

CURRICULUM VITAE

Franz-Josef Mueter
Department of Fisheries
College of Fisheries and Ocean Sciences
University of Alaska Fairbanks
17101 Point Lena Loop Road
Juneau, AK 99801
E-mail: franz.mueter@alaska.edu
Office: (907) 796-5448

Education

Ph.D. University of Alaska Fairbanks (1999)
Major: Fisheries Oceanography
M.S. University of Alaska Fairbanks (1998)
Major: Statistics
M.S. University of Alaska Fairbanks (1992)
Major: Biological Oceanography
Vordiplom (B.S.) Rhino-Westphalian Technical University, Aachen, Germany
Major: Biology

Work Experience

Jul 2020 – present President's Professor of Quantitative Fisheries and Ecosystems, University of Alaska Fairbanks, Juneau, Alaska
Jul 2019 – Jun 2020 Professor of Fisheries, University of Alaska Fairbanks
Jul 2013 – Jun 2019 Associate Professor of Fisheries, University of Alaska Fairbanks
Aug 2008 – Jun 2013 Assistant Professor of Fisheries (Fishery biometrician), University of Alaska Fairbanks
2001 - 2012 Statistical and Fisheries consultant, Sigma Plus, Statistical Consulting Services.
Jan – May 2006 Adjunct faculty, School of Fisheries and Ocean Sciences, UAF
Aug – Dec 2007
Jul - Dec 2005 Research Scientist, Joint Institute for the Study of the Atmosphere and Ocean, University of Washington
2002 – Jun 2005 Research Associate, Joint Institute for the Study of the Atmosphere and Ocean, University of Washington
1999 - 2001 Post-doctoral fellow, School of Resource and Environmental Management, Simon Fraser University, Burnaby, BC, Canada
1995 - 99 Research Assistant / Graduate Student (Ph.D.), Institute of Marine Science, University of Alaska, Fairbanks, AK

- 1993 - 94 Research Technician, Juneau Center, School of Fisheries and Ocean Science, University of Alaska Southeast, Juneau, AK
- 1988 - 92 Research Assistant / Graduate Student (M.S.), Institute of Marine Science, University of Alaska, Fairbanks, AK

Professional Services

- 2018-2020 Guest Editor, Special issue on 'Arctic Gadids in a changing climate' in Polar Biology
- 2018 Science Advisory Panel for the Climate Action for Alaska Leadership Team.
- 2017-2018 North Pacific Fishery Management Council Ecosystem Research Workshop Steering Committee.
- 2016-2017 Co-convener, ESSAS Open Science Meeting, Tromsø, Norway
- 2016-present** **Contributing Editor, Marine Ecology Progress Series.** As CE for MEPS I annually handle the review process and make decisions on 15-20 manuscripts submitted to MEPS in my areas of expertise.
- 2017-2018 Guest Editor, 31st Lowell Wakefield Symposium Proceedings
- 2016-2017 Co-chair, Steering Committee, 31st Lowell Wakefield Fisheries Symposium (<https://seagrant.uaf.edu/events/2017/wakefield-fish-dynamics>)
- 2015-2017 Scientific Expert for Eastern Bering Sea Vulnerability Assessment.
- 2014-present Co-chair, ESSAS Working Group on Arctic-Subarctic Interactions (WGASI). As co-chair of this WG, I help organize workshops and scientific sessions at meetings to bring together on experts in high-latitude marine research on advective and migratory exchanges between the Subarctic and Arctic.
- 2015-2017 Guest Editor, Special Issue on 'Arctic Ecosystem Integrated Survey' in Deep-Sea Research II (<https://www.sciencedirect.com/journal/deep-sea-research-part-ii-topical-studies-in-oceanography/vol/135>)
- 2014-2016 Guest Editor, Special issue on 'Ecology of Arctic Gadids' in Polar Biology (<https://link.springer.com/journal/300/39/6/page/1>)
- 2014 Scientific Expert (Fish) for Aleutian Bering Climate Vulnerability Assessment
- 2013-present Guest Editor, Gulf of Alaska project special issue in Deep-Sea Research II
- 2013-2014 Guest Editor, 28th Lowell Wakefield Symposium Proceedings (<https://seagrant.uaf.edu/bookstore/pubs/AK-SG-13-03.html>)
- 2011-2012 Chair, Steering Committee, 28th Lowell Wakefield Fisheries Symposium on Responses of Arctic Marine Ecosystems to Climate Change (<https://seagrant.uaf.edu/events/2013/wakefield-arctic-ecosystems>)
- 2011-present** **Co-chair, Ecosystem Studies of Sub-Arctic Seas (ESSAS).** As co-chair of ESSAS, along with Benjamin Planque (IMR, Norway) and Naomi Harada (JAMSTEC, Japan), I help organize and host Annual Science meetings that typically

draw 60-80 participants from the circumpolar North. ESSAS coordinates and actively fosters comparative analyses on the effects of climate variability and climate change on subarctic and Arctic marine ecosystems by bringing together researchers from its member countries to participate in workshops, sessions at scientific meetings, and periodic Open Science Meetings.

- 2011-present Member, PICES Section on Climate Change Effects on Marine Ecosystems (S-CCME).
- 2011-2012 Guest Editor, Theme Section on Gadid-Crustacean Interactions, Marine Ecology Progress Series (<https://www.int-res.com/abstracts/meps/v469/#theme>)
- 2008-2013 Co-chair, Working Group 4 on Climate Effects on Upper Trophic Levels, Ecosystem Studies of Sub-Arctic Seas (ESSAS)
- 2008-2011 ICES/PICES Working Group: Forecasting Climate Change Impacts on Fish and Shellfish (WGFCCIFS)
- 2004-present Scientific and Statistical Committee (SSC), North Pacific Fisheries Management Council.** The SSC meets five times a year for three days each to review technical analyses and stock assessments conducted by NOAA Fisheries Scientists and Council staff. The SSC provides recommendations and sets catch limits for federally managed fish and shellfish stocks based on the best available scientific information.
- 2007-2008 Guest editor, ICES Journal of Marine Science, theme session related to Early Career Scientist Conference (<https://doi.org/10.1093/icesjms/fsp012>)
- 2005-2007 Scientific Steering Committee, PICES/ICES Early Career Scientist Conference (http://www.pices.int/meetings/international_symposia/2007_symposia/Young_scientists/newfrontiers.aspx)
- 2006-present Working group on Bio-Physical Coupling (WGBPC), Ecosystem Studies of Sub-Arctic Seas (ESSAS)
- 2006-2007 Working group on Comparison of Marine Ecosystems of Norway and the US (MENU)
- 2003 North Pacific Ecosystem Status Working Group
- 2003-2004 SCOR/IOC Working Group 119: Quantitative Ecosystem Indicators for Fisheries Management
- Reviewer for: *Journal reviews:* Canadian Journal of Fisheries and Aquatic Sciences; ICES Journal of Marine Science; Fisheries Oceanography; Fisheries Research; Fisheries Science; Progress in Oceanography; Deep-Sea Research; Continental Shelf Research; Estuarine, Coastal and Shelf Science; Journal of Marine Systems; Marine and Coastal Fisheries; Marine Biology Research; Marine Ecology Progress Series; North American Journal of Fisheries Management; Polar Biology; Fishery Bulletin; Oceanographic Literature Review; Global Change Biology; Fish and Fisheries; Environmetrics; Philosophical Transactions of the Royal Society B: Biological Sciences
Proposal reviews: National Science Foundation, Alaska Sea Grant; North Pacific

Research Board; Exxon Valdez Oil Spill Trustee Council; Gulf Ecosystem Monitoring and Research Program; AYK Sustainable Salmon Initiative; Hudson River Foundation; California Sea Grant, NOAA Fisheries and The Environment (FATE)

Workshops

Polar cod in a changing Arctic Ocean, Mini workshop, Bremerhaven, Germany, 9 May 2018

North Pacific Fishery Management Council Ecosystem Research Workshop, Seattle, Washington, February 7, 2018

Sablefish Summit, Juneau, Alaska, September 26, 2018

A 5°C Arctic in a 2°C World. Union Theological Seminary, Columbia University, New York, July 20-21, 2016

Arctic Marine Workshop: Rapid Assessment of Circum-Arctic Ecosystem Resilience (RACER) across the Bering and Chukchi Seas, Anchorage, Alaska, January 19, 2014

Fostering Yukon Chinook Resilience: A UAF Chapman Chair Workshop Honoring C.S. Holling, Fairbanks, Alaska, April 1-3, 2014.

AYK SSI Juvenile Chinook Salmon Workshop: Risks and Benefits of Using Juvenile Salmonid Research to Understand Adult Population Dynamics, Anchorage, Alaska, April 23-24, 2014

Aleutian and Bering Climate Vulnerability Assessment, Anchorage, Alaska, January 20, 2014

2nd Meeting of Scientific Experts on Fish Stocks in the Arctic Ocean, Tromsø, Norway, October 28-30, 2013

Workshop on Assessment/Management Issues Related to Recruitment, Seattle, Washington, April 4-5, 2012

Management Strategy Evaluation Workshop, Seattle, Washington, October 27-28, 2018

Stock-specific indicators workshop, Seattle, Washington, April 7-8, 2011

EBS Snow Crab Symposium: Identifying best approaches for advancing understanding of EBS snow crab biology and incorporating research into fisheries management, Seattle, Washington, February 22-23, 2011

Alaska sablefish data and modeling workshop, Juneau, Alaska, January 26-28, 2010

International Stock Production Modeling Workshop, Woods Hole, Massachusetts, May 10-14, 2010

Alaska Fisheries Research Plan, Juneau, Alaska, May 11-13, 2009

Training courses

Size-based stock assessment modeling in ADMB (January 7-8, 2019)

Alaska Marine Safety Education Association Small Boat Operator Training (April 11-12, 2012)

Spatial Data Analysis (Margaret Short, Juneau, AK, August 2011, 2 days)

Center for Distance Education teaching workshop (Spring 2011, 4 days)
Qualitative Modelling Short Course (Jeffrey Dambacher, Juneau, Alaska, May 17-19, 2010)
ADMB (Marc Maunder, AFS meeting, Anchorage, 2005, 2 days)
Multivariate data visualization with GGOBI (Diane Cook, Palmer, July 2004, 2 days)
Spatial Data Analysis (Dale Zimmermann, Fairbanks, July 2003, 2 days)
Applied Logistic Regression (David Hosmer, Fairbanks, July 2001, 2 days)

Field Experience

2019 R/V *Sikuliaq*, Chukchi Sea, CODA/GO-WEST expedition. Under-ice sampling of zooplankton and fish, oceanography, zooplankton, acoustics (Co-PI)

2019 20' skiff, Auke Bay, Berners Bay, Eagle Beach, sampling zooplankton and water, CTD profiles

2013 F/V *Bristol Explorer*, Chukchi Sea. Arctic Ecosystem Integrated Survey. Oceanography, zooplankton, acoustics, surface and midwater trawling (Lead PI)

1995-97 M/V *Tiglax*, Aleutian Islands, Alaska. Prey surveys by bottom trawl around sea lion rookeries; towed video observations; sediment collection; CTD transects; bird observations; hydroacoustic survey of midwater plankton and fish.

1996 M/V *Bering Explorer*, Cook Inlet, Alaska. Survey of juvenile groundfishes; bottom type assessment; CTD survey.

1995 F/V *Big Valley*, Shelikof Strait and Sitkinak Strait, Alaska: Survey of juvenile groundfishes by bottom trawl. Oceanographic surveys using CTD, sidescan sonar, Acoustic Doppler Current Profiler (ADCP), ROV, sediment grab, and bottom trawl.

28' skiff, Kachemak Bay, Alaska. Survey of juvenile flatfishes; CTD survey; sediment collection.

1994 30' Boston Whaler, chief scientist, Kazakof Bay, Afognak Island, Alaska. baseline survey of juvenile ground-fishes; CTD survey; sediment collection.

28' skiff, Kachemak Bay, Alaska. Survey of juvenile flatfishes; CTD survey; sediment collection.

1993/94 Lake Becharof and Lake Ugashik, SW Alaska. Chief scientist. Limnological sampling and assessment of bathymetry by skiff and float plane.

1993 30' skiff, Icy Strait, SE Alaska. Chief scientist, Collection of outmigrating juvenile salmon using gillnet

1992 F/V *Big Valley* and skiff, Kodiak Island, Alaska. Collection of juvenile groundfishes using beam trawl; CTD survey; ROV transects.

1991 F/V *Big Valley* and skiff, Kodiak Island, Alaska. Collection of juvenile groundfishes using beam trawl; CTD survey.

R/V *Little Dipper*, Resurrection Bay, Alaska. Ichthyoplankton collections using Tucker trawl; CTD survey.

R/V *Alpha Helix*, North Pacific, Alaska to Hawaii. Ichthyoplankton collections using MOCNESS; CTD survey.

1990

R/V *Alpha Helix*, Gulf of Alaska. Ichthyoplankton collections using MOCNESS; CTD survey.

F/V *Ocean Hope III*, Chuckchi Sea, Alaska. Bottom trawl survey; CTD survey.

Teaching

I developed and regularly teach three quantitative courses at the graduate level that are designed for graduate students in fisheries and marine science:

- *Modern Applied Statistics for Fisheries* (FISH/MSL 604). Taught every other fall since 2007.
- *Data Analysis in Community Ecology* (FISH/MSL 631). Taught every other spring since 2009.
- *Statistical Computing with R* (FISH 627). As demand warrants (Pre-requisite for FISH 604/631)

General oceanography and marine science courses:

- *Oceanography for Fisheries* (FISH 440). I developed this upper-level undergraduate course for both undergraduate and graduate students in Fisheries to cover basic oceanographic principles (chemical, physical, biological) that are relevant to the study of marine fishes.
- *Social, Oceanographic, and Ecological Perspectives (SOEP) in Marine Ecosystems*. (Co-instructor). Core course for the Marine Ecosystem Sustainability in the Arctic and Subarctic (MESAS) program.
- *Innovative Approaches to Marine Ecosystems* (FISH/NRM/MSL 692, Co-instructor). Discussion-based seminar course for students enrolled in the Marine Ecosystem Sustainability in the Arctic and Subarctic (MESAS) program.

Seminars and independent study courses:

- *Fisheries Department Seminar*.
- *Dynamics of Marine Ecosystems* (Seminar).
- *Applied Regression* (Independent Study).
- *Data wrangling and analysis: Case studies in Fisheries* (Seminar)

Other:

- I contributed a module on *Arctic Fish & Fisheries* to a Massive Open Online Course on *Climate Change in Arctic Environments* developed at the International Arctic Research Center, UAF.
- I regularly contribute guest lectures to classes in the Fisheries and Oceanography departments, including *Marine Ecosystems*, *Biological Oceanography*, *Fisheries Oceanography*, and *Responsible Conduct in Research*

- I contributed a segment on *Arctic Fisheries* to a Massive Open Online Course on the *Global Arctic* developed at the ‘MOOC factory’ at the École Polytechnique Fédérale de Lausanne.
- I have developed and taught several short courses (1-3 days) including *Beyond the linear model: Analyzing ecological data using generalized mixed-effects models*, *Introduction to R*, and *Multivariate Statistics for Ecologists*

Mentoring

Graduate students (thesis advisor, all UAF): Laurinda Marcello (M.S., 2011), Janelle Mueller (M.S., 2011), Brendan Coffin (M.S., 2014), Elizabeth Siddon (Ph.D., 2013), Megan Peterson (Ph.D., 2014), Mayumi Arimitsu (Ph.D. 2016), Jordan Watson (Ph.D., 2017), Jennifer Marsh (Ph.D., 2019), Lauren Wild (Ph.D., 2020), Tadayasu Uchiyama (Ph.D., current), Zane Chapman (M.S., current), Jared Weems (Ph.D., current), Wesley Strasburger (Ph.D., current).

Post-docs: Jason Waite (now ADF&G); Colleen Petrik (now Univ Texas); Cathleen Vestfals (now NOAA), Jen Marsh (current), Krista Oke (current).

Graduate Students (Committee Member):

MS (graduated): Nina Lundstrom (2021), Matt Callahan (2020), Justin Priest (2020), Michael Knutson (2020), Caitlin Forster (2019), Alicia Schuler (2019), Noel Sme (2019), Sarah Apsens (2017), Dan Olsen (2017), Jane Sullivan (2016), Michael Kohan (2015), Jessica Glass (2014), Karson Coutré (2014), Kevin Foley (2014), Wesley Strasburger (2012), Mayumi Arimitsu (2009)

MS (current): Kevin McNeel, Austin Flanigan, Lilian Hart, Tristan Sebens

PhD (graduated): Kelly Cates (2021), Janelle Badger (2021), Valentina Melica (2020), Wendel Raymond (2020), Fletcher Sewall (2020), Cheryl Barnes (2019), Julie Nielsen (2019), Michael Malick (Simon Fraser University, 2018), Stephanie Berkman (2017), Ellen Martinson (2017), Suzie Teerlink (2017), Lauren Divine (2016), Zachary Hoyt (2015), Vanessa von Biela (2015), Michael Litzow (University of Tasmania, 2014), Jonathan Richar (2014), Bev Agler (2012), Tammy Hoem-Neher (2012), Kray van Kirk (2012), Douglas Dasher (2010).

Ph.D. (current): Jeannette Gann, Robert Levine (University of Washington), Chris Sergeant, Laura Slater, Lauren Sutton, Hannah Myers, Stephanie O’Daly

Professional memberships

American Fisheries Society

American Statistical Association

American Association for the Advancement of Science

American Geophysical Union

Honors/Awards

2020 Appointment as President’s Professor of Quantitative Fisheries and Ecosystems

2020 Dean’s Recognition Award for Outstanding Instructor

2018 Dean's Recognition Award for Outstanding Researcher

2006 Robert L. Kendall Best Paper in Transactions of the American Fisheries Society Award

1998 NAS travel award to participate in a symposium to celebrate "50 years of ocean discovery, National Science Foundation 1950-2000" at the National Academy of Sciences, Washington, D.C.

1992 Outstanding graduate student, Graduate Program in Marine Science and Limnology

Current Grants

Utilization of the under-ice habitat by Arctic Cod in the western Arctic Ocean: a multidisciplinary collaborative study. BOEM/CMI (07/01/19 - 06/30/22) (\$258,439). PI: Franz Mueter

Assessing the potential for pollock growth and productivity in the northern Bering Sea. PCCRC (9/1/2019 - 8/31/2021) (\$122,494). PI: Franz Mueter.

Model-based Fish Distributions and Habitat Descriptions for Arctic Cod, Saffron Cod and Snow Crab in the Alaskan Arctic (July 17, 2019 – July 8, 2021) (\$171,308), PI: Franz Mueter.

Environmental covariates of young of the year sablefish growth and recruitment in the Gulf of Alaska. Alaska Sea Grant (September 1, 2018 - August 31, 2021) (\$81,110.00), PI: Franz Mueter.

Ecological controls of Alaskan pollock weight-at-length and size-at-age under rapid environmental change. NOAA Saltonstall-Kennedy (September 1, 2019 - August 31, 2022) (\$199,082.00) PI: Franz Mueter

Arctic Integrated Ecosystem Survey (Arctic IES) Phase II. BOEM (June 1, 2017 - May 31, 2022), awarded May 15, 2017 (\$1,014,390.00) PI Franz Mueter.

A sustainable, integrated AMBON in the Chukchi Sea. ONR (08/01/19 - 07/31/22) (\$1,036,256). PI: Katrin Iken; Co-PIs: Seth Danielson, Russell Hopcroft, Franz Mueter.

Recent Grants

Go West: Sea-ice association of polar cod and its prey in the western Arctic Ocean. Arctic Research Icebreaker Consortium (ARICE) (September 1, 2019 - June 30, 2020) (€ 555,741). PI: Hauke Flores (AWI, Germany), Franz Mueter, Alexei Pinchuk.

Solving a growing problem in marine carbon stable isotope research (07/11/19 - 06/30/20) (\$79,452). PI: Nicole Misarti, Franz Mueter.

Alaska Marine Biodiversity Observing Network. NOAA-NOPP, BOEM (November 1, 2014 - October 31, 2019) (\$5,607,492), PI Katrin Iken; Co-PIs: Eric Collins, Seth Danielson, Russell Hopcroft, Franz Mueter. (Mueter share: \$228,637)

Identifying Arctic Cod Hatch Dates and Location in the Alaskan Arctic (07/01/18 - 07/31/19) (\$25,000). PIs: Zane Chapman, Franz Mueter.

Alaska Chinook Salmon Production and Decline. State of Alaska, Alaska Department of Fish and Game (July 1, 2013 - June 30, 2018) (\$625,532). PI Milo Adkison; Co-PIs Jeffrey Falke, Larissa Horstmann, Megan Mcphee, Franz Mueter, Trent Sutton, Mark Wipfli (Mueter share: \$35,463).

Extension of CIFAR project 'Status of fishes and research in the central Arctic Ocean', Cooperative Institute for Alaska Research (July 1, 2017 - June 30, 2018) (\$14,307). PI Franz Mueter.

Fish & Fisheries in Central Arctic Ocean, Funded by Cooperative Institute For Alaska Research (May 1, 2016 - March 31, 2018) (\$15,704). PI: Franz Mueter.

Arctic Gadids in a Changing Climate, Funded by North Pacific Research Board (September 1, 2015 - January 31, 2018) (\$255,288). PI Franz Mueter, Co-PIs: Cathleen Vestfals, Seth Danielson

Collaborative Research: Resilience and adaptive capacity of arctic marine systems under a changing climate (RACArctic). NSF / Belmont Forum (June 1, 2015 - May 31, 2018) (\$95,655). PI Franz Mueter.

GOA IERP Synthesis, Funded by North Pacific Research Board (NPRB) (September 1, 2015 – March 31, 2018) (\$185,928). Co-PIs Russell Hopcroft, Ken Coyle, Georgina Gibson, Franz Mueter (Mueter share: \$13,118).

Coastal Resilience Research: Capturing spatial behaviors of observed and unobserved fishing over time using vessel monitoring system data, Funded by Alaska Sea Grant (February 1, 2015 - March 31, 2017) (\$26,272). PI: Franz Mueter.

Distribution of Fish, Crab and Lower Trophic Communities in the Chukchi Sea. Bureau of Ocean and Energy Management (April 1, 2012 - March 31, 2016) (\$1,153,464). PI: Franz Mueter; Co-PIs: Brenda Norcross, Katrin Iken, Trent Sutton, Bodil Bluhm, Tony Gharrett.

Arctic Ecosystem Integrated Survey, Funded by US F&WS / Coastal Impact Assistance Program (CIAP) (November 1, 2011 - June 30, 2016) (\$3,028,542). PI Franz Mueter; Co-PIs: Brenda Norcross, Trent Sutton, Megan Mcphee, Edward Farley (NOAA), Mike Sigler (NOAA), Robert Lauth (NOAA).

BEST Synthesis: The variable transport of pollock eggs and larvae over the Bering shelf: A marriage of physics and biology. National Science Foundation (July 1, 2011 - June 30, 2014) (\$396,397). PI Franz Mueter; Co-PIs Seth Danielson, Cathleen Vestfals.

GOA IERP: Surviving the Gauntlet. North Pacific Research Board (NPRB) (September 1, 2010 – December 31, 2016) (\$743,379). PI Franz Mueter; Co-PI Shannon Atkinson Demaster

BSIERP Ichthyoplankton, Funded by North Pacific Research Board (NPRB) (August 1, 2009 – December 31, 2013) (\$290,968). PI Franz Mueter

BSIERP Correlative Biomass Dynamics Model. North Pacific Research Board (NPRB) (August 1, 2007 – December 31, 2013) (\$320,326). Co-PIs Franz Mueter and Gordon Kruse.

BSIERP Trophic Interactions of Fish, Birds, and Mammals. North Pacific Research Board (NPRB) (August 1, 2007 – December 31, 2013) (\$293,987). PI Franz Mueter, Co-PI Gordon Kruse

Publications in review:

Grebmeier, J.M., Huntington, H.P., **Mueter, F.J.**, Pulsifer, P., Davies, J. (In Revision) A step-wise progression to fisheries ecosystem science in the central arctic ocean. Marine Policy.

Chapman et al (In revision) Deep-Sea Research II

Oke et al. (In revision) Canadian Journal of Fisheries and Aquatic Sciences

Edited Volumes / Guest editor:

- Mueter, F.**, Bouchard, C., Hop, H., Laurel, B., and Norcross, B. (2020) Arctic gadids in a rapidly changing environment. *Polar Biology* 43(8): 945-950.
<https://doi.org/10.1007/s00300-020-02696-1>
- Ormseth, O.A., Baker, M.M., Hopcroft, R.R., Ladd, C., Mordy, C.W., Moss, J.H., **Mueter, F.J.**, Shotwell, S.K., Strom, S.L. (2019) Introduction to understanding ecosystem processes in the Gulf of Alaska, volume 2. *Deep Sea Research Part II: Topical Studies in Oceanography* 165, 1-6. <https://doi.org/10.1016/j.dsr2.2019.06.019>
- Drinkwater, K., **Mueter, F.**, Saitoh, S.-I. (2018) Shifting boundaries of water, ice, flora, fauna, people and institutions in the Arctic and Subarctic. *ICES Journal of Marine Science* 75(7): 2293-2298. <https://doi.org/10.1093/icesjms/fsy179>
- Mueter, F.J.**, Baker, M.R., Dressel, S.C., Hollowed, A.B. (Editors) (2018) Impacts of a Changing Environment on the Dynamics of High-latitude Fish and Fisheries. Alaska Sea Grant, University of Alaska Fairbanks. <https://doi.org/10.4027/icedhlff.2018.02>
- Mueter, F.J.**, Dickson, D.M.S., Huntington, H.P., Irvine, J.R., Logerwell, E.A., MacLean, S.A., Quakenbush, L.T., Rosa, C. (Editors) (2013). Responses of Arctic Marine Ecosystems to Climate Change. Alaska Sea Grant AK-SG-13-03, Fairbanks, Alaska

Peer-reviewed publications (including book chapters) (Underlined authors denote students)

123. **Mueter, F.J.** (2022) Chapter 14: Arctic Fisheries in a Changing Climate. In: Global Arctic. M. Finger and G. Rekvig (Eds). Springer International Publishing. 486pp.
https://doi.org/10.1007/978-3-030-81253-9_14
122. Lundstrom, N., Beaudreau, A., **Mueter, F.J.**, Konar, B. (2022). Environmental drivers of nearshore fish community composition and size structure in glacially influenced Gulf of Alaska estuaries. *Estuaries and Coasts*. <https://doi.org/10.1007/s12237-022-01057-x>
121. Priest, J. T., **Mueter, F.J.**, Raborn, S.W., and Sutton, T.M. (2022) Effects of environmental variables on a nearshore Arctic fish community, 2001–2018. *Polar Biology*.
<https://doi.org/10.1007/s00300-022-03013-8>
120. Berkman, S.A., Sutton, T.M., **Mueter, F.J.**, and Elliott, B.W. (2021). Effects of early-life stage and environmental factors on the freshwater and marine survival of Chinook salmon (*Oncorhynchus tshawytscha*) in rivers of Southeast Alaska. *Fishery Bulletin* 119(4): 201-215. <https://doi.org/10.7755/FB.119.4.1>
119. Sutton, L., **Mueter, F.J.**, Bluhm, B.A., and Iken, K. (2021). Environmental filtering influences functional community assembly of epibenthic communities. *Frontiers in Marine Science* 8: 1439. <https://doi.org/10.3389/fmars.2021.736917>
118. Drinkwater, K. F., Harada, N., Nishino, S., Cherici, M., Danielson, S. L., Ingvaldsen, R. B., Kristiansen, T., Hunt Jr, G.L., **Mueter, F.J.**, and Stiansen, J.E. (2021). Possible future scenarios in the Gateways to the Arctic for Subarctic and Arctic marine systems: I. Climate

- and physical–chemical oceanography. *ICES Journal of Marine Science* 78(9): 3046-3065, <https://doi.org/10.1093/icesjms/fsab182>
117. **Mueter, F. J.**, Planque, B., Hunt Jr, G. L., Alabia, I. D., Hirawake, T., Eisner, L., Dalpadado, P., Drinkwater, K. F., Harada, N., Arneberg, P., and Saitoh, S.-I. (2021) Possible future scenarios in the Gateways to the Arctic for Subarctic and Arctic marine systems: II. Prey resources, food webs, fish, and fisheries. *ICES Journal of Marine Science* 78(9): 3017-3045, <https://doi.org/10.1093/icesjms/fsab122>
116. **Mueter, F.J.**, Iken, K., Cooper, L.W., Grebmeier, J.M., Kuletz, K.J., Hopcroft, R.R., Danielson, S.L., Collins, R.E., and Cushing, D.A. (2021). Changes in diversity and species composition across multiple assemblages in the eastern Chukchi Sea during two contrasting years are consistent with borealization. *Oceanography* 34(2): 38-51, <https://doi.org/10.5670/oceanog.2021.213>
115. Deary, A.L, Vestfals, C.D, **Mueter, F.J.**, Logerwell, E.A, Goldstein, E.D., Stabeno, P.J., Danielson, S.L., Hopcroft, R.R., Duffy-Anderson, J.T. (2021) Seasonal abundance, distribution, and growth of the early life stages of polar cod (*Boreogadus saida*) and saffron cod (*Eleginus gracilis*) in the US Arctic during a warm year. *Polar Biology* 44: 2055-2076, <https://doi.org/10.1007/s00300-021-02940-2>
114. Callahan, M.W., Beaudreau, A.H., Heintz, R.A., **Mueter, F.J.**, Rogers, M.C. (2021) Temporal and size-based variation in juvenile Sablefish diet composition and quality: Inferences from stomach contents and stable isotopes. *Marine and Coastal Fisheries* 13(4):396–412, <https://doi.org/https://doi.org/10.1002/mcf2.10173>
113. Melica, V., Atkinson, S., Calambokidis, J., Lang, A., Scordino, J., and **Mueter, F.J.** (2021). Application of endocrine biomarkers to update information on reproductive physiology in gray whale (*Eschrichtius robustus*). *PLOS ONE*, 16(8): e0255368, <https://doi.org/10.1371/journal.pone.0255368>
112. Clark, C. T., Cape, M. R., Shapley, M. D., **Mueter, F. J.**, Finney, B. P., and Misarti, N. (2021). SuessR: Regional corrections for the effects of anthropogenic CO₂ on $\delta^{13}\text{C}$ data from marine organisms. *Methods in Ecology and Evolution* 12(8): 1508-1520, <https://doi.org/10.1111/2041-210X.13622>
111. Melica, V., Atkinson, S., Gendron, D., Calambokidis, J., and **Mueter, F.** (2021). Blubber endocrine profiles provide insights into reproductive biology in blue whales from the eastern North Pacific Ocean. *General and Comparative Endocrinology* 310: 113830, <https://doi.org/10.1016/j.ygcen.2021.113830>
110. van Putten, I., Kelly, R., Cavanagh, R. D., Murphy, E. J., Breckwoldt, A., Brodie, S., Cvitanovic, C., Dickey-Collas, M., Maddison, L., Melbourne-Thomas, J., Arrizabalaga, H., Azetsu-Scott, K., Beckley, L. E., Bellerby, R., Constable, A. J., Cowie, G., Evans, K., Glaser, M., Hall, J., Hobday, A. J., Johnston, N. M., Llopiz, J. K., **Mueter, F.**, Muller-Karger, F. E., Weng, K. C., Wolf-Gladrow, D., and Xavier, J. C. (2021). A Decade of Incorporating Social Sciences in the Integrated Marine Biosphere Research Project (IMBeR): Much Done, Much to Do? *Frontiers in Marine Science*, 8: 575. <https://doi.org/10.3389/fmars.2021.662350>

109. Alabia, I. D., García Molinos, J., Hirata, T., **Mueter, F. J.**, Hirawake, T., and Saitoh, S.-I. (2021). Marine biodiversity refugia in a climate-sensitive subarctic shelf. *Global Change Biology*, 27(14): 3299-3311. <https://doi.org/10.1111/gcb.15632>
108. Vestfals C.D., **Mueter F.J.**, Hedstrom K.S., Laurel B.J., Petrik C.M., Duffy-Anderson J.T., Danielson S.L. (2021). Modeling the dispersal of polar cod (*Boreogadus saida*) and saffron cod (*Eleginus gracilis*) early life stages in the Pacific Arctic using a biophysical transport model. *Progress in Oceanography* 196: 102571. <https://doi.org/10.1016/j.pocean.2021.102571>
107. Callahan, M.W., Beaudreau, A.H., Heintz, R.A., **Mueter, F.J.** (2021) First winter energy allocation in juvenile sablefish *Anoplopoma fimbria*, a fast growing marine piscivore. *Marine Ecology Progress Series* 663: 145-156. <https://doi.org/10.3354/meps13641>
106. Levine, R. M., De Robertis, A., Grünbaum, D., Woodgate, R., Mordy, C. W., Mueter, F., Cokelet, E., Lawrence-Slavas, N., Tabisola, H. (2021). Autonomous vehicle surveys indicate that flow reversals retain juvenile fishes in a highly advective high-latitude ecosystem. *Limnology and Oceanography*, 66: 1139–1154. <https://doi.org/10.1002/lno.11671>
105. Brown, K.L., Atkinson, S., Furin, C.G., **Mueter, F.J.**, Gerlach, R. (2021) Metals in the stomach contents and brain, gonad, kidney, and liver tissues of subsistence-harvested northern sea otters (*Enhydra lutris kenyoni*) from Icy Strait, Alaska. *Marine Pollution Bulletin* 166: 112183. <https://doi.org/10.1016/j.marpolbul.2021.112183>
104. Sutton L. , Iken, K., Bluhm, B.A., **Mueter, F.J.** (2020) Comparison of functional diversity of two Alaskan Arctic shelf epibenthic communities. *Marine Ecology Progress Series*, 651: 1–21. <https://doi.org/10.3354/meps13478>
103. Barnes, C.L., Beaudreau, A.H., Dorn, M.W., Holsman, K.H., **Mueter, F.J.** (2020) Development of a predation index to assess trophic stability in the Gulf of Alaska. *Ecological Applications*, 30(7): e02141. <https://doi.org/10.1002/eap.2141>
102. Marsh, J.M., **Mueter, F.J.**, Thorson, J.T., Britt, L., Zador, S. (2020) Shifting fish distributions in the Bering Sea. In: *State of the Climate 2019*. Bulletin of the American Meteorological Society 101(8): S254-S256. <https://doi.org/10.1175/BAMS-D-20-0086.1>
101. Alabia, I., Molinos, J.G., Saitoh, S.-I., Hirata, T., Hirawake, T., **Mueter, F.J.** (2020) Multiple facets of marine biodiversity in the Pacific Arctic under future climate. *Science of the Total Environment* 744: 140913. <https://doi.org/10.1016/j.scitotenv.2020.140913>
100. Wild, L.A., **Mueter, F.J.**, Witteveen, B.H., and Straley, J.M. (2020). Exploring variability in the diet of depredating sperm whales in the Gulf of Alaska through stable isotope analysis. *Royal Society Open Science* 7: 191110. <https://doi.org/10.1098/rsos.191110>
99. Spencer, M.L., Vestfals, C.D., **Mueter, F.J.**, Laurel, B.J. (2020) Ontogenetic changes in the buoyancy and salinity tolerance of eggs and larvae of polar cod (*Boreogadus saida*) and other gadids. *Polar Biology* 43(8): 1141-1158. <https://doi.org/10.1007/s00300-020-02620-7>
98. Forster, C., Norcross, B., **Mueter, F.**, Seitz, A., Logerwell, L. (2020) Spatial patterns, environmental correlates, and potential seasonal migration triangle of polar cod (*Boreogadus saida*) distribution in the Chukchi and Beaufort seas. *Polar Biology* 43(8): 1073-1094. <https://doi.org/10.1007/s00300-020-02631-4>

97. Marsh, J.M., Mueter, F.J., Quinn II, T.J. (2020) Environmental and biological influences on the distribution and population dynamics of Arctic cod (*Boreogadus saida*) in the US Chukchi Sea. *Polar Biology* 43(8): 1055-1072. <https://doi.org/10.1007/s00300-019-02561-w>
96. Marsh, J.M., Mueter, F.J. (2020) Influences of temperature, predators and competitors on Arctic cod (*Boreogadus saida*) at the southern margin of their distribution. *Polar Biology* 43(8): 995-1014. <https://doi.org/10.1007/s00300-019-02575-4>
95. Smé, N., Lyon, S., Mueter, F.J., Brykov, V., Sakurai, Y., Gharrett, A.J. (2020) Examination of saffron cod *Eleginus gracilis* (Tilesius 1810) population genetic structure. *Polar Biology* 43(8): 963-978. <https://doi.org/10.1007/s00300-019-02601-5>
94. Nielsen, J., Mueter, F., Adkison, M., Loher, T., McDermott, S., Seitz, A. (2020) Potential utility of geomagnetic data for geolocation of demersal fishes in the North Pacific Ocean. *Animal Biotelemetry* 8: 17. <https://doi.org/10.1186/s40317-020-00204-0>
93. Olsen, D.W., Matkin, C.O., Mueter, F.J., Atkinson, S. (2020) Social Behavior Increases in Multi-Pod Aggregations of southern Alaska Resident Killer Whales (*Orcinus orca*). *Marine Mammal Science*. <https://doi.org/10.1111/mms.12715>
92. Uchiyama, T., Mueter, F.J., Kruse, G.H. (2020). Multispecies biomass dynamics models reveal effects of ocean temperature on predation of juvenile pollock in the Eastern Bering Sea. *Fisheries Oceanography* 29: 10-22. <https://doi.org/10.1111/fog.12433>
91. Thorson, J. T., Fossheim, M., Mueter, F. J., Olsen, E., Lauth, R. R., Primicerio, R., Husson, B., Marsh, J, Dolgov, A, Zador, S.G. (2019). Comparison of near-bottom fish densities show rapid community and population shifts in Bering and Barents seas. Department of Commerce, NOAA, <https://arctic.noaa.gov/Report-Card/Report-Card-2019/ArtMID/7916/ArticleID/845/Comparison-of-Near-bottom-Fish-Densities-Show-Rapid-Community-and-Population-Shifts-in-Bering-and-Barents-Seas>
90. Schuler, A., Piwetz, S., Di Clemente, J., Steckler, D., Mueter, F.J., Pearson, H.C. (2019). Humpback whale movements and behavior in response to whale watching vessels in Juneau, AK. *Frontiers in Marine Science* 6: 710. <https://doi.org/10.3389/fmars.2019.00710>
89. Vestfals, C.D., Mueter, F.J., Duffy-Anderson, J.T., Busby, M.S., De Robertis, A. (2019). Distribution of early life stages of Arctic cod and saffron cod in the Pacific Arctic. *Polar Biology* 42: 969-990. <https://doi.org/10.1007/s00300-019-02494-4>
88. Divine, L.M., Mueter, F.J., Kruse, G.H., Bluhm, B.A., Jewett, S.C., Iken, K. (2019) New estimates of growth, size-at-maturity, fecundity, mortality and biomass of snow crab, *Chionoecetes opilio*, in the Arctic Ocean off Alaska. *Fisheries Research* 218: 246-258. <https://doi.org/10.1016/j.fishres.2019.05.002>
87. Kohan, M.L., Mueter, F.J., Orsi, J.A., McPhee, M.V. (2019). Variation in size, condition, and abundance of juvenile chum salmon (*Oncorhynchus keta*) in relation to marine factors in Southeast Alaska. *Deep Sea Research Part II: Topical Studies in Oceanography* 165: 340-347. <https://doi.org/10.1016/j.dsr2.2017.09.005>
86. Iken, K., Mueter, F.J., Grebmeier, J.M., Cooper, L.W., Danielson, S, Bluhm, B. (2019) Developing an observational design for epibenthos and fish assemblages in the Chukchi Sea. *Deep-Sea Research II* 162: 180-190. <https://doi.org/10.1016/j.dsr2.2018.11.005>

85. Nielsen, J., Mueter, F.J., Adkison, M.A., Loher, T., McDermott, S., Seitz, A. (2019). Effect of study area bathymetric heterogeneity on parameterization and performance of a depth-based geolocation model for demersal fishes. *Ecological Modeling* 402: 18-32. <https://doi.org/10.1016/j.ecolmodel.2019.03.023>
84. Sullivan, J.Y., Kruse, G.H., Mueter, F.J. (2018). Do Environmental and Ecological Conditions Explain Declines in Size-at-age of Pacific Halibut in the Gulf of Alaska? *In: Mueter, F., Baker, M., Dressel, S., Hollowed, A. (eds.) Impacts of a Changing Environment on the Dynamics of High-latitude Fish and Fisheries*. Alaska Sea Grant, University of Alaska Fairbanks.
83. Holsman, K., Ito, S.-I., Hollowed, A, Bograd, S., Hazen, E., King, J., **Mueter, F.**, Perry, I. (2018). Chapter 6: The North Pacific & Pacific Arctic. *In: Barange, M., Bahri, T., Beveridge, M.C.M., Cochrane, K.L., Funge-Smith, S., and Poulain, F. (eds.) Impacts of climate change on fisheries and aquaculture: synthesis of current knowledge, adaptation and mitigation options*. FAO Fisheries and Aquaculture Technical Paper No. 627, Rome.
82. Wild, L.A., Chenoweth, E.M., Mueter, F.J., Straley, J.M. (2018). Evidence for dietary time series in layers of cetacean skin using stable carbon and nitrogen isotope ratios. *Rapid Communications in Mass Spectrometry* 32(16): 1425-1438. <https://doi.org/10.1002/rcm.8168>
81. Watson, J.T., Haynie, A.C., Sullivan, P.J., Perruso, L., O'Farrell, S., Sanchirico, J.N., Mueter, F.J., (2018). Vessel monitoring systems (VMS) reveal an increase in fishing efficiency following regulatory changes in a demersal longline fishery. *Fisheries Research* 207: 85-94. <https://doi.org/10.1016/j.fishres.2018.06.006>
80. Alabia I, D., García Molinos, J., Saitoh, S.I., Hirawake, T., Hirata, T., **Mueter F.J.**, (2018). Distribution shifts of marine taxa in the Pacific Arctic under contemporary climate changes. *Diversity and Distributions* 24: 1583-1597. <https://doi.org/10.1111/ddi.12788>
79. Sewall, F., Norcross, B., Mueter, F., Heintz, R. (2018). Empirically based models of oceanographic and biological influences on Pacific Herring recruitment in Prince William Sound. *Deep Sea Research Part II: Topical Studies in Oceanography* 147: 127-137. <https://doi.org/10.1016/j.dsr2.2017.07.004>
78. Foley, K., Rosenberger, A., Mueter, F.J. (2018). Longitudinal patterns of juvenile Coho Salmon distribution and abundance in headwater streams of the Little Susitna River, Alaska. *Transactions of the American Fisheries Society*. 147(2): 247-264. <https://doi.org/10.1002/tafs.10014>
77. Sme, N., Lyon, S., Canino, M., Chernova, N., O'Bryhim, J., Lance, S., Jones, K., Mueter, F., Gharrett, A. (2018). Identification of saffron cod (*Eleginus gracilis*) and its distinction from several other gadid species by microsatellite differences. *Fishery Bulletin* 116: 60–68. <https://doi.org/10.7755/FB.116.1.6>
76. Van Pelt, T.I., Huntington, H.P., Romanenko, O.V., **Mueter, F.J.**, (2017). The missing middle: Central Arctic Ocean gaps in fishery research and science coordination. *Marine Policy* 85: 79-86, <https://doi.org/10.1016/j.marpol.2017.08.008>

75. Coutré, K.M., Beaudreau, A.H., Courtney, D., **Mueter, F.J.**, Malecha, P., Rutecki, T.L. (2017). Vertical movement patterns of juvenile Sablefish in coastal Southeast Alaska. *Marine and Coastal Fisheries* 9: 161-169, <https://doi.org/10.1080/19425120.2017.1285377>
74. Malick M.J., Cox S.P., **Mueter F.J.**, Dorner, B., Peterman, R.M. (2017). Effects of the North Pacific Current on the productivity of 163 Pacific salmon stocks. *Fisheries Oceanography* 26(3): 268-281, <https://doi.org/10.1111/fog.12190>
73. Divine, L.M., Bluhm B.A., **Mueter, F.J.**, Iken K. (2017). Diet analysis of Alaska Arctic snow crabs (*Chionoecetes opilio*) using stomach contents and $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ stable isotopes. *Deep Sea Research II* 135: 124-136, <https://doi.org/10.1016/j.dsr2.2015.11.009>
72. Marsh, J.M., **Mueter, F.J.**, Iken, K., Danielson, S. (2017). Ontogenetic and spatial variation in trophic roles of Chukchi Sea fishes. *Deep Sea Research II* 135: 78-94, <https://doi.org/10.1016/j.dsr2.2016.07.010>
71. Sigler, M.F., **Mueter, F.J.**, Bluhm, B.A., Busby, M.S., Cokelet, E.D., Danielson, S.L., De Robertis, A., Eisner, L.B., Farley, E.V., Iken, K., Kuletz, K.J., Lauth, R.R., Logerwell, E.A., and Pinchuk, A.I. (2017). Summer zoogeography of the northern Bering and Chukchi seas *Deep Sea Research II* 135: 168-189, <https://doi.org/10.1016/j.dsr2.2016.03.005>
70. **Mueter, F.J.**, Weems, J., Farley, E.V., Sigler, M.F. (2017) Arctic Ecosystem Integrated Survey (Arctic Eis): Marine ecosystem dynamics in the rapidly changing Pacific Arctic Gateway. *Deep Sea Research II* 135: 1-6, <https://doi.org/10.1016/j.dsr2.2016.11.005>
69. von Biela, V.R., Zimmerman, C.E., Kruse, G.H., **Mueter, F.J.**, Black, B.A., Douglas, D.C., Bodkin, J.L. (2016). Influence of basin- and local-scale conditions on nearshore production in the northeast Pacific Ocean. *Marine and Coastal Fisheries*. *Marine and Coastal Fisheries* 8: 502-521, <https://doi.org/10.1080/19425120.2016.1194919>
68. Arimitsu, M.L., Piatt, J.F., **Mueter, F.J.** (2016). Influence of glacier runoff on ecosystem structure in Gulf of Alaska fjords. *Marine Ecology Progress Series* 560: 19-40, <https://doi.org/10.3354/meps11888>
67. Kvamsdal, S.F., Eide, A., Ekerhovd, N.-A., Enberg, K., Gudmundsdottir, A., Hoel, A.H., Mills, K.E., **Mueter, F.J.**, Ravn-Jonsen, L., Sandal, L.K., Stiansen, J.E., Vestergaard, N. (2016). Harvest Control Rules in Modern Fisheries Management. *Elementa: Science for the Anthropocene* 4: 000114, <https://doi.org/10.12952/journal.elementa.000114>
66. **Mueter, F. J.**, Nahrgang, J., Nelson, R.J., Berge, J. (2016). The ecology of gadid fishes in the circumpolar Arctic with a special emphasis on the polar cod (*Boreogadus saida*). *Polar Biology* 39: 961-967, <https://doi.org/10.1007/s00300-016-1965-3>
65. Yasumiishi, E.M., Criddle, K.R., Helle, J.H., Hillgruber, N., **Mueter, F.J.** (2016). Growth of two chum salmon (*Oncorhynchus keta*) populations from southeast Alaska and Washington in relation to population abundance and climate in the eastern North Pacific Ocean, 1972-2004. *Fishery Bulletin* 114: 203-219. <https://doi.org/10.7755/FB.114.2.7>
64. Sergeant, C.J., Starkey, E., Bartz, K., Wilson, M., Larsen, A., **Mueter, F.J.** (2016). A practitioner's guide for exploring water quality patterns using Principal Components Analysis and Procrustes. *Environmental Monitoring and Assessment* 188: 249. <https://doi.org/10.1007/s10661-016-5253-z>

63. Petrik, C.M., Duffy-Anderson, J.T., Castruccio, F., Curchitser, E.N., Danielson, S., Hedstrom, K., **Mueter, F.** (2016). Modeled connectivity between Walleye Pollock (*Gadus chalcogrammus*) spawning and age-0 nursery areas in warm and cold years with implications for juvenile survival. *ICES Journal of Marine Science* 73: 1890-1900, <https://doi.org/10.1093/icesjms/fsw004>
62. Spencer, P.D., Holsman, K.K., Zador, S., Bond, N.A., **Mueter, F.J.**, Hollowed, A.B., and Ianelli, J.N. (2016) Modeling spatially-dependent predation mortality of eastern Bering Sea walleye pollock, and its implications for stock dynamics under future climate scenarios. *ICES Journal of Marine Science* 73(5): 1330-1342, <https://doi.org/10.1093/icesjms/fsw040>
61. Hunt Jr, G.L., Drinkwater, K.F., Arrigo, K., Berge, J., Daly, K.L., Danielson, S., Daase, M., Hop, H., Isla, E., Karnovsky, N., Laidre, K., **Mueter, F.J.**, Murphy, E.J., Renaud, P.E., Smith Jr, W.O., Trathan, P., Turner, J., Wolf-Gladrow, D. (2016). Advection in polar and sub-polar environments: Impacts on high latitude marine ecosystems. *Progress in Oceanography* 149, 40-81, <https://doi.org/10.1016/j.pocean.2016.10.004>
60. Uchiyama, T., Kruse, G.H., **Mueter, F.J.** (2016). A multispecies biomass dynamics model for investigating predator-prey interactions in the Bering Sea groundfish community. *Deep Sea Research II* 134, 331-349. <https://doi.org/10.1016/j.dsr2.2015.04.019>
59. Coffin, B. and **Mueter F.J.** (2016). Environmental covariates of sablefish (*Anoplopoma fimbria*) and Pacific ocean perch (*Sebastes alutus*) recruitment in the Gulf of Alaska. *Deep Sea Research II* 132:194-209. <https://doi.org/10.1016/j.dsr2.2015.02.016>
58. Foley, K., Rosenberger, A., Mueter, F., (2015). Effectiveness of single-pass backpack electrofishing to estimate juvenile coho salmon abundance in Alaskan headwater streams. *Fisheries Science* 81: 601-610. <https://doi.org/10.1007/s12562-015-0888-1>
57. Yasumiishi, E.M., Criddle, K.R., Hillgruber, N., **Mueter, F.J.**, Helle, J.H. (2015). Chum salmon (*Oncorhynchus keta*) growth and temperature indices as indicators for the year class strength of age-1 pollock (*Theragra chalcogramma*) in the eastern Bering Sea. *Fisheries Oceanography* 24(3): 242-256. <https://doi.org/10.1111/fog.12108>
56. von Biela, V.R., Kruse, G.H., **Mueter, F.J.**, Black, B.A., Douglas, D.C., Helser, T.E., and Zimmerman C.E. (2015). Evidence of bottom-up limitations in nearshore marine systems based on otolith proxies of fish growth. *Marine Biology* 162, 1019-1031. <https://doi.org/10.1007/s00227-015-2645-5>
55. Malick, M.J., Cox, S.P., **Mueter, F.J.**, Peterman, R.M. (2015). Linking phytoplankton phenology to salmon productivity along a north/south gradient in the Northeast Pacific Ocean. *Canadian Journal of Fisheries and Aquatic Sciences* 72(5): 697-708. <https://doi.org/10.1139/cjfas-2014-0298>
54. Petrik, C.M., Duffy-Anderson, J.T., **Mueter, F.**, Hedstrom, K., and Curchitser, E.N. (2015). Biophysical transport model suggests climate variability determines distribution of walleye pollock early life stages in the Eastern Bering Sea through effects on spawning. *Progress in Oceanography* 138: 459-474. <https://doi.org/10.1016/j.pocean.2014.06.004>
53. Strasburger, W.W., Hillgruber, N., Pinchuk, A.I., and **Mueter, F.J.** (2014). Feeding ecology of age-0 walleye pollock (*Theragra chalcogramma*) and Pacific cod (*Gadus macrocephalus*)

- in the southeastern Bering Sea. *Deep Sea Research II* 109: 172-180.
<https://doi.org/10.1016/j.dsr2.2013.10.007>
52. Sigler, M.F., Stabeno, P.J., Eisner, L.B., Napp, J.M., and **Mueter, F.J.** (2014). Spring and fall phytoplankton blooms in a productive subarctic ecosystem, the eastern Bering Sea, during 1995-2011. *Deep Sea Research II* 109: 71-83. <https://doi.org/10.1016/j.dsr2.2013.12.007>
51. Peterson, M.J., **Mueter, F.J.**, Criddle, K., and Haynie, A.C. (2014). Costs incurred by Alaskan sablefish, Pacific halibut and Greenland turbot longliners due to killer whale depredation. *PLoS ONE* 9:e88906. <https://doi.org/10.1371/journal.pone.0088906>
50. Litzow, M.A., **Mueter, F.J.**, and Hobday, A.J. (2014). Reassessing regime shifts in the North Pacific: incremental climate change and commercial fishing are necessary for explaining decadal-scale biological variability. *Global Change Biology* 20(1): 38-50.
<https://doi.org/10.1111/gcb.12373>
49. Litzow, M.A., and **Mueter, F.J.** (2014). Assessing the ecological importance of climate regime shifts: an approach from the North Pacific Ocean. *Progress in Oceanography* 120: 110-119.
<https://doi.org/10.1016/j.pocean.2013.08.003>
48. **Mueter, F.J.**, Reist, J.D., Majewski, A.R., Sawatzky, C.D., Christiansen, J.S., Hedges, K.J., Coad, B.W., Karamushko, O.V., Lauth, R.R., Lynghammar, A., MacPhee, S.A. and Mecklenburg, C.W. (2013). Marine Fishes of the Arctic. In Jeffries, M.O., Richter-Menge, J.A., and Overland, J.E., editors. Arctic Report Card 2013. Department of Commerce, NOAA. <http://www.arctic.noaa.gov/reportcard>
47. Siddon, E.C., Kristiansen, T., **Mueter, F.J.**, Holsman, K.K., Heintz, R.A., and Farley, E.V. (2013). Spatial match-mismatch between juvenile fish and prey explains recruitment variability across contrasting climate conditions in the eastern Bering Sea. *PLoS ONE* 8(12): e84526. <https://doi.org/10.1371/journal.pone.0084526>
46. Zimmerman, C.E., Ramey, A.M., M.Turner, S., **Mueter, F.J.**, Murphy, S.M., and Nielsen, J.L. (2013). Genetics, recruitment, and migration patterns of Arctic Cisco (*Coregonus autumnalis*) in the Colville River, Alaska and Mackenzie River, Canada. *Polar Biology* 36(11): 1543-1555. DOI 10.1007/s00300-013-1372-y
45. Waite, J.N., and **Mueter, F.J.** (2013). Spatial and temporal variability of chlorophyll a concentrations in the coastal Gulf of Alaska waters, 1998-2011, using cloud-free reconstructions of SeaWiFS and MODIS data. *Progress in Oceanography* 116: 179-192.
<http://dx.doi.org/10.1016/j.pocean.2013.07.006>
44. Hollowed, A.B., Barange, M., Beamish, R., Brander, K., Cochrane, K., Drinkwater, K., Foreman, M., Hare, J., Holt, J., Ito, S.-i., Kim, S., King, J., Loeng, H., MacKenzie, B., **Mueter, F.**, Okey, T., Peck, M.A., Radchenko, V., Rice, J., Schirripa, M., Yatsu, A., and Yamanaka, Y. (2013). Projected Impacts of Climate Change on Marine Fish and Fisheries. *ICES Journal of Marine Science* 70(5): 1023-1037. <https://doi.org/10.1093/icesjms/fst081>
43. Agler, B.A., Ruggerone, G., Wilson, L.I., and **Mueter, F.J.** (2013). Historical growth of Bristol Bay and Yukon River, Alaska chum salmon (*Oncorhynchus keta*) in relation to climate and inter-and intraspecific competition. *Deep Sea Research Part II: Topical Studies in Oceanography* 94: 165-177. <http://dx.doi.org/10.1016/j.dsr2.2013.03.028>

42. Peterson, M.J., **Mueter, F.J.**, Hanselman, D., Lunsford, C., Matkin, C., and Fearnbach, H. (2013). Killer whale (*Orcinus orca*) depredation effects on catch rates of six groundfish species: Implications for commercial longline fisheries in Alaska. *ICES Journal of Marine Science* 70(6): 1220-1232. <https://doi.org/10.1093/icesjms/fst045>
41. Litzow, M.A., **Mueter, F.J.**, and Urban, J.D. (2013). Rising catch variability preceded historical fisheries collapses in Alaska. *Ecological Applications* 23(6): 1475-1487.
40. Siddon, E.C., Heintz, R.A., **Mueter, F.J.** (2013). Conceptual model of energy allocation in walleye pollock (*Theragra chalcogramma*) from age-0 to age-1 in the southeastern Bering Sea. *Deep Sea Research Part II* 94: 140-149.
39. **Mueter, F.J.**, Dawe, E.G., and Pálsson, Ó. (2012). Effects of climate and predation on subarctic crustacean populations. *Marine Ecology Progress Series* 469: 191-193.
38. Marcello L.A., **Mueter F.J.**, Dawe EG, and Moriyasu M. (2012) Effects of temperature and gadid predation on snow crab recruitment: Comparisons between the Bering Sea and Atlantic Canada. *Marine Ecology Progress Series* 469: 249-261.
37. Bundy, A., Bohaboy, E.C., Hjermann, D.O., **Mueter, F.J.**, Fu, C., and Link, J.S. (2012). Common patterns, common drivers: comparative analysis of aggregate surplus production across ecosystems. *Marine Ecology Progress Series* 459: 203-218.
36. Renner, H.M., **Mueter, F.J.**, Drummond, B.A., Warzybok, J.A., and Sinclair, E.H. (2012). Patterns of change in diets of two piscivorous seabird species during 35 years in the Pribilof Islands. *Deep Sea Research Part II* 65-70: 273-291.
35. **Mueter, F.J.**, Siddon, E.C., and Hunt Jr., G.L. (2011). Climate change brings uncertain future for subarctic marine ecosystems and fisheries. Pages 329-357 in A. L. Lovecraft and H. Eicken, editors. *North by 2020: Perspectives on Alaska's Changing Social-Ecological Systems*. University of Alaska Press, Fairbanks.
34. Hunt Jr., G.L., Coyle, K.O., Eisner, L.B., Farley, E.V., Heintz, R.A., **Mueter, F.**, Napp, J.M., Overland, J.E., Ressler, P.H., Salo, S., and Stabeno, P.J. (2011) Climate impacts on eastern Bering Sea food webs: A synthesis of new data and an assessment of the Oscillating Control Hypothesis. *ICES Journal of Marine Science* 68(6): 1230-1243.
33. Ianelli, J.N., Hollowed, A.B., Haynie, A.C., **Mueter, F.J.**, and Bond, N.A. (2011). Evaluating management strategies for Eastern Bering Sea walleye pollock (*Theragra chalcogramma*) in a changing environment. *ICES Journal of Marine Science* 68(6): 1297-1304.
32. Siddon, E. C., Duffy-Anderson, J. T., and **Mueter, F. J.** (2011). Community-level response of fish larvae to environmental variability in the southeastern Bering Sea. *Marine Ecology Progress Series* 426: 225-239.
31. **Mueter, F.J.**, Bond, N.A., Ianelli, J.N., and Hollowed, A.B. (2011). Expected declines in recruitment of walleye pollock (*Theragra chalcogramma*) in the eastern Bering Sea under future climate change. *ICES Journal of Marine Science* 68(6): 1284-1296. <https://doi.org/10.1093/icesjms/fsr010>
30. Coyle, K.O., Eisner, L.B., **Mueter, F.J.**, Pinchuk, A., Janout, M.A., Cieciel, K., Farley, E.V., and Andrews, A.G. (2011). Climate change in the southeastern Bering Sea: impacts on

- pollock stocks and implications for the Oscillating Control Hypothesis. *Fisheries Oceanography* **20**(2): 139–156.
29. **Mueter, F.J.**, Broms, C., Drinkwater, K.F., Friedland, K.D., Hare, J.A., Hunt Jr., G.L., Melle, W., & Taylor, M. (2009). Ecosystem responses to recent oceanographic variability in high-latitude Northern Hemisphere ecosystems. *Progress in Oceanography* **81**: 93-110.
 28. Drinkwater, K., **Mueter, F.J.**, Friedland, K., Taylor, M., Hunt, G., Hare, J., Melle, W., and Broms Årnes, C., (2009). Comparison of 4 Northern Hemisphere regions: Physical oceanographic responses to recent climate variability. *Progress in Oceanography* **81**: 10-28. <https://doi.org/10.1016/j.pocean.2009.04.018>
 27. Link, J.S., Stockhausen, W., Skaret, G., Overholtz, W., Megrey, B.A., Gjøsaeter, H., Gaichas, S., Dommasnes, A., Falk-Petersen, J., Kane, J., **Mueter, F.**, Friedland, K., and Hare, J. (2009). A comparison of biological trends from four marine ecosystems: synchronies, differences, and commonalities. *Progress in Oceanography* **81**: 29-46.
 26. North, E.W. and **Mueter, F.J.** (2009). Marine science with global vision: creating a place for early career scientists. An introduction to selected articles from the 2007 Early Career Scientists Conference. *ICES Journal of Marine Science* **66**: 334-335.
 25. Peterman, R.M., Pyper, B.J., **Mueter, F.J.**, Haeseker, S.L., Su, Z., and Dorner, B. (2009). Statistical models of Pacific salmon that include environmental variables and habitat capacity. In *Pacific Salmon Environment and Life History Models*. Edited by E. Knudson, H. Michael, and C. Steward. American Fisheries Society Symposium 71, Bethesda, Maryland, pp. 125-146.
 24. **Mueter, F.J.**, and Litzow M.A. (2008). Sea ice retreat alters the biogeography of the Bering Sea continental shelf. *Ecological Application* **18**: 309-320.
 23. Aydin, K., and **Mueter, F.J.** (2007). The Bering Sea - A dynamic food web perspective. *Deep Sea Research II* **54**: 2501-2525.
 22. **Mueter, F.J.**, Boldt, J., Megrey, B.A., and Peterman, R.M. (2007). Recruitment and survival of Northeast Pacific Ocean fish stocks: temporal trends, covariation, and regime shifts. *Canadian Journal of Fisheries and Aquatic Sciences* **64**: 911-927.
 21. Misra, D., Naidu, S.A., Kelley, J.J., Venkatesan, M.I., and **Mueter, F.J.** (2006). Heavy metals and hydrocarbons in Beaufort lagoon sediments, North Arctic Alaska. In *Coastal Environment and Water Quality* Edited by Y.J. Xu and V.P. Singh. Water Resources Publications, LLC, Highlands Ranch, CO. pp. 3-16.
 20. **Mueter, F.J.**, Ladd, C., Palmer, M.C., and Norcross, B.L. (2006). Bottom-up and top-down controls of walleye pollock (*Theragra chalcogramma*) on the eastern Bering Sea shelf. *Progress in Oceanography* **62**:152-183
 19. **Mueter, F.J.**, and Megrey, B.A. (2006). Using multi-species surplus production models to estimate ecosystem-level maximum sustainable yields. *Fisheries Research* **81**:189-201.
 18. **Mueter, F.J.** and Megrey, B.A. (2005). Distribution of population-based indicators across multiple taxa to assess the status of Gulf of Alaska and Bering Sea groundfish communities. *ICES Journal of Marine Science* **62**: 344-352

17. **Mueter, F.J.**, Pyper, B.J. and Peterman, R.M. (2005) Relationships between coastal ocean conditions and survival rates of Northeast Pacific salmon at multiple lags. *Transactions of the American Fisheries Society* **134**:105-119.
16. Pyper, B.J., **Mueter, F.J.** and Peterman, R.M. (2005) Across species comparisons of spatial scales of environmental effects on survival rates of Northeast Pacific salmon. *Transactions of the American Fisheries Society* **134**:86-104
15. **Mueter, F.J.** (2004) Gulf of Alaska. *In: Marine Ecosystems of the North Pacific*. PICES Special Publication 1, pp.153-175.
14. **Mueter, F.J.**, Peterman, R.M., and Pyper, B.J. (2002). Opposite effects of ocean temperature on survival rates of 120 stocks of Pacific salmon (*Oncorhynchus* spp.) in northern and southern areas. *Canadian Journal of Fisheries and Aquatic Sciences* **59**:456-463
13. **Mueter, F.J.**, and Norcross, B.L. (2002). Spatial and temporal patterns in the demersal fish community on the shelf and upper slope regions of the Gulf of Alaska. *Fishery Bulletin* **100**: 559-581
12. **Mueter, F.J.**, Ware, D.M., and Peterman, R.M. (2002). Spatial correlation patterns in coastal environmental variables and survival rates of Pacific salmon in the Northeast Pacific Ocean. *Fisheries Oceanography* **11**:205-218.
11. Pyper, B.J., **Mueter, F.J.**, Peterman, R.M., Blackbourn, D.J., and Wood C. (2002) Spatial Covariation in Survival Rates of Northeast Pacific Chum Salmon. *Transactions of the American Fisheries Society* **131**:343-363 .
10. Pyper, B.J., **Mueter, F.J.**, Peterman, R.M., Blackbourn, D.J., and Wood C. (2001). Spatial covariation in survival rates of Northeast Pacific pink salmon (*Oncorhynchus gorbuscha*). *Canadian Journal of Fisheries and Aquatic Sciences* **58**:1501-1515.
9. **Mueter, F.J.**, and Norcross, B.L. (2000). Changes in species composition of the demersal fish community in nearshore waters of Kodiak Island, Alaska. *Canadian Journal of Fisheries and Aquatic Sciences* **57**: 1169-1180.
8. **Mueter, F.J.** and Norcross, B.L. (2000). Species composition and abundance of juvenile groundfishes around six Steller sea lion (*Eumetopias jubatus*) rookeries in the Gulf of Alaska. *Alaska Fisheries Research Bulletin*. **7**: 33-43.
7. **Mueter, F.J.**, and Norcross, B.L. (1999). Linking community structure of small demersal fishes around Kodiak Island, Alaska, to environmental variables. *Marine Ecology Progress Series* **190**: 37-51.
6. **Mueter, F.J.**, and Norcross, B.L. (1999). A multivariate approach to monitoring changes in species composition of a demersal fish community. *In: Ecosystem approaches for fisheries management*. University of Alaska Sea Grant AK-SG-99-01, Fairbanks. pp. 589-592.
5. Norcross, B.L., **Mueter, F.J.** (1999). The use of an ROV in the study of juvenile flatfish. *Fisheries Research* **39**: 241-251.
4. Norcross, B.L., **Mueter, F.J.**, and Holladay, B.A. (1997). Habitat models for juvenile pleuronectids around Kodiak Island, Alaska. *Fishery Bulletin* **95**: 504-520.

3. Norcross, B.L., Holladay, B.A., and **Mueter, F.J.** (1995). Nursery area characteristics of pleuronectids in coastal Alaska, USA. *Netherlands Journal of Sea Research* **34**(1-3): 161-175.
2. **Mueter, F.J.**, Norcross, B.L., and Royer, T.C. (1995). Do cyclic temperatures cause cyclic fisheries? *In* Climate change and northern fish populations. *Edited by* R.J. Beamish. National Research Council of Canada, Ottawa. pp. 119-129.
1. **Mueter, F.J.**, and Norcross, B.L. (1994). Distribution, abundance, and growth of larval walleye pollock, *Theragra chalcogramma*, in an Alaskan fjord. *Fishery Bulletin* **92**: 579-590.

Reports

- R17. Vestfals, C.D., **F.J. Mueter**, K.S. Hedstrom, B.J. Laurel, C.M. Petrik, J.T. Duffy-Anderson, S.L. Danielson, A. De Robertis, and E.N. Curchitser. 2018. Arctic gadids in a changing climate. NPRB project 1508 Final report. 80pp.
- R16. **Mueter, F. J.**, J. Weems, E.V. Farley, K. Kuletz, R.R. Lauth, M.F. Sigler 2017. Arctic Ecosystem Integrated Survey Final Report on Distribution of Fish, Crab, and Lower Trophic Communities in the Northeastern Bering Sea and Chukchi Sea. US Dept. of the Interior, Bureau of Ocean Energy Management, Alaska OCS Region. OCS Study BOEM 2017-077. 1584 p.
- R15. **Mueter, F.J.**, S.K. Shotwell, S. Atkinson, B. Coffin, M. Doyle, S. Hinckley, K. Rand, J. Waite. 2016. Gulf of Alaska Retrospective Data Analysis. North Pacific Research Board GOAIERP Project G81 Final Report, 165p.
- R14. **Mueter, F.J.** and S.L. Danielson 2015. Collaborative Research: BEST Synthesis: The variable transport of pollock eggs and larvae over the Bering shelf: A marriage of physics and biology. NSF Award 1108440. Final Report.
- R13. **Mueter, F.J.** and G.H. Kruse. 2015. Retrospective analysis of patterns in productivity of fish, seabirds and marine mammals in the eastern Bering Sea ecosystem. North Pacific Research Board BSIERP Project B68 Final Report, 257 p.
- R12. Uchiyama, T., G.H. Kruse, and **F.J. Mueter**. 2014. Correlative biomass dynamics model. North Pacific Research Board Project B75 Final Report, 79 p.
- R11. Duffy-Anderson, J.T., **Mueter, F.J.**, Hillgruber, N., Matarese, A., Napp, J., Eisner, L., Smart, T., Siddon, E., De Forest, L., Petrik, C. 2014. Horizontal, vertical, and temporal distribution of larvae and juveniles of Walleye Pollock, and transport pathways between nursery areas. NPRB BSIERP Project B53 Final Report, 274 p.
- R10. Litzow, M. A., **F. J. Mueter**, and A.J. Hobday (2012). Four decades of climate-biology covariation in Alaskan and North Pacific ecosystems. Final Report to the North Pacific Research Board. 115pp.
- R9. Pirtle, J.L., and Mueter, F.J. 2011. Beaufort Sea Fish and their Trophic Linkages: Literature Search and Synthesis, Bureau of Ocean Energy Management, Anchorage, AK.

- R8. Hunt, G. L., Jr, B. M. Allen, R. P. Angliss, T. Baker, N. NBond, G. Buck, G. V. Byrd, K. O. Coyle, A. Devol, D. M. Eggers, L. Eisner, R. Feely, S. Fitzgerald, L. W. Frits, E. V. Gritsay, C. Ladd, W. Lewis, J. Mathis, C. W. Mordy, **F. J. Mueter**, J. Napp, E. Sherr, D. Shull, P. Stabeno, M. A. Stepanenko, S. Strom, and T. E. Whitledge. 2010. Status and trends of the Bering Sea region, 2003-2008. Pages 196-267 *In* S. M. McKinnell and M. Dagg (editors). Marine ecosystems of the North Pacific Ocean, 2003-2008.
- R7. Mundy, P. R., D. M. Allen, J. L. Boldt, N. A. Bond, S. Dressel, E. V. Farley Jr., D. H. Hanselman, J. Heifetz, R. R. Hopcroft, M. A. Janout, C. Ladd, R. C. Lam, P. A. Livingston, C. R. Lunsford, J. T. Mathis, **F. J. Mueter**, C. N. Rooper, N. Sarkar, S. A. K. Shotwell, M. V. Sturdevant, A. C. Thomas, T. J. Weingartner, and D. Woodby (2010). Status and trends of the Gulf of Alaska Coastal region, 2003-2008. pp. 142-195, *In* S. M. McKinnell and M. Dagg (editors). Marine ecosystems of the North Pacific Ocean, 2003-2008. PICES Special Publication 4.
- R6. **Mueter, F. J.** (2010). Evaluation of stock assessment and modeling options to assess sablefish population levels and status in the Northern Southeast Inside (NSEI) management area. Alaska Department of Fish and Game, Anchorage. Special Publication No. 10-01. 115pp.
- R5. Litzow, M. A., and **F. J. Mueter** (2009). Four decades of climate-biology covariation in the Northeast Pacific: 98 updated ecosystem indicators, 1965-2006. Final Report to the North Pacific Research Board. 46pp.
- R4. Moulton, L. L., and **F.J. Mueter**. (2008). Feasibility study for estimating broad whitefish production in tapped lakes of the Colville Delta, final report. ConocoPhillips Alaska, Inc., Anchorage, Alaska, 52pp.
- R3. Murphy, S. M., **Mueter, F. J.** and Braund, S. R. (2007). Variation in the abundance of Arctic cisco in the Colville River: Analysis of existing data and local knowledge. Volumes I and II: Final Report. Unpublished report by ABR, Inc. to U. S. Department of the Interior, Minerals Management Service (MMS), Alaska Outer Continental Shelf Region, Anchorage, AK. Technical Report No. MMS 2007-042. Available from ABR, Inc. P.O. Box 80410, Fairbanks, Alaska 99708-0410, USA.
- R2. Norcross, B.L., **Mueter, F.J.**, and Holladay, B.A. (1995). Habitat models for juvenile pleuronectids around Kodiak Island, Alaska, USA. *In* Proceedings of the International Symposium on North Pacific Flatfish. *Edited by* Anonymous. Alaska Sea Grant College Program Report No. 95-04, Fairbanks. pp. 151-175.
- R1. Mathisen, O. A., and **F. J. Mueter**. 1994. Salmon investigations in the Egegik watershed in 1993. Juneau Center for Fisheries and Ocean Sciences, Juneau, Alaska. 19pp.

Presentations (2008-present, first-author/presenter only):

- Mueter, F.J.** Assessing and managing fish stocks in a rapidly changing environment. (Keynote). Ecosystem Studies of the Subarctic and Arctic Seas. Virtual Meeting. May 31, 2021.

- Mueter, F.J.**, J.M. Grebmeier, J.M., H.P. Huntington, P.L. Pulsifer, J. Davis. A Step-Wise Progression to Fisheries Ecosystem Science in the Central Arctic. Arctic Science Summit Week. Virtual Meeting. March 26, 2021.
- Mueter, F.J.**, J. Marsh, C. Vestfals, R. Levine, A. de Robertis, GO-WEST team. Fisheries studies, with a focus on Arctic cod (*Boreogadus saida*), in the Pacific Arctic. IARPC (Interagency Arctic Research Policy Committee) Marine Ecosystems collaboration team webinar. March 25, 2020.
- Mueter, F.J.**, H. Flores, A. Pinchuk, J. Weems, R. ten Boer, M. van Dorssen, L. Edenfield, A. Klasmeier, K. Kunz, S. Maes, N. Zakharova. Chasing Arctic Cod under the ice. Strait Science (UAF seminar series), Nome, Alaska, March 11, 2020.
- Mueter, F.J.**, H. Flores, A. Pinchuk, J. Weems, R. ten Boer, M. van Dorssen, L. Edenfield, A. Klasmeier, K. Kunz, S. Maes, N. Zakharova. Utilization of the under-ice habitat by Arctic Cod in the western Arctic Ocean: Chasing fish under ice. CMI Annual Research Review, Anchorage, Alaska, January 31, 2020.
- Mueter, F.J.** Climate and ecosystem trends in the Bering Sea and Gulf of Alaska. Alaska Young Fishermens Symposium (AYFS), Juneau, Alaska, January 22, 2020.
- Mueter, F.J.** The Arctic Cisco mystery. Presentation on R/V Sikuliaq, November 9, 2020.
- Mueter, F.J.** Arctic Cod in the Bering Sea: A ‘bellwether’ of changes to come? Strait Science (UAF seminar series), Nome, Alaska, November 5, 2019.
- Mueter, F.J.**, Benjamin Planque, George Hunt, Irene Alabia, Sei-ichi Saitoh, Padmini Dalpadado, Lisa Eisner, Yutaka Watanuki, Toru Hirawake. Prey resources, food webs, fish and fisheries in rapidly changing Subarctic and Arctic marine systems. IMBER Open Science Conference, June 19, 2019.
- Mueter, F.J.** Fish, fisheries and fishery management in rapidly changing Subarctic and Arctic marine systems. Fisheries and Ocean Sciences Seminar, Fairbanks, AK, February 20, 2019
- Mueter, F.J.**, K. Drinkwater, S.-I. Saitoh (Oral). Resilience and Adaptive Capacity of Arctic marine systems under a changing climate. Mid-Term Meeting of the Belmont Forum Arctic Observing and Science for Sustainability Collaborative Research Action (CRA), 8-10 December 2018, Washington D.C.
- Mueter, F.J.** Fishery Management Challenges in our Changing Bering Sea. Strait Science series, Nome, AK, November 26, 2018.
- Mueter, F.J.** and H. Flores (Oral). Current and future research on *Boreogadus saida* in the Central Arctic Ocean and surrounding shelf seas. Ecosystem Studies of the Subarctic and Arctic Seas (ESSAS) Annual Science Meeting, Fairbanks, Alaska, June 14, 2018.

Forster, C., B.L. Norcross, **F.J. Mueter** (Oral). Assessing spatial patterns of Arctic Cod (*Boreogadus saida*) abundance and distribution using GAM in the Chukchi and Beaufort seas.

- Western Division of the American Fisheries Society Meeting, Anchorage, Alaska, May 24, 2018.
- Ecosystem Studies of the Subarctic and Arctic Seas Annual Science Meeting, Fairbanks, Alaska, June 14, 2018

Mueter, F.J., C. Vestfals, J. Marsh, L. Divine, J. Weems, K. Iken, B. Bluhm (Oral). Arctic cod, *Boreogadus saida*, and snow crab, *Chionoecetes opilio*, in Alaska's Arctic. Western Division of the American Fisheries Society Meeting, Anchorage, Alaska, May 24, 2018.

Mueter, F.J. (Oral) Arctic Gadids in a Changing Climate. Alaska Marine Science Symposium, Workshop on Arctic Gadids, Anchorage, Alaska, January 24, 2018.

Mueter, F.J., Pirtle, J., Shotwell, K. (Oral). Linking sablefish recruitment to ocean circulation and habitat in the Gulf of Alaska. NOAA Alaska Fisheries Science Center, Auke Bay Lab, Sablefish Summit, September 26, 2017.

Mueter, F.J. (Department Seminar). Eastern Bering Sea Walleye Pollock in a changing climate. UAF seminar. Global Change seminar, University of Alaska Fairbanks, Fairbanks, Alaska, September 13, 2017.

Mueter, F.J. (Invited seminar). Walleye Pollock in the Eastern Bering Sea: From past patterns to future projections? Seminar presented at the Hatfield Marine Science Center, August 24, 2017.

Mueter, F.J. (Invited) UAF/NOAA collaborations in the Arctic: Past, Present and Future. Presentation to the NOAA Fisheries Science Board. Juneau, Alaska, August 23, 2017.

Mueter, F.J. (Invited). Moving in, out, and across Arctic and Subarctic Marine Ecosystems: Where do we go from here? ESSAS Open Science Meeting, Tromsø, Norway, June 15, 2017.

Mueter, F.J. Sigler, M.F., Bluhm, B.A., Busby, M.S., Cokelet, E.D., Danielson, S.L., De Robertis, A., Eisner, L.B., Farley, E.V., Iken, K., Kuletz, K.J., Lauth, R.R., Logerwell, E.A., Pinchuk, A.I. (Oral) Summer zoogeography of the Northern Bering and Chukchi seas. ESSAS Open Science Meeting (Session 4), Tromsø, Norway, June 13, 2017.

Mueter, F.J. Siddon, E.C., Holsman, K. Petrik, C., Uchiyama, T., Kruse, G. (Oral). An uncertain future for walleye pollock in the eastern Bering Sea. 31st Lowell Wakefield Symposium, Anchorage, Alaska, May 10, 2017.

- Mueter, F.J.** (Invited). Responses of Arctic Marine Ecosystems to a Changing Climate. Workshop 'A 5°C Arctic in a 2°C World', Union Theological Seminary, Columbia University, New York City, July 20, 2016.
- Mueter, F.J.**, Marsh, J. (Oral). Northern Gadids in a Changing Climate: 'Winners' and 'Losers'. Ecosystem Studies of the Subarctic and Arctic Seas (ESSAS) Annual Meeting, Yokohama, Japan, March 8, 2016.
- Mueter, F.J.**, Sigler, M. (Oral). Responses of Fish to Climate Change in a Changing Arctic. Workshop on Resilience and Adaptive Capacity of Arctic marine systems under a changing climate (Belmont Forum), Hakodate, Japan, March 2, 2016.
- Mueter, F.J.**, Drinkwater, K. (Oral) Responses of Arctic Marine Ecosystems to a Changing Climate. Workshop on Resilience and Adaptive Capacity of Arctic marine systems under a changing climate (Belmont Forum), Hakodate, Japan, March 1, 2016.
- Mueter, F.J.** (Department Seminar). A tale of 2 poles: High-latitude ecosystems in a changing climate. UAF Fisheries Division Seminar. Juneau, Alaska, February 19, 2016
- Ladd, C., **Mueter, F.J.** (Oral, joint presentation). Gulf of Alaska Project: The Gauntlet Games - Final Showdown. Alaska Marine Science Symposium, Anchorage, Alaska, January 2016
- Mueter, F.J.** (Oral). Some highlights from the Arctic Ecosystem Integrated Survey. Arctic EIS Workshop, Alaska Marine Science Symposium, Anchorage, Alaska, January 2016.
- Mueter, F.J.** (Department Seminar). From research to adaptation: climate change in northern marine ecosystems. Global Change Seminar Series. UAF, Fairbanks, Alaska, November 18, 2015.
- Mueter, F.J.** (Invited Seminar). Current and future climate change research in northern marine ecosystems. Institute of Marine and Antarctic Studies. University of Tasmania. August 12, 2015.
- Mueter, F.J.** (Invited Seminar). Ecosystem challenges and approaches in the management of Alaska's fisheries. CSIRO Marine and Atmospheric Research, Hobart, Tasmania, July 24, 2015.
- Mueter, F.J.** (Invited Seminars). High-latitude fish and fisheries in a changing climate.
- Institute of Marine and Antarctic Studies, University of Tasmania, Taroona, Tasmania, December 2, 2014.
 - CSIRO Marine and Atmospheric Research, Hobart, Tasmania, December 5, 2014.
- Mueter, F.J.**, Danielson, S., Drinkwater, K., and Gjøsæter, H. (Oral). Pacific and Atlantic gateways to the Arctic for plankton and fish. PICES 2015 Annual Meeting, Yeosu, South Korea, October 21, 2014.

- Siddon, E.C., Kristiansen, T., **Mueter, F.J.**, Holsman, K.K., Heintz, R.A., Farley, E.V. (Oral). Spatial match-mismatch between juvenile walleye pollock (*Gadus chalcogrammus*) and zooplankton prey in the eastern Bering Sea may contribute to recruitment variability. PICES 2015 Annual Meeting, Yeosu, South Korea, October 23, 2014.
- Peterson, M.J., **Mueter, F.J.**, Carothers, C. Criddle, K.R., Haynie, A.C. (Oral) Toothed whale interactions with longline fisheries in Alaska & economic implications. PICES 2015 Annual Meeting, Yeosu, South Korea, October 23, 2014.
- Mueter, F.J.**, Danielson, S., Drinkwater, K., and Gjørseter, H. (Oral) Variability in the Subarctic to Arctic transition region and implications for fish populations in the Arctic Ocean. IMBER Open Science Conference FUTURE OCEANS. Bergen, Norway, June 25, 2014
- Mueter, F.J.** (Invited) Correlation, Inference and Causality: Challenges to understanding linkages between juvenile and adult salmon population dynamics. AYK SSI Juvenile Chinook Salmon Workshop: Risks and Benefits of Using Juvenile Salmonid Research to Understand Adult Population Dynamics. Anchorage, Alaska, April 23, 2014.
- Mueter, F.J.** (Invited) The role of ocean survival and fishing in recent Chinook salmon declines. Workshop on "Fostering Yukon Chinook Resilience: A UAF Chapman Chair Workshop Honoring C.S. Holling", Fairbanks, Alaska, April 1, 2014.
- Weems, J. and **Mueter, F.J.** (Department Seminar). Fish and shellfish in the Chukchi Sea and beyond: Status, trends, and outlook. UAF Fisheries Division Seminar. Juneau, Alaska, March 7, 2014.
- Mueter, F.J.** (Invited Seminar), Lauth, R., Andrews, A., Taylor, K., Weems, J., de Robertis, A., Kuletz, K., Pham, C., Farley, E., Norcross, B, Sigler, M, and Wilson, C. Twice in the Far North: Chukchi Sea fish communities in 1990 and 2012. Nome, AK, Strait Science Series, September 11, 2013.
- Mueter, F.J.** (Oral) Spatial dynamics of fish communities in subarctic and arctic seas under a changing climate. PICES-ICES workshop on a "Global assessment of the implications of climate change on the spatial distribution of fish and fisheries", St. Petersburg, Russia, May 22, 2013.
- Mueter, F.J.**, Lauth, R., Andrews, A., de Robertis, A., Britt, L., Farley, E., Norcross, B, Sigler, M, and Wilson, C. (Oral) The Marine fish communities of the Bering & Chukchi Sea. 28th Lowell Wakefield Fisheries Symposium. March 27, 2013.
- Mueter, F.J.**, Lauth, R., Andrews, A., de Robertis, A., Britt, L., Farley, E., Norcross, B, Sigler, M, and Wilson, C. (Oral) Arctic Ecosystem Integrated Survey. Alaska Marine Science Symposium. Anchorage, Alaska, January 22, 2012
- Mueter, F.J.**, Litzow, M.A., Lauth, R.L., Danielson, S.L., and Spencer, P.D. (Oral) Spatial dynamics of groundfish: the roles of temperature, abundance and advection. Ecosystem

Studies of the Subarctic Seas (ESSAS) Annual Science Meeting, Hakodate, Japan, January 9, 2013.

Mueter, F.J. (Department Seminar). Fishes of Alaska's Arctic and the Arctic Ecosystem Integrated Survey. UAF Fisheries Division seminar, Juneau, Alaska, November 30, 2012.

Mueter, F.J. (Invited). Forage fish in Alaska's Arctic (with a focus on Arctic cod). Alaska Beluga Whale Committee Annual Meeting, November 14, 2012

Mueter, F.J. (Keynote). Ecosystems, complexity, and sustainability from global to regional to local scales. American Fisheries Society, Alaska Chapter, Annual Meeting. Kodiak, Alaska, October 24, 2012.

Mueter, F.J., Litzow, M.A., Lauth, R.L., Danielson, S.L., and Spencer, P.D. (Oral) The roles of temperature, abundance and advection in modifying the spatial dynamics of groundfish at the Subarctic-Arctic boundary in the eastern Bering Sea. PICES 2012 Annual Meeting, Hiroshima, Japan, October 12, 2012.

Mueter, F.J. (Invited seminar), Limits to the northward movement of fishes in the Eastern Bering Sea. Nome, AK, Strait Science Series, May 29, 2012.

Mueter, F.J., Duffy-Anderson, J.T., Curchitser, E., Danielson, D. and Hedstrom, K. (Oral) Ocean forcing and effects of distribution of walleye pollock early life history stages: a marriage of physics and biology. BSIERP Principal Investigator's Meeting. Anchorage, AK, 2012.

Litzow, M.A., **Mueter, F.J.** (Oral), Urban, D. Rising variance as an early indicator of fishery collapses in Alaskan crab populations. Alaska Marine Science Symposium. January 18, 2012.

Mueter, F.J. (Department seminar). The (F)Utility of Forecasting Climate Change Impacts on Marine Fish and Shellfish: Approaches and Examples. Global Change Seminar Series. UAF, October 19, 2011.

Mueter, F.J., Bohaboy, E.C., Bundy, A., Fu C., Hjermand, D.O., Link, J.S. (oral) Common patterns, common drivers: comparative analysis of aggregate surplus production across ecosystems. American Fisheries Society 141st Annual Meeting, Seattle, WA, September 4-8, 2011.

Litzow, M.A., **Mueter, F.J.**, Urban, D. (Invited). Can rising variance predict sudden shifts in populations and ecosystems? A test using Alaskan crustacean data. American Fisheries Society 141st Annual Meeting, Seattle, WA, September 4-8, 2011.

Mueter, F.J., Stepanenko, M.A., Smirnov, A.V., and Yamamura, O. (Invited). Comparing walleye pollock dynamics across the Bering Sea and adjacent areas. International Symposium on "Comparative studies of climate effects on polar and sub-polar ocean

ecosystems: progress in observation and prediction” (ESSAS Open Science Meeting). Seattle, WA, May 23, 2011.

Mueter, F.J. (Keynote) Groundfish in Hot Water: Challenges facing Fish and Fisheries in Alaska. Alaska Department of Fish & Game. Statewide groundfish meeting, Anchorage, Alaska, April 27, 2011.

Mueter, F.J. (Invited seminar) The Bering Sea ecosystem: From climate to plankton to fish. University of Alaska Southeast. Biological Sciences seminar, Juneau, AK, April 13, 2011.

Mueter, F.J. (Oral) Effects of temperature and density on spatial dynamics of Bering Sea groundfishes. Alaska Marine Science Symposium. January 20, 2011.

Mueter, F.J. (Oral) Spatial dynamics of Bering Sea groundfish: Effects of temperature and density. Alaska Chapter, American Fisheries Society, Annual Meeting. November 4, 2010.

Mueter, F.J., Nicholas A. Bond, James N. Ianelli (Invited). Long-term forecasts of walleye pollock dynamics in the eastern Bering Sea based on estimated responses of recruitment and growth to climate variability. PICES 2010 Annual Meeting, Tuesday, October 26, 2010.

Mueter, F.J., M.A. Litzow (Invited). Linking climate and fish in the Northeast Pacific. Ecosystem Studies of the Subarctic Seas (ESSAS) Annual Meeting. Reykjavik, Iceland, August 31, 2010.

Mueter, F.J., N. Bond, J. Ianelli, and A. Hollowed (oral) Future recruitment of Bering Sea walleye pollock: (1) retrospective patterns & uncertainty. International symposium on "Climate change effects on fish and fisheries: Forecasting impacts, assessing ecosystem responses, and evaluating management strategies.", Sendai, Japan, April 25-29, 2010.

Mueter, F.J. (Oral) Biological responses to recent climate variability on the eastern Bering Sea shelf. Workshop on "Networking across global marine "hotspots", held in conjunction with the international symposium on "Climate change effects on fish and fisheries: Forecasting impacts, assessing ecosystem responses, and evaluating management strategies." in Sendai, Japan, April 24, 2010.

Mueter, F.J. (Invited) Climate variability in the eastern Bering Sea. Western Alaska Interdisciplinary Science Conference (WAISC). 24 March 2010, Unalaska, AK

Mueter, F.J. (Invited) Climate variability on the eastern Bering Sea shelf: Effects on the distribution and productivity of fish populations. Western Alaska Interdisciplinary Science Conference (WAISC). 24 March 2010, Unalaska, AK.

- Mueter, F.J.**, Carol Ladd, Phyllis Stabeno, Ron Heintz, Ken Coyle, Gordon H. Kruse. (oral) Environmental controls of gadid year class strength in the eastern Bering Sea. Alaska Marine Science Symposium, January 21, 2010, Anchorage, AK.
- Mueter, F.J.**, Gordon H. Kruse, Vernon Byrd, and Heather Renner (Poster). Covariation among major fish, seabird, and mammal populations in the Eastern Bering Sea. Alaska Marine Science Symposium, January 20, 2010, Anchorage, AK.
- Mueter, F.J.** (Invited) Climate change impacts on fisheries. Alaska Community-Based Climate Change Adaptation Outreach Program Development Workshop, November 16-18, 2009. Videoconference from Juneau to Fairbanks.
- Mueter, F.J.** and M.A. Litzow (Invited). The spatial footprint of biological re-organization in a demersal community. PICES XVIII Science Board Symposium, Cheju Island, Korea, October 26, 2009.
- Mueter, F.J.** (Department Seminar). Climate effects on Bering Sea food webs and fisheries. University of Alaska Fairbanks, Fairbanks, AK. September 30, 2009.
- Mueter, F.J.**, Siddeek Shareef, Jie Zheng. (oral) Gadid-crustacean interactions in the Eastern Bering Sea and Gulf of Alaska. Ecosystem Studies of Subarctic Seas (ESSAS) Annual Meeting. June 18, 2009.
- Mueter, F.J.** (Invited seminar). Environmental and Ecological Indicators for the Eastern Bering Sea. NOAA, NMFS, Ted Stevens Marine Research Institute. May 4, 2009.
- Mueter, F.J.** (Invited seminar). Climate effects on Bering Sea food webs and fisheries. NOAA, NMFS Alaska Regional Office. Juneau, Alaska. February 25, 2009.
- Mueter, F.J.** (Department Seminar). Climate effects on Bering Sea food webs and fisheries. Juneau Center, School of Fisheries and Ocean Sciences, University of Alaska Fairbanks. Juneau, Alaska, January 23, 2009.
- Mueter, F.J.** et al. (Poster). NPRB, BSIERP PI meeting. Girdwood, Alaska. October 14-16, 2009.
- Mueter, F.J.** (Invited). Effects of a changing climate on fish and fisheries off Alaska. Dialogue and Commission on Arctic Climate Change. The Aspen Institute. August 13, 2008.
- Mueter, F.J.**, K. Coyle. (oral) From physics to humans: Climate effects on Bering Sea food webs and fisheries. PICES XVII, Dalian, China, October 30, 2008.
- Mueter, F.J.**, C. Broms, K. Drinkwater, K. Friedland, J. Hare, **G. Hunt**, W. Melle, and M. Taylor. Comparison of Northern Hemisphere ecosystems: Responses to recent oceanographic variability.

- presented at ICES Annual Meeting. Helsinki, Finland, September 19, 2007 (**G. Hunt**)
- presented at PICES XVI, Victoria, B.C., Canada. November 2, 2007.
- presented at Ocean Sciences Meeting, Orlando, Florida, March 4, 2008 (**G. Hunt**)