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EDUCATION

MFS Forest Science	1997
Yale School of Forestry & Environmental Studies, New Haven CT	
Thesis research: Beech regeneration in a northern hardwood forest	
BS Aquatic Biology	1989

PROFESSIONAL EXPERIENCE

USA NATIONAL PHENOLOGY NETWORK, Tucson AZ		
Monitoring Design and Data Coordinator	2010-present	
Monitoring Design Specialist	2008-2010	
Interim IT Project Manager	2008-2009	
NORTHEAST REGIONAL PHENOLOGY NETWORK, Kittery Point ME		
Co-Founder and Network Coordinator	2007-present	
HUBBARD BROOK ECOSYSTEM STUDY, Durham NH		
Ecological Research Data Manager	2005-2011	
US FOREST SERVICE, Northern Research Station, Durham NH		
Ecologist and Research Data Manager	2004-2007	
ECOLOGICAL AND ENVIRONMENTAL CONSULTING SERVICES, INC., Lyme CT		
Project Leader	1999-2000	
YALE SCHOOL OF FORESTRY & ENVIRONMENTAL STUDIES, New Haven CT		
Research Laboratory and Data Manager (for a PI of Hubbard Brook LTER)	1998-2005	
Teaching and Research Assistant	1996-1997	
US PEACE CORPS, Uruguay, South America		
Peace Corps Volunteer	1993-1994	
THE NATURE CONSERVANCY, Cosumnes River Preserve, Galt CA		
Habitat Restoration Manager	1991-1992	
Habitat Restoration Intern	1990-1991	

PUBLICATIONS

Crimmins, T., E. Denny, E. Posthumus, A. Rosemartin, R. Croll, M. Montano, H. Panci. 2022. Science and Management Advancements Made Possible by the USA National Phenology

Network's Nature's Notebook Platform. *BioScience*, biac061.
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Bates, A.E., R.B. Primack, C.M. Duarte, and PAN-Environment Working Group. 2021. Global COVID-19 lockdown highlights humans as both threats and custodians of the environment. *Biological Conservation*. DOI: <https://doi.org/10.1016/j.biocon.2021.109175>

Pearson, K.D., G. Nelson, M.F.J. Aronson, P. Bonnet, L. Brenskelle, C.C. Davis, E.G. Denny, E.R. Ellwood, H. Goëau, J.M. Heberling, A. Joly, T. Lorieul, S.J. Mazer, E.K. Meineke, B.J. Stucky, P. Sweeney, A.E. White, and P.S. Soltis. 2020. Machine learning using digitized herbarium specimens to accelerate phenological research. *BioScience*. biaa044. DOI: <https://doi.org/10.1093/biosci/biaa044>

Crimmins, T.M., L. Barnett, E.G. Denny, A.H. Rosemartin, S. Schaffer, and J.F. Weltzin. 2020. "From tiny acorns grow mighty oaks: what we've learned from nurturing *Nature's Notebook*." In: *Handbook of Citizen Science in Ecology and Conservation*. Eds. C. Lepczyk, T. Vargo, and O.D. Boyle. University of California Press.

Kissling, D.W., R. Walls, A. Bowser, M.O. Jones, J. Kattge, D. Agosti, J. Amengual, A. Basset, P.M. van Bodegom, J.H.C. Cornelissen, E.G. Denny, S. Deudero, W. Egloff, S.C. Elmendorf, E.A. García, K.D. Jones, O.R. Jones, S. Lavorel, D. Lear, L.M. Navarro, S. Pawar, R. Pirzl, N. Rüger, S. Sal, R. Salguero-Gómez, D. Schigel, K.S. Schulz, A. Skidmore, and R.P. Guralnick. 2018. Towards global data products of Essential Biodiversity Variables on species traits. *Nature Ecology & Evolution*. DOI: [10.1038/s41559-018-0667-3](https://doi.org/10.1038/s41559-018-0667-3)

Stucky, B.J., R. Guralnick, J. Deck, E.G. Denny, K. Bolmgren, R. Walls. 2018. The Plant Phenology Ontology: A new informatics resource for large-scale integration of plant phenology data. *Frontiers in Plant Science*. 9:517. DOI: [10.3389/fpls.2018.00517](https://doi.org/10.3389/fpls.2018.00517)

Rosemartin, A., E.G. Denny, K.L. Gerst, R.L. Marsh, E.E. Posthumus, T.M. Crimmins, and J.F. Weltzin. 2018. USA National Phenology Network observational data documentation. *U.S. Geological Survey Open-File Report* 2018–1060. DOI: [10.3133/ofr20181060](https://doi.org/10.3133/ofr20181060)

Yost, J.M., P.W. Sweeney, E. Gilbert, G. Nelson, R. Guralnick, A.S. Gallinat, E.R. Ellwood, N. Rossington, C.G. Willis, S.D. Blum, R.L. Walls, E.M. Haston, M.W. Denslow, C.M. Zohner, A.B. Morris, B.J. Stucky, J.R. Carter, D.G. Baxter, K. Bolmgren, E.G. Denny, E. Dean, K.D. Pearson, C.C. Davis, B.D. Mishler, P.S. Soltis, and S.J. Mazer. 2018. Digitization protocol for scoring reproductive phenology from herbarium specimens of seed plants. *Applications in Plant Science* 6(2):e1022. DOI: 10.1002/aps3.1022

Guertin, P., L. Barnett, E.G. Denny and S.N. Schaffer. 2017. USA National Phenology Network Phenophase Primer for Plants-Draft Version. www.usanpn.org

Brown, T.B., K.R. Hultine, H. Steltzer, E.G. Denny, M.W. Denslow, J. Granados, S. Henderson, D. Moore, S. Nagai, M. SanClements, A. Sanchez-Azofeifa, O. Sonnentag, D. Tazik, and A.D. Richardson. 2016. Using phenocams to monitor our changing Earth: towards a global phenocam network. *Frontiers in Ecology and the Environment* 14(2):84-93. DOI: 10.1002/fee.1222

Gerst, K.L., J.L. Kellerman, C.A.F. Enquist, A.H. Rosemartin, and E.G. Denny. 2015. Estimating the onset of spring from a complex phenology database: trade-offs across geographic scales. *International Journal of Biometeorology*. DOI: 10.1007/s00484-015-1036-4

Rosemartin, A.H., E.G. Denny, J.F. Weltzin, R.L. Marsh, B.E. Wilson, H. Mehdipoor, R. Zurita-Milla, and M.D. Schwartz. 2015. Lilac and honeysuckle phenology data 1956–2014. *Nature Scientific Data* 2:1-8. DOI: 10.1038/sdata.2015.38

Guertin, P., L. Barnett, E.G. Denny and S.N. Schaffer. 2015. USA National Phenology Network Botany Primer. USA-NPN Education and Engagement Series 2015-001. www.usanpn.org

Johnson, C.E., T.G. Siccama, E.G. Denny, M.M. Koppers, and D.J. Vogt. 2014. *In situ* decomposition of northern hardwood tree boles: decay rates and nutrient dynamics in wood and bark. *Canadian Journal of Forest Research* 44:1515-1524. DOI: 10.1139/cjfr-2014-0221

Crimmins, T.M., J.F. Weltzin, A.H. Rosemartin, E.M. Surina, L. Marsh, and E.G. Denny. 2014. Focused campaign increases activity among participants in *Nature's Notebook*, a citizen science project. *Natural Sciences Education* 43:64-72. DOI: 10.4195/nse2013.06.0019

Denny, E.G., K.L. Gerst, A.J. Miller-Rushing, G.L. Tierney, T.M. Crimmins, C.A.F. Enquist, P. Guertin, A.H. Rosemartin, M.D. Schwartz, K.A. Thomas, and J.F. Weltzin. 2014. Standardized phenology monitoring methods to track plants and animal activity for science and resource management applications. *International Journal of Biometeorology* 58(4):591-601. DOI: 10.1007/s00484-014-0789-5

Rosemartin, A.H., T.M. Crimmins, C.A.F. Enquist, K.L. Gerst, J.L. Kellermann, E.E. Posthumus, E.G. Denny, P. Guertin, L. Marsh and J.F. Weltzin. 2014. Organizing phenological data resources to inform natural resource conservation. *Biological Conservation* 173:90-97. DOI: 10.1016/j.biocon.2013.07.003

Tierney, G., B. Mitchell, A. Miller-Rushing, J. Katz, E. Denny, C. Brauer, T. Donovan, A. D. Richardson, M. Toomey, A. Kozlowski, J. Weltzin, K. Gerst, E. Sharron, O. Sonnentag, F. Dieffenbach. 2013. Phenology monitoring protocol: Northeast Temperate Network. *Natural Resource Report NPS/NETN/NRR—2013/681* National Park Service, Fort Collins, Colorado.

Schwartz, M.D., C.A.F. Enquist and E.G. Denny. 2013. Phenological implications of warming temperatures and extreme climatic events. *Eos, Transactions American Geophysical Union* 94(10):99.

Kellermann, J.L., T.M. Crimmins, E.G. Denny, C.A.F. Enquist, R.L. Marsh, A.H. Rosemartin, and J.F. Weltzin. 2012. USA National Phenology Network 2011 Data & Participant Summary. USA-NPN Technical Series 2012-001. www.usanpn.org.

Crowley, K.F., B.E. McNeil, G.M. Lovett, C.D. Canham, C.T. Driscoll, L.E. Rustad, E. Denny, R.A. Hallett, M.A. Arthur, J.L. Boggs, C.L. Goodale, J.S. Kahl, S.G. McNulty, S.V. Ollinger, L.H. Pardo, P.G. Schaberg, J.L. Stoddard, M.P. Weand, and K.C. Weathers. 2012. Do nutrient limitation patterns shift from nitrogen toward phosphorus with increasing nitrogen deposition across the northeastern United States? *Ecosystems* 15:940-

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- Crimmins, T.M., A.H. Rosemartin, R.L. Marsh, E.G. Denny, C.A.F. Enquist, and J.F. Weltzin. 2010. USA National Phenology Network 2010 Data & Participant Summary. USA-NPN Technical Series 2011-001. www.usanpn.org.
- Crimmins, T.M., A.H. Rosemartin, K.A. Thomas, R.L. Marsh, E.G. Denny, and J.F. Weltzin. 2010. USA National Phenology Network 2009 Data Summary. USA-NPN Technical Series 2010-002. www.usanpn.org.
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- Richardson, A.D., E.G. Denny, J.A. Forbush, T.G. Siccama, and K.S. Hunter. 2001. Differential aluminum and calcium concentrations in the tissues of ten *Cornus* species. *Journal of the Torrey Botanical Society* 128:120-127.
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