

**Meeting Summary**  
**North Pacific Research Board**  
**Science Panel Meeting**  
**Seattle, WA**  
**April 12-14, 2011**

The Science Panel met on April 12-14, 2011, at the Sheraton Seattle Hotel and at the main branch of the Seattle Public Library in Seattle, Washington. The meeting was chaired by Doug Woodby and the following members were in attendance: Vera Alexander, Carin Ashjian, Dick Beamish, Jim Berner, Don Bowen, Stew Grant, Tuula Hollmen, Pat Livingston, Andre Punt, Cheryl Rosa, Tom Royer, Pat Tester, Bill Wilson and David Witherell. Seth Macinko joined the meeting via teleconference. Henry Huntington also joined the meeting via teleconference as an ad-hoc Science Panel member. The meeting was staffed by Francis Wiese, Carrie Eischens, Tom Van Pelt, Katie Blake, and Nora Deans (Thursday only).

**1. Call to Order and Approve Agenda**

Doug Woodby introduced Carin Ashjian, Tuula Hollmen and Don Bowen as new Science Panel members. The agenda and terms of individual Science Panel members were reviewed and the agenda approved with the election of officers moving to Thursday morning. The draft Science Panel meeting summary from the August 2010 meeting was also approved as final.

When officers were elected on Thursday morning, Doug Woodby was re-elected as Chairman and David Witherell was elected as Vice- chairman. Woodby noted he would be retiring from ADF&G in the next year or so and would agree to be chair for just one more year.

**2. NPRB Program Review/COV concerns**

Doug Woodby provided an update to the Science Panel on the work by the COV Task Force, which has been working since January to evaluate and respond to the Committee of Visitors report submitted to the Board in January 2011. The COV Task Force was established during the January 2011 Board meeting and consists of selected Board members, Science Panel members and Advisory Panel members. The Task Force Recommendations on the COV Report was distributed to all Science Panel members.

Woodby highlighted three main COV concerns/recommendations that he wanted to get feedback on from the Science Panel members. Those were:

D3 – regarding the manner in which the Science Panel reviews proposals (i.e., tier system), and specifically whether they should move to a four-tier system

R1 – regarding how the RFP is formulated each year; and specifically whether each SP member should be charged with writing the specific section of the RFP that corresponds to their expertise

G6 – regarding four-year term limits for Science Panel members. The idea would be to stagger terms so there is always a mix of new and experienced members on the panel.

Woodby requested that the Science Panel members review the Task Force recommendation document and be prepared for further discussion on Thursday afternoon.

### **3. Proposals Review for 2011**

The Science Panel was given a quick overview on past projects regarding their status (complete or on-going) and how they parse out into ecosystem priorities. It was suggested by staff that this be taken into account if faced with a choice between equally meritorious proposals. The SP was also updated on the accumulation of metadata and data files from completed projects and on the 273 peer reviewed publications that have come out of NPRB funded projects since 2002.

Science Panel conflict-of-interest procedures were reviewed and followed during the meeting. Specifically, there were three conflicts of interest in this year's SP proposal reviews with Carin Ashjian, Andre Punt and Pat Tester each being involved in a submitted proposal. When these proposals came up for review and discussion the associated SP member left the room and were not privy to the discussion or outcome.

Regarding the SP review process, the SP has agreed that they would proceed as they had in the past. That is, first going through all proposals and determining tier rankings according to their scientific merit only and then going through the list again to try and fit within the category budgets. However, unlike previous years, the SP would show the Board both sets of rankings -- one that shows the proposals by tiers according to scientific merit only and the second set where the Tier 1 proposals fit both scientific merit and conform as closely as possible to the RFP category budgeting caps. As they reviewed the proposals, the SP came up with a fourth category, Tier 1-minus, to nuance high quality proposals in the lower half of Tier 1 but better than Tier 2.

The panel reviewed 101 proposals that responded to the 2011 RFP (4 of 115 received were rejected due to formatting issues, 8 were rejected as non-responsive and 3 were withdrawn by the investigator and not processed further). Each panel member conducted primary and secondary reviews of a total of 13-14 proposals, which included considering anonymous technical reviews, leading the panel discussion on their proposals and the development of a funding recommendation for the Board.

Overall, the panel found the quality of submitted proposals to be very high again this year and produced an initial Tier 1("should fund") recommendation of 40 proposals totaling \$6.7M dollars. A Tier 2 category of proposals ("fund if extra money is available or if proposal is tweaked slightly") was also established containing 22 proposals requesting a total of almost \$4M. The remaining 39 proposals were placed in Tier 3, indicating that they had substantial scientific flaws and should not be funded. The SP then proceeded to review all Tier 1 proposals a second time to consider how the Tier 1 category could be pared down to more closely fit the RFP category budget caps. This was done in terms of scientific merit only and in the end resulted in 25 proposals remaining in the Tier 1 category for a total of \$4.69M, still \$1.14M over the RFP budget of \$3.55M. Most of the overage, (\$1M), is in the Fish and Invertebrate category, which received a total of 46 proposals, many of high quality). Fifteen proposals were moved to a Tier 1-minus category, which, combined with Tier 2 proposals totaled \$6M.

The Panel's considerations of the various sections of the RFP and the final recommendations are presented below. This summary will be accompanied by a spreadsheet identifying the proposals for each of the tiers, and a document which summarizes the panel comments for each of the 101 proposals considered.

Oceanography and Lower Trophic Level Productivity (RFP Section 1a – **Funding cap: \$500,000**): Eight responsive proposals were submitted to this section of the RFP with requests for almost five times the amount of funding allotted to this category. The panel's final recommendation included funding two Tier 1 proposals for **\$640,056**, exceeding the category funding cap. One proposal for just under \$70,000 was

given a final rating of Tier 1-minus, and one proposal for just over \$310,000 was given a Tier 2 ranking. The remaining four proposals in this category were ranked as Tier 3.

Fish and Invertebrates (section 1b – Funding cap: \$800,000): Requests for more than \$9M, encompassing 46 proposals, were received in this category. On the initial pass through the proposals, 16 proposals totaling \$2.88M were given a ranking of Tier 1 with another 10 proposals (\$1.77M) ranked as Tier 2 by the Science Panel. The remaining 20 proposals were given a Tier 3 ranking. A second review of the Tier 1 proposals resulted in nine being retained as Tier 1 proposals and 7 proposals assigned a Tier 1-minus ranking. The final set of Tier 1 proposals total **\$1.87M**, exceeding the category budget cap by more than \$1M. However, the SP did not feel they could pare down this category further based on scientific merit.

Marine Mammals (section 1c – Funding cap: \$800,000): Eighteen proposals were received under this category for a total of \$4.15M. The panel's final recommendation consisted of five Tier 1 proposals for **\$934,411**, exceeding the category funding cap by 130K. One additional proposal, for \$156,023, was ranked as a Tier 1-minus, three proposals were ranked as Tier 2, and nine proposals were ranked as Tier 3.

Humans (section 1d – Funding cap: \$200,000): Four proposals were received in this category for a total request of \$507,909. Two proposals were rated as Tier 1, totaling **\$223,723**, just slightly over the budget cap for this category. Two other proposals were rated as Tier 2 for \$284,186.

LTK and Community Involvement (section 2 – Funding cap: \$200,000): Five proposals were received under this category requesting \$544,695. The panel's final recommendation placed two proposals for **\$238,431** in the Tier 1 category, just slightly over the budget cap for this category. Two other proposals were considered Tier 2 proposals and one was ranked as a tier 3 proposals.

Cooperative Research with Industry (section 4 – Funding cap: \$400,000): Four proposals were submitted under this category, three with respect to cooperative research with the fishing industry and one related to cooperative research with the oil and gas industry. The panel's final recommendation placed one proposal in the Tier 1 ranking for **\$365,913**. Two proposals were placed in the Tier 1-minus category and one was considered a Tier 3 proposal.

Technology Development (section 5 – Funding cap: \$200,000): Eleven proposals were received in response to this section of the RFP, requesting \$1.7M. The panel recommended two proposals in Tier 1 for **\$258,807**, slightly over the budget cap for this category. Three proposals received a Tier 1-minus ranking, three were ranked as Tier 2 and three were ranked as Tier 3.

Data Rescue (section 6 – Funding cap: \$50,000): Two proposals were received under this RFP category requesting funding of \$80,832. The panel recommended funding one of these proposals for \$30,847 and placed the other proposal in the Tier 2 category.

Arctic Focus (Funding cap:\$400,000): Three proposals were received under this category requesting a total of \$632,717. The panel's final recommendation was to fund one proposal as a Tier 1 for \$135,600 and gave the other two proposals a Tier 3 ranking.

OSRI Collaboration: Four proposals (44, 97, 110, and 111) were considered of mutual interest to NPRB and OSRI. Two OSRI Science Panel members (and Tom Royer who sits on both panels) met jointly with the NPRB SP to discuss these four proposals and after this joint consideration, the SP placed 97 and 111 in Tier 1, 110 in Tier 2 and 44 in Tier 3. If any of these are funded, a total of \$100K from OSRI would be

available for leverage. The exact contribution to each proposal will be determined after the Board decision in consultation with OSRI staff.

#### **4. 2011 Graduate Student Research Awards**

Thirty-one applications were received in response to the NPRB 2011 Graduate Student Research Award solicitation. One application was subsequently rejected because their research topic was outside of the scope funded by the North Pacific Research Board. The Science Panel reviewed the remaining 30 applications. Each panel member conducted a primary or secondary review of three to four proposals, and rated the proposals as poor, fair, good, very good, or excellent.

Recognizing that the aim of these awards is to foster new marine scientists in the areas of interest of the Board, the Panel set up a slightly different process from that for evaluating the regular proposals. The Science Panel first limited discussion to those applications that had received at least two “Very Good” or “Excellent” rankings from the Science Panel member’s independent reviews. This narrowed the field down to 13 applicants (4 MS and 9 PhD). The Panel then gave two separate rankings (out of 10) on proposal merit and student qualification, recognizing that for graduate awards, student qualifications should be weighed just as high, if not higher, than the scientific merit of the proposal.

The Science Panel also considered the criteria that two of the five awards be given to each degree level (master’s and Ph.D.), with the fifth award a wild card with respect to degree level. Additionally, at their September 2009 meeting, the Board passed a motion that two of the five awards be reserved for students pursuing quantitative stock assessment research to help address the projected shortage of stock assessment scientists in the future. Unfortunately, the two applicants that were pursuing quantitative stock assessment research this year did not score well, and did not receive a “Very Good” or “Excellent” ratings from the individual Science Panel reviewers.

Based on the criteria and ranking system stated above, the Science Panel recommended awarding the 2011 GSRA to:

Delphine Mathias – Ph.D. student, University of California San Diego, Scripps Institution of Oceanography - *Quantifying sperm whale depredation rates using passive acoustic detection and tracking.*

Shiway Wang – Ph.D. student, University of Alaska Fairbanks - *Tracking the contribution of ice algal fatty acids to ice seals in the Bering Sea from 2003 – 2010*

Joseph Bizzarro – Ph.D. student, University of Washington - *Resource utilization of the Gulf of Alaska skate assemblage with applications for ecosystem-based management*

Raphaelle Descoteaux – MSc student, University of Alaska Fairbanks - *Effects of ocean acidification on development of larval Tanner crabs (*Chionoecetes bairdi*) in Alaska*

Matthew Lawonn – MSc student, Oregon State University - *Breeding Ecology of Kittlitz's Murrelet on Kodiak Island, Alaska: Limiting Factors for a Declining Seabird Species of Conservation Concern*

It should be noted that Raphaelle Descoteaux application stated that her work was also represented in a proposal (#56) submitted by her supervisor in response to the NPRB 2011 RFP. In the event that both her supervisor’s proposal and her own GSRA application were funded she would decline the GSRA in order to prevent duplicate funding. If this occurs, the Science Panel recommends awarding the fifth award to

Jenny Kemper, MSc student at California State University Monterey Bay (Moss Landing Marine Laboratories) -- *Food habits and trophic ecology of two common skate species, Raja rhina and Bathyraja interrupta, in Prince William Sound, Alaska.*

## **5. Gulf of Alaska Integrated Ecosystem Research Program**

Staff gave a status report on the Gulf of Alaska Project. The program is entering its first field year with PIs heading out into the field this month, following a logistics-focused PI meeting held in February in Seattle. A final sampling grid has been developed and was presented to the Panel, along with a final group of hypotheses, objectives, and goals. It was noted that iron-related studies remain a significant gap; the Panel voiced support for the single iron proposal recommended for funding under the current RFP and it was noted that the proposal PI has good connections already to the Gulf of Alaska Project scientists.

Data management was also discussed — staff have been working on a special RFP for data management but it has not yet gone out. Also the SP and Board have endorsed contracting with a dedicated modeling manager, but that role has proven difficult to fill and staff are still working on it. The current approach is to see how the modeling group develops -- with this smaller and more cohesive group (relative to the BEST-BSIERP group), the modeling management role may prove less important. Related to both the data management and modeling management is the advertised Program Manager position that closed on 15 April. The person hired for that position will spend part of their time working as the Gulf of Alaska program manager and may be able to help follow through with these two management issues.

The availability of ships poses an immediate problem. The R/V *Thompson* has propulsion issues and the spring cruise is delayed by about 2 weeks. PIs are concerned about missing the spring bloom, but everyone is hopeful it will work out.

Overall, the group dynamics are working very well and the group has come together in a very constructive way.

## **6. Bering Sea Integrated Ecosystem Research Program**

Staff provided a brief introduction to the BEST-BSIERP Bering Sea Project, and acknowledged the hard work of the Science Advisory Board (SAB) members who have been so integral to the development of the project. Staff introduced Carin Ashjian, new Science Panel member and one of the founding SAB members, who presented a partial summary of Bering Sea Project highlights.

Staff then provided a programmatic status report, noting the status of the peer-reviewed publication library arising from the project (currently at number 21 and counting). Staff also explained the progress of the Bering Sea Project special issue planned for *Deep-sea Research II*. The SAB are serving as guest-editors for the special issue, with Van Pelt serving as the managing guest-editor. Currently 24 manuscripts are under review and the guest-editing process is expected to wind up around July, with publication around six months later.

The panel received a summary of the Bering Sea Project PI meeting held March 22-24, 2011, in Anchorage, Alaska. The key mechanism for tracking project progress toward its objectives is the Road Map, introduced at the PI meeting—the Science Panel received an overview of the Road Map structure and function.

The Science Panel enthusiastically supported the peer-reviewed publications, and also asked about plans for alternative publications—for example, something like a book that “tells the story” of what has been

learned in the Bering Sea Project. These publications would be aimed at scientists, but in a more accessible format than peer-reviewed publications. Staff agreed that such publications are important, and noted that the SAB and program managers and PIs have been discussing it, but concrete plans are not yet in place—staff will follow up on this issue. It was also noted that staff have been working with managers and PIs to develop alternative publications aimed at a variety of audiences, including multi-dimensional illustrations of the Bering Sea Ecosystem-- follow-up on this was provided during the Communication, Education, and Outreach part of the SP meeting.

Staff provided brief updates on the data management component of the Bering Sea Project. BSIERP data management is nearly set to be integrated with the EOL/NCAR team that already manages the BEST data. The Science Panel asked about participation of Axiom, and were updated that Axiom is not yet formally engaged and is only being considered as a supplementary effort.

Staff also provided a status report on the integrated modeling effort and noted that although schedules keep changing, the modeling PIs had a good productive meeting during the PI meeting in March and have already started implementing the new timeline, which should result in a completed 60-layer hindcast by September, with a 10-layer one already completed and being integrated with the MSE and Econ components. The 10-layer model is also a fully integrated model but with some reduced complexity so it can run faster. This will allow running the same scenarios an appropriate number of times (50-100) to make proper inferences from the MSE results.

A MSE workshop is scheduled for early fall and staff will notify interested Board members as soon as a date is fixed. It will most likely be held in Seattle.

## **7. Arctic Strategy**

Staff presented the memo outlining NPRB's possible contribution to Arctic research following the December 2010 Arctic Workgroup meeting in Anchorage, Alaska. The main point that came out of that meeting is the need for a coordinator to track Arctic research activities. To achieve this, the Program Manager we're hiring will spend a portion of their time focused on the Arctic.

The Science Panel noted that timing for increased NPRB engagement in the Arctic is critical; for example, the new UAF vessel R/V *Sikuliaq* will be operations-ready in 2014 and NSF is likely to support a large commitment to a field program. NPRB can't afford the \$40k a day costs, but could cooperate with NSF and/or partner with other organizations.

Panel members asked what the Board is seeking from an Arctic Strategy, and provided input from their perspectives, mainly emphasizing the fact that there are many different plans, approaches, and capabilities and noting that a coordinating role is desirable and valued.

## **8. Other Matters**

Education and Outreach: Nora Deans gave a presentation, updating the panel on all outreach activities over the last 18 months. Research summaries, 2011 Calendars and the NPRB issue of Current were distributed to all panel members. Panel members were enthusiastic and pleased with the outreach activities and commended Deans and staff on a job well done.

Japanese Radiation: Tom Royer spoke about the ongoing nuclear radiation situation in Japan and suggested that the Panel and the Board may want to think about emergency response to the Japanese

radiation release into the North Pacific and potential impacts it may have on the Alaskan fishing industry. Based on circulation models it could be two to three years before the contaminated water reaches the Gulf of Alaska. The Panel agreed it would be good to keep up on the developing situation and discuss this further at the August meeting.

Meeting Schedule: The Science Panel scheduled their fall meeting for August 16 and 17<sup>th</sup>, 2011, in Anchorage. The Panel also tentatively scheduled their April 2012 meeting for the week of April 9<sup>th</sup> and would like the Board to consider the option of meeting in Monterey Bay, California, at the MBARI facility, as a relatively central location and to build linkages with MBARI staff and resources. If this location is not acceptable by the Board then Seattle would be the second choice of meeting location for April 2012.

COV Task Force recommendations and feedback: Science Panel members voiced support for recommendation D3 in the COV task force report, and agreed that switching to a four-tier system would improve their ranking system and allow for more nuanced reviews and ranking. The Science Panel also supported recommendation I4, regarding inclusion of prior relevant NPRB-supported research results in proposals. Staff noted that is already asked for in the RFP, but that it is not rigorously enforced. Following the discussion, staff agreed to modify the future RFP proposal format to include a stand-alone, required element per COV task force item I4.