

HOLLY DEVAUL

Digital Learning Sciences
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PROFESSIONAL PREPARATION

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| 1984 | B.A. Human Ecology
Senior thesis: Population estimates for Harbor porpoise (<i>Phocoena phocoena</i>) near Mount Desert Island, Maine | College of the Atlantic, Bar Harbor, ME |
| 1990 | M.S. Wildlife Biology
Thesis: A theoretical and empirical evaluation of a method of estimating area occupied for breeding woodland hawks in Maine | University of Maine, Orono, ME |

APPOINTMENTS

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| 2007-present | Manager of Education Programs and Services, Digital Learning Sciences, University Corporation for Atmospheric Research, Boulder, CO |
| 2000-2006 | Outreach and Community Relations Liaison, Digital Library for Earth System Education, University Corporation for Atmospheric Research, Boulder, CO |
| 1997-2000 | Program Officer, Science Education and Outreach, The Earth and Space Science Technological Education Project (ESSTEP), The Geological Society of America, Boulder, CO |
| 1996-1997 | Project Manager, Learning to Teach Secondary Mathematics (LTSM). School of Education, University of Colorado, Boulder, CO. |
| 1994-1997 | Project Manager, One Sky, Many Voices; Kids as Global Scientists (KGS). School of Education, University of Colorado, Boulder, CO. |
| 1985-1993 | Research Associate, Department of Wildlife Biology, University of Maine, Orono, ME |
| 1983-1985 | Field Research, Manomet Bird Observatory, Manomet, MA (seabirds and cetaceans) and US Fish and Wildlife Service, Roosevelt, Arizona (bald eagles) |
| 1982-1983 | Outreach Coordinator, The Natural History Museum, College of the Atlantic, Bar Harbor, ME |

RESEARCH INTERESTS AND ACTIVITIES

Digital library design and tool development: Emphasis on technology development and best practices to support associating educational standards with learning objects, community-contributed metadata, distributed collection development and services; cataloging workflows, quality assurance processes.

Teacher professional development: Design and conduct in-service and professional development workshops for teachers focusing on integrating electronic learning resources and digital libraries services into the classroom. Focus on technical skills development, community building and communication strategies.

Curriculum and program development: Core advisor for the NSDL Pathways Teachers Domain project, building the Earth and Space Science Collection and designing an on-line teacher professional development course. Participated in the development of the DLESE Teaching boxes. Project manager and curriculum developer of a large collaborative learning education research project (Kids as Global Scientists and Hurricane!) involving the utilization of the Internet and data sharing in middle school science curricula.

User needs assessment: Design, conduct and analyze focus groups and user feedback workshops to inform functional specifications and user interface of tool development.

Professional community activities: Co-chair of the NSDL Educational Standards Workgroup. Local arrangements chair for the 2005 JCDL Annual meeting, Denver, CO.

Population survey methodologies and analysis: Field techniques and data analysis for population assessment of marine mammals, seabirds and birds of prey.

PUBLICATIONS

- Olds, Shelley, Lynne Davis, Holly Devaul, and Judy Scotchmoor. (2006). DLESE Teaching Boxes: The Familiar "Box on the Shelf" Goes Digital. *The Earth Scientist*, 22(4), 15-19.
- Diekema, Anne and Holly Devaul. (2006). Computer Assisted Standard Assignment and Alignment. On *NSDL ToolTime series* [ReadyTalk demonstration]. Boulder, CO: National Science Digital Library (NSDL) Retrieved 14 April 2006 from: <http://commserv.comm.nsd.org/tooltime/2006-03-16/lib/playback.html>.
- Kastens, Kim A., Barbara DeFelice, Holly Devaul, Christopher DiLeonardo, Kathryn M. Ginger, Suzanne Larsen, David W. Mogk, and Sharon Tahirkheli. (2005). Questions and challenges arising in building the collection of a digital library for education: Lessons from five years of DLESE. *D-Lib Magazine*, 11(11). Online at: <http://www.dlib.org/dlib/november05/kastens/11kastens.html>
- Balasubramanian, N., Devaul, H., Diekema, A.R., Harwell, S.C., Liddy, E.D. NLP-based Content Standard Assignment.(poster) National Science Digital Library All Projects Meeting, Denver, CO. November 16-18, 2005.
- Devaul, Holly. (2005). *Assigning Educational Standards to On-line Resources Using a Computer-Assisted Tool*. Results of a Design Review Session at the DLESE Annual Meeting, July 10, 2005 unpublished paper. Boulder, CO: University Corporation for Atmospheric Research, Digital Library for Earth System Education Program Center.
- Sumner, Tamara, Mary R. Marlino, Judy Scotchmoor, Holly Devaul, Lynne Davis, Marianne Weingroff, Shelley Olds, Lisa White, Huda Khan, and Lecia Barker. (2004). *Teaching Boxes Workshop Series*. Workshops: Sponsored by the Digital Library for Earth System Education, the UC Berkeley Museum of Paleontology, San Francisco State University, USGS, and the National Science Foundation, Berkeley, CA and Boulder, CO (April - June).
- Devaul, H. and K. Kelly, 2003. Searching by educational standards in DLESE: what does it mean and what do users want? Poster presented at NSDL Annual meeting, October 12-15, 2003, Washington, D.C. http://nsdl.com.nsd.org/meeting/archives/2003/docs_download.php?id=1648
- Pandya, Rajul E., Holly Devaul, Tamara Sumner, and Mary R. Marlino. (2003). Learn how to use a digital library to enhance Earth system education. Conference presentation. *NSTA 2003 National Convention*: Philadelphia, PA, (27-30 March).
- Khoo, M., H. Devaul, and T. Sumner, 2002. Functional requirements for groupware to support community-led collections building. *6th European Conference on Research and Advanced Technology for Digital Libraries*

(ECDL 2002), Rome, September 16-18. http://www.dlese.org/documents/papers/ECDL2002_springer.pdf (1 October 2002).

- Sumner, T. R., M. Dawe and H. Devaul, 2002. Creating reusable educational components: Lessons from DLESE. *Journal of Geoscience Education*. 50:(1, January), pp. 25-30.
- Songer, N. B., Devaul, H., Hester, P., Crouch, S. (1993, 1994, 1995, 1996, 1997) Kids as Global Scientists: Weather!: An Eight-Week Inquiry Curriculum for Middle School Atmospheric Science. University of Colorado. Boulder, CO.
- Songer, N. B., and Devaul, H. 1995, 1998. Kids as Global Scientists. Pages 159-162 in Owen, T. and R. Owston, eds. *The Learning Highway: Smart Students and the Net*. Key Porter Books Ltd. Toronto, Ontario, Canada.
- Songer, N. B., Mistler-Jackson, M., Powell, J., Devaul, H. (1996, 1997) Hurricanes!: A Four-Week Inquiry Curriculum for Middle School Atmospheric Science. University of Colorado and University of Michigan.
- Devaul H. and O'Connor, R.J. 1992. Checkplots as a survey method for breeding birds: development of field methods and a comparison to point counts. Report to USEPA, Assistance ID No. CR 81817901-0.
- O'Connor, R.J., Boone, R.B., Devaul, H., Jones, M.T., and Lauber, T.B. 1992. The relative effects of environmental and agricultural practices on bird populations in the United States. Program and Abstracts, 77th Annual Meeting of the Ecological Society of America: 290.
- Devaul, H., Whitman, A., Boone, R., Jones, M., Hunter, M. and O'Connor, R.J. 1990. An analysis of selected extant data for birds in New England. Report to the U. S. Environmental Protection Agency, 1200 pp.
- Devaul, H. 1989. A review of survey techniques for woodland hawks in the Northeast. Pages 301-309 in Pendleton, B.G., Proc. Northeast Raptor Manage. Symposium and Workshop. Natl. Wildl. Fed. Scientific and Technical Series No. 13, Washington D.C.