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North Carolina State University
Department of Parks, Recreation, and Tourism Management
College of Natural Resources
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Raleigh, NC 27695

Education

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|-------------|---|
| 2017 – 2021 | Ph.D. , Parks, Recreation, and Tourism Management,
North Carolina State University, Raleigh, NC, US |
| 2008 – 2010 | M.S. , Management of Agroecological Knowledge and Social Change,
Wageningen University, The Netherlands |
| 2003 – 2006 | B.S. , Rural Development and Environmental Science,
Zamorano University, Honduras |

Professional Experience

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| 2021 – Present | Research Associate , Department of Parks, Recreation and Tourism
Management, North Carolina State University, Raleigh, NC, US |
| 2017 – 2020 | Graduate Research Assistant , Department of Parks, Recreation and
Tourism Management, North Carolina State University, Raleigh, NC, US |
| 2012 – 2017 | Assistant Manager , Vice rectorate of Academic Affairs, Universidad
Nacional Autónoma de Honduras, Honduras |
| 2007 – 2008 | Research Assistant , Environmental Science Department, Zamorano
University, Honduras |

Publications

Knollenberg, W., **Brune, S.**, Harrison, J., Savage, A. (2021). Identifying a community capital investment portfolio to sustain a tourism workforce. *Journal of Sustainable Tourism*, <https://doi.org/10.1080/09669582.2021.1890094>

- Brune, S.,** Stevenson, K. T., Knollenberg, W., & Barbieri, C. (2020). Development and validation of a children's agricultural literacy instrument for local food. *Journal of Agricultural Education* 61(3), 233–260. <https://doi.org/10.1016/j.appet.2020.104848>
- Brune, S.,** Knollenberg, W., Stevenson, K. T., & Barbieri, C., Schroeder Moreno, M. (2020). The influence of agritourism experiences on consumer behavior towards local food. *Journal of Travel Research*. <https://journals.sagepub.com/doi/10.1177/0047287520938869>
- Johnson, D., **Brune, S.,** Dagan, D. T., Meier, E., Wilkins, E. J., & Zhang, H. (2020). A holistic strategy for carbon reduction programs in parks and protected areas: Leveraging three “fixes.” *Parks Stewardship Forum*, 36(3), 477–482. <https://doi.org/10.5070/p536349858>
- Brune, S.,** Knollenberg, W., Stevenson, K. T., & Barbieri, C. (2020). U-pick farms: Harvesting more than pumpkins. *Journal of Park and Recreation Administration*. doi: 10.18666/JPra-2020-10038
- Knollenberg, W., **Brune, S.,** Harrison, J., Savage, A. (2019). Strategies to facilitate the integration of Hispanic migrants in a tourism-dependent community. *Journal of Policy Research in Tourism, Leisure and Events*, <https://doi.org/10.1080/19407963.2019.1592827>

Honors and Awards

- 3rd place at poster competition of the Latin American Research Symposium, March 2020, Raleigh, NC
- Graduate Fellowship, North Carolina State University (\$4000), August 2017, Raleigh, NC
- Master’s Degree Netherlands Fellowship Program (NFP). The Dutch Organisation for Internationalisation in Education (Nuffic), September 2008, The Hague, The Netherlands

Presentations

- Brune, S.,** Vila, O., Lawson, D., Knollenberg, W. (2021, July). Family farms resilience under COVID-19 restrictions in North Carolina. Natural Hazards Center Annual Researchers Meeting, Boulder, Colorado (Accepted)
- Brune, S.,** Knollenberg, W., Stevenson, K., Reilly, C., Barbieri, C., & Vila, O. (2021, June, *forthcoming*). *Strategies for increasing resilience in tourism operations: Lessons from agritourism*. Proceedings at Uncharted Territory: Reimagining Tourism for a New Era: 51st Annual Travel and Tourism Research Association International Conference, Fort Worth, Texas, USA (Accepted).

- Brune, S.,** Vila, O., Lawson, D., Knollenberg, W. (2020, July). *Family farms resilience and challenges under COVID-19 containment measures in North Carolina: Preliminary findings*. Researchers Meeting of the Natural Hazards Center, Boulder, Co.
- Reilly, C., Stevenson, K. T., **Brune, S.,** Knollenberg, W., & Barbieri, C. (2020). *Creating a new normal: Intergenerational pathways to address environmental issues*. Invited panel presentation at the North American Association for Environmental Education Research Symposium, Tucson, AZ. (pending acceptance)
- Reilly, C., Stevenson, K. T., **Brune, S.,** Knollenberg, W., & Barbieri, C. (2020). *Growing together: Opportunities for collaboration between agricultural and environmental education*. Research roundtable presentation at the North American Association for Environmental Education Research Symposium, Tucson, AZ. (pending acceptance)
- Reilly, C., Stevenson, K.T., **Brune, S.,** Knollenberg, W., Barbieri, C. (2020). *Resetting the table: The role of family in youth agricultural literacy*. Poster presentation at the Environmental Educators of North Carolina Research Symposium, Hendersonville, NC. (pending acceptance)
- Brune, S.,** Knollenberg, W., Stevenson, K., Reilly, C., & Barbieri, C. (2020, October, forthcoming). *A glance at the educational and marketing impact of agritourism*. Oral presentation at the International Workshop on Agritourism, Vermont, U.S. (Accepted)
- Reilly, C., Stevenson, K. T., **Brune, S.,** Knollenberg, W., & Barbieri, C. (2020, June). *Growing our future: Agricultural literacy among North Carolina youth & their families*. Panel presentation at the International Symposium for Society and Resource Management, Cairns, Australia. (Conference canceled)
- Reilly, C., Stevenson, K. T., **Brune, S.,** Knollenberg, W., & Barbieri, C. (2020, June). *Bringing home more than the produce: Outcomes from farm-based learning experiences among North Carolina youth*. Poster presented at the International Symposium for Society and Resource Management, Cairns, Australia. (Conference canceled)
- Brune, S.,** Knollenberg, W., Stevenson, K., Reilly, C., & Barbieri, C. (2020, June). *Beyond attitudes change: Agritourism as a setting to explore tourism experiences' impact on intended behaviors*. Proceedings at 20/20 Vision: Looking Forward, Looking Back: 51st Annual International Conference of Travel and Tourism Research Association, Victoria, Canada. Available at: https://scholarworks.umass.edu/ttra/2020/research_papers/1/
- Reilly, C., Stevenson, K. T., **Brune, S.,** Warner, W., Knollenberg, W., & Barbieri, C. (2020, May) *Agricultural literacy: The influence of family and identity among youth*. Poster presented at the American Association for Agricultural Education Annual Conference, Oklahoma City, OK. (Conference canceled)
- Brune, S.,** Knollenberg, W., Stevenson, K., Reilly, C., & Barbieri, C. (2020, April). *Growing new markets: The contribution of agritourism to local food consumption*. Oral presentation

at the National Environment and Recreation Research Symposium, Annapolis, MD.
(Conference canceled)

Reilly, C., Stevenson, K. T., **Brune, S.**, Knollenberg, W., & Barbieri, C. (2020, April). *Growing our future: Agricultural literacy among North Carolina youth & their families*. Poster presented at the National Environment and Recreation Research Symposium, Annapolis, MD. (Conference canceled)

Driscoll, L., **Brune, S.**, Stevenson, K. & Knollenberg, W. (2020, April). *Agritourism experiences increase intentions to purchase local food*. Poster presentation at the 10th National Farm to Cafeteria Conference, Albuquerque, New Mexico

Brune, S., Knollenberg, W., Stevenson, K., Reilly, C., & Barbieri, C. (2020, March). *Garnering change: How agritourism farms contribute to local food consumption*. Poster presented at the Latin American Student Association (LASA) Research Symposium, Raleigh, NC

Reilly, C., Stevenson, K. T., **Brune, S.**, Knollenberg, W., & Barbieri, C. (2020, February). *Cultivating our heritage: Youth agricultural literacy in a family context*. Poster presented at the NC State College of Natural Resources Graduate Research Symposium, Raleigh, NC.

Brune, S., Knollenberg, W., Stevenson, K., Reilly, C., & Barbieri, C. (2020, February). *Cultivating the future: How agritourism experiences influence pro-environmental behavior*. Oral presentation at the NC State College of Natural Resources Graduate Research Symposium, Raleigh, NC.

Knollenberg, W., **Brune, S.**, Harrison, J., Savage, A. (2019, June). *Building a community for all: Evidence of immigrant employee integration in a tourism-dependent community*. Oral presentation at the Travel and Tourism Research Association (TTRA), Melbourne, Australia

Brune, S., Knollenberg, W., Stevenson, K., & Barbieri, C. (2019, June). *Picking pumpkins, changing behaviors: How agritourism can influence consumer behavior towards local foods*. Oral presentation at the Travel and Tourism Research Association (TTRA), Melbourne, Australia (accepted)

Brune, S., Knollenberg, W., Stevenson, K., & Barbieri, C. (2019, April). *U-pick farms: Harvesting more than pumpkins?* Oral presentation at the National Environment and Recreation Research Symposium (NERR), Annapolis, MD

Brune, S., Knollenberg, W., Harrison, J., & Savage, A. (2019, April). *Working in paradise: resources and strategies supporting the tourism workforce in Ocracoke, NC*. Oral presentation at the National Environment and Recreation Research Symposium (NERR), Annapolis, MD

Knollenberg, W., **Brune, S.**, Harrison, J., Savage, A., (2019, March). *The importance of tourism ambassadors for seasonal tourism destinations*. Oral presentation at the South Eastern Chapter of Travel and Tourism Research Association (SETTRA) Symposium, Daytona Beach, FL

- Brune, S.**, Knollenberg, W., Stevenson, K., & Barbieri, C., & Schroeder-Moreno, M. (2019, March). *The power of agritourism in influencing consumer behavior towards local foods*. Poster presented at the Graduate Research Symposium. North Carolina State University, Raleigh, NC
- Brune, S.**, Knollenberg, W., Harrison, J., & Savage, A. (2019, February). *Identifying holistic strategies for migrant labor integration in a tourism-dependent community*. Poster presented at the NCSU College of Natural Resources Graduate Research Symposium, Raleigh, NC
- Stevenson, K. T., Grether, E. K., Knollenberg, W., **Brune, S.**, Barbieri, C. (2018, October). *Adapting an environmental literacy framework to measure agricultural literacy*. Visual presentation at North American Association for Environmental Education, Spokane, WA.
- Brune, S.**, Stevenson, K., Knollenberg, W., Grether, E. K., & Barbieri, C. (2018, September). *Approaching common ground: Measuring agricultural literacy using an environmental literacy model*. Poster presented at Environmental Educators of North Carolina (EENC), Durham, NC
- Brune, S.**, Knollenberg, W., Stevenson, K., Grether, E. K., & Barbieri, C. (2018, June). *Introducing a framework to assess agritourism's impact on agricultural literacy & consumer behavior towards local foods*. Proceedings of Encouraging Innovation in the Universe of Tourism Research: 49th Annual International Conference of Travel and Tourism Research Association, Miami/Coral Gables, FL. Available at: https://scholarworks.umass.edu/ttra/2018/Academic_Papers_Visual/28
- Brune, S.**, Knollenberg, W., Stevenson, K., Grether, E., & Barbieri, C. (2018). *Proposing an instrument to measure the influence of agritourism on consumer behavior toward local food*. Proceedings of Anchored in Tourism: The Southeast Chapter of the Travel and Tourism Research Association Symposium (SETTRA), Myrtle Beach, SC.
- Brune, S.**, Knollenberg, W., Stevenson, K., Grether, E. K., & Barbieri, C. (2018, April). *The alphabet theory's suitability for examining consumer behavior in the context of agritourism: A proposal*. Poster presented at the National Environment and Recreation Research Symposium (NERR), Annapolis, MD
- Grether, E.K., Stevenson, K., Knollenberg, W., **Brune, S.**, & Barbieri, C. (2018, April). *Developing an instrument to measure how agritourism may build agricultural literacy*. Poster presented at National Environment and Recreation Research Symposium (NERR). Annapolis, MA
- Brune, S.**, Knollenberg, W., Stevenson, K., Grether, E. K., & Barbieri, C. (2018, February). *Cultivating local food consumers: A framework to study agritourism's impact on agricultural literacy and consumer behavior*. Poster presented at the Latin American Student Association (LASA) Research Symposium, Raleigh, NC

Non-refereed presentations

- Knollenberg, W., Stevenson, K.T., Barbieri, C. **Brune, S.**, & Grether, E. K. (2018, August). *Assessing agritourism's impact on agricultural literacy & consumer behavior toward local foods*. USDA NIFA Project Directors Meeting, Washington, DC
- Barbieri, C., **Brune, S.**, Stevenson, K., & Knollenberg, W., & Reilly, C. (2019). Agritourism as a catalyst to increase knowledge and consumption of local foods: Truth or myth? Faculty Seminar, Department of Applied Economy, Universidad de las Islas Baleares – Palma (Spain). November 8.

Written Extension Materials

- Brune, S.**, Vila, O., Lawson, D., & Knollenberg, W. (2021) *Four Lessons to Build Resilience in Agritourism*. Agricultural Publication AG-901 (Factsheet). North Carolina Cooperative Extension Service, Raleigh, NC. Available on-line at: <https://content.ces.ncsu.edu/four-lessons-to-build-resilience-in-agritourism>
- Brune, S.**, Vila, O., Lawson, D., & Knollenberg, W. (2021). *Family farms resilience and challenges under COVID-19 containment measures in North Carolina*. Technical report prepared for the Natural Hazards Center.
- Brune, S.**, Knollenberg, W., Barbieri, C., Stevenson, K., Reilly, C., Strnad, R., & Driscoll, L. (2021). *Cultivating local food consumers: Using agritourism to promote local foods*. Agricultural Publication AG-894 (Factsheet). North Carolina Cooperative Extension Service, Raleigh, NC. Available on-line at: <https://content.ces.ncsu.edu/cultivating-local-foods-consumers-using-agritourism-to-promote-local-foods>
- Savage, A., **Brune, S.**, Hovis, M., Spencer, S.E., Dinan, M., Seekamp, E. (2018) *Working together: A guide to collaboration in rural revitalization*. Agricultural Publication AG-849 (Factsheet). North Carolina Cooperative Extension Service, Raleigh, NC. Available on-line at: <https://content.ces.ncsu.edu/working-together-a-guide-to-collaboration-in-rural-revitalization>
- Knollenberg, W., Tweedie, D., Harrison, J., Savage, A., & **Brune, S.** (2018). *Identifying community capitals for a sustainable tourism workforce on Ocracoke Island*. (Technical Report). Final report for SeaGrant North Carolina.
- Zapata, C., **Brune, S.** and Achieng Adero, J. (2010) Retrofitting the Brazilian biodiesel programme: Implications for policy design. *International Policy Centre for Inclusive Growth*. August 2010, No. 15. Available on-line at: <http://www.ipc-undp.org/pub/IPCPolicyResearchBrief15.pdf>
- Brune, S.**, Sanders, A. (2008) *Vulnerability and perceptions in the coastal communities of Belize: Case study of San Pedro, Placencia, and Port Loyola*. WWF-CA – NOAA – EAP Zamorano.

Oral Extension Presentations

Brune, S., Knollenberg, W., Stevenson, K., & Barbieri, C. (2019, January). *Strengthening local food systems through children: Preliminary findings*. Education Committee, NC Association of Soil & Water Conservation Districts 75th Annual Meeting, Durham, NC

Brune, S., Knollenberg, W., Stevenson, K., Grether, E.K., and Barbieri, C. (2018, February). *The sustainability of food systems*. Lake Johnson Environmental Lecture Series, Raleigh, NC

Teaching

Spring 2020 Introduction to Commercial Recreation and Tourism Management, NC State

Lawson, D.F., Stevenson, K.T., Peterson, M.N., Carrier, S.J., Strnad, R., Seekamp, E., Hartley, J.M., DeMattia, Busch, K.C., **Brune, S.**, Barbieri, C., Knollenberg, W., & Reilly, C. (2019, September). *Intergenerational learning: Can younger generations help us work towards a more sustainable future?* University of Minnesota – Duluth. Department of Biology Seminar Series. Duluth, MN.

Research Experience

Brune, S., Vila, O., Lawson, D., Knollenberg, W., (PI). Quick-Response Research Grant (2020) Family Farms' Resilience and Challenges under COVID-19 Containment Measures in North Carolina. Natural Hazards Center; \$2285 (PI).

National Institute of Food and Agriculture – Agriculture and Food Research Initiative (NIFA-AFRI). Strengthening local food systems through children: The role of agritourism in agricultural literacy and purchasing behaviors of local foods. (2017-12237353). September 1, 2017 – August 31, 2021; \$499,536. (Graduate research assistant)

Community Collaborative Research Grant Program (2016 – 2017). Identifying Community Capitals for a Sustainable Tourism Workforce on Ocracoke Island. North Carolina Sea Grant; \$6,956. (Graduate research assistant)

The Future of Reefs in a Changing Environment (FORCE) (July – August, 2011) Research Project, Bay Islands, Honduras. (Field assistant)

International Policy Centre for Inclusive Growth (IPC-IG) (February – May, 2010) United Nations Development Programme (UNDP) Brasília, Brazil. (Visiting Scholar)

Agricultural Economics Research Institute (LEI), (August – November, 2009) The Netherlands
Value chain governance: Rice for development in Nante, Mozambique. (Intern)

Salvadorian Rural Development Research Program Intern (PRISMA), (January – April 2006)
San Salvador, El Salvador. (Intern)

Service to Profession

Reviewer for Scholarly Journals & Conferences

- 2021 Travel and Tourism Research Association (TTRA): Two extended abstracts
- 2020 Journal of Park and Recreation Administration: One manuscript
- 2020 International Workshop on Agritourism: Six abstracts
- 2020 Travel and Tourism Research Association (TTRA): Three extended abstracts
- 2019 Tourism Recreation Research: One manuscript
- 2018 Open Agriculture: One manuscript
- 2018 National Environment and Recreation Research Symposium (NERR): Two abstracts

Other

- 2019-2020 Social Networking Committee for the National Environment and Recreation
Research Symposium (NERR)
- 2018-202 Student volunteer Annual International Conference at the Travel and Tourism
Research Association

Service to Department

- 2019 – 2020 College of Natural Resources Dean Search Committee Member
- 2018 – 2019 Academic and Professional Development Officer, Graduate Student Association
of the Department of Parks, Recreation and Tourism Management, NCSU
- 2018 – 2019 GSA NCSU Libraries Representative

Professional Membership/Affiliations

- 2019 – Current The Academy of Leisure Sciences
- 2017 – Current Travel and Tourism Research Association (TTRA)

2017 – Current South Eastern Chapter of the Travel and Tourism Research Association (SETTRA)

2017 – Current National and Environmental Research Symposium (NERR)

Consultant Experience

2011 – 2012 **Communication and Capacity Building Center for Development (Comunica)**

Food security in urban areas: data collection for user manuals for urban farming in Tegucigalpa, Honduras

Food security in rural areas: participatory systematization of experience of the Reitoca Municipal grain bank in Honduras

Supply chain management: smallholder's inclusion in the Jatropha biodiesel chain in the South of Honduras. SNV, Honduras

2011 **Center for Marine Studies (CEM)**

Inventory of artisanal fishing in the Northern Coast of Honduras (Sept–Dec 2011)

Professional Development

2020 Inclusive Excellence Certificate Program. Office for Institutional Equity and Diversity. North Carolina State University. Raleigh NC (August-December)

2020 Cultural Competence in Hazards and Disaster Research. Natural Hazards Center, University of Colorado Boulder, Boulder CO (March)

2020 Disaster Mental Health. Natural Hazards Center, University of Colorado Boulder, Boulder CO (March)

2017 Foundations of Responsible Conduct of Research. RCR 101. North Carolina State University, Raleigh NC (August – October)

2017 Food, Land and People Training. Resources for Learning Facilitator Training, Raleigh, NC (September 25–27)

2013 Cultural Management for Development Certificate. Universidad Nacional Autónoma de Honduras, Honduras (June 21–November 9)

2008 Household Survey Design for Environmental Research. CATIE/LACEEP, Turrialba, Costa Rica (July 28–August 09)

2008 Impact Evaluation Design for Development Projects. World Bank, Managua, Nicaragua (March 3–7)

2008 Impact Evaluation of Technical Assistance Projects. Virginia Tech-USAID, Zamorano, Honduras (February 25–28)

2007 Climate Change Science, Impact & Policy workshop. World Wildlife Fund WWF, Belize City, Belize (June 28 – 3)

Languages

Spanish Native speaker

English Fluent in reading, speaking, and writing

Portuguese Proficient in reading, intermediate in speaking, beginner in writing