

Eastern U.S.-Canada Boundary Line Drawn by World Court

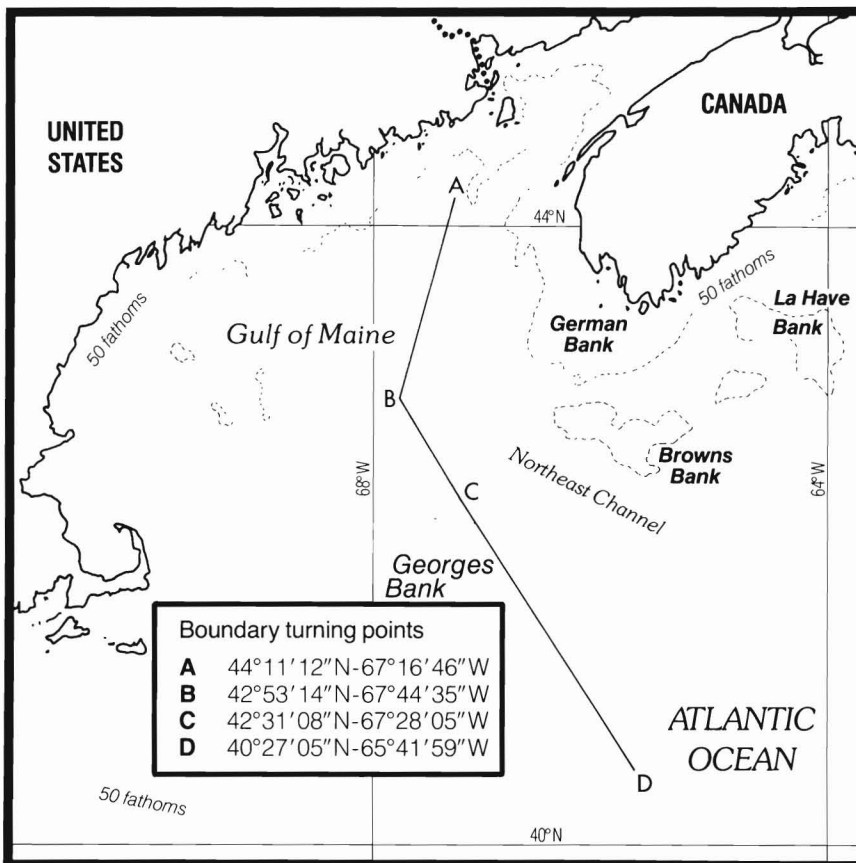
A compromise North Atlantic boundary line, dividing Georges Bank and its resources between the United States of America and Canada, has been drawn by the World Court in The Hague, Netherlands. The new boundary between New England and Nova Scotia gives part of the Bank to Canada for the first time. The issue was settled on 12 October 1984 and the decision was enforced as of midnight, 26 October 1984. Both Canada and the United States had agreed to a 14-day grace period to allow fishing

vessels from both sides to return to their respective sides of the new boundary (see map).

The heart of the issue, which has been a source of dispute since 1976 when both Canada and the United States extended their eastern boundaries, was control of an area of between 13,000 and 18,000 square nautical miles that included the northeastern half of Georges Bank, one of the world's richest fishing grounds. The area may also contain oil and natural gas reserves. The United

States had argued that it was entitled to a boundary line that retained all of Georges Bank. Canada had asked for a line dividing the Bank virtually in half, leaving all of the northeastern segment under its control. The World Court, in essence, split the difference, setting a line that cut Georges Bank about midway between the two claims. According to the National Oceanic and Atmospheric Administration, which has jurisdiction over fisheries out to 200 miles off the U.S. coast, including the Georges Bank area, the new boundary will make management of Atlantic fisheries, including cod and haddock, very complex, and will require close consultation with all interested parties. High seas rights pertaining to the area, such as freedom of navigation, are not affected.

The Court, at the request of Canada and the United States, established a Special Chamber of five judges to hear the case, and had considered extensive written and oral submissions presented by both sides during the previous 2 years. Members of the Chamber included: Judge Roberto Ago of Italy, President of the Chamber; Judge Andre Gros of France; Judge Herman Mosler of the Federal Republic of Germany; Judge Stephen Schwebel of the United States; and Judge ad hoc Maxwell Cohen of Canada.



Symposium Honors NEFC Gloucester Laboratory

In honor of the 25th anniversary of the National Marine Fisheries Service's Gloucester Laboratory of the Northeast Fisheries Center, a 1-day "International Symposium on Fisheries Technology" has been scheduled in conjunction with the 30th Atlantic Fisheries Technological Conference 25-29 August 1985.

The Conference will be held at the Copley Plaza Hotel in Boston, Mass., and is chaired by Ron Lundstrom. Keynote speaker for the Symposium will be Jack Connell, Director of the United Kingdom's Torrey Research

Station. In addition, a program has been assembled which features some of the world's foremost fishery technologists and the Symposium will be an excellent opportunity to examine the state of the art in the field of fisheries technology.

The entire program of the 30th AFTC has been in preparation, as well, with the first call for papers being sent out in early March. The second and final call for papers was to be issued in early June, with an abstract submission deadline of 1 July 1985. A final mailing, 1 month prior to the conference, will include the final program and registration and hotel information.

American Lobster Size, Gear Requirements Told

Effective 1 January 1985, federal regulations which implement the American Lobster Fishery Management Plan (FMP) require that lobsters landed in whole form must have a minimum carapace length of $3\frac{3}{16}$ inches, and gear must be appropriately marked and vented. Richard H. Schaefer, Acting Northeast Regional Director of the National Marine Fisheries Service, stated that these provisions apply to all lobster fishermen who are permitted to fish in the fishery conservation zone (FCZ), either by his office or through an endorsement on a State lobster permit.

Lobster gear deployed in the FCZ or possessed by a person whose vessel is permitted to fish in the FCZ must be marked with the vessel's Federal fishery permit number, or the markings required by the vessel's homeport State. This gear must also include an escape vent(s) in the parlor section of the trap. The vent may either be: 1) A rectangular portal with an unobstructed opening not less than 1 $\frac{3}{4}$ inches (44.5 mm) by 6 inches (152.5 mm); or 2) two circular portals with unobstructed openings not less than 2 $\frac{1}{4}$ inches (57.2 mm) in diameter.

According to Schaefer, these provisions for the minimum carapace size

and the gear marking and venting requirements will not affect most lobstermen because they are already required in many of the states. The American Lobster FMP was prepared by the New England Fishery Management Council, and is intended to implement the Federal share of the coastwide lobster management program for this valuable fishery.

Misleading Reports Given by Japanese Fish Groups

The National Marine Fisheries Service announced at the North Pacific Fishery Management Council meeting in Anchorage last fall that documents seized from Japanese fishing vessels indicate that organized measures had been used by Japanese fishing associations to frustrate U.S. observer programs and at-sea enforcement.

During fishing violations investigations conducted for improper catch logging and reporting, Japanese language documents were seized and subsequently translated. Those documents indicate that the Japanese Longline and Gillnet Association and the National Federation of Medium Trawlers used highly organized schemes to manipulate U.S. observer coverage on foreign vessels. The tactics included purposeful reductions in catch and restricting fishing areas. U.S. observers are used to monitor foreign catch levels and composition. The biased observer data may have allowed the foreign vessels to avoid payment of poundage fees and resulted in improper estimates of fish stocks by fishery managers.

Fishery managers use observer catch estimates when coverage of each class of foreign vessel is 20 percent or more in a statistical area each week. The schemes employed often prevented achieving 20 percent observer coverage so that foreign reported catch would be used. The documents infer that vessels without observers aboard could fish unrestricted but report only assigned quotas.

The schemes also involved monitoring of U.S. patrols to prevent at-sea boardings of vessels that did not have observers assigned. Patrol craft location and movement information was sent by code to fishing vessels to allow movement away from patrol vessels. When vessels without observers were boarded, catch underlogging violations were often found.

Beginning in 1984, U.S. observer coverage was increased to nearly 100%. That has eliminated the effects of some of the tactics that had been used. The level of foreign fishing off Alaska was significantly reduced in 1984 and in part stems from increased levels of observer coverage. Observers, however, cannot monitor the entire catch of a vessel that fishes continuously and opportunities to bias observer catch estimates still exist.

The investigation results were provided to Department of State officials who asked the Japanese Government to conduct an inquiry. While awaiting that report, the North Pacific Fishery Management Council and fishery managers were studying possible actions available to prevent recurrence of such schemes.

Gulf Reef Fish Fishery Regulation Established

Regulations to conserve and manage reef fish resources of the Gulf of Mexico became effective on 8 November 1984, announced Jack T. Brawner, Southeast Regional Director, National Marine Fisheries Service (NMFS).

The regulations implement the fishery management plan (FMP) for reef fish resources prepared by the Gulf of Mexico Fishery Management Council under the Magnuson Fishery Conservation and Management Act. The regulations apply in the Gulf of Mexico portion of the fishery conservation zone (FCZ), which generally includes all waters extending from 3 n.mi. off Alabama, Mississippi, and Louisiana, and 9 n.mi. off Florida

(west coast) and Texas, to a distance of 200 n.mi. offshore. Species regulated under the FMP are snappers, groupers, and sea basses.

The regulations establish a "stressed area" in the nearshore waters of the FCZ off Florida and Alabama and portions of Mississippi and Texas where reef fish resources are subjected to intensive fishing effort and where some species, especially red snapper, are overfished. In this area, the use of fish traps and roller-rigged trawls is prohibited altogether, while powerheads (a projectile-firing device used by divers) may not be used to harvest any regulated species. These restrictions are intended to reduce fishing effort and the potential for user conflicts.

Fish traps used outside the "stressed area" are subject to certain construction specifications, number and size limitations, and permitting and tagging requirements. Individuals tending to use traps in the FCZ were required to apply for a permit from the Regional Director at least 45 days in advance of the desired fishing date. Trap fishermen were given until 23 November 1984 to comply with the permit and tag requirements. There is no charge for permits and tags for fish traps. Permit applications may be obtained by writing or phoning the Fishery Operations Branch, National Marine Fisheries Service, 9450 Koger Boulevard, St. Petersburg, FL 33702, (813) 893-3723. A copy of the reef fish regulations containing details of fish trap construction features, a description of the "stressed area," and other prohibitions also may be obtained from the Fishery Operations Branch.

In addition, the regulations prohibit the use of poisons or explosives for taking any regulated species, and establish a minimum size limit of 12 inches fork length (13 inches total length) on red snapper harvested in the FCZ with three exceptions: 1) An incidental catch of five undersized red snappers per person per trip is allowed; 2) domestic vessels lawfully fishing trawls in the FCZ are exempt from the minimum size limit and incidental catch allowance for red snap-

per; and 3) persons fishing in the FCZ from headboats (generally vessels that carry seven or more persons who fish for a fee) are exempt from the minimum size limit and incidental catch allowance for red snapper until

8 May 1986. All red snapper harvested in the FCZ must be landed with the head and fins intact. Federal civil penalties up to \$25,000 may be assessed for violation of these regulations.

NEFC Increases Salmon Research

The United States, Canada, and many European countries as far south as Spain produce Atlantic salmon, *Salmo salar*, which annually migrate to the waters off West Greenland where they remain from one to several years before returning to their native rivers to spawn. Greenland has no Atlantic salmon rivers but conducts a significant fishery that has been the focus of international concern since the mid-1960's. In 1971, for example, 2,700 metric tons (t), or 750,000 salmon, were caught in the high seas fishery off West Greenland. Scientists have estimated that on average about 42 percent of these fish come from the United States and Canada.

In 1972, the ICNAF (International Commission for Northwest Atlantic Fisheries) was able to set national quotas on fished species in the Northwest Atlantic for the first time and shortly thereafter the West Greenland high seas fishery also came under control of ICNAF. The total catch was gradually reduced to about 1,100 t annually, and the high seas fisheries of Norway, the Faroe Islands, Sweden, and Denmark were completely eliminated by 1976. The ICNAF measures continued in force until 1977 when the U.S. extended its fisheries jurisdiction to 200 miles.

In March 1983 the NMFS Northeast Fisheries Center (NEFC), was tasked to begin an Atlantic salmon research program which would address the high seas fisheries and the interception problem of U.S. salmon in the Northwest Atlantic. On 25 March 1983, NEFC representatives met with Canadian scientists in Halifax, Nova Scotia, to review the Canadian research on Atlantic salmon. On 21 April 1983, many of the U.S. scientists who are working directly with

Atlantic salmon from the States, Universities, and Federal Government met at the NEFC in Woods Hole, Mass., to plan a detailed program of research for the National Marine Fisheries Service.

After review of the current U.S. research programs the group decided that the NEFC could contribute a significant amount of information primarily in four areas: 1) Exploration and assessment of the methods other than external tagging to separate U.S. stocks of Atlantic salmon from other stocks on the high seas, 2) provide assistance to the states in analyzing their tagging data, 3) provide assistance to the states in expansion of their tagging programs, and 4) sponsorship of technical workshops which would bring together people within the New England area working on Atlantic salmon to discuss common problems.

Thus, the NEFC has taken several steps. It is providing money to the Atlantic Sea Run Salmon Commission in Maine to evaluate the timing, magnitude, and distribution of commercial and home-water exploitation of 50,000 tagged hatchery-reared Atlantic salmon smolts in 1984. The Center is also helping them to summarize and evaluate their tag return data and establish a data processing system for tagging studies.

Also, the NEFC is providing funds to the University of Rhode Island, Narragansett, for the assessment of certain characteristics associated with scales, otoliths, and body measurements which may be used in identifying U.S. Atlantic salmon stocks on the high seas. In addition the Center has requested proposals, nationwide, for two studies on the review and evaluation of genetic and nongenetic

techniques to distinguish U.S. Atlantic salmon stocks from all other stocks. Proposals are under review. The Center also held a workshop to evaluate the value of the stock identification techniques that will be studied during the coming months.

Much effort has been spent over the years to restore runs of Atlantic salmon to the New England area by many people. Their efforts are now being rewarded with a significant increase in runs in several rivers. The National Marine Fisheries Service, which has responsibility for research in the FCZ (3-200 miles from the coast) and beyond, is now significantly developing an Atlantic salmon research program which will assist the States and the Fish and Wildlife Service. By summer 1985, the Center hopes to be in a position to know which procedures are most useful for identifying U.S. Atlantic salmon, regardless of where they are on the high seas. This will be useful in evaluating the degree of exploitation of U.S. Atlantic salmon off West Greenland as well as in the Canadian fisheries as the salmon migrate from West Greenland back to the United States. If a proportion of U.S. Atlantic salmon are being killed by other countries on the high seas, then it is very important that the United States be in a position to evaluate its significance.

Witch Flounder Eyed As Fishing Pressure Rises

The witch flounder, *Glyptocephalus cynoglossus*, also called gray sole, is a slow-growing deep-water flatfish that is fairly common in the Gulf of Maine-Georges Bank region. Over the years, the species has been taken primarily as a by-catch and landings have generally been minor, averaging about 3,000 metric tons (t) during the 1960's and 1970's. Since 1980, however, landings have increased substantially; the 1982 total was 5,100 t and an increase to perhaps 7,000 t was projected for 1983. This increase has been accompanied by an increase in effort and in landings of

smaller fish. In response to these trends, the NMFS Northeast Fisheries Center has developed a preliminary assessment to evaluate the current status of the witch flounder resource.

In U.S. waters, witch flounder are most abundant throughout the Gulf of Maine and in deeper areas along the fringes of Georges Bank. In 1982 the primary fishing areas were located in the west-central Gulf of Maine, off Cape Cod, and along the northwestern rim of Georges Bank. Specific spawning grounds have not been found, but the species appears to spawn widely throughout the western Gulf of Maine from March to October, with a peak in May and June.

Witch flounder are prized as a food fish and command a high market price, but they are not abundant enough off New England to support a continuous directed fishery. Therefore they have been caught primarily as part of a mixed fishery and as a by-catch in other directed fisheries.

The bulk of U.S. landings in recent years has been taken by small vessels fishing year-round in the Gulf of Maine and by larger vessels fishing on Georges Bank during late spring and early summer. In general, effort and total catch have increased for all tonnage classes. Another noteworthy trend in the witch flounder fishery has been an apparent increase in landings of small "peewee" flounder of 11-12 inches in length. Future prospects for this resource are uncertain. Research vessel survey data suggest a declining trend since the late 1970's implying that the 1982-83 landings average about 6,000 t.

Northern Gadoid Workshop Scheduled at NWAFC

An international "Workshop on Comparative Biology, Assessment, and Management of Gadoids from the North Pacific and Atlantic Oceans" will be held 24-28 June 1985 at the NMFS Northwest and Alaska Fisheries Center, Seattle, Wash. It is cosponsored by the Center, the Institute of Marine Research, Bergen,

Norway, and other Seattle and Bergen institutions.

At the Workshop, specialists from several nations will review and discuss the life history, ecology, management, and utilization of these important gadoids and provide recommendations for future studies. Papers will be submitted for the workshop, but not formally presented. Instead, rapporteurs will provide a synthesis of the contributed papers by category. Workshop papers will be compiled in proceedings and selected papers will be published in a special journal issue. Additional information can be obtained from the Gadoid Workshop Organizing Committee, c/o Miles Alton, F/NWC1, Northwest and Alaska Fisheries Center, NMFS, NOAA, 7600 Sand Point Way N.E., Bin C15700, Seattle, WA 98115.

NOAA/USGS Will Map 200-Mile EEZ

NOAA and the Department of the Interior's U.S. Geological Survey (USGS) have launched a cooperative multi-year program to provide basic "roadmaps" vital to systematic resource exploration, development, and conservation of the U.S. EEZ (exclusive economic zone). When President Ronald Reagan proclaimed the EEZ 200 miles from the shores of the United States in 1983, the size of the United States nearly doubled.

NOAA's responsibilities for the largely uncharted 6 million square mile area in the EEZ include surveying, mapping, oceanic and resource analysis, and fisheries management. USGS responsibilities include definition of seafloor geology, geological processes, and resources, which include sand and gravel, placers, phosphorites, manganese nodules, cobalt crusts and sulfides, all with major strategic and economic potential. The project began in the Pacific, with the West Coast schedule for 1984-85; Alaska in 1986; the Hawaiian Islands in 1987; and then the Trust Territories. East and Gulf Coast schedules have not yet been set.