

Acadia science publications – 2020

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

1. Arflack CG. 2020. Selling Eden: Economic development and conservation in Mount Desert Island and Acadia National Park. Dissertation, University of Memphis.
2. Barakian S, P Golias, J Kirsh, and Z Zhang. 2020. Preparing for the implementation of a vehicle reservation system in Acadia National Park. Worcester Polytechnic Institute, Worcester, Massachusetts.
3. Bennett MR. 2020. Characterizing the range shifts of two *Peromyscus* species in Maine. Honors Thesis, University of Maine.
4. Bricknell IR, SD Birkel, SH Brawley, T Van Kirk, H Hamlin, K Capistrant-Fossa, K Huguenard, GP Van Walsum, ZL Liu, LH Zhu, G Grebe, E Taccardi, M Miller, BM Preziosi, K Duffy, CJ Byron, CT Quigley, TJ Bowden, D Brady, BF Beal, PK Sappati, TR Johnson, S Moeykens. 2020. Resilience of cold water aquaculture: a review of likely scenarios as climate changes in the Gulf of Maine. *Reviews in Aquaculture* 1-44. doi:10.1111/raq.12483
5. Briwa R, NT Bergmann. 2020. Picturing the national parks through postcards at the National Park Service centennial. *Focus On Geography* 63: 1.
6. Charpentier JE. 2020. Wildland fire disturbance-recovery dynamics in upland forests at Acadia National Park, Maine. Dissertation, Antioch University New England.
7. Coen MC, E Andrews, A Alastuey, TP Arsov, J Backman, BT Brem, N Bukowiecki, C Couret, K Eleftheriadis, H Flentje, M Fiebig, M Gysel-Ber, JL Hand, A Hoffer, R Hooda, C Hueglin, W Joubert, M Keywood, JE Kim, S Kim, C Labuschagne, N Lin, Y Lin, CL Myhre, K Luoma, H Lyamani, A Marinoni, OL Mayol-Bracero, N Mihalopoulos, M Pandolfi, N Prats, AJ Prenni, J Putaud, L Ries, F Reisen, K Sellegri, S Sharma, P Sheridan, JP Sherman, J Sun, G Titos, E Torres, T Tuch, R Weller, A Wiedensohler, P Zieger, P Laj. 2020. Multidecadal trend analysis of in situ aerosol radiative properties around the world. *Atmospheric Chemistry and Physics*. 20):8867–8908
8. Cox S. 2020. Making Vacationland: The modern automobility and tourism borderlands of Maine and New Brunswick, 1875-1939. Thesis, University of Maine.
9. Cybularz R. 2020. Bass Harbor Head Light Station historic structure report. National Park Service and Friends of Acadia, Bar Harbor, Maine.

10. Derrien MM, PA Stokowski. 2020. Discursive constructions of night sky experiences: Imagination and imaginaries in national park visitor narratives. *Annals of Tourism* 85: 103038.
11. Doser JW, AS Weed, EF Zipkin, **KM Miller**, AO Finley. 2020. Trends in bird abundance differ among protected forests but not bird guilds. arXiv preprint: 2008.12184.
12. Duffy KP, HC Cipparone, ES Johnson, LN Rickard, K Beard, F Nascimento. 2020. Leveraging spatial dimensions of news media content analysis to explore place-based differences in natural resource issues. *Journal of Environmental Studies and Sciences* doi.org/10.1007/s13412-020-00595-9
13. Eagles-Smith CA, JJ Willacker, **SJ Nelson**, CM Flanagan Pritz, DP Krabbenhoft, CY Chen, JT Ackerman, EH Campbell Grant, DS Pilioud. 2020. A national-scale assessment of mercury bioaccumulation in United States national parks using dragonfly larvae as biosentinels through a citizen science framework. *Environmental Science and Technology* DOI: 10.1021/acs.est.0c01255
14. Fernandez IJ, S Birkel, **C Schmitt**, J Simonson, B Lyon, A Pershing, E Stancioff, G Jacobson, P Mayewski. 2020. Maine's Climate Future: 2020 Update. University of Maine, Orono.
15. Guthrie A, N Machado, I Wernick, J Woodruff, K Zhao. 2020. Feasibility of cellular webcams for remote wildlife monitoring in Acadia National Park. Worcester Polytechnic Institute, Worcester, Massachusetts.
16. Hefley TJ, RE Russell, AE Ballmann, H Zhang. 2020. When and where: estimating the date and location of introduction for exotic pests and pathogens. arXiv: 2006.16982
17. Ishaq SL, A Hotopp, S Silverbrand, JE Dumont, A Michaud, J MacRae, SP Stock, E Groden. 2020. Assessment of pathogenic bacteria transfer from *Pristionchus entomophagus* (Nematoda: Diplogasteridae) to the invasive ant *Myrmica rubra* and its potential role in colony mortality in coastal Maine. Research Square, preprint. doi.org/10.21203/rs.3.rs-101817/v1
18. Jennings DT, CP Donahue. 2020. A checklist of Maine spiders (Arachnida: Araneae), 2020. Forest Health and Monitoring Technical Report No. 47. Maine Forest Service, Augusta.
19. McBride SE. 2020. Patterns and mechanisms of tick-borne disease exposure risk in Acadia National Park, Thesis, University of Maine.
20. McDonnell TC, TJ Sullivan, B Knees, MD Bell, E Felker-Quinn. 2020. Intermodal comparison of atmospheric nitrogen deposition estimates for the conterminous United

States and critical load exceedance for selected national parks. Natural Resources Report NPS/NRSS/ARC/NRR—2020/2125, National Park Service, Fort Collins, Colorado.

21. **McDonough MacKenzie C**, T Chang, MA Nocco, RS Barak, MC Bletz, SE Kuebbing, M Dombeck. 2020. Recurrent neural network reveals overwhelming sentiment against 2017 review of US monuments from humans and bots. *Conservation Letters* e12747.
22. **McDonough MacKenzie C**, AS Gallinat, L Zipf. 2020. Low-cost observations and experiments return a high value in plant phenology research. *Applications in Plant Sciences* 8: e11338.
23. **Miller KM**, BJ McGill, AS Weed, CE Seirup, JA Comiskey, ER Matthews, S Perles, JP Schmit. 2020. Long-term trends indicate that invasive plants are pervasive and increasing in eastern national parks. *Ecological Applications* e02239. 10.1002/eap.2239
24. **Miller-Rushing AJ, B Henkel, R Cole-Will**. 2020. A partnership-based, whole-watershed approach to climate adaptation in Acadia National Park. *Parks Stewardship Forum* 36: doi.org/10.5070/P536146397
25. **Miller-Rushing AJ**, RB Primack, R Bonney, **E Albee**. 2020. The history of citizen science in ecology and conservation. In CA Lepczyk, OD Boyle, TLV Vargo (eds) *Handbook of Citizen Science in Ecology and Conservation*. University of California Press.
26. **Nadeau C**. 2020. Fine-scale climates and evolution alter species responses to climate change. Doctoral Dissertation, University of Connecticut. 2503.
27. Parsons ECM, **JA Cigliano**. 2020. Is the “academic conservation scientist” becoming an endangered species? *Journal of Environmental Studies and Sciences* 1-5.
28. Quigley CTC, KA Capistrant-Fossa, HG Morrison, LE Johnson, A Morozov, VS Hertzberg, SH Brawley. 2020. Bacterial communities show algal host (*Fucus* spp.)/zone differentiation across the stress gradient of the intertidal zone. *Frontiers in Microbiology* 11: 563118.
29. **Schmitt C**, C Brigham, **N Fisichelli, AJ Miller-Rushing**, K Nydick, T Watkins, MA Wood. 2020. National park research fellowships increase capacity and creativity in responding to climate change. *Parks Stewardship Forum* 36: doi.org/10.5070/P536146403
30. Schuurman GW, C Hawkins Hoffman, DN Cole, DJ Lawrence, JM Morton, DR Magness, AE Cravens, S Covington, R O’Malley, **NA Fisichelli**. 2020. Resist-Accept-Direct (RAD)—A framework for the 21st century natural resource manager. Natural Resource Report NPS/NRSS/CCRP/NRR—2020/2213, National Park Service, Fort Collins, Colorado.

31. Warner KA, **RA Fowler**, JE Saros. 2020. Differences in the effects of storms on dissolved organic carbon (DOC) in boreal lakes during an early summer storm and an autumn storm. *Water* 12: 1452.
32. Wilkins E. 2020. Using social media to assess the impact of weather and climate on visitation to outdoor recreation settings. Dissertation. Utah State University.
<https://digitalcommons.usu.edu/cgi/viewcontent.cgi>
33. Williams C, C DeFranco, A Alhejaili, B Wang. 2020. Exploring electric bicycle and bicycle use in Acadia National Park. Worcester Polytechnic Institute, Worcester, Massachusetts.
34. Zuykov M, B Allam, M Gosselin, P Archambault, G Spiers, M Schindler. 2020. First report of signs of infection by *Coccomyxa*-like algae in wild blue mussels, *Mytilus* spp., in the Gulf of Maine (USA, Maine). *Journal of Fish Diseases* doi.org/10.1111/jfd.13172