# Ashley L. Asmus

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## Education

2012 – 2017 Ph.D., Quantitative Biology
*The University of Texas at Arlington*

2008 – 2012 B.Sc., Biology: Ecology, Evolution, & Behavior
*The University of Texas at Austin*

2005 – 2006 Middlebury College; left after one year to pursue national service in Americorps NCCC

## Professional Experience

2017 – Post-doctoral Research Associate and Coordinating Scientist
The Nutrient Network, University of Minnesota

2014– 2017 Graduate Teaching Assistant
Department of Biology, The University of Texas at Arlington
*Received 2017 Excellence in Graduate Student Teaching Award in Biology*

2012 – 2014 Graduate Research Assistant
Birds and Seasonality Project; The University of Texas at Arlington

2010 – 2012 Research Assistant
Juenger Laboratory; The University of Texas at Arlington

## Publications

Tiusanen, M., Huotari, T., Hebert, P.D.N., Andersson, T., **Asmus, A.,** Bêty, J., *et al.* (2019). Flower-visitor communities of an arcto-alpine plant—Global patterns in species richness, phylogenetic diversity and ecological functioning. *Mol. Ecol.*, 28, 318–335.

Koltz, A.M., **Asmus, A.,** Gough, L., Pressler, Y. & Moore, J.C. (2018). The detritus-based microbial-invertebrate food web contributes disproportionately to carbon and nitrogen cycling in the Arctic. *Polar Biol.*, 41, 1531–1545.

**Asmus, A.,** Koltz, A., McLaren, J., Shaver, G.R. & Gough, L. (2018). Long-term nutrient addition alters arthropod community composition but does not increase total biomass or abundance. *Oikos*, 127, 460–471.

Barrio, I.C., Lindén, E., Te Beest, M., Olofsson, J., Rocha, A., Soininen, E.M., *et al.* (2018). Publisher Correction to: Background invertebrate herbivory on dwarf birch (Betula glandulosa-nana complex) increases with temperature and precipitation across the tundra biome. *Polar Biol.*, 41, 1653–1654.

Chmura, H.E., Krause, J.S., Pérez, J.H., **Asmus, A.,** Sweet, S.K., Hunt, K.E., *et al.* (2018). Late-season snowfall is associated with decreased offspring survival in two migratory arctic-breeding songbird species. *J. avian Biol.*, 49, e01712.

**Asmus, A.L.,** Chmura, H.E., Høye, T.T., Krause, J.S., Sweet, S.K., Perez, J.H., *et al.* (2018). Shrub shading moderates the effects of weather on arthropod activity in arctic tundra. *Ecol. Entomol.*, 43, 647–655.

Roslin, T., Hardwick, B., Novotny, V., Petry, W.K., Andrew, N.R., **Asmus, A.,** *et al.* (2017). Higher predation risk for insect prey at low latitudes and elevations. *Science (80-. ).*, 356, 742–744.

Barrio, I.C., Lindén, E., Te Beest, M., Olofsson, J., Rocha, A., Soininen, E.M., *et al.* (2017). Background invertebrate herbivory on dwarf birch (Betula glandulosa-nana complex) increases with temperature and precipitation across the tundra biome. *Polar Biol.*, 40, 2265–2278.

Krause, J.S., Chmura, H.E., Pérez, J.H., Quach, L.N., **Asmus, A.,** Word, K.R., *et al.* (2016). Breeding on the leading edge of a northward range expansion: differences in morphology and the stress response in the arctic Gambel's white-crowned sparrow. *Oecologia*, 180, 33–44.

Pérez, J.H., Krause, J.S., Chmura, H.E., Bowman, S., McGuigan, M., **Asmus, A.L.,** *et al.* (2016). Nestling growth rates in relation to food abundance and weather in the Arctic. *Auk Ornithol. Adv.*, 133, 261–272.

Boelman, N.T., Gough, L., Wingfield, J., Goetz, S., Asmus, A., Chmura, H.E., *et al.* (2015). Greater shrub dominance alters breeding habitat and food resources for migratory songbirds in Alaskan arctic tundra. *Glob. Chang. Biol.*, 21, 1508–1520.

Sweet, S.K., **Asmus, A.,** Rich, M.E., Wingfield, J., Gough, L. & Boelman, N.T. (2015). NDVI as a predictor of canopy arthropod biomass in the Alaskan arctic tundra. *Ecol. Appl.*, 25, 779–790.

Lowry, D.B., Taylor, S.H., Bonnette, J., Aspinwall, M.J., **Asmus, A.L.,** Keitt, T.H., *et al.* (2015). QTLs for biomass and developmental traits in switchgrass (Panicum virgatum). *Bioenergy Res.*, 8, 1856–1867.

Gough, L. & **Asmus, A.L.** (2014). Tundra-Taiga Biology: Human, Plant, And Animal Survival In The Arctic. By RMM Crawford: New York: Oxford University Press, 2014. 270 pp. $125.00 (softcover). ISBN 9780199559404.

## Manuscripts Submitted

**Asmus, A.,** Seabloom, E.S., Henning, J.H., Borer, E.T., *and 34 other members of the Nutrient Network.* Core species at risk under perturbations. In Review, *Ecology Letters.*

## Manuscripts in Review

Strauss, A.T., Henning, J.H., Pothrak-Krause, A., **Asmus, A.L.,** *et al.* Vector demography, dispersal, and the spatial spread of disease: Experimental epidemics 1 under elevated resource supply. In Review, *Ecology Letters.*

## Selected Research Grants and Fellowships

2017: Graduate Writing Fellowship, The Univeristy of Texas at Arlington, $3000

2016: Graduate School of Science and Technology at Aarhus University, Denmark. GSST Visiting Fellowship. $4456.

2014: Phi Sigma Biological Honors Society at the University of Texas at Arlington. Research Grant: Resolving a cross-system, predator-dominated food web with stable isotope analysis. $1500.

2013: Phi Sigma Biological Honors Society at the University of Texas at Arlington. Research Grant: Building a complex food web using next-generation sequencing. $5000.

## Professional Service

2016: Symposium organizer: Plant-insect Interactions in a Changing Arctic. Session at: International Congress of Entomology Meeting. 27 September 2016; Orlando, Florida.

2013-2017. Student Representative of the Arctic LTER.

2014-2015: Scholarship Program Coordinator: Phi Sigma Graduate Student Society at The University of Texas at Arlington.

2013-2014: President: Phi Sigma Graduate Student Society at The University of Texas at Arlington.

2013: Symposium organizer: Arthropod food webs: a system for studying dynamic responses to global change. Session at: Entomological Society of America Meeting. 12 November 2013; Austin, Texas.

## Community Service

2017-Present: Board Member, the Women's Prison Books Project (wpbp.org).