Brit B. Laginhas

EDUCATION

Ph.D., Geospatial Analytics, North Carolina State University **In progress**
GPA: 4.0

M.Sc., Geography (GIS & Technology), UMass-Amherst **2020**
GPA: 4.0

M.A., Biology, Clark University **2012**
GPA 4.0

B.A., Environmental Science (Conservation Biology), Clark University **2010**
GPA 3.88 (*summa cum laude*)

PROFESSIONAL & RESEARCH EXPERIENCE

Graduate Research Assistant, Center for Geospatial Analytics, NC State **2020 - present**
Produce near-term, iterative crop pest spread forecasts. Quantify uncertainty in crop pest spread forecasts. Train CNN to detect hosts in millions of Google Street View images.

Graduate Research Assistant, ECO Dept., UMass-Amherst **2020**
Convert in-person Introduction to GIS materials for remote/hybrid instruction. Test functionality and scalability of Introduction to GIS remote/hybrid instruction on virtual desktops.

Graduate Research Assistant, ECO Dept., UMass-Amherst **2016 - 2020**
Developed the Global Invaders Plant database (https://doi.org/10.1002/ecy.3569). Assessed global patterns in invasive plant saturation using rarefaction/extrapolation.

Supervisory Biologist/GIS Specialist, ACT/Lycott Environmental, Inc. **2010 - 2015**
Designed invasive species management plans for private and public agencies. Maintained GIS database and interoperability. Provided GIS training and support.

Graduate Research Assistant, Dept. of Biology, Clark University **2010 - 2012**
Examined demographics and habitat requirements of a central MA population of a globally-imperiled freshwater mussel species using multivariate and generalized linear models.

Research Assistant, Eco. & Evo. Biology Dept., Brown University **2007 - 2009**
Used multivariate models to study plasticity in *A. thaliana* fecundity across climate gradients.

GRANTS, AWARDS, & HONORS

ESA George Mercer Award **2021**
Northeast Climate Adaptation Science Center (NECASC) Fellow **2018-2020**
Organismic & Evolutionary Biology (OEB) Teaching Assistant Award **2019**
NEON-ESA Early Career Scholar **2018**
MACC Annual Conference Best Poster Award (2nd Place) **2018**
Geller Research Fellowship Award **2011**
Phi Beta Kappa Inducted Member **2010**

PUBLICATIONS & MANUSCRIPTS IN REVIEW*

Morelli, T.L., Brown-Lima, C.J., Allen, J.M., Beaury, E.M., Fusco, E.J., Barker-Plotkin, A., **Laginhas, B.B.**, Quirion, B.R., Griffin, B., McLaughlin, B. and Munro, L., 2021. Translational invasion ecology: Bridging research and practice to address one of the greatest threats to biodiversity. Biological Invasions, 23 (11), pp.3323-3335. https://doi.org/10.1007/s10530-021-02584-7

Vila, M., Beaury, E.M., Blumenthal, D.M., Bradley, B.A., Early, R., **Laginhas, B.B.**, Trillo, A., Dukes, J.S., Sorte, C.J. and Ibáñez, I., 2021. Understanding the combined impacts of weeds and climate change on crops. Environmental Research Letters, 16(3), p.034043. https://doi.org/10.1088/1748-9326/abe14b

Laginhas, B.B. and Bradley, B.A., Global plant invaders: a compendium of invasive plant taxa documented by the peer-reviewed literature. Ecology, p.e03569. https://doi.org/10.1002/ecy.356

Rockwell-Postel, M., **Laginhas, B.B.** and Bradley, B.A., 2020. Supporting proactive management in the context of climate change: prioritizing range-shifting invasive plants based on impact. Biological Invasions, 22(7), pp.2371-2383. https://doi.org/10.1007/s10530-020-02261-1

Wallingford, P.D., Morelli, T.L., Allen, J.M., Beaury, E.M., Blumenthal, D.M., Bradley, B.A., Dukes, J.S., Early, R., Fusco, E.J., Goldberg, D.E., Ibáñez, I., **Laginhas, B.B.**, Vila, M., and Sorte, C.J. 2020. Adjusting the lens of invasion biology to focus on the impacts of climate-driven range shifts. Nature Climate Change, 10(5), pp.398-405. https://doi.org/10.1038/s41558-020-0768-2

Beaury, E.M., Fusco, E.J., Jackson, M.R., **Laginhas, B.B.**, Morelli, T.L., Allen, J.M., Pasquarella, V.J. and Bradley, B.A., 2020. Incorporating climate change into invasive species management: insights from managers. Biological Invasions, 22(2), pp.233-252. https://doi.org/10.1007/s10530-019-02087-6

Bradley, B.A., **Laginhas, B.B.**, Whitlock, R., Allen, J.M., Bates, A.E., Bernatchez, G., Diez, J.M., Early, R., Lenoir, J., Vilà, M. and Sorte, C.J., 2019. Disentangling the abundance–impact relationship for invasive species. Proceedings of the National Academy of Sciences, 116(20), pp.9919-9924. https://doi.org/10.1073/pnas.1818081116

*Pfadenhauer, W.G., Nelson, M.F., **Laginhas, B.B.**, and Bradley B.A. Remember your roots: Biogeographic traits of plants' native habitats can inform invasive plant risk assessments.

*Lopez, B.E., Allen, J.M., Dukes, J.S., Lenoir, J., Vila, M., Blumenthal, D. M., Beaury, E.M., Fusco, E.J., **Laginhas, B.B.**, Morelli, T.L., O'Neill, M.W., Sorte, C.J.B., Maceda-Veiga, A., Whitlock, R., and Bradley, B.A. Global environmental changes more frequently offset than intensify detrimental effects of biological invasions.

*__Laginhas, B.B.,__ Fertakos, M., and Bradley, B.A. We don't know what we're missing - evidence of a vastly under-identified invasive plant pool.

SELECTED PRESENTATIONS & WORKSHOPS

Laginhas, B.B. and Bradley, B.A. We don't know what we're missing - Evidence of a vastly under identified invasive plant pool. ESA Annual Conference, Virtual, Aug. 2020. (**Talk**)

Laginhas, B.B. Our Landscape and Global Climate Change. Hilltowns Responding to Environmental Crises Series, Plainfield, MA, Feb. 2020. (**Talk**)

Bradley, B. A., Beaury, E.M., Fusco, E. J., **Laginhas, B.B**, Brown-Lima, C., and Morelli, T. L. Examples and obstacles in climate-smart invasive species management. NAISMA Annual Conference, Saratoga Springs, NY, Oct. 2019. (**Workshop**)

Laginhas, B.B. Using manager-informed invasive species lists to assess proactive management and to build networks. NAISMA Annual Conference, Saratoga Springs, NY, Oct. 2019. (**Talk**)

Laginhas, B.B. Climate change could awaken some naturalized 'sleeper' species. NE RISCC 2nd Annual Meeting, Amherst, MA, Jul. 2018. (**Talk**)

Laginhas, B.B., Rockwell-Postel, M. and Bradley, B.A. Prioritizing range-shifting invasive plants: assessing the impacts of invasive plant species using EICAT. MACC Annual Conference, Worcester, MA, Mar. 2018. (**Poster**)

Laginhas, B.B. A river-wide assessment of an imperiled bivalve, Eastern Pearlshell (*M. margaritifera*) in MA. NEF&W Conference, Manchester, NH, Apr. 2011. (**Poster**)

LEADERSHIP SERVICE & OUTREACH

Founding Board Member & Alumni Advisory Chair, TerraCorps **2017 – 2021**

Co-created ends policy to uphold the mission statement (i.e. prepare emerging environmental leaders that promote equitable land access). Co-develop systems to track alumni success.

Science Team, NE Regional Invasive Species Climate Change Network **2018 – 2020**

Co-led surveys and workshops identifying research needs of invasive species managers. Produced technical reports and publication summaries on invasive species and climate change research. Developed a networking tool to connect managers based on shared concerns.

Treasurer & Member, Life Science Café **2017 – 2020**

Organized scientific talks for the public. Managed funds (bookkeeping, grant writing) for talks.

Member, Chicopee River Watershed Council **2014 – 2016**

Developed GIS-based blue trail, paddling maps for the Chicopee River Watershed.

UNDERGRADUATE STUDENT MENTEES

*denotes an honor's thesis project

Drew Bresingham ('22), Vincent Chan ('17-'19), Kristyn Chin ('17-'19), William Coville ('19-'20), Avery Guan ('16), My Huynh ('17), Evan Johnson ('17), Ben Kessler ('18-'20), Nicole Pawell ('16-'17)*, Mei Rockwell-Postel ('17)*, Katie Simi ('22), Shawn Small ('18-'20)*

TEACHING EXPERIENCE

Teaching Assistant, Introductory GIS, UMass-Amherst **S17, S18, F18 & F19**

Teaching Assistant, Environmental Ethics, Clark University **S09**

SELECTED TECHNICAL REPORTS

Laginhas, B.B., Morelli, T.L., Barker-Plotkin, A., Beaury, E.M., Cousins, E., Joubran, S., Nelson, M., Talbot, S. and Bradley, B.A., 2020. NE RISCC Management Challenge: Nuisance Neonatives. Guidelines for Assessing Range-Shifting Species. https://doi.org/10.7275/8n20-kk32

Bradley, B.A., Bayer, A., Griffin, B., Joubran, S., **Laginhas, B.B.**, Munro, L., Talbot, S., Allen, J.M., Barker-Plotkin, A., Beaury, E.M. and Brown-Lima, C., 2020. NE RISCC Management Challenge: Gardening with climate-smart native plants in the Northeast. https://doi.org/10.7275/mvej-dr35

Bradley, B. A., Beaury, E., Fusco, E. J., **Laginhas, B.B.**, Morelli, T. L., and Pasquarella, V., 2018. NE RISCC Management Challenge: Preparing for sleeper species. https://doi.org/10.7275/R5F18WXT