ocean Regime

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The agenda for the Gulf and Caribbean Fisheries Institute includes topics of vital interest to oceanographers and fishery scientists as well as to fishermen. All of these parties will be affected by the new ocean regime that is under development.

Law of the Sea negotiations have been going on now for more than 5 years, and the end is not in sight. The present exercise began with the recognition that there was no proper maritime regime for exploitation of deep seabed resources which suddenly, 100 years after their discovery, appeared to be economically harvestable. Early in the deliberations there arose a noble concept, the common heritage of mankind, which was warmly embraced by the General Assembly of the United Nations. But as time has passed, that heritage has been ground away by the relentless advance of nationalism, and it is now clear that the great bulk of ocean resources, be they animal, vegetable or mineral, are going to end up in the hands of the coastal states.

Although the United States as a major maritime power has pressed vigorously for narrow territorial limits, there is no doubt that this country, with its tremendous coastline and island territories, will benefit more than most countries from a broad extension of jurisdiction over coastal resources. At the same time, there are important segments of our people, such as those who fish in distant waters, who are less than enthusiastic about the way that sea law is developing. Oceanographers are in somewhat the same boat as the distant water fishermen, and I would like to comment on a few aspects of the impending ocean regime of special interest to the fisherman and oceanographer:

1. Although the Law of the Sea negotiations were initiated because of the need for a regime for deep sea mineral exploitation, a resource issue of

greater importance and complexity is that of fisheries.

2. Fishery resources, apart from highly migratory species such as tuna, are almost entirely coastal, almost all of the world catch being taken within 100 miles of the coast.
3. Unilateral extensions of national jurisdiction over coastal fisheries began in the 1950s and are almost certain to be sanctified by international agreement on a 200-mile exclusive economic zone (EEZ).
4. Within the EEZ, coastal state jurisdiction should be limited to control over resources. The international community will retain some rights – for example, freedom of transit and overflight – and may lose others – for example, freedom of scientific research.
5. Establishment of the zone will affect fishery management by extending the authority and responsibility of the coastal state at the expense of other countries or organizations.
6. It has been proposed that in the EEZ, there should be maximum utilization of living resources – i.e., if the coastal state can't utilize all of the total allowable catch, the surplus should be made available to fishermen from other countries.
7. In the simplest case – a single stock of fish residing entirely within the EEZ of one country – effective management should be easy to achieve, presupposing that the necessary data and understanding are available.
8. Few cases will be so simple. Usually several countries will be exploiting the single population, and joint action will be required for effective management to be achieved.
9. Assuming the goal of management is to maintain an optimum yield, among the data required are measures of catch and effort and of composition of the catch. These can be used to determine the effect of the fishery on its target population.
10. That population is also affected by environmental changes, especially during the early stages of its development; some day fishery scientists will learn how to use environmental data to predict the success of recruitment.
11. If the coastal state gains control over all marine scientific research in the EEZ, it may become difficult to collect environmental data required for management purposes.
12. A distinction has been proposed between “fundamental” and “resource-related” research, with more liberal treatment proposed for the former. But all research is in some degree resource-related. More useful distinctions are between open and proprietary research, or between research that is directly related to exploitation of resources (i.e., with short-term payoff) and other kinds of research.

The new ocean regime will affect all of our activities in the Gulf and Caribbean. The Rosenstiel School is engaged in both education and research in that region. Our graduate students become acquainted with this important part of the world ocean, and we welcome students from bordering countries. The importance of the ocean and its resources is becoming more widely evident, and I

foresee a great increase of marine scientific activity in the countries surrounding the Gulf and Caribbean as it is recognized that scientific understanding is a prerequisite for rational use.

The principal activity of the Rosenstiel School is research, and we operate in the Gulf and Caribbean and elsewhere in the tropical ocean. Most of our research is "resource-related" in the broad sense since it is concerned with understanding the processes of change in the ocean. Changes in the abundance, distribution, and availability of living resources are an obvious part of such investigations. In fact, it is usually easier to study the dynamics of change in an exploited population than in a wild one because of the intensive sampling performed by the fisherman. On the other hand, scarcely any of this research is directly related to the exploitation of resources, and all of it is openly published and widely available to all concerned.

I would like to see a more vigorous and systematic study of the Gulf and Caribbean, following in the footsteps of the international CICAR project and synthesizing the data that are now available into a coherent whole. From such an analysis it should become evident where our knowledge is inadequate and where further research is required if we are to use these waters and their resources wisely. We at the Rosenstiel School are prepared to work closely with other institutions in the region in such a study and in the continuing research program that should ensue. Perhaps the Gulf and Caribbean Fisheries Institute, together with other interested organizations, can play a part in helping to make this possible.