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

experience

2016 - Postdoctoral fellow — UC Davis
Advised by Alan Hastings

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

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

education

2011 - 2016 Ph.D. 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

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. 2016. Competition-mediated feedbacks in experimental multi-species epizootics (in press: *Ecology*)
- Dallas, T., M. Holtackers, and J. Drake. 2016. Costs of resistance and infection by a generalist pathogen. *Ecology and Evolution* doi: 10.1002/ece3.1889 </>
- 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 Linnean 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 2014. 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

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