

ALASKA BOARD OF FISHERIES
DECISIONS REGARDING
MANAGEMENT OF DOMESTIC KING CRAB FISHERIES
IN THE BERING SEA/ALEUTIAN ISLANDS AREA (OFF ALASKA)
MARCH 1985

85-112-FB

During its March 1981 meeting, the Alaska Board of Fisheries developed the Joint Statement of Principles on the Management of Domestic King Crab Fisheries and the Bering Sea/Aleutian Islands (BS/AI) King Crab Fishery Management Framework. These documents, which were prepared in cooperation with the North Pacific Fishery Management Council, clearly defines the roles of both entities in the management of the domestic king crab fishery in the BS/AI area. The board and council formally adopted the Joint Statement of Principles in October 1981 as an interim measure until formal implementation of the framework plan by the Secretary of Commerce.

In conformance with the above mentioned documents and recognizing its responsibility for management of the domestic king crab fisheries in the BS/AI area, the board received public testimony and reviewed staff reports and recommendations by Alaska Department of Fish and Game (ADF&G), Alaska Department of Public Safety (ADPS), Alaska Department of Law (ADL), National Marine Fisheries Service (NMFS), and the North Pacific Fishery Management Council. During its March 1985 meeting, the board discussed at length the issues related to regulations managing these fisheries. Unfortunately, due primarily to budgetary and scheduling problems the board was unable to meet with the council for shellfish discussions. The board did participate in a Joint Board/Council public hearing on March 2 in Seattle. The decisions of the board are presented in summary in this report. Further details are available on the tape record of the board meeting.

The Fishery

In the last five years, the Alaska king crab fishery has experienced both record high and record low harvests. Last fall former major king crab production areas, such as Bristol Bay and Dutch Harbor, were opened to limited commercial harvests or not opened at all because of extremely low stock abundances. The resulting reduced crab harvest has had a major impact on all sectors of the industry and upon the communities which rely heavily on successful crab fisheries. Large fleets and increased effort in the few remaining crab fisheries have put additional pressure on the target fishery and increased the

management risks of conducting fisheries at low stock levels. As recently as the 1980-81 season, king crab harvests in the BS/AI area peaked at 164 million pounds. During the 1984-85 season, harvests declined to about 12 million pounds. Additionally, there has been a significant shift of catch composition. In previous years, the predominant harvest was red king crab; in recent years, the harvest is composed primarily of blue and brown king crab. The low harvests have been the result of reduced population levels which, generally, have experienced successive years of poor or failed recruitment. In the near term, further declines in harvest are expected. Harvests over the long term are uncertain.

The reasons for crab stock declines are not well understood. In recent years, environmental conditions have changed, including documented increases in ocean temperatures. The observed temperature changes are within the known temperature regime which king crab live. Predator populations have increased and several diseases have been identified. However, dramatic increases in research over a significant time period would be necessary to quantify any of the above factors. If the funds are committed for these types of basic research programs, then in the future it may be possible to better anticipate population changes. Advance warning would allow for better management and industrial planning to respond to these changes.

On a more promising note, management may be able to respond to other causative factors which are assumed to contribute to stock declines. Establishing minimum spawning population requirements and limiting incidental harvests of crab in other fisheries, will likely improve stock rebuilding potential. Many of these factors are not fully understood and will require additional research. It is known, for instance, that female stock levels in several fisheries, where abundance estimates are made for females, have shown dramatic declines which parallel declines observed in the male portion of the stock. Commercial fishing undoubtedly has had an effect on reducing the legal male portion of the stock. But what is less understood is the effect of other factors, such as handling, on the female and prerecruit components of the stocks. The evidence is circumstantial, but these effects may be great. We know that in the Bering Sea tanner crab fishery, 1.6 king crab are also captured and subsequently discarded for every legal male tanner crab captured. We also know that large numbers of crab of various sizes and both sexes are being routinely harvested in the demersal groundfish fisheries. These fisheries undoubtedly have some effect. However, the data necessary to quantify these effects are poor or non-existent in the domestic groundfish fisheries. Information for the joint ventures and foreign groundfish fisheries are more complete and rates of observer coverages are improving.

Seasons

After hearing considerable public testimony and staff comment regarding appropriate season openings, the board adopted the following opening dates:

	<u>Adopted</u>	<u>Was</u>
Norton Sound (Q)	Aug. 1 & Jan. 1	(Aug. 1 & Jan. 1)
St. Lawrence (Q)	Aug. 1	(Sept. 1)
St. Matthew (Q)	Sept. 1	(Sept. 1)
Pribilof (Q)	Sept. 25	(Oct. 1)
Bristol Bay (T)	Sept. 25 - red & blue	(Oct. 1)
Adak (R)	Nov. 1	(Nov. 10)
Dutch Harbor	Nov. 1 - red & blue	(Nov.10)

The opening dates were recommended by a working group of industry representatives. These dates are identical to the 1984 season except for earlier openings in Bristol Bay, Pribilofs, Dutch Harbor and Adak management areas. The primary reasons provided in support of the earlier openings of Bristol Bay and Pribilof was to reduce the lag time between the end of the St. Matthew fishery and the beginning of the other king crab fisheries. The Dutch Harbor and Adak opening dates were set 10 days earlier to provide more fishing time prior to the winter and holiday season. None of the season adjustments conflict with the recognized biological seasons and therefore fall within the framework.

Area Registration

The board adopted a proposal to classify the brown king crab fishery in the Dutch Harbor as non-exclusive. Exclusive registration for Dutch Harbor and Bristol Bay was initiated prior to the experimental brown king crab fishery in these areas and needlessly prevented fishermen from fishing brown king crab in both the areas. Seasons currently separate the red and brown king crab fisheries in the BS/AI and at present the red king crab fishery in the Dutch Harbor area is closed in order to rebuild the stocks. Adoption of this proposal will allow fishermen to fish in both areas.

Size Limits

The existing 6½" minimum size limit for brown king crab in the Adak management area is the largest for any brown king crab fishery under the FMP. This size limit was based on biological information on red king crab and was universal throughout the BS/AI at one time. As scientific information on brown king crab in other areas was collected, analysis showed that a lowering of the size limit to 6" was possible while still maintaining the reproductive potential of the stocks. By 1984, the brown king crab size limit was subsequently lowered to 6"

in all areas but Adak, where information had yet to be collected. Little information exists for the Adak brown king crab stocks. ADF&G staff reported that there is now some limited information which supports the proposed decrease in that size limit. Additionally, they indicated that the Adak brown king crab stocks are probably biologically similar to brown king crab found in the Dutch Harbor area. Therefore, the board felt a lowering of the brown king crab size limit to 6" was appropriate.

Bait-up Period

The board rejected a proposal to establish a 5 day bait-up period prior to the opening of the king crab fisheries in Bristol Bay and the Bering Sea. The primary reason for this decision was the concern that given the very low harvests estimated for some of these areas, the optimum yield could be harvested during the bait-up period (i.e. one pull of gear). Catch data would not be available until after the opening at which time the OY might be exceeded. In addition, the board was concerned about use of the 5-day bait-up period to explore for prime crab areas.

Pot Storage

The board adopted a proposal to allow pot storage on the grounds for seven days following a season closure of the Bering Sea (excluding Norton Sound), since the distances from processing plants and pot storage areas make it extremely difficult for fishermen to both unload their catches and remove their pots within the current 72-hour regulation.

Check-out Requirements

No action was taken on a proposal to require king crab vessels registered for the Bristol Bay or Bering Sea areas to check out of the areas by radio to ADF&G before landing their catch at King Cove. The ADF&G staff advised the board that no regulation is necessary since the state can advise vessels by news releases to check out.


Ron Jolin, Chairman
Alaska Board of Fisheries

Adopted March 1985
Anchorage, AK