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## **PROFESSIONAL PREPARATION**

- 2010 Ph.D. Cornell University, Natural Resources: *Models of North Atlantic Right Whale Habitat: Tools for Science & Conservation*
- 2003 M.S. Cornell University, Soil & Crop Science: *Influence and Measurement Algorithm on Lacunarity of Porous Media*
- 1999 B.S. Minnesota State Univ., Mankato, Mathematics, Statistics

## **APPOINTMENTS**

- 2014–Pres. Research Faculty, Univ. Massachusetts Boston, Boston, MA
- 2012–Pres. Research Scientist, New England Aquarium, Boston, MA
- 2010–2012 Postdoctoral Associate, Conservation Biology Division, Mathematical Biology Program, NOAA Northwest Fisheries Science Ctr, Seattle, WA
- 2005–2010 Graduate Research Assistant, Cornell University, Ithaca, NY
- 2007–2009 Research Assistant, Ecosystem Modeling Lab, University of Maine & Gulf of Maine Research Institute, Portland, ME

## **PUBLICATIONS**

- Jin, M., Popova, E.E., Zhang, J., Ji, R., **Pendleton, D.E.**, Varpe, Ø., Yool, A. (2016) Ecosystem model intercomparison of total and under-ice primary production in the Arctic Ocean. *Journal of Geophysical Research Oceans*, 121:934–948
- Pantel, J.P., **Pendleton, D.E.**, Walters, A. and Rogers, L. (2014) Linking environmental variability to population and community dynamics. *American Society for Limnology and Oceanography e-book chapter. Eco-DAS IX* p119–131
- Laist, D.W., Knowlton, A.R. and **Pendleton, D.E.** (2014). Effectiveness of mandatory vessel speed limits for protecting North Atlantic right whales. *Endangered Species Research* 23:143–147
- Hampton, S.E., Holmes, E.E., Scheef, L.P., Scheuerell, M.D., Katz, S.L., **Pendleton, D.E.** and Ward, E.J. (2013). Quantifying effects of abiotic and biotic drivers on community dynamics with multivariate autoregressive (MAR) models. *Ecology* 94:2663–2669
- Scheef, L.P., **Pendleton, D.E.**, Hampton S.E., Katz, S.L., Holmes, E.E., Scheuerell, M.D., Johns, D.G. (2012). Assessing marine plankton community structure from long-term monitoring data with multivariate autoregressive (MAR) models: a comparison of fixed station versus spatially distributed sampling data. *Limnology & Oceanography: Methods* 10:54–64

- Pendleton, D.E.**, Sullivan, P.J., Brown, M.W., Cole, T.V.N., Good, C.P., Mayo, C.A., Monger, B.C., Phillips, S., Record, N.R. and Pershing, A.J. (2012). Weekly predictions of North Atlantic right whale *Eubalaena glacialis* habitat reveal influence of prey abundance and seasonality of habitat preferences. *Endangered Species Research* 18:147–161
- Pendleton, D.E.**, Pershing, A.J., Brown, M.W., Mayo, C.A., Kenney, R.D., Record, N. R. and Cole, T.V.N. (2009). Regional-scale mean copepod concentration indicates relative abundance of North Atlantic right whales. *Marine Ecology Progress Series* 378:211–225
- Pershing, A.J., Record, N.R., Monger, B.C., **Pendleton, D.E.** and Woodard, L.A. (2009). Model-based estimates of *Calanus finmarchicus* abundance in the Gulf of Maine. *Marine Ecology Progress Series* 378:227–243
- Pershing, A.J., Record, N. R., Monger, B.C., Mayo, C.A., Brown, M.W., Cole, T.V.N., Kenney, R.D., **Pendleton, D.E.** and Woodard, L.A. (2009). Model-based estimates of right whale habitat use in the Gulf of Maine. *Marine Ecology Progress Series* 378:245–257
- Pendleton, D. E.**, Dathe, A. and Baveye, P. (2005). Influence of image resolution and evaluation algorithm on estimates of the lacunarity of porous media. *Physical Review E* 72:041306
- Wilson, C., et al. (2009). Remote Sensing Applications to Marine Resource Management. International Ocean Colour Coordinating Group Report 8

## GRANTS

- 2016-2019 How and why is the timing and occurrence of seasonal migrants in the Gulf of Maine changing due to climate? Grant awarded by USGS Northeast Climate Science Center.
- 2015 Development of modern statistical methods to estimate marine mammal occupancy: A framework for analyzing and interpreting aerial survey data. Grant awarded by the New England Aquarium.
- 2012–2016 Forecasting Changes in Habitat Use by Bowhead Whales in Response to Arctic Climate Change: Integration of Physical-Biological Models with Satellite, Biological Survey and Oceanographic Data. Grant awarded by the NASA Biodiversity and Ecological Forecasting program. Co-PI with Elizabeth Holmes and Jinlun Zhang.
- 2001-2003 NSF Nonlinear Systems IGERT traineeship, Cornell University Center for Applied Mathematics.