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DEVELOPMENT AND EVOLUTION OF THE SEA HERRING
FISHERY MANAGEMENT PLAN

by

David E. Pierce

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Preliminary Management Plan

In preparation for implementation of the Fishery Conservation and Management Act of 1976 on March 1, 1977, the National Marine Fisheries Service (NMFS) drafted a Preliminary Management Plan (PMP) for sea herring to remain in effect until the appropriate Fishery Management Council could write its own. That Draft PMP, published in September 1976, was to regulate foreigners, not U.S. fishermen. Under the provisions of the FCMA, herring in excess of U.S. harvesting and processing capacity had to be allocated to foreign nations through a Governing International Fisheries Agreement (GIFA). The PMP contained permit requirements, data reporting procedures, fishing restrictions, and total allowable catches (quotas). The Final PMP was published in January 1977 with no significant changes.

Previous to the FCMA (early 60's on), foreigners enjoyed a lucrative herring fishery in the Gulf of Maine, on Georges Bank, off southern New England, and in waters farther to the south. Later, from 1972-1976, under the auspices of the International Commission for Northwest Atlantic Fisheries (ICNAF), quotas were established to control foreign, as well as U.S. catch. For example, in 1975 the total foreign allocation for Georges Bank and south (5Z/6) (Figure 1) was 137,400 metric tons (MT) in contrast to a U.S. quota of 8,400 MT (6% of total). Historically (1960-1975), U.S. landings of herring caught in 5Z/6 averaged only 2,000 MT with peak landings of approximately 4,600 MT. The USSR, Poland, Federal Republic of Germany, and German Democratic Republic were the primary nations harvesting this resource during that time.

Catch quotas were established in the Gulf of Maine (5Y) in 1972 also. These quotas did not apply to coastal, state waters fisheries which were excluded from ICNAF management. Quotas for both the 5Y and 5Z/6 regions from 1972-1976 and proposed 1977 quotas were:

	<u>5Y</u>	<u>Actual Catch</u>	<u>5Z/6</u>	<u>Actual Catch</u>	
1972	30,000	18,267	150,000	174,000	
1973	25,000	4,201	150,000	200,000	
1974	25,000	8,809	150,000	148,000	
1975	16,000	16,628	150,000	146,000	
1976	7,000	17,190	60,000	43,000	
1977 (proposed)	7,000	20,000	33,000	1,000	(U.S. only)

In spite of these quotas, stock sizes declined drastically particularly for 5Z/6 herring. Sindermann (1979), summarizing Anthony and Wareing (1978), considered reasons for this decline to be: 1) excessive fishing mortality; 2) poor management; 3) concentration of fishing effort on

Figure 1

Source: Anderson et al. 1979

spawning areas; 4) fishing directly on spawning beds; and 5) actions taken as a result of inadequate stock assessments (decreasing order of significance).

According to Anthony and Wareing (1978), the history of Georges Bank herring management under ICNAF was characterized by quotas influenced more by considerations of social disruptions or short-term economic gains than by conservation. Managers consistently selected highest catch options provided by scientists and in some instances accepted quotas that were one to three times higher than recommended amounts. Also, scientists stated that to provide for Georges Bank stock recovery, a fishing mortality of approximately 30% per year was desirable (percent removal from the stock each year) assuming average recruitment. However, from 1968-1975 the lowest fishing mortality was judged to be 41% for age four and older herring with a peak of 74% in 1972. As part of this high fishing mortality, fishing was also concentrated on spawning areas and beds and it was thought that this activity disrupted and scattered schools thereby hindering the spawning process, and destroyed subunits of the Georges Bank stock moving westward from the Northeast Peak to the southwest portion leaving Nantucket Shoals as the only remaining spawning area.

Clark and Anderson (1977) stated further that,

"During the period of regulation under ICNAF, the Gulf of Maine and Georges Bank spawning stocks have been reduced to levels (146,000 tons for Georges Bank and 31,000 tons for the Gulf of Maine) at which low recruitment is believed to be more probable and recruitment more disastrous to the fishery and stock.....

Due to low levels of abundance, the ICNAF Assessment Subcommittee recommended a catch quota of zero for the Gulf of Maine (5Y) stock and 50,000 tons or less for the Georges Bank stock (5Z/6) for 1977. The very strong economic consequences to the USA of a zero quota for the Gulf of Maine subsequently resulted in establishment by the Commission of a quota of 7,000 tons (5Y) which would result in an estimated decrease of about 49% in adult stock biomass (age 4 and older) from 1977-1978, while the quota for Georges Bank (5Z/6) stock was set at 33,000 tons which would result in an increase of about 13% in the adult stock biomass (age 4 and older) from 1977-1978."

ICNAF management (or mismanagement) set the stage for the NMFS PMP and 1977-1978 Council deliberations and development of a Council Sea Herring Plan. The NMFS PMP proposed a quota of 33,000 MT for 1977 for 5Z/6 with 12,000 MT as the U.S. share and a quota of 7,000 MT for 5Y with 6,000 MT for the U.S. Again, no regulations or catch restrictions were pro-

posed for state waters. The 22,000 MT balance from both areas was available for foreign (including Canadian) harvest. Additionally, a nine inch total length minimum landing size was proposed (with a 10% exemption). It was also stated that foreign herring fishing might have to be limited to one of by-catch in foreign mackerel, silver hake, red hake, and squid fisheries. In 1974, 3,700 MT were taken as by-catch in those other fisheries, thus a "window" or specific fishing area for foreign fishing directed towards sea herring was set. The "window" was to be open from August 15, 1977 - September 30, 1977.

An important and controversial part of both the Draft and Final PMP's was estimated U.S. capacity which was judged to be 18,000 MT. According to NMFS, this figure was optimistic and recognized recent years' increased catches and interests in the 5Z/6 stock. The latter interest was expected due to declines in abundance of the 5Y stock. However, industry from Maine to Rhode Island disagreed with NMFS's appraisal. At April 19 and 20, 1977 NMFS public hearings, arranged at the request of the Council and the State of Maine to re-address U.S. capacity to harvest, process, and market herring, and foreign allocations and stock assessments, these disagreements were stated. For example, according to Barlow (Maine Commercial Fisheries, May 1977), Edward MacLeod of Kennebec Fish Corporation and Lipman Marine (Gloucester) stated that his company could potentially increase its capacity from 40% to 75%. He also expected a 100% increase in cutting capacity in 1977. Charles Stinson of Stinson Canning Company (Maine) stated that his company had purchased a new plant, and he predicted a very good market potential. Similar comments were provided by other testifiers in attempts to have the U.S. estimated capacity increased.

Unfavorable decisions

On June 10, 1977, the Department of Commerce denied the U.S. fishery any increase in its quota for the following reasons: 1) U.S. industry did not have the physical capacity to harvest the entire 33,000 MT quota for the 5Z/6 stocks; 2) evidence indicated it was economically infeasible for the U.S. to harvest that amount in a directed fishery during the remainder of 1977 due to existing and expected ex-vessel prices of \$65 per short ton; and 3) U.S. industry had exerted only a relatively small amount of effort in the offshore fishery (5Z/6) in 1977.

A further blow to industry's desires to increase the U.S. quota was dealt by a July 18, 1977 decision by a U.S. District Judge on a State of Maine February lawsuit brought against the government. That lawsuit attempted to prohibit foreign fishing for herring. The decision was in favor of the federal government which argued that there would be widespread repercussions in foreign affairs if the foreigners were denied

herring, and U.S. fishermen could only utilize approximately 7,000 MT; therefore, the 12,000 MT quota was more than adequate (Spivack, National Fisherman September 1977). Maine had argued that foreign fishing would not allow rapid rebuilding of the stocks which were already judged to be in poor condition in the Georges Bank area, and that foreign fishing was going to take place (8/15/77-9/30/78) on Georges Bank spawning areas during the spawning season, and there was growing evidence of intermixing of 5Y and 5Z/6 stocks thus fishing in 5Z/6 could impact the resource and fisheries inshore.

Foreign fishing extended

On October 21, 1977, NMFS announced a 30-day extension to foreign fleets fishing Georges Bank. During the allowable fishing period of August 15-September 30, less than one metric ton had been caught. The extension was provided because according to NMFS, "We anticipate this action, in the spirit of international cooperation and comity, will provide the greatest overall benefit to the U.S. with respect to fishing, fish, and other activities and products pertaining to food supply".

Future changes

Interestingly, in September 1977, NMFS announced a reduction in allowable foreign harvest of herring for 1978 as a proposed change in the PMP. The proposed change was a drastic decrease from 22,000 MT (5Y and 5Z/6) to 3,200 MT which included 2,000 MT for the Canadian directed fishing and only 1,200 MT for other foreign by-catch. U.S. capacity was increased from 18,000 to 25,800 MT. These changes were made because optimum yield (OY) was reduced, and the capability of the U.S. fleet to catch more fish had increased. As stated in the Supplement to the PMP:

"...information presented before, during, and after a public hearing held in Peabody, Massachusetts on April 18 and 19, 1977, along with the development of a Fishery Management Plan by the New England Fishery Management Council and other related evidence of technological advancement and expanded markets indicate that this limitation (i.e., inability to harvest, process, and market adult herring from the 5Z/6 herring stock) is no longer as important as previously determined."

Council efforts - a need for rebuilding

At its May 1977 meetings, the Council set objectives to be the basis for development of a Sea Herring Fishery Management Plan. Those objectives were:

- 1) Fishing on juveniles will continue as is, with the

understanding that this fishery is restricted by size limit, some controls on access to spawning grounds, and existing industry capacity.

- 2) There will be a 10% recovery rate for the stock.
- 3) Investment in the U.S. herring fishery will be encouraged.
- 4) Regulations affecting domestic fishermen will be minimized as much as possible.

The Council also decided, "For management purposes, and recognizing that there is controversy among the scientists regarding this point, it will be assumed that there is one stock of herring. However, because many scientists still feel there are two stocks, the Council is requesting the Scientific and Statistical Committee to come up with a line creating two areas based on the best scientific evidence available."

On August 3, 1977, the Council amended these objectives to:

- 1) To manage the Gulf of Maine and Georges Bank/Southern New England adult sea herring stocks so as to achieve individual biomass levels at which continued and relatively stable annual recruitment is probable allowing for annual rates of stock increases that are consistent with:
 - a) the provision that spawning stocks in all areas are maintained at or above current levels of abundance; and with
 - b) reasonable social and economic impacts on the various industry and consumer user groups including those user groups dependent upon the Gulf of Maine juvenile herring fishery.
- 2) To manage the Gulf of Maine juvenile herring stock so as to stabilize and subsequently rebuild the sardine fishery.

Staff initiatives

Using these objectives for guidance, the Council Staff prepared a "Report on Biological and Economic Analyses in Support of Herring FMP Development". The Report, submitted to the Council at its December, 1977 meetings, assumed a desired 10% 5Y rebuilding management strategy for 1978 and a strategy designed to allow spawning stock (age 4 and older or age 4+) recovery to the desired size of 100,000 MT (according to scientists). As a basis for comparison, the Report evaluated this strategy versus a

"no Plan" strategy. The Staff did not consider a "zero growth" strategy since as stated by the Staff, "In the near future it represents merely a postponement of the stock rebuilding decision. Extended into the future it would not be compatible with the Council's objectives for rebuilding of stocks". This 10% rebuilding strategy and analysis of its economic impacts were aimed at the 5Y stock. TAC's for the 5Z/6 stock were expected to ensure relatively high stock recovery rates without restricting U.S. herring catches.

The Staff's conclusion was that a 10% rebuilding strategy for 1978 was clearly dominate over the "No Plan" strategy. Benefits to the industry on a long-term basis clearly outweighed the costs. The income criteria used to examine cost/benefits were gross returns to the harvesting sector; value of processing in the fillet sector; employment in the fillet processing sector; labor income in the fillet sector; consumer net benefits, and aggregate impact on regional income. As an example, with the 10% rebuilding strategy, gross return to the harvesting sector was expected to increase by \$1.3 million while regional income was expected to increase \$9.8 million when compared to "no Plan" or action.

An integral part of the 10% rebuilding strategy, with eventual attainment of the 100,000 MT desired 5Y spawning stock size (size for expected continued and relatively stable recruitment), was a stipulation that 5Y total allowable catches (TAC's) of age 3 and older herring (age 3+) for 1978 had to be 1,000 MT. To reach the 100,000 MT spawning stock size, this TAC needed to be effective until 1982. Once this stock size was reached, TAC could be raised to the level (17,000 MT) considered to be compatible with sustainable surplus production (i.e., 17,000 MT could be removed annually with no stock size decline).

The Staff's proposal to limit 5Y catches in the adult fishery (age 3+) to 1,000 MT for five years with obvious economic consequences caused the Council and Herring Committee at its December 21, 1977 meeting to request further information from the Staff. One request was an evaluation of economic impacts associated with delaying the initiation of stock rebuilding. The other request was for alternate seasonal/area quotas for 1978 than those proposed in the Staff's Report. Previously considered were a historic distribution of 5Y catch and a six week closed spawning season; i.e., no fishing from September 1 to October 15.

In a January 10, 1978 addendum to their Report, the Staff produced other strategies for the Committee's discussion. Each strategy postponed stock rebuilding one further year and each one specified annual TAC's for the adult herring fishery in 5Y for a 10-year period. The Staff recommended that a strategy of initiation of 5Y rebuilding in 1979 be accepted with annual 1,000 MT TAC's of age 3+ herring in 5Y (outside Maine waters) from 1979-1983. Considering that

the Plan could not be implemented before mid-year, the Staff acknowledged the impossibility of stock rebuilding in 1978 due to an unrestricted 5Y winter/spring fishery in 1978.

Regarding seasonal/area TAC's, the Staff suggested two TAC scenarios conditional upon 5Y catch during the first six months of 1978. The Staff noted that if 14,000-15,000 MT were taken in the winter/spring 5Y fishery (December-March 1977/1978), as occurred in 1976/1977, it would be necessary to close the 5Y adult fishery for the remainder of 1978 with fall fishing quotas in 5Z/6 only. Otherwise, additional 5Y catches would lead to 5Y stock depletion. The other TAC scenario was to transfer a percentage (up to 35%) of any amount of adult herring representing the difference between the anticipated 15,000 MT and actual harvest from January-June, 1978 into the fall 5Y adult fishery.

Assuming Plan implementation in mid-1978, prospects for the fall 5Y fishery did not appear promising. The fall fishery was prosecuted primarily by purse seiners during herring return migrations to spawning grounds and during spawning itself.

Maine juvenile fishery

An important point made in the original Staff Report was the influence of the Maine juvenile fishery on the adult fishery analyses. As stated in the Report: "In the past, the juvenile fishery has principally been conducted using fixed gear (weirs and stop seines) which tends to provide yield in relation to abundance (environmentally induced variations in availability assumed average), thus producing a constant rate of fishing mortality...Where it is no longer possible to assume constant fishing mortality on a given year-class in the juvenile fishery, the validity of the adult fishery analyses may be impaired..." and "...the ability to adequately assess the composition, abundance, and growth of the adult stock under consideration requires that the rate of fishing mortality in the juvenile fishery may be assumed constant. Clearly, effective management of the herring resources requires that no component (adult or juvenile) be addressed independently of the others." The validity of this assumed constant fishing mortality became a point of contention at Committee and Council meetings.

Committee deliberations

Prior to the Council's January 18 and 19, 1978 meetings, the Herring Committee met on January 16 to discuss the Staff's Addendum and to formulate recommendations. However, the Committee was unable to present a recommendation to the Council. There were too many unresolved problems relating to the fishery and user groups. Another meeting with industry advisors was felt necessary before the Committee could make recommendations. The advisors were of two primary

factions (excluding those representing the juvenile fishery interests) representing the winter/spring (December-March) fishery in the Gulf of Maine carried out by inshore pair trawlers primarily along the Massachusetts shore, and the summer/fall (August-November) fishery in the Gulf of Maine pursued by purse seiners on Jeffrey's Ledge.

At another meeting of the Herring Committee on January 30, 1978, results of the Staff's evaluations, Council inquiries, and industry advisor input, discussed at previous December 30 and January 16 Committee meetings, led to the following draft recommendations:

- 1) 5Y quota (age three and older fish - 3+) of 14,000 MT for 1978 divided equally between fisheries inside three miles off the State of Maine and elsewhere. It was acknowledged that 14,000 MT would not provide for rebuilding and would cause further stock declines.
- 2) States implement measures to limit catch of sea herring in cooperation with the Council to the 14,000 MT level.
- 3) Establish a 1979 OY to achieve stock size stability and to consider rebuilding in 1980. This was recommended because the Committee realized that there would not be any fishery limitations until at least mid-1978. The goal of rebuilding in 1978 was abandoned.
- 4) 5Z/6 quota of 26,000 MT for a high possibility of stock rebuilding.
- 5) No recommendation for a spawning area closure since the low fall quotas were expected to be taken before fishing on spawning concentrations could commence in September and October.
- 6) 9" minimum size for the adult sea herring fishery.
Note: absence of reference to total or fork length.

Later, these recommendations were revised somewhat (see below) and submitted to the Council at its February 14 and 15, 1978 meetings. They could not be acted upon, however, since time constraints forced the Council to devote all its debate to that of groundfish which at that time was a central issue.

The most significant change in the draft recommendations was that no recommendation for a specific quota inside Maine waters was made - only that it was assumed that appropriate and complementary quotas would be set by Maine for age 3+ fish harvested in the juvenile fishery. This change was to prevent the need for other state herring allocations if Maine

was to receive one. It was Allen Peterson's position (then Director of the Massachusetts Division of Marine Fisheries) that the directed fishery for age 3+ herring should be under one quota with no separate state allocations. If Maine was to receive an allocation, Massachusetts was to insist it be given an allocation also. A quota of 7,000 MT age 3+ was proposed for waters outside of Maine.

On February 27 prior to March 1 and 2 Council meetings, the Committee met again to review its draft recommendations and to recommend seasonal breakdowns of its proposed quotas. The Committee proposed summer/fall quotas of 3,000-4,000 MT for 5Y and 12,000-14,000 MT for 5Z/6 with an anticipated 1979 5Y winter/spring quota of approximately 6,000 MT assuming 1979 sea herring stock assessments were similar to 1978 assessments. It proposed an August 1-July 31 fishing year in order that the "fall quota for the beginning of a fishing year would reflect the stock assessment for that calendar year while the remaining seasonal quotas for the balance of the fishing year would reflect the assessment for the next calendar year".

The 5Y fishing year quota of approximately 10,000 MT was considered consistent with a 5Y stock removal of 7,000 MT which was expected to prevent further stock decline. The logic for this rested with one of the primary considerations in setting TAC's. To explain, since one goal of the Herring Plan was to rebuild 5Y stock, it was therefore necessary to restrict catches during the time of the year when the 5Y stock was most available. This time was during the summer/fall as the 5Y stock proper concentrated on spawning grounds. At other times of the year, herring from other stocks such as those located off Southwest Nova Scotia and Georges Bank intermingled with 5Y stock; e.g., winter/spring. Hence, greater amounts of fishing could be tolerated in the winter/spring since impacts on the 5Y stock itself were lessened. In other words, the 5Y stock was dispersed.

The Committee opted to select one of the Staff's previous options not given much attention by the Staff because it conflicted with the objectives used by the Staff to guide their analyses. This strategy was to set 1978-1979 fishing year quotas to maintain the 5Y stock without further decline and to consider an "appropriate rebuilding program" for the 1979-1980 fishing year. An annual 10,000 MT 5Y quota with a seasonal breakdown of 70:30 (winter/spring: summer/fall) was considered advisable for the 1978-1979 fishing year.

Again, regarding the State of Maine,

"The Committee recognized that the traditional fishery within the territorial waters of the State of Maine included an aggregated catch of 6,000-8,000 MT of

adults (emphasis added) taken as an incidental catch (emphasis added) in the juvenile fishery. It was the recommendation of the Committee that with catches of this magnitude a position of non-interference be established. It was understood that the State of Maine would take appropriate action should such adult catch levels be exceeded significantly. The Committee recommended that the Council request that those states which catch adult herring from within their territorial waters cooperate with the Council to ensure that quotas were not exceeded."

It is here that a major problem developed; viz, the interpretation of what was a juvenile herring. While the biological definition was clear (ages 1-3), the Committee, Staff, and Council and industry perceptions apparently were not the same. The terms juveniles, juvenile fishery, adults, and adult fishery often were used loosely leading to more confusion than realized. For example, Committee recommendations presented at March Council meetings (above) indicated an aggregate traditional catch of 6,000 - 8,000 MT of adults taken as incidental catch in the juvenile fishery of Maine waters. Adults are age 4 and older herring - not age 3 and older.

The Committee recommendation was that with catches of this magnitude, a position of non-interference should be established. However, in retrospect it appears that different Committee members and advisors who had major input had different views on what the Committee was recommending. For example, Massachusetts representatives, notably Allen Peterson, felt that the Committee was recommending an aggregate catch of 6,000-8,000 MT of age 3+ fish from Maine territorial waters and that this catch would truly be incidental; i.e., that Maine fishermen did not direct their efforts toward age 3 and older, especially age 3. However, Maine representatives such as James Warren of the Maine Sardine Council felt the recommendations referred to 6,000-8,000 MT of age 4 and older since: 1) adult herring were ages 4 and older; and, 2) catch of age 3 in the juvenile fishery was not really incidental but dependent on availability and abundance of age 2 as well as 3. When age 2 are not abundant and age 3 are abundant and available, the juvenile fishery utilizes that age. These points were not well elucidated back during the early stages of Plan development, at least in the opinions of some who were involved in the process. Recommendations were therefore formulated in spite of a significant misconception.

Additional recommendations were:

- 1) to make seasonal quotas adjustable with respect

to time and area;

- 2) to recommend high priority for an International Herring Tagging Program by NMFS;
- 3) no foreign fishing until optimum stock levels are achieved;
- 4) no minimum size limit (9 inches) for 1978 and 1979 but to continue evaluation of a meaningful limit for the future;
- 5) closed spawning areas/seasons for future implementation; and,
- 6) all recommendations had to be accepted in their entirety or returned to the Committee for further deliberations.

At its March 1 and 2, 1978 meetings, the Council approved the Committee's recommendations to be used as guidelines for development of the Draft Management Plan, and at later March 22 and 23 meetings it approved additional Committee recommendations which were:

1. The following statement on stock rebuilding shall be added to the quotas adopted by the Council on March 1, 1978.

The Committee recommends that rebuilding of the Gulf of Maine ("Jeffreys Ledge") herring stock begin in 1980. The quotas for the 1979/1980 winter/spring and 1980 summer/fall fisheries in the Gulf of Maine, appropriate for stock rebuilding, shall be set as soon as assessment and recruitment data necessary for reliable estimates of appropriate quotas are available.

The commitment to rebuild the Gulf of Maine stock in 1980 may be re-evaluated and postponed, for one year, to permit fishing to a maximum harvest compatible with current stock assessments if the current assessment and recruitment data for the Georges Bank and southern New England stock indicate a stock size that could not support a viable commercial fishery.

A decision to postpone rebuilding of the Gulf of Maine stock must be re-assessed after one year, taking into account all relevant assessment data on the Gulf of Maine stock and the stocks in areas other than the Gulf of Maine.

2. The Committee recommends the Council adopt a Resolution that

- a) foreign fishing for herring shall be prohibited until herring stocks have been rebuilt and maintained at MSY for several years,
 - b) until the domestic fishery has developed the vessel capability of fishing on Georges and other offshore areas, and
 - c) until there is an adequate understanding of the migrations, and reproductive inter-relationships between the various stocks inshore and offshore.
3. The Committee recommends that the fisheries directors of the appropriate coastal states be requested to send letters to the Council stating the specific plans of their states to cooperate with the Council for effective implementation of the herring management plan.

The commitment to rebuild the 5Y stock in 1980 was not firm. The Council left itself the option to postpone rebuilding if necessary. Also, the Council emphasized its position that foreign fishing should not be allowed even after stock rebuilding at least until the U.S. fishery developed the capacity to take advantage of the offshore stock. It was felt unreasonable to rebuild the Georges Bank stock for the benefit of the foreigners. Additionally, foreign fishing could have "unforeseen damaging effects on other herring stocks" since the relationship between stocks was not fully understood.

Draft Plan received

At April 19 and 20, 1978 meetings, the Council received copies of the Draft Sea Herring Management Plan. Public hearings were scheduled for May, and barring any unforeseen events, final regulations were projected for the beginning of October, 1978.

The 5Y and 52/6 OY's for 3 year and older herring for the fishing year July 1, 1978 to June 30, 1979 were set at 8,000 MT and 16,000 MT, respectively. The 8,000 MT TAC was to be divided equally between winter-spring (December- June) and summer-fall (July-November) fishing seasons while the 16,000 MT TAC was to be apportioned as 13,500 MT and 2,500 MT for the summer-fall and winter-spring fishing seasons, respectively. The latter figure was to be revised after receipt of updated NMFS stock assessments. There was no recommended quota for foreign fleets, and a no discard rule was established. The 50:50 ratio between summer-fall and winter-spring fisheries was adopted for 1978-1979 by the Council in lieu of the 70:30 ratio to forestall any immediate adverse

effects of the 70:30 ratio on purse seiners.

States were requested by the Council to relate their plans for cooperative management of the sea herring resource. The Council also considered the territorial waters of Maine as a distinct management entity, but recommended restrictions with regard to catch of age 3+ fish in the juvenile fishery. No serious objections were raised over Maine's exempt status because it was assumed that the Council's restrictive recommendations were acceptable to Maine. Regarding one state, Massachusetts, this proviso was critical to the extent of its cooperation and possible adoption of the Council Plan for its own territorial seas.

Maine's plan

As early as January 1, 1977, Maine's Department of Marine Resources and Maine's herring industry began considerations of a Plan for management of herring along the Maine coast during 1978. During the last half of 1977 a draft plan was developed and brought to Maine's industry for discussion and improvement. One objective of the Plan was, "to eventually increase herring abundance to a level that could provide an average annual catch of twice that of recent years in the juvenile fishery (ages 1-3) and additional increases in catches of adult herring". Vinal Look, then Commissioner of Maine DMR noted,

"Because of New England Regional Fishery Management Council action which is imminent and to maintain control over our own inshore fishery, it has been deemed desirable that the State formulate a plan of action. Following discussion with the Maine Sardine Council, we feel that this plan should demonstrate our intent to conserve our juvenile herring stocks. Further, this plan should also insure the maintenance of our own control and management of this fishery."

On April 14, 1978, the DMR Advisory Council was presented with a proposed Preliminary Management Plan for herring in Maine waters. The Plan recommended a closure to fishing for herring age 4 and older (10" and larger) to protect spawning fish "to give increased egg protection and offer a better opportunity for stock recovery". The Maine coast was to be divided into two sections. The east area was to close August 27-October 7, 1978 and the west area from September 10-October 21, 1978. These closures were to apply to mobile gear only. A possible closure was suggested for some fixed gear capable of catching spawning fish.

The Plan also proposed a 3,500 MT quota for adult herring (10" and greater) to be divided among months. The quota's purpose was to protect Maine's fishery from "excessive

effort by either Maine or non-resident fishermen if there was a sudden jump in either demand or price" (Donnell, Maine Commercial Fisheries, May 1978). No quota was recommended for the juvenile fishery (less than 10"). This proposed plan was to be brought before Maine's industry to acquire its sentiments.

At a preliminary meeting with sardine packers before formal public hearings, Maine DMR acquired views on its proposed plan. Five options were presented ranging from no plan to catch quotas. The most agreeable measure was the spawning area closure involving separate east and west coast closures of different durations (above) although some felt that closure periods could be shorter and flexible; i.e., closure dates could be set by DMR biologists performing surveys of spawning activity.

Regarding quotas, the proposed Plan suggested as one option a quota of 30,000 MT for juveniles and adults caught by the entire Maine fishery. Only once since 1963 had that figure ever been attained. In 1977-33,000 MT were caught. This proposal was criticized by Maine industry representatives who felt markets were expanding and the 30,000 MT would be exceeded again.

Another option was the Council recommendation of 8,000 MT age 3+ (9" and greater). This suggestion was considered by industry to be unworkable and "disastrous". The following excerpt (Donnell, Maine Commercial Fisheries, June 1978), relates those concerns and the option that was finally accepted; i.e., 3,500 MT quota of 10" and larger herring (Note: These views were those of sardine processors, not of those dependent on adults).

"The New England Regional Council asked the state to consider a 6,000-8,000 mt quota on 9" and up. But Maine is hesitant. Age 1, 2, and 3 are the mainstay of the Maine sardine industry. These age groups, especially the 2 and 3 yr. old swim together and are caught together in Maine's inshore fishery.

Usually by age 4 (10" and up) herring mature and migrate offshore. Some of the early-maturing 3 yr. olds also move offshore and mix with them. But present consensus is that most of the 3 yr. old, 9" herring aren't sexually mature and do remain inshore. They mix with the 2 yr. olds and separation is extremely difficult. It is Maine's argument that any 9" enforcement would be difficult to enforce inshore, although it is the ideal separating size for adults offshore.

It was the general thought of the group that any limit on 3 yr. olds "could prove disastrous" to the sardine

industry. Packer and Regional Council member Charlie Stinson was worried about Council acceptance of a Maine plan that threw the 9" in with the juveniles. The success of Maine's sardine industry is directly related to the amount of 2 yr. olds, and to a lesser extent the 3 yr. olds. Any quota limits on age 3 could be disastrous, especially if there aren't many age 2 around, such as 1972.

Packers were also concerned with the economics involved with putting the 9" under a quota. There's more money and it's cheaper to process the 9" into fillets rather than pack them as sardines. Currently there is a large and expanding foreign market for the fillets. The rush to put all the 9" into fillets, where the money is, could result in a closure. This would leave the sardine plants, with their fixed yearly costs, really in deep financial troubles.

Despite the economic arguments for keeping the 9" and up quota, some foresaw that leaving them "wide open" could possibly in the long run - "murder the fishing."

The packers finally voted to give the 3500 mt - 10" and up quota a whirl. As Moses Pike of Holmes Packing put it, "We can always change it next year."

Public sentiment

On June 7 and 8, 1978, the Council was informed of public comment heard at its hearings on the Sea Herring Plan. The Committee had yet to meet to consider comments and complete its final recommendations to the Council. A general summary from Council members who attended the hearings indicated that the public was concerned over: 1) size and seasonal breakdown of quotas. For example, Gloucester purse seiners stated they could not survive with the summer/fall quota of 4,000 MT. They suggested a "buy back" program to take purse seiners out of the fishery or help the vessels convert for participation in the offshore fishery; 2) Canadian fishing. According to Council member Jacob Dykstra, the Canadians were taking more fish than the U.S.; hence, the Canadian fishery could have several times the impact than the U.S.; 3) 8,000 MT incidental catch of adults in the Maine juvenile fishery. Some individuals felt that the 8,000 MT was not really an incidental catch to the directed fishery for juveniles. They felt that the 8,000 MT would be harvested during a directed fishery for adults. A Rhode Island Representative, Leonard Stasikiuwiz of the Point Judith Cooperative Fishermen's Association stated, "For 10 years, R.I. fishermen have caught most of their herring within the territorial waters of Rhode Island, yet Rhode Island doesn't get its own quota."

The Council voted to give preliminary approval to the Herring Plan as it went to public hearings but awaited a final decision on the Plan until its August 9 and 10 meetings before sending the Plan to the Secretary of Commerce for approval.

State representatives also related their stances. Allen Peterson stated his support for the Plan and said that Massachusetts would abide by it. Jay Cronin of R.I. Department of Marine Resources stated that R.I. would act in a responsible manner but that there would be difficulties with the 2,500 MT quota for the 5Z/6 area during the December-June period.

The Herring Committee met on July 5, 1978 to review all comments heard at the public hearings and to make possible modifications in the Plan for Council consideration at its August 9 and 10 meetings. Again, a review of the hearings showed great concern over the non-quota'ed juvenile fishery and the so-called incidental catch of 8,000 MT of "adults" (3 years+, 9"+) in the juvenile fishery. However, this concern was not shared by Maine fishermen and others involved with the juvenile fishery. For example, many at the Maine hearings said that management of the juvenile fishery should be left to Maine and that Maine had done a good job to date and would continue to do so in the future. James Warren presented Maine's historic herring management measures in support of this belief.

Plan revisions

At August 9 and 10, 1978 meetings Council Staff related revisions in the Atlantic Herring Final Management Plan made in accordance with comments received from public hearings and the National Marine Fisheries Service. The revisions involved possible Canadian allocations, expected domestic catch and total allowable level of foreign fishing on Georges Bank/southern New England, and discarding at sea. The Plan still disallowed any foreign allocation except for a Canadian allotment which was subject to negotiation (U.S./Canadian Treaty) but not expected to exceed 10% of the optimum yield for the fishery on Georges Bank/southern New England (5Z/SA6). One noticeable change was a reduction in the Georges Bank/southern New England July-November, 1978 quota of 13,500 metric tons to 7,500 metric tons. An expected domestic catch of approximately 7,500 metric tons, the FCMA provision that foreigners must be allowed to take that portion of OY in excess of domestic capacity, and a Council desire to rebuild the Georges Bank/southern New England spawning stock to make it more available for domestic fishermen in the future were responsible for this reduction. Area/season quotas for age 3+ fish became the following:

	<u>July-November 1978</u>	<u>December-June 1979</u>	<u>Total</u>
5Y	4,000	4,000	8,000
5Z/SA6	7,500	2,500	10,000

An amendment to the proposed Plan was also considered. The State of Rhode Island, originator of the amendment, sought to readjust the area/season quotas to account for possible shifts in fishing effort by R.I. boats to the southern New England area during December-June, 1979 in response to a small December-June, 1979 Gulf of Maine quota (4,000 MT). The suggested R.I. area/season quotas were:

	<u>July-November 1978</u>	<u>December-June 1979</u>	<u>Total</u>
5Y	4,000	3,100	7,100
5Z/SA6	5,900	5,000	10,900

R.I. feared that the 2,500 MT would be too restrictive for their fishermen. Allen Peterson did not favor this amendment since those Massachusetts fishermen who historically fished the Gulf of Maine were already being severely restricted by the 4,000 MT and a further reduction of 900 MT, as small as it may have seemed, would have been inappropriate. His feelings were shared by other Council members, particularly those from ports bordering the Gulf of Maine, for the amendment failed to win approval. However, it was stated that the Plan was sufficiently flexible to accommodate similar future adjustments, if warranted.

Increased concern about Maine management

At these August meetings the issue of Maine management surfaced again. Maine Plan proponents felt that Maine's herring regulations would prevent expansion of the fishery in 1978. They felt that the processing capacity of Maine plants limited juvenile catch, and since the quota of 3,500 MT for adult herring (10" and greater) was the average annual catch of adults from 1970, adult catches could not increase.

Others were still concerned over the lack of a quota on juvenile herring and Maine's refusal to have its quota directed towards 9"+ herring as recommended in the Council's Plan. Vinal Look countered that Maine was being more restrictive on its adult fishery by reducing the Council recommended quota of 8,000 (age 3+, 9"+) to 3,500 (age 4+, 10"+).

Even though the issue of whether Maine's Plan was in keeping with the Council's intent was not resolved, the Council voted to approve its own Plan with the Staff's revisions. The vote was needed to get the Plan in place for 1978; otherwise, there would have been no Plan for the year.

In early August, Maine held its public hearings on its proposed Plan. On August 27, 1978, the first provision of the Plan became effective; i.e., the six week spawning area closure from the area east of Mount Desert Rock to Cutler, Maine. Taking of adult herring over 10" was prohibited until October 7, 1978. It was expected that the 3,500 MT quota of 10"+ would be taken by September 1 and the fishery would close, thus, that spawning area closure and the one scheduled in western Maine from September 10 to October 21 were moot.

An attempt to force the issue

At August 30 and 31, 1978 meetings Edward MacLeod attempted to (by way of a vote) get the Council to request a Secretary of Commerce hearing, "to obtain information to determine whether the State of Maine has complied with the intent of the New England Fishery Management Council in not establishing an annual quota on juvenile herring, and by classifying 9" herring in Maine territorial waters as juveniles." The rationale for his motion was: 1) Since the Council and Maine seemed to be at odds as to what constituted a good conservation measure, the Secretary should make the final decision; and, 2) the Maine juvenile fishery would be a good test case on how far the Secretary would go with preemption of State authority. He also disagreed with Maine's contention that its juvenile herring industry had a limited capacity - the criteria which indicated that it needed no further restrictions. He noted that his company was going to be seriously impacted by the Herring Plan and that everyone engaged in the herring fishery should share the burden.

Vinal Look opposed any Council action to subject Maine's Plan to Secretarial review. He also noted that the Maine Plan had not been in effect long enough to evaluate whether it was inconsistent with the Council's Plan and that Council members had not even had a chance to read Maine's Plan which had been distributed to them that day. Also, and perhaps most importantly, Mr. MacLeod's employer, Lipman Marine Company was seeking a restraining order to stop a closure of the adult fishery in Maine waters while the juvenile fishery continued. In the opinion of Edward Bradley, then Assistant Attorney General of Maine, a Council approval of the motion would jeopardize Maine's defense of its Plan. Mr. MacLeod's motion was tabled. The Council felt such an action was premature since the Herring Committee had yet to review Maine's Plan and no action or inaction by Maine had led to actual demonstrable non-compliance with the Council Plan. At Council September meetings the motion was defeated overwhelmingly.

Other issues

On another related issue, Mr. MacLeod requested the Herring Committee to meet to discuss the advantages and disadvantages of trip limits for boats engaged in the herring

industry. The Committee met on September 20, 1978 and determined that trip limits were not an appropriate solution to the problem of restricting catches particularly when herring were of poor quality, full of feed, or when herring were spawning. The fate of these poor quality fish; i.e., reduction, had long been a concern of the Committee for it was felt by most that the primary use of herring should have been for food purposes. One reason for this attitude was the high value of herring fillets (over \$100 per ton).

The eventual Committee recommendation presented and accepted at the September 20 and 21, 1978 Council meetings was "that NMFS be requested to monitor herring processors and the vessels engaged in the fishery to determine the disposition of the fish once landed and that these NMFS reports to the Council should be every two weeks. If it is determined that there are substantial re-occurrences of herring going into reduction, the Committee recommends the Council take appropriate action." "Substantial" was suggested to be 7-10% of the annual allocation going to non-human food purposes. The appropriate action to be taken was not defined.

On September 28, 1978, the Committee met to review draft regulations for the Herring Plan. These were modified and sent back to the Staff for further work. Additionally, the Committee discussed the second part of the R.I. Amendment which was not previously recommended to the Council. That amendment was, ".that all herring caught in Subarea 6 (west of 71°50' Long.) at any time of the year, shall be deducted from the July-November quota for area 5Z/6." The rationale for this amendment was that it would provide for substantial increase in catch "without negatively impacting on the resource or management strategies in other areas." At November 29 and 30 Council meetings this amendment was accepted and submitted to the Secretary of Commerce for review during the 60 day review period.

Plan implementation

The Council Herring Plan establishing July 1, 1978 - June 30, 1979 quotas for the Gulf of Maine and Georges Bank/South was implemented on December 28, 1978, approximately one month after the end of the summer-fall period which had been allotted a quota of 4,000 MT of age three and older herring for 5Y and 7,500 MT for 5Z/6. The remaining quota period of December 1, 1978 - June 30, 1979 consisted of 4,000 MT (5Y) and 2,500 MT (5Z/6).

The Plan was implemented on an emergency basis (effective 12/28/78) by the Secretary of Commerce to respond to preliminary data from the 1978 summer/fall fishery showing a significant overage of the 5Y quota. The overage was 600 MT or 15% and catch of age 3+ in Maine waters was anticipated to double the expected amount. Additionally, since the winter/

spring fishery, which normally began in December or January could easily harvest the 4,000 MT 5Y quota in two or three weeks, the December implementation was considered necessary to prevent a much larger quota overage causing spawning stock to drop below the critical minimum level of 60,000 MT (recommended by ICNAF).

Scientists had recommended that a spawning stock size (age four and older) of 80,000 - 120,000 MT was needed to maintain the stock by supporting continued and relatively stable recruitment. The 5Y quota of 8,000 MT was already judged to be in excess of catch (1,000 MT) required to allow a 10% rate of 5Y spawning stock size increase. A catch of 7,000 MT was expected to allow for no increase whatsoever. Spawning stock size at the beginning of 1978 was judged to be 67,600 MT.

To review, the Management Plan sought to change the pattern of U.S. fishing to result in the "greatest overall benefit from the fishery". This was to be accomplished by eventually shifting effort away from the summer/fall purse seine fishery so that the catch ratio between this fishery and the one pursued in the winter/spring would be 30:70 instead of 50:50. The latter ratio had occurred in 1976 and 1977. For the first year of the Plan, the quotas were split 50:50 so as not to immediately impact the purse seine fishery.

The reason for the shift was that by favoring the winter/spring fishery, TAC could be increased because fishing mortality would then be concentrated on mixed herring stocks (5Y, 5Z/6, Nova Scotian). In the fall 5Y fishing effort was concentrated on the 5Y stock. Intermixing was minimal. Since the goal of the Plan was to rebuild the 5Y stock, the summer/fall fishery needed to be reduced to allow for that rebuilding.

Disparities

January and February 1979 Council meetings dealt with "disparities between the Maine and Council Herring Plans". These discrepancies were cited by both William Gordon, then Regional Director of NMFS, and Edward MacLeod in correspondence to the Council. The Council also addressed another concern of Mr. MacLeod. He believed that the Council was on record not wanting to interfere in state waters. He thought that fish caught in any state's waters were not going to count against the Council quotas. It was his understanding that most herring caught in January had been from Massachusetts waters, thus they should not have been deducted from the quota.

Regarding the alleged disparities, the Council voted to

accept a Committee recommendation to have the Staff "complete analyses by weight and age of herring, including herring in and out of the Bay of Fundy, for the past ten years to determine if management of juvenile herring was necessary." An additional analysis was requested to investigate the impact of 1978 catch on the stocks and implications of the 1978 fall assessment survey.

With respect to herring in other states' waters being counted against the quota, William Gordon noted the only adult herring exempt from the Plan were those taken in Maine waters (with the understanding that Maine would take appropriate action should the adult catch exceed 6,000-8,000 MT by a significant amount). Allen Peterson, emphasized that the states were working in voluntary cooperation with the Council in implementing the plan within state waters. (Note: refer to Plan sections "The Management Unit", "Other Fisheries Impacting Upon Management Unit", and "Maine Juvenile Fishery Considerations" - below).

1.1.2 The Management Unit

The fishery resources addressed by this FMP are the herring stocks which spawn in and are generally restricted to the waters off the U.S. northeast and mid-Atlantic coasts out to the limit of the U.S. Fishery Conservation Zone. The two resource components identified are the Gulf of Maine and the Georges Bank herring stocks. A third resource component, the Southwest Nova Scotia adult herring stock demonstrates some seasonal migrations into the U.S. Fishery Conservation Zone. As such, it enters into the analysis required to identify U.S. management strategies. It is, however, not made subject to the provisions of this FMP.

In delineating the management units within the total resource, it is necessary to acknowledge two provisions of the FCMA. The national standards for fishery conservation and management specify that:

"To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination." (Sec. 301(a)(3)).

The FCMA asserts also that:

"Except as provided in subsection (b) nothing in this Act shall be construed as extending or diminishing the jurisdiction or authority of any state within its boundaries" (Section 306(a)).

The juvenile herring of the Gulf of Maine (fish aged one to three) are largely confined to areas within 3 miles off the State of Maine coastline. Three year old herring, however, migrate to a degree and become avail-

able to the adult fisheries both inside and outside the three mile zone. During any given year fish aged 3 and older belonging to Gulf of Maine stock may become subject to fishing in waters over which the States of Maine, New Hampshire, Massachusetts and Rhode Island have management authority as well as in the U.S. Fishery Conservation Zone outside state boundaries. A similar situation exists with respect to the Georges Bank herring stock whereby herring during certain seasonal migration phases appear in the territorial waters off the States of Rhode Island, Connecticut and New York.

In order to meet the need for coordinated management of the herring resources while at the same time recognizing the management authorities of the states, it is recommended that:

1. the provisions of this FMP through appropriate institutional arrangements be made applicable to all herring fisheries from the shore lines of the New England and Mid-Atlantic States out to the limit of the U.S. Fishery Conservation Zone with the exception of the fisheries for juvenile herring in the territorial waters of the State of Maine and that

2. the management provisions be specified based on the presumption that the State of Maine in the management of the fisheries for juvenile herring carefully considers the bio-economic interaction between the juvenile and adult components of the Gulf of Maine herring stock and through appropriate measures (1) seeks to contribute towards the achievement of management objective and (2) conducts the herring fishery within 3 miles in a manner that does not impede the achievement of the Council's objective 1.

2.3.1.3. Other Fisheries Impacting Upon Management Unit

Historically the assessments which have been generated for the Gulf of Maine spawning stock have not explicitly addressed the juvenile fishery along the coast of Maine. Rather, in establishing allowable catches for the 5Y adult fishery (principally through ICNAF) the analysis has determined year class strengths recruiting to that fishery at age 3. As a result, fishing mortality induced in the juvenile fishery has already been implicitly discounted.

In the past the juvenile fishery has principally been conducted using fixed gear, which tends to provide yield in relation to abundance (environmentally induced variations in availability assumed average), thus producing a constant rate of fishing mortality.

Where the fishery is exploited using movable gear (i.e., purse seine), the possibility exists for fishing mortality to increase substantially on a given year class, particularly when the juvenile herring are relatively less available to the fixed gear. In the latter case, the juvenile fishery is able to take increased advantage of a given year class, thus impeding the achievement of objective 1, to rebuild and sustain at optimum levels the size of the Gulf of Maine spawning stock. Where it is no longer possible to assume constant fishing mortality on a given year class in the juvenile fishery, the validity of the adult fishery analysis may be impaired without explicitly considering the activity in the juvenile fishery. Moreover, in order that the entire resource may be managed equitably, controls on fishing mortality by juvenile fishery purse seiners may be indicated.

2.6.2.4. Maine Juvenile Fishery Considerations

As noted in Section 2.3.1.3., the ability to assess the composition, abundance and growth of the adult spawning stocks requires that the rate of fishing mortality induced on these stocks in the traditional juvenile fishery be assumed constant. As a practical matter, harvests of age 3+ fish from within the traditional juvenile fishery must be known and accounted for so as not to violate the assumptions of fishing mortality associated with adult fishery area/period TACs and spawning stock projections. Where age 3+ fish are retained in the fixed gear of the juvenile fishery, the assumption of a constant fishing mortality rate is not unreasonable; that is, catch is proportional to year class availability and abundance. However, where the catch of age 3+ fish in the juvenile fishery results from directed fishing inside State waters, then quotas on these harvests need to be established consistent with the area/period TAC analysis for the adult fishery.

The annual catch of herring within the territorial waters of the State of Maine in recent years has included 6,000-8,000 MT of age 3 and older herring. This represents removals of age 3+ herring within the total Maine catch of a proportion that is consistent with the achievement of the Council's objective 1. It is expected that this recommended level of harvest will be carefully reviewed by the State of Maine in light of (1) the current status of herring stocks, and (2) the manner in which age 3+ fish are harvested, and that appropriate and complementary quotas will be established in State waters. Future assessments leading to area/period TACs for the adult fishery are expected to consider catches from all relevant fisheries (adult and juvenile), and in doing so provide improved biological

advice on the harvest of 3+ fish in the traditional juvenile fishery in relation to the regional utilization of sea herring resources.

Differences in opinion

Another controversy arose at the meeting - the issue of what size herring were being landed during December and January. This was important since, using 9" as the dividing line between age 3+ and ages 1 and 2 fish, Mr. MacLeod indicated that his own samples of herring landed at his plant showed that 40-50% of the fish were less than three years (using size as a guideline). NMFS samples, on the other hand, indicated that the percentage was approximately 10-20%. The smaller the percentage age 3+ in landings, the more fish available to be caught before the quota was reached. According to Mr. Gordon, few fish sampled during December and January were expected to be less than three years.

Adding to this argument on percent age composition, was the size guideline used by NMFS to separate age 3 and older from age 2 and younger fish. NMFS considered all herring landed under 8" natural total length (TL) (tip of snout to end of tail). Mr. MacLeod and others had been under the impression that 9" fork length (FL) was the standard to be used. The difference between 8" TL and 9" FL could be as great as 2" for 9" FL equalled approximately 10" TL. This "small difference" in interpretation was very significant during the winter of 1978-1979 since many fish being landed from December through March were near these sizes, thus depending on the interpretation, fish counting against the quota could range from 10-50% of actual landings. A strong 1976 year-class ranging from about 8-9" TL was responsible for this abundance of herring and importance of the size/age distinction.

NMFS used the 8" TL standard since, according to conventions of fish ageing, all herring observed a "birthday" on January 1; hence, the 1976 year-class became three years old on that date. This convention caused many "small" fish (approximately 8") to be age 3; hence, the need for an 8" breakoff point to account for these small fish in the landings. Accurate breakdowns of the age composition timely enough to be used for quota purposes were not possible since collection, processing, and ageing of samples was a slow laborious effort with only a few people devoted to the chore.

This convention caused more industry discontent with the Council/federal sea herring management approach. Herring generally spawn in late September-early October and metamorphose to become juveniles in the spring of the following year (approximately 1.5"). Logically, it would seem reasonable that these fish would be one year old the next September-October period. While true biologically, the ageing con-

vention and assessments using this convention caused a herring to be arbitrarily assigned as age 1 at the beginning of the calendar year. Thus in January, while biologically a herring might be only three months old (from date of spawning), for assessment purposes it would be one year old. Many industry representatives said, "How can a January caught fish (8") be three years old when biologically it is only two years and three months? If the Council is controlling catch of age 3+ herring, the size delimiter should be that which fish would measure in October; this is, about 10-11". Industry confusion was understandable.

The first closure

On March 14, 1979 the first closure occurred in the Gulf of Maine (excluding Maine waters). Four thousand metric tons had been caught by the first week of March. Fishing could continue if catch of herring did not exceed 5% of weight of fish on board or 20% of weight if the vessel was fishing for mackerel (Council decision). Some industry representatives complained that size of fish to be counted against the quota and the measurement guideline for those fish were misunderstood by the industry. Specifically, a 4,000 MT quota of age 3+ fish at 9" FL (or approximately 10" TL) would have provided the adult herring industry with much more herring than a quota based on 8" TL (or approximately 7" FL). Regardless, the fishery was closed.

Massachusetts efforts

On March 13 and 14, 1979 the Massachusetts Division of Marine Fisheries and its Advisory Commission held public hearings to present the substance of the Division's proposal that the Commonwealth adopt the Council Herring Plan and implement complementary regulations. It was pointed out to a rather large audience (60 people) of Massachusetts processors, fishermen, et al. by Allen Peterson, then Director of the Division, that the Division was contemplating a State waters closure when federal waters were closed to herring fishing.

No one supported the Division's proposal; there was unanimous opposition. Leonard Stasikiuewicz of the Point Judith Fishermen's Cooperative raised the issue of size of fish to be counted against the Council quota. He noted that the States of Maine and Rhode Island had not adopted the Council Plan. In Rhode Island, nothing under 10" TL was counted against the quota. It was also his understanding that the Council had never intended to count herring under 9" FL against the quota. He and others were totally surprised by the NMFS decision to discount herring 8" TL and smaller from the quota when industry had been led to believe from the beginning that 9" FL was to be the length used to distinguish small from lar

herring. He believed that 60 to 65% of the landings was under 9" FL in contrast to approximately 6% under 8" TL which was used by NMFS and resulted in a closure. He emphasized that the industry had been misled, and consequently, Massachusetts should not adopt the Council Plan.

Edward MacLeod was also opposed to a Massachusetts adoption of the Council Plan. He stated that Maine was more sympathetic to its fishing industry. Mr. MacLeod was in favor of adopting the Rhode Island and Maine plan. He stressed that as a former Council member, he was under the impression that three year old herring were to correspond to fish 9" FL, and the use of 8" TL effectively made the 4,000 MT quota of age 3+ fish more like 2,600 MT. Mr. MacLeod also noted that the resource was not in dire shape since, according to the scientists, the 1976 year-class of herring was equal to the 1970 year-class (largest on record) and that a good 1977 year-class was expected. He stated that we were not in an emergency situation where Massachusetts had to take action immediately.

Processors were asked how they measured their fish. Mr. MacLeod responded that the sampling scheme depended on the type of truck used to transport herring. For straight dump jobs which held approximately sixteen to eighteen thousand pounds of herring, one bushel was taken at random, 80 pounds was weighed out and separated according to fish greater than and less than 9", and the percentage of herring less than 9" was applied against the overall weight. For trailer trucks which held approximately fifty thousand pounds, three bushels were taken at random. In addition, he stated that every boat in Gloucester was sampled at his plant; he considered the NMFS sampling to be inadequate. Two samples were taken in Gloucester on December 1 and 6 and one sample on January 10. He reiterated that Council members had intended to use the 9" figure.

Wayne Bassett of Sandwich stated that the percent composition of fish under 9" FL ranged from 31 to 33% and averaged 45%. He sampled by taking 100 lbs, examining that quantity for length composition, letting 10,000 lbs go through, then taking another 100 lbs, etc. He was also convinced that the Council had gone with 9" FL; 46% of the landings at his plant were less than 9" FL.

Of interest was that some processors were using the Council's 9" FL as a mean to designate "small" vs "large" herring which commanded different prices. James Avila of Dartmouth stated that in 1978 processors considered everything over 8" FL as large and the fishermen were paid accordingly. In 1979 everything over 9" FL was considered as large; consequently, 95% of his catch had been classified as small. George Vasconselos of New Bedford noted that he

was getting 25% less money and a 50% reduction in catch in 1979 in contrast to 1978.

The Director mentioned the heart of the problem faced by the Division and the Commission. He stated, "We realize money is invested today. We have to worry about whether you can work on that investment over the next few years. Do we allow you to keep fishing and take the chance that you won't have an impact on the herring down-the-road, or should we take action to support the Council, to consider the 4,000 MT quota sensible and to protect these herring so that the stock can rebuild? Should we get the short-term dollar and worry about next year when it comes?" Mr. Peterson concluded that the Division might not follow the federal action of closure if the federal action was inappropriate under the plan. All available data had to be used to determine if the action was appropriate.

Ultimately, as a result of this industry confusion, the Division and its Advisory Commission decided not to close the fishery. It was felt that industry arguments were valid, and besides, the winter-spring fishery was winding down so additional landings were not expected to be heavy.

New recommendations

At March 14 and 15, 1979 Council meetings, Committee preliminary recommendations for amending the Herring Plan were presented. One recommendation was to define adults as age 3+ herring, which were 9" TL and longer, for the current fishing year (until June 30, 1979). NMFS was asked to re-assess landings data using this standard instead of the 8" TL criteria. These recommendations were approved. NMFS pointed out, however, that a re-evaluation would still indicate the need for a closure.

This recommendation was approved by the Council in spite of Spencer Apollonio's objection. He had preferred to see the issue brought back to Committee for further discussion. Note: In retrospect, this vote went farther than it should have. The Council Plan did not regulate adults vs. juveniles - only age 3+ fish. Hence, it regulated some juveniles (age 3) and all adults (age 4+). This age composition made up the adult fishery. The Council's acceptance of the motion caused confusion for many because the Plan already defined adults as age 4+ and juveniles as ages 1-3 but only regulated catch of age 3+.

Other recommendations involved major revisions in the Council Plan. The first was to increase the 5Y OY from 8,000 MT to 30,000 MT for the 1979-1980 fishing year. This increase was due to a recommended change in the management unit to include all herring age 3+ taken from territorial waters of all states. Furthermore, the 5Y area was recommended to be split into two regions - north and south of Cape Elizabeth, Maine - with seasonal suballocations for each region to

ensure historical access of user groups (Figure 2). By taking this approach, the Committee and the Council could remove the exemption for catches in Maine waters not counting against the 5Y seasonal catch allocation.

It was recommended that the 5Y North area be allotted a 10,470 MT annual allocation. Since most fishing for age 3+ in 5Y North occurred in Maine waters this allocation effectively was for the Maine coastal fishery which historically focused on juvenile (age 1-3) herring and took significant numbers of adults too. The 5Y South quota was recommended to be 19,530 MT (30,000 MT - 10,470 MT) for the 1979-1980 fishing year.

The 30,000 MT represented the average U.S. total removal from 5Y over the past decade and was considered to be consistent with the maximum long-term average yield from the 5Y stock. This recommended OY originated from results of a Regional Herring Assessment Working Group which met in early 1979 to evaluate the condition of and outlook for the 5Y and Georges Bank spawning stocks.

These recommendations were to go to public hearings in April. Also, at that time, two other recommendations were to be discussed: 1) a two week closure of all fishing in herring spawning areas on Jeffrey's Ledge and Georges Bank during October; 2) age 3+ fish to be defined as 8" TL from December 1-June 30 and 9" TL from July 1-November 30 ; and, 3) options for seasonal OY breakdowns for north and south of Cape Elizabeth, Maine. An admittedly optimistic June 30 implementation date was projected.

Resource status

Mindful of the need to address the entire herring resource supporting various age 3+ fisheries in the Gulf of Maine, the Assessment Working Group adopted a pooled approach to their assessment. The pooled assessment estimated the combined magnitude of the three spawning stocks contributing to the FCZ fisheries and estimated relative strengths of recent year classes.

Results of the assessment indicated that the combined spawning stocks of Southwestern Nova Scotia, the Gulf of Maine, and Georges bank were at their lowest recorded level. This condition was primarily the result of the 1970 year class being fished out and succeeding year classes being below average. Catches of herring from the 1976 year class; however, had been strong in both 1977 (as age 1) and in 1978 (as age 2). Evaluation of the importance of the 1976 year class to the resource indicated that this year class might approach the strength of the 1970 year class (the largest year class for which data were available).

from Amendment #3 to the Herring FMP - 2/80

Recent history had shown, however, that year classes generally did not recruit to the Georges Bank stock with the strength anticipated from their performance elsewhere. Since there was no evidence that the 1976 year class would successfully recruit to the Georges Bank stock, and in light of the stock's current depleted condition, the Working Group recommended that allowable 1979/1980 harvests should be restricted to 10,000-15,000 MT.

The 1976 year class appeared strong in catches from the Gulf of Maine. The Working Group recommended that given the anticipated strength of this 1976 year class in the Gulf of Maine, a total harvest of 30,000 MT of age 3+ herring could be established for the Gulf of Maine fisheries and still provide for significant stock rebuilding. This level of rebuilding was expected to restore the Gulf of Maine spawning stock to the minimum desirable level. The increased spawning stock level was expected to enhance the probability of future good year classes as well as provide a buffer to permit continued levels of harvest in spite of occasional poor year classes. The level of allowable catch suggested for 1979/1980 represented the approximate maximum long-term average.

Public hearings

Three hearings (April 9, 10, and 11) were held from Maine to Rhode Island to discuss the aforementioned changes in the Herring Plan. In general, substantial support was given for the concept of seasonal/area quotas; spawning area closures were considered desirable, but size and site of the closed area difficult to determine; and, the 8" TL and 9" TL seasonal "guidelines" for industry to determine age 3+ composition in their catches did not match industry guidelines for product utilization (typically, 9" minimum FL or approximately 10" TL were acceptable for filleting with smaller fish for canning). Additionally, comments centered on a lack of a quota for juveniles; that the proposed spawning closure would occur during the height of the purse seine fishery; i.e., when that fishery had its greatest catches; and, that the quota should be based on length; e.g., 9" FL, not age.

Council decisions

At its April 18 and 19, 1979 meeting the Council approved Committee recommendations based in part on the public hearing input. The OY's and seasonal/area quotas were set. Herring age 3+ were defined for industry guidance purposes as 9" TL. Transfers of unused north and south of Cape Elizabeth quotas between seasons in each area were permitted. A pooled southern Gulf of Maine and 5Z/SA6 (east 71° 51') quota for December through March with baseline allocations of 2,000 MT and 1,000 MT, respectively, was to provide maximum flexibility in shifting quotas between the

two areas according to herring availability. A recommendation on spawning closures was postponed.

Additionally, at the request of the Maine Sardine Council, the Council approved a Plan provision stating "nothing in the Herring FMP should be interpreted to prohibit or discourage the canning of sexually immature herring as sardines".

Discussions on herring management at these April meetings concluded with a motion to request the Secretary of Commerce to amend the Plan to extend existing 1978/1979 OY's and area/period allocations into the 1979/1980 fishing year. It was realized that the Plan amendments could not be reviewed, approved, and implemented before the July 1 beginning of the new fishing year.

At its May 16 and 17, 1979 meetings the Council endorsed the development of a program of spawning closures for herring and endorsed the Maine program of herring spawning closures that existed in 1978. Since any closure of a herring spawning area would impact other fisheries; e.g., those with bottom tending gear in the area, it was felt advisable for the Herring Committee to meet with the Groundfish Committee to develop a workable program. A meeting was scheduled for July.

Amendment status

June 27 and 28, 1979 meetings dealt with the status of the Herring Amendment which would increase the OY from 9,000 MT to 30,000 MT in the Gulf of Maine. The National Marine Fisheries Service did not feel the Amendment could be implemented. The Council requested reasons for the Plan holdup and William Gordon stated that eight items had to be addressed before NMFS could approve the Amendment. According to Mr. Gordon, the Amendment provisions and reasons for them had to be better articulated - nothing substantial was wrong with the Amendment. Edward Spurr, Chairman, of the Herring Committee chided NMFS and NOAA for not making their criticisms known sooner. The beginning of the new fishing year was only three days away and new OY's were not in place.

William Gordon summarized the issues which needed to be addressed before the Amendment could be approved. Those were: 1) a lack of an explanation as to whether the Council was continuing its action to shift catches of winter/spring and summer/fall fisheries from 50:50 to 70:30; 2) no explanation of the OY increase in 5Z/SA6; 3) confusion over the total OY's and area breakdowns; 4) need to address processing capacity based on the "Joint Venture Amendment" to the FCMA.

In keeping with the Council's request at its April meetings, to prevent a lapse of the Herring Plan, NMFS extended the Plan in its existing form into the next fishing year.

Maine Plan changes

On June 26 Maine's Department of Marine Resources Advisory Council met to review previous public hearing comments and recommended changes to the Maine Herring Plan for 1979. Vaughn Anthony, then Chief Scientist of Maine's Department of Marine Resources, stressed that protection of the 1976 year class while avoiding economic hardships to the industry formed the basis of the State's 1979 Plan. The 1976 year class was supporting the fishery. It was reiterated that one real purpose of the Plan was to limit the growth of the mobile gear fishery which was considered to be, in the opinions of Spencer Apollonio and Vaughn Anthony, the only serious threat to overfishing. Fixed gear was not considered a threat since, even though many more weirs were being built, canneries could only handle a fixed quantity of fish in a given amount of time and catches in excess of that capacity had to be held by fishermen until they could be processed, or had to be let go.

Maine DMR had proposed at early June hearings the following:

- 1) a quota for mobile gear of 8,000 MT 9" and longer TL fish (10" and longer TL in 1978);
- 2) a quota for fixed gear of 2,470 MT 9" and longer TL fish;
- 3) all quotas retroactive to January 1 and to extend to December 31;
- 4) eastern Maine spawning area closure of August 26 to October 6 and a western Maine September 2 to October 13 spawning area closure; fixed gear was not included in the closure.

At its Advisory Council meetings, DMR proposed the following based on the public hearing comments:

- 1) mobile gear quota of 8,000 MT 9" and longer TL fish;
- 2) no fixed gear quota;
- 3) all mobile gear quotas retroactive to January 1 and to extend to December 31;
- 4) an eastern Maine spawning area closure from August 26 to September 22 and a western Maine spawning area closure from September 2 to September 29;
- 5) spawning area closure would not prohibit fishing if catches were less than 20% spawned fish by volume (10% in 1978);

These provisions were later implemented.

- 6) remove all mobile gear quotas east of Cross Island after October 15.

An irksome situation

At August 1 and 2, 1979 Council meetings it was related that the revised Amendment was submitted to Washington on July 23. Early October implementation was expected. (Note: Implementation occurred on March 12, 1980.) Since this implementation date was well into the summer-fall fishing season, concern was expressed that closures might occur because new, increased OY's would not be in place. After Robert Hanks, then Deputy Director of NMFS Regional Office, stated that a closure was a possibility since the 4,000 MT quota was projected to be exceeded, the Council approved a motion by Mr. Apollonio to "consider the possibility of a restraining order on the Secretary of Commerce if the Secretary should impose a closure on the adult herring fishery when 4,000 MT have been taken". Dr. Hanks did state, however, that extenuating circumstances (e.g., pending OY increase) would be taken into account before a decision to close was made.

The Council felt the delay in the Amendment's implementation (July 1, 1979 original expectation) was due to a "change in the rules"; i.e., a new Executive Order (12044) requiring an analysis of all regulations and the Joint Ventures Amendment to the FCMA requiring an analysis of domestic processing capacity. These events had taken the Council away from its schedule for development and implementation of the Amendment. There was no biological reasons for a closure, thus a closure would have been unfair to the industry. (Note: Other deficiencies in the Amendment had been cited by NMFS. However, some Council members perceived these deficiencies to be minor and not of the magnitude to delay this important Amendment's implementation.)

No closure

At September Council meetings the status of the herring fishery was related. Catch of herring in the Gulf of Maine from July 1 to August 15, 1979, was already 3,965 metric tons. Since the Amendment was not yet in place, the 4,000 MT quota for that period was still in effect; therefore, a closure seemed imminent. However, recognizing the illogic of closing the fishery down just before implementation of a significant increase in optimum yield, the Regional Director of NMFS stated that he had initiated no action to close the fishery.

Shifting quotas

On another issue, efforts were made by Charles Stinson of Stinson Canning Company, to have the Council further amend

its Herring Amendment currently being evaluated by NMFS in Washington. Mr. Stinson stated that catch of adult herring in the North Gulf of Maine region since July had been poor, thus much of the soon to be in effect 10,470 MT quota would be unharvested because, according to him, since August, adult herring had been unavailable north of Cape Elizabeth. He sought to have any unharvested portion of the 10,470 MT re-allocated to the South Gulf of Maine region where herring were available into the winter months.

The Council did not abide by Mr. Stinson's request for the following reasons: 1) there was no evidence that the proposed separation scheme would not work; 2) in the Regional Director's opinion, the north to south shift would raise questions over the need for further public input on the issue. The Amendment stated that quotas could be reallocated into another seasonal period and not shifted north to south or vice versa; 3) according to Mr. Peterson, even if the Council decided to shift the quota, it wouldn't be until at least late October before the action occurred; 4) If the Council action triggered a Washington request for more justification, the Amendment with the increased optimum yield provisions, might not go into effect until December when the winter-spring season began and new quotas went into effect; 5) Any shift in quota would remove tonnage specifically allotted for the Maine inshore fishery, thus if significant by-catches of age three and older fish in that juvenile fishery occurred in September and October, there would be a strong potential for the July through November Gulf of Maine quota to be exceeded. This issue was referred to the Committee for consideration in future Plan amendments.

Polish venture

On still another and more controversial issue, James Warren, Executive Director of the Maine Sardine Council, related a proposed purchase of 5,000 MT or more of juvenile herring by a Polish vessel and raised concerns over the impacts of such a purchase on the current Council and State of Maine herring plans. The Council Plan was sensitive to increased catches of juveniles beyond traditional harvests. A substantial increase in catch beyond those levels would have violated the basic structure of the Council Plan and adversely impacted the adult herring optimum yield. At the state level, Spencer Apollonio emphasized that a quota on the taking of juvenile herring would be needed if the Polish venture was successful. The Council voted to oppose foreign vessel purchases of juvenile herring.

An account of this proposed purchase was provided by Donnell (Maine Commercial Fisheries, November 1979):

"This year found Maine herring fishermen with a lot of fish - more than has been seen in recent years, and far more than Maine processors could handle. This situation brought several Maine fishermen to the DMR and National Marine Fisheries Service (NMFS) seeking a chance to sell this "surplus" to foreigners.

Legal Counsel from both NMFS and the DMR could see no problems if the vessels docked in Maine and bought over the side. The Polish apparently were the most interested in a deal. However, as Poland is a Communist nation, it takes several weeks to clear the necessary red tape. So for this year, it was no dice, although the caper has since been tagged the "Polish Venture".

The New England Council, although sympathetic to the fishermen's market problems, have gone on record as opposing such a venture. The strongest argument voiced in opposition to the venture is upsetting the present balanced situation which doesn't call for juvenile herring quotas. In drawing up the state plan, the state argued that the canning capacity of the state's 15 plants can serve as a quota or a lid on reaping the resource. The Feds accepted this. Those arguing against such ventures have pointed out that letting one foreign vessel in might serve the short term interests of weir fishermen and stop seiners for this year's glut, but in the long term it could mean quota limits imposed.

The reaction of the DMR Advisory Council was the same as the Regional Council's. The Advisory Council strongly favored the idea of expanded markets for Maine herring fishermen. But they were uncomfortable with the idea of opening up the quota argument on one hand, and they were concerned with the problems that might arise with setting a precedence on the other. They might be giving the foreigners a toehold that might not serve the best long term interests of the fishermen and the packers."

The first summer-fall closure

On October 1, 1979 the adult herring fishery (ages 3+) was closed in the Gulf of Maine until December 1. As of August 31, 1979, 9,992 MT had been taken and this exceeded the 9,000 MT in the yet-to-be-implemented Amendment. In response to this closure, industry representatives, notably Edward MacLeod of Gloucester, attempted to get the Council to recommend a reopening of the fishery after the spawning period (i.e., sometime in late October and early November).

His request was made at the October 3 and 4, 1979 Council meetings. He stipulated that the reopening would be contingent on the opening not placing the resource in jeopardy. He stressed that the best price for herring would be in October and until the Canadians re-entered the fishery. The market for herring was very strong due to an extremely poor 1979 Canadian fishery. Additionally, according to Mr. MacLeod, "There were more herring than had been seen in years" so the resource did not appear to be in jeopardy and the closure was not justifiable for biological considerations (see newspaper article).

Mr. Peterson noted that landings of age 3+ in mobile gear to September 15 (from July 1) were close to 20,000 MT, and this figure represented an overwhelming improvement over catches of a few years previous. Considering this improvement in the fishery and the large overage of the Council's proposed quota and that a large proportion of the 20,000 MT was going into reduction (not for food), Mr. Peterson felt that there was no other option for NMFS than to close the fishery and for it to remain closed. Mr. MacLeod responded that no more than 4% of landings at his plant went into reduction, and the fishery had come back from the threat of a stock collapse.

Many Council members supported Mr. MacLeod's request. Some felt that even though the great abundance of herring available to the adult fishery in the Southwest Gulf of Maine might have been due to a change in fish geographic distribution - not increased stock abundance - industry should be allowed the opportunity to increase its income by catching fish when they were of highest value and readily available. Others disagreed and considered a re-opening prior to December 1 as creating an open fishery and not a well thought-out action. On a close vote (5 yea, 6 nay, and 3 abstentions) a motion to open the fishery from November 1 to November 30, 1979 was defeated.

The issue was not dead, however, because Mr. Apollonio offered another suggestion. He moved:

"That the Council amend the herring management plan to permit a harvest of 5,000 MT of herring 3 years of age and older in the FCZ of the Gulf of Maine in the month of November, 1979, taking into account that 1) the OY of the herring MP was based upon a pooled assessment of the entire resource in the Gulf of Maine, 2) that the assessment assumed a Canadian catch of approximately 66,000 MT in the Gulf of Maine and Bay of Fundy, and 3) that the Canadian catch will fall short of the catch assumed in the assessment by approximately 40,000 MT. In view of the biological and harvest assumptions

Quota cuts herring haul short

By BILL CAHILL

Herring seining off Gloucester was never better this summer when the federal government's controversial quota regulations stopped it on Sept. 30.

A fleet of 15 herring chasers had to tie up and more than 100 workers at Kennebec Fish Corp. went on unemployment when they could have been working. Competitors from Canada and the Scandinavian countries got a three-month free reign in the profitable markets of West Germany.

To Edward MacLeod, general manager of the Kennebec plant on the Community Fish Pier, it was an example of how the quota system devastates an industry. MacLeod points out the need to devise a better, quicker way of providing flexibility in quota regulations.

"Now it takes 60 to 90 days to get quotas changed, if you're lucky," MacLeod said. This is often too late to effect needed change according to MacLeod.

MacLeod said herring boat skippers and crews told him "they had never seen so much herring out there as there was this summer. Good, adult herring, too; nine or 10 inches, running about six to eight ounces."

The winter herring season opens Dec. 1 with a quota of 9,000 metric tons, the same figure as the summer.

But winter and summer fishing differ greatly, MacLeod said. "In the winter sometimes you're lucky if you can get out one day in six or seven," MacLeod said.

In the summer, Capt. Joseph "Cheeks" Curcuro and his 10-man crew on the Barnegat; Ned Lakemen and his men on the Kingfisher regularly steamed out of Gloucester harbor at midnight, were back in at 6:30 or 7 in the morning with trips of 250,000 to 300,000 pounds. Prices ranged near six or seven cents a pound.

"They were out there in droves about two hours off," said MacLeod.

In addition to the Gloucester boats, there were another dozen operating here, unloading here for herring plants all over New England. "Gloucester was the central port for the industry all over New England and we even have two plants in Canada," said MacLeod.

One July day, according to MacLeod, more than 1.5 million pounds of herring was landed here.

Much of the herring was shipped out in 30 tank trucks, iced and brined and carrying 40,000 to 50,000 pounds apiece to plants at Portland, Maine, Sandwich, and elsewhere.

MacLeod said that one day's haul represented about 8 percent of the summer quota of 9,000 metric tons.

Late in September, the National Marine Fisheries Service caught up with figures, found that quota had been reached and halted the herring fishery.

That happened when the ocean was still brimming with good marketable adult herring, MacLeod claims. "And a lot of that fish is just going to die if it's not caught."

Leaving the herring fishery open was a logical move, MacLeod said, but moving the federal bureaucracy to approve a quota change in time to benefit the fishermen, the dock workers and MacLeod's firm, was virtually impossible.

The herring fishery will be discussed at the Nov. 7-8 meeting of the New England Fishery Management Council. MacLeod and others will seek a November quota of 5,000 metric tons.

MacLeod is not optimistic of approval.

And even should that come, herring industry officials are not sure it can help now. The summer fishery closed Sept. 30 when fish were plentiful.

No one knows what has happened to that huge herring stock since.

This is another sore point with MacLeod.

He claims government herring quotas are based "on indecisive, often skimpy information. MacLeod said, "No one knows, for example, how tidal flow, how environment, how warm water has an effect on the herring. Yet an arbitrary figure of 9,000 metric tons is established.

"It's always up to the fishermen to prove the quotas are wrong. It should be up to the government to prove their quotas are right. The shoe is on the wrong foot," MacLeod said.

MacLeod said the herring industry in Gloucester this summer was a \$10 million business "and I'd say the livelihoods of about 500 people were involved directly." The industry could have probably thrived through November.

MacLeod pointed out an irony. MacLeod noted if the fishermen and possibly the wharf workers were in the farming industry, they would be receiving government subsidies for not catching, cutting, packing and shipping the 40-pound cartons of herring.

Farmers are paid for not growing surplus crops under certain market conditions, a kind of quota system in agriculture devised by the Federal government, he said.

Fishermen and fish workers are governed by a quota system, also imposed by the federal government.

The difference is that fish is not subsidized, only regulated, MacLeod points out.

MacLeod said sociological impact should be considered in any management quota for a fishery. "The sociological value to the industry is important," he said. "Whether or not they put people out of work must be considered."

incorporated in the plan and the status of the Canadian herring fishery in the Gulf of Maine, it is clear that the OY may be safely increased by 5,000 MT without an adverse effect on the resource or on the plan's objectives, or on future harvest options by either the U.S. or the Canadian fisheries. The additional harvest may provide an economic opportunity entirely compatible with the concept of optimum yield and the plan's objectives."

This motion was accepted by the Council. It was hoped that the existing proposed Amendment (in the review process) could be altered to include this decision. However, it could not be altered since time was too short for review and implementation before the prescribed December 1 opening.

The Council received a quick response from Terry Leitzell (then Assistant Administrator for Fisheries) to its request for a re-opening of the fishery. Mr. Leitzell stated he was not convinced by available information that a re-opening would be in the best interest of the fishery. He further stated:

"The Canadians have been unable to catch their quota of herring either because: 1) the total biomass is not as large as estimated, or 2) the herring have moved south and are not available in Canadian waters. If the first reason is true, it would be imprudent to reopen the fishery. If the second reason is true, the herring could move back to Canadian waters and be caught. I do believe that a future amendment could include a formula for taking Canadian catches into account during the season and making adjustments accordingly.

In addition, the management categories established for 5Y and 4Y herring under the U.S. Canada Fishery Resources Agreement do not provide for management of these stocks as a unit. Although the treaty has not been ratified, disregard for that agreement at this time might further exacerbate relationships."

Coincident with the publication of these regulations, the Division of Marine Fisheries closed the fishery in its Northern Massachusetts Management Area until December 1 when federal waters were to re-open. This State's closure lagged 14 days beyond the federal closure due to needed compliance with State administrative procedures.

In announcing this closure to Terry Leitzell, Philip Coates expressed a primary concern and rendered an opinion on the impact of any overage of the summer-fall quota. He stated:

"Additionally, I wish to express our concern over the fate of any summer/fall quota overage. Allen Peterson stated at the October 3 and 4 Council meetings that the overage would not be deducted from the winter/spring quota which begins December 1, but that it would be implicitly accounted for in assessments used for the setting of the next fishing year's optimum yield. We trust that your office shares this view. Massachusetts has a significant fishery off its coast during the winter months, and we do not wish to see it unfairly penalized through a quota reduction.

Incidentally, I am led to believe that the Gulf of Maine 30,000 MT optimum yield was based in part on the assumption that the Canadians would harvest approximately 95,000 MT of herring off their coast. As reported at the last Council meeting, however, recent catches have only been 50,000 MT. Apparently, the Canadians are having difficulty acquiring this catch for one reason or another. Thus, it is likely when all is said and done that the overage incurred by our summer/fall fishery may not have any adverse influence on the attainment of the Council Herring Plan objective; i.e., to rebuild the Gulf of Maine spawning stock, particularly if the increased reported availability of herring off our coast is partially due to a shift in herring abundance from waters off the Canadian coast to those off Massachusetts. Of course, the latter statement can never be supported with scientific evidence, yet it cannot be disproven either."

A flexible OY

November, 1979 through February, 1980 Committee and newly established Working Group meetings were devoted to means of providing greater flexibility in allocation schemes and OY determination, and a better way for industry to judge age composition of landings for its own estimation of rate of quota attainment. Time was also spent checking on the status of Amendment #3 to determine when it would finally be implemented.

Council meetings during this time period involved little discussion on herring issues - just periodic updates on Amendment progress and future strategies. One such strategy was, using 30,000 MT as a baseline OY, to adjust the OY upwards or downwards in response to various factors. The feeling was that within any fishing year the Council could increase or decrease quotas in response to apparent changes

in abundance or some other factor without going through a formal amendment process. For example, the initial setting of a fishing year OY could be done with the understanding that perceived abundance, availability to gear, and market conditions during the fishing year could enable increases or decreases in OY by a pre-determined percentage (e.g., 20%). This percentage could be determined when assessments were initially performed and could be related to the value of fishing mortality biologically justifiable after prospects for the coming year were evaluated (e.g., strengths of incoming year-classes and previous year catches). After the percent factor was justified in a Supplemental Environmental Impact Statement and accepted by higher authorities, the Council and/or the Herring O/S Committee would, as part of the SEIS, direct the Regional Director to increase or decrease the quotas by the percentage within the fishing year in response to an industry request for a higher quota or some other consideration. An industry request would be based on the one or all of the aforementioned three criteria; i.e., abundance, availability, and the market-place. A major obstacle to this strategy was a determination of some sort of reliable, timely indicator to demonstrate when "things were looking good or bad" for the stocks and/or industry.

Another strategy was to use 8" TL as a guideline for the industry to delineate age 3 and older herring in the December through June period and 9" TL for the July through November period. Massachusetts had adopted this Committee proposed suggestion when it implemented its own herring regulations.

Amendment #3 implementation

On March 19, 1980 NMFS announced the implementation of Amendment #3 establishing the North and South Cape Elizabeth seasonal breakdown of an increased 5Y OY (i.e., 30,000 MT July 1, 1979 - June 30, 1980). In support of the increased OY, NMFS stated in its news release:

"The catch levels permitted in the Gulf of Maine are liberal due to strong 1976 and 1977 year classes of herring. This situation allows for substantial catches while also increasing the spawning stock. The population now has the potential to produce relatively stable recruitment of young herring to the fishery. However, there is no evidence of any increase in abundance in the Georges Bank herring stock.

The Gulf of Maine presently has one of the few significant herring populations left in the world and, as such, it is an extremely valuable resource. A strong world market exists and is expected to continue for some time. With proper

management of this resource, the U.S. herring industry can look forward to an extended period of prosperity."

Small fish

In the winter-spring fishery of 1979-1980 a high percentage of landings in the adult fishery were small fish. This was evident from Massachusetts DMF samples of landings in Gloucester and Sandwich which indicated approximately 25% of landings by weight were less than 9" TL. Some individual catches, however, were reported to be almost 100% small fish.

While the Herring Committee did not take a position on whether this high amount of small fish in the adult fishery was appropriate, others did take a stand. The Massachusetts DMF was petitioned by fishermen and processors out of Gloucester to investigate the amount of juvenile herring caught in Massachusetts territorial waters and landed in Massachusetts ports. There was concern that these fish were being wasted due to their poor condition on landing caused by method of capture (otter and pair trawls), the fish being full of feed, fat contents being too low, and the small size not being suitable for filleting.

At an April 2, 1980 hearing to address this issue, the DMF and its Advisory Commission heard testimony. Edward MacLeod made five recommendations for the Division/Commission's consideration. They were:

- 1) An adult herring caught in Massachusetts territorial waters shall be any herring 10 inches in overall length or greater. Over length shall be from the tip of the tail to the tip of the snout.
- 2) The Director of the Division of Marine Fisheries shall close the winter herring fishery in Massachusetts territorial waters on a weekly basis at any time when:
 - a) tests of daily landings by State representatives of the Division indicate that catch contains 30% or more juveniles, or
 - b) fish are "feedy".
- 3) The Director shall appoint a committee of six commercial herring fishermen consisting of two representatives from Rhode Island, two from Maine, and two from Massachusetts to meet with a committee from the Massachusetts Lobstermen's Association representing the North Shore and the South Shore of Massachusetts. This committee shall establish zones in Massachusetts territorial waters that will be closed to pair trawlers. Their findings shall be enforced no later than December 1, 1980.

- 4) All boats engaged in the herring fishery in Massachusetts territorial waters shall be licensed.
- 5) The Director shall be empowered to establish a trip limit on a daily basis to apply to all boats engaged in the fishery if he deems it in the best interests of conservation to invoke such a measure.

Jim Warren, of the Maine Sardine Council, also commented:

- 1) Herring should not be for fish meal. He called it a waste of a resource with little return to fishermen and with little contribution to shoreside employment.
- 2) Fish caught in Massachusetts waters have been used by Maine canneries. If Maine can use the fish in canneries, they should be allowed to do so. If Mr. MacLeod's second recommendation had already been in effect, approximately 3,500 metric tons of fish would not have been available to the canneries.
- 3) Provide for a better definition of adult versus juvenile herring.

He concluded by saying that Canada had always bought Maine fish, and recommended that Massachusetts should pass a law prohibiting reduction of herring. Mr. MacLeod added Mr. Warren's recommendation to his list.

With one exception, the Division and the Commission did not pursue any of these recommendations in 1980.

Maine 1980 Plan

During the spring, Maine presented its proposal to its industry for the 1980 fishing season. After public hearings DMR and its Advisory Council decided the following:

- 1) allow mobile gear fishermen to harvest adult herring (9" TL+) throughout the year as long as the total herring with spawn did not exceed 20% of the total volume;
- 2) during a quota closure of the Maine adult fishery, herring 9" TL and larger could be taken if they comprised 25% or less of total by volume;
- 3) 8,000 MT quota for mobile gear of 9" TL and greater herring;

- 4) spawning closure for mobile gear from September - December, 1980 (25% tolerance);
- 5) east of Cape Elizabeth the 8,000 MT of 9"+ was to apply for mobile gear except that the most eastern portion of Maine water was to remain open from October 15 to December 31 regardless of a quota closure since the area was already closed prior to October 15.
- 6) west of Cape Elizabeth, the Council's 5Y South quotas were to apply with a closure for mobile gear when the Council quotas were reached. An exception was that a quota transfer from east to west of Cape Elizabeth could be made during July-November if the quota east of Cape Elizabeth was not taken.

These regulations were promulgated on June 25, 1980.

Regarding the 8,000 MT quota of age 3+ for mobile gear, Maine determined this figure by subtracting the approximate long-term average catch of age 3+ in the fixed gear fishery (2,470 MT) from the Council's fishing year 10,470 MT quota for 5Y North. The 8,000 MT was to be a calendar year quota for mobile gear since Maine's coastal herring fishery was primarily from June to October; there were no seasonal breakdowns. No quota was set for fixed gear. Maine considered this exemption justifiable "by the historically constant harvest of fixed gear which cannot significantly affect the levels of adult herring stock." The plan stated:

"The fixed gear (stop seines and weirs) along the Maine coast harvest most of the juvenile herring and have not increased in numbers in recent years. Studies have indicated that the exploitation rate (percentage of the population taken) by fixed gear has not increased and has remained fairly stable. This means that as the abundance has declined so has the catch. This is an unusual situation which does not occur in most fisheries. Normally, as abundance declines the catch remains at a high level or even increases, particularly in clupeoid fishes that tend to school more closely as stock abundance decreases. This means that the exploitation rate increases with declining abundance which poses severe management problems. Pooled assessment also showed that the average fishing mortality rate of age 2 herring has been about 0.35 which is not excessive, considering half of that mortality comes from the Canadian juvenile

fishery. Since the fixed gear do not indicate a trend of increasing effort on the herring stocks, there is no need to restrict fishing of fixed gear if the past levels of effort have been appropriate. Since this appears to be the case, this plan does not recommend any restriction to the fixed gear fishery. Catches of herring by fixed gear, especially weirs, is largely a function of abundance and availability, not effort.

The spawning closures that are recommended should enhance reproductive success and could significantly improve subsequent recruitment to the fisheries. It is a conservation measure that has unknown but possibly great potential for stock rebuilding. The closure to fishing for adult herring should have little impact on the juvenile fisheries since the plan allows the use of mobile gear for harvesting juvenile herring should they not be available to the fixed gear inshore.

The lack of regulation for the juvenile herring fishery for fish 4 1/2" to 9" in 1980 should not have any adverse effect on the stocks of adult herring. The exploitation rate on young herring from fixed gear has been relatively constant since the early 1950's. Recruitment to the adult populations of the Gulf of Maine is expected to be of the same order of magnitude as in recent years provided that unusual changes in the nature or magnitude of the fixed gear effort do not occur."

Regarding the impact of the Plan, it further states:

"The State of Maine has developed a herring management plan designed to conserve herring resources without causing unduly adverse social or economic impact upon Maine's citizens. The State's plan was influenced by the New England Regional Fisheries Management Council which recommended catch restrictions on herring larger than 9 inches in length. The State will adopt a yearly quota of 8,000 MT for fish 9 inches and longer taken by mobile gear. This will permit the fishermen to harvest an amount of herring which will conserve the spawning stocks.

The herring is an extremely important part of the marine ecosystem in the Gulf of Maine and is a major forage species for groundfish and for gamefish species such as tuna. The conservation and management of herring along the Maine coast would therefore have significant biological impact to other marine species. The objectives of 1) preventing further expansion of the adult fishery along the Maine coast until the abundance increases, 2) rebuilding the stocks fished in Maine's coastal waters at the maximum rate consistent with the preservation of the Maine herring industry and 3) helping to rebuild the Gulf of Maine (5Y) spawning stock to an appropriate level (80,000 - 120,000 MT) will eventually tend to stabilize the processing industry and permit the retention of the traditional fishery. This stabilization in the processing and fishing labor market would be accompanied by an increased opportunity for diversification into other herring products. Some of the more important aspects of this enhanced supply of fish might include a stabilization of the lobster bait market, possible reduction in dependence on imports of Canadian herring, and some increased potential for the export of herring by-products."

Another joint venture

Herring was not discussed again by the Council until

its July 30 - 31, 1980 meetings when a joint venture application was reviewed. In order to begin harvest of the Georges Bank and south quota, American Ocean Side Fisheries (AOSF) of Gloucester sought a joint-venture with a Polish company. AOSF presented its application to the Council in hopes of support. With all joint-ventures, the Council had to assess potential impacts on FMP's; i.e., would the joint venture hinder or prevent the attainment of the Plan's objectives.

AOSF designated four American vessels to supply 3,000 MT of Georges Bank herring to a Polish stern trawler for \$231 a metric ton. The application was for a July 21 - October, 1980 time period; catches were to be sorted on board the American vessels; transfer of catch was to occur by pump; fish were to be frozen on board the Polish vessel and sold in Poland and other Eastern Bloc countries. If no fish were found on Georges Bank, the operation was expected to shift to the Gulf of Maine. The processing capacity of the Polish trawler was 60 MT per day (maximum) or 50 days of activity for an allowable take of 3,000 MT.

The Council first decided to consider the proposal only if catches were limited to Georges Bank. It was felt that domestic processing capacity already exceeded the quota for the Gulf of Maine region. The Council was reminded by its Staff that both the Georges Bank and Gulf of Maine quotas were less than the U.S. harvesting capacity; hence, one of the provisions needed for a joint-venture were not met; i.e., domestic harvesting capacity was not greater than the domestic processing capacity. Representatives of Port Clyde Seafoods, Inc., the Maine Sardine Council, and Kennebec Fish reiterated the Staff's views.

One of the fishermen involved in the proposed joint-venture stated his case. According to Robert Rose of Gloucester, he had invested approximately \$500,000 to fish George's Bank herring. He and others did not feel it profitable for them to go to George's Bank in search of herring with no assurance that they could find them quick enough to return to port with a profitable trip of good condition, marketable herring. By unloading at sea to the Polish vessel, the needed trip to shore could be omitted and long search times would not be prohibitive. Additionally, Mr. Rose said that herring processors had basically imposed a limited entry scheme for the fishery. He felt that company owned vessels had an unfair advantage over privately owned vessels; i.e., processors did not have to buy and unload herring from privately owned vessels when

their own boats were fishing.

After long discussion, the Council voted not to support the joint-venture application. Ostensibly, the Council considered it inappropriate to support the application because domestic processing capacity was greater than harvesting capacity. However, the vote on this issue was not unanimous. Five were in favor while eight were against the application. There was one abstention.

A closure recommendation

At August 27 and 28, 1980 meetings, the Council was informed by the Regional Director that he was recommending a closure of the 5Y North area. From July 1 - August 15 over 11,000 MT of age 3+ herring had been caught. The Council quota was 8,850 MT. A mid to late September closure date was estimated. Age 3+ catch in 5Y South, on the other hand, was approximately 5,700 MT; the quota was 9,000 MT. No recommendation for a closure was given.

A Maine response

At September 24 and 25 meetings the Regional Director announced that a closure of the fishery for age 3+ herring in FCZ waters in the Gulf of Maine south of Cape Elizabeth would occur October 5. As of August 31 the quota (July to November 30) was exceeded by approximately 2,000 MT. The FCZ fishery north of Cape Elizabeth had been closed since September 21. Both regions were to open on December 1. In the meantime, Massachusetts and Maine had to respond in some way to the federal action brought about by the Council Plan which both States helped develop.

Maine did not intend to deviate from its own management plan. It had set an annual quota of 8,000 MT of herring 9" and larger TL caught in State waters by mobile gear. Fixed gear catch of herring 9" and larger was not regulated. Maine believed that the "exploitation rate has been relatively stable in the fixed gear juvenile fishery for a long time and at a fairly low level and that as long as the rate does not increase, there is no immediate need to limit the juvenile fishery through catch restrictions". Maine also felt that "enforcement of a 9" size (Council Plan guideline for an age 3 herring) was difficult in the juvenile fixed gear fishery. In the mobile gear fishery, however, the 9" catch size could be used since it generally corresponded to total catch.

Since as of August 31 approximately 4,500 MT of 9" and larger herring were caught by mobile gear inside Maine territorial waters, Maine did not feel it necessary to prohibit further landings of those size fish. Consequently, the Maine mobile gear fishery was to continue to

operate in State waters.

Total Maine landings of age 3+ herring as of August 31 were 13,922 MT (9,199 by fixed gear and 4,723 by mobile gear). The summer/fall Council north of Cape Elizabeth quota was 8,850 MT; hence, an overage of approximately 5,072 MT had occurred. Apparently, slow growing strong 1977 year-class sea herring (age 3 in 1980) were contributing towards the large fixed gear landings of age 3+ herring (approximately 75% of landings). Those fish were smaller than 9" TL, thus suitable for use by the sardine fishery (and not subject to Maine regulation). When age 2 herring were not abundant in a given year, small age 3 herring became very important to the sardine industry.

If growth of 1977 year-class herring had been greater, and age 2 fish had been more abundant, fixed gear catch of the 3 year olds might not have been so large and Maine would not have been faced with its difficult management problem; i.e., catch of age 3 herring could continue to escalate in the fixed gear fishery thereby raising the issue of the Maine Plan hindering the effective carrying out of the Council Plan which regulated age 3+ herring. Maine had a difficult situation since it was almost impossible to stop fixed gear catch of age 3 herring without closing the entire fishery.

Management in Massachusetts was simpler because no fixed gear fishery existed. It was a question of determining the quantity of age 3+ herring caught regardless of size and closing the fishery.

Since a closure of the fishery south of Cape Elizabeth was to occur on October 5, Massachusetts had to determine a need to close its waters as well. Public hearings were scheduled for October 27 and 29 in accordance with necessary guidelines; i.e., 21 day public hearing notice. An emergency closure in the interim was an option.

Massachusetts actions

On October 9 at a monthly meeting of the Marine Fisheries Advisory Commission (open to public) the Director presented his views on a needed Massachusetts response to the federal closure and sought Commission support for an emergency closure of the territorial waters sea herring fishery in the Northern Massachusetts Management Area. While not needing Commission support, the Director had made it a matter of policy to do so.

The Director based the need for an emergency closure on two points. First, the July 1 - November 30 quota for the South Gulf of Maine region had as of September 15 already been exceeded by approximately 48%, and a delay

in closing Massachusetts waters until sometime after October 27 and 29 hearings would surely have led to a much larger overage, perhaps over 100%.

The Director related that a goal of the New England Council Herring Plan was to rebuild the Gulf of Maine herring stock, and an intense fishery during the year when the Gulf of Maine stock was concentrated for spawning purposes; that is, late summer/fall, combined with catches in excess of what was judged to be biologically sound, would likely prevent or at least hinder attainment of that goal. This was the reason why Council concern over impacts of large catches in the winter/spring fishery was not as great as during the summer/fall. During the winter/spring period, the Gulf of Maine stock was dispersed and believed to intermix with Nova Scotian and George's Bank herring; hence, the impact of fishing on the Gulf of Maine stock was less during this period.

Secondly, the Director stated while it was recognized that the peak spawning period in the Southwest Gulf of Maine had probably passed, the inshore fishery was still on spawning herring. During spawning, fish should be undisturbed to enhance chances of increased reproduction and egg survival. The emergency closure was to relieve some of the fishing pressure being exerted on spawning herring since sometime during mid-September.

Several representatives of the herring industry, Rhode Island and Massachusetts processors, and Massachusetts fishermen and boat owners appeared at the meeting to present their views. Three issues were raised in attempts to convince the Division that an emergency closure should not occur. First the State of Maine had not closed its fishery in response to a September 21 North Gulf of Maine closure of federal waters; hence, a Massachusetts closure would put other states' fishermen and processors at a disadvantage. Secondly, according to some present, herring had finished spawning. Third, it appeared to some that herring were more abundant at least close to shore, than in the past ten years; hence, quotas were not reflective of current abundance.

The Commission, at the Director's suggestion, postponed its decision to support an emergency closure until questions raised by those present could be answered and all pertinent information gathered. On the following day samples were taken from two Gloucester purse seiners to see if fish were still spawning. Over 95% of males and females examined were ripe and spawning. Interestingly enough, during sampling efforts, fishermen frequently commented that the fishery should have been closed three weeks sooner when spawning began. Additional comments from NMFS port agents documented continued spawning.

With regard to industry comments on increased abundance, a recent assessment (Status of sea herring fisheries off the Gulf of Maine-Georges Bank region by M.P. Sissenwine and G.T. Waring, February 1980) was reviewed and evaluated in terms of recent events in the fishery. According to the assessment, with catch in the Maine inshore fishery as an indication of year-class strength, the 1976 and 1977 year-classes would be strong contributors to the future of the western Gulf of Maine fishery, but the 1978 year-class would likely be small. The assessment concluded,

"Available information (biostatistical and survey) indicates that the Gulf of Maine herring fishery has begun its recovery from the depressed state of the late 1970's and will continue to rebuild this year as a result of the 1976 and 1977 year-classes unless the catch in 1980 increases sharply. Given the poor performance of the 1978 year-class in the inshore Maine fishery, these year-classes (1976 and 1977) may have to sustain the fishery through at least 1981."

Scientists predictions were being proven correct. In 1980 in the Gulf of Maine fishery (Jeffreys Ledge, Massachusetts Bay, Cape Cod Bay, Ipswich Bay, etc.) fish spawned in 1977 and 1976 made up 90% and 93% of landings (number of fish) in the February - March winter/spring pair trawl fishery and 50%, 73%, and 61% in the June-August purse seine fishery, respectively (data through August only). The majority of landings in the purse seine fishery had been from the 1976 year-class (June, 44%; July, 59%; August, 60%). Age 3 fish (1977 year-class) were small, immature, and probably not concentrated on spawning grounds. From July 1 - September 30, approximately 59% of the catch in the coastal Maine fishery had been of the 1977 year-class.

Since catches of age 3+ herring in the Gulf of Maine were in excess of the annual quota of 30,000 Mt (July 1, 1980 through June 30, 1981), prospects for the future could be dimmed particularly if the 1978 year-class did turn out to be small and the yet-to-be assessed 1979 year-class was also of low abundance. Landings of age 3+ herring for the North Gulf of Maine had been 20,551 MT (July 1 through September 30) and had been 13,331 MT (July 1 through September 15) for the South Gulf of Maine bringing the total to approximately 33,882 MT. Hence, the annual quota had already been exceeded in only three months of fishing. Non-tallied October landings and the yet-to-begin winter/spring pair trawl fishery were to boost the total further.

Considering the apparent accuracy of the predictions made by assessment scientists, Mr. Coates assumed that

quotas were reflective of current abundance and that continued catch of the Gulf of Maine stock could have an adverse effect particularly if the "great abundance of herring" close to shore in Massachusetts waters was caused by a concentration of available herring into a few places as opposed to abundance everywhere. It was also judged, after consultation with Council Staff, that even if the quotas could be increased by 25% (a possible response to the abundance of the 1977 year-class if the Management Plan was more flexible), the quota would still be exceeded.

Finally, while Mr. Coates appreciated fishermen's concerns over unrestricted catch of age 3 herring, as well as younger fish, in Maine's juvenile fishery, he could not keep Massachusetts waters open simply because Maine failed to close. In his opinion, that would not have been a responsible action.

According to Mr. Coates, the Division was a voting member of the Council, took part in the development of the Council Herring Plan (member of the Herring Oversight Committee), and voted to accept the Plan with its quotas and provision to deduct herring age 3 and older taken from territorial waters of New England and mid-Atlantic states from appropriate quotas. The Division could only encourage other states which voted to accept the Plan with all its provisions to take similar supportive action.

The Division's eventual decision was to implement an emergency closure. The Commission concurred with this decision. The October hearings were still to be held to provide the Director and Commission with future guidance on responses to federal closures and to initiate discussions on the desirability of spawning area closures from the fishermen's perspective and willingness to abide by them. Moreover, public comments on a proposal to require special permits for all mobile gear herring fishermen for Massachusetts waters were needed.

At both hearings there was little opposition to maintaining the State waters closure until December 1, Nor was there much opposition to the concept of spawning area closures provided they were not implemented just because fish were full of spawn. Fishermen felt that areas where fish were concentrated and "dropping their spawn" should be the only sites for closures. They also stressed that the timing and areas of spawning were variable from year to year and noted the unusual occurrence of spawning herring in Ipswich Bay as an example.

To set the record straight, one fisherman stated that no one had tried to mislead the Commission at its meeting

regarding the absence of spawning fish. On the day of the meeting, the Ida and Joseph and the Rockaway (two Gloucester vessels) landed approximately 300,000 lbs. of herring taken one half mile from Ipswich Bay; not one fish had spawn. However, the next day fish with spawn were caught again. It was emphasized that fishermen had great investments in gear, etc., and consequently, they wanted to see the herring fishery prosper.

With respect to special permits, there appeared to be a willingness to abide by the requirement that permits be obtained.

Georges Bank

While closures had occurred for 5Y North and South regions, no closure was expected for Georges Bank and South. Catches of herring on Georges Bank had been nonexistent. No herring could be found either by fishermen or scientists during surveys. As stated by NEFC scientists Dr. Michael Sissenwine at September, 1980 Council meetings, "Evidence certainly would be that the Gulf of Maine stocks are in better condition than Georges Bank. Certainly, the 1976 and 1977 year-classes have looked very good from all the evidence we have had. Historically, when the inshore coastal fishery has looked good, the Georges Bank stock has fared well also. A few years ago the 1976 year-class when it first showed up we were optimistic that tradition would hold true. To date, there is no evidence that that has occurred."

This lack of herring on Georges Bank raised further questions about stock structure and intermixing and whether Georges Bank herring could ever rebuild from earlier efforts of foreign fishermen. It also sparked requests for new stock assessments to provide the Council with guidance as to the appropriateness of its 30,000 MT Gulf of Maine and 15,000 MT Georges Bank and South OY's for 1981 and beyond. It was noteworthy that no formal assessment was performed in 1980 and as a result the size of the strong 1977 year-class was not factored into the 1980 OY.

New amendments

At October 29 and 30, 1980 Council meetings, the Chairman of the Herring Committee, Edward Spurr, related work on a new series of amendments to the Herring FMP. These developing amendments were: 1) real time spawning area closures in the Gulf of Maine during the fall; 2) a flexible OY system to change OY without going through the long amendment process; 3) a change from age to length as the basis for assessment and quota purposes.

At these meetings Spencer Apollonio was asked by Philip Coates why he felt Maine's Plan was consistent with that of the Council. Mr. Coates was concerned that Massachusetts was taking the role of the "good guys"; i.e., closing the fishery in Massachusetts water to be consistent with the Plan while fishing continued unregulated in other state's waters. In response, Mr. Apollonio stated that Maine's actions were consistent with the Council intent. He noted that one objective of the Herring Plan was to stabilize and rebuild the Maine juvenile fishery, and Maine's actions were not inconsistent with this objective. Mr. Apollonio also pointed out that the Maine juvenile fishery was a fixed gear fishery - not one directed towards adult fish which the Council was regulating. He stressed that the fixed-gear fishery was only taking what was available and that because of the nature of the fixed gear fishery, fishing mortality rate was constant, thus the fishery presented no problem to the well-being of the resource. He also noted that Maine tagging work was indicating that herring taken in Maine probably originated from the Bay of Fundy and western shore of Nova Scotia - not from the Jeffreys Ledge stock which was of concern to the Council.

Spawning area closure

On November 13, informational meetings were held in Gloucester, Rockland, and Portland to obtain industry input on a Council scheme to provide some protection for spawning herring. The Council was proposing to establish for next September/October discrete 5' X 5' areas on Jeffreys Ledge, and areas were to be closed for two weeks if after monitoring by State and/or Federal personnel and industry guidance, spawning herring (ripe and running) were present in great abundance. It was proposed that all groundfishing (except by fixed gear) would be excluded from closed areas. Areas for probable spawning area closures were identified beforehand after consulting purse seine fishermen from Massachusetts and Maine. It appeared that of those who attended the meeting, most were skeptical of effective monitoring, enforcement, and importance or meaningfulness of relatively small closed areas for short periods of time.

On November 25 the Advisory Subpanel of the Herring Oversight Committee met to make recommendations to the Committee on spawning area closure strategies as well as on the appropriate minimum fish size to be deducted from quotas (8, 9, or 10 inches?). The Subpanel did not support the proposed strategy for spawning area closures. Instead, it was recommended to the Council's Herring Committee that the entire Gulf of Maine be closed for herring fishing during October (except for fixed gear). Reasons for this recommendation were similar to concerns expressed at the informational meetings; that is, the scheme appeared unenforceable,

and it did not seem that small areas of closure would have much impact on successful herring reproduction and egg survival. The Subpanel also recommended to use 9 inches total natural length (tip of the snout to the very end of the tail) as the size of fish which should be deducted from the quota. While the Subpanel believed that 10 inches would be more in keeping with industry needs, particularly in the adult fishery, it was acknowledged that no regulation of herring under 10 inches (approximately four years of age) would probably lead to resource problems by continuing non-regulation of juvenile catch.

The Herring Oversight Committee met December 2 to discuss results of the informational meeting and Advisory Subpanel recommendations. After a great deal of debate, the Committee voted to accept the Advisory Subpanel's recommendation for the October Gulf of Maine closure. The vote was unanimous (one abstention). Before the vote, it was emphasized that the proposal to close the entire Gulf of Maine for all of October was not discussed at the recent informational meetings, and some of those in attendance would likely object to the seemingly abrupt change in Council position from limited spawning area closures prohibiting mobile gear groundfishing, to a wholesale closure with no restriction on groundfishing. However, the majority of Committee members felt that while that may have been true, the original Council scheme was in fact relatively unenforceable, probably ineffective, and would cause more problems than it would solve. Additionally, there would be other opportunity for public input on the "new" strategy before a final decision was made on the type of closure next fall.

It was mentioned at the Committee meeting that at least in Gloucester, purse seiner representatives, while concerned about the resource on which they were dependent, felt it unreasonable for them to stop fishing on spawning herring to protect unborn fish, when years later these same fish would be caught by Maine fishermen in a juvenile fishery with no quota. Recognizing the logic of this statement and the very large summer/fall catch of herring, the Committee began discussion to develop more realistic and appropriate objectives for the Council Herring Plan. In the opinion of many, those objectives had to address the need to manage juvenile and adult herring on a unified basis. Independent management of the adult and juvenile fisheries did not seem sensible.

The Committee also agreed to use 9" and greater herring (total length) as those fish to be deducted from the quota. The vote was 4 vs. 3 in favor of this strategy. The Committee also voted to remove the no-discard provision in the current Plan - not because it approved of discarding but because it considered the rule unenforceable. The vote was 6 vs. 1.

The New England Council at its December 3 and 4, 1980 meetings, voted to accept the Committee's recommendation for spawning area closures. Similar discussion and debate occurred. It was decided that in order to meet the strict timetable set up to get a spawning area closure system in place for fall of 1981 the Council had to take a stand and select a preferred option for an amendment to the Plan.

A controversial decision

At December Council meetings, the Regional Director stated that the summer/fall 5Y quota of 17,850 MT age 3+ had been exceeded. Total catch was approximately 35,000 MT. Consequently, he related:

"I am in a dilemma. My particular responsibility is to implement and administer FMPs. I find in no way am I able to turn around and justify the kind of catches in the summer/fall fishery. The total landings would be projected to exceed two years of OYs. No way can I recommend that the fishery continue. In fact I am making a recommendation to Washington that the herring fishery be closed for the remainder of the fishing year. I am making it with a few caveats. I am not prone to close the fishery. The closure would probably not be effective until the end of the month of January due to paper work and that there be no consideration of reopening the fishery in the future without some clearly established actions being taken. The first is an internal one within NMFS....that I be delegated field authority to close the fishery immediately. I can see very little ability from NMFS perspective to implement and carry out an FMP unless one of the two conditions occur. First we get a written commitment from the states to the effect that they will close the fisheries when the fisheries in the FCZ close or second, that the Secretary pre-empt states rights and that the Regional Director be given the authority to manage the fisheries in those waters. Without cooperation the herring plan is essentially non-operative and will be a bankrupt plan. The herring plan is a good plan and the Council made a lot of hard decisions when it put the plan together. The fact is that the plan is not being abided by. I feel compelled to take this action with considerable reluctance. If there is no commitment to resolve these problems, I am committed to closing the fishery."

Extensive debate ensued with no one supporting the Regional Director's position. Arguments against the Regional Director's recommendation were reflected in a correspondence between Philip Coates and the Regional Director. Reasons for opposition were:

- "1) The New England Council has previously amended its Sea Herring Management Plan to establish seasonal/area quotas for the Gulf of Maine region. This action represented an attempt, in part, to maintain historic access to fisheries in that region for various user groups along the New England coast consistent with National Standard 4 of the FCMA. A closure of the winter/spring fishery will unjustly prevent participants such as pair trawlers from harvesting historical shares in this economically important seasonal fishery. It will result in a severe disruption of the fishery and cause irreparable harm to the commercial herring industry of the Commonwealth.
- 2) The Herring Plan contains no provision whereby overages from one seasonal/area quota may be lawfully deducted from another seasonal/area quota. Pursuant to Amendment 3 of the Plan, overages are to be evaluated by the Council in reassessments of herring stocks and considered by the Council in future amendments.
- 3) The Plan's original intent was to favor the so-called adult fishery in the winter/spring period over that in the summer/fall period to take fishing pressure off and rebuild the Gulf of Maine stock which is more vulnerable during the summer/fall period. This has not happened and is attributable to increased availability and/or abundance of herring to fishermen in the summer/fall period brought about by a rapid rebuilding of the Gulf of Maine stock. A closure of the winter/spring fishery is not in keeping with original Council intent.
- 4) Results of this past summer/fall fishery have demonstrated that independent management of fisheries in the FCZ and state waters is ineffective in controlling resource removals and addressing needs and concerns of the Council, State governments and the herring industry. This ineffectiveness has prompted the Council at the Committee level to re-assess the Plan's objectives and to investigate an alternative approach to management of juvenile and adult herring. A closure of the winter/spring fishery at this time will serve no real purpose but to antagonize Council and State managers and the industry itself thereby creating an unproductive environment. At the State level, and federal as well, it will divert personnel and time from seeking answers to tough problems in order to justify or condemn past management actions or inactions. Surely, no one wishes to waste time and energy in bureaucratic and legal battles.

- 5) The present system for monitoring herring catches has proven to be very untimely. In a fishery such as that for herring where daily landings can be extremely large, even small delays in monitoring can be very significant. Until an alternate system is devised or management strategies are revised to de-emphasize the need for timeliness, quota overages will likely continue. The winter/spring fishery should not be penalized for overages created by untimely monitoring.
- 6) The Council is unsure of the condition of the Gulf of Maine stock at this time and it awaits results of an upcoming assessment working group meeting to be held in February. Additionally, a series of questions have been presented to the Oversight Committee by the Division regarding the appropriateness of the Gulf of Maine OY in light of recent events in the fishery. Answers have yet to be provided. Therefore, action to close the winter/spring fishery in response to a need to protect the resource would seem unwise."

Additionally, Spencer Apollonio commented on the recommended closures and defended, once again, his position on herring management in Maine (see letter).

More on spawning area closures

On January 12 and 13 the Council again held hearings to acquire public comment on spawning area closures. As a result of these hearings, at January 27 and 28, 1981 meetings, the Council adopted a strategy of an annual closure for all herring fishing in 5Y South from October 1-21 and that a prohibition on taking, processing, or landing herring occur when twenty percent or more of such herring contained ripe spawn during the same period as the annual closure in any other area.

An exception was made for herring caught on Georges Bank. The Council decided to authorize the Regional Director to issue permits to vessels in order to facilitate the development of the herring fishery on Georges Bank.

The spawning area closure was to be submitted to Washington as a separate Amendment (#4) to facilitate its implementation before October and the 1981 spawning season. The flexible OY and size limit to be used for quota and assessment purposes was to be addressed in a separate Amendment (#5).

SPENCER APOLLONIO, COMMISSIONER

TELEPHONE: 807-633-5573

STATE OF MAINE

DEPARTMENT OF MARINE RESOURCES

MARINE RESOURCES LABORATORY

WEST BOOTHBAY HARBOR, MAINE 04575

December 31, 1980

Allen E. Peterson, Jr.
Regional Director
National Marine Fisheries Service
Federal Building
14 Elm Street
Gloucester, Massachusetts 01930

Dear Allen:

Your decision to recommend the closure of the winter-spring herring fishery amply expresses your concern over the substantial catch of 3+ herring in the summer-fall period. Since approximately 60% of the catch of 3+ herring occurred in Maine waters, we must obviously consider this problem while developing our herring plan for 1981. I want to assure you that the state of Maine has no desire to contribute to the collapse of the stocks. We have too much at stake in the resource.

I have stated in Council session the situation we face in the Maine herring fishery. I will briefly review this for you. We have had a herring management plan in place for three years that establishes a quota on the mobile gear catch. The Council recommended that 10,470 MT of age 3+ herring be taken north of Cape Elizabeth during a 12 month period. They have further stated that for the summer-fall period, which is when our fishery occurs, age 3+ can be equated with 9" and larger. Maine's mobile gear quota for the calendar year was therefore set at 8,000 MT of 9" and larger. The remaining 2,470 MT were set aside to cover the catch of 3+ herring in the fixed gear, a level we felt was consistent with the long term average. In preparing this plan we attempted to conform as much as possible to the stated objectives and allowable catch levels of the Council plan and, indeed, until just recently we had received no adverse comment from the Council or NMFS on our management.

This year was an unusual one in that an extremely strong year class of three year olds was followed by a poor year class of two year olds. Although we expected the 1977 year class to be abundant in the fixed gear catch, we did not anticipate such large amounts. We intend to carefully examine the future impact of that catch on other fisheries and if we find our catch was unduly large with respect to year class size, we will take further steps to limit the fixed gear fishery.

We are now beginning to develop our management plan for 1981. Maine's herring management plan is rewritten each year to enable us to profit from our mistakes. Although we do not anticipate a repeat of the problems of 1980, we are looking for ways to ensure that the catch of age 3+ fish in Maine's fixed gear fishery is indeed proportional to year class abundance. We are now negotiating for a small NEFMC contract to cover our computer costs in examining this problem of catch by age by gear type in detail. At this time we could profit from input from the Herring Oversight Committee, the Council and your staff. We are particularly interested in suggestions on how to divide the 5Y north quota equitably between the fixed and mobile gear fisheries without causing economic devastation to either group of fishermen. The original Council plan did not address this problem since the management of the juvenile fishery was to be left to the state of Maine. Further, neither the state of Maine nor the Council has yet produced an adequate economic impact analysis of the consequences of placing a highly restrictive quota on either gear type.

Obviously, the best time to iron out potential problems in a plan is at the time it is being drafted and publicly reviewed rather than after it is implemented. We will welcome the opportunity to discuss mutual problems with your staff or that of the Council at any time during the course of our plan development.

Sincerely,

Spencer Apollonio

SA:PC

NMFS takes further steps

At February 24 and 25, 1981 meetings the Regional Director related NMFS new stance regarding closing the herring fishery for the rest of the fishing year (until June 30, 1981). Washington NMFS rejected the Regional Director's recommendation for the closure. Reason's for this rejection, along with new NMFS initiatives, were related in a February 23 correspondence from the Regional Director to the Council Chairman (see letter and Council response).

NMFS took the position that the Council had to take actions to resolve the problem of inconsistent regulation of the territorial sea fisheries. As stated in the Regional Director's letter, if by March meetings the Council did not take positive steps to address the problem, NMFS would consider a Secretarial Amendment to the Plan, preemption of state management authority, or reconsideration of NMFS decision to approve the Plan. According to the Regional Director, NMFS was ready to hold a Secretarial Hearing to determine which of those actions to take and was ready to suspend the herring regulations pending the hearing outcome.

To react to NMFS position, a working group was established to "discuss in greater detail this issue and to provide guidance to the Oversight Committee which was to meet prior to the next Council meeting and to bring recommendations back to the Council at that time."

Herring market changes

As of the end of February, the 12,000 MT 5Y quota for age 3+ herring had not been taken. An estimated 2,185 MT had only been landed. Reasons for these reduced catches centered on a lack of an overseas market for filleted herring.

A Council inquiry and states' responses

To respond to NMFS insistence that the Council address inconsistent herring management in all state waters, the Council acted on Working Group and Committee recommendations at its March 24 meeting. The Council voted to send a letter to each of the states to determine how each state was prepared "to support the effective implementation of the Atlantic Herring FMP in their respective territorial waters."

NMFS, dissatisfied with this Council approach, decided to hold Secretarial Hearings anyways. According to the Regional Director, "Clearly the letter does nothing as far as NMFS is concerned."

#7 - 2/24/81

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
 NATIONAL MARINE FISHERIES SERVICE
 Northeast Region
 Federal Building, 14 Elm Street
 Gloucester, MA. 01930

February 23, 1981

MANA000 1434-337474
 Mr. Robert A. Jones
 Chairman, New England
 Fishery Management Council
 Suntaug Office Park
 15 Broadway
 Saugus, Massachusetts 01906

Dear Bob,

At the New England Fishery Management Council's December meeting, I advised the Council of my intention to recommend closure of the Gulf of Maine herring fishery because the optimum yield for the fishing year has been exceeded. I reviewed my recommendation with Terry Leitzell, Assistant Administrator for Fisheries, and William Gordon, Director, Office of Resource Conservation and Management, and we concluded that Section 2.6 of the herring fishery management plan (FMP) does in fact prevent us from taking the recommended action. Further, we determined that such an action would not resolve the problem arising from inconsistent regulation in the territorial sea fishery and could further contribute to the breakdown of cooperative management of this regional resource. However, we are still concerned about the excessive harvest levels and are prepared to take other actions that are available to us to address these apparent inadequacies of the FMP. We are aware that the herring FMP was the first plan prepared by the Council and its staff and prefer that the Council address the problems.

We believe that the intent and definition of Section 2.6 should be clarified. As presently written, this section coupled with a lack of an effective corresponding management regime in the territorial sea fishery prevents us from limiting the harvest to the levels prescribed in the FMP for the various fisheries. Consequently the plan does not permit compliance with national standard 1. I strongly urge the Council through whatever means possible to identify solutions to these problems in order to make herring management effective and equitable as intended.

This is an urgent matter that must be addressed before the end of this fishing year; therefore, I would like the Council to take some positive actions towards resolving the problem by the March meeting. If the Council is unable to do this, The National Marine Fisheries Service (NMFS) is prepared to take positive action to address these problems. We will consider a number of options including Secretarial amendment, preemption of State management authority or reconsideration of our decision to approve the plan. NMFS is ready to hold a hearing under Section 305(b) of the Act to determine which of these actions to take and to suspend the herring regulations under Section 305(b) (B) pending the outcome of the hearing.

I hope that the Council will be able to address this matter in a meaningful and constructive fashion and I am prepared to assist the Council in every reasonable way in doing this.

Sincerely yours,

Allen E. Peterson, Jr.
 Northeast Regional Office, NMFS

NEW ENGLAND FISHERY MANAGEMENT COUNCIL

SUNTAUG OFFICE PARK, 5 BROADWAY (ROUTE 1)

SAUGUS, MASSACHUSETTS 01906

FTS 8-223-3822

SAUGUS 617-231-0422

March 26, 1981

Mr. Allen E. Peterson, Jr.
Regional Director
National Marine Fisheries Service
Federal Building - 14 Elm Street
Gloucester, MA 01930

Dear Allen:

The Council has reviewed your letter of February 23, and, in view of the significant levels of harvest in excess of the quotas thus far in fishing year 1980-1981, shares your concern for effective implementation of the Atlantic Herring FMP. The Council recognizes that inconsistencies between state and federal management regulations may be particularly problematic for a fishery such as herring where catches may accumulate rapidly during prime seasonal periods. Further, the Council acknowledges and reaffirms its long-standing position regarding the importance of securing consistent state and federal regulatory regimes for achievement of the herring management objectives in compliance with the requirements of the MFCMA.

The issue of compatible state and federal management regulations has been of continuing concern to the Council. The Council first stated its position regarding the need for cooperative state regulatory action in Section 3.3.4 of the original Herring FMP, and reiterated that position in the context of an expanded management unit in Section 4.2.2 of Amendment 3 to the FMP. Therefore, consistent with its earlier action and in furtherance of its desire to promote effective implementation of the Atlantic Herring FMP, the Council passed the following motion on March 24, 1981:

"The Council reaffirms its position with regard to the need for appropriate state management measures, consistent with the provisions of the Atlantic Herring FMP, as stated in Section 4.2.2 of Amendment #3, and requests that the States of Maine, New Hampshire, Massachusetts and Rhode Island give evidence to the Council as to how they are prepared to support the effective implementation of the Atlantic Herring FMP in their respective territorial waters."

The states will be asked to respond to the Council's request in a timely manner, and that response will be evaluated by the Council both in the context of the current management program as well as in recognition of planned action to amend the FMP.

As you are aware, the Council has continued to monitor various aspects of the herring management program, and is concerned with an apparent need to refine the basis for implementing its quota system. Currently under development, Amendment 5 to the FMP will contain two proposed actions to modify the basis for establishing annual quotas, as well as the basis for implementing them. First, an annual quota adjustment mechanism will be established, and second, quotas will be implemented on the basis of size instead of age. These actions will make annual quotas automatically responsive to current resource conditions (accounting for previous levels of catch) and simplify the procedures required for tallying catches during a fishing period.

With its action in Amendment 3 to extend the herring management unit to include all herring resources from the shoreline out to the outer boundary of the FCZ, the Council recongized that it would be difficult to reconcile the FMP's quota management system (designed principally for mobile gear) with the unique characteristics of the fixed-gear juvenile herring fishery. Wishing only to directly control the catch of age 3 and older herring, the Council in Section 4.2.2 of Amendment 3 suggested a procedure to account for the incidental catch of these age groups in the fixed gear without jeopardizing the continued catch of juveniles aged 1 and 2. Implemented by the State of Maine, the procedure was not responsive to the unprecedented availability and catch of the 1977 year class (age 3) in Maine's 1980 fixed gear fishery. The latter contributed to the apparent excessive catch of age 3 and older herring relative to the 5V North summer/fall quota. The Council does not see this specific overage as either necessarily presenting a problem for the resource or being addressable through a straightforward institutional agreement. The problem is complex and is being technically reviewed by the Council's Herring Assessment Working Group. Pending formal resolution of this problem through the plan amendment process, the Council will provide interim guidance to assist the Secretary in effectively implementing the seasonal quota in 5V North for the 1981-1982 fishing year.

The intent of Section 2.6 in Amendment 3 is to assure historical access to the fishery by seasonally and geographically identifiable user groups. The Council's policy in this regard is not expected to change. Further, modification of Section 2.6 to allow for within-year adjustments in quotas when early overages are encountered is not considered to be an appropriate response to the general problem of excessive harvests. Rather, the Council believes that the actions outlined above, including the motion transmitted herein, will serve to meaningfully address our shared concerns for the effective implementation of the Atlantic Herring FMP.

Sincerely yours,

Robert A. Jones
Chairman

RAJ/GM/pp

The letter and state responses are indicated here. In summary, Maine stated it had recently completed its proposed management plan for the 1981-1982 season, and Maine's plan would be "completely consistent" with the Council's. Maine was proposing to redefine its mobile gear quota as age 3+ rather than 9" and longer, to include circle sets as mobile gear - not fixed gear - and to close any portion of the fixed gear fishery which conducted a directed fishery for age 3+. New Hampshire expressed its intent to hold hearings in August to establish a management program for herring which would include spawning closures, gear size restrictions, and a quota based on the Council's OY. Massachusetts repeated its record of past support for the Council's Herring Plan and its intention to continue to consider Massachusetts industry insights and concerns at public hearings and other states' responses to future federal waters closures before deciding whether to close. Rhode Island stated that it "had acted in a very responsive and responsible manner". According to that state, its plan "permitted orderly management of the Rhode Island sea herring fishery in response to changes in the Council Plan."

Secretarial Hearing

On May 22 the Secretarial Hearing was held and the various states and the Council presented testimony (included here). The Council's position was that its plan had served three functions: 1) acted as a framework for effective conservation and management of the New England U.S. Coast herring resources 2) reflected a commitment on the part of both industry and state and federal governments for responsible action in the best long-term interests of all parties; 3) acted as a forum for the constructive process of evolving regional management policy mediating different regional perspectives and was responsive to new developments in the industry. The Council (as a whole) stated it was generally satisfied with the individual state responses but that its final position on the various state programs had not been set especially since the Maine 1981 Plan was still a draft and New Hampshire had yet to design a plan. The Council concluded by stating its belief that "the Atlantic Sea Herring FMP has contributed significantly to effective resource conservation and management. Moreover, the FMP reflects an unprecedented degree of state, federal, and industry cooperation which can be expected to result in a successful long-term management program." Further correspondence (June 23) is included here.

Massachusetts began its testimony by expressing its displeasure with its being included as a state with a lack of commitment to adhere to management measures of the FMP. Massachusetts closed its fishery on October 14, only nine days after the federal closure. It emphasized that it did not wish to see the Plan suspended and noted that at least

#10 - 7/1/81

NEW ENGLAND FISHERY MANAGEMENT COUNCIL

SUNTAUG OFFICE PARK, 5 BROADWAY (ROUTE 1)

SAUGUS, MASSACHUSETTS 01906

SAUGUS 617-231-0422

FTS 8-223-3822

June 23, 1981

Mr. Allen E. Peterson, Jr.
Regional Director
NOAA/NMFS
Fed. Bldg., 14 Elm St.
Gloucester, MA 01930

Dear Allen:

I appreciate the opportunity to reiterate and further elaborate on the testimony I gave before the Secretarial Hearing on the Atlantic Herring FMP on May 22. I request that this letter be entered as part of the record of those proceedings.

As Chairman of the Council's Herring Oversight Committee, it is my belief that the Atlantic Herring FMP has served three important functions. First and foremost, the FMP has served as a framework for effective conservation and management of the herring resources off the northeast coast of the United States. Upon its implementation in 1979, the FMP imparted both structure and coherence to the program of rebuilding the Gulf of Maine and Georges Bank herring stocks, and has subsequently provided a rational basis for the long-term management of these resources. Second, the Atlantic Herring FMP and the ongoing process of continuing management reflect a commitment on the part of both industry and state and federal government for responsible action in the best long-term interest of all parties. Few other management programs have benefitted from the same multilateral cooperation that has characterized the herring management program and which holds promise for continued effective management in the future. Third, the Atlantic Herring management program provides a forum for the constructive process of evolving regional management policy which mediates among differing regional perspectives and is responsive to new developments in the industry. The continuing existence of a fully operative FMP is, in my view, vital to assuring the continuing support of the industry and is an essential ingredient in the timely development of management measures which will improve the effectiveness of the overall management program.

In its letter of March 26, the Council stated a shared concern with NMFS for the effective implementation of the FMP in consideration of the quota overages in the summer/fall 1980 fishery. In that letter the Council reiterated its position that cooperative state action is essential to the effectiveness of the FMP, and subsequently requested that the states provide the Council with evidence as to how they are (or might be) prepared to support the effective implementation of the Atlantic Herring FMP in their respective state waters.

On May 19 the Oversight Committee had the opportunity to review the various state responses which included: 1) the draft 1981 Maine Herring Plan; 2) a statement of Intent from New Hampshire; and 3) the existing pertinent regulations and management plan of the states of Massachusetts and Rhode Island, respectively. I testified before the Secretarial Hearing on May 22 that based upon its initial review, the Council was generally satisfied with the individual state responses. However, in recognition of the draft status of the Maine plan and action underway by New Hampshire to develop a plan, a

final Council position on the various state programs will be forthcoming. In that regard, I believe that the view is generally held by Council members that the terms "consistent" and "compatible", when applied to state management regulations in relation to those regulations implementing the Council FMP, should not necessarily imply a need for duplicate regulatory language or even management measures specified in exactly the same way. An interpretation which recognizes special circumstances and the institutional limitations of existing regulatory authorities will be applied by the Council in its continuing evaluation of the relationship between state programs and the FMP.

Apart from the issue of the interjurisdictional compatibility of management measures, the Council has recognized various shortcomings in the plan which are associated with the basis for specifying and implementing annual quotas. To some extent, I believe that these shortcomings contributed to the interpretation that the quota overages witnessed in 1980 were problematic for the resource and brought into question the effectiveness of the management program. Indeed, the inflexibility of the annual quotas specified in the Plan, in the face of unusual resource circumstances, apparently led to equally inflexible management expectations regarding the achievement of Optimum Yield. By way of the measures under development to amend the FMP (No. 5), noted in the March 26 letter, the Council expects to make the FMP quotas more responsive to current trends in resource abundance, without jeopardizing long-term benefits from harvesting and use of the herring resource. At the same time, these actions can be expected to improve both the credibility of the management program, as well as the basis for evaluating the efficacy of the FMP.

With the assistance of the scientific community (Herring Assessment Working Group), the Committee is continuing its efforts to understand the relationship between the region's juvenile and adult herring fisheries. Specifically, the Committee will be considering the appropriateness and desirability of extending management to the fixed gear juvenile fishery, and irrespective of any decision in that regard, clarifying the terms of reference in the FMP to better define the management unit.

In conclusion, I believe that the Atlantic Herring FMP has contributed significantly to effective resource conservation and management. Moreover, the FMP reflects an unprecedented degree of state, federal and industry cooperation which can be expected to result in a successful long-term management program. I believe that efforts underway by the Council, the states and NMFS will improve the overall effectiveness of the plan, while successfully addressing our current concerns. I urge that no action be taken by the Secretary to withdraw approval from the FMP or suspend its implementing regulations, and that herring management be allowed to proceed within the Council process. Further, I urge that no pre-emptive action be initiated at this time toward any state.

Sincerely,

Edward W. Spurr
Chairman
Herring Oversight Committee

IDENTICAL LETTER SENT TO EACH STATE

April 8, 1981

Mr. Charles E. Barry
Executive Director
New Hampshire Fish & Game Dept.
34 Bridge Street
Concord, NH 03301

Dear Mr. Barry:

The issue of complementary state and federal management regime for Atlantic Herring has been of continuing concern to the New England Fishery Management Council. This Council first articulated its position in regard to the need for cooperative state regulatory action in section 3.3.4. of the original herring fishery management plan (FMP), and reiterated that position in the context of an expanded management unit in section 4.2.2. of Amendment #3 to the FMP (see attachment).

Consistent with these actions and in furtherance of the promotion of consistent and effective implementation of the Atlantic Herring FMP, the Council adopted the following motion at its March 24, 1981 meeting;

"The Council reaffirms its position with regard to the need for appropriate state management measures, consistent with the provisions of the Atlantic Herring FMP, as stated in section 4.2.2. of Amendment #3, and requests that the states of Maine, New Hampshire, Massachusetts and Rhode Island give evidence to the Council as to how they are prepared to support the effective implementation of the Atlantic Herring FMP in their respective territorial waters."

In response to the above I respectfully request that you inform the Council of your state's present and planned future management measures for the Atlantic Herring fishery within the territorial waters. The Council will then evaluate your response for consistency in the context of existing management programs as well as in the recognition of anticipated action to amend the FMP. As the Council staff is currently engaged in the preparation of support documents for Amendment #5 to the Atlantic Herring FMP, we would appreciate a reply by May 15, 1981. Thank you for your cooperation.

Sincerely,

Robert A. Jones
Chairman

EMS/1

STATE OF MAINE

DEPARTMENT OF MARINE RESOURCES

MARINE RESOURCES LABORATORY
WEST BOOTHBAY HARBOR, MAINE 04575

APR 28, 1981

Mr. Robert A. Jones, Chairman
New England Fishery Management Council
Suntaug Office Park
5 Broadway (Route 1)
Saugus, Massachusetts 01906

Dear Mr. Jones:

This is in reply to your letter of April 8, 1981 in which you request that I inform the Council of Maine's "present and planned future management measures for the Atlantic herring fishery within the territorial waters."

We have recently completed and mailed our proposed herring management plan for the 1981-82 season (see attached copy). The differences between last years plan and this are outlined in the covering memo dated April 16, 1981. You will note that our management in Maine's territorial waters in 5Y South is now completely consistent with the Council's. Notable changes in 5Y North include redefining our mobile gear quota to "age 3 and older" rather than 9" and larger; the inclusion of circle set under mobile gear; and the contingency measure to allow closing any portion of the fixed gear fishery which is conducting a directed fishery for age 3+. We feel that we will not have excessive overruns.

I should point out that our plan must go to public hearings for comment on June 2 and 4, and that by law we must allow a ten day period for written comments after that. Sometime in mid-June I will meet with my Advisory Council to finalize the plan. I would appreciate comments from the Council before that time.

Sincerely,

Spencer Apollonio

April 16, 1981

The Maine Department of Marine Resources is proposing a herring management plan for the state's territorial waters for the period June 1, 1981 to May 31, 1982. The proposed plan is a continuation of the herring management policies begun in 1978, but with several important changes. These changes are:

South of 43°34' N (Cape Elizabeth) - 5Y South

1. The mobile gear quota transfer provision from 5Y north to 5Y South will not be allowed this year.

2. A herring spawning closure (total prohibition on the use of mobile gear for herring fishing) will be in effect from October 1-21.

North of 43°34' N - 5Y North

1. A prohibition on the use of pair trawls, otter trawls and midwater trawls for herring fishing.

2. The addition of ring nets^(circle set) under the definition of mobile gear.

3. A closed season, all gear, from December 1, 1981 to May 31, 1982.

4. The mobile gear quota is changed from 9" and larger to age 3 and older.

5. The spawning closure tolerance is reduced from 25% to 20%.

6. No exclusion is made for purse seine catches east of Cutler after October 15.

7. The fishing year is changed from January 1-December 31 to June 1-May 31.

8. A contingency measure to allow the Commissioner to hold a public hearing to consider closing any portion of the fixed gear fishery which is conducting a directed fishery for age 3 and older herring.

A copy of the proposed plan is enclosed. Please examine it carefully, especially in regard to the proposed changes. Your written comments are solicited, and should be mailed to: Spencer Apollonio, Commissioner, Maine Dept. of Marine Resources, State House, Station 21, Augusta, Maine 04333 before May 8, 1981. Public hearings are planned for early June:

June 2 - 7:00 p.m. - Ellsworth, Council Chambers, Ellsworth City Hall.

June 4 - 7:00 p.m. - Brunswick, Court Room, Municipal Building, 28 Federal Street

The concise summary of the proposed plan is as follows: Repeal and replace 1980 Herring Regulations:

For Maine's territorial waters south of 43°34' N: a mobile gear quota closure whenever such closure is in effect for the federal waters in 5Y South; quota periods to correspond to the federal, December-March, April-June, July-November; a total prohibition on the use of mobile gear from October 1-21 (herring spawning closure).

For Maine's territorial waters north of 43°34' N: a prohibition on herring fishing with pair trawls, otter trawls and mid-water trawls; no quota on weirs, stop seines and floating traps; all other gear types, a quota of 8,000 MT age 3+ with 25% tolerance by volume when the quota is reached; plan to be in effect from June 1, 1981-May 31, 1982 with a closed season from December 1, 1981-May 31, 1982; no mobile gear fishing for herring containing roe or milt from September 1-November 30, with 20% tolerance by volume allowed.

STATE OF NEW HAMPSHIRE

FISH AND GAME DEPARTMENT

Box 2003
34 Bridge Street
Concord, N.H. 03301
(603) 271-3421

April 23, 1981

Mr. Robert A. Jones, Chairman
New England Fishery Management Council
Suntaug Office Park
5 Broadway (Route 1)
Saugus, Massachusetts, 01960

Dear Sir:

The State of New Hampshire is in full agreement with the New England Regional Fishery Management Council's position on the need for cooperative state regulatory measures implementing FMP's within the territorial sea. Consistent with this, we are scheduling marine regulatory proceedings for August of this year to consider management of the Atlantic herring fishery and other coastal matters.

It is our intention to implement a state herring management plan at that time, which will include the proposed 21 day October spawning closure, gear size restrictions and a flexible OY mechanism, based on the OY of the FMP, that will allow us to regulate the fishery in close cooperation with both state and federal fishery management agencies.

Sincerely

Charles E. Barry
Charles E. Barry,
Executive Director

CEB/kcl

PHILIP G. COATES
DIRECTOR

The Commonwealth of Massachusetts
Division of Marine Fisheries
Leverett Tilton Hall State Office Building
100 Cambridge Street
Boston, Massachusetts 02202

May 6, 1981

Mr. Robert A. Jones, Chairman
New England Fishery Management Council
Suntaug Office Park
5 Broadway (Route 1)
Saugus, MA 01906

Dear Bob:

In response to your April 8th letter requesting information on Massachusetts' present and future herring management measures, Massachusetts has demonstrated its record of support for the Council's Sea Herring Management Plan. Sea herring regulations (attached) governing the fishery in Massachusetts territorial waters were implemented on October 18, 1979. These regulations defined State waters management areas, set incidental catch provisions, and established procedures for closures which have subsequently been used on two occasions (October 1979 and 1980) to close the fishery in our Northern Massachusetts Management Area.

Unlike Council regulations which oblige the Regional Director to close FCZ fisheries in attempts to keep catch within area/period quotas, Massachusetts regulations give me the option to close or keep the fisheries open. I have used this flexibility to acquire industry insights and concerns at public hearings and to consider other states' responses to federal waters' closures. I intend to continue this procedure with future FCZ closures.

Planned future management measures include those being considered by the Council; i.e., possible spawning area closures in territorial waters and adoption of a nine inch (total length) and larger herring as those to be counted against the Council quota. I am receptive to any strategy that benefits the resource and simplifies management.

As you know, Bob, I have become increasingly concerned about the effectiveness of the Herring Management Plan and the various states' abilities or desires to comply with management provisions contained therein. Furthermore, I am concerned that the present Plan does not adequately address such issues as the current and future levels of juvenile harvest, the variability of the world herring market and its effects on domestic harvesting and processing capacity, and, of course, the role of herring in maintaining an adequate forage base.

I hope the states' responses to your inquiry, as well as input from the upcoming Secretarial hearings, begin to identify the best course for management of herring in state as well as federal waters.

Sincerely,

Philip G. Coates
Director

COUNCIL RECOMMENDATIONS

May 28, 1981

Mr. Allen E. Peterson
Regional Director
National Marine Fisheries Service
Federal Bldg., 14 Elm St.
Gloucester, MA 01930

Attn: Herring Comments

Dear Allen:

This letter is in response to your request for comments concerning the effectiveness of state and federal herring management regulations. I have enclosed a copy of the R. I. sea herring management plan, which was adopted by the R. I. Marine Fisheries Council on December 18, 1979. I have also enclosed a copy of the statutory powers and responsibility of the R. I. Marine Fisheries Council.

The present R. I. plan permits orderly management of the territorial sea herring fishery in response to changes in the N. E. Council FMP. The R. I. FMP also permits the R. I. Council the flexibility to limit catches or immediately close the fishery, if warranted. Although there are several facets of the R. I. FMP which do not completely agree with the N. E. Council FMP, the basis for management remains essentially the same. The State of Rhode Island was the second coastal state to implement a state FMP in support of the N. E. Council Plan and, therefore, it is my opinion that the State has acted in a very responsive and responsible manner.

It is my opinion that the N. E. Council FMP should continue to regulate the fishery in the FCZ. I oppose in principle any action which may be initiated to preempt state statutory authority. The present state-federal management framework has numerous shortcomings, but should be viewed as a continuing program, which is improving on a yearly basis. In addition, I oppose suspension in whole, or part, of the N. E. Council FMP.

Two areas in particular do warrant additional analysis and discussion. First, the Regional Director should be delegated the authority to initiate immediate fishery restrictions, or other modifications to the FMP, based upon a Council recommendation. Secondly, the implications and merits of a quota on juvenal herring should also be evaluated by the Northeast Fishery Center.

Thank you very much for the opportunity to comment on the proposals.

Sincerely,

John M. Cronan
Chief

JMC/DB:dh
Enclosure

PHILIP G. COATES
DIRECTOR

The Commonwealth of Massachusetts
Division of Marine Fisheries
Leverett Saltonstall State Office Building
100 Cambridge Street
Boston, Massachusetts 02202

727-3193

May 21, 1981

Mr. Allen E. Peterson, Jr.
Regional Director
National Marine Fisheries
Service
14 Elm St., Federal Bldg.
Gloucester, MA 01930

Dear Allen:

We wish to present our views on management of the sea herring resource in federal and states' waters and to advise the National Marine Fisheries Service on action it should take to respond to "inconsistent management of the herring fishery within state waters".

First, let the record be clear that Massachusetts has repeatedly demonstrated its support for the Council's Herring Plan. Massachusetts sea herring regulations, implemented on October 18, 1979, were designed to assist the Council meet its goals for sea herring management. Regulations defined Massachusetts Management Areas, set incidental catch provisions, and established closure procedures which were used on two occasions to close the fishery in territorial waters north of Cape Cod shortly after FCZ closures. We do not appreciate inclusion of Massachusetts within the category of "states with a lack of commitment to adhere to management measures of the Herring FMP".

Questions you raise are similar to those asked by us on past occasions. For example, in November, 1980 correspondence, we asked the Herring Oversight Committee to address the impact of the Maine juvenile fishery on the Council's Herring Plan; that is, was catch of age three and older fish in fixed gear proportional to year-class availability and abundance thereby indicating no need for restraint on catch of those age groups in that fishery, or was it otherwise? We also asked if the 30,000 metric ton Gulf of Maine OY of age three and older herring was an underestimation of what could be removed from the stock with some rebuilding. Answers to our questions were not possible until results of the Herring Assessment Working Group were available. We understand a report of the Working Group's meetings will soon be completed, and we hope it provides you and us, as a state and member of the Herring Oversight Committee, with guidance for decisions on the best course for management of herring.

We do not wish to see the Herring Plan suspended, "pending implementation of some action to make it better". This year, abundant 1976 and 1977 year-classes, which make up the majority of the spawning stock, will be readily available to mobile gear fisheries from Maine to Massachusetts. By suspending the Plan, the potential for further large catches of these year-classes exists. Also, fishing on spawning concentrations of herring this fall could be intense, if not for food, then for reduction. I do not believe we wish to risk depletion of the Gulf of Maine resource to levels which are now observed on Georges Bank and in other areas of the world.

You will probably argue that the Council had quotas in 1980, and they were greatly exceeded; therefore, what is to prevent the same situation from occurring this year? First, with better monitoring of the fishery and a willingness on the Regional Director's part to anticipate quota attainment, more timely FCZ closures can be implemented. As you know, in 1980, federal closures lagged far behind landings data. For example, in late September your office learned that South Cape Elizabeth catch of age three and older herring was approximately 11,000 metric tons as of August 31. A closure was scheduled for October 5; thus, the entire month of September and first week of October

were open to fishing even though the quota was already exceeded by 2,000 metric tons as of the end of August. September's catch was approximately 4,800 metric tons in the western Gulf of Maine fishery.

Secondly, New Hampshire has recently stated its intention to regulate its fishery in close cooperation with other states and the Council. If their intent is carried out, unrestricted fishing in New Hampshire territorial waters this late summer and fall should not occur.

For Massachusetts, we intend to continue our support for the Council Plan. For example, future management measures include those being considered by the Council; that is, spawning area closures and a possible adoption of a year-round nine inch and larger herring as those to be counted against the Council quota. Regarding future closures, we intend to continue our past policy of holding public hearings to listen to industry viewpoints and concerns and to consider other states' responses to FCZ closures. We do not rule out emergency closures prior to hearings, however.

The only unanswered question pertains to control of catch of age three and older herring in Maine waters. While we appreciate difficult problems of Maine to regulate its juvenile fishery any further, Maine should realize the problem this situation creates for the Council and other states, especially Massachusetts. From July 1 through November 30, approximately 19,261 metric tons of age three and more significantly, 7,154 metric tons of age four and older herring were reportedly taken in fixed gear of Maine's coastal fishery for a total of 26,580 metric tons. The fishing year's North Cape Elizabeth quota was 10,470 metric tons. Consequently, the 2,470 metric tons set aside by Maine as an allocation "to cover the usual amounts of age three and older herring taken in fixed gear" was inadequate for 1980. We are concerned that this situation will repeat in future years, and it might repeat as early as 1982.

When the FCZ fishery is closed this summer - fall, it is our intention to close, but if we do, a continuance of our closure will be contingent upon NMFS capability to prevent continued fishing and quota overages in other states' waters. We cannot keep our waters closed when it serves to impact Massachusetts fishermen and processors inequitably.

In conclusion, we do not feel that NMFS or Massachusetts concerns will be addressed and resolved by Plan suspension at this time. It is too early for such a drastic action. We much prefer that you wait and allow the Council to reconcile the objectives of its plan, which are being re-examined now, with those of other states. All plans' objectives must be compatible; otherwise, there is no sense for the Council to manage the resource and its fisheries as it currently does.

Sincerely,

Philip G. Coates
Director

STATE OF MAINE TESTIMONY

Maine is in support of the present herring fisheries management plan that addresses removal of adult fish by mobile gear. We recognize that successful implementation of the plan depends to a great extent on proper coordination with state policy, and we feel that this can be achieved.

As evidence for this support we have submitted for you the proposed 1981 Maine herring management plan which has been significantly modified over the previous three years of the Maine herring plan to address some of the problems of those last years.

Let me remind you first of all that Maine was the first entity to have a herring management plan. Let me briefly summarize the actions in the proposed plan that are intended to improve coordination with the Regional Council, FMP.

First, 5Y South the herring fishery within Maine's territorial waters will conform exactly to the measures specified for the FCZ. Second, in 5Y North Maine's plan will conform to the size or age that is defined by the Council as adult herring for the purpose of mobile gear quotas.

The 1981 Maine plan calls for age three plus in accordance with the present FMP. That is changed from our existing situation, but we would go back to the 9 inch, which we prefer, if so recommended in Amendment 5 of the Regional Council plan.

We would like to recommend that the 9 inch minimum size be implemented by the Secretary under emergency regulations. Considering that the Council intends to go to 9 inches with the next amendment, and that Maine is currently using 9 inches it would avoid confusion which contributed significantly to last year's problem, avoid the confusion resulting from both of us changing regulations.

Third, Maine is taking additional measures to make sure that the mobile gear quota is adhered to. The practice of circle setting with stop seines that appeared for the first time last year and contributed significantly to the age three plus catch in Eastern Maine will be defined as mobile gear, and thus the catch will be counted against the quota.

The prohibition of non-traditional types of gear such as pair trawling, and the Department's contingency powers to close portions of the fixed gear fishery, all of which are included in the proposed plan and are designed to improve the state's control over the removal of age three plus herring.

Maine is opposed to the removal of the FMP, or deregulation, by the Secretary. We feel that the plan is workable, that it addresses problems that need to be addressed, and to remove it would significantly increase the risk of depleting the stocks.

We, of course, are opposed to Federal pre-emption of herring management in our territorial waters, or those of any other state. We feel that neither requirement for pre-emption specified under Section 306 of the Act is met.

First, most of the fishery for herring is conducted within the state's waters -- Maine, New Hampshire and Massachusetts -- and not within the FCZ, which is clearly contrary to the first condition under which pre-emption can take place.

Second, we believe the record shows that Maine's herring management plan is and always has been an attempt to support regional management policy.

Maine does not intend to establish catch levels for herring taken in its fixed gear, although a deduction is made from the OY in the 5Y North to account for the expected catches of age three plus fish in the fixed gear. There are a number of reasons for this policy.

The first is that the stated Council policy is not to establish catch levels for one and two year old herring because of the passive nature of the fixed gear. Amendment 3, sections 3.2.6.1 and FMP Sections 2.3.1.3 refer to that situation.

We feel that this assumption that the fixed gear is a passive fishery is still valid, and we intend to monitor both the amount and type of effort used in fixed gear fishery to insure that this assumption remains valid.

Another reason is that there is no reliable biological method of establishing the year class strength of two year old herring recruiting to the fishery, and therefore no reliable data upon which to establish catch levels for that fishery.

The third reason is the Maine herring fishery is a very complex one with at least seven distinct user groups and with fishing methods that differ significantly from those to the south. The existing FMP was developed to address primarily the 5Y south fishery, and it was therefore tailored toward those user groups and those seasonal fisheries.

If the Council desires that the State of Maine take further action to curtail such gear fishery, the consequences of those measures must be closely examined through a complete economic impact analysis.

Maine does request that prior to a possible closure by the National Marine Fisheries Service in 5Y North, the National Marine Fisheries Service liaison should meet with the department staff and be briefed on what is actually occurring in the herring fishery, that is to say, what is occurring in Maine in the herring fishery.

It is our observation that there has been a great deal of misunderstanding about what has occurred in the Maine herring fishery. And I would also indicate that Maine would not attempt to comply with the OY unless a detailed assessment is done each year.

I would like to point out that I think one of the problems that occurred last year was due to a nearly totally unexpected phenomenon, that is to say, an unexpected occurrence of a very large year class of three year olds in the territorial waters, and therefore available to the fixed gear. Nobody foresaw this problem, there was no provision for such an eventuality, and because of that experience I think it's essential that an assessment be provided each year, so that if necessary plans can be adjusted to take care of such contingencies or such eventualities.

I would like to comment upon one point which is included in the discussion paper, on page 6 at the bottom, under the section Summary of the landings at the Gulf of Maine herring fishery. The statement, there is a statement that the State of Maine, I am quoting, "The State of Maine took no action to restrict or limit harvest of age three plus herring from the waters under its jurisdiction."

For the record, I would like to point out that as for the previous two years Maine, in 1980, was operating under a legally promulgated herring management plan, and that any closure at that time under the circumstances outlined here would have been illegal, contrary to Maine law, according to the Maine herring plan.

This is one of the problems that arose last year, and it arose because of the lack of assessment and the lack of anybody anticipating the possible very large occurrence of that particular year class close in shore. But just as the discussion paper points out that it would have been illegal for the Regional Director to close the winter-spring fishery in 1981, so would it have been illegal for the State of Maine to close the fall fishery under the terms which prevailed at that time.

As I say, the very large and unexpected occurrence of that particular year class was one of those circumstances. Another circumstance, of course, was the discrepancy between the criteria for determining adult fish under the Maine plan, 9 inches, and then the Council plan of 3 plus years. And, again, the fact that we had a legally promulgated plan which went through the review and the public hearing process with no adverse criticism from anybody.

two causes of the summer-fall fishery overage were being addressed. First, NMFS had already stated that it was intending to monitor the fishery in a better manner. In Massachusetts' opinion, because NMFS was unsuccessful in acquiring up-to-date landings and administratively couldn't implement a closure when immediately needed, large overages caused by the summer-fall fishery occurred.

For example, in late September NMFS learned that the 5Y South quota of 9,000 MT age 3+ herring was exceeded by approximately 2,000 MT as of August 31. The earliest possible closure date was October 5, allowing five weeks of continued fishing. Approximately 5,000 MT were caught in the 5Y fishery during September alone. Another cause of the overage was a failure of New Hampshire to close its waters after FCZ waters were closed. It was expected that New Hampshire would not repeat its inaction since New Hampshire had already stated its intent to implement regulations in support of the Council's Plan for 1981.

Massachusetts considered the third major cause of the overage to be fixed gear catch of age 3+ in state of Maine waters. It noted that the 2,470 MT set aside by Maine as an allocation "to cover the usual amounts of age 3+ herring taken in fixed gear", was inadequate for 1980, and it feared that this allocation could also be inadequate for 1982.

Massachusetts closed its testimony by stating its intention to close the fishery in 1981 provided NMFS prevented continued fishing and quota overages in other states' waters. It would not keep its waters closed when "it served to impact Massachusetts fishermen and processors inequitably".

Maine reiterated its past positions and believed that the mobile gear fishery, not passive fixed gear, was responsible for a large share of the excess catch. The Maine 1981 proposed plan was also expected to address some of the problems of past years, particularly 1980. For example, the "new" practice of circle setting with stop seines, which contributed significantly to the 1980 age 3+ catch in eastern Maine and the quota overage, was to be defined as mobile gear with its catches counting against the Maine quota. Maine stated its opposition to removal of the FMP and felt that the Plan was workable and addressed problems that needed to be addressed. According to Maine, a removal of the Plan would significantly increase the risk of stock depletion.

Regarding the failure of Maine to set catch quotas for herring in fixed gear, Maine stated that if the Council wanted measures to curtail the fixed gear fishery, consequences of those measures needed to be closely examined through a complete Council economic impact analysis. Maine concluded its testimony by indicating that its past plans went through the public review process with no adverse criticism from anyone (see testimony).

New Hampshire outlined its proposed future actions (expressed in an April 1981 letter to the Council Chairman) within its territorial waters and stated its intention to follow through with a "commitment that will ensure a cooperative program of obtaining objectives set forth in the Herring Management Plan". Reasons for a failure to close the New Hampshire fishery in 1980 were also given:

"The immediate concern before us today is to ensure that the existing fishery plan is implemented in the state waters in order to prevent a reoccurrence of the overages which resulted during the past summer-fall season. The state of New Hampshire has not participated in the herring fishery in the recent years.

Therefore, it is not thought to be of high priority to develop a herring fisheries management plan for this state's territorial waters. This was probably also the posture which prevailed when the Council Amendment #3 to the Herring Fisheries Management Plan was written, which excluded New Hampshire and Connecticut in the following sections of the Plan, 422, appropriate state management measures under the amended Fisheries Management Plan, 'the states of Maine, Massachusetts, and Rhode Island are expected to implement management plans for the sea herring fishery within their territorial seas which are both timely and complimentary with the Atlantic Herring Fisheries Management Plan as amended herein.'

As most people are well aware, this past year's fishery showed that New Hampshire was vulnerable because of this exclusion. Subsequent to the herring closures in both the FCZ and waters of Massachusetts, New Hampshire was exploited as an area to conduct illegal fishery, as well as for the landing of herring. These events placed the state in an awkward position with very few options available to resolve the problem.

A normal course of action to address the conduct of these fishing activities would have been to schedule a public hearing and promulgate a regulation. However, the entire process from scheduling a hearing to implementation of a necessary regulation requires a minimum of 42 days. During this interval, the fishing season would have concluded and the regulation would not have provided any meaningful effect.

The only other possible action would have been to declare an emergency situation whereby the Director of the Fish and Game Department could have promulgated a regulation to close the fisheries immediately under RSA 206 15A, areas closed temporarily to hunting and fishing. The applicable provision in this statute states, 'The Director shall have the power and authority to close any season for the taking of fish in any area for not over 60 days for stocking, for conservation purposes, and 90 days to reclaim ponds in any calendar year when in his opinion such action shall be necessary for the protection or preservation of the fish in such area.'

Further, New Hampshire's administrative procedure statute requires that an emergency regulation shall not be promulgated solely to avoid the previously mentioned 42-day time requirements, but that a genuine emergency requiring immediate agency action must first exist. In this statute, this emergency is defined as 'an imminent peril to the public health, safety, or welfare.'

Since there was no evidence presented by anyone that a failure to invoke emergency powers would endanger the stock of the fishery, an emergency situation could not be demonstrated and this course of action was not initiated. The ultimate decision was to allow the fishery to continue and concentrate efforts to develop procedures which would alleviate these problems in the future."

Another joint venture proposal

At its May 26 and 27, 1981 meetings the Council approved an August 1 - October 31, 1981 joint venture for 4,000 MT of adult Georges Bank herring between U.S. fishing vessels and a Polish processing vessel. The joint venture was viewed as a good opportunity to see if any herring were on Georges Bank. Without a joint venture, and off-loading at sea, incentives for U.S. vessels to venture out to Georges Bank to search for herring were few due to high costs of fuel, a depressed market, and the lack of assurance that herring could be found. Also, the joint venture was viewed as an opportunity for some fishermen to acquire increased income.

Many U.S. processors expressed disapproval of the Council's action. According to one Maine processor, "Selling U.S. caught fish to foreign factory vessels not only makes it more difficult for U.S. processors to open European markets for their products, but costs thousands of shoreside workers their jobs." Another processor noted that the joint

venture was to occur during the Georges Bank herring spawning season. Since the Georges Bank stock was already depressed, he could not understand the logic of allowing fishing on spawning concentrations.

Council responds to Maine's plan

At May meetings the Council voted to send a letter to Maine to express approval of Maine's proposed plan which attempted to address some of the Council's (and NMFS) concerns. The letter urged Maine to keep its proposed plan intact. Public hearings on the plan were scheduled for June 2 and 7, 1981.

Massachusetts comments on Maine's plan

Massachusetts commented on the Maine 1981 plan (see correspondence). Questions were asked such as whether Maine even intended to adjust upwards the "allocation" of age 3+ fish to the fixed gear fishery if the catch of those age groups was expected to be high during the summer/fall. An upwards adjustment of this allocation would have meant a reciprocally smaller quota of age 3+ fish for the mobile gear fishery in Maine waters. It was Massachusetts' opinion that, to comply with the intent of the Council Plan, Maine had to go as far as to close its entire mobile gear fishery if "expected" catch of age 3+ herring in the fixed gear fishery equalled the 5Y North Council quota. Massachusetts also asked how Maine would know when "unexpected and excessive catches of age 3+ herring occurred as a result of a directed fishery for those age groups by any portion of the fixed gear fishery...."

Maine's reply

In July 6 correspondence (included here), Spencer Apollonio answered questions posed by Massachusetts. He stated that, "our mobile gear fishermen will not pay the price for unexpected overages in the fixed gear catch", and he defended Maine's 2,470 MT expected catch of age 3+ herring in fixed gear. He noted that the 2,470 MT allocation, "would have been more than adequate in 1969, 1970, 1972, 1973, 1974, 1975 and close to adequate in 1977 and 1978."

An offer was made to Massachusetts that,

"If Massachusetts does not feel that Maine's response is adequate to justify quotas in Massachusetts waters, then we would be happy to explore with you, both through the Council and between ourselves, options for non-quota management. We feel that a proper balance of non-quota regulations could be achieved that would satisfy the social and economic needs of the fishermen of both states, and in turn ensure that the stocks on which we fish do not collapse...."

PHILIP G. COATES
DIRECTOR

The Commonwealth of Massachusetts
Division of Marine Fisheries
Leverett Saltonstall State Office Building
100 Cambridge Street
Boston, Massachusetts 02202

Mr. Spencer Apollonio
Commissioner
Department of Marine Resources
State House
Augusta, ME 04330

Dear Spencer:

To this point in time, Maine and Massachusetts interactions on sea herring management have been primarily addressed during Council and Committee debate. It's time we addressed our mutual problems and individual concerns outside of that forum and I see no better way to begin than to comment on your proposed Herring Plan.

First, I don't believe any state needs to exactly conform to any Council Plan particularly if the fishery in that state's waters presents special problems requiring a different management approach. This is especially true when the fishery across the range of the resource is predominately within states' waters (viz., sea herring). However, since states, as Council members, have a large role in development of Council Plans and their management strategies, I feel we are obligated to support Plans in any way we can particularly if we have not objected to those Plans during their evolution and final implementation. In keeping with our approvals of the Council Herring Plan, Maine and Massachusetts have both taken significant steps towards providing this support; i.e., your Plan which was initiated in 1978 and our regulations implemented in October, 1979.

I feel it is necessary to comment on your Plan because I am concerned over the possibility of a repeat of 1980-like conditions in the future; i.e., very large overages of the seasonal-area quotas for age three and older herring due to continued catch in fixed gear. I'm sure my concern is of no surprise to you since I or David have expressed it at Council/Committee meetings and at the recent Secretarial hearing.

In your Plan you recognize the issue which, in my opinion, is central to the successful carrying out of the Council's Plan and the securing of Massachusetts full cooperation. You state, "Amendment 3 eliminates the exception for catches of age 3+ herring in Maine territorial waters not counting against the Gulf of Maine's seasonal catch allocations. This amendment further states that 'all states are relied upon to enforce the area/period seasonal allocations by closing directed herring fisheries in their territorial waters when the seasonal catch allocations have been taken. The State of Maine may at its option provide information on expected harvests of herring age 3 and older in the fixed gear fishery which may then be deducted from the available catch allocations. Maine is also expected to comply with a determination that the sub-allocation for 5Y North has been taken by closing state waters to the mobile gear harvest of herring age three and older. The fixed gear fishery for juveniles may be allowed to continue to harvest age 3+ herring if (my emphasis) expected harvests from this fishery have been previously deducted from the 5Y North sub-allocation'." You continue, that to meet the Council 5Y North 10,470 MT quota of age 3+ herring, while preserving the traditional season and nature of the 5Y North fixed gear fishery, 2,470 MT of age 3+ herring is allocated (not a quota) to the fixed gear fishery to cover usual amounts of these ages caught by that gear.

This is a good attempt on your part to meet the Council quota. However, since the 2,470 MT has proven to be inadequate for 1980 and could easily prove inadequate for coming years, do you intend to adjust this figure according to expected catches of age 3+ fish in fixed gear based on your assessment of the stock and the past year's catch of age 2 fish in fixed gear? In your "Status of the Stocks" you reveal some predictive capability since you state, "For the 1981 fishing season, we expect two year old herring (the 1979 year-class) to be reasonably abundant and available to fixed gear. Three year old herring (the 1978 year-class) should not be very abundant in either fixed or mobile gear since this year-class is very poor both in the Gulf of Maine and in Canadian waters...."

It appears that you are in a position to predict with some confidence whether catch of age 3 (the contentious age group) will be relatively high or low in fixed gear catches. With this prediction you could decrease the mobile gear 8,000 MT quota to accommodate expected increased catches in fixed gear thereby providing better assurance that the 10,470 MT quota would not be exceeded (excepting the occurrence of another 1977-like year-class).

This raises my next question which is, would you ever be prepared to reduce your mobile gear quota to levels below 5,000 MT, for example, to accommodate an expected higher fixed gear catch of age 3+ herring? I can understand that this can be a sensitive political problem since one user group sacrifices at the expense of another, but it is a question which must be answered to give me an indication of how you intend to manage your juvenile and increasingly important adult fisheries, and in turn, how Massachusetts should proceed with its management strategies. If by "preserving the traditional season and nature of the fishery" you mean never to impact potential catch of age 3+ fish in fixed gear (particularly age 3), then 5Y North quotas will never be meaningful even if based on nine inch and larger herring.

Note that my foregoing discussion applies to state regulation of age 3+ herring. I have not addressed the need to regulate catch of age 2 herring, and I don't intend to at this time, although I am concerned about future growth of the sardine industry and potential impacts of increased juvenile catch on recruitment. While I am sure many Massachusetts herring industry representatives will continue to protest no regulation of age 2 fish while catch limitations exist for other fish (the chicken and the egg argument), the economic importance and long history of the Maine sardine industry is clear and attempts to manage that industry beyond your current philosophies might produce additional problems. Nevertheless, it would be helpful to me if you could provide specific reasons for not regulating catch of age 2 fish. I need this information to apprise the Massachusetts Marine Fisheries Advisory Commission and the public on your future juvenile management strategy in order to prevent misunderstandings.

Regarding your "Contingency Measure", you state in the plan that the 5Y North fishery is traditionally for age 2 and 3 herring, thus I assume this means a directed fishery for ages 2 and 3 by fixed gear. How will you know when "unexpected and excessive catches of age 3+ herring have occurred as a result of a directed fishery for these age groups by any portion of the fixed gear fishery...." (in particular for age 3 fish)? Furthermore, assuming you hold a public hearing in response to "unexpected and excessive catches", if you decide to close, how long would it be before implementation of that closure?

Certainly, the herring resource is important to both the Maine and Massachusetts fishing industries. It is in both our best interests to make our intentions clear to each other to foster cooperative management of the resource between ourselves and with the Council.

Sincerely,

Philip G. Coates
Director

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES

STATE HOUSE STATION 11
AUGUSTA MAINE 04333

July 6, 1981

Philip G. Coates, Director
Massachusetts Division of Marine Fisheries
Leverett Saltonstall State Office Building
100 Cambridge Street
Boston, Massachusetts 02202

Dear Phil:

I agree wholeheartedly with the opening sentence in your letter of June 9. It is indeed time that Maine and Massachusetts began to interact on problems of sea herring management outside of as well as within the forum of Council and Committee debate.

It is obvious from your sea herring regulations, as it is from our Maine management plan, that neither state is conforming precisely to Amendment #3 to the Council HMP. The reason I did not object to Amendment #3 during its development and implementation was because of my interpretation of Section 4.2.2.; "The fixed gear fishery for juveniles may be allowed to continue to harvest 3+ herring if expected harvests from this fishery have been previously deducted from the 5Y North sub-allocation." Therefore, for 1980, we deducted an expected harvest of 2,470 MT from the sub-allocation. Obviously, actual harvests greatly exceeded that amount but Amendment #3 states that this is allowable. Having deducted an amount from the sub-allocation of 10,470 MT we interpreted the Council's intent as meaning that the remaining 8,000 MT would be a quota for the mobile gear. Since our fishery is primarily a summer-fall fishery, we felt it was proper to equate age 3+ with 9" and larger (see Section 2.5 of Amendment #3). We did not in 1980, nor will we now in 1981, interpret the amendment to mean that mobile gear fishing in 5Y North should be shut down before that 8,000 MT is taken. In other words, our mobile gear fishermen will not pay the price for unexpected overages in the fixed gear catch.

The 2,470 MT allocation was not adequate for 1980. However, it would have been more than adequate in 1969, 1970, 1972, 1973, 1974, 1975 and close to adequate in 1977 and 1978. It is not adequate when there is a very large year class of 3 year olds available to the fixed gear. It may be that the best way to deal with this is by yearly assessments, if such are possible, and a flexible OY mechanism which allows Maine a larger sub-allocation when age 3 fish are in great supply. This increase in the sub-allocation would go to the fixed gear fishery. We can hardly be expected to tell our mobile gear fishermen that due to the great abundance of fish, they may harvest little or none! That is the contradiction and the problem in Amendment #3. In this respect, the somewhat peculiar and unpredictable inshore/offshore distribution of 3 year olds must be kept in mind.

We are not in a position to predict with any great degree of confidence whether the catch of age 3 will be low or high in the fixed gear. As an example, when the great 1970 year class was age 3, only 1,295 MT was taken in Maine's fixed gear fishery. Much depends upon the availability of 3 year olds.

We would be prepared to lower our mobile gear quota if the resource was in danger. The pooled assessment for 1981 showed that in spite of the overages in 1980, the OY for 5Y North and South should be increased: to 38,000 MT if fishing at the Fo.1 level of .34 and to 35,000 if fishing at the more conservative Fo.1 level of .30. Canada also had tremendous overages in 1980. Their response has been to increase their quota from 55,800 MT to 101,000 MT and to allow their "juvenile" 4XB fishery to continue to harvest without quota. These actions do not indicate to me a resource which is in serious danger.

Specific reasons for not regulating the catch of age 2 fish include: the lack of decent assessment information on year class strength at that age; the fact that the fishery for age 2 is almost completely a passive, fixed gear fishery; and the fact that Canada sees no need to quota its juvenile fishery in very adjacent waters. I am sure you are aware that most of our fishery is from Penobscot Bay east and that much of the resource we

fish is mixed Canadian and coastal Maine stock. We have increasing evidence that the western Gulf of Maine (so-called Jeffreys Ledge stock) could collapse without significantly impacting Maine's fishery. We also feel that strict conservation of our resource from Penobscot Bay east would do little to enhance your summer-fall fishery. There is evidence that our fish mix in with yours during the winter-spring fishery. With this in mind, both Maine and Massachusetts should husband the resource they harvest, for the best economic benefit.

Our contingency measure is meant to apply when there is, indeed, concern for the resource; and when the Council, the States and Canada are taking actions which reflect that concern; or when a fishery exists that is harvesting large quantities for reduction purposes. If a public hearing were held, under DMR's emergency powers I could close such a fishery in five days.

If Massachusetts does not feel that Maine's response is adequate to justify quotas in Massachusetts waters, then we would be happy to explore with you, both through the Council and between ourselves, options for non-quota management. We feel that a proper balance of non-quota regulations could be achieved that would satisfy the social and economic needs of the fishermen of both states, and in turn ensure that the stocks on which we fish do not collapse. Herring will probably always undergo wide fluctuations in abundance, and a stable MSY may not be possible, but certainly it should be possible to prevent either biological or economic collapse.

Maine has so many laws pertaining to herring that it is impossible to judge our management from our regulations alone. I feel that communication between ourselves is probably the best way to prevent misunderstandings, and I look forward to your response, both to this letter and with suggestions for mutually agreeable management measures.

Sincerely,

SPENCER APOLLONIO
Commissioner

Maine's final 1981 plan

As a result of public hearing comments, Maine's Department of Marine Resource's Advisory Council decided to:

- 1) ban fishing for herring by otter trawls, pair trawls, and midwater trawls north of Cape Elizabeth;
- 2) close the mobile gear fishery south of Cape Elizabeth when 5Y South federal waters closed;
- 3) enact an October 1-21 spawning area closure south of Cape Elizabeth for mobile gear only (no tolerance);
- 4) set again an 8,000 MT 9" and larger herring quota for mobile gear fishing north of Cape Elizabeth (exception - if mobile gear catch was 25 percent or less 9" and larger herring by volume, fishing could continue during the quota closure);
- 5) enact a September 1 - November 30 spawning area closure north of Cape Elizabeth for mobile gear only (tolerance of 20 percent by volume; i.e., herring with spawn could be taken if 20 percent or less by volume).

Maine's Council and the Department of Marine Resources decided against including the "circle set" method of stop seining as mobile gear. Circle setting apparently was a common practice for eastern Maine fishermen in particular, and enforcement of a closure for circle setting was considered practically impossible. The New England Council had hoped circle setting would remain a mobile gear since reportedly circle setting was responsible for a large share of the catch of age 3+ herring in the fixed gear fishery.

Maine's Council and the Department of Marine Resources also decided to retain the 5Y North quota based on size and not on age. According to Spencer Apollonio, it was likely that the Regional Council would eventually use the 9" total length cutoff; therefore, Maine might as well retain its existing size limit rather than adopting the Council's existing age limit.

Finally, regarding the emergency closure provision whereby Mr. Apollonio would hold an emergency public hearing to consider closing segments of the fixed gear fishery which directed efforts towards age 3+ herring, the following account (Donnell, Commercial Fisheries Review, August 1981) provided the Department's viewpoint. Note: The weir fishery was excluded from the emergency closure.

"There is one item in the 1981 Maine plan that has given a scare to many Maine fishermen. The plan gives the Commissioner the power to hold an emergency public hearing to weigh closing any directed

herring fishery that's after "9's-and-up" except the weir fishery. This would only happen if it seemed apparent continued fishing could harm the stock.

This only means if it looks like a big overrun, we can take a look at it, and we can shut it down if it's advisable, explained Apollonio. We couldn't do this last year, he added, when we had 26,000 odd MT overrun that caused a lot of concern on regional and federal levels.

Most feel that this highly unusual year won't be repeated. "It was a biological aberration," said Apollonio. It was a unique combination of a very large 3-year old class that practically swarmed inshore at Little Machias Bay. It's unusually rare for 3 year olds to hit inshore in such quantity. The 1978 year class (this year's 3 year olds) is much smaller, explained Apollonio. But, even so, we don't expect such a biological aberration to recur, he added.

But in any event, putting a lid on the mobile gear activity, and classifying circle-seining as mobile gear, coupled with the sudden increase in weir building activity Downeast should put a damper on any repeat of this Apollonio told the Council. (In Maine it is unlawful to set any gear within a 2,000 foot radius of a weir -- Ed.)"

The rationale behind Maine's ban on some forms of mobile gear was as follows (Donnell, Commercial Fisheries Review, August 1981):

"Throughout its deliberations, the Council clearly indicated it strongly favored "encouraging the old fisheries and discouraging the new." All agreed that the top quality sardine herring come from the weirs and stop seines, which give the opportunity for the fishermen to hold fish until they clear themselves of feed. Whereas the "newer" mobile gear methods don't lend themselves to this. Furthermore, general consensus is that the traditional passive gear methods do in fact effectively limit the juvenile as well as the adult catch.

Council member Spencer Fuller faulted the 1981 plan for its lack of creativity. Fuller felt that limiting purse seine size and encouraging the use of drift nets was a more practical approach. The total mobile gear closure is called for to limit the larger purse seiners, but it inflicts real

economic problems on the little fellow, he explained. Fuller is one of the "small" purse seiners.

"I hate to say it, but the mobile gear fishery is the most dangerous in the ocean. It's cleaned up in Europe, and we must keep a lid on it here," argued long-time fisherman and Council member Bernie Johnson from Bailey Island. A little mobile gear activity in Massachusetts' Ipswich could effectively keep the herring offshore and out of Maine's major bays, he explained.

Council's concern with an unrestrained mobile gear fishery was punctuated by their frequent reference to the 1980 mobile gear activity in Massachusetts' Ipswich Bay. Allegedly the larger purse seiners and other mobile gear really "hammered them" there last year. Reportedly millions of pounds of herring were smothered and trashed by all states' vessels."

No 1981 spawning area closure

During June the Council received a response from NMFS regarding the implementation date of Amendment #4 which sought to establish an October 1-21 spawning area closure. The contents of this response was related to the Council at its June 30-July 1, 1981 meetings. NMFS stated that unless the Council declared a resource emergency, the Amendment could not be implemented for the 1981 spawning season. Since a resource emergency did not exist, the Council had no other choice but to plan for a 1982 spawning area closure.

No time for herring

Council activities during the summer and early fall of 1981 were primarily devoted to finalizing the Scallop and Interim Groundfish Plans. Herring was not a major concern since markets for herring were not strong and catches in Maine waters by both fixed and mobile gear were predominately age 2. The 1979 year-class (as age 2) was strong and was the preferred age group for the juvenile fishery. Thus, there were doubts that the fisheries in 5Y North and South would need to be closed in 1981. NMFS pointed out, however, that if a closure was needed, its date of implementation would be seven days from the time a decision was made to close. NMFS did not want to have a repeat of 1980 and the long lag time between the decision to close and the actual closure itself.

The only Council action related to herring was at August 25 and 26, 1981 meetings when the Council requested NMFS to return Amendment #4 as soon as possible so that it could be labeled a draft and resubmitted. According to the

Chairman of the Herring Committee, NMFS had indicated that it had serious problems with the Amendment and it appeared the Amendment was going to be rejected.

The Chairman also indicated that the Committee was in the midst of developing revised management objectives for the plan. He noted:

"We met yesterday to continue our discussion of management objectives as directed from the Chair. The Committee wants more than a restatement but a new set that would minimize regulations but would prevent stock collapse. The trend would be to allow economic factors to control fishing to a point when the brakes would have to be put on. Some of the suggested strategies would be to have a continued spawning closure and limit the amount of fishing for reduction. It has been assigned to a working group."

Massachusetts hearings

Just prior to August Council meetings, on August 17, the Massachusetts Division of Marine Fisheries and its Advisory Commission announced an August 27 public hearing to solicit public input concerning a possible closure of the sea herring fishery within waters of the Division's Northern Massachusetts Management Area and establishment of an annual October 1-21 spawning area closure in State waters. According to the news release:

"This year the National Marine Fisheries Service intends to, well in advance, project when the July 1 through November 30 quota of 9,000 metric tons of age three and older herring will be reached to provide for more timely closures of federal waters. A federal closure could occur in early September." Coates continued, "In the last two years the Division, with the Commission's approval, closed the Northern Massachusetts Management Area shortly after federal closures. It is my intention to recommend to the Commission that we follow the same procedure this year. However, a continuance of a closure would be contingent upon the National Marine Fisheries Service's capability to prevent continued fishing and quota overages in other state's waters. I cannot keep our waters closed when it serves to impact Massachusetts fishermen and processors inequitably."

The Division is on record in support of a proposed New England Fishery Management Council October 1-21 herring spawning area closure in the southern Gulf of Maine. The Council's annual closure is scheduled for implementation in 1982. Other states

either already have or are proposing spawning area closures for this fall. The Commission wishes to have public input on whether Massachusetts should do the same."

At the hearing everyone present wanted to see the fishery kept open until the middle of October after which herring usually scattered following spawning and the fishery wound down by itself. As expressed by Edward MacLeod, General Manager of Lipman Marine Products and Kennebec Fish Company and chief spokesman for those in attendance, the herring resource was in good shape (according to U.S. scientists) and the adult herring industry in both the U.S. and Canada, in contrast to 1980, was generally in very poor shape due to a lack of European markets brought about by a resurgence of the North Sea fishery. Therefore, there was adequate justification for keeping the fishery open in Massachusetts waters if only on a limited basis (See Fishery Gazette article).

To prevent unrestricted catch following a federal water's closure, Mr. MacLeod suggested that boats could be put on trip limits (e.g., 100,000 pounds) and fishing could be restricted to weekdays only. This would enable processors and fishermen to supply their small markets with hopes of maintaining them for another year. He and George Colley of Seafood Packers Co. (Provincetown and Hyannis) stated that a market existed for whole frozen fish and they didn't want to lose that market because of a closure. A constant supply of approximately 100,000 pounds per boat was considered adequate for them to retain their existing buyers.

Mr. MacLeod noted that processors and fishermen had showed a great deal of restraint in July by not catching herring for reduction and that in 1980 when the Commission/Division said stop fishing, everyone complied. Now, in return, he and others were seeking the Commission/Division forbearance to allow the industry to continue to operate in state's waters after an expected late September/early October federal closure.

Regarding a spawning area closure in Massachusetts waters, no support was given for 1981. Industry reasons for this lack of support were three-fold. First, a joint venture with the Polish for herring on Georges Bank had been approved by the Council and the National Marine Fisheries Service. This venture was to take place during the spawning season. If fishing was to occur on Georges Bank during spawning and since the Georges Bank stock was assessed to be extremely poor, then why not allow continued fishing on Jeffrey's Ledge during spawning when that stock was assessed to be in very good condition. Secondly, the adult herring industry was in need of more product to maintain new market opportunities. Schools of fish were currently dispersed for some reason (perhaps

Herring Exports

by Nick Mencher

Lose Race to Foreign

Competition

A LACK OF traditional West German markets caused by fresh European and frozen Canadian herring has knocked the bottom out of the East Coast herring export industry.

Processors along the coast have stopped purchasing fresh herring from domestic seiners for freezing and export to the major European herring markets in West Germany. In Gloucester, Kennebec Fish Corp. has not bought any herring from vessels since last October, when Gulf of Maine herring grounds were closed because of overfishing. Those areas reopened in November, but with its customary markets non-existent, Kennebec — Gloucester's largest herring processor — has yet to purchase and freeze any herring.

Seiners Not Fishing

And the fleet of seiners from Maine, New Jersey and other northeastern states which fished out of Gloucester each year for herring has all but disappeared this season. Many of the vessels fishing for the Maine sardine market are working under quotas set by the canneries which are receiving an ample supply from their own boats. While some of the major Maine canneries have softened the market decline through their sardine operations, the lack of West German herring markets has meant less employment for shoreside workers and fewer markets for fishermen.

"It's impossible for us to operate on the West German market," says Geir Monsen, manager of Global Seafoods in Narragansett, Rhode Island. "We simply can't compete and we haven't shipped to West Germany in half-a-year."

Seek Other Foreign Markets

Monsen thinks the situation may improve somewhat as other foreign markets are sought and found for frozen herring, but he is not expecting a return to the level of exports American processors once enjoyed in the West German market.

"This is the first time in 11 years this has occurred to this degree. It's quite a serious problem and nobody knows how long it will last," says Edward MacLeod, general manager of Kennebec. If the foreign market does not improve by the summer-fall herring season, about 100 shoreside workers and the seiners which fish for Kennebec will be out of luck.

Two Gloucester vessels, the 77-foot *Italian Gold* and the 80-foot *Gloucesterman*, abandoned plans to enter the pair-trawl herring fishery last winter and a plan by Joseph Curcuro to attempt the difficult winter purse seine method on the 120-foot *Barneget* had to be scrapped. Some vessels have switched over to join the already-crowded groundfish fleet, and some seiners are planning to fish hard for industrial species this summer. While herring prices last summer and fall were thought by some fishermen to be unreasonably low, industrial fish this summer are bound to have an even lower ex-vessel price.

Canadian Competition

Dealers and exporters who formerly supplied herring markets in West Germany are now facing stiff competition for their traditional buyers from low-priced Canadian frozen herring and fresh herring caught in European waters.

The National Marine Fisheries Service said recently that West German herring markets are packed with frozen Canadian herring — including some 4,000 to 5,000 metric tons unsold since last August — and dealers already holding frozen herring are hesitant to buy more.

Canadian House Clearing

"I think the Canadians are trying to clear house," says MacLeod of the herring bottleneck. "They're selling at ridiculously low prices and they're losing money." MacLeod thinks the Canadian move is intended to clear freezer space for the summer and fall season

and that the Canadians are ready to sell the frozen herring at any price. With freezers already full of herring in the United States and world-wide, American processors remain wary of buying and freezing herring.

Illegal Fishing

Until March of this year, much of the fresh herring on the West German market which lured dealers away from the American supplies had been caught in the face of a British closure of the North Sea herring grounds. Vessels from the Netherlands, Denmark and France joined others to fish illegally in the North Sea and were spurred on by conflicting claims over fishing rights in the area.

Fresh Herring Find Good Market

Fresh herring from the North Sea began to taper off recently when the British government opened the area under a tight herring quota and the Baltic Sea fishery opened. The sources may have changed, but the flood of fresh herring on the West German market means American processors are left out in the cold.

According to MacLeod, Eastern Block fleets are fishing hard for herring in the Baltic and are supplying the West German market with all the fresh fillets they can use.

Those fillets are finding a ready market. The high fat content and age of the frozen Canadian herring is keeping sales of the product slow and West German buyers are showing a preference for the fresh fillets which are cheaper to process and more attractive to consumers.

The double punch of fresh herring from fishing grounds all over Europe and a decline in the average amount of

herring consumed by Europeans has pulled the West German market out of American export reach, says Monsen.

Caught between currency fluctuations that have raised the cost of American herring, the fresh supply in Europe and available, cheap Canadian herring, MacLeod says, "We're not sure we're even going to open this summer."

Groundfish Picture

For the vessels which geared over to join the northern shrimp fishery this year and watched as a promising start slumped to a poor finish, groundfish was the stalwart this spring and summer. While Boston and Gloucester groundfish prices for fishermen were high this spring, \$1,000 a day fuel bills for large dragners and a scarcity of groundfish off-hore may mean the herring seiners which switch to groundfish this season will find the effort difficult.

But the search for new frozen herring markets to replace the shattered West German outlets may not be much easier. □

bluefish). During spawning schools reform; hence, they would be more available to catch. Third, the State of Maine had no quota on juveniles, thus why should Massachusetts fishermen stop fishing on herring with spawn when these same spawn when older would be subjected to the Maine juvenile fishery which was not restricted in terms of total catch.

No closures?

NMFS stated at September 29 and 30, 1981 Council meetings that a closure in the 5Y North area was not projected. Through mid-September approximately 79 percent of the 8,850 MT quota of age 3+ fish had been landed. Furthermore, in the 5Y South area landings were even lower (approximately 50 percent of the quota). NMFS stated, "It doesn't appear that we face problems in the herring fishery this year." This revelation was good news to everyone, especially Massachusetts Council representatives who did not relish another State waters fall closure.

Catches increase

On October 8, 1981, to their surprise, states were informed by NMFS that 5Y South waters were to close on October 18, 1981. Catches had increased towards the end of September and early October, and total landings were projected to reach the quota on October 18.

In Massachusetts, the announcement coincidentally coincided with the monthly meeting date of the Division and its Advisory Commission. At that meeting the Commission was convinced to close the fishery. The closure was effective October 18, 1981 in the Northern Massachusetts Management Area (later revised to October 21). This State waters closure closely coincided with the Federal closure and closures of New Hampshire and Maine territorial waters fisheries. The latter closure applied to Maine waters south of Cape Elizabeth and for mobile gear only. New Hampshire waters, as well as Maine's 5Y South waters, had already been closed since October 1 for spawning area protection. New Hampshire eventually continued its closure beyond October 21 by emergency action. Maine's closure also continued since, as prescribed in its regulations, the 5Y South area was to close when FCZ waters closed. New Hampshire's spawning area closure was adopted by its Fish and Game Commission on September 4, 1981 and resulted after an August 19 hearing.

The Division of Marine Fisheries and its Advisory Commission decided that Massachusetts' closure would be contingent on closures in other state's waters adjoining the southern Gulf of Maine area. These closures were to occur, thus all states took actions to support the New England Fishery Management Council Herring Plan.

Massachusetts did not, however, implement an October 1-21 spawning area closure. The Council was not successful in establishing a spawning area closure in Federal waters in 1981; consequently, Massachusetts felt a State spawning area closure would not be effective because it would be unenforceable. Also, since the majority of spawning had historically taken place in offshore waters, a spawning area closure in Massachusetts waters would have had a minimal impact on the resource. The primary purpose of a Massachusetts closure would have been to prevent a potential loophole in a Federal spawning area closure.

The Division and its Advisory Commission recognized desires of many in the herring industry to continue fishing throughout October until schools dispersed to deeper offshore waters. The lack of herring early in the fishing season and economic concerns of fishermen and processors were made clear at the August hearing. However, as stated in a news release, "If the Council's Herring Plan is to continue to exist, it must be supported by the states which have been intimately involved with its development and evolution. A failure on the part of Massachusetts to close this season would likely be interpreted by the Federal government as just one more action by a state to ignore the plan."

Explanations given

The Regional Director at October 20 and 21, 1981 Council meetings explained the "sudden" 5Y South closure. According to him,

"I think everybody is aware that we had a closure in the herring fishery in 5Y South effective October 18. That probably was a surprise to most people, because at the last Council meeting we indicated that we didn't see any problems, and that was very much the case at that time. But at the end of September we had some very high catches occur. For the Gulf of Maine 5Y North and the age 3+ fish during the reporting period, which was through September, there was 1,537 tons caught. The total so far for the fishing year in the 5Y North area of the age 3+ is 8,224. That's versus a quota of 8,850. It is pretty close to the quota. Generally, the fishery is pretty much slowed down, however, there is a possibility for some further fishing activity east of Cutler area (eastern Maine) on the adults, and we may potentially face a closure there. Our figures for all ages at this point in time in 5Y North are 30,293. During the period through the end of September there were 6,360 tons caught in 5Y South versus the 9,000 quota. That is age 3+. During the first nine

days of October we had better than an additional 2,000 tons caught. We then did some projections on the catch rates at that time; and it gave us an indication that we would reach the quota, so we moved to close the fishery. The best figures we have at this point, which are still somewhat tentative, would show that as of October 16 we had 8,799 tons caught. The fisheries are being closed in all the state waters. The totals for both areas were 14,584 of adults and 36,723 of all ages. In George's Bank and Southern New England we have had 26 tons."

Again regarding the increase in landings, the Regional Director stated,

"It is pure speculation, but we heard that one of the biggest reasons for the increase was some orders for spawn herring; and the fish finally showed up and became available and were caught in pretty good numbers in a very short period of time. I've also heard comments that some of them were going to reduction. We have never been terribly successful at getting good figures on that in the past. There seems to be some reluctance. I might add that once we talked about the closure, it became a little harder to get the current figures out of the dealers as well."

Negative feedback

Massachusetts industry was not silent on the closure in Massachusetts territorial waters. The Division received a letter from Edward MacLeod (writing at the request of all parties affected by the closure) to protest the closure which, at the time of his letter, was pending. He stated that the Advisory Commission made a serious error in not fulfilling the industry request to close the fishery two weeks after the Federal closure. He related orders which he would not be able to fill and impacts on fishermen, employees, other companies, and suppliers in Gloucester. Mr. MacLeod noted the hypocrisy of a plan which claimed to manage the fishery when in fact catches of age 2- and 3-year-olds in fixed gear were not controlled, and he demanded that events of 1981 not be repeated during the summer of 1982.

In response to Mr. MacLeod's, et al. arguments, the Division cited four reasons why it and the Commission decided to close the fishery in spite of industry protests.

Those reasons were:

Kennebec Fish Corporation

P. O. BOX 779 · STATE FISH PIER · GLOUCESTER MASS 01930 AREA CODE (617) 283-8332

October 15, 1981

Mr. Phil Coates, Director
Division of Marine Fisheries
100 Cambridge Street
Boston, MA 02202

Dear Phil:

I am writing this letter at the request of all parties that will be affected by the herring closure in Massachusetts that will take place on October 21, 1981.

In so doing, I do not wish to minimize or detract from the cooperation your department has given to the commercial fisheries since you have served as director. It has been excellent.

However, this herring situation is intolerable and must be corrected if the herring industry is going to "make it in Massachusetts." The Marine Advisory Council, in our opinion, made a serious error in judgement, in not fulfilling the request of the industry to close the fishery in Massachusetts waters two weeks after the Federal closure.

During 1980, when the Federal closure on herring took place, Massachusetts participants in the herring industry withdrew, as requested, 100%. New Hampshire, at the request of the Governor's office, since it was an election year, held its fishery open. Further, Bruno and Stillman opened a new plant in Portsmouth and let it be known that they would have an interest in the herring fishery then and in the future. Now, 1981, is not an election year, and the fishery company owned by Bruno and Stillman (I have been told) is in Chapter 11. Now, New Hampshire is going to close its herring fishery as requested on October 21, 1981. To add insult to injury, most of the lobstermen in New Hampshire depend upon Massachusetts for bait for their lobstermen, but will not allow purse seining within two miles of their coast which eliminates our menhaden boats.

The State of Maine's industry is broken down into two segments, the mobile gear and the fixed gear fishery. Further, it has interest in both the juvenile and the adult fishery. The fixed gear fishery which accounts for the highest percentage of landings is not controlled by quotas in either the juvenile or adult fishery. It was the major factor for the cause of the overcatch last year in the adult fishery. During October of last year, our Campobello plant purchased

adult herring from 3000 seines in eastern Maine. Therefore, even though the purse seiners (mobile gear) may withdraw from the adult fishery on October 18, 1981 the fixed gear will still be able to catch adult herring without penalty. Further, there is no way the herring fishery will or can be managed effectively without controlling the numbers of two and three year old fish being removed from the fishery by the Maine canners. We are told by the biologists that a year class is "poor", "fair", or "good" or "excellent," but we don't know, nor are we given numbers, even if they only are estimates. Therefore, how can any management plan allow two and three year old withdrawals by both mobile and fixed gear without control of the numbers, and then be able to state emphatically we are managing the fishery. This is a hypocritical situation.

International markets turn "hot" and "cold" quite rapidly at times. Therefore, flexibility to move fast has to be available to the "adult" industry. Dave Pierce for the past several months has indicated the importance of bringing economics into play, when called for. Again the flexibility factor enters into the plan. Since Dave realizes the importance of periodically taking advantage of an economic situation, I do not understand why he did not emphasize this factor at your meeting. The adult herring fishery in Massachusetts did not participate in the winter or spring fishery. The summer-fall fishery really did not start until the last half of September. That is why I requested two weeks beyond the Federal closure. We will have orders for approximately 1 1/2 million pounds of fillets in Gloucester which we will not be able to fill. It means approximately \$150,000 to our boats; \$125,000 to our employees; and \$125,000 to other companies and suppliers in Gloucester.

In regards to herring going into reduction, the volume still is under 5% of the landings. This is less than has been processed by other reduction plants in New England, or destroyed by boats making larger sets than they can carry. Further, any herring that has gone into our reduction plant was not "fit for human consumption" (bottoms of trips that were soft with broken bellies or bodies), and we did not label them "pollock" or some other species.

Some of our help has not made enough money to collect unemployment; the herring boats owners have not made enough to pay their bills; and the crew members earnings are considerably less than they were a year ago. If this is not economic justification for some assistance, then I do not know what is.

Meanwhile, the Maine industry can smile all the way to the bank! This situation must be corrected by the summer of 1982.

Sincerely,
Kennebec Fish Corp.

Edward J. Macleod
General Manager

cc: Seafood Workers Union
Atlantic Fishermen's Union
Boat Barneget
Boat Italian Gold
Boat Kingfisher
Alan Peterson
Frank Lipman
Joe Brancalleone

1) Public hearing input - At the hearing industry emphasized the need to keep the fishery open until October 15 if federal waters closed on October 1. Federal waters did not close until October 18. At the hearing there was no request to keep the fishery open until the end of October or two weeks after a federal closure whenever that might have occurred, only two weeks after a possible October 1 federal closure.

2) Keeping a commitment - At the Secretary of Commerce hearing held in May the Division stated its intention to recommend a State waters closure when federal waters closed. The Division felt it necessary to carry out that commitment. Also, at the Secretarial hearing the Division mentioned it would not keep the fishery closed if catches of age three and older herring in other states' waters were above Council recommended levels. It intended to live up to that commitment too. As much as possible, the Division was keeping track of catches of age three and older fish in Maine waters taken by fixed and mobile gear. If that catch exceeded the Council 5Y North quota of 10,470 MT, the Division intended to open the fishery before December 1. As of the end of September, in both fixed and mobile gear, approximately 8,224 MT of age three and older herring were taken in 5Y North.

3) Interstate cooperation - In 1980 Massachusetts processors and fishermen expressed great concern that fishing was allowed to continue in New Hampshire waters after the federal closure, yet Massachusetts waters closed. The Division and its Commission shared those views. Since then, at the urging of NMFS and Massachusetts, New Hampshire agreed to close its waters when the 5Y South quota was taken. Those waters were closed in October. Additionally, New Hampshire implemented a spawning area closure from October 1-21. Those were significant actions to prevent a repeat of unrestricted 1980 fishing in New Hampshire waters and offloading in New Hampshire ports.

If Massachusetts had not closed its fishery, New Hampshire certainly would have had second thoughts about closing its waters. With both Massachusetts and New Hampshire waters open, it was likely that a significant overage of the 9,000 MT 5Y South, July - November quota of age three and older herring would have occurred. In the Division's opinion, failures to close would have been further indications to NMFS that states were not serious about complying with the Council Plan that states had a major role in developing.

4) NMFS reaction - NMFS recommended options for the Secretary of Commerce (or NMFS) to react to problems with the Herring Plan created by "inconsistent management of the herring resource (age 3 or older) within the waters under the jurisdiction of the States of Maine, New Hampshire, and Massachusetts." Among those series of options was one to rescind all or parts of the Plan. Failure of first Massachusetts and then New Hampshire to close would have provided NMFS with the "final straw" prompting it to rescind the Plan or take some other drastic action. The Division felt it was too early to give up on the Plan.

The Division also indicated that,

"Next summer/fall there is a strong likelihood that catch of age three and older herring in Maine fixed gear will be very large, perhaps similar to catch in 1980; that is, 26,604 MT. The 1979 year-class looks to be strong and in 1982 it will continue to be caught in the fixed gear fishery as age 3 fish. If age 2 fish are not abundant and age 3 fish become available to the fixed gear (do not remain offshore), catches could again be very significant. In this case, it would be unreasonable to expect Massachusetts to shut its fishery down totally when the 9,000 MT of age 3 and older herring is taken."

NMFS Criticizes Amendment #4

On October 27, 1981 the Council received NMFS informal comments on the Draft Environmental Assessment and Amendment #4 to the Herring Plan (see letter). Several deficiencies were noted, and a complete rewrite was indicated. Some deficiencies were:

- 1) Failure of the Amendment to present a clear, concise statement of the problem and to develop sufficient justification for implementation of a closure. Without stronger justification the Amendment could be viewed as an extra regulatory burden on fishermen;
- 2) If the Gulf of Maine spawning stock had rebuilt significantly without a spawning protection program, why was one necessary for the future;
- 3) The herring fishery would probably continue to be closed through the quota management system prior to the spawning closure period; therefore, why get involved with a spawning area closure;

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
 NATIONAL MARINE FISHERIES SERVICE

14 Elm Street-Federal Building
 Gloucester, MA 01930

October 26, 1981

RECEIVED

OCT 27 1981

Mr. Douglas Marshall, Executive Director
 New England Fishery Management Council
 Suntaug Office Park
 Saugus, Massachusetts 01906

Dear Doug:

This letter advises you of the completion of the National Marine Fisheries Service review of the Council's draft Environmental Assessment and Amendment No. 4 to the Atlantic herring fishery management plan. Our informal comments are enclosed.

Our review of the document revealed it is deficient in several respects. Our specific comments (enclosed) include a number of critical issues, but not substantive issues and editorial comments. Because the draft needs considerable work, we anticipate a major rewrite of the entire document, rendering substantive issues and editorial comments obsolete.

I recommend the Council submit a revised draft package prior to the final documents. This is necessary because of the substantial rewrite that will probably occur. The draft package should include the draft amendment, Environmental Assessment, Regulatory Impact Review, and draft regulatory language.

Since the Council wants to have the amendment in place by October 1, 1982, the draft package should be submitted by mid-December. According to a rough schedule of events, the mid-December submission will result in a late September implementation date. If the draft package is in good shape, NMFS could finish its review by the end of January and get formal comments to the Council on the first of February. During February and March, the Council could address these comments, revise the documents, and submit the final documents by the beginning of April. The 60-day Secretarial review period would occur during April and May. Assuming the Amendment is approved, proposed regulations will be reviewed by the Department of Commerce and the Office of Management and Budget, as required by E.O. 12291, during June, with publication in the Federal Register by the end of June. After a 45-day public review period, a similar process would be required for the final regulations, beginning in mid-August. By the end of September, final regulations could be published in the Federal Register. The major problem we will encounter is the 30-day cooling-off period required prior to implementation of these regulations by the Administrative Procedures Act. For "good cause," this can be waived. Since the time frame is so tight, we will work on having the cooling-off period waived in order to implement the Amendment in a timely manner.

My staff is available to assist the Council in getting the document in shape within the indicated time frame. If you have any questions, or need further clarification of our comments, please contact Barbara Claflin, the herring plan coordinator, or Carol Kilbride.

Sincerely,

 Allen E. Peterson, Jr.
 Regional Director

Enclosure

- 4) The Amendment lacked a detailed discussion on expected benefits to the resource and industry resulting from the spawning area closure;
- 5) There was doubt as to whether a full range of reasonable alternatives were considered in the decision-making process;
- 6) There was no discussion on jurisdiction problems that would arise if inconsistent management measures in state and federal waters continued to exist.

Due to the need to get the Amendment in place by October 1, 1982 for the spawning season, NMFS indicated that the new rewrite had to be submitted by mid-December for a late September implementation date. Unfortunately, as of mid-January, the rewrite was not finished for reasons explained below.

NMFS final recommendations

In December the Council received another letter from NMFS. Findings of the Secretarial Hearing held in May were related. According to William Gordon, Assistant Administrator for Fisheries, based on the findings of the Regional Director, "Since a majority of catches come from state waters, and since the several coastal states have not been sufficiently cooperative in extending the management measures of the FMP to their waters, the ability of the Secretary of Commerce to implement the FMP effectively and equitably is severely constrained." To permit effective management, Mr. Gordon stated that four NMFS concerns had to be addressed. They were:

- 1) The scope of coverage of the FMP management unit of age 3+ herring within Maine state waters had to be clarified;
- 2) The Council needed to clarify the level of state cooperation which it anticipated for that portion of the management unit under state jurisdiction;
- 3) The rigidity of the fixed quota management system under the FMP had to be examined;
- 4) The term "overage" had to be defined in order that there be a clear understanding, by all parties, of what the Council believed was an acceptable level of catch above and beyond the established OY for the fishery.

Mr. Gordon noted that these concerns needed to be addressed through a Plan Amendment by July 1, 1982 else a Secretarial Amendment or withdrawal of Secretarial approval of parts of the FMP would occur.

He stated that "In either case, the result would be a plan that manages herring only in the FCZ, where the Secretary can effectively enforce management measures. Such a plan will protect the stock in the FCZ and serve as a mechanism to address international (U.S./Canadian) herring issues. If this course of action is pursued by the Secretary, NMFS will be directed to work with the concerned states to develop a rational management program for the Gulf of Maine herring fisheries through the State/Federal Fisheries Management Program."

Developing an approach

On January 12, 1982 the Herring Committee met to develop an approach to address NMFS concerns. It was decided that advisors be assembled (by way of an Industry Advisory Subpanel) to list industry problems and concerns which the Council could address. These were to be used by the Committee to construct plan objectives which would be responsible to industry needs. Concern for the resource was still to be important, but economics was to play more of a role in determining how the plan with its objectives was to evolve.

The above approach and results of an Industry Subpanel meeting were provided at January 26 and 27, 1982 Council meetings. According to Edward Spur:

"We have identified a list of issues and problems that are seen. I think that the various components of the industry want some sort of management, some sort of constraint, and some level on the catch. We are just beginning down the road of careful examination of the Herring Plan and what we want to do with it. At the February meeting we will be asking the Council some fundamental questions about herring management and what we want".

A new direction

At February 24 and 25, 1982 meetings, Edward Spur summarized the recent evolution of the Herring Plan and related a Committee proposal made at a February 18 meeting. He stated:

"We have gone through three amendments on the herring plan. In the last amendment we changed the quota system and extended the management unit. We

inserted a provision stating that the overages from one fishing period couldn't be deducted from the following ones. Amendments 4 and 5 were in progress. During the course of examination of the plan, it was pointed out that the objectives in the original plan were no longer applicable to what we are doing. We began examination of the objectives. It was during this examination that the problem occurred in the fall of 1980 where the OYs were exceeded because of the inclusion in the management unit of Maine waters and Section 4.2.2. of the Plan that didn't allow the Regional Director to make changes within the fishing year. The Regional Director initiated a Secretarial review of the plan. We have received a letter from Mr. Gordon with the findings of the Secretary. After lengthy Committee discussion on how to respond to herring management in general, we are making the assumption that the Council wants to be in the herring management business for social and economic reasons. I move:

"that the Council prepare an amendment or a new plan addressing the management of all herring stocks wherever found within the jurisdiction of the United States, with separate management programs for Georges Bank on the one hand, and the Gulf of Maine and other more inshore areas on the other. On Georges Bank the management program would contain a variable quota procedure, which would result in a zero quota except for scientific purposes given current stock sizes. For the other areas, which are the Gulf of Maine and Southern New England, the federal management program would be support of the States, giving the Regional Director authority to adopt regulations in support of State regulations. The Council would, however, remain an active proponent of sound management policy in these areas."

We were intending to make a further recommendation that the states be encouraged to begin discussion on the development of interstate management plans, but the states have already agreed to do this. The meeting will be on March 12 and is hosted by Mr. Coates for the four concerned states."

The Council approved the Committee's proposal. However, while the Regional Director considered the motion to be a

"positive direction", he stressed that the problems of the existing Plan still remained and needed to be addressed. He noted the July 1 deadline given by the Assistant Administrator.

In reply, Edward Spurr stated:

"The Committee recognizes that this would not be responsive to the July 1 deadline. A response to the Secretarial review has been discussed at the past two meetings. The Committee doesn't have a recommendation, but there is a consensus that the best thing that could happen would be a withdrawal of the implementing regulations except for Georges Bank. If we are going in a new direction, let's get started on it."

Continued concern by the Regional Director prompted Mr. Spurr to schedule another Committee meeting to develop specific recommendations for the interim period before implementation of the management regime described by the Committee proposal subsequently accepted by the Council.

Maine's retort

The letter from William Gordon which expressed four NMFS concerns noted, "Maine's Plan is inconsistent with the FMP because all age 3+ herring taken by fixed gear, and any age 3+ herring less than 9 inches taken by mobile gear, are not subject to the quota." This statement prompted Spencer Apollonio to defend his state's herring management program (see letter). He specifically pointed out that "Maine's management has not impeded the Council in achieving its objectives", and he defended his interpretation of Section 4.2.2 of the Sea Herring Plan Amendment #3, "Appropriate State Management Measures under the Amended FMP."

It had become apparent that a critical section of the Herring Plan had been interpreted in different ways. More discussion on this Section 4.2.2 and state responsibilities occurred in later correspondence between the Regional Director and the Council, and the Regional Director and Maine (see March 22, April 5, and April 8 correspondence). Clearly these differing interpretations and the Council's inability or unwillingness to clarify its own intent (requested by NMFS) were contributing to the demise of the Herring Plan.

State Directors meet

On March 12, 1982 the State Directors from Maine to Rhode Island met to discuss Sea Herring Management; i.e.,

MAR 5 1982

MANAGEMENT COUNCIL

NATIONAL MARINE FISHERIES SERVICE
16 FEB 11 1982
CORRESPONDENCE CONTROL UNIT

DEPARTMENT OF MARINE RESOURCES

MARINE RESOURCES LABORATORY
WEST BOOTHBAY HARBOR, MAINE 04578

January 28, 1982

Mr. William G. Gordon
Assistant Administrator for Fisheries
United States Department of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Washington, D.C. 20235

Dear Bill:

I have recently received the recommendations from the Secretarial Hearing on the New England Fishery Management Council's Atlantic Herring FMP. Although I am pleased with the decision against preemption of the management authority of any state, I am disturbed by some of the comments about the "inconsistent management of age 3+ herring in Maine's waters" and the various insinuations that Maine is the cause of any and all problems with the FMP. I would like, therefore, to draw your attention to several items that are a matter of record and which led to a different interpretation of Amendment 3 as it applies to the waters under Maine's jurisdiction.

While Amendment 3 was in preparation, the State of Maine consistently stated that it would not quota its fixed gear fishery. Stop seines and weirs, as they are fished in Maine, are largely passive, and, on the long-term, tend to fish in proportion to population size. These gear types are selective for the age 1-3 juvenile herring which are the raw material for an industry that has been of great economic importance to Maine since 1897. The Council, recognizing Maine's refusal to quota its fixed gear fishery, incorporated their response in section 4.2.2. of Amendment 3, "Appropriate State Management Measures Under the Amended FMP". This section began "The State of Maine may, at its option" - and the State declared from the outset that it intended to implement that option - may "provide information on expected harvests of herring age 3 and older in the fixed gear fishery which may then be deducted from the available catch allocations... The fixed gear fishery for juveniles may be allowed to continue to harvest 3+ herring if expected harvests from this fishery have been previously deducted from the 5Y North sub-allocation". The Council offered no instructions on how to determine "expected" catches, how to divide the sub-allocation between fixed and mobile gear, or what to do when the expected 3+ catch greatly exceeded the sub-allocation. Maine was left to determine all these variables itself.

In a year such as 1980, when the year class of two year olds is poor and the year class of three year olds is very large, there will be many three year old fish in the fixed gear catches. They school with the two year olds and there is no way to separate the ages. Because of density dependent growth in a large year-class many of the age 3 herring will be very small. To stop the catch of these age 3 fish would require closing the fishery completely. In 1980, the July-November sub-allocation was taken in the first five weeks of fishing. To close the entire 5Y North fishery by early August would have been an economic disaster for the Maine herring industry. Obviously, such a solution for curtailing the 3+ catch is completely untenable.

3+ in fixed versus mobile gear, that 76% of the 3+ catch was usually taken by mobile gear. There were some data to support this assumption. Therefore, 76% or 8,000 MT of the yearly sub-allocation, was set aside as a quota for the mobile gear. The remainder was used as an allocation to the fixed gear, keeping in mind that section 4.2.2. states that "the fixed gear fishery for juveniles may be allowed to continue to harvest 3+ herring...". The State felt that the mobile gear in 5Y North had to have an assurance of what part of the catch was theirs; that they could not be asked to pay the price for unexpected overages in the fixed gear catch; and that the State could not be expected to tell the mobile gear fishermen that due to the great abundance of fish, they could harvest little or none! The State felt this would be in violation of National Standard No. 4. Therefore, a fixed amount, a quota, was set for the 5Y North mobile gear, with the quota lower than the sub-allocation.

Perhaps Amendment 3 is too ambiguous. Certainly it seems to be in light of the confusion it has caused. But it should be remembered that Maine declared its intentions clearly from the beginning; that the Council's response was given in section 4.2.2., which seems to be frequently forgotten or overlooked; and that no guidance has ever been given by the Council on how it expected section 4.2.2. to be applied.

In the recommendations from the Secretarial Hearing it is stated that "Inconsistent management of age 3+ herring in Maine's waters thwarted the goal of unified management of that portion of the management unit in its own waters and also caused a breakdown in cooperative state and federal management in New Hampshire's and Massachusetts' state waters". To suggest any duplicity on Maine's part, by implying that they voted for Amendment 3 and then did not enforce it, is false. To suggest that New Hampshire wouldn't cooperate because of Maine is false; New Hampshire simply did not anticipate a herring fishery of any magnitude in its waters and therefore in 1980 had no plan in place. And to suggest that Massachusetts wouldn't cooperate because of Maine is to overlook the fact that Massachusetts has usually cooperated by closing its fishery soon after the FCZ was closed.

It should also be pointed out that Maine's management has not impeded the Council in achieving its objectives. The original FMP stated that "the Council believes that the Western Gulf of Maine stock could be rebuilt to an optimum level for maximum average harvests of about 17,000 metric tons". The Western Gulf of Maine spawning stock has rebuilt. The yearly quota for this area is already set at 22,530 metric tons. And the catch by mobile gear, which has been associated with the collapse of most herring stocks around the world, is under quota in all areas, including Maine's territorial waters.

We also submit that we do not believe that management can be completely consistent throughout the herring's range. One fishery, 5Y South, is basically a mobile gear, adult, age 4 and older fishery. The other, 5Y North, is basically a fixed gear, age 1-3 fishery. Even spawning times differ between the two areas, as do the seasons of the fisheries.

The stocks are being managed in close coordination, as required by National Standard No. 3. National Standard No. 6 requires taking into account and allowing for "variations among and contingencies in fisheries, fishery resources, and catches". Section 4.2.2. attempted to allow for these differences.

In closing, we submit that the State of Maine has implemented Amendment 3 in its waters, according to its interpretation of section 4.2.2. and in the absence of any interpretation by the Council or other sources.

Sincerely,
Spencer Apollonio

SPENCER APOLLONIO, Commissioner
Maine Department of Marine Resources

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
 NATIONAL MARINE FISHERIES SERVICE
 14 Elm Street-Federal Building
 Gloucester, MA 01930

March 22, 1982

Mr. Douglas G. Marshall, Executive Director
 New England Fishery Management Council
 Suntaug Office Park, 5 Broadway
 Saugus, MA 01906

Dear Doug:

Attached is a copy of my letter to Spencer Apollonio reaffirming the National Marine Fisheries Service's interpretation of Section 4.2.2 of the Fishery Management Plan for the Atlantic Herring Fishery of the Northwest Atlantic (FMP). The letter was prepared because I feel that past herring management problems have been due, in part, to different interpretations of Section 4.2.2. Furthermore, Maine believes it has not received sufficient guidance on how to interpret and apply Section 4.2.2 of the herring FMP.

I am requesting the Council to respond in writing to Spencer with its interpretation of Section 4.2.2. I believe this is an opportune time for us to do this, especially since Maine is in the process of preparing its 1982 herring plan. I hope you will be able to give Spencer your interpretation as soon as possible.

Thank you for your assistance in clarifying this section of the FMP for the State of Maine.

Sincerely,

Allen E. Peterson, Jr.
 Regional Director

Attachment

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

14 Elm Street-Federal Building
Gloucester, MA 01930

March 22, 1982

Mr. Spencer Apollonio, Commissioner
Maine Department of Marine Resources
State House
Augusta, Maine 04333

Dear Spencer:

Serious herring management problems have arisen in the past, in part because of different interpretations of Section 4.2.2 of the Fishery Management Plan for the Atlantic Herring Fishery of the Northwest Atlantic (FMP). This letter reaffirms the National Marine Fishery Service's interpretation of that section. In addition, I have requested the Council to provide you with its interpretation of Section 4.2.2 of the FMP as soon as possible. I understand that Maine is in the process of preparing its 1982 herring plan, so this information should be not only timely, but useful to Maine in revising its herring plan.

NMFS has interpreted the first part of Section 4.2.2 literally, and in conjunction with other sections of the plan. Section 4.2.2 states "The management provisions ... are intended to apply to all herring fisheries where herring age 3 and older are harvested from the shoreline out to the limit of the FCZ." Similarly, Section 2.1 defines the management unit as all herring fisheries from the shoreline out to the seaward limit of the FCZ, and Section 2.2 clearly requires all age 3+ herring taken from territorial waters to be deducted from the appropriate area/period allocation. The FMP and regulations provide NMFS with the authority to close the FCZ when the catch allocations are reached in order to achieve the established OY, as required by National Standard 1. As stated in Section 4.2.2, "To ensure the effectiveness of the management measures established by the FMP, all states are relied upon to enforce the area/period seasonal allocations by closing directed herring fisheries when the seasonal catch allocations have been taken."

Section 4.2.2 does allow Maine to provide information on expected harvests of herring age 3 and older in the fixed gear fishery which may then be deducted from the available catch allocations. The fixed gear fishery for juveniles may be allowed to continue to harvest 3+ herring if expected harvests from this fishery have been previously deducted from the 5Y north suballocation. However, we have a significant problem with the way Maine has interpreted and applied this section.

The problem we have with Maine's interpretation concerns Maine's determination of expected harvests of age 3+ herring in the fixed gear fishery. Although unstated, it is implicit in Section 4.2.2 that the estimate of the expected harvest be realistic. I do not believe the basis for Maine's determination of the expected catch in the fixed gear fishery is valid. The catch in Maine's juvenile fishery is related to the abundance of age 2 herring and to a lesser degree, the age 3 herring. If age 2 herring are not abundant in a given year, then age 3 herring are important in the fixed gear fishery. Maine's determination of the expected catch, however, is not based on or influenced by the year class strength, but only on the distribution of the age 3+ herring catch in one year, 1978, when 23.5% of all age 3+ herring landed were taken by fixed gear. In 1978, a good 1976 year class resulted in a large number of age 2 herring available to the fixed gear, and age 3+ fish were not so important.

Maine has used the 1978 catch distribution of age 3+ herring to estimate the expected catch of age 3+ herring in the 5Y north fixed gear fishery for subsequent years. The expected catch has been estimated as 2,470 mt, or roughly 23.5% of the FMP quota. Maine erred by continuing to estimate the expected catch of age 3+ herring in this way, and by not adjusting it to reflect the fact that when age 2 herring are not abundant in a given year, the age 3+ herring are more important to the fixed gear fishery.

Furthermore, an adjustment of the percentage of age 3+ herring caught by fixed gear should have been made to reflect the increase in the number of fixed gear units. Since 1978, when the percentage was determined, the number of units of fixed gear has increased substantially relative to the number of units of mobile gear. The percentage of age 3+ herring caught by fixed gear has probably increased accordingly, yet this has not been addressed by the State of Maine.

The Council may have intended to prevent closures in Maine's fixed gear fishery through Section 4.2.2. However Maine has used Section 4.2.2 as a loophole to: (1) underestimate the expected age 3+ herring catch by fixed gear, and (2) artificially inflate the remaining portion of the quota available to the mobile gear. Maine also classified some mobile gear (circle sets) as fixed gear, and counted only age 3+ herring greater than 9 inches against the quota, thereby reducing likelihood of closing down the directed herring fishery.

An appropriate interpretation of Section 4.2.2 should include a realistic estimate of the expected catch of age 3+ herring by fixed gear. This estimate should be based on the expected year class strength, the ratio of fixed gear units to mobile gear units, and on historical catches, not just on the catch distribution during 1978. All age 3+ herring caught by mobile gear, including those caught by circle sets, and those less than 9 inches in length, should be deducted from the quota available to mobile gear. When the quota is exceeded, and the FCZ is closed, directed herring fisheries in Maine territorial waters should also be closed.

If it appears that the expected catch of age 3+ herring in the fixed gear fishery will take the entire FMP quota of 10,470 mt for 5Y north, then perhaps Maine should consider some restrictions on the juvenile fishery, and/or not even open the mobile gear fishery. If you decide it is not appropriate to have the mobile gear fishery in 5Y north pay the price for unexpected overages in the fixed gear fishery, then I suggest that the fixed gear fishery be held accountable for these overages.

By voting to adopt Amendment 3, the Council, and the State of Maine agreed to the established quotas for age 3+ herring for the 1979-1980 fishing year and for subsequent fishing years until otherwise amended. Successful implementation of the FMP and these quotas depends on State cooperation.

I hope you find this interpretation of Section 4.2.2 useful for the preparation of your 1982 herring plan. If we all work with the same interpretation of this section, we should not have a recurrence of the problems experienced during the 1980-1981 fishing year. Please feel free to contact me if you have any questions on the interpretation of Section 4.2.2.

Sincerely,

Allen E. Peterson, Jr.
Regional Director

April 5, 1982

Mr. Allen E. Peterson, Jr., Regional Director
National Marine Fisheries Service
14 Elm Street - Federal Building
Gloucester, Massachusetts 01930

Dear Allen:

Your letter of March 22 did indeed make clear your interpretation of Section 4.2.2. of the Atlantic Herring FMP. I believe, however, that Maine has made clear that given current levels of stock size and recruitment, it will not manage its fishery under that interpretation. The reasons for this have been covered in numerous letters, Council debates and the Secretarial Hearing. It is time to lay amendment 3 aside and to go forward with new management measures which reflect biological and economic reality.

As you are aware, the NEFMC Herring Oversight Committee instructed the State Directors to meet to see if agreement could be reached on new directions for herring management. That meeting was held in Boston on March 12 and the results have been given both to you and the Council. It was agreed that for the upcoming fishing year, the transitional period during the development of a new interstate management structure, Maine would continue its 1981 regulations. Therefore, we are no longer in the process of preparing a 1982 herring plan.

You raised many issues in your letter which must be addressed. First, Maine's determination of the expected 3+ catch in the fixed gear was not based solely on the distribution of age 3+ herring in one year, 1978, as you stated in your letter. It is true that when Maine wrote its 1979 herring plan, catch by gear by age information was available for only one year, 1978. However, a ten year time series, 1969-1978, was examined for total mobile gear catch and total 3+ catch and it was determined that the allocation would have been suitable for nine of the ten years. A memo to Dr. Vaughn Anthony, who was then our research director, stated: "In 1978, the only year for which catch by age by gear data are available, the mobile gear took 75% of the 3+ catch. An analysis of the past ten years of data shows that it is probably safe to assume that, with the exception of 1976, this is a typical pattern." Since then we have examined catch by gear by age, under contract to NEFMC, and the actual fixed gear 3+ catch for that time series bears out the original assumption.

Things have changed, however, since 1979. Recruitment has improved dramatically. Stock size is up. The age 3+ fishery this year will be composed of three above average year classes, 1976, 1977 and 1979. Amendment 3 was valid for one year, the year in which it was written. It is now invalid, inflexible, and out-of-date. At last year's meeting of the NEFMC Herring Technical Working Group, the staff from the Center stated that the 30,000 MT figure in Amendment 3 was biological MSY, not OY. For one year, 1979, when the stock was low and one good year class was recruiting, biological MSY happened to equal OY. They also stated that for a species such as herring which fluctuates greatly, it is foolish to manage on an MSY basis. As a long-term average, the 30,000 MT is valid, but it is not valid year to year. To hold a fishery to an average catch or average recruitment figure means simply that you will still have your very low years; you just will never have a high year to offset it. The net effect is to depress your average catches to new lows. If the stocks were undergoing a steady decline, that strategy might make sense. To depress your catch when your stocks are steadily increasing is obviously poor management.

Your letter raises other problems. How can we adjust a quota to reflect the fact that age 2 herring are not abundant, when we don't know until well into the fishing season whether they are abundant or not? If you have access to precise information on the strength of the 1980 year class, we wish you would share it with us. If you have evidence that an increase in the number

of weirs will increase the percentage of 3+ fish caught in the fixed gear, then we would like to see that also. We do not feel we have "artificially inflated" our mobile gear quota. It is set at a level which allows it to continue as it has in the past with good years and bad years, and which restricts any long-term increase in its average catch. The 10 year average age 3+ mobile gear catch, 1969-1978, was 7,400 MT. The average 3+ mobile gear catch since 1978, for the three years 1979-1981, is 4,637 MT. Now you suggest that we consider not even opening our mobile gear fishery! That would be a very drastic and totally unnecessary measure. We will not consider such a move.

You also make some remarks such as "Maine should consider some restrictions on the juvenile fishery" and that the fixed gear be held "accountable" for overages. Would you discuss in detail what you have in mind by "some" restrictions and in what way the fixed gear be held "accountable"? Also, would you define "directed fishery" as it applies to the fixed gear. At what point does a fishery for mixed 2 and 3 year olds cease to be "mixed" or non-directed and become a directed age 3+ fishery? It is easy for anyone to discuss generalities. However, the only useful advice would be precise recommendations with a complete list of current biological, economic and social justifications for these recommendations.

You also state emphatically that circle sets are mobile gear, when we have determined that they are not. What are your reasons for classifying circle sets as mobile gear? And how do you propose to collect statistics on their catches?

Also you must be aware that we proposed in last year's plan to quota mobile gear on an age 3 rather than 9 inch basis, and met with overwhelming opposition. It was strongly felt that we should not change since the Council had repeatedly stated its intent to go to 9 inches. We consider going to age 3 a dead issue.

In your last paragraph on page 2 you say Maine should make an appropriate interpretation of Section 4.2.2. including a realistic estimate of the expected catch of age 3+ herring by fixed gear. For the coming fishing year we have no idea of the exact strength of the year class of 2 year olds. We know the 1979 year class was very abundant last year and therefore should be very abundant as 3 year olds. We do not know how many will be caught, although we suspect the July - Nov. Amendment 3 allocation of 8,850 MT will be exceeded. We do not expect that exceeding the quota will adversely impact the stock.

Maine cannot increase its allocation to the fixed gear without adversely impacting its mobile gear fishermen. Thus, as there is no flexibility in Amendment 3, it follows there can be and will be no flexibility in our interpretation of it for 1982.

I request that you refer to the NEFMC Herring Technical Working Group all the biological issues you have raised. These issues include: year class strength of the 1980 and 1979 year classes, expected catches in the fixed gear of each age, appropriate mobile gear quotas for 5Y North for 1982, realistic OY for 1982 and stock size estimates. I further request that the results of the Herring Technical Working Group be distributed in report form to all Council members as soon as possible.

I also request that you not pursue herring management based on Amendment 3, due to your literal interpretation and its inflexibility and inappropriateness for the coming year. The Council and the States are going forward with new measures and I urge you to respect this new direction, and to support the States in their efforts.

Sincerely,

SPENCER APOLLONIO, Commissioner
Maine Department of Marine Resources

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES

STATE HOUSE - STATION 21
AUGUSTA MAINE 04333

April 8, 1982

Mr. Allen E. Peterson, Jr.
Regional Director
National Marine Fisheries Service
14 Elm Street - Federal Building
Gloucester, Massachusetts 01930

Dear Allen:

The attached letter was prepared for me by my staff in response to your letter of March 22 concerning herring management. I have studied your letter and my staff's reply carefully to understand your concerns and to be certain that your concerns were adequately addressed in our reply. I believe they are, although I do not realistically expect that we thereby reach full accord and agreement on these issues. I expect that we do not.

This letter is to express what in my view is a larger and more serious concern; that is, that you and I, as shown by our two letters, are now enmeshed in a confusing and bewildering morass of detail and technicality which in fact has nothing to do with reasonable resource management. I am concerned that we could continue to exchange letters full of details, explanations and complexities - each correct from a technical point of view or from a particular perspective - and that the exercise would be pointless, indeed counterproductive. By way of example, much of the detailed discussion revolves around the current validity of Amendment 3. In fact, Amendment 3 is probably out of date as far as the herring are concerned even though it may still be legally binding.

I would like to emphasize another serious problem - perhaps the most serious. I suspect your staff prepared your letter of March 22 for you, just as I relied upon my staff for our reply. In fact, I could not trust my own recollection of all the complexities, assumptions, and details that lie behind the various issues raised in your letter. Nor did I have the time to research the history of where we are with the herring plan, nor by what circuitous route we got here. (I used to trust my memory to let me do this, but rapidly advancing age shakes my confidence now in my ability to rely on memory alone.)

What we have, then, is a plan that requires very detailed attention indeed if it is to be understood, implemented, or intelligently interpreted or changed. It is clear, also, that even when that detailed attention is given to it by full-time staff (yours and mine, both working in good faith on the problem), we come up with different answers. We don't even agree on a statement of the problem, let alone whether or how the plan addresses a problem!

If our full-time staffs, with full knowledge of the issues, reach different conclusions, how then can we hope that the council, the industry or the public can hope to comprehend the issues or the plan? By way of illustration, citing only one point of disagreement, Maine's public hearing process (the only formal process to address this particular question in any realistic way) clearly showed, and absolutely persuaded me, that circle nets in Maine are not mobile gear. As used in Maine, they are nearly or totally indistinguishable from stop seines. And yet your letter is based in part on the conclusion that circle nets are mobile gear, and I believe the council as a whole will assume from your letter that that is the case. It is not. There apparently, then, is basic disagreement between us on a rather simple but important point.

This simple example is merely one of a number of far more complex points of disagreement within the whole issue of current herring management. And none of them appear to relate significantly to the question of the status or management of the resource! We seem to be mired in a swamp of words. In the understated words of Jim Warren to the Maine Sardine Council, recently - "... the current situation is quite confusing." If it is confusing to Jim, who pays full-time attention to herring, has the benefit of many years in the business, attended many ICNAF meetings on herring, has attended since 1977 almost every council and herring oversight committee meeting, and prepares detailed reports of each meeting for his council, how can we expect that council members have a clear grasp of the complexities? In short, I am suggesting that we now have a plan of such complexity that it cannot be clearly understood nor intelligently acted upon by the people who have the responsibility to do so, many of whom were not party to the preparation of the plan and may not have read it! This is not a criticism of the people. It is a comment on the plan. And if we permit ourselves to be further snared by differing interpretations of what Amendment 3 did or did not mean or intend, then all our time and energies will be wasted on a meaningless and wasteful exercise - and the real issues of herring management will be ignored. I do not believe it is profitable to continue an exchange of letters such as yours of March 22 and my reply, enclosed. If we do, we shall not have the time to identify nor deal with the real issues.

The real issue, I suggest, is that we have not yet, after nearly five years, decided the purpose of herring management - beyond a very general and ill-defined concern about "stock collapse" (which of course is a very valid concern) - nor how to implement effectively any agreed-upon purpose, including that of preventing a stock collapse.

Frankly, I would prefer to devote my available time to worrying about the possibility of a stock collapse and how to prevent it, rather than further haggling over Amendment 3, the purpose of which does not appear to be clear to anyone.

We will of course, if we must, continue to respond to relevant comments about the council herring plan, but we much prefer to devote our energies to useful and constructive activities. And that we are always ready and willing to do.

Yours sincerely,

SPENCER APOLLONIO
Commissioner

the appropriateness of the FMP, applicability of the MFCMA to sea herring, and mechanisms for state management. It was recognized that, "the harvest of herring, both adult and juvenile, occurred predominantly within state's territorial seas and each state had regulatory authority to respond to resource problems within a meaningful time frame as opposed to the unwieldy and burdensome time constraints imposed by the FCMA."

The states tentatively decided to develop a separate interstate management structure for sea herring and felt that one option for this structure could be provided by Amendment #1 to the Atlantic States Marine Fisheries Commission compact. In the interim; i.e., until this interstate management regime could be formulated, the states "tentatively agreed" that Maine and New Hampshire should continue their existing management programs and Massachusetts should begin procedures to evaluate the need and desirability of a Massachusetts spawning area closure from October 1-21 so as to provide a unified state action from Maine to Massachusetts.

The states also requested that the Council,

"initiate a complimentary management program through amendment to the existing FMP for Atlantic Herring. This amendment should include a flexible OY for Georges Bank adjusted to zero considering present stock size and there should be no TALFF either for Georges Bank or the Gulf of Maine regardless of stock size considering the importance of herring in the food chain of other important fishes. The OYs in the current FMP should be removed as they are neither reflective of the status of the stocks nor the associated fisheries."

Disagreement

At March 30-31 Council meetings it was apparent that some Council members did not remember (or at least did not agree with) the Council decision made at February 24 and 25, 1982 meetings: i.e., for the Gulf of Maine and southern New England "the federal management program would be to support states, giving the Regional Director authority to adopt regulations in support of state regulations". This decision was in support of sea herring management in the Gulf of Maine and southern New England waters by the states.

A motion was made by Robin Peters that, "the Council commend the State Directors for getting together to discuss cooperative herring management, but that the Council states its belief that the appropriate forum for resolving questions of cooperative herring management is the Council and not ASMFC". This motion originated from her concern that cooperative state agreements might result in a herring management regime not up to the FCMA standards. She was concerned that

the Council would somehow be left out of the herring management discussions if states opted to use the Amendment #1 process. After being assured that the Council would not be bypassed, she withdrew her motion. It was apparent that with all states as Council members, the Council would be kept informed on state management policies and strategies.

The meeting ended with Edward Spurr noting that his Committee would endeavor to provide procedure for states to follow in their attempts to cooperatively manage sea herring - a procedure acceptable to the Council.

A Regional Office decision

At June 15-17, 1982 Council meetings Edward Spurr related a May 28 Committee decision that the Council "recommend to NMFS that the appropriate response to Secretary of Commerce review of the Herring Plan be suspension of quotas in all areas except Georges Bank." Mr. Spurr had led off Council discussion on this issue by again relating his understanding of the Committee's charge and a possible tact for keeping development of state herring management strategies within the Council forum. He stated,

"The Committee was instructed to prepare formal comments for Secretarial review, and there was concern of how development of amendments to the existing plan should proceed. The Committee recommendation was that the Herring Plan Amendment be prepared by State Directors and be implemented in state waters. The Council Plan would consist of delegation of non-discretionary authority to the Regional Director so he could parallel regulations within the FCZ. Two members could not make the meeting but we came up with a recommendation that, through some mechanism, the bylaws defining composition of Committees be suspended so that the Chair could be directed to compose the Herring Oversight Committee of State Directors. As far as action to be taken on July 1 in response to Secretarial review, the Herring Oversight Committee recommends that there be no quotas in the Gulf of Maine."

In response to the Committee's recommendation that the Gulf of Maine quota be suspended, Allen Peterson noted that there might not be any Plan to amend. He stated that the Regional Office had recommended Secretarial withdrawal of Plan approval and repeal of implementing regulations. He noted that the Georges Bank stock would still be protected from impacts of foreign fishing since herring was a prohibited species under foreign fishing regulations.

No Council members commented on this revelation - perhaps because the Regional Office recommendation was expected. The Committee was directed to develop a response to the Regional Office recommendation to Washington NMFS.

The Committee recommendation of a change in its own structure to include only State Directors met with great Council resistance. A motion by Mr. Spurr that,

"the rules on Committee composition and the discretionary authority of the Chair to compose these Committees be suspended and the Chair be directed to designate as the Herring Oversight Committee the State Representatives from the five states who will continue to develop a herring plan for final approval of the Council"

was withdrawn. Allen Peterson had been the most outspoken opponent of this recommended change, and he concluded that the appropriate mechanism for Plan development was the ASMFC. Proponents of the recommendation had felt that the proposed change in Committee structure would facilitate and expedite interstate management of herring. Plan development through ASMFC was expected to take a much longer period of time. Since many of the "prime players" in Council Herring Plan development were already State Directors and the future FCZ regulations were expected to reflect those set for state waters, the sense of going to ASMFC instead of creating a Committee of State Directors which would benefit from Council Staff assistance and keep all discussions in the Council forum, was questioned.

ASMFC

The Council obtained an estimate of cost for ASMFC development of a sea herring plan. This estimate and ASMFC agreement to undertake this project were obtained at a July 20 meeting of the North Atlantic Section (Maine to Connecticut) of ASMFC. This estimate was revealed at July 27 and 28, 1982 meetings, and the Council directed the Committee and Staff to continue its negotiations with ASMFC to investigate alternate means for funding a contract with the Commission.

Final nail in the coffin

In August, NMFS published an Environmental Assessment and Regulatory Impact Review for withdrawal of Secretarial approval of the Sea Herring Management Plan. The Assessment noted:

- 1) state failures to ensure effectiveness of the Plan's management measures (quotas);
- 2) lack of state cooperation resulting in a failure of the Plan to achieve National Standards 1 (to achieve OY) and 3 (to manage the fishery as a unit);
- 3) failure of the Council to clarify and amend various portions of the FMP by July 1, 1982;
- 4) likelihood that quotas would be exceeded in 1982;
- 5) significant improvement in the condition of the herring resource since 1977;
- 6) faulty assumptions made in approving the FMP and amendments;
- 7) possible violation of National Standard 6 - that conservation and management measures must take into account and allow for variation among and contingencies in fisheries, fishery resources, and catches;
- 8) harvest levels being controlled by resource availability and market demand - not FMP quotas;
- 9) the action to withdraw FMP approval and to repeal the regulations being the least costly alternative available for resolving management problems experienced under the FMP.

Of importance, the Assessment indicated that each state with herring plans or regulations would continue to regulate their fisheries and that each state could control vessels permitted by each state wherever they fished even if in the FCZ. Based on this premise the Assessment concluded that, "Since the herring fishery will not be completely unregulated, and since FMP quotas have not effectively limited herring fishing anyway, eliminating the FMP should not adversely affect the resource."

NMFS indicated in the Assessment that federal regulation of Gulf of Maine and Georges Bank sea herring would be eliminated until the Council prepared a new Plan which would have to be approved and implemented by the Secretary of Commerce.