Bering Sea FEP team invitees

December 2, 2016

The generic invitation letter and candidate CVs are attached.

1. Kerim Aydin – AFSC (ecosystem modeling)
2. Mike Dalton - AFSC (economist)
3. Diana Evans – Council (Council management)
4. Anthony Fischbach – USGS (subsistence, walrus)
   *awaiting confirmation*
5. Brandee Gerke – NMFS AKR (NMFS management)
6. Jim Ianelli – AFSC (pollock stock assessment, Plan Team chair)
7. Bradley Harris - UAA (habitat modeling)
8. Jo-Ann Mellish – NPRB (research, marine mammals)
9. Heather Renner - USFWS (seabirds)
10. Elizabeth (Ebett) Siddon – AFSC (ecology)
11. Ian Stewart – IPHC (halibut stock assessment)
12. Stephani Zador – AFSC (ecosystem considerations report)
13. Chris Siddon – ADFG

*declined*
October 31, 2016

Dear Candidate:

The Council has initiated development of a Fishery Ecosystem Plan (FEP) for the Bering Sea (BS). In order to help write the FEP, the Council is creating a scientific and technical Bering Sea Ecosystem Team. You have been recommended as an excellent candidate, and we invite you to join the BS Ecosystem Team.

Fisheries management in Alaska has long been recognized as being particularly responsive to ecosystem concerns. The Council has practiced an ecosystem approach for many years. The Council has acknowledged that moving toward ecosystem-based fishery management (EBFM) is a process, and as new information or tools become available, the Council has responded by improving the fishery management program. Nonetheless, while there are strong relationships between management and ecosystem science in Alaska, which are recognized worldwide as exemplary, they often remain informal. Fisheries Ecosystem Plans are a tool that can serve as a framework for continued incorporation of ecosystem goals and actions in regional management. An FEP for the Bering Sea could be used to guide policy options and associated opportunities, risks, and tradeoffs affecting FMP species and the broader Bering Sea ecosystem in a systematic manner. The Bering Sea FEP could document current procedures and best practices for EBFM, provide brief, targeted, and evolving descriptions of the interconnected physical, biological, and human/institutional Bering Sea ecosystem and through ecosystem thresholds and targets, and direct how that information can be used to guide fishery management options.

The Council has scoped out how to design a FEP for the Bering Sea (see the Council discussion paper on this topic from December 2015, at www.npfmc.org/bsfep). The Council has opted to develop a core FEP as a framework document, with the potential for various action modules to be developed under the framework, as time and resources allow. The core FEP would contain a series of strategic components for the FEP, as illustrated in the figure below. Action modules are specific analyses or research efforts that can be initiated within the framework of the FEP, but are projects with their own scope, tasking, and timeline. The action modules are linked directly to the FEP’s strategic objectives, and the purpose and scope of each task, as well as a description of how the outcome will be used in management (e.g., whether it will lead to an FMP amendment analysis), is defined in the core FEP. In this way, the action modules will be responsive to the Council’s management needs, and their outcomes will have a direct effect on the Council’s decision-making process. The Council also has the flexibility to prioritize action modules, and initiate them concurrently or sequentially depending on Council needs and resource constraints. As they are completed, modules should be synthesized and evaluated in aggregate; modules should leverage other modules where possible.

The core FEP would include the Council’s approved list of action modules, and a description of each one, along with its priority.
The primary responsibilities of the BS Ecosystem Team will be:

1) To develop the core FEP document, which describes EBFM principles, the BS ecosystem, FEP goals and objectives, and the FEP framework process for identifying, prioritizing, and re-evaluating action modules.

2) Once the FEP is developed, team members will continue to meet to discuss ongoing and upcoming action modules, and make recommendations to the Ecosystem Committee and the Council about future steps.

3) The FEP team will be responsible for writing up the five questions to evaluate each potential action module: a synopsis of the task, what purpose it will achieve relative to FEP objectives, how it will inform and be integrated into the Council’s decisionmaking and management process, an estimate of time and staff resources to achieve, and a plan for public involvement.

4) Team members will also evaluate action module outcomes, and help to communicate results to the Council and adapt the FEP process as appropriate.

For the first phase, members will be asked to attend two or three meetings in order to develop the document, and will help to draft sections of the FEP document. The charge to the BS Ecosystem Team is to develop the FEP, and the team may change constituency at the end of that time. We anticipate that the process for developing the FEP will take approximately 18 months; this will be discussed and refined by the Team at the initial meeting.

- **December 2016:** finalize Ecosystem Team membership
- **Early Jan 2017:** Ecosystem Team meets to refine FEP process/intent, review existing compilation materials, determine TOC/assignments
- **Feb/Apr 2017:** feedback from Ecosystem Committee, SSC, Council on Ecosystem Team plan
• Feb-Sep 2017: Team works on drafting sections, synthesis
• Apr-May 2017: Team meets
• June 2017: feedback from Ecosystem Committee
• October 2017: Council reviews first draft of FEP
• Oct 2017-Mar 2018: team revises FEP
• April 2018: Council reviews final FEP

We will pay travel expenses for non-Federal employees attending the Ecosystem Team meetings, but we are not able to offer any stipendiary compensation. We anticipate the meetings will take place at the Alaska Fisheries Science Center, in Seattle, WA.

We are excited about developing a FEP for the Bering Sea, and hope that you will be available to assist us in this challenge. I should be grateful to receive your response by November 28, 2016. All appointments to the Team are subject to Council final approval, and we hope to submit the resumes of all candidates to the Council for review at their meeting in early December. Diana Evans is our staff lead on this project, and you may contact her by email, diana.evans@noaa.gov, or by telephone, at (907) 271-2809, with any questions.

Sincerely,

Chris Oliver
Executive Director

cc: Supervisor(s)
KERIM Y. AYDIN.
Alaska Fisheries Science Center, US NOAA Fisheries
7600 Sand Point Way NE, Seattle, WA 98115 U.S.A.
PH: (206) 526-4225
E-mail: Kerim.Aydin@noaa.gov

EDUCATION
“Trophic Feedback and variation in Carrying Capacity of Pacific Salmon (Oncorhynchus
spp.) on the High Seas of the Gulf of Alaska.”
B.S. (1992) Mathematical Biology, Harvey Mudd College, Claremont, CA

RECENT EXPERIENCE
2005-present: Supervisory Research Fishery Biologist, Resource Ecology and Ecosystem
Modeling Program, Alaska Fisheries Science Center, U.S. NMFS, Seattle
2005-present: Affiliate Professor, School of Aquatic and Fisheries Sciences, Univ. of Washington,
Seattle
Science Center, Seattle.
1999-2002: Contractor and Postdoctoral Associate, NMFS, University of Washington, Seattle

PROFESSIONAL ASSOCIATIONS
Chair, North Pacific Marine Science Organization (PICES) Task Team on Climate, Fisheries,
Member, North Pacific Fisheries Management Council (NPFMC) Bering Sea and Aleutian
Islands Groundfish Plan Team (2003-present).
Alaska Region representative for the NOAA Integrated Ecosystem Assessment (IEA) Steering
Committee, (2012-present).

SELECTED PUBLICATIONS
Holsman, KK and K Aydin. 2015. Comparative methods for evaluating climate change impacts on the
points estimated from temperature-specific multispecies and single species stock assessment models.
Deep Sea Res II.
Ianelli, J, KK Holsman, AE Punt, K Aydin (in press). Multi-model inference for incorporating trophic
and climate uncertainty into stock assessment estimates of fishery biological reference points. Deep
Sea Res II.
Moffitt, E, AE Punt, KK Holsman, KY Aydin, JN Ianelli, I Ortiz (in press). Moving towards Ecosystem
Based Fisheries Management: options for parameterizing multi-species harvest control rules. Deep
Sea Res II.
Buckley, T.W., I. Ortiz, S. Kotwicki, K. Aydin. In press. Summer diet composition of walleye pollock
and predator-prey relationships with copepods and euphausiids in the eastern Bering Sea, 1987-2011.
Deep-Sea Research II.
Hunt, G.L. Jr., P.H. Ressler, G.A. Gibson, A. DeRobertis, K. Aydin, M.F.Sigler, I. Ortiz, E.J. Lessard,
B.C. Williams, A. Pinchuk, T. Buckley. In Press. Euphausiids in the eastern Bering Sea: A
synthesis of recent studies of euphausiid production, consumption and population control. Deep-Sea


RECENT COLLABORATIONS
Michael Dalton
Alaska Fisheries Science Center
7600 Sand Point Way NE
Seattle WA 98115
Email: Michael.Dalton@noaa.gov
Ph. 206-526-6551

Education
Ph.D. 1995  Economics, University of Minnesota
B.S. 1989  Economics and Mathematics (Cum Laude), University of Minnesota

Professional Experience
2006-  Industry Economist, Alaska Fisheries Science Center/NOAA Fisheries
2006  Associate Professor, Division of Science and Environmental Policy, California State University Monterey Bay
2001-05  Assistant Professor, Division of Science and Environmental Policy, California State University Monterey Bay
1998-01  Lecturer, Division of Science and Environmental Policy, California State University Monterey Bay
1998-99  Research Associate, Stanford University
1995-98  Postdoctoral Research Associate, Stanford University
1994-95  Research Assistant, University of Minnesota
1990-94  Teaching Associate, University of Minnesota

Service and Synergistic Activities
Pacific Fishery Management Council Scientific and Statistical Committee (2000-2006; Chair, Economic Subcommittee),
North Pacific Fishery Management Council Gulf of Alaska Groundfish Plan Team (2008-pres.)
National Climate Assessment Ocean and Marine Services Technical Input Team (2012-13)
Principal Investigator NPRB Bering Sea Integrated Ecosystem Research Program (2008-15)
Principal Investigator, NOAA Ocean Acidification Program (2008-pres.)

Graduate Student Advisor and Post-Doctoral Supervisor
Monica Galligan (M.S., California State University Monterey Bay); Prasanth Meiyappan (Ph.D., University of Illinois Urbana-Champaign), James Murphy (Post-Doc, University of Washington)
Dusanka Poljak (M.S., University of Washington), Suresh Sethi (Ph.D., University of Washington)
Selected Publications


DIANA EVANS

North Pacific Fishery Management Council
605 W 4th Ave Suite 306
Anchorage, AK 99501

Diana.evans@noaa.gov
(907) 271-2815

EDUCATION

MSc in Geography, King’s College London, University of London, United Kingdom, 1999
BA in Linguistics and Geography, University of California, Berkeley, 1997

RELEVANT EXPERIENCE

North Pacific Fishery Management Council
Fishery Analyst, 2008 - present
NEPA Specialist, 2002 - 2008

Primary responsibilities include research, analysis and coordination of environmental analyses for
amendments to the Fishery Management Plans for Council-managed groundfish, halibut, and crab
fisheries in the Bering Sea/Aleutian Islands and Gulf of Alaska, and all related staff support for the five
annual North Pacific Fishery Management Council meetings and related committee meetings (Science
and Statistical Committee, Advisory Panel, Ecosystem Committee, Observer Advisory Committee,
Electronic Monitoring Workgroup, Aleutian Islands Ecosystem Team). Key examples of Council work
summarized below.

- **Aleutian Islands Fishery Ecosystem Plan (FEP).** Council lead for developing the 2007
  Aleutian Islands FEP, and Chair of the Aleutian Islands Ecosystem Team. The team was
  responsible for designing the structure of the FEP within the Council’s guidelines, including
  identifying key interactions within the AI ecosystem and developing a qualitative risk assessment
  and monitoring indicators.

- **Staff to the Council’s standing Ecosystem Committee** from 2004-2014. Responsible for
  coordination of and presentations at all committee meetings, development of minutes following
  the meeting and conveying the committee’s recommendations to the Council.

- **Coordinator of the Alaska Marine Ecosystem Forum** from 2005-2011. The forum brought
  together Federal and State agencies with jurisdiction over activities in marine waters to improve
  coordination and communication.

- **Observer and electronic monitoring issues.** Primary analyst on the Council’s action to
  integrate electronic monitoring as part of the groundfish and halibut observer program process.
  Council coordinator of Observer Advisory Committee and Fixed Gear Electronic Monitoring
  Workgroup. Primary analyst on diverse range of analyses relating to the Observer Program and
  the development of electronic monitoring in Alaska.

- **Bycatch issues.** Primary environmental analyst on 2015 halibut bycatch reduction limit analysis
  in the Bering Sea, also previous salmon and crab bycatch reduction actions in the Gulf of Alaska.

- **Habitat issues.** Prepared the 2010 5-year review of Essential Fish Habitat report, refinements to
  the process for establishing habitat areas of particular concern, development of analyses for using
  modified trawl sweeps to reduce habitat impacts of bottom trawls.

- **Analyst and Council project coordinator** for the 2004 *Groundfish Programmatic Supplemental
  Environmental Impact Statement* (PSEIS). Tracked Council progress on implementing the
  goals of the PSEIS through 2015, including preparation of a Supplemental Information Report in
  2015 to evaluate new information.
URS Corporation
Project Manager and Environmental Analyst
2000-2002
• Deputy Project Manager, preparation of the Groundfish Programmatic Supplemental EIS for NMFS Alaska Region.
• Assistant Project Manager for other NEPA documents, including the NMFS Pacific Islands Region Pelagics EIS and the cumulative effects section of the NMFS Alaska Region Steller Sea Lion Supplemental EIS
Anthony Fischbach
USGS Alaska Science Center
4210 University Drive
Anchorage, AK 99508 USA
(907) 786-7145
afischbach@usgs.gov

Resume Purpose
Wildlife Biologist / Ecosystem Team

Education

University of Texas at Austin, Texas
Zoology: (Fall 1991 to Spring 1994)
Passed PhD qualification exam,
Accepted Masters of Arts

University of Bayreuth, Germany
Molecular Systematics: (1989 through 1990)
Fulbright Scholar

University of Wisconsin-Madison, Wisconsin
Molecular Biology (Honors Program): (Fall 1985 through Spring 1989)
Bachelor of Science
256/3112 (top 10%)
3.7
840 (98th %tile)

Data Management and Analysis Skills
- Database Development and Analysis: Access/SQL/Visual Basic, R
- GIS Cartography and Analysis: R, ArcGIS/Python
- Statistical Analysis: R

Special Skills and Experiences
Cross cultural: Lived 5 springs in Siberian Yu’pik walrus hunting village;
20 years’ of wildlife biology work in Native Alaskan communities of the Arctic coast;
Presented environmental education talks in rural Costa Rica;
Volunteered 3 months in rural India;
Studied one year in Germany with extensive travel in Poland

Language: German (fluent), Spanish (moderately fluent), Russian (2 semesters)
Work and Related Experiences

Wildlife Biologist GS-12
Walrus Research Program - Alaska Science Center, USGS
(Jan. 2004 to present) 
Supervisor: Chad Jay

Duties: As the assistant to the project leader, conduct Pacific walrus research; manage research databases; analyze research results; present science to user groups, the press and the public; and author peer reviewed papers

Wildlife Biologist GS-11
Kodiak National Wildlife Biologist – US Fish and Wildlife Service
(Nov. 2002 to Jan 2004) 
Supervisor: William Pyle

Duties: As the native mammal program leader, provide biological support for the management of native mammals by authoring native mammal sections of the Refuge plan; documenting and replicating previous wildlife biology studies; including a 4 ½ month brown bear behavior study; and initiating and coordinating a comprehensive population genetics study of brown bears on the Kodiak archipelago.

Supervision: Supervised one Student Career Employment Program position and acted as field supervisor of 5 employees and volunteers.

Zoologist GS-9
Polar Bear Research Program - Alaska Science Center, USGS
(Dec. 2000 to Nov. 2002) 
Supervisor: Steve Amstrup

Duties: As a member of a team of biologists and aviators, conduct polar bear research in the Alaskan arctic; manage research databases; analyze research results; present public talks and posters; and co-author peer reviewed papers.

Wildlife Biologist GS-9
Marine Mammals Management, US Fish and Wildlife Service
(May 1998 to April 1999) 
Supervisor: Scott Schliebe

(April 1999 to Dec 2000 - Detailed to USGS) 
Supervisor: Steve Amstrup

Duties: Manage and analyze polar bear management and population data; manage GIS data, author peer reviewed publications; monitor the walrus harvest; supervise 7 contract employees in rural Alaska; instruct and supervise wildlife biologists in the use of databases

Biological Technician GS-7
Marine Mammals Management, US Fish and Wildlife Service
(April 1995 to May 1998) 
Supervisors: Scott Schliebe and Wells Stephenson

Duties: Monitor walrus harvest, supervising contract employees; assist on marine mammal research; manage and analyze polar bear management data and GIS

Nordic Ski Patroller
South Central Alaska (1997-2002)
Duties: Provide emergency medical support in remote settings

Bat Biologist
Collaborator: Steve Lewis
Duties: Co-lead radio-telemetry study of bat roosting habitat; supervise field assistants

GIS Specialist and Biologist: SCA intern
Kenai National Wildlife Refuge
(September 1994 through March 1995) 
Supervisors: Dr. Ed Berg
Duties: Manage GIS; compile wildlife data; and assist with fieldwork


**Technical Presentations**


Reports


**Databases**


BRANDEE GERKE  (907)586-7650, Brandee.Gerke@noaa.gov

EDUCATION
Master’s Degree in Fisheries Science, University of Alaska Fairbanks, Fairbanks, Alaska, December 2002
Bachelor’s Degree in Fisheries Science, Oregon State University, Corvallis, Oregon, June 1997

EXPERIENCE
Supervisory Fishery Management Specialist, ZP-IV
NOAA Fisheries, Alaska Region Sustainable Fisheries
September 2014 – Present

- Serve as the Ecosystem Branch Chief for Sustainable Fisheries.
- Supervise the successful completion of Fishery Management Plan amendments and implementing regulations.
- Ensure all Endangered Species Act (ESA) section 7 consultations are completed for North Pacific Federal fishery actions.
- Coordinate Alaska Region Ecosystem Based Fishery Management issues.
- Negotiate exempted fishing permits to allow testing of new fishing methods and gear types.

Resource Management Specialist, ZP-IV
NOAA Fisheries, Alaska Region Protected Resources
August 2012 – August 2014

- Served as the Marine Mammal and Fishery Interaction Specialist for Protected Resources.
- Led the development of an ESA Biological Opinion on effects of the Alaska Groundfish Fisheries on Steller Sea Lions.

Fishery Management Specialist, ZP-III
NOAA Fisheries, Alaska Region Sustainable Fisheries
June 2008 – August 2012

- Served as the liaison with the Alaska Fishery Science Center Fishery Monitoring and Analysis Division (FMA) for Sustainable Fisheries.
- Alaska Region lead for FMP amendment and regulations to restructure the funding and deployment system for groundfish and halibut fisheries observers in the North Pacific.
- Collaborated with the FMA, North Pacific Fishery Management Council, and Alaska Region staff to complete rulemaking and implement the new program on schedule.

Sea Turtle Recovery Coordinator, ZP-IV
NOAA Fisheries, Pacific Islands Region Protected Resources

- Led the sea turtle management and conservation program for Protected Resources.
- Developed and maintained partnerships for sea turtle conservation and research with federal agency partners, Western Pacific Fishery Management Council staff, university researchers, local and national non-governmental organizations, State of Hawaii agencies, and partners in Guam, American Samoa, and the CNMI.
- Prioritized spending for sea turtle conservation and recovery activities.
Fishery Biologist, ZP-III
NOAA Fisheries, Alaska Region Protected Resources
June 2001 – June 2004

• Served as the Assistant Steller Sea Lion Coordinator.
• Lead marine mammal analyst for the 2004 Alaska Groundfish Fisheries Programmatic Supplemental Environmental Impact Statement.
• Co-authored 2001 Biological Opinion and 2003 Supplement on the Effects of the Alaska Groundfish Fisheries on ESA-listed species including Steller sea lions.
• Compiled fishery data requests and provided technical support to the Steller Sea Lion Recovery Team and the North Pacific Fishery Management Council’s Steller Sea Lion Mitigation Committee.
• Served as the technical monitor for NOAA’s Steller sea lion research grants.

OTHER EXPERIENCE
• GIS Coordinator, Cramer Fish Sciences, June 2004 – December 2004
• Fishery Biologist, Alaska Department of Fish and Game, June 2000 – June 2001
• Research Fishery Biologist, Auke Bay Lab, June 1997 – June 2000
Bradley P. Harris
Phone: (907) 564-8802
Email: bharris@alaskapacific.edu
Website: www.alaskafastlab.org

EDUCATION
Ph.D.  Fisheries Oceanography. University of Massachusetts - School of Marine Sciences. 2011
M.Sc.  Fisheries Oceanography. University of Massachusetts - School of Marine Sciences. 2006
B.Sc.  Wildlife and Fisheries Science. Texas A&M University. 1999

PROFESSIONAL EMPLOYMENT
Primary Appointments
2011 - Present  Director, Fisheries, Aquatic Science & Technology (FAST) Lab, Alaska Pacific University
2011 - Present  Associate Professor, Alaska Pacific University
2012 - Present  Adjunct Professor, School of Marine Sciences, University of Massachusetts

PROFESSIONAL SERVICE
2014 - Present  Member: Scientific and Statistical Committee, North Pacific Fisheries Management Council
2013 - Present  Member: Working Group on Scallop Assessment, International Council for Exploration of the Sea
2013 - Present  Member: Working Group on Fishing Technology and Fish Behavior, International Council for Exploration of the Sea / Food and Agriculture Organization

PEER-REVIEWED PUBLICATIONS
3rd Edition
knowledge needs to achieve best practices for bottom-trawling in relation to seabed habitats.

Fish and Fisheries. 17(3): 637–663


Stokesbury, K.D.E., Carey, J.D., Harris, B.P., and O’Keefe, C.E. 2011. Incidental fishing mortality may be responsible for the death of ten billion juvenile sea scallops in the mid-Atlantic. Marine Ecology Progress Series. 425: 167-173


Harris, B.P. and Stokesbury K.D.E. 2010. The spatial structure of local surficial sediment characteristics on Georges Bank, USA. Continental Shelf Research 30(17): 1840–1853


Stokesbury, K.D.E. and Harris, B.P. 2006. Impact of a limited fishery for sea scallop (Placopecten magellanicus) on the epibenthic community of Georges Bank closed areas. Marine Ecology Progress Series. 307: 85-100


CURRENT GRADUATE STUDENTS

K. Bockelman - Assessment of the benthic community inside and outside the Red King Crab Savings Area.
B. King - Exploring methods to directly monitor trawl ground gear sea bed contact.
B. Richie - Impacts of diet on groundfish growth and fitness.
A. Kroska - Investigating halibut stress physiology.
J. Ashline - Identification of Juvenile Coho Salmon overwintering habitat selection and dispersal strategies.
M. Baldwin-Schaeffer - Assessing the impacts of offshore mining on Norton Sound Red King Crab.
V. Batter - Weathervane scallop species distribution modelling.
J. Hagan - Assessing the accuracy and uncertainty of Landsat derived stream temperatures for use in Chinook salmon habitat assessments on the Anchor River, Alaska.
L. Junge - Assessment of habitat information to improve the Aleutian Island Pacific cod stock assessment.
A. Nimick - Modeling fishing effects on EFH: What is more than minimal and not temporary?
S. Sitkiewicz - Impacts of the parasite Ichthyophonus on groundfish growth and fitness.
J. Stone - Assessment of Eastern Bering Sea juvenile Chinook salmon stock origin and the role of diet in growth and fitness.
S. Zagorski - Benthic impacts of raised groundgear for the Eastern Bering Sea pollock fishery.

PAST GRADUATE STUDENTS

C. Provost - Deepsea skate (Bathyraja abyssicola) size at age and maturity.
C. Grenier - Quantifying Ichthyophonus hoferi prevalence and intensity in Pacific halibut (Hippoglossus stenolepis) in Cook Inlet, Alaska.
S. Larsen - Triploid Induction of Hatchery Chinook Salmon (Oncorhynchus tshawytscha).
J. Mumm - A bathymetry-based habitat model for predicting Yelloweye Rockfish (Sebastes ruberrimus) distributions on the Outer Coast of Alaska’s Kenai Peninsula.
C. Simpson - “Smart Fishing in the Bering Sea” curriculum development and evaluation.
S. Simpson - Spatiotemporal assessment of Nushagak river salmon upstream migration with DIDSON sonar.
D. Verna - Ballast water management and associated risk of invasive species in coastal Alaska.
S. Webster - Size-at-age and diet composition of Pacific halibut (Hippoglossus stenolepis) in Cook Inlet, Alaska.
CURRICULUM VITAE

James N. Ianelli
Jim.ianelli@noaa.gov 3044 NE 98th St. Seattle WA 98115

(a) Education
Humboldt State University  Fisheries (minor in statistics)  BSc 1983
University of Washington  Fisheries  PhD 1993

(b) Appointments
1991 - present  Fisheries Research Scientist, South Pacific Commission
1998 - 2015  Associate Professor, University of Washington,
1986 - 1988  Fisheries Research Scientist, South Pacific Commission
1984 - 1986  Lab Director, Achatines Marine Laboratory, IATTC, Panama
1981 - 1982  Associate Scientist, IATTC, San Diego and Japan

(c) Selected publications


**(d) Synergistic activities**

1995 - present  North Pacific Fishery Management Council’s Gulf of Alaska groundfish Plan Team (formal review panel for groundfish stock assessments). Nominated as chair and have served in that capacity since 2003.

2000 - present  Science advisor to the Commission for the Conservation of Southern Bluefin Tuna, Robert Kennedy, Director. Serve on panel of external experts on stock assessment and management for this regional fisheries management authority.

2010 – present  Chair of the Scientific Committee for the South Pacific Regional Fisheries Management Organization. This has involved coordinating a complex stock assessment and management of Chilean jack mackerel resource.

2012 – present  Member of advisory panel for the Center on the advancement of population assessment methods (CAPAM) jointly coordinated by the Southwest fisheries science center and the Inter-American tropical tuna commission (IATTC).

2014-present  Co-chair of the Science Review Board for the International Halibut Commission

**(e) Collaborators and Other Affiliations**

Maunder, Mark N.; Aydin, Kerim; Barbeaux, Steven; Dorn, Martin W.; Hollowed Anne B; Holman, Kirstin K; Methot, Richard D.; Taylor, Ian; Thorson, James T; Butterworth, Douglas S; Stewart, Ian J.; Ana M. Parma; Szuwalski, Cody; Stram, Diana; Hanselman, Dana; Hurtado-Ferro, Felipe; Johnson, Kelli; Lee, Qi; Whitten, Athol. Webber, Darcy; Ortiz, Ivonne;

Post-docs supervised or graduate student committees: Ernst, Billy; Kinsey, Douglas; Kotwicki, Spies, Ingrid; Magnusson, Arni; McGilliard, Carey, M.; Moffit, Elizabeth; Ono, Kotaro, Whitten, Athol; Woillez, Mathieu; Webber, Darcy,
JO-ANN MELLISH, PHD
1007 W. 3rd Avenue, Anchorage AK 99515
joann.mellish@nprb.org | 907.644.6712

EXPERIENCE

SENIOR PROGRAM MANAGER NORTH PACIFIC RESEARCH BOARD
CORE AND GRADUATE STUDENT PROGRAMS
DEC 2014-PRESENT

RESEARCH PROFESSOR UNIVERSITY OF ALASKA FAIRBANKS
SCHOOL OF FISHERIES AND OCEAN SCIENCES
ALASKA SEALIFE CENTER
ASSOCIATE SEP 2007-JUN 2015
ASSISTANT SEP 2001-AUG 2007

POSTDOCTORAL RESEARCHER TEXAS INSTITUTE OF OCEANOGRAPHY
AUG 1999-AUG 2001

EDUCATION

DALHOUSIE UNIVERSITY, HALIFAX, NOVA SCOTIA CANADA
DOCTOR OF PHILOSOPHY 1995-1999
BACHELOR OF SCIENCE, Honours 1990-1994

PUBLICATIONS


FUNDING


2001-2006 NOAA, Steller sea lion Research Initiative ($1,056,137) Installation of a remote census and photogrammetry network.

2001-2006 NOAA, Steller sea lion Research Initiative ($1,689,405) Satellite-linked mortality transmitters in Steller sea lions: effect of health status, foraging ability, and environmental variability on juvenile survival and production.

STUDENT ADVISING
Michele Shero, University of Alaska Fairbanks
Courtney Shuert, University of Alaska Fairbanks
Linnea Pearson, University of Alaska Fairbanks
Kristen Walker, University of British Columbia
Jeanette Neinaber, University of Alaska Fairbanks
Matthew Myers, University of Alaska Fairbanks
Peter Nilsson, University of Alaska Fairbanks
Lisa Petrauskas, University of Alaska Fairbanks
Wendy Schrader, Texas A&M University

SYNERGISTIC SERVICE AND REVIEW
Aquatic Mammals
Canadian Journal of Zoology
Center for Global Change
Comparative Biochemistry and Physiology
Endangered Species Research
Frontiers in Aquatic Physiology
Hormones and Behavior
Marine Biology
Marine Mammal Science
National Science Foundation
Office of Naval Resources
Physiological and Biochemical Zoology
ASLC Institutional Animal Use and Care Committee
Heather M. Renner  
*Curriculum Vitae*

Supervisory Wildlife Biologist, Alaska Maritime National Wildlife Refuge, 95 Sterling Highway Suite 1, Homer AK 99603. (907) 226-4623; E-mail: heather_renner@fws.gov

**Education**

M.Sc., Wildlife Ecology, Cornell University, January 2000  
Thesis topic: Population ecology and nesting biology of Yellow Wagtails  
B.A., Biology, Colorado College, December 1994

**Relevant Work Experience**

Current: Supervisory Wildlife Biologist  
2008-2011: Bering Sea Unit Biologist  
2004-2008: Alaska Peninsula Unit Biologist  
2000-2004: Wildlife Biologist  
Since 2011, I have served as the supervisory wildlife biologist for the Alaska Maritime NWR. This involves leading a large biological program on one of the most prestigious refuges, supervising 9 permanent biologists, and managing a $650K budget. I also provide technical input and briefings to regional and local management. Major projects include implementing the refuge’s long-term biological inventory and monitoring program on nine annual and dozens of periodic sites, supporting a marine research program with dozens of partners, and restoration projects involving introduced species eradication.

**May-October 1997**: Biological Science Technician, USFWS, Yukon Delta NWR  
**April-May 1997**: Field Events Coordinator, Kachemak Bay Shorebird Festival, Homer, AK.  
**May-September 1994**: Biologist Trainee, USFWS, Togiak NWR, based at Cape Peirce.  
**May-August 1993**: Biological Science Technician, USFWS, Kenai Fishery Resource Office.  
**May-August 1992**: Biological Science Technician, USFWS, Fisheries Management Services.  
**May-August 1991**: Biological Science Technician, USFWS, Fisheries Lab, Anchorage AK.

**Recent Publications**


**COLLABORATORS**

During the past four years, I have collaborated with the following on proposals and papers: Yuri Artukhin (Russian Academy of Sciences), Anna-Marie Benson (USFWS), Mike Goldstein (USFS), Ann Harding (Alaska Pacific Univ.), David Irons (USFWS), Alexander Kitaysky (Univ. Alaska, Fairbanks), Kathy Kuletz (USFWS), Franz Mueter (U. Alaska, Juneau), Rosana Paredes (Oregon State Univ.), Sanjay Pyare (University of Alaska Southeast), Martin Renner (Tern Again Consulting), Joel Reynolds (USFWS), Dan Roby (Oregon State Univ.), Joel Schmutz (USGS), William Sydeman (Farallon Institute).
CURRICULUM VITAE
ELIZABETH CALVERT SIDDON

PERSONAL
NOAA/NMFS
Alaska Fisheries Science Center (w) 907.789.6055
17109 Pt. Lena Loop Road (c) 907.209.0630
Juneau, Alaska 99801 Email: Elizabeth.Siddon@noaa.gov

EDUCATION
2013 Ph.D. in Fisheries, University of Alaska Fairbanks
2005 M.S. in Fisheries, University of Alaska Fairbanks
2000 B.S. in Marine and Freshwater Biology, University of New Hampshire Magna Cum Laude; University Honors in Major

PROFESSIONAL EMPLOYMENT
April 2016 - Research Fisheries Biologist, NOAA/Alaska Fisheries Science Center, Program Lead for southeastern Bering Sea Ecosystem Assessment
April 2014 – April 2016 Postdoctoral Fellow, National Research Council
A cross-ecosystem comparison of predator-prey dynamics with implications for predicting ecosystem-level responses to climate variability
2005 – 2008 Associate Scientific Editor, Fishery Bulletin, NOAA/NMFS
2002 Research Technician, NOAA/NMFS/Northeast Fisheries Science Center
2001 Fisheries Observer, Ocean Technology Foundation, Northwest Atlantic
2001 Dive Coordinator, Cornell University, Shoals Marine Laboratory
2000 Aquanaut, Aquarius Undersea Laboratory, National Undersea Research Center
2000 Island Coordinator, Cornell University, Shoals Marine Laboratory
1998, 1999 Research Technician, UNC Chapel Hill, Institute of Marine Sciences Supervisor: Dr. Jonathan Grabowski

TEACHING
2005 – present Academic Teaching Staff
Cornell University and University of New Hampshire, Shoals Marine Laboratory

November 2011 Co-instructor, American Fisheries Society - Alaska Chapter Annual Meeting Short Course: Beyond Linear Models

2005 – 2007 Adjunct Faculty, University of Alaska Southeast Courses: Fundamentals of Biology I/II; Introduction to Marine Biology

2003 - 2004 Teaching Assistant, University of Alaska Courses: Marine Ecology; Introduction to Ichthyology


Curriculum Vitae
Ian J. Stewart
International Pacific Halibut Commission
2320 West Commodore Way, Suite 300, Seattle, WA 98199 (206)552-7667; e-mail: ian@iphc.int

Education:
- Doctor of Philosophy, School of Aquatic and Fishery Sciences, University of Washington, Seattle, WA, 2006 (Graduate Advisor: Dr. Ray Hilborn)
  - National Sea Grant/National Marine Fisheries Service Joint Graduate Fellowship in Population Dynamics, 2001-2004
- Master of Science, School of Aquatic and Fishery Sciences, University of Washington, Seattle, WA, 2001
- Bachelor of Arts, Dartmouth College, Hanover, NH, 1996

Experience:
  - 2009 Employee of the year (Scientific); NOAA Fisheries, Northwest Fisheries Science Center
- Teaching Assistant, University of Washington, 2001-2003
- Field Research Technician, Alaska Salmon Program, School of Aquatic and Fishery Sciences, University of Washington, 1999-2001

Publications:


**Documents:**


Software:
- Developed open-source plotting and diagnostic software for stock assessment modeling: r4ss. https://github.com/r4ss/r4ss
- Extensive testing and development support for Stock Synthesis (Richard Methot, NWFSC), 2004-2012.
- ScapeMCMC. R package for analysis of Bayesian model diagnostics. http://cran.r-project.org/

Workshops and Reviews:
- 2016. Invited participant. NOAA Southwest Fisheries Science Center & Pacific Fishery Management Council workshop on Coastal Pelagic Species (CPS) assessments. 2-5 May, La Jolla, California.
- 2015. Co-presented a 5-day stock assessment workshop for ISMAR (Ponza, Italy) and other European scientists on: Stock Synthesis modeling software, R code for plotting, output and model diagnostics, as well as other stock assessment related topics.
- 2014. Invited participant. Albacore working group model subgroup meeting. 14-18 April, La Jolla, California.
- 2012. Review panel member. 2012 Hoki (Macruronus magellanicus) stock assessment review. 4-8 June, Viña del Mar, Chile.
2012. NOAA Workshop on Application of Non-Linear Time Series Analysis. 17-19 April, La Jolla, California.


2008. Prepared and presented an introductory 4-day stock assessment workshop for the NOAA NEFSC (Woods Hole, MA) focusing on: conversion of existing models (ASAP, VPA) to SS2 modeling software, R code for plotting, output and model diagnostics, as well as many stock assessment related topics. Included a 1-hour seminar for general audience on preliminary results of an analysis of the effects of adverse weather conditions on bottom trawl survey catches.

2007. Prepared and presented a comprehensive 5-day stock assessment workshop for CSIRO (Australian Fisheries, Hobart, Tasmania) showcasing NWFSC research products including: SS2 modeling software, National Fisheries Toolbox user interface, R code for plotting, output and model diagnostics, as well as many other stock assessment related topics.


Academic service:

Affiliate Associate Professor, University of Washington, School of Aquatic and Fishery Sciences. 2012-present.

Current student committees:

- Cole Monnahan (PhD), University of Washington, 2014-present.
- Chantell Wetzel (PhD), University of Washington, 2011-present.

Completed student committees:

- James Thorson (PhD, 2011), University of Washington. Also served as NOAA mentor for the NOAA/National Sea Grant Fellowship in Population Dynamics.
- Melissa Muradian (MS, 2015), University of Washington.
- Chantell Wetzel (MS, 2011), University of Washington.
- Dawn Dougherty (MS, 2009), University of Washington.

Professional service:

- North Pacific Fishery Management Council Scientific and Statistical Committee, 2016-present.
- NOAA Untrawlable Habitat Strategic Initiative team member. 2013-present.
- Steering Committee member, 2012 Western Groundfish Conference.
- Steering Committee member, NOAA-NMFS National Stock Assessment Workshop 11, 2010.
**STEPHANI ZADOR**  
Research Fish Biologist

**Address:**  
NOAA Alaska Fisheries Science Center, Bldg 4, 7600 Sand Point Way NE, Seattle, WA 98115

**Current phone:**  
Office (206) 526-4693, FAX: (206) 221-6939

**Email:**  
stephani.zador@noaa.gov

**Education:**  
School of Aquatic and Fishery Sciences, University of Washington, Seattle, PhD, 2007  
Advisors: Andre Punt, Julia Parrish, Bob Francis, David Ainley  
Dissertation: *Management Implications of Factors Influencing Seabird Populations*

Wildlife Science, College of Forest Resources, University of Washington, Seattle, MS, 2001  
Biology and Environmental Studies (double major), U.C. Santa Cruz, BA, 1993

**Current research foci:**  
Marine ecosystem indicators, developing ecosystem assessments, communication of ecosystem information to managers, seabirds as ecosystem indicators.

**Current activities:**
- Editor of the annual Ecosystem Considerations report to the North Pacific Fisheries Management Council.
- Co-Chair of the Steering Committee of NOAA’s FATE (Fisheries and the Environment) program.
- Full-time FATE researcher at the Alaska Fisheries Science Center.
- Member of several working groups: NCEAS Coastal Gulf of Alaska Futures, EBS regional action plan development, EBS Fishery Ecosystem Plan Core Team, GOAIERP Synthesis, NOAA National Seabird Program.

**Professional experience:**
- Research Scientist. JISAO, University of Washington, Seattle, WA, 2009 – 2011
- Research assistant, Australian Antarctic Division, Davis Station, Antarctica. 1993 – 1994.

**Publications in review:**
5. Jamie C. Tam, Jason S. Link, Scott I. Large, Kelly Andrews, Kevin Friedland, Jamison Gove, Elliott Hazen, Kirstin Holsman, Isaac Kaplan, Mandy Karanuskas, Jameal Samhouri, Rebecca Shuford, Nick Tomillieri, **Stephani Zador**. Comparing apples and oranges: thresholds of ecological indicators in response to environmental and anthropogenic pressures reveal common trends in multiple ecosystems. Target journal: Ecological Applications.

**Recent Publications (10 years, including Ecosystem Considerations):**

7. Kristin Kleisner¹, Marta Coll², Christopher P. Lynam³, Alida Bundy⁴, Lynne Shannon⁵, Yunne-Jai Shin⁶, Jennifer Boldt⁷, Maria F. Borges⁸, Ibrahima Diallo⁹, Clive Fox¹⁰, Didier Gascuel¹¹, Joanna J. Heymans¹², Maria J. Juan Jordá¹³, Didier Jouffre⁹, Scott I. Large¹⁴, Kristin N. Marshall¹⁶, Henn Ojaveer¹⁷, Chiara Piroddi¹⁸, Jorge Tam¹⁹, Maria A. Torres²⁰.
Morgane Travers-Trolet, Konstantinos Tsagarakis, Gro I. van der Meeren, Stephani Zador. 2015. Evaluating changes in marine communities that provide ecosystem services through comparative assessments of community indicators. Ecosystem Services 16:413-429


Selected Recent Presentations:
- 7 presentations to Fisheries Management Council bodies in FY 15.
- “Using ecosystem indicators to track effects of recent warm conditions in Alaska”. FATE annual science meeting, La Jolla, CA 2016
• Ecosystem-based management in Alaska: the role of seabirds as indicators of ecosystem change”. Invited Plenary Speaker, Pacific Seabird Group, Juneau, AK 2014.

Funded Proposals
• FATE 16-05. Duffy-Anderson, Koslow, Brodeur, McClatchie, Zador, Bograd. Ichthyoplankton metrics as fishery-independent indicators of ecosystem change along the US west coast from California to Alaska.
• FATE 16-01. Litzow, Hunsicker, Zador. An early warning index for abrupt change in Northeast Pacific Ecosystems
• FATE 14-05. Aydin, Ortiz, Zador. Evaluating ecosystem indicator performance under climate change..
• NPRB 1213 Seabirds as indicators of forage fish stocks and marine ecosystems in Alaska. Piatt, Sydeman, Renner, (Irons, Hatch, Zador, Gelatt – collaborators).
• NPRB 1208 Developing a euphausiid biomass time series for the central Gulf of Alaska continental shelf to understand fish-zooplankton interactions and ecosystem conditions. Ressler, Dorn, Zador (collaborators).
• FATE 10-01. Aydin, Gaichas, Zador. A top predator index for the Bering Sea.


Reviewer: Marine Ecology Progress Series; Biology Letters; Biological Conservation; Bulletin of Marine Science; Fish and Fisheries; North Pacific Research Board; Exxon Valdez Oil Spill Trustee Council; The Condor; Endangered Species Research, Ecosystems, Puget Sound Partnership

Collaborators in the past 48 months: Kerim Aydin, Janet Duffy-Anderson, Shannon Fitzgerald, Sarah Gaichas, Kirstin Holsman, Mary Hunsicker, Kristin Kleisner, Olav Ormseth, Ivonne Ortiz, Patrick Ressler, Jameal Samhouri, Mike Sigler, Paul Spencer, Eric Ward (NOAA); Miriam Doyle, George Hunt (U. Washington); Bill Sydeman, Mike Litzow (Farallon Institute); John Piatt (USGS); Heather Renner (USFWS); Marta Coll (UMR MARBEC); Kirsten Simonsen (National Research Council).