

North Pacific Fishery Management Council

James O. Campbell, Chairman
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FINANCIAL STATUS REPORT November 1983

<u>DESCRIPTION</u>	<u>84-ABH-00007</u>	<u>83-ABH-00027</u>	<u>82-ABH-22</u>	<u>81-ABH-76</u>	<u>83-ABH-00002</u>	<u>TOTAL</u>
Grants Rec. as of 11/30/83:	\$312,000.00	\$112,548.00	\$ 17,649.00	\$ 503.00	\$ 83,800.00	\$ 526,500.00
Cash in Bank as of 11/30/83:	15,676.87	6,570.93	7,777.23	-0-	(1,707.60)	28,317.43

Total Grants Budgeted:	442,000.00	127,548.00	243,449.00	145,000.00	982,200.00	1,940,197.00
Amount Expend. Date:	(114,223.13)	(8,429.07)	(218,022.77)	(144,497.00)	(900,207.60)	(1,385,379.57)
Total Funds available as of 11/30/83:	<u>\$327,776.87</u>	<u>\$119,118.93</u>	<u>\$ 25,426.23</u>	<u>\$ 503.00</u>	<u>\$ 81,992.40</u>	<u>\$ 554,817.43</u>

MONTHLY FINANCIAL STATUS REPORT - NOVEMBER 1983

Cooperative Agreement 84-ABH-00007
NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

	<u>Budgeted</u>	<u>Amount Expended to Date</u>	<u>Percent Expended to Date</u>	<u>Balance</u>	<u>Monthly Expenditures</u>
Personnel	\$240,000.00	\$ 77,784.20	33%	\$162,215.80	\$44,579.40
Special Consultants	-0-	-0-	0%	-0-	-0-
Fringe Benefits	51,000.00	14,281.85	28%	36,718.15	7,100.50
Travel	110,000.00	19,584.66	18%	90,415.34	17,384.66
Equipment	-0-	-0-	0%	-0-	-0-
Supplies	3,000.00	78.35	3%	2,921.65	78.35
Contractual	4,000.00	-0-	0%	4,000.00	-0-
Other	<u>34,000.00</u>	<u>2,494.07</u>	<u>8%</u>	<u>31,505.93</u>	<u>1,979.57</u>
TOTALS	<u>\$442,000.00*</u>	<u>\$114,223.13</u>	<u>26%</u>	<u>\$327,776.87</u>	<u>\$71,122.48</u>

GRANTS RECEIVABLE

Balance as of November 1, 1983	\$412,000.00
Drawdown for November	(100,000.00)
Increase for November	-0-
Balance as of November 30, 1983	<u>\$312,000.00</u>

CASH IN BANK

Balance as of November 1, 1983	\$(13,100.65)
Receipts for November	100,115.06
Disbursements for November	(71,337.54)
Balance as of November 30, 1983	<u>\$ 15,676.87</u>

This grant will close September 30, 1984.

* Six months funding.

MONTHLY FINANCIAL STATUS REPORT - NOVEMBER 1983

Cooperative Agreement #82-ABH-22
NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

	<u>Budgeted</u>	<u>Amount Expended to Date</u>	<u>Percent Expended to Date</u>	<u>Balance</u>	<u>Monthly Expenditures</u>
82-1 Management Plan Writing and Development	\$ 53,960.00	\$ 53,000.00	99%	\$ 960.00	\$ closed
82-2 Tanner & King Crab Observer Program	69,489.00	62,540.72	90%	6,948.28	-0-
82-3 An Economic Profile of the SE AK Salmon Industry	10,000.00	7,008.27	70%	2,991.73	-0-
82-4 Halibut Limited Entry Program	85,000.00	72,000.00	85%	13,000.00	-0-
83-1 Halibut Limited Entry Socio-Cultural Study	<u>25,000.00</u>	<u>23,473.78</u>	<u>94%</u>	<u>1,526.22</u>	<u>-0-</u>
TOTALS	<u><u>\$243,449.00</u></u>	<u><u>\$218,022.77</u></u>	<u><u>90%</u></u>	<u><u>\$ 25,426.23</u></u>	<u><u>\$ -0-</u></u>

GRANTS RECEIVABLE

Balance as of November 1, 1983	\$ 17,649.00
Drawdown for November	-0-
Increases for November	-0-
Balance as of November 30, 1983	<u><u>\$ 17,649.00</u></u>

CASH IN BANK

Balance as of November 1, 1983	\$ 7,777.23
Receipts for November	-0-
Disbursements for November	-0-
Balance as of November 30, 1983	<u><u>\$ 7,777.23</u></u>

This grant will close December 31, 1983.

MONTHLY FINANCIAL STATUS REPORT - NOVEMBER 1983

Cooperative Agreement #81-ABH-76
NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

	<u>Budgeted</u>	<u>Amount Expended to Date</u>	<u>Percent Expended to Date</u>	<u>Balance</u>	<u>Monthly Expenditures</u>
81-4 Marine Mammals Study	\$ 45,000.00*	\$ 44,497.00	99%	\$ 503.00	\$closed
81-5 Incidental Salmon Catch Study	<u>100,000.00</u>	<u>100,000.00</u>	<u>100%</u>	<u>-0-</u>	<u>14,125.36</u>
TOTAL	<u>\$145,000.00</u>	<u>\$144,497.00</u>	<u>100%</u>	<u>\$ 503.00</u>	<u>\$14,125.36</u>

GRANTS RECEIVABLE

Balance as of November 1, 1983	\$ 14,000.00
Drawdown for November	(13,497.00)
Increases for November	-0-
Balance as of November 30, 1983	<u>\$ 503.00</u>

CASH IN BANK

Balance as of November 1, 1983	\$ 628.36
Receipts for November	13,497.00
Disbursements for November	(14,125.36)
Balance as of November 30, 1983	<u>\$ -0-</u>

* \$12,500 - Funding from Marine Mammal Commission
32,500 - Funding from NOAA/NMFS Grant
45,000
41,397 - Amount of Contract
3,100 - Special consultant: G. Swartzman
503 - Unobligated Balance

This grant will close December 31, 1983.

MONTHLY FINANCIAL STATUS REPORT - NOVEMBER 1983

Cooperative Agreement #83-ABH-00002
NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

	<u>Budgeted</u>	<u>Amount Expended to Date</u>	<u>Percent Expended to Date</u>	<u>Balance</u>	<u>Monthly Expenditures</u>
Personnel	\$531,500.00	\$496,805.28	94%	\$ 34,694.72	\$ 2,256.58
Special Consultants	15,000.00	6,639.51	45%	8,360.49	-0-
Fringe Benefits	103,400.00	95,943.90	93%	7,456.10	607.02
Travel	217,100.00	197,633.42	91%	19,466.58	2,210.14
Equipment	1,000.00	1,518.23	152%	(518.23)	274.11
Supplies	10,000.00	9,894.20	99%	105.80	126.28
Contractual	8,000.00	8,560.24	107%	(560.24)	-0-
Other	<u>96,200.00</u>	<u>83,212.82</u>	<u>87%</u>	<u>12,987.18</u>	<u>925.20</u>
TOTALS	<u>\$982,200.00</u>	<u>\$900,207.60</u>	<u>92%</u>	<u>\$ 81,992.40</u>	<u>\$ 6,399.33</u>

GRANTS RECEIVABLE

Balance as of November 1, 1983	\$ 83,800.00
Drawdown for November	-0-
Increase for November	-0-
Balance as of November 30, 1983	<u>\$ 83,800.00</u>

CASH IN BANK

Balance as of November 1, 1983	\$ 4,691.73
Receipts for November	659.22
Disbursements for November	(7,058.55)
Balance as of November 30, 1983	<u>\$ (1,707.60)</u>

This grant will close September 30, 1983.

MONTHLY FINANCIAL STATUS REPORT - NOVEMBER 1983

Cooperative Agreement #83-ABH-00027
NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

	<u>Budgeted</u>	<u>Amount Expended to Date</u>	<u>Percent Expended to Date</u>	<u>Balance</u>	<u>Monthly Expenditures</u>
83-2 Management Plan Writing & Development	\$ 60,000.00	\$ 8,429.07	14%	\$ 51,570.93	\$ 4,757.97
83-4 Joint Venture Trawl Logbook Program	33,400.00	-0-	0%	33,400.00	-0-
84-1 Stellar Sea Lion Pup Count in Shelikof Straits	11,548.00	-0-	0%	11,548.00	-0-
84-2 Salmon Troll Data, High Seas FMP	<u>22,600.00</u>	<u>-0-</u>	<u>0%</u>	<u>22,600.00</u>	<u>-0-</u>
	<u>\$127,548.00</u>	<u>\$ 8,429.07</u>	<u>7%</u>	<u>\$119,118.93</u>	<u>\$ 4,757.97</u>

GRANTS RECEIVABLE

Balance as of November 1, 1983	\$ 78,400.00
Drawdown for November	-0-
Increases for November	34,148.00
Balance as of November 30, 1983	<u>\$112,548.00</u>

CASH IN BANK

Balance as of November 1, 1983	\$ 11,328.90
Receipts for November	-0-
Disbursements for November	(4,757.97)
Balance as of November 30, 1983	<u>\$ 6,570.93</u>

This grant will close September 30, 1984.

FINANCE COMMITTEE MINUTES
December 8, 1983

The Finance Committee met on December 8, 1983. In attendance were Dick Knapp (Chairman), Don Bevan, Harold Lokken, Bob McVey, Pat Barker, Bob Alverson, Jim Branson, Judy Willoughby and Clarence Pautzke.

FY84 Programmatic Funding. The Committee reviewed a prioritized list of research projects recommended by the SSC for FY84 programmatic funding. In order of priority they are as follows:

- | | | |
|----|--|-----------|
| 1. | <u>Domestic Groundfish Monitoring</u> | \$145,000 |
| | Provide first year funding for a State of Alaska monitoring system including dock sampling and observers to collect catch and effort information on the domestic groundfish fishery. | |
| 2. | <u>Chinook Salmon Incidental Catch - Part II</u> | 40,000 |
| | Provide additional information on stock separation of chinooks caught incidental to the foreign trawl fisheries. | |
| 3. | <u>Bering Sea Herring Scale Analysis - Part II</u> | 60,000 |
| | A continuation of the ongoing stock separation studies on herring. | |
| 4. | <u>Fisheries Management Conference</u> | 10,000 |
| | Will provide the Council's share in cosponsoring this conference that will examine current problems and solutions in fisheries management. Total estimated cost is \$92,000. | |
| 5. | <u>ADF&G FMP Development</u> | 15,000 |
| | Provide support for ADF&G personnel participation in Council activities. | |
| | TOTAL | \$270,000 |

The Finance Committee recommends forwarding detailed proposals on these projects to NMFS for support from programmatic funds. These proposals will be available the week of December 12. The SSC and Finance Committee recommends sole-sourcing these studies either because they are extensions of ongoing work where necessary expertise has been accumulated, or as with item 4, the Council is simply a cosponsor.

Current Contracts: The Finance Committee reviewed current contracts and found no action necessary other than to withhold final payment on Contract 82-2 (Crab Observer Program), and Contract 82-1 (Social and Cultural Aspects of the Pacific Halibut Fishery) until final reports are approved.

King Crab Research: The Committee cannot recommend specific projects at this time, but does recommend that the Council be provided in February with a summary compilation of current research projects being conducted by relevant agencies.

The Finance Committee adjourned at 8:30 a.m.

M E M O R A N D U M

TO: Council, SSC, and AP Members
FROM: Jim H. Branson
Executive Director
DATE: November 29, 1983
SUBJECT: Status of Contracts and Proposed Projects

ACTION REQUIRED

- (a) *Sablefish Research: Approve funding.*
- (b) *Fisheries Management Conference: Approve funding.*
- (c) *Bering Sea Herring Scale Analysis - Part II: Approve funding.*
- (d) *Incidental Salmon Catch Study - Part II: Approve funding.*

BACKGROUND

Current Council contracts are listed below with information on the contractor, funding amount, percent expended to date, duration, objective, and status.

Current Council Contracts

82-2: Crab Observer Program
(ADF&G, \$69,489, 90%, April 1982 to December 31, 1983)

Objective: To gather in-season catch data on species and sex composition, size frequency, fecundity, and discards.

Status: A draft final report will be available for SSC review.

83-1: Social and Cultural Aspects of the Pacific Halibut Fishery
(Langdon, \$26,500, 94%, January 1 to July 31, 1983)

Objective: To gather social, cultural and demographic information descriptive of the contemporary Pacific halibut fishery important to management decisions.

Status: The final report has been received and distributed to the SSC for review.

* Requires Council action at this meeting.

83-2: ADF&G Plan Maintenance
(ADF&G, \$60,000, 7%, July 1, 1983 to June 30, 1984)

Objective: To support liaison between ADF&G and the Council by funding personnel travel to Council activities and providing support for such other activities as computer compilation and data analysis, etc.

Status: Work is proceeding satisfactorily; no progress reports are required.

83-4: Joint Venture Trawl Logbook Program
(ADF&G, \$33,400, 0%, September 1, 1983 to September 30, 1984)

Objective: To provide interview coverages at three major ports (Kodiak, Akutan, and Unalaska/Dutch Harbor) to support the joint venture logbook program.

Status: Field work will begin January 1, 1984.

84-1: Sea Lion Pup Census Adjacent to Shelikof Strait
(ADF&G, \$16,548, 0%, October 1, 1983 to October 31, 1984)

Objective: To provide an estimate of the total number of sea lion pups produced at the major sea lion rookeries in and adjacent to Shelikof Strait for comparison with similar counts made in 1978 and 1979.

Status: The pup census will be conducted in June 1984.

84-2: Chinook Troll Data Analysis
(ADF&G, \$22,600, 0%, January 1 to September 30, 1984)

Objective: To provide a comprehensive analysis and evaluation of the potential consequences of ADF&G changing the chinook accounting period.

Status: The analysis will commence in January.

Proposed Projects

* Sablefish Research

In May the Council approved FY/84 programmatic funding for six projects including \$100,000 for sablefish research. Several research proposals were sent to agency review since the Council meeting in September. Comments received are under item E-1(a). Given approval one or more of these projects could be forwarded for funding support.

* Fisheries Management Conference

The planning committee held its second meeting in Seattle on October 25. Additional meetings will be held during the week of the Council's meeting in December. A progress report and proposal for funding may be available for Council consideration.

* Requires Council action at this meeting.

* Bering Sea Herring Scale Analysis - Part II

Fisheries Research Institute at the University of Washington is just finishing up the Bering Sea Herring Scale Analysis (see below) approved by the Council and farmed out to NWAFC. A follow-on study will be reviewed by the SSC at this meeting and also by the Bering Sea herring research workgroup. Given approval, the Council may want to approve funding this second phase from FY/84 programmatic funds.

* Incidental Salmon Catch Study - Part II

Fisheries Research Institute at the University of Washington has submitted a proposal for follow-on research to their recently completed study of the origin of salmon caught incidentally by the groundfish trawl fleet. Given SSC approval, the Council may want to recommend funding this project from FY/84 programmatic funds.

Status of Other Projects

Marine Mammal Workshop

This workshop was held on October 18-21 in Anchorage and provided a forum for the discussion of biological interactions among marine mammals and commercial fisheries in the southeastern Bering Sea and a five- to ten-year plan to gather scientific information on which to base management of commercial fisheries with regard to marine mammals. Alaska Sea Grant handled the arrangements. The Council's co-sponsorship of \$10,000 was approved in July 1982. The other co-sponsor was the Marine Mammal Commission which contributed \$5,000. A report on the workshop should be available next April.

Joint Venture Analysis

This analysis of the short and long term effects of joint ventures on the entire domestic groundfish industry was requested by Larry Cotter in early 1982. In July 1982 the SSC recommended that the study be conducted by employing a graduate student to compile existing data and summarize the relevant analyses. This is being done at the Northwest and Alaska Fisheries Center under the supervision of Dr. Rich Marasco. The project is progressing satisfactorily and a final report should be available by January 1984.

Bering Sea Herring Scale Analysis

This project was approved by the Council in March 1983. The \$59,930 from FY/83 funds recently approved by NMFS have been channeled through the NWAFC to expedite the project. The contractor is the University of Washington Fisheries Research Institute and the period of the contract is April 1, 1983 to March 31, 1984. The project will determine the degree of separability of major spawning stocks of herring in the eastern Bering Sea, north Alaska Peninsula and Aleutian areas using scale pattern characters. It will also examine the stock composition of herring collected from the domestic summer food and bait fishery and from offshore overwintering grounds if spawning stocks are determined to be separable. The project is progressing satisfactorily and a draft final report may be available for SSC review at this meeting.

* Requires Council action at this meeting.

Lowell Wakefield Fisheries Symposium on Non-fishing and Fishing Induced
Changes in King Crab Populations

The Council in September approved contributing \$4,000 from administrative funds to co-sponsor the Lowell Wakefield Symposium which is tentatively scheduled for January 1985.

SABLEFISH RESEARCH: SUMMARY OF AGENCY COMMENTS

1. Domestic Fishery Monitoring

PMT: High priority for Council funds.
ABL: Top priority; use \$100 k as start-up.
NWAFC: Essential data; Council fund foundation; ADF&G continue program.
* ADF&G:

2. Japan-U.S. Cooperative Survey Data Analysis

PMT: Does not recommend Council support.
ABL: Council could fund translation of data; ABL will do analysis.
NWAFC: Work will be conducted at NWAFC.
* ADF&G:

3. Single Tagging Data Base

PMT: Does not recommend Council support.
ABL: High priority using \$50,000 for two-year effort.
NWAFC: Work will be done at NWAFC.
* ADF&G:

4. Age Data, Collection and Reading

PMT: Does not recommend Council support.
ABL: No comment.
NWAFC: Recommends no Council action.
* ADF&G:

5. Gear Comparisons

PMT: Does not recommend Council support.
ABL: No comment.
NWAFC: ADF&G and NWAFC may be doing sufficient job on this;
if not, fund PHD study.
* ADF&G:

6. Recruitment/Oceanography

PMT: Recommends low priority; management agencies or universities
could be funded to compile and analyze data.
ABL: No comment.
NWAFC: Cannot expect short-term success, but Council could indicate
its support for a modest program in fisheries oceanography.
* ADF&G:

* ADF&G comments will be available at the meeting.

7. Specific Migration Studies

PMT: Recommends medium priority with Council supporting charter costs for adult and juvenile tagging.

ABL: No comment.

NWAFC: Tagging is needed and could benefit from Council support and university participation.

* ADF&G:

8. Electrophoretic Stock Structure Analysis

PMT: Recommends low priority for Council funding, and only fund after analysis of existing data.

ABL: No comment.

NWAFC: Only consider after thorough evaluation of applicability of method; could benefit from Council support and university participation.

* ADF&G:

* ADF&G comments will be available at the meeting.

Outline of Sablefish Research Studies
prepared for
Scientific and Statistical Committee, NPFMC.

September 27, 1983

Prepared by

Barry Bracken, ADF&G
Evan Haynes, NMFS
Phil Rigby, ADF&G
Gary Stauffer, NMFS

GOA PMT Sablefish Research Project Priorities

	<u>PROJECT</u>	<u>PRIORITIES</u>			
		<u>Agency Support</u>	<u>Council Support</u>	<u>Annual Cost</u>	<u>Time Frame</u>
1.	Domestic fishery monitoring	H	H	~100k	Annual; continuous
2.	Japan-U.S. Cooperative Survey Data Analysis	H	--	50k 25k	2-year initial Annual updates
3.	Single tagging data base	M	--	50k	1 year
4.	Age data, collection & reading	H	--	50k	Annual Continues
5.	Gear comparisons	M	--	unknown	1 year
6.	Recruitment/oceanography	--	L	25k	2 years
7.	Specific migration studies	--	M	> 50k	2 years
8.	Electrophoretic stock structure	--	L	< 80k	2 years

H - high
M - medium
L - low

1. DOMESTIC FISHERY MONITORING

As the domestic fishery expands management agencies will continue to lose abundance indices based on foreign catch and effort as well as biological data obtained from the foreign fishery. CPUE and biological data bases using data collected from the U.S. fishery must be developed to replace the foreign fishery data base. A sampling plan needs to be developed after an analysis of sampling intensities, sizes and fishery time, area, vessel components has been completed. The ADF&G will soon be initiating the base study to specify present and needed sampling effort, but at this time a determination of sampling adequacy and funding needs is not available.

2. JAPAN-U.S. COOPERATIVE SURVEY DATA ANALYSIS

Establish a dual data set from the Japan-U.S. longline survey. U.S. scientists need to have access to the raw survey data to examine variance and possible areas of bias from the survey. This would not require additional funding and is considered a high priority. Initial efforts are being taken to acquire the data and accomplish this task. Effort is being conducted by the NWAFC at the Auke Bay and Montlake labs.

3. SINGLE TAGGING DATA BASE

Exchange of tagging data among the various agencies engaged in sablefish migration studies lacks coherency and has been severely limited by both hardware and software compatibility. An additional problem is publishing credit. A single data base file should be compiled that is compatible with existing packages, does not preempt publishing rights, and is available to all agencies involved in sablefish migration problems. A single data base will enhance data reporting, standardization of data entry and real-time analyses related to management problems. Initial efforts are directed to understanding the relation between magnitude and extent of sablefish migration patterns to management schemes. Dr. Jeff Fujioko (ABL) has begun compilation of the data base, but his research efforts are severely restricted by prior obligations. A marked increase in dedication of personnel to this task is essential for its completion.

4. AGE DATA, COLLECTION AND READING

Data on age structure of catch/landings provides basic information to analyze dynamics of the stocks and to determine abundance trends. Sablefish are a long-lived species with infrequent strong year classes supporting the fishery. Routine collection and ageing does not exist for the Alaska or West Coast fisheries. We need to establish an agency group for production ageing of sablefish collections and for conducting research on age validation. Sampling plans for age structure collections from domestic and foreign fisheries and resource surveys need to be developed. This task will not require Council funding but may necessitate some agency reprogramming to handle sablefish age structures. Sample plan will require maximum of 6 man-months and actual ageing probably would not exceed 2 man-years.

5. GEAR COMPARISONS

Comparison of efficiencies for catching sablefish by longline, trap, and trawl gear can be accomplished within existing funding by both NMFS and ADF&G. Statistically valid experimental procedures are being finalized that will provide measures of catchability of each gear type. These measures will result in separate estimates of population abundances by gear type based on summation of decreasing CPUE with time. Mark-recapture experiments executed concurrently with gear comparison studies may provide an additional estimate of population abundance. This study will also include measures of gear efficiency as related to type of hook, hook spacing, etc. Study results will be used to estimate biomass of sablefish stocks regardless of year fished as well as hindcasting the calculations of gear efficiencies to historical abundance measures. Both ADF&G and NMFS (ABL) are active in the funding, planning, coordinating, and execution of this study.

6. RECRUITMENT/OCEANOGRAPHY

Recent studies correlating oceanographic changes with recruitment of hake, English sole, etc., as well as the recent appearance of exceptionally strong age classes of sablefish and cod have highlighted the need to study the recruitment process of sablefish. A potential benefit is the ability to forecast sablefish recruitment strength for both the industry and fisheries managers. Large oceanographic data bases are available, and a first step in the study would be to search out and catalog this information. Secondly, although age composition data from the sablefish fishery is not directly available, size frequency data from surveys and the fishery can provide investigators opportunity to qualitatively if not quantitatively compare oceanographic parameters with recruit class abundance. A study(s) could be performed by management agencies and/or universities.

7. SPECIFIC MIGRATION STUDIES

Extensive tagging studies have been conducted throughout the Gulf of Alaska. A better understanding of sablefish movement has resulted; however, there are gaps in the data that need to be filled by specific carefully designed tagging studies.

Needed research falls into two categories, adult tagging and juvenile tagging.

A. Adult tagging needs to be conducted on spawning populations during the winter to determine distribution of adult fish during the summer months when the extensive fishery is ongoing. There is evidence that fish move offshore from the deep coastal fjords to spawn during the late winter and early spring and that there may be some concentration of adult fish from along the coast for spawning. Information on extent and timing of movement is needed to determine if spawning concentrations occur and if management strategy should be altered to protect spawning populations. No research is currently planned by ADF&G or NMFS. This project would require charter

of a large vessel during the late winter (Jan-Feb) period. Suggested areas are Cape Ommaney and off the Queen Charlotte Islands.

B. Juvenile tagging has been conducted in southern Southeastern and British Columbia. In both cases large numbers of juvenile fish migrated into the Gulf of Alaska. These studies need to be expanded to better understand the recruitment process. Suggested areas include Northern Chatham Strait and Sitka Sound in the Eastern Gulf and Kodiak Island in the Central Gulf. Unfortunately, the occurrence of juvenile is impossible to predict and tagging has to be conducted on an opportunistic basis. ADF&G is retaining 10,000 tags to be used for juvenile tagging. Charter money for at least thirty days would be required to accomplish this task. No money is currently available for this project.

8. ELECTROPHORETIC STOCK STRUCTURE ANALYSIS

Dr. Garrett (U of A, Juneau) conducted a study of the genetic heterogeneity of sablefish for the Northeast Pacific. His early results showed no difference in the genetic make up of the stocks along the coast. In a reanalysis of his data, he made pair wise comparison of all samples and found differences between many adjacent samples and concluded sablefish had many separate groupings. This study needs to be repeated to determine if the pattern persists. Prior to funding a second study, the details of Garrett's second analysis must be evaluated and critiqued by knowledgeable scientists familiar with electrophoretic studies. If the results are found to be valid, then proposals need to be prepared. This study could be conducted by the University of Alaska, NMFS-NWAFC, or private research firms. A sampling plan specifying sample sizes, areas and depths must be developed; agency commitment will be required to provide these samples.



RECEIVED NOV 7 4 1983

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest and Alaska Fisheries Center
2725 Montlake Boulevard East
Seattle, WA 98112

Table with columns: ACTION, ROUTE TO, INITIAL. Includes handwritten date NOV 8 1983 and initials MLH.

Mr. Jim H. Branson
Executive Director
North Pacific Fishery Management Council
P. O. Box 103136
Anchorage, AK 99510

Dear Jim:

We have reviewed the "Outline of Sablefish Research Studies" attached to your memo dated October 5, 1983 and offer comments as follows:

The table of PMT priorities is confusing in that it does not clearly identify those items that the team recommends for Council support. Are the annual cost estimates the total cost for the items listed or the "increment" of new support that the team recommends? Are the Agency and Council Support columns recommendations of the team or their perceptions of Agency and Council priorities?

Our comments on the specific projects are keyed to the "capsule descriptions":

- 1. Domestic Fishery Monitoring--Adequate statistics on catch, effort, location, biological characteristics, and by-catch are essential data for fisheries management. This is a role of ADF&G and is a continuing need. The Council's support should be limited to one time costs of developing the sampling strategy and establishing the data management system. The latter should be a part of the State's continuing system.
2. Cooperative Survey Data Analysis--This work will be conducted at NWAFC.
3. Single Tagging Data Base--The NWAFC will pursue this work. Dr. Fujioka will provide leadership and the RACE Division will provide programming assistance, if necessary.
4. Age Data, Collection and Reading--This is a continuing problem being addressed by the research community and we recommend no Council action. The collection of age samples from the fishery is an inherent part of item 1 above.
5. Gear Comparisons--This is not a simple problem but it may be simple to analyze the data available for comparisons. The discussion implies that both "ADF&G and NWAFC (ABL) are active in funding, planning, coordinating, and execution of this study" and, if so, then no additional action would be required. This would, however, be an excellent project to contract to a PhD candidate should the Council choose to proceed since it is a reasonably limited problem that could be completed in one or two years (or less with dedication of Agency scientist).



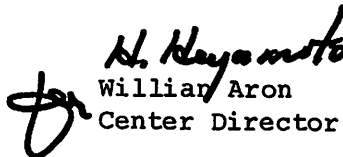
6. Recruitment/Oceanography--there is no reasonable expectation of short-term success on this project. We recommend that the Council indicate its support for a modest program in fisheries oceanography.

7. Specific Migration Studies--There is a continuing need to tag sablefish for migration studies and for stock unit identification. Adult tagging should continue in the assessment work. The tagging of spawning adults will require more information on winter distribution. We are not optimistic that vessel time from NWAFC will be available but opportunities may occur. Juvenile tagging (of opportunity) should be pursued and NWAFC could allocate some vessel time to this effort if a well designed study were proposed. We will pursue this end within Agency funding and vessel constraints. A program in southeast Alaska might make a good cooperative project with the University of Alaska at Juneau.

8. Electrophoretic Stock Structure Analysis--The NWAFC (RACE) supported both in-house research and a portion of Dr. Garrett's work on this problem. We would recommend further work only after expert review of work completed to date reveals potential for practical application of results.

In summary, our analysis suggests that there are Agency program and support for most projects on the list. Council financial support should consider not only your three criteria but also the increment to information needed for management that would be provided by additional Council support. Of first importance is adequate fishery statistics. If ADF&G cannot provide adequate support, then we recommend that Council funds be provided. We consider Agency programs (with some change of emphasis and internal re-allocations of effort) adequate to support projects 2, 3, 4, and 6. Projects 5, 7, and 8, in that order of priority, could benefit from Council support and might yield added benefits from University participation. Work units could be defined for items 5 (gear comparison) or 8 (electrophoretic studies) whereas that for item 7 (juvenile tagging) would best yield to joint or cooperative studies out of Juneau.

Sincerely,


William Aron
Center Director

cc:

F/NWC1 - Alton
F/NWC1 - Dark
F/NWC2 - Stauffer
F/NWC9 - Snyder

rates of sablefish from the 1981 and 1982 Japan-U.S. cooperative longline and trap surveys. I have just written Dr. Fukuda, Director, Far Seas Fisheries Research Laboratory requesting the raw data for the 1979, 1980, and 1983 cooperative surveys, which we will need before continuing the analyses. The cooperative raw data are tallied in Japanese script and must be translated into arabic numerals prior to analyses. The translation is tedious and would take about 6 months. Presently, no one at the Auke Bay Laboratory is available for the translation task. Contracting for the translation would probably be the most cost-effective method. The translation format should be compatible to that of our 1981 and 1982 data because the translated data will be used to complete our variance estimates. We are prepared to give the Council the desired format needed for the translation. Analyses of the translated data will be done by ABL scientists at no cost to the Council.

Single Tagging Data Base (PMT's research item No. 3)

A single tagging data base for sablefish also has high priority. Its compilation could easily be accomplished within the maximum 2-year time span dictated by the Council for programmatic funds. At least \$50K should probably be devoted to the compilation. Although Dr. Jeff Fujioka has started a compilation, it has been necessarily restricted to data readily accessed, and he does not have time for a full-scale compilation.

ABL's Commitments

The above three tasks would exhaust the \$100K, and any additional comments on PMT's research items 4 through 8 are probably superfluous. Because of prior commitments, it is not practical for me to obligate in FY84 either personnel or funding to fulfill PMT research items 1, 2, or 3. All three items are important studies and needed to meet our stated obligations and goals. I hope the Council will act favorably toward funding any or all of PMT's research items 1 to 3.

Feel free to give me a call if you would like to discuss further ABL's role in sablefish research, including the PMT's prioritized listing of research projects.

Sincerely,



George R. Snyder
Laboratory Director