

Matthew H. E. M. Browning

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EDUCATION

Doctor of Philosophy (2015) Department of Forest Resources & Environmental Conservation, Virginia Tech, Blacksburg, VA

Master of Environmental Science (2012) The Yale School of Forestry & Environmental Studies, Yale University, New Haven, CT

Teaching Certificate in Environmental Education (2009) State of North Carolina Department of Natural Resources, Raleigh, NC

Teaching Certificate in Middle Grades Science (2009) Western Carolina University, Cullowhee, NC

Bachelor of Arts (2005) Major: Biology, Minors: Geology and Art History, Oberlin College, Oberlin, OH, Study abroad in 2014 to University of Otago, Dunedin, New Zealand

PROFESSIONAL EXPERIENCE

Assistant Professor (2015-present) University of Illinois, Champaign, IL
Department of Recreation, Sport and Tourism in the College of Applied Health Sciences

Director (2017-present) Virtual Reality & Nature Lab

Affiliate (2017-present) Illinois Informatics Institute

Lead (2015-present) Parks & Environ. Behavior Research Group, Health & Nature Unit

Scholar (2015-present) Inst. for Sustainability, Energy & the Environ. IL Water Scholar

Affiliate (2015-present) Department of Natural Resources & Environmental Sciences

Project Liaison (2013-2016) MYLES of Science, Montreat College, Montreat, NC

Program Evaluator (2012-2016) Children & Nature Network, Minneapolis, MN

Research Assistant (2012-2015) Virginia Tech, Blacksburg, VA

Student Intern (2013-2014) Community Design Assistance Center, Blacksburg, VA

Teaching Fellow (2011-2012) Yale University, New Haven, CT

Research Assistant (2010-2012) Yale University, New Haven, CT

Lead Resource Management Ranger (2007-2010) Mt. Mitchell State Park, Burnsville, NC

Backcountry Ranger (2006) Grandfather Mountain, Linville, NC

Visitor Services Intern (2005) Neal Smith National Wildlife Refuge, Prairie City, IA

Student Conservation Association Intern (2005) Arches National Park, Moab, UT

Research Assistant (2005) Kent State University, Kent, OH

Research Assistant (2004-2005) Oberlin College, OH

National Science Foundation REU Fellow (2004) Gustavus Adolphus, St Peter, MN

PEER-REVIEWED PUBLICATIONS

N.B. Prior to May, 2010, Matthew published under the name M. H. E. Mutel.

1. **Browning, M.**, Stern, M., Ardoin, N., & Heimlich, J. (2016). Factors of community support for local nature centers. *Environmental Education Research*. <http://dx.doi.org/10.1080/13504622.2016.1217397>
2. **Browning, M.**, Stern, M., Ardoin, N., Heimlich, J., Petty, R., & Charles, C. (2016). Investigating the sets of values that community members hold toward local nature centers. *Environmental Education Research*. <http://dx.doi.org/10.1080/13504622.2016.1177713>
3. **Browning, M.**, Marion, J.L., & Gregoire, T.G. (2013). Sustainably connecting children with nature: An exploratory study of nature play area visitor impacts and their management. *Journal of Landscape & Urban Planning*. 199, p. 104-112. <http://dx.doi.org/10.1016/j.landurbplan.2013.07.00>
4. Nassar, N., Barr, R., **Browning, M.**, Zhouwei, D., Friedlander, E., Harper, E., Henly, C., Kavlak, G., Kwatra, S., Jun, C., Warren, S., Yang, M., & Graedel, T. (2012). Criticality of the geological copper family. *Environmental Science & Technology*. 46, DOI: 10.1021/es203535w. Available online: <http://dx.doi.org/10.1021/es203535w>
5. **Mutel, M.**, Waugh, D., Feldmann, R., & Hubbard, K. (2006). Experimental taphonomy of *Callinectes sapidus* and cuticular controls on preservation. *Palaios*. 23:9, p. 615-623. <http://dx.doi.org/10.2110/palo.2008.p08-024r>
6. Waugh, D., Feldmann, R., Schroeder, A., & **Mutel, M.** (2006). Differential cuticle architecture and its preservation in fossil and extant *Callinectes* and *Scylla* claws. *Journal of Crustacean Biology*. 26:3, p. 271-282. <http://dx.doi.org/10.1651/S-2692.1>

BOOKS AND BOOK CHAPTERS

7. **Mutel, M.** (2005). Hubert Robert (1733-1808): Young girls dancing around an obelisk, 1798. In Borys, S., Ed., *The Splendor of Ruins in French Landscape Painting, 1630-1800*. Allen Memorial Art Museum Press, Oberlin, OH
8. **Mutel, M.** (2005). Simon Vouet (1590-1649): The muses Urania and Calliope, 1634. In Borys, S., Ed., *The Splendor of Ruins in French Landscape Painting, 1630-1800*. Allen Memorial Art Museum Press, Oberlin, OH

PEER-REVIEWED CONFERENCE PROCEEDINGS

9. **Browning, M.** (2012). The need for sustainable management of nature play areas: A survey of environmental impacts caused by children's play. In Fredman, P., Stenseke, M., Liljendahl, H., Mossing, A., and Laven, D., Ed. *The 6th International Conference on Monitoring and Management of Visitors in Rec. & Protected Areas - Proceedings*. Stockholm, Sweden. http://mmv.boku.ac.at/refbase/files/mmv6_182_183.pdf

10. **Browning, M.** (2012). Environmental impacts along informal trails and recreation sites at well-established Swedish nature play areas. In Fredman, P., Stenseke, M., Liljendahl, H., Mossing, A., & Laven, D., Ed. *The 6th International Conference on Monitoring and Management of Visitors in Rec. & Protected Areas - Proceedings*. Stockholm, Sweden. http://mmv.boku.ac.at/refbase/files/mmv6_182_183.pdf
11. Lusk, L., **Mutel, M.**, Walker, E., & Levy, F. (2009). Forest change in high elevation forests of Mt. Mitchell, North Carolina. *Proceedings from the Conference on the Ecology and Management of High-Elevation Forests in Central and Southern Appalachian Mountains*. Slatyfork, WV. http://www.nrs.fs.fed.us/pubs/gtr/gtr_nrs-p-64.pdf
12. **Mutel, M.** (2005). Experimental taphonomy of the blue crab, *Callinectes sapidus*: Experimental and cuticular controls on preservation. *Geological Society of America Abstract Programs*. 36:5, p. 65. https://gsa.confex.com/gsa/2004AM/finalprogram/abstract_75525.htm

OTHER SCHOLARLY PUBLICATIONS

13. **Browning, M. H. E. M.**, Aldunate, R., Brooks, I., & Cragin, M. (2017). Advanced cyberinfrastructure for health care data. *National Science Foundation Request for Information on Future Needs for Advanced Cyberinfrastructure to Support Science and Engineering Research*.
14. **Browning, M. H. E. M.**, Thomsen, J. M., & Choi, W. (In press). Student and professional perspectives on protected area careers. *Park Science*.
15. **Browning, M. H. E. M.** (In press). How professional organizations were critical to my career. *Park Science*.
16. **Browning, M.**, Choi, W., Stern, M., Petty, B., Ardoin, N., & Heimlich. (2016). *Nature centers and communities summary report*. Prepared for Corkscrew Swamp Sanctuary and Blair Audubon Center, Naples FL
17. **Browning, M.**, Choi, W., Stern, M., Petty, B., Ardoin, N., & Heimlich. (2016). *Nature centers and communities summary report*. Prepared for Audubon Center at Debs Park, Los Angeles, CA
18. **Browning, M.**, Choi, W., Stern, M., Petty, B., Ardoin, N., & Heimlich. (2016). *Nature centers and communities summary report*. Prepared for Elachee Nature Science Center, Gainesville, PA
19. **Browning, M.**, Choi, W., Stern, M., Petty, B., Ardoin, N., & Heimlich. (2016). *Nature centers and communities summary report*. Prepared for the Environmental Learning Center, Vero Beach, FL
20. **Browning, M.**, Choi, W., Stern, M., Petty, B., Ardoin, N., & Heimlich. (2016). *Nature centers and communities summary report*. Prepared for Grange Insurance Audubon Center and Scioto Audubon Metro Park, Columbus, OH
21. **Browning, M.**, Choi, W., Stern, M., Petty, B., Ardoin, N., & Heimlich. (2016). *Nature centers and communities summary report*. Prepared for Audubon Greenwich Kimberlin Nature Education Center and Sanctuary, Greenwich, CT

22. **Browning, M.**, Choi, W., Stern, M., Petty, B., Ardoin, N., & Heimlich. (2016). *Nature centers and communities summary report*. Prepared for Hitchcock Nature Center, Honey Creek, IA
23. **Browning, M.**, Choi, W., Stern, M., Petty, B., Ardoin, N., & Heimlich. (2016). *Nature centers and communities summary report*. Prepared for Mitchell Lake Audubon Center, San Antonio, TX
24. **Browning, M.**, Choi, W., Stern, M., Petty, B., Ardoin, N., & Heimlich. (2016). *Nature centers and communities summary report*. Prepared for Plains Conservation Center, Aurora, CO
25. **Browning, M.**, Choi, W., Stern, M., Petty, B., Ardoin, N., & Heimlich. (2016). *Nature centers and communities summary report*. Prepared for Audubon Society of Portland Nature Sanctuary and Facilities, Portland, OR
26. **Browning, M.**, Choi, W., Stern, M., Petty, B., Ardoin, N., & Heimlich. (2016). *Nature centers and communities summary report*. Prepared for Richardson Bay Audubon Center and Sanctuary, Tiburon, CA
27. **Browning, M.**, Choi, W., Stern, M., Petty, B., Ardoin, N., & Heimlich. (2016). *Nature centers and communities summary report*. Prepared for Seven Ponds Nature Center, Dryden, MI
28. **Browning, M.**, Choi, W., Stern, M., Petty, B., Ardoin, N., & Heimlich. (2016). *Nature centers and communities summary report*. Prepared for Seward Park Audubon Center, Seattle, WA
29. **Browning, M.**, Choi, W., Stern, M., Petty, B., Ardoin, N., & Heimlich. (2016). *Nature centers and communities summary report*. Prepared for Silver Lake Nature Center, Bristol, PA
30. **Browning, M.**, Choi, W., Stern, M., Petty, B., Ardoin, N., & Heimlich. (2016). *Nature centers and communities summary report*. Prepared for Corkscrew Swamp Sanctuary and Blair Audubon Center, Naples FL
31. **Browning, M.**, Choi, W., Stern, M., Petty, B., Ardoin, N., & Heimlich. (2016). *Nature centers and communities summary report*. Prepared for the Urban Ecology Center, Milwaukee, WI
32. **Browning, M.**, Choi, W., Stern, M., Petty, B., Ardoin, N., & Heimlich. (2016). *Nature centers and communities summary report*. Prepared for the Wilderness Center, Wilmot, OH
33. **Browning, M.**, Choi, W., & Charles, C. (2016). *Six month changes in evaluative beliefs about the 2015 ING Summit*. Prepared for the Brandwein Institute, Milford, PA
34. **Browning, M.**, Choi, W., & Charles, C. (2016). *Goal achievement and contribution of factors for success: Interim report on post-survey results from the 2015 North American Inspiring a New Generation Summit*. Prepared for the Brandwein Institute, Milford, PA
35. **Browning, M.** (2015). *Nature centers in local communities: Perceived values, support factors, and visitation constraints*. Dissertation, Virginia Tech, Blacksburg, VA. <http://vttechworks.lib.vt.edu/handle/10919/54581>

36. **Browning, M.**, Choi, W., & Charles, C. (2015). *Factors of success, personal motivations, and group goals for the 2015 Inspiring a New Generation Summit*. Prepared for the Brandwein Institute, Milford, PA
37. **Browning, M.** (2014). *Legacy Camp evaluation: Results from 2014*. Prepared for the Children & Nature Network, Minneapolis, MN. <https://uofi.box.com/s/2z3dg0wh29es924ho2tq4gk3zd49t2dh>
38. Gilboy, E., Browning, L., Jessup, J., Wu, S., & **Browning, M.** (2014). *Greendale outdoor classroom & educational trail*. Prepared for Greendale Elementary School, Abingdon, VA
39. Gilboy, E., Browning, L., **Browning, M.**, Walker, H., & Crump, L. (2014). *Scenic River evaluation projects: Cranesnest and Tye rivers*. Prepared for the Virginia Department of Conservation & Recreation, Richmond, VA
40. Gilboy, E., Browning, L., **Browning, M.**, & Crump, L. (2014). *Clinch Scenic River report: Tazewell county*. Prepared for the Virginia Department of Conservation & Recreation, Richmond, VA
41. Gilboy, E., Browning, L., **Browning, M.**, Dunn, M., & Walker, H. (2014). *Waynesboro Ridgeview Park, greenway, and trailhead conceptual design*. Prepared for the City of Waynesboro, VA
42. **Browning, M.** (2012). *Advancing sustainable land management to connect children with nature*. Prepared for the American Swedish Institute, Minneapolis, MN
43. **Browning, M.** (2012). *Sustainably connecting children with nature*. Master's Thesis, Yale School of Forestry & Environmental Studies, New Haven, CT
44. Browning, L., **Browning, M.**, Decker, M., & Smith, S. (2011). *Camp property management plan*. Prepared for the Connecticut Forest & Parks Association, Rockfall, CT
45. Arthur, T., **Browning, M.**, Cook, L., Martin, R., Saleh, T., & Martinez, J. (2010). *Natural Leaders Network toolkit*. Children & Nature Network, Minneapolis, MN. <http://www.childrenandnature.org/learn/training/toolkits/>
46. **Mutel, M.** (2010). *Research hints forest improving*. The Stewart, North Carolina Division of Parks and Recreation, Raleigh, NC. 24:1, p. 11

EXTERNAL GRANTS AND CONTRACTS

- 2016-2019. **Browning, M.**, Kuo, M., Greenberg, J., and van Den Eeden, S. *Urban forestry's return on investment: Tying residential nature to health care expenditures*. 2016 U.S Forest Service National Urban and Community Forestry Challenge Cost-Share Grant Program. \$278,383 awarded + \$369,169 cost-share match (\$647,552 total project cost)
2016. **Browning, M.** *Connecting MBDH to health insurance company big data*. Midwest Big Data Hub Seed Grant. \$7,000
2016. **Browning, M.**, & van Riper, C., & Browning, L. *Investigating the human dimensions of aquatic invasive species part II: A behavioral mapping study*. National Great Rivers Research and Education Center Internship Program. \$6,500

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2016. van Riper, C., **Browning, M.**, & Browning, L. *Investigating the human dimensions of aquatic invasive species part I: A vignette survey design*. National Great Rivers Research and Education Center Internship Program. \$6,500
- 2013-2016. Shuman, D., Sachs, S., and **Browning, M.** *Hiking MYLES of Science*. Burroughs Wellcome Fund Science Enrichment Award. \$178,550
- 2012-2017. Kuo, F., Westphal, L., and **Browning, M.** *Hierarchical linear modeling of green and school performance*. U.S. Forest Service Northern Research Service Joint Venture Agreement with University of Illinois at Urbana-Champaign. \$19,757
2012. Martinez, J., and **Browning, M.** *Natural Leaders Network Legacy Camp Continuation Grant*. The North Face. \$75,000
- 2012-2013. **Browning, M.**, and Arthur, T. *Appalachian Trail Millennial Youth Led Expeditions Planning Grant*. U.S. Fish & Wildlife Service and National Park Service. \$16,000
- 2011-2012. **Browning, M.** *Measuring possible concerns about bringing children to nature*. Clemson University Conference on the Value of Play Research Seed Grant. \$3,000
- 2011-2012. **Browning, M.**, and Arthur, T. *Appalachian Trail Millennial Youth Led Expeditions Youth Engagement Grant*. Outdoor Foundation. \$2,500
2011. **Browning, M.** *Advancing sustainable land management to connect children with nature*. The American Swedish Institute Malmberg Scholarship for Study in Sweden. \$10,000
2011. Martinez, J. and **Browning, M.** *Natural Leaders Network Legacy Camp Continuation Grant*. The North Face. \$25,000

INTERNAL GRANTS

- 2017-2019. Khan, N. A., **Browning, M.**, Schwingel, A., and Holscher, H. D. *Gardening and family health: Elucidating the role of the human and environmental microbiota*. Family Resiliency Center Pilot Grant Program. \$49,985
- 2016-2017. **Browning, M.**, LaValle, S., and Mimnaugh, K. *The technology of healing: Exploring simulated natural environments in virtual reality for therapeutic applications*. The Center on Health, Aging, and Disability Pilot Grant. \$20,000
2011. **Browning, M.** *Berkley Conservation Scholarship*. Yale School of Forestry & Environmental Studies. \$6,000

FELLOWSHIPS AND AWARDS

- Citizen Science Engagement Award**. 2014. Virginia Tech
- Park Break Fellow**. 2012. National Park Service, U.S.G.S., and the George Wright Society
- Malmberg Fellow**. 2012. American Swedish Institute
- Best Presenter Award**. 2012. Yale School of Forestry & Environmental Studies
- Grad Research Fellowship Program Honorable Mention**. 2011. National Science Foundation
- Featured Article Award**. 2008. BioOne

MEDIA REFERENCES TO RESEARCH

- Bohri, M. 2016. New faculty story: Dr. Matthew Browning. The Center on Health, Aging, and Disability. <http://chad.illinois.edu/featured>
- Forrest, S. 2016. Urban forestry project ties residential nature to health care spending. Illinois News Bureau, October 2016. <https://news.illinois.edu/blog/view/6367/415332>
- Reposted on *EurekaAlert!* https://www.eurekaalert.org/pub_releases/2016-10/uoa-ufp100716.php
 - Reposted on *phys.org*. <http://phys.org/news/2016-10-urban-forestry-ties-residential-nature.html>
 - Reposted on *Chesapeake Tree Canopy Network News & Announcements*. <http://www.chesapeakenetwork.org/2016/10/14/article-urban-forestry-project-ties-residential-nature-to-health-care-spending/?gid=139&aid=13578>
 - Reposted on *Israel Abomus news*. <https://news.abomus.co.il/en/news/nauka/urban-forestry-project-ties-residential-nature-health-care-spending>
 - Reposted on *Health Medicine Network*. <http://healthmedicinet.com/new-research-project-to-explore-how-urban-forestry-affects-health-care-spending/>
 - Reposted on *Headline News*. <https://www.headlines-news.com/2016/10/08/1898025/urban-forestry-project-ties-residential-nature-to-health-care-spending>
 - Reposted on *#follownews*. <https://www.follownews.com/urban-forestry-project-ties-residential-nature-to-health-care-spending-1ym6c>
 - Reposted on *#MakeMeFeed*. <http://us.makemefeed.com/2016/10/08/urban-forestry-project-ties-residential-nature-to-health-care-spending-2823489.html>
- Marris, E. 2014. Let kids run wild in the woods. *Slate*, May 2014. http://www.slate.com/articles/health_and_science/science/2014/05/kid_play_zones_in_parks_leave_no_trace_inhibits_fun_and_bonding_with_nature.single.html
- Marris, E. 2014. Bringing the fun back to the woods. *The Dallas Morning News*, Jun. 2014. <http://www.dallasnews.com/opinion/commentary/2014/06/27/bringing-the-fun-back-to-the-woods>
- Kwok, R. 2013. Kids damage 'nature play areas.' *Conservation This Week*, Aug. 2013. <http://conservationmagazine.org/2013/08/kids-damage-nature-play-areas/>
- Gibbons, W. 2012. Develop some natural play areas for children. Savannah River Ecology Laboratory. <http://srel.uga.edu/outreach/ecoviews/ecoview121202.htm> Republished in the *ECOVIEWS*, Tuscaloosa News, Dec. 2, 2012.
- Wells, C., Kauffman, G., Ulrey, C., Menges, E., Rock, J., Mutel, M., and Pope, J. Aug., 2008. Botanists blitz area cliffs for endangered plant. Asheville Field Office Press Releases, U.S. Fish and Wildlife Service, Asheville, NC. <https://www.fws.gov/asheville/htmls/media/2008-08-pressreleases.html>

TEACHING EXPERIENCE

Instructor of Record

- RST 242: Nature and American Values (Online, Summer 2017)
- RST 199: Management in RST, UIUC (Spring 2017)
- RST 501: Concepts and Applications in RST, UIUC (Spring 2017)

RST 503: Advanced Research Methods, UIUC (Online, Summer 2016)

RST 370: Research Methods, UIUC (Spring 2016)

RST 429: Contemporary Issues in Leisure Services, UIUC (Fall 2015)

FOR 3524: Environmental Interpretation, Virginia Tech (Spring 2014)

Teaching Assistant

FOR 3574: Environmental Education Service Learning, Virginia Tech (Fall 2013)

FOR 3524: Environmental Interpretation, Virginia Tech (Spring 2013)

FOR 3574: Environmental Education Service Learning, Virginia Tech (Fall 2012)

EEB 123L: Principles of Evolution, Ecology, and Behavior Lab, Yale (Spring 2012)

CHEM 116L: General Chemistry Lab, Yale (Fall 2011)

EEB 123L: Principles of Evolution, Ecology, and Behavior Lab, Yale (Spring 2011)

Guest Lecturer

RST 502: Critical Issues in Recreation and Park Management, UIUC (Fall 2016)

RST 101: Orientation to Leisure Studies, UIUC (Spring 2016)

RST 120: Foundations of Community Recreation, UIUC (Spring 2016)

RST 340: Facility Management, UIUC (Spring 2016)

RST 217: Public Recreation, UIUC (Fall 2015)

FOR 3574: Environmental Education Service Learning, Virginia Tech (Fall 2013)

FOR 3524: Environmental Interpretation, Virginia Tech (Spring 2013)

FOR 3574: Environmental Education Service Learning, Virginia Tech (Fall 2012)

EEB 123: Principles of Evolution, Ecology, and Behavior, Yale (Spring 2012)

EEB 123: Principles of Evolution, Ecology, and Behavior, Yale (Spring 2011)

Instructor

Natural Leaders Legacy Camp, Shepherdstown, WV (2014)

Natural Leaders Legacy Camp, Bainbridge Island, WA (2013)

Natural Leaders Legacy Camp, Harpers Ferry, WV (2011)

North Carolina Park Ranger Advanced Interpretation Trainings, Raleigh, NC (2009-2010)

Toe River Valley Festival, Celo, NC (2009-2010)

Mount Mitchell State Park, Burnsville, NC (2007-2010)

Canon America Envirothon, Asheville, NC (2009)

Muddy Sneakers, Brevard, NC (2008-2009)

Parkway Elementary School, Boone, NC (2006-2007)

Neal Smith National Wildlife Refuge, Prairie City, IA (2006)

Arches National Park, Moab, UT (2006)

Families Rediscovering Eclectic Education, Oberlin, OH (2005)

INVITED TALKS

1. **Browning, M.**, & Van Den Eeden, S. (Apr. 2017). *More nature, better health: Urban forestry's reduction of health care expenditures*. Yale Center for Business and the Environment, Nature's Returns: Investing in Ecosystem Services Series Webinar, New Haven, IL
2. **Browning, M.** & Herriott, L. (Jan. 2017). *Health data access for research*. The Center on Health, Aging, and Disability Research and Faculty Development Academy Seminar Series, Champaign, IL

3. **Browning, M.** (Oct. 2016). *How might contact with nature promote human health?* East Tennessee State Univ. Environmental Health Seminar Series, Johnson City, TN
4. van Riper, C., & **Browning, M.** (May 2016). *A guide for understanding the social sciences.* National Great Rivers Research & Education Center Summer Internship Short Course, Alton, IL
5. **Browning, M.**, Petty, B., Stern, M., Ardoin, N., & Heimlich, J. (Dec. 2015). *A national study of the value of nature centers: Discussing the broader implications for other community-based environmental organizations.* National Audubon Society Webinar
6. **Browning, M.**, Davis, M. E., Migus, L. H., & Sullivan, M. (Nov. 2015). *Measuring and articulating the value of museums and libraries.* Institute for Museum and Library Services Focus Conference, New Orleans, LA
7. **Browning, M.**, Petty, B., Stern, M., Ardoin, N., & Heimlich, J. (Nov. 2015). *The value of nature centers to local communities.* National Audubon Society Webinar
8. **Browning, M.**, Petty, B., Stern, M., Ardoin, N., & Heimlich, J. (Aug. 2015). *The value of nature centers to local communities.* Association of Nature Center Administrators Summit, Gainesville, GA
9. **Browning, M.**, Browning, L., & Arthur, T. (Apr. 2014). *MYLES of Science.* Appalachian Trail Conservancy Regional Partner Meeting, Pembroke, VA
10. **Browning, M.** (Mar. 2014). *Giving guided interpretative hikes.* Virginia Master Naturalists workshop, Blacksburg, VA
11. **Browning, M.** (May 2013). *Connecting children with nature: Why you should care and what you can do.* American Swedish Institute Midsommer Fest, Minneapolis, MN
12. **Browning, M.** (Feb. 2013). *Environmental impacts on and sustainable management of nature play areas.* The Conference on the Value of Play, Clemson, SC
13. **Browning, M.**, Browning, L., & Arthur, T. (Nov. 2012). *MYLES of Science.* Appalachian Trail Conservancy Regional Partner Meeting, Waterbury Center, VT
14. **Browning, M.**, Browning, L., & Arthur, T. (Oct. 2012). *MYLES of Science.* Appalachian Trail Conservancy Regional Partner Meeting, Asheville, NC
15. **Browning, M.** (Jul. 2012). *The need for nature play areas in protected natural areas and how to manage them.* Museum of Natural Science, Raleigh, NC
16. **Browning, M.** (May 2012). *Expanding nature opportunities for children: Encouraging and managing children's play in public forests.* United States Forest Service, Washington, D.C.
17. **Browning, M.** (Feb. 2012). *Managing natural lands for connecting children with nature.* The Conference on the Value of Play, Clemson, SC
18. Martinez, J. & **Browning, M.** (Mar. 2010). *Natural Leaders Network.* North Carolina Children & Nature Coalition Conference, Asheboro, NC
19. Hodges, A., Jackson, C., **Mutel, M.**, & Arthur, T. (Dec. 2009). *Panel on youth in natural resources.* National Conservation Training Center Youth in Natural Resources Working Meeting, Shepherdstown, WV

20. Ostfeld, J., Fanning, C., Rodriguez, J., **Browning, M.**, & Prouty, S. (Sep. 2009). *Sowing the seeds for a greener future: Preparing youth for the green economy*. Good Jobs Green Jobs Conference, Washington, D.C.
21. **Browning, M.** (May 2009). *Cooking and foraging Southern Appalachian wild edibles*. Grandfather Mountain Naturalist Weekend, Linville, NC
22. **Browning, M.** (May 2009). *Identifying Western North Carolina flora and fauna*. Environmental Educators of North Carolina Section Gathering, Hot Springs, NC
23. **Browning, M.** (May 2008). *Cooking and foraging Southern Appalachian wild edibles*. Blue Ridge Discovery Weekend, Little Switzerland, NC

CONTRIBUTED PRESENTATIONS

24. Kuo, M., Wolf, K., **Browning, M.**, & Van den Eeden, S. (Jun. 2017). *Do health care savings grow on trees? A new line of investigation for environment design research*. Panel presentation at Environmental Design Research Association conference, Madison, WI
25. **Browning, M.**, Kuo, M., & Penner, M. (Jun. 2017). *Does teaching children outdoors in greenspace improve their classroom engagement after they return indoors? A study of 3rd graders' time-on-task behavior following indoor and outdoor environmental science lessons in a public environmental magnet school*. Presentation at Environmental Design Research Association conference, Madison, WI
26. **Browning, M.**, & Mimnaugh, K. (Jun. 2017). *Can virtual reality be used to mimic the health benefits of nature and systematically test environmental psychology theory?* Poster presented at Environmental Design Research Association conference, Madison, WI
27. Kuo, M., **Browning, M.**, Sachdeva, S., & Lee, K. (Jun. 2017). *Methodological considerations in measuring the impact of greenspace on school outcomes*. Panel presentation at Environmental Design Research Association conference, Madison, WI
28. Cabrera, S. E., Schwingel, A., **Browning, M.**, & Naiman, K. (Apr. 2017). *Cultivating healthier lifestyles: Gardening amongst Latinos*. Presentation at University of Illinois Undergraduate Research Symposium, Champaign, IL
29. Taff, D., Van Riper, C., **Browning, M.**, Mimnaugh, K., Thomsen, J., Newman, P., Hipp, A., Brownlee, M., Koontz, L., and Richardson, L. (Apr. 2017). *Health parks healthy people: State of the evidence and paths to improve the science*. Panel presentation at George Wright Society conference, Virginia Beach, VA
30. Lawson, S., Benfield, J., Taff, B., Newman, P., **Browning, M.**, Powell, B., & Belenzs, A. (Apr. 2017). *Second Century thinking: Research to support interpretation, education, and engagement*. Panel presentation at George Wright Society conference, Virginia Beach, VA
31. Mimnaugh, K., & **Browning, M.** (Apr. 2017). *Do we need 'actual' park visitation for Park Rx? Studying nature-based virtual reality for stress-reduction*. Poster presentation at George Wright Society conference, Virginia Beach, VA

32. **Browning, M.**, Thomsen, J., & Palmer, J. (Apr. 2017). *Pursing parks and protected area careers in a changing political climate*. Sharing circle presentation at George Wright Society conference, Virginia Beach, VA
33. Merrett, G., Van Riper, C., & **Browning, M.** (Apr. 2017). *Constraints that demotivate recreationists from engaging in pro-environmental behaviors*. Poster presentation at George Wright Society conference, Virginia Beach, VA
34. **Browning, M.**, & Mimnaugh, K. (Mar. 2017). *Preliminary results from simulating nature, enhancing health project: An exploration of the therapeutic applications of natural environments in virtual reality*. Poster presented at Chittenden Symposium on Assistive Technologies in Health, Champaign, IL
35. **Browning, M.** (Oct. 2016). *Job opportunities in parks and protected areas*. Parks and Moderated panel for Parks and Environmental Behavior Research Group seminar, Champaign, IL
36. **Browning, M.** (Oct. 2016). *Technology of healing: Exploring simulated natural environments for therapeutic applications*. Poster presentation at North American Association for Environmental Education Conference, Madison, WI
37. Zint, M., Ardoin, N., Baek, J., **Browning, M.**, Chase, D., Ernst, J., Heimlich, J., Li, C., Marcinkowski, T., McCann, E., Monroe, M., Simmons, B., & Stevenson, K. (Oct. 2016). *Evaluation clinic*. Workshop at North American Association for Environmental Education Conference, Madison, WI
38. **Browning, M.** (Sep. 2015). *Health and nature*. Presentation at Parks and Environmental Behavior Research Group seminar, Champaign, IL
39. Kayser, R., van Riper, C., **Browning, M.**, Merrett, G., Browning, L., Stewart, W., & Suski, C. (Aug. 2016). *Norms and human nature relationships determine boater behaviors that affect the spread of aquatic invasive species*. Presentation and poster at National Great Rivers Research & Education Center Symposium, East Alton, IL
40. Merrett, G., **Browning, M.**, van Riper, C., & Kayser, R. (Aug. 2016). *Factors that demotivate recreationalists from engaging in pro-environmental behaviors*. Presentation and poster at National Great Rivers Research & Education Center Internship Symposium, East Alton, IL
41. Mimnaugh, K., & **Browning, M.** (Jun. 2016). *The technology of healing: Exploring simulated natural environments in virtual reality for therapeutic applications*. Poster presentation at International Symposium on Society and Resource Management, Houghton, MI
42. **Browning, M.**, Browning, L., Chalip, L., van Riper, C., Stewart, W., & Mimnaugh, K. (Apr. 2016). *Simulating nature, enhancing health: Virtual reality proposal for the Design Center*. Poster presentation at University of Illinois Design Center Lightning Symposium, Champaign, IL
43. **Browning, M.**, & Mimnaugh, K. (Apr. 2016). *Simulating nature, enhancing health: Exploring therapeutic applications of natural environments in virtual reality, and opportunities for the Design Center*. Poster presentation at Chittenden Symposium, Champaign, IL

44. van Riper, C.J., **Browning, M.**, Stewart, W., Suski, C., & Browning, L. (Mar. 2016). *Minimizing the spread of aquatic nuisance species in Illinois: A study of factors that shape angler behavior*. Paper presentation to Great Lakes Fishery Commission, Ann Arbor, MI
45. **Browning, M.** (Mar. 2016). *The value of nature centers in local communities*. Presentation at Environmental Education Association of Illinois conference, Canton, IL
46. **Browning, M.**, Petty, B., Stern, M., Ardoin, N., & Heimlich, J. (Oct. 2015). *The ways in which communities value nature centers*. Presentation at North American Environmental Education Association annual conference, San Diego, CA
47. **Browning, M.**, Petty, B., Stern, M., Ardoin, N., & Heimlich, J. (Oct. 2015). *The value of nature centers to communities*. Presentation at North American Environmental Education Association Research Symposium, San Diego, CA
48. Dahlstrom, T., Reuter, J., Troy, N., Mokrycki, K., & **Browning, M.** (Sep. 2015). *Recreation and tourism career panel*. Panel moderator at Sapora Symposium, Champaign, IL
49. **Browning, M.**, Petty, B., Stern, M., Ardoin, N., & Heimlich, J. (Aug. 2015). *Discussion on the value of nature centers to communities*. Presentation at Association of Nature Center Administrators Summit, Gainesville, GA
50. **Browning, M.** (Jul. 2015). *MYLES of Science: Engaging high school students along the AT through peer-led citizen science research and low-impact backpacking*. Presentation at Appalachian Trail Conservancy Biennial Conference, Winchester, VA
51. Roberts, N., & **Browning, M.** (Mar. 2015). *Outside your door: Urban youth media producers create new connections to the land*. Panel moderator at George Wright Society Conference on Parks, Protected Areas, and Cultural Sites, Oakland, CA
52. Villalba, F., & **Browning, M.** (Mar. 2015). *Transformative and inclusive: Rethinking youth engagement in nature and conservation*. Panel moderator at George Wright Society Conference on Parks, Protected Areas, and Cultural Sites, Oakland, CA
53. **Browning, M.**, Thomsen, J., Johnson, B., Ballard, H., Wojcik, D., Morris, J., Machlis, G., English, K., Ramey-Renk, J., & Brownlee, M. (Mar. 2015). *Where am I going and how do I get there? Honest conversations about conservation careers*. Roundtable discussion at George Wright Society Conference on Parks, Protected Areas, and Cultural Sites, Oakland, CA
54. **Browning, M.** (Mar. 2015). *The value of nature centers in communities*. Presentation at Virginia Tech Graduate Student Symposium, Blacksburg, VA
55. **Browning, M.** (Oct. 2014). *How and why different populations visit/support nature centers differently*. Poster presentation at North American Association for Environmental Education Research Symposium, Ottawa, Ontario
56. **Browning, M.** (Jul. 2014). *An introduction to social psychology and behavior theory*. Presentation at Children & Nature Network's Legacy Camp, Shepherdstown, WV
57. **Browning, M.** (Mar. 2014). *Perceived and actual valuation of nature centers; And does it matter?* Presentation at Virginia Tech Grad Student Symposium, Blacksburg, VA

58. van Riper, C., Knudten, C., **Browning, M.**, Rose, N., Reed, S., & Dennis, K. (Mar. 2013). *Supporting experiential learning in national parks: The 2012 Delaware Water Gap National Recreation Area Park Break program*. Sharing circle at George Wright Society Conference on Parks, Protected Areas & Cultural Sites, Denver, CO
59. **Browning, M.** (Oct. 2012). *Environmental impacts at nature play areas and suggestions for sustainable management*. Presentation at North American Association for Environmental Education annual conference, Oakland, CA
60. **Browning, M.** (Aug. 2012). *Leadership IQ*. Presentation at Children & Nature Network's Legacy Camp, Shepherdstown, WV
61. **Browning, M.** (Aug. 2012). *The need for sustainable management of nature play areas: A survey of environmental impacts caused by children's play*. Presentation at International Conference on Monitoring and Management of Visitors in Recreation and Protected Areas, Stockholm, Sweden
62. **Browning, M.** (Aug. 2012). *Environmental impacts along informal trails and recreation sites at well-established Swedish nature play areas*. Presentation at International Conference on Monitoring and Management of Visitors in Recreation and Protected Areas, Stockholm, Sweden
63. **Browning, M.** (Apr. 2012). *'Best' guidelines for connecting children with nature: An assessment of environmental impacts at nature play areas and suggestions for sustainable management*. Presentation at Yale School of Forestry & Environmental Studies Graduate Student Research Colloquium, New Haven, CT
64. **Browning, M.** (Apr. 2012). *Expanding nature opportunities for children: Encouraging and managing nature play in public forests*. Presentation at North Eastern Society of American Foresters, Amherst, MA
65. **Browning, M.**, & Lamers, V. (Mar. 2012). *Securing the future of land conservation: Connecting children with nature on lands under easement*. Presentation at Connecticut Land Conservation Conference, Middletown, CT
66. **Browning, M.** (Oct. 2011). *Assessing management and practices of natural play areas*. Presentation at North American Association for Environmental Education Research Symposium, Raleigh, NC
67. **Browning, M.**, Marion, J., Gregoire, T., & Asperdt, A. (Jul. 2011). *Developing protocols for managing unstructured children's play in natural areas*. Poster presentation at International Play Association Conference, Cardiff, Wales
68. **Browning, M.** (Mar. 2011). *Assessing best management practices of natural play areas*. Presentation at Association for the Study of Play Conference, Atlanta, GA
69. Lusk, L., **Mutel, M.**, Walker, E., & Levy, F. (May 2009). *Forest change in high elevation forests of Mt. Mitchell, North Carolina*. Presentation at Conference on the Ecology and Management of High-Elevation Forests in Central and Southern Appalachian Mountains. Slatyfork, WV
70. **Mutel, M.**, Waugh, D., Feldmann, R., & Parsons-Hubbard, K. (Nov. 2004). *Experimental taphonomy of the blue crab, Callinectes sapidus: Experimental & cuticular controls on preservation*. Presentation at Geological Society of America Conference, Denver, CO

PROFESSIONAL MEMBERSHIPS

Academy of Leisure Sciences
American Evaluation Association
Environmental Education Association of Illinois
George Wright Society
National Association for Interpretation
North American Association of Environmental Education

JOURNAL REVIEWER

Conservation Biology
Environmental Education Research
Illuminaire: A Student Journal in Recreation, Parks, and Tourism Studies
International Journal of Environmental Research and Public Health
Leisure Sciences
Journal of Park and Recreation Administration
Journal of Environmental Planning and Management
Society and Natural Resources

STUDENTS MENTORED

Mitchell Fransen (2017-present) UIUC RST Undergraduate major: Research supervisor
Doug Becker (2016-present) UIUC NRES PhD student: Advisor
Kangjae Lee (2016-present) UIUC INFO PhD student: RA Advisor
Grace Merrett (2016) UIUC RST undergraduate student: Internship supervisor
Katherine Mimnaugh (2015-present) UIUC NRES master's student: Advisor
Wonjun Choi (2015-present) UIUC RST doctoral student: RA supervisor

SELECTED PUBLIC AND UNIVERSITY SERVICE

UIUC RST Doctoral Student Teaching Working Group (2017) Champaign, IL
UIUC RST Environmental Policy Search Committee (2016-2017) Champaign, IL
UIUC RST Graduate Student Committee (2015-present) Champaign, IL
UIUC CWWHE Director Search Committee (2015-2016) Champaign, IL
Inspiring a New Generation Evaluator (2015-2016) Shepherdstown, WV
Graduate Student Representative (2013-2015) GWS Board of Directors, Hancock, MI
Inner City Outings Trip Leader (2010-2012) Sierra Club, New Haven, CT
Trip Leader (2008-2010) Friends of the Mountains to Sea Trail, Raleigh, NC
Stewardship Volunteer (2007-2010) S. Appalachian Highlands Conservancy, Asheville, NC
Land Monitor Volunteer (2006-2007) Blue Ride Conservancy, Boone, NC
Outing Club President (2003-2005) Oberlin College, OH

SELECTED CERTIFICATIONS AND TRAININGS

UIUC ACES Research Academy (2017) Champaign, IL

UIUC IHSI NIH Grant Writing Workshop program (2016) Champaign, IL

Leave No Trace Trainer (2014) Blacksburg, VA

Playworker (2011) Asheboro, NC

Special Peace Officer (2007) Raleigh, NC

Emergency Medical Technician - Basic (2008) Marion, NC