

# Groundfish Plan Team Meetings

September 19<sup>th</sup>-21<sup>st</sup>, 2005

## Joint GOA/BSAI Groundfish Plan Team

### Introduction

The Bering Sea/Aleutian Island Groundfish Plan Team and the Gulf of Alaska Groundfish Plan Team met jointly on September 19-21, 2005 to review a number of management initiatives, survey results, and new stock assessment models.

Groundfish Plan Team members are listed in Attachment 1. Jeff Fujioka was absent. Loh-lee. Low, Ward Testa and Tory O'Connell attended part of the meeting. Brenda Norcross was connected via teleconferencing and internet document exchange. New Plan Team member Dan Lew, and two nominated Plan Team members Ken Goldman (GOA) and Tien-Shui Tsou (BSAI and GOA) were warmly welcomed.

The Joint Teams adopted a revised agenda (Attachment 2).

A list of all draft documents and presentations made during the Plan Team meetings is provided in [Attachment 3](#). NOTE that these are to be considered working documents and are subject to further review and possible changes.

**Council and Center updates.** Diana Stram provided an overview of BSAI and GOA groundfish FMP amendments underway and recently adopted. These included the BSAI salmon bycatch amendment, GOA other species TAC calculation, EFH/HAPC amendments, and Central GOA rockfish rationalization.

**Habitat and Ecosystems Processes Research (HEPR).** Mike Sigler reviewed the new Alaska Fisheries Science Center (AFSC) program he leads, will bring together relevant expertise for collaborative research. This is an organized program for research tailored toward ecological processes. Initial areas of research include studies on the impact of sea ice loss, EFH, and Critical Habitat. The HEPR core Team includes one individual from each AFSC division that participates in an initial workshop.

**Ecosystem Approaches to Management.** Diana Evans provided an update on different approaches the Council is considering to include ecosystem-based management (EBM) initiatives. EBM extends beyond fisheries management jurisdictions since it proposed to coordinate information across agencies. The Ecosystem Committee has been reactivated by the Council and will review and advise the Council on appropriate approaches to pursue under EAM. More information is available on the Council website.

**Marine Stewardship Council (MSC) update.** The Teams received an update that pollock in the GOA and BSAI has been certified under the MSC. The MSC program requires an annual audit of certified fisheries, and At-Sea Processors Association is working to meet various conditions attached to the original certification determination. A new assessment Team has been appointed to perform the annual audit and evaluate APA's response to conditions. There is no direct responsibility for NMFS. The BSAI Pacific cod freezer-longliner sector is currently being considered for MSC certification as are the sablefish and halibut longline fisheries.

**Center for Independent Experts (CIE).** The CIE is a national initiative to review critical research and assessment activities by independent experts. Kerim Aydin reported that the CIE reviewed the multi-species and predator-prey models developed by the AFSC, as well as the technical interactions model used for the PSEIS in 2005. The CIE concluded that the approaches used were reasonable and provided a number of suggestions for improvement. These included incorporation of better seasonal coverage, use of statistical methods (e.g., ADMB), potential of age-structured models, length-based models GADGET (better for use with trends on weight and consumption at age), fleet dynamics, alternative model configurations, and sensitivity analyses on uncertain assumptions. The CIE panel also suggested that the time-horizon for considerations should be within 3-7 years for MSVPA whereas the Ecomath/Ecosim be used for evaluating policy implications are of more medium to long-term duration.

In 2004, the CIE reviewed the EFH habitat model and provided a number of suggestions for further evaluation that were completed by AFSC staff. A review of the salmon program at the Auke Bay Lab (ABL) also took place and future CIE reviews include crab (OFL update), and possibly rockfish.

Jim Ianelli noted that despite these efforts, the overall level of review for critical assessments for North Pacific groundfish has declined over the past several years due to increasing numbers (and size) of stock assessments and management analyses. The Plan Teams and SSC should continue to strive to improve the level of review for these documents.

**Proposed Rule on NS1 Guidelines.** Grant Thompson summarized draft comments on the proposed NS1 guidelines prepared by the SSC and others (see attached). The Plan Teams expressed concern about proposed treatment of “core” and assemblage species. The draft comments encourage NMFS to provide flexibility in the guidelines regarding management of non-target species. The Teams expressed concern that species currently managed as single species may be moved into assemblages to “cover” poorly understood species. The ability to move individual species from assemblages may be restricted.

**Economic SAFE Report.** Ron Felthoven, AFSC, summarized the draft economic SAFE report. He reviewed recent work by his staff, including discard rates and the impact of utilization regulations, recovery rate trends (whole fish to product), estimates of value based on fish-ticket data, the impact of Steller sea lion conservation area, a fish processing boom in China, and halibut bycatch mortality impacts.

**Research Priorities.** Jane DiCosimo reviewed the status of the Council’s list of research priorities, which was last revised in 2003. Council staff reduced the list to 5 general themes to assist the North Pacific Research Board in setting its 2006 research funding priorities. The Teams divided the key items to a number of subcommittees to review research priorities. These smaller groups are to review and update their sections and report back by the November 2005 meeting. The revised research priorities is scheduled to be reviewed by the SSC and adopted by the Council in February 2006.

**Information Quality Act.** Bubba Cook, NMFS AKRO, reviewed the Information Quality Act provisions as they relate to Council and NMFS fishery actions. While the Plan Teams are part of the Council’s review process, the SSC is the peer review process that has been determined to meet the requirements of the IQA.

**TAC Projections.** Ben Muse, NMFS AKRO, provided an overview of the projection methodology used to prepare OFL and ABC projections for BSAI and GOA Team consideration. The projections for Tier 1 to 3 species used species-specific AFSC population models, which include information on age structure, growth and reproduction, and natural and fishing mortality. The projections follow procedures adopted by the Council and are detailed in the TAC specification environmental assessment (EA). The

projections for Tiers 4-6 “roll over” the 2006 final specifications. The [draft specifications table](#) is available using the updated projection models. NOTE that these will change as information is presented during the November 2005 Plan Team meetings.

The Plan Teams concurred with the improved methodology but noted a number of inconsistencies in the tables that needed to be checked. The Teams also agreed to schedule additional review at the November Plan Team meeting. The Teams will provide recommendations on the projected OFLs and ABCs in their separate meetings. These recommendations will be published in the proposed rule for 2006/2007 specifications, but will not be used to start the fishing year.

**Sablefish.** Tory O’Connell reviewed Alaska state sablefish fisheries and Team members clarified how these stocks are managed and assessed relative to the federal sablefish fishery. The Chatham strait fishery is the largest state fishery; it is managed under limited entry with an equal share distribution. The assessment is based on a mark recapture program and annual longline survey. Generally, the AK sablefish is considered a single stock and includes state waters. The trends in state abundance are very similar to trends in federal waters for southeast (and Chatham). The federal catch accounting system includes removals from state fisheries in the BSAI, but not from the state waters in the Chatham and Clarence regions because of the state management system. Since there is a large buffer between ABC and OFL and given that the IFQ fishery is able to remain below the TAC, the ~5% state catches are not considered a problem. The Teams noted the need to clarify state and federal waters fishery information.. The Teams recommended that the assessment authors consider adding information on state stocks, catches, and management programs in the sablefish stock assessment chapter.

A sablefish symposium is planned towards the end of 2006 or in early 2007. Ken Goldman noted that this is the 10<sup>th</sup> year of a sablefish survey in PWS and that analyses of these data may provide some useful insights.

**Non-target species update.** Rebecca Reuter reviewed a preliminary draft worksheet to determine relative “sensitivity” of non-target species. The Teams provided a number of suggestions for revisions.

The Teams expressed a number of concerns with regards to the use of the terms “sensitivity” and “vulnerability.” “Sensitivity” relates to a statistical analysis that is part of a stock assessment. “Vulnerability” describes the susceptibility of a species to overfishing. The Teams suggested “overall level of concern” to rank the potential vulnerability of the species for management purposes. Species might be “sensitive” according to their life-history characteristics, but not currently vulnerable to fishing pressure and/or of management concern. Likewise, other species might not have sensitive life-history characteristics as such, yet it is possible that a high harvest rate may increase their relative “level of concern.” The Teams found it useful to vet these ideas as they could advise on the potential pitfalls and possibilities of the management implications of the tables. The Teams suggested clearly displaying a column on relative risk or “concern,” in addition to a column on species sensitivity. They also suggested that this key be updated to better characterize these species as information becomes available. The Teams expressed great concern that given the current information, many long-lived species would not be characterized as sensitive, whereas it may be that some or all of these species are just not candidates for additional management actions at this time.

Other specific recommendations for the authors:

- Possibly use economic information and market-driven data as well in characterizing the relative vulnerability of species
- Fishery Interactions: Need to consider additional fisheries for incidental catch in characterizing the potential interactions

- Abundance trend: survey selectivity should be changed to catchability in this section (if that is what is being approximated); important to note when using the survey versus the model for results.
- Important to note when using the survey abundance estimates versus output from the assessment model for abundance trend

This information might eventually be summarized in the introductory section of the SAFE reports (e.g., similar to trends that are summarized in the GOA SAFE introductory Table 2)

The Teams discussed the possibility of expanding this sort of characterization to target species as well as non-target species. Concerns were noted that this might prove repetitive with current summaries of assessments. The Teams suggested that one approach might be to review existing information in assessments in order to ensure that this type of information is already available in each assessment.

Jane DiCosimo explained that the Non-Target Species Committee needs the results of this sensitivity analysis in order to move forward with refining management alternatives for analysis. The timeline for this analysis is indeterminate at this point. The next step is to assess vulnerability/sensitivity of various species and evaluate revising management regimes for those deemed “at-risk.” Anne Hollowed noted that this work must coordinate with pending revisions for proposed assemblage management under the National Standard 1 guidelines. Jane suggested re-starting the “Ad Hoc” working group to review this information with the committee but the Teams did not comment on to what extent that was necessary.

**Rockfish Management.** Jane DiCosimo reviewed a paper on rockfish management to be presented to the Council at its October meeting. This paper was compiled following a Council request in 2004 for a comprehensive review of rockfish management and habitat. She requested that the Teams specifically comment on to what extent the science in the paper was correct. The Teams provided some specific guidance on corrections to tables and information in the paper. The Teams further recommended that the definitions of sensitivity and vulnerability should be clearly defined in the paper. Concerns were expressed regarding the classifications of sensitive and non-sensitive in the paper (as described under the previous agenda item).

**Rockfish studies on localized depletion.** Dana Hanselman, AFSC, presented results from his study on localized depletion of Pacific ocean perch, northern rockfish and dusky rockfish. Results suggest that depletions from small-scale areas appeared to occur but the periods were relatively short (generally less than two weeks). The depleted areas seemed to be replenished in the following year for Pacific ocean perch, but not for northern and dusky rockfish in at least one area. The rate of replenishment (i.e., within a year) was unknown given the available data.

**Dark rockfish amendment.** The GOA Plan Team recommended in 2004 that dark rockfish be removed from the FMP and turned over to the state for management. The Council initiated that analysis in 2005. The analysis was delayed until 2005 GOA trawl survey data was available for development of the analysis. It was discussed to what extent the BSAI Team had a similar recommendation (and that a combined amendment for both could be pursued). The BSAI Team noted that they did not discuss this last year and were provided no additional catch information. The Teams in general recommend that treatment of species be consistent among region. Ivan Vining, ADF&G, commented that there is no research or monitoring in BSAI and that the State may not implement such a program. The BSAI Team agreed to discuss independently in their break out discussion to what extent this should be a priority or recommendation for a BSAI amendment.

**Aleutian Islands Fishery Ecosystem Plan.** Diana Evans reviewed Council initiatives on the Aleutian Islands FEP. The Council decision to move forward with developing the idea of an AI FEP was

done with the understanding that it represents a non-binding document without legal standing. It would provide a guidance document in addition to (and not superseding in any way) the current FMPs. The intent is that this would represent an information and planning document to provide the Council with a greater understanding within an ecosystem context for policy decisions. She noted that guidance was sought from the Teams on to what extent this sort of initiative would actually provide additional guidance for the Council, in addition to the current activities on ecosystem considerations. If it did not, this would be important for the Council to be aware of this prior to moving further along this path. The Council's Ecosystem Committee is to meet sometime this fall, and further Council activity has been rescheduled to after this committee meets again.

The Teams felt that an FEP seemed to be a good idea as a guiding document but were not clear on the necessity of a separate ecosystem Team, and suggested that the Plan Teams ought to be considered for reviewing and revising FEPs. The Teams also noted that while the idea and content seemed to be a good idea the operational management was as yet unclear. David Witherell noted that the FEP should be more focused on management and policy level decisions than specific stock assessment.

The difference between AI and BS stocks and their boundaries were noted. While many single stocks might be easier to separate by region, species complexes are notably different between the BS shelf and the AI region.

Ivonne Ortiz, AFSC, noted that where the eastern AI and western GOA overlap might also present a problem. She commented that while the FEP might not have a weight of its own for regulations, it could serve as a type of legal precedence-setting document. Thus care should be taken in its drafting and use.

**Ecosystem Considerations Chapter.** Jennifer Boldt, AFSC, reviewed additions and improvements to the Ecosystem Considerations chapter. She noted the new availability of easily accessible information via the new website. The Teams acknowledged the immense amount of effort that continues to go into this chapter and noted the utility of the updates and improvements since suggestions were given last year. The web interface facilitates easier updates and increased communication and extensive reference and updated information can be easily accessed. These include ecological indicators and all time series and data as provided by authors.

The Plan Teams recommended that the chapter be produced once per year, perhaps with an additional update on sections and topics that have been changed or are new. The website can facilitate with these changes and should be marked with a date stamp accordingly.

**Ecosystem Assessment/Update on multi-species modeling.** Kerim Aydin, AFSC, summarized the February 2005 SSC modeling workshop, which included MSVPA/MSFOR, Ecopath/Ecosim (CIE review on ecosystem modeling), and technical interaction modeling. One output from the trophic models has proved useful in comparing the change in biomass by species relative to single species models. This is particularly relevant for evaluating responses of apex predators in the absence of fishing (e.g., changes in Steller sea lions). Changes may be more apparent on local scales than the larger scales used for these models.

The food-habits website now has extensive presentations of modeling results that can be accessed interactively. The Teams acknowledged the usefulness of these improvements and strongly encouraged authors to examine these resources in the development of the assessment chapters. Another new development includes the possibility of using some food habits data as indices of abundance. A presentation of length frequencies of pollock in predator stomachs suggests a significant correlation with subsequent estimates of year-class strengths. As on-board sampling and food habits data processing

continue to improve, these data may become increasingly useful for assessment modeling and ecosystem considerations.

A discussion on how the ecosystem chapter could be more effectively presented and summarized by the Plan Teams ensued. Bob Foy suggested that a summary of the ecosystem effects relative to GOA flatfish would be useful to include in the introduction section to the GOA SAFE Report, if it were not adequately covered in the assessment document. Other examples included how the ecosystem information was incorporated into the Atka mackerel chapter of the BSAI SAFE Report. Stock assessment authors were encouraged to work closely with Kerim to incorporate information in a similar way for this year's assessments. The Teams will attempt to incorporate a summary section of the ecosystem considerations and ecosystem modeling chapter in the introductory section of the SAFE reports and will also draw information from the individual species chapters as available.

**Survey Overview.** Bob Lauth, AFSC, summarized the EBS trawl survey results. Northern stations were added to evaluate the possibility of an expanded snow crab distribution. There were three tows that were rejected for inclusion in the survey results (due to gear damage etc). There was a slight biomass increase for pollock, particularly in the northwest stations. Pacific cod increased in northwest area (increased abundance was noted in the combined 8 areas but it is important to note that this does not necessarily imply a biomass increase in the standard area). Observed bottom temperatures in 2005 were warmer to the southeast with colder waters further to north, compared to the 1-3 degree water in 2004 seen further south. The sea surface temperatures in 2005 were slightly cooler than 2004. A deeper-water slope survey is scheduled for summer 2006.

Mark Wilkins, AFSC, summarized the GOA trawl survey results. The survey crew was ahead of schedule most of the summer and was able to add stations resulting in 839 tows. They attempted to add stations proportionately across all depth strata. The presentation of time-series of biomass estimates required the caveats that: in 1999 deep stations were sampled whereas in 2001 there were no deep stations and the Eastern GOA was not covered. Unusual sightings occurred, such as sardines in southeast GOA, and hake, pelagic armorheads, and frigate birds seen further north.

The Teams greatly appreciated the excellent presentations on the summer trawl surveys by both Lauth and Wilkins. The Teams would encourage a similar presentation for the September meeting in 2006.

Phil Rigby, AFSC, briefly reviewed the sablefish longline survey, noting that the survey overall was successful although he did not have available information on the trends in sablefish by area. This year represented a Bering Sea year for the survey; archival tagging of Greenland turbot and shortspine thornyhead continued this year.

**Management Strategy Evaluation.** Teresa A'Mar provided an update on the MSE project she is conducting for GOA pollock. One objective is to test the robustness of decision rules and changes over time and incorporate changes in climate, spatial and temporal TACs. The Teams suggested that ecosystem effects be taken into consideration since food web interactions show that of all recent mortality on pollock, only about 6% appears to be due to fishing. If fishing is only 6% of total mortality to what extent will minor adjustments to the management strategy for a stock like GOA Pollock matter? The project is still preliminary and no results are available at this time.

Some suggestions for the author include:

- Using the existing tier system and proposed changes due to NS1 Guideline revisions.
- How to accommodate climate change? Consider including calculations of recruitment following the 1977 regime shift.

- When would it be appropriate to switch baseline years? Currently we don't have an analysis to support changing baseline years for reference purposes so perhaps MSE could incorporate this.

**BSAI Pacific cod model.** Grant Thompson summarized the new Pacific cod model using stock synthesis 2 (SS2). To focus attention on differences between models, no new data were used in the analysis, except for an updated estimate of the maturity schedule (Stark, in review). Overall the model was seen to be an improvement over earlier versions and despite some technical difficulties with implementing SS2, in the long run the conversion will provide a number of benefits for the analyst and reviewers.

The Teams discussed the changes in the results with the new model. The spawning biomass time series is somewhat lower under the new model. Whether the lower estimates of spawning biomass imply that recent harvests have exceeded retroactively computed OFLs depends on which maturity schedule is used (the old maturity schedule implies that recent harvests have exceeded retroactively computed OFLs, the new maturity schedule implies the opposite). The time series of total biomass is also somewhat lower under the new model. Jim Ianelli commented that the lower estimates of total biomass are explained largely by the fact that the new model estimates higher survey selectivity for large fish than the old model.

Kerim Aydin commented that the new model is better from an ecosystem modeling perspective, the lower abundance estimates (with less dome-shaped survey selectivity) was more consistent with the ecosystem modeling work because the higher biomass estimates consistently drove the other species extinct. The new model results are more likely to balance well with ecosystem models.

The Teams concurred that the new model presents substantial improvements over the old, specifically that the new model's estimates of total biomass are much closer to those obtained from the survey. However, Team members also noted that Stock Synthesis 2 is still inflexible in some ways and suggested that the authors consider creating a new model which is more flexible.

The BSAI Team requested that additional information be provided to them on the new maturity schedule by November because applying the new maturity curve will have a substantial impact on the assessment. Information should be included in the draft mailed to Plan Team members in advance for review and should be on the agenda as a major discussion item for the BSAI Team in November. Grant noted that he would try to do a model run for the GOA stock as well. A revised maturity schedule is also available for the GOA stock and will be presented in November as well.

The Teams noted that the model is to be evaluated by the SSC in October. Given the Plan Team convention to review all new models before recommended their use in estimating ABCs, the Teams recommend going ahead with this new model, noting that they will likely consider using the new model for guiding ABC recommendations in November given improved fits to available data.

The Teams suggested using the longline survey data in the model. Grant noted that he would consider using those data in the future (possibly next year) and has tried to do so in the past, but without much success. The new model framework will facilitate adding these types of data.

**Marine Mammals.** Lowell Fritz provided an overview of two pinniped stocks in Alaska, along with an update of the northern right whale critical habitat issue. A survey of western stock Steller sea lion pups across the AI and GOA was conducted in 2005. Relative to 2001, pup numbers increased in the eastern Aleutian Islands and eastern Gulf of Alaska, continued to decrease in the western Aleutian Islands, and were relatively unchanged overall. An update through 2004 of a demographic model of sea lions in the CGOA indicated that, since the early 1990s, survival rates of juvenile and adult sea lions rebounded to

rates observed in the mid 1970s before the steep decline, while reproductive rates of adult females have continued to decline. This suggests that reduced condition or health of adult females may be affecting fecundity, but there is currently no direct evidence to support this.

Northern fur seal pup production on St Paul and St George Islands was assessed in 2004 and indicated an average decline of 6% per year since 1998; no new information was available this year. In July 2005, adult males were counted on the two Pribilof Islands, and their numbers are correlated positively with pup production; there was an increase in harem males relative to 2004, but trends in male counts are variable. Pup production was assessed on Bogoslof Island in 2005 for the first time since 1997. Pup numbers more than doubled since 1997, to over 12,000 pups born in 2005. Much of this increase is thought to be driven by immigration of seals, possibly from the Pribilof Islands. The increase observed on Bogoslof Island, however, does not account for decreases observed on the Pribilof Islands.

The Teams were briefed on the status of the lawsuit regarding designation of right whale critical habitat. On June 14, 2005, the U.S. District Court remanded the matter of revising critical habitat for the northern right whale in the Pacific Ocean to NMFS. [The remand includes orders](#) for NMFS to publish a conclusive determination by October 28, 2005 by either proposing designation of an area in the North Pacific Ocean as critical habitat for right whales or by explaining why such a designation should not occur due to more paramount statutory considerations.

The Joint Plan Team meeting adjourned at 12:30pm on Wednesday September 21<sup>st</sup>. Individual teams met that afternoon.



## GOA Plan Team Report

The September meeting of the Gulf of Alaska Groundfish Plan Team took place on September 21<sup>st</sup>, 2005 at the Alaska Fishery Science Center in Seattle, WA. Members of the public and state and agency staff present included: Julie Bonney, Dan Falvey, Phil Rigby (NMFS), Gary Stauffer (NMFS), Dana Hanselman (NMFS), Chris Wilson (NMFS), Diana Evans (NPFMC), Dave Clausen (NMFS)

**Proposed Specifications** The Team recommended the use of the projections as listed in the table provided for use in establishing the proposed 2006 specifications. Where projections were not available (as for tier 5 species in the GOA) the Team recommended rolling over the 2005 specifications.

The Team discussed the difficulty presented for establishing proposed specifications for tier 5 species. The Team noted that for these species, biomass estimates and hence the related ABCs and OFLs could change dramatically from one year to the next as they are tied to (i.e., a straight calculation of) the survey estimate of biomass. In the GOA where biennial assessments are now being done for these stocks, biomass estimates from an “off cycle” year could change dramatically in an “on cycle” year once the survey estimates and stock assessments are available in November for the full stock status. This could result in large relative differences in ABCs and OFLs for those stocks between proposed and final specifications. The Team noted that a follow up discussion of noticeable changes from the proposed specifications would be appropriate in discussing stock status (and final specification recommendations) in November.

The Team noted a discrepancy in the sablefish projection, whereby the ABC declines from 2005 to 2006, but OFL for this species is increasing. The Team recommends that this discrepancy be further evaluated and updated prior to moving forward with proposed specifications.

The Team also noted that specification tables should be distributed to Plan Team members in advance of the meeting for their review and to facilitate discussion and decision-making at the meeting.

**Other species.** Diana Stram reviewed the final action by the Council on the interim measure to establish the TAC for the other species complex in the GOA at less than or equal to 5% of the sum of the target TACs. Tom Pearson noted that the proposed rule will not be finalized prior to action taken by the Council on proposed specifications.

The Team discussed what additional information on other species could be included in the November SAFE report. It was agreed that a brief overview section would be included in the SAFE report introduction containing information on the incidental catch of other species in GOA groundfish fisheries as well as any additional information on new and developing fisheries. This would provide the Council with additional information should they wish to set the complex TAC at less than 5%.

**Shortraker/rougheye.** Dana Hanselman presented a report from a recent research project addressing the potential for misidentification of shortraker and rougheye rockfish on fish-ticket data at processing plants in the Gulf of Alaska. This project was a cooperative effort between the Alaska Longline Fishermen’s Association (ALFA) and NOAA Auke Bay Laboratory.

The Team discussed the results regarding the average percent of landings and the correlation between low landings percentages and increased tendency to misidentify rougheye as shortraker in those ports. Tom Pearson noted that a similar project was occurring in Kodiak with Alan Kinsolving.

The author sought input from the Plan Team on to what extent they continued to feel that misidentification of rougheye rockfish as shortraker could represent a problem. Based on the results of this project the Team did not feel that it represented a problem, however they noted that additional work on verifying the validity of these rates would be beneficial. Concerns were expressed regarding the small sample size although it was notably difficult to observe landings at those plants that rarely see rougheye and shortraker landings. The Team noted that smaller fish tend to be more difficult to identify. The Team questioned to what extent discard rates have increased after separating the species and placing on bycatch only status. A discussion of the relative impacts of discards was suggested for the November meeting.

The Plan Team noted that identification concerns extend to many species (e.g., skates) and recommended that sampling be coordinated with existing agencies especially in plants where observer coverage is lacking and also to evaluate the fish-ticket identification issues.

**Shelikof Strait winter EIT survey and summer GOA EIT studies.** Chris Wilson provided the team with an update on the 2005 GOA winter and summer acoustic trawl survey results which included winter surveys of the Shumagin Islands, Sanak Trough, Shelikof Strait, Chirikof Shelf Break, and the summer GOA survey. He noted that the summer survey represented the first cruise on the new Oscar Dyson.

No juvenile fish were seen in the survey areas for the Shumagins and Sanak Island. For the Shelikof survey this represented the second year, since 2000, when spawners were observed in the western Strait area where they have traditionally been found. Preliminary indications are that the 2004 year class appears strong.

Chris explained that the contribution of acoustic backscatter from eulachon appears insignificant to that from pollock in the Shelikof area and this affected the pollock biomass estimates since 1992. The target strength to length relationship for eulachon was assumed to be the same as that for pollock until recent research provided evidence to the contrary. This assumption meant that, since 1992, the acoustically derived biomass estimates for pollock were incorrectly reduced an average of about 8% because of the assumed contribution from eulachon. Because researchers in the Program have now determined that the backscatter from eulachon is much less than that from pollock, the reduction in the pollock biomass estimates in the past were greater than was necessary. Chris argued that given the eulachon to pollock catch composition and target strength relationship between these two species, it is unnecessary to make adjustments for the presence of eulachon in the Shelikof Strait area. Thus, no adjustments are currently being made for eulachon so the previous biomass estimates (1992-2005) have been modified (increased) to reflect this change. Pollock estimates from the other winter survey areas have never been adjusted for eulachon because little, if any eulachon are caught during those surveys. Chris noted that the process report for the winter surveys will be available shortly and will be presented at November plan team meeting.

For the summer of 2005, the primary objective was to look for pollock beyond the shelf break (typically 30 nmi beyond the break) in response to earlier comments during an external program review where it was suggested that significant quantities of pollock might exist beyond the shelf. Results indicated that although pollock were located along the shelf break, pollock were not detected beyond the shelf break. Given those results, the summer 2007 survey will concentrate effort on the shelf, in bays, and along the shelf break but little effort will be spent surveying beyond the shelf break. Chris also mentioned that the 2007 summer survey effort may be redistributed so that areas along the shelf where pollock have not been detected during the 2003 and 2005 surveys may be surveyed with less effort so that more effort could be spent in areas where pollock have been detected earlier so that the entire GOA could be covered during a 2-2.5 month period. He noted that the survey is designed for assessing pollock and not all species. To get

additional information on non-pollock species, requires more trawling to accurately identify those species from the backscatter.

The summer 2005 survey was cut short with the Dyson because of mechanical problems (about 50% of days scheduled were lost) thus coverage was not as good for overlap in comparing 2003 and 2005 areas across the GOA. In a cursory comparison of 2003 and 2005 data, one plan team member commented that many survey areas showed much lower biomass. However, one should not consider the difference in biomass from areas between the two surveys related to that fact that the FREEMAN was used in 2003 and the DYSON was used in 2005. Many other biological and physical factors could explain these differences. The Team then questioned how comparable surveys are between vessels. Chris noted that the 2006 summer and winter work will conduct comprehensive inter-vessel comparison experiments with the 2 vessels and more information will be available following those studies. The 2006 survey efforts will utilize the Miller Freeman as the primary survey vessel, even though the Dyson will also conduct the survey (for inter-comparison reasons) because the time series is based on the Freeman data and it is necessary to ensure that the Dyson is reliable before basing the survey on that vessel.

**GOA rockfish pilot project.** The Team was requested by the SSC to comment on the potential biological implications of the change in the central GOA rockfish fishery under the Rockfish Pilot Project approved by the Council for implementation in 2007. Members noted that moving the start date could result in catching rockfish when they are spawning as opposed to after spawning. If the fishery occurs before spawning this could result in a lower projected ABC. The assessment authors noted that the change in start date would be factored into the assessment, and that concerns regarding the biological impacts had been more focused on the proposed March 1 start date (not the recommended May 1<sup>st</sup> start date). The Plan Team noted that it will review the biological implications of the new start date when reviewing the stock assessment in November.

The Team noted that the proposed rockfish fishery opening in May could conflict with the longline survey for sablefish. Tom Pearson noted that in the past start dates for rockfish were changed specifically to avoid or minimize interactions with the longline survey. Julie Bonney suggested that if fishermen are appropriately notified about the location and dates of the sablefish longline survey, they can make a voluntary effort to avoid those areas and times.

**Other Slope Rockfish: silver grey rockfish discussion.** Dan Falvey (ALFA) provided the Team an overview of current efforts under an EFP to develop hook and line gear for targeting underutilized species. He provided the Team a document describing the EFP utilizing shrimp fly troll gear and an estimate of the catchability results and bycatch using this gear type. He noted that the gear works particularly well for targeting silvergrey rockfish, but that fishermen are not permitted to target anything in the other slope rockfish (OSR) complex because the whole complex is placed on bycatch-only status from the beginning of the year. He requested Plan Team input on the conservation concerns with potentially allowing a directed fishery under the OSR complex, and/or possible recommendations for additional EFP work if opening the complex for directed fishing is not recommended at this time.

Team members questioned the bycatch of species using this gear and were shown results indicated that the bycatch was minimal presumably due to the fishing habit of finding a school and then targeting that school specifically. Concerns were expressed that bycatch might be greater if the fishing practice did not include surfing directly on the school.

Team members questioned the level of economic incentive to fish for silvergrey rockfish. Dan indicated that there may be a market for it that there was a higher price per pound was found in 2005 compared with 2004. He noted that it would not be a high value fishery for awhile but represents a possible entry level fishery opportunity to augment income without high overhead costs.

Stock assessment authors noted that age and growth information for the species is contained in the assessment for OSR. The Team reviewed the current survey data and the 2005 ABC noting that the ABC is unlikely to increase this year substantially. The Team expressed concerns that if the OSR complex were opened to directed fishing it would be possible to take the entire TAC on silvergrey rockfish. The Council has specifically established the TAC at a level to meet incidental catch needs. If the fishery were opened concerns were expressed regarding the potential for localized depletion, and the need for improved port sampling and better age data from the unexploited population.

Dan Falvey indicated his desire to protect the fishery from over exploitation by limiting the gear type. It was noted that this would require an FMP amendment to do so. Team members expressed concern that if the complex were open to all gear types there could be increased halibut bycatch from baited longlines.

The Team recommended that the EFP be continued to collect additional data prior to opening the complex to directed fishing. The Team felt that additional data are required to appropriately assess and manage this stock. Opening a complex to directed fishing is not generally recommended. Hence, continuing an EFP while the needed data collection systems and management analyses (e.g., an FMP amendment) are initiated seems reasonable. It was noted that collecting data on the age distribution of this lightly exploited stock may be a useful baseline for management.

Specific recommendations for the EFP included the following:

- Look at OR and CA data on similar gear for seabird interactions
- Longer gear train could result in degraded product.

The Team recommended that cooperative research funding be pursued in order to age otoliths collected under the EFP. The Team discussed the possibility of also pursuing an amendment to limit the gear type, but in the absence of that felt that it was premature to open the complex to directed fishing at this time.

The meeting adjourned 4:45pm Wednesday September 21<sup>st</sup>.

## BSAI Groundfish Plan Team

The BSAI Team convened from 1:30 to 5:00 PM on Wednesday, September 21, 2005 at the AFSC, Seattle. Joint Plan Team members Kathy Kuletz (USFWS) and Tien-Shui Tsou (WDFW) attended the GOA Plan Team meeting. The agenda included: 1) proposed 2006/2007 BSAI groundfish specifications; 2) ecosystem considerations; 3) Bogoslof pollock survey and stock assessment; 4) 2-year Aleutian Island stock assessment cycle; 5) draft “other species” assessments; 6) dark rockfish FMP amendment.

**2006/2007 BSAI groundfish specifications.** The BSAI Plan Team reviewed the following tables provided by Ben Muse, NMFS AKRO: 1) the 2006 BSAI specification table that was implemented in 2005 and will start the 2006 season until it is replaced; 2) projected specifications for the 2006/2007 seasons that include projected catch through 2005; and 3) a table comparing the two. The projections for Tier 1 to 3 species used species-specific AFSC population models, which include information on age structure, growth and reproduction, and natural and fishing mortality. The projections follow procedures adopted by the Council and detailed in the TAC specification environmental assessment (EA) (see Appendix). The projections for Tiers 4-6 “roll over” the 2006 final specifications.

The Team noted that two of the 2006 ABC projections are higher than those that are in place for the start of the 2006 fishing year. The Greenland turbot ABC projection increased by a factor of 3 (from 3.6 to 11 mt) and the Alaska plaice ABC projection is higher by 68 percent. The 2005 projection model assumed that those TACs would be completely harvested in 2005, which resulted in lower ABC estimates for 2006. The 2006 projection model no longer makes that assumption; therefore the revised ABC projections are higher for those species (since fewer fish were actually removed).

The Team recommended adoption of the projected OFL and ABC for the 2006/2007 seasons. These recommendations will be published in the proposed rule for 2006/2007 specifications, but will not be used to start the fishing year.

**Inclusion of ecosystem considerations into assessment chapters.** The Team recalled that the 2004 Atka mackerel assessment incorporated ecosystem considerations into an examination of the appropriate ABC level due to close collaboration between the author Sandra Lowe, AFSC and Kerim Aydin, AFSC Resource Ecology and Ecosystem Modeling (REEM). The Team recognized that such collaboration could not be achieved for every BSAI assessment this year. The Team identified its highest priority for broadening the use of ecosystem considerations as the 2005 pollock assessment. Dr. Aydin also will provide information at the November 2005 meeting to assist the Team in setting a timeline for broadening the use of ecosystem considerations in the remaining assessments. He encouraged all authors to review the ecosystem databases on the REEM website and provide comments on corrections or enhancements. The Team also plans to address how well each stock assessment meets guidelines for ecosystem considerations during its November meeting.

**Bogoslof pollock.** The Council manages three management areas for walleye pollock in the BSAI: Bering Sea shelf, Aleutian Islands, and Aleutian Basin (comprised of the Donut Hole and Bogoslof Islands area). The degree to which pollock intermix among these areas is unknown.

Taina Honkalehto reported on the 2005 Bogoslof EIT pollock survey (a survey was not conducted in 2004). She identified three periods of Bogoslof pollock abundance. Abundance declined during 1988-1993, following a dominant 1978 year class around Bogoslof Island with an average biomass of 1.5 M mt. It stabilized during 1994-1999, with a dominant 1989 year class and an average biomass of 540,000 mt concentrated in Samalga Pass and northeast of Umnak Island. Since 2000, the EIT biomass estimates have averaged about 230,000 mt.

Jim Ianelli presented a newly developed age-structured assessment model for Bogoslof Island region pollock. This model makes extensive use of the EIT surveys since fishery data are limited. This assessment evaluated trends in recruitment and abundance of pollock from this region using all available data. An initial age-structured model was presented in 1997 as part of the BSAI pollock assessment chapter. At that time, the SSC noted that the stock is believed to extend outside the range of the Bogoslof Island area. This model partially addresses those concerns by including more data from the region and allowing survey catchability to be freely estimated. A concern discussed by the Plan Team was whether pollock in the Bogoslof during winter are on the eastern Bering Sea shelf during summer, and thus would be double-counted in AFSC surveys.

The fishery has been closed since 1992 following high catches between 1985 and 1991. The extent to which this stock is vulnerable to fisheries in other regions (e.g., eastern Bering Sea shelf, Russian waters) remains a key question. As with pollock in other waters, an anomalous 1978 year class dominated the Bogoslof Island region. Results from the age-structured analysis suggest that largely due to the 1978 year class the peak biomass in the Bogoslof Region was nearly ten times what might be expected under average recruitment conditions (where the average included the 1978 estimate). As with other pollock stocks, it is clear that Bogoslof region pollock abundance is highly variable due to large year class fluctuations.

The author presented some preliminary alternative values for setting the 2006 ABC: 1) 5,500 mt using the SSC's procedure (with a rebuilding target of 2 M mt); 2) 56,925 mt under Tier 5; 3) 184,090 mt under Tier 3a of the age-structured model; and 4) 470 mt using recent 5-year average fishing mortality level to allow bycatch removals in other fisheries.

**Other species.** AFSC staff prepared two draft assessments in response to proposed revisions to the National Standards and a planned joint BSAI/GOA FMP amendment to set specifications at the group level for sharks, skates, squid, sculpins, and octopus for the 2007 fishing year. The Team endorsed the proactive response by the AFSC in preparing these assessments and encourages the development of draft assessments for the remaining BSAI other species groups: sharks and skates.

Elizabeth Conners, AFSC, presented a draft assessment for BSAI octopus. The author noted that historical catch is much less than estimated biomass for all species of octopus. The Team concurred with the analytical approach and the author's recommendation for using tier 5 for this group. The Team recommended that the author: 1) examine the BS and AI separately; 2) include information on appropriate maximum retention allowances by gear and fishery; 3) include ecosystem considerations as octopus are an important forage species for species such as Steller sea lions and northern fur seals; and 4) explore using habitat associations as a means of identifying catch to species.

Rebecca Reuter, AFSC, presented a draft assessment on BSAI sculpins. The Team concurred with the authors' recommendation for managing sculpins at Tier 5, and recommended adding species-level information.

**2-year cycle for Aleutian Islands assessments.** Anne Hollowed, AFSC, discussed the protocol in the BSAI and GOA FMPs for 2-year assessments cycles where biennial surveys occur. The GOA Plan Team adopted this cycle in 2004 for some 2005 GOA rockfish and flatfish assessments. The Team endorsed biennial assessments for the Aleutian Islands for Pacific Ocean perch, northern rockfish, and the other rockfish assemblage.

**Dark rockfish FMP amendment.** The Team recommended that the Council add an alternative to analyze the effects of removing dark rockfish from the BSAI Groundfish FMP in the analysis that it initiated for the Gulf of Alaska FMP in 2004.

# GOA PLAN TEAM

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**A. Joint Plan Team Meetings**

<b>Mon Sept 19<sup>th</sup></b>		<b>Room 1055 (Observer training room)</b>
13:00	Introductions	Scheduling, adoption of agenda
13:15	Council and AFSC update	BSAI salmon, GOA rockfish, GOA/BSAI other species, Habitat Areas of Particular Concern, Ecosystem approach to mgt (EAM) actions Habitat and Ecological Processes Research (HEPR), Marine Stewardship Council, Center for Independent Experts, Proposed Rule on NS1 guidelines
14:00		Economic SAFE
14:30	Break	
14:45	EA & Projections	Research Priorities Standardized projections and methods used for EA; Discussion of multi-year EA/EIS for specifications
16:00		Information Quality Act
<b>Tues Sept 20<sup>th</sup></b>		
9:00	Sablefish	Update on State removals, recent catches, population trends in AK compared to elsewhere, upcoming symposium
	Non-target	Sensitive non-target species update
10:30	Break	
10:45	Rockfish	Rockfish management paper GOA dark rockfish amendment(possible combined GOA/BSAI)
12:00	Lunch	
13:00	Ecosystem	AI Fishery Ecosystem Plan, Ecosystem Considerations Chapter review
15:00	Break	
	Ecosystem	Ecosystem Considerations Chapter review (continued)
16:00	Economic	Economic SAFE report and other socio-economic information
16:40	Research priorities	Update council list (will be related to NPRB themes)
<b>Wed Sept 21<sup>st</sup></b>		
09:00	Surveys	Survey updates: EBS bottom trawl, GOA LL survey, EIT survey, GOA bottom trawl surveys
09:30	MSE	Management Strategy Evaluation update
10:15	Models	BSAI and GOA Pacific cod models
11:30	Mammals	Marine Mammal assessments: fur seals, SLLs, Right Whale CH designation

**B. Gulf of Alaska Groundfish Plan Team**

<b>Wed Sept 21<sup>st</sup></b>		<b>Room 1055 (Observer training room)</b>
13:00	Other species	Discussion of available information for November SAFE report
	Rockfish	SR/RE breakout, OSR(silver grey rockfish EFP results) GOA rockfish pilot project (POP, northerns and PSR)
15:00	Assessments	Pollock: Shelikof survey, 2006 TAC/ABC projections (from EA), other issues.
	Planning	Wrap-up/planning for November meeting
	Other Business	As needed

**C. Bering Sea/Aleutian Islands Groundfish Plan Team**

<b>Wed Sept 21<sup>st</sup></b>		<b>Room 2039 (NMML Room)</b>
13:00	Rockfish	Rockfish working group studies
	Bogoslof	Survey results, new model, Donut hole
15:00	Assessments	2-year cycle for Aleutian Islands stocks, Atka mackerel survey approaches, Octopus, Skates, Sharks, and Sculpins
	Other Business	As needed

Document list presented at the September 2005 Plan Team meeting  
 The following lists the documents available for download as presented at the September groundfish Plan Team meetings held in Seattle.  
 Selecting links will allow users to download the electronic documents.

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## Joint Plan Team

### Document

[Agenda](#)

[List of Plan Team Members](#)

[Ecosystem approach to Management \(EAM\)](#) (Diana Evans)

[Aleutian Islands Fishery Ecosystem Plan—Project planning](#) (Diana Evans)

[Area-specific Management for the Aleutian Islands Discussion Paper](#) (Diana Evans)

[Update on council actions](#) (BSAI salmon, GOA rockfish, HAPC, Amndmnt 80; Diana Stram)

[Research priorities, Res. Priorities NPRB Letter](#) (Jane Dicosimo)

[NS1 Proposed rule and Council memo, Federal Reg Announcement for NS1](#) (Grant Thompson)

[Ecosystem / Ecosystem assessment considerations chapter](#) (Jennifer Boldt)

[Non-target species Sensitivity key](#) (Rebecca Reuter)

[Rockfish management, Supplemental paper](#) (Jane Dicosimo)

Environmental Assessment ([TAC specs](#); Ben Muse)

Marine Mammal Assessments ([Presentation](#); Lowell Fritz)

[Rockfish depletion study](#) (Dana Hanselman)

Sablefish issues ([Summary](#); Tory O'Connell)

[Economics Draft, summary presentation](#) (Terry Hiatt and Ron Felthoven)

## BSAI Plan Team

An alternative model for BSAI Pacific cod assessment ([Presentation](#), or [handout](#); Grant Thompson)

[An age-structured assessment model for Bogoslof pollock](#) (James Ianelli)

[Bogoslof EIT survey presentation](#) (Taina Honkalehto)

[Presentation on alternative Atka mackerel survey approaches](#) (Liz Conners)

[Octopus draft Assessment](#) (Liz Conners et al.)

[Sculpin Draft](#) (Todd Tenbrink et al.)

## GOA Plan Team

[Memo to SSC for 2005 GOA SAFE authors to address rockfish issue](#) (Bill Richardson)

Shelikof and summer EIT Survey results ([Presentation](#)) (Chris Wilson)

[SR/RE species ID study](#) (Dana Hanselman)

[Silvergrey rockfish](#) (Dan Falvey)

[SEO Fishery development \(Presentation\)](#) (Dan Falvey)

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