

Application: Gil Bohrer

Posting number: P04630UF

Posting: Department Head (Unclassified Faculty)

Form: Faculty Profile

Submitted: September 08, 2021 at 12:58 PM (PDT) (confirmation number: CN000430949)

Personal Information

Application Date

Initial Application Date	09/08/2021 07:58 PM
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Contact Information

First Name	Gil
Middle Name	
Last Name	Bohrer
Other Names Used	
Address Line 1	2721 Montcalm RD
Address Line 2	
City	Columbus
State or Province	OH
Zip Code	43221
Nation	
Personal Phone	9196996793
Alternate Phone	
International Phone	
Email	bohrer.17@osu.edu

General Information

Are you a current Oregon State University Employee?	No
If yes, indicate job titles and start date	
If yes, what is your employment type?	
Have you worked at Oregon State University before?	No
If yes, indicate job titles and dates of employment	
What is your OSU University identification number if you have one?	

Are you currently enrolled as an undergraduate student at Oregon State University or in the Degree Partnership Program?	No
Are you currently enrolled in a graduate studies program at Oregon State University?	No
Where did you learn about this vacancy?	Other Source (please specify below)
Other Source (indicate N/A if not applicable)	Got an email from Simonich, Staci Lynn <staci.simonich@oregonstate.edu>
Was the source in print or electronic media (online)?	Electronic Media (online)

Additional Information

I authorize University officers and authorized agents to verify the information submitted on my employment application or attached materials prior to making a final determination regarding my application of employment.	Yes
I authorize the University to conduct the required background and/or motor vehicle check prior to making a final determination regarding my application for employment.	Yes

Documents Needed To Apply

Required Documents

Kind	Name	Conversion Status
Cover Letter	Cover Letter 09-08-21 12:34:24 (PDT)	PDF complete
Curriculum Vitae	Curriculum Vitae 09-08-21 12:34:49 (PDT)	PDF complete
Diversity Statement	Diversity Statement 09-08-21 12:36:17 (PDT)	PDF complete

Optional Documents

No optional documents added.

Professional References

References

Name	William Riley
Email	wjriley@lbl.gov

Phone Number	(510) 486-5036
How do you know this reference?	Collaborate as co-PIs on several Department of Energy projects and proposals

Name	Martin Wikelski
Email	wikelski@ab.mpg.de
Phone Number	+49 7732 1501 25
How do you know this reference?	We collaborate over a long period on several NASA, and NSF funded projects and through work on Movebank.org which Martin heads

Name	Peter Curtis
Email	curtis.7@osu.edu
Phone Number	614 557 2289
How do you know this reference?	Co-PIs on many projects (DoE, Ameriflux, NSF, internal OSU funding), co-lead the Ameriflux core flux site, co-authors of papers, served on theses committees of each other's students

Name	Ashley Matheny
Email	ashley.matheny@jsg.utexas.edu
Phone Number	614 270 1825
How do you know this reference?	I mentored Ashley from undergrad to postdoc. Coauthored papers, co-PI'ed proposals, currently research collaborators in multiple research sites. Ashley can attest to my effectiveness and approach in mentoring

Supplemental Questions

Required fields are indicated with an asterisk (*).

Voluntary Self Identification of Protected Veteran Status

Qualifying Veteran Status Under Federal Law

Qualifying Veteran status under federal law:	I am not a protected veteran.
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Qualifying veteran status under OSU's Veterans Policy

Oregon State University's hiring process extends an affirmative preference to applicants who self-identify as qualifying veterans. For the purpose of applying this preference and following the provisions of ORS Section 408.205, OSU defines 'qualifying veteran' more inclusively than the federal regulations as any veteran or disabled veteran who was honorably discharged from U.S. military service. NOTE: If you do not self-disclose on this page as a qualifying veteran, you will not receive the veteran's preference under OSU's policy.

Qualifying veteran status under OSU's Veterans Policy	I am not a Veteran under this definition
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Certification

I authorize University officers and authorized agents to verify the information submitted on my employment application or attached materials prior to making a final determination regarding my application of employment. I authorize the University to conduct the required background and/or motor vehicle check prior to making a final determination regarding my application for employment. Any false, fraudulent, or misleading oral or written statement contained in this application profile and attached materials or made in the course of any related employment process, whether made by you or by others at your request, will result in rejection of your application, denial of employment, dismissal from state service if discovered after employment, and/or prosecution for a crime. In electronically certifying this application, you certify and affirm that you have read and understood the above notice. You further certify that you personally completed this application profile and attached materials or requested its completion and that all statements contained herein are true and complete to the best of your knowledge. By electronically submitting your application, you agree to the conditions stated in the certification above, which are enforceable as if you had signed.

☒ I certify that I have read and agree with these statements.

Gil Bohrer Please enter your initials to verify your identity.

Submitted on September 08, 2021 at 07:58 PM (UTC) by Gil Bohrer



Gil Bohrer, Ph.D.

Civil, Environmental & Geodetic Engineering
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September 8, 2021

Dr. Lisbeth Goddik
Search Committee Chair
lisbeth.goddik@oregonstate.edu
541-737-8322.

**Cover letter – application for position of Administrator 1 – Department Head
Biological & Ecological Engineering (ABE), Oregon State University**

To whom it may concern

I have been an active researcher during the last 20 years, and have been successful in research-based discovery and development of models, datasets, and research tools, and in training a diverse next generation of scientists. I am/was the PI or co-PI for research projects totaling more than \$17,000,000, funded by a wide range of federal and state agencies, including NSF, NASA, Department of Energy, NOAA, USGS, Department of Agriculture, Ohio Department of Natural Resources, the Ohio Water Resources Center, and the Ohio Water Development Authority. I have published more than 140 papers in peer reviewed journals (including high impact journals such as Science, Nature, PNAS, ES&T, etc.) and my current impact H-factor is 52. My research and education are interdisciplinary. I have an undergraduate degree in Biology, Masters in Ecology, and PhD in Civil and Environmental Engineering. If forced to choose a one-word description, I would classify myself as an ecohydrologist. I study how interactions between the atmosphere and biosphere control the surface-energy and green-house-gas budgets of forest and wetland ecosystems. I develop models that simulate the function of individual organisms (mostly plants, but in a few projects also moving animals) and their interactions with their surrounding environment. I am the PI of one of the National Core Flux Sites (funded by the Department of Energy through the Ameriflux project). I am/was member of national workgroups and subcommittees for several federal agencies and programs (e.g., NASA, SOCCR, Ameriflux, DoE ESS-DiVE, NEON) and actively participate in shaping the goals and focus of future research. You can find more details of these, as well as my funding, publications, teaching, mentoring, and synergistic activities record in the attached CV. I believe that my interdisciplinary background, research and service experience, and my familiarity and involvement with multiple aspects of environmental engineering, ecology and climate research will be valuable for leading the very interdisciplinary ABE Department.

I have gained administrative experience in OSU during two terms (6 years) as the co-director of the Environmental Science Graduate Program (ESGP). ESGP is one of four interdepartmental graduate programs (IGPs) in OSU. It has roughly 60-80 graduate students, and about 50 active affiliated faculty from different departments and colleges throughout the Ohio State University. During my term as co-director, OSU reviewed the role and structure of all interdepartmental graduate programs (including ESGP) and, as the outcome of this review, I have helped forming

the recommendations and negotiations for a new business model. Under the new model, all IGPs moved from different disciplinary colleges where they affiliated previously, to be directly under the Graduate College. We also negotiated a change to the funding model to allow growth of the IGPs through increased student numbers and student fellowships. I have led the move to create several specialization tracks within the ESGP, including Environmental Public Health, which in collaboration with the College of Public Health, replaced their disciplinary environmental graduate program. I have strengthened the ESGP Student Association and expanded their activities to include, for example, social outings, and post-seminar informal happy hour with the external seminar speakers. I worked with the Student Association to strengthen the program cohesiveness and inclusiveness, and create a sense of home and belonging for all the program's students. This was a particular challenge in ESGP given its interdepartmental nature and the fact that supervisors and labs are distributed throughout several OSU campuses. In my own department, I have been the chair of my department's mentoring committee and led the implementation of a new mentoring plan for faculty at all career stages, with focus on creating a sense of home and supportive guidance for tenure track faculty. I am currently chairing the departmental P&T committee where I am implementing some of the procedures instituted by the mentoring committee (e.g., a second-year review, designed to demystify the 4th-year and tenure review processes and give early guidance and direction). Both positions provided me with the opportunity to mentor new faculty and help them develop and grow their research and career.

Throughout my work in my own research group, in my department, and as the co-director of the ESGP I have promoted recruitment, retention, and success by diverse students, researchers, and faculty. I am very proud of my achievements as a mentor. I focus on creating a sense of belonging in my research group (and my department) through personalized mentoring and guidance (there is no one-way to do things that works equally for everyone) and by providing supervised opportunities of early experience and practice of activities that are typically reserved to the "next career level" (e.g., grad students organize a conference session, post-docs write proposals as co-PIs). I am particularly proud of my former students, many of whom belong to under-represented groups, and are currently in tenure-track faculty positions. I have been initiating, leading, and mentoring research experiences for undergraduates, teachers, and high school students. I believe that we scientists can and should expand our presence in our community, through research activities with high school students and undergraduates, training the next diverse generation of researchers.

We are at an exciting juncture, with expected increased funding for infrastructure and climate change, which could provide opportunities to broaden the scope, visibility, and impact of research in ABE.

I am looking forward for the opportunity to be involved.

Thank you for considering my application



Gil Bohrer
Professor

Department of Civil, Environmental and Geodetic Engineering, The Ohio State University



Curriculum Vitae - Gil Bohrer (he/him)

Professor

Department of Civil, Environmental and Geodetic Engineering, The Ohio State University

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E-mail: bohrer.17@osu.edu Homepage: <https://ecohydrometeorology.engineering.osu.edu/people>

ORCID: <https://orcid.org/0000-0002-9209-9540>; Scopus ID: 8304718100; ResearcherID: A-9731-2008

EDUCATION

Duke University, Durham, NC	Civil & Environmental Engineering	PhD,	2007
Duke University, Durham, NC	Computer Sci. in Eng. & Medicine	Certificate,	2007
Ben Gurion University, Israel	Life Sciences - Ecology Track	M.Sc., <i>Cum Laude</i>	2001
Ben Gurion University, Israel	Life Sciences	B.Sc., <i>Summa Cum Laude</i>	1998

ACADEMIC AND RESEARCH APPOINTMENTS

2016-Present	Professor, <i>OSU, Department of Civil, Environmental & Geodetic Engineering (CEGE)</i>
2014-2018	Associate Professor, <i>OSU, CEGE</i>
2008-2014	Assistant Professor, <i>OSU, CEGE</i>
2007-2008	John & Elaine French Post-Doctoral Fellow, <i>Harvard University Center for the Environment</i>
2003	Visiting Researcher, <i>University of Amsterdam, Institute for Biodiversity and Ecosystem Dynamics, Amsterdam, Holland</i>
2002-2007	Graduate Research Assistant, <i>Duke University, Civil & Environmental Engineering</i>
2000-2002	Data Scientist, <i>SupplyScience LTD</i> (Currently part of NCR), <i>Nathania, Israel</i> .
1998-2000	Graduate Teaching Assistant, <i>Ben Gurion U., Life Sciences Dept., Be'er Sheva, Israel</i> .

University Centers/Programs Affiliation and leadership roles

9/2021 – Present	Co-Director, <i>TDAI Community of Practice (CoP) Program</i> .
2013 – 2019	Co-Director, <i>OSU, Environmental Science Graduate Program</i>
2020 – Present	Affiliated Faculty, <i>Translational Data Analytics Institute (TDAI)</i>
2016 – Present	Affiliated Faculty, <i>Sustainability Institute (SI)</i>
2008 – Present	Affiliated Faculty, <i>Environmental Science Graduate Program (ESGP)</i>

RESEARCH INTERESTS

Ecohydrology; Environmental Fluid Dynamics; Eddy Flux Measurements; Evapotranspiration; Greenhouse-Gas Emissions; Large-Eddy Simulations; Wind Dispersal and Movement Ecology; Wetlands; Forests.

AWARDS AND FELLOWSHIPS

OSU College of Engineering, Harrison Faculty Award for Excellence in Engineering Education, 2020
Hebrew University, Lady Davies Fellowship Trust, Jerusalem, Israel, Jacob and Lena Joels Memorial Foundation Award - Visiting Professor in the Life and Medical Sciences, 2016.
Karlsruhe Institute of Technology, Institute of Meteorology and Climate Atmospheric and Environmental Research (IMK-IFU), Garmisch-Partenkirchen, Germany, MICMoR Visiting Scientist Fellowship, 2015
OSU College of Engineering, Lumley Interdisciplinary-Research Award, 2014.
Advances in Water Resources, Certificate of Excellence in Reviewing, 2014.
OSU College of Engineering, Lumley Research Award, 2012.
American Geophysical Union, Editors' Citation for Excellence in Refereeing for Journal of Geophysical Research-Biogeosciences in 2011.
PADI Foundation Research Award (#181) – Project Title: *Eddy-flux measurements of evaporation from the coral-reef lagoon in the red sea*. 2009.
Harvard University, Center for the Environment, John & Elaine French Fellowship, 2007-2008.

Current Professional Society Affiliations

American Meteorological Society; American Geophysical Union; American Ecological Engineering Society; AAAS.

SUMMARY

Summary of Research Funding

Funding sources: NSF, Department of Energy, NOAA, NASA, Department of Agriculture, USGS, Ohio Department of Natural Resources, Ohio Water Resources Center, Ohio Water Development Authority, Private industry.

43 funded research projects since 2009. 12 funded training/outreach grants.

Total grants: ~\$17.4M (my total direct-expenditure share of collaborative projects ~\$6.4M)

Summary of Publications

142 Published/in-press journal papers; 6 proceedings full/short papers; 5 book chapters.

Google: H-index: 52; Citations: 9,992 (9/8/2021); WoS: H-index: 45, Citations: 7,500 (9/8/2021)

41 invited/Keynote presentations in international conference.

>200 conference presentations/abstracts, >200 invited seminar talks.

Summary of Teaching and Mentoring

Current courses: Water Resources Engineering; Surface Hydrology; Climate Change; Graduate Data Analysis.

Postdoc supervisor for 8 researchers (1 current)

PhD Supervisor for 10 students (3 current, 7 graduated, of which, 5 are currently in professor positions).

MS Thesis supervisor for 12 students (10 graduated, 2 current).

Recruited and supported a diverse group of graduate students and postdocs: ~60% female, ~25% Latinx/African American.

Led 2 NSF funded Research Experience for Teachers (RET) and 1 REU projects. Currently leading NSF-funded Research Advancement of High School Students (RAHSS) project with Franklinton High School. Successful in securing funding for graduate student training grants from NSF, NASA, Department of Energy.

Won *OSU College of Eng.* Harrison Faculty Award for Excellence in Engineering Education, 2020.

Synergistic Activity and University Service – Highlights

Ameriflux (Lawrence Berkeley National Laboratory, Department of Energy), PI, *National Core Flux Site*; member of *Year-of-Water-Fluxes Organizing Committee*; member of *Data Advisory Committee*.

ESS-DiVE, member of *Archive Partnership Board*.

NEON, member of *Surface Atmosphere Exchange Technical Working Group*.

NASA, member of *Biological Diversity and Ecological Forecasting Working Group*.

Max Planck Society, member of *ICARUS Satellite Mission Scientific Advisory Board*.

Associate Editor, *Journal of Geophysical Research-Biogeosciences*.

Review Editor, *2nd State of the Carbon Cycle Report (SOCCR)*.

Chair, *CEGE P&T Committee* (2020 – current).

Member, *CEGE Executive Committee* (2018-Current).

Co-Director, *TDAl Community of Practice (CoP) Program* (2021-Current).

Co-Director, *OSU, Environmental Science Graduate Program* (2013-2019).

DETAILED CURRICULUM VITAE

SERVICE AND SYNNERGISTIC ACTIVITIES

Editorial Activity

2017 – Current Associate Editor, *Journal of Geophysical Research-Biogeosciences*.
 2015 – Current Editor, *Plant Diversity*.
 2013 – Current Editorial Board Member, *Movement Ecology*.
 2017 – 2019 Guest Editor, Special Issue (Canopy Traits), *Forests*.
 2012 – 2017 Editorial Board Member, *Advances in Water Resources*.
 2011 – 2017 Associate Editor, *PLoS One*.

External Synergistic activities

2021 – Current *Ameriflux, Year-of-Water-Fluxes Organizing Committee* – Member.
 2020 – Current *Ameriflux, Data Advisory Committee* – Member.
 2021 – Current *Department of Energy, ESS-DiVE Archive Partnership Board* – Member.
<https://ess-dive.lbl.gov/about/team/>
 2019 – Current *American Geophysical Union, Kaula Award Committee* – Member.
<https://www.agu.org/Learn-About-AGU/About-AGU/Governance/Committees/Honors-Recognition-Committee/Kaula-Committee>
 2019 – Current *NEON, Surface Atmosphere Exchange Technical Working Group* – Member.
<https://www.neonscience.org/community/advisory-groups/surface-atmosphere-exchange-technical-working-group>
 2014 – Current *Max Planck Society, ICARUS Satellite Mission* – Scientific Advisory Board Member
<https://www.icarus.mpg.de/28056/about-icarus>
 2008 – current *Ameriflux Network* – National Core Flux Site PI (UMBS site cluster)
<http://ameriflux.lbl.gov/sites/siteinfo/US-UMB>
 2018 – 2021 *NASA, Biological Diversity and Ecological Forecasting Working Group* – Member.
<https://cce.nasa.gov/biodiversity/index.html>
 2017 – 2019 *2nd State of the Carbon Cycle Report (SOCCR)* – Review editor.
<https://www.globalchange.gov/content/about-soccr-2>
 2014 – 2018 *American Meteorological Society, Agricultural & Forest Meteorology Scientific and Technological Activities Commission (STAC)* - Member.
<https://www.ametsoc.org/stac/index.cfm/committees/committee-on-agricultural-and-forest-meteorology/>

Conference Session/Workshop Convener/Organizer/ Media Appearances

Conference Organizing Committee – *American Ecological Engineering Society Annual Meeting*, 5/2021, (Virtual). <https://aees2021.engineering.osu.edu/>
 Conference Session Chair – *5th International Conference of Recent Trends in Environmental Science and Engineering (RTESE'21)*, Session 4: Water and Air Pollutions and Treatments II. 5/2021, (Virtual).
 Panelist/Breakout Room Discussion Leader – *Ameriflux Community Meeting, Year of Water Fluxes*, 3/2021, (Virtual).
 Conference Organizing Committee – *Ameriflux Annual PI meeting*, 10/2020, (Virtual).
<https://ameriflux.lbl.gov/community/ameriflux-meetings-workshops/2020-ameriflux-annual-meeting/>
 Panelist – *AmeriFlux Webinar Series* – 2020 webinar #2: Measurement Best Practices panel discussion. 9/2020, (Virtual). <https://ameriflux.lbl.gov/community/amp-webinar-series/>
 Panelist – *Animal Tech: Help for a Planet in Crisis. Roundtable*, TRTWorld. 2/2020, London, UK.
<https://www.youtube.com/watch?v=fz-GYw9ctuc>
 Workshop Organizer - *Linking Remote Animal Detection and Movement Data with Macrosystem Environmental Datasets and Networks*, workshop. 10/2018, Front Royal, VA.
 Conference Session Chair – *American Meteorological Society 33rd Conference on Agricultural Forest Meteorology*, Session 6: Vegetative Response to Changing Soil and Atmospheric Conditions Part II, 5/2018. Boise, ID.
 Workshop Organizer - *NSF Mobility Workshop - Workshop on Analyzing Movement and Mobility within Geographic Context*. 5/2017. Columbus, OH <https://cura.osu.edu/may17>

Panelist, “*Species Migration*”, *Earth to Sky Seminar @NWT*, 4/2017. Yellowknife, Canada
 Discussion Leader “*Global Environmental Changes and Movement*”, *Gordon Research Conference -Movement Ecology of Animals*, 3/2017.Ventura, CA.
<https://www.grc.org/programs.aspx?id=17363>
 Conference Session Convener - B14B: Carbon and Water Cycling in Terrestrial Ecosystems during the Anthropocene (8 talks, 34 posters), *AGU Fall Meeting 2016*, San Francisco, CA, 12/2016.
 Workshop organizer - *Workshop on measuring and analyzing interactions among mobile entities at UT*, 11/2016. Austin, TX. <https://sites.utexas.edu/interaction/>
 Conference Session Convener - *Opportunities for Conservation Advances in Movement Analyses and their Applications to Wildlife Conservation* (6 talks), *23rd annual conference of the wildlife society*, 10/2016. Raleigh NC.
 Panelist, The future direction of movement analysis (Panel Discussion). *Workshop on Analysis of Movement Data (AMD'16)*, *GIScience 2016*, 9/2016. Montreal, Canada.
 Conference organizer - *Symposium on Animal Movement and the Environment*, 5/2014. Raleigh, NC.
 Conference Session Moderator - Migration research talks, *Symposium on Animal Movement and the Environment*, 5/2014. Raleigh, NC.
 Conference Session Convener - Remote-sensing the impact of climate change on wildlife, *AGU Fall Meeting 2013*, 12/2013. San Francisco, CA.
 Conference Exhibitor (OSU Environmental-Network Booth), *EcoSummit 2012*, Columbus, OH, 10/2012.
 Conference Symposium Chair - Symposium 59-Carbon sequestration and greenhouse gases in wetlands, *EcoSummit 2012*, 10/2012. Columbus, OH.
 Conference Panelist - *Max Planck institute of Ornithology ICARUS planning meeting*. 7/2012. Ringberg Castle, Lake Tegernsee, Bavaria, Germany.
 Conference Session Convener - *AGU Fall Meeting 2011*, 12/2011. San Francisco, CA.
 Conference Session convener - Innovative Methods Poster Session, *3rd iLEAPS International Science Conference*, 9/2011. Garmisch Partenkirchen, Bavaria, Germany.
 Panelist - Pulse of the living planet - *1st Discussion Meeting on The Global Tracking of Animals*, *Max Planck Institute of Ornithology*, 3/2011. Washington, DC.
 Referee of Outstanding Student Presentation Award, *Ag. & Forest Met. Meeting*. 2014; 2018
 Referee of Outstanding Student Presentation Award, *AGU Fall Meeting*. 2011; 2012; 2014; 2016

University/College Committees

4/2021 – Current	Member, Water-Science-Major Advisory Group, <i>Earth Science, FABE</i> .
11/2017 – 3/2018	Member, Faculty Search Committee, Sustainable Water Engineering, <i>FABE/SI</i> .
1/2015 – 6/2015	Chair, University sustainability-goals teaching and learning workgroup.
8/2012 – 2/2013	Member, Faculty Search Committee, joint hire in energy policy, <i>College of Engineering-Glenn School of Public Policy</i> .
2010 – 2012	Member, Environmental Sciences Advisory Committee, <i>OSU</i> .
2011 – 2012	Member, Graduate Studies Committee, <i>ESGP</i> .
2009 – 2011	Chair, Graduate Studies Committee, <i>ESGP</i> .
2009 – 2010	Member, Special Task-Force on Alternative Energy, <i>Collage of Engineering</i> .

Department Committees

4/2020 – Current	Chair, Promotions and Tenure Committee.
9/2018 – Current	Member, Departmental Executive Committee.
9/2019 – Current	Member, Undergraduate Curriculum Renewal Taskforce.
9/2021 – Current	Member, Departmental Advisory Committee (5-year hiring plan).
7/2021 – Current	Member, Search Committee - CE/GE/KSA/EED Grants Coordinator
6/2018 – 12/2019	Chair, Faculty Mentoring Committee.
11/2018 – 3/2019	Member, Faculty Search Committee – targeted hire, faculty of practice, structures.
4/2018 – 4/2020	Member, Promotion and tenure Committee.
9/2017 – 4/2018	Chair, Faculty Search Committee, Hydrology.
11/2014 – 5/2015	Member, Faculty Search Committee, Discovery Themes – Sensor Analytics.
9/2010 – 3/2011	Member, Faculty Search Committee.
2008 – 2014; 2016 – 2017	Member, Graduate Studies Committee.

TEACHING AND MENTORING

Academic Courses

OSU Course ID (Old quarter system course number)

ENVENG6220 – Graduate Data Analysis, OSU, 2016-2019.

ENVENG/CIVILEN5880 Graduate – Civil & Environmental Engineering Seminar, OSU, 2013-2018; 2020.

ENVSCI7899 Graduate – Environmental Science Graduate Program Seminar, OSU, 2013-2019.

ENVENG 6218/5218/4218 Grad/Undergrad – Measurements and Modeling of Climate Change, OSU, 2010; 2012; 2017; 2019-2021.

CIVILEN3160 (316) Water Resources Engineering, OSU, 2012-2015; 2020-2022.

ENVENG5130 Grad/Undergrad – Applied Hydrology, OSU, Fall 2016-2019; 2022.

ENVENG5217 (817) Grad/Undergrad – Applied Mathematical Ecology, OSU, 2011; 2018.

ENVENG5310 (618) Ecological Engineering, OSU, 2010-2015.

CIVILEN 2050 (406) Fundamentals of Civil Engineering Analysis. OSU, 2009-2011.

Short Courses

Short course on analyzing animal tracking data. Workshop organizer and lecturer. NC State Museum of Natural Sciences, Raleigh, NC, 5/2017; 5/2018; and Scottish Centre for Ecology and the Natural Environment (SCENE), Balloch, Scotland, UK. 5/2019. <https://movebankworkshopraleighnc.netlify.com/>.

Movement Ecology, Ecology 90890, Determining the Environmental Drivers of Movement, Course organizer and lecturer. Department of Ecology, Evolution and Behavior, Hebrew University, Jerusalem, Israel, 2/2016.

Summer School 2015 'Modeling of Land Surface-Atmosphere Interactions' – MICMoR Fellowship Program, Course organizer and lecturer. Karlsruhe Institute of Technology, Institute for Environmental Research, Garmisch-Partenkirchen, Germany, 8/2015.

Academic Mentor

Post-Doc: Justine Missik (3/2021-); Jorge Villa-Betancur (2/2018-10/2019, Currently: Assist. Prof. UL Lafayette); Golnazalsadat Mirfenderesgi (8/2017-5/2018, Currently: Assist. Clinical Prof. OSU); Ashley Matheny (8/2016-8/2017 Currently: Assist. Prof. UT Austin); Kay Stefanik (5/2014-8/2015, Currently: Assist. Director, Iowa Nutrient Research Center); Renato Frasson (1/2012-6/2015, Currently: Researcher, JPL); Somayeh Dodge (2/2012-8/2013, Currently: Assist. Prof. UC Santa Barbara); Steve Garrity (6/2010-5/2011, Currently: Director, Product Management, NoiseAware).

PhD: Theresia Yazbeck (CEGE, 8/2019-); Yang Ju (ESGP, 8/2017-); Chante' Vines (CEGE, 8/2015-); Camilo Rey-Sánchez (ESGP, 8/2014-12/2018, Currently: Assist. Prof. NC State); Golnazalsadat Mirfenderesgi (CEGE, 8/2013-8/2017); Timothy Morin (ESGP, 6/2012-4/2017 Currently: Assist. Prof. SUNY ESF); Ashley Matheny (CEGE, 8/2012-8/2016); William Kenny (ESGP, 9/2010-8/2015, Currently: OH EPA); Efthalia Chatziefstratiou (ESGP, 9/2010-12/2014, Currently: Lecturer, AZ State); Kyle Maurer (CEGE, 8/2011-5/2012, Currently: SC DHEC).

Masters Thesis: Madeline Scyphers (ESGP, 8/2021-); Yvette Onyango (8/2021-); Theresia Yazbeck (CEGE, 8/2017-5/2019); Miriam Handler (ESGP, 1/2017-5/2018); Camilo Rey-Sánchez (CEGE, 8/2016-5/2018); Krystaal McClain (ESGP, 8/2013-8/2015); Liel Naor-Azrieli (ESGP, 9/2010-8/2013); Ashley Matheny (CEGE, 9/2009-4/2013); Kyle Maurer (CEGE, 6/2009-8/2011); Dekel Shlomo (CEGE, 9/2009-8/2011); Kunpeng Zhu (CEGE, 1/2010-8/2011); Anthony Bova (CEGE, 9/2008-6/2010).

Masters (non-thesis) supervisor: Robin Bautista-Jimenez (ESGP, Co-Supervisor with Cinnamon Carlarn, 1/2019-); Hao Wu (ESGP, co-supervisor with Desheng Liu, 9/2018-12/2020); Luke Johnston (CEGE, 8/2017-3/2019).

Undergraduate Research Projects: Isabella Richardson (TEK8, 4/2021-); Callie Kleinke (9/2020-); Tess Belleville (TEK8, 6/2021-); Saleh Hamdan (5/2021-8/2021); Makayla Lawrence (TEK8, 5/2019-8/2019); Zach Levy (5-8/2020); Dave DeLoughry (9-12/2019); Sara Quinlin (5-8/2019); Madison Evans (5-8/2019); Xu Di (9-12/2018); Kateland Kirk (5-8/2018); Timothy Becker (5-12/2018); Tasmina Uddin (5-8/2018); Taylor Stephen (SROP, UMBC, 6-8/2018); Alexa Baratucci (6/2017-5/2018); Brian Cassidy (5/2017-12/2017); Dominique Haddad (6/2016-9/2017); Anna Thompson (4-12/2017); Lisa Sartin (1-5/2017); Tyler Freeman (1-5/2017); Austin Rechner (5/2016-8/2017); Mathew Wright (6-

11/2016); Miriam Handler (3/2015-11/2016); Noah Portman (6-9/2015); Renee Obringer (Env Honors thesis, 9/2013-4/2015); Grace Debbeler (5/2013-4/2015); Alyssa Wunderlich (5/2014-8/2014); Joshua Funk (8/2013-12/2013); Michele Kingrey (4/2012-5/2013); Scott Mesi (8/2011-4/2013); Ding Lu (ENR, 9-12/2012); Phoebe Low (3-5/2012); Hilary Brooks (4-6/2012); Gregory Scannell (1-5/2012); Julia Thomsen (NSF REU, 6-11/2011); Robert Jones (6/2009-12/2011); Kevin Meyer (NSF REU, 6/2009-6/2010); Ashley Matheny (NSF REU, 6-8/2009).

Research Supervisor: Sarah Davidson (1/2013-12/2014; 1/2016-12/2019; 2021-); Hugh Morris (NSF RET 3/2021-); Qing Xu (Visiting Researcher 9/2019-6/2020); Lu Xia (Visiting Researcher, 8/2013-7/2014); Rea-Sung Kim (GRA CEGE, 9/2012-5/2013); Jelle Treep (Visiting Researcher, U of Amsterdam, 10-12/2012); Fabian Schlegel (Visiting Researcher, Dresden U. 7-9/2012); Corey Frasson (NSF RET, 6-9/2012); Ravishankar Subramanian, (GRA, Comp Sci. 3/2008-4/2010).

PhD Thesis Committee Member: Marcos Miranda (ESGP-); Kay Sung (CEGE-); Wang Jian (Geography-); Yang Li (ESGP-); Utkarsh Shah (CBE-); Meicheng Shen (MSU Geography-); Soomin Chun (ESGP-); Vahid Ahmadi-Kalkhorani (CEGE-); Haley Kujawa (ESGP-); Michael Charles (CBE, 8/2021); Yen-Ru Lai (CEGE-); Yangyang Zou (CEGE-); Yilong Xiao (CEGE-); Anna Apostel (FABE-); Robert Heltzel (West Virginia U, 5/2021); Dylan Wood (CEGE, 8/2020); Hanyang Li (ESGP, 4/2020); Xinjie Tong (FABE, 4/2020); Garrett Smith (Microbiology 12/2019); Jonathan Ogland-Hand (ESGP, 3/2019); Christopher Eidson (ESGP, 12/2018); Jordan Angel (Microbiology, 5/2018); Yaoping Wang (ESGP, 8/2018); Mike Brooker (ESGP, 12/2017); Alex Fotis (EEOB, 8/2017); Colton Conroy, (CEGE, 11/2014); Lingli He (CEE, U of Mich 6/2014); Jorge Villa-Betancor, (Co-Supervisor, ESGP, 4/2014); Brady Hardiman (EEOB, 6/2012); Kay Stefanik (ENR, 5/2012); Panagiotis Velissariou (CEGE, 10/2008); James Mandel (Cornell EEB, 6/2009).

Master's Committee Member: Hannah Field (Earth Sci-); Aminata Fofana (ESGP-); Kathryn Boening (FABE, 7/2020); Yinan Feng (ESGP, 8/2020); Samantha McCabe (ESGP, 12/2019); Meicheng Shen (ESGP, 7/2019); Yushan Hao (ESGP, 6/2019); Rachel Warren (CEGE, 5/2019); Adam Green (U. Waterloo, 4/2019); Anjelica Moreno (ESGP, 3/2019); Kristie Stein (SENR, 8/2018); Chenyuan Yang (CEGE, 5/2018); Lindsey Solden (Microbiology, 3/2018); Kelsey Hunter (CEGE, 10/2017); Dominik Mattioli (CEGE, 8/2017); Anna Apostel (CEGE, 7/2016); Allison Cody (CEGE, 7/2016); Maria Yauffman (CEGE 5/2016); Rachel Sebian (CEGE, 4/2016); Qicheng Peng (ESGP, 11/2015); Christopher Eidson (ESGP, 5/2015); Yaoping Wang (ESGP, 11/2014); Drew Browning (CEGE, 8/2014); Matt Shilling (CEGE 5/2014); Angela Nappi (CEGE, 12/2013); Michael Brooker (ESGP, 8/2013; CEGE, 10/2017); David Dibling (CEGE 11/2012); Patrick Wilson (CEGE 3/2012); Connor Flynn, (EEOB, 5/2012); Ying Wang (CEGE 12/2011); Ashley Maggi (CEGE, 4/2011); Colton Conroy, (CEGE, 3/2011); Admas Awoke (CEGE, 5/2009).

School Teacher

"Eichut" Creative Learning (supported by "Keren Karev" – Andrea and Charles Bronfman Foundation).
Nature and environment through art, 1995-1997.

The Memorial Society for Uri Maymon, and Israeli Society for Protection of Nature. Outdoor-Skills Group
Instructor for middle/high school students, 1989-2000.

RESEARCH FUNDING

Research Grants

Active

1. Department of Energy (DE-SC0022191) – *Rewriting the Redox Paradigm: Dynamic hydrology shapes nutrient and element transformations in a Great Lakes coastal estuary* (Co-PI), with Lauren Kinsman-Costello (PI, Kent State U.), John Senko, Thomas Quick, Chelsea Monty-Bromer, Elizabeth Herndon, Tim Morin (SUNY ESF), Ethan Kubatko (OSU), 9/2021-8/2022, \$297,959 (\$9,998)
2. NASA Ecological Forecasting (80NSSC21K1182) – *Ecological forecasting tools for movement track management at the Yukon-to-Yellowstone migration corridor* (PI), with Roland Kays (NCSU), John Fieberg (U. MN), Y2Y end-user coalition (various Canada and US agencies and NGOs), 2021-2025, \$874,265 (\$326,132)
3. US Department of Energy (through Lawrence Berkeley National Laboratory, research contract 7560193) – *UM Biological Station Ameriflux Core Site Project* (PI), with Chris Gough (Virginia Commonwealth U.), Luke Nave, (U. of Mich.), 2021-2025, \$1,234,236 (\$286,689).
4. US Department of Energy (DE-SC0021067) – *Functional-type modeling approach and data-driven parameterization of methane emissions in wetlands* (PI), with Bill Riley (Berkeley Lab), Kelly Wrighton (Colorado State U.), Eric Ward (USGS, LA), Jorge Villa (U. Louisiana), 2020-2023, \$808,246 (\$395,743).
5. United States-Israel Binational Agricultural Research and Development Fund (BARD) (IS-5304-20) – *Optimal irrigation strategies informed by direct tree-water storage measurements* (Dual-PI), with Yair Mau (Hebrew U. Jerusalem), 2020-2023, \$310,000 (\$154,000)
6. NSF-CBET (2036982) – *NSF2026: EAGER: Spatio-temporal design of techno-ecological synergies for a world without waste and resilient landscapes* (Co-PI), with Bhavik Bakshi (PI, CBE), Joel Paulson (CBE), 2021-2022, \$299,943 (\$99,981).
7. NOAA (NA18NOS42000079) through OWC-NERR, administered by ODNR (Subaward N18B 315-11) – *Hydrological modeling of Old Woman Creek* (PI), with Ethan Kubatko, Margaret Kalcic (SENR), 2020-2021, \$37,965 (\$34,517).
8. NSF-DEB (1915909) – *Collaborative Research: Scale-dependent processes as the drivers for understanding range- and niche-expansion in a widespread native species* (Co-PI, Institutional PI), with David Ward (Kent State, Lead PI), Oscar Rocha (Kent State), Juliana Medeiros (Holden Arboretum), Sarah Supp (Denison U.), 2019-2022, \$914,000 (\$82,000).
9. USDA-NIFA-AFRI (20186701927803) – *Modeling fluxes, fate and transport of ammonia emission from egg production and manure management facilities* (Co-PI), with Lingying Zhao (PI, FABE), Sewoon Hong, 2018-2022, \$497,000 (\$17,416).

Completed

10. Ohio Water Development Authority (7880) – *Predictive modeling of nutrient and carbon processing in wetlands – linking hydrology, water quality and microbial processes* (PI), with Kelly Wrighton (Colorado State U), Lauren Kinsman-Costello (Kent State), 2017-2021, \$199,925 (\$80,000).
11. Ohio Water Resources Center (G16AP00076) – *Linking wetland ecological functions: towards a combined ecosystem-service quantification to promote ecosystem health in Lake Erie* (Co-PI), with Jorge Villa (PI), 2019-2020, (\$39,710).
12. US Department of Energy Ameriflux (through Lawrence Berkeley National Laboratory, 7096915) – *UM Biological Station Ameriflux Core Site Project* (PI), with Peter Curtis, OSU, Chris Gough (Virginia Commonwealth U.), Knute Nadelhoffer, (U. of Mich), 2013-2020, \$1,646,900 (\$587,460).
13. NSF Biological Infrastructure (1564380) – *Collaborative research: ABI Sustaining: The Environmental-Data Automated Track Annotation (Env-DATA) system* (PI, Lead institution), with Roland Kays (NCSU), 2016-2020, \$451,042 (\$337,474).
14. US Forest Service (17-CR-11242302-050) – *Soil Heating in Sandy Ecosystems in the Southeastern US and Northern Wisconsin - Presence of Duff Violates a Key Assumption of the First Order Fire Effects Model's Soil Heating Module* (PI), 2017-2020, (\$15,070).
15. US Department of Energy (DE-SC0018170) – *Accounting for hydrological and microbial processes on greenhouse gas budgets from river systems* (PI), with Kelly Wrighton (Colorado State U.), James Stegen, (PNNL), 2017-2019, \$180,000 (\$90,000).

16. NSF-CBET (1508994) – *UNS: Collaborative Research: Measurement and modeling of the pathways of potential fugitive methane emissions during hydrofracking* (PI, lead institution), with Jeffrey Bielicki, Zuzana Bohrerova, Jaclyn Matthes (Wellesley College), Derek Johnson (West Virginia U), 2015-2019, \$330,000 (\$175,813).
17. NSF-Hydrological Science (1521238) – *Including tree water storage dynamics in modeling of stomatal conductance* (PI), with Ashley Matheny, 2015-2019, (\$496,537).
18. Ohio Water Resources Center (G16AP00076) - *Bog HELPR: Bog history, ecosystem status and land-use for peatland restoration in Ohio* (Co-PI), with Matt Davies. 2017-2019, \$28,123 (\$14,000).
19. NASA ABoVE (NNX15AT91A) – *Animals on the move: Remotely based determination of key drivers influencing movements and habitat selection of highly mobile fauna throughout the ABoVE study domain* (Co-PI, Institutional PI), with Natalie Boelman (PI, Columbia U.), Jan Eital (U Idaho), Lee Vierling Laura Prugh (U Washington), Mark Hebblewhite (U Montana), 2015-2018, \$1,536,289 (\$77,481).
20. Avangrid (PO 4503947933) - *The Dynamics of Ice Throws from Wind Turbine Rotors* (PI), 2017-2018, (\$9,900).
21. OSU OARDC (2016-055 SEEDS) - *PRO Peat Bog: indicators for assessing the Potential for Restoration of Ohio's Peat Bog ecosystems*. (Co-PI), with Matt Davies, Virginia Rich. 2016-2018, \$98,184 (\$17,463).
22. Ohio Water Development Authority (6560) – *Observations and modeling of wetland methane emissions* (PI), 2013-2018, (\$164,495).
23. Ohio Water Development Authority (6835) – *Opening the microbial black box: Identifying microbial enzymatic control on carbon stability in Ohio Wetlands* (co-PI), with Kelly Wrighton (PI), 2014-2017, \$197,882 (\$15,000).
24. Ohio Water Resources Center (G16AP00076) – *Baseline measurements of methane emissions from Piedmont Lake - current and future fracking area* (PI) 2016-2017, (\$51,207)
25. Ohio Water Resources Center (6300) – *Baseline measurements of methane emissions from rivers and lake waters in the proposed site of the OSU hydrofracking research station* (PI), 2015-2018, (\$5,290).
26. NSF-BIO Behavioral System (IOS-1145952) – *Collaborative Research: Modeling movement and survival of intercontinental songbird migrants crossing the Gulf of Mexico* (co-PI, Institutional PI), with Jill Deppe (PI, Eastern Illinois U), Thomas Benson (UIUC), Robert Diehl (USGS, Northern Rocky Mountain Science Center), Frank Moore (U. South. Miss.), 2012-2016, \$853,533 (\$41,497).
27. USGS (G14AC00091) – *Improve wildlife species tracking: Implementing an improved GPS capture and delivery system for California condors* (co-Investigator), with Robert Waltermire (PI, USGS, CO), Pat Lineback, Joseph Brandt (USFWS). 2014-2015, \$93,261 (\$15,079).
28. US Department of Energy-BER-Terrestrial Carbon Cycle Research (DE-SC0007041) – *Effects of disturbance on carbon sequestration in the New Jersey Pine Barrens* (Co-PI), with Karina Schäfer (PI, Rutgers U), Nick Skowronski (USDA Forest Service, NJ), Ken Clark, 2011-2015, \$518,000 (\$263,140).
29. NSF CBET (CBET-1033451) – *Collaborative research: Greenhouse gas balance of temperate urban wetlands*, (co-PI, Institutional PI), with Karina Schäfer (PI, Rutgers University), William Mitsch (OSU), Mei Yin Wu (Montclair College). 2010-2015, \$321,000 (\$62,221).
30. US Department of Energy-BER-Terrestrial Carbon Cycle Research (DE-SC0006708) – *Forecasting carbon storage as eastern forests age: joining experimental and modeling approaches at the UMBS AmeriFlux site* (co-PI) with Peter Curtis (PI), Chris Gough (Virginia Commonwealth U.), Knute Nadelhoffer (U. of Mich.), 2011-2014, \$1,030,766 (\$250,718).
31. NASA-ROSES – Biodiversity and Ecological Forecasting (NNX11AP61G) – *Type B (application): Discovering relationships between climate and animal migration with new tools for linking animal movement tracks with weather and land surface data* (PI) with Roland Kays (NC State Museum), David Douglas (USGS, AK), Jiawei Han (UIUC), David Brandes (Lafayette College), Martin Wikelski (Max Planck Institute, Germany), 2011-2014, \$682,805 (\$612,296).
32. NOAA-CPO (NA11OAR4310190) – *Improving process-level understanding of the factors underlying long-term trends and year-to-year variability in carbon sequestration of northeastern forests* (co-PI, Institutional PI), with Andrew Richardson (PI, Harvard U), William Munger, Peter Curtis (OSU), Danilo Dragoni (Indiana U), David Hollinger (USDA FS, NH), 2011-2014, \$524,736 (\$45,000).

33. Ohio Water Resources Center (G11AP20099-2012OH259B) – *Green-House-Gas budget of constructed wetlands: Understanding the sources to maximize benefits* (PI), 2012-2014, (\$25,677).
34. NSF-CBET (CBET-1311547) – *Collaborative Research: RAPID: Impact of disturbance from hurricane Sandy on methane emission and carbon sequestration rates in NJ coastal wetlands* (co-PI, Institutional PI), with Alper Yilmaz, OSU, Karina Schäfer (PI, Rutgers U.), Peter Jaffe (Princeton U.), 2012-2013, \$192,141 (\$70,200).
35. Ohio Water Resources Center (G11AP20099- 2011OH205B) – *The constructed wetland dilemma: Nitrogen removal at the expense of methane generation?* (Co-PI), with Paula Mouser (PI). 2011-2014, \$29,953 (\$5,000).
36. International Arid land Consortium (10R-05) – *Mitigating aeolian erosion from dry Aral Sea bed with Haloxylon plantations*, with Somnath Baidya Roy (PI, UIUC), Sergei Volis (Ben Gurion U, Israel), Nikolai Orlovski, 2011-2012, \$85,601 (\$3582).
37. US Department of Agriculture-NIFA-AFRI (CSREES-OHOR-2009-04566) – *Large eddy simulations of PM dispersion to quantify the effects of windbreaks on air quality around CAFOs.* (PI), With Barbara Wyslouzil, Lingying Zhao, William Eichinger (U Iowa). 2010-2013, (\$399,961).
38. US Forest Service, Delaware, OH (09-CR-11242302-033) – *Physical models of fire behavior and effects in eastern mixed-oak forests* (PI), with Matthew Dickinson (USFS), 2009-2014, (\$120,937).
39. US Forest Service, East Lansing, MI, Joint Research Venture Agreement (10-JV-11242302-013) – *Smoke dispersion from low intensity fires: Large eddy simulations using RAFLES* (PI), with Warren Heilman (USFS), 2009-2013, (\$94,663).
40. NSF Ecosystem Science (DEB 0911461) – *Collaborative research: Linking heterogeneity of above-ground and subsurface Processes at the gap-canopy patch scales to ecosystem level dynamics.* (Co-PI, Institutional PI), with Valery Ivanov (PI, U. of Mich.), Mahta Moghaddam, 2009-2013, \$576,709 (\$237,293).
41. NSF Ecological Biology (DEB-0918869) – *Collaborative research: How structural heterogeneity and connectivity of landscapes affect wind dispersal.* (Co-PI, Institutional PI), With Ellen Damschen (PI, Washington U. in St. Louis), Jay Turner, Dirk Baker. 2009-2012, \$165,085, (\$24,412).
42. US Department of Energy-NICCR (DE-FC02-06ER64158) – *Disturbance, succession and forest carbon dynamics: a large-scale experiment at the University of Michigan Biological Station* (Co-PI) with Peter Curtis (PI), Chris Gough (Virginia Commonwealth U), Chris Vogel (U. of Mich.), 2009-2011, \$450,952 (\$115,267).
43. Institute for Energy and the Environment, OSU – *Identification and optimization of potential locations for wind-power turbines on the OSU campus* (PI), with Peter Curtis. 2009-2010, (\$49,729).

Training and Outreach Grants

44. ODNr (N18B315-13-01-03) – *OWC Fellowship: Yvette Onyango* (PI, research supervisor), with Yvette Onyango (Trainee), 2021-2022, (\$50,000).
45. NSF DEB (Supplement for NSF1915909) – *Research Experience for Teachers (RET)* (PI, research supervisor), with David Ward (Kent State U.), Hugh Morris (Trainee, Franklinton High School), 2021-2022, (\$15,000).
46. NSF DEB (Supplement for NSF1915909) – *Research Assistantship for High School Students (RAHSS) for Teachers (RET)* (PI, research supervisor), with David Ward (Kent State U.), Hugh Morris (Franklinton High School), 2021-2022, (\$18,000).
47. NSF-IOS (1823498) – *Workshop: Linking remote animal detection and movement data and macrosystem environmental datasets and networks* (Co-PI), with David Luther (PI, George Mason U), Bill McShea (Smithsonian), 2018-2020, \$47,604 (\$1800).
48. NSF Behavioral & Cognitive Sciences (1560727) – *Conferences: Advancing movement and mobility science by bridging research on human mobility and animal movement ecology* (Co-PI), with Harvey Miller (PI), Jennifer Miller (U. TX), 2016-2018, \$57,184 (\$28,592).
49. DOE Office of Science Graduate Student Research Fellowship (SCGSR) – *Multiple-scale parameterization of CLM4.5bgc* (PI, research supervisor), with Timothy Morin (Trainee), Bill Riley (Co-supervisor, LBNL), 2016-2017, (\$29,000).
50. NSF Environmental Biology Doctoral Dissertation Improvement Grant (1601224) – *The nexus of observation and modeling of methane emissions from inland water bodies* (PI, thesis supervisor), with Timothy Morin (Trainee), 2016-2017, (\$19,056).

51. NASA Earth and Space Science Fellowship (NNX11AL45H) – *Modeling the effect of high-resolution land-surface heterogeneity and forest structure on emission, chemistry, and dispersion of volatile organic compounds and reactant species* (PI, research supervisor), with William Kenny (Trainee), 2011-2014, (\$90,000).
52. NASA Earth and Space Science Fellowship (NNX09AO26H) – *Incorporating the effects of tree-scale land-surface heterogeneity on litter moisture for use in regional models of wildland fire dynamics and fire risk.* (PI, research supervisor) with Anthony Bova (Trainee), 2009-2011, (\$58,365).
53. NSF IGERT (NSF-DGE-0504552, sub contract through U of Mich. UMBS-BART program) – *Incorporating Effects of Remote-Sensed Tree-Scale Structural Heterogeneity of Forests on Flux Exchanges and Atmospheric Surface Layer Properties* (PI, research supervisor and BART mentor), with Kyle Maurer (Trainee), 2009-2011, (\$57,000).
54. NSF DEB (supplement for DEB 0911461) – *Research Experience for Undergraduate Students (RET)* (PI, research supervisor), 2010, (\$7,500).
55. NSF DEB (supplement for DEB 0911461) – *Research Experience for Teachers (RET)* (PI, research supervisor), 2012, (\$14,925).

Supercomputer and Lab-Resources Allocation Grants

56. Battelle, NEON – *Mobile Deployment Platform FY21 Mezzanine IR&D Deployment* (Co-PI), with Rommel Zulueta (PI, NEON), Tanya Berger-Wolf (OSU, TDAI), Rajiv Ramnath, John Horack, Anish Arora, 6/2021-5/2022, (\$200,000 in kind, instrument deployment resources)
57. Department of Energy, EMSL (51858) – *Incorporating hydrologic perturbation and microbial processes into carbon budgets from coastal wetland soils* (Co-PI), with Kelly Wrighton (PI, Colorado State U.), Rebecca Daly, Tim Morin (SUNY ESF), Eric Ward (USGS, LA), Jorge Villa (U. LA), 10/2021-9/2024, (\$350,000 in kind, 2100 laboratory hours)
58. Department of Energy – JGI-CSP (504205) – *From genomes to methane production: Targeting critical knowledge gaps in wetland soils* (Co-PI), with Kelly Wrighton (PI), Matt Sullivan, Timothy Morin, Jorge Villa, Lauren Kinsman-Costello (Kent State U.), Chris Miller (Colorado State U.), 10/2018-9/2021, (\$220,000 in kind laboratory resources)
59. Ohio Supercomputer Center (PAS0409-4) – *Virtual laboratory for tree-water-atmosphere interactions* (PI), 2013-2021, (100,000 Computational Units).
60. Department of Energy, EMSL (50229) – *Methanogenesis in wetland soils: It may not always be as deep as we all thought* (Co-PI), with Kelly Wrighton (PI), Lauren Kinsman-Costello (Kent State U.), Chris Miller (Colorado State U.), 2018-2021, (\$346,918 in kind, 3,104 Laboratory hours).
61. Department of Energy, EMSL – *Biogeochemical and genomic determinants of methane cycling in freshwater wetland sediments* (Co-PI), with Kelly Wrighton (PI), Paula Mouser, Chris Miller (Colorado State U.), 2016-2018, (3,000 Laboratory hours).
62. Great Lakes Consortium for Petascale Computation – *Scaling the effects of intermediate disturbance and changes to small-scale ecosystem structure on ecosystem, hydrology, lake and weather interactions to the scale of the great-lakes region* (PI), 2013-2014, (1,000,000 Computational Units).
63. Ohio Supercomputer Center (PAS0626) – *Discovering relationships between climate animal movement with new tools for linking movement tracks with remote-sensing land-surface data* (PI), 2012-2015, (100,000 Computational Units).
64. Ohio Supercomputer Center (PAS0409-2) – *Linking heterogeneity of above-ground and subsurface processes at the gap-canopy patch scales to ecosystem level dynamics* (PI), 2011-2013, (100,000 Computational Units).
65. Ohio Supercomputer Center (PAS0409-1) – *Large Eddy simulations for incorporating the effects of tree-scale structural heterogeneity of forests on flux exchange and atmospheric surface layer properties* (PI), 2009-2011, (30,000 Computational Units).

PUBLICATIONS AND PRESENTATIONS

Co-author affiliations:

* - my student/post-doc/technician; * - Co-supervised by me as a thesis committee member;

^ - my participation as a data contributor to an Ameriflux/Fluxnet/NACP multi-site synthesis study.

Peer-Reviewed Journal Publications

1. Mathes K, Ju* Y, Kleinke* C, Oldfield C, Bohrer G, Vogel C, Bond-Lamberty B, Dorheim K, Gough CM. (2021). A multidimensional stability framework enhances interpretation and comparison of carbon cycling response to disturbance. *Ecosphere* (accepted for publications).
2. Gough CM, Bohrer G, Hardiman B, Nave L, Vogel CS, Atkins J, Bond-Lamberty B, Fahey R, Fotis A, Grigri M, Haber L, Ju* Y, Kleinke* C, Mathes K, Nadelhoffer K, Stuart-Haëntjens E, Curtis PS. (2021). Disturbance-accelerated succession increases the production of a temperate forest. *Ecological Applications* e02417 (in press, preprint published online: <https://doi.org/10.1002/eap.2417>).
3. Nourani E, Bohrer G, Becciu P, Bierregaard R, Duriez O, Figuerola J, Gangoso L, Giokas S, Higuchi H, Kassara C, Kulikova O, Lecomte N, Monti F, Pokrovsky I, Sforzi A, Therrien J-F, Tsiopelas N, Vansteelant W, Viana D, Yamaguchi N, Wikelski M, Safi K. (2021). The interplay of wind and uplift facilitates over-water flight in facultative soaring birds. *Proceedings of the Royal Society B* 1958: 20211603 <https://doi.org/10.1098/rspb.2021.1603>.
4. Young AM, Friedl MA, Seyednasrollah B, Beamesderfer E, Carrillo CM, Li X, Moon M, Arain MA, Baldocchi DD, Blanken PD, Bohrer^ G, Burns SP, Chu H, Deasai AR, Griffis TJ, Hollinger DY, Litvak ME, Novick K, Scott RL, Suyker AE, Verfaillie J, Wood JD, Richardson AD. (2021). Seasonality in aerodynamic resistance across a range of North American ecosystems. *Agricultural & Forest Meteorology* 310:10863 <https://doi.org/10.1016/j.agrformet.2021.108613>.
5. Li* Y, Zhao K, Liu Y, Bohrer G, Cai Y, Wilson A, Hu* T, Wang Z, Zhao K. (2021). Impacts of forest loss on local climate across the conterminous United States: Evidence from satellite time-series observations. *Science of the Total Environment* 802:149651 <https://doi.org/10.1016/j.scitotenv.2021.149651>.
6. Delwiche KB., Knox SH, Malhotra A, Fluet-Chouinard E, McNicol G, Feron S, Ouyang Z, Papale D, Trotta C, Canfora E, Cheah YW, Christianson D, Fluxnet CH4 Data Contributors^, Poulter B, Jackson RB. (2021). FLUXNET-CH4: A global, multi-ecosystem dataset and analysis of methane seasonality from freshwater wetlands. *Earth System Science Data* 13:3607-3689 <https://doi.org/10.5194/essd-13-3607-2021>.
7. Irvin J, Zhou S, McNicol G, Lu F, Liu V, Fluet-Chouinard E, Ouyang Z, Knox SH, Lucas-Moffat A, Trotta C, Papale D, Vitale D, Mammarella I, Fluxnet CH4 Data Contributors^, Poulter B, Jackson RB. (2021). Gap-filling eddy covariance methane fluxes: Comparison of machine learning model predictions and uncertainties at FLUXNET-CH4 wetlands. *Agriculture and Forest Meteorology* 308-309:108528 <https://doi.org/10.1016/j.agrformet.2021.108528>.
8. Knox SH, Bansal S, McNicol G, Schafer K, Sturtevant C, Ueyama M, Valach AC, Baldocchi D, Delwiche K, Desai AR, Euskirchen E, Liu J, Lohila A, Malhotra A, Melling L, Riley WJ, Runkle BRK, Turner J, Vargas R, Zhu Q, Aalto T, Fluet-Chouinard E, Göeckede M, Melton JR, Sonnentag O, Vesala T, Ward EJ, Zhang Z, Feron S, Ouyang Z, Fluxnet CH4 Data Contributors^, Poulter B, Jackson RB. (2021). Identifying dominant environmental predictors of global freshwater wetland methane fluxes across diurnal to seasonal time scales. *Global Change Biology* 27: 3582-3604 <https://onlinelibrary.wiley.com/doi/10.1111/gcb.15661>.
9. Poyatos R, Granda V, Flo V, SapFluxnet Data Contributors^, Steppe K, Mencuccini M and Martínez-Vilalta J. (2021). Global transpiration data from sap flow measurements: the SAPFLUXNET database. *Earth System Science Data* 13: 2607–2649 <https://doi.org/10.5194/essd-13-2607-2021>.
10. Yazbeck* T, Bohrer G, Vines* C, De Roo F, Mauder M, Bakshi B. (2021). Effects of spatial heterogeneity of leaf density and crown spacing of canopy patches on dry deposition rates. *Agricultural and Forest Meteorology* 306:108440 <https://doi.org/10.1016/j.agrformet.2021.108440>.
11. Chang K-Y, Riley WJ, Knox S, Jackson R, McNicol G, Poulter B, Fluxnet CH4 Data Contributors^, Zhang Z, Zona D. (2021). Substantial hysteresis in emergent temperature sensitivity of global

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Invited Conference Presentation

1. Bohrer G. Keynote: Going Beyond the “Whole Wetland”: Small-Scale Within-Wetland Heterogeneity, Translates To Big Difference in Methane Flux Dynamics and Regulation. 5/2021. *5th International Conference of Recent Trends in Environmental Science and Engineering (RTESE’21)*, Niagara Falls, Canada (Virtual).
2. Bohrer G., Villa* JA, Ju* Y, Stephen* T, Rey-Sanchez* C, Wrighton KC. Wetland plant phenology and the consequences to methane emissions at a Lake Erie estuarine mineral-soil marsh. 12/2019. *American Geophysical Union Fall Meeting 2019*, San Francisco, CA.
3. Bohrer G., Yazbeck* T, Mauder M, De Roo F, Bakshi B. Large Eddy Simulation Study of the role of Canopy Density and Structure in Removing Air Pollution by Dry Deposition, Oral Presentation, 1/2020. *American meteorological Society 100th Annual Meeting*, Boston, MA.
4. Matheny AM, Bohrer G., Agee E, Rechner AF, Restrepo Acevedo AM, Mursinna AR. Dynamics of ecosystem-scale water use efficiency as a product of plant hydraulic strategy. 12/2018, *American Geophysical Union Fall Meeting*. Washington DC.
5. Bohrer G. Introduction: Global Environmental Changes and Movement. 3/2017, *Gordon Research Conference – Movement Ecology of Animals*, Ventura, CA.
6. Novick KA, Ficklin DL, Stoy PC, Williams CA, Bohrer G., Oishi AC, Papuga SA, Blanken P, Noormets A, Scott RL, Wang L, Roman DT, Yi K, Sulman BN, Phillips R. Harnessing long-term flux records to better understand ecosystem response to drought. 12/2016. *American Geophysical Union Fall Meeting 2016*, San Francisco, CA.
7. Bohrer G., Matheny* AM, Mirfenderesgi* G, Morin* TH, Rey-Sánchez* AC, Gough CM, Vogel CS, Nadelhoffer KJ, Curtis PS. Forest disturbance spurs growth of modeling and technology. 12/2016. *American Geophysical Union Fall Meeting 2016*, San Francisco, CA.
8. Bohrer G., Davidson* SC, McClain* K, Weinzierl R, Kays R, Wikelski M. The Movebank environmental-data automated track annotation (Env-DATA) system: new possibilities in processing and interpretation of animal movement data. 10/2016. *The Wildlife Society Annual Conference*. Raleigh, NC.
9. Morin* TH, Bohrer G., Stefanik* KC, Rey-Sánchez* AC, Mitsch WJ. Combining eddy-covariance and chamber measurements to determine the methane budget from a small, heterogeneous urban wetland park. 8/2016. *5th International EcoSummit – Ecological Sustainability Engineering Change*. Montpellier, France.
10. Morin* TH, Bohrer G., Rey-Sánchez* AC, Stefanik* KC, Schäfer KVR, Mitsch WJ. Modeling greenhouse gas chemistry and transport in heterogeneous wetlands. 8/2016. *5th International EcoSummit – Ecological Sustainability Engineering Change*. Montpellier, France.
11. Bohrer G. The Movebank Environmental-Data Automated Track Annotation (Env-DATA) System – New Possibilities in Processing and Interpretation of Animal Movement Data. 5/2016. *Minerva School 2016: High-throughput systems for wildlife tracking at the regional scale*. Jerusalem/HaGoshrim, Israel.
12. Bohrer G. Not out of the blue - discovering the environmental context of movement. Plenary lecture. 9/2015. *AniMove Workshop and Symposium*. Konstanz, Germany.
13. Bohrer G. Hierarchical testing of individual-based models to determine effective environmental drivers of movement. 2/2015. *European Network for the Radar surveillance of Animal Movement (ENRAM)*, Kfar Blum, Israel.
14. Bohrer G., Morin* TH, Kenny* WT, Vogel CS. Observations and modeling the advection of carbon from an inland lake surrounded by a forest. 12/2014. *American Geophysical Union Meeting 2014*, San Francisco, CA.
15. Keenan T, Richardson A, Gray J, Friedl M, Toomey M, Bohrer G., Hollinger D, Munger JW, Schmid HP, Wing IS, Yang B. Net carbon uptake has increased through warming-induced changes in

- temperate forest phenology. 12/2014. *American Geophysical Union Meeting 2014*, San Francisco, CA.
16. Gough CM, Bohrer G, Nave L, Nadelhoffer K, Vogel CS, Bond-Lamberty B, Goodrich-Stuart E, Curtis PS. Forest carbon cycling across gradients of disturbance severity: patterns and underlying mechanism. 12/2014. *American Geophysical Union Meeting 2014*, San Francisco, CA.
 17. Bohrer G, Morin* TH, Vogel CS. CO₂ advection from a small inland lake surrounded by forest in Northern Michigan. 9/2014. *Advancing the Science of Gas Exchange between Fresh Waters and the Atmosphere*, Hyytiälä, Finland.
 18. Bohrer G, Beck PSA, Bartlam-Brooks HLA, Ngene, SM. Hierarchical testing of individual-based models to determine effective environmental drivers of movement. 9/2014. *GIScience 2014 – Analysis of Movement Data Workshop*, Vienna, Austria.
 19. Davidson* SC, Bohrer G, Weinzierl R, Kays R, Wikelski M. Scaling up the impact of local animal telemetry studies using Movebank. 8/2014. *American Fisheries Society Annual Meeting*, Quebec City, Quebec, Canada.
 20. Frasson* RPM, Bohrer G. Exploring the influence of time and spatial resolution on the prediction of latent heat fluxes. 6/2014. *Ohio Supercomputer Center Statewide User Group Meeting*, Columbus, OH.
 21. Bohrer G, Dodge* S, Bildstein K, Davidson* SC, Weinzierl R, Barber D, Kays R, Brandes D, Han J, Wikelski M. Discovering relationships between climate and animal migration with new tools for linking animal movement tracks, weather and land surface data. 5/2014. *NASA Biodiversity and Ecological Forecasting Team Meeting*, Silver Spring, MD.
 22. Bohrer G, Dodge* S, Bildstein K, Davidson* SC, Weinzierl R, Barber D, Kays R, Brandes D, Han J, Wikelski M. Environmental drivers of variability in the movement ecology of four turkey vulture populations in two continents. 5/2014. *Symposium for Animal Movement and the Environment*, Raleigh, NC.
 23. Keenan TF, Hollinger DY, Bohrer G, Dragoni D, Munger WJ, Schmid HP, Richardson AD. Long-term increase in forest water-use efficiency observed across ecosystem carbon flux networks. 12/2013. *American Geophysical Union Meeting 2013*, San Francisco, CA.
 24. Bohrer G. Env-DATA – New Tools for Studying Animal Movement and Their Environment. 11/2013. *Global Precipitation Measurements Applications Workshop - NASA*, College Park, MD.
 25. Davidson* SC, Kays R, Dodge* S, Weinzierl R, Wikelski M, Bohrer G. Animal movement data and the Movebank online database. 10/2013. *The Wildlife Society Annual Conference*, Milwaukee, WI.
 26. Bohrer G, Matheny* AM. The Finite-Elements Tree-Crown Hydrodynamics model (FETCH): Assessing the effects of hydrodynamic strategy in different tree species, 7/2013. *12th U.S. National Congress on Computational Mechanics, USNCCM12*, Raleigh, NC.
 27. Gough CM, Bohrer G, Nadelhoffer KJ, Vogel CS, Curtis PS. Resilience of forest carbon storage to low-intensity disturbance: Insights from a large-scale experiment within a long-term AmeriFlux site in the upper Great Lakes. 5/2013. *US Department of Energy 2013 Terrestrial Ecosystem Science/Subsurface Biogeochemical Research Joint Investigator Meeting*, Washington, DC.
 28. Bohrer G, Naor-Azrieli* L, Mesi* S, Schäfer KVR, Mouser P, Stefanik* K, Mitsch WJ, Morin* T. Eddy flux measurements of methane at the Oletangy River Wetland Research Park wetland - Determining the seasonal and diurnal dynamics of methane emissions, 10/2012. *4th International EcoSummit on Ecological Sustainability*, Columbus, OH.
 29. Mouser P, Brooker* M, Bohrer G. Factors influencing microbial gas production rates in wetland sediments, 10/2012. *4th International EcoSummit on Ecological Sustainability*, Columbus, OH.
 30. Schäfer KVR, Bohrer G. Effect of restoration on the carbon balance in the Meadowlands of New Jersey, 10/2012. *4th International EcoSummit on Ecological Sustainability*, Columbus, OH.
 31. Schäfer KVR, Bohrer G, Reid M, Tripathee R, Jaffe P. Temporal and spatial dynamics of methane fluxes in a temperate urban wetland, 10/2012. *4th International EcoSummit on Ecological Sustainability*, Columbus, OH.
 32. Bohrer G. Combining wind simulations and bird-density surveys for optimization of green wind power generation in urban limited space applications. 6/2012. *The Israel Academy of Sciences and Humanities – Abraham Kogan Seminar on Renewable Energies*, Jerusalem, Israel.

33. Schäfer KVR, Bohrer G, Tripathee R. Carbon sequestration by *Phragmites australis*, 4/2012. *Northeast Natural History Conference 2012*, Syracuse, NY.
34. Bohrer G. Optimization of small scale wind turbine in limited-space urban applications - maximizing wind and minimizing bird collision hazard. 2/2012, *OSU Center for Applied Plant Sciences, 1st CAPS Morning Gathering: Biofuels & Sustainable Energy Practices*, Columbus, OH.
35. Bohrer G, Maurer* K, Matheny* A, Meyer* K, Garrity* S. Assessing the effects of hydrodynamic stresses on photosynthesis with natural and modified canopy structures. 12/2010, *American Geophysical Union Fall Meeting*, San Francisco, CA.
36. Bohrer G. If only life were so simple – Handling some of dispersal's most neglected phenomena with simple(ified) mechanistic solutions. 9/2010. *FoResTTraC Workshop: Long Distance Gene Flow and Adaptation*, Bordeaux, France.
37. Brandes D, Bohrer G, Mandel* J, Katzner T, Miller T, Lanzone M, Maisonneuve C, Trembley J. Raptor migration by computer: using modeling and satellite tracking data to fill in the GPS. 4/2010. *Conference of the Hawk Migration Association of North America*, Duluth, MN.
38. Bohrer G. The shaved-grid-cell method for sub-grid-scale representation of vegetation volume in atmospheric simulations of forest canopies. 7/2009. *10th US National Congress on Computational Mechanics (USNCCM-X)*, Columbus, OH.
39. Bohrer G, Katul GG & Avissar R. Modification of mean boundary layer properties by micro-scale heterogeneity in large eddy simulations. 5/2008. *Inaugural International Conference of the Engineering Mechanics Institute (EM08)*, Minneapolis, MN.
40. Bohrer G, Brady R & Avissar R. Immersed virtual reality visualization of a forest-atmosphere flow model. 5/2007. *Duke Frontiers*, Duke University, Durham, NC.
41. Bohrer G, Ward D, Roth-Bejerano N, Kagan-Zur V. Host-VAM interactions affect seedling survival and growth. 10/1999. *Combating desertification with plants*. Beer Sheva, Israel.

Conference Presentations

42. Davidson* S, Bohrer G, Kölzch A, Vinciguerra C, Kays R. Mobilizing Animal Movement Data: API use within the Movebank platform. Oral Presentation 10/2021. *TDWG 2021* (Virtual).
43. Kujawa* H, Kalcic M, Bohrer G. Using SWAT+ to build a management tool for Old Woman Creek to project climate and land use change. Poster 11/2021. *Water Management Association of Ohio Annual Conference*.
44. Yazbeck* T, Bohrer G, Gentine P, Ye L, Arriga N, Bernhofer C, Blanken PD, Desai AR, Durden D, Knohl A, Kowalska N, Metzger S, Mölder M, Noormets A, Novick K, Scott RL, Šigut L, Soudani K, Ueyama M, Varlagin A. Site characteristics mediate the relationship between forest productivity and satellite measured solar induced fluorescence. Poster 6/2021. *Ameriflux Land-Atmosphere Interactions Workshop* (virtual)
45. Yazbeck* T, Bohrer G, Vines* C, de Roo F, Mauder M, Bakshi B. Effects of spatial heterogeneity of leaf density and crown spacing of canopy patches on dry deposition rates. Oral Presentation 6/2021. *American Meteorological Society, 34th Conference on Agricultural and Forest Meteorology/Fifth Conference on Atmospheric Biogeosciences* (Virtual).
46. Bohrer G, Villa* JA, Ju* Y, Sanchez* CA, Wrighton KC. Vegetation controls of methane emissions at a Lake Erie estuarine mineral-soil marsh. Oral Presentation 6/2021. *American Meteorological Society, 34th Conference on Agricultural and Forest Meteorology/Fifth Conference on Atmospheric Biogeosciences*, (Virtual).
47. Yazbeck* T, Bohrer G, Zhu Q, Riley WJ, Villa* JA, Ward E, Wrighton KC. Functional-type modeling approach and data-driven parameterization of methane emissions in wetlands. Poster 5/2021. *20th Annual Meeting of the American Ecological Engineering Society*, (Virtual)
48. Bohrer G, Villa* JA, Ju* Y, Messik* JE, Wrighton KC. Controls of methane emissions from different types of vegetation patches within a wetland. Poster 5/2021. *20th Annual Meeting of the American Ecological Engineering Society*, (Virtual)
49. Yazbeck* T, Bohrer G, Vines* C, De Roo F, Mauder M, Bakshi B. Effects of spatial heterogeneity of leaf density and crown spacing of canopy patches on dry deposition rate. Poster, 4/2021. *European Geophysical Union Annual Meeting*, Vienna Austria (virtual).
50. Villa* JA, Ju* Y, Stephen* T, Rey-Sanchez* AC, Wrighton KC, Bohrer G. Plant-mediated methane transport in a temperate freshwater estuarine marsh. Oral Presentation 4/2021. *13th International Symposium on Biogeochemistry of Wetlands*. Baton Rouge, LA (Virtual).
51. Mathes K, Ju* Y, Oldfiend CA, Bohrer G, Vogel C, Bond-Lamberty B, Gough C. A multidimensional framework enhances interpretation and comparison of carbon cycling response to disturbance. Poster, 3/2021. *NACP 7th Open Science Meeting* (virtual)

52. Davidson* SC, Bohrer G, Jennewein J, LaPoint S, Gurarie E, Kelly A, Mahoney P, Grier M, Hebblewhite M, Miller TA, Katzner T, Couriot O. An archive for animal-borne sensor data supports ecological monitoring and collaboration across the Arctic. Poster, 3/2021. *Arctic Science Summit Week 2021*, Portugal (Virtual).
53. Gough CM, Bond-Lamberty BP, Nave LE, Clay C, Mathes KC, Haber L, Grigri MS, Agee E, Dorheim K, Pennington S, Shiklomanov AN, Tallant J, Fahey RT, Curtis PS, Nadelhoffer KJ, Stuart-Haëntjens EJ, Hardiman BS, Bohrer G. Dynamic mechanisms support forest carbon cycling stability following disturbance. Poster, 12/2020. *American Geophysical Union Fall Meeting 2020*, San Francisco, CA (virtual).
54. Yazbeck* T, Bohrer G, Gentine P, Ye L. Evaluation of solar-induced chlorophyll fluorescence as a prediction of gross primary production using multiple eddy covariance sites. Poster, 12/2020. *American Geophysical Union Fall Meeting 2020*, San Francisco, CA (virtual).
55. Villa* JA, Ju* Y, Yazbeck* T, Waldo S, Wrighton KC, Bohrer G. Methane diffusion and ebullition from ecohydrological patches in a freshwater estuarine marsh: underscoring the spatial heterogeneity of methane fluxes within wetland ecosystems. Oral Presentation, 12/2020. *American Geophysical Union Fall Meeting 2020*, San Francisco, CA (virtual).
56. Ju* Y, Villa* JA, Bohrer G. Quantification of methane emissions from different land-cover patches in a heterogeneous wetland. Poster, 12/2020. *American Geophysical Union Fall Meeting 2020*, San Francisco, CA (virtual).
57. Mathes KC, Vogel CS, Ju* Y, Bohrer G, Bond-Lamberty BP, Gough CM. A multidimensional framework enhances interpretation of carbon (C) cycling stability following disturbance. Poster, 12/2020. *American Geophysical Union Fall Meeting 2020*, San Francisco, CA (virtual).
58. Xiao J, Li X, Kimball J, Reichle RH, Scott RL, Litvak ME, Bohrer G, Frankenberg C. Synergistic use of SMAP and OCO-2 data in assessing the responses of ecosystem productivity to the 2018 U.S. drought. Oral Presentation, 12/2020. *American Geophysical Union Fall Meeting 2020*, San Francisco, CA (virtual).
59. Davidson* SC, Bohrer G, LaPoint S, Gurarie E, Mahoney P, Jennewein JS, Greier E, Couriot O, Katzner TE, Kelly A, Hebblewhite M. Continental-scale and decadal patterns in animal phenology discovered using the Arctic Animal Movement Archive. Poster, 12/2020. *American Geophysical Union Fall Meeting 2020*, San Francisco, CA (virtual).
60. Bohrer G. Formulation of a consistent multi-species canopy description for hydrodynamic models in mixed-forests. Oral Presentation, 12/2020. *American Geophysical Union Fall Meeting 2020*, San Francisco, CA (virtual).
61. Rodríguez-Ramos JAA, Burton M, Smith* G, McGivern BB, Solden LM, Graham EB, Villa* JA, Nelson WC, Song H-S, Purvine S, Nicora C, Daly R, Lipton MS, Hoyt DW, Bohrer G, Stegen J, Wrighton KC. The tale of a microbial community and its infective agents: Microbial and viral interactions fuel carbon and nitrogen cycling in the hyporheic zone of the Columbia River. Poster, 12/2020. *American Geophysical Union Fall Meeting 2020*, San Francisco, CA (virtual).
62. Yazbeck* T, Bohrer G, Gentine P. Evaluation of Solar-Induced Chlorophyll Fluorescence as a prediction of Gross Primary Production using multiple eddy covariance sites. Poster, 10/2020. *Ameriflux PI Meeting* (virtual).
63. Bisht G, Riley W, Bohrer G, Matheny AM, Mills R. Development of a soil-plant-atmosphere continuum model with support for heterogeneous computing architectures. Poster, 10/2020. *Earth System Model Development (ESMD) program area Principle Investigator (PI) and E3SM Annual All-Hands meeting* (virtual).
64. Bohrer G, Yazbeck* T, Restrepo Acevedo AM, Matheny AM. Diurnal and inter-day hysteresis of species-specific stomatal conductance from sap-flow measurements illustrates hydraulic-stress responses strategies of trees. Oral Presentation. 5/2020. *EGU General Assembly*, Vienna, Austria (virtual).
<https://doi.org/10.5194/egusphere-egu2020-5672>
65. Ju* Y, Bohrer G. Classification of Wetland Vegetation Based on NDVI Time Series Generated From HLS Dataset. Virtual Poster, 4/2020. *Environmental Science and Design Research Initiative 2020*, Kent, OH.
66. Butterfield Z, Barr S, Gough CM, Sehlin T, Grossman K, Bohrer G, Keppel-Aleks G. Intraseasonal dynamics and directional dependencies in novel tower-based SIF observations over a temperate deciduous forest. Poster, 12/2019. *American Geophysical Union Fall Meeting 2019*, San Francisco, CA.
67. Fisher JB, Lee B, Purdy AJ, Halverson G, Cawse-Nicholson K, Wang A, Anderson RG, Aragon B, Arain MA, Baldocchi DD, Baker JM, Barral H, Bernacchi C, Bernhofer C, Biraud S, Bohrer G, Brunsell NA, Cappelaere B, Castro-Contreras S, Chun H, Conrad B, Cremonese E, Demarty J, Desai AR, De Ligne A, Foltýnová L, Goulden M, Griffis TJ, Grünwald T, Johnson MS, Kang M, Kelbe D, Kowalska N, Jong-Hwan Lim, Ibrahim Maïnassara, Jonghwan Lim, Matthew McCabe, Justine Missik, Mohanty B, Moore C, Morillas L, Morrison R, Munger W, Posse G, Richardson AD, Russell E, Ryu R, Sanchez-Azofeifa GA, Schmidt M, Schwartz E, Sharp E, Šigut L, Tang Y, Lee CM, Hulley GC, Anderson M, Hain C, French AN, Wood EF, Hook SJ. First evapotranspiration results from NASA's ECOSTRESS mission. Oral Presentation, 12/2019. *American Geophysical Union Fall Meeting 2019*, San Francisco, CA.
68. Bohrer G, Yazbeck* T, Restrepo Acevedo AM, Rechner AF, Matheny AM. Tree-level hydraulic stress: insights from long-term measurements of sap-flow and tree-water storage. Oral Presentation, 12/2019. *American Geophysical Union Fall Meeting 2019*, San Francisco, CA.

69. Stuart-Haëntjens EJ, Hardiman BS, Fahey RT, Bohrer G, Rey-Sanchez* C, Cheng SJ, Morin* TH, Curtis PS, Vogel CS, Gough CM. Lessons from a 15-year eddy-covariance dataset: could changing soil water content tip the temperate forest carbon balance? Oral Presentation, 12/2019. *American Geophysical Union Fall Meeting 2019*, San Francisco, CA.
70. Silva M, Matheny M, Pauwels V, Bohrer G, Daly E. Tree-hydrodynamic modelling of *Eucalyptus globulus* for plantation assessment. Oral Presentation, 12/2019. *23rd International Congress on Modelling and Simulation MODSIM 2019*, Canberra, Australia.
71. Bisht G, Riley WJ, Bohrer G, Matheny AM. Development of a tree-level hydrodynamics model for ELM to study competition for water. Oral Presentation, 11/2019. *E3SM All-Hands Fall Meeting*, Washington, DC.
72. Ju* Y, Villa* J, Bohrer G. Quantification of methane emissions from different land-cover patches in a heterogeneous wetland. Poster, 11/2019. *The 48th Annual Water Management Association of Ohio Conference and Symposium*, Columbus, OH.
73. Bohrer G, Villa* JA, Ju* Y, Rey-Sanchez* CA, Wrighton KC. Process-scale observations of methane fluxes in a mineral soil marsh. Oral Presentation, 9/2019. *Ameriflux PI Meeting*. Boulder, CO.
74. Bohrer G, Davidson* SC, Gurarie E, Hebblewhite M, Jennewein J, LaPoint SD, Mahoney PJ, Prugh LR, Boelman N. A shared archive for animal movement data in the Arctic (A2MA). Poster, 8/2019. *Ecological Society of America Annual Meeting*, Louisville, KY.
75. Villa* J, Stephen* T, Ju* Y, Bohrer G. Plant-level relationships between CH₄ flux and CO₂ uptake during the growing season in three wetland cosmopolitan plant species. Poster, 8/2019. *Ecological Society of America Annual Meeting*, Louisville, KY.
76. Ju* Y, Villa* J, Bohrer G. Quantification of methane emissions from different land-cover patches in a heterogeneous wetland. Poster, 8/2019. *Ecological Society of America Annual Meeting*, Louisville, KY.
77. Smith* GJ, Borton MA, Solden* LM, McGivern B, Rodríguez-Ramos J, Graham EB, Nelson WC, Song HS, Purvine SO, Daly RA, Lipton M, Bohrer G, Stegen J, Wrighton KC. Metabolic exchanges influenced by organic nitrogen and carbon inputs drive biogeochemical cycling in Columbia River sediments. Oral presentation, 7/2019. *Gordon Research Seminar: Applied and Environmental Microbiology*, South Hadley, MA.
78. Ju* Y, Villa* JA, Bohrer G. Distribution of plant communities in relation to water level fluctuations at an estuarine marsh. Poster, 6/2019. *19th Annual Meeting of the American Ecological Engineering Society*, Ashville, NC.
79. Vines* C, Rey-Sanchez* AC, Johnson D, Hatala-Matthes J, Russell S, Bohrer G. Evaluating fugitive methane emissions from hydraulic fracturing using eddy covariance methods. Poster, 6/2019. *19th Annual Meeting of the American Ecological Engineering Society*, Ashville, NC. (Best student presentation award)
80. Villa* JA, Ju* Y, Rey Sanchez* AC, Morin* TH, Bohrer G. Towards Wetland Creation and Restoration in the Lake Erie Basin with Reduced Feedbacks from Methane Emissions. Poster, 6/2019. *19th Annual Meeting of the American Ecological Engineering Society*, Ashville, NC.
81. Villa* JA, Smith* G, Renteria L, Stegen J, Wrighton K, Bohrer G. Methane and nitrous oxide porewater concentration and flux at the hyporheic zone of a large river. Poster, 5/2019. *Department of Energy – Office of Biological and Environmental Research, 2019 Environmental System Science PI Meeting*. Potomac, MD.
82. Rodríguez-Ramos J, Borton M, Smith G, Solden L, Daly R, Villa* JA, Graham E, Purvine SO, Arntzen E, Song HS, Nelson W, Lipton M, Bohrer G, Stegen J, Wrighton K. More than Meets the Eye: Microbial Communities and their Viral Predators Govern Carbon and Nitrogen Transformations in the Hyporheic Zone. Poster, 5/2019. *Department of Energy – Office of Biological and Environmental Research, 2019 Environmental System Science PI Meeting*. Potomac, MD.
83. Boelman N, Gurarie E, Jennewein J, Mahony P, Oliver R, Bohrer G, Eital J, Hebblewhite M, Prugh L, Vierling L. Animals on the Move: Where, when & why have they been? Poster 5/2019. *5th ABOVE Science Team Meeting*, La Jolla, CA.
84. Rodríguez-Ramos J, Borton MA, Smith* GJ, Solden* LM, Daly RA, Villa* JA, Graham EB, Purvine SO, Arntzen EV, Song HS, Nelson WC, Lipton MS, Bohrer G, Stegen JC, Wrighton KC. More than meets the eye: Microbial communities and their viral predators govern carbon and nitrogen transformations in the hyporheic zone. Poster, 4/2019. *Front Range Microbiome Symposium*, Fort Collins, CO.
85. Smith* GJ, Solden* LM, Borton MA, Graham EB, Nelson WC, Purvine SO, Daly RA, Wilkins MJ, Lipton MS, Bohrer G, Stegen JC, Wrighton KC. Chemolithoautotrophic nitrogen oxidation and polysaccharide degradation by novel microorganisms drive nitrogen and carbon biogeochemistry and microbial community structure in river shore sediments. Poster, 4/2019. *Front Range Microbiome Symposium*, Fort Collins, CO.
86. Rodríguez-Ramos J, Borton MA, Smith* GJ, Solden* LM, Daly RA, Villa* JA, Graham EB, Purvine SO, Arntzen EV, Song HS, Nelson WC, Lipton MS, Bohrer G, Stegen JC, Wrighton KC. More than meets the eye: Microbial communities and their viral predators govern carbon and nitrogen transformations in the hyporheic zone. Poster, 4/2019. *Rocky Mountain Geobiology Symposium*, Fort Collins, CO.
87. Yazbeck* T, Bohrer G, Vines* C, De Roo F, Mauder M, Bakshi BR. The effects of canopy density and spacing in modulating pollution deposition rate. Poster, 4/2019. *Ohio Supercomputer Statewide User Group*, Columbus, OH.

88. Vines* C, Rey-Sanchez* AC, Johnson D, Hatala Matthes J, Russell S, Bohrer G. Evaluating fugitive methane emissions from hydraulic fracturing using an artificial neural network. Poster, 4/2019. *Ohio Supercomputer Statewide User Group*, Columbus, OH.
89. Yazbeck* T, Bohrer G, De Roo F. Large eddy simulations of sustainable greenbelts in industrial complexes. Poster, 3/2019. *Byrd Polar and Climate Research Center Symposium on Climate Change*, Columbus OH
90. Villa* JA, Stephen* T, Ju* Y, Bohrer G. Methane transport through wetland plants. Poster, 3/2019. *Byrd Polar and Climate Research Center Symposium on Climate Change*, Columbus OH
91. Ju* Y, Villa* JA, Bohrer G. Quantification of methane emissions from different land-cover patches in a heterogeneous wetland. Poster, 3/2019. *Byrd Polar and Climate Research Center Symposium on Climate Change*, Columbus OH
92. Vines* C, Rey-Sanchez* AC, Johnson D, Hatala-Matthes J, Russell S, Bohrer G. Baseline methane concentrations using eddy covariance methods near a hydraulic fracturing site. Poster, 3/2019. *Byrd Polar and Climate Research Center Symposium on Climate Change*, Columbus OH
93. Stephen* TL, Villa* JA, Bohrer G. Measuring greenhouse gas fluxes due to ebullition in a freshwater estuarine wetland. Poster, 1/2019. *American Meteorological Society 18th Annual Student Conference*, Phoenix, AZ.
94. Morin* TH, Riley WJ, Rey Sanchez* C, Bohrer G, Mekonnen ZA, Stefanik* KC, Wrighton KC. Seasonal water level strongly affects CH₄ emissions in a natural estuarine wetland: Current and future predictions using a mechanistic model. Poster, 12/2018. *American Geophysical Union Fall Meeting*. Washington, D.C.
95. Russell S, Vines* C, Rey Sanchez* AC, Bohrer G, Johnson D, Hatala Matthes J. Partitioning sources of methane emissions near a hydraulic fracturing field in West Virginia using stable isotopes. Poster, 12/2018. *American Geophysical Union Fall Meeting*. Washington, D.C.
96. Vines* C, Rey Sanchez* C, Johnson D, Hatala Matthes J, Russell S, Bohrer G. Baseline methane concentrations using eddy covariance methods near a hydraulic fracturing site. Poster, 12/2018. *American Geophysical Union Fall Meeting*. Washington, D.C.
97. Bisht G, Riley WJ, Bohrer G, Mirfenderesgi* G, Matheny* AM. Development of a flexible modeling framework for representing soil-plant continuum in the E3SM global land model. Poster, 12/2018. *American Geophysical Union Fall Meeting*. Washington, D.C.
98. Villa* JA, Stephens* T, Rey Sanchez* C, Bohrer G. Relationship between methane flux and carbon uptake in three cosmopolitan wetland plant genera. Poster, 12/2018. *American Geophysical Union Fall Meeting*. Washington, D.C.
99. Oliver R, Liston GE, Reinking A, Bohrer G, Davidson* SC, Gurarie E, Hebblewhite M, LaPoint S, Mahoney P, Boelman N. Environmental and ecological drivers of American robin (*Turdus migratorius*) migration and habitat selection. Oral Presentation, 12/2018. *American Geophysical Union Fall Meeting*. Washington, D.C.
100. Bohrer G, Ruehr N, Fatichi S, Matheny* AM, Rehschuh R, Mirfenderesgi* G. Tree-level recovery from hydraulic stress: insights from experiments and hydrodynamic models. Poster, 12/2018. *American Geophysical Union Fall Meeting*. Washington, D.C.
101. Rey-Sanchez* AC, Davies M, Slater J, Hao* Y, Rich V, Bohrer G, Grau-Andres R. Patterns of porewater methane concentration and atmospheric emissions within different sites of a peat bog in Ohio. Poster, 12/2018. *American Geophysical Union Fall Meeting*. Washington, D.C.
102. Charles M, Ziv G, Bohrer G, Bakshi B. Designing manufacturing sites toward local sustainability by understanding spatial variance of industrial air pollution and local ecosystem regulation. Oral Presentation, 11/2018. *American Institute for Chemical Engineers Annual Meeting*, Pittsburgh, PA.
103. Rey-Sanchez* AC, Davies M, Slater J, Hao* Y, Grau-Andres R, Rich V, Bohrer G. An upscaling framework for methane emissions in an ombrotrophic peat bog in Ohio. Oral Presentation, 10/2018. *AmeriFlux PI Meeting*, Bloomington, ID.
104. Bohrer G, Mirfenderesgi* G, Matheny* AM. The role of tree hydraulic traits in response to soil water availability. Oral Presentation, 10/2018. *AmeriFlux PI Meeting*, Bloomington, ID.
105. Bohrer G, Davidson* SC, Kays R, Wikelski M. The environmental-data automated track annotation (Env-DATA) system: linking animal tracks with environmental data. Poster, 10/2018. *Linking Remote Animal Detection and Movement Data with Macrosystem Environmental Datasets and Networks, workshop*. Front Royal, VA.
106. Yazbeck* T, Bohrer G, DeRoo F. Large eddy simulation of sustainable greenbelts in industrial complexes. Poster, 10/2018. *Ohio Supercomputer Statewide Users Group Conference*, Columbus, OH.
107. Villa* JA, Daly R, Smith G, Narowe A, Rey-Sanchez* C, Ju* Y, Morin* T, Kinsman-Costello L, Wrighton K, Bohrer G. Understanding the links between nutrient cycling, hydrology and nutrient loading in a Lake Erie estuarine wetland. Poster, 9/2018. *Understanding Harmful Algal Blooms: State of The Science*, Toledo, OH
108. Davidson* SC, Bohrer G, Kays R, Wikelski M. Big data, big challenges: new Movebank tools for avian telemetry. Poster, 8/2018. *International Ornithological Congress*, Vancouver, BC, Canada.
109. Bohrer G, Angle* JC, Rey-Sanchez* AC, Morin* TH, Wrighton KC. Observations of methane production in the aerobic zone of a riverine wetland and consequences for the wetland's greenhouse gas budget. Oral Presentation, 6/2018. *Association of the Science of Limnology and Oceanography 2018 Summer Meeting*, Victoria, BC. Canada.

110. Bohrer G, Mirfenderesgi* G, Matheny* AM. Hydrodynamic model used to bridge observations at multiple scales and define tree hydraulic traits. Oral Presentation, 6/2018. *Computational Methods in Water Resources XXII*, Saint-Malo, France.
111. Rey-Sanchez* AC, Bohrer G. Production and emission of methane in disturbed and undisturbed areas in a peat bog in Ohio. Poster, 5/2018. *Society of Wetland Scientists Meeting*, Denver, CO.
112. Rey-Sanchez* AC, Morin* TC, Angle J, Mirfenderesgi* G, Stefanik* K, Wrighton KC, Bohrer G. Methane production/consumption within the soil column and associated atmospheric emissions among different land cover types of a Lake Erie estuarine wetland. Oral Presentation, 5/2018. *American Meteorological Society 33rd Conference on Agricultural and Forest Meteorology*. Boise, ID.
113. Bohrer G, Mirfenderesgi* G, Matheny* AM. Hydrodynamic model illuminates the role of tree hydraulic traits in transpirational response to soil water availability. Oral Presentation, 5/2018. *American Meteorological Society 33rd Conference on Agricultural and Forest Meteorology*. Boise, ID.
114. Solden* LM, Graham EX, Nelson W, Hoyt D, Tfily M, Villa* J, Bohrer G, Stegen J, Wrighton KC. Microbial Ammonium Cycling is Critical to Nitrogen Transformations in Columbia River Sediments. Poster 5/2018. *2018 DoE Environmental System Science Principal Investigator Meeting*, Potomac, MD.
115. Miller HJ, Miller J, Bohrer G. Bridging research on human mobility and animal movement ecology. Oral presentation, 4/2018. *American Association of Geographers Annual Meeting*, New Orleans, LA.
116. Bohrer G, Davidson* SC, LaPoint S, Boelman N, Wikelski M. New tools for environmental annotation of animal movement tracks at the ABoVE domain and beyond. Poster, 1/2018. *4th ABoVE Science Team Meeting*. Seattle, WA.
117. LaPoint S, Bohrer G, Davidson* SC, Mahoney P, Boelman N. Arctic warming and golden eagle migrations: potential for desynchrony between spring and eagle arrival dates. Poster, 1/2018. *4th ABoVE Science Team Meeting*. Seattle, WA.
118. Bohrer G, Mirfenderesgi* G, Matheny* AM. Hydrodynamic Model Illuminates the Role and Consequences of Tree Hydraulic Traits. Oral Presentation, 1/2018. *American Meteorological Society Annual Meeting, 32nd Conference on Hydrology*, Austin, TX.
119. Matheny* AM, Bohrer G. The role of biomass hydraulic capacitance in forest transpiration. Poster, 1/2018. *American Meteorological Society Annual Meeting, 32nd Conference on Hydrology*, Austin, TX.
120. LaPoint S, Bohrer G, Davidson* SC, Gurarie E, Mahoney P, Boelman N. Golden Eagle Migratory Behaviors in Response to Arctic Warming. Oral Presentation, 12/2017. *American Geophysical Union Fall Meeting*, New Orleans, LA.
121. Handler* M, Davidson* SC, Bohrer G. Building an archive of Arctic-Boreal animal movements and links to remote sensing data. Poster, 12/2017. *American Geophysical Union Fall Meeting*, New Orleans, LA.
122. Matheny* AM, Bohrer G. Implications of vegetation hydraulic capacitance as an indicator of water stress and drought recovery. Poster, 12/2017. *American Geophysical Union Fall Meeting*, New Orleans, LA.
123. Rey-Sanchez* AC, Morin* TH, Stefanik* KC, Angle* J, Wrighton KC, Bohrer G. Patterns of in-soil methane production and atmospheric emission among different land covers of a Lake Erie estuarine wetland. Poster, 12/2017. *American Geophysical Union Fall Meeting*, New Orleans, LA.
124. Bohrer G, Rey-Sanchez* AC, Kenny* WT, Morin* TH. Eddy-Covariance Observations and Large-Eddy-Simulations of Near-Shore Fluxes from Water Bodies. Oral Presentation, 12/2017. *American Geophysical Union Fall Meeting*, New Orleans, LA.
125. Mirfenderesgi* G, Matheny* AM, Bohrer G. Hydrodynamic trait coordination and cost-benefit tradeoffs throughout the isohydric-anisohydric continuum in trees. Oral Presentation, 12/2017. *American Geophysical Union Fall Meeting*, New Orleans, LA.
126. Pappas C, Baltzer JL, Barr A, Black TA, Bohrer G, Detto M, Maillet J, Matheny* AM, Roy A, Sonnentag O, Stephens J. Boreal tree light- and water-use: asynchronous, diverging, yet complementary. Poster, 12/2017. *American Geophysical Union Fall Meeting*, New Orleans, LA.
127. LaPoint S, Bohrer G, Davidson* SC, Gurarie E, Mahony P, Boelman N. Golden eagle migrations through northwestern North America: plasticity is timing as an adaptation to dynamic movement? Oral Presentation, 11/2017. *Raptor Research Foundation*, Salt Lake City, UT.
128. Rey-Sanchez* AC, Slater J, Hao* Y, Grau-Andres R, Davies M, Bohrer G. (2017). Measuring Methane Emissions in a Peat Bog in Ohio with Fluctuating Water Level: Comparison of Disturbed vs. Undisturbed Areas. Poster, 11/2017. *46th Annual Water Management Association of Ohio Conference*. Worthington, OH.
129. Vines* C, Rey Sánchez* AC, Bohrer G. Using footprint analysis to determine flux measurements source over a heterogeneous surface. Poster, 10/2017. *Fifth Annual Water and Land Symposium at Kent State University*, Kent, OH.
130. Rey Sánchez* AC, Bohrer G. Using Artificial neural networks to model evaporation and CO₂ fluxes in a coastal reef. Poster, 9/2017. *Ohio Supercomputer Center Statewide Users Group Conference*, Columbus, OH.
131. Davidson* SD, Kays R, Bohrer G, Wikelski M. Introduction to Movebank. Oral Presentation, 9/2017. *1st ICARUS User Workshop*, Konstanz, Germany.
132. Davidson* SD, Wikelski M, Kays R, Bohrer G. Accessing remote sensing and weather reanalysis data for movement ecology. Poster, 9/2017. *1st ICARUS User Workshop*, Konstanz, Germany.

133. Handler* M, Bohrer G, Wikelski M, Gagliardo A. Preliminary findings: Olfactory navigation of pigeons represented by aerosol dispersion modeling. Poster, 9/2017. *The 6th International Bio-Logging Science Symposium*, Konstanz, Germany.
134. Bohrer G, Davidson* SD, Weinzierl R, Sherub S, Flack A, Wikelski M. New method for measuring wind and air speed from high resolution GPS tags in thermalling birds. Oral Presentation, 9/2017. *The 6th International Bio-Logging Science Symposium*, Konstanz, Germany.
135. Smith GJ, Angle* J, Borton MA, Stefanik* KC, Johnston MD, Morin* TH, Daly RA, Wolfe R, Bohrer G, Wrighton KC. New Methylococcaceae Genus Possessing Unexpected Denitrification Potential Dominates Freshwater Wetland Soils. Oral Presentation 6/2017. *ASM Microbe*, New Orleans, LA.
136. Angle* J, Morin* TH, Solden LM, Smith GJ, Narrowe AB, Borton MA, Hoyt DW, Daly RA, Wolfe R, Stefanik* KC, Riley WR, Miller CS, Bohrer G, Wrighton KC. Methanogenesis in oxygenated soils is an unrecognized driver of wetland methane emissions. Oral presentation 6/2017. *ASM Microbe*, New Orleans, LA.
137. Green A, Bohrer G, Petrone RM. The effects of forest sheltering on peatland evapotranspiration in the Boreal Plains, Alberta, Canada. Oral presentation, 5/2016. *Canadian Geophysical Union and Canadian Society of Agricultural and Forest Meteorology Joint Annual Scientific Meeting*, Vancouver, BC, Canada. http://cgu-ugc2017meeting.ca/wp-content/uploads/2017/05/CGU-CSAFM_2017_H02.pdf
138. Slater JM, Davies GM, Rich VI, Bohrer G. Plant community composition across environmental and disturbance gradients in Ohio's peat bogs. Poster, 4/2017. *Ohio Academy of Science Annual Meeting*, Cincinnati, OH.
139. Slater JM, Davies GM, Rich VI, Bohrer G, Hao* Y, Ray Sanchez* AC. A comparison of plant communities in intact and damaged Ohio peat bogs. Poster, 3/2017. *Society for Ecological Restoration Mid-West Great Lakes Chapter Annual Meeting*. Grand Rapids, MI.
140. Morin* TH, Rey-Sánchez* AC, Bohrer G, Riley W, Angle* J, Mekonnen Z, Stefanik* K, Grant R, Wrighton K. Utilizing patch and site level greenhouse-gas concentration measurements in tandem with the prognostic model, *ecosys*. Poster, 3/2017. *Joint NACP and Ameriflux PI Meeting*, North Bethesda, MD.
141. Gough CM, Bohrer G, Curtis PS, Bond-Lamberty B, Stuart-Haentjens EJ, Hardiman BS, Fahey R, Atkins J, Sagara B, Haber L. The surprising role of disturbance in maintaining forest carbon sequestration: Implications for carbon science, policy and management. Oral Presentation, 3/2017. *Joint NACP and Ameriflux PI Meeting*, North Bethesda, MD.
142. Bohrer G, Matheny* AM, Mirfenderesgi* G, Curtis PS, Vogel CS, Rey-Sánchez AC. Plant hydraulic regulation of response to drought and plot-scale canopy disturbance. Poster, 3/2017. *Joint NACP and Ameriflux PI Meeting*, North Bethesda, MD.
143. Matheny* AM, Mirfenderesgi* G, Bohrer G. Tree water storage as a diagnostic metric of forest response to drought. Oral Presentation, 1/2017. *American Meteorological Society 97th Annual Meeting*, Seattle, WA.
144. LaPoint S, Gurarie E, Davidson* SC, Bohrer G, Boelman N. Golden eagle migratory behavior and arctic warming. Poster 1/2017. *3rd ABoVE Science Team Meeting*, Boulder, CO.
145. Davidson* SC, Bohrer G, LaPoint S, Gurarie E, Eitel J, Hebblewhite M, Jennewein J, Mahoney M, Meddens A, Oliver R, Palm E, Prugh L, Vierling L, Boelman N. Animals on the Move: Status of data acquisition & archiving. Poster 1/2017. *3rd ABoVE Science Team Meeting*, Boulder, CO.
146. Agee E, He L, Bisht G, Gough CM, Couvreur V, Matheny* AM, Bohrer G, Ivanov VY. Root water uptake and lateral interactions among root systems in a temperate forest. Poster 12/2016. *American Geophysical Union Fall Meeting 2016*, San Francisco, CA.
147. Mirfenderesgi* G, Bohrer G, Matheny* AM, Fatichi S, Frasson* RPD, Schafer KVR. Tree-level hydrodynamic approach for modeling aboveground water storage and stomatal conductance highlights the effects of tree hydraulic strategy. Poster 12/2016. *American Geophysical Union Fall Meeting 2016*, San Francisco, CA.
148. Bohrer G, Mirfenderesgi* G, Matheny* AM, Fatichi S. Tree to plot scaling – how individual properties and species specific traits add up to describe a forest. Poster 12/2016. *American Geophysical Union Fall Meeting 2016*, San Francisco, CA.
149. Rey-Sánchez* CA, Morin* TH, Stefanik* KC, Wrighton KC, Bohrer G. Carbon fluxes in a heterogeneous estuarine wetland in Northern Ohio. Comparing eddy covariance and chamber measurements. Poster 12/2016. *American Geophysical Union Fall Meeting 2016*, San Francisco, CA.
150. Matheny* AM, Bohrer G, Mirfenderesgi* G, Morin* TH, Rey-Sánchez* AC, Vogel CS, Gough CM, Curtis PS. Plant hydrodynamics help govern forest water cycling response to intermediate severity disturbance. Oral Presentation 12/2016. *American Geophysical Union Fall Meeting 2016*, San Francisco, CA.
151. Gough CM, Curtis PS, Nave LE, Nadelhoffer KJ, Bohrer G, Bond-Lamberty BP, Scheuermann CM, Stuart-Haentjens E, Turner L, Sagara B. Canopy complexity's role in (re)shaping carbon cycling following disturbance and with age: Do new observations support old theories? Poster 12/2016. *American Geophysical Union Fall Meeting 2016*, San Francisco, CA.
152. Fiorella R, Poulsen CJ, Matheny* AM, Rey-Sánchez* AC, Fotis* AT, Morin* TH, Vogel CS, Gough CM, Aron P, Bohrer G. Forest Canopy Water Cycling Responses to an Intermediate Disturbance Revealed Through Stable Water Vapor Isotopes. Poster, 12/2016. *American Geophysical Union Fall Meeting 2016*, San Francisco, CA.

153. Morin* TH, Rey-Sánchez* AC, Bohrer G, Riley RJ, Angle* J, Mekonnen ZA, Stefanik* KC, Wrighton KC. Utilizing patch and site level greenhouse-gas concentration measurements in tandem with the prognostic model, *ecosys*. Poster 12/2016. *American Geophysical Union Fall Meeting 2016*, San Francisco, CA.
154. Mirfenderesgi* G, Bohrer G, Matheny* AM, Fatichi S, Frasson* RPdM, Schäfer KVR. Tree-level hydrodynamic approach for modeling aboveground water storage and stomatal conductance highlights the effects of tree hydraulic strategy. Poster 12/2016. *45th annual WMAO conference*, Columbus, OH.
155. Rey-Sánchez* AC, Morin* TH, Bohrer G. Semi-continuous monitoring of methane in wetlands' soils through the use of pore water dialysis 'peepers'. Oral Presentation, 10/2016. *Innovative Environmental Monitoring Symposium*, Athens, Ohio.
156. Rey-Sánchez* AC, Morin* TH, Bohrer G. Carbon fluxes from an estuarine wetland in Northern Ohio. Oral Presentation, 9/2016. *Ohio River Basin Consortium for Research and Education 32nd annual symposium*. Youngstown, Ohio (Won best student presentation award).
157. Bohrer G, Davidson* SC, McClain* KM, Friedemann G, Weinzierl R, Sherub S, Harel R, Efrat R, Nathan R, Wikelski M. Contextual Movement Data of Bird Flight – Direct Observations and Annotation from Remote Sensing. Oral presentation, 9/2016. *GIScience 2016, Workshop on Analysis of Movement Data (AMD'16)*, Montreal, Canada.
158. Matheny* AM, Bohrer G, Mirfenderesgi* G. Shifting the plant functional type paradigm to reflect hydraulic properties may improve model simulations of drought and disturbance. Oral presentation, 6/2016. *32nd Conference on Agricultural and Forest Meteorology*, Salt Lake City, UT (Best student presentation award, 2nd place).
159. Desai AR, Golub M, Vesala T, Bohrer G, Blanken PD, Franz D, Deshmukh C, Guérin F, Heiskanen J, Jammet M, Jonsson A, Karlsson J, Koebsch F, Liu H, Lohila A, Lundin E, Mammarella I, Rutgersson A, Sachs T, Serça D, Spence C, Strachan IB, Weyhenmeyer G, Xiao Q, Glatzel S. Little lakes and large lakes: The first global inland water eddy covariance flux synthesis. Oral presentation, 6/2016. *32nd Conference on Agricultural and Forest Meteorology*, Salt Lake City, UT.
160. Rey Sánchez* AC, Morin* TH, Stefanik* KC, Wrighton K, Bohrer G. The carbon balance in a heterogeneous estuarine wetland in Northern Ohio. Oral Presentation 6/2016. *16th Annual Meeting of the American Ecological Engineering Society*, Knoxville, TN.
161. Bohrer G, Matheny* AM, Mirfenderesgi* G, Morin* TH, Fatichi S. Scaling tree-level hydrodynamics to plot-level hydrology using novel model and measurements. Oral presentation, 4/2016. *European Geosciences Union General Assembly*, Vienna, Austria.
162. Matheny* AM, Bohrer G, Fiorella R, Mirfenderesgi* G. Plant hydraulic traits govern forest water use and growth. Poster, 4/2016. *European Geosciences Union General Assembly*, Vienna, Austria.
163. Villa* JA, Handler* M, Blanca Bernal, Bohrer G. Carbon sequestration in wetlands: Methods to determine accumulation rates. Oral presentation, 3/2016. *Segundo Congreso Interamericano de Cambio Climático - Second inter-American Congress on Climate Change*, Mexico City, Mexico.
164. Mirfenderesgi* G, Bohrer G, Fatichi S, Matheny* AM, Frasson* RPdM, Schäfer KVR. Application of a tree-level hydrodynamic model to simulate plot-level transpiration in the upland oak/pine forest in New Jersey. Oral presentation, 1/2016. *96th American Meteorological Society Annual Meeting*, New Orleans, LA.
165. Bohrer G, Matheny* AM, Mirfenderesgi* G. Including tree water potential in plot-level transpiration modeling using the hydrodynamic approach. Oral presentation, 1/2016. *96th American Meteorological Society Annual Meeting*, New Orleans, LA.
166. Mirfenderesgi* G, Bohrer G, Matheny* AM, Fatichi S, Frasson* RPdM, Schäfer KVR. Application of a tree-level hydrodynamic model to simulate plot-level transpiration in the upland oak/pine forest in New Jersey. Poster, 12/2015. *American Geophysical Union Fall Meeting 2015*, San Francisco, CA.
167. Morin* TH, Stefanik* KC, Bohrer G, Rey Sánchez* AC, Mitsch WJ. Combining eddy-covariance and chamber measurements to determine the methane budget from a small, heterogeneous urban wetland park. Poster, 12/2015. *American Geophysical Union Fall Meeting 2015*, San Francisco, CA.
168. Fiorella R, Poulsen C, Matheny* AM, Bohrer G. Constraints on water cycling in a deep mountain valley from stable water isotope and sap flux measurements. Poster, 12/2015. *American Geophysical Union Fall Meeting 2015*, San Francisco, CA.
169. Van Emmerik THM, Mirfenderesgi* G, Bohrer G, Steele-Dunne S, Van De Giesen N. Crop modeling: Studying the effect of water stress on the driving forces governing plant water potential. Poster, 12/2015. *American Geophysical Union Fall Meeting 2015*, San Francisco, CA.
170. Schäfer KVR, Jaffe P, Morin* TH, Bohrer G. Greenhouse gas balance in a restored and natural wetland. Poster, 12/2015. *American Geophysical Union Fall Meeting 2015*, San Francisco, CA.
171. Bohrer G, Kenny* W, Morin* TH. Large-eddy simulations of surface-induced turbulence and its implications to the interpretation of eddy-covariance measurements in heterogeneous landscapes. Poster, 12/2015. *American Geophysical Union Fall Meeting 2015*, San Francisco, CA.
172. Matheny* AM, Bohrer G, Fiorella R, Mirfenderesgi* G. Proposed hydrodynamic model improves resolution of species-specific responses to drought and disturbance. Poster, 12/2015. *American Geophysical Union Fall Meeting 2015*, San Francisco, CA.

173. Agee E, He⁺ L, Couvreur L, Bisht G, Gough CM, Ivanov VY, Shahbaz P, Fatichi S, Matheny* AM, Bohrer G. Compensatory root water uptake of overlapping root systems. Poster, 12/2015. *American Geophysical Union Fall Meeting 2015*, San Francisco, CA.
174. Golub M, Desai AR, Bohrer[^] G, Blanken P, Deshmukh CS, Franz D, Guérin F, Heiskanen JJ, Jammet M, Jonsson A, Karlsson J, Koebsch F, Liu H, Lohila A, Lundin E, Mammarella E, Rutgersson A, Sachs T, Serça D, Spence C, Strachan IB, Vesala T, Weyhenmeyer GA, Xiao W. Environmental controls of energy and trace gas exchanges at the water-air interface: Global synthesis of eddy fluxes over inland waters. Oral Presentation, 12/2015. *American Geophysical Union Fall Meeting 2015*, San Francisco, CA.
175. Zscheischler J, Blanken P, Bohrer[^] G, Clark K, Desai A, Fatichi S, Hollinger D, Keenan T, Novick KA, Wolf S, Seneviratne SI. Short-term weather variability is an important control of interannual variability in carbon and water fluxes in temperate forests. *American Geophysical Union Fall Meeting 2015*, San Francisco, CA.
176. Novick K, Williams C, Phillips R, Oishi A, Sulman B, Bohrer[^] G, Ficklin D. Vapor pressure deficit is as important as soil moisture in determining limitations to evapotranspiration during drought. *American Geophysical Union Fall Meeting 2015*, San Francisco, CA.
177. Zscheischler J, Blanken P, Bohrer[^] G, Clark K, Desai A, Fatichi S, Hollinger D, Keenan T, Novick KA, Wolf S, Seneviratne SI. Short-term weather variability is an important control of interannual variability in carbon and water fluxes in temperate forests. Poster, 11/2015. *13th Swiss Geoscience Meeting*, Basel, Switzerland.
178. Morin* TH, Stefanik* KC, Bohrer G, Rey-Sánchez* AC, Mitsch WJ. Combining eddy-covariance and chamber measurements to determine the methane budget from a small, heterogeneous urban wetland park. Poster, 10/2015. *Potsdam GHG Flux Workshop - from natural to urban systems*, Potsdam, Germany.
179. Bohrer G. Remote Sensing in support of endangered species management and animal movement research – The Env-DATA tool pack. Oral presentation, 10/2015. *66th International Astronautical Congress*, Jerusalem, Israel.
180. Obringer* R, Bohrer G, Davidson* SC, Weinzierl R, Ward M, Moore F, Bolus R, Diehl R, Deppe J. Modelling correlations between thrush migrations and Weather variables. Poster. 7/2015. *U21 Undergraduate Research Conference: Peoples and Places*, Auckland, New Zealand
181. Stefanik* K, Bohrer G, Mitsch WJ. Seasonal and Diurnal Relationships between Methane and Carbon Dioxide Flux from *Typha spp.* Dominated Wetland. Oral presentation, 6/2015. *Society of Wetland Scientists Annual Meeting 2015*, Providence, RI.
182. Kenny* WT, Chatziefstratiou* E, Bohrer G. Large eddy simulations as a parameterization tool for canopy-structure X VOC-flux interactions. Poster, 4/2015. *European Geosciences Union Meeting*, Vienna, Austria.
183. Gough CM, Bohrer G, Nadelhoffer K, Vogel CS, Curtis PS. Declining aspen and increasing NEP at the University of Michigan Biological Station Core Site: trends and underlying mechanisms. Poster, 1/2015. *AmeriFlux Principal Investigators Meeting*, Washington, DC.
184. Gough CM, Bohrer G, Nadelhoffer K, Vogel CS, Curtis PS. Carbon cycle resilience to disturbance in Great Lakes forests: measurements, mechanisms, and models. Poster, 1/2015. *AmeriFlux Principal Investigators Meeting*, Washington, DC.
185. Frasson* RPDm, Bohrer G, Medvigy D, Matheny* AM, Gough CM, Vogel CS, Curtis PS. Modeling forest carbon cycle response to tree mortality: effects of plant functional type and disturbance intensity. Poster, 1/2015. *5th NACP PI Meeting and AmeriFlux Principal Investigators Meeting*, Washington, DC.
186. Morin* TH, Stefanik* K, Bohrer G. Footprint-driven gap filling strategies for fluxes from mixed forest-aquatic systems. Poster, 1/2015. *5th NACP PI Meeting and AmeriFlux Principal Investigators Meeting*, Washington, DC.
187. Matheny* AM, Morin* TH, Bohrer G, Garrity* S, Vogel CS, Ivanov V, Curtis PS. Improved latent heat flux modeling through plant hydrodynamics accounts for the influence of species-specific storage and diurnal hysteresis. Poster, 1/2015. *5th NACP PI Meeting and AmeriFlux Principal Investigators Meeting*, Washington DC.
188. Schäfer KVR, Jaffe P, Bohrer G. Greenhouse gas fluxes in a natural and restored wetland before and after hurricane Sandy. Poster, 12/2014. *American Geophysical Union Meeting 2014*, San Francisco, CA.
189. Gough CM, Cheng S, Hardiman* B, Curtis PS, Bohrer G, Vogel CS, Nadelhoffer K, Morin* TH. Ecological and environmental controls over fifteen-year forest net ecosystem production at the University of Michigan Biological Station. Poster, 12/2014. *American Geophysical Union Meeting 2014*, San Francisco, CA.
190. Frasson* RPDm, Bohrer G, Medvigy D, Vogel CS, Gough CM, Curtis PS. Representing sub-plot canopy heterogeneity improves model prediction of net ecosystem exchange in a mixed-deciduous forest. Oral presentation, 12/2014. *American Geophysical Union Meeting 2014*, San Francisco, CA.
191. Bohrer G, Maurer* KD, Chatziefstratiou* E, Medvigy D. Large-eddy simulations with a dynamic explicit vegetation model. Oral presentation, 12/2014. *American Geophysical Union Meeting 2014*, San Francisco, CA.
192. Matheny* AM, Bohrer G, Mirfenderesgi* G, Schäfer KVR. Proposed hydrodynamic model increases the ability of land-surface models to capture intra-daily dynamics of transpiration and canopy structure effects. Oral presentation, 12/2014. *American Geophysical Union Meeting 2014*, San Francisco, CA. (best student presentation award).

193. Chen M, Keenan T, Hufkens K, Munger JW, Bohrer G, Brzostek E, Richardson A. Inter-annual variability of carbon fluxes in temperate forest ecosystems: effects of biotic and abiotic factors. Poster, 12/2014. *American Geophysical Union Meeting 2014*, San Francisco, CA.
194. Mirfenderesgi* G, Bohrer G, Matheny* AM. Tree-level hydrodynamic approach for improved stomatal conductance parameterization. Poster, 12/2014. *American Geophysical Union Meeting 2014*, San Francisco, CA.
195. Sivandran G, Bohrer G, Rizzo B, Soldaini D. The sensitivity of modeled evapotranspiration to rooting parameters during interstorm periods. Poster, 12/2014. *American Geophysical Union Meeting 2014*, San Francisco, CA.
196. Morin* TH, Bohrer G, Naor-Azrieli* L. Environmental causes of methane fluxes from an urban wetland; Oral Presentation, 11/2014. *43rd Annual Water Management Association of Ohio Meeting*, Columbus, OH.
197. Kenny* WT, Morin* TH, Bohrer G. Development of the High resolution VOC Atmospheric Chemistry in Canopies (Hi-VACC) model and application to a lake flux scenario. Poster, 9/2014. *Advancing the Science of Gas Exchange between Fresh Waters and the Atmosphere*, Hyttälä, Finland.
198. Bolus RT, Diehl RH, Deppe JL, Ward MP, Moore FR, Bohrer G, Schofield LN, Zenzal TJ. Availability and use of supportive winds by migrating land birds that cross the Gulf of Mexico. Oral Presentation, 9/2014. *Annual meeting of the American Ornithologists' Union*, Estes Park, CO.
199. Supp SR, Cormier TA, La Sorte FA, Lim M, Bohrer G, Powers D, Wethington S, Goetz S, Graham CH. Hummingbird migration - Integrating continental-scale citizen-science, environmental, and physiological data to identify the drivers of species migration. Poster, 7/2014. *Gordon Research Conference- Unifying Ecology across Scales*, Biddeford, ME.
200. Morin* TH, Bohrer G, Naor-Azrieli* L, Frasson* RP, Schäfer KVR Mitsch WJ. Modeling an urban wetland's methane fluxes using the eddy covariance method. Oral Presentation, 6/2014. *14th Annual Meeting of the American Ecological Engineering Society*, Charleston, SC.
201. Matheny* AM, Mirfenderesgi* G, Bohrer G. Tree-level hydrodynamic approach for improved stomatal conductance parameterization. Oral presentation, 6/2014. *Computational Methods in Water Resources*, Stuttgart, Germany.
202. Chatziefstratiou* E, Kenny* WT, Heilman WE, Bohrer G. Resolving the effects of canopy structure on fire-emitted smoke dispersion using large eddy simulations. Oral presentation, 5/2014. *Large Wildland Fires: Social, Political and Ecological Effects Conference*, Missoula, MT.
203. Bohrer G, Maurer* KD, Medvigy D, Kenny* WT, Ivanov VY. Large-eddy simulations with a dynamic vegetation model of tree-scale soil-vegetation flux interactions. Oral presentation, 5/2014. *31st Conference on Agricultural and Forest Meteorology*. Portland, OR.
204. Chatziefstratiou* EK, Bohrer G. Resolving the effects of canopy structure on fire-emitted heat transport using large eddy simulations. Oral presentation, 5/2014. *31st Conference on Agricultural and Forest Meteorology*. Portland, OR.
205. Kenny* WT, Bohrer G, Chatziefstratiou* EK. Development and application of the High resolution VOC Atmospheric Chemistry in Canopies (Hi-VACC) model. Oral presentation, 5/2014. *2nd Conference on Atmospheric Biogeosciences*, Portland, OR.
206. Matheny* AM, Bohrer G. Proposed hydrodynamic model increases the ability of land-surface models to capture hysteretic nature of transpiration. Poster, 5/2014. *2nd Conference on Atmospheric Biogeosciences*, Portland, OR.
207. Renninger H, Schäfer K, Bohrer G, Clark K, Skowronski N. Effects of disturbance on carbon sequestration in the New Jersey Pine Barrens. Poster, 5/2014. *The 2014 Joint TES/SBR Principal Investigators Meeting*, Potomac, MD.
208. Gough C, Curtis PS, Bohrer G, Nadelhoffer K. Carbon and water cycling following low-severity disturbance in an Upper Great Lakes forest: Empirical and modeling results from an AmeriFlux core site. Poster, 5/2014. *The 2014 Joint TES/SBR Principal Investigators Meeting*, Potomac, MD.
209. Frasson* RPM, Bohrer G, Curtis PS. Predicting the impact of disturbances on the carbon cycle of a mixed deciduous forest in the upper Midwest. Poster, 5/2014. *Ameriflux Annual PI Meeting*, Potomac, MD.
210. Morin* TH, Bohrer G, Frasson* RPM. Optimizing a gapfill model for an urban wetland's methane fluxes. Poster, 5/2014. *Ameriflux Annual PI Meeting*, Potomac, MD.
211. Bolus RT, Bohrer G, Deppe JL, Diehl RH, Moore FR, Schofield L, Ward MP, Zenzal TJ. Do migrating birds respond to altitudinal variation in winds during long, over-water flights? Oral presentation, 5/2014. *Symposium for Animal Movement and the Environment*, Raleigh, NC.
212. Cormier T, Supp SR, La Sorte FA, Bohrer G, Weinzierl R, Wethington S, Powers D, Graham CH, Goetz S. A framework for modeling population-level hummingbird migration using citizen science observations and Env-DATA annotation. Oral presentation, 5/2014. *Symposium for Animal Movement and the Environment*, Raleigh, NC.
213. Dodge* S, Bohrer G, Davidson* SC, Weinzierl R. Environmental data track annotation with Env-DATA. Tutorial, 5/2014. *Symposium for Animal Movement and the Environment*, Raleigh, NC.

214. Obringer* R, Bohrer G, Davidson* SC, Weinzierl R, Ward M, Moore F, Bolus R, Diehl R, Deppe J. Correlations between thrush migrations and weather variables. Poster, 5/2014. *Symposium for Animal Movement and the Environment*, Raleigh, NC.
215. Supp S, Cormier T, La Sorte FA, Bohrer G, Goetz S, Powers D, Wethington S, Graham CH. Using continental-scale citizen-science data and remote sensing products to identify the drivers of hummingbird migration routes and timing. Oral presentation, 5/2014. *Symposium for Animal Movement and the Environment*, Raleigh, NC.
216. Keenan T, Bohrer G, Friedl M, Gray J, Hollinger D, Munger JW, Schmid H P, Toomey M, Richardson AD, Wing IS, Yang B. Increased carbon uptake in the eastern US due to warming induced changes in phenology. Oral presentation, 4/2014. *European Geosciences Union General Assembly 2014*, Vienna, Austria.
217. Keenan TF, Hollinger DY, Bohrer G, Dragoni D, Munger WJ, Schmid HP, Richardson AD. Long-term increase in forest water-use efficiency observed across ecosystem carbon flux networks. Oral presentation, 4/2014. *European Geosciences Union General Assembly 2014*, Vienna, Austria.
218. Bohrer G, Dodge* S, Weinzierl R, Davidson* SC, Kays R, Douglas DC, Brandes D, Bildstein K, Wikelski M. The Environmental-Data Automated Track Annotation (Env-DATA) system: linking animal tracks with environmental data. Poster, 12/2013. *American Geophysical Union Meeting 2013*, San Francisco, CA.
219. Curtis PS, Gough CM, Bohrer G, Nadelhoffer KJ, Ivanov VY. Tree death leading to ecosystem renewal? Forecasting carbon storage as eastern forests age. Poster, 12/2013. *American Geophysical Union Meeting 2013*, San Francisco, CA.
220. Cheng SJ, Bohrer G, Steiner AL, Nadelhoffer KJ, Fotis* A. The Impact of Diffuse Light on Terrestrial Carbon Uptake. Poster, 12/2013. *American Geophysical Union Meeting 2013*, San Francisco, CA.
221. Matheny* AM, Bohrer G. Multi-site model-observations comparison shows the diurnal effects of hydrodynamic stress on evapotranspiration. Poster, 12/2013. *American Geophysical Union Meeting 2013*, San Francisco, CA.
222. Frasson* RPM, Bohrer G, Medvigy D, Ivanov VY, Vogel C, Curtis PS. Modeling the impact of disturbances on the carbon cycle of a mixed-deciduous forest in the upper Midwest. Poster, 12/2013. *American Geophysical Union Meeting 2013*, San Francisco, CA.
223. Naor-Azrieli* L, Morin* TH, Bohrer G, Schäfer KVR, Brooker* M, Mitsch WJ. Effects of environmental conditions on an urban wetland's methane fluxes. Poster, 12/2013. *American Geophysical Union Meeting 2013*, San Francisco, CA.
224. Keenan TF, Bohrer G, Dragoni D, Friedl MA, Gray JM, Hollinger DY, Munger WJ, Schmid HP, Toomey MP, Richardson AD. Oral presentation, Increased carbon uptake in the eastern US due to warming induced changes in phenology. 12/2013. *American Geophysical Union Meeting 2013*, San Francisco, CA.
225. Kenny* WT, Bohrer G, Chatziefstratiou* E. Development and application of the High resolution VOC Atmospheric Chemistry in Canopies (Hi-VACC) model. Oral presentation, 12/2013. *American Geophysical Union Meeting 2013*, San Francisco, CA.
226. Morin* TH, Bohrer G, Vogel C. Environmental drivers influence carbon emissions and storage of a freshwater lake. Poster, 12/2013. *American Geophysical Union Meeting 2013*, San Francisco, CA.
227. Morin* TH, Bohrer G, Naor-Azrieli* L, Mesi* S, Schäfer KVR, Stefanik* K, Mitsch WJ. Effects of environmental conditions on urban wetland's methane fluxes. Poster, 11/2013. *42nd Annual Water Management Association of Ohio Conference, Now Trending: Innovations in Water Resource Management*, Columbus, OH.
228. Kenny* WT, Chatziefstratiou* E, Heilman WE, Bohrer G. Using the High resolution VOC Atmospheric Chemistry in Canopies (Hi-VACC) model to simulate smoke dispersion from forest fires. Oral Presentation 10/2013. *American Meteorological Society 10th Symposium of Fire and Forest Meteorology*, Bowling Green, KY.
229. Bohrer G, Dodge* S, Davidson* SC, Weinzierl R, Kays R, Wikelski M. The Environmental-Data Automated Track Annotation (Env-DATA) system – new possibilities in processing and interpretation of movement data. Oral Presentation, 8/2013. *American Ornithologists' Union/Cooper Ornithological Society Joint Meeting*, Chicago, IL.
230. Davidson* SC, Dodge* S, Weinzierl R, Kays R, Wikelski M, Bohrer G. New services for archiving, processing, and analyzing avian movement data on Movebank. Oral Presentation, 8/2013. *American Ornithologists' Union/Cooper Ornithological Society Joint Meeting*, Chicago, IL.
231. Davidson* SC, Bohrer G, Dodge* S, Weinzierl R, Kays R, Wikelski M. Incorporating remote sensing and environmental data in animal movement research using the Env-DATA system and Movebank. Oral presentation, 8/2013. *Ecological Society of America 98th Annual Meeting*, Minneapolis, MN.
232. Morin* TH, Bohrer G, Naor-Azrieli* L, Mesi* S, Schäfer KVR, Stefanik* K, Mitsch WJ. Effects of environmental conditions on an urban wetland's methane fluxes, Poster 6/2013. *13th Annual American Ecological Engineering Society Meeting*. East Lansing, MI
233. Rodríguez-Ronderos ME, Schnitzer SA, Bohrer G, Powers J. Contribution of lianas to LAI and canopy structure in a seasonal forest in Panamá. Poster 6/2013. *The Association for Tropical and Biology and Conservation (ATBC) 50th Anniversary Meeting*, San José, Costa Rica.

234. Frasson* RPM, Bohrer G, Maurer* KD, Kim* R-S, Hardiman* BS, Gough CM, Ivanov VY, He* L, Vogel CS, Nadelhoffer K, Curtis PS. Resolving scale-dependencies in the effects of canopy structure on carbon, water, and energy fluxes in a mixed deciduous forest. Poster 5/2013. *US Department of Energy 2013 Terrestrial Ecosystem Science/Subsurface Biogeochemical Research Joint Investigator Meeting*, Washington, DC.
235. Bohrer G, Dodge* S, Davidson SC, Kays R, Douglas D, Brandes D, Han J, Wikelski M. The Environmental-Data Automated Track Annotation (Env-DATA) system: linking animal tracks with environmental data. Poster 5/2013. *10th Biennial Deer and Elk Workshop*, Missoula, MT.
236. Bohrer G, Discovering relationships between climate and animal migration with new tools for linking animal movement tracks, weather and land surface Data. Oral presentation 4/2013. *NASA Biodiversity and Ecological Forecasting Team Meeting*, Washington, DC.
237. Dodge* S, Bohrer G, Weinzierl R, Davidson* SC, Wikelski M, Kays R. Exploring Animal Movement Patterns in Response to Environmental Change. Oral presentation 4/2013. *Association of American Geographers Annual Meeting*, Los Angeles, CA.
238. Bova* A, Bohrer G, Dickinson MB, Mell W. Numerical experiments to provide functional relationships that describe differential heating around a tree bole. Poster 4/2013. *4th Fire Behavior and Fuels Conference*, Raleigh, NC.
239. Maurer* KD, Bohrer G, Hardiman* BS, Vogel CS, Curtis PS. Spatial and temporal heterogeneity of surface roughness parameters and flux dynamics due to canopy structure change. Poster. 2/2013. *4th NACP All-Investigator Meeting*, Albuquerque, NM.
240. Frasson* R, Bohrer G, Frasson* CD, Maurer* KD, Kenny* WT, Vogel CS, Medvigy D, Curtis PS. Effects of intermediate disturbances on the carbon cycle in the upper Midwest. Poster. 2/2013. *4th NACP All-Investigator Meeting*, Albuquerque, NM.
241. Matheny* AM, Bohrer G, Ivanov V, Stoy P. Typical patterns of latent heat flux error – indicative of missing hydrodynamic processes in land surface models. Poster. 2/2013. *4th NACP All-Investigator Meeting*, Albuquerque, NM.
242. Keenan TF, Bohrer G, Dragoni D, Hollinger D, Munger JW, Schmid HP, Richardson AD. Increasing carbon sequestration in the northeastern US over the past two decades. Poster. 2/2013. *4th NACP All-Investigator Meeting*, Albuquerque, NM.
243. Bohrer G, Gough CM, Ivanov VY, Maurer* KD, Frasson* R, Matheny* AM, He* L, Hardiman* BS, Nadelhoffer K, Vogel CS, Nave LE, Curtis PS. Forecasting carbon stocks in Eastern forests: joining experimental and tree-level modeling approaches to understand structure-function dynamics with ecological succession and disturbance. Poster. 2/2013. *4th NACP All-Investigator Meeting*, Albuquerque, NM.
244. Curtis PS, Gough CM, Hardiman* BS, Nave LE, Bohrer G, Maurer* KD, Vogel CS, Nadelhoffer K. Resilience of Great Lakes forest carbon stocks to disturbance and succession. Poster. 2/2013. *4th NACP All-Investigator Meeting*, Albuquerque, NM.
245. Beck PS, Bohrer G, Wethington S, Bartlam-Brooks HL, Powers DR, Goetz SJ, Graham CH. Satellite-driven predictions of animal migrations in response to short and long-term environmental change. Oral Presentation, 12/2012. *American Geophysical Union Meeting 2012*, San Francisco, CA.
246. Bohrer G, Morin* T, Naor-Azrieli* L, Mouser PJ, Mitsch WJ, Schäfer KVR. Determining the meteorological forcing that affect seasonal and diurnal dynamics of respiration and GPP in a constructed urban wetland in Ohio. Oral Presentation, 12/2012. *American Geophysical Union Meeting 2012*, San Francisco, CA.
247. Brooker* M, Bohrer G, Mouser PJ. Factors Influencing Microbial Carbon Emission Potential from Wetland Sediments and its Relation to Surface- and Plot-Scale Measurements. Poster, 12/2012. *American Geophysical Union Meeting 2012*, San Francisco, CA.
248. Chatziefstratiou* T, Bohrer G, Velissariou* V. Large eddy simulations of volume restriction effects on canopy-induced increased-uplift regions. Poster, 12/2012. *American Geophysical Union Meeting 2012*, San Francisco, CA.
249. Frasson* R, Bohrer G, Frasson* CD, Kenny* WT, Maurer* KD, Ivanov VY, Vogel CS, Walko RL, Medvigy D, Curtis PS. Understanding the effects of intermediate disturbances on evapotranspiration in the upper Midwest. Poster, 12/2012. *American Geophysical Union Meeting 2012*, San Francisco, CA.
250. Gough CM, Hardiman* BS, Nave LE, Bohrer G, Maurer* KD, Vogel CS, Nadelhoffer KJ, Curtis PS. Defying the decline: Carbon storage resistance to moderate disturbance in a temperate forest. Poster, 12/2012. *American Geophysical Union Meeting 2012*, San Francisco, CA.
251. Keenan TF, Bohrer G, Dragoni D, Hollinger DY, Munger WJ, Richardson AD. Increasing carbon sequestration in the northeastern US over the past two decades. Oral Presentation, 12/2012. *American Geophysical Union Meeting 2012*, San Francisco, CA.
252. Kenny* WT, Maurer* KD, Bohrer G. Roughness length as a measure of the effects of a vegetative windbreak. Poster, 12/2012. *American Geophysical Union Meeting 2012*, San Francisco, CA.
253. Matheny* AM, Bohrer G, Thomsen* JE, Frasson* R, Frasson* CD, Ivanov VY. A framework for incorporating the effects of hydrodynamic stresses on forest photosynthesis and evaporation. Poster, 12/2012. *American Geophysical Union Meeting 2012*, San Francisco, CA.

254. Maurer* KD, Bohrer G, He* L, Ivanov VY, Vogel CS, Curtis PS. Measuring and modeling disturbance-induced changes to flux dynamics in increasingly heterogeneous canopy environments. Poster, 12/2012. *American Geophysical Union Meeting 2012*, San Francisco, CA.
255. Schäfer KVR, Tripathee R, Bohrer G. Effect of restoration on carbon fluxes in urban temperate wetlands. Poster, 12/2012. *American Geophysical Union Meeting 2012*, San Francisco, CA.
256. Morin* T, Bohrer G, Naor-Azrieli* L, Mesi* S, Schäfer KVR, Stefanik* K, Mitsch WJ. Effects of environmental conditions on an urban wetland's methane fluxes. Poster, 11/2012. *41st Annual Water Management Association of Ohio Conference*, Columbus, OH.
257. Beck PSA, Bohrer G, Bartlam-Brooks H. Studying animal migrations using remotely sensed environmental time-series. Poster, 10/2012. *Research Coordination Network – FORECAST Conference 2012*, Woods Hole, MA.
258. Brooker* M, Mouser PJ, Bohrer G. Quantifying in situ rates of methanogenesis and denitrification in wetland sediments. Poster, 9/2012. *4th International EcoSummit on Ecological Sustainability*, Columbus, OH.
259. Kenny* WT, Bohrer G, Meyer* K, Garrity* SR. Determining forest structure at an individual-tree scale using remote-sensing-based methods. Poster, 9/2012. *4th International EcoSummit on Ecological Sustainability*, Columbus, OH.
260. Matheny* A, Bohrer G. Mechanistic linking of stomata conductance to soil moisture using a tree level hydrodynamic model. Poster, 9/2012. *4th International EcoSummit on Ecological Sustainability*, Columbus, OH.
261. Scannell* GS, Bohrer G, Jones* RL. Green solutions for wet weather management. Poster, 9/2012. *4th International EcoSummit on Ecological Sustainability*, Columbus, OH.
262. Davidson SC, Kays R, Wikelski M, Weinzierl R, Dodge* S, Bohrer G. Exploring how animals respond to environmental change: Linking animal movement data to global environmental datasets with Movebank. Poster 9/2012. *IMPACT - International Conference on Managing Protected Areas under Climate Change*, Dresden, Germany.
263. Kenny* WT, Bohrer G, Dodge* S, Garrity* SR, Matheny* AM, Low* P, Maurer* KD. Tree-scale forest structure for modeling of hydrodynamic stresses. Poster 9/2012. *ForestSAT 2012*, Cornwallis, OR.
264. Damschen EI, Baker DV, Bohrer G, Turner JR, Brudvig LA, Haddad NM, Levey DJ, Nathan R, Orrock JL, Tewksbury JJ. Predicting and understanding wind-driven seed dispersal in fragmented landscapes with corridors. Oral Presentation, 8/2012. *The 97th Annual Meeting of the Ecological Society of America*. Portland, OR.
265. Maurer* KD, Bohrer G, He L, Ivanov VY. Modeling the effects of increasingly heterogeneous canopy environments on flux dynamics using high-resolution, forest-resolving large-eddy simulations. Oral presentation, 7/2012. *American Meteorological Society 20th Symposium on Boundary Layers and Turbulence*, Boston, MA.
266. Brooker* MR, Bohrer G, Mitsch WJ, Mouser PJ. Factors influencing methane emission potential from wetland sediments. Poster, 7/2012. *Ohio River Basin Consortium for Research and Education 2012*, Athens, OH.
267. Curtis PS, Gough CM, Hardiman* BS, Bohrer G, Nadelhoffer KJ. Managing Great Lakes forests for climate change mitigation. Oral presentation, 7/2012. *BIOGEOMON 2012: The 7th International Symposium on Ecosystem Behavior*, Northport, ME.
268. He* L, Ivanov VY, Bohrer G, Maurer* KD, Vogel CS. Modeling the Effects of fine-scale soil moisture and canopy heterogeneities on energy and soil water fluxes in a temperate mixed forest. Oral Presentation, 6/2012. *Computational methods in Water Resources*, Urbana-Champaign, IL.
269. Matheny* AM, Bohrer G. Mechanistic linking of stomata conductance to soil moisture using tree-level hydrodynamic model. Oral Presentation, 6/2012. *Computational methods in Water Resources*, Urbana-Champaign, IL.
270. Mesi* S, Bohrer G, Naor-Azrieli* L, Brooker* M, Mouser P. Spatial-temporal intermittency of methane flux in an urban temperate wetland. Poster, 6/2012. *12th Annual American Ecological Engineering Society Meeting*, Syracuse, NY.
271. Mouser P, Brooker* M, Mitsch WJ, Bohrer G. Factors Influencing Microbial Gas Production Rates in a Constructed Wetland Ecosystem. Oral Presentation, 5/2012. *American Meteorological Society, first Conference on Atmospheric Biogeosciences*, Boston, MA.
272. Bohrer G, Matheny* AM, Maurer* KD, Frasson* R. Modeling hydrodynamic stress limitations on transpiration. Oral Presentation, 5/2012. *American Meteorological Society 30th Conference on Agricultural and Forest Meteorology*, Boston, MA.
273. Bohrer G, Naor-Azrieli* L, Mesi* S, Mouser P, Stefanik* K, Schäfer KVR, Mitsch WJ. Determining the meteorological forcing that affect seasonal and diurnal dynamics of methane emissions at a constructed urban wetland in Ohio. Poster, 5/2012. *American Meteorological Society 30th Conference on Agricultural and Forest Meteorology*, Boston, MA.

274. Kenny* WT, Frasson* R, Bohrer G, Chatziefstratiou* E, Hadlocon L, Wyslouzil B, Zhao L, Eichinger WE. Measurements and large-eddy simulations of particulate matter dispersion over a vegetative wind-break. Oral presentation, 5/2012. *American Meteorological Society 30th Conference on Agricultural and Forest Meteorology*, Boston, MA (best student presentation award).
275. Bohrer G, Dodge* S, Wikelski M, Weinzierl R, Kays R, Brandes D, Garrity* S, Han J, Douglas D. Discovering relationships between climate and animal migration with new tools for linking animal movement tracks, weather and land surface data. Oral presentation, 4/2012. *NASA Biodiversity and Ecological Forecasting Team Meeting*, Seattle, WA.
276. Matheny* AM, Bohrer G, Curtis PS, Ivanov VY, Schäfer KVR. Plot-level measurements and modeling of sap flux - providing a mechanistic link between stomata conductance and soil moisture. Poster, 4/2012. *Department of Energy, Terrestrial Ecosystem Science PI meeting*, Washington, DC.
277. Gough CA, Curtis PS, Bohrer G, Nadelhoffer K. Sustained canopy light-use efficiency supports forest carbon storage resistance to moderate disturbance. Poster, 4/2012. *Department of Energy, Terrestrial Ecosystem Science PI meeting*, Washington, DC.
278. Hardiman* BS, Curtis PS, Bohrer G, Gough CA. Maintaining high rates of carbon storage in old forests: A mechanism linking canopy structure to forest function. 4/2012. *Department of Energy, Terrestrial Ecosystem Science PI meeting*, Washington, DC.
279. Maurer* KD, Bohrer G, Vogel CS, Curtis PS. Changes to canopy structure drive shifts in flux ejection-sweep dynamics at the Forest Accelerated Succession Experiment (FASET). Poster, 4/2012. *Department of Energy, Terrestrial Ecosystem Science PI meeting*, Washington, DC.
280. Maurer* KD, Bohrer G, He* L, Ivanov VY. Modeling the effects of increasingly heterogeneous canopy environments on flux dynamics using a high-resolution, forest-resolving large-eddy simulation (RAFLES). Poster, 4/2012. *Department of Energy, Terrestrial Ecosystem Science PI meeting*, Washington, DC.
281. Hardiman* BS, Gough CM, Bohrer G, Nadelhoffer KJ, Curtis PS. Old-growth ecosystem services as a conservation goal in Upper Great Lakes forests. Oral Presentation, 2/2012. *2nd Emerging Issues Conference of the Ecological Society of America: Developing Ecologically-Based Conservation Targets under Global Change*, Shepherdstown, WV.
282. Heilman WE, Kiefer MT, Bohrer G, Zhong S, Bian X, Clark KL, Hom JL, Skowronski NS, Getting a handle on local smoke transport during prescribed fires. Oral Presentation, 1/2012. *Science, Practice & Art of Restoring Ecosystems*, East Lansing, MI.
283. Schäfer KVR, Bohrer G, Naor-Azrieli* L, Mouser PJ, Mitsch WJ, Wu M. Temporal dynamics of methane fluxes in temperate urban wetlands. Oral presentation, 12/2011. *American Geophysical Union Fall Meeting 2011*. San-Francisco, CA.
284. Cheng SJ, Steiner AL, Nadelhoffer K, Bohrer G, Curtis PS. Effects of cloud optical thickness on net ecosystem exchange in a Northern U.S. Poster, 12/2011. *American Geophysical Union Fall Meeting 2011*. San-Francisco, CA.
285. Gough CM, Hardiman* BS, Bohrer G, Maurer* KD, Nave LE, Vogel CS, Curtis PS. Enhanced light use efficiency as a mechanism for forest carbon storage resilience following disturbance. Poster, 12/2011. *American Geophysical Union Fall Meeting 2011*. San-Francisco, CA.
286. Matheny* AM, Bohrer G, Ivanov VY, Stoy PC. Towards modeling hydrodynamic stress limitations on transpiration. Poster, 12/2011. *American Geophysical Union Fall Meeting 2011*. San-Francisco, CA.
287. He* L, Ivanov VY, Bohrer G, Maurer* KD, Vogel CS, Moghaddam M. The effects of fine-scale soil moisture and canopy heterogeneities on energy and soil water fluxes in a temperate mixed deciduous forest. Oral presentation, 12/2011. *American Geophysical Union Fall Meeting 2011*. San-Francisco, CA.
288. Kenny* WT, Bohrer G, Garrity* SR, Wyslouzil B, Zhao L, Eichinger WE. Large-eddy simulations of PM dispersion to quantify the effects of windbreaks on air quality around CAFOs. Poster, 12/2011. *American Geophysical Union Fall Meeting 2011*. San-Francisco, CA.
289. Bohrer G, Garrity* SR, Chatziefstratiou* EK, Heilman WE. Large eddy simulation of canopy-structure effects on smoke dispersion from low-burning prescribed fires. Oral presentation 10/2011. *9th Symposium on Fire and Forest Meteorology*. Palm Springs, CA, USA.
290. Bohrer G, Kays R, Wikelski M, Brandes D, Han J, Garrity* SR, Douglas D. Discovering relationships between climate and animal migration with new tools for linking animal movement tracks with weather and land-surface data. Poster (+speed talk) 10/2011. *NASA Carbon Cycle & Ecosystems Joint Science Workshop*. Washington, DC.
291. Bohrer G, Matheny* AM, Meyer* K, Maurer* KD. Detecting and modeling hydrodynamic stresses on stomatal conductance in the forest accelerated succession experiment (FASET). Poster 9/2011. *ILEAPS International Science Conference*. Garmisch-Partenkirchen, Germany
292. Curtis PS, Gough CM, Nave LE, Hardiman* BS, Bohrer G, Halperin A, Vogel CS, Maurer* KD, Nadelhoffer K., Le Moine J. Disturbance dynamics and the maintenance of sustained carbon storage in aging forests of the

- upper Great Lakes region. Oral presentation 8/2011. *96th Ecological Society of America Annual Meeting*. Austin, TX.
293. Chatziefstratiou* EK, Bohrer G, Bova* AS, Dickinson MB. FireStem II – A 2-D heat transfer model for simulation of stem damage in prescribed fires. Poster 8/2011. *96th Ecological Society of America Annual Meeting*. Austin, TX.
 294. Kenny* WT, Bohrer G, Garrity* SR, Wyslouzil B, Zhao L, Eichinger W. Large-eddy simulations of PM dispersion to quantify the effects of windbreaks on air quality around CAFO's. Poster 6/2011. *Department of Agriculture 2011 Air Quality Project Directors' Meeting*, Washington, DC.
 295. Roberts D, Bohrer G. Darwin's "uniform green carpet": modelling the theoretical limits to the dispersal of orchid seeds. Oral presentation 6/2011. *4th International Orchid Conservation Congress*, Hluboka, Czech Republic.
 296. Naor-Azrieli* L, Bohrer G, Mitsch W. Collaborative research: Greenhouse gas balance of urban temperate wetlands. Oral presentation 5/2011. *Annual Meeting of the American Ecological Engineering Society*, Asheville, NC.
 297. Chatziefstratiou* TK, Bohrer G, Bova* AS, Dickinson MB. FireStem II – a 2-D heat transfer model for simulation of stem damage in prescribed fires. Poster 5/2011. *4th Fire in Eastern Oak Forests Conference*, Springfield, MO.
 298. Zhu* K, Jones* RL, Bohrer G. Large eddy simulation and lidar 3-D mapping for optimization of wind power generation in limited-space applications. Poster 4/2011. *University Clean Energy Alliance of Ohio 5th annual conference*, Columbus, OH.
 299. Ivanov VY, He* L, Bohrer G, Vogel CS, Moghaddam M. Upscaling tree-scale canopy and soil water heterogeneity for a temperate deciduous forest of Northern Michigan. Oral presentation 4/2011. *European Geosciences Union General Assembly 2011*. Vienna, Austria.
 300. Bohrer G. Assessing the effects of hydrodynamic stresses on stomatal conductance in forest patches with trees of difference structures, sizes and species. Oral Presentation, 3/2011. *CESM LMWG/BGCWG meeting*, NCAR, Boulder, CO.
 301. Garrity* SR, Bohrer G, Mueller K, Maurer* KD, Vogel CS, Curtis PS. Measuring forest phenology: A comparison of seven contemporary methods. Poster, 2/2011. *AmeriFlux Science Meeting & 3rd NACP All-Investigator Meeting*, New Orleans, LA.
 302. Curtis PS, Gough CM, Nave LE, Hardiman* BS, Bohrer G, Halperin A, Vogel CS, Maurer* KD, Nadelhoffer K, Le Moine J. Forecasting carbon storage in aging forests of the upper Mid-West: New insights from the Forest Accelerated Succession Experiment (FASET). Oral presentation, 2/2011. *AmeriFlux Science Meeting & 3rd NACP All-Investigator Meeting*, New Orleans, LA.
 303. He* L, Ivanov VY, Bohrer G, Maurer* KD, Vogel CS, Hardiman* BS, Curtis PS, Moghaddam M. Effect of fine-scale canopy heterogeneity on energy and soil water fluxes in a northern temperate deciduous forest. Poster, 2/2011. *AmeriFlux Science Meeting & 3rd NACP All-Investigator Meeting*, New Orleans, LA.
 304. Maurer* KD, Bohrer G, Curtis PS, Vogel CS, Ivanov VY, Hardiman* BS. Measuring changes to canopy structure and productivity during accelerated succession at an AmeriFlux site in Northern Michigan. Poster, 2/2011. *AmeriFlux Science Meeting & 3rd NACP All-Investigator Meeting*, New Orleans, LA.
 305. Bohrer G, Medvigy D. Dynamic evapotranspiration in tree-resolving LES – The ED2RAFLES model. Poster, 12/2010, *AGU Fall Meeting*, San Francisco, CA.
 306. He* L, Ivanov VY, Vogel, CS, Bohrer G, Moghaddam M. Temporal dynamics and spatial heterogeneity of soil moisture in a northern temperate deciduous forest. Poster, 12/2010, *AGU Fall Meeting*, San Francisco, CA.
 307. Gough CM, Nave LE, Hardiman* BS, Bohrer G, Halperin A, Maurer* K, Le Moine J, Nadelhoffer K, Vogel CS, Curtis PS. High rates of carbon storage in old deciduous forests: Emerging mechanisms from the Forest Accelerated Succession Experiment (FASET). Poster, 12/2010, *AGU Fall Meeting*, San Francisco, CA.
 308. Garrity* S, Bova* AS, Heilman W, Skowronski N, Bohrer G. Large eddy simulation of canopy structure effects on smoke dispersion from prescribed fire. Poster, 10/2010, *Third Fire Behavior and Fuels Conference*, Spokane, WA.
 309. Heilman W, Skowronski N, Bian X, Shadbolt R, Zhong S, Clark K, Charney J, Bohrer G, Kiefer M, Hom J. Development and validation of modeling tools for predicting smoke dispersion during low-intensity fires. Poster (+ extended abstract), 10/2010, *Third Fire Behavior and Fuels Conference*, Spokane, WA.
 310. Bova* AS & Bohrer G. Forest canopy sub-layer turbulence and atmospheric coupling in a wildland fire model. Oral Presentation, 8/2010, *The 29th Conference on Agricultural and Forest Meteorology*, Keystone, CO.
 311. Velissariou* V & Bohrer G. Resolving a forest-strip induced uplift region using the shaved-grid-cell method with large eddy simulations. Oral Presentation, 8/2010, *The 29th Conference on Agricultural and Forest Meteorology*, Keystone, CO.

312. Goedhart Nietz J, Bohrer G, Detto M, Maurer* KD, Vogel CS, Gough CM & Curtis PS. Linking GPP and soil respiration during partial forest canopy senescence. Poster, 8/2010. *Ecological Society of America, Annual meeting 2010*. Pittsburgh, PA.
313. Hardiman* BS, Gough CM, Bohrer G, Vogel CS & Curtis PS. Structural and biological diversity increase NPP resiliency during forest succession, Poster, 8/2010. *Ecological Society of America, Annual meeting 2010*. Pittsburgh, PA.
314. Baker DV, Damschen EI, Bohrer G & Turner JR. Importance of spatial and individual heterogeneity for wind-dispersed plants. Poster, 8/2010. *Ecological Society of America, Annual meeting 2010*. Pittsburgh, PA.
315. Bova* AS, Dickinson MB & Bohrer G. Estimating the protection given by natural and artificial animal shelters in wildland surface fires. Poster, 8/2010. *Ecological Society of America, Annual meeting 2010*. Pittsburgh, PA.
316. Bohrer G. Large-eddy simulations of PM dispersion to quantify the effects of windbreaks on air quality around CAFO's. Poster, 8/2010. *2010 AFRI Air Quality PD Meeting*, Amarillo, TX.
317. Bova* AS, Bohrer G, Dickinson MB. The effects of canopy heterogeneity on fuel moisture and wildland fires. Poster, 4/2010, *NASA Land-Cover and Land-Use Change Program Science Team Meeting*. Bethesda, MD.
318. Bohrer G, Shlomo* D, Yair S, Berenshtein I. Eddy flux observations of evaporation and vapor advection in the Gulf of Aqaba (Eilat), northern Red Sea. Poster, 2/2010, *AGU Ocean Science Meeting*, Portland, OR.
319. Bova* AS, Dickinson MB, Bohrer G. Ventilation of animal shelters in wildland fire scenarios. Poster, 11/2009, *4th International Fire Ecology and Management Congress*, Savannah, GA.
320. Heilman WE, Zhong S, Charney JC, Hom J, Clark K, Bohrer G, Skowronski N, Bian X, Kiefer MT. Development of modeling tools for predicting smoke dispersion from low intensity fires. Poster, 11/2009, *4th International Fire Ecology and Management Congress*, Savannah, GA.
321. Bova* AS, Bohrer G, Dickinson MB. Ventilation of Animal Shelters in Wildland Fire Scenarios. Oral presentation, 12/2009. *AGU fall meeting 2009*, San-Francisco, CA.
322. Maurer* KD, Bohrer G, Curtis PS, Vogel CS. The phenology of roughness length – long term analysis from a Michigan mixed forest. Poster, 12/2009. *AGU fall meeting 2009*, San-Francisco, CA.
323. Curtis P, Gogh CM, Hardiman* BS, Vogel CS, Bohrer G. Mechanisms for sustained carbon storage in old forests: Early results from the Forest Accelerated Succession Experiment (FASET). Poster, 12/2009. *AGU fall meeting 2009*, San-Francisco, CA.
324. Bohrer G, Walko RL. The Ocean-Land-Atmosphere Model (OLAM) – A new approach for simulation of transport and dispersion. Poster, 12/2009. *SERDP-ESTCP Symposium 2009: Partners in Environmental Technology*, Washington, DC.
325. Curtis PS, Gough CM, Vogel CS, Hardiman* BS, Bohrer G, Nave LE. Carbon cycling in future forests: An ecological succession experiment at the University of Michigan Biological Station. Oral presentation, 9/2009. *AmeriFlux Principal Investigator Workshop*, Washington, DC.
326. Hardiman* BS, Bohrer G, Gough CM, Vogel CS, Curtis PS. Net primary productivity is positively correlated with canopy structural complexity in a northern hardwood forest. Oral Presentation, 8/2009. *Ecological Society of America (ESA) 94th Annual Meeting*, Albuquerque, NM.
327. Chiriboga AT, Hardiman* BS, Bohrer G, Vogel CS, Curtis PS. Comparing LiDAR based estimates of height, DBH and biomass with biometric measurements. Poster, 6/2009. *Carbon in Northern Forests: Integration of research and management*, Traverse City, MI.
328. Hardiman* BS, Bohrer G, Gough CM, Vogel CS, Curtis PS. Net primary productivity is positively correlated with canopy structural complexity in a northern hardwood forest. Poster, 6/2009. *Carbon in Northern Forests: Integration of Research and Management*, Traverse City, MI.
329. Bohrer G, Moorcroft PR. The Atmospheric effects of selective logging in the Amazon – An LES case study. Poster, 12/2008. *AGU fall meeting 2008*, San-Francisco, CA.
330. Curtis PS, Gough CM, Vogel CS, Hardiman* B, Bohrer G, Nave LE. Projecting carbon cycling trajectories in forests of the upper Midwest, USA: Has carbon storage peaked? Poster, 12/2008. *AGU fall meeting 2008*, San-Francisco, CA.
331. Bova* AS, Bohrer G. Small scale surface heterogeneity effect on atmospheric-boundary layer turbulence – Potential application for optimization of wind turbine location. Poster, 11/2008. *Institute for Energy and the Environment – Alternative Energy Poster Session* Columbus, OH.
332. Bohrer G, Longo M, Zielinski DJ, Brady R. VR visualization as an interdisciplinary collaborative data exploration tool for large eddy simulations of biosphere-atmosphere interactions. Oral presentation, 11/2008. *4th International Symposium on Visual Computing*, Las Vegas, NV.
333. Bohrer G, Brady R. VR interface to facilitate multi-disciplinary collaboration in data exploration of the forest large eddy simulations, Oral presentation, 10/2008. *VisWeek 08 Workshop on Scientific Workflow with Immersive Interfaces for Visuals*, Columbus, OH.
334. Bohrer G, Katul GG, Avissar R, Moorcroft PR. Large-eddy simulations of the effects of forest canopy microscale structural heterogeneity. Poster, 5/2008. *The 4th Annual Plant Biology Symposium*, Harvard University, Cambridge, MA.

335. Bohrer G, Katul GG, Walko RL, Avissar R. Large-Eddy simulations of forest canopy micro-scale structural heterogeneity effects on the atmospheric boundary layer. Poster, 12/2007. *AGU fall meeting 2007*, San-Francisco, CA.
336. Bohrer G, Walko RL, Avissar R. A New Concept for Representing Trees in LES Simulations, Oral presentation, 12/2006. *AGU fall meeting 2006*, San-Francisco, CA.
337. Bohrer G, Walko RL, Avissar R. RAFLES – a new generation high-resolution model for simulation of turbulence and dispersal within and above forest canopies. Poster, 1/2006. *1st Integrated Land Ecosystem-Atmosphere Processes Study Conference*, Boulder, CO.
338. Bohrerova Z, Bohrer G, Linden KG, Ducoste JJ, Mohanraj MS. Experimental measurements of fluence distribution in a UV reactor using fluorescent microspheres. Oral Presentation 11/2005. *Water Quality Technology Conference*, Québec City, Canada
339. Bohrer G, Ramos da Silva R, Otte M, Werth D, Avissar R. Sensitivity of ice storms in the southeast US to elevated Atlantic SST. Poster, 5/2005. *International conference of Israeli Society for Ecology and Environmental Quality Sciences*. Weizmann Institute, Rehovot, Israel.
340. Bohrer G, Ward D, Roth-Bejerano N, Kagan-Zur V. Different hosts gain different benefits from communities of Kalahari VAM fungi. Oral presentation, 8/2000. *85th Annual meeting of the Ecological Society of America*. Snowbird, Utah.
341. Bohrer G, Ward D, Kagan-Zur V, Roth-Bejerano N. Correlation between abundance of endomycorrhizal fungal communities, environmental conditions and plant community composition in the Kalahari desert. Poster, 7/1999. *42nd Annual symposium of the International Association for Vegetation Science*. Bilbao, Spain.

Invited Seminar Presentations

342. *Circumpolar Biodiversity Monitoring Programme (CBMP) Co-Lead Meeting*, Reykjavik, Iceland (Virtual). "Movebank and the Arctic Animal Movement Archive". 8/2021 (co-presented with Sarah Davidson*)
343. *IJGIS Webinar* (virtual). "Bridging Research on Human Mobility and Animal Movement Ecology". 6/2021 (co-presenter, with Harvey Miller, Jennifer Miller and Somayeh Dodge)
https://www.youtube.com/channel/UCHhdFPA_sw9HYgluFcjK1bA.
344. *Arctic Research Consortium of the U.S. (ARCUS), Research Seminar* (Virtual). "Ecological insights from the new Arctic Animal Movement Archive - tracking three decades of animal movement across a changing Arctic". 3/2021.
345. *Baldocchi Lab Meeting, UC Berkeley, Environmental Science, Policy and Management* (Virtual). "Understanding patch-level heterogeneity of methane fluxes: Small-scale, big difference". 2/2020.
346. *Ameriflux Early Career Network (ECN) Seminar* (Virtual). "The tree-hydrodynamic revolution – how stomata regulation moved from the soil to the trees". 1/2020.
347. *FluxCourse*, University of Colorado Mountain Research Station, Nederland, CO. "Guest lecture: Site Analysis". 7/2019.
348. *Hebrew University in Jerusalem, Agriculture Faculty, Plant Science Seminar*, Rehovot, Israel. "Plant hydrodynamics – Mechanistic linking of stomatal conductance to ~~soil moisture~~ xylem water potential". 5/2019.
349. *Picarro Biosciences Lunch & Learn Webinar*, Santa Clara, CA (virtual). "Field Measurements of Dissolved CO₂ and CH₄ Gases in Wetlands with a Picarro Gas Scouter". 4/2019.
350. *University of Michigan Biological Station (UMBS) Winter Research Meeting*, Ann Arbor, MI. "Hydrodynamic Model Used to Bridge Observations at Multiple Scales and Define Tree Hydraulic Traits", 2/2019.
351. *Pacific Northwest national Laboratory, Subsurface Biogeochemical Research (SBR) Scientific Focus Area (SFA) Seminar*, Richland, WA (virtual). "Decrypting Hydrological and Microbial Contributions to Greenhouse Gas Emissions along the Columbia River", 10/2018.
352. *Karlsruhe Institute of Technology, Institute of Meteorology and Climate Research, Research Seminar*, Garmisch-Partenkirchen, Germany. "The Methane Paradox: Observations of methane production in aerobic wetland soils", 7/2018.
353. *Washington State University, Civil and Environmental Engineering*, Pullman, WA. "Drivers of methane emissions from a small, heterogeneous urban wetland park", 5/2018.
354. *Meter Group*, Pullman, WA. "Plant hydrodynamics – Mechanistic linking of stomatal conductance to soil moisture", 5/2018.
355. *Ohio State University, Microbiology Bio3401*. "Climate change", 3/2018.
356. *Ohio State University, Center for Applied Plant Science*. "Plant hydrodynamics – mechanistic linking of stomatal conductance to soil moisture", 3/2018.
357. Haifa University, Haifa Israel. "Why did the [vulture] cross the [mountains] – Insights from tag-based and remote-sensing-based movement track annotation [insert your animal/ecosystem here, e.g. Chicken/road]" 10/2017.

358. *NASA Earth to Sky Workshop @NWT*, Yellowknife, NWT, Canada (virtual), "Animals on the move: Remote sensing of drivers influencing animal movements and habitat selection in the Arctic and beyond", 4/2017.
359. Kent State University, *Department of Biological Sciences*, Kent, OH, "Drivers of methane emissions from a small, heterogeneous urban wetland park. 10/2016.
360. *University of Montreal, Department of Geography*, Montreal, Canada, "I reject your reality and substitute my own – model-augmented observations in ecohydrology". 9/2016.
361. *Hebrew University, Avian Ecology, Evolution and Behavior Seminar*, Jerusalem, Israel, "Modeling animal movement with environmental context". 6/2016.
362. *Haifa University, Department of Biology, Bird tracking mini-symposium*, Haifa, Israel, "Wind estimation based on thermal soaring of birds". 5/2016.
363. *The Mitrani Department of Desert Ecology, Ben-Gurion University of the Negev, Departmental Seminar*, Sede Boker, Israel, "Forest X Atmosphere interactions – How forest structure affects the ecosystem water budget". 4/2016.
364. *Weizmann Institute, Dept. of Environmental Sciences & Energy Research, CLIFF project, Second year annual meeting*, Rehovot, Israel, "Advances in tree hydrodynamic modeling". 2/2016.
365. *Volcani Institute for Agricultural Research, Research Seminar*, Rehovot, Israel, "Tree-level hydrodynamic approach for improved stomatal conductance parameterization". 2/2016.
366. *University of Würzburg, 7th MICMoR Research Forum*, Würzburg, Germany, *The upcoming revolution of plant hydrodynamics and a tale of navigation in the interdisciplinary maze*. 11/2015.
367. *Karlsruhe Institute of Technology, Institute of Meteorology and Climate Research, Research Seminar*, Garmisch-Partenkirchen, Germany, "New plant hydrodynamic approach to simulate hydraulic limitations of forest transpiration". 7/2015.
368. *Karlsruhe Institute of Technology, Institute of Meteorology and Climate Research, Graduate Student Seminar Series*, Garmisch-Partenkirchen, Germany, "Research Career Pathways". 7/2015.
369. *ETH Zurich, Department of Hydrological Engineering*, Zurich, Switzerland, "Tree-level hydrodynamic approach for improved stomatal conductance parameterization". 6/2015.
370. *ETH Zurich, Department of Hydrological Engineering*, Zurich, Switzerland, "See the forest for the trees – The role of tree-scale structural heterogeneity in forest-atmosphere exchange". 6/2015.
371. *University of Kent, Statistical Ecology Group Seminar*, Canterbury, UK, "Hierarchical Testing of Individual-Based Models to Determine Effective Environmental Drivers of Movement". 5/2015.
372. *University of Bristol, School of Biological Sciences, Biocomplexity Seminar*, Bristol, UK, "The Environmental-Data Automated Track Annotation (Env-DATA) system – providing the environmental context for animal movement research". 5/2015.
373. *Tel Aviv University and the Society for the Protection of Nature in Israel - "The Way of a Vulture in the Sky..." Lecture day*, Tel Aviv, Israel, "Using satellite and weather data for predicting the flight characteristics of birds". 4/2015.
374. *Ohio State University, Environmental Professional Network, EPN Breakfast Club - "Unmanned Aerial Vehicle: Environmental and Ag Applications Take Flight"*, Columbus, OH, "Use of drones in ecosystem –climate interactions studies". 11/2014.
375. *University of Delaware – Seminar, School of Marine Science and Policy Seminar*, Lewes, DE, "Movement Weather – New Tools for Studying Animal Movement and Their Environment". 9/2014.
376. *Zoological Center – Tel Aviv, Science Lecture Series*, Ramat Gan, Israel, "Why would the bird care? Using satellite remote sensing to study how migrating animals utilize weather and environmental conditions", 8/2014.
377. *NASA DEVELOP National Program*, Washington, DC (virtual), "Discovering relationships between climate and animal migration with new tools for linking animal movement tracks, weather and land surface data". 7/2014.
378. *Oregon State University – Seminar, Department of Biological and Ecological Engineering*, Corvallis, OR, "Tree-scale hydrodynamics – why the high-resolution details of forest structure matter". 6/2014.
379. *AmeriFlux Data Managers Workshop*, Lawrence Berkeley National Laboratory, Berkeley, CA, "The University of Michigan Biological Station core flux site." 2/2014.
380. *Ohio State University – Seminar, Department of Evolution, Ecology and Organismal Biology* – "From trees to forests: modeling the interactions between vegetation structure and the movement of water along the hydro-bio-atmo-sphere continuum". 1/2014.
381. *Decagon Devices – online public webinar*, Pullman, WA, "From trees to forests - modeling the interactions between vegetation structure and the movement of water along the hydro-bio-atmo-sphere continuum." 11/2013.
382. *Decagon Devices Inc.*, Pullman, WA, "Canopy-structure effects on atmospheric surface layer." 10/2013.

383. *University of Idaho, College of Natural Resources*, Moscow, ID, "From trees to forests - modeling the interactions between vegetation structure and the movement of water along the hydro-bio-atmo-sphere continuum." 10/2013.
384. *North Carolina State Museum of Natural Sciences Daily Planet Presentations*, Raleigh, NC, "Movement weather – new tools for studying animal movement and their environment." 7/2013.
385. *Midwest Flux Core-Site Workshop*, Bloomington, ID, "Relationships between roughness length and forest structure – results from observations and large eddy simulations". 6/2013.
386. *USGS Geo Data Portal Development Group*, "The Environmental-Data Automated Track Annotation (Env-DATA) system". 4/2013.
387. *US Fish & Wildlife Service National Climate Team Meeting*, Washington, DC (virtual). "The Environmental-Data Automated Track Annotation (Env-DATA) system – new possibilities in processing and interpretation of animal movement data". 4/2013.
388. *Smithsonian Tropical Research Institute – CTFS-science meeting*, Panama city, Panama. "From forest to trees – how changes to tree-level structure affect the hydrologic, atmospheric and productivity functions of the forest". 3/2013.
389. *NASA Earth to Sky VI workshop*, Shepherdstown, WV (virtual), "Migration track annotation - New tools for linking animal movement tracks with weather and land-surface data", 2/2013.
390. *Environmental Friendly Drilling Workshop – Site Assessment and Baseline Monitoring Measurements in Ohio*, Columbus, OH, "Measuring methane in the air". 2/2013.
391. *University of Wisconsin – Milwaukee, Department of Biological Sciences*, Milwaukee, WI, "A framework for incorporating the effects of hydrodynamic stresses on forest photosynthesis and evaporation". 10/2012.
392. *University of Michigan Biological Station, All-Camp Lecture Series*, Pellston, MI, "Strategies of water use – how different trees manage their water, and what does it mean for the forest as it changes". 7/2012.
393. *Denali Education Center Community Lecture Series*, Denali, AK, "Animal weather forecasts - satellite data help show what migrating animals know and like about the weather". 6/2012.
394. *Movebank Track Annotation Workshop #2*, Denali, AK, "Environmental data in Movebank - introduction and updates". 6/2012.
395. *North Carolina Museum of Natural Sciences, Nature Research Center Opening – Meet a Scientist Lecture*, Raleigh, NC, "If a tree moves in the wind – do the clouds care?" 4/2012.
396. *The Water Management Association of Ohio and The Water Resources Center, Water Luncheon Seminar*, Columbus, OH, "Determining the Meteorological Forcing that Affects the Dynamics of Methane Emissions from Wetlands", 4/2012.
397. *University of Wisconsin, Atmospheric Science Departmental Seminar*, Madison, WI, "Detecting and modeling hydrodynamic stresses on stomatal conductance in the Forest Accelerated Succession Experiment (FASET)", 3/2012.
398. *Biological Response to Climate Change: Track Annotation Workshop*, Point Reyes, CA, "Migration track-annotation: New tools for linking animal movement tracks with weather and land-surface data", 11/2011.
399. *NASA Earth to Sky V workshop*, Shepherdstown, WV, "Migration track annotation - New tools for linking animal movement tracks with weather and land-surface data", 9/2011.
400. *University of Washington, Dept. of Atmospheric Science*. Seattle, WA, "Modeling the interactions between forest structure and forest function at the atmospheric surface layer", 2/2011.
401. *Hebrew University, EEB Departmental Seminar*, Jerusalem, Israel. "Forest-Atmosphere interactions - Where structure meets function". 11/2010.
402. *National Institute of Soil, Water and Environmental Science*, Bet-Dagan, Israel, "Tree-level simulations of transpiration - can the trees add details to the forest?" 11/2010.
403. *Weizmann Institute of Science, ESER seminar*, Rehovot, Israel, "From trees to forests - modeling the interactions between vegetation structure and atmosphere dynamics". 11/2010.
404. *OSU College of Engineering, Continuing Professional Education Seminar*. Columbus, OH, "More than simply trees – forest-atmosphere interactions as potential for green solutions", 9/2010.
405. *University of Michigan Biological Station, All Camp Lecture*. Pellston, MI, "Modeling the Interactions between forest structure and forest function at the atmospheric surface layer", 7/2010.
406. *Washington University, Ecology Seminar Series*, St. Louis MO. "Modeling the interactions between forest structure and forest function at the atmospheric surface layer", 4/2010.
407. *Ohio State University, Mechanical Engineering Seminar*. Columbus, OH, "Tree-scale representation of forests in atmospheric simulation - Connecting forest function with canopy structure", 4/2010.
408. *Woods Hole Oceanographic Institution, Physical Oceanography Seminar*. Woods Hole, MA, "Eddy flux observations of evaporation and vapor advection in the Gulf of Aqaba (Eilat), northern Red Sea", 12/2009.

409. *Olentangy River Wetland Research Park "Wednesday Afternoon on Your Way Home" Seminar*, Columbus, OH, "Roughness, evaporation and surprisingly difficult surface interactions - Eddy flux observations of ORW and beyond", 11/2009.
410. *Smithsonian Tropical Research institute, BAMBI Seminar series*, Barro Colorado Island, Panama, "Interactions between forest and atmosphere: The tree-crown point of view", 10/2009.
411. *Max Planck Institute of Ornithology, MoveBank Water-Bird Tracking Workshop*, Konstanz, Germany, "Weather data in MoveBank", 9/2009.
412. *Max Planck Institute of Ornithology, Radolfzell, Germany*. "Riding the eddies – movement ecology of flight", 9/2009.
413. *University of Amsterdam, Computational geo-Ecology Seminar*, Amsterdam, Holland, "Modeling the interactions between forest and atmosphere at a tree-crown resolution", 9/2009.
414. *US Forest Service, E. Lansing, MI*. "The effects of canopy structure on atmosphere-biosphere interactions", 6/2009.
415. *Inter-University Institute for Marine Research, Seminar Series*, Eilat, Israel, "Modeling the interactions between forest structure and forest function at the atmospheric surface layer", 3/2009.
416. *University of Michigan, Dept. Civil & Environmental Engineering Seminar Series*, Ann Arbor, MI, "Simulating the effects of tree-scale canopy structure on atmosphere biosphere interactions", 11/ 2008.
417. *US Forest Service, Northern Research Station*, Delaware, OH, "The effects of canopy structure on atmosphere-biosphere interactions", 10/2008.
418. *Harvard University, Department of Earth and Planetary sciences, Atmospheric Seminar*. Cambridge, MA, "3-D virtual reality visualization of wind in the Amazon forest: Atmospheric-biosphere interactions at local and regional scales", 4/2008.
419. *University of Minnesota, St. Antony Falls Laboratory*, Minneapolis, MN, "Large-eddy simulations of forest-canopy micro-scale structural heterogeneity and its effects on the atmospheric boundary layer", 2/2008.
420. *King's College, Dept. of Geography*, London, GB, "Tree-scale hydrometeorology: determining the environmental consequences of forest structure", 5/2007.
421. *Duke University, Department of Computer Science, Visualization Technology Group*, Durham, NC, "See the wind blow – virtual reality as a development and a science-communication tool for large eddy simulations", 4/2007.
422. *University of Georgia, Faculty of Engineering*, Athens, GA, "Tree-scale hydrometeorology: simulating the effects of forest heterogeneity on atmosphere-biosphere interactions", 4/2007.
423. *Ohio state University, Department of Civil and Environmental Engineering and Geodetic Science*, Columbus, OH, "Tree-scale hydrometeorology: simulating the effects of forest heterogeneity on atmosphere-biosphere interactions", 3/2007.
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Gil Bohrer, Diversity statement

Everyone's identity is a complex multidimensional matrix. I am a white male, and as such benefited from some privileges. I am also an immigrant and of a minority religion, which gave me the misfortune of experiencing some biases and micro aggression. My personal experiences have made me very conscious of how my own unconscious biases, actions, and words may be felt by others, of different identities than mine. I understand and cherish the contribution of diverse opinions and experiences. I am aware that true talent is everywhere and different peoples' identities and experiences provide unique points of view that make the whole group more creative and productive, while at the same time these experiences may lead to specific challenges in the way of fulfilling their potential. I take a very personalized approach to mentoring a diverse research group and try to give every student and mentee the resources and support they need. I create the atmosphere required for each of my group members to fulfil their true talents. It is my role as a mentor to promote and facilitate my mentees professional growth and help them be successful. I work hard to generate a sense of home and belonging within my research group to all of its members at all ranks and identities. In addition to personal meetings, I initiate group-level social events, and generate networking opportunities for my group members. I initiate opportunities for my mentees to experience and practice, in a guided and hopefully non-stressful way, activities that would typically be classified as belonging in the next career stage. For example, all my post-docs have had to opportunity to write grants as formal co-PIs (some were successfully funded). Some of my students organized conference sessions, all of them reviewed a paper. Most of my students and all my postdocs taught and were credited as co-instructors of sections of undergraduate classes. I am proud of my accomplishments as a mentor. Since starting my academic role as a supervisor, I have been successful in recruiting and retaining a diverse research group (graduate students and post docs). At least 60% of my group were female, 25% were Hispanic or Black. All my graduate students and former postdocs were successful in finding job placement (in industry, government or academia). 5 of my former PhD students and 2 of my former postdocs are currently in academic positions and of these, 3 are Hispanic and the other 4 are female.

Within the Civil, Environmental and Geodetic Engineering Department, I have chaired the departmental mentoring committee, and currently chair the departmental P&T committee. In these roles, I helped develop and institute a new 2nd-year for tenure track faculty. This review is not "judgmental" but it is a part of the mentoring process, and introduces new faculty to the P&T committee, the dossier writing and review processes. We found that it is particularly

effective in demystifying the P&T process and providing opportunity for discussion and communication for early career faculty, some of whom feel very isolated and “alone”, especially in the first 2-3 years of their tenure track.

I have been active in outreach to the next generation of diverse students and researchers. I have led and supervised two NSF-funded research experience projects for teachers (RET). I have (and currently are) supervised many undergraduate research students, including many to students of different underrepresented groups, and including students affiliated with the SROP and TEK8 programs. I am currently leading an NSF-funded research advancement project for high school students (RAHSS). In this RAHSS project I am collaborating with Franklinton High School, located in one of the most economically depressed neighborhoods of Columbus. I work with the school’s science teacher and a diverse group of 7 students (3 seniors and 4 juniors). I and my graduate students work with a team composed of a teacher and the high school students at a field site of one of my NSF projects. The high school team is conducting measurements and data analysis. This experience will extend beyond the current-summer field sampling, and with my mentorship, the students will present their results in the Kent State University Undergraduate Research Symposium in the fall semester. The students further work towards incorporating the research experiences in their career-goals plan (which they are developing with the science teacher and the school counselor) and collage application statements. I am particularly excited about this project, as it provides a new approach of incorporating high-school teacher-student teams as a part of an active research project. I have plans to expand this project in future years, and to more research projects of me and other colleagues and collaborators. By collaborating with Franklinton High School, we are providing opportunities for positive and constructive experiences with hands-on STEM research for students of different backgrounds, who typically had no previous exposure or opportunity to experience STEM research work and will inspire young students to develop a future in STEM.

I am looking forward to creating and expanding research opportunities to a diverse group of researchers at all career levels, and particularly, for expanding early access to STEM research experiences, that will help recruit a more diverse cohort of students and future researchers. I am committed the creating an atmosphere of belonging and mutual respect, and to work, think and create together to achieve the mission of the ABE Department.



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