

Executive Director's Report

Update on MSA reauthorization

In late October NOAA Fisheries hosted a new Council member training session, parallel to an interim Council Chair and Executive Director (CCED) meeting. Several of our newest members attended the training session, and Ms. Madsen, Mr. Bundy, and myself attended the CCED meeting. I can get copies of the training materials for any Council member who wants them. The agenda for the training session is attached under B-1(a). The CCED meeting (agenda attached under B-1(b)) focused on budget and MSA reauthorization issues, including provisions of both the Administration draft bill and the Senate Commerce Committee draft circulated in September. Some of those key issues were the focus of my testimony later that week at a U.S. House Resources Committee hearing. That testimony (which is posted on our website) also reflected previous testimony given by the Council Chair, as well as the consensus positions of the eight regional Councils.

Since then a revised draft bill has been circulated from the Senate Commerce Committee, and I understand it will be the subject of 'mark up' in the next week or so, and possibly make its way out of Committee. I am uncertain as to whether and how a House version will intersect, or how quickly a final reauthorization bill could actually be passed. Given the rapid movement however, and given the significance of some of the provisions in this most recent draft (particularly the limited access program provisions), I did feel compelled to provide additional comments on this latest draft bill. In consultation with the Council Chair, and trying to be as consistent as possible with our previous positions, I submitted draft comments earlier this week to the Commerce Committee staff. A copy of these comments is contained in your Supplemental Folder.

NOAA Fisheries will be hosting an additional interim CCED meeting in January in Washington, D.C., where budget and MSA reauthorization issues will once again be discussed.

December 2006 30-year anniversary celebration

Many of you will recall the event we organized in 1996, celebrating the 20th anniversary of the Magnuson-Stevens Fishery Conservation and Management Act and the eight Regional Fishery Management Councils. Well, 10 more years have passed and we likely will have a newly reauthorized Act by sometime next year; therefore, we are planning a similar event for our December 2006 meeting in Anchorage. Right now we are planning on Saturday evening, the 9th, for this shindig. Stay tuned for details as they develop!

American Fisheries Act (AFA) year end reports

December 1 was the due date for AFA cooperatives to submit their year end fishing reports, as well as their cooperative agreements for the upcoming year. We have the draft reports in our office and copies will be provided upon request. However, consistent with practice in recent years, we will wait until February to review the final year end reports, when all the current year's fishing information will be fully incorporated.

Executive Sessions later in week

On Friday we will have an extended lunch break so that the Council can hold an Executive Session to discuss 2006 AP and SSC appointments. Thursday will also likely involve an extended lunch session as the Council's Finance Committee will be meeting to review the administrative budget and related issues.

Amendment 80 data workshop

Because Amendment 80 is not on our agenda for this meeting (final action is scheduled for February and the analysis is still in preparation), representatives from the affected industry requested Council staff to provide an opportunity to review some of the recently compiled data and be available to answer questions in this regard. This will hopefully lead to a better understanding of the data and analyses when the full document is released in January, and assist the industry in arriving at recommendations for the Council. As I stressed to industry representatives, this is strictly an informational setting, and not an opportunity to request additional analysis or make changes to any alternatives or options. This workshop will be tonight from 5:30 to 7:00 pm in the AP room.

Plan Team Nominee

The University of Alaska Southeast has nominated Dr. Ginny Eckert to replace Tom Shirley on the Council's Crab Plan Team. The nomination letter and resume are included under B-1(c). The SSC will review these materials and provide a recommendation to the Council at this meeting.

Travel Claims

Just a year-end reminder to get any outstanding travel claims (and claims for this meeting) submitted to Gail ASAP. Thanks!

Fishery Management Council New Member Training
October 25-26, 2005
Oasis Room at Almas Temple, 1315 K Street NW, Washington, DC

Moderator: Mary Hope Katsouros

Tuesday, October 25

- 8:00 am Continental Breakfast
- 8:30 am Welcome and Opening Remarks (Bill Hogarth)
- 8:45 am Council Training: An Overview (Mary Hope Katsouros)
- 9:00 am Rules of Conduct and Conflict of Interest for Council Members (David Maggi)
- 9:30 am Statutory Requirements (Adam Issenberg)
- Laws Affecting Fisheries Management
 - Litigation
 - Integration of Conflicting Statutes
- 10:30 am Break
- 10:45 am The Magnuson-Stevens Fishery Conservation and Management Act (MSA):
An Overview (Marian Macpherson)
- 12:00 pm Lunch (on your own)
- 1:00 pm Fishery Management Plans (FMP) and the Regulatory Streamlining Process
(RSP): Overview of Requirements and Steps in the Process (Marian Macpherson)
- 1:45 pm Ecosystem Approaches to Management (Steve Murawski)
- 2:15 pm Stock Assessment: The Science of Fisheries Management (Rick Methot)
- 3:00 pm Break
- 3:15 pm Stock Assessment, continued (Rick Methot)
- 4:00 pm Overview of the National Standards (Marian Macpherson)
- 4:30 pm Focus on National Standard 1 (Rick Methot)
- 5:30 pm Adjourn

Wednesday, October 26

- 8:00 am Continental Breakfast
- 8:30 am NEPA (John Hansel)
- 9:45 am Protected Resources
- Endangered Species Act (Ann Garrett)
 - Marine Mammal Protection Act (Tammy Adams)
- 10:45 am Break
- 11:00 Protected Areas
- Essential Fish Habitat (Karen Abrams)
 - Marine Protected Areas (Lauren Wenzel)
- 12:00 pm Lunch (on your own)
- 1:00 pm Guidelines for Economic Analysis of Fishery Management Actions (Myles Raizin)
- 1:45 pm Social Impact Assessment (Peter Fricke)
- 2:15 pm Enforcement (Dale Jones/Bob Hendrickson)
- 3:00 pm Break
- 3:15 pm Working the Complete FMP Process (Marian Macpherson)
- Applying the FMP/RSP Steps
 - Considering All Relevant Laws
 - NMFS-Council Roles
 - Discussion
- 5:15 pm Summary and Wrap-up (Mary Hope Katsouros)
- 5:30 pm Adjourn

Fishery Management Council Chairs and Executive Directors Meeting
October 25-26, 2005
Sphinx Club at Almas Temple, 1315 K Street NW, Washington, DC

Tuesday, October 25

Moderator: Jack Dunnigan

- 8:30 am Continental Breakfast
- 9:00 am Welcome (Bill Hogarth)
- 9:15 am FY05 Budget (Gary Reisner)
- 9:45 am FY06: Review of House and Senate marks, NMFS funding status, and Council funding status (Gary Reisner)
- 10:30 am Break
- 10:45 am FY06: Budget discussions, continued
- 11:30 am FY07: Fiscal Outlook (Gary Reisner)
- 12:30 pm Lunch (on your own)
- 1:30 pm National Marine Sanctuary Program Briefing (Craig McLean/Jim Balsiger)
- 3:00 pm Break
- 3:15 pm FY08: PPBES Overview (Gary Reisner)
- 3:30 pm FY08: Current Status (Galen Tromble)
- 3:45 pm Performance Measures: Overview and Corporate Performance Measures (Gary Reisner)
- 4:15 pm Performance Measures: Fish Stock Sustainability Index (Galen Tromble)
- 5:15 pm FY09-13: Planning Outlook (Galen Tromble)
- 5:30 pm Adjourn

Wednesday, October 26, 2005

Morning: Briefings and MSA Reauthorization Overview

Moderator: Jack Dunnigan

- 8:00 am Continental Breakfast
- 8:30 am International Office Briefing (Jean-Pierre Ple)
- 9:00 am Aquaculture Briefing (Michael Rubino)
- 9:30 am Development of Dedicated Access Privileges Guidelines under the U.S. Ocean Action Plan (Mark Holliday)
- 10:30 am Break
- 10:45 am MSA Reauthorization: Overview of Administration Bill (Jack Dunnigan)
- 12:00 pm Lunch (on your own)

Afternoon: MSA Discussion

Moderator: Jim Balsiger

- 1:00 pm MSA Topics – NEPA Provisions
- 2:00 pm MSA Topics – DAPs/LAPs
- 2:45 pm Break
- 3:00 pm MSA Topics – Ecosystems/EFH
- 3:45 pm MSA Topics – Science/Data Collection
- 4:30 pm MSA Topics – Council Membership & nomination
- 5:00 pm Adjourn



School of Arts and Sciences

19 November 2005

Ms. Stephanie Madsen, Chair
North Pacific Fishery Management Council
605 West 4th Ave., Suite 306
Anchorage, AK 99501-2252

RECEIVED
NOV 29 2005
N.P.F.M.C.

Dear Ms. Madsen,

I would like to nominate Dr. Ginny Eckert to serve on the Crab Plan Team of the North Pacific Fishery Management Council. Dr. Eckert has been an Assistant Professor of Biology at the University of Alaska Southeast with a joint appointment in Marine Biology with the Institute of Marine Science, University of Alaska Fairbanks since January 2000. In that capacity, she has taught undergraduate courses in Biology, trained graduate students, and carried out research on the ecology of Dungeness crabs and other marine invertebrates.

Dr. Eckert is a very competent scientist as is evident from her publication record. She has assumed an early leadership role on the faculty at UAS and makes strong contributions in many areas. Her strong performance in research and service is coupled by an equally strong record in teaching. That record of accomplishment has allowed her to submit a very strong application for tenure and promotion. The application is mid way through the review process, and I am confident that she will easily win tenure and promotion.

It is a pleasure to work with Dr. Eckert, and I know that her knowledge of crab populations in Alaska, her work ethic, and her strong communication skills would make her a great asset to the Crab Plan Team and the Council.

Please feel free to contact me if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Brendan P. Kelly". The signature is written in a cursive style with a large initial "B".

Brendan P. Kelly
Dean of Arts and Sciences
Vice Provost for Research

CURRICULUM VITAE

10/30/05

GINNY L. ECKERT

Assistant Professor of Biology
University of Alaska Southeast
Joint position - School of Fisheries and Ocean Sciences,
University of Alaska Fairbanks
11120 Glacier Hwy.
Juneau, AK 99801
Phone (907) 796-6450 Fax (907) 796-6447
e-mail: ginny.eckert@uas.alaska.edu
website : <http://www.uas.alaska.edu/biology/eckert/index.html>

Born: March 29, 1968
SSN 138-48-4577

EDUCATION

Ph.D. 1999, Department of Ecology, Evolution, and Marine Biology, University of California, Santa Barbara, CA. Major advisor: Dr. Steven D. Gaines
M.S. 1994, Department of Zoology, University of Florida, Gainesville, FL
Major advisor: Dr. Larry R. McEdward (deceased)
B.A 1990, Dartmouth College, Hanover, NH
Major: Biology; Minor (departmental certificate): Education

RESEARCH INTERESTS

Ecology of fished marine invertebrates; Reproductive and larval biology of marine invertebrates; Evolution of life histories; Long-term ecological and environmental monitoring; Ecotoxicology

PEER REVIEWED PUBLICATIONS

- Shanks, A. L. and G.L. Eckert. 2005. Life history traits and population persistence of California current fishes and benthic crustaceans: Solution of a marine drift paradox. *Ecological Monographs* 75(4):505-524.
- Eckert, G.L. 2003. Effects of the planktonic period on marine population fluctuations. *Ecology* 84: 372-383.
- Grantham, B., G.L. Eckert, and A.L. Shanks. 2003. Dispersal potential of marine invertebrates in diverse habitats. *Ecological Applications* 13:S108-S116.
- Eckert, G.L., J.M. Engle and D.J. Kushner. 2000. Sea star disease and population declines at the Channel Islands. *Proceedings of the Fifth California Islands Symposium. Minerals Management Service* 99-0038.
- Micheli, F., K.L. Cottingham, J. Bascompte, O.N. Bjørnstad, G.L. Eckert, J.M. Fischer, T.H. Keitt, B.E. Kendall, J.L. Klug, and J.A. Rusak. 1999. The dual nature of community variability. *Oikos* 85: 161-169.
- Eckert, G.L. 1998. Larval development, growth, and morphology of the sea urchin *Diadema antillarum*. *Bulletin of Marine Science* 63: 443-451.
- Eckert, G.L. 1995. A novel, larval feeding strategy in the tropical sand dollar, *Encope michelini* (Agassiz): Adaptation to larval food limitation and an evolutionary link between planktotrophy and lecithotrophy. *Journal of Experimental Marine Biology and Ecology* 187: 103-128.

REPORTS

- Schoch, G. Carl, G. L. Eckert, and Thomas A. Dean. 2002. Long-Term Monitoring in the Nearshore: Designing Studies to Detect Change and Assess Cause. Project Number: 02395. Final report to the Exxon Valdez Oil Spill Trustee Council.
- Eckert, G.L. 2004. Report to the Southeast Alaska Regional Dive Fishery Association summarizing scientific literature relating to enhancement activities for *P. californicus* in Southeast Alaska.
- Eckert, G.L. 2005. Southeast Alaska Synthesis of Marine Biology and Oceanography Workshop Report. Prepared for the North Pacific Research Board.

THESES AND DISSERTATIONS

- Eckert, G.L. 1994 MS thesis. Department of Zoology, University of Florida
- Eckert, G.L. 1999. Consequences of diverse reproductive strategies in marine invertebrates. PhD dissertation. Department of Ecology, Evolution and Marine Biology, University of California, Santa Barbara.

MANUSCRIPTS IN REVIEW AND PREPARATION

- Porter, S.S.*, G.L. Eckert, C. J. Byron* and J. L. Fisher. Comparison of light traps and plankton tows for sampling brachyuran crab larvae in an Alaskan fjord. In revision to be submitted to Bulletin of Marine Science. (*undergraduate students)
- Webb, Joel B., Ginny L. Eckert, Thomas C. Shirley, and Sherry L. Tamone. Changes in embryonic development and hatching in the snow crab, *Chionoecetes opilio*, from the eastern Bering Sea with variation in incubation temperature. To be submitted to the Journal of Crustacean Biology.
- Webb, Joel B., Ginny L. Eckert, Thomas C. Shirley, and Sherry L. Tamone. Changes in zoeae of the snow crab, *Chionoecetes opilio*, with variation in incubation temperature. Journal of Experimental Marine Biology and Ecology.
- Cieciel, Kristin, Ginny L. Eckert, and Brian J. Pyper. Temporal and spatial variation in movement of the sea cucumber *Parastichopus californicus* in Southeast Alaska. To be submitted to the Canadian Journal of Fisheries and Aquatic Sciences.
- Cieciel, K. G.L. Eckert, and B.J. Pyper. Tag retention and effects of tagging on short-term movement of the sea cucumber *Parastichopus californicus* in Southeast Alaska. To be submitted to Transactions of the American Fisheries Society.
- Eckert, G.L., D. R. Pinkard, D. C. Reed, and S. C. Schroeter. Seasonal variation in density and body composition of the commercially important sea cucumber, *Parastichopus parvimensis*.
- Eckert, G.L., D. R. Pinkard, D. C. Reed, and S. C. Schroeter. Larval development, settlement, and juvenile growth of the sea cucumber, *Parastichopus parvimensis*.
- Eckert, G.L. and R. K. Louis. Effects of barium on settlement of red abalone (*Haliotis rufescens*) larvae.
- Eckert, G.L., J.M. Engle and D.J. Kushner. Factors influencing outbreaks of sea star wasting disease: effects of El-Niño associated warm water events.
- Eckert, G.L. Spatial patchiness in a marine species with limited dispersal.
- Eckert, G.L. The role of phylogeny and adaptation in egg size of marine invertebrates.

GRANTS RECEIVED

- 2005-2008 "Dungeness crab larval recruitment and settlement dynamics in Southeast Alaska" funded by Alaska Department of Fish and Game \$84,168
- 2005-2006 "Assessment of coastal water resources and estuarine conditions in selected national parks of Southwest Alaska" funded by the National Park Service \$88,928
- 2004-2005 "Assessment of coastal water resources and estuarine conditions in selected national parks of Southeast Alaska" funded by the National Park Service \$69,784

- 2004-2005 "Synthesis of marine biology and oceanography of Southeast Alaska" funded by the North Pacific Research Board \$120,000
- 2003-2005 "Synthesis of natural variability in the nearshore: Can we detect change?" funded by Exxon Valdez Oil Spill Trustee Council \$53,800
- 2004-2006 "Larval ecology and settlement dynamics of Dungeness crab in an Alaskan marine reserve" – funded by Alaska Sea Grant College Program \$99,047
- 2003-2004 "Synthesis of ecological research on sea cucumbers" funded by the Southeast Alaska Regional Dive Fishery Association \$9,793
- 2003-2004 "MRI/RUI Acquisition of planktonic sampling equipment for Southeast Alaska" – funded by the National Science Foundation \$112,530.
- 2001-2003 "Reproductive biology of snow crabs" with co-PIs Thomas Shirley and Sherry Tamone - funded by Alaska Department of Fish and Game \$383,211.
- 2002 "Distribution of Dungeness crab larvae in a marine protected area: Sampling larvae during crab pot surveys" – funded by Alaska EPSCOR \$5,988.
- 2001-2002 "Workshop on nearshore/intertidal monitoring" with co-PIs Carl Schoch and Thomas Dean - funded by Exxon Valdez Oil Spill Trustee Council \$63,600.
- 2001-2002 "Southeast Alaska Sea cucumber fishery research" -funded by the Southeast Alaska Regional Dive Fishery Association \$5,450
- 2000-2003 "Southeast Alaska Sea cucumber fishery research" - funded by Alaska Department of Fish and Game \$62,792
- 2001 "Identification of nursery areas for juvenile Dungeness crabs in Southeast Alaska" - funded by University of Alaska Natural Resources Fund renewal \$9,417.
- 2000 "Identification of nursery areas for juvenile Dungeness crabs in Southeast Alaska" - funded by University of Alaska Natural Resources Fund \$18,845.
- 1998-1999 "Evaluation of the Sustainability of the Sea Cucumber Fishery in California" with PIs Daniel C. Reed, John D. Dixon, and Stephen C. Schroeter - funded by National Marine Fisheries Service Saltonstall-Kennedy Fund \$136,500.
- 1998 Lerner Gray Fund for Marine Research
- 1992 Lerner Grey Fund for Marine Research
- 1992 Sigma Xi Grants-in-Aid-of-Research
- 1992 The Nature Conservancy Small Grants Program
- 1992 Florida Institute of Oceanography - Keys Marine Lab Grant-in-Aid

INVITED SEMINARS

- June, 2006 The Santa Cruz Meeting for Ecology and Reproduction in Marine Organisms: A Tribute to Prof. John S. Pearse – invited plenary talk
"Larval dispersal potential and population dynamics of diverse reproductive strategies"
- Nov, 2001 University of Alaska Fairbanks
"Effects of dispersal on population variability and geographic range in marine invertebrates"
- March, 2001 University of Alaska Anchorage
"Comparative analyses of marine invertebrate life histories and implications for conservation"
- March, 2001 Kachemak Bay Research Reserve, Homer, AK
"Comparative analyses of marine invertebrate life histories and implications for conservation"
- May, 2000 Alaska Department of Fish and Game, Juneau
"Recruitment of marine invertebrates"

- Oct, 1999 Department of Ecology, Evolution, and Marine Biology, University of California, Santa Barbara
"Consequences of diverse reproductive strategies of marine invertebrates"
- Sept, 1999 Bodega Marine Lab, University of California
"Consequences of diverse reproductive strategies of marine invertebrates"

CONTRIBUTED PAPERS (* denotes first author)

- 2005 Evolution 2005, a joint meeting of the Society for the Study of Evolution, the Society for Systematic Biologists, and the American Society of Naturalists, Fairbanks, AK*
"Assessing natural variability in Gulf of Alaska populations"
- 2005 Alaska Marine Science Meeting, Anchorage, AK*
"A synthesis of natural variability in the nearshore: Can we detect change?" Poster.
- 2004 Interagency Crab Meeting, Anchorage, AK*
"An overview of life histories and larval ecology"
- 2004 Western Society of Naturalists, Rohnert Park, CA* & Glacier Bay Science Symposium, Juneau, AK*
"Temporal and spatial patterns in Dungeness crab larval abundance within Glacier Bay, Alaska" Poster.
- 2004 American Society of Limnology and Oceanography, Honolulu, HI* & Glacier Bay Science Conference, Gustavus, AK*
"Dungeness crab larval and settler abundance in an Alaskan marine reserve"
- 2004 Society for Integrative and Comparative Biology, New Orleans, LA
"The consequences of incubation temperature for zoea of the snow crab, *Chionoecetes opilio*" (Presented by J. B. Webb, with G. L. Eckert, T. C. Shirley, S. L. Tamone and J. M. Dutton)
- 2003 American Society of Limnology and Oceanography, Salt Lake City, UT
"Distribution and relative abundance of larval crabs in Glacier Bay" (Poster presented by Jeff J. Douglas with Ginny L. Eckert, S. James Taggart, Jennifer Mondragon, Gail Irvine)
- 2003 Society for Integrative and Comparative Biology, Toronto, Canada
"A comparison of light traps and plankton tows for sampling crab larvae in Bartlett Cove, Alaska" (Poster presented by Stephanie Porter with Ginny L. Eckert, Carrie Byron, Jennifer Fisher)
- 2003 American Fisheries Society, Western regional meeting, San Diego, CA
"Movement behaviors of the giant red sea cucumber, *Parastichopus californicus*, in Southeast Alaska" (Poster presented by Kristin Ciciel, with Ginny Eckert)
- 2002 American Fisheries Society, Alaska Chapter meeting, Girdwood, AK
"Growth and movement of the sea cucumber *Parastichopus californicus* in Southeast Alaska" (Poster presented by Kristin Ciciel, with Ginny Eckert, received Best Student Poster Award)
- 2002 Western Society of Naturalists, Monterey, CA*
"Recruitment of Dungeness crabs in an Alaskan marine reserve"
- 2002 Glacier Bay Science Conference, Gustavus, AK*
"Dungeness crab recruitment in Glacier Bay"
- 2002 Kachemak Bay Science Conference, Homer, AK* (invited speaker)
"Effects of dispersal on population variability in marine invertebrates."
- 2002 Kachemak Bay Science Conference, Homer, AK* (invited speaker)
"Processes in the nearshore: Interrelationships between habitat, disturbance and larval supply"

- 2001 Western Society of Naturalists, Ventura, CA*
"Seasonal variation in density and body composition of the commercially important sea cucumber, *Parastichopus parvimensis*" (with Deanna R. Pinkard, Daniel C. Reed, and Stephen C. Schroeter)
- 2001 American Fisheries Society - Alaska Chapter, Sitka, AK*
"Seasonal variation in density and body composition of the commercially important sea cucumber, *Parastichopus parvimensis*" (with Deanna R. Pinkard, Daniel C. Reed, and Stephen C. Schroeter)
- 2001 4th North American Echinoderm Conf., Darling Marine Center, Walpole, ME*
"Larval development, settlement, and juvenile growth of the sea cucumber, *Parastichopus parvimensis*" Poster Presentation (with Deanna R. Pinkard, Daniel C. Reed, and Stephen C. Schroeter)
- 2001 4th North American Echinoderm Conf., Darling Marine Center, Walpole, ME
"Seasonal variation in density and body composition of the commercially important sea cucumber, *Parastichopus parvimensis*" (Presented by Deanna R. Pinkard, with Ginny L. Eckert, Daniel C. Reed, and Stephen C. Schroeter)
- 2000 Fourth International Larval Biology Meeting, Santa Cruz, CA*
"Relationships between development mode, planktonic period and geographic range in marine invertebrates"
- 2000 Society for Integrative and Comparative Biology, Atlanta, GA*
"A comparative analysis of egg size in marine invertebrates: Relationships with development mode, planktonic period and adult size"
- 1999 University of California Toxic Substances Research and Teaching Program - Eleventh Annual Research Symposium, Santa Barbara, CA*
"Observations of sea star disease and population declines at the Channel Islands" Poster Presentation
- 1999 Channel Islands Symposium, Santa Barbara, CA*
"Sea star disease and population declines at the Channel Islands"
- 1999 American Society of Limnology and Oceanography, Santa Fe, NM (invited symposium speaker)*
"Testing old paradigms: Do marine invertebrate species with feeding larvae really have smaller eggs, larger geographic ranges, and more population variability?"
- 1998 Western Society of Naturalists, San Diego, CA*
"Distribution and density limiting factors for the aggregating sea cucumber, *Pachythyone rubra*"
- 1998 University of California Toxic Substances Research and Teaching Program - Tenth Annual Research Symposium, San Diego, CA*
"Sensitivity to environmental disturbance: effects of larval dispersal" Poster Presentation
- 1998 Benthic Ecology Meeting, Melbourne, FL*
"Population dynamics of adults and recruits: does the larval planktonic period matter?"
- 1997 Western Society of Naturalists, Monterey, CA*
"Population dynamic effects of dispersal"
- 1997 Society for Environmental Toxicology and Chemistry, San Francisco, CA*
"Developmental effects of barium exposure on red abalone (*Haliotis rufescens*)" Poster Presentation
- 1996 University of California Toxic Substances Research and Teaching Program - Ninth Annual Research Symposium, Santa Cruz, CA*

- "Effects of barium on settlement of red abalone (*Haliotis rufescens*) larvae" Poster Presentation (with R. L. Louis)
- 1995 7th International Congress on Invertebrate Reproduction, Santa Cruz, CA*
"Larval development, growth, and morphology of the tropical sea urchin *Diadema antillarum*" Poster Presentation
- 1994 Florida Academy of Sciences - 58th Annual Meeting, Tallahassee, FL*
"A novel larval feeding strategy for the tropical sand dollar *Encope michelini*"
- 1994 Benthic Ecology Meeting, Mystic, CT *
"Predation on bivalve and gastropod veligers by three ascidian species" (with K.M. Rodgers)
- 1993 Larval Ecology Meetings, Port Jefferson, NY*
"A novel, larval feeding strategy for the tropical sea urchin *Encope michelini*"
- 1993 American Society of Zoologists, Los Angeles, CA
"Stratification of adult and larval barnacles along a coast with well-mixed waters" (with K.A. del Carmen, A.T. Sewell, P.J. Wood, and J.D. Zardus [speaker])

TEACHING EXPERIENCE

- 2000-present University of Alaska Southeast, Assistant Professor
 Three to four courses per year, including Fundamentals of Biology I, Ecology (with lab), Invertebrate Zoology (with lab), Marine Ecology (with lab), Current Topics in Biology (topic varies and has included Biodiversity and Evolutionary Developmental Biology), Field Studies in Behavior and Ecology, Biology Seminar, Introduction to Marine Biology
- 1994-1999 University of California, Santa Barbara
 Teaching Assistant for: Introductory Biology (development, physiology and genetics); Aquatic Community Ecology
 Guest Lecturer: Applied Marine Ecology
- 1991-1993 University of Florida
 Teaching Assistant for: Integrated Principles of Biology (Introductory Biology); Cells, Organisms & Genetics (Biology for non-majors)
 Guest Lecturer: Cells, Organisms & Genetics, Marine Ecology
- 1987-1989 Dartmouth College
 Laboratory Assistant for: Biology of Adaptation; Ecology

FELLOWSHIPS AND AWARDS

- 1999 ASLO Student Travel Award
- 1997-1998 NSF Graduate Research Training Fellowship
- 1997&1998 Western Society of Naturalists - Graduate Student Travel Award
- 1995-1998 University of California Toxic Substances Research and Teaching Program Fellowship
- 1994 Best Student Paper Award - Vice Admiral William W. Behrens Award for Oceanography - Florida Institute of Oceanography & Florida Academy of Sciences
- 1991-1993 Grinter Fellowship (University of Florida)
- 1990&1992 National Science Foundation - Honorable Mention - Predoctoral Fellowship
- 1989-1990 Kem Hartwell Tyler 1973 Leadership Award (Dartmouth College)

To conduct an Aleutian Islands state-waters Pacific cod fishery the following management plan is provided.

If adopted, amend 5 AAC 28.081 to include the proposed Aleutian Islands state-waters Pacific cod fishery.

If adopted, consider amendments to 5 AAC 28.629 (d) (1&2) and (e). For example 5 AAC 28.629 (d) (1) allows trawl vessels less than or equal to 60' to operate in Sitkin Sound for Pacific cod year-round. That contradicts the trawl exclusion from May 1 – September 15 in the proposal.

5 AAC 28.6XX. Aleutian Islands District, west of 170° W long., Pacific Cod Management Plan

(a) This management plan governs the harvest of Pacific cod in the Aleutian Islands District west of 170° W longitude, of the state Bering Sea-Aleutian Islands Area.

(b) Each year the commissioner shall open and close, by emergency order, a parallel Pacific cod season in the Aleutian Islands District west of 170° W longitude to coincide with the initial federal season in the federal Bering Sea-Aleutian Islands Area. The commissioner shall open and close, by emergency order, the parallel Pacific cod season during which the use of the same gear allowed in the federal Bering Sea-Aleutian Islands Area Pacific cod season is permitted, unless use of that gear is prohibited under 5 AAC 28.050 or 5 AAC 28.629.

(c) The commissioner shall open, by emergency order, a state-waters Pacific cod season in the Aleutian Islands District west of 170° W longitude on March 15. The commissioner shall, by emergency order, close the state-waters Pacific cod season opened under this subsection when the guideline harvest level is taken or on December 31, whichever occurs first;

(d) The commissioner may open and close, by emergency order, fishing seasons at times other than those specified in this management plan if;

(1) the guideline harvest level specified in (e)(1) of this section has been reached and a federal season is ongoing in adjacent federal waters; or

(2) the commissioner determines it is necessary to

(A) adapt to unanticipated openings and closures of the federal season;

(B) maintain sustained yield management; or

(C) provide for orderly fisheries.

(e) During a state-waters season,

(1) the guideline harvest level for Pacific cod in the Aleutian Islands District west of 170° W long. is 3 percent of the estimated total allowable harvest of Pacific cod for the federal Bering Sea-Aleutian Islands Area;

(2) Pacific cod may be taken only with groundfish pots, mechanical jigging machines, and hand troll gear:

(A) During 2006, in addition to the gear types specified in (2) of this subsection, non-pelagic trawl and longline gear may be used during the state-waters season except from May 1 – September 15. A vessel must be registered to fish with non-pelagic trawl or longline gear; a vessel's gear registration may be changed during a state-waters season to a different gear registration if the owner, or the owner's agent, submits a written request for a change in registration by mail, facsimile, or in person, to the department office in Dutch Harbor, and that registration has been validated by the department;

(B) During 2006, trawl gear may only be operated during the state-waters Pacific cod fishery in those waters opened for non-pelagic trawling during the parallel Pacific cod fishery.

(f) in addition to the requirements of 5 AAC 28.020, a vessel must be registered to fish with pot gear or with mechanical jigging machines and hand troll gear (jig gear), and may be registered to fish only with one of these two gear types; a vessel's gear registration may be changed during a state-waters season to a different gear registration if the owner, or the owner's agent, submits a written request for a change in registration by mail, facsimile, or in person, to the department office in Dutch Harbor, or other locations specified by the department for validation, and that registration has been validated by the department;

(g) The Aleutian Islands District is a non exclusive registration area for Pacific cod during a state-waters season.

Additional DRAFT Comments from the North Pacific Fishery Management Council on the November 16, 2005 (version 17A) Commerce Committee MSA bill:

Generally the draft bill contains many positive provisions, including those which have the potential to greatly improve the management process by resolving the difficulties associated with NEPA application. There are some aspects of the draft bill however that cause us significant concerns. The primary issues of concern include the following:

- Catch Limits: In specifying provisions for establishing annual catch limits, the language references optimum yield (OY) as the limit, rather than a biologically based reference such as Acceptable Biological Catch (ABC). Detailed comments and suggested alternative language are included below.
- LAP provisions: Regarding development of limited access programs (LAPs), the draft bill contains a number of provisions that will add complexity to development of a program (entry level economic assistance programs, community sustainability plans, certification requirements, etc), a number of provisions that are not clearly defined (regional associations, substantial participation, historical participation of communities, to extent practicable, to extent appropriate, etc), a number of provisions that will limit to a large degree the Council's flexibility in program design (or mandate the program's design), and a number of provisions that will require the development of extensive oversight. This will likely expand the time and resources necessary for program development and require a larger bureaucracy for management. **Coupled with the referendum (petition) requirement, the overall effect of these limited access provisions will likely be to severely impede the use of this management tool by any regional Council.** Detailed comments regarding the LAP provisions are included below.
- Statutes: Section 107 is intended to address the concerns with reconciliation of MSA and NEPA. The language in the Senate Commerce draft has the potential to result in great improvements to the current situation; however, it has the potential to result in no improvements. How the Secretary implements this section of the Act in concert with the CEQ and the Councils (i.e. whether and how the revised procedures result in effective change) will be critical. The Councils have suggested an alternative approach (which would include critical NEPA provisions directly in the MSA and include a NEPA exemption), and we continue to believe this would be a superior solution.
- Data Collection: The draft bill would add a provision to Section 202 (collection of information) which allows the Secretary seemingly broad discretion to initiate significant information collection measures (including observer programs) without Council input, and without clear justification. We recommend that language be added which would limit this discretion to instances where a Council has clearly failed to act responsibly, or where the lack of information clearly results in critical resource conservation issues.

Following from the general comments above, we offer the following detailed comments and recommendations for your consideration:

Section 103 – Regional Fishery Management Councils

Regarding the additional requirement for Councils to adopt annual catch limits after considering SSC recommendations – this is consistent with current practice, but later section (104) requires it to be set at level that will not exceed OY (see additional comments below on Section 104).

Regarding notice of meetings, deletes requirement for publication in newspapers, and replaces with “*any means that will result in wide publicity*”. This should be fine, but we **recommend also deleting the requirement to publish in FEDERAL REGISTER.**

This draft establishes a Council Coordination Committee to provide FACA exemption for CCED and other meetings. This is good, but we recommend adding language from the Administration Draft Bill which would expand that exemption. To that end we **recommend adding the following language at the end of the new (g) (1) “or to meetings that include Federal employees, committee members, or Council staff”.**

Section 104 – FMP Requirements

Adds requirement for specification of annual catch limits that do not exceed optimum yield (OY). **We recommend language that simply references establishment of an annual ABC, and adds a definition for ABC.** While the North Pacific operates under on overall OY cap (this essentially equals our combined TACs for all species each year), individual species or species complexes could be affected. **If the OY limit is meant to be applied to overall (collective) species OYs, rather than on a species-by-species basis, then the problems are mitigated, but are not entirely eliminated.** Also, deductions from following year’s harvest limit would be redundant (in the case of the North Pacific) to reductions which would automatically be included in the ABC setting process (if harvest/TAC were exceeded in previous year), and could greatly complicate the annual TAC setting process, and could result in challenges under the Administrative Procedures Act, thereby delaying annual TAC specifications. Suggested alternative language follows:

Option 1: Use the ABC/TAC model and add a definition for ABC

Definition for ABC could be “Acceptable Biological Catch (ABC) is defined as an annual specification of fishing mortality (upper limit) established for individual fish stocks or stock assemblages that prevents overfishing and promotes maximum sustainable yield”.

With regard to role of the SSC (page 10, line 22), you could delete reference to OY. SSC would still set ABC.

With regard to role of Council (page 17, line 13), you could delete "at a level that does not exceed optimum yield", and replace that with "at a level that does not exceed ABC limits established by the SSC or appropriate scientific body" . (You could add "and which is consistent with the concept of OY" if you really need to retain some reference to OY...)

Option 2: Base on overfishing limits

Regarding role of SSC (page 10, line 22), delete "optimum yield" and replace with "and overfishing limits". (our SSC establishes OFL limits as well as ABC already).

Regarding role of Council (page 17, line 13), delete "does not exceed optimum yield" and replace with "does not exceed overfishing limits established by the SSC or other appropriate scientific body". (Again, you could add "and which is consistent with the concept of OY" if you really need to retain some reference to OY...)

Rationale for this alternative language includes the following:

(1) MSY, ABC, and OFL (overfishing level) are biological reference points that the SSC can and should be setting. OY, like TAC, is not a scientific, biological reference point but is a 'subjective' harvest level and includes social and economic factors - it is not a constraint for biological reasons and therefore can be set over a very wide range.

(2) \diamond The definition of "optimum" and its use in optimum yield has been in place for nearly a decade, and has not prevented overfishing. Instead, it is intended to provide significant flexibility to account for economic factors and has been used to justify unsustainable fishing levels (i.e., right at MSY rather than below it, where MSY is defined at all). The goal of having each council set biologically based annual catch levels could be undermined by the use of OY as a replacement for ABC.

(3) OY is not specified annually (in our case it is in our FMPs and is an overall OY cap across all species). OY is determined using social and economic information and reflects social and economic goals. These are policy calls that often involve allocation decisions.

(4) Scientists on the SSCs should not be put in the position of making allocation decisions (OY). If the industry or the public at large believe the scientists are making allocation decisions, public confidence in the scientific process will quickly evaporate.

Section 106 – Limited Access Provisions

Primary Comments

Requirements for referendum (petition) would eliminate a Council's authority to initiate programs, could prevent potentially beneficial programs from ever being developed, and could negatively affect programs already under development in the North Pacific such as CGOA rockfish, H&G fishery cooperatives, and GOA

rationalization. It is unclear whether the referendum requirement is for *submittal and approval*, or if it would limit *initiation* as well. If a referendum is required before a Council can initiate a program (and provide some type of draft program design), then a Catch-22 results – it will be difficult if not impossible for license holders to vote for something that is completely undefined. Along the same lines, the provision that allows a referendum by “*a group of fishermen holding more than 50% of the allocation*” appears illogical because at this point the allocation criteria have not been defined (nor do we yet know what other set asides might be included to address the requirements for consideration of communities, regional associations, crewmembers, etc). Additionally, a large number of permit holders with relatively low (or no) participation levels could very likely prevent development of a program that could benefit those permit holders most dependent upon the fishery, as well as benefit coastal communities dependent upon those fisheries. **We believe that the Councils should have the ability to initiate and develop programs, and we recommend eliminating the requirement for a certification through referendum (petition).**

Draft bill includes language (303(c)(3)(F)) that says “shall...authorize LAPs to be held by persons substantially participating in the fishery...as specified by the Council...as appropriate...including vessel owners, captains, crew members, fishing communities, and regional fishery associations...” It is still unclear whether this means that any program *must* allocate privileges to all these groups, or that it allows a Council *discretion* in this regard. It is also unclear (and will be difficult to determine) what ‘substantially participates’ means. **We recommend that Section (303(c)(3)(F) under ALLOCATION be altered to read “allow, at the Councils’ discretion, limited access privileges to be held by or issued under the system to persons including fishing vessel owners, vessel captains, vessel crew members, fishing communities, and regional fishery associations”. Generally, we recommend replacement of the word ‘shall’ with the word ‘may’ to provide the Councils and Secretary with maximum flexibility in program design.**

Regional fishery association – this term is not clearly defined, particularly as it relates to ‘fishing communities’. It does seem to allow processors to form an organization for purposes of participating in a limited access privilege program; i.e., a fishery cooperative. It is not clear how this works, or whether an association with more than one processor would have a high risk of violating antitrust laws. Additionally, there **do not appear to be any clear authorizations for development of ‘AFA-style’ fishery cooperatives** (with processor associations or linkages), which the North Pacific has used and is considering for other fisheries. We recommend adding language in Section 303(c)(3)(F) to include AFA-style fishery cooperatives – i.e., consistent with recommendation in paragraph above, it would read “*allow, at the Councils’ discretion, limited access privileges to be held by or issued under the system to persons including fishing vessel owners, vessel captains, vessel crew members, fishing communities, fishery cooperatives (similar in structure to those established under the American Fisheries Act), and regional fishery associations*”

While Section (g) (Effects on Certain Existing Shares and Programs) protects existing programs from reallocations of shares based on the new provisions, it is unclear what would guide the development of other amendments to existing programs. The new provisions appear to pertain only to creation and development of new programs, and therefore other provisions of the Act (such as National Standards, and Required Provisions of FMPs) would apply to amendments to existing programs (as they do now). One exception could be Section 303(c)(2)(A), which does not contain specific language referencing “creation or development of a new program” (and which for example could be construed to require an overhaul of the existing community purchase program for halibut and sablefish IFQs in the North Pacific). **We recommend the following language be substituted – “IN GENERAL – To be eligible to participate in a limited access privilege program to harvest fish developed under the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2005, a fishing community shall-“**

Generally, the provisions in Section 106 give more weight to communities to receive initial allocations, and emphasize ‘historic and sustained participation’, ‘dependence on the fishery’ and ‘economic and social impact’ on eligible communities to a much greater extent than the current MSA. Overall, this may strengthen the rationale for councils to make allocations to community entities, crew, captains, etc. if it was desired. **But it considerably narrows a Council’s flexibility to determine the eligibility criteria for communities and how the programs are structured to meet the particular objectives of the program being developed. The mandated criteria for eligible communities is subjective and will be extremely difficult to implement.**

Additional, specific comments

- (c)(2)(A)(iv) “community sustainability plan” is not well defined, but allows Council to develop and determine criteria for such plans (after approval by SOC).
- (c)(3)(A)(ii) allocation criteria are not crystal clear – suggests, for example, that processing participation may be considered with “processing employment”
- (c)(3)(A)(iii) unclear what investment in the “fishery” means – NOAA GC has traditionally defined the fishery as stopping at the water’s edge (not including processors for example). We recommend deletion of reference to investment in the fishery, unless the term ‘fishery’ is clearly defined.
- (c)(3)(A)(iv) consideration of current and historic participation of communities is cloudy and subject to a lot of interpretation. For example, is an allocation to the community the only way that “community participation” is recognized? Also some question of what community participation means – communities historically have had no active role in the fishery – they may own some port facilities, but never employed fishing or processing effort – also, if a community’s residents receive an allocation is that sufficient consideration of the community?

- (c)(3)(B) terminology here is problematic – requires the consideration “to the extent practicable” of small, owner-operated fleet and communities – better terminology might be “to the extent appropriate”.
- (c)(3)(E) the DOJ and FTC requirements are pretty cumbersome and not clear as to FTC role – since there appear to be no processing privileges it is unclear why these provisions are necessary.
- (c)(6)(B) the provision for establishing criteria to approve and monitor transfers almost suggests that the Council will be overseeing transfers on an individual basis – this is not clear and could be cumbersome and problematic. We recommend deletion of this provision.
- (g) The provision that the act requires no changes to programs approved by the Secretary or Congressional action could be said to leave the CGOA rockfish program intact, but may jeopardize other, on-going programs in the North Pacific (H&G cooperatives under Amendment 80 and GOA rationalization).

LAP provisions specific to community involvement

p. 22 – Sec. 106 (c)(1)(C): Throughout, the Act references that access privileges can be acquired by ‘fishing communities’, as opposed to ‘an entity representing a fishing community,’ as all of our current and proposed programs in the North Pacific allocate to an entity representing a community that is specified in regulation. The new version adds that a ‘regional fishery association’ may acquire a privilege to harvest fish. Intent of adding ‘regional fishery association’ is unclear, relative to fishing community or entity representing a fishing community.

p. 23 – Section 106(c)(2)(A): Provisions (i) – (iv) specify minimum criteria for communities participating in a limited access privilege program, and then (ii) allows the Councils to develop even more restrictive criteria. But communities would at LEAST have to meet (i) – (iv). In specific, (ii) appears to limit the Councils to create criteria for eligible communities—you could not just pick community X and Y and Z to be part of a program.

In criteria (iii), the revised version is modified such that Councils could only allow communities with commercial or recreational fishing within the Council’s management area in a program. Modified version is more appropriate, removes mention of subsistence fishing.

In criteria (iv)—still unclear what a ‘community sustainability plan’ is. It does not seem to need to be related to fishing. The new language requires that it is submitted to both the Council and the SOC, but it is unclear whether it requires both the Council AND the SOC to approve the plan, or just the SOC.

p. 24 – Section 106(c)(2)(B): The new version adds language such that the Council shall base participation criteria for eligible communities on several factors, including *the existence and severity of projected economic and social impacts associated with implementation of limited access privilege programs on harvesters, captains, crew, processors, and other businesses substantially dependent upon the fishery in the region or subregion.* Comment is similar to previous comment. This section mandates the participation criteria for eligible communities and

requires that the criteria are based on all listed factors (not one or two). And while we typically consider all those factors when we develop a program in general, NMFS encourages the use of clear, objective criteria in order to be able to apply it correctly and have it hold up to appeals. Thus, we commonly use population and proximity to the fishery as our main, if not only criteria, with landings thresholds to show 'dependence' or 'use' of the fishery at issue. Instead of requiring that the Council consider these factors when deciding whether to allocate to communities in general, the Act mandates that the criteria must be based on these extremely subjective factors. As an example of the difficult this creates, NOAA HQ social science program has spent years and hasn't yet defined what 'dependence on the fishery' means and how to determine it in each region. The language in this section could invite litigation.