

CURRICULUM VITAE – 08/01/2024

Jordon C. Tourville

Email: jtourville@outdoors.org
Phone: 734-263-5530
orcid.org/0000-0003-4005-5914
Website: <https://www.jordontourville.com>

Appalachian Mountain Club
10 City Square,
Boston, MA 02129, USA

Education

2022	SUNY – College of Environmental Science and Forestry Ph.D. Ecology	Syracuse, NY
2018	University of Michigan M.S. – Natural Resources and Environment	Ann Arbor, MI
2013	University of Vermont B.A. Biology; Minor in History	Burlington, VT

Recent research activity

2024-Present	Appalachian Mountain Club Terrestrial Ecologist/Staff Scientist <i>Impacts of climate change on montane and alpine vegetation communities</i>	Boston, MA
2022-2024	Appalachian Mountain Club Ken Kimball Postdoctoral Research Fellow <i>Impacts of climate change on montane and alpine vegetation communities</i>	Boston, MA
2018-2022	SUNY ESF PhD Dissertation Research <i>Role of biotic interactions in shaping tree range dynamics in montane systems in response to climate change</i>	Syracuse, NY
2016-2018	University of Michigan M.S. Thesis Research <i>Interactions between climate change and herbivory in Isle Royale National Park</i>	Ann Arbor, MI

Professional appointments

2024-Present	Terrestrial Ecologist , Appalachian Mountain Club
2022-2024	Postdoctoral Research Fellow , Appalachian Mountain Club
2022	Guest Lecturer – Forest Health (FOR 3350) , University of Vermont
2019-2022	Research Associate , Dovciak Lab – SUNY ESF
2018-2021	Teaching Assistant , Dept. of Environmental Biology, SUNY ESF
2017-2018	Graduate Student Instructor , SEAS, University of Michigan
2017-2018	Research Assistant II , Ibanez Lab – University of Michigan
2016-2018	Head Caretaker , Matthaei Botanical Gardens and Nichols Arboretum
2016-2017	Research Assistant , USGS Great Lakes Science Center

Grants, awards, & fellowships

2023	Ecosystem Monitoring Fund , Forest Ecology Monitoring Cooperative	\$23,900
2022	ESA Vegetation Section Ton Damman Award Finalist	\$210
2022	Lowe-Wilcox Graduate Student Scholarship , SUNY ESF	\$7,000
2021	Edwin H. Ketchledge Scholarship Fund , SUNY ESF	\$2,700
2021	Sussman Fund Graduate Internship and Special Merit Award	\$8,000
2019	Botanical Society of America Graduate Student Research Award	\$1,500
2019	NY Flora Association Research Award	\$750
2017	Samuel A. Graham Award for Forest Biology , University of Michigan	\$1,000
2017	MBGNA Drake Award , University of Michigan	\$2,000
2015-16	SCA AmeriCorps Education Award	\$3,200
2014	Georgia Botanical Society Marie Mellinger Award	\$750
2013	Honors College Award , University of Vermont	\$300
2013	Fall Mini-Grant , University of Vermont	\$1,600
2013	APLE Biology Department Award , University of Vermont	\$500

Publications (peer-reviewed, in review, or in prep)

† I am the first and/or corresponding author; § Coauthored with undergraduate student mentee

In Prep †**Tourville, J.** Spatial patterns of dominant mycorrhizal associations and linkages to aboveground tree communities along northeastern elevation gradients. In preparation

†**Tourville, J.**, & Dovciak, M. Relationships between herbivory and resource utilization of tree seedlings along altitudinal gradients in the Green Mountains of Vermont. In preparation

†**Tourville, J.**, Griffin-Nolan, R., Mohanbabu, N., Araldi-Brondolo, S., Ebert, A., LeVonne, J., & Fridley, J. A meta-analysis of studies comparing aboveground traits of co-occurring invasive and native plant species. In preparation

McClintic, S., **Tourville, J.**, Dovciak, M. Relations among tree demography, microclimate, and soil conditions at upper treelines in the Adirondack Mountains, northeastern United States. *Arctic, Antarctic, and Alpine Research*. In preparation

Kimball, K., **Tourville, J.**, Murray, G., & Weihrauch, D. M. Northeastern alpine plant communities become taller and shrubbier after 40 years of climatic warming. *Ecosphere*. In preparation

†**Tourville, J.**, Murray, G., & Nelson, S., & Weihrauch, D. M. Snowfall and topography more important drivers of alpine flowering phenology than temperature. In preparation

2024 †**Tourville, J.**, Horton, T., & Dovciak, M. (2024). Mycorrhizal fungi as critical biotic filters on tree seedling establishment during species range expansions. *Ecological Monographs*.

†**Tourville, J.**, Murray, G., & Nelson, S. (2024). Distinct latitudinal patterns of forest spring phenology across the Appalachian Trail Corridor. *Ecology*.

Hale, K. R., Curlis, J. D., Auteri, G. G., Bishop, S., French, R. L., Jones, L. E., **Tourville, J.**, & Valdovinos, F. S. (2024). A highly resolved network reveals the role of terrestrial herbivory in structuring aboveground food webs. *Philosophical Transactions B*, 379(1909), 20230180.

- 2023 †**Tourville, J.**, Zarfos, M. R., Lawrence, G. B., McDonnell, T. C., Sullivan, T. J., & Dovčiak, M. (2023). Soil biotic and abiotic thresholds in sugar maple and American beech seedling establishment in forests of the northeastern United States. *Plant and Soil*, 1-14. <https://doi.org/10.1007/s11104-023-06123-2>
- †**Tourville, J.**, Publicover, D., & Dovciak, M. (2023). Forests on the move: tracking climate-related treeline changes in mountains of the northeastern United States. *Journal of Biogeography*, 00, 1–15. <https://doi.org/10.1111/jbi.14708>
- †**Tourville, J.**, & Dovciak, M. (2023). Small mammal granivory as a biotic filter for tree establishment beyond elevation range boundaries. *Plant Ecology*, 1-13. <https://doi.org/10.1007/s11258-023-01305-5>
- 2022 †**Tourville J.**, Wason J, Dovciak M. (2022). Canopy gaps facilitate upslope shifts in montane conifers but not in temperate deciduous trees in the Northeastern United States. *Journal of Ecology*. *110*(12), 2870-2882. <https://doi.org/10.1111/1365-2745.13993>
- §Beeles, K. L., **Tourville, J. C.**, and Dovciak, M. (2022). Characterizing Canopy Openness Across Large Forested Landscapes Using Spherical Densimeter and Smartphone Hemispherical Photography. *Journal of Forestry*, *120*(1), 37-50. <https://doi.org/10.1093/jofore/fvab046>
- 2021 Griffin-Nolan, R., Mohanbabu, N., Araldi-Brondolo, S., Ebert, A., LeVonne, J., Lumsden-Pinto, J., Roden, H., Stark, J., **Tourville, J.**, Becklin, K., Drake, J., Frank, D., Lamit, J., and Fridley, J. (2021). Friend or foe? The role of biotic agents in drought-induced plant mortality. *Plant Ecology*, 1-12. <https://doi.org/10.1007/s11258-021-01126-4>
- Wason, J., Battles, J., Berdugo, M. B., Casson, P., **Tourville, J.**, and Dovciak, M. (2021). Sentinel Research Sites in Global Change Research: Whiteface Mountain, New York. *Northeastern Naturalist*, *28*(sp11), 47-63. <https://doi.org/10.1656/045.028.s1104>
- 2019 Ibanez, I., Acharya, K., Juno, E., Karounos, C., Lee, B., McCollum, C., Schaffer-Morrison, S., and **Tourville, J.** (2019). Forest resilience after disturbance: implications for conservation and management practices. *PloS One*, *14*(9). <https://doi.org/10.1371/journal.pone.0222207>

Students mentored

(listed alphabetically by last name) *published first-authored paper as an undergraduate

Kirk Acharya (undergraduate at University of Michigan, now plant biologist for NPS)
Josiah Ault (undergraduate at University of Michigan, now MS student at University of Vienna)
 ***Katie Beeles** (undergraduate at SUNY-ESF, Botanist for the State of New York)
Audrey Fatone (undergraduate at SUNY-ESF, now MS student at North Carolina State University)
Rachel Goland (UVM Field Naturalist Master's student, Master's thesis committee)
Leslie Hamar undergraduate at University of Michigan, now an Alaskan Fisheries Observer)
Hailey Lynch (undergraduate at SUNY-ESF, now trail coordinator for Green Mountain Club)
Hannah Rola (undergraduate at SUNY-ESF)
Ben VanderStouw (undergraduate at SUNY-ESF)
Amanda Varhol (undergraduate at SUNY-ESF)
Heather Zimba (undergraduate at SUNY-ESF, now MS student at New Mexico State University)

Classes taught

SUNY-ESF: Syracuse, NY

- 2021 **EFB 202:** *Ecological Monitoring and Biodiversity Assessment*. Cranberry Lake Biological Station (Plant Ecology)
- 2021 **EFB 202:** *Ecological Monitoring and Biodiversity Assessment*. Cranberry Lake Biological Station (Orienteering)
- 2020 **EFB 210:** *Diversity of Life I*
- 2018-19 **EFB 434/635:** *Flowering Plant Systematics and Evolution*

University of Michigan: Ann Arbor, MI

- 2018 **EAS 531:** *Principles of GIS*
- 2017 **EAS 436:** *Woody Plants: Biology and Identification*

Outreach and volunteering

- 2023 **Mount Washington Observatory:** Trip leader for MWO's Edutrip winter mountain educational series, Gorham, NH
- 2023 **Appalachian Mountain Club:** Trip leader for AMC annual climate education hike; Trip leader for alpine plant identification walks, Gorham, NH
- 2021-23 **Green Mountain Club:** Trail and corridor monitor; Leading forest ecology education and outreach (leading plant identification and ecology walks), Waterbury, VT
- 2021-22 **Vermont Youth Conservation Corps Forestry Crew:** Leading forest ecology lectures and training (plant identification and forest management techniques to professional forestry crews), Richmond, VT
- 2018-22 **SUNY-ESF:** Departmental Representative for Graduate Student Association; Graduate Student Ambassador; Mentor for Annual Colloquium on Teaching and Learning, Syracuse, NY
- 2018 **BioBlitz Detroit:** Leading ecological and agricultural educational programs for Detroit elementary and middle-school children, Detroit, MI
- 2016-18 **Matthaei Botanical Gardens and Nichols Arboretum:** Leading public walking tours and ecological education (invasive species education and management); Student representative to University of Michigan Tree Advisory Council, Ann Arbor, MI
- 2011-16 **Echo Lake Champlain Aquarium and Science Center:** Animal care intern (maintenance of animal enclosures and animal intake); Resource room volunteer (developing educational materials and programs for children), Burlington, VT

Science Communication and Non-Peer Reviewed Publications

- 2024 **As temperatures rise, so do Maine's mountain tree lines:** Portland Press Herald article. <https://www.pressherald.com/2024/07/28/as-temperatures-rise-so-do-maines-mountain-tree-lines/>
- Backcountry Skiing Is Booming in the Northeast. But Can It Survive?:** New York Times article. <https://www.nytimes.com/2024/01/19/travel/northeast-backcountry-skiing-threatened.html>

- 2021 **How Climate Change May Be Shifting the Mountain Tree Line:** AMC Outdoors magazine article. <https://www.outdoors.org/resources/amc-outdoors/conservation-and-climate/how-climate-change-may-be-shifting-the-mountain-tree-line/>
- 2018 **Tourville, J. C.,** Lindman, M., Weinstein, C., Schultze, R., and Noack, M. 2018. Moose Herbivory Monitoring Protocol for Isle Royale National Park. Natural Resource Report NPS/ISRO/NRR—2018/XXXX. National Park Service, Fort Collins, Colorado.
- 2016 **A black swallowwort by any other name is still just as toxic:** Blog post series related to various invasive plants of Rhode Island: U.S. Fish and Wildlife Service Northeast Region. <https://usfwsnortheast.wordpress.com/2016/07/05/a-black-swallowwort-by-any-other-name-is-still-just-as-toxic/>
- 2015 **Tourville, J. C.,** and Armstrong, M. 2015. Invasive species management for Katmai National Park & Preserve, Alagnak Wild River, and Aniakchak National Monument & Preserve: 2015 summary report. Natural Resource Data Series NPS/KATM/NRDS—2015/672. National Park Service, Fort Collins, Colorado.
- Katmai team fights invasive plants:** Radio interview for KDLG, NPR affiliate in Bristol Bay, Alaska. <https://www.kdlg.org/environment/2015-09-10/katmai-team-fights-invasive-plants>

Invited presentations (scientific and public audiences)

- 2024 **Syracuse University, Biology Department,** March: “Spatial dynamics of climate induced tree range shifts and the influence of biotic interactions on tree seedling establishment”
- University of Vermont, Plant Biology Department,** February: “Montane and alpine plant communities in an era of global change: perspectives from the Appalachian Mountain Club”
- 2023 **Mount Washington Observatory, (MWO),** Science in the Mountains lecture series: “Plant Responses to Shifting Climate Across the High Elevation Areas of the Northeast.” https://www.youtube.com/watch?v=GCd9b161YQ&t=1765s&ab_channel=MountWashingtonObservatory
- 2023 **Appalachian Mountain Club (AMC),** President’s Society climate hike and public lecture
- 2023 **Appalachian Mountain Club (AMC),** President’s Society public lecture
- 2022 **UVM,** Burlington, VT. Guest lecture on mycorrhizal ecology for Forest Health 3350.
- 2020 **Symposium on Climate Change in Maine’s Mountains.** “Directions and Drivers of Tree Elevation Range Shifts in the Northeastern United States: Insights and Implications for Management.” Oral presentation.
- 2020 **SUNY-ESF,** Research Seminar (Ecolunch). Syracuse, USA.
- 2019 **SUNY-ESF,** Research Seminar (Ecolunch). Syracuse, USA.

Conference oral presentations (presenting author only)

- 2024 **Tourville, J. C.** “Current research and natural history of the plant communities of Mt. Washington” ESA Annual Conference, Long Beach, CA, USA.
- 2023 **Tourville, J. C.,** G. Murray, and S.J. Nelson. “Understory plant phenological windows shift asynchronously across the Appalachian Trail corridor with warming springs.” ESA Annual Conference, Portland, OR, USA.
- Tourville, J. C.,** T.J. Horton, and M. Dovciak. “Mycorrhizal fungi as critical biotic filters on tree seedling establishment during species range expansions.” Northeastern Natural History Conference. Burlington, VT, USA.

- Tourville, J. C.,** G. Murray, and S.J. Nelson. "Patterns and drivers of woodland understory flower phenology and canopy closure." Adirondack Research Forum. Old Forge, NY, USA.
- 2022 **Tourville, J. C.,** G. Murray, and S.J. Nelson. "Patterns and drivers of woodland understory flower phenology and canopy closure." Forest Ecology Monitoring Cooperative Annual Conference. Burlington, VT, USA: <https://streaming.uvm.edu/watch/47439/patterns-and-drivers-of-woodland-understory-flower-phenology-and-canopy-closure/>
- Tourville, J. C.,** D. Publicover, and M. Dovciak. "Forests on the Move: Tracking Climate Related Changes of Treelines in Montane Systems of the Northeast." Northeastern Alpine Stewardship Gathering. Craftsbury, VT, USA.
- Tourville, J. C.,** D. Publicover, and M. Dovciak. "Forests on the Move: Tracking Climate Related Changes of Treelines in Montane Systems of the Northeast." Adirondack Research Forum. Virtual.
- Tourville, J. C.,** D. Publicover, and M. Dovciak. "Forests on the Move: Tracking Climate Related Changes of Treelines in Montane Systems of the Northeast." ESA Annual Conference. Montreal, QC, Canada.
- 2021 **Tourville, J. C.,** D. Publicover, and M. Dovciak. "Forests on the Move: Tracking Climate Related Changes of Treelines in Montane Systems of the Northeast." Forest Ecology Monitoring Cooperative Annual Conference. Virtual.
- Tourville, J. C.** "Directions and Drivers of Tree Elevation Range Shifts in the Northeastern United States: Insights and Implications for Management." Adirondack Research Forum. Virtual.
- 2020 **Tourville, J. C.,** J. Wason, and M. Dovciak. "Potential Elevation Range Shifts of Dominant Tree Species in the Northeastern United States Revealed by Seedling Distributions." ESA Annual Conference. Virtual.
- 2018 **Tourville, J. C.,** I. Ibáñez, K. Acharya, E. Juno, C. Karounos, B. R. Lee, C. McCollum, and S. Schaffer-Morrison. "Forest resilience after disturbance: implications for conservation and management practices." ESA Annual Conference. New Orleans, LA, USA.

Conferences with poster presentations and years:

Ecological Society of America, Student Conference on Conservation Science, UVM Student Research Symposium
Contributed posters: 2013, 2017, 2021

Service/Society membership

Reviewer for: *Forest Ecology and Management, Journal of the Torrey Botanical Society, Journal of Vegetation Science, Ecological Society of America Annual Conference*

Member of: Botanical Society of America, Ecological Society of America, Mycological Society of America, New England Botanical Club, New England Wildflower Society

Relevant Data Skills

Computer programming

R (fluent)

Python (fluent)

Java (proficient)

Data analysis

Spatial data: ArcGIS Pro, Desktop, and QGIS

Bayesian modeling