

## Tyler R. Kartzinel

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### EDUCATION

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- 2012 Ph.D. Odum School of Ecology, The University of Georgia  
2007 B.A. Honors Biology, *cum laude*, Rollins College  
Environmental Studies, *cum laude*, Rollins College

### PROFESSIONAL APPOINTMENTS

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- 2017- Assistant Professor, Ecology and Evolutionary Biology, Brown University  
2017- Fellow, Institute at Brown for Environment and Society, Brown University  
2015-2017 NatureNet Fellow, Princeton University & The Nature Conservancy  
2013-2015 Postdoctoral Research Associate, Princeton University  
2007-2012 Presidential Fellow, The University of Georgia

### PUBLICATIONS

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12. Pellegrini AFA, Anderegg WRL, Paine CET, Hoffmann WA, **Kartzinel TR**, Rabin SS, Sheil D, Franco AC, Pacala SW. 2017. Convergence of bark investment according to fire and climate structures ecosystem vulnerability to future change. *Ecology Letters*, 20: 307-317.
  - *Nature* Research Highlights.
  - Princeton University Homepage Feature.
  - Coverage in *Boston Globe* and other media sources.
11. Coverdale TC\*, **Kartzinel TR**, Grabowski K, Shriver R, Hassan A, Goheen JR, Palmer TM, Pringle RM. 2016. Elephants in the understory: opposing direct and indirect effects of consumption and ecosystem engineering. *Ecology*, 97: 3219-3230.
  - *Ecology* homepage feature.
10. **Kartzinel TR**, Campbell DA\*, Trapnell DW. 2016. Spatial patterns of haplotype variation in the epiphytic bromeliad *Catopsis nutans*. *Biotropica*, 48: 206-217.
9. **Kartzinel TR**, Hamrick JL, Wang C, Bowsher AW\*, Quigley BGP\*. 2015. Heterogeneity of clonal patterns among patches of kudzu, *Pueraria montana* var. *lobata*, an invasive plant. *Annals of Botany*, 116: 739-750.
8. **Kartzinel TR**, Chen PA\*, Coverdale TC\*, Erickson DL, Kress WJ, Kuzmina ML, Rubenstein DI, Wang W, Pringle RM. 2015. DNA metabarcoding illuminates dietary niche partitioning by African large herbivores. *Proc. Nat. Acad. Sci. USA* 112: 8019-8024.
  - Cover article and cover photograph.
  - PNAS Commentary by Tilman & Borer. "African mammals, foodwebs, and coexistence"
  - PNAS "New and Newsworthy" feature; Recommended on Faculty of 1000.
  - Top 5% of all articles scored by Altmetric for attention in the popular and social media.
  - Lead story on Princeton University homepage.
  - Coverage in *New York Times*, *National Geographic*, NPR, and other media outlets.
7. **Kartzinel TR** and Pringle RM. 2015. Molecular detection of invertebrate prey in vertebrate diets: Trophic ecology of Caribbean island lizards. *Molecular Ecology Resources*, 15: 903-914.

6. **Kartzinel TR**, Goheen JR, Charles GK, DeFranco E, Maclean JE, Otieno T, Palmer TM, Pringle RM. 2014. Plant and small-mammal responses to large-herbivore exclusion in an African savanna: five years of the UHURU experiment. *Ecology* 95: 787.  
Data paper published with *Ecological Archives* E085-064.
5. **Kartzinel TR**, Shefferson RP, Trapnell DW. 2013. Relative importance of pollen and seed dispersal across a Neotropical mountain landscape for an epiphytic orchid. *Molecular Ecology* 22: 6048-6059.
4. **Kartzinel TR**, Trapnell DW, Shefferson RP. 2013. Highly diverse and spatially heterogeneous mycorrhizal symbiosis in a rare epiphyte is unrelated to broad biogeographic or environmental features. *Molecular Ecology* 22: 5949-5961.
3. **Kartzinel TR**, Trapnell DW, Shefferson RP. 2013. Critical importance of large native trees for conservation of a rare Neotropical epiphyte. *Journal of Ecology* 101: 1429-1438.
2. Trapnell DW, Hamrick JL, Ishibashi CD\*, **Kartzinel TR**. 2013. Genetic inference of epiphytic orchid colonization; it may only take one. *Molecular Ecology* 22: 3680-3692.
1. **Kartzinel TR**, Trapnell DW, Glenn TC. 2012. Microsatellite primers for the Neotropical epiphyte *Epidendrum firmum* (Orchidaceae). *American Journal of Botany* 99: e450-452.

\*Mentees and Supervisees.

## FORTHCOMING PUBLICATIONS

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15. **Kartzinel TR**, Pringle RM. *In Review*. Multiple dimensions of dietary diversity in large herbivores.
14. Trapnell DW, Ishibashi CD\*, **Kartzinel TR**, Quigley CTC\*. *In Revision*. Phylogeography of the Neotropical epiphytic orchid, *Brassavola nodosa*: evidence for a secondary contact zone.
13. Reese AT, Pereira F, Schintlmeister A, Berry D, Durand H, **Kartzinel TR**, Pringle RM, Tung J, Dunn RR, Wright JP, David LA. *In Revision*. Mammals both induce and attenuate microbial nitrogen limitation in the large intestine.

\*Mentees and Supervisees.

## WORKING GROUPS & COORDINATION

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| 2017 | “Predicting extinction of tropical species under climate change: combining precise data, robust models, and new perspectives.” Emerging Frontiers in Tropical Science Working Group, Organization for Tropical Studies. (Co-organizer) |
| 2016 | “Leveraging prairie reserves for conservation under climate change.” Science Solution Space, The Nature Conservancy. (Invited)   |

## RESEARCH FUNDING & AWARDS

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### Current Grants:

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|-----------|---|
| 2017      | Organization for Tropical Studies, Emerging Frontiers in Tropical Sciences Working Group (co-PI with PI John Kress and co-PI Carlos Garcia-Robledo) |
| 2015-2018 | National Science Foundation, Population & Community Ecology (senior personnel with PI Robert Pringle and co-PI Rowan Barrett)                       |

### Completed Grants:

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|-----------|---|
| 2013-2015 | Princeton Environmental Institute, Development Grand Challenges (co-PI with PI Robert Pringle, co-PI Ryan Long, and co-PI Corina Tarnita) |
| 2011-2012 | National Science Foundation, Doctoral Dissertation Improvement Grant (co-PI with PI Dorset Trapnell)                                      |

### Pending Grants:

- National Science Foundation, Population & Community Ecology (co-PI with PI Jacob Goheen)

### FELLOWSHIPS, SCHOLARSHIPS, AWARDS

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2015-2017	The Nature Conservancy, NatureNet Science Fellowship
2015	International Barcode of Life Conference Travel Award
2007-2012	Presidential Fellowship, The University of Georgia
2012	Smithsonian Tropical Research Institute Fellowship (declined)
2012	University of Georgia Graduate School Travel Award
2011	University of Georgia Graduate School Travel Award
2011	IDEA WILD
2010	The Explorers Club Exploration fund
2009	Lewis and Clark Fund for Exploration and Field Research
2009	Eugene P. Odum Small Grant
2009	Sigma Xi Grant in Aid of Research
2009	Tinker Foundation Field Research Award
2009	National Science Foundation Graduate Research Fellowship, honorable mention
2009	University of Georgia Costa Rica Ecology Program
2009	Bosque de Paz Biological Reserve, Costa Rica
2008	University of Georgia Graduate School Travel Award
2006	Morris K. Udall Scholarship
2006	Honors thesis award, Rollins College
2006	Sustainable Development International Scholar, Singapore & Vietnam
2005	Sustainable Development International Scholar, Costa Rica
2004	Archer D. Midland Scholarship Galápagos National Park
2004	Service Learning Scholarship, Dominican Republic
2004	National Society of Collegiate Scholars

### INVITED SEMINARS

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2017	University of Wyoming Departmental Seminar, Laramie, Wyoming, USA
2015	Brown University, Providence, Rhode Island, USA.
2013	Gorongosa National Park Science-Media Workshop, Carr Foundation, Sun Valley, Idaho, USA.
2012	University of Georgia Presidential Fellows Lecture Series, Athens, Georgia, USA.
2011	The Explorers Club, Columbia, South Carolina, USA.
2011	Universidad Técnica Nacional, San Luis, Costa Rica (Given in English and Spanish).
2009	University of Georgia Research Station, San Luis, Costa Rica.

### RESEARCH TALKS & POSTERS

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2017	Ecological Society of America, Portland, Oregon, USA (Organized oral session invited speaker).
2017	Association for Tropical Biology Conference, Mexico (Symposium organizer & invited speaker).
2016	Ecological Society of America Conference, Florida, USA.
2016	Association for Tropical Biology Conference, Montpellier, France (Symposium invited speaker).
2015	International Barcode of Life Conference, University of Guelph, Canada.
2012	Ecological Society of America, Oregon, USA.
2011	Ecological Society of America, Texas, USA (Poster).
2011	Southeastern Ecology and Evolution Conference, Mississippi, USA.
2011	Symbiofest, Georgia, USA.

## MENTORSHIP AND SUPERVISION

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### Postdoctoral Supervision:

- Brian Gill (Brown IBES; 2017 – present).

### Graduate Student Advising:

- Bianca Brown (Brown EEB; 2017 – present).
- Patrick Freeman (Brown EEB; 2017 – present).

### Second Reader:

- Fiona Beltram (Brown EEB; 2017 – present).

### Mentorship & Supervision as a Postdoctoral Fellow (Princeton University):

Ph.D. students (3), undergraduate thesis students and interns (4), laboratory managers (3)

- Advisee accomplishments include coauthoring publications (above), winning scholarships of \$1000-\$7390, and presenting research talks and theses.

### Mentorship & Supervision as a Graduate Student (University of Georgia):

Ph.D. students (3), M.S. students (1), undergraduate students (5), research technicians (1), and undergraduate student workers (10).

- Advisee accomplishments include coauthoring publications, giving talks at international meetings, winning symposia research awards.

## TEACHING

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### Teaching:

2017 Field Ecology: Skills for Science and Beyond. Resource Faculty, Organization for Tropical Studies Graduate Program, Costa Rica.

### Teaching Awards:

2009 Outstanding Teaching Award (Costa Rica Ecology Program, University of Georgia)

### Guest Lectures:

2016 Savanna Ecology (Makerere University, Uganda; Presented at Mpala Research Centre, Kenya)

2015 Ecology: Species interactions, biodiversity, and society (EEB321, Princeton University)

2012 Evolutionary Ecology (ECOL4500/6500, University of Georgia)

2011 Evolutionary Ecology (ECOL4500/6500, University of Georgia)

### Teaching Assistantships:

2012 The Ecological Basis for Environmental Issues (ECOL1000, University of Georgia)

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2010 Plant Variation and Evolution (PBIO8720, University of Georgia)

2009 The Ecological Basis for Environmental Issues (ECOL1000-Lab, University of Georgia)

2009 Ecology Research (ECOL4960, University of Georgia, Costa Rica)

2009 Ecology Lab (ECOL3510, University of Georgia, Costa Rica)

2009 Methods in Marine Science (ECOL4510, University of Georgia, Costa Rica)

### Pedagogical Preparation:

2009 Participant in teacher training and evaluations (University of Georgia)

## SERVICE & OUTREACH

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**Peer reviewing** (reviews submitted = 36):

*Acta Oecologica, American Journal of Botany, Biological Conservation* (“Outstanding Reviewer”), *Conservation Genetics, Journal of Applied Ecology, Journal of Applied Entomology, Journal of Ecology, Journal of Heredity, Marine Ecology Progress Series, Molecular Ecology, Molecular Ecology Resources, Nature Communications, Oikos, Plant Molecular Biology Reporter, PLoS ONE, Proceedings of the Royal Society B, Scientific Reports.*

### University Committees:

2011            \*Faculty search committee. Ecology, University of Georgia.  
2010-2011    \*Executive committee, Office of the Dean of Ecology, University of Georgia.  
2009-2011    \*Program committee (chair), Graduate symposium, Ecology, University of Georgia.  
2010-2011    \*Graduate student representative, Ecology, University of Georgia.  
                  \*Elected positions

### Leadership in the Profession:

2013-            Department of Scientific Services, Gorongosa Restoration Project, Mozambique.  
2008-2010    Undergraduate symposium convener and abstract judge, Center for Undergraduate Research Opportunities, University of Georgia.  
2007-2009    Society for Conservation Biology, Founding member of the State of Georgia & University of Georgia chapters. \*Vice President & \*Program development chair (2008-2009)  
                  \*Elected positions

## ADDITIONAL LANGUAGE PROFICIENCY

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Spanish

## PROFESSIONAL MEMBERSHIPS

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Association for Tropical Biology and Conservation, British Ecological Society, Ecological Society of America, International Canopy Network, MinION Access Programme, Sigma Xi (Associate Member), Society for the Study of Evolution, Society for Conservation Biology. Note: not all are current.