

## AGENDA

Center for Independent Experts Panel Review Meeting for the  
Review of the 2010 Biological Opinion on the Effects of the  
Alaska Groundfish Fisheries on Steller Sea Lions and Other Endangered Species

Seattle, Washington  
August 1-2, 2012

David Fluharty, Ph.D., Meeting Chair

### August 1, 2012

- 9:00 – 9:10 Welcome and introductions (Dave Fluharty)
- 9:10 – 9:30 Purpose of the meeting, overview of the CIE Review and Terms of Reference (Dave Fluharty)
- 9:30 – 12:00 Presentations by Alaska Fisheries Science Center
1. SSL abundance, vital rates, telemetry data, food habits (Tom Gelatt)
- [Break]
2. Stock assessment updates for SSL prey (Sandra Lowe - Atka mackerel; Grant Thompson - AI Pacific cod; Steve Barbeaux - AI pollock)
  3. Spatial distribution and abundance of SSL prey (Libby Logerwell)
- 12:00 – 1:00 Lunch
- 1:00 – 3:00 Presentations by the States of Alaska and Washington
1. Introductory summary (Doug Vincent-Lang and Bill Tweit)
  2. AK/WA science review panel findings (Dave Bernard and Andrew Trites)
  3. Update on additional, recent data and research results (Doug Vincent-Lang)
  4. Concluding summary (Doug Vincent-Lang and Bill Tweit)
- 3:00 – 3:15 Break
- 3:15 – 4:30 Presentations by the North Pacific Fishery Management Council (Steve MacLean)
1. Review of Council comments regarding development of RPA
  2. Review of SSC comments on available science and analysis
  3. Council views on need for additional information
  4. Council concern about the level of information available to support a link between natality, nutritional stress, and fisheries interactions
  5. Any new information identified by the SSL Mitigation Committee to date

August 2, 2012

9:00 – 9:10 Welcome and introductions (Dave Fluharty)

9:10 – 9:20 Structure for presentations, consistent with the Terms of Reference (Dave Fluharty)

9:20 – 11:30 Fishing Industry Presentations

1. Gerry Merrigan, Fisherman and former NPFMC member
  2. John Gauvin, Scientific advisor to trawl industry participants
  3. Dave Fraser, Longtime Aleutian Islands fisherman
- [Break]
4. Kenny Down, Representative of the freezer longliner fleet
  5. Todd Loomis, Director of government affairs for Ocean Peace, Inc.

The industry panel will provide perspectives regarding the scientific analysis used in the BiOp, the operational characteristics of Aleutian Island fisheries and their interaction with SSL and critical habitat, the management measures adopted pursuant to the 2010 SSL Biological Opinion, and possible alternative management measures or adaptive management experiments.

11:30 – 12:30 Lunch

12:30 – 1:30 Jon Warrenchuk, Oceana (also on behalf of Ocean Conservancy, Greenpeace, and the World Wildlife Foundation)

The presentation will address new information since 2010 and whether such information affects the analysis or conclusions of the BiOp, including a discussion of updated stock assessment and trends of SSL prey abundance, and recent relevant publications.

1:30 – 2:15 Markus Horning, Oregon State University

1. Update contemporary survival rate estimates for the eastern Gulf of Alaska region from Horning & Mellish, PLoS ONE 2012 (Chapter 2 mandatory document that presented results based on 12 mortalities detected via implanted telemetry transmitters in juvenile SSL from Nov. 2005 through Nov. 2011) with data based on 16 mortalities detected through June 30, 2012.
2. Update our contemporary regional (eastern GoA) predation estimate to at least 14 predation events in 16 detected mortalities (we previously reported at least 11 in 12).
3. Clarify the intent and applicability of the density dependent SSL population conceptual model we presented in the referenced PLoS ONE paper. The intent of this conceptual model is not to make inferences on causes of the past

population trajectories of western SSL. The intent is to highlight linkages between the hypothesized, age-structured and density-dependent predation and vital rates including survival, female recruitment, and pup production.

4. Present an additional output from this conceptual model that pertains to the use of pup to non-pup ratios (P/nP) from surveys to make inferences on natality (birth rates), as applied by the NMFS to the western Aleutian Islands. Our conceptual model suggests that P/nP can be substantially depressed even with constant natality for declining populations under high predation pressure.

2:15 – 2:30 Break

2:15 – 3:00 Andrew Trites, University of British Columbia

1. An update of Trites et al. (2010) that includes additional data and analyses that addressed review comments received from NMFS.
2. Results of ongoing proximate analysis of Atka mackerel that addresses the nutritional quality of this prey species relative to the energetic requirements of Steller sea lions.
3. Predicted biomass of Atka mackerel, Pacific cod and walleye pollock available to Steller sea lions in the western Aleutians relative to the designated critical habitats (from Gryba et al. 2012).

3:00 – 3:45 Shannon Atkinson, University of Alaska Fairbanks

Summarize results from recent feeding trials (Calkins et al. 2012) demonstrating juvenile SSL experienced rapid growth on pollock diets in fall and spring: 1) measurement of average daily mass gain or loss, 2) measurement of average daily intake, 3) proximate analysis of the pollock diet, and 4) assessment of body composition. The results are not consistent with existing published mechanisms regarding digestive capacity of growing (juvenile) SSLs (Rosen and Trites 2000, 2004). Further, the ability to understand the feeding ecology of SSLs and the associated dietary implications is greatly aided by protocols well developed in the animal science literature and we propose directions that this line of work should pursue. In particular, information on the proximate analysis of diets of different prey species and their implications on SSL bioenergetics is likely to be of considerable importance to managing for the recovery of this ESA listed species.

3:45 – 4:30 Final questions from the CIE reviewers for any of the presenters