

M E M O R A N D U M

TO: Council, AP and SSC Members
FROM: Jim H. Branson
Executive Director
DATE: January 7, 1986
SUBJECT: Tanner Crab Fishery Management Plan

ACTION REQUIRED

Review State-Federal management action on 1986 Bering Sea C. bairdi fishery. Provide recommendations to NMFS on further action.

BACKGROUND

Following the December Council meeting, the Alaska Department of Fish and Game (ADF&G) and National Marine Fisheries Service (NMFS) met to discuss the condition of the Chionoecetes bairdi resource, and the impacts of a commercial Tanner crab fishery on both C. bairdi and Bristol Bay king crab stocks.

The NMFS trawl surveys show that the Bering Sea C. bairdi stocks have declined to their lowest level since 1975. The decline has occurred in both male and female segments of the stock with males declining from about 210 million crab in 1975 to 4.4 million crab in 1985. Preliminary data from the commercial fishery show 3.3 million pounds of C. bairdi were landed in 1985. On the basis of the NMFS trawl survey results, the 1986 harvest would not exceed 2.0 - 4.0 million pounds. The 1985 and 1986 harvest levels are below the 5.0 - 28.5 million pound OY range for C. bairdi specified in the FMP. Most of the C. bairdi fishery is conducted on the same grounds as the Bristol Bay king crab fishery.

The best available information on the current status of Bristol Bay red king crab stocks is from the 1985 NMFS Eastern Bering Sea crab survey. Data show mature female red king crab to be at a record low, declining from 17.6 million crabs in 1984 to 6.8 million crabs in 1985. This estimate is considerably below the 20 - 40 million threshold considered optimal for recruitment. Legal male red king crab have declined from a high of 46.6 million in 1978 to 2.5 million crab in 1985.

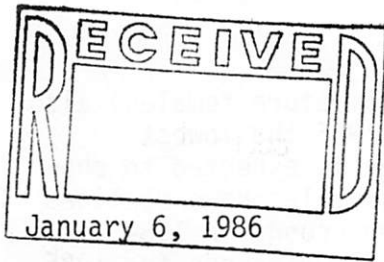
The 1986 season for C. bairdi is scheduled for January 15-June 15 for the sixth consecutive year. This fishery is conducted in an area where the incidental catch of female red king crab in C. bairdi pots is high. Incidental catches were documented in a 1983 study funded by the Council when catches of female red king crab were observed while fishing for legal C. bairdi. Observers reported that 1,471 female red king crab were caught while catching 2,420 C. bairdi (about one female red king crab for every two C. bairdi).

Mature red king crab in Bristol Bay molt and mate between February 1 and June 15. Female red king crab are in a "soft-shell" condition during the molting period. While in this condition, red king crab are especially subject to physical injury when caught incidentally in the Tanner crab fishery and any other fisheries that use gear directed at bottom benthos. Observer data indicate that 700 to 800 thousand female red king crab would be captured during the C. bairdi fishery and, thus, would be subject to handling during the most sensitive period of their life history.

Based on the preceding information, NMFS has concluded that current stocks of C. bairdi and red king crab are extremely depressed. The short-term closure of the C. bairdi fishery from January 15 to February 1 is intended to protect both stocks and provide additional time to determine whether the closure should continue for the remainder of the 1986 season or whether a less restrictive modification of the C. bairdi season is warranted. Under the present inseason adjustment authority, the status of king crab stocks may not be considered as a basis for such adjustments. In addition, only inseason information can be used to justify an action. Thus, the Secretary is precluded from using preseason information such as that provided by the NMFS preseason trawl surveys. Because both the status of red king crab stocks and the use of information from the preseason NMFS trawl surveys are highly relevant to the conservation and management of both species, NMFS has included provisions in the emergency rule that authorize the consideration of all relevant information concerning the conservation and management of both Tanner and king crab as a basis for continuing, modifying or rescinding the closure of the Bering Sea C. bairdi fishery by inseason adjustment.

NMFS would like to discuss their emergency rule with the Council and receive any recommendations for future action.

Both survey and observer information indicate that majority of the female red king crab captured incidentally in a C. bairdi fishery would occur east of 163°W. longitude. Council action taken to address the king crab/halibut interceptions discussed under agenda item C-3, may be relevant here.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

AGENDA D-2(a) Supple.
JANUARY 1986

National Marine Fisheries Service
P.O. Box 1668
Juneau, Alaska 99802

ROUTE TO	INITIAL
Dir.	J
Deputy Dir.	
Admin. Off.	
Spec. Inv.	
Spec. Inv. 1	
Spec. Inv. 2	
Spec. Inv. 3	
Spec. Inv. 4	
Spec. Inv. 5	
Spec. Inv. 6	
Spec. Inv. 7	
Spec. Inv. 8	
Spec. Inv. 9	
Spec. Inv. 10	
Spec. Inv. 11	
Spec. Inv. 12	
Spec. Inv. 13	
Spec. Inv. 14	
Spec. Inv. 15	
Spec. Inv. 16	
Spec. Inv. 17	
Spec. Inv. 18	
Spec. Inv. 19	
Spec. Inv. 20	

Mr. James O. Campbell, Chairman
North Pacific Fishery Management Council
P.O. Box 103136
Anchorage, Alaska 99510

Dear Jim:

At the December Council meeting the issue of the incidental catch of red king crab in the C. bairdi Tanner crab fishery beginning January 15, 1985, was raised. The Council instructed NMFS to consult with ADF&G and take whatever action was appropriate. We have consulted with ADF&G and NWAFC and would like to inform the Council of the management actions we have taken.

We considered the current and predicted status of both C. bairdi Tanner crab and red king crab stocks in the eastern Bering Sea. We concluded that management actions were necessary to protect and promote the rebuilding of both stocks.

Information from NMFS pre-season trawl surveys shows that the C. bairdi stock has declined to its lowest level since 1975. This decline has occurred in both the male and female segments of the stock. Estimates of legal males indicate a decline from 210 million crab in 1975 to only 4.4 million crab in 1985.

Table of population declines among segments of the C. bairdi stocks in the Bering Sea District from 1984 to 1985.

Year	Numbers of crab (million)		Percent decline
	1984	1985	
Legal males	5.8	4.4	24
Sub-legal males	106.3	40.0	62
Mature females	34.4	15.6	55
Immature females	107.0	24.2	77

This severe decline in legal males has continued recently. As shown in the above table, legal males declined by 24 percent, from 5.8 million crab to 4.4 million crab between 1984 and 1985. Other segments of the C.



bairdi stock (sub-legal males, mature females, and immature females) also suffered severe declines from 1984 to 1985, making 1985 the lowest year-of-record for these estimates. The 1986 survey is expected to show even further population declines. Landings of legal males have declined from 66.4 million pounds in 1978 to only 1.2 million pounds in 1984. Preliminary data show C. bairdi landings of 3.3 million pounds for 1985. On the basis of the survey results, the 1986 harvest would not exceed 2.0-4.0 million pounds. All of these recent harvest levels are below the 5.0-28.5 million pound OY range for C. bairdi that is specified in the FMP. Section 2.1 of the FMP states that when Tanner crab stocks have declined to levels below that capable of producing MSY, management measures should promote rebuilding the stocks. We have concluded that current and projected stock conditions are such that the directed fishery for C. bairdi in the Bering Sea should not open as scheduled on January 15. Furthermore, consideration should be given to whether the C. bairdi fishery should be closed for the entire year to protect the stock from further fishing related mortality and to promote rebuilding.

Mature female red king crab in Bristol Bay molt and mate between February 1 and June 15. The estimated abundance of mature female red king crab declined from 17.6 to 6.8 million crab from 1984 to 1985. Estimated abundance of mature female red king crab is at a record low and considerably below the 20 to 40 million spawners considered optimal for recruitment. About 80-90 percent of the C. bairdi stock distribution overlaps that of the red king crab. Observer data indicate that 700 to 800 thousand female red king crab would be captured during the C. bairdi fishery and be subject to handling mortality during the most sensitive period of their life history. The extremely low abundance of female red king crab and the likelihood of substantial handling mortality provide additional compelling reasons not to open the directed fishery for C. bairdi on January 15.

We have, therefore, submitted an emergency rule to our Central Office that closes the C. bairdi fishery in the Bering Sea for 15 days from January 15 until February 1 by emergency rule.

We have initially closed the C. bairdi fishery only until February 1 days to allow additional time to consider the status of the C. bairdi and red king crab stocks and the necessity of a complete closure for the entire 1986 fishing year. During the closure we will take public comment on its basis and the need for continued closure. At the end of the closure we will consider whether to extend, modify, or rescind the closure. Included in our consideration will be any recommendations from the Council and the results of the Council's actions regarding the incidental catch of crab in the flatfish trawl fisheries.

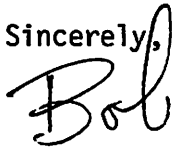
This issue again highlights the procedural difficulties we have with the Tanner crab FMP field order criteria. Under the present field order authority, the status of king crab stocks may not be considered as a basis for the order. In addition, only inseason information can be used to justify a field order. Thus, we are precluded from using preseason information such as that provided by the NMFS preseason trawl surveys. As a consequence, we have included provisions in the emergency rule that authorize the Regional Director to consider all relevant information

concerning the conservation and management of both Tanner and king crab as a basis for continuing, modifying or rescinding the closure by field order. Because this temporary rulemaking to expand field order authority will expire by mid-year, we recommend that the Council again submit an amendment for comprehensive field order authority similar to the disapproved part of Tanner crab Amendment 9. We are willing to contribute one of our management staff full-time to assist the Council in this effort, and we urge that work begin immediately.

We have heard from industry sources that segments of the trawling industry fear that our actions relative to the C. bairdi fishery will predetermine the outcome of the Council's deliberations concerning the incidental catch of red king crab by the trawl fleet. We have no such intention, and believe that our action relative to the targeted pot fishery for C. bairdi does not prejudice in any way which option the Council may select for the trawl fishery. The Council has complete freedom to weigh the costs and benefits of allowing various degrees of directed flounder trawling and incidental crab catches. We do wish to bring to the Council's attention the very depressed status of the C. bairdi stock and the need to give careful consideration to protecting and rebuilding both the C. bairdi and the red king crab stocks.

We have also taken two actions affecting the Bering Sea C. opilio fishery. First, we have closed the area east of 164° N. latitude and south of 58° W. longitude to C. opilio fishing to prevent the incidental catch and potential handling mortality of C. bairdi and red king crab. This closure is merely a continuation of the area closure in effect in the C. opilio fishery since the 1985 season was extended last October. Second, at the request of a substantial number of C. opilio fishermen and processors we have advanced the C. opilio season opening date from January 15 to January 1. The C. opilio fishery was scheduled to open January 15 to provide a "fair start" to the C. bairdi fishery. With the closure of the C. opilio fishery, the two week closure of the C. opilio fishery is not necessary.

Sincerely,



Robert W. McVey
Director, Alaska Region