

Acadia science publications – 2019

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

1. Alatiq AKA, JC Smith, MJ Pellerin. 2019. Acadia National Park carbon footprint. Worcester Polytechnic Institute, Worcester.
2. Anagnostou E, B Williams, I Westfield, GL Foster, JB Ries. 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* 254: 142-155.
3. Aydlett, M. 2019. Examining the microbiome of *Porphyra umbilicalis* in the North Atlantic. Honors Thesis, University of Maine.
4. Berend K, K Haynes, **C McDonough MacKenzie**. 2019. Common garden experiments as a dynamic tool for ecological studies of alpine plants and communities in northeastern North America. *Rhodora* 121: 174-212.
5. Berg JH, **B Zoellick**. 2019. Teacher leadership: toward a new conceptual framework. *Journal of Professional Capital and Community* 4: 2-14.
6. Buxton RT, MF McKenna, D Mennitt, E Brown, K Fristrup, KR Crooks, LM Angeloni, G Wittemyer. 2019. Anthropogenic noise in US national parks—sources and spatial extent. *Frontiers in Ecology and the Environment* 17: 559-564.
7. Campellone RM, KM Chouinard, **NA Fisichelli**, JA Gallo, JR Lujan, RJ McCormick, TA Miewald, BA Murry, J Pierce, DR Shively. 2019. The iCASS Platform: Nine principles for landscape conservation design. In *Current Trends in Landscape Research* (pp. 339-365). Springer, Cham.
8. Cao Y, LA Green-Gavrielidis, RL Eriksen, AS Klein. 2019. A pilot study of genetic structure of *Porphyra umbilicalis* Kützing in the Gulf of Maine using SNP markers from RNA-Seq. *Journal of Applied Phycology* 31: 1493-1503.
9. Evans SM, V Cunningham, Y Wang. 2019. Climate change in Acadia National Park. Worcester Polytechnic Institute, Worcester.
10. Flaherty S, AL Moffa. 2019. Conserving a vision: Acadia, Katahdin, and the pathway from private lands to park lands. *Maine Law Review* 71: 37.
11. **Fowler, R**. 2019. Assessing the mechanisms and implications of altered carbon cycling in Arctic and boreal lakes. Dissertation, University of Maine, Orono.

12. Gilbert C., E. Blomberg. 2019. Changes in occupancy and relative abundance of a southern population of spruce grouse based on a 25-year resurvey. *Northeastern Naturalist* 26: 275-286.
13. Guarnieri L. 2019. The effects of European fire ants on blacklegged ticks in Acadia National Park. Honors Thesis, University of Maine.
14. Hand JL, TE Gill, BA Schichtel. 2019. Urban and rural coarse aerosol mass across the United States: Spatial and seasonal variability and long-term trends. *Atmospheric Environment* 218: 117025.
15. Hitchcox DP, T Aversa, LR Bevier, TB Persons. 2019. Eighth report of the Maine Bird Records Committee. *Bird Observer* 47: 107.
16. Hogan JF, J Plante. 2019. Acadia visitor study: a mobile tracking application. Worcester Polytechnic Institute, Worcester.
17. Hollander N, M Zhu, Y Yang. 2019. Implementation and design of webcam systems for traffic monitoring in Acadia National Park. Worcester Polytechnic Institute, Worcester.
18. Laughlin D, J Grace. 2019. Discoveries and novel insights in ecology using structural equation modeling. *Ideas in Ecology and Evolution* 12: 28-34.
19. Mathieson AC, CJ Dawes. 2019. A comparison of marine and estuarine algal populations from Downeast Maine and eight contiguous Northwest Atlantic areas. *Rhodora* 120: 310-380.
20. McCabe, JD, AJ Leppold, RL Holberton, BJ Olsen. 2019. Coastal songbird condition on migratory stopover varies by geographical location and bird age. *The Auk* 136: ukz025.
21. **McDonough MacKenzie C**, J Johnston, **AJ Miller-Rushing**, W Sheehan, R Pinette, R Primack. 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: 561-579.
22. **McDonough MacKenzie C**, G Mittelhauser, **AJ Miller-Rushing**, RB Primack. 2019. Floristic change in New England and New York: regional patterns of plant species loss and decline. *Rhodora* 121: 1-36.
23. **McDonough MacKenzie C**, RB Primack, **AJ Miller-Rushing**. 2019. Trails-as-transects: phenology monitoring across heterogeneous microclimates in Acadia National Park, Maine. *Ecosphere* 10: e02626.
24. **Miller KM**, BJ McGill. 2019. Compounding human stressors cause major regeneration debt in over half of eastern US forests. *Journal of Applied Ecology* 56: 1355-1366.

25. **Miller-Rushing AJ**, AS Gallinat, RB Primack. 2019. Creative citizen science illuminates complex ecological responses to climate change. *Proceedings of the National Academy of Sciences* 116: 720-722.
26. **Mortelliti A**, I Grentzmann, S Fraver, AM Brehm, S Calkins, **N Fisichelli**. 2019. Small mammal controls on the climate-driven range shift of woody plant species. *Oikos*. 128: 1726-1738.
27. **Nadeau CP**, MC Urban. 2019. Eco-evolution on the edge during climate change. *Ecography* 42: 1280-1297.
28. **Nelson SJ**, CY Chen, JS Kahl. 2019. Dragonfly larvae as biosentinels of Hg bioaccumulation in northeastern and Adirondack lakes: relationships to abiotic factors. *Ecotoxicology* doi.org/10.1007/s10646-019-02149-4
29. Patel KF, MD Jakubowski, IJ Fernandez, **SJ Nelson**, **W Gawley**. 2019. Soil nitrogen and mercury dynamics seven decades after a fire disturbance: a case study at Acadia National Park. *Water, Air, & Soil Pollution* 230, 29.
30. **Royer CJ**, S Redmond, CS Lai, SH Brawley. 2019. *Porphyra umbilicalis* in applied and basic research: reproductive phenology, development, seed stock culture, and a field trial for aquaculture. *Journal of Applied Phycology* 31: 547-560.
31. **Smetzer J**, TL Morelli. 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/
32. Smith B, J Hallo. 2019. Informing good lighting in parks through visitors' perceptions and experiences. *International Journal of Sustainable Lighting* 21: 47-65.
33. 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>
34. Warner KA, JE Saros. 2019. Variable responses of dissolved organic carbon to precipitation events in boreal drinking water lakes. *Water Research* 156: 315-326.
35. Xiao X, J Lu, P Gao, GK Riungu, M Wang. 2019. Traffic safety on Acadia National Park roadways. *Journal of Park and Recreation Administration* 37: 1-13.