

M E M O R A N D U M

TO: Council, SSC, and AP

FROM: Jim H. Branson
Executive Director

DATE: February 20, 1981

SUBJECT: Council Joint-Venture Data Workshop Meeting

ACTION REQUIRED

Possible endorsement and/or suggestions by the Council of a data collection program which would provide CPUE and other data on groundfish from American fishermen.

BACKGROUND

The Council Joint-Venture Data workgroup met in Seattle on January 21st. The minutes from this meeting follow this memorandum. It was suggested by those attending the meeting that a logbook program would be the appropriate way to collect this data and that ADF&G should be the agency responsible for the logbook program operation. Details of the proposed logbook program were discussed and are included in the minutes. Among the important issues yet to be resolved are:

- 1) How is the program to be funded?
- 2) What is the best way to initiate the program?

A proposed trial operation of a logbook program, using several volunteer fishermen to record fishing data this year, was suggested by the workgroup. The Council may wish to comment on this approach.



The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the smooth operation of any business and for the protection of its interests. The text further elaborates on the various methods and systems used to collect and organize data, highlighting the need for consistency and reliability in the information gathered.

In the second section, the focus shifts to the analysis and interpretation of the collected data. This part of the document provides a detailed overview of the techniques used to identify trends, patterns, and anomalies within the data sets. It discusses the challenges associated with data analysis, such as the need for specialized software and the importance of having a clear understanding of the data's context. The text also touches upon the role of statistical methods in making sense of complex data and the importance of presenting the findings in a clear and concise manner.

The final section of the document addresses the practical application of the data analysis results. It discusses how the insights gained from the data can be used to inform decision-making and to improve business performance. The text highlights the importance of communication in this process, as the findings must be effectively conveyed to the relevant stakeholders. It also touches upon the need for ongoing monitoring and evaluation to ensure that the data remains relevant and useful over time.



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MINUTES OF MEETING - COUNCIL JOINT-VENTURE DATA WORKSHOP Seattle, Washington, January 21, 1981

Workshop Participants:

Al Burch, Fisherman, Kodiak, AK
Phil Chitwood, NMFS, Juneau, AK
Barry Fisher, Fisherman, Newport, OR
Bob Francis, NWAFC, Seattle, WA
Rich Marasco, NWAFC, Seattle, WA
Jim Richardson, NPFMC, Anchorage, AK
Phil Rigby, ADF&G, Juneau, AK
Konrad Uri, Fisherman, Seattle, WA

Purpose of Meeting:

The purpose of the meeting was to evaluate whether additional data should be collected on the groundfish fishery in Alaska from joint-venture and other domestic fishermen, and if so, determine what method would be most effective in providing data useful to the management agencies.

Discussion:

To begin the discussion, Phil Chitwood and Phil Rigby reviewed the data presently being collected by NMFS and ADF&G, respectively. In addition, Phil Chitwood reviewed the section of the Bering Sea/Aleutian Islands Groundfish FMP concerning catch and effort data. The plan states:

"To be most useful in the evaluation of stock condition and sustainable yield, data from the commercial fisheries should include the catch by species and the quality and quantity of effective effort expended to take this catch; they should be provided for relatively small geographical areas and time periods. In this way trends in catch and standardized catches-per-unit-of effort (CPUE) can be monitored by precise time-area units so reliable inferences may be drawn concerning stock abundance."

Some sort of logbook program was proposed as a method to provide the necessary catch-effort data to the management agencies.

After this introduction, the purpose of data collection was discussed. It was stressed by Barry Fisher that data collected would have to be used for management purposes only, not for other purposes such as enforcement. Phil Rigby suggested the possibility that logbooks could provide data which would lead to area closures. The response by Barry Fisher was that fishermen would not object to use of the data to protect the resource; they have an interest

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in maintaining healthy population levels of target species. It was additionally brought out that in some cases, CPUE data can be a misleading indicator of the status of the target species. For species that school, the density of the population will remain fairly constant even though the school size is growing smaller as the total biomass decreases. The CPUE for a species such as this will remain relatively constant until the point where the population is reduced to where CPUE crashes. Rockfish off the Columbia River was given as an example. To be able to account for this problem with CPUE interpretation, it was suggested that some measure be collected as an indication of time spent searching for fish with gear out of the water. If searching time increased over time, it would provide some indication that the stocks were distressed.

This led to a discussion of other types of information which should be collected by management agencies, and how this information should be collected from fishermen. Barry Fisher suggested that environmental and oceanographic information should be passed on to the management agencies in addition to catch and effort data. Bob French suggested that the best way to obtain this type of information in addition to the catch and effort data would be to retrieve logbooks in person. The most successful logbook programs he has observed used interviews to record information from the logbooks. Sitting down and talking with fishermen provides additional information beyond the logbook requirements. It was suggested that a logbook should be in duplicate so management biologists could take the copy and leave fishermen with the original. The logbook's usefulness to fishermen would provide an incentive to provide the data.

From here, the discussion circulated back and forth on the subject of incidental catch. This was a sensitive issue with all three fishermen present. It was felt that in order to obtain the support and enthusiasm of fishermen, a data collection system, logbook or other type, would have to be oriented toward providing information on the target species. It was felt that incidental catch data should be obtained through monitoring programs rather than by data collected from fishermen. The consensus of the way to record total biomass removed by the fishing effort was to record the amount of the target species caught and include everything else under the category of "other," which would include incidental catch. It was stressed that in order to have a successful logbook program, it is necessary to have the support of the fishermen. This support would not be forthcoming if a logbook program were looked to as a source for data on incidentally caught species which trawl fishermen feel could be used against them.

The question of whether or not logbooks should be mandatory or voluntary was brought up. Konrad Uri pointed out that whether or not fishermen comply with a logbook program depends upon the perceived usefulness of the data in management. The consensus of the group was that a logbook program should be voluntary. If fishermen were forced to provide information when they did not want to comply, then poor data would result.

From this point, the discussion was concerned with forming a list of information which should be included in a logbook form. Al Burch presented a sample trawl log which was developed for shrimp fishermen in Kodiak. This form was deemed to be more satisfactory than other formats in use and with modifications, was felt to be a reasonable draft of a logbook prototype for further consideration. A copy of the logbook form presented is attached.

One of the major items to be resolved to make catch and effort data more useful to management agencies, is to determine some methodology to standardize fishing effort. As an example of the problem, a unit of fishing effort by Barry Fisher's EXCALIBUR is not equivalent to a unit of fishing effort from Konrad Uri's ARCTIC TRAWLER. Characteristics included in the sample trawl logbook page which would be useful for purposes of categorization are: (1) vessel length and horsepower, and (2) footrope length.

It was pointed out by Barry Fisher that footrope length alone would not take into account the volume of the trawl. He suggested that generalized net plans would also be necessary to be able to categorize effort into reasonably homogenous units of effort. The suggested general classifications for trawl nets were: (1) pelagic, (2) high opening lift trawl, and (3) standard bottom trawl. Sub-classifications under these general categories would also be possible. In summary, at least five classifications for effort units should be determined, based upon the variables of net characteristics, vessel engine horsepower and vessel length.

The consensus of the units in which catch should be recorded was in metric tons (mt). Fishermen are used to working with these units and the derived CPUE figures would also be compatible with foreign CPUE data.

Other suggested changes to or comments on the sample logbook format from Al Burch were:

1. Expand the page area in so that there is more room to write. Logbooks are completed in less than ideal writing conditions.
2. Add a column for bottom temperature. Not all trawl fishermen are able to measure the water temperature, but it was felt that a significant number would be able to.
3. Leave the area for species blank so that groundfish species could be filled in as required.
4. Space should be available for comments on weather, oceanographic conditions, etc.
5. The logbook should be a full page with the hinge at the top to make writing easier, rather than hinged in the center like a book (this is the same as the logbook sample presented by Al Burch).
6. Pages should be duplicate so that fishermen could retain the original for their records.

The discussion then shifted to the need for confidentiality of the logbook data. It was felt by those present that ADF&G should be responsible for the program. It was stressed that the data should go only to ADF&G, and not to Commercial Fisheries Entry Commission, the Internal Revenue Service, enforcement agencies, or other agencies or individuals. It was suggested that vessel identification be scrambled before the data was passed on to NMFS so that individual data could not be traced.

The statistical areas to be reported were discussed with regard to what size area would be appropriate. The consensus of the group was that a 1° latitude by 1° longitude (60 x 60 miles) would be a reasonable compromise between not requiring fishermen to give away specific fishing areas while allowing necessary recording of catch by area.

It was suggested that an annual summary of logbook data be provided to fishermen so they would be able to receive something tangible as a result of compliance with the program. A trial effort, using a prototype logbook on the current fishing season was discussed as the best way to introduce the program. This logbook trial would be completed by several volunteer trawl fishermen. Changes, if necessary, could then be made before the logbooks were generally distributed.

A question concerning implementation of a logbook program which remains to be resolved is the financing. Two possible sources of financing which were discussed were from the raw fish tax or from an assessment to fishermen in the groundfisheries.

As a follow-up to this meeting, a draft logbook format will be drafted and presented to the Council for their comments.

