

ALASKA STATE LEGISLATURE
HOUSE SPECIAL COMMITTEE ON FISHERIES

February 24, 2009

10:14 a.m.

MEMBERS PRESENT

Representative Bryce Edgmon, Chair
Representative Craig Johnson
Representative Wes Keller
Representative Charisse Millett
Representative Cathy Engstrom Munoz
Representative Robert L. "Bob" Buch
Representative Scott Kawasaki

MEMBERS ABSENT

All members present

COMMITTEE CALENDAR

CONFIRMATION HEARING(S):

Commercial Fisheries Entry Commission

Judge Peter Froehlich - Juneau

- CONFIRMATION(S) ADVANCED

HOUSE BILL NO. 43

"An Act relating to aquatic farm permitting involving geoducks and to geoduck seed transfers between certified hatcheries and aquatic farms."

- HEARD AND HELD

PREVIOUS COMMITTEE ACTION

BILL: HB 43

SHORT TITLE: GEODUCK AQUATIC FARMING/SEED TRANSFER

SPONSOR(S): REPRESENTATIVE(S) SEATON

01/20/09	(H)	PREFILE RELEASED 1/9/09
01/20/09	(H)	READ THE FIRST TIME - REFERRALS
01/20/09	(H)	FSH, RES
02/24/09	(H)	FSH AT 10:15 AM BARNES 124

WITNESS REGISTER

PETER FROEHLICH, Appointee
to the Commercial Fisheries Entry Commission
Alaska Department of Fish & Game (ADF&G)
Juneau, Alaska

POSITION STATEMENT: Testified as appointee to the Commercial Fisheries Entry Commission.

REPRESENTATIVE PAUL SEATON
Alaska State Legislature
Juneau, Alaska

POSITION STATEMENT: Presented HB 43 as sponsor.

RON JOSEPHSON, Section Chief
Statewide Hatchery and Mariculture Program
Division of Commercial Fisheries
Alaska Department of Fish & Game (ADF&G)
Juneau, Alaska

POSITION STATEMENT: Testified with concern on HB 43.

CYNTHIA PRING-HAM, Mariculture Coordinator
Alaska Department of Fish & Game (ADF&G)
Juneau, Alaska

POSITION STATEMENT: Testified with concern on HB 43.

JEFF HETRICK, Director
Alutiiq Pride Shellfish Hatchery
Alaska Shellfish Institute
Seward, Alaska

POSITION STATEMENT: Testified on HB 43.

RODGER PAINTER, President
Alaska Shellfish Growers Association
Juneau, Alaska

POSITION STATEMENT: Testified on HB 43.

ACTION NARRATIVE

[10:14:14 AM](#)

CHAIR BRYCE EDGMON called the House Special Committee on Fisheries meeting to order at 10:14 a.m. Representatives Edgmon, Johnson, Buch, Munoz, Kawasaki, and Keller were present at the call to order. Representative Millett arrived as the meeting was in progress.

[10:15:05 AM](#)

CONFIRMATION(S): Reappointment To Commercial Fisheries Entry Commission - Judge Peter Froehlich

10:15:28 AM

JUDGE PETER FROEHLICH, Appointee, to the Commercial Fisheries Entry Commission (CFEC), Alaska Department of Fish & Game (ADF&G), provided a brief personal history of how he originally came to sit on the CFEC. His history includes a litany of positions in the Alaska fishing industry, as well as the field of law, prior to being appointed District Court Judge in Juneau.

10:20:07 AM

MR. FROEHLICH reviewed the CFEC goals, highlighting the priority to reduce the adjudication caseload; cut by 2/3 from a high of 250 down to 88. He directed attention to the committee packet handout to review additional CFEC activities and focus. The commission has eliminated general fund appropriations to the budget, as of FY08, he reported, in large part due to the legislation enacted in FY05 allowing the commission to reconfigure the fee schedule. The current budget includes \$6 million of revenue, of which approximately \$4 million comprises operational costs. The remaining \$2 million are funds dispersed to the Fishermen's Fund, under the Department of Labor & Workforce Development (DLWD), and the Division of Commercial Fisheries at ADF&G. Further, the commission has had no increase in the operating budget since FY07, save for the mandated pay raises, and no new positions since FY04. Technological advances have been made, including the development of the e-landings program. This project is being accomplished in conjunction with the Division of Commercial Fish and National Marine Fisheries to instantly capture computerized fish ticket data. A capital budget request, of \$140,000, was submitted this year to purchase the necessary equipment. He also pointed out that an on-line renewal system is being launched this year to assist the fishermen with their permit requirements. He invited the committee to visit the CFEC web site, which receives between 3-4 million hits per year.

10:25:40 AM

REPRESENTATIVE BUCH asked for clarification regarding the permit renewal process.

MR. FROEHLICH responded that approximately 20,000 fishing permits and 10,000 vessel licenses are renewed annually.

[10:26:47 AM](#)

REPRESENTATIVE BUCH referring to the proposed on-line electronic system, asked if it would allow anyone access to information regarding a commercial fishing permit or vessel license; who owns the vessel, in what port it is registered, and other specifics.

MR. FROEHLICH replied yes. He also reported that permits have been tracked since 1975 to provide data on movement from rural to urban Alaska, and from Alaska to Outside addresses.

[10:28:00 AM](#)

CHAIR EDGMON inquired if a trend has been observed.

MR. FROEHLICH indicated that rural permits are moving to urban Alaska, more than to out of state locations. Additionally, this movement is more via migration of the permit holder to a new residence versus sale of the permit. A downward trend for permits has also been observed. He speculated that it may be due to fishery consolidation, as well as the reduction of the pending cases. When a lengthy adjudication is decided the fishing allowed under the interim permit ceases. "The percent of non-resident permits is creeping up," he said.

[10:29:30 AM](#)

REPRESENTATIVE MUNOZ asked about the opportunities for young Alaskan's to gain fishing permits.

MR. FROEHLICH acknowledged that it can be financially difficult for a young person to enter the industry. The commission does not have many options to address this concern. The best approach is via the state fishing loan system, he opined.

[10:31:34 AM](#)

REPRESENTATIVE SEATON asked how many of the fisheries indicate a number of unused permits each year.

MR. FROEHLICH said that it varies considerably by fishery. Exact numbers are available to the committee. He reported that, in Southeast, the gillnet fishery has approximately 20 percent

latent permits, and the purse seine 43 percent. Of the 43 percent, he noted that residents not fishing comprise 39 percent, and non-residents 47 percent. This fishery has recently experienced a buy back, of roughly 30 permits. Other statistics are available.

[10:33:31 AM](#)

REPRESENTATIVE SEATON stipulated that this is a concern because the counsel is considering termination of the license limitation permits (LLPs). By eliminating these permits, the ability for coastal Alaskans to participate is diminished. The existence of latent permits is not necessarily a concern, he opined, as it leaves options open. Many fishermen hold permits for different fisheries, and it would be important to maintain this flexibility in the industry.

MR. FROEHLICH agreed, and said that the points made are important. A fairly high percentage of the latent permits may become available for purchase or otherwise be dispersed, he suggested.

[10:35:47 AM](#)

REPRESENTATIVE MILLETT asked him to comment on the cod fishery, and the possibility that it may become a limited fishery.

MR. FROEHLICH stated that the commission is poised to deal with the fishery, and is monitoring the actions of the North Pacific Fisheries Management Council (NPFMC). He said there is a valid concern for fishermen who may be pushed into the three mile zone, should the NPFMC decide to take action. Unfortunately the board must take a reactionary stance to whatever the federal government decides.

[10:37:29 AM](#)

CHAIR EDGMON queried if there is a trend analysis for crew members that parallels the permit holder trends, previously reported.

MR. FROEHLICH replied, no, there is not adequate data on crew members. The crew member licenses are sold by various vendors and it is not possible to receive information with a consistent level of confidence; however, an effort is being made to gain this data.

10:39:14 AM

REPRESENTATIVE SEATON referred to the modification of the crew license in recent years, with the introduction of Dude licenses. When these licenses appeared, there was concern that there could be misuse, and he asked if there is information available on how the system is working.

MR. FROEHLICH pointed out that crew licenses come under the purview of ADF&G.

10:41:14 AM

REPRESENTATIVE MUNOZ moved to forward Judge Peter Froehlich's nomination to the Commercial Fisheries Entry Commission to the full body for confirmation. There being no objection, the confirmation of Judge Peter Froehlich was advanced from the House Special Committee on Fisheries.

10:41:33 AM

HB 43-GEODUCK AQUATIC FARMING/SEED TRANSFER

10:42:06 AM

CHAIR EDGMON announced that the next order of business would be HOUSE BILL NO. 43, "An Act relating to aquatic farm permitting involving geoducks and to geoduck seed transfers between certified hatcheries and aquatic farms."

10:42:42 AM

REPRESENTATIVE PAUL SEATON, Alaska State Legislature, provided an introduction to HB 43, describing the physical nature and biology of the geoduck as being a bi-valve, harvestable product of approximately seven inches/two pounds, non-predatory filter feeder, sedentary/non-transient species, which inhabits tidal mud flats to depths of 350 feet. The geoduck achieves maturity in five to seven years, but its life span is 140-163 years. Further, he explained that the species is basically disease free, with the ability to migrate any invasive microbes to the exterior of its shell. The geoduck range includes the Pacific Northwest coasts of Washington, British Columbia, and southeast Alaska. The bill specifies that ADF&G cannot use the absence of wild geoduck populations in an area, to deny a [mariculture] permit. This species does exist in Alaska, and outside stock is not permitted for import, unlike oysters. He explained that the

animal begins life as a larvae, settles to become spat, and develops into the marketable seed.

[10:46:14 AM](#)

REPRESENTATIVE SEATON continued his presentation of HB 43, paraphrasing from the sponsor statement, which read as follows [original punctuation provided]:

Mariculture has the potential to diversify the economic base of coastal communities impacted by the changing dynamics of the fishing industry. HB 43 allows this expansion of this clean water industry by permitting geoducks to be farmed sub tidally in the Gulf of Alaska even if wild geoducks are not present. The bill does not exempt farmers from any health, safety, or other transfer provisions relating to hatchery seed.

The Alutiiq Pride Shellfish Hatchery is the only hatchery that supplies mariculture spat and seed in the State. It was initiated by the State to be a self-sustaining operation in association with the private mariculture farms permitted by the State. Their business plan relies on the sale of geoduck seed. However, the informal policy of the Department of Fish and Game prevents geoduck seed from being utilized by farms anywhere outside of southeast Alaska. These restrictions on the sale of geoduck seed cause the sole hatchery for the mariculture industry in Alaska to require continual subsidy by the State. HB 43 will allow the mariculture industry to develop around the Gulf of Alaska, providing a potentially strong market for seed and private sector financing for the operation of the hatchery.

As non-mobile filter feeders, farmed geoducks will not prey on any local commercial, sport or personal use fish. There have been no reports of species displacement in sedimentary habitat by geoduck clams. Farmed geoducks will not interfere with personal recreational boaters as they are cultivated in the sediment below low tide and without the numerous buoys and floating cages used in oyster farms. No infectious disease has been identified in any wild geoduck population or the geoduck farming industries of Washington, British Columbia, or Alaska.

The conflict surrounding geoducks in southeast Alaska is between the dive fishermen who harvest wild stock and farmers who wish to farm in areas with existing wild stock. HB 43 would evade this conflict because there is no wild stock in the proposed area. This bill will not override any Department of Natural Resources farm site leasing or Department of Fish & Game permit regulation.

HB 43 eliminates unnecessary hindrances to the growth of the mariculture industry in Alaska providing a potential alternative economic base for coastal communities while adequately considering the health of our marine ecosystem.

[10:52:08 AM](#)

REPRESENTATIVE SEATON, referring to an often asked question of whether the geoduck will supplant animals, such as polycyte worms and other benthos activity, said that it appears there is no displacement, and that the eco diversity is increased by the geoducks presence. Farming this species may provide year-round ocean farming jobs, he opined.

[10:53:32 AM](#)

REPRESENTATIVE MUNOZ asked what is the size of a typical farm.

REPRESENTATIVE SEATON replied that a farm is limited to five acres, the same limitation that DNR allows for other farm permits. This does not change any basic regulations required by DNR or ADF&G. He pointed out the letters of support from the Alutiiq Pride Shellfish Hatchery and Alaskan Shellfish Growers Association, in the committee packet, and touted that there is no competition occurring between companies, just a desire to see this budding industry unfold. However, these are the most valuable clams on the market today, commanding prices that far exceed other shellfish: \$30.00 to \$125.00 each in the retail Asian market.

[10:55:03 AM](#)

REPRESENTATIVE BUCH asked for a description of the geoduck farm harvesting process.

REPRESENTATIVE SEATON pointed out that this bill calls for subtidal farms, which are harvested by shallow water divers, at a depth under 35 feet. Referring to the handout, he paraphrased from the description to say that the "hookah" divers utilize a high pressure pump [streaming 50 gallons per minute to liquefy the sediment around the geoduck,] which is then extracted by hand. In planting the seed, a plastic tube is embedded upright in the sand, the seed is dropped down, and a net is rubber banded over the end of the tube to guard against debris. After a year the tubes are pulled, and the bay appears undisturbed.

[10:57:45 AM](#)

REPRESENTATIVE BUCH asked for a definition of subtidal, and how it is determined from intertidal.

REPRESENTATIVE SEATON responded, "Mean low, or low water, is the generally accepted; out of the intertidal range. So that which would not be exposed on any of the normal low tides." The purpose of the bill is to eliminate the concern for interaction between subsistence or sport harvest activities of clams. The geoduck will only be grown in water depths where hookah gear will be used for harvest.

[10:59:06 AM](#)

REPRESENTATIVE BUCH cited the coldness of the Alaskan water.

REPRESENTATIVE SEATON offered that using a dry suit makes cold water diving plausible.

[10:59:50 AM](#)

REPRESENTATIVE MUNOZ clarified that the activity of growing and harvesting these clams occurs below the surface, and does not disturb or impose barriers on the surface.

REPRESENTATIVE SEATON affirmed that all activity is accomplished in the substrate. In an oyster farm, the nets are suspended and the surface area is occupied, causing conflict with other activities. He noted that Kachemak Bay is a critical habitat area, which does not allow bottom farming, and would be exempt from the benefit of passing HB 43. The villages on the outer coast, however, could benefit from the possibility of this as a valuable economic base.

REPRESENTATIVE MUNOZ reported that the high school in Metlakatla teaches diving specifically because of the geoduck farming industry and opportunities in that area.

[11:02:46 AM](#)

RON JOSEPHSON, Section Chief, Statewide Hatchery and Mariculture Program, Division of Commercial Fisheries, Alaska Department of Fish and Game (ADF&G), said that the department is supportive of continued mariculture growth and the economic development of the industry. The development must be balanced with the need to facilitate programs that offer protection to the natural resources. The department is officially neutral on HB 43, with specific concerns regarding the bills intent including: allowing unconstrained transfer and culturing of geoduck into Southcentral Alaska subtidal areas. This would be analogous to an invasive species transfer, he opined, and given the lack of information the possible impacts cannot be foreseen. Despite predictions, the stock may become productive, and the natural food web could be at risk. He cited how zebra mussel and green crab species have triggered an alert, due to their progression north. He provided the committee copies of a larval drift zone map, and said that the department's current policy allows mariculture seed source to be obtained only from animals that occur within their identified zone. Thus, transporting geoduck seed from the Southeast Zone 1, to Southcentral Zone 2 would be considered an introduction of species and contrary to departmental policy.

[11:06:59 AM](#)

REPRESENTATIVE KAWASAKI referred to the sponsor statement, and read, "However, the informal policy of the Department of Fish and game prevents geoduck seed from being utilized by farms anywhere outside of southeast Alaska." He asked the sponsor to state the informal policy.

MR. JOSEPHSON declined to offer a determination on what constitutes a formal or informal policy in this regard.

REPRESENTATIVE SEATON responded that the larval drift zone prohibition is not in regulation, but held as a policy. These zones are used to minimize genetic interference, however, in this case, there is no competing genetic stock, which presents a different scenario.

[11:08:59 AM](#)

REPRESENTATIVE KAWASAKI determined that the study has not been completed on what type of competition this species might impose. Referring to a 1,000 page report, he said only a small note has been included on the species invasive possibilities.

[11:10:13 AM](#)

MR. JOSEPHSON recognized that the British Columbia drift zones were established for the same reasons mentioned. He stressed the need for caution when dealing with the complex ocean environment. Many species are difficult to observe and study in an ocean setting.

[11:11:27 AM](#)

REPRESENTATIVE MUNOZ queried if examples exist in BC, or Washington State, of the wild stock moving outside of their natural waters.

MR. JOSEPHSON replied, "Not to my knowledge."

REPRESENTATIVE MUNOZ surmised that the stock generally remains in its natural area.

MR. JOSEPHSON stressed that the answer to that question is unknown. In areas where the animal already exists, there is no means to determine its origin, or ascertain if the individual clam was farm reared or naturally occurring.

[11:12:38 AM](#)

REPRESENTATIVE BUCH referred to the drift zone map, and asked how verification is established for the existence of the species in a given area. Additionally, what is the confidence level of the information gathered.

MR. JOSEPHSON reported that the department surveys each area, and unusual or unique species are documented.

[11:14:01 AM](#)

REPRESENTATIVE KELLER asked if aquaculture of this species occurs in other areas of the world.

MR. JOSEPHSON stated that the geoducks are unique to the Pacific Northwest.

REPRESENTATIVE SEATON clarified that Alaska does have a mariculture farm rearing geoduck, and they are the stocks that would be utilized for populating a permitted farm. He asked whether the department has given permits for clam population enhancement in coastal areas.

[11:15:54 AM](#)

MR. JOSEPHSON stipulated that hard shell permits are allowed in the specified zones, utilizing the local stocks [as the genetic source.] The department considers those as non introduced species. The department does not have the same comfort level for allowing the transport of geoduck stocks and is taking a precautionary approach; considering the lack of knowledge available. He suggested that the Southeast geoduck farms be studied to allow the department a means for gaining a degree of confidence. Further, he clarified that the larval drift zones do exist in regulation.

[11:17:23 AM](#)

REPRESENTATIVE JOHNSON inquired whether the regulations allow research to be conducted, should this legislation pass. Wouldn't a permitted, five acre test bed be beneficial in solving some of the "I don't know," that surround this species, he asked.

MR. JOSEPHSON emphasized that this clam would difficult to study, outside of a contained area. The hatchery would be a helpful setting, however, to study this in a non controlled open ocean setting would be nearly impossible, he opined.

[11:19:20 AM](#)

REPRESENTATIVE JOHNSON theorized a situation of this clam being farmed, studied, and at some point identified as an invasive species. What is the trigger mechanism to indicate "we've gone too far," he asked.

MR. JOSEPHSON suggested that the research could be conducted in the Southeast drift zones where these animals exist naturally. The farms in Southeast are young, and it is indeterminate how they will perform, and what level of success they will attain. The department would like to study these endeavors prior to introducing the species into another area.

11:22:19 AM

REPRESENTATIVE JOHNSON asked why would a pure scientific test could not be conducted, if a farm were established in an area known to be void of the species.

MR. JOSEPHSON clarified that the department is not undertaking these tests, the industry is by being permitted. The farm will establish its own level of success whenever the farmer experiences a return/income on the investment.

REPRESENTATIVE JOHNSON exclaimed, "Is that how we manage all our fisheries - if they just make a profit then they're OK?"

11:24:00 AM

CYNTHIA PRING-HAM, Mariculture Coordinator, Alaska Department of Fish & Game (ADF&G), explained that specific regulations in both DNR and ADF&G, require production to be increased over time, and also meet a commercial use requirement after five years. It is based on acreage: \$3,000 per acre, or a maximum of \$15,000 if they have more than five acres. For most mariculture endeavors, that would not be a difficult achievement, however, geoducks require several years to reach maturity or attain a harvestable size. The farming efforts in Southeast have not produced a marketable geoduck, to date. She pointed out that the growth of this species is slower in Alaska, than in warmer waters.

11:25:25 AM

REPRESENTATIVE JOHNSON asked how a farm raised animal is identified, if it is within a zone where wild stock spat could also be present.

MS. PRING-HAM disclosed that the exact identification cannot be ascertained unless dye is introduced; which is a possibility.

REPRESENTATIVE JOHNSON stated confusion as to why ADF&G would be reluctant to allow private industry to initiate a project that the department could monitor, at minimal cost to the state, and tax payers. It appears to be a viable means to explore an economic opportunity.

11:28:43 AM

REPRESENTATIVE SEATON noted that the department has not indicated that a successful farm in Southeast would clear the

way for geoduck farms elsewhere. Also, a major roadblock for getting geoduck farms in Southeast has been contention/competition with the harvest of wild stock and commercial divers. He pointed out that the department has not delineated how studies of Southeast farms will provide the required comfort zone, and alleviate concerns for further development. He requested a statement from the department to answer the question:

How would a successful [geoduck] farm in Southeastern answer your questions about larval drift zones and give you more comfort about having [geoduck] farms ... outside of ... larval drift zone [number] one?

MR. JOSEPHSON agreed to provide further information to the committee.

[11:30:50 AM](#)

REPRESENTATIVE BUCH acknowledged the need for caution, and asked for any similar examples [of species introduction] where unintended consequences have occurred. He asked if such caution is based on previous experience.

MR. JOSEPHSON described what occurred in Flathead Lake [Montana]. The intent was enhancement of the existing kokanee fishery by providing an abundant food source, and mysis were introduced. However, the mysis larvae compete for the same plankton food source as the emergent kokanee. The unintended consequence has been a lake full of the small shrimp like mysis, and the loss of the kokanee fishery. Additionally, given the size of the lake, there does not appear to be a means to reverse the situation.

[11:34:01 AM](#)

JEFF HETRICK, Director, Alutiiq Pride Shellfish Hatchery, Alaska Shellfish Institute, argued that the geoduck would not be reproductive in South Central Alaska, similar to the oyster that is farmed in Southcentral. Geoduck culture is currently being practiced in Mexico, and China is beginning to enter the market. He has also been contacted by British Columbia, which has one hatchery in the southern area. He indicated that the industry supports maintaining the genetic zones.

[11:36:51 AM](#)

REPRESENTATIVE SEATON asked Mr. Hetrick to address the economic viability of Alutiig, as the only state certified hatchery, and the effects of geoduck farming being restricted to Southeast.

MR. HETRICK provided that each year the hatchery requests operational funding from the legislature. He predicted that if geoduck seed sales were allowed, outside of southeast Alaska, the hatchery could become self sufficient. The hatchery operating plan uses geoduck seed sales for a major base of income.

[11:39:09 AM](#)

REPRESENTATIVE KELLER stated that the food web has been a concern, and asked what might be interrupted by geoduck farming.

MR. HETRICK responded that the species which could be directly effected might be the horseshoe crab. He agreed with the departmental statement that the food web is a complicated concern.

[11:40:30 AM](#)

RODGER PAINTER, President, Alaska Shellfish Growers Association, explained that farm size is not regulated by the department. Five acres is the average size for a geoduck farm, but a farm could be any size. He pointed out that ADF&G has stocked species, of various types, in areas where they would not otherwise exist, in locales throughout the state. The caution for farming geoduck has not proven to be founded. He pointed out that the ocean is a dynamic force, which changes through natural occurrences and ranges. He cited various species appearance/disappearance that reflect these changes. In terms of viability of a geoduck farm in SE, he said, the permits were only issued in the last seven years. The product has not yet been harvestable.

MR. PAINTER, in response to Representative Munoz, explained that the crops are planted annually, allowing for continued harvest following the initial crop, which is not anticipated to be abundant.

[11:45:57 AM](#)

CHAIR EDGMON closed public testimony and announced that the bill would be held.

[11:46:25 AM](#)

ADJOURNMENT

There being no further business before the committee, the House Special Committee on Fisheries meeting was adjourned at 11:46 a.m.