

FINDINGS

The Board of Fisheries met in Anchorage, Alaska for three (3) days from August 25th through August 28th, 1997. Six of the seven board members were in attendance, Grant Miller having been excused by the Chairman. The meeting was scheduled in response to a petition filed by the Alaska Department of Fish and Game (ADF&G) under 5 AAC 99.625 resulting from the 1996 harvest of Bristol Bay Red King Crab exceeding the guideline harvest level by seventy percent (70%). The petition was originally scheduled for hearing in March, 1997 but, due to notice problems and the need for an economic report relative to the effects of pot limits, action on the petition was postponed until August 25-28, 1997.

During the course of both the March and the August, 1997 meetings, the Board received oral and written reports from the staff of ADF&G (stock status, prior years fisheries, pending fisheries, management considerations), from Professors Greenberg and Herrmann from the University of Alaska, Fairbanks (economic implications of pot limits), from the Alaska Department of Law (legal issues), from staff of the National Marine Fisheries Service (NMFS) (stock status and compliance with federal requirements under the Fisheries Management Plan (FMP) and Magnuson-Stevens), from the Alaska Department of Public Safety (enforcement), from the United States Coast Guard (safety) and received both oral and written testimony from both advisory committees and members of the general public.

At the beginning of the meeting, the Board received a briefing from both the staff of ADF&G and the Department of Law on the criteria of the Fisheries Management Plan, the Magnuson-Stevens Act national standards, the Regulatory Flexibility Act and Executive Order 12866. Throughout the meeting, the Board regularly referred to the standards and criteria set forth by these statutes, regulations and orders. The Board members were presented with a synopsis prepared by the Vice Chairman and reviewed and approved by the Department of Law, outlining the various criteria and standards to be considered in their decision making process (See RC 16).

At the conclusion of the public testimony, Board Chairman White appointed a committee of three (3) Board Members (Larry Engel, committee chairman, Ed Dersham and Dan Coffey). The committee conducted a three (3) hour public discussion/meeting with thirteen (13) advisors selected by the Chairman and approved by all in attendance at the meeting. The charge of the committee was to determine what regulations would be required by the Department and would be acceptable to the industry which would allow inseason management of the harvest. The committee made recommendations to the full Board (See RC 26).

At the conclusion of the committee report, the Board began deliberations. Initially, the Board brought Proposal 3 to the table, substituted the committee recommendations portion of RC 26 for proposal 3 and entered into deliberations. The proposal had numerous elements to it. At the direction of Board Chairman White, the Board agreed to discuss each element of the proposal, give or withhold approval of that particular element and then, once all of the elements had been considered separately, to consider all of the tentatively approved elements to see if a coherent fisheries plan had been developed.

During deliberations, the following elements of the fishery plan were considered.

1) Voluntary daily reporting by department selected fishermen at maximum intervals of 12 hours.

The Board's discussion centered on the issue of voluntary versus mandatory reporting. The industry favored mandatory reporting by all fishers with some time allowed to "gear up" with the proper equipment. ADF&G staff and Public Safety favored the voluntary system currently in effect because this system had proven to be reliable during the 1996 fishery.

It was noted that for a mandatory reporting system to work, it would take at least one (1) year for the entire fleet to obtain the necessary equipment. Thus, even if mandatory reporting were required, it could not, as a practical matter, go into effect until after the 1997 fishery.

The Board opted for voluntary reporting based upon the Department's representations that it has an excellent reporting system in place and based upon the Department's experience during the 1996 fishery where the reports of the catch under the voluntary system were extremely accurate.

The Board expects that over the next two (2) years, the Department and the industry will develop a reporting system which can be presented to the Board at its regular meeting in the 1998-99 cycle at which time the voluntary system will be reviewed. The Board further stated that if voluntary reporting proves to be inadequate to allow for inseason management during 1997, the Department shall submit an Agenda Change Request (ACR) to the Board prior to the prosecution of the 1998 fishing season.

2) Extend the running time to and from the grounds from 24 hours to 30 hours.

These changes are proposed primarily for safety reasons. They are supported by the industry, ADF&G and the Department of Public Safety. The increased running times as proposed were acceptable to Public Safety, which had enforcement concerns, but felt that the safety considerations outweighed the enforcement consideration. ADF&G noted that the increased running times as proposed will necessitate some adjustments in the Department's practices and in the opening hour of the season, but these are acceptable to the Department because of the importance of the safety concerns. The Department stated that the extended running times, if adopted by the Board, can be accomplished without further regulatory action by the Board.

The Board adopted the changes in the running time to and from the grounds from 24 to 30 hours. This action requires registered vessels to have their holds or live tanks inspected by the Department within thirty (30) hours of the opening of the season or at any time during the open season; and further allows registered vessels to have king crab aboard for a period not to exceed thirty (30) hours after closure of the season.

3) Allow the department to provide the fleet with notices of closure of the fishery with no minimum time being set for such notice. If notice of closure is less than 24 hours, baited gear can remain on the grounds for up to ten (10) days (240 hours) after the closure. After closure and prior to delivery of king crab no vessel shall be permitted to have a line in the block.

These changes were supported by the industry, the Department and Public Safety. Again, these changes address safety concerns, but there are inseason management considerations, bycatch considerations (sublegal males, females and crabs other than king crab) and enforcement considerations as well. All of these issues were discussed by the Board during its deliberations.

Providing a short notice closure coupled with leaving baited pot storage on the grounds after the season, is expected to enhance the Department's ability to manage inseason more effectively. At the same time, it allows fishers the option to leave gear on the grounds rather than be forced to retrieve gear in hazardous weather. By prohibiting any pulling of gear after the closure and prior to delivery of product, the Department of Public Safety's concerns were addressed.

The question of bycatch and associated handling mortality was discussed by the Board in the context of mortality during the season arising from increased pot pulls and the mortality which might occur from allowing baited gear storage on the grounds. Also, in the Board's discussion was a recognition that exceeding the mid

point of the guideline harvest level by seventy percent (70%), as occurred in 1996, is also a bycatch mortality which needs to be avoided. Unfortunately, there is not sufficient data upon which to base any firm conclusions. The Board did consider and discuss in detail the very limited bycatch and handling mortality information which it did have. Based upon that data, which is the best scientific information available to the Board, it was concluded that there would be bycatch from leaving baited gear on the grounds after the season, but that the handling mortality would not occur to such an extent so as to exceed the benefits of this practice. Also, the department will, during the course of the next two (2) years, through an on-board observer program developed with industry's cooperation, obtain additional bycatch and handling mortality data for consideration by future Boards.

4) The Board then considered pot storage on the grounds at locations further to the east of current pot storage locations. This proposal was favored by the industry as a way of helping the acknowledged re-allocation against small boats resulting from short seasons and low guideline harvest levels (GHLs). However, enforcement concerns, the possibility of creating a re-allocation in favor of smaller vessels and the increased efficiency of the fleet resulting from pots being stored closer to the grounds all resulted in this part of the proposal not being adopted by the Board.

5) Next, the Board considered closing the fishery when the GHL is less than 4 million pounds. The support and opposition to this proposal in the industry was split between those who felt a fishery could be allowed below this level (e.g. 2 million pounds) and those that thought that a fishery below 4 million pounds was too risky for a fishery in the rebuilding mode. The department supported closure of the fishery when the GHL falls below 4 million pounds because of the high harvesting power of the King Crab fleet which in turn creates an unacceptably high risk of over harvesting this depressed stock. The Department also stated that it cannot manage this fishery at low levels of GHL given the level of participation and the uncertainty of the information which creates a high risk of over fishing a depressed fishery.

In its discussion, the Board noted that the concept of optimum yield is not an annualized optimum yield. While a fishery with a 4 million pound GHL could, at current prices, be worth as much as \$16,000,000.00, the long term optimum yield from this fishery in its current rebuilding mode, is best met by not risking over harvest at low levels of GHL.

The Board also considered that the department has modeled the fishery in the range of a 4 million pound GHL and concluded that it could manage such a fishery with pre-announce seasons, pot limits of 60-75 or lower and effort not exceeding 225 vessels. At GHLs lower than this the "size of the bite" is too great and the risk of exceeding the GHL is too great. Thus, based upon the lack of knowledge of the fishery at low levels of GHL, inexperience with the new "tools" which are being provided to the department, the fears of the department as to its ability to manage the fishery at low levels of GHL and the risks of over-fishing, the Board adopted the portion of the proposal which closes the fishery if the GHL is less than 4 million pounds.

6) The Alaska Fisheries Conservation Group filed a proposal requesting the harvest rate for mature male crabs be increased to 20%, the harvest rate before adoption of the rebuilding plan.

In March, 1996, the Board adopted a fishery management strategy to promote stock rebuilding and optimal harvest of Bristol Bay king crabs. This rebuilding plan sets an annual guideline harvest level based upon a harvest rate coupled to fishery thresholds. When the stock is at or below a threshold of 8.4 million mature females or 14.5 million pounds of effective biomass (the biomass of mature female crabs that are mated in any one year), the fishery is closed. If the stock is above both of these thresholds, the GHL is determined by the abundance of mature and legal sized males. The plan provides for mature male harvest rate of ten percent (10%) wherever the effective biomass is below the rebuilding goal of 55 million pounds. When the stock exceeds the rebuilding goal at 15% harvest rate is allowed for mature males. The GHL is further capped to insure that no more than 50% of the legal males are harvested in any one year.

A large majority of industry did not favor increasing the exploitation rate at this time. During its deliberations, the Board noted that this proposal was short sighted, could lead to over-fishing, could result in a loss of optimum yield over the long term and could be detrimental to fishing communities over time. Based on the fact that the rebuilding plan is now one year old, based on the cautions received from the staff of the Department and the National Marine Fisheries Services (NMFS) as to what the trawl survey reveals and the fact that the rebuilding plan will be reviewed in two (2) years, the Board did not adopt this proposal.

7) Finally, the Board considered the question of pot limits which was the most hotly contested issue before the Board.

During its deliberations, the Board recognized that the Bristol Bay king crab fishery has been governed by a proportional pot limit since 1993. The fishery was, however, closed in 1994 and 1995 because of low stock abundance. Vessels in excess of 125 feet in length are presently limited to 250 pots, whereas vessels 125 or less in length are allowed to more than 200 pots.

Pot limits were established primarily to slow the pace of the fishery for improved manageability. The 1996 season demonstrated clearly that with the number of vessels participating that, even with these pot limits, the fishery was unmanageable inseason.

The Board further noted that the Bristol Bay king crab fishery is managed with limited entry. However, there are over 320 vessels that qualify for the fishery, a number well in excess of the number of participants during recent years (e.g. 196 vessels participated in the 1996 fishery which resulted in a harvest that exceed the GHY by seventy percent). There is a large number of potential entrants into the fishery. ADF&G staff estimated that as many as seventy (70) additional vessels might participate in the 1997 fishery.

During this portion of the deliberations, the FMP criteria were reviewed and discussed in detail by the Board. In addition, the report from the University of Alaska professors was discussed. There was criticism of this report based upon the absence of information relative to fixed costs associated with the vessels of various sizes and how the absence of this information prevented the Board from doing an adequate economic analysis and thus being precluded from imposing new pot limits. These concerns were addressed in a series of questions to Professors Greenberg and Herrmann and to staff of ADF&G and NMFS so that the Board was satisfied that it did, in fact, have sufficient information to make an appropriate decision as to pot limits.

The reasons for pot limits, as discussed by the Board, are as follows:

A) Short seasons with low GHY re-allocate the fishery resource to the larger vessels which are able to carry their full complement of pots. Most smaller vessels cannot do this. Thus, given the current situation in the Bering Sea Bristol Bay red king crab fishery, there has been a re-allocation of the fishery to the larger vessels. Further pot limit restrictions at low levels of GHY will address this re-allocation.

B) The fishery is in a rebuilding mode. While there is dispute as to the conservation value of pot limits and issues of handling mortality (see discussion below), the department maintains that pot limits do reduce harvest capacity and thus

can be an effective management tool. The Board also believes that pot limits can be an effective management tool to prevent over fishing and to allow for inseason management of the fishery.

C) To the extent practical, inseason management is preferable to a pre-announced season because inseason management is more likely to result in the Guideline Harvest Level (GHL) being attained. The department informed the Board that it cannot manage inseason at lower levels of GHL without a reduction in the number of pots on the grounds. Without pot limits, a real danger exists that excessive amounts of gear, coupled with a small guideline harvest level and a depressed (rebuilding) stock, could result in over harvest.

D) As to bycatch issues, the pot limit may cause an increase in the number of pot pulls which results in reduced soak times and thus causes an increase in bycatch. However, inseason management with the other tools being provided to the department may cause a decrease in the handling mortality. The net effect on by-catch mortality is not known. The department will, over the course of the next two (2) years, conduct research into mortality thru a program of on board observers in the fishery. Thus, the net effect of these changes will be better known in two (2) years.

The Board, during its deliberations, stated its preference for inseason management over a pre-announced season for the reason that the GHL is more likely to be reached with inseason management and the risk of over harvesting depressed stocks due to lack of knowledge and lack of control over the participation is greater with a pre-announced season. There was substantial debate over whether or not the department, with the new tools being provided to it by the Board, would be able to manage inseason without pot limits. During deliberations, it was noted that the Board cannot, with any degree of precision, determine the catch per unit effort (CPUE), the number of pot pulls and the number of vessels which will participate in the fishery. Thus, while the Department's ability to manage inseason with the new tools is still an open question, the Board felt that the more conservative approach was one which imposed pots limits and allowed for inseason management.

In two years it may be apparent that the department can manage for low levels of GHL without these pot limits. It is this Board's stated intention that the department use the next two (2) years to develop information and management strategies that will answer these unknowns.

The Board then discussed that fact that if pot limits are to be adopted by the Board, it would be necessary to consider three variables: the GHL, the number of vessels in the fishery and the number of pots per vessel. There are an infinite number of variations using these three considerations. After lengthy discussion and application of the principles set forth in the FMP as to pot limits, the Board adopted the following pot limits:

<u>Number of Vessels</u>	<u>GHL Range</u>	<u>Number of Pots</u>
less than 200	4-6 million	80-100
between 200 & 250		60-75
less than 200	6-9 million	120-150
between 200 & 250		100-125
less than 200	9-12 million	200-250
between 200-250		160-200
more than 250	>12 million	200-250

In circumstances where the number of participating vessels exceeds 250, the pot limits set for the 200-250 vessel range in the appropriate GHL range will become mandatory, but there will also be a pre-announced season (See also RC 26 and RC 27).

7) Provide for sun setting of any new regulation adopted by the Board at this meeting.

This proposal will insure that the new regulations are reviewed in two years as much of what may be adopted here is new and is designed to allow as much adaptive management as possible. This concept was supported by industry, the Department, Public Safety and adopted by the Board.

It is the Board's stated intent that, during the course of the next two (2) years, the fishery will be conducted in such a manner so as to gather important fishery and management practices information so as to allow future Boards to better manage the fishery. The sunset provision was adopted by this Board so that this entire fishery would be examined at the next regularly scheduled meeting on this fishery

The Board then considered two additional matters:

1) With the pot limit structure outlined above, there must be early vessel registration for the fishery. The Board adopted as part of the proposal, a requirement that vessels register by the close of business on the first Friday in October.

2) In the event of a pre-announced season with adequate voluntary reporting, the Department currently has the authority and will, in the appropriate circumstances, consider extending the season if the GHL is not met during the period of the pre-announced season and if, in the discretion of the department, considering all of the factors which it deems appropriate, such extension is warranted.

During Board discussions, it was repeatedly noted that the rebuilding plan adopted by the Board at its 1996 meeting has only been through one (1) season. The actions which the Board took at this meeting were designed to strengthen the rebuilding plan and, at the same time, adopt new management tools and practices and increase the safety of a very dangerous fishery.

The Board noted that its primary concern in its March, 1996 meeting was conservation of the resource. At this meeting, the Board, while still giving primary consideration to the conservation actions taken previously, spent more time discussing and dealing with the economic and social objectives of the FMP, with vessel safety concerns and with the research and management objectives of the Department.

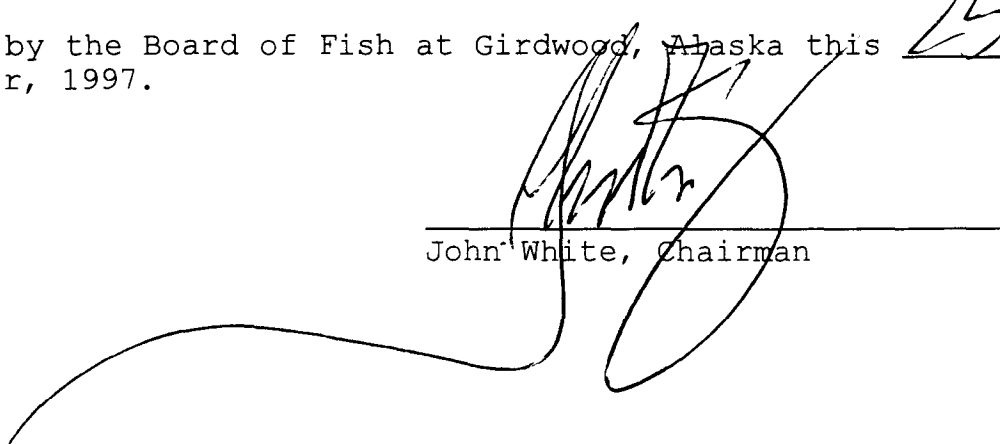
The Magnuson-Stevens act national standard which require regulators to avoid over-fishing and to achieve on a continuing basis, optimum yield from the fishery resource, was discussed and considered by the Board in its deliberations, along with other standards such as safety of human life at sea, allowance for variations in the fishery, minimization of costs, minimization of bycatch and handling mortality and the effects of various aspects of the proposals on fishing communities.

After all of the various elements of the proposal were discussed individually and tentatively approved, the Board then considered the proposal as a whole to see if all of the various elements fit into a proper plan which would be in compliance with the FMP, the Magnuson-Stevens Act and the other statutes and regulations governing the fishery. Various Board members spoke to the fishery plan as a whole and its compliance with these statutes and regulations. The Board concluded that the various elements of the fishery plan did, in fact, fit together well and resulted in a fishery plan which would conserve the resource and comply with the rebuilding plan adopted in March, 1996, would allow fishing a low GHL's, would allow inseason management, would prevent over harvesting, would optimize the return to the fishers over time and would meet the statutory and regulatory requirements. The plan was then adopted unanimously by the Board.

In conclusion, the Board intends that these new regulations be in place for two (2) years to allow the department to manage the fishery in season and gather the necessary experience to enable it to manage this type of fishery. It is expected that there will be a complete review of the new regulations and the rebuilding plan in cycle in 1998-99.

ADOPTED by the Board of Fish at Girdwood, Alaska this
day of October, 1997.

257A



John White, Chairman