

# Tad Dallas

## about

PhD Candidate  
University of Georgia

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taddallas.github.io



taddallas

## programming

R  
C++  
Java  
SQL  
Octave  
SAS

TeX  
Markdown

## education

since 2011	Ph.D. candidate in Ecology <i>Advised by John Drake</i>	Odum School of Ecology
2009–2010	M.S. Biology <i>Ecology of small mammal-tick interactions</i> advised by Stephanie Foré	Truman State University
2005–2009	B.S. Biology Majoring in Biology <i>Minor in Mathematical Biology</i>	Truman State University

## experience

2015	Distributed R Analytics Intern <i>Software development for analysis of large data</i>	HP Vertica - Big Data Platform Dev Team
2010–2011	Biological Science Technician <i>Subtropical Plant Pathology Lab</i>	USDA - Agricultural Research Service
2009–2010	Masters thesis research <i>Understanding differential tick burdens on small mammals</i>	Truman State University
2008	Mathematical Biology Program <i>Mathematical estimation of host range using mark-recapture data</i>	NSF Research Experience for Undergraduates (REU)





## publications

### in review



- Park, A., C. Cleveland, T. Dallas, J. Corn. 201X. Vector species richness increases parasite prevalence in host populations through functional diversity modulating the duration of seasonal transmission (in review: *Ecology and Evolution*)
- Dallas, T., J. Drake, M. Krkosek. 201X. Pathogen invasion thresholds in a *Daphnia*-microparasite system. (in review: *Proceedings B*)

### published

- Dallas, T., R. Hall, and J. Drake. 201X. Competition-mediated feedbacks in experimental multi-species epizootics (in press: *Ecology*)
- 🐱 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, Dallas, T., and J. Corn. 2015. Vector species richness increases hemorrhagic disease prevalence through functional diversity modulating the duration of seasonal transmission. *Parasitology*
- Presley S.J., Dallas, T., B.T. Klingbeil, M.R. Willig. 2015. Phylogenetic signals in host-parasite associations for Neotropical bats and Nearctic desert rodents. *Biological Journal of the Linnaean 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*.

## software

<b>metacom</b>	Analysis of metacommunity structure	CRAN and 	R package
<b>parasiter</b>	Programmatically access the Global Helminth Database		R package

## professional service

I have served as a reviewer for the following journals:

- Ecology
- Ecology and Evolution
- Ecological Complexity
- Journal of Animal Ecology
- Oikos
- Proceedings B

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	Best presentation award (4 <sup>th</sup> 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