C. MINUTES of the Technical Subcommittee

51st Annual Meeting of the Canada-U.S. Groundfish Committee's Technical Subcommittee (TSC)

May 5-6, 2010 Nanaimo Convention Center 101 Gordon Street, Nanaimo, BC V9R 5J8 Chair, Dave Clausen, AFSC Host, Rick Stanley, DFO

Wednesday, May 5

- I. Call to Order Dave Clausen, Chair, called the meeting to order at 9:20 am, May 5, 2010
- II. Appointment of Secretary Rick Stanley, DFO Pacific Biological Station
- **III. Introductions -** Greetings from Greg Workman, Section Head for DFO's Groundfish Section, Marine Ecosystem, and Aquaculture Section. Stephen Phillips sent his apologies for not attending owing to an illness in the family.

Reports that were made available on line before the meeting, or provided at the meeting, included the 2009 TSC report, and the 2009 reports from SWFSC, ODFW, WDFW, NWFSC, IPHC, DFO, AFSC, ADFG and CARE. The 2010 report will be compiled by Stephen Phillips. ODFW also provided Information Report 2009-04: Length and age at maturity for female yelloweye rockfish (*Sebastes ruberrimus*) and cabezon (*Scorpaenichthys marmoratus*) from Oregon waters based on histological evaluation of maturity.

List of Participants

Cleo Brylinsky	Alaska Department of Fish and Game, Sitka,
	(cleo.brylinsky@alaska.gov)
Troy Buell	Oregon Department of Fish and Wildlife, Newport,
	(troy.v.buell@state.or.us)
Dave Clausen	Alaska Fisheries Science Center, NOAA, Auke Bay Lab, Juneau,
	(dave.clausen@noaa.gov)
Claude Dykstra	International Pacific Halibut Commission, Seattle,
	(claude@iphc.washington.edu)

Adam Keizer	Fisheries and Aquaculture Management, Canada DFO, Vancouver,
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Aimee Keller	Northwest Fisheries Science Center, NOAA, Seattle,
	(Aimee.Keller@noaa.gov)
Shayne MacLellan	Science Branch, Pacific Biological Station, Canada DFO, Nanaimo, (Shayne maclellan@dfo-mpo ac ca)
Steve Ralston	Southwest Fisheries Science Center NOAA Santa Cruz
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Kate Rutherford	Science Branch Pacific Biological Station Canada DFO Nanaimo
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Lynne Yamanaka	Science Branch, Pacific Biological Station, Canada DFO, Nanaimo,
	(Lynne.Yamanaka@dfo-mpo.gc.ca)

- IV. Approval of the 2009 report The 2009 Report was approved at 9:30 am.
- V. Approval of the 2009 agenda The 2009 Agenda was approved at 9:35 am.
- VI. Brief historical review of TSC for new participants provided by various members.

VII. Working Group Reports

A. Committee of Age Reading Experts (CARE)

Shayne MacLellan reviewed CARE activities that followed the CARE 2009 workshop. The results of the workshop were summarized during the previous TSC meeting. During the workshop, seven CARE to CARE recommendations were developed. Related to these, CARE subsequently assembled and presented a poster on the mission, history, and

accomplishments of CARE at the August 2009 International Otolith Symposium in Monterey, California. CARE has tasked itself with updating the CARE manual and exploring the possibility of a meeting in 2010 to review results of the sablefish otolith exchange study. There were no outstanding TSC to CARE recommendations that required action and no outstanding recommendations from CARE to TSC. Shayne noted that Moss Landing has not sent a representative to the last two CARE meetings. With the retirement of Greg Cailliet and Allen Andrews moving to Hawaii, future MLML representation may be in question.

Regarding particular species, Shayne mentioned that she was not hopeful concerning the development of ageing methods for shortspine and longspine thornyheads; historical and ongoing attempts to age these species have showed little promise to date. She also reported that study (AFSC) that included used of a known-age sablefish otoliths indicated a tendency to underage sablefish.

Steve Ralston proposed that an attempt be made to compile a catalogue across agencies of what exists in archives of ageing materials. These materials could be used to develop additional ageing chronologies. This idea was endorsed by TSC (see TSC to CARE recommendations below).

Claude Dykstra noted that the IPHC is now maintaining a clean/dry reference collection in addition to the main collection which is stored in glycerol to facilitate future analyses that might otherwise be corrupted by the glycerol medium. The AFSC has recently switched to glycerol from alcohol owing to lab safety concerns. Shayne noted that older historical DFO sablefish samples (in glycerol) seem to suffer from de-calcification and there is ongoing concern about the status and quality of archived samples. In reply to a query regarding the impact of ocean acidification on otoliths, she said that little had been published. She referred members to a recent paper (Checkley et al. 2009, Nature vol. 324) where, contrary to expectations, study results indicated that larval fish otolith growth was enhanced by elevated CO_2 .

B. Trawl Survey Working Group Report

There was no trawl survey WG meeting in 2009; however the committee endorsed a meeting for early 2011. TSC suggested that the format be expanded to include hook-and-line surveys (see TSC to TSC recommendations below). Discussion topics for the meeting would include survey design issues, operational issues, and updates concerning at-sea methods of data acquisition.

C. Yelloweye rockfish working group

TSC originally started the yelloweye rockfish WG to discuss the potential for conducting a coast wide assessment for yelloweye. There has been no action on this issue although all yelloweye rockfish researchers have shared their data and are open to the idea of cooperative work in the future. Since this WG has not been active in the past two years, the TSC recommended that it be de-activated until needed.

The yelloweye rockfish discussion, however, led into an extensive discussion on "no-take" survey technology. Lynne Yamanaka noted that DFO had moved from submarine to ROV

technology owing to cost. Troy Buell summarized ODFW's ongoing work with drop cameras. He suggested that this technique shows promise for indexing sedentary species. ODFW is also experimenting with stereo cameras. Mark Wilkins noted that AFSC is also working with stereo cameras. The research leads are Chris Rooper and Kresimir Williams. They plan to organize a workshop for September 2011 on stereo video technology. Mark also commented that a study comparing near-bottom trawl, ROV and drop camera performance was completed and should be written up this year. Contacts for this study are Chris Rooper, John Butler, and Kresimir Williams.

Steve Ralston noted that NMFS has funding for further development of no-take monitoring technology. It was his understanding that sometime within next 12 months, Liz Clarke (NWFSC), Mary Yoklavich (SWFSC), and John Butler (SWFSC) were planning a field study comparison of no-take monitoring technologies to include AUV, submersible, and ROV. Steve referred TSC members to the SWFSC report for a summary of work on passive-acoustic techniques.

As noted above, the NWFSC continues to experiment with mounting a camera in a midwater trawl net with the codend open. Theresa Tsou commented that WDFW plans to conduct comparative studies of longline gear with release mechanisms and submersible technology.

Following further discussion on no-take survey technologies, the TSC recommended that a workshop be held to bring together various groups working on these technologies (see TSC to TSC recommendations below).

D. Proposal for Data Poor Assessment Working Group or Workshop

Members from most of the agencies contributed to a discussion on developing methodologies for data poor assessments. Steve Ralston mentioned that at the NMFS National Stock Assessment Workshop this year, data poor assessments will be a major discussion topic and that a WG will produce a document with recommendations. There was a suggestion that TSC sponsor a workshop on data poor assessment methods or create a WG but the overall committee noted that there already appeared to be lot of activity in this field with numerous conferences and publications including books dedicated to the issue. The TSC did not endorse any specific recommendations on this issue.

E. Proposal to re-activate a TSC Hake Working Group

Greg Workman noted that the process to formally ratify the hake treaty between the U.S. and Canada has slowed and that each country has submitted "competing" assessments for the last three years. He suggested that the TSC Hake Working Group should be reactivated. Following general discussion on the actual role of this WG, the TSC endorsed the idea but noted that given the relatively high profile that this WG would receive, initial discussion should focus on development of a Terms of Reference (see TSC to TSC and TSC to Parent Committee recommendations below).

VII. Other Topics

Representatives were invited to elaborate on select issues from their reports or add any items that were omitted from their reports.

A. Marine Reserves

Troy Buell noted that Oregon plans to have two new MPAs in place in 2011 (Redfish Rock and Otter Rock) and are now collecting reference data in the areas. NGOs are offering substantial research funding to work on marine reserves in Oregon. Steve Ralston commented that it is difficult to obtain funding to provide monitoring of existing MPAs in California. Lynne Yamanaka noted that DFO has begun ROV monitoring in selected MPAs from among the total of 164 however, no "before" studies had been conducted on these locations. Various members noted that "compliance" was suspected to be poor in MPAs.

B. Genetics and stock structure

The TSC discussed the issues of separating cryptic rockfish species. Rick Stanley noted that while managers in Canada and the US may be allowed to manage an aggregate grouping of species, the absence of catch data, survey indices, and biological sampling for each species separately, renders stock assessment problematic. This leaves managers vulnerable to the criticism that quota management is not possible, and, by definition, each of the populations can be considered "threatened or endangered". Furthermore, fisheries that catch each species may find it difficult to attain eco-certification.

Positive identification of blackspotted and rougheye rockfish based on visual characteristics continues to be a problem in both B.C. and Alaska. Aimee Keller noted that NWFSC trawl surveys are attempting to separate blackspotted and rougheye rockfish at-sea while obtaining fin-clips from problematic specimens. Steve Ralston commented that in California they are having difficulties distinguishing between vermilion and sunset rockfish and also separating the two proposed "blue" rockfish species.

Dave Clausen noted that unpublished genetics work by Tony Gharrett (University of Alaska) indicates that Pacific ocean perch probably move less than 100 km and, at most, 400 km during their lifetime. Mark Wilkins noted that walleye pollock and Pacific cod show isolation by distance although the Georgia Basin population may differ from that of the Gulf of Alaska. Claude Dykstra commented that genetics work on Pacific Halibut continues to indicate a panmictic stock. If there were a dividing line it would be Amchitka Pass.

C. Western Groundfish Conference 2010 and 2012 Update

Dave Clausen noted that the abstracts from the 2010 conference will be online soon. There were 165 registrants, many signing up at the last moment including many students. The 2012 conference will be in Washington. The organizing committee has not yet been formed.

VIII. Review of Agency Groundfish Research, Assessment, and Management

A. Agency Overviews

There were limited additional comments to add to what was included in the Agency reports.

B. Multispecies studies

1. SWFSC

Steve Ralston noted that John Field (SWFSC) has been appointed to the PMFC's Ecosystem Plan Development Team. He also commented that the long-running midwater trawl YOY rockfish survey was conducted in 2009 on the RV *Miller Freeman* rather than the RV *David Starr Jordan*, which was recently retired. Catches in 2009 were consistent with previous years of colder water. Catches of rockfish were modestly above the long term trend for the first time since 2004. Work continued on the *Collaborative Optically-Assisted Acoustical Survey Technique* (COAST) to study rockfish dispersions and abundances. Lead staff members in COAST are Dave Demer and John Butler.

2. ODFW

Troy Buell noted that ODFW staff are conducting various studies directed at hypoxic zone monitoring, acoustic telemetry; maturity-at-age, and rockfish depth-dependent discard mortality estimates. They are also initiating a study of shrimp trawl impact on macrofauna (Bob Hannah).

3. NWFSC

Aimee Keller commented that the NWFSC is examining the catchability (q) of petrale sole by their survey nets. In particular, they are attempting to estimate the herding of petrale sole by the sweeps and bridles. They also continue to experiment with placing video cameras in the nets while leaving the codend open. They are also now equipping their survey nets to measure fluorescence, light, and oxygen. There was evidence of hypoxia in the more northern area of the survey. Jason Cope, a Research Scientist is examining data-poor assessment techniques.

4. WDFW

The WDFW black rockfish tagging project has been expanded to address more species. The Puget Sound trawl survey changed from a random to a fixed design. In 2008, one bocaccio was observed during an ROV survey in the San Juan area which translated to 4,000 bocaccio specimens after spatial expansion. A publication on Puget Sound rockfish biology was completed. Steve Ralston asked whether there was a genetic basis for separating Puget Sound rockfish species from outside populations. Theresa Tsou responded that there is no direct genetic evidence. The biological review team (BRT) report inferred the separation based on other rockfish species like copper, brown, quillback, yelloweye, and POP

5. DFO

DFO is conducting a pilot test version of the Australian *Ecological Risk Assessment of the Effects of Fishing* (ERAEF). The pilot focuses on 25 selected benthic species captured in the bottom trawl fishery of Hecate Strait. The lead researcher is Kendra Holt.

C. Stock assessment (general)

Steve Ralston recommended that assessment staff consider the work of Alec MacCall and E.J. Dick (SWFSC-Santa Cruz) on their Depletion Corrected Average Catch (DCAC) and Depletion-Based Stock Reduction Analysis (DBSRA) assessment procedures. They appear to show promise for assessing west coast rockfish and other species for which little more than average catch is available. It has been endorsed by the Pacific Fishery Management Council (PFMC) and used for over 40 species. It provides a relatively rapid method for providing harvest management advice for data poor species with estimates of uncertainty. A manuscript has been prepared and should be available by the end of June. The model will be added to the NMFS assessment toolbox and includes examples.

The SWFSC is also active in investigating an objective basis for adjusting ABCs relative to the uncertainty in the assessments for data-rich stocks. Steve Ralston led an effort by the PFMC's Scientific and Statistical Committee to quantify retrospective, among assessment, variation in biomass estimates, which was ultimately used by the PFMC in buffering ABCs below overfishing limits (OFLs). Washington, Oregon, and DFO all noted they are spending considerable time and effort in improving their reconstruction of groundfish catch histories.

D. By Species

1. Pacific Cod

See agency reports; no additional information reported.

2. Nearshore Rockfish

There was a general discussion on estimating post-capture rockfish mortality. Oregon has a publication on harvesting procedures that could aid individual rockfish recovery but there is no official California or Oregon policy on the handling of rockfish by harvesters. Steve Ralston noted that there is a published document which identifies the mortality rates assumed for estimating of total catch mortality. [Note: subsequent to the meeting Steve informed the rapporteur that this document can be found at <u>http://www.pcouncil.org/wp-content/uploads/chp4_0910.pdf</u>].

3. Shelf rockfish

Steve Ralston drew TSC's attention to a weight specific fecundity study developed by E.J. Dick (SWFSC). Results of that study have already been incorporated into the stock assessment of four rockfish species. SWFSC work is also continuing work on the passive

acoustic studies particularly on bocaccio. SWFSC updated the assessments on widow rockfish, bocaccio, and cowcod as well as worked on assessments of greenspotted and bronzespotted rockfish.

Troy Buell referred participants to the comments in the report regarding recreational gear experiments by Oregon to selectively capture yellowtail while avoiding yelloweye rockfish. Preliminary results appeared promising. ODFW has completed a paper on yelloweye rockfish age at maturity. Cleo Brylinsky reported that ADFG will be doing a submersible dive survey for yelloweye rockfish in Southeast Alaska in late July – early August.

Rick Stanley (DFO) reported that the Federal Minister of the Environment was expected to make a decision this fall (2010) on whether canary rockfish and bocaccio would be listed as "threatened".

4. Slope rockfish

Dave Clausen noted that OSU graduate student Linsey Arnold presented work at the Western Groundfish Conference indicating a positive relationship between maternal age and offspring quality for Pacific ocean perch. Dave mentioned, however, that similar work for quillback rockfish in Southeast Alaska indicated low correlation between maternal age and size of the oil globule in larvae. Steve Ralston commented that ongoing work by Susan Sogard has not consistently revealed such a relationship among rockfish species.

5. Thornyheads

Dave Clausen mentioned that Kris Munk and the ADFG ageing lab had validated their shortspine thornyhead rockfish ages with C^{14} techniques. Shayne MacLellan noted that the PBS sclerochronology lab, as with other labs, was attempting to age thornyheads but the irregularity in the patterns makes them difficult. There is also significant variation among samples in the readability of the otoliths.

6. Sablefish

Cleo Brylinsky (ADFG) commented that the recreational fishery for sablefish is continuing. The bag limit is 4/day, with a 4 fish possession limits and an 8 fish annual limit. The technical specifics of the "permitted" electric sport reel have been officially defined. She also noted that sablefish taken in ADFG's Chatham Strait longline survey are now being counted toward the quota in this area. Because the survey takes about 10% of the quota, this has made some fishermen unhappy. Dave Clausen added that due to new regulations in the recently amended Magnuson-Stevens Fishery Conservation and Management Act, survey catches in U.S. Federal waters for sablefish and other species also count toward annual fishing quotas.

7. Halibut

IPHC staff commented that tagging and stock studies are continuing. Data continue to indicate one population with considerable movement/migration. Moving further towards the

assumption of one management stock has necessitated the development of new procedures for allocation among management areas. This process has been very controversial. Current methods are based on survey abundance which requires strong assumptions on relative catchability among areas. Ageing data indicates that mean length at age is the lowest ever seen and is declining.

The pop-up tagging program is proving informative. In 2009, the IPHC survey deployed Seabird units on each of the 1,200+ stations to collect oceanographic observations. They have an MSc student working on doing spatial interpolation of the O_2 data.

The IPHC is conducting a review of their survey design. In particular, the IPHC is considering allocating sets in proportion to relative density, expanding further north in the Bering Sea, and extending the survey deeper from 275 to 325 fm. They are also looking at whether bait costs can be reduced by changing bait although this would require a "connection" factor. Chum salmon has been the standard bait in the survey since 1998. The IPHC is considering holding a catchability workshop in 2011.

8. Flatfish

Aimee Keller noted that petrale sole (Washington-California) were assessed in 2009. The biomass is estimated to be depleted to about 11% of unfished biomass. The base model indicates that the spawning biomass has been below 25% of the unfished level continuously since 1953. Petrale sole are considered overfished and catches have been restricted for 2009 and 2010. A rebuilding plan for petrale sole is complete. Petrale sole abundance in the Washington-California survey has been declining.

9. Lingcod

Oregon is conducting a comparison of otoliths and fin rays for ageing lingcod. ADFG is reexamining old yelloweye rockfish submersible footage to estimate lingcod density by habitat type. WDFW is planning to conduct an assessment of Puget Sound lingcod.

10. Pacific hake

The TSC endorsed the re-creation of a TSC Hake Working Group (see TSC to TSC, and TSC to Parent committee recommendations).

11. Walleye Pollock

The AFSC noted that walleye pollock population in the Bering Sea has been decreasing. This had been attributed to five consecutive years of poor recruitment. The Gulf of Alaska population appears to be increasing.

12. Sharks, rays and Skates

DFO noted that an "outside" dogfish (i.e., excluding Strait of Georgia) assessment will be presented at PSARC on May 17. The work is a joint collaboration of DFO staff with Dr. Vince Gallucci of the University of Washington. The basking shark in BC waters is under

consideration for being designated as threatened or endangered by the Canadian Minister of the environment.

13. Pacific Mackerel and Sardines

The committee recommended that "Sardines and mackerel" be excluded from further TSC discussion.

14. Other Species

a) Cabezon

The fishery for live cabezon is increasing in northern California. Oregon has published a paper on cabezon biology.

b) Hagfish

ODFW has suspended their limited entry permit system for hagfish reverting to open access management due to funding limitations. There is a harvest guideline of 1.6 million pounds and a pot limit. There is a proposal under consideration in BC to restart a modest hagfish fishery. Commercial interest has also been expressed in SE Alaska. WDFW has initiated research on hagfish.

c) Grenadiers

Dave Clausen noted that there has been recent interest in starting a fishery on giant grenadiers in the Gulf of Alaska.

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E. Other Related Studies

1. SWFSC

Steve Ralston referred TSC to the SWFSC document for a summary of a number of economic studies on the various groundfish fisheries.

2. AFSC

Mark Wilkins commented that Craig Rose of the AFSC is testing the performance of salmon excluders in trawl nets. The AFSC also continues to benefit from the analysis of the specimens collected in a "benthic bag" which is attached to the bottom trawl gear in AFSC surveys. A number of new species of fish and invertebrates have been obtained with this device.

Mark Wilkins noted that the Northeast Fisheries Science Center (NEFSC) is taking a lead role in ensuring US fishery surveys do not represent a threat to marine mammals. The development of a review and permitting process has been problematic since NOAA is responsible both for issuing the permits and conducting the surveys. NMFS researchers are examining whether pingers on trawl gear would reduce trawl net/marine mammal interaction.

Dave Clausen reported that Pat Malecha of the AFSC's Auke Bay Lab conducted a trawling impact study in 2009 in which a submersible was used to re-examine a study site off Southeast Alaska that had been trawled in 1996. Although the study site was in a trawl closure area and had not been trawled since 1996, trawl damage to the sea floor and to sponges was still apparent after 13 years.

F. Other Items

1. Integrated groundfish management in B.C. - update

Rick Stanley provided a brief update on the Integrated Groundfish Project in BC. It is generally considered to be a success in BC and has been converted from a 'pilot study" to a quasi-permanent status. Some details of the monitoring are provided in a paper by Stanley *et al.* cited in the Canadian report. DFO and the TSC recommended that this topic can be deleted as a "permanent" item on the agenda for future TSC meetings.

2. Marine mammal predation on groundfish

Lynne Yamanaka noted that the preliminary results from an ongoing yelloweye rockfish assessment for the Strait of Georgia indicates that marine mammals may be consuming significant amounts of yelloweye rockfish and thus slowing or possibly even preventing the recovery of this population.

IX. Progress on 2009 Recommendations

A. From TSC to Itself

- 1. There is a need for a WDFW person to attend TSC and TSC should ask councils to send a participant. A letter should be sent out by December to directors of agencies, regions, centers, and states. This may promote attendance of TSC meetings. The TSC meeting this year was also lacking someone from Canada DFO management. It was likely hard to travel because this meeting was in Alaska, and the TSC hopes more can make it in future.
 - The TSC chair (Dave Clausen) sent these letters in early 2010.
 - Dr Theresa Tsou of WDFW attended this years meeting
 - DFO management was represented by both Adam Keizer and Rob Tadey.
- 2. As in recent past years, a summary letter explaining the purpose of the TSC and highlights of the meeting should be sent to agency supervisors and/or division directors.
 - These letters were sent by the TSC chair in summer 2009.

B. TSC to CARE - No recommendations were made

C. TSC to Parent Committee

- 1. The TSC recommends that a letter be sent to the Division Director of the NMFS AFSC Fisheries Monitoring and Analysis Division (FMA, sometimes referred to as the Alaska groundfish observer program) inviting a representative of this division to attend annual TSC meetings in the future.
 - This letter was sent. The invitation was declined.

X. 2010 Recommendations

A. From TSC to Itself

- 1. As in recent past years, a summary letter explaining the purpose of the TSC and highlights of the meeting should be sent to agency supervisors and/or division directors.
- 2. The TSC requests that members of the Trawl Survey Working Group coordinate with individuals who conduct hook-and-line surveys to plan and host a 3-day workshop in Seattle in late February 2011. Mark Wilkins and Rick Stanley offered to organize the workshop.
- 3. The TSC notes the number of projects related to the development of no-take monitoring technologies. It recommends that these initiatives would benefit from a 1-2 day workshop. Theresa Tsou has offered to initiate organization of a workshop on no-take monitoring methods to be held later in 2010.

B. TSC to CARE

1. Recognizing the value of carbon dating and other potential uses of archived ageing material, TSC recommends that CARE examine the feasibility of preparing an on-line summary of the material that is archived by each of the west coast groundfish research agencies.

C. TSC to Parent Committee

- 1. The TSC requests that the Parent Committee ask the AFSC to host the 2011 survey workshop in Seattle.
- 2. In the interim period while the Hake Treaty legislation is pending approval, TSC recommends that the Parent Committee create an interim Hake Working Group under the auspices of the TSC. Greg Workman has offered to initiate discussions

with Canadian and US staff on developing the Terms of Reference for this Working Group.

XI. Schedule and Location of 2011 Meeting

Dave Clausen will continue as chair for a third year. The location and date will be Oregon, Tuesday May 3 and Wednesday May 4. ODFW offered to host the meeting. Note: the Astoria location within Oregon was approved subsequent to the meeting].

XI. Other

The Parent Committee and TSC once again thanked Stephen Phillips and the Pacific States Marine Fisheries Commission for providing funding and organizational support to TSC meeting. This includes producing the annual report and maintaining the website. The TSC thanked Dave Clausen for chairing the 2010 meeting and offering to stay on for a third term. They also thanked Rick Stanley and DFO for hosting (with PSMFC assistance) the 2010 meeting. The 2010 meeting was adjourned at 11:45, May 6, 2010.

D. Parent Committee Minutes

Minutes of the 50th Annual Meeting of the Canada-U.S. Groundfish Committee (a.k.a. "Parent Committee")

I. Call to Order

Mr. Mark Wilkins, AFSC, represented the United States (for Stephen Phillips, PSMFC) and Adam Keizer represented the Canada (for Tamee Mawani, DFO). The meeting was called to order at 11:45 Wednesday, May 6, 2010.

II. Rapporteur

Rick Stanley was appointed secretary for the meeting.

III. The Agenda

The agenda, following the format of previous meetings, was approved.

IV. The 2009 Parent Committee meeting minutes

The Parent Committee minutes were adopted as presented

V. The 2009 Parent Committee recommendations There were no Parent Committee recommendations

VI. 2010 Parent Committee Recommendations

- a. Parent Committee agrees with the 2010 TSC recommendation to ask the AFSC to host the 2011 survey workshop in Seattle.
- b. The Parent Committee agrees with 2010 TSC recommendation that in the interim period while the Hake Treaty legislation is pending approval, that TSC create a Pacific Hake Working Group. They also agree that this process starts with development of the Terms of Reference of this Working Group.

VII. 2011 Meeting Location

 Parent Committee agrees with the proposed location and schedule for the 2011 TSC and Parent Committee Meeting: Astoria Oregon, Tuesday May 3, and Wednesday May 4, 2011. Troy Buell of ODFW has offered to host the meeting. [Note: the Astoria location within Oregon was approved subsequent to the meeting].

VIII. Other Business

- a. The Parent Committee thanks Dave Clausen for chairing the meeting and Rick Stanley for being the recording secretary
- b. The Parent Committee thanks PSMFC for its ongoing support for the Annual TSC meetings.
- c. The TSC thanked Cleo Brylinsky for her long standing contribution to, and support of, the TSC and congratulated her on her impending retirement.



Draft Agenda

Fifty First Annual Meeting of the Technical Subcommittee (TSC) of the Canada-U.S. Groundfish Committee May 5-6, 2010 Vancouver Island Conference Centre 101 Gordon St. Nanaimo, British Columbia V9R 5J8 Rick Stanley, Canada DFO, host Contact: <u>Rick.Stanley@dfo-mpo.gc.ca</u> Phone: (250) 756-7134 (w) (250) 755-5115 (h)

- I. Call to Order (9:00 a.m; 5/5/2010) Dave Clausen (NMFS), Chair
- II. Welcome Greg Workman: Groundfish Section Head (DFO-PBS)
- III. Appointment of Recording Secretary (Rick Stanley DFO-PBS)
- IV. Introductions
- V. Business issues
- VI. Approval of 2009 Report
- VII. Approval of 2010 Agenda
- VIII. Brief History of TSC (51st Meeting)

IX. Working Group Reports

- A. Committee of Age Reading Experts (CARE)
- B. Trawl Survey Working Group Report
- C. Yelloweye rockfish working group need to activate?
- D. Hake Working Group (proposed)
- X. Other Topics
 - A. Marine Reserves
 - B. Genetics and stock structure

- C. Western Groundfish Conference 2010 summary
- XI. Review of Agency Groundfish Research, Assessment, and Management
 - A. Agency Overviews
 - B. Multispecies Studies
 - C. Stock assessment (general)
 - D. By Species
 - 1. Pacific Cod
 - 2. Nearshore Rockfish
 - 3. Shelf Rockfish
 - 4. Slope Rockfish
 - 5. Thornyheads
 - 6. Sablefish
 - 7. Halibut and IPHC activities
 - 8. Flatfish
 - 9. Lingcod
 - 10. Pacific Whiting
 - 11. Walleye Pollock
 - 12. Dogfish and other sharks
 - 13. Pacific Mackerel and Sardines (*Note: recommended be excluded from 2011 discussions*)
 - 14. Skates
 - 15. Grenadiers
 - 16. Other Species
 - E. Other Related Studies
 - F. Other Items
 - 1. Integrated groundfish management in B.C.- update
 - 2. Marine mammal predation on groundfish
- XII. Progress on 2009 Recommendations
 - A. From TSC to itself
 - B. TSC to Parent Committee
 - C. TSC to Care
- XIII. 2010 Recommendations
 - A. From TSC to itself
 - B. TSC to Parent Committee
 - C. TSC to CARE
- XIV. Selection of Next Chairperson and Schedule and Location of 2011 Meeting
- XV. Adjourn ~12:00 p.m. May 6, 2010