

A fisherman wearing a red jacket and blue gloves is holding a large, dark fish on a boat deck. The fish is suspended by a hook. The background is a blue metal structure of the boat. The text is overlaid on the image in white, bold, sans-serif font.

SCIENTIFIC AND STATISTICAL  
COMMITTEE DRAFT REPORT  
to the  
NORTH PACIFIC FISHERY  
MANAGEMENT COUNCIL

# Nominations

- **B-1 Plan Team Nominations**

The SSC reviewed the Plan Team nominations of Ben Williams (ADFG) and Patrick Lynch (S-n-T Headquarters) to the GOA Groundfish Plan Team, and Alan Hicks (IPHC) to the BSAI Groundfish Plan Team. The SSC finds all of these nominees to be well qualified, with appropriate expertise that will assist the Groundfish Plan Teams. The SSC recommends that the Council approve these nominations and look forward to having Lew Coggins joining the SSC in October.

# SSC Draft Minutes June 2016

- **C-4 Tanner Crab Custom Processing**
  - **Did not get to this agenda item**
- **C-6 Squid to Ecosystem**
- **D-1 Research Priorities**
- **NMFS Climate Change**
- **D-2 Electronic Monitoring**

# SSC Draft Minutes June 2016



# C-6 Squid to Ecosystem

**The SSC recommends that the document not yet be released for public review.**

- It is unclear whether the proposed actions will have no significant impacts, either beneficial or adverse.
- The description of the Alternatives and Options as described are somewhat confusing. There are a large number of permutations and combinations of options, with important implications if one option, but not another, is chosen.
- Under Alternative 2, if Option 2 is not selected, then the Council would need to define what is considered to be directed fishing, as an EC determination requires that a species is not targeted. This is a major deficiency in the analysis.

# C-6 Squid to Ecosystem

**SSC recommends that the document not yet be released for public review.**

- Do the limitations on retention and sale apply to conditions before a species is moved into the EC, or only when it is an EC?
- The proposed rule for revised NS1 guidelines was published January 20, 2015 and the Final Rule is to be published in the near future. The analysis should briefly indicate whether this revision is expected to impact.

# C-6 Squid to Ecosystem

The proposed actions, to move squid to EC was proposed because of the difficulty to assess squid stocks, and the management problems associated with constraining squid catch in the BSAI

- What alternate methods have been considered, and why they were deemed unworkable.
- Such documentation is important to fully evaluate whether some option could render Alternative 1 more viable.

# C-6 Squid to Ecosystem

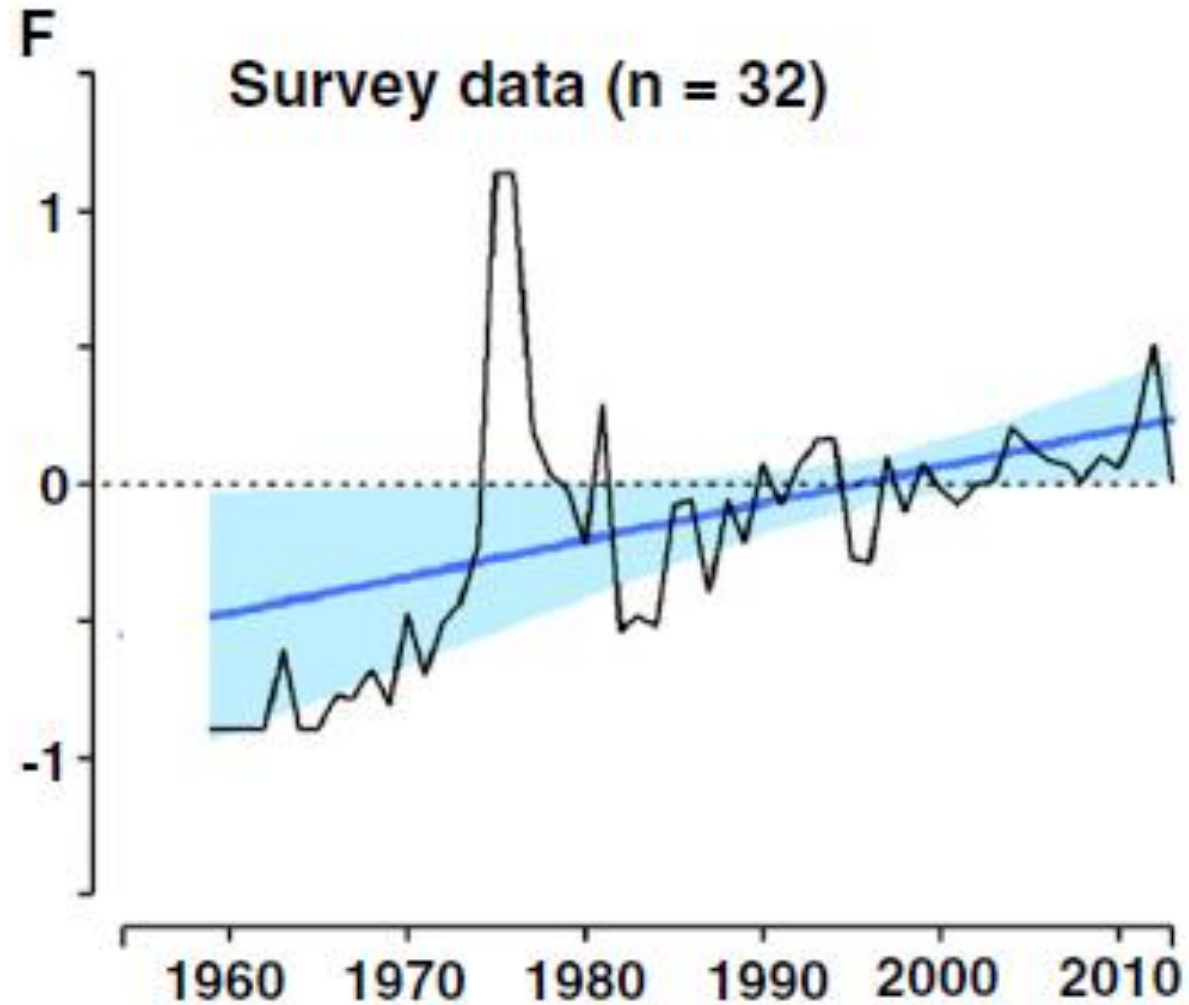
It would seem that methods could include:

- Redefining the time period over which catches are averaged,
- Biomass estimation using ecosystem models
- Biomass estimation using hydroacoustic surveys such as shown in the BSAI squid SAFE for 2016
- Methods used in a recent analysis of global increases in cephalopods using survey and fishery data (Doubleday et al. 2016; Current Biology 26(10):R406-R407).



# C-6 Squid to Ecosystem

Doubleday et al. 2016; Current Biology 26(10):R406-R407



# D-1 Research Priorities

The SSC reviewed the **nine new research priorities submitted by the Plan Teams** and provided ranks for each project. The SSC also reviewed research priorities discussed during SSC meetings in 2015/16. **Six new projects were identified by the SSC.**

- Meta-population of scallops, SSC rank – Important
- Development of a statewide survey program to address catchability in different geographic areas. SSC rank = Urgent, no action
- Implementation of a statewide scallop survey. SSC rank = Critical ongoing monitoring,
- Resolve conflicting information on seasonal molt and mate timing for Norton Sound Red King Crab. SSC rank = Important; no action
- Expand research on Pacific herring genetics to assess overwintering and spawning grounds SSC rank = Important; no action
- Estimates of herring PSC from commercial trawl landings to address efficacy of current herring closure areas. SSC rank = Urgent; no action

# D-1 Research Priorities

- The SSC considered the **new research themes proposed by NPRB and Council Staff**. The **SSC agrees** that the addition of overarching research themes such as those proposed by NPRB **would provide a very useful way to consolidate research projects under a common theme and facilitate** matching Council research priorities directly to NPRB research themes. It was noted that some cross-cutting studies may be responsive to multiple themes.
- The SSC reiterates its request to have an **option to see SSC proposed prioritization ranks** because the current configuration of the database only allows visualization of the Council's prioritization scores.

# D-1 Research Priorities

- The SSC recommends that **meta-data** on the research project(s) that are responsive to NPFMC research priorities **is added to the database**. This information might include the PI(s), contact information for the PI(s), the title of the research project, an abstract of the research project, project start and end years, a list of publications derived from the project, and current status of the project (no action, pending, partially under way, under way, completed). Ideally PIs on an active research project would be contacted annually to obtain a brief progress report. It was noted that links of the NPRB database through a distributed network might expedite the addition of project meta-data into the NPFMC database

# D-1 Research Priorities

The SSC noted that the **addition of a new classification, “Important – Ongoing Monitoring”**, is needed. This added classification would allow the Council and its advisory bodies to distinguish between critical ongoing monitoring that is needed to assess the status and trends of communities, industry and living marine resources and important ongoing ecosystem monitoring.

The SSC agrees with the CPT’s recommendation that when research topics are consolidated under a general research category (e.g., project 147), that an **additional column** be added to the database **to indicate some of the high priority species** that might be candidates for targeted research under a consolidated research theme.

# D-1 Research Priorities

The SSC reviewed discrepancies between past SSC and Council research ranks. There appears to be some confusion between the interpretation of Urgent and Critical Ongoing Monitoring.

- The SSC continues to rank priorities in the Critical On-Going Monitoring if they are critical surveys without a specific end date.
- The SSC continues to rank research that is urgent and can be complete in one or two years in the Urgent category.

# NMFS Climate Strategy

The resulting document is much improved and more comprehensive in its treatment of ongoing and planned work relating to climate change.

# NMFS Climate Strategy

The SSC offers a few additional suggestions that the writing team may consider before the document is finalized:

- *Human communities*: One aspect of the Action Plan that could benefit from some additional discussion is the evaluation of climate change impacts on human communities. The SSC realizes that weaknesses in the relevant sections largely reflects **the relative lack of resources to address socio-economic considerations** compared to bio-physical data collection and analytical capabilities.



# NMFS Climate Strategy

- **Mitigation:** The document includes a brief discussion (p. 15/16) on the potential for climate change to result in local extirpation of some species. We suggest that this section should distinguish between target species and non-target species. **Mitigation measures for target species (e.g. snow crab)** could be analyzed in the context of existing or modified harvest control rules, which may be sufficiently precautionary to ramp down F at low levels of abundance to slow down potential declines. However, possible declines in non-target species such as forage fish will require other mitigation approaches.
- **Collaborations and partners:** The Climate Strategy document overall seems to downplay the importance of contributions and collaborations on climate research in the Bering Sea. While a section near the end lists many of the collaborators outside NOAA, it would be good to **stress the importance of these collaborations throughout the document.**
- **National context:** The presentation included some broader context for addressing climate change issues within NOAA fisheries, in particular the link to ecosystem-based management. It would be useful to **provide the broader context** within the document to clarify if and how this Action Plan is linked to national efforts and to climate change strategies in other regions.

# NMFS Climate Strategy

- ***Prioritization:*** The SSC previously discussed the need for prioritization. The document acknowledges this need but does not yet **provide a real strategy for balancing monitoring, process studies, laboratory studies and modeling**. This will be challenging and perhaps the document could provide some guidance on how it could be accomplished.
- ***Coordination of climate change efforts:*** There are a large numbers of programs and people across the AFSC and PMEL who directly or indirectly deal with climate issues. This document is a great start to identifying an overall climate strategy for NOAA Fisheries, but there may also **need to be some more centralized coordination** and structure for these efforts to provide a strong voice for climate change issues in upper management to ensure that the program gets the resources it needs.
- ***Management options:*** Fisheries management in the Bering Sea has become fairly rigid as fisheries have become rationalized and bycatch is tightly regulated through PSC limits, MRAs, etc., which limits viable options for alternative approaches. The document could **highlight the need to invest some resources into exploring reasonable alternatives to the current management paradigm** in order to maintain greater flexibility in the face of climate change.

# D-2 Electronic Monitoring

The SSC is optimistic about the role of EM for catch estimation in the future but considers the EMWG's proposed implementation timeline to be **extremely optimistic** and is concerned that there **may not be sufficient opportunity for review**.

## **Catch estimation process:**

- Unverifiable haul-size information poses a serious data quality issue for catch estimation.

## **Impacts of implementation:**

# Questions?

