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EDUCATION

Columbia University, Graduate School of Arts and Sciences, *New York, NY*

Ph.D. in Earth and Environmental Science 2015
Concentrations: Plant Physiology, Remote Sensing, and Ecology
Dissertation: The impact of deciduous shrub dominance on phenology, carbon flux, and arthropod biomass in the Alaskan arctic tundra

M.Phil. in Earth and Environmental Science 2013
3.9 GPA (of possible 4.0); 14 credit hours
Thesis: Greater deciduous shrub dominance extends the annual period of maximum tundra greenness and increases modeled net CO_2 uptake

M.A. in Earth and Environmental Science 2012
3.9 GPA (of possible 4.0); 41 credit hours
Thesis: Tall deciduous shrubs offset delayed start of growing season through rapid leaf development in the Alaskan arctic tundra

State University of New York at Plattsburgh, *Plattsburgh, NY*

B.A. in Earth and Environmental Science 2005
Major: Environmental Science (minor in Cultural Anthropology)
3.9 GPA (of possible 4.0); 113 credit hours
Graduated Suma Cum Laude; Dean's list every semester

RESEARCH EXPERIENCE

New York State Energy Research & Development, *Cornell University, Ithaca, NY* 2020
Current research focuses on climate change mitigation and resiliency and investigates on-farm pyrolysis of dairy manure to address climate change, make farms more resilient to extreme weather events, and protect the social and environmental wellbeing of local areas.

The Atkinson Center for a Sustainable Future, *Cornell University, Ithaca, NY* 2019
The Nature Conservancy (TNC), *California State Office, San Francisco, CA*
Postdoctoral Researcher with Drs. Johannes Lehman, Jonathan Schuldt (Cornell University) and Deborah Bossio (TNC)

Project title: *Natural Climate Solutions: "Size of the prize: Establishing soil carbon sequestration potentials"*
Project description: This project is part of an ongoing effort to start long-term collaborations between Cornell University and TNC soil groups. It focuses on the potential of global soils to sequester carbon in order to halt and potentially reverse climate change. It hopes to identify constraints and solutions to the scaling up of investment in soil carbon. It also plans to model and better understand public opinion, attitudes, and acceptance of soil carbon sequestration as a means to mitigate climate change (particularly in the United States).
Specific duties include: (1) developing a national poll to survey the U.S. public about soil carbon sequestration; (2) conducting interviews and focus groups with decision-makers, policy-makers, and key people potentially able to influence soil carbon sequestration on a national and global scale; (3) scheduling regular meetings and conference calls to keep the team on track.

The Atkinson Center for a Sustainable Future, *Cornell University, Ithaca, NY* 2018-2019
Postdoctoral Researcher with Drs. Richard Stedman and Nelson Hairston (Cornell University)
Project title: *Harmful Algal Blooms in Lakes – a Legacy of Past Enrichment: Measurement, Modeling, and Management*
Project description: This project offers residents of Honeoye Lake a variety of practical solutions to the harmful algal bloom problem. As a key component of successful implementation of a management strategy, the project assesses the community acceptability of various solutions, the factors underlying this acceptability, and provides insights into elements that might increase acceptability. In addition to producing a practical solution to the Honeoye Lake harmful algal bloom problem, this effort will provide insight into strategies for encouraging more efficient lake management for legacy nutrient effects in lakes regionally and globally, thus promoting sustainability of water bodies across upstate New York and elsewhere. This will become more important as climate change alters the internal dynamics of regional lakes.
Specific duties included: (1) developing interview guides for community members; (2) conducting interviews and with local community members.

The Atkinson Center for a Sustainable Future, *Cornell University, Ithaca, NY*
The Nature Conservancy (TNC), *New York State Office, Albany, NY* 2016-2018
NatureNet Science Fellows Postdoctoral Research Fellow with Drs. David Wolfe (Cornell) and Rebecca Benner (TNC)
Project title: *Adapting to Climate Change – 'climate smart' agriculture*
Project description: This project investigated farmer coping mechanisms and adaptations related to extreme weather events, such as drought and flooding, that are occurring and will continue to occur more frequently due to climate change in some regions. This was an effort to better understand how farmers view extreme weather events, as well as how farmers were impacted by and how they responded to such events. This research helped inform New York State agricultural agencies, such as Soil and Water Conservation Districts, the Farm Bureau, and Cornell Cooperative Extension, about ways in which they can help farmers better prepare for future drought and flood events.
Specific duties included: (1) gathering and merging existing data on crop distribution and agricultural water use, agricultural practices, and climate and hydrology; (2) investigating current and future vulnerabilities, particularly regarding water quantity and quality; and (3) developing agricultural management recommendations to enhance agricultural resiliency to climate change.

I also participated in networking and training activities associated with the NatureNet Fellows program, and provided support for other collaborative efforts between Cornell supervisor, David Wolfe and The Nature Conservancy (including The NY State Soil Health Roadmap).

Lamont-Doherty Earth Observatory, *Columbia University, New York, NY* 2015-2016
Postdoctoral Research Scientist with Dr. Natalie Boelman
Project title: *Arctic phenology and songbird migration*
Project description: This project brought together five years of multi-institutional collaborative research on the multi-trophic impacts of climate change in the Arctic tundra. It investigated how multiple meteorological and climatological factors effect plant and insect communities, and, in turn, migratory songbird reproductive success.
Specific duties included: (1) conducting analysis of large quantities of data from a five-year, collaborative, multi-university study in the Alaskan arctic tundra pertaining to vegetation, climate, arthropods, and songbirds; (2) bringing together and analyzing data from above listed factions; (3) providing technical support, maintaining open lines of communication between collaborators, and helping in the preparation and publication of manuscripts.

Dept. of Earth & Environmental Science, *Columbia University, New York, NY* 2010-2014
Graduate Research Scientist with Drs. Natalie Boelman and Kevin Griffin
Project title: *Phenology, Carbon Flux, and Arthropod Biomass in the Arctic Tundra*
Conducted graduate research in the Alaskan arctic tundra using field surveys, remote sensing and various environmental monitoring techniques. Research focused on the impacts of climate change, inter-annual variability, and changing seasonality on interactions among vegetation, insects and songbird communities. See dissertation for more detailed information: https://doi.org/10.7916/D8ZG6RV4

WH Miner Research Institute, *Chazy, NY* 2004
Undergraduate Research Experience with SUNY Plattsburgh
Participated in the Applied Environmental Science Program through SUNY Plattsburgh. Lived on campus and attended full-day courses that integrated theory developed in lectures with hands-on experience in indoor and outdoor labs dealing with soil, forestry, and the agricultural environment interface.

RESEARCH INTERESTS

My graduate research at Columbia University (working with Drs. Boelman and Griffin) focused on: (1) understanding the ways in which Arctic warming in northern Alaska is altering tundra vegetation phenology and productivity; and (2) developing near surface remote sensing techniques to quantify changes in vegetation form and function, and in primary consumer (arthropod) communities. I learned a large suite of field and lab techniques that include environmental monitoring, near surface remote sensing, measures of vegetation form and function, arthropod sampling, as well as measures of songbird reproductive success.

My postdoctoral research at Cornell University in collaboration with The Nature Conservancy (TNC) (working with Drs. Wolfe and Benner) focused on identifying vulnerabilities for New York State water resources associated with climate change and agriculture. This research took advantage of the extreme drought of 2016 and the extreme rainfalls of 2017 to investigate ways

in which climate change impacts agriculture and farms across NY, how farmers react to extreme weather events, and how this ultimately impacts water resources.

My second postdoctoral research position at Cornell (working with Drs. Hairston and Stedman) focused on identifying the causes and solutions of harmful algal blooms (HABs) on Honeoye Lake in New York State's Finger Lakes Region. My specific role in the research focused on the social science aspect of HABs and how lake users and homeowners think about HABs and the best way to share and decipher scientific knowledge. This research was also an effort to understand how willing and able citizens are to stay involved in managing water quality issues when the causes and solutions are extraordinarily complicated.

My current postdoctoral position at Cornell in collaboration with TNC (working with Drs. Lehman and Schuldt) focuses on the paradigm surrounding soil carbon in the U.S. and how to get that to shift in order to tap in to the potential of soil carbon sequestration as a climate mitigation strategy. Currently there is a disconnect between soils and society, which is likely due to a misunderstanding, or lack of understanding, about soil carbon and its role in the climate. The environmental benefits of increased soil carbon are far reaching and important enough to warrant prioritization of increasing soil carbon storage on a national and global scale.

TEACHING EXPERIENCE

Teaching Assistant 2012-2013
Earth and Environmental Science, *Columbia University, New York, NY*
Organized and taught weekly labs and field trips; attended course lectures; held office hours; and graded exams and lab reports in Spring 2012 and 2013 for Life Systems (EESC V2300).

Mentor 2012-2014
Toolik Field Station, *University of Alaska, Fairbanks, AK*
Mentored undergraduate research assistants during summer field work (and beyond) conducted at a remote arctic tundra field station in Alaskan.

Lab Assistant 2003
Ecology, *State University of New York at Plattsburgh, Plattsburgh, NY*
Provided support for students and professor in the laboratory and the field in Fall 2003 for Ecology (ENV 304).

FELLOWSHIPS, AWARDS, AND HONORS

Atkinson Center for a Sustainable Future:
Rapid Response Fund ($1,000) 2018

IOP Publishing:
Reviewer of the Year for *Environmental Research Letters* (award) 2016

Cornell University:
NatureNet Science Fellowship (~ $75,000 per year) 2016-2018

Columbia University:

Faculty Teaching Fellowship (~ $65,000 per year)	2010-2015
James D. Hayes Graduate Student Research Grant ($4,000)	2012
Bruce C. Heezen Memorial Prize ($1,000)	2015

State University of New York, Plattsburgh:

Presidential Scholarship (~ $40,000 per year)	2001-2005
James Fitzpatrick Scholarship in Environmental Science ($30,000)	2004
Academic Excellence-NYHESC Scholarship ($5,000)	2001
Outstanding Graduating Senior in Environmental Science (award)	2005

PEER-REVIEWED PUBLICATIONS

Sweet SK, Gough L, Griffin KL, Boelman NT (2014) Tall deciduous shrubs offset delayed start of growing season through rapid leaf development in the Alaskan arctic tundra. *Arctic, Antarctic, and Alpine Research*, 46:694-709. URL: http://www.bioone.org/doi/abs/10.1657/1938-4246-46.3.682.

Boelman NT, Gough L, Wingfield J, Goetz S, Asmus A, Chmura HE, Krause J, Perez J, **Sweet S**, Guay KC (2014) Greater shrub dominance alters breeding habitat and food resources for migratory songbirds in Alaskan arctic tundra. *Global Change Biology*, 21:1508-1520. URL: http://onlinelibrary.wiley.com/doi/10.1111/gcb.12761/abstract;jsessionid=3D36C29F1692F8E0B0F7DB0FC1E9A4A3.f02t04.

Sweet SK, Asmus A, Rich ME, Gough L, Wingfield J, Boelman NT (2015) NDVI as a predictor of canopy arthropod biomass in the Alaskan arctic tundra. *Ecological Applications*, 25:779-790. URL: http://onlinelibrary.wiley.com/doi/10.1890/14-0632.1/abstract.

Sweet SK, Griffin KL, Steltzer H, Gough L, Boelman NT (2015) Greater deciduous shrub abundance extends tundra peak season and increases modeled net CO_2 uptake. *Global Change Biology*, 21:2394-2409. URL: http://onlinelibrary.wiley.com/doi/10.1111/gcb.12852/abstract.

Krause JS, Chmura HE, Perez JH, Quach LN, Asmus A, Word KR, Nemeth Z, McGuigan M, **Sweet SK**, Meddle SL, Gough L, Boelman N, Wingfield JC (2015) Breeding on the leading edge of a northward range expansion: differences in morphology and stress responses in the Arctic Gambel's White-crowned Sparrow. *Oecologia*, 180:33-44. URL: https://link.springer.com/article/10.1007/s00442-015-3447-7.

Krause JS, Perez JH, Chmura HE, **Sweet SK**, Meddle SL, Hunt KE, Gough L, Boelman N, Wingfield JC. (2016) The effect of extreme spring weather on body condition and stress physiology in Lapland longspurs and white-crowned sparrows breeding in the Arctic. *General and Comparative Endocrinology*, 237:10-18. URL: https://www.sciencedirect.com/science/article/pii/S001664801630212X?via%3Dihub.

Gersony JT, Prager CM, Boelman NT, Eitel JUH, Gough L, Greaves HE, Griffin KL, Magney TS, **Sweet SK**, Vierling LA, Naeem S. (2016) Scaling thermal properties from the leaf to the

canopy in the Alaskan arctic tundra. *Arctic, Antarctic, and Alpine Research*, 48:739-754. URL: http://www.bioone.org/doi/abs/10.1657/AAAR0016-013.

Boelman NT, Krause JS, **Sweet SK**, Chmura HE, Perez JH, Gough L, Wingfield J. (2017) Extreme spring conditions in the Arctic delay spring phenology of long distance migratory songbirds. *Oecologica*, 185:69-80. URL: https://link.springer.com/article/10.1007%2Fs00442-017-3907-3.

Sweet SK, Wolfe DW, DeGaetano A, Benner R. (2017) Anatomy of the 2016 drought in the Northeastern US: Implications for agriculture and water resources in humid climates. *Agricultural and Forest Meteorology*, 247:571-581. URL: https://www.sciencedirect.com/science/article/pii/S0168192317302800

Oliver RY, Ellis DPW, Chmura HE, Krause JS, Pérez JH, **Sweet SK**, Gough L, Wingfield JC, Boelman NT. (2018) Eavesdropping on the Arctic: Automated bioacoustics reveal dynamics in songbird breeding phenology. *Science Advances*, vol. 4. URL: http://advances.sciencemag.org/content/4/6/eaaq1084/tab-pdf

Asmus AL, Chmura HE, Hoye TT, Krause JS, **Sweet SK**, Perez JH, Boelman NT, Wingfield JC, Gough L (2018). Shrub shading moderates the effects of weather on arthropod activity in arctic tundra. *Ecological Entomology*, 34:647-655. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/een.12644

Chmura HE, Krause JS, Perez JP, Asmus A, **Sweet SK,** Hunt KE, Meddle SL, McElreath R, Boelman NT, Gough L, Wingfield JC (2018). Late-season snowfall is associated with decreased offspring survival in two migratory arctic-breeding songbird species. *Journal of Avian Biology*, 49:1-13. URL: https://onlinelibrary.wiley.com/doi/abs/10.1111/jav.01712

EXTENSION AND OTHER PUBLICATIONS

Sweet SK, Wolfe DW. (2017) Anatomy of a rare drought event: insights from New York farmers. In Cornell Cooperative Extension's Vegetable Program Newsletter: *VEGEdge*, 13,2:6-8. URL: https://rvpadmin.cce.cornell.edu/pdf/veg_edge/pdf106_pdf.pdf

Sweet SK, Wolfe DW. (2017) Anatomy of a rare drought event: insights from New York farmers. In Cornell's Institute for Climate Smart Solutions: *CICSS Research & Policy Brief*, 3:1-4. URL: https://blogs.cornell.edu/cicca/files/2015/02/CICSS-RPB-Drought-Survey-v3-126h0si.pdf

Sweet SK, Wolfe DW. (2017) Anatomy of a rare drought event: insights from New York farmers. In Cornell University's NYS Agricultural Experiment Station and Cornell Cooperative Extension's Fruit Crop Newsletter: *Scaffolds Fruit Journal*, 25,25:1-5. URL: http://www.scaffolds.entomology.cornell.edu/2016/SCAFFOLDS-2-1-17.pdf

Sweet SK, Wolfe DW. (2017) Anatomy of a rare drought event: insights from New York field crop farmers. In Cornell University's Soil and Crop Science Newsletter: *What's Cropping Up?,* 27,1:1-4. URL: https://issuu.com/cornellfieldcrops/docs/wcu_vol27_no1

Sweet SK, Wolfe DW. (2017) Anatomy of a rare drought event: insights from New York farmers. Northeast Organic Dairy Producers Alliance: *NODPA News*, 17,3:10-14. URL: http://www.nodpa.com/may2017-lowres-final.pdf

Sweet SK, Wolfe DW. (2017) Anatomy of a rare drought event: insights from New York field crop farmers. *Agricultural News: Schuyler and Steuben Counties*, 98,3:10-13. URL: https://s3.amazonaws.com/assets.cce.cornell.edu/attachments/21184/March_2017_Ag_News.pdf?1488905575

Sweet SK, Wolfe DW, Benner R. (2018) Anatomy of a wet year: insights from New York farmers. In Cornell University's NYS Agricultural Experiment Station and Cornell Cooperative Extension's Fruit Crop Newsletter: *Scaffolds Fruit Journal*, 27,1:6-9. URL: http://www.scaffolds.entomology.cornell.edu/2018/SCAFFOLDS-3-26-18.pdf

Sweet SK, Wolfe DW, Benner R. (2018) Anatomy of a wet year: insights from New York farmers. In Cornell Cooperative Extension's Vegetable Program Newsletter: *VEGEdge*, 14,4:6-7.

Sweet SK, Wolfe DW, Benner R. (2018) Anatomy of a wet year: insights from New York farmers. Northeast Organic Dairy Producers Alliance: *NODPA News*, 18,2:20-22 . URL: http://www.nodpa.com/march2018-lowresfinal.pdf

Sweet SK, Wolfe DW, Benner R. (2018) Anatomy of a wet year: insights from New York farmers. In Cornell's Institute for Climate Smart Solutions: *CICSS Research & Policy Brief*, 4:1-4. URL: https://cpb-us-east-1-juc1ugur1qwqqqo4.stackpathdns.com/blogs.cornell.edu/dist/8/4308/files/2018/04/CICSS_RPB_-__Heavy_Rain_Survey-Final-1l565y6.pdf

Sweet SK, Wolfe DW, Benner R. (2018) Anatomy of a wet year: insights from New York farmers. In Cornell University's Soil and Crop Science Newsletter: *What's Cropping Up?,* 28,2:24-27. URL: http://blogs.cornell.edu/whatscroppingup/2018/03/01/anatomy-of-a-wet-year-insights-from-new-york-farmers/

Draper K, **Sweet SK**, (2020) The potential for biochar to enhance sustainability in the dairy industry. *Innovation Center for US Dairy*. URL: https://cpb-us-e1.wpmucdn.com/blogs.cornell.edu/dist/c/8159/files/2020/09/Dairy-Manure-Biochar-Synthesis-Report_Innovation-Center_2020.pdf

CONFERENCE PRESENTATIONS AND INVITED TALKS

Sweet SK, Krause JS, Asmus A. Effects of warming-induced increases in shrub abundance and changing seasonality on migratory songbirds in the Alaskan arctic tundra. Presented at Arctic Long Term Ecological Research (ARC LTER) Meeting 2014: Woods Hole, MA.

Chmura HE, Krause JK, Perez JH, Asmus AL, **Sweet SK**, Boelman N, Gough L, Ramenofsky M, Wingfield JC. Avian phenology in a changing Arctic: Implications for reproductive success and migratory behavior. Presented at Ecological Society of America (ESA) conference 2017: Portland, OR.

Sweet SK. Anatomy of the 2016 drought in New York State: implications for agriculture and water resources. Presented at Tri-Society (American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America) conference 2017: Tampa, FL.

Sweet SK. Anatomy of the 2016 drought in New York State: implications for agriculture and water resources. Presented at Mid-Atlantic Water Resources conference 2017: Shepherdstown, WV.

Sweet SK. The Future of Water and Agriculture in NY State. Presented at The Nature Conservancy's symposium The Future of Nature: Agriculture 2017: Ithaca, NY.

Sweet SK, Wolfe DW, DeGaetano A, Benner R. Anatomy of the 2016 drought in the Northeastern US: Implications for agriculture and water resources in humid climates. Presented at International Academic Forum's International Conference on Sustainability, Energy & the Environment 2018: Honolulu, HI.

Sweet SK. Anatomy of the 2016 drought in New York State: implications for agriculture and water resources. Presented at Cornell University Horticulture Section Seminar Series 2018: Ithaca, NY. URL: https://www.youtube.com/watch?v=tjfODI7dyQM&index=2&t=219s&list=PLHPXm2Es8aQBjobZ8Nz0s9bILSdjwCpXv

Sweet SK. Anatomy of the 2016 drought and 2017 heavy rainfalls/flooding in New York State: implications for agriculture and water resources. Presented at NYSCDEA Water Quality Symposium 2018: Syracuse, NY.

Sweet SK. Anatomy of the 2016 drought in New York State: implications for agriculture and water resources. Presented at Tompkins County Water Resources Council 2018: Ithaca, NY.

Sweet SK. Protecting New York State agriculture and water resources. Presented at NatureNet Fellows Orientation 2016: Indianapolis, IN.

Sweet SK. 2016 NY State Drought Farmer Survey. Presented at Agriculture, Food & Environmental Systems In-Service (Ag In-Service) Conference 2016: Ithaca, NY.

Sweet SK. 2016 NY State Drought Farmer Survey. Presented at Empire State Producers Expo 2017: Syracuse, NY.

Sweet SK. 2016 NY State Drought Farmer Survey. Presented at Northeast Regional Climate Center Post Drought Assessment 2017: Ithaca, NY.

Sweet SK. 2018 Climate Change Impacts to NY Agriculture. Webinar presentation for Climate Change Course taught by Anne Armstrong, 19 Sep 2018: Cornell University, Ithaca, NY. URL: https://drive.google.com/file/d/1_ldKKBhfXl-Fk7ammhLodSSEdnn8tB9j/view?ts=5bbce5bb

Draper K, **Sweet SK**. 2020 Biochar Uses in the Dairy Industry. Presented at PRO-Dairy's Dairy Educators Webinar, 16 Mar 2020: Cornell University, Ithaca, NY.

CONFERENCE POSTERS

Gough L, Boelman NT, Wingfield JC, Krause JS, **Sweet S**, Rich ME, Asmus A. Effects of increasing shrub cover in arctic tundra on associated arthropods and migratory birds. Presented at Long Term Ecological Research All Scientists Meeting (LTER ASM) 2012: Estes Park, CO.

Sweet SK, Boelman NT, Gough L, Team Bird. Greater thaw depth facilitates the growth of woody shrubs through accelerated leaf development. Presented at Arctic Long Term Ecological Research (ARC LTER) Meeting 2013: Woods Hole, MA.

Krause JS, Perez JH, **Sweet S**, Asmus A, Rish ME, Schas J, Word KR, Gough L, Wingfield JC, Boelman NT. Impacts of changing seasonality and the potential for trophic mismatches in the Arctic. Presented at Society of Integrative and Comparative Biology (SICB) 2013 San Francisco, CA.

Krause JS, Perez JH, **Sweet S**, Asmus A, Rish ME, Schas J, Word KR, Gough L, Wingfield JC, Boelman NT. Impacts of changing seasonality and the potential for trophic mismatches in the Arctic. Presented at Woods Hole Biological Marine Lab Arctic LTER Meeting 2013: Woods Hole, MA.

Krause JS, Perez JH, Word KR, Chmura HE, Asmus A, **Sweet S**, Gough L, Boelman NT, Schas J, Wingfield JC. Timing of reproduction in two long distance migrants: trophic match? Presented at UC Davis Regional Annual Animal Behavior Student Conference 2013: Davis, CA.

Sweet SK, Boelman NT, Griffin KL, Steltzer H, Gough L. Greater deciduous shrub abundance extends tundra peak season and increases modeled net CO_2 uptake. Presented at Arctic Long Term Ecological Research (ARC LTER) Meeting 2014: Woods Hole, MA.

Sweet SK, Boelman NT, Griffin KL, Steltzer H, Gough L. Greater deciduous shrub abundance extends tundra peak season and increases modeled net CO_2 uptake. Presented at the American Geophysical Union (AGU) Meeting 2014: San Francisco, CA.

Chmura HE, Krause JS, Perez JH, **Sweet S**, Asmus A, Boelman NT, Gough L, Wingfield JC. Interannual variability in arctic phenology and reproductive success in the White-crowned sparrow (*Zonotrichia leucophrys gambelii*) and Lapland longspur (*Calcarius lapponicus*). Presented at Society of Integrative and Comparative Biology (SICB) 2014: Austin, TX.

Chmura, HE, Krause, JS, Perez, JH, **Sweet SK**, Asmus A, Hunt KE, McGuigan, MA, Boelman, NT, Gough L, Wingfield JC. Reproductive success in the White-crowned sparrow *(Zonotrichia leucophrys gambelii)* and Lapland longspur *(Calcarius lapponicus)*: Reproductive Timing and Implications for Global Change. Presented at Society of Integrative and Comparative Biology (SICB) 2015: West Palm Beach, FL.

Sweet SK, Asmus A, Rich M, Wingfield JC, Gough L, Boelman NT. NDVI as a predictor of canopy arthropod biomass in the Alaskan arctic tundra. Presented at Arctic Long Term Ecological Research (ARC LTER) Meeting 2015: Woods Hole, MA.

Boelman NT, Gough L, Wingfield JC, **Sweet SK**, Asmus A, Krause JS, Chmura H, Perez J. Arctic breeding songbirds cope with variability in the timing of spring onset. Presented at Ecological Society of America (ESA) conference 2015: Baltimore, MD.

Sweet SK, Wolfe DW. Anatomy of a rare drought event: insights from New York farmers. Presented at Empire State Producers Expo 2017: Syracuse, NY.

MANUSCRIPT AND PROPOSAL REVIEWS

Environmental Research Letters (4), AoB (Annals of Botany) Plants (1), Global Change Biology (3), Ecosystems (2), Cornell University's Atkinson Center postdoctoral proposals (4)

PROFESSIONAL ACTIVITIES

Moderator for Soil Health Community Session entitled "National and International Policy and Incentives for Soil Health" at Tri-Society (American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America) conference; 2017: Tampa, FL.

Chair and moderator for Session entitled "Climate Change" at International Academic Forum's International Conference on Sustainability, Energy & the Environment; 2018: Honolulu, HI.

Organizer, chair, and moderator for "Harmful Algal Bloom Consortium" meeting; 2018: Ithaca, NY.

Organizer for "Harmful Algal Bloom Consortium" meeting; 2019: Ithaca, NY.

Participated in the Atkinson Center and Environmental Defense Fund sponsored "AIBS Communications Bootcamp for Science" workshop; 2019: Washington DC.

PROFESSIONAL AFFILIATIONS

The New York Academy of Sciences (2010 – 2015)
American Society for Enology and Viticulture (2014 – 2016)
American Geophysical Union (2014 – 2019)
Ecological Society of America (2016 – present)
American Society of Agronomy (2016 – present)

Crop Science Society of America (2016 – present)
Soil Science Society of America (2016 – present)

MEDIA AND PRESS FEATURES

Field blog (by N. Boelman) featured in the *NY Times: Scientist at Work*,
URL: http://scientistatwork.blogs.nytimes.com/author/natalie-boelman/?_r=0

Article published in *Audubon* (by A. Mascarelli) entitled '*Out of Sync*',
URL: http://www.audubon.org/magazine/september-october-2013/arctic-researchers-race-uncover

Article published by The Nature Conservancy (by C. Byington) entitled *'Mapping the Way to a World That Can Feed 10 Billion People'*, URL:
http://blog.nature.org/science/2016/09/21/shannan-sweet-naturenet-climate-change-agriculture-maps/

Article published by The Atkinson Center for a Sustainable Future (by S. Englund) entitled *'Protecting NY Water Resources'*, URL: http://www.atkinson.cornell.edu/news/blog/shannan-sweet-protecting-ny-water-resources

Article published by Cornell Field Crops (by S. Sweet) entitled. Anatomy of a rare drought event: insights from New York field crop farmers, URL:
http://blogs.cornell.edu/whatscroppingup/

Article published by Cornell Chronicle (by B. Friedlander) entitled '*Survey details impact of 2016 drought on New York farming'*,
URL: http://news.cornell.edu/stories/2017/04/survey-details-impact-2016-drought-new-york-farming – article referenced in article published by The Independent (London, UK) entitled *Anna Coogan on Trump, climate change and break-up songs*.

Radio interview by WHXC/X101 – Cortland, NY local news (by B. Smith) about the impact of the 2016 drought on New York State farmers, URL:
http://www.wxhc.com/?m=201704&paged=2

Article published on Farms.com (by D. Flammini) entitled *'Impact of 2016 drought on agriculture in New York documented in survey'*, URL: http://www.farms.com/ag-industry-news/impact-of-2016-drought-on-agriculture-in-new-york-documented-in-survey-464.aspx

Article published by The Albany Times Union (by R. Downen) entitled *'Devastation of 2016 looms in farmers' minds, plans, wallets: Drought resilience the key issue in face of warmer, drier seasons'* URL: https://www.timesunion.com/tuplus-business/article/Devastation-of-2016-drought-looms-in-farmers-11109159.php

Article published in *New Frontiers* (by The Nature Conservancy) entitled *'A Sweet spot for farmers'*, page 10, URL:

https://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/newyork/places-preserves/cwny-fall-17-newsletter.pdf

Article published in *Hot Potato Press* entitled *'NYS farmers and drought: Q&A with Shannan Sweet*'. URL: http://hotpotatopress.org/2017/12/06/nys-farmers-and-drought-qa-with-shannan-sweet/

Article published by *What's Cropping Up?* (bi-monthly Cornell Field Crops newsletter) entitled *'Anatomy of a Wet Year: Insights from New York Farmers'*. URL: http://blogs.cornell.edu/whatscroppingup/2018/03/01/anatomy-of-a-wet-year-insights-from-new-york-farmers/

Article published by New York State IPM Program (by Mary M. Woodsen) entitled *'When It Rains, It Pours: Anatomy of a Wet Year'*. URL: https://blogs.cornell.edu/nysipm/2018/03/14/anatomy-of-a-wet-year/

REFERENCES

Dr. Johannes Lehmann (postdoctoral advisor)
Atkinson Center for a Sustainable Future
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