

Scallop Plan Team Meeting

February 23-24, 2006

Hilton Hotel, Anchorage, AK

Plan Team members present:

Jeff Barnhart, Chair (ADF&G Kodiak), Gregg Rosenkranz (ADF&G Kodiak), Herman Savikko (ADF&G Juneau), Gretchen Harrington (NMFS), Scott Miller (NMFS), Jie Zheng (ADF&G Juneau), Diana Stram (NPFMC)

Public and agency personnel present: sign-in sheet for public, Mark Kandianis, Tom Minio, Max Hulse, Joe Chaszer (UAA OTC), John Lemar, Scott Hulse

On Teleconference line: John Doody, Jim Stone

The Scallop Plan Team meeting convened on February 23rd at the Hilton Hotel in Anchorage, Alaska.

The following agenda was approved with no changes:

Introduction and approval of agenda

Membership issues: welcome new member, election of chair

Scallop OTC training film presentation

Status of Statewide Scallop Stocks:

- **compile SAFE Report**
- **update to SPT on video techniques**

Status of Statewide Scallop Stocks: compile SAFE Report

Discussion of overfishing definition for Statewide scallop stocks in relation to pending revisions to National Standard 1 Guideline

Economic Discussion Paper

New business:

- **BOF proposals**

Membership issues: welcome new member, election of chair

Jeff Barnhart was re-elected unanimously as chair for two additional years.

Scallop OTC training film presentation

A draft training film put together by the Observer Training Center was shown. The video is intended to be completed for the next round of scallop observer training. Joe Chazner explained that the film's intent is to train scallop observers on scallop operations, sampling operations, and daily life aboard scallop vessels. Discussion was held with the fishermen present regarding the average trip length on scallop fishing trips. Most indicated that it ranges from a week to 10 days. Mark Kandianis noted that the average trip on the Provider is approximately 20 days, but can be for as long as one month. Team members questioned members of the public regarding specifics of scallop operations (crew size, shucking operations, freezing capacity). Members of the public noted that operations are similar but relative scale differs by vessel capacity. Almost all scallop C/Ps in Alaska wash, drain and freeze the shucked meats. No chemical additives are added to the

meats. On the east coast of the U.S., it has been common practice to soak the shucked scallop meats in tri-phosphate which enhances water uptake and retention thus adding weight to the product. Scallop meats that have been soaked in tri-phosphates must be identified as such.

Typically, larger-sized scallop meats command a premium price. The largest, best quality scallops in Alaska are found around Kodiak Island and the Bering Sea. The Yakutat scallop meats are smaller and of lower quality according to vessel owners and operators at the meeting.

Status of Statewide Scallop Stocks:

Gregg Rosenkrantz presented an overview of the scallop fishery, status of statewide scallop stocks and a new video survey methodology. One figure showed the location of tows from NMFS and ADF&G surveys detailing locations where scallops were found, as well as commercial fishing effort together with closed areas.

The team discussed the utility of depletion estimators and why they are not utilized in management. Gregg noted that the plots are useful to examine from the data but are not utilized very much in management as generally they tend to extrapolate outside of the data range. He noted that the data are highly variable, but can be smoothed by CPUE data by day rather than haul-by-haul.

Gregg presented an overview of the new video survey methodology, which had been presented to the SSC in December 2005. He discussed that survey results indicate that the Shelikof data shows a wide range of sizes and steady recruitment but harvest in comparison to the estimated biomass looks high. This could be due to a low biomass estimate. Team members questioned to what extent the estimate assumes an even distribution over the area. Gregg explained that it is a random measurement for tows, with average shell height obtained from the video, and a shell height/meat weight ratio applied. He noted that they are not able to stratify the area due to a lack of data.

Mark Kandianis commented on the differences noted in the Bering Sea where effort in the 1990s was higher, and the dredge efficiency probably missed many scallops. He said that the Shelikof area seems to be growing back faster but this is not similar to the observed thinning in the Bering Sea stock. Gregg noted that higher abundance leads to higher variability. The areas of high abundance tend to become fished down. Survey effort is concentrated in high tow areas to decrease variance.

Methodologically they are generally looking more at smaller spatial areas. Biomass estimates (from the video survey) are on a bed by bed basis. Gregg showed an example of the Yakutat bed biomass versus effort and the potential for overfishing on a bed by bed basis but noted that overall for the region the potential for overfishing is very low. This raises questions regarding what is the appropriate measure of overfishing?

Mark Kandianis noted that they see yield changes on a bed by bed basis from one year or season to the next, or at times even as rapidly as after storms. The team discussed the reasons for these observed productivity changes, relating to possible changes in freshwater input, plankton, and turbidity impacting scallops. Yakutat presents a particular challenge to ascertain why the scallops are in seemingly poor health.

Scallop movement was noted to be dependant on area. The Shelikof area scallops seem to move more where scallops in other regions are fairly sedentary after the scallops are older. The team discussed the potential for storm impact in the Yakutat area impacting scallop health, the tides, and other ideas from skippers regarding why scallop health is different in that region.

Jeff Barnhart commented that scallops in the Yakutat area grow much slower then scallops in the Kodiak area. Anecdotal reports also indicated that while shells can be the same size between areas, the actual meat in Yakutat very small. Team members noted that this may be due to possible environmental factors.

Gregg noted that, several years ago, onboard observers conducted meat-weight experiments; observers counted and weighed scallops from three bushels, then had the crew shuck those scallop meats into one container which was then weighed on the ship's digital scales. The experiment was conducted to look for a seasonal change in scallop meats (adductor muscles) particularly to observe if the adductor muscles gained weight after the spawning period. Results were inconclusive at that time. Gregg noted that on the east coast this type of relationship is visible in the data. More survey effort is also available on the east coast. This type of data could be useful if there were a proposed change to scallop seasons.

The team discussed the comparison between the dredge and video surveys. One notable issue is that in Alaska, where dredge surveys are conducted, ADF&G staff assume 100% dredge efficiency. East coast efficiency has been estimated at 40-50% over wide areas and different bottom strata. Gregg's data shows that as the density of scallops increases, the dredge efficiency declines.

Mark Kandianis noted that 50% is a conservative number used in the east coast on surveys so that the chances of exceeding the biomass are very low. In reality, dredges are probably less efficient than 50%, possibly as low as 25%. The 100% efficiency assumption should be reevaluated. The team discussed dredge efficiency, noting that fishing improves when the dredge contains some organisms.

Gregg summarized the status of the video survey development, explaining that he is using a prototype from Woods Hole and building a similar model in Alaska. He is hopeful to have this completed in time for the 2006 summer survey. The benefits for video surveying include more data, less time, and a more cost effective methodology. The team discussed that the camera is probably not adequate for evaluating bycatch species (crab, flatfish). Gregg noted that the scientists in Woods Hole are also hoping to use the scallop video survey equipment for habitat mapping.

Max Hulse questioned to what extent the dredge survey showed the results of the die-off of scallops at Kamishak. Gregg commented that there was a large die-off of scallops observed in the survey a few years ago. Specimens were sent for analysis but the results did not indicate a specific disease causing that die-off.

SAFE report:

The team discussed the necessary updates to SAFE report sections and then discussed stock status by region.

CPUE in the Yakutat, Area D, fishery remained stable. Shell height plots showed little change for this area since the previous season. Scallops of various ages show similar shell height and seem to reach a critical age where growth nearly stops.

District 16 showed a slightly larger harvest in 2004/05. Public comment indicated that there was not much improvement in scallop sizes; however, abundant scallops were available for harvest but quality of meats remained poor. In general, there are very abundant scallops in this area, yet yield remains poor. Discussion noted that in the early 90s decent scallop weights were obtained but recently only the smaller meats are observed. Mark Kandianis noted that it was more cost effective previously to harvest in that area with large crews and cheaper fuel. Gregg discussed shell height data from District 16, indicating a nice recruitment event in 1996, but no similar recurrence since that time period. Limited data is available.

For Prince William Sound problems were again noted with respect to the meat recovery rate from the dredge survey. Discussion noted that this may be due to inappropriate assumptions of 100% dredge efficiency combined with low meat recovery rate. The data in 2002 were notably problematic with respect to estimated biomass. This area continues to have the highest CPUE in the state. Members of the public again noted that 100% efficiency is not well founded and is contrary to all other conservative estimates utilized elsewhere.

Gregg explained that the ADF&G Central Region is very proactive in that they conduct a survey and then work to apply appropriate methodology for estimating biomass and GHR caps. Discussion ensued that the Central Region lacks flexibility in their GHR because they are up against the regulatory GHR cap in Prince William Sound. Mark Kandianis noted that if they utilized a different dredge efficiency calculation they would have much higher biomass estimates and it would then be clear that they are being restricted by the GHR cap.

The meat recovery rate in Prince William Sound is being impacted by shucking of small scallops (these are included in the survey meat recovery rate but not in the commercial fishery. Jie Zheng commented that there should be some parameters established for these calculations regarding the appropriate size ranges to include. This would be similar to other survey methods whereby the smallest organisms might be counted but not then included in estimates of biomass available for commercial fishing.

Areas surveyed are variable with catch rates used to establish bed edges. Therefore, they are not surveying similar areas each year so the biomass estimates cannot be compared on a year by year basis.

For Cook Inlet, a new scallop bed was found and surveyed in 2003, therefore there was an increase in the overall area surveyed. While ADF&G found the bed and notified fishermen about it, the subsequent survey did not indicate a large biomass of scallops. Max Hulse commented that they did some exploratory fishing in the area and could not keep their dredges down. The area was subsequently closed. He noted that Gilmartin thought he could fish there if he could pull the dredges slower. This area is deeper than other traditional areas. Information is lacking regarding the extent of the new bed.

The Kodiak NE district continues to be one of the best producing areas. CPUE is stable and catch appears sustainable at this level. Shell height data show new recruitment in 2004/05. Many closed areas are located nearby. The team discussed the trend in looking at smaller and smaller management units. Public comment requested whether there would be any consideration given to changing the management of the three different areas being fished. Mark Kandianis commented

that everyone is fishing in the areas with fixed GHLs but there is interest in additional developing fisheries in new areas, and with the ability to conduct exploratory fishing away from the traditional grounds where GHLs are already taken in entirety. Additional public comments noted that there ought to be consideration given to increasing the quota for the northeast side. They noted that new beds are being discovered but that there is no incentive to fish near them when the quota can be taken easily nearby. Discussion focused on the possibility of allowing a GHL increase for some fishing to the north. Jeff Barnhart noted that the department is taking a conservative approach in order to guard against the potential for overfishing. Jeff indicated that he would work with fishermen for possibly allowing some exploratory fishing. Conservation concerns were noted for management due to lack of survey data (data is fishery-dependant). The northeast appears able to sustain potentially higher fishing levels. Most of the harvest is from a limited geographic area.

The Kodiak Shelikof District has had stable GHRs for many years. Shell height data show a wide range of scallop sizes in the commercial harvest as well as frequent recruitment. The Shelikof Registration Area shows the best annual recruitment of all Registration Areas and Districts. Oceanographic features are likely playing role in the region. The quota was reduced by 20,000 this year (2005/06 fishing year), based primarily on declining CPUE .

The Kodiak Semidi District has had no fishing effort since the BOF closed state waters to scallop fishing in 2000.

The Alaska Peninsula has been closed for 2 out of the last 4 years, 2001/02 and 2002/03. There is little industry interest in the fishery. Because a scallop survey does not occur in this registration area, the department must rely on fishery-dependent data, thus there is no data when the commercial fishery does not occur. Mark noted that for economic reasons, it is very expensive to fish in this region, e.g. a long way to go with an observer, registration costs, etc. Members of the public noted that they can't register for two areas at once, so there is a necessity of returning to Dutch to re-register for the Bering Sea area. If the department wants to generate interest, they may need to increase the GHR higher than 10,000 lbs. Jeff explained the department's conservative approach and very detailed observer plan. Mark noted that tow data from the flatfish survey indicated that a fishable area appeared northeast of Synak. Gregg noted additional scallops located in a rocky area which is also partially closed. Jeff thinks that historical catches attributed to the Alaska peninsula were likely caught elsewhere and incorrectly recorded.

A research video stock assessment of the Bering Sea Registration Area was conducted in 2003. Survey video showed that scallops were widely spaced, which is not conducive to reproductive success. Observer-collected data has shown limited recruitment and ADF&G management has conservation concerns about the region. A recent genetic study indicated that there is genetic similarity in the Alaska Peninsula and Bering Sea scallops. Members of the public noted concerns in the region regarding the bycatch of *Chionoecetes* crabs.

The Dutch Harbor Registration Area remains closed due to concerns regarding localized depletion. Mark commented on the limited information that went into the original closure for crab habitat. He cited anecdotal reports of fishing for 1 ½ years with no indication of any crab bycatch at all. Jeff noted there is evidence that historic catches attributed to the Dutch Harbor Registration Area were made in other registration areas and reported on fish tickets as harvested in the Dutch Harbor area.

The Adak area is open, however there is no effort, and limited available information. Mark noted that he spent a week fishing previously in the Adak area to Semisopchnoi, and caught some

small scallops. Pink scallops are available here but machines are necessary for shucking them. The Petrel Bank is closed to scallop fishing.

The team decided to add a section to the SAFE report to include the information Gregg presented on survey and scallop locations. A new section will be added on "Survey Information" and will be built upon in subsequent years as additional information becomes available.

The team discussed SSC comments on the previous year's SAFE report and presentation of survey methodology. The team felt that additional information was needed from the Central Region regarding their survey methodology. The team suggested inviting the Central Region to present to the SPT at the 2007 meeting, as well as possibly encouraging a presentation to the SSC as well.

Overfishing Definitions

The team reviewed the SSC comments on scallop overfishing definitions from 2005. Overfishing definitions remain as a Federal measure under the FMP. Jie Zheng commented that we need to define the stocks and then decide what the appropriate level for defining overfishing is. The team debated to what extent it is appropriate to define overfishing on a stock by stock basis. Gregg noted that he does not believe the data is sufficient at present to support this, for example to define Yakutat and Kayak Island as a separate stock from Kodiak. There is no genetic data to support this. The observed differences in growth rates could be explained by environmental factors. Jeff explained that genetic work currently accomplished does not discriminate between southeast and Kodiak. Team members noted the apparent inconsistency with the reported Bering Sea and Alaska Peninsula genetic data. Jeff agreed to follow-up on that genetic report as the final report has yet to be produced from that study.

Mark asked if the spawning biomass in closed areas is being included for consideration of its contribution to downstream effects on recruitment. Gregg replied that while this contribution needs to be addressed the means by which to do so is unclear. Mark noted that the Prince William Sound stock for example, may be originating from regions further south and downstream. Jeff agreed that there is some mechanism for active recruitment to southern beds. Team members agreed that additional information is necessary on identifying the stocks.

The team agreed that data should be summarized to the extent possible with respect to genetic data on stock differences and reviewed by the team next year. Adequate survey coverage of most of the regions remains a concern for smaller scale management and application of overfishing definitions on a stock by stock basis as opposed to statewide. There is a lack of available data to evaluate spatially discrete beds and genetic information is likewise lacking. Until additional evidence is made available to support smaller scale management, the intention is to continue to manage as a statewide stock.

The team was updated by Diana Stram and Gretchen Harrington on the present status of revisions to National Standard 1 guidelines. These are currently on hold following the comments received on the proposed rule and the possibly necessity of additional NEPA analysis on these revisions.

The team discussed additional studies (larval drift, incorporation of oceanographic data and rotational closure studies) for incorporation into their meeting next year. The team would like to increase the discussion at these meetings to include special topics of research interest including

some industry-funded studies. The team would particularly like to pursue inviting some personnel from the east coast to participate in next year's meeting.

The team discussed the SSC comments on the draft age-structured analysis, noting that with the absence of Bill Bechtol, there has not been adequate staffing for anyone to pursue updating this analysis. Jie Zheng volunteered to examine the analysis and work on possibly updating the age-structured analysis in the future.

The team discussed the SSC comments on further investigation of larval drift information. Team members discussed the magnitude of undertaking that evaluating this would entail, noting that it is beyond the scope of the department's ability and budget. This type of work would require outside funding, such as NPRB. This is an area which could be highlighted to the SSC as a research priority.

Economic Paper:

Scott Miller presented his economic paper. The team and members of the public commented on the overview of the scallop fishery. Mark noted that the period from 77-78 of high yield included vessels which came from the east coast and then moved back to the east afterwards, hence exiting the fishery during this period. Alaska-based scallop vessels also moved back east during this period due to better yields and market conditions there.

Sea Scallops (east coast) notably drive the price setting for Scallop landings. The team discussed the historical aspect of the transition to catcher processors, lengthening trips, and improving product quality. Members of the public commented that one day trips were close to town and vessels were fishing on stocks nearby. When these areas were closed to protect crab or crab habitat, they were forced to longer 10 day trips and that was a limitation on their ability to keep scallops iced. Earlier catcher vessels were impractical for market reasons.

The team discussed the difficulties of consolidating fish ticket data. The original LLP under amendment 4 included a break-even analysis. Mark noted that insurance and observer costs have increased since that break-even analysis was done.

The team discussed the Felthoven study mentioned in the economic paper. The team cautioned Scott to caveat the economic paper more regarding the quoted 85% excess capacity result from this study. Effort consolidation was summarized in the paper but there was limited information on the effects of consolidation, particularly on fishing communities. Scott cited some evidence of improve economic conditions in the fleet. Jeff noted potential discrepancies in the lease fee information included. The team discussed the co-op operations and the benefits of the voluntary cooperative structure. Some of the noted downfalls to this include consolidation of crew jobs, and fewer vessels in Alaska. Mark noted that landings are also reduced. Gretchen Harrington noted some similarities with crab rationalization in that there is the potential for reduced necessity for the best qualified captains when the fishery becomes rationalized and asked if this had been observed in the scallop fishery to date. Mark noted that they have yet to see similarities of this in the scallop fishery. Gretchen requested if research has been done on the effects on crew from rationalization. Mark commented that many crew members moved back east for job purposes.

Port deliveries have declined. Mark commented that they have utilized the same buyer for 15yrs, but that fuel cost is an issue and there are other extraneous things that can be affecting the sort of data that Scott is trying to pull together.

Scott provided an overview of landings tax and the impact of it (not being paid in Alaska) resulting in a possible loss of tax revenue. Mark noted that they are currently offloading to a trawler as they cannot get fuel at sea thus have lost the efficiency of at-sea ability (hence still going to port for fuel)

The team discussed revisions to the paper for incorporation into the SAFE report as well as future directions for the paper. The Felthoven results need to be better explained, particularly details included regarding the purpose of and considerations included in that study as well as increased description as to how and in what respect the information on potential overcapacity would be useful.

The team would like to see increased examination in the paper of the impacts of reduced capacity on coastal communities, and the specific impacts of fleet consolidation. This would be beneficial to describe potential effects as other fisheries become rationalized. Jennifer Sepez's work on coastal communities might be a resource for some community level information. Scott indicated his desire to develop a relational database and pursue an input/output model. Mark requested that any study on economic effects should also look into the lost economic opportunity afforded by closed areas.

Jeff commented that specific language in the paper needs to be refined to reflect language that has been developed to characterize situations in the fishery. Fish ticket landings information problems should be resolved with the data such that it is not misleading. Next year the paper should look more at the fish ticket data and vessel logs, in order to further resolve some of the difficulties.

The team decided to include the paper as an appendix to the SAFE report with the intent that next year this would evolve into the economic section of the Scallop SAFE report. Mark noted that the industry could work with Scott next year to provide additional data.

New Business:

The team finalized arrangements and timing for the SAFE report. Final edits should be sent to Diana by March 13th for incorporation into the report.

The team would like to schedule their 2007 meeting as far in advance as possible in order to facilitate scheduling. Tentatively next year's meeting will be held for two days in the week of February 19-23. Location: TBD (Anchorage, Juneau, Kodiak)

The team reviewed the BOF proposals for the March 2006 Statewide shellfish meeting. These proposals are roughly the following:

- Proposal 292 clarify location of closed waters
- Proposal 303: clarify closed area, language in regulations is redundant.
- Proposal 328. GHR for Scallops reduce for consistency with current overfishing definitions
- Proposal 326: reduced observer coverage for vessels <80ft length.

Comments and discussion focused primarily on the proposal for reduced observer coverage. Jeff noted that the department is opposed to this proposal. Scott Hulse commented that he would be in favor of the reduction from a cost perspective but would not be interested in reducing the available data used to manage fishery. He questioned to what extent the reduced coverage could

be limit to areas where bycatch is not a problem (e.g., Kayak island where crab bycatch not excessive). He noted that in Cook Inlet this is already waived.

Mark Kandianis commented that while he sympathizes with the excessive observer costs and differential economic impacts on smaller vessels, he felt that decreased observer data in the Kayak Island region would not help with reconciling survey dredge efficiency with data collected by observers. Kayak Island is an area where they would like to see a higher harvest range eventually. He commented that possibly Yakutat would be a better region for area-specific decreased coverage. He noted however, that there would be a concern that decreased observer requirements for smaller vessels could create an incentive to increase capacity at smaller vessel lengths.

Additional public comments on new business were solicited by the chair:

John Doody commented that he would like to begin the season prior to July 1st. He would like to see a season change earlier to April/May. Jeff noted that the department has been previously opposed to this because it moves into spawning time and could potentially impact scallops ability to spawn during this period.

Jim Stone requested whether just the GOA areas could open a month earlier, nothing that it is a safety issue for bad weather later in the year. Mark Kandianis was also in favor of an earlier opening, nothing that the additional month in good weather would be helpful from an efficiency perspective. He suggested a June 1st opening in SE where it would not be an issue with crab molting. He commented that on the east coast the fishery occurs year-round and does not seem to affect recruitment. Scott Hulse also agreed with this noting that he would like to see all areas open a month earlier, to promote additional safety and provide for more cost effective fishing. Jim Stone reiterated that he was only proposing an earlier opening for Yakutat.

John Doody requested that the 12 man crew limit restriction be relaxed noting that it is not necessary and there is no purpose for those rules.

Jim Stone requested an increase in vessel length by 10%. The team noted that this MLOA restriction (as opposed to previous comments on seasons and crew size restrictions) is a Federal measure which would require an FMP amendment to change. It is tied to the original LLP and the capacity restrictions at the time of the LLP, e.g. horsepower limit, LOA, and dredge size. Mark Kandianis commented that adding vessel length could increase horsepower ability.

The team and public discussed the capacity restriction measures in existence, particularly in the context of the Council's recent amendment 10 discussions. It was noted that examination of any increase in vessel length in the fishery at present could open up larger suite of management measures under consideration to limit capacity if this is re-evaluated. The public commented that they were not interested in re-evaluating this at this time.

Mark Kandianis requested that there be a larger discussion of the rationale behind the closure areas at Unimak, and Cherikof, commenting that these were initially closed due to anecdotal information on crab habitat and perceived gear conflicts between fishing gears. These areas are open to hard on bottom trawling. He believes that areas open to bottom trawling should be open for scallop fishing as well. This is a state measure not a Federal measure despite these waters encompassing Federal waters (but the gear restriction is for scallop gear only).

Jeff commented that there may be some potential for opening these areas but cannot speak for the department in that matter. Gregg noted that Tanner crab fisheries are now open in these areas. Mark commented that they have 100% observer coverage and Tanner crab caps.

The team discussed the possibility of a test fishery in the area. Jeff commented that this was attempted in March 1993. Mark Kandianis noted that at the time no crab bycatch were observed. Herman commented that a commissioner's permit could be obtained for a test fishery. Some data are available from a trawl survey of the area. Mark commented that perhaps they would attempt to obtain an experimental fishing permit first to obtain data and then present their case to the BOF to open up those areas depending on the results of the test fishery.

The team discussed some possibilities with coordinating with the video or dredge survey and the necessity to coordinate with other fisheries outside of 3 miles prior to the permit application process.

The meeting adjourned at 3pm.