

Tad Dallas

about

PhD Candidate
University of Georgia

tdallas@uga.edu
taddallas.github.io



taddallas

programming

R
C++
Java
SQL
Octave
SAS

LaTeX
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 Development 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



- Dallas, T., R. Hall, and J. Drake. 2015. Competition-mediated feedbacks in experimental multi-species epizootics (in review: *Ecology*)
- Dallas, T., J. Drake, M. Krkosek. 2015. Pathogen invasion thresholds in a *Daphnia*-microparasite system. (in review: *Proceedings B*)

published

-  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

| | | | |
|------------------|--|--|-----------|
| metacom | Analysis of metacommunity structure | CRAN and  | R package |
| parasiteR | 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 th 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 |