

LAURA GOUGHCurrent Address

Department of Biological Sciences
Towson University
8000 York Road
Towson, MD 21252

phone: (410) 704-5033
FAX: (410) 704-2405
e-mail: lgough@towson.edu

Professional Experience

Aug. 2015- Professor and Chairperson, Biological Sciences, Towson University
 Aug. 2014-July 2015 Interim Chairperson, Department of Biology, University of Texas Arlington
 Sep. 2013-Aug. 2015 Professor, Department of Biology, University of Texas Arlington
 Sep. 2005-Aug. 2013 Associate Professor, Department of Biology, University of Texas Arlington
 Aug. 2008-Aug. 2009 Program Director, Ecological Biology Cluster, Division of Environmental Biology, National Science Foundation, Arlington, Virginia
 Sep. 2002-Aug. 2005 Assistant Professor, Department of Biology, University of Texas Arlington
 Jan. 1999-Aug. 2002 Assistant Professor, Department of Biological Sciences, University of Alabama, Tuscaloosa
 Oct. 1996-Dec. 1998 Postdoctoral Scientist, The Ecosystems Center, Marine Biological Laboratory, Woods Hole, Massachusetts

Education

1991-1996 Louisiana State University, Baton Rouge, Louisiana
Ph.D., Plant Biology, minor: Experimental Statistics
 1986-1990 Brown University, Providence, Rhode Island
Sc.B., Biology, with Honors

Funding History (PI/co-PI)

2017-2023 NSF, Division of Environmental Biology Grant, "LTER: The Role of Biogeochemical and Community Openness in Governing Ecological Change in Arctic Ecosystems" \$214,000 to TU (out of \$6.7 million total), co-PI (with E. Rastetter and A. Giblin, Marine Biological Laboratory; G.W. Kling, University of Michigan; P. Budy, Utah State University; W.B. Bowden, University of Vermont)
 2017-2022 Howard Hughes Medical Institute, "TU-REP: Expanding Inclusive Excellence in Science at Towson University" \$1,050,000, PI/PD
 2016-2021 NSF, Division of Polar Research Grant, "Collaborative Research: Adding animals to the equation: linking observational, experimental and modeling approaches to assess herbivore impacts on carbon cycling in northern Alaska" \$340,935 to TU (out of \$2.7 million total), PI/PD (with N. Boelman and K. Griffin, Columbia University; J. McLaren, University of Texas-El Paso; E. Rastetter, Marine Biological Laboratory; R. Rowe, University of New Hampshire)
 2009-2015 NSF, Office of Polar Programs Grant, "Collaborative Research: Effects of Warming Induced Increases in Shrub Abundance and Changing Seasonality on Migratory

- Songbirds in Alaskan Arctic Tundra” \$346,230, PI/PD (with N. Boelman, Columbia University and J. Wingfield, University of California Davis)
- 2009-2014 NSF, Division of Undergraduate Education Grant, “UBM-Institutional: Undergraduate Training in Theoretical Ecology Research (UTTER)” \$781,000, co-PI
- 2009-2013 NSF, Office of Polar Programs Grant, “Collaborative Research: A Biotic Awakening: How Do Invertebrates, Microbes, and Plants Determine Soil Organic Matter Responses to Release from Nutrient Limitation in Arctic Tundra” \$225,550, lead PI/PD (with J.C. Moore, M. Wallenstein, and W. Parton, Colorado State University)
- 2010-2012 Luminant Power, “Succession of Turtles and Frogs in Reclaimed Wetlands” \$105,446, fellowship support for Jayme Walton (M.S. student)
- 2004-2009 NSF, Office of Polar Programs Grant, “Collaborative Research: Above- and Below ground Community Responses to Climate Change in Arctic Tundra” \$152,000, lead PI/PD (with J.C. Moore, Colorado State University)
- 2004-2005 University of Texas Arlington, Research Enhancement Program, “The Influence of Management Regime and Invasion by Non-native Species on Native Prairie Grass Growth in North Central Texas” \$9,722, PI
- 2002-2006 NSF, Office of Polar Programs Grant, “ADVANCE Fellows Award: Continuing and Enhancing a Career in Arctic Ecology Research and Education” \$449,500, PI/PD
- 2000 NSF, Research Experience for Undergraduates (REU) Supplement to Polar Programs Grant, \$6,750, PI/PD
- 2000 NSF, REU Supplement to Ecology Program Grant, \$5,000, PI/PD
- 1999-2003 NSF, Office of Polar Programs Grant, “Collaborative Research: Moist Acidic vs. Non-acidic Tundra: Why Does the Vegetation Composition Differ and What Are the Consequences for Ecosystem Carbon Storage?” \$180,000, PI/PD (with S.E. Hobbie, University of Minnesota)
- 1999-2003 NSF, Ecology Program Grant, “Collaborative Research: Competitive Ability of Clonal Plants: The Roles of Clonal Integration and Ramet Aggregation in Structuring Plant Communities” \$55,000, PI/PD (with D.E. Goldberg, University of Michigan)
- 1999-2001 University of Alabama, Center for Freshwater Studies Grant, "Interdisciplinary Approach to Assessing Interactions Between Riparian Vegetation and Fluvial Geomorphic Processes in a Coastal Plain Stream, West-Central Alabama" \$36,000, co-PI (with D.A. Cenderelli, Dept. of Geological Sciences, University of Alabama)
- 1999-2000 University of Alabama, School of Mines and Energy Development Grant, “Changes in Forested Wetlands of Alabama Caused by Beaver Activity” \$17,600, PI/PD
- 1993-1995 NSF, Ecology Program, Doctoral Dissertation Improvement Grant, “Development of a Model of Wetland Community Structure: Experimental Testing and Evaluation” \$6,330, PI: James B. Grace
- 1989 Brown University Biomedical Support Grant for Undergraduate Research

Other Funded Project Involvement (Senior Personnel)

- 2016-2018 NSF, ADVANCE Grant, “Faculty Workload and Rewards Study” \$5,000 to Towson from UM College Park, Department Leader for Biological Sciences
- 2011-2017 NSF, DEB Grant, “The Arctic LTER: Climate Change and Changing Disturbance Regimes in Arctic Landscapes” \$5 million, Senior Personnel/Executive Committee Member
- 2010-2014 NSF, DUE Grant, “Robert Noyce Scholarship Program for Science and Math Teachers” \$1.45 million, Senior Personnel
- 2004-2010 NSF, DEB Grant, “The Arctic LTER: Regional Variation in Ecosystem Process and Landscape Linkages” \$5.7 million, Senior Personnel

Honors and Awards

2015	College of Science Outstanding Research Award, UTA
2012	Faculty Development Leave, UTA
2009	Honorary Service Award, Division of Environmental Biology, NSF
2004	Professor of the Year, Phi Sigma, Biology Graduate Student Honor Society, UTA
1996	Outstanding Biology Teaching Assistant Award, LSU Introductory biology labs for non-majors, 1995-6 academic year
1991-1995	Board of Regents Fellowship, LSU

Peer-Reviewed Journal Articles (*graduate student, †undergraduate student, ‡postdoc)

- Rastetter, E, G.W. Kling, G.R. Shaver, B. Crump, L. Gough, and K.L. Griffin. Accepted. Ecosystem recovery from disturbance is constrained by element cycle openness, vegetation-soil element distribution, and form of element losses. *Ecosystems*.
- Wojdak, J., T. Phelps-Durr, L. Gough, T. Atuobi, C. DeBoy, P. Moss, J. Sible and N. Mouchrek. Accepted. Learning together: Four institutions' collective approach to building sustained inclusive excellence programs in STEM. *ASCN Transforming Institutions*.
- Rastetter, E.B., et al. (L. Gough is one of 13 co-authors). Accepted. Future trajectories for ecosystems in the U.S. Long-Term Ecological Research Network: The importance of time lags. *Ecosphere*.
- Roy, A., M. Suchocki*, L. Gough, and J.R. McLaren. 2020. Above- and belowground responses to long-term herbivore exclusion. *Arctic, Antarctic, and Alpine Research* 52:1, 109-119, DOI: 10.1080/15230430.2020.1733891
- Komatsu, K.J. et al. (L Gough is one of 75 co-authors). 2019. Global change effects on plant communities are magnified by time and the number of global change factors imposed. *Proceedings of the National Academy of Sciences* <https://doi.org/10.1073/pnas.1819027116>.
- Krause, J., J. Pérez, H. Chmura, S. Meddle, K. Hunt, L. Gough, N. Boelman, and J. Wingfield. 2018. Weathering the storm: Do arctic blizzards cause repeatable changes in stress physiology and body condition in breeding songbirds? *General and Comparative Endocrinology* DOI: 10.1016/j.ygcen.2018.07.004
- Chmura, H., J. Krause, J. Pérez, A. Asmus*, S. Sweet, K. Hunt, S. Meddle, R. McElreath, N. Boelman, L. Gough and J. Wingfield. 2018. Snow fall decreases offspring survival in two migratory arctic-breeding songbird species. *Journal of Avian Biology* DOI: 10.1111/jav.01712.
- Asmus, A.L.* , H.E. Chmura, T.T. Høye, J.S. Krause, S.K. Sweet, J.H. Pérez, N.T. Boelman, J.C. Wingfield, and L. Gough. 2018. Shrub shading moderates the effects of weather on arthropod activity in arctic tundra. *Ecological Entomology* DOI: 10.1111/een.12644.
- Oliver, R. D. Ellis, H. Chmura, L. Gough, J. Krause, J. Pérez, S. Sweet, J. Wingfield, and N. Boelman. 2018. Eavesdropping on the Arctic: Automated bioacoustics reveal dynamics in songbird breeding phenology. *Science Advances* DOI: 10.1126/sciadv.aag1084.
- Gough, L. and Johnson, D.R.* 2018. Mammalian herbivory exacerbates plant community responses to increased soil nutrients in two Alaskan tundra plant communities. *Arctic Science* 4: 153-166. DOI: 10.1139/AS-2017-0025
- Asmus, A.* , A. Koltz, J.R. McLaren‡, G.R. Shaver, and L. Gough. 2018. Long-term nutrient addition alters arthropod community structure and seasonality in arctic tundra. *Oikos* 127: 460-471. DOI: 10.1111/oik.04398
- McLaren, J.R.‡, A. Darrouzet-Nardi, M. Weintraub, and L. Gough. 2018. Seasonal patterns of nitrogen availability in moist acidic tundra. *Arctic Science* 4: 98-109. DOI: 10.1139/AS-2017-0014
- Koltz, A.M., A. Asmus*, L. Gough, Y. Pressler, and J.C. Moore. 2017. The detritus-based microbial-invertebrate food web contributes disproportionately to carbon and nitrogen cycling in the Arctic. *Polar Biology*. DOI 10.1007/s00300-017-2201-5

- Wilcox, K.R. et al. (L. Gough is one of 43 co-authors). 2017. Asynchrony among local communities stabilizes ecosystem function of metacommunities. *Ecology Letters* 20:1534-1545
- Boelman, N., J. Wingfield, L. Gough, J. Krause, S. Sweet, H. Chmura and J. Perez. 2017. Extreme spring conditions in the Arctic delay spring phenology of long-distance migratory songbirds. *Oecologia*. 185: 69-80.
- McLaren, J.R.‡, M.J. van de Weg, K.M. Buckeridge, G.R. Shaver, J.P. Schimel and L. Gough. 2017. Shrub encroachment in arctic tundra: *Betula nana* effects on above- and belowground litter decomposition. *Ecology* 98: 1361-1376.
- Green, M.L.* , K. Foster† and L. Gough. 2016. Urban development in the southern Great Plains: Effects of elevated atmospheric NO_x on the long-lived post oak tree (*Quercus stellata*). *Urban Ecosystems*. DOI 10.1007/s11252-016-0622-5
- Gersony, J.T., C.M. Prager, N.T. Boelman, J.U.H. Eitel, L. Gough, H.E. Greaves, K.L. Griffin, T.S. Magney, S.K. Sweet, L.A. Vierling and S. Naem. 2016. Scaling thermal properties from the leaf to the canopy in the Alaskan arctic tundra. *Arctic, Antarctic and Alpine Research*. DOI 10.1657/AAAR0016-013
- Gough, L., N.D. Bettez, K.A. Slavik, W.B. Bowden, A.E. Giblin, G.W. Kling, J.A. Laundre and G.R. Shaver. 2016. Effects of long-term nutrient additions on arctic tundra, stream, and lake ecosystems: Beyond NPP. *Oecologia* 182: 653-665.
- Krause, J., J.H. Pérez, H.E. Chmura, A. Asmus*, S.K. Sweet, S.L. Meddle, K.E. Hunt, L. Gough, N. Boelman, and J.C. Wingfield. 2016. The effects of an extreme spring on body condition and stress physiology in Lapland longspurs and white-crowned sparrows breeding in the Arctic. *General and Comparative Endocrinology* 237: 10-18.
- Boelman, N.T., J.D. Holbrook, H.E. Greaves, J.S. Krause, H.E. Chmura, T.S. Magney, J.H. Perez, J.U.H. Eitel, L. Gough, K.T. Vierling, J.C. Wingfield, and L.A. Vierling. 2016. Airborne laser scanning and spectral remote sensing give a bird's eye perspective on arctic tundra breeding habitat at multiple spatial scales. *Remote Sensing of the Environment* 184:337-349.
- Krause, J., J.H. Pérez, H.E. Chmura, S.L. Meddle, K.E. Hunt, L. Gough, N. Boelman, & J.C. Wingfield. 2016. The stress response is attenuated during inclement weather in parental, but not in pre-parental, Lapland longspurs (*Calcarius lapponicus*) breeding in the Low Arctic. *Hormones and Behavior* 83: 68-74.
- Pérez, J.H., J.S. Krause, H.E. Chmura, S. Bowman, M. McGuigan, A.L. Asmus*, S.L. Meddle, K.E. Hunt, L. Gough, N.T. Boelman, and J.C. Wingfield. 2016. Nestling growth rates in relation to food abundance and weather in the Arctic. *The Auk* 133: 261-272.
- Abbott, B., et al. 2016. Biomass offsets little or none of permafrost carbon release from soils, streams, and wildfire: an expert assessment. *Environmental Research Letters* 11: 034014.
- Krause, J.S., H.E. Chmura, J.H. Perez, L.N. Quach, A. Asmus*, K.R. Word, M.A. McGuigan, S.K. Sweet, S.L. Meddle, L. Gough, N. Boelman and J. Wingfield. 2015. 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.
- Christie, K.S., R.W. Ruess, K.D. Tape, L. Gough, V.T. Ravolainen and J.P. Bryant. 2015. The role of vertebrate herbivores in regulating shrub expansion in the Arctic: A synthesis. *BioScience* 65: 1123-1133.
- Sweet, S.K., K. Griffin, H. Steltzer, L. Gough and N. Boelman. 2015. Greater deciduous shrub abundance extends the annual period of maximum tundra greenness and increases modeled net CO₂ uptake. *Global Change Biology* 21: 2394-2409.
- Smith, M.D., K. LaPierre, S.L. Collins, A.K. Knapp, K.L. Gross, J.E. Barrett, S.D. Frey, L. Gough, R.J. Miller, J.T. Morris, L.E. Rustad, and J. Yarie. 2015. Global environmental change and the nature of aboveground net primary productivity responses: Insights from long-term experiments. *Oecologia* 177: 935-947.

- Sweet, S.K., A. Asmus*, M.E. Rich*, J. Wingfield, L. Gough, and N.T. Boelman. 2015. NDVI as a predictor of canopy arthropod biomass in the Alaskan arctic tundra. *Ecological Applications* 25: 779-790.
- Gough, L., H. Bass†, and J.R. McLaren‡. 2015. Effects of increased soil nutrients on seed rain: a role for seed dispersal in the Greening of the Arctic? *Arctic, Antarctic, and Alpine Research* 47: 27-34.
- Boelman, N., L. Gough, J. Wingfield, S. Goetze, A. Asmus*, H. Chmura, J.S. Krause, J. Perez, S. Sweet and K. Guay. 2014. Greater shrub dominance alters breeding habitat and food resources for migratory songbirds in Alaskan arctic tundra. *Global Change Biology* 21: 1508-1520.
- Sweet, S., N. Boelman, L. Gough, and K. Griffin. 2014. Greater thaw depth enhances the growth and phenological development of woody deciduous shrubs in arctic tundra. *Arctic, Antarctic, and Alpine Research* 46:82-697.
- Sistla, S.A., J.C. Moore, R.T. Simpson, L. Gough, G.R. Shaver and J.P. Schimel. 2013. Twenty years of tundra warming restructures plant and soil communities without changing overall soil carbon pools. *Nature* 497: 615-618.
- Heskel, M., H. Greaves, A. Kornfeld, L. Gough, O.K. Atkin, M.H. Turnbull, G.R. Shaver and K.L. Griffin. 2013. Differential physiological responses to environmental change promote woody shrub expansion. *Ecology and Evolution*. DOI: 10.1002/ece3.525
- Rich, M.E.* , L. Gough, and N.T. Boelman. 2013. Arctic arthropod assemblages in habitats of differing shrub dominance. *Ecography* 9: 994-1003.
- Johnson, D.R.* and L. Gough. 2013. Two arctic tundra graminoids differ in tolerance to herbivory when grown with added soil nutrients. *Botany* 91:82-90.
- Kornfeld, A., M. Heskel, O.K. Atkin, L. Gough, K.L. Griffin, T.W. Horton, and M.H. Turnbull. 2013. Respiratory flexibility and efficiency are affected by simulated global change in arctic plants. *New Phytologist* 197:1161-1172.
- Rout, M.E.* , L. Gough, W.K. Smith and T.H. Chrzanowski. 2013. Impacts of an invasive grass, *Sorghum halepense*, on native tallgrass prairie: the role of allelopathy. *Biological Invasions* 15: 327-339. DOI 10.1007/s10530-012-0289-7.
- Gough, L., J.C. Moore, G.R. Shaver, R.T. Simpson, and D.R. Johnson*. 2012. Above- and belowground responses of arctic tundra ecosystems to altered soil nutrients and mammalian herbivory. *Ecology* 93:1683-1694.
- Gough, L., K.L. Gross, E.E. Cleland, C.M. Clark, S.L. Collins, K.N. Suding, J.E. Fargione, and S.C. Pennings. 2012. Incorporating clonal growth form clarifies the role of plant height in response to nitrogen addition. *Oecologia* 169:1053-1062.
- Watson, C.M.* and L. Gough. 2012. The role of temperature in determining distributions and coexistence of three species of *Plestiodon*. *Journal of Thermal Biology* 37:374-379.
- Moulton, C.A.* and L. Gough. 2011. Effects of soil nutrient availability on the role of sexual reproduction in an Alaskan tundra plant community. *Arctic, Antarctic, and Alpine Research* 43: 612-620.
- Cleland, E.E., C.M. Clark, S.L. Collins, J.E. Fargione, L. Gough, K.L. Gross, S.C. Pennings, and K.N. Suding. 2011. Patterns of trait convergence and divergence among native and exotic species in herbaceous plant communities are not modified by nitrogen enrichment. *Journal of Ecology* 99: 1327-1338.
- Boelman, N.T., L. Gough, J. McLaren‡ and H. Greaves. 2011. Does NDVI reflect variation in the structural attributes associated with increasing shrub dominance in arctic tundra? *Environmental Research Letters* 6:03550; doi: 10.1088/1748-9326/6/3/035501.
- Cherry, J.A.* and L. Gough. 2009. Trade-offs in plant responses to herbivory influence trophic routes of production in a freshwater wetland. *Oecologia* 161: 549-557.
- Wookey, P.A., R. Aerts, R.D. Bardgett, F. Baptist, K.A. Bråthen, H. Cornelissen, L. Gough, I. Hartley, D. Hopkins, S. Lavorel, S.F. Oberbauer, G.R. Shaver, and CAT-B Participants. 2009. Climate change-induced feedback mechanisms drive ecosystem responses in a greening Arctic. *Global Change Biology* 15: 1153-1172.

- Collins, S.L., K.N. Suding, E.E. Cleland, M. Batty, S.C. Pennings, K.L. Gross, J.B. Grace, L. Gough, J.E. Fargione, and C.M. Clark. 2008. Rank clocks and plant community dynamics. *Ecology* 89: 3534-3541.
- Cleland, E.E., C.M. Clark, S.L. Collins, J.E. Fargione, L. Gough, K.L. Gross, D.L. Milchunas, S.V. Pennings, W.D. Bowman, I.C. Burke, W.K. Lauenroth, G.P. Robertson, J.C. Simpson, G.D. Tilman, and K.N. Suding. 2008. Species responses to nitrogen fertilization in herbaceous plant communities, and associated species traits. *Ecology* 89:1175.
- Gough, L., K. Shrestha†, D.R. Johnson*, and B. Moon†. 2008. Long-term mammalian herbivory and nutrient addition alter lichen community structure in Alaskan dry heath tundra. *Arctic, Antarctic, and Alpine Research* 40:65-73.
- Clark, C.M., E.E. Cleland, S.L. Collins, J.E. Fargione, L. Gough, K.L. Gross, S.C. Pennings, K.N. Suding, and J.B. Grace. 2007. Environmental and plant community determinants of species loss following nitrogen enrichment. *Ecology Letters* 10:596-607.
- Wildová, R., L. Gough, T. Herben, C. Hershock and D.E. Goldberg. 2007. Architectural and growth traits differ in effects on performance of clonal plants: an analysis using a field-parameterized simulation model. *Oikos* 116:836-852.
- Gough, L., E.A. Ramsey†, and D.R. Johnson*. 2007. Plant-herbivore interactions in Alaskan arctic tundra change with soil nutrient availability. *Oikos* 116:407-418.
- Cherry, J.A.* and L. Gough. 2006. Contribution of seed bank to vascular plant assemblages on temporary floating islands. *Aquatic Botany* 85:29-36.
- Gough, L. 2006. Neighbor effects on germination, survival, and growth in two arctic tundra plant communities. *Ecography* 29:44-56.
- Pennings, S.C., C.M. Clark, E.E. Cleland, S.L. Collins, L. Gough, K.L. Gross, D.A. Milchunas, and K.N. Suding. 2005. Do individual plant species show predictable responses to nitrogen addition across multiple experiments? *Oikos* 110:547-555.
- Hobbie, S.E., L. Gough, and G.R. Shaver. 2005. Species compositional differences on different-aged glacial landscapes drive contrasting responses of tundra to nutrient addition. *Journal of Ecology* 93: 770-782.
- Suding, K.N., S.L. Collins, L. Gough, C.M. Clark, E.E. Cleland, K.L. Gross, D.A. Milchunas, and S.C. Pennings. 2005. Functional and abundance based mechanisms explain diversity loss due to soil fertilization. *Proceedings of the National Academy of Science* 102: 4387-4392.
- Hobbie, S.E. and L. Gough. 2004. Litter decomposition in moist acidic and non-acidic tundra with different glacial histories. *Oecologia* 140: 113-124.
- Herbert, D.A., E.B. Rastetter, L. Gough and G.R. Shaver. 2004. Species diversity along nutrient gradients: an analysis of resource competition in model ecosystems. *Ecosystems* 7: 296-310.
- Pauliukonis, N.* and L. Gough. 2004. Field evidence of limited clonal integration in four sedges that differ in ramet aggregation. *Plant Ecology* 173: 1-15.
- Gough L. and S.E. Hobbie. 2003. Responses of moist non-acidic arctic tundra to altered environment: productivity, biomass, and species richness. *Oikos* 102: 204-216.
- van Wijk, M.T., K.E. Clemmensen, G.R. Shaver, M. Williams, T.V. Callaghan, F.S. Chapin, III, J.H.C. Cornelissen, L. Gough, S.E. Hobbie, S. Jonasson, J.A. Lee, A. Michelsen, M.C. Press, S.J. Richardson, and H. Rueth. 2003. Long-term ecosystem level experiments at Toolik Lake, Alaska and at Abisko, Northern Sweden: Generalisations and differences in ecosystem and plant type responses to global change. *Global Change Biology* 10: 105-123.
- van Wijk, M.T., M. Williams, L. Gough, S.E. Hobbie, and G.R. Shaver. 2003. Luxury consumption of soil nutrients: a possible competitive strategy in above-ground and below-ground biomass allocation and root morphology for slow-growing arctic vegetation? *Journal of Ecology* 91:664-676.
- Gough, L., P.A. Wookey, and G.R. Shaver. 2002. Dry heath arctic tundra responses to long-term nutrient and light manipulation. *Arctic, Antarctic, and Alpine Research* 34:211-218.

- Gough, L., D.E. Goldberg, C. Hershock, N. Pauliukonis*, and M. Petru. 2002. Investigating the community consequences of competition among clonal plants. *Evolutionary Ecology* 15:547-563.
- Hobbie, S.E. and L. Gough. 2002. Foliar and soil nutrients in tundra on glacial landscapes of contrasting ages in northern Alaska. *Oecologia* 131: 453-462.
- Shaver, G.R., M.S. Bret-Harte, M.H. Jones, J. Johnstone, L. Gough, J. Laundre, and F.S. Chapin, III. 2001. Species composition interacts with fertilizer to control long-term change in tundra productivity. *Ecology* 82:3163-3181.
- Mittelbach, G.G., C.F. Steiner, S.M. Scheiner, K.L. Gross, H.L. Reynolds, R.B. Waide, M.R. Willig, S.I. Dodson, and L. Gough. 2001. What is the observed relationship between species richness and productivity? *Ecology* 82:2381-2396.
- Thompson, J.N., O.J. Reichman, P.J. Morin, G.A. Polis, M.E. Power, R.W. Sterner, C.A. Couch, L. Gough, R. Holt, D.U. Hooper, F. Keesing, C.R. Lovell, B.T. Milne, M.C. Molles, D.W. Roberts, and S.Y. Strauss. 2001. Frontiers of ecology. *BioScience* 51:15-24.
- Gough, L., C.W. Osenberg, K.L. Gross, and S.L. Collins. 2000. Fertilization effects on species density and primary productivity in herbaceous plant communities. *Oikos* 89:428-439.
- Gross, K.L., M.R. Willig, L. Gough, R. Inouye, and S. Cox. 2000. Patterns of species diversity and productivity at different spatial scales in herbaceous plant communities. *Oikos* 89:417-427.
- Gough, L., G.R. Shaver, J. Carroll†, D. Royer†, and J.A. Laundre. 2000. Vascular plant species richness in Alaskan arctic tundra: the importance of soil pH. *Journal of Ecology* 88:54-66.
- Gough, L. and J.B. Grace. 1999. Effects of environmental change on plant species density: comparing predictions with experiments. *Ecology* 80:882-890.
- Waide, R.B., M.R. Willig, G. Mittelbach, C. Steiner, L. Gough, S.I. Dodson, G.P. Juday, and R. Parmenter. 1999. The relationship between productivity and species richness. *Annual Review of Ecology and Systematics* 30:257-300.
- Rastetter, E.B., L. Gough, A.E. Hartley, D.A. Herbert, K.J. Nadelhoffer, and M. Williams. 1999. A revised assessment of species redundancy and ecosystem reliability. *Conservation Biology* 13:440-443.
- Gough, L. and J.B. Grace. 1998. Effects of flooding, salinity, and herbivory on coastal plant communities, Louisiana, USA. *Oecologia* 117:527-535.
- Gough, L. and J.B. Grace. 1998. Herbivore effects on plant species density at varying productivity levels. *Ecology* 79:1586-1594.
- Gough, L. and J.B. Grace. 1997. The influence of vines on an oligohaline marsh community: results of a removal and fertilization study. *Oecologia* 112:403-411.
- Marrs, R.H., J.B. Grace, and L. Gough. 1996. On the relationship between plant species diversity and biomass: a comment on a paper by Gough, Grace, and Taylor. *Oikos* 75:323-326.
- Gough, L., J.B. Grace, and K.L. Taylor. 1994. The relationship between species richness and community biomass: the importance of environmental variables. *Oikos* 70:271-279.
- Bertness, M.D., L. Gough, and S. Shumway. 1992. Salt tolerances and the distribution of fugitive salt marsh plants. *Ecology* 73:1842-1851.

Manuscripts Submitted or In Revision

- Kropp, H. et al. (L. Gough is one of 50 co-authors). In review. Shallow soils are warmer under trees and tall shrubs across arctic and boreal ecosystems. *Environmental Research Letters*.
- Min, E., M. Wilcots, S. Naeem, L. Gough, J.R. McLaren, R.J. Rowe, E. Rastetter, N. Boelman and K.L. Griffin. In review. Herbivore influence on carbon sink capacity of Alaskan dry heath tundra is sensitive to temperature and light. *Environmental Research Letters*.
- Lindén, E., L. Gough, and J. Olofsson. In revision. Large and small herbivores cause strong effects on Arctic tundra vegetation in Scandinavia and Alaska.

Green, M.L.*, A. Ponette-Gonzalez, J. McCullars†, and L. Gough. In revision. Nitrogen deposition effects on native prairie grasses along an urban development gradient in the Southern Great Plains, USA.

Peer-Reviewed Book Chapters

- Gough, L. 2016. Conducting research at the Arctic LTER: Bridging community and ecosystem ecology via collaborations. pp. 83-90 in Willig, M. and L. Walker (eds.) *Long Term Ecological Research: Changing the Nature of Scientists*. Oxford University Press, New York.
- Gough, L. 2014. Vignette 5.1. Plant Species Diversity in the Vicinity of Toolik Lake, Alaska. pp. 95-96 in Hobbie, J.E. and G. Kling (eds.) *Alaska's Changing Arctic: Ecological Consequences for Tundra, Streams, and Lakes*. Oxford University Press, New York.
- Shaver, G.R., J.A. Laundre, M.S. Bret-Harte, F.S. Chapin, III, A.E. Giblin, L. Gough, et al. 2014. Terrestrial Ecosystems at Toolik Lake, Alaska. pp. 90-142 in Hobbie, J.E. and G. Kling (eds.) *Alaska's Changing Arctic: Ecological Consequences for Tundra, Streams, and Lakes*. Oxford University Press, New York.
- Gough, L. 2012. Freshwater arctic tundra wetlands. pp. 371-385 in Batzer, D. and A. Baldwin (eds.), *Wetland Habitats of North America: Ecology and Conservation Concerns*. University of California Press, Berkeley.
- Keddy, P.A., L. Gough, J.A. Nyman, T. McFalls, J. Carter, and J. Siegrist. 2009. Pelt traders, alligator hunters, and runaway consumption of Gulf Coast marshes: a trophic cascade perspective on coastal wetland losses. pp. 115-133 in Silliman, B.R., M.D. Bertness, and D.R. Strong (eds.), *Human Impacts on Salt Marshes, A Global Perspective*. University of California Press, Berkeley.

Book Reviews and Other Articles

- Gough, L. and A.L. Asmus*. 2014. Review of *Tundra-Taiga Biology: Human, Plant, and Animal Survival in the Arctic* by R.M.M. Crawford. *Arctic, Antarctic, and Alpine Research* 4:1011-1018.
- Gough, L. 2009. How the Arctic LTER helped me prepare to be a mom. LTER Network News, Spring 2009. <http://news.lternet.edu/article235.html>

Research in the News and Public Outreach

- Interviewed for "Listening to the Arctic" radio documentary, June 2019, <https://beta.prx.org/stories/281334>
- Science News for Students*, January 2018, "Here's why scientists have been fertilizing the Arctic," <https://www.sciencenewsforstudents.org/article/heres-why-scientists-have-been-fertilizing-arctic>
- Frontier Scientists, 2015, "Migration" Videos, <http://frontierscientists.com/projects/animal-physiology-science/migration/>
- Audubon Magazine*, Sep-Oct 2013, Arctic Researchers Race to Uncover Effects of Global Warming on Songbirds. <http://www.audubon.org/magazine/september-october-2013/arctic-researchers-race-uncover>

Workshops and Panels

- 2019 NSF Office of Polar Programs Panel
- 2019 NSF-funded Faculty Workload and Rewards Study, Panelist for Leading Workload Reform: Department Chair Perspective
- 2018 Panelist for New Chairs Workshop, Towson University
- 2018 NSF-funded Faculty Workload and Rewards Study, Panelist for Concluding Workshop
- 2017 NSF Office of Polar Programs Panel

- 2016 NSF Division of Environmental Biology Panel
- 2012 LTER Veg-DB (Vegetation-Database) Workshop, Harvard Forest, MA
- 2011 Women Evolving Biological Sciences (WEBS) Symposium, NSF-funded workshop to retain women in ecology and environmental biology, Served as Mentor, Durham, NC
- 2011 LTER Synthesis and Hypothesis Testing Working Group, Hartford, CT
- 2010 Women Evolving Biological Sciences (WEBS) Symposium, NSF-funded workshop to retain women in ecology and environmental biology, Served as Mentor, Seattle, WA
- 2007 NSF Division of Environmental Biology Ecology Program Advisory Panel
- 2006 NSF Division of Environmental Biology Doctoral Dissertation Improvement Grant Panel
- 2003 Predicting Species Response to Changes in Resource Availability, Sevilleta LTER, New Mexico
- 2003 Predicting Species Response to Changes in Resource Availability, LTER All Scientists Meeting, Seattle, WA
- 2003 Species Responses to N Fertilization: an LTER Synthesis Workshop, hosted at UTA
- 2001 NSF ADVANCE Institutional Transformation Grant Panel
- 2000 NSF Division of Environmental Biology Doctoral Dissertation Improvement Grant Panel
- 1999 NSF Frontiers of Ecology Workshop
- 1996 Analysis of the Relationship Between Productivity and Diversity Using Experimental Results from the Long-Term Ecological Research Network, Working Group, National Center for Ecological Analysis and Synthesis, Santa Barbara, CA

Invited Talks

- 2018 Smithsonian Environmental Research Center, Edgewater, MD
- 2017 Department of Biological Sciences, Dartmouth College, Hanover, NH
- 2016 Department of Ecology and Environmental Science, Umeå University, Sweden
- 2015 Department of Biology, University of Denver, CO
- 2012 Department of Ecosystem Science and Management, Texas A&M University, College Station
- 2009 Department of Biology, University of Texas Arlington
- 2004 Department of Biology and Biochemistry, University of Houston, TX
- 2004 Environmental Science Program, Southern Methodist University, Dallas, TX
- 2003 Botanical Research Institute of Texas, Ft. Worth, TX
- 2000 Dauphin Island Sea Lab, AL
- 1998 Department of Biology, University of Michigan, Ann Arbor, MI
- 1998 Department of Ecology and Evolutionary Biology, Brown University, Providence, RI
- 1997 International Tundra Experiment Annual Workshop, Royal Holloway College, England
- 1997 Kellogg Biological Station, Michigan State University, Hickory Corners, MI
- 1997 The Ecosystems Center, Woods Hole, MA
- 1995 Department of Botany, University of Reading, England
- 1995 Ness Botanic Gardens, University of Liverpool, England

Invited Symposium and Organized Session Papers

- Boelman, N., L. Gough, K.L. Griffin, J.R. McLaren, E. Rastetter, and R.J. Rowe. Adding animals to the equation: Trophic interactions mediate carbon cycling in arctic tundra. Ecological Society of America Annual Meeting, Baltimore, MD, August 2015.
- Gough, L. Ecological monitoring at Toolik Field Station: lessons learned and challenges ahead. Arctic Biodiversity Congress, Trondheim, Norway, December 2014.
- Boelman, N., L. Gough and J.C. Wingfield. Trophic matches in northern Alaska: existing synchrony among climate, vegetation, arthropods and migratory songbirds. Organized Session: Multitrophic

- Level Responses to Climate Change in the Arctic Tundra Ecosystem, American Geophysical Union, Annual Meeting, San Francisco, CA, December 2011.
- Moore, J.C., L. Gough, R. Simpson, and D.R. Johnson*. Aboveground and below ground responses to nutrient additions and herbivore exclusion in arctic tundra ecosystems in northern Alaska. Organized Session: Multitrophic Level Responses to Climate Change in the Arctic Tundra Ecosystem, American Geophysical Union, Annual Meeting, San Francisco, CA, December 2011 (poster).
- Daly, K.M., H. Steltzer, N. Boelman, M.N. Weintraub, A. Darrouzet-Nardi, M.D. Wallenstein, P. Sullivan, L. Gough, et al. Lepidoptera larvae as an indicator of multi-trophic level responses to changing seasonality in an arctic tundra ecosystem. Organized Session: Multitrophic Level Responses to Climate Change in the Arctic Tundra Ecosystem, American Geophysical Union, Annual Meeting, San Francisco, CA, December 2011 (poster).
- Gough, L. Interactions between top-down and bottom-up factors in arctic tundra plant communities. Organized Oral Session: Examining Bottom-up and Top-Down Forces: Bringing Together Aquatic and Terrestrial Perspectives, Ecological Society of America, Annual Meeting, Austin, TX, August 2011.
- Gough, L. The cutting edge: Writing successful research grant proposals, Symposium on Essential Skills for Success in Wetland Science, Society of Wetland Scientists, Annual Meeting, Madison, WI, June 2009.
- Gough, L. The role of clonal plant growth form in community response to environmental change. Symposium on Clonal Plant Ecology, Ecological Society of America, Annual Meeting, Memphis, TN, August 2006.

Contributed Papers and Posters

- Suchocki, M.*, J. Sheppy†, M. Muller-Girard†, and L. Gough. The effects of fertilizer on a tundra plant community and plant-vole interactions. Ecological Society of America, Mid-Atlantic Regional Meeting, Bowie, MD, April 2019. (poster)
- Park, M.* and L. Gough. Invasion ecology of *Miscanthus sinensis*. Ecological Society of America, Mid-Atlantic Regional Meeting, Bowie, MD, April 2019.
- Grow, D.*, V. Beauchamp, and L. Gough. Short-term plant community impacts of an invasive tree removal. Ecological Society of America, Mid-Atlantic Regional Meeting, Bowie, MD, April 2019.
- Sible, J., J. Wojdak, L. Gough, P. Moss, and N. Mouchrek. Sustaining institutional change for inclusive excellence. Thematic Symposium. ASCN Transforming Institutions Conference, Pittsburgh, PA, April 2019.
- Moore, J.C., P. Budy, L. Gough, A. Huryn, A. Koltz, S.M. Parker, Y. Pressler, G.R. Shaver, and R. Simpson. The different responses of arctic terrestrial and aquatic food webs to long-term nutrient additions. American Geophysical Union Annual Meeting, Washington, DC, December 2018.
- Gough, L., R. Miranda, T. Atuobi, M. Hemm and C. Oufiero. Towson University Research Enhancement Program: Providing Authentic Research Experiences in the College Classroom to Better Educate All STEM Majors. AAC&U Transforming STEM Higher Education Conference, Atlanta, GA, November 2018 (poster).
- Grow, D.*, V. Beauchamp, and L. Gough. Escaping arboreta: Understanding the ecological impact of an invasive tree recently escaping cultivation. Ecological Society of America Annual Meeting, New Orleans, LA, August 2018 (poster).
- Gough, L. and J.R. McLaren. Long-term nutrient addition in arctic tundra alters decomposition rates through multiple mechanisms. Ecological Society of America Annual Meeting, New Orleans, LA, August 2018 (poster).

- Ghent, C., L. Gough, T. Atuobi, R. Miranda and M. Hemm. Towson University's Research Enhancement Program (TUREP). Network of STEM Education Centers National Conference, June 2018 (poster).
- Grow, D.*, V. Beauchamp, and L. Gough. Ecological impacts of an invasive tree recently escaping arboreta. Ecological Society of America, Mid-Atlantic Regional Meeting, Rutgers, NJ, April 2018.
- Gough, L., T. Atuobi, R. Miranda, C. Ghent and M. Hemm. TUREP: Providing authentic research experiences in the college classroom to better educate all STEM majors. Capitol Project Kaleidoscope Regional Network Conference, Stevenson University, MD, March 2018.
- Asmus, A.L.*, A.M. Koltz, J.R. McLaren, G.R. Shaver, and L. Gough. Bottom-up effects of experimental nutrient addition on arthropod assemblages in arctic tundra mediated by plant traits. Ecological Society of America, Annual Meeting, Portland, OR, August 2017.
- Pressler, Y., A.M. Koltz, A.L. Asmus*, R.T. Simpson, L. Gough, G.R. Shaver and J.C. Moore. Recovery and recoupling of above- and belowground food webs after an unprecedented arctic wildfire. Ecological Society of America, Annual Meeting, Portland, OR, August 2017.
- Green, M.L.* and L. Gough. Urbanization and nitrogen deposition in North Texas: Effects on the native prairie grass, little bluestem (*Schizachyrium scoparium*). Ecological Society of America, Annual Meeting, Ft. Lauderdale, FL, August 2016.
- Krause, J.S., J.H. Perez, H.E. Chmura, S.L. Meddle, K.E. Hunt, L. Gough, N. Boelman and J.C. Wingfield. Breeding in an extreme environment: the effects of interannual variation in snow cover and snow storms on the timing of arrival and stress physiology in Lapland longspurs. Society for Integrative and Comparative Biology, Annual Meeting, Portland, OR, January 2016.
- Perez, J.H., J.S. Krause, H.E. Chmura, S. Bowman, M. McGuigan, A.L. Asmus*, S.L. Meddle, K.E. Hunt, L. Gough, N.T. Boelman and J.C. Wingfield. Growing up in the Arctic: Nestling growth rates in two species of passerines. Society for Integrative and Comparative Biology, Annual Meeting, Portland, OR, January 2016.
- Boelman, N., L. Gough, J.C. Wingfield, J.S. Krause, H.E. Chmura, J. Perez, A.L. Asmus and S. Sweet. Arctic breeding songbirds cope with variability in the timing of spring onset. Ecological Society of America, Annual Meeting, Baltimore, MD, August 2015.
- McGuigan, M.A., J.S. Krause, H.C. Chmura, J.H. Perez, L. Gough, N.T. Boelman, M. Ramenofsky, and J.C. Wingfield. Spatial habitat use post-breeding: A radio-telemetry study in Gambel's White-crowned sparrows. Society for Integrative and Comparative Biology, Annual Meeting, Sacramento, CA, January 2015.
- Sweet, S., N.T. Boelman, K.L. Griffin, H. Steltzer, and L. Gough. Greater deciduous shrub abundance extends tundra peak season and increases modeled net carbon dioxide uptake. American Geophysical Union Annual Meeting, San Francisco, CA, December 2014.
- Asmus, A.L.*, L. Gough, N. Boelman, J. Wingfield, S. Sweet and others. Bugs in shrubs: arthropod community response to shrub expansion in the Alaskan Arctic. Arctic Biodiversity Congress, Trondheim, Norway, December 2014.
- McLaren, J.R. ‡ and L. Gough. Effects of increasing shrub abundance on litter production and decomposition in arctic tundra. Ecological Society of America, Annual Meeting, Sacramento, CA, August 2014.
- Chmura, H.E., J.S. Krause, J.H. Perez, S.K. Sweet, A.L. Asmus*, N.T. Boelman, L. Gough, and J.C. Wingfield. Interannual variability in arctic phenology and reproductive success in the White-crowned sparrow (*Zonotrichia leucophrys gambelii*) and Lapland longspur (*Calcarius lapponicus*). . Society for Integrative and Comparative Biology, Annual Meeting, Austin, TX, January 2014 (poster).
- Asmus, A.L.*, L. Gough, N.T. Boelman, J.C. Wingfield, S.K. Sweet, J.S. Krause, J.H. Perez, and H.E. Chmura. Multi-trophic impacts of shrub dominance on arctic arthropod assemblages in arctic tundra. Society for Integrative and Comparative Biology, Annual Meeting, Austin, TX, January 2014 (poster).

- McLaren, J.R.‡, M.J. van de Weg, L. Gough and G.R. Shaver. Increasing shrub abundance and N addition in arctic tundra affect leaf and root litter decomposition differently. American Geophysical Union Annual Meeting, San Francisco, CA, December 2013.
- Asmus, A.L.* and L. Gough. Poleward range expansion of jumping plant lice (Psyllidae) in Alaska. Entomological Society of America, Annual Meeting, Austin, TX, November 2013 (poster).
- Grover, J.P., H.V. Kojouharov, L.D. Mydlarz, L. Gough, and C. Kribs-Zaleta. A model for research-oriented education at the intersection of biology and mathematics: The undergraduate training in theoretical ecology research (UTTER) program. Ecological Society of America, Annual Meeting, Minneapolis, MN, August 2013 (poster).
- Gough, L., N.D. Bettez, and K.A. Slavik. Effects of long-term resource additions in arctic lake, stream, and tundra environments: Beyond NPP. Ecological Society of America, Annual Meeting, Minneapolis, MN, August 2013.
- McLaren, J.R.‡, M. van de Weg, L. Gough, and G.R. Shaver. Effects of increasing shrub abundance on leaf and root litter decomposition in arctic tundra. Ecological Society of America, Annual Meeting, Minneapolis, MN, August 2013.
- Buckeridge, K.M., J.R. McLaren‡, M.J. van de Weg, L. Gough, G.R. Shaver and J.P. Schimel. The impact of shrub encroachment and litter mixing on microbial exoenzyme activity. Ecological Society of America, Annual Meeting, Minneapolis, MN, August 2013.
- Krause, J. S., J.H. Perez, S.K. Sweet, A. Asmus*, K.R. Word, M.E. Rich*, J. Schas, J.C. Wingfield, L. Gough, and N. Boelman. Impacts of changing seasonality and the potential for trophic mismatches in the Arctic. Society for Integrative and Comparative Biology, Annual Meeting, San Francisco, CA, January 2013.
- McLaren, J.R.‡, L. Gough, and M.N. Weintraub. Seasonal variation in soil nitrogen availability across a fertilization chronosequence in moist acidic tundra. American Geophysical Union, Annual Meeting, San Francisco, CA, December 2012.
- Moore, J.C., L. Gough, R.T. Simpson and D. Johnson*. Aboveground and belowground responses to nutrient additions and herbivore exclusion in arctic tundra ecosystems in northern Alaska. LTER All Scientists Meeting, Estes Park, CO, September 2012 (poster).
- Gough, L., N. Boelman, J. Wingfield, et al. Effects of increasing shrubs in arctic tundra on associated arthropods and migratory songbirds. LTER All Scientists Meeting, Estes Park, CO, September 2012 (poster).
- Smith, M., K. LaPierre, J. Barrett, S. Collins, S. Frey, L. Gough, K.L. Gross, R. Miller, J. Morris, L. Rustad and J. Yarie. Assessing ecosystem sensitivity to chronic resource alterations: a synthesis of long-term experiments. LTER All Scientists Meeting, Estes Park, CO, September 2012 (poster).
- McLaren, J.R.‡ and L. Gough. Shrub abundance and seasonal variation in ecosystem properties across a fertilization chronosequence in moist acidic tundra. Ecological Society of America, Annual Meeting, Portland, OR, 2012.
- McLaren, J.R.‡ and L. Gough. Shrub abundance and seasonal variation in ecosystem properties across a fertilization chronosequence in moist acidic tundra. International Polar Year 2012 Conference, Montréal, Canada (poster).
- Cavallo, A.M.L., Hale, G., Mydlarz, L., Jorgensen, T., Gough, L., Lopez, R., Hoke, K., & Mergele, J. High School Earth and Life Science, and Middle Level Science and Mathematics: Preparing Teachers to Teach the Next Generation. Robert Noyce Teacher Scholarship Program Conference of the National Science Foundation and American Association for the Advancement of Science, Washington, DC. May 2012.
- Grover, J.P., H.V. Kojouharov, B. Scarbrough, A. Prieto Langarica, L.D. Mydlarz, L. Gough, D.L. Hawkins, C. Kribs-Zaleta and B. Chen-Charpentier. Research-oriented education at the intersection of biology and mathematics: The undergraduate training in theoretical ecology research (UTTER) program. Ecological Society of America, Annual Meeting, Austin, TX, 2011 (poster).

- Gross, K.L., L. Gough, K.N. Suding, and E.E. Cleland. Moving beyond growth form: Predicting species responses to nutrient addition. Ecological Society of America, Annual Meeting, Austin, TX, 2011.
- Cavallo, A.M.L., Hale, G., Mydlarz, L., Jorgensen, T., Gough, L. & Lopez, R. Expanding the Effort: Recruitment, Preparation and Induction of Middle Level Science and Math, and Secondary Earth and Life Science Teacher Candidates in the NSF Noyce Program II. Robert Noyce Teacher Scholarship Program Conference of the National Science Foundation and American Association for the Advancement of Science, Washington, DC, July 2011.
- Gough, L., J.C. Moore, G.R. Shaver, R.T. Simpson, and D.R. Johnson*. An aboveground and belowground test of EEH in Alaskan arctic tundra. Ecological Society of America, Annual Meeting, Albuquerque, NM, 2009.
- Spasojevic, M.J., S.C. Pennings, S.L. Collins, C. Clark, E. Cleland, L. Gough, K.L. Gross, and K.N. Suding. Predicting community response to N-enrichment with SLA: a multisystem test. Ecological Society of America, Annual Meeting, Albuquerque, NM, 2009.
- Watson, C. M.* and L. Gough. Comparative thermal biology of three morphologically similar syntopic lizards of the genus *Plestiodon*. Evolution Meeting, Minneapolis, MN, 2008.
- Collins, S., K. Suding, E. Cleland, M. Batty, S.C. Pennings, K.L. Gross, J.B. Grace, L. Gough, J.E. Fargione, and C. Clark. Rank clocks and plant community dynamics. Ecological Society of America, Annual Meeting, San Jose, CA, 2007.
- Cleland, E., K. Suding, C. Clark, S. Collins, J. Fargione, L. Gough, J. Grace, K. Gross, and S. Pennings. Crashing the party: non-native plant species have different traits than native species in a cross-site synthesis of fertilization studies. Ecological Society of America, Annual Meeting, Memphis, TN, 2006.
- Johnson, D.* , L. Gough, and E. Ramsey†. Nutrient amendment and herbivory interact differently for five arctic Alaska plant species. Ecological Society of America, Annual Meeting, Memphis, TN, 2006.
- Clark, C.M., E.E. Cleland, S.L. Collins, J. Fargione, L. Gough, J. Grace, K.L. Gross, D. Milchunas, S. Pennings and K.N. Suding. Predicting the loss of biodiversity with nitrogen addition cross North American grasslands: abiotic vs. biotic drivers. Ecological Society of America, Annual Meeting, Montreal, 2005.
- Fargione, J., S. Pennings, C. Clark, E. Cleland, L. Gough, J. Grace, K. Gross, S. Collins, and K. Suding. A negative relationship between species richness and productivity response to N addition in a synthesis of N fertilization studies. Ecological Society of America, Annual Meeting, Montreal, 2005.
- Rout, M.* and L. Gough. *Sorghum halepense* displaces the common native prairie grass *Schizachyrium scoparium*: the possible role of allelopathy. Ecological Society of America, Annual Meeting, Montreal, 2005.
- Cherry, J.A.* and L. Gough. The effects of herbivory on growth, production, and resource allocation in *Nymphaea odorata*. Ecological Society of America, Annual Meeting, Portland, OR, 2004.
- Gough, L. Can we predict plant response to nitrogen based on clonality? LTER All Scientists Meeting, Seattle, WA, 2003.
- Gough, L. Ongoing research in populations and communities at the Arctic LTER. LTER All Scientists Meeting, Seattle, WA, 2003.
- Goldberg, D.E., L. Gough and C. Hershock. Traits determining competitive ability in clonal plants. Seventh Clonal Plant Workshop, Kuusamo, Finland, 2003.
- Hobbie, S. E. and L. Gough. The influence of glacial history on ecosystem processes in arctic Alaskan tundra. Carey Conference X, Ecosystem Function in Heterogeneous Landscapes, Institute for Ecosystem Studies, Millbrook, NY, 2003 (poster).
- Gough, L. and S.E. Hobbie. Effects of four years of warming and fertilization on species-rich moist non-acidic tundra in Alaska. Ecological Society of America, Annual Meeting, Tucson, AZ, 2002.

- Cherry, J.A.* and L. Gough. Changes in emergent plant community composition after a natural substrate disturbance in an Alabama lake. Ecological Society of America, Annual Meeting, Tucson, AZ, 2002 (poster).
- Cherry, J.A.* and L. Gough. The effects of herbivory on the growth and production of *Nymphaea odorata*. Society of Wetland Scientists, Annual Meeting, Lake Placid, NY, 2002.
- Pauliukonis, N.* and L. Gough. The effects of rhizome severing on growth of four clonal sedges that differ in ramet aggregation. Society of Wetland Scientists, Annual Meeting, Lake Placid, NY, 2002.
- Cherry, J.A.* and L. Gough. The effects of herbivory on the growth and production of *Nymphaea odorata*. Association of Southeastern Biologists, Annual Meeting, Boone, NC, 2002.
- Gough, L., S.E. Hobbie, and G.R. Shaver. Understanding arctic ecosystem response to climate change: the role of individual species. NSF Arctic System Science All-Hands Meeting, Seattle, WA, 2002 (poster).
- Hobbie, S.E., L. Gough, and G.R. Shaver. Contrasting responses of plant production and biomass to nutrient addition on landscapes with different glacial histories. NSF Land-Atmosphere-Ice Interactions All-Hands Meeting, Salt Lake City, UT, 2001 (poster).
- Gough, L. Response of arctic tundra to nutrient addition and warming: the role of clonal plant growth form. Ecological Society of America, Annual Meeting, Madison, WI, 2001.
- Pauliukonis, N.*, L. Gough, and D.E. Goldberg. The role of clonal integration in the survival and growth of four wetland plant species. Ecological Society of America, Annual Meeting, Madison, WI, 2001.
- Gough, L. Understanding plant community and ecosystem dynamics through insights from clonal plant biology. Clone 2000: Current Progress and Developments in Clonal Plant Research, Obergurgl, Austria, 2000.
- Pauliukonis, N.*, L. Gough, and D.E. Goldberg. The effects of clonal integration and community competition on the growth of four clonal sedges in a calcareous fen of southwestern Michigan. Clone 2000: Current Progress and Developments in Clonal Plant Research, Obergurgl, Austria, 2000 (poster).
- Doles, J.L., J. Moore, G.R. Shaver, and L. Gough. The effects of nutrient addition in the arctic tundra on soil and moss-inhabiting mesofauna. Ecological Society of America and British Ecological Society Joint Symposium Meeting, Orlando, FL, 2000 (poster).
- Gough, L. and G.R. Shaver. Plant species diversity, plant biomass, and soil nutrients in acidic and non-acidic Alaskan arctic tundra, Ecological Society of America, Annual Meeting, Spokane, WA, 1999.
- Gough, L. and G.R. Shaver. Why is non-acidic tundra so species rich: an examination of northern Alaska plant communities. Society of Wetland Scientists, Annual Meeting, Anchorage, AK, 1998.
- Gough, L., C.W. Osenberg, K.L. Gross, and S.L. Collins. Fertilization effects on species density, richness, and productivity in herbaceous plant communities. Ecological Society of America, Annual Meeting, Baltimore, MD, 1998.
- Willig, M.W., K.L. Gross, S. Cox, and L. Gough. Scale-dependence in the relationship between productivity and species density of low stature vascular plants. Ecological Society of America, Annual Meeting, Baltimore, MD, 1998.
- Gough, L. and J.B. Grace. The influence of vines on an oligohaline marsh community: results of a removal and fertilization study. Ecological Society of America, Annual Meeting, Providence, RI, 1996.
- Gough, L. and J.B. Grace. Plant species richness changes due to experimental manipulations in a Louisiana coastal marsh. Ecological Society of America, Annual Meeting, Snowbird, UT, 1995.
- Gough, L. and J.B. Grace. The relationship between species richness and community biomass: the importance of environmental variables. Ecological Society of America, Annual Meeting, Madison, WI, 1993.

Teaching Experience

TU	Undergraduate: Biodiversity Undergraduate/Graduate: Urban Ecology Graduate: Global Change Biology
UTA	Undergraduate: Plant Science (lecture and laboratory), Probability and Random Processes in Biology, Seminar in Mathematical Biology, UTeach Research Methods Undergraduate/Graduate: Plant Ecology Graduate: Wetlands Ecology, Ecology Journal Club, Principles of Ecology
UA	Undergraduate: General Ecology, Introductory Biology for Non-Majors Graduate: Statistics in Ecological Research, Community Ecology
LSU	Undergraduate: Biology for Non-Majors Laboratory, General Botany Laboratory

Graduate Students (all Biology, UT Arlington unless noted)

Ashley Asmus, Ph.D., 2012-2017
Michelle Green, Ph.D., 2010-2016
C. Matthew Watson, Ph.D., 2005-2008
David R. Johnson, Ph.D., 2003-2008
Julia Cherry, Ph.D. (Biology, University of Alabama), 2000-2005

Sara Kramer, M.S. student, Environmental Science, Towson, 2020-
Nicole Williamson, M.S. student, Environmental Science, Towson, 2019-
Matt Suchocki, M.S., Biology, Towson, 2017-2020
David Grow, M.S., Biology, Towson, 2016-2019
Margaret Park, M.S., Environmental Science, Towson, 2016-2019
Heather Bass, M.S., Environmental and Earth Science, UT Arlington, 2013-2015
Matt Rich, M.S., 2010-2012
Jayme Walton, M.S., 2009-2012
Carol Moulton, M.S., 2006-2009
Carolyn Hess, M.S., 2006-2008
Amie Treuer, M.S., 2004-2006
Marnie Rout, M.S., 2003-2005
Nijole Pauliukonis Wellendorf, M.S. (Biology, University of Alabama), 2000-2002

Opponent for Ph.D. Students

Dr. Matteo Petit Bon, student of Professor Kari Anne Bråthen, Department of Biosciences, Fisheries, and Economics, UiT The Arctic University of Norway, August 2020

Dr. Hélène Barthelemy, student of Professor Johan Olofsson, Department of Ecology and Environmental Science, Umeå University, Sweden, June 2016

Postdoctoral Scientist

Jennie McLaren, UT Arlington, 2010-2012

Editorial Board Service

Appointed member, editorial board of *Arctic, Antarctic, and Alpine Research*, Jan 2011-

Appointed member, editorial board of *Oecologia*, Feb 2011-2016

Appointed member, editorial board of *Ecology* and *Ecological Monographs*, Jan 2006-Aug 2008,
Jan 2010-Jan 2011

Manuscript Reviews

American Journal of Botany, American Naturalist, Annals of Botany, Applied Vegetation Science, Arctic, Antarctic and Alpine Research, Canadian Journal of Botany, Castanea, Community Ecology, Ecography, Ecological Applications, Ecology and Ecological Monographs, Ecology Letters, Ecology and Society, Ecoscience, Ecosystems, Evolutionary Ecology, Folia Geobotanica, Global Change Biology, Global Ecology & Biogeography, Journal of Applied Ecology, Journal of Ecology, Journal of Geophysical Research-Atmospheres, Journal of Vegetation Science, Nature, New Phytologist, Northwest Science, Oecologia, Oikos, Plant and Soil, Plant Ecology, Science, Wetlands

Proposal Reviews

U.S. National Science Foundation; National Sciences and Engineering Research Council of Canada; Ohio Agricultural Research and Development Center; Association for Women in Science Educational Foundation Pre-doctoral Fellowship Proposals; Georgia Sea Grant College Program; U.S. Civilian Research and Development Foundation Georgian-U.S. Bilateral Grants Program; Earthwatch Institute; book proposals to Springer; National Geographic; Texas Academy of Science

Departmental, College and University Service

2019- Co-Chair, Council of Chairs, Towson
 2015-2019 Member, Council of Chairs, Towson
 2015- Member, Chairs Council, Fisher College of Science and Mathematics, Towson
 2013-2015 Member, Undergraduate Assembly, UTA
 2013-2015 Chair, Undergraduate Curriculum Committee, Biology Department, UTA
 2005-2015 Faculty Mentor, UTA; mentoring one assistant professor in another college
 2005-2015 Member, Promotion and Tenure Committee, Biology Department, UTA
 2005-2015 Chair, Greenhouse Committee, Biology Department, UTA
 2003-2015 Appointed Member, Graduate Studies Committee, Environmental and Earth Sciences Program, UTA
 2002-2015 Member, Graduate Studies Committee, Biology Department, UTA
 2013-2014 Proposal Reviewer, Phi Sigma, Biology Department, UTA
 2013-2014 Member, Chair Search Committee, Biology Department, UTA
 2013-2014 Member, College of Science Promotion and Tenure Committee, UTA
 2012-2013 Member, Strategic Planning Committee, Biology Department, UTA
 2004, 2007, Judge, Annual Celebration of Excellence by Students, undergraduate and graduate
 2009, 2013 student oral sessions, UTA
 2012 Organizer, Biology Undergraduate Research Symposium, UTA
 2011-2012 Member, Ecology Search Committee, Biology Department, UTA
 2007-2008, Graduate Advisor, Biology Department, UTA
 2009-2011
 2010-2011 Member, Ecosystems Ecology Search Committee, Biology Department, UTA
 2006-2007, Member, Advisory Committee, Biology Department, UTA
 2009-2010
 2007-2008 Member, Science, Technology, Engineering and Mathematics Gender Equity Committee,
 UTA
 2006-2008 Chair, Graduate Studies Committee, Biology Department, UTA

- 2005-2008 Faculty Mentor, Biology Department, UTA; mentoring three assistant professors in the Biology Department
- 2006 Chair, Evolutionary Biology/Ecology Search Committee, Biology Department, UTA
- 2004-2005 Faculty Advisor, National Science Teachers Association, UTA Chapter
- 2004 Faculty Mentor, McNair Scholars Program, to Elizabeth Ramsey, Biology major, UTA
- 1999-2001 Initiated and coordinated the Teaching Advancement Program (TAP), Department of Biological Sciences, UA; mentoring program for graduate students to teach several lectures in introductory biology courses
- 2000-2001 Member, Curriculum Committee, Department of Biological Sciences, UA
- 2000 Initiated and organized Department of Biological Sciences undergraduate research poster session, UA

Professional Service and Outreach

- 2020- Arctic LTER Representative, LTER Diversity and Inclusion Committee
- 2020 Invited Speaker, Women in Science Forum, Towson University
- 2017 Panel Participant, Million Women Mentors Maryland, Women in STEM Summit, Baltimore, MD
- 2016 Guest Speaker, Tri Beta Induction Ceremony, Towson University
- 2011- Member, Executive Committee, Arctic LTER (Long-Term Ecological Research)
- 2012-2015 Member, Consortium Board, Lake Lewisville Environmental Learning Area, Lewisville, TX
- 2012-2015 Member, Science Advisory Committee, Botanical Research Institute of Texas, Ft. Worth, TX
- 2009-2013 Member, NEON Domain Science and Education Coordination Committee for Domain 11 (Southern Plains)
- 2009-2010 Mentor, Society of Wetland Scientists, Women in Wetlands section
- 2009 Career Panel Participant, SACNAS (Society for the Advancement of Chicanos and Native Americans in Science) National Meeting, Ecological Society of America sponsored field trip, Dallas, TX
- 2001, 2002, 2009 Served as Braun/Buell Award judge for outstanding graduate student presentation at Ecological Society of America annual meeting
- 2008-2009 Member, U.S. Climate Change Science Program Carbon Cycle Interagency Working Group, representing NSF
- 2006, 2008 Participant in NSF-funded TREC (Teachers and Researchers Exploring and Collaborating) program to match arctic researchers with teachers; sponsored summer research experience at Toolik Lake, AK by Ms. Charla Jordan, junior high school science teacher, Price, TX and Ms. Cathy Campbell, junior high science teacher, Ann Arbor, MI
- 2003 Judge, Botany Category, Texas Science and Engineering Fair
- 2001 Presided over session entitled "Elevated CO₂ and Global Change" at Ecological Society of America annual meeting
- 1997, 1998 Organized "Toolik Talking Shop," weekly series for investigators to present brief talks about arctic research at Toolik Lake, Alaska; organized REU poster session, Toolik Lake LTER
- 1997-1998 Coordinator, Ecosystems Center Seminar Series, MBL

Additional Education, Service and Outreach

- 2015- Visiting Biologist, Timonium Elementary School and Ridgely Middle School, MD
- 2016- Career Day Speaker, Ridgely Middle School, Lutherville, MD
- 2015 Visiting Biologist, Coppell Middle School West, Coppell, TX

- 2010-2015 Visiting Biologist, Cottonwood Creek Elementary School, Coppell, TX
- 2014 Guest speaker, Sierra Club, Dallas Chapter
- 2014 Guest speaker, North Texas Master Naturalists
- 2013 Guest speaker, Dallas Chapter of the Native Plant Society of Texas
- 2011 Guest speaker on global change in the Arctic in UTA's Contemporary Science course for secondary science teachers pursuing a master's degree
- 2010 Hands-on presentation on seeds and plants to 1st grade students, Austin Elementary School, Coppell, TX
- 2009, 2010 Hands-on science presentation on global warming in the Arctic at Expanding Your Horizons in Math and Science conference for junior high school girls, UTA
- 2009 Science Day volunteer, Bannockburn Elementary School, Bethesda, MD
- 2006-2008 Nature walk leader, Smart Start Preschool, Coppell, TX
- 2006 Participant in Toyota TAPESTRY proposal (with the National Science Teachers Association) from Reagan Middle School, Grand Prairie, TX to request funding for an outdoor learning center and wetland restoration project
- 2005, 2006 Guest Speaker on Women in Science in UTA Course "Contemporary Science" for current secondary science teachers pursuing a master's degree
- 2003, 2004 Guest Speaker in UTA Education/Women's Studies Course "Women in Science"
- 2000 Presentation on Global Change in the Arctic to Tuscaloosa Audubon Society
- 1995 Women's Center Advisory Board, LSU, appointed member
- 1992-1994 Women's and Gender Studies Outreach Committee, LSU, appointed member
- 1992-1993 Dean of Students' Safer Campus Committee, LSU, appointed member

Other Volunteering

- 2020 Assistant Coach and Head Coach, LTRC Soccer, Timonium, MD
- 2015-2018 Garden Volunteer, Timonium Elementary, Timonium, MD
- 2013-2015 Founder/Chair, Sustainability Committee, Cottonwood Creek Elementary, Coppell, TX
- 2012-2013 Weekly Electronic Newsletter Editor, Cottonwood Creek Elementary PTO, Coppell, TX
- 2010-2013 Team Parent, Coppell Youth Soccer Association, Coppell, TX

Professional Societies

- Botanical Society of America
- Ecological Society of America