

CURRICULUM VITAE

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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

2008-present Assistant Professor, Fishery biometrician, University of Alaska Fairbanks

2001 – present Statistical and Fisheries consultant, Sigma Plus, Statistical Consulting Services.

Jan – May 2006 Adjunct faculty, School of Fisheries and Ocean Sciences, University of Alaska

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

2008-present Co-chair, ESSAS Working Group 4: Climate Effects on Upper Trophic Levels

2003-present Scientific and Statistical Committee. North Pacific Fisheries Management Council.

2007-present Guest editor, ICES Journal of Marine Science

2005-2007 Scientific Steering Committee, PICES/ICES Early Career Scientist Conference

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: Canadian Journal of Fisheries and Aquatic Sciences
ICES Journal of Marine Science
Fisheries Oceanography
Progress in Oceanography
Deep-Sea Research
Continental Shelf Research
Estuarine, Coastal and Shelf Science
Journal of Marine Systems
Marine and Coastal Fisheries
Marine Ecology Progress Series
North American Journal of Fisheries Management
Fishery Bulletin
Oceanographic Literature Review
Alaska Sea Grant
North Pacific Research Board
Exxon Valdez Oil Spill Trustee Council
Gulf Ecosystem Monitoring and Research Program
AYK Sustainable Salmon Initiative

Field Experience

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.

Selected publications

- Mueter, F.J.**, and M.A. Litzow. (2008). Warming climate alters the demersal biogeography of a marginal ice sea. *Ecol. Appl.* 18: 309-320.
- Aydin, K., and **Mueter, F.J.** 2007. The Bering Sea - A dynamic food web perspective. *Deep Sea Research II* **54**: 2501-2525.
- Peterman, R.M., Pyper, B.J., **Mueter, F.J.**, Haeseker, S.L., Su, Z., and Dorner, B. (2007). 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, Bethesda, Maryland.

- Mueter, F.J.**, Boldt, J., Megrey, B.A., and Peterman, R.M. (2007). Patterns of covariation in productivity among Northeast Pacific fish stocks. *Can. J. Fish. Aquat. Sci.* **64**: 911-927.
- 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.
- 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. *Prog. Oceanogr.* **62**:152-183
- Mueter, F.J.**, and Megrey, B.A. (2006). Maximum productivity estimates for the groundfish complexes of the Gulf of Alaska and Eastern Bering Sea / Aleutian Islands. *Fish. Res.* **81**:189-201.
- 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 J. Mar. Sci.* **62**: 344-352
- 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. *Trans. Am. Fish. Soc.* **134**:105-119.
- 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. *Trans. Am. Fish. Soc.* **134**:86-104
- Mueter, F.J.** (2004) Gulf of Alaska. In: *Marine Ecosystems of the North Pacific*. PICES Special Publication 1, pp.153-175.
- 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. *Can. J. Fish. Aquat. Sci.* **59**:456-463
- 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. *Fish. Bull.* **100**:559-581
- 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. *Fish. Oceanogr.* **11**:205-218.
- 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. *Trans. Am. Fish. Soc.* **131**:343-363.
- 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*). *Can. J. Fish. Aquat. Sci.* **58**:1501-1515.

- Mueter, F.J.**, and Norcross, B.L. (2000). Changes in species composition of the demersal fish community in nearshore waters of Kodiak Island, Alaska. *Can. J. Fish. Aquat. Sci.* **57**: 1169-1180.
- 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 Fish. Res. Bull.* **7**: 33-43.
- Mueter, F.J.**, and Norcross, B.L. (1999). Linking community structure of small demersal fishes around Kodiak Island, Alaska, to environmental variables. *Mar. Ecol. Prog. Ser.* **190**: 37-51.
- 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.
- Norcross, B.L., **Mueter, F.J.** (1999). The use of an ROV in the study of juvenile flatfish. *Fish. Res.* **39**: 241-251.

Professional memberships

American Fisheries Society

American Statistical Association

American Association for the Advancement of Science

Honors/Awards

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

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.

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

Recent Presentations:

Mueter, F.J., K. Coyle. From physics to humans: Climate effects on Bering Sea food webs and fisheries. PICES XVII, Dalian, China, October 30, 2008.

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., 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)
- Mueter, F.J. Effects of sea-ice dynamics on fish and fisheries. Presentation at a sea-ice workshop, ESSAS meeting, Hakodate, Japan, June 4, 2007.
- Mueter, F.J. (Invited seminar). The changing biogeography of the southeast Bering Sea: Effects of a cold event in a warming climate. Juneau Center, SFOS, UAF, March 30, 2007.
- Mueter, F.J., and B.A. Megrey. Estimating multi-species maximum sustainable yields for the Bering Sea / Aleutian Islands and Gulf of Alaska groundfish complexes. 3rd Annual Meeting of the Alaska Chapter of the American Fisheries Society, Fairbanks, Alaska, Nov. 16, 2006.
- Mueter, F.J. and M.A. Litzow (Invited). Effects of climate change on the biogeography of groundfishes in the Southeast Bering Sea. 33rd Annual Meeting of the Alaska Chapter of the American Fisheries Society, Fairbanks, Alaska, Nov. 16, 2006.
- Mueter, F.J., B.A. Megrey, and J.M. Napp (Invited seminar). Geographical shifts in the spatial distribution of Northeast Pacific groundfish populations in relation to climate. FOCI seminar series, Alaska Fisheries Science Center, NMFS, NOAA, Sand Point Lab, November 30, 2005.
- Mueter, F.J., B.J. Pyper, R.M. Peterman, and P.W. Lawson (Invited). Spatial scales of ocean environmental effects on Northeast Pacific salmon. NPAFC-PICES Joint Symposium on "The status of Pacific salmon and their role in North Pacific marine ecosystems" Jeju Island, Republic of Korea, October 30 – November 1, 2005
- Mueter, F.J. (Invited). Detecting and modeling environmental effects on recruitment: Strategies and pitfalls. PICES XIV Annual Meeting, Vladivostok, Russia. October 5, 2005.
- Mueter, F.J., B.A. Megrey, and J.M. Napp. Geographical shifts in the spatial distribution of Northeast Pacific groundfish populations. PICES XIV Annual Meeting, Vladivostok, Russia. October 5, 2005.
- Mueter, F.J., J. Boldt, B.A. Megrey, and R.M. Peterman (Invited). Spatial and temporal scales of variability in the productivity of Northeast Pacific fish stocks. Science Board Symposium, PICES XIV Annual Meeting, Vladivostok, Russia. October 3, 2005
- Mueter, F.J., and B.A. Megrey. Variability in groundfish productivity off Alaska: potential causes and implications for management. American Fisheries Society Annual Meeting, Anchorage, Alaska, September 13, 2005.
- Mueter, F.J., S.M. Murphy, L.J. Moulton, A.K. Prichard, and R.H. Day (Invited). Variations in abundance of Arctic cisco in the Colville river: Impacts of oil development, fishing, and

the environment. American Fisheries Society Annual Meeting, Anchorage, Alaska, September 11, 2005.

- Mueter, F.J., Murphy, S.M., Braund, S.R., Moulton, L.J., and R.H. Day. Analysis of variation in abundance of arctic cisco in the Colville river: analysis of patterns in existing data. MMS-Information Transfer Meeting, Anchorage, Alaska, March 15, 2005.
- Mueter, F.J. Maximum productivity estimates for GOA and BSAI groundfish. NPFMC Scientific and Statistical Committee Workshop on Multispecies and Ecosystem Modeling, February 9, 2005.
- Mueter, F.J., Ladd, C., Palmer, M.C., and B.L. Norcross. Bottom-up and top-down controls of walleye pollock on the Eastern Bering Sea shelf. PICES 13th Annual meeting, Honolulu, Hawaii, October 18-21, 2004
- Mueter, F.J., and B.A. Megrey. Spatial scales and magnitudes of covariation among fish populations in the Northeast Pacific. PICES/CLIVAR workshop, Honolulu, Hawaii, October 23-24, 2004
- Mueter, F.J. A randomization procedure to test for trends in multivariate time series. Alaska Chapter, American Statistical Association, Annual meeting. Kodiak, Alaska, July 13-15, 2004.
- Mueter, F.J., and B.A. Megrey (Poster). Ecosystem assessment of two subarctic systems in the Northeast Pacific. Fourth World Fisheries Congress. Vancouver, Canada, May 2-6, 2004.
- Mueter, F.J. (Invited seminar). Quantitative ecosystem indicators for ecosystem-based fisheries management. School of Aquatic and Fisheries Sciences, University of Washington. April 16, 2004.
- Mueter, F.J., and B.A. Megrey. Population-based indicators to assess the status of Alaska groundfish communities with reference points. Symposium: Quantitative Ecosystem Indicators for Fisheries Management. Paris, France, March 31 - April 3, 2004.
- Mueter, F.J., Palmer, M.C., and B.L. Norcross (Invited seminar). The (un)predictability of walleye pollock recruitment on the Eastern Bering Sea shelf. FOCI seminar series, Alaska Fisheries Science Center, NMFS, NOAA, Sand Point Lab, March 24, 2004.