ALASKA STATE LEGISLATURE
HOUSE SPECIAL COMMITTEE ON FISHERIES
February 21, 2007
8:41 a.m.

MEMBERS PRESENT

Representative Kyle Johansen
Representative Craig Johnson
Representative Gabrielle LeDoux
Representative Bryce Edgmon

MEMBERS ABSENT

Representative Paul Seaton, Chair
Representative Peggy Wilson
Representative Lindsey Holmes

COMMITTEE CALENDAR

OVERVIEW: SEA GRANT CRAB ENHANCEMENT PROJECT/ALUTIQ PRIDE HATCHERY

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to record

WITNESS REGISTER

BRIAN ALLEE, Ph.D., Director
Alaska Sea Grant
School of Fisheries and Ocean Sciences
University of Alaska Fairbanks
Fairbanks, Alaska
POSITION STATEMENT: Presented Sea Grant Crab Enhancement Project overview.

JEFF HETRICK, Director
Alutiiq Pride Shellfish Hatchery
Moose Pass, Alaska
POSITION STATEMENT: Presented Alutiiq Pride Shellfish Hatchery overview.

HEATHER MCCARTY, Central Bering Sea Fishermen's Association (CBSFA)

Juneau, Alaska
POSITION STATEMENT: Offered comments regarding the Sea Grant Enhancement Project.

ARNI THOMSON, Executive Director
Alaska Crab Coalition;
United Fishermen of Alaska (UFA)
Seattle, Washington
POSITION STATEMENT: Offered comments regarding the Sea Grant Enhancement Project.

ACTION NARRATIVE

REPRESENTATIVE KYLE JOHANSEN called the House Special Committee on Fisheries meeting to order at 8:41:09 AM. Representatives Johnson, LeDoux, and Edgmon were present at the call to order.

OVERVIEW: SEA GRANT CRAB ENHANCEMENT PROJECT/ALUTIQ PRIDE HATCHERY

8:41:24 AM

REPRESENTATIVE JOHANSEN announced that the only order of business would be to hear an overview from the Sea Grant Crab Enhancement Project in conjunction with the Alutiq Pride Hatchery.

BRIAN ALLEE, Ph.D., Director, Alaska Sea Grant, School of Fisheries and Ocean Sciences, University of Alaska Fairbanks, began by directing attention to handouts entitled "Alaska King Crab Research and Rehabilitation Program," and "Alaska Crab Stock Enhancement and Rehabilitation Workshop Proceedings." Alaska Sea Grant's web site also offers a number of documents regarding the king crab initiative.

8:43:05 AM

DR. ALLEE, referring to a slide presentation titled "Presentation to the Alaska State House of Representatives Special Committee on Fisheries, Brian Allee, Ph.D., Director, Alaska Sea Grant, University of Alaska Fairbanks, School of Fisheries and Ocean Sciences, Alaska Sea Grant Program Assessment, September 2006," stated that one of the strategic goals of the Alaska Sea Grant Program is to enhance and improve the profitability and viability of Alaska's commercial fisherman and fishing communities. Alaska's Sea Grant program is one of 30 in the United States. He explained that this program

develops and supports research, education, and extension programs, in order to implement research in coastal communities. This program is directed at coastal communities, in the marine, estuarine environment, and the coastal watersheds of Alaska. Moving on to Slide 4, he explained that this is a "grassroots initiative," with regard to king crab rehabilitation. Fishermen from Kodiak and Pribilof Island requested that Alaska Sea Grant convene an international workshop in March of 2006. This meeting resulted in a consensus for Alaska to pursue king crab ocean ranching. He explained the process of ocean ranching, noting that this is different from ocean farming. He compared this to salmon ocean ranching, and noted that the state has the largest salmon ocean ranching program in the world. This program is run by private, non-profit organizations. He stated that this could possibly be implemented across the state. These proceedings have been published.

8:46:09 AM

DR. ALLEE went on to say that the Steering Committee has expressed enthusiasm. He said that it is "pretty exciting when you get a number of coastal communities and fisherman groups, and people interested in initiatives such as this." Referring to a handout titled "Alaska King Crab Research and Rehabilitation Program," he said that this shows that the fishery was a "boom and bust" system. Kodiak has not had a fishery in 20 years, and in the Pribilof Islands it has been less than ten years. The motivation is to try and rehabilitate stocks that are not recovering. Returning to the slide presentation, he stated that scientific partnerships are being developed. He then detailed these partnerships. He pointed out significant research initiatives, which include king crab culture technology transfer from National Oceanic and Atmospheric Administration fisheries and the University of Massachusetts, genetic mass marketing, and graduate and research technicians. In regard to genetics, he said:

> One of the more exciting aspects of the program is working on the genetics of these crab populations, and characterizing the parent population where we're obtaining brood stocks. We've got brood stock from Alitak Bay in Kodiak [for red king crab], and ... from the Pribilof Islands for blue king crab. ... Taking the brood stock in their native habitat, 15 females are down at the hatchery at this time. So, we're characterizing - and will be overtime - those populations. And then, we're going to fingerprint -

> or genotype - the hatchery juveniles. And that will effectively be a mass-mark. It's very important to have that ... capability, so that we can monitor the success of this program over time. And see how these hatchery-produced, ocean ranched juveniles, contribute to the fishery and survive.

8:50:57 AM

DR. ALLEE went on to say that the Alutiiq Pride Shellfish Hatchery is the only shellfish hatchery in Alaska. This hatchery has hatchery expertise, culture equipment and facilities, and algal and artemia cultures. He then discussed the status and future approach of the hatchery. The red king crab females are currently hatching, while blue king crab females are expected in 1-2 months. He explained the three phases of future growth: larval culture; nursery culture; and post release stimulation of wild out-stocking.

8:55:46 AM

DR. ALLEE then discussed the program budget. The existing budget includes "bootstrap contributions" of $226 thousand, with $303 thousand in obligated funds for fiscal year 2008 (FY 08). The legislature provided funding for the Alutiiq Pride Shellfish Hatchery for a total of $75 thousand in FY 07, and a request was made for $250 thousand for FY 08. The FY 08 request is for multiple species; however, $120 thousand is for blue and red king crab. Additionally, there is a congressional request for over $1 million. In total, this is a three-year program, using $2.5 million to get the program started.

8:57:40 AM

REPRESENTATIVE JOHNSON asked whether this is part of the Seward Sea Life Center.

DR. ALLEE replied that this is a separate facility. He stated there will be an open house at the shellfish hatchery on March 24, 2007, which legislators are invited to attend.

8:58:43 AM

JEFF HETRICK, Director, Alutiiq Pride Shellfish Hatchery, stated that he would be discussing the crab project and how it has progressed over the past 6 months. The hatchery received brood stock from the Kodiak area in July of the previous year, which

is being held at the Seward Marine Center. Brood stock was received from the Pribilof Islands in November. The crabs are currently being moved from the Seward Marine Center to the Shellfish Hatchery. The Alutiiq Pride Shellfish Hatchery was constructed from criminal settlement money from the Exxon Valdez. There was a year-long site planning process. He stated that originally, the hatchery was also to be a research center, and was to be called the Mariculture Technical Center (MTC). The intention was to have a portion of the facility dedicated to research on emergent species, which might someday fuel the mariculture industry in Alaska. In reality, the hatchery itself has functioned as the MTC, with no real research component. This project utilizes the MTC space, which helps to augment funding shortages that have been faced for the past ten years, as well as maximizing the production of the facility. In the past 4-5 months, he said, two crab modules have been constructed. The blue king crab and red king crab are separated due to requirements of the Alaska Department of Fish & Game (ADF&G). The hatchery is focusing on taking the methods used in Kodiak, and applying these to a larger scale. Several groups are involved in the project. He stated that the goals are two-fold. The research will be applied to a larger scale, and mass culture will be considered.

9:04:25 AM

MR. HETRICK, in response to a question from Representative Edgmon, stated that the permitting process is often contentious, but the transport permits were received for moving the crab. The current permits do not allow for the release of the juveniles, as it is not known how they will behave once released. There are also questions regarding the technique that will be used to mark the crabs. He pointed out that coded wire tags are used to mark salmon; however, crabs molt, which requires a different method. He stated that the advances in genetic research allow the crabs to be tracked back to parental origin. In the future, permits will be needed to move shellfish around the state.

9:06:41 AM

REPRESENTATIVE LEDOUX asked if there is any reason to believe that the released crab would behave differently than crabs would normally behave in the wild.

9:07:02 AM

MR. HETRICK replied that he suspects them to behave similarly. If the culture technique is successful, the hatchery has a series of experiments to observe the behavior, although this is still an artificial environment. He explained that the hatchery is avoiding the mortality and cannibalism that would occur in the wild.

REPRESENTATIVE LEDOUX pointed out that these crabs are genetically identical to crab that is raised in the wild.

MR. HETRICK agreed, noting that the only difference is that the crab entered into an artificial facility.

9:08:04 AM

REPRESENTATIVE EDGMON inquired as to how "cutting edge" the effort is, and whether this is being done elsewhere in the US.

MR. HETRICK opined that it is cutting edge. There is research being done world-wide. Domestically, there has been a lot of work involving lobster and blue crab, and the techniques are very similar. Russia has a hatchery manual that the Alutiiq Pride Shellfish Hatchery is trying to utilize. He stated that Alaska is "a little behind." The everyday technology of the hatchery is "pretty straightforward." He surmised, then, that the key is going to be the out-planting and management, which must be faced once the crabs are released.

REPRESENTATIVE JOHNSON inquired as to whether there is a way to utilize the farming aspect of enclosing an area, or a way to control the environment so that the raised crabs do not escape.

MR. HETRICK replied that Russia intends to farm crab, as does South America. He described a method used by the Japanese, which divides the ocean floor into regions. These regions are then managed through the fisheries. Once the crabs are released, cannibalism will be the biggest challenge. He questioned whether they should be released after this stage is over, when it is assumed that the survival would be higher. He stated that he does not anticipate holding them in any type of container, and said "I think once they're released, they're released."

9:12:03 AM

HEATHER MCCARTY, Central Bering Sea Fishermen's Association (CBSFA) stated that the CBSFA was involved in requesting the

workshop held in March of 2006, and is currently on the steering committee. She stated that the Pribilof blue king crab stocks have declined precipitously. On St. Paul Island, one of the major economic forces is the crab fishery. The residents of the island are interested in learning more about what has happened to the blue king crab, and why they are not thriving, in addition to whether they can be rehabilitated. She stated that the CBSFA has contributed a significant amount of money to this project, one of which was the cost of collecting the brood-stock. She offered thanks for this program, and the possibility of restoring these crab.

9:14:38 AM

ARNI THOMSON, Executive Director, Alaska Crab Coalition, United Fishermen of Alaska (UFA), stated that the association is enthusiastic to see this project go forward. The UFA letter of record supports the effort. The project does not introduce a new species, and this program would benefit communities from Southeast Alaska to Nome. The king and tanner crab research over the years have been enlightening, and the workshop held in Kodiak was a continuation of the education he gained through the ASG program. He then referred to page 15 of the Alaska Crab Stock Enhancement and Rehabilitation booklet, stating that the author of this article gave a presentation at the aforementioned workshop. He explained that this is a case study on how to grow king crab in captivity, which the Russians have been doing since 2000. Referring to a handout entitled "National Marine Fisheries Service Fisheries Statistics and Economics Division," he explained that this shows the total imports of king crab into the US. He brought attention to the imports from the Russian Federation, which totaled $277 million worth of king crab imported into the US from Russia. He explained that Russia took crab from the Barents Sea and introduced them into the North Atlantic Ocean. Alaska is competing with this on the world market. Pointing out that Alaska's total production of king crab for the same year was an estimated $65 million, he opined that Alaska needs to take a look at this and do what needs to be done to rejuvenate the depressed stocks.

9:20:21 AM

REPRESENTATIVE JOHNSON offered his understanding that in 1959 the Russians "picked up some crab and dropped them into the ocean" without any resulting diseases or problems.

MR. THOMSON replied that there is controversy regarding what has been done; however, this has become a “huge cash crop” for Russia. Norway and Russia negotiate quotas of the king crab, with Norway taking a smaller quota. He pointed out that the average weight of these crabs is 10 pounds, which is three pounds larger than Alaskan king crab. He stated that there has been controversy in the Norwegian sector, with both pro and con in the Norwegian parliament. He explained that there is a policy of eradication in some areas and an IFQ fishery in part of the sector. He agreed that this species is not native to the aforementioned area.

9:21:54 AM

REPRESENTATIVE LEDOUX asked for clarification of the aforementioned eradication policy.

MR. THOMSON explained that there is a line which has an IFQ Fishery on its East, and an open fishery on the West. In response to an additional question, he explained that within this context, “eradicate” means to wipe out the species, recognizing that the species is invasive.

REPRESENTATIVE LEDOUX asked what affect the king crab has had on the native species in the area.

MR. THOMSON shared his understanding that there is concern regarding the king crab consuming large amounts of larvae, in addition to getting caught in fishing nets, which causes problems when the nets are brought back onto the boat.

9:24:04 AM

ADJOURNMENT

There being no further business before the committee, the House Special Committee on Fisheries meeting was adjourned at 9:24 a.m.