

2023 NCAC1 Annual Meeting

- This meeting was originally scheduled to take place at the Hilton Garden Inn in San Diego Old Town on January 11, 2024.
- Due to very low in-person registrations, the meeting was changed to remote format and took place via **Zoom on February 7, 2024**.
- **AGENDA**
 - 9:30 am – Welcome (Karcher)
 - 9:35 am – Administrative Comments (Pierzynski)
 - 9:40 am – Host Selection for 2025 Meeting (Karcher)
 - 9:45am – Project Reviews (15 minutes max each)
 - 1:00 pm- State Reports (5 minutes max each)
 - 2:00 pm – Adjourn

- We were unsuccessful in electing a secretary and host for the 2025 meeting in February. However, Adam Davis was self-nominated and elected to host the 2025 through e-mail discussions in October of 2024. Adam indicated that the 2025 meeting will occur in the January 8 – 10 window with a location to be determined through a member poll.

- 2024 meeting attendees are listed below, followed by project review assignments and outcomes and submitted state reports.

Attendee	Institution
Doug Karcher, chair	Ohio State (Hort and Crop Sci)
Brian Slater	Ohio State (Env and Natural Resources)
Doug Soldat	Wisconsin
Adam Davis	Univ of Illinois
Martha Mamo	Univ of Nebraska
Christina Hargiss	North Dakota State University
Raj Khosla	Kansas State University
Stephen Anderson	Univ of Missouri
Mary Wiedenhoft	Iowa State
Gary Pierzynski, administrative advisor	Ohio State

2024 Assigned NCAC1 Reviews

Current Proj # (Temp #)	Renewal or Midterm (R/M)	Title	Project/Proposal Homepage (Ctrl+Click to follow link)	Example Review Form for FYI only (review MUST be submitted directly to the assigned NIMSS form; Ctrl+Click to follow link)	Primary Reviewer	Secondary Reviewer	Decision
NC1178 (NC_temp1178)	R	Land use and management practice impacts on soil carbon and associated agroecosystems services	https://www.nimss.org/projects/19080	AppH: https://www.nimss.org/forms/appendix_h.pdf	Slater	Zhang	Approve
NC1181 (NC_temp1181)	R	Sustaining Forage-based Beef Cattle Production in a Bioenergy Environment	https://www.nimss.org/projects/19056	AppH: https://www.nimss.org/forms/appendix_h.pdf	Davis	Khosla	Approve with Minor Revision
NC1182 (NC_temp1182)	R	Nitrogen Cycling, Loading, and Use Efficiency in Forage-Based Livestock Production Systems	https://www.nimss.org/projects/19086	AppH: https://www.nimss.org/forms/appendix_h.pdf	Khosla	Davis	Approve
NC1208 (NC_temp1208)	R	Biology, Etiology, and Management of Dollar Spot in Turfgrasses	https://www.nimss.org/projects/19055	AppH: https://www.nimss.org/forms/appendix_h.pdf	Soldat	Slater	Approve

NCERA3 (NCERA_temp3)	R	Soil and Landscape Assessment, Function and Interpretation	https://www.nimss.org/projects/19122	AppJ2 (ignore the word "optional"); https://www.nimss.org/forms/appendix_i2.pdf	Zhang	Anderson	Approve/continue with normal revision.
NCERA137 (NCERA_temp137)	R	Soybean Diseases	https://www.nimss.org/projects/19054	AppJ2 (ignore the word "optional"); https://www.nimss.org/forms/appendix_i2.pdf	Slater	Anderson	Approve/continue with normal revision.
NCERA217 (NCERA_temp217)	R	Drainage design and management practices to improve water quality	https://www.nimss.org/projects/19088	AppJ2 (ignore the word "optional"); https://www.nimss.org/forms/appendix_i2.pdf	Hargiss	Zhang	Approve/continue with normal revision.
NC1195	M	Enhancing nitrogen utilization in corn based cropping systems to increase yield, improve profitability and minimize environmental impacts	https://www.nimss.org/projects/18786	Appl: https://www.nimss.org/forms/appendix_i.pdf	Slater	Davis	Approve
NC1203	M	Lipids In Plants: Improving and Developing Sustainability of Crops ("LIPIDS of Crops")	https://www.nimss.org/projects/18796	Appl: https://www.nimss.org/forms/appendix_i.pdf	Davis	Karcher	Approve
NC1212	M	Exploring the Plant Phenome in Controlled and	https://www.nimss.org/projects/18782	Appl: https://www.nimss.org/forms/appendix_i.pdf	Wiedenhoft	Karcher	Approve

		Field Environments					
NCERA13	M	Soil Testing and Plant Analysis	https://www.nimss.org/projects/18801	AppK: https://www.nimss.org/forms/appendix_k.pdf	Slater	Hargiss	Approve/continue with normal revision.
NCERA59	M	Soil Organic Matter: Formation, Function and Management	https://www.nimss.org/projects/18793	AppK: https://www.nimss.org/forms/appendix_k.pdf	Anderson	Khosla	Approve/continue with normal revision.
NCERA221	M	Turfgrass and the Environment	https://www.nimss.org/projects/18783	AppK: https://www.nimss.org/forms/appendix_k.pdf	Karcher	Wiedenhoft	Approve/continue with normal revision.

ILLINOIS

Department of Crop Sciences, University of Illinois: AY 2023-2024 updates

Dr. Adam Davis, Professor and Head (asdavis1@illinois.edu, 217-333-9654)

The Department of Crop Sciences has a proud history at the University of Illinois, descending from the Department of Agronomy, which was founded in 1899 as the first department of its kind in the nation. Over the decades, the department has adapted to the demands of its time. In recent years, we have updated our faculty composition and curriculum to balance discovery science with serving growers and industry stakeholders and training students in applied plant, soil and data sciences. Our mission is to train the next generation of scientific leaders to develop and implement agricultural innovations that balance productivity, profitability and environmental sustainability. Below are some departmental news updates.

- I. Budget: We've adapted to the demands of the IVCB (Integrated Value Centered Budget model) with an increase in efficiencies; we've cut about as much as we can cut and are now targeting areas for strategic investments. Our efficiencies helped gain support for new hires in AY 2022-2023 and AY 2023-2024.
- II. Leadership: Dr. German Bollero became the new Dean of ACES in May 2023. Dr. John Coleman became Provost in August 2023. Dr. Adam Davis was renewed in August 2023 for a second 5-year term as Crop Sciences Department Head.
- III. Enrollment trends:
 - UG: Overall undergraduate enrollment is remaining steady (130), with increasing non-traditional student representation. Intercollege transfers continue to be an important part of our enrollment strategy. We saw the largest applicant pool in years for the 2024 recruitment cycle (2023 was second largest). We will aim to use recruiting scholarships to effectively attract more students (statistical analysis of 2023 cycle showed that \$5K is the decision tipping point, will offer \$6K).
 - Grad: We remain one of the top graduate programs of our kind in the country, with 45 doctoral and 47 masters students, as well as 40 online M.S. students. Our graduate student quality remains high, and our alumni are well-placed.
- IV. Faculty:
 - A. New faculty:

2023: Dr. Giovani Preza-Fontes (agronomy Extension), Dr. Eliana Monteverde (soybean breeding), Dr. Jack McCoy (Horticulture Lecturer), Dr. Gavin Behnke (Agronomy Lecturer)

2024: Dr. Boris Camiletti (Field Crops Pathology Extension), Dr. Bin Peng (Water Quality Extension), Dr. Amit Rai (Horticulture/Human health). Dr. Isaac Klimasmith (Statistics Lecturer)

B. Composition: plant improvement (17), plant protection (14), production management & ecology (13), data acquisition and analysis (5). These numbers include tenure line (36), specialized (7), and USDA-ARS (6) faculty.

C. Searches: Agronomy/Soil Fertility Extension (in-progress), Horticulture Extension (in-progress)

D. Retirements: Dr. Bruce Branham (turfgrass, May 2024)

E. Awards: Dr. German Bollero named Robert Easter Dean of the College of ACES

V. Diversity, Equity and Inclusion (DEI): Dr. Elizabeth Olson is the new ACES Associate Dean of DEI. CPSC has a standing DEI committee; steady improvement in representation of women among our faculty ranks (20%, compared to 13% 5 years ago) and underrepresented minorities (18% compared to 13% 5 years ago) as well as among students.

VI. Research: Research and Education Centers are in improving financial position after restructuring research plot fees. Deferred maintenance issues (tile drainage, farm roads, building maintenance) are being addressed.

Two new, large extramurally funded research projects: CROPPS (Center for Research on Programmable Plant Systems, NSF) and Soybean PanGenome Project (JGI, DOE)

VII. Extension and Outreach:

A. Agronomy Days

B. Harvest Open House

C. Continuing to hire new Extension faculty

VIII. Education:

A. Update of majors is complete: Crop Sciences (Agroecology, Crop Agribusiness, Hort Food systems), Computer Sciences + Crop Sciences, Plant Biotechnology, Agronomy (mgt + data layer)

B. Increased focus on online programs: An increase in non-traditional student pathways is driving increased development and delivery of both credit and non-credit online educational offerings, including continuing education for professionals.

**NCAC1 Annual Report
School of Natural Resource Sciences (SNRS)
North Dakota State University
February 2024**

University Updates:

- New President, Dr. David Cook, became President about a year and a half ago.
- Currently there in Interim Provost, Dr. David Bertolini, with a national search happening sometime in the next three years.
- Transform of NDSU in past year which rearranged colleges and cut some programs. Our SNRS group and College of Agriculture, Food Science and Natural Resources (CAFSNR) did well through these changes.
- NDSU part of new up to \$160 million NSF Engines grant for Ag Tech that is expected to transform Ag Tech work on campus and in the state.

College Updates:

- Strong consistent leadership by Dr. Greg Lardy at the Vice President and Dean of CAFSNR level.
- Currently an Interim Associate Dean, Dr. Carrie Hammer. Expected to be a national search for permanent in the next year.
- Funding for Ag Experiment Station and Extension are solid in the state as they are from different legislative funding lines than teaching.
- Starting an online option for Agriculture Science BS degree.
- Launching in Fall 2025 an applied Masters of Agriculture degree aimed at professionals developing skills. Within this applied masters, CAFSNR is developing certificate programs.

School of Natural Resource Sciences:

- Approximately 90 undergrads, 75 graduate students (27 MNRM), 23 faculty and 23 technicians and staff.
- In recent years have created an online option for an online applied Masters of Natural Resources Management (MNRM) degree. Degree is coursework only and has been successful at enhancing skills for professionals.
- Dr. Christina Hargiss named permanent (moving from interim) Director of SNRS in May 2023.
- Lots of retirements at NDSU, most notable to this group Dr. Dave Franzen will be retiring August 2024. Also unfortunate passing of State Climatologist Dr. Adnan Akyuz.
- Daryl Ritchison has been named Interim State Climatologist.
- A number of new soils faculty joined NDSU. Dr. Lindsay Malone (Climate Smart Ag), Dr. Kirsten Butcher (Soil Health/Microbes), Dr. Kelsey Griesheim (Soil Fertility), Dr. Travis Seaborn (Climate Smart Ecology), and Dr. Rakhi Palit (Invasive species). Will have two new Soil Health Extension Faculty joining in 2024 (names haven't been officially announced).

- Currently hiring a Natural Resources Management faculty position (large teaching component), and in the coming year expect to hire Range Science Faculty position and a second Natural Resources Management (again large teaching component) in the next year.
- Additionally, expect to be hiring a number of research scientist positions in the next year+.

**NCAC1 Annual Report
School of Natural Resources
University of Missouri
January 2024**

Faculty/Administration:

College of Agriculture, Food and Natural Resources (CAFNR)

- **Harvey James** is serving as Interim Division Director of the Division of Applied Social Sciences but a nation-wide search is on-going.
- **Dojin Ryu** was named Director of the Division of Food, Nutrition and Exercise Sciences (FNES)
- **Kathleen Matz** was hired as CAFNR Director of Student Recruitment and Events
- **Rachael Lees** was hired as a CAFNR Recruitment and Event Specialist
- **Monica Flynn**, Senior Grant Writer, **Angie Hake**, Lead Grant Writer, **David Lankitus**, Senior Grant Writer all hired in the CAFNR Grants Office
- **Lisa Williams** was hired as CAFNR Senior Director of Advancement
- **Allsion Meyer**, an Associate Professor in the Division of Animal Sciences, was appointed a Research Faculty Fellow in the CAFNR Office of Research

School of Natural Resources (SNR)

- **Dr. Patrick Market**, Director and Professor of Atmospheric Science
- **Dr. Sonja Wilhelm Stanis**, Associate Director and Professor of Parks, Recreation, and Tourism
- **Dr. Neil Fox**, Director of Graduate Studies and Professor of Atmospheric Science

SNR leadership will be tasked to work on several large projects:

- Five working groups established during the SNR Retreat to help move forward with specific targeted impact items which may lead to revisiting the SNR Strategic plan.
- CAFNR website redesign was completed and launched.
- The Provost's 5-Year Assessment of SNR was successful and suggested little to no change.

Enrollment Highlights [as of Fall 2023 official census data]:

- 767 Undergraduate Students and 124 Graduate Students = 891 (858 in 2022) / SNR continues to be the Division in the college with the largest undergraduate enrollment.
- Environmental Sciences program continues new record enrollment.
- New accelerated BS in Environmental Sciences (emphasis in Atmosphere) to MS in Natural Resources (emphasis in Soil, Environmental and Atmospheric Sciences). The accelerated option will allow students to earn a bachelor's and master's degree within five years.
- Participate in a variety of recruitment events: MU Admissions Staff-SNR Overview; SNR Open House with Discovery Center Advisors and continue to host new students welcome; CAFNR Career Fair.

Funding Highlights/Budget:

Supported by a new five-year, \$2.5 million collaborative grant from the National Science Foundation, SNR Associate Professor Rebecca North and her colleagues will examine how rapidly warming temperatures and shorter winters can influence the growth and toxicity of lake algae.

In FY2023, our faculty applied for **\$44,356,968** in funding resulting in **\$13,014,090** in new awards.

SNR Activities/Highlights:

New faculty hires:

- **Zackary Leasor**, Assistant Professor and State Climatologist
- **Jennifer Freund**, Instructor
- **Kelly Wilson**, Assistant Research Professor

New staff hires:

- **Amy Grus**, Executive Assistant
- **Christina Meier**, Strategic Communications Associate
- **Taylor Richardson**, Office Support Assistant

Faculty and staff numbers held steady, with departures largely balanced by arrivals and staff retirements.

Division-wide Accomplishments:

- The SNR Alumni Association held its annual Trivia in the Wild event in-person, generating over \$4000 for SNR Scholarships.
- The W.A. Albrecht Lecture, *“From Albrecht to the 21st Century – Missouri’s Legacy of Achievements in Soil biology and Contributions to Soil Health,”* was delivered in-person by **Dr. Robert Kremer**, Adjunct Professor of Soil Microbiology, School of Natural Resources and Plant Science & Technology.
- Successful 5-year renewal of the CESU and concurrent review of its strategic plan.
- Return of the Dunmire Lecture Series in the fall of 2023. **Dr. Zeb Hogan** presented “Chasing Giants: In Search of the World’s Largest Freshwater Fish; Zeb is a Research Associate Professor and the University of Nevada, Reno and Host of “Monster fish” on Nat Geo Wild.
- SNR Director continues to attend and participate in MNRC, MDNR Round Table, CFM, MPRA annual meetings/conferences in support of SNR Faculty and undergraduate/graduate/post doc students; Prairie Fork Coordinating Committee and SNR Advisory Council meetings.
- SNR Director has also added the responsibility of Interim Co-Director of the Missouri Water Center (consequence of losing faculty member who was co-director).

Notable society awards/accomplishments

Jodi Whittier, Assistant Research Professor, was elected as a Fellow for the American Fisheries Society.

A paper by **Ranjith Udawatta**, Research Professor of soil, environmental and atmospheric sciences, “*Grassland conversion to croplands impacted soil pore parameters measured via X-ray computed tomography*,” was recently named a top-cited paper in *Soil Science Society of America Journal*. The recognition covers work published between January 2021 and December 2022.

“A Case Study of Drought during Summer 2022: A Large-Scale Analyzed Comparison of Dry and Moist Summers in the Midwest USA.” **Sarah M. Weaver** (PhD student), **Patrick E. Guinan**, Inna G. Semenova, **Noel Aloysius**, Assistant Professor, **Anthony R. Lupo**, Professor, Sherry Hunt. *Atmosphere* 2023, 14(9); <https://doi.org/10.3390/atmos14091448>. This paper was in the top 5 for the month of September for Multidisciplinary Digital Publishing Institute (MDPI). <https://blog.mdpi.com/2023/10/31/insights-from-mdpi-top-5-picks-september/>.

Harold E. “Gene” Garrett (PhD Forestry, 1970) was the recipient of the 2023 CAFNR Column Award.

The MU Collegiate Soil Judging Team won third place overall and third place for team judging in the Social Science society of America Region V soil judging contest. The team qualified for the national contest to be held in April 2024. The team coach is **Kerry Clark**.

Michelle Bogowith (MS 2011) won an Emmy (National Academy of Television Arts & Sciences / Mid-America Chapter) in the Category of Weathercast / Severe Weather Preparedness. She works for FOX4 WDAF-TV in Kansas City.

Michael Stambaugh, Associate Professor, was awarded the 2023 Distinguished Leader in Research Award from the Association for Fire Ecology.

The 75th Anniversary of the establishment of the Atmospheric Sciences Department was celebrated with an anniversary dinner and a special presentation “Cloudspotting” by Gavin Pretor-Pinney, founder of the Cloud Appreciation Society and bestselling author of *The Cloudspotter’s Guide* and *The Cloud Collector’s Handbook* and *A Cloud A Day*. He is the winner of the Royal Society Winton prize for Science Books, and he is a TED Global speaker.

The University of Missouri Board of Curators approved naming of the “Johnny Morris Institute of Fisheries, Wetlands and Aquatic Systems” which recognizes John L. Morris, founder of Bass pro Shops, for his unparalleled contributions to conservation. A search for its Director is on-going.

Steward T.A. Pickett represented SNR as the CAFNR Executive in Residence Program. He is a Distinguished Senior Scientist and the Cary Institute of Ecosystem Studies.

OHIO

NCAC1 State Report – Doug Karcher, Horticulture and Crop Science

OSU Leadership

- New President, Ted Carter (Neb), started 1/1/24
 - President Johnson resigning at end of academic year (Spring 24)
- Provost search ongoing - Melissa Gilliam left Fall 23 to become President of Boston Univ
- Leadership Stability on College Admin
 - Dean Kress in 2nd 5-yr term (through June 2027)
 - Exception in OSU Extension – Dir. Jackie Wilkins stepped down in 2023; new Interim Extension Director (David Civitollo)
- Lots of turnover at dept chair level,
 - Plant Pathology, FST, SENR, AEDE

HCS

Budget

– Has remained steady, slight increase at the dept level mainly due to increase in SCH's

Horticulture and Crop Science Faculty -34 TT faculty, 2 PP onboarded 9 in 2023

- Agronomic Weed Specialist – Alyssa Essman
- Root Soil Microbiome – Florence Sessoms
- Turf Ext Specialist – Tyler Carr
- Synthetic Biologist – Radin Sadre
- Weed Ecology – Eugene Law
- Urban Foods, Greenhouse Nursery, Landscape Horticulture, and Ornamental Germplasm
-
- Announced 2 faculty positions Fall 2023
 - Specialty Crop Weed Science
 - Forage Specialist
 - Reviewing applications now – pleased with strength of pool
- One retirement in 2023 – Doug Doohan – Specialty Crop Weed Specialist
- Passing of Mark Sulc (forage extension, glioblastoma) in Sept 2023

Facilities

- CEAREC \$30M opened Fall 2022, Became fully online in Spring 2023. Production and research scale greenhouses utilized by our CEA and Floriculture faculty.
- Staffing issues at Wooster, North Central, and Muck Crop research stations

Student Numbers

- Undergraduates – numbers remain steady, 140, across 8 programs of study
 - New CEA major and minor program
 - Graduates 10% growth from 2022 year- 46 students in 2023 ~ evenly split between MS and PhD. Expect continued upward trend with onboarding many new faculty

EXTERNAL REVIEW IN MARCH

Recruiting from urban populations, strategic future faculty hiring,

WISCONSIN

NCAC1 Annual Report, 2023

Created by Doug Soldat, Chair of Department of Soil Science

College of Agricultural and Life Sciences (CALs)

University of Wisconsin-Madison

Faculty/Administration Updates

University Updates

- Jennifer Mnookin named Chancellor in 2022, replacing Rebecca Blank who left the University for Northwestern University, but passed away shortly after.
- Charles Isbell named Provost in 2023.

CALS Updates

- Glenda Gillaspay began her term as Dean and Director of CALS in October 2022.
- Troy Runge named Associate Dean of Research of CALS, replacing Bill Barker, who retired in 2021.
- Irwin Goldman named Interim Senior Associate Dean of CALS, replacing Mark Rickenbach who moved to the Provost's Office in 2023.
- Paul Mitchell named Interim Associated Dean of Teaching, replacing Karen Wasserman, who returned to the faculty in 2023.
- Doug Reinemann will remain as Associate Dean of Extension in CALS.
- Louis Macias was named Associate Dean for Diversity, Equity, and Inclusion in 2022 – a new office in CALS.

CALS Department Updates

- The former departments of **Agronomy** and **Horticulture** merged in July 2023 to form the **Department of Agroecosystem Sciences**, the new department is developing two new majors: one in Agroecology, and another in Plant Science and Technology. Patrick Krysan is chair of the new department.
- The Department of **Soil Science** is the administrative home to the Environmental Sciences major in CALS which currently has 140 students. The Soil Science major has low enrollment and is facing potential closure. The department is working on a certificate in Environmental Soil Science to attract students who wish to major in a broader field but have a keen interest in soils. The graduate programs of the department are robust/stable with ~17 PhD and 13 MS. The department recently created a one-year professional MS (non-thesis) degree in Environmental Remediation and Management. Doug Soldat replaced Alfred Hartemink as chair in July 2023.
 - 13 faculty, five hired in the last two years, including three new faculty lines
 - Xia Zhu-Barker – assistant professor, biogeochemistry
 - Inna Popova- assistant professor, soil chemistry
 - Natasha Rayne- assistant professor, soil fertility and nutrient management
 - Two faculty searches are in final stages