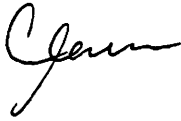


MEMORANDUM

TO: Council, AP and SSC Members`

FROM: Clarence G. Pautzke 
Executive Director

DATE: April 18, 1991

SUBJECT: International Fisheries

ACTION REQUIRED

- (a) Status reports on international activities.
- (b) Regulatory proposals for Donut fisheries.

BACKGROUND

(a) International Activities

There have been several important meetings on international fisheries off Alaska since the January Council meeting. Dave Benton will report on these activities, and several of the Council members have been involved as well. The ones for which I've received summaries are listed below:

U.S.- USSR Bering Sea Fisheries Advisory Body. The BSFAB met on February 11-12 in Seattle. They reviewed data on pollock resources in the entire Bering Sea, including trends in biomass and abundance. A summary of the meeting is under Item C-6(a). Bill Aron, Don Bevan, Rich Marasco, Mark Pederson and other Center scientists attended on behalf of the U.S.

U.S.- USSR Bilateral. This meeting was held February 11-15 in Seattle. The objectives of the meeting were to review data and exchange views on pollock resources in the Bering Sea, coordinate groundfish research cruises between the two countries, coordinate salmonid research and exchange of samples, and exchange data and views on condition of other fisheries resources. A summary is provided under Item C-6(b).

Central Bering Sea Fisheries Conference. About 65 delegates from China, Japan, Korea, Poland, the U.S.S.R. and the U.S. met February 19-21 in Washington, D.C., to discuss conservation and management measures for the Donut Hole. A summary is under Item C-6(c). Representatives from this region include Steve Pennoyer, Bill Aron, Dave Benton, Joe Blum, Mark Pederson, Al Burch, Rick Lauber, Henry Mitchell, and Don Bevan.

(b) Regulatory proposals for Donut fisheries

Last September the Council adopted the policy under Item C-6(d) "... to strictly prohibit all fishing activity in the Central Bering Sea outside the U.S. EEZ, including by U.S. vessels." The Council since has raised the possibility of taking regulatory action, for example, setting aside an apportionment of pollock in the BSAI strictly for domestic vessels that do not fish in the Donut Hole. The Council may wish to consider this and other actions it could take to deter fisheries in the international waters.

**REPORT OF THE SECOND MEETING
OF THE U.S.-USSR
BERING SEA FISHERIES ADVISORY BODY**

FEBRUARY 11-12, 1991

1. BSFAB MEETING

The second meeting of the U.S.-USSR Bering Sea Fisheries Advisory Body (BSFAB) was held during February 11-12, 1991 held in Seattle, Washington.

The scientists reviewed data on pollock resources of the entire Bering Sea, including those presented at the International Pollock Workshop held in Seattle during February 4-8, 1991.

2. BSFAB FUNCTION

The purposes and functions of BSFAB are presented in Appendix 1.

3. PARTICIPANTS

For the U.S.

William Aron	Science and Research Director, Alaska Region, National Marine Fisheries Service, Alaska Fisheries Science Center (AFSC)
Donald Bevan	University of Washington
Richard Marasco	AFSC, Resource Ecology and Fisheries Management (REFM) Division Director
Loh-Lee Low	AFSC, REFM Division, Deputy Director
Doug Eggers	Chief scientist, Alaska Department of Fish and Game
Jim Balsiger	AFSC, Deputy Science and Research Director
Vidar Wespestad	Scientist, AFSC, REFM Division
Richard Bakkala	Scientist, AFSC, Resource Assessment and Conservation Engineering Division
Mark Pederson	Deputy Assistant Director, Marine Fish and Shellfish, Washington Department of Fisheries

For the USSR

Nikolai P. Novikov Director, Pacific Research Institute of Fisheries and Oceanography (TINRO)
Nikolai Fadeev Director of Laboratory, TINRO, Vladivostok
Yevgeny Moiseev Scientist, TINRO, Vladivostok
Yelena Serepieva TINRO, Vladivostok

Interpreters

Yelena Serepieva Vladivostok
Tanya Bevan Seattle

4. **STATISTICAL AREAS**

Bering Sea statistical areas are shown in Figure 1. The donut hole area is the zone outside the exclusive economic zones (EEZs) of the U.S. and USSR in the central Bering Sea.

5. **CATCH STATISTICS**

Pollock catches, in thousands of metric tons, from the donut hole area were reported to be:

YEAR	Japan	ROK	Poland	PRC	USSR	U.S.	TOTAL
1980	5.7	12.5	?	0	0	0	18.2
1981	0.2	0	?	0	0	0	?
1982	1.2	2.9	?	0	0	0	?
1983	4.1	66.6	?	0	0	0	?
1984	100.9	80.6	?	0	0	0	?
1985	136.5	82.4	115.8	1.6	0	0	336.4
1986	698.0	155.7	163.2	3.0	12.0	0	1,061.1
1987	802.6	241.9	230.3	16.5	34.0	0	1,325.3
1988	749.2	268.6	298.7	18.4	61.0	0	1,395.9
1989	647.1	301.6	268.6	31.1	151.0	0	1,399.4
1990	400.0*	219.5	223.1	26.5	4.9	2	876.0

* Preliminary data

Catches (in thousands of metric tons) from the donut hole area compared to those from the U.S. and USSR EEZs were:

Year	Donut Hole	USSR. EEZ	U.S EEZ	Total
1980	18	-	958	976
1981	-	-	974	974
1982	4	-	956	960
1983	71	-	982	1,053
1984	181	756	1,099	2,036
1985	336	662	1,179	2,177
1986	1,061	871	1,189	3,121
1987	1,325	812	1,254	3,391
1988	1,396	1,327	1,228	3,951
1989	1,399	1,119	1,386	3,904
1990	876	814	1,353	3,043

The pollock catch from the donut hole area peaked at 1.4 million metric tons (t) in 1988-89. Donut hole area catches exceeded those taken in the traditional fishing areas of the U.S. and USSR EEZs in 1987-89. Catches in the donut hole area dropped drastically in 1990.

6. STOCK STRUCTURE

The February 4-8 International Pollock Workshop affirmed the U.S. and USSR view that there is no self-sustaining pollock stock in the donut hole area of the central Bering Sea. Pollock found in the donut hole area are a mixture of fish that originate and migrate from the EEZs of U.S. and USSR.

The major spawning grounds for pollock are located in the U.S. EEZ (the eastern Bering Sea shelf and Bogoslof Island area) and the USSR EEZ (the western Bering Sea shelf). Spawning activity in the donut hole area has been practically absent.

There are still gaps in knowledge on the inter-relationships and mixing of pollock in the Bering Sea. Based on relative stock sizes, most of the pollock found in the donut hole area probably originate from the U.S. EEZ.

7. ABUNDANCE TREND AND BIOMASS

A. Abundance Trend

In the donut hole area, catch per unit effort data from the commercial fisheries indicate that pollock abundance has declined substantially from about 1986/87 to 1990 (see Figure 2). The decline was drastic from 1989 to 1990. Preliminary observer data indicate that this decline continued into 1991.

In the USSR EEZ, pollock CPUE has decreased slightly in the Navarin area while that in the western Bering Sea (Korfa-Karaginskiy area) has been relatively stable.

In the U.S. EEZ, cohort analyses indicate a moderate decrease of pollock abundance in the eastern Bering Sea shelf. However, ichthyoplankton data indicate substantial declines in spawning intensity in the eastern Bering Sea shelf and the Bogoslof area in 1989-90. Projections from biomass surveys also indicate that pollock abundance will decline in the Bogoslof area.

Year-class strength data and age-structured analyses indicate that pollock biomass will continue to decline into the near future. This is especially obvious for the Aleutian Basin pollock (of which donut hole area is a part) because the strong 1978 year-class that supported the donut hole area fishery of recent years is rapidly ageing out of the fishery. Subsequent year-classes that are replacing the 1978 year-class are not strong.

B. Biomass

Estimated exploitable biomass of pollock (generally age 3+ fish) for 1991 are:

EEZ	AREA	Exploitable Biomass (1,000 t)
U.S. EEZ	Eastern Bering Sea shelf	6,667
	Bogoslof area	1,150
	Aleutian region	406
USSR EEZ	Western Bering Sea shelf (west of 170° E)	1,700
	Northwestern Bering Sea shelf (Navarin shelf)	400*
	Other Areas (Deep Waters)	???
	TOTAL	10,323

* Some pollock migrating from the eastern and western Bering Sea shelves may be included in this figure.

The decline in pollock biomass and spawning intensity is attributed to two main factors: 1) over-exploitation of pollock resources due to disproportionately high fishing pressure in the central Bering Sea (the donut hole area), and 2) absence of strong year-classes since the 1978 strong year-class in the Bering Sea.

8. APPROPRIATE EXPLOITATION RATE

The scientists reaffirmed the November 1989 findings of BSFAB that a 25 percent exploitation rate is appropriate for the pollock resource in the Bering Sea.

The 25 percent rate corresponds to the $F_{0.1}$ strategy of exploitation. When pollock abundance is well above B_{msy} , the F_{msy} rate of 30 percent may be appropriate.

9. APPROPRIATE HARVEST LEVEL

The equation used by BSFAB in November 1989 to calculate appropriate harvest level (AHL) was:

AHL = appropriate exploitation rate x exploitable biomass

Using the same equation, the calculations for 1991 are:

YEAR	EXPLOITABLE BIOMASS (t)	AHL (t)
1991	10,323,000	2,580,750

For comparison, AHL calculated by BSFAB in November 1989 were:

1989 AHL = 2,925,000 t
1990 AHL = 2,632,500 t

10. COMPARISON OF CATCH AND AHL

The comparison of actual catch levels and AHL are:


YEAR	CATCH (t)	AHL (t)
1989	3,904,000	2,925,000
1990	3,042,000	2,632,500
1991	???	2,580,750


The data indicate that catch levels have exceeded AHL in 1989 (by 979,000 t) and 1990 (by 409,500 t).

11. OTHER CONCLUSIONS OF THE NOVEMBER 1989 BSFAB REPORT

The scientists reaffirmed that their views have not changed for other conclusions reached at the first BSFAB meeting as recorded in the 1989 November 27-28 "Report of the Bering Sea Fisheries Advisory Body".

12. REPORT APPROVAL -- This report was approved by:


Dr. William Aron
Science and Research Director
Alaska Region, National Marine
Fisheries Service, Alaska
Fisheries Science Center


Dr. Nikolai P. Novikov
Director, Pacific Research
Institute of Fisheries and
Oceanography

APPENDIX 1

BERING SEA FISHERIES ADVISORY BODY PURPOSES AND FUNCTIONS

The Committee, recognizing the need for coordinated measures for conservation and management of pollock resources in the Bering Sea, have established a Bering Sea Fisheries Advisory Body, which shall have the following purposes and functions:

1. Identify and assess pollock resources in the Bering Sea, and establish a common databank, an agreed upon and standardized methodology for stock assessment, and procedures for determining appropriate harvest levels.
2. Coordinate fisheries research in the Bering Sea, including identification of specific research projects to monitor the Bering Sea ecological complex and provide data on fisheries and other living marine resources.
3. Summarize and share fisheries data for the Bering Sea, including existing data and data developed as a result of ongoing research projects and research identified above.
4. Examine and report on the following list of management issues related to pollock resources in the Bering Sea, including the area beyond the zones of the Parties:
 - a. appropriate rates of exploitation
 - b. fishing effort
 - c. gear specifications
 - d. fish size limits
 - e. season
 - f. limits and prohibitions on incidental harvest of other species, especially salmonids
 - g. observers and other monitoring programs
 - h. enforcement
 - i. reporting
 - j. others as directed by the Committee
5. Consider the need to develop similar recommendations for other species as agreed by the Committee, and develop such recommendations as appropriate.
6. Prepare the necessary reports for submittal to the Committee presenting their findings and recommendations.

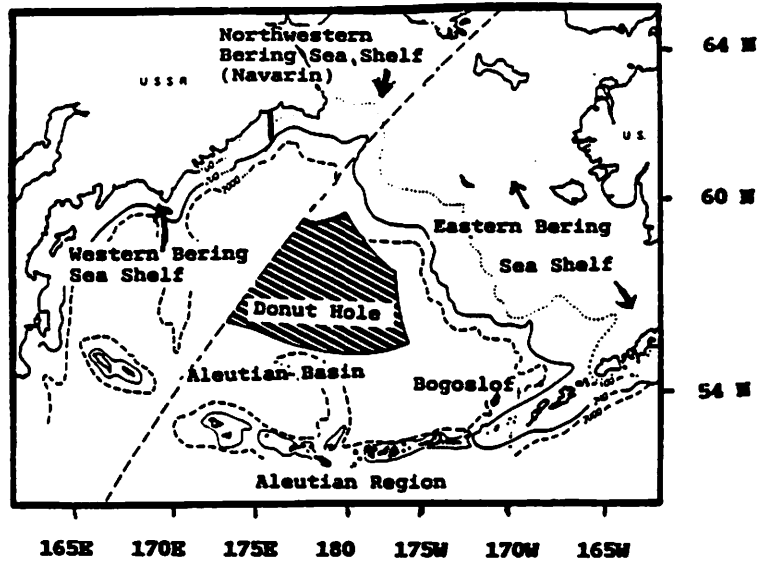


Figure 1. Statistical areas of the Bering Sea.

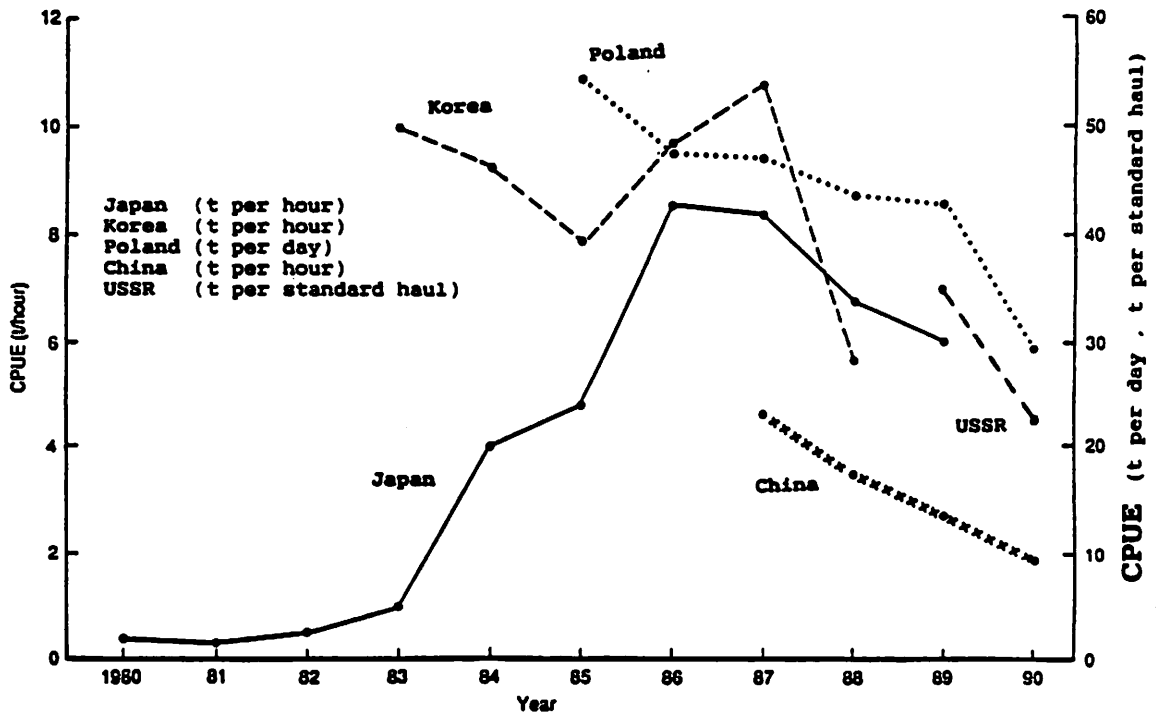


Figure 2. Catch per unit effort (CPUE) trends for pollock in the donut hole area of the central Bering Sea.

**REPORT OF THE 1991 U.S.-U.S.S.R. BILATERAL MEETING
FOR ASSESSMENT OF NORTH PACIFIC FISHERIES RESOURCES**

**February 11-15, 1991
Seattle, Washington**

INTRODUCTION

Bilateral meetings between U.S. and Soviet scientists provide an essential forum to coordinate research and exchange data on fishery resources that are of mutual concern. This year's meeting was held at the Alaska Fisheries Science Center, National Marine Fisheries Service in Seattle.

The principal objectives of the 1991 meeting were to 1) review data and exchange views on pollock resources in the Bering Sea, 2) coordinate groundfish research cruises between the two countries, 3) coordinate salmonid research and exchange of samples, and 4) exchange data and views on condition of other fishery resources. This report summarizes the results of these discussions.

LIST OF PARTICIPANTS

The participants of the meetings were:

Soviet Participants

Dr. Nikolai Novikov

Director, Pacific Research Institute of Fisheries and Oceanography (TINRO), Vladivostok

Dr. Nikolai Fadeev
Yevgeny Moiseev
Yelena Serepieva

Director of Laboratory, TINRO
Fisheries scientist, TINRO
Intepreter, TINRO

U.S. Participants

Dr. William Aron

Science and Research Director, Alaska Fisheries Sceince Center (AFSC), Seattle

Dr. Richard Marasco

Director, Resource Ecology and Fisheries Management Division (REFM), AFSC, economist, fisheries management

Dr. Loh-Lee Low

REFM Division, AFSC, groundfish research and management

Dr. Donald Bevan

University of Washington, fisheries management

Dr. Richard Bakkala

Resource Assessment and Conservation Engineering Division (RACE), AFSC, Bering Sea groundfish research

Dr. Jimmie Traynor	RACE, AFSC, hydroacoustic research
Vidar Weststad	REFM, AFSC, pollock research
Pierre Dawson	REFM, AFSC, pollock research
Dr. Kevin Bailey	RACE, AFSC, ichthyoplankton research
Dr. Art Kendall	RACE, AFSC, ichthyoplankton research
Dr. Edmund Nunnallee	RACE, AFSC, hydroacoustic research
Ms. Nazila Merati	RACE, AFSC, ichthyoplankton research
Terry Sample	RACE, AFSC, groundfish research
Gary Walters	RACE, AFSC, groundfish research
Joe Klein	RACE, AFSC, hydroacoustic research
Ms. Denise Adams	RACE, AFSC, hydroacoustic research
Dr. Jim Olsen	Auke Bay Laboratory (ABL), AFSC, salmon research
Dr. Jack Helle	ABL, AFSC, salmon research
Ms. Kate Myers	Fisheries Research Institute, University of Washington (FRI, UW), salmon research
Tray Walker	FRI, UW, salmon research

Interpreters for the meeting were Tanya Bevan and Yelena Serepieva.

AGENDA

The participants used the following agenda to guide their discussions:

1. Introduction
2. Bering Sea Fisheries Advisory Body (BSFAB) Discussions
 - Status of Bering Sea pollock resources
 - Preparation of BSFAB report
3. Salmon Matters
 - Review status and plans for exchange of data and samples (scales, genetic samples, parasite samples, etc.)
 - Status of plans for cooperative research
 - Planning of next salmon symposium
 - Exchange of salmon scientists
4. Groundfish Matters
 - Review status of Bering Sea pollock and other groundfish stocks in the North Pacific
 - Review and plan groundfish cooperative research (both U.S. and USSR plans)
5. Other Matters

EXCHANGE OF DOCUMENTS

Documents Submitted By the U. S.

1. Gharrett, A.J., S.M. Shirley, and G.R. Tromble. 1987. Genetic relationships among populations of Alaskan Chinook salmon (*Oncorhynchus tshawytscha*). Canadian Journal of Fisheries and Aquatic Sciences 44: 765-774.
2. Gharrett, A.J., Cameo Smoot, A.J. McGregor, and P.B. Holmes. 1988. Genetic relationships of even-year northwestern Alaskan pink salmon. Transactions of American Fisheries Society 117(6): 536-545.
3. Gharrett, A.J., R.B. Wilson, B.M. Baker, C.M. Guthrie III, C.M. Kondzela, and H.R. Carlson. 1990. Preliminary report on genetic diversity of southern southeast Alaskan pink salmon populations. Northwest and Alaska Fisheries Center, National Marine Fisheries Service, Processed Report 90-03, 50pp.
4. C.M. Kondzela, C.M. Guthrie III, R.B. Wilson, H.R. Carlson, and A.J. Gharrett. 1989. Preliminary report on genetic diversity of southern southeast Alaska chum salmon populations. Northwest and Alaska Fisheries Centers, National Marine Fisheries Service, Processed Report 89-12, 63pp.
5. Stock assessment and fishery evaluation document for groundfish resources in the Bering Sea/Aleutian Islands region as projected for 1991. North Pacific Fishery Management Council. 209p plus Appendices.
6. Stock assessment and fishery evaluation report for the 1991 Gulf of Alaska groundfish fishery. North Pacific Fishery Management Council. 227p plus Appendices.
7. Status of the Pacific Coast groundfish fishery through 1990 and recommended ABC for 1991 -- Appendix Volumes 1 and 2. Pacific Fishery Management Council.

Documents Submitted by the U.S.S.R.

1. Reliability of determination of age of pollock by scales and otoliths (by N. J. Fadeev, Ye. I. Moiseev, and M. M. Raklistova).
2. Distribution of cod in the Bering Sea in 1990 (by Ye. I. Moiseev).
3. Condition of stocks, interannual variability of

behavior, distribution, qualitative composition of yellowfin sole, rock sole, Alaska plaice, and halibut-like flounders (by M. A. Stepenenko).

4. Fisheries and condition of stock of pollock in the Bering Sea (by V. M. Pashchenko and Ye. I. Moiseev).
5. Condition of stocks, age-size composition, interannual variability of recruitment, migrations, and fisheries of Oregon hake off the North Pacific coast (by M. A. Stepenenko).
6. The USSR pollock fishery in the Bering Sea (by N. Fadeev).

SALMON MATTERS

Participants discussed U.S.-U.S.S.R. cooperation in salmon research and noted the need for further cooperation to facilitate research of mutual benefit and interest. Cooperation in recent years has consisted of joint high seas tagging and sampling on U.S.S.R. research vessels, exchanges of scales for stock identification analyses, and exchange of salmon specialists.

Exchange of Data and Samples

Appendix 1 provides details of the sample and data requests by the U.S.

Scale Samples: On exchanges of scales and data, the U.S. noted that it had provided the U.S.S.R. with all of the samples requested at the November 1989 U.S.-U.S.S.R. Bilateral Meeting. The U.S. submitted a new request for scales from 1990 U.S.S.R. runs of coho, chinook, and sockeye salmon, and emphasized that these samples are urgently required for completion of current high seas stock identification studies.

Tissue and Parasite Samples: The U.S. repeated their 1989 request for tissue and parasite samples.

Cooperative Salmon Research

The Soviet side indicated that plans for 1991 cooperative high seas salmon research cruises on Soviet research vessels are similar to those of 1990. The U.S. expressed appreciation for the invitation to participate. Further planning will be made via correspondence.

As in previous years, the U.S. will provide equipment and supplies needed for the cooperative salmon research cruises.

Exchange of Salmon Scientists

In 1990, the U.S. hosted a Soviet geneticist at the National Marine Fisheries Service (NMFS) Auke Bay Laboratory and four Soviet salmon specialists at the Fisheries Research Institute, University of Washington, and the NMFS Northwest Fisheries Center. In 1991, Auke Bay Laboratory in cooperation with the University of Alaska and the U.S. Fish and Wildlife Service (Anchorage) expects to host as many as eight Soviet scientists; the Northwest Fisheries Center will host two Soviet scientists; and the Fisheries Research Institute will host one Soviet scientist.

Planning of Future Salmon Symposia

The U.S. again expressed appreciation for the International Salmon Symposium that was held in September 1989 at Yuzhno-Sakhalinsk. The next symposium will be hosted by Canada in June 1991. The U.S. will host an international salmon symposium in Alaska in 1993.

GROUND FISH MATTERS

Status of Pollock and Other Groundfish Stocks

The scientists reviewed data on pollock resources of the entire Bering Sea, including those presented at the International Pollock Workshop held in Seattle during February 4-8, 1991.

The views and conclusions of the scientists are reported in the attached report entitled "Report of the second meeting of the Bering Sea Fisheries Advisory Body".

Comparisons of stock assessments by U.S. and USSR scientists for major groundfish groups are shown in Table 1. There is general agreement between U.S. and USSR scientists concerning the status of groundfish stocks for the eastern Bering Sea/Aleutians and the Gulf of Alaska.

U.S. scientists estimated that 1991 groundfish ABC's are 2.9 million t for the Bering Sea/Aleutians, 770,000 t in the Gulf of Alaska, and 401,000 off the Washington-Oregon-California Coasts.

Based upon U.S. estimates of ABCs and total allowable catches (TAC) set by the North Pacific Fishery Management Council, the scientists also agreed that groundfish resources in the eastern Bering Sea/Aleutians and the Gulf of Alaska have not been fully utilized. The ABC for the eastern Bering Sea/Aleutians is 2.9 million t while the TAC is set at 2.0 million t. The ABC for the Gulf of Alaska is 770,000 t, but the TAC is set at 331,000

United States Department of State



*Bureau of Oceans and International
Environmental and Scientific Affairs*

Washington, D.C. 20520

February 27, 1991

MAR - 8 1991

Mr. Clarence G. Pautzke
Executive Director
North Pacific Fishery
Management Council
P.O. Box 103136
Anchorage, Alaska 99510

Dear Mr. Pautzke:

On behalf of Deputy Assistant Secretary David A. Colson, I am writing to inform you of the results of the just concluded Conference on the Conservation and Management of the Living Marine Resources of the Central Bering Sea, which was held in Washington, D.C. on February 19, 20 and 21.

From the U.S. perspective, the meeting with representatives of the Soviet Union, Japan, Korea, China and Poland was very successful. Highlights of the conference included the adoption by the delegates of a resolution which acknowledges the need for the establishment of a conservation regime in the donut hole area. The delegations agreed to apply interim measures and to meet again in July 1991, tentatively in Japan.

Enclosed is a record of discussion of the conference, which includes the resolution, delegation lists, and statements of national interest.

Sincerely,

Larry L. Snead
Director
Office of Fisheries Affairs

Enclosure:
As stated.

- 2 -

2. No retention of anadromous species or herring by vessels operating in the area. Any anadromous species or herring taken incidentally in the fishery to be returned to the sea immediately.
3. Understanding the need to establish a program of monitoring and assessment of catch and effort data, including bycatch amounts and the collection of biological data, the participants agree to come to the July meeting prepared to discuss the establishment of an appropriate observer, inspector, and real-time satellite transmitter program for the fisheries in the area.
4. Make no further plans to expand fishing operations in the area, which we expect to contribute to our purpose of decreasing the catch in 1991. To this end, each government should make available preliminary catch and effort data for the first quarter of 1991 to each country by June 1, 1991, for discussion at the July meeting.
5. Take necessary and appropriate action to ensure that flag vessels and their crews operate in accordance with these interim measures.
6. Cooperate in the conduct of scientific research to understand and assess the living marine resources in the area, as the size and complexity of the Bering Sea ecosystem make such cooperative efforts essential for the understanding necessary for rational management and conservation.

CONFERENCE ON THE CONSERVATION AND MANAGEMENT
OF THE LIVING MARINE RESOURCES
OF THE CENTRAL BERING SEA

FEBRUARY 19, 20, and 21, 1991
DEPARTMENT OF STATE
WASHINGTON, D.C.

Approximately 65 delegates from China, Japan, Korea, Poland, the U.S.S.R., and the United States attended a Conference at the Department of State, February 19-21, to discuss conservation and management measures for the high seas area of the Bering Sea (the so-called "donut hole" area which is beyond the U.S. and Soviet 200-mile zones). Ambassador Richard J. Smith, Principal Deputy Assistant Secretary of State, chaired the conference, while the United States delegation, which included federal, state, and industry representatives, was led by Mr. David A. Colson, Deputy Assistant Secretary of State for Oceans and Fisheries Affairs.

The delegates assessed the extensive and unregulated fishery for pollock in the area. The conference delegates adopted the attached resolution calling for interim measures to (1) freeze fishing effort in the area; (2) discourage other countries from seeking to fish in the area and discourage reflagging of vessels already operating in the areas; (3) accelerate scientific research and standardize catch reporting for the area; and (4) not retain anadromous species or herring taken as bycatch.

Given the serious and urgent nature of the issue, the delegates agreed to meet in July 1991, tentatively in Japan, to continue discussions. The delegates have agreed to come to the July meeting prepared to discuss the establishment of appropriate scientific monitoring and enforcement programs in the area.

CONFERENCE ON THE CONSERVATION AND MANAGEMENT
OF THE LIVING MARINE RESOURCES OF THE CENTRAL BERING SEA

FEBRUARY 19, 20 AND 21, 1991
WASHINGTON, D.C.

RESOLUTION OF THE MEETING

The Delegations of Governments* meeting in Washington, D.C., February 19-21 to discuss the establishment of an international conservation regime for the pollock resource of the high seas area of the Central Bering Sea (the area):

Note the responsibilities and duties of states for the conservation and management of living marine resources as reflected in the United Nations Convention on the Law of the Sea;

Affirm the need to take urgent conservation measures for the living marine resources of the area;

Note that the pollock resource in the area is fully utilized and affirm their intent to discourage additional fishing in the area by countries other than those with vessels fishing in the area prior to 1989, and to discourage the reflagging of fishing vessels for entry into this fishery;

Affirm the conclusions of the International Pollock Workshop held in Seattle on February 4-8;

Acknowledge the need for the establishment of an international conservation regime in the area, and agree to meet in July 1991, tentatively in Japan, towards this end;

Intend to apply the following interim measures pending further discussions at the next meeting:

1. Implement the procedures for collecting and reporting fisheries data which were agreed to at the International Pollock Workshop conducted at the Alaska Fisheries Science Center in Seattle, February 4-8.

* - The People's Republic of China, Japan, the Republic of Korea, the Republic of Poland, the Union of Soviet Socialist Republics, and the United States of America.

Bering Sea Donut Policy

The Council adopted the following policy statement concerning fishing in the international waters of the Central Bering Sea (the donut hole):

Policy on Fisheries in the Central Bering Sea outside the U.S. EEZ

The Magnuson Act charges the North Pacific Fishery Management Council with conservation and management of fisheries resources off Alaska. Of particular importance is the groundfish complex of the Bering Sea and Aleutian Islands. Pollock is a major component of that resource, contributing almost two thirds of the annual harvest. The species ranges widely in the Bering Sea, well beyond the U.S. 200-mile Exclusive Economic Zone.

A major policy goal of the Council and the Magnuson Act during the 1980s was to develop U.S. fisheries and displace foreign fisheries from the U.S. EEZ. Foreign fisheries ended in the Gulf of Alaska in 1987 and in the Bering Sea and Aleutians in 1988. Unfortunately, foreign fleets of five countries displaced from the U.S. zone moved to the Central Bering Sea to fish pollock.

The Council has grave concerns with the potential consequences that unregulated foreign fisheries in the Central Bering Sea may have on pollock stocks within the U.S. EEZ. No pollock stock is unique to the Central Bering Sea international waters. Pollock found there originate from adjacent continental shelves. Reported catches of 1.4 million metric tons exceed the U.S. catch within 200 miles and do not include discards. These uncontrolled foreign harvests may threaten long-term conservation of the pollock resource.

The Council has urged the U.S. State Department to negotiate a ban on fishing outside 200 miles. The Council supports the efforts of the U.S.-USSR Intergovernmental Consultative Committee on Fisheries and the U.S. -Soviet Bering Sea Fisheries Advisory Body in developing fishery conservation and management options for pollock in the Central Bering Sea.

There have been recent reports of U.S. fishing operations on pollock and increasing interest in such activity in the Central Bering Sea. Though the Council encourages optimal utilization of available resources, the unknown impacts of such activity on U.S. stocks and the sensitive international situation regarding the uncontrolled foreign fisheries dictate conservative management for U.S. fisheries attempting to develop outside 200 miles. Therefore, the Council has adopted the following policy:

The North Pacific Fishery Management Council's policy is to strictly prohibit all fishing activity in the Central Bering Sea outside the U.S. EEZ, including by U.S. vessels. Such a prohibition supports the efforts of the Council and the United States in seeking a ban on unregulated foreign fisheries that may be adversely affecting pollock stocks within the U.S. EEZ. The Council requests that the Secretary of Commerce take all actions necessary to support this policy. All vessels operating in the international waters of the Central Bering Sea should be required to carry observers and adhere to appropriate reporting requirements.

AQUATIC RESOURCES CONSERVATION GROUP
4110 WHITMAN AVE N., #9
SEATTLE, WA 98103

18 April 1991

STATEMENT
TO THE NORTH PACIFIC FISHERY MANAGEMENT COUNCIL
ON POLLOCK FISHING IN THE DONUT HOLE.

1. Pollock in the Aleutian Basin show signs of overharvesting.

Reported catches of walleye pollock (*Theragra chalcogramma*) over the entire Bering Sea, including eastern Bering Sea (EBS), international waters of the Aleutian Basin (Donut Hole) and western Bering Sea (WBS) have increased dramatically over the last 6 years. The catch doubled from 2 million mt in 1984 to 4 million mt in 1988. This was primarily due to the explosion of unregulated pollock catches in the donut hole from only 181,000 mt in 1984 to over 1.3 million mt annually in 1987-1989. During those three years, pollock caught in the donut hole surpassed catches elsewhere in the Bering Sea (Table 1). These high catches were maintained for only three years. In 1990, the catch declined to under 900,000 mt. It is particularly noteworthy that the USSR fishery all but abandoned the donut hole in 1990, and that U.S. factory trawlers were not very successful (BSFAB, 1991).

Despite declining catches, the exploitation rate of pollock has remained high. In 1987, the Bering Sea-wide exploitation rate was estimated at 35-42% (Springer, 1990), much exceeding the recommended appropriate exploitation rate of 25% (BSFAB, 1991). Since then the catch has continued to exceed appropriate harvest levels by 16 to 36% (an excess of 1,036,000, 1,039,000 and 415,000 tons for 1988, 1989, and 1990, respectively; Table 1). It must be noted that these are minimum excesses, since they do not take into account discards of pollock in both, the pollock fishery and other groundfish operations. The discards are likely to increase the excess removals by another 10-20% (Aquatic Resources Conservation Group, unpublished data).

Simultaneously, catch per unit effort (CPUE), a relative measure of population abundance, has been declining in the donut hole. Data presented at a recent pollock workshop in Seattle show that all nations fishing in the donut hole recorded significant declines in CPUE during the last 3 years (Figure 1). Scientists there generally agreed that the decline in CPUE indicated a real decline in pollock abundance in the donut hole. Preliminary observer data show that the decline in CPUE is continuing through 1991 (BSFAB, 1991).

TABLE 1. Bering Sea-wide nominal catches (excluding discards) of walleye pollock, appropriate harvest levels (AHL), and estimated exploitable biomass (Biomass), in thousands of metric tons, in the Bering Sea. Data from Bulatov (1990), Wespestad et al. (1990), BSFAB (1991), and International Pollock Workshop, February 1991.

YEAR	USSR EEZ	USA EEZ	Donut Hole	Total	AHL	Biomass
1980	-	958	18	976		
1981	-	974	<1 [?]	974		
1982	-	956	>4 [?]	960		
1983	-	982	>71 [?]	1,053		
1984	756	1,099	>182 [?]	2,036		
1985	662	1,179	336	2,177		
1986	871	1,189	1,061	3,121		
1987	846	1,254	1,325	3,425		
1988	1,388	1,228	1,398	4,014	2,978	11,912 ^a
1989	1,180	1,386	1,399	3,965	2,926	11,703 ^a
1990	819	1,353	876 [?]	3,048	2,633	10,530 ^b (8,824) ^a
1991					2,581	10,324 ^b

^a from Bulatov (1990) and Wespestad et al. (1990)

^b from BSFAB (1991)

[?] does not include possible catch from Poland, or preliminary (for 1990)

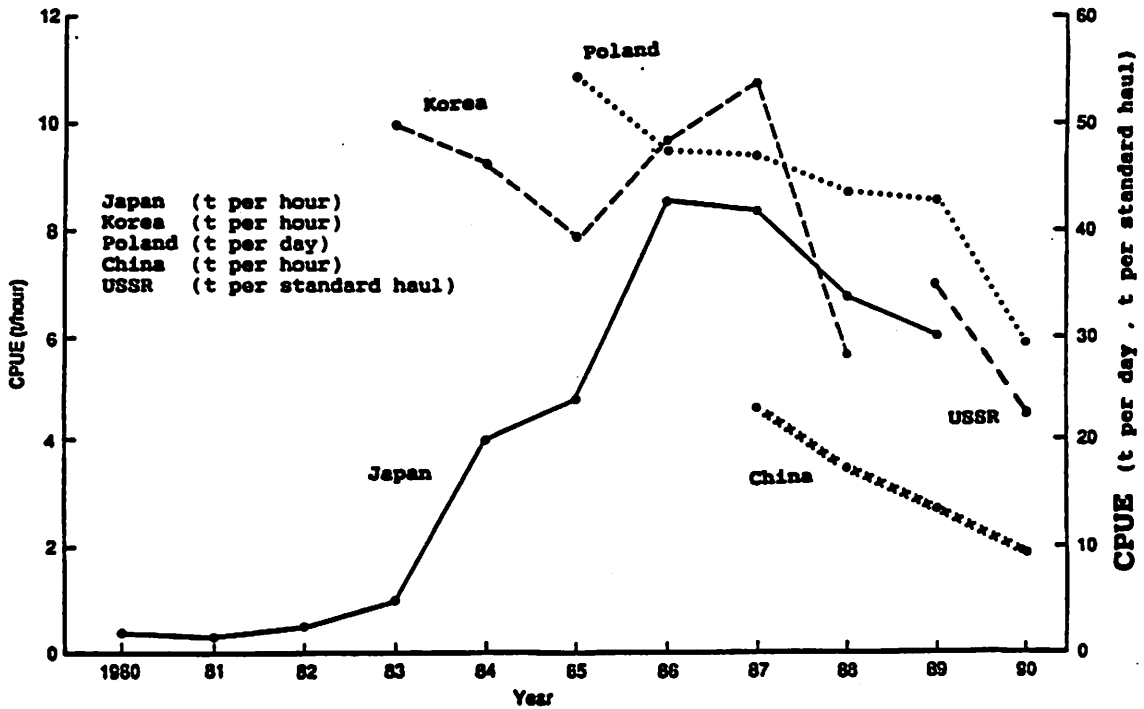


FIGURE 1. Catch per unit effort (CPUE) progression for walleye pollock in the international waters (donut hole) of the Bering Sea. Data from BSFAB (1991), submitted to the International Pollock Workshop held in February 1991 at the Alaska Fisheries Science Center, Seattle, WA.

Biomass of spawning pollock in the Bogoslof area of the eastern Bering Sea (EBS) is also declining. Comparisons of ages, size and genetic structure have shown that Bogoslof pollock are undistinguishable from Aleutian Basin pollock and belong to the same group of fish (e.g., Dawson, 1990; Honkalehto, 1990; Wespestad et al., 1990). Aleutian Basin pollock are believed to aggregate for winter/spring spawning in the Bogoslof area. Combined hydroacoustic and trawl winter surveys from that region indicated pollock spawning biomasses of 2.4 and 2.1 million mt in 1988 and 1989 (Wespestad et al., 1990). No survey took place in 1990; the recently completed 1991 survey indicates that substantially less

pollock were present this winter, lower than the originally projected 1.15 million mt on which the 200,000 mt TAC for the 1991 Bogoslof pollock harvest was based (cf. Wespestad et al., 1990; Honkalehto, pers. comm.).

Finally, the average age of the Aleutian basin pollock population is increasing. There has not been a very strong year class since 1978 (e.g. Wespestad et al., 1990), and no above-average year class since pollock fishing dramatically expanded in the donut hole in 1984/5.

The combinations of declining catches, declining indices of CPUE, an apparently declining spawning biomass, together with a lack of good recruitment over many years, are warning signs that pollock in the Aleutian basin are now being overharvested. While other explanations, such as emigration of pollock from the Aleutian Basin, cannot be discounted, it must be noted that the progression of these indices are not unlike those of earlier unregulated exploitation of several species in the Northeast Pacific (Megrey and Wespestad, 1990).

2. Pollock in the Aleutian Basin are not isolated from pollock living in the Eastern Bering Sea.

Traditionally, pollock in the U.S. EEZ, living on both the Eastern Bering Sea shelf and in deeper waters around the Bogoslof area, has been assessed and managed as one single stock, separate from pollock living in the donut hole or on the western Bering Sea shelf. However, recent scientific understanding of the population biology of pollock indicates that the assumption of stock separations is not valid, for several reasons.

- Pollock from the Aleutian Basin are found in the donut hole and also in the Bogoslof region. These pollock consist primarily of fish older than 4 years, while pollock on the EBS and WBS shelves are of all ages (e.g. Honkalehto, 1990). Most likely, the older fish in the Basin must spend part their juvenile lives on the Bering Sea shelves.

However, source and manner of recruitment of basin pollock are not yet fully understood. Nevertheless, there is evidence that

- eggs and larvae spawned in the Bogoslof area are not returning to the Donut hole but drift and move towards and across the EBS shelf (Mulligan et al., 1989).

- pollock spawning in the basin, primarily in the Bogoslof area, either return to the basin or move first to the EBS or WBS shelves (Fadeyev, 1990). In turn, pollock that spawn on the EBS shelf may either stay on the shelf or may move into the basin.

In summary, it is clear that pollock from both the EBS shelf and the Aleutian basin migrate and intermix. Nature and extent of these migrations are not fully understood and must be clarified through tagging and related studies. Meanwhile, recognizing the importance of intermixing and migrations, scientists at the pollock workshop rejected the idea of stock separations, and agreed to develop a Bering-Sea wide age structured pollock population model accounting for spawning and feeding migrations between the EBS and WBS shelves and the Aleutian basin.

3. Overharvesting of Aleutian Basin pollock may have unforeseen ecosystem effects.

Pollock play an important role in the Bering Sea food web (Springer, 1990). They are consumers of zooplankton, squid, and small fish (e.g. Sasaki, 1988). In some areas, young pollock are consumed by older pollock (Livingston, 1989) and are important food for birds and small marine mammals (Kajimura, 1985; Springer and Byrd, 1989; Trites, 1990). Older pollock are consumed by large predators, including adult Steller sea lion (Lowry et al., 1989). At a recent international workshop in Fairbanks, scientists agreed that declines of several species of mammals and birds in the Bering sea were linked to food shortages (Schneider, 1991). The shortages may be linked to changes in the availability of suitable small forage food, such as small and juvenile fish. Driving forces responsible for these changes could be fluctuations in the physical environment,

excessive commercial fisheries, or a combination of both. It is currently impossible to separate or totally discount one or the other.

Since fisheries currently remove annually over 35% of the pollock biomass, it would be imprudent to continue harvesting Bering Sea-wide at such high rates while discounting possibilities of effects on the ecosystem. Until dynamic interactions of environment, fisheries, and food web response are better understood, Bering Sea-wide pollock harvest levels must be set extremely conservatively.

4. Conclusion.

Given these circumstances, we urge the Council to take an active role in Bering Sea-wide management of pollock. This includes:

- accounting for catch removals of donut hole pollock in assessing ABCs and TACs of pollock in the Bogoslof region and the eastern Bering Sea shelf. While future fishing in the donut hole may crash and thus limit itself, the current practices will likely affect future pollock resources in the eastern Bering Sea.
- in face of the rapidly deteriorating pollock resource in the Aleutian Basin, to get more actively involved in seeking a temporary moratorium of all donut hole fishing.
- actively encourage and pursue management of Bering Sea-wide fisheries for all appropriate species. Pollock are not the only species that migrate across EEZ boundaries (e.g. Bulatov, 1990).

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GREENPEACE

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April 23, 1991

Richard B. Lauber, Chairman
North Pacific Fishery Management Council
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Anchorage, AK. 99510

Dear Council Members:

Greenpeace U.S.A., an environmental organization with over 2 million supporters in the United States, including over 3,000 Alaskans, is highly concerned over the potential impact of unregulated trawling in the international waters of the Bering Sea (the "donut hole") on walleye pollock stocks. We are further alarmed that this uncontrolled activity could threaten the viability of the entire Bering Sea marine ecosystem.

Our organization supports the institution of an immediate moratorium on all donut hole trawling activity by vessels of any nation. We applaud the Council for passing a resolution for a donut hole trawling moratorium at its September, 1990 meeting.

We are deeply concerned, however, that despite the effort of the Council, a number of United States trawl vessels engaged in donut hole fishing operations at the end of 1990, and are likely to go fishing in the area during 1991. It is our view that in light of uncertainty over the effects of donut hole harvests on the marine food web throughout the Bering sea, U.S. vessels should be prohibited from operating in the donut hole. Additional fishing in the area will cause further depletion of pollock stocks which likely migrate into the U.S. Exclusive Economic Zone (EEZ). (I have attached a report by Aquatic Resources Conservation Group which communicates the biological concerns of the scientific community over this situation).

In addition, it is our concern that U.S. participation in the unregulated donut hole fishery will substantially undercut efforts by the U.S. Department of State to attain conservation measures through a comprehensive management regime for the area.

As a result, we request the Council to take immediate measures to deter U.S. vessels from operating in the donut hole. Our organization's first choice is for the Council to outrightly prohibit U.S. vessels from fishing in the donut hole through an emergency measure for amendment of the Fishery Management Plan (FMP) for the Bering Sea/Aleutian Islands

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Alternatively, an FMP amendment could be adopted on an emergency basis to institute a system whereby all U.S. vessels that desire to fish in the U.S. EEZ will be required to obtain permits. Any vessel that operates in the international waters of the Bering Sea would be precluded from obtaining a permit.

The Council has the ability to take either of these two measures because the Magnuson Fishery Conservation and Management Act (MFCMA) provides the regional councils with authority to manage stocks under their purview. Current scientific information indicates that donut hole pollock stocks migrate between the international waters and the EEZ's of both the U.S. and the Soviet Union. The Council must take measures to control donut hole harvests or the pollock stocks it is charged with managing will be negatively affected.

In National Fisheries Institute v. Mosbacher, 732 F.Supp. 210 (D.D.C. 1990), a United States District Court ruled that, under the MFCMA, a regional council and the Secretary of Commerce have the authority to regulate fishing activity outside the U.S. EEZ by U.S. nationals when their operations could cause harmful results within the U.S. EEZ. The Court's decision established that the powers of the Council allow it to regulate pollock fishing by U.S. nationals in the donut hole as a measure to conserve the stocks inside the EEZ. Under the National Fisheries Institute decision, the National Marine Fisheries Service could enforce this by prohibiting the retention of pollock caught by U.S. vessels in the donut hole when they return into the U.S. EEZ. Additionally, the landing of donut hole pollock at U.S. ports could be prohibited.

We encourage the Council to act expediently to take either of our two recommended measures so that the future viability of the pollock stocks -- and the other species that depend upon pollock in the marine ecosystem -- can be maintained.

Sincerely,



Alan Reichman
Special Projects
Ocean Ecology Campaign

cc: Dr. William Fox -- NMFS