Shrimp Advisory Panel Summary

Webinar Meeting November 16, 2020 10:30am – 5:00pm

Members Present:

Corky Perret, Chair Steve Bosarge, Vice-Chair Thu Bui Kim Chauvin Glenn Delaney Gary Graham Andrea Hance Harris Lasseigne Lance Nacio Franklin Parker John Williams

Council Staff:

Matt Freeman John Froeschke Karen Hoak Lisa Hollensead Jessica Matos Bernadine Roy Charlotte Schiaffo Camilla Shireman Carrie Simmons

NMFS Staff: Michael Barnette Jade Chau **Roy Crabtree** Christina Fellas Dan Foster Jeff Gearhart David Gloeckner Rebeccah Hazelkorn Frank Helies Peter Hood Michael Jepson Mara Levy Alan Lowther **Richard Malinowski** Michelle Masi Amy Piko Jeff Pulver James Reinhardt Cody Rewis Mike Travis Jo Williams

Council Members:

Leann Bosarge

The Shrimp Advisory Panel met on November 16, 2020 via webinar. The agenda was adopted, as modified with the addition of two Other Business items: NOAA Aquaculture Opportunities and public comment. The minutes from the March 24, 2020, meeting were approved.

Update on NMFS Shrimp Working Groups

Dr. Michelle Masi presented an update on the five National Marine Fisheries Service (NMFS) Shrimp Working Groups, which are tasked with evaluating various shrimp data processing and estimation methods. The Southeast Area Monitoring and Assessment Program (SEAMAP) Shrimp Indices Working Group is reviewing current methods for deriving indices of abundance from SEAMAP trawl data and will also be exploring alternative methods for deriving those indices. The Shrimp Fishery Effort Estimation Working Group is currently on hold, while waiting on a new shrimp effort data collection method. The Shrimp Life History and Environmental Data Working Group is working to update life history parameter estimates and collating environmental data from literature for future stock assessment improvements. The Shrimp Catch Technical Working Group has requested the Gulf States Marine Fisheries Commission (GSMFC) deliver the previous year's catch (through August) by November, in order to present assessments by spring. This Working Group is also developing a work plan with states to meet shrimp monthly reporting needs. The Shrimp Bycatch Estimation Working Group is developing best-practice guidance, as well as documenting and justifying any revisions to the previous Working Group's recommendations, as needed.

An AP member inquired about the forecasting method (non-linear dynamic) estimation being used with SEAMAP; Dr. Masi explained that it best fits the data points in order to predict the next year's abundance. The AP member also asked if most of the samples with SEAMAP are done offshore. Dr. Masi referred to two maps in her presentation which identifies SEAMAP tows in summer and in fall, which displays most samples occurring offshore. Another AP member then asked why there is a two-month lag time on shrimp landings data. Dr. Gloeckner explained that trip tickets are not due until two weeks after the end of each month, and then there is a quality control check of data. An AP member inquired what happens to an individual shrimper as well as to an individual state that does not meet the reporting deadlines. Dr. Gloeckner stated that, since there is no federal dealer permit, any repercussions to an individual shrimper would come from an individual state; Dr. Gloeckner stated that the GSMFC handles missed reporting deadlines for an individual state.

Ms. Bosarge asked for additional explanation on annual catch limit tracking estimation procedures for estimating missing trip ticket reports. Dr. Gloeckner stated that if a dealer does not report, then they have to generate an estimate for those missing reports, based on previous reports from that dealer.

An AP member asked for clarification on best-practice guidance by the Shrimp Bycatch Estimation Working Group, in terms of what the guidance is on. Dr. Masi explained that it is with regard to the methods for estimating shrimp bycatch.

Data Issues with Unmatched Trips

Dr. Dave Gloeckner presented background information on shrimp reporting systems. The "Gulf Shrimp System" was comprised of two types of collections – trip tickets and post trip effort interviews. Electronic Logbooks (ELB) became mandatory in 2006 for selected vessels, and then cellular Electronic Logbooks (cELB) became mandatory in 2014 for selected vessels. Current data collections needed for catch-per-unit-effort estimation include effort data (through cELB) and landings data (through dealer reported state trip tickets). Dr. Gloeckner noted that 3G will no longer be supported in 2021, which is what the current cELB program uses.

The LGL algorithm attempts to "match" a cELB trip to a dealer reported trip ticket using a 'trip' start and end date. Trip matching ranges from 50-80% across years. Dr. Gloeckner then

discussed various reasons why trips may not match and reviewed possible solutions to improve current matching. Ms. Bosarge asked if there was a possibility to improve the matching percentages by checking unmatched trips by hand. Dr. Gloeckner noted that that his budget does not support that effort as it would require an additional 1-2 staff members. An AP member stated that he had concerns with tracking where an offshore vessel had been fishing, given storms and other obstacles. Dr. Gloeckner acknowledged that some information is best collected at the vessel level and that reinforces the importance of matching cELB data with trip ticket data. Dr. Gloeckner also noted that unmatched trips can also be used for compliance purposes. An AP member asked about the current cELB program, as the 3G network will be phased out in 2021. Dr. Gloeckner stated that some of the same issues might occur with a new program.

Pilot Program to Evaluate Use of Vessel Navigation System to Measure Shrimping Effort

Dr. Benny Gallaway presented an overview of a two-phased pilot program that uses the P-Sea WindPlot navigation software to acquire and transmit shrimp fishing effort data. He noted that the data will be stored on "thumb-drives" along with the matched landings record, likely on paper, and that development of an electronic reporting system in the pilot study will begin soon, with an expected finalization during 2021. He noted that, as of August 17, 2020, there were 1,392 total federal shrimp permits, of which 1,283 were valid and another 109 were eligible to be renewed or transferred. He also noted that permitted vessels could either be actively fishing or simply holding a permit. He stated that modifications to P-Sea WindPlot would be ready for initial testing in mid-November of 2020 and that a random selection of shrimp boats would be made to measure effort for 2021. Dr. Gallaway also noted that the program could be run for another two years beyond the 2021 study, before passing it to NMFS in 2024. The estimated costs for the two years beyond the 2021 study would be approximately \$1 million each year.

An AP member confirmed with Dr. Gallaway that trip tickets would come from all five states for use with the pilot program. Dr. Simmons asked if it could be confirmed that 3G would be completely cutoff at the end of 2020, or if it would be phased out in 2021. Dr. Gallaway stated that he could not confirm either way. An AP member stated that the Verizon website says the service will end December 31, 2020. Dr. Simmons stated that she thinks AT&T would be continuing 3G coverage up to 2022 before ending. She also asked if the pilot program would be sampling a similar number to what is currently covered by the cELB program and if those estimates are reflected in the \$1 million. Dr. Gallaway stated that would be determined from the initial phase of the pilot program and in discussions with NMFS. Dr. Masi asked how the data would be transmitted electronically, instead of saved to "thumb-drives". Dr. Gallaway stated that would be a jointly solved problem with NMFS, but that transmission would occur after a trip had concluded. Ms. Bosarge added that the cELB collects data on location every 10 minutes, which translates to transit information, and thus it can be determined if a vessel is towing.

Dr. Travis asked where the landings data was coming from. Dr. Gallaway stated that it would come from the trip tickets right at the dock. Dr. Travis also asked where the funding would

come from for the anticipated program cost estimates. Dr. Gallaway stated that he was uncertain, and that NMFS would have to decide that.

Following Dr. Gallaway's presentation and the resulting AP discussion, an AP member made the following motion, with the rationale that the collection of shrimp fishing effort is essential to the prosecution and management of the Gulf shrimp fishery and also essential to enable fishery managers to evaluate marine spatial management measures:

Motion: The Shrimp AP requests the Council to request NMFS to fully implement and fund a new shrimp effort data collection system, otherwise known as electronic logbooks, in the Gulf of Mexico beginning in 2021 based on the methods and results of the Pilot Program using P-Sea WindPlot technology conducted by Dr. Gallaway.

- Such a system must collect and analyze effort data that is sufficient to evaluate compliance with the shrimp fishing effort cap for sea turtles, as well as compliance with the applicable shrimp fishing effort reduction threshold for addressing juvenile red snapper bycatch.

- Such effort data must also be sufficient to evaluate federal and state marine spatial management proposals in the Gulf in order to minimize their impacts on the shrimp fishery including, but not limited to coral protection areas, artificial reef sites, and NOAA Aquaculture Opportunity Areas and aquaculture facility sites.

- The collection and analysis of this effort data should be, where feasible, integrated with the agency's collection and analysis of shrimp catch data.

- Such a system should be limited to collecting effort data and not be expanded to require shrimp fishermen to submit landings data, economic data or gear information, as these data are already collected in a timely and efficient manner by means other than electronic logbooks, and so placing them into the new electronic logbook system for collecting shrimp effort data would place unnecessary burden on the fishermen.

Motion carried unanimously.

Following the motion, Dr. Gloeckner proposed potential options to continue vessel effort reporting as well as possible options for modifying the current reporting requirements following the end of the 3G network capabilities. Option 1 would no longer produce effort data through vessel reporting. Option 2 would retain the 'status quo' of vessel reporting with electronically transmitted time-stamped GPS data. Currently, cELB GPS data is transmitted electronically via 3G cellular signal, so another method for transmission would be needed. Option 2a would require a trip ticket link, which would improve the match efficiency. Option 2b would require census level coverage, and matching with trip tickets would no longer be necessary to estimate effort. Option 3 would build upon the requirements in Options 2a/2b in that vessels would electronically report landings in weight by shrimp species at a tow-by-tow level. Per the presentation, the Council would need to pursue an amendment if it decides to make changes to the expiring cELB effort data collection program,

require shrimp dealer permits, or require weekly electronic reporting to NMFS by all permitted shrimp dealers.

An AP member asked if Dr. Gloeckner could provide any cost estimates associated with the four options. Dr. Gloeckner stated that there would be equipment costs, transmission costs, and software costs; the costs would run in the range of \$500 for tablets and additional transmission costs. He noted that there may also be initial training costs. An AP member inquired if these proposed options would apply to every single Gulf vessel on the water. Dr. Gloeckner responded that while these proposed options would apply to federally permitted vessels, some of the proposed options would only apply to a sample of those vessels. However, these are only proposed options that the Gulf Council could choose to explore, and the Gulf Council could explore other options as well. An AP member commented that, while accurate data is needed, too much data can be requested, which creates a burden on shrimpers. Another AP member asked Dr. Gloeckner which of the presented options most closely represents the current cELB program; Dr. Gloeckner responded that Option 2a is closest, but also would require a Trip Ticket link. Dr. Gloeckner stated that the Trip Ticket link would either require a trip ticket number be transmitted with the GPS report or a trip identifier that could be included with the trip ticket. An AP member noted that in her area, there is an aging fleet that is not tech-savvy, and that weekly reporting could be a large burden. An AP member stated that, given the urgency and need to expedite a new reporting program, the closest option to the status quo should be pursued and that additional requirements could be explored at a later date. An AP member inquired if an amendment would be needed for any change to the current reporting program. Ms. Levy responded that it would depend on what changes would occur. Dr. Freeman stated that a conference call to discuss this would take place prior to the November Council meeting and Dr. Freeman will inform the AP about the outcome. Following the discussion, an AP member made the following motion:

Motion: To recommend that the Council select the option of status quo so as not to be burdensome for the industry where the reporting aligns with the current reporting requirements.

Motion carried unanimously.

Ms. Bosarge inquired how prevalent the P-Sea WindPlot software is among the Gulf shrimping industry. Two AP members commented that, to their knowledge, most vessels have the software. One AP member that works with the Vietnamese shrimpers in Louisiana commented that a fair percentage of them use older computer operating software, which may not be compatible.

Small Bar TEDs

Ms. Fellas and Mr. Gearhart presented on a funded project to reduce juvenile sea turtle bycatch through development of reduced bar spacing in turtle excluder devices (TEDs). The development of new TED prototypes that would allow small turtles (less than 4" body depths) to

escape would provide a restorative benefit. Regional industry engagement will occur in Years 1 and 4 of the project, along the Gulf coast.

An AP member inquired if Open Ocean monies would also be used to fund work conducted towards shrimp restoration. Ms. Fellas replied that she was unsure if other monies would go towards that or not, but she could get a response to that question later. Several AP members expressed concern that the results of this project could lead to a more stringent TED regulation.

Dr. Freeman reiterated that Ms. Fellas and Mr. Gearhart needed input on their list of suggested meeting locations; he also asked Ms. Fellas and Mr. Gearhart how meetings would be noticed. Ms. Fellas and Mr. Gearhart said they would work with shrimping associations and Sea Grant for noticing meetings, but they were open to input on how to best do that. An AP member commented that New Orleans would not be an ideal location; areas closer to the coast where vessels and fishermen are located would be better. Dr. Travis suggested looking at the federal permit locations from the SERO website, and he commented it would likely not be Corpus Christi or Pensacola. Another AP member commented that timing is also important – the offseason is best (i.e., January through April); she also commented that the fleet in Intracoastal City is primarily Vietnamese, which would require a translator. Ms. Fellas asked if a virtual meeting would work well. An AP member responded that an in-person meeting would be much more productive, but that COVID-19 had led to changes in the ability to hold in-person meetings. Dr. Gallaway asked if there was a restoration benefit by increasing the stock of Kemp's Ridley turtles in the Gulf and asked when the last stock assessment occurred. Ms. Fellas replied that she did not have that information readily available, but could access that later.

Better BRDs for the Gulf of Mexico Commercial Shrimp Trawl Fishery

Mr. Foster presented on a funded project with the goal to restore fish biomass through actions that are expected to reduce finfish bycatch in the commercial shrimp trawl fishery. A total of eight industry meetings were held in February 2018. New bycatch reduction devices (BRDs) would need to improve shrimp retention, be simple to use, be cost effective, and improve bycatch reduction. The project will involve an industry stakeholder working group – from the brown shrimp industry and from the white shrimp industry. Participation in testing of BRDs will be voluntary and have a target of 20% of the federally permitted vessels in the Gulf (~250 vessels). Dr. Freeman inquired if AP members could volunteer to participate in the industry stakeholder working group, and Mr. Foster welcomed AP members to do so. Dr. Freeman also inquired how project members would get volunteers for participating in testing new BRDs; Mr. Foster stated that Sea Grant would be the primary vehicle for recruitment.

Other Business

Mr. Delaney noted that NOAA Fisheries is seeking public input on the identification of areas within the Gulf of Mexico as Aquaculture Opportunity Areas (AOAs) and on what other areas in the nation NOAA should consider for future AOAs. He noted that the Gulf shrimp industry is a

major stakeholder in the NOAA AOA initiative and that offshore aquaculture siting decisions must be based on a thorough evaluation of the potential impacts on traditional shrimp fishing activities in the affected areas. As such, the consideration of shrimp fishing effort data must be a central component of such evaluations. Dr. Simmons commented the Council Coordination Committee drafted a letter to Dr. Oliver regarding the AOA initiative, and that letter would be circulated to the Shrimp AP for their information. Following the discussion, an AP member made the following motion:

Motion: The Shrimp AP requests the Council to -

- engage the Shrimp AP in the NOAA Aquaculture Opportunity Area initiative to the maximum extent practicable; and

- utilize all available shrimp fishing effort data, including all tow points, in its own evaluations of proposed Aquaculture Opportunity Areas for the purpose of minimizing any impacts on the shrimp fishery, and to provide such input to NOAA.

Motion carried unanimously.

The AP meeting adjourned at 4:40 pm eastern time.