PERSONAL DETAILS

Name Pat Harcourt

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Curriculum Vitae Patricia M. Harcourt

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I have experience translating marine and climate science for classroom teachers and informal science educators, training teachers and students to use selected marine and climate data sets, and facilitating and coordinating interactions among scientists and educators.

Experience

2014: Project Manger, Maryland-Delaware Climate Change Education Assessment and Research

Coordinate project activities; manage internal and external communication about project; manage budget; plan and organize events; prepare reports and publications

2013- 2014: Woods Hole Science and Technology Education Partnership, Woods Hole, MA. Administrator. Organize and present teacher professional development programs in science, coordinate programs for scientists and educators to work together, facilitate contacts among scientists, teachers, students, community members, and STEM businesses.

2003-Present:Framingham State University Instructor for on-line and in-person graduate credit courses for teachers on topics including climate change, marine and coastal ecology, fish and fishing, harmful algal blooms, weather, energy, coastal birds, ocean observing systems, satellite oceanography, using marine and coastal data, and research by the Center for Dark Energy Biosphere Investigations (C DEBI).

2010-2013:Centers for Ocean Science Education Excellence (COSEE) West, USC Wrigley Institute for Environmental Studies, Los Angeles, CA. Program manager. Produced and presented on-line and in-person professional development classes, courses, and curriculum materials to support the incorporation of marine and climate science and data into classroom practice and informal education programs. Recruited scientists as presenters and provided guidance to them on communicating science to a variety of audiences.

1997-2010: Waquoit Bay National Estuarine Research Reserve, Falmouth, MA. Teacher and project coordinator for classroom lessons and field studies of climate science, hydrology, watersheds, estuarine ecology, coastal marine science, and using marine and climate data for students in grade 5-12, teachers, and undergraduates. Member of NERRS leadership team for climate education. Project chair for development of an on-line graphing application for estuarine data.

1994-2004:Sea Education AssociationWoods Hole, MA. Instructor for Research at Sea, Teacher Enhancement Seminars in Marine Sciences. Developed and presented classroom activities on marine science topics, including the role of the ocean in the climate system. Five-week summer courses for middle and high school science teachers, on shore and at sea.

1989-94: Consultant in elementary and middle school science. Silver Spring, MD. Developed and presented science classes and teacher training sessions, predominantly using marine and water-related themes.

1991-92:College of the Atlantic,Bar Harbor, ME. Instructor, marine science education methods and marine mammal biology, summer graduate course for K-12 teachers.

1987-88: St. Mel School,Gloucester, MA. Science specialist grades 1-6. Developed and taught science curriculum including ecology and marine biology field studies.

1985-87:Ocean Research and Education Society, Gloucester, MA. Instructor, marine biology,

marine technology, and maritime history, Developed and taught courses for students in grades 1-8.

1982-83: New England Aquarium.Boston, MA.Interpretivenaturalist for whale watching cruises in the Gulf of Maine

Publications

2014: Harcourt, Patricia. Bringing Wetlands to Market: A curriculum on carbon sequestration in wetlands. Waquoit Bay National Estuarine Research Reserve and NERRS Science collaborative.

2013: deCharon, Annette, L Duguay, J. McDonnell, C. Peach, C. Companion, C. Herren, P. Harcourt, T. Repa, C. Ferraro, P. Kwon, S. Lichtenwalner, E. Simms, and L. Whitley. Concept mapping workshops: Helping ocean scientists represent and communicate science. *Oceanography* 6(1):98;.

2010:On-line graphing application for National Estuarine Research Reserve System estuarine data (project chair)http://estuaries.noaa.gov/ScienceData/Graphing.aspx and tutorial http://estuaries.noaa.gov/ScienceData/Default.aspx?ID=536

2008: Contributing editor, Estuaries 101. On-line curriculum about estuaries for high school students, focused on using coastal data to investigate water quality, extreme events, and change over time in estuaries. http://www.estuaries.gov/estuaries101/Teachers/Home.aspx

2007:Interactive lessons on climate education for Climate Change Backpack http://www.sciencecentercollaborative.org/backpack.php

2003: On-Line Marine Science curriculum materials for K-12 teachers posted at Sea Education Association web site http://www.sea.edu/k12LessonPlans/k12pgmtop.htm

1992: "In the Company of Whales," a multidisciplinary middle school curriculum on whale and dolphin topics. Interactive CD with video and text database. Discovery Communications, Inc.

1980-82: Publications on distribution and ecology of baleen whales in the North Atlantic.

Education

1994: M.Ed. Science Education. University of Maryland.

1976: B.A. Education and Asian Studies. Certification grade 1-8. Connecticut College.

Professional affiliations

California Science Teachers Association Member

NOAA Climate Stewards Participant

Massachusetts Association of Science Teachers

Past Vice President; County Rep

Massachusetts Marine Educators Past President

National Science Teachers Association Member

National Marine Educators Association Past member of Board of Directors

New England Ocean Science Education Collaborative Board of Directors

New England Science Center Collaborative

Board of Advisors

Woods Hole Science and Technology Education Partnership

Administrator

Awards

Massachusetts Association of Science Teachers

County Science Teacher of the Year

2008

Massachusetts Marine Educators

Distinguished Service Award 2009

Massachusetts Science Teaching Hall of Fame

Inducted 2009