BSFRF Draft Meeting Minutes July 16, 2020

Phone: McManus, Herzog, Lowenberg, Poulsen, Painter, Loncon, Robinson, Kelty, Kvinge;

Stauffer; Guest: Goen, Lescher (ABSC)

NRC: Wells; Goodman

Wells calls the meeting to order at 9:39 am.

MOTION: Kelty moves to adopt the minutes from the June 23, 2020 BOD meeting, Painter seconds. No opposition and the motion passes.

Goen introduced Cory Lescher, ABSC's new Fishery Policy Analysis, who is finishing up his Master's program at Alaska Pacific University on catch accounting for the bycatch of red king crab in the Bering Sea bottom trawl fishery.

Matherly's financial report was not sent out by Goodman to the Board until this morning so Wells and Loncon recommend that they financials be tabled until next meeting. No one objects.

Goodman notes that the biennial audit is about done, and everything appears to be in order. The Auditors are following a new standard that may require them to make a few changes from previous years. Goodman though noted that they have agreed to not implement the new standards this year but will be follow them in the future. Their report should be available for review by the Board members in 7-10 days. Once we approve of the report, the auditors will finalize it.

Kelty tells Goodman to remind Matherly to send an invoice to City of Unalaska after July 1<sup>st</sup> for their \$10K contribution to the attention of the Clerk's Department. Wells thanks Kelty for the City's generous support.

Goodman reports on the tagging cruise just completed aboard the crabber F/V Provider. The Heller-Shipley team arrived home last night around mid-night. She reports the cruise was very successful with positive results. Goodman included a few photos of the on-deck operations in the packet starting on page 12. Zacher from the NMFS Kodiak who served as the NOAA scientist leader aboard the Provider is expected to call into our August Board meeting. Goodman will also invite Daly from ADFG to call in or one of the two ADFG biologists who were aboard to carry out their ADFG tagging study. This would give them the opportunity to report directly to the Board and to thank you for this work. Collectively our two cooperative partner agencies have been very positive and encouraged that they accomplished this research given the all the circumstances this summer. We need to send a strong thank you to the owners, captain and crew of the Provider for being flexible to make sure that this cruise was successful in this challenging year. Our heaviest lift was preparing our safety plan prior to the cruise which required extensive communication among all parties to meet all the guidelines and requirements of Covid-19 mandates. We were successful in keeping everyone safe and healthy including vessel crew, scientific personnel and the Kodiak community. The Provider and crew

functioned very well and the weather was nearly perfect. Over 2,000 crab were caught and tagged in 9 days accomplishing the goals for all three tagging projects, including 305 acoustic Vemco tags (this includes 5 Vemco tags worth about \$2,200 recovered by processors and returned to Zacher from the 2019 releases), ADFG's 78 satellite pop-up tags and 1,624 Floy spaghetti tags. Even though we did not have the 2020 NMFS summer trawl survey to locate hot spot areas for male crab in advance of our cruise, the Provider caught more than enough crab at the pre-determined locations fished by the Provider that Zacher identified from past NMFS surveys. The crabber F/V Lady Alaska skippered by Scott Campbell Jr. also assisted by deploying about 10 of the Provider's crab pots 10 days in advance of the Provider to determine if our first site contained sufficient number of large male crab. Unfortunately, none of these crab were tagged because they had been held in pots for as long as 10 days which could likely have had an impact on their movement behavior. Goodman was often in contact with Heller-Shipley. She noted that everything went well on the cruise, the only challenge that she mentioned to Goodman was they needed to worked number of 16<sup>th</sup> hour days to complete the research in the 9-day window

Goodman states that we need to publicize that we have about 2,000 tagged red king crab in the Bristol Bay area including instructions for each type of tag so that fisherman who finds a tagged crab knows what to do. We need to notify the crab fleet and as well as the other fishing sectors to be on the lookout for tagged crab in their catch. We can include pictures of each tag type so everyone knows what to look for. Goen is happy to coordinate with us and offers to include the information in the ABSC newsletter. She also points out that it is critical to the word get out to the pot cod fishery before they start their season in September. Goodman notes that we also need to hand out hats to those who report the tag information to the agencies. McManus reminded Goodman to also connect with the NMFS and ADFG observer programs so they are on the lookout for tagged crab, know the reporting requirements, and know to return the crabs to the sea if they are alive. Goen also mentions that we need to get the word out to processors also.

Goen asks Goodman about the status of the October Saildrone survey. Goodman replied that we were notified earlier that Saildrone would not be able to conduct the October survey as planned given the constraints resulting from the continued spread of the Covid-19. Goodman will start communication soon with Saildrone to update our contract with them to conduct our planned spring survey in 2021. We will also be looking for another drone provider because Saildrone has not come through with this survey as the result of the damage to the two saildrones during their Alaska shipment and followed by their lack of available technicians during the Covid-19 pandemic to ready operative saildrones for this fall. Wells is interested in finding out whether it is feasible to locate tagged crab from commercial fishing vessels outfitted with Vemco transceivers to detect tagged crab while fishing or during a survey charter. Goodman will connect with Zacher on feasibility of this idea and will report back to the Board. If feasible then we need to start connecting with the fishing fleets to identify any vessels interested in installing transceivers during their next drydocking.

Goodman moves on to plans and directions for opilio research. He refers the Board to the draft document dated 7/16/20 on page 18 of the packet entitled "BSFRF Draft Working Statement for Opilio Research." This document resulted from a planning meeting within the past week that included Wells, Paint, Poulsen, Stauffer and Goodman. This document is meant to be a starting point to inform the crab fishery participants on the scientific nature of our future research on size, growth, and maturity of opilio crab. With Board approval, our goal is to share and distribute this with our crab harvester and processor supporters so everyone is aware that our opilio research program is focused on the biological issues related to size of maturity and will not involve studies on the associated opilio economic and management issues. To initiate the review, Goodman reads the first paragraph of the document to the Board. The first paragraph emphasizes the Boards earlier decision to focus on the biology of opilio crab related to the apparent changes in the current declining trend in the male size of maturity which is significantly impacting the rate of discards of undersized but mature male opilio associated with the apparent high abundance of small crab. Six hypotheses are identified that could be potential biological explanations for this current trend in size at maturity. The first hypothesizes that the warming trend and declining cold pool in the Bering Sea has resulted in male opilio maturing at a smaller size. The second hypothesizes that the fishery which targets fishing on large male crab has reduced their contribution to the DNA of the stock. The third hypothesizes that the fishery has reduced cannibalism by large crab on the smaller crab so a higher proportion of small crab are surviving. The fourth hypothesizes that the fishery focus on large crab has increased the competitive mating advantage of small mature crab. The fifth hypothesizes that the warming trend has resulted in the larger male crab are moving further north beyond the spatial distribution observed prior to the warming trend and away from the normal fishing and breeding grounds. The sixth hypothesizes that during a period of high recruitment, there are just more small crab with no change in size of maturity, there are just more small crab of all sizes, immature and mature. Goodman reminds the Board that this document is for Board review and comment and has not been distributed any further than the addressees of the monthly Board meeting packet, which includes Jamie Goan of ABSC and Nicole Kimball of PSPA. Once the document has Board approval we will distribute it to our supporters unless the Board wants to keep a close hold on it until later. Wells considers this document to be a "problem statement" that directs our opilio research we need to conduct. The first project is to setup a workshop to scope out a research program on the science questions to be addressed. We would invite crab scientists from eastern Canada and other north Altantic nations with expertise in opilio crab biology, NMFS, and ADFG. We want the Board to provide review including questions, edits or conditions. I hope to have this in a form to share by next board meeting.

Lowenberg asks whether we will consult and collaborate with ADFG staff before we proceed. Goodman says "yes" we definitely will work with the 3 Westward lead staff to get their input on what they see and what they agree with and what they would like to change. Herzog would like to see some modelling research to size up what the impact of a change in the size of maturity

along with a change in retention size would have on the productivity of the opilio population. Painter says that BSFRF must stick to the science and biology of the stock. This is particularly important given the sensitivity of this issue. Lowenberg agrees with Painter but notes that ADFG will consider things other than biology if they do a re-evaluation of the harvest strategy. Wells says that Lenny's question is a legitimate question and he understands the sensitivity. Goodman agrees that Lenny's concern should be added here to our list and should be addressed using an assessment model to evaluate the impact on future stock dynamics and stock productivity resulting from the declining trend in size of male maturity along with alternative changes in harvest retention size. This could be one of the projects recommend by the workshop. Goodman concludes from the discussion that nobody is saying anything that is disagreeable. The comments highlight that it is very important for us as a group to be clear in what we want to help with and hope to accomplish. Poulsen thinks that it is important for this group to just focus on the science. We need to figure out what is going on with the biology of the stock and will it continue. How important are these issues. How do we push to get the research done? We need to stay clear of the policy concerns. We need other entities to be concerned about those. We absolutely need to coordinate with ADFG. They have other concerns that they will deal with. It is important that BSFRF prepare a statement on what the issues are for opilio crab that describes the issue, scales the size of the problem, and states why BSFRF is prioritizing it. He thinks our document is a good template but he would like to see some wording that addresses the scale of the problem. He would really like to focus beyond the workshop and identify some specific research projects to begin to understand what's happening, e.g. undertake a detail analysis of the historic chela height data. Stauffer comments that our collaborators in NMFS and ADFG have important roles in this research. NMFS assessment scientist would be responsible for evaluating changing trend in size at maturity using his assessment models to forecast future population trends and stock productivity based on the results of our biological research. ADFG would have the responsibility for evaluating alternative harvest strategies taking into account economic and marketing factors in addition to the biological factors. Painter and Wells agrees.

Before our next meeting, please let Goodman know if you have any comments or feedback on this document. Within the next couple of weeks, it will be important for us to identifying additional steps that need to be taken, put together a list of research ideas, and approve a revised single page problem statement on the whats and whys of our research focus. We can then share with our supporters and agency partners for their feedback, comments, and ideas. These would be informative for the Subcommittee so we are better to proceed with of our planning. We need to meet with our agency partners to discuss our plan and get their input., It is important that we take a couple of concrete steps before our August meeting. Goodman will also include Lenny's comment by adding a 7<sup>th</sup> hypothesis that would be something like "Stock productivity is impacted by changes in the biology, changes in the environment, and management measures; [which could all be evaluated by stock assessment sensitivity analyses]" Stauffer commented that we should focus on how changes impact stock productivity

rather than stock abundance. Wells says our statement is not meant to be final yet; it is a work-in-progress. We are just trying to put some definition on what the problem is, what the questions are, and how best to address the problem. We need to meet with the agency staff to get their input before our August meeting. No board members expressed a lack of support to move forward as suggested by Goodman and Wells. Goodman will update the statement based on today's comments, share the revised statement with the agencies, and schedule a meeting of the Subcommittee members with the agencies' staffs to get their input.

Goodman moves on to discuss Heller-Shipley's progress on her Master's thesis. Her graduate education has advanced her modeling and mathematical skill level to the point where she has the capacity to assist with stock assessment modeling. She is capable of undertaking analyses of extensive data sets that may fit with some of our research projects going forward. In a few weeks she will defend her thesis on the Tanner crab MSE research. Her oral defense seminar will be a virtual internet meeting that Board members will be invited to attend. Goodman will forward her seminar call-in information as soon as it is available.

Her graduate research and experience is one of BSFRF success stories. Her program was sponsored by the crab industry through financial support provided by BSFRF. Her research was fundamental to the successful, collaborative and cooperative research project that lead to the re-evaluation of the Tanner Crab harvest strategy. This project actively involved the crab industry, BSFRF, UW School of Aquatic and Fishery Science, NMFS, ADFG and the Alaska Board of Fisheries. Prof. Punt has invited her to enroll in a Ph D program in his lab starting in a year from now. Her research topic would continue to focus on crab population issues and could contribute to our new emphasis on Bering Sea opilio stock. Goodman will arrange a meeting with her, Punt and Stauffer to discuss possible topics and support. Goodman will bring the results of this meeting to the next meeting.

Goodman moves on to the letter addressed to Goodman and Goen from Jeff Regnart (on page 19 of the packet) to address his request for a new RFM Memo of Understanding for the five major stocks of Alaska crab between the Bering Sea Crab Client Group (fully owned by BSFRF) and the Certified Seafood Collaborative Foundation. CSC is the new owner of the RFM certification program established by the Alaska Seafood Marketing Institute. Regnart's correspondence includes copies of the prior crab MOU (page 25) with BSCCG signed by Gary Painter and ASMI and a draft of an MOU (page 22) with CSC and BSCCG. The new MOU would be signed by Doug Wells as President of BSFRF which holds authority over BSCCG. **Given that the Board is supportive of continuing to be the crab client group, Goodman will make a copy of the MOU for Wells to sign and send the original to Regnart.** Regnart also asked for a list of the companies that make up the BSCCG that CSC could post. Goodman would prepare a list of processing companies that contribute to BSFRF. Wells comments that this list identifies those companies that have the right to use the CSC RFM Certificate and Logo on their crab products certified by the CSC RFM. Stauffer asked if there are any processor companies that do not contribute to BSFRF including Aleutian golden king crab, that benefit from the CSC RFM

certificate – some discussion. The question needs to be asked of Regnart or others to verify. At the moment, Regnart's letter on page 19 states that the CSC will reimburse BSFRF for cost of RFM certification cost through June 2021 and according to Wells all processors contribute to ASMI so all processors should be covered until then and the Client Groups are responsible for the cost. We should have some time before this transition to come up with a list of companies. Goodman also comments that processors must be awarded the Chain of Custody certificate before they can use the new CSC RFM logo.

With regard to our schedule of activities, Goodman notes that we have not yet heard whether our two proposals to NOAA/BREP whether any have been selected for funding but he expects to hear soon. Our next scheduled Board meeting is on the 3<sup>rd</sup> Wednesday of August which is August 20. We have a few of things we need to keep moving forward on. These include the opilio planning effort is very important, identifying optional work assignments for Heller-Shipley after she finishes her thesis and determine what's next are important, our plans for our September crab science symposium during CPT week is also important. We need to start planning and make progress on these three action items. Will these activities be virtual or can we meet in person and where will they take place? Goodman wants to bring these to our attention so we can be thinking about how best proceed. Wells askes when will ADFG notify the industry on whether there will be a red king crab fishery? Goodman expects that we will hear from ADFG on this by mid-August if not earlier.

The last item of business is to decide whether the Board wants to supply a letter of support for two new research proposals being submitted for funding. The first request is from ADFG on opilio black eye syndrome to NPRB, Wells replied to the authors that BSFRF will send them a letter of support given that they can provide more details on their proposed research. Loncon recommended that Goodman ask the authors to change the name of the proposal and strike "Black Eye" from the title. The second one is for a support letter from Darren Pilcher for his Bering Sea ocean acidification model forecast for a second round of funding from NOAA's Ocean Acidification Program. We provided a letter of support for their first proposal which was funded. Goodman will be on a call in a week to learn more about this proposal.

Wells adjourn the meeting at 11:15 am.