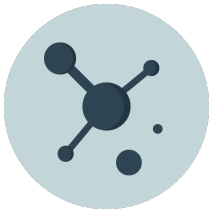
Tad Dallas

Ecologist



about

Postdoctoral researcher
U California @ Davis

tdallas@ucdavis.edu
taddallas.github.io
taddallas

programming

Proficient
Matlab/Octave
R
SQL

Familiar
C++
Java
Julia
Python

Markup
HTML/XML/XPath
LaTeX
Markdown

Version control
Git

experience

2016 -	Postdoctoral fellow *Advised by Alan Hastings*	University of California @ Davis
2015	Distributed *R* Analytics Intern *Software development for analysis of large data*	HP Vertica - Big Data Platform Dev Team
2010-2011	Biological Science Technician *Subtropical Plant Pathology Lab*	USDA - Agricultural Research Service
2008	Mathematical Biology Program *Mathematical estimation of host range using mark-recapture data*	NSF Research Experience for Undergraduates (REU)

education

2011 - 2016	Ph.D. Ecology *Advised by John Drake*	U Georgia - Odum School of Ecology
2009 - 2010	M.S. Biology *Ecology of small mammal-tick interactions* advised by Stephanie Foré	Truman State University
2005 - 2009	B.S. Biology Majoring in Biology *Minor in Mathematical Biology*	Truman State University

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. Metacommunity ecology links environmental drivers to *Culicoides* communities and hemorrhagic disease reports in the southeastern United States. *Oecologia*
- Dallas, T., J. Drake, and M. Krkosek. Pathogen invasion thresholds in a *Daphnia*-microparasite system. *American Naturalist*

published

- Dallas, T., A. Kramer, M. Zokan, and J.M. Drake. 2016. Ordination obscures the influence of environment on plankton metacommunity structure. (in press: *Limnology and Oceanography Letters*)

- Dallas, T., A.W. Park, & J.M. Drake. 2016. Predictability of helminth parasite host range using information on geography, host traits and parasite community structure. (in press: *Parasitology*)
- 🔓 Dallas, T. & J.M. Drake. 2016. Fluctuating temperatures alter environmental pathogen transmission in a *Daphnia*-pathogen system. (in press: *Ecology and Evolution*)
- 🔓 Stephens, P., Altizer, S., Smith, K., Aguirre, A., Brown, J., Budischak, S., Byers, J., Dallas, T., Davies, J., Drake, J., Ezenwa, V., Farrell, M., Gittleman, J., Han, B., Huang, S., Hutchinson, R., Johnson, P., Nunn, C., Onstad, D., Park, A., Vazquez-Prokopec, G., Schmidt, J., and Poulin, R. 2016. The Macroecology of Infectious Diseases: A New Perspective on Global-scale Drivers of Pathogen Distributions and Impacts. *Ecology Letters* 19(9): 1159-1171. doi: 10.1111/ele.12644
- 🔓 Dallas, T. 2016. *helminthR*: An R interface to the London Natural History Museum's Host-Parasite Database. *Ecography* 39(4): 391-393. doi: 10.1111/ecog.02131 </>
- Dallas, T., R. Hall, and J. Drake. 2016. Competition-mediated feedbacks in experimental multi-species epizootics. *Ecology* 97(3):661-670. doi:10.1890/15-0305.1 </>
- 🔓 Dallas, T., M. Holtackers, and J. Drake. 2016. Costs of resistance and infection by a generalist pathogen. *Ecology and Evolution* 6(6): 1737-1744. 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* 116(2): 312-327. </>
- 🔓 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.*

selected presentations

- T Dallas and JM Drake. Using niche modeling to detect unobserved interactions in host-parasite networks. Ecological Society of America, August 11, 2015.
- J.E. Byers, P. Pappalardo, J.P. Schmidt, P.R. Stephens, S. Haas, C. Nunn, J.M. Drake, & T. Dallas. What parasite and host traits best explain the geographic range of mammal parasites and diseases? Ecological Society of America, August 11, 2015.
- T Dallas and JM Drake. Costs of resistance and infection in Daphnia species exposed to a generalist microparasite. Ecology and Evolution of Infectious Disease Conference. Fort Collins, CO. June 2014
- T Dallas, JM Drake, M Krkosek. Thresholds to pathogen invasion: theory + experiment. Ecological Society of American Annual Meeting. Sacramento, California. August 11, 2014
- T Dallas and JM Drake. The Influence of Nitrate on Fungal Parasitism of Daphnia. 98th annual American Society for Microbiology (Southeastern Branch) meeting, October 2012.
- T. Dallas. Odum School of Ecology Graduate Student Symposium, Athens GA. Effects of competition and selective predation in a two-host system. January 2011.
- T. Dallas. Truman State University. Thesis defense: An examination of variation in *Dermacentor variabilis* burdens within and between host species. August 2010.

professional service

For information on my service as a reviewer, see my Publons page. I have served as a reviewer for the following journals:

- Ecography
- Ecology
- Ecology and Evolution
- Ecological Complexity
- Functional Ecology
- Global Ecology and Biogeography
- Journal of Animal Ecology
- Journal of Vector Ecology
- Landscape Ecology
- Methods in Ecology and Evolution
- Oecologia
- Oikos
- Philosophical Transactions B
- Proceedings of the Royal Society 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	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

2016 -	Association for the Sciences of Limnology and Oceanography	
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