

Acadia science publications – 2019

Acadia National Park and Schoodic Institute staff and adjuncts and Second Century Stewardship Fellows in **bold**

1. Anagnostou, E., Williams, B., Westfield, I., Foster, G. L., & Ries, J. B. (2019). Calibration of the pH- $\delta^{11}\text{B}$ and temperature-Mg/Li proxies in the long-lived high-latitude crustose coralline red alga *Clathromorphum compactum* via controlled laboratory experiments. *Geochimica et Cosmochimica Acta*.
2. Berend, K., K. Haynes, and **C. McDonough MacKenzie**. 2019. Common garden experiments as a dynamic tool for ecological studies of alpine plants and communities in northeastern North America. *Rhodora*, in press.
3. Berg, J. H., & **Zoellick, B.** (2019). Teacher leadership: toward a new conceptual framework. *Journal of Professional Capital and Community*, 4(1), 2-14.
4. Buxton, R. T., McKenna, M. F., Mennitt, D., Brown, E., Fristrup, K., Crooks, K. R., ... & Wittemyer, G. (2019). Anthropogenic noise in US national parks—sources and spatial extent. *Frontiers in Ecology and the Environment*.
5. Robert M. Campellone, Kristina M. Chouinard, Nicholas A. Fisichelli, John A. Gallo, Joseph R. Lujan, Ronald J. McCormick, Thomas A. Miewald, Brent A. Murry, D. John Pierce, Daniel R. Shively. (2019) The iCASS Platform: Nine Principles for Landscape Conservation Design. In: Mueller L., Eulenstein F. (eds) *Current Trends in Landscape Research. Innovations in Landscape Research*. Springer, Cham
6. Flaherty, S., & Moffa, A. L. (2019). Conserving a Vision: Acadia, Katahdin, and the Pathway from Private Lands to Park Lands. *Maine Law Review*, 71(1), 37.
7. Fowler, R. 2019. Assessing the mechanisms and implications of altered carbon cycling in Arctic and boreal lakes. Dissertation, University of Maine, Orono.
8. Gilbert, C., & Blomberg, E. (2019). Changes in Occupancy and Relative Abundance of a Southern Population of Spruce Grouse Based on a 25-year Resurvey. *Northeastern Naturalist*, 26(2), 275-286.
9. Hitchcox, D. P., Aversa, T., Bevier, L. R., & Persons, T. B. (2019). Eighth Report of the Maine Bird Records Committee. *BIRD OBSERVER*, 47(2), 107.
10. Laughlin, D., & Grace, J. (2019). Discoveries and novel insights in ecology using structural equation modeling. *Ideas in Ecology and Evolution*, 12: 28-34.
11. Liu, Y., **C. McDonough MacKenzie**, R. B. Primack, M. J. Hill, X. Zhang, Z. Wang, and C. Schaaf. 2019. Using remote sensing to monitor the spring phenology of Acadia National Park across elevational gradients. *Biogeosciences*, in press.
12. Mathieson, A. C., & Dawes, C. J. (2019). A Comparison of Marine and Estuarine Algal Populations from Downeast Maine and Eight Contiguous Northwest Atlantic Areas. *Rhodora* 120: 310-380.
13. McCabe, J. D., Leppold, A. J., Holberton, R. L., & Olsen, B. J. (2019). Coastal songbird condition on migratory stopover varies by geographical location and bird age. *The Auk: Ornithological Advances*.
14. **MacKenzie, C. M.**, Johnston, J., **Miller-Rushing, A. J.**, Sheehan, W., Pinette, R., & Primack, R. (2019). Advancing Leaf-Out and Flowering Phenology is Not Matched by Migratory Bird Arrivals Recorded in Hunting Guide's Journal in Aroostook County, Maine. *Northeastern Naturalist*, 26(3), 561-579.

15. **McDonough MacKenzie, C.**, Mittelhauser, G., **Miller-Rushing, A. J.**, & Primack, R. B. (2019). Floristic change in New England and New York: regional patterns of plant species loss and decline. *Rhodora*.
16. **McDonough MacKenzie, C.**, Primack, R. B., & **Miller-Rushing, A. J.** (2019). Trails-as-transects: phenology monitoring across heterogeneous microclimates in Acadia National Park, Maine. *Ecosphere*, *10*(3), e02626.
17. **Miller, K. M.**, & McGill, B. J. Compounding human stressors cause major regeneration debt in over half of eastern US forests. *Journal of Applied Ecology*.
18. **Miller-Rushing, A. J.**, Gallinat, A. S., & Primack, R. B. (2019). Creative citizen science illuminates complex ecological responses to climate change. *Proceedings of the National Academy of Sciences*, *116*(3), 720-722.
19. **Miller-Rushing, A. J.**, Henkel, B., & **Cole-Will, R.** (2020). A partnership-based, whole-watershed approach to climate adaptation in Acadia National Park. In *Parks Stewardship Forum* (Vol. 36, No. 1).
20. **Mortelliti, A.**, Grentzmann, I., Fraver, S., Brehm, A. M., Calkins, S. and **Fisichelli, N.** (2019), Small mammal controls on the climate-driven range shift of woody plant species. *Oikos*. 128: 1726-1738.
21. **Nadeau, C. P.**, & Urban, M. C. (2019). Eco-evolution on the edge during climate change. *Ecography*.
22. **Nelson, S. J.**, Chen, C. Y., & Kahl, J. S. Dragonfly larvae as biosentinels of Hg bioaccumulation in Northeastern and Adirondack lakes: relationships to abiotic factors. *Ecotoxicology*, 1-14.
23. Patel, K. F., Jakubowski, M. D., Fernandez, I. J., **Nelson, S. J.**, & **Gawley, W.** (2019). Soil Nitrogen and Mercury Dynamics Seven Decades After a Fire Disturbance: a Case Study at Acadia National Park. *Water, Air, & Soil Pollution*, *230*(2), 29.
24. **Schmitt, C.**, Brigham, C., **Fisichelli, N.**, **Miller-Rushing, A. J.**, Nydick, K., Watkins, T., & Wood, M. A. (2020). National park research fellowships increase capacity and creativity in responding to climate change. In *Parks Stewardship Forum* (Vol. 36, No. 1).
25. **Smetzer, J.**, Morelli, T. L. 2019. Incorporating climate change refugia into climate adaptation in the Acadia National Park region. Smith College, Northampton, MA.
https://scholarworks.smith.edu/second_century_refugia/
26. Smith, B., & Hallo, J. (2019). Informing good lighting in parks through visitors' perceptions and experiences. *International Journal of Sustainable Lighting*, *21*(02), 47-65.
27. Warner, K. (2019). Ecological and economic implications of increased storm frequency and severity for boreal lakes Dissertations, University of Maine, Orono.
<https://digitalcommons.library.umaine.edu/etd/2954>
28. Warner, K. A., & Saros, J. E. (2019). Variable responses of dissolved organic carbon to precipitation events in boreal drinking water lakes. *Water Research*.
29. Xiao, X., Lu, J., Gao, P., Riungu, G. K., & Wang, M. (2019). Traffic Safety on Acadia National Park Roadways. *Journal of Park and Recreation Administration*.
30. Pedersen, K., Transtrum, M. K., Gee, K. L., Butler, B. A., James, M. M., & Salton, A. R. (2018, November). Machine learning-based ensemble model predictions of outdoor ambient sound levels. In *Proceedings of Meetings on Acoustics 176ASA* (Vol. 35, No. 1, p. 022002). ASA.

31. Hand, J. L., Gill, T. E., & Schichtel, B. A. (2019). Urban and rural coarse aerosol mass across the United States: Spatial and seasonal variability and long-term trends. *Atmospheric Environment*, 117025.