Tad Dallas

about

PhD Candidate
University of Georgia

tdallas@uga.edu
taddallas.github.io
taddallas

programming

Proficient
R
SQL
Matlab/Octave

Familiar
Python
Java
C++

Markup
LaTeX
Markdown
HTML/XML/XPath

Version control
Git

education

since 2011 — Ph.D. candidate in Ecology — Odum School of Ecology
Advised by John Drake

2009–2010 — M.S. Biology — Truman State University
Ecology of small mammal-tick interactions
advised by Stephanie Foré

2005–2009 — B.S. Biology — Truman State University
Majoring in Biology
Minor in Mathematical Biology

experience

2015 — *Strategy Execution* report creation — Dr. Donald Sull, MIT Sloan School of Business
Created R markdown template to generate dynamic report from survey data

2015 — Distributed *R* Analytics Intern — HP Vertica - Big Data Platform Dev Team
Software development for analysis of large data

2010-2011 — Biological Science Technician — USDA - Agricultural Research Service
Subtropical Plant Pathology Lab

2009-2010 — Masters thesis research — Truman State University
Understanding differential tick burdens on small mammals

2008 — Mathematical Biology Program — NSF Research Experience for Undergraduates (REU)
Mathematical estimation of host range using mark-recapture data

software

`metacom` — Analysis of metacommunity structure — CRAN and — R package

`helminthR` — Programmatically access the a global host-helminth database — R package

publications

in review

- Cleveland, C.A., T. Dallas, S. Vigil, D.G. Mead, J.L. Corn, and A.W. Park. 201x. Metacommunity ecology links environmental drivers to *Culicoides* communities and hemorrhagic disease reports in the southeastern United States.
- Dallas, T., J. Drake, M. Krkosek. 201x. Pathogen invasion thresholds in a *Daphnia*-microparasite system.

published

- Dallas, T. 2016. `helminthR`: An R interface to the London Natural History Museum's Host-Parasite Database. (in press: *Ecography*)
- Dallas, T., R. Hall, and J. Drake. 2015. Competition-mediated feedbacks in experimental multi-species epizootics (in press: *Ecology*)

- Dallas, T., M. Holtackers, and J. Drake. 2015. Costs of resistance and infection by a generalist pathogen. (in press: *Ecology and Evolution*)
- Dallas, T. and E. Cornelius. 2015. Co-extinction in a host-parasite network: identifying key hosts for network stability. *Nature Scientific Reports* doi: 10.1038/srep13185
- Park, A., C. Cleveland, T. Dallas, and J. Corn. 2015. Vector species richness increases hemorrhagic disease prevalence through functional diversity modulating the duration of seasonal transmission. *Parasitology* 10: 1-6. doi: 10.1017/S0031182015000578
- Presley S.J., T. Dallas, B.T. Klingbeil, M.R. Willig. 2015. Phylogenetic signals in host-parasite associations for Neotropical bats and Nearctic desert rodents. *Biological Journal of the Linnaen Society* </>
- Dallas, T. and J.M. Drake 2014. Relative importance of environmental, geographic, and spatial variables on zooplankton metacommunities. *Ecosphere* 5(9): art104 doi:10.1890/ES14-00071.1.
- Dallas, T. 2014. `metacom`: an R package for the analysis of metacommunity structure. *Ecography* 37(4):402-405. doi:10.1111/j.1600-0587.2013.00695.x
- Dallas, T. & S. Presley. 2014. Relative importance of host environment, transmission potential, and host phylogeny to the structure of parasite metacommunities. *Oikos* 123: 866–874. doi:10.1111/oik.00707
- Dallas, T. & J.M. Drake 2013. Nitrate enrichment alters a Daphnia-microparasite interaction through multiple pathways. *Ecology and Evolution* 4(3):243-250. doi: 10.1002/ece3.925
- Kim, H.J., J.E. Cavanaugh, T. Dallas, & S. Foré. 2013. Model selection criteria for overdispersed data and their application to the characterization of a host-parasite relationship. *Environmental and Ecological Statistics* doi:10.1007/s10651-013-0257-0
- Dallas, T. 2013. `metacom`: Analysis of the 'Elements of Metacommunity Structure'. R package version 1.2. http://CRAN.R-project.org/package=metacom
- Dallas, T., S. Foré. 2013. Chemical attraction of *Dermacentor variabilis* ticks parasitic to *Peromyscus leucopus* based on host body mass and sex. *Experimental and Applied Acarology* 61(2): 243-250. doi:10.1007/s10493-013-9690-x
- Dallas, T., S. Foré, & H.J. Kim. 2012. Modeling the influence of *Peromyscus leucopus* body mass, sex and habitat on immature *Dermacentor variabilis* burdens. *Journal of Vector Ecology*. 37(2):338-341.doi:10.1111/j.1948-7134.2012.00236.x
- Dallas, T., S. Foré & H.J. Kim. 2010. Factors influencing immature *Dermacentor variabilis* load on the white-footed mouse (*Peromyscus leucopus*). *Technical Report, Truman State University.*

professional service

I have served as a reviewer for the following journals:

- Ecology
- Ecology and Evolution
- Ecological Complexity
- Global Ecology and Biogeography
- Journal of Animal Ecology
- Oecologia
- Oikos
- Proceedings B
- Landscape Ecology
- Functional Ecology
- Methods in Ecology and Evolution
- Ecography

I have served as webmaster for the following organizations:

- Ecological Society of America - Disease Ecology section

- Macroecology of Infectious Disease - NSF Research Coordination Network
- Computational Ecology and Epidemiology Study Group - UGA
- Graduate Student Association - Odum School of Ecology

mentoring

2013	Young Dawgs Program	Mathieu Holtackers
2014	Population Biology of Infectious Disease REU	Trianna Humphries

awards

2014	Best student paper award - Odum School of Ecology	Applied category
2014	Best student paper award - Odum School of Ecology	Theoretical category
2014	Presentation award ($4th$ place)	Odum School Graduate Student Symposium
2012 - 2014	Odum School small grant recipient	Fully funded for 3 years
2011	Love of Learning award	Phi Kappa Phi

professional affiliations

since 2014	Society for Conservation Biology member	Georgia chapter
since 2012	Ecological Society of America member	Aquatic Ecology and Disease Ecology sections
since 2010	Phi Kappa Phi member	Academic honor fraternity