

2023 NCAC1 Annual Meeting

Thursday January 12

8:30 AM – 5:00 PM meeting in the Conservatory Boardroom, Hilton Garden Inn, San Diego, Old Town.

- Order of business included:
 - Opening comments
 - *Gary Pierzynski*
 - Identify a meeting secretary to keep the minutes of the meeting
 - *Karcher, OH*
 - Identify the host of the 2023 NCAC1 meeting
 - *OH will host the 2024 NCAC1 meeting using same timing and venue as 2023 meeting*
 - Begin review of the 8 projects assigned to NCAC1
 - *See following pages*
 - State reports
 - *See following pages*
 - NIFA update
 - *Vance Owens*
- Attendees:

| Attendee | Institution |
|---|---|
| Gary Muehlbauer, chair | Univ of Minnesota (Agronomy and Plant Genetics) |
| Doug Karcher, secretary | Ohio State (Hort and Crop Sci) |
| Brian Slater | Ohio State (Env and Natural Resources) |
| Adam Davis | Univ of Illinois |
| Brian Horgan | Michigan State |
| Martha Mamo | Univ of Nebraska |
| Ron Turco | Purdue |
| Carl Rosen | Univ of Minnesota (Soil, Water, and Climate) |
| Kendall Lamkey | Iowa State |
| Rich Horsley | North Dakota State |
| Raj Khosla | Kansas State University |
| Stephen Anderson | Univ of Missouri |
| Gary Pierzynski, administrative advisor | Ohio State |
| Vance Owen | USDA |

2023 Assigned NCAC1 Reviews

| Current Proj # (Temp #) | Renewal or Midterm (R/M) | Title | Project/Proposal Homepage (Ctrl+Click to follow link) | Decision | Primary Reviewer | Secondary Reviewer |
|----------------------------|-----------------------------------|--|---|---|---------------------|-----------------------|
| NC213 (NC_temp213) | R | Marketing and Delivery of Quality Grains and BioProcess Coproducts | https://www.nimss.org/projects/18950 | Approve with normal revision - | Brian Horgan | Rich Horsley |
| NCCC307 (NCCC_temp307) | R | Biochemistry and Genetics of Plant- Fungal Interactions | https://www.nimss.org/projects/18953 | Approve with normal revision - | Gary Muehlbauer | Kendall Lampkey |
| NC246 | M | Ecology and Management of Arthropods in Corn | https://www.nimss.org/projects/18695 | Approve with normal revision - | Adam Davis | David Wright |
| NC1186 | M | Water Management and Quality for Ornamental Crop Production and Health | https://www.nimss.org/projects/18690 | Approve with normal revision - | Stephen Anderson | Brian Slater |

| | | | | | | |
|---------|---|---|---|--|--------------|-----------------|
| NC1187 | M | The Chemical and Physical Nature of Particulate Matter Affecting Air, Water and Soil Quality | https://www.nimss.org/projects/18665 | Approve with normal revision | Brian Slater | Carl Rosen |
| NC1213 | M | Sources and fate of ammonia across the landscape | https://www.nimss.org/projects/18780 | Approve with normal revision | Carl Rosen | David Wright |
| NCCC31 | M | Ecophysiological Aspects of Forage Management | https://www.nimss.org/projects/18696 | Approve with normal revision | Doug Karcher | Adam Davis |
| NCCC211 | M | Cover crops to improve environmental quality in crop and biofuel production systems in the Great Lakes and Upper Mississippi basins | https://www.nimss.org/projects/18697 | Approve with normal revision | Raj Kosla | Kendall Lampkey |

2023 State Reports

ILLINIOS

Department of Crop Sciences, University of Illinois: 2022 updates; Dr. Adam Davis, Head

- I. Budget: we've adapted to the demands of the IVCB (Integrated Value Centered Budget model) with increase in efficiencies; we've cut about as much as we can cut and are now targeting areas for strategic investments. Efficiencies helped gain support for new hires.
- II. Leadership: Search for Dean of ACES in process. Interim Provost. Department Heads have been stable for 4 years.
- III. Enrollment trends:
 - UG: further decline for on-campus students (109), increase in online students (37), 146 total
 - We've had the largest applicant pool in years for the 2023 recruitment cycle, and are working on yield now.
 - Grad: Slight decline: 100 (48 doctoral, 52 masters)
- IV. Faculty:
 - A. New faculty: Dr. Giovanni Preza-Fontes (Field Crops Extension Agronomist); Dr. Eliana Monteverde (soybean breeding)
 - B. Faculty Searches: Water Quality Extension, Field Crops Extension Pathologist, Horticulture, Instructors (Hort and Stats)
 - C. Retirements: Dr. Brian Diers (sb breeding; Dec. 2022); Dr. Bruce Branham (turfgrass, June 2023)

Awards: Lisa Ainsworth named as member National Academy of Sciences; Brian Diers named as fellow of AAAS; Weeds Group received team award from WSSA Herbicide Resistance Action Committee
- V. DEI: Have standing DEI committee; slow 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) [these groups are represented at 50% and 40%, respectively, among Assistant Professors]; among students, 48% women, 13% underrepresented
- VI. Research: Research Farm management reorganization: team structure; emphasis on cooperation among the locations; some staff transitions. Things are working more smoothly.
- VII. Extension and Outreach:
 - A. Agronomy Days
 - B. Harvest Open House
 - C. Permission 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. Curriculum review underway; Fall faculty retreat to examine UG, GR and Online curricula to ask: what needs to be updated/discontinued? what's missing and needs to be added? how can we make our educational offerings better?
- C. Peer Review of Teaching: requirement has increased, with at least one annual review required (and two for jr. faculty)

INDIANA

Purdue University State Report-

Agronomy for NCAC1

Personnel Updates

University Administration

- President Mitch Daniels retired and was replaced by Dr. Mung Chiang, Former Dean of Engineering
- Provost and Executive Vice President for Academic Affairs and Diversity Dr. Jay Akridge stepped down and was replaced by Dr. Patrick Wolfe, Former Dean of the School of Science
- Dr. Karen Plaut was named the Executive Vice President for Research(EVPR). She was the Dean of Agriculture.

College of Agriculture

- Dr. Karen Plaut became the EVPR. We have an interim Dean, Dr. Ken Foster, former Department Head of Ag Econ. We are searching for a new dean.
- Dr. Jason Henderson, Associate Dean for Extension, has accepted a position at Iowa State; we will be searching for a new Associate Dean starting late this spring.

Agronomy Department

Retirements

- Dr. Bob Nielsen (corn extension) retired in Dec 2022

New Department Faculty Hires

- Dr. Roland Wilhelm – Microbiome Sciences (spring 22)
- Dr. Yichao Rui – Agroecosystems / Crop Ecology (fall 22)
- Dr. Sidd Paul – Geospatial Science for Agronomic Systems (spring 23)
- Dr. Pratishtha Poudel – Cropping Systems Modeling (spring 23)

Active Department Faculty Searches

- Cropping Systems & IoT – applications of digital agriculture
- Urban Soil Science – to improve the resiliency of the urban environment.
- International Plant Breeding (Assoc or Full Professor only)
- The next hire is a soil fertility position

Current Status of the Department

Agronomy Highlights

Total Faculty Headcount: 31 (21 Prof., 5 Assoc., 4 Asst.) Faculty: URM 11% & Female 27%

Clinical: 2 and Continuing Lecture: 2

Indiana State Climatologist: 1

Agronomy Center for Research and Education, Manager: 1

Visiting Scholars/Postdocs Hosted:11

USDA Associated 3, Partial Faculty 5

Publications:

- 2020-2021 we released 140 referred publications. The average H-Index for the current faculty is 29, the same as last year. The average lifetime citation increased from the 2020 value of 3930 to 4660, an 18.6 % jump.

Grant Activity:

- 2020-2021 was \$9.74M
- 2021-2022 was \$8.98M

Extension:

- We hosted 100 learning events and 10,522 direct contacts. We increased support from our baseline of \$0.62M to \$0.89M.

International Funding:

- \$2.12M

Startups:

- NutraMazie, Gryfn, and Phenix (formerly Progeny Drone).

Undergraduate Enrollment:

- Enrollment: ~150 (Fall 2022)
- Resident: 82%, Non-Resident:12% and International:5%
- Average time to degree: 3.82 years; Credits to graduate: 120 (2021)
- *Purdue in total*: Enrollment: 50,884 @ 24% Graduate Students & 75% Undergrads

Graduation:

- Fall/Spring 2021, 40 students with B.S. degrees (5 were less than four years)
- Fall/Spring 2022, 43 Students with B.S. degrees (8 were less than four years) • 76% employed and 20% continuing education
- Starting salary ~ \$56,000

Agronomy Graduate Students (data fall 22)

- Enrollment: 82 Active (14 shared) = 68
- Five-year average = 56 graduate students
- Graduated: 9 MS and 2 Ph.D. degrees

Other Highlights

- Completed a 5-year review of both the department and the department head
- Renovation of soils teaching space is underway
- Renovation of soils preparation space in the planning phase
- Added 250 acres to our research farm (ACRE) now with a total area of 1,600 acres
- An assessment of infrastructure needs at ACRE is underway
 - Grain Storage System
 - Drainage/land improvements
 - Update on critical equipment
 - Irrigation for breeding plots

IOWA

Department of Agronomy Iowa State University Ames, IA 50011

2023 Report for NCAC-1 January 12, 2023 – Virtual

University Administration:

No major changes in the university administration.

After setting a record for enrollment in Fall of 2016 of 36,600 students (30,671 undergrads) our enrollment has fallen to 29,969 (25,241 undergrads (18% decline) in Fall 2022 (a 16% decline). Many are optimistic about enrollment for Fall 2023, so we will see.

Faculty and staff pay increases the last few years have been meager – in FY21 we received no pay raises in FY22 we received a 2.9%, in FY23 we received 3% with a few getting discretionary increases.

Jason Henderson

College Administration:

Our college has created a new associate dean position for facilities and operations. I will be interviewing for that position in early February.

Our college enrollment peaked at 4,657 undergraduate students and 738 graduate students in Fall 2016 and as of Fall 2022 our enrollment has fallen to 3769 (19% decline) undergraduate and 541 (27% decline) graduate students. This continued decrease in undergraduate enrollment has created enormous budget challenges for our college. It should be noted that Agronomy has 35% of the college's graduate students.

Departmental Administration:

Agronomy has two faculty positions open, one in forage extension and another in nitrogen extension. The forage position closed on December 31, 2022 and we are reviewing applicants, the N position closes February 19, 2023.

We currently have 27 tenure-track faculty (20 professors, 6 associate professors, and 1 assistant professor) and 9 term faculty (7.5 FTEs).

On the bright side, we just did a \$3.4M replacement of 32 growth chambers in Agronomy Hall. The project just finished and the GC are up and running for faculty to use.

Students:

Agronomy set a record for undergraduate enrollment of 364 for Fall 2016. As of fall 2021, we have 195 undergraduate students a decline of 169 (46%) students.

Department of Agronomy Iowa State University Ames, IA 50011
Agronomy Enrollment

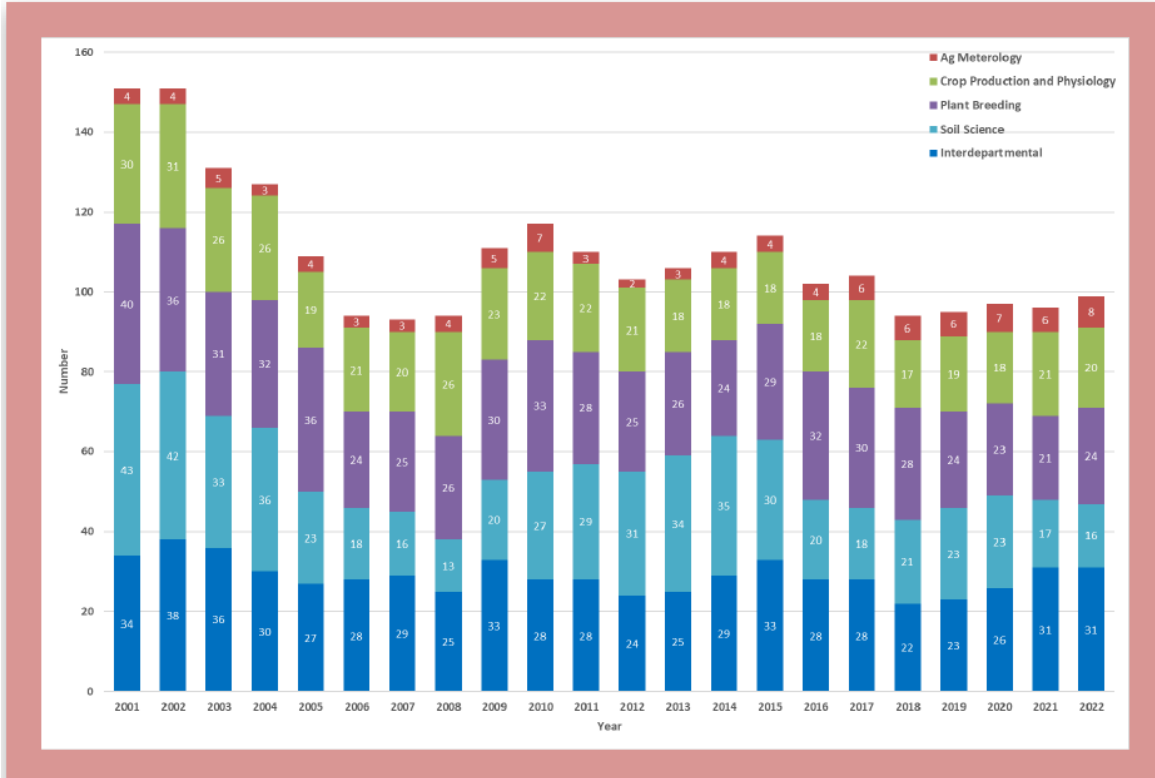
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|------------------------------|------------|------------|------------|------------|------------|------------|
| Total Agronomy Majors | 346 | 289 | 262 | 213 | 206 | 207 |
| Agron 1st majors | 323 | 273 | 254 | 204 | 194 | 195 |
| Agron 2nd majors | 22 | 16 | 8 | 9 | 12 | 12 |
| Gender | | | | | | |
| Male | 207 (64%) | 177 (61%) | 156 (60%) | 125 (59%) | 123 (60%) | 123 (60%) |
| Female | 116 (36%) | 112 (39%) | 106 (40%) | 88 (41%) | 83 (40%) | 84 (40%) |
| Residency | | | | | | |
| Iowa | 237 (70%) | 215 (74%) | 194 (74%) | 146 (69%) | 150 (73%) | 150 (73%) |
| Other | 87 (30%) | 74 (26%) | 68 (26%) | 67 (31%) | 56 (27%) | 57 (27%) |

New Student Enrollment – Agronomy

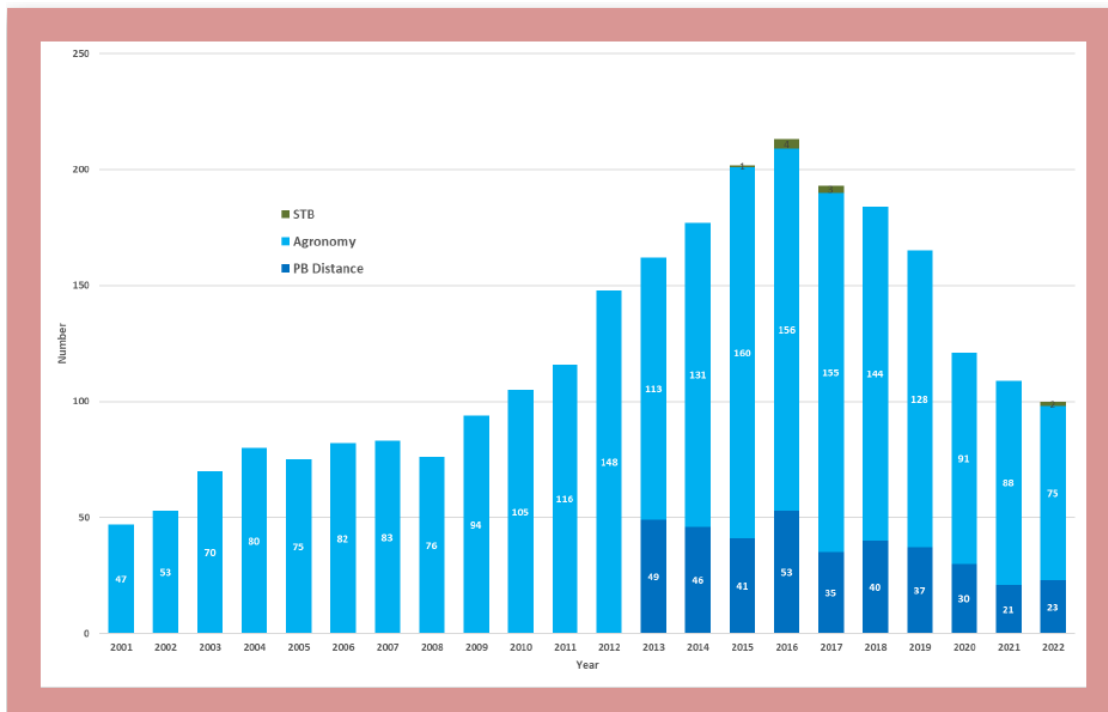
| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|--------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Total New Students | 76 | 56 | 61 | 47 | 53 | 53 |
| Total Agronomy Freshman | 48 | 40 | 45 | 31 | 36 | 35 |
| Male | 29 | 17 | 24 | 20 | 24 | 22 |
| Female | 19 | 23 | 21 | 11 | 12 | 13 |
| Iowa | 30 | 28 | 40 | 17 | 28 | 24 |
| Other | 18 | 12 | 5 | 14 | 8 | 11 |
| Total Agronomy Transfer | 28 | 16 | 16 | 16 | 17 | 18 |
| Male | 20 | 9 | 13 | 14 | 10 | 9 |
| Female | 8 | 7 | 3 | 2 | 7 | 9 |
| Iowa | 22 | 13 | 12 | 12 | 15 | 16 |
| Other | 6 | 3 | 4 | 4 | 2 | 2 |

Department of Agronomy Iowa State University Ames, IA 50011

Our on-campus graduate student numbers continue to be stable.



Our distance graduate student numbers in agronomy MS and plant breeding MS.



MICHIGAN

Michigan State University Department of Plant, Soil and Microbial Sciences

NCAC1 State Report

Brian Horgan

Current searches in 2023

Host pathogen interaction cluster – two positions

Searches approved in 2023

Open rank tenure system agroecologist

Entomology diagnostician, academic specialist

Dry bean breeding and geneticist, tenure system assistant professor

Turfgrass pathology, tenure system assistant professor

Retirements or departures

Mike Thomashow - PRI

Brad Day - PRI

Sheng Yang He

Ashley Shade – MMG

Steve Boyd

Ray Hammerschmidt

Jon Dahl

Fred Warner

Jim Kells

Recent hires into PSM

Molecular microbial ecologist - Sarah Lebeis

Maize phenology - Addie Thompson

Mineral plant nutrition - Hatem Rouached

Soil health – KBS, Christine Spunger

Soil ecology – Chris Blackwood

Soil Pedology – Barret Wessel

Isotope Biogeochemist – Jim Moran

Molecular Seed biology – Margaret Flemming

Plant Resilience Institute director – Sue Rhee

Center Grants

Superfund Center grant renewal - NIEHS

USAID biotechnology - potato

Great Lakes Bioenergy Research Center – DOE

Long Term Ecological Research – NSF

Long Term Agroecology Research – USDA

Enrollment

- Institute of Agriculture Technology - ~100 in Ag industries and Turf
- B.S. in CSS - ~100 students
- M.S. and Ph.D in CSS, PLP and PBGB - ~150 graduate students

New online Plan B M.S. in Global Plant Breeding

Other updates

\$50M for greenhouse renovations and a new dairy

Plant Science building – in design phase

Strategic planning for the Plant and Pest Diagnostic Clinic

Closing Soil testing lab

MISSOURI

NCAC1 Annual Report School of Natural Resources University of Missouri January 2023 Faculty/Administration:

College of Agriculture, Food and Natural Resources (CAFNR)

- **Harvey James** was named Interim Division Director of the Division of Applied Social Sciences

- **Matt Fleming** was hired as Coordinator of Facilities and Operations, Office of Vice Chancellor and Dean

- **Alex Munoz** was hired as CAFNR Director of Student Recruitment

- **Jeri Lou Zimmerman** was hired as CAFNR Grants Business Manager

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:

- 5-Year Assessment Program

- Redesign of the CAFNR website

- Revisit the SNR Strategic Plan

Enrollment Highlights [as of Fall 2022 official census data]:

- 733 Undergraduate Students and 125 Graduate Students = 858 (833 in 2021) / SNR continues to be the Division in the college with the largest undergraduate enrollment

- Environmental Sciences and Natural Resource Science and Management programs continue new record enrollment

- Parks, Recreation and Sport is still lower in enrollment than previous years but stabilizing

- Degree name change was recently approved but likely not go into effect until next year – Parks, Recreation & Sport > **Parks, Recreation, Sport & Tourism**

- 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:

<https://cafnr.missouri.edu/2022/11/a-growth-mindset/>

“The CAFNR Center for Regenerative Agriculture (CRA) recently received the largest grant in University of Missouri history – \$25 million to help farmers adopt climate-smart practices that will ultimately help them improve the resiliency of their crops and livestock. In addition, they are also part of a \$95 million award as part of the same grant program – Partnerships for Climate-Smart Commodities, funded by the USDA. This second grant is led by Farmers for Soil Health, and Missouri is one of 20 states participating in the program. CRA is providing the cover crop trainings for all 20 states.” Several members of SNR are affiliated with this grant.

In FY2022, our faculty applied for **\$37,144,245** in funding resulting in **\$8,855,587** in new awards.

SNR Activities/Highlights:**New faculty hires:**

- • **Gurpreet Kaur**, Assistant Research Professor
- • **Brandon Gerig**, Great Rivers Cooperative Ecosystem Studies Unit, Research Coordinator
- • **Benjamin Knapp**, Interim Director of the Center for Agroforestry
- • **Sam Lord**, Instructor in Soil Science
- • **Allison Pease**, Assistant Professor, Fisheries & Wildlife, Great Rivers Cooperative Ecosystem Studies Unit, Director
- • **Brian Schweiss**, Extension Specialist and Teaching Instructor
- • **Daniel Springer**, Assistant Teaching Professor, Parks, Recreation and Sport
- • **Michael Sunde**, Assistant Research Professor appointment transitioned from a 100% Research appointment to a 60% working with Extension and 40% Research
- • **Kelly Wilson**, Assistant Research Professor

New staff hires:

- • **Daniel Norman**, Senior Student Support Specialist
- • **Mara Stoll**, Office Support Assistant
- • **Traci Wren**, Business Manager

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

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, “*Greening the Agricultural Landscape: Using Perennial Groundcover to Enhance Ecosystem Services*”, was delivered in-person **Dr. Kenneth Moore**, Charles F. Curtiss Distinguished Professor in Agriculture and Life Sciences and Pioneer Hi-Bred Agronomy Professor in Agronomy at Iowa State University

- • Continuing participation in the Promoting Future Faculty for Faculty Diversity Program and will be interviewing in early 2023
- • Will be interviewing in early 2023 for positions: H.E. Garrett Endowed Chair Professor and Director of the Center for Agroforestry, an Assistant Professor of Climate and an Assistant Professor and Director of the Missouri Climate Center
- • Creation of the Institute of Fisheries, Wetlands, and Aquatic Systems
- Successfully competed for grants to rework/expand laboratories and classrooms in our Anheuser-Busch Natural Resources Building
 - ABNR 116, our **Soil Science** teaching laboratory, is now replete with the latest technology
 - ABNR 114, our Weather Analysis Lab (WAV) Lab was moved and is updated with the latest technology
 - ABNR Classrooms and Conference Rooms (123, 115, 112, 210, 307) have received enhancements focused on health and well-being. In recent weeks, classrooms have been transformed through the addition of plants (including a living wall), light covers, sit-stand desks, wobble stools, foot rockers, fidget toys, and framed photographs taken by members of the SNR community.
- • Established a program for undergraduate research grants with the very first award went to Maddie Carter, majoring in Tourism, who is studying cave tourism in Missouri
- • Working with CAFNR Advancement on developing “cases for support” for Environmental Sciences, Sport Management (FAQs to work with donors on)
- • Since the CESU Great Rivers program is fully staffed, working on its 5-year renewal and reviewing its strategic plan. Will be working with one potential addition to the CESU
- • Potential SNR faculty collaboration. concerning partnerships and use of the Missouri River Center site with the Nature Conservancy and Missouri River Relief Staff
- • Returning to a fall Dunmire Lecture as the endowment requested a lecture in to support research, teaching, or outreach activities in aquatic ecology and water quality in the Department of Fisheries and Wildlife Sciences, in the School of Natural Resources in the College of Agriculture, Food and Natural Resources
- • The Fall meeting of the SNR Advisory Council added a Career Panel to help students with questions about their futures in the various fields in SNR. It will be a regular feature of Advisory Council Meetings
- • There will be a return to at least monthly “conversations” where SNR areas will be represented in providing a SNR-topic and presenter
- • SNR Director will continue 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; Attend Prairie Fork Coordinating Committee and SNR Advisory Council meetings

Notable society awards/accomplishments

Alba Argerich, was inducted into the CAFNR Teaching Academy

Tom Bonnot, Daniel Dey, Frank Thompson, Michael Stambaugh, Kristen Heath, John Kabrick, Lauren Pile were recognized with the U.S. Department of Agriculture / Forest Service Chief's Award for their work on restoring the brown-headed nuthatch

Chung-Ho Lin, Mohamed Bayati, Hsinyeh Hsieh, Shu Yu Hsu, Chenhui Li, Lindsie Wilfing, Elizabeth Rogers are recipients of the 2021 Governor's Award for Quality and Productivity Pinnacle Award for their Coronavirus Sewershed Surveillance project

Charles Nilon received the Sustainability Science Award from the Ecological Society of America

Rebecca North, Fellow with the Association for the Sciences of Limnology and Oceanography

Craig Paukert received the Fisheries Excellence Award through the North Central Division of the American Fisheries Society

Greg Rotert, Mumford Outstanding Staff Award

Robin Rotman, CAFNR Outstanding Early Career Teacher Award

Robin Rotman, Provost Outstanding Junior Faculty Teaching Award

Kristen Veum has been elected President of the American Society of Agronomy

Jordon Wade was a panelist AS PART OF THE National Academies of Sciences' discussion on the "State of Our Soil's as part of Earth Day 2022

Jason Young received the Missouri Park and Recreation Association 2022 Associate Fellow Award
10th Annual Trivia in the Wild generated over \$4000 for SNR scholarships

The American Society of Agronomy (ASA), Crop Science Society of America (CSSA) and Soil Science Society of America (SSSA) has announced that MU Crop Scientist Kerry Clark will receive the Emerging Leader for African Agricultural Transformation Award at the ASA Awards Ceremony in November during the scientific society's Annual Meeting. The annual awards are presented for outstanding contributions to agronomy, crop science, and/or soil science through education, national and international service, and research.

The University of Missouri [Center for Agroforestry](#) is part of a \$64-million, 5-year grant led by [The Nature Conservancy](#) for *Expanding Agroforestry Production & Markets for Producer Profitability and Climate Stabilization*, announced by the U.S. Department of Agriculture. The project aims to advance agroforestry in 5

38 states across the eastern United States and Hawaii, and is funded by the USDA through the [Climate-Smart Agriculture and Forestry Partnership Initiative](#).

Clark Gantzer (Professor Emeritus of Soil Science) is one of ten inaugural Fellows in Sigma Xi, an international scientific research honor society of science and engineering.

Mike Griggs (M.S., Parks, Recreation and Tourism, 1991 and B.S., Recreation and Park Administration, 1985) is a Class of 2022 inductee into the Missouri Sports Hall of Fame.

Michael Stambaugh, (Associate Professor of Forestry), was awarded the Charles Bullard Fellowship in Forest Research from Harvard Forest.

Craig Paukert (Cooperative Professor US Geological Survey, Missouri Cooperative Fish and Wildlife Research Unit) was elected as an American Fisheries Society Fellow.

The MU Collegiate Soil Judging Team competed in the Region V contest in Spirit Lake, Iowa and won 2nd place in team judging. Alex Kalisz, a junior in Environmental Science, scored 2nd place in the individual's contest. Dr. Kerry Clark serves as the coach for the judging team.

The MU Forestry Club placed first in its Conclave (a timber sports competition).

A partnership of 14 public and private entities led by [Roeslein Alternative Energy](#) (RAE) has been awarded \$80 million from the federal government's first pool of funds from the U.S.D.A.'s [Partnerships for Climate-Smart Commodities](#) program. The funding will be used in a five year pilot project in Iowa and Missouri called 'Horizon II' to demonstrate a "Climate-Smart Future for Corn, Soybean, Livestock, and Renewable Natural Gas Production." Assistant Professor Jordon Wade will be working with the University of Missouri portion of the grant.

Joe Dillard (BS '63, MA '65) was presented with an Honorary Degree as part of CAFNR's December Commencement Ceremony. The University of Missouri awards honorary degrees on a selective basis to distinguished individuals who merit special recognition for outstanding achievement or leadership in a field or activity consistent with the ideals and purposes of the University.

NORTH DAKOTA

NCAC1 Annual Report Department of Plant Sciences, North Dakota State University

January 12, 2023

Rich Horsley, Head

Faculty/Administration:

- David Cook was named as NDSU President in February 2022. He replaced Dean Bresciani, who served as President from 2010-2022. Prior to coming to NDSU, President Cook was the vice chancellor for the Office of Public Affairs and Economic Development at the University of Kansas.
- David Bertolini was named interim provost in spring 2022. Prior to this appointment, David was the dean of the College of Health Professions.
- In the North Dakota Agricultural Experiment Station (NDAES), Frank Casey accepted the position as the full-time associate director.
- Mohamed Khan accepted the position of NDSU Extension assistant director of agriculture and natural resources.
- The Department of Plant Sciences currently has 38 faculty (17 professors, 9 associate professors, 10 assistant professors, and 2 associate professors of practices).
- New faculty in the department include:
 - Shahidul Islam, who replaced Senay Simsek as the head of the wheat quality lab;
 - Minwei Xu, who replaced Clifford Hall as a food scientist; and
 - Zhou Jin, who replaced Paul Schwarz as head of the barley and malt quality lab.

Budget:

- Following a decline in student enrollment for the fifth straight year, the university again faces a budget shortfall.
- Likely changes expected to manage the budget gap include consolidation of colleges, elimination of programs, and reductions in positions with high teaching appointments.
- Construction of the \$85 million Peltier Complex, which will house the department's Cereal/Food Science program, the meat science program from Animal Science, the Northern Crops Institute, and the North Dakota Trade Office has begun. \$70 million of the construction costs were provided by the state. The remainder of the funds were from gifts.

Departmental Activities/Highlights:

- Undergraduate programs:

- 96 students in the department's Crop and Weed Sciences (down 9 from last year)
- 44 students in the Horticulture program (down 9 from last year), and
- 18 students in the Food Science program (up 3 last year).
- Graduate programs:
 - 78 students (47 MS and 31 PhD) in the department's Plant Sciences program (up 3 from last year)
 - 10 MS students in the Horticulture program (up 2 from last year), and
 - 24 students (nine MS and 15 PhD) in the Cereal Science program (up 3 from last year).

OHIO

**NCAC1 Annual Report
School of Environment and Natural Resources; The Ohio State University**

January 12, 2023

Brian Slater, Professor

Faculty/Administration:

In 2022, from the perspective of our programs, the University administrative environment has been fairly stable. OSU President Kristina Johnson is beginning to make a mark on the direction of the University in her fourth year of leadership, but recently announced her resignation.

The leadership of the College of Food, Agricultural, and Environmental Sciences has also been fairly stable. Dr. Cathann Kress is in her sixth year as Dean, and has been reappointed. Dr. Gary Pierzynski is in his fifth year as Associate Dean for Research and Graduate Education. Dr. Jacqueline Wilkins (a family science extension specialist) is in her fourth year as Extension Director. CFAES recently appointed Dr. Ann Christy, an agricultural engineer as Associate Dean of Academic Programs.

Dr. Mary Stromberger is our new Graduate School Dean (Soil Science background).

In the School of Environment and Natural Resources, Dr. Jeff Sharp (Rural Sociologist) stood down from his second term as Director in May 2022, and returned to a regular faculty role. A national search is underway for a new Director failed to result in an appointment. A new search will be underway in 2023. Dr. Eric Toman, a social scientist will serve as acting Director of SENR. As of September 1, 2022, there are 40 tenure track faculty in SENR, three professional practice faculty (clinical faculty), and three faculty holding an appointment in SENR but tenured in another unit, for a total of 46 faculty. Six of the tenure-track faculty are located on the Wooster campus. During 2022, three faculty resigned, including an Aquatic Ecologist, Soil Fertility faculty, and Rhizosphere Processes position. Several new faculty positions are in search: A Forest Ecology position, a position in Indigenous Environmental Studies, a Wetland Ecologist, and a Soil Fertility specialist.

Budget:

Ohio State University enrollment in Columbus has been fairly stable; currently 65,795 (51,377 undergraduate students). About 5% of OSU students choose CFAES majors.

The COVID crisis stressed university, college and School budgets, though improvement occurred through 2021 and 2022. SENR has managed to weather these challenges well due to increased flows from General Funds directly related to significant increases in enrolment in our programs and careful fiscal management; impacts have been fairly minimal.

An ongoing significant budgetary challenge for SENR remains that direct research (OARDC) and extension (OSUE) budget lines have remained unchanged for a decade, with the consequence that increasingly General Funds have been tapped to support mandated salary increases and program needs beyond the teaching mission. Faculty numbers have grown mostly via special funds, particularly the Discovery Themes initiative which is nearing end-of-life.

Departmental Activities/Highlights:

Undergraduate: In Autumn 2022 SENR enrolled 980 undergraduate students, continuing a long-term upward trend. (Undergraduate enrolment in SENR was 391 in 2009). SENR continues to grow rapidly. Graduate enrolment is stable.

Current SENR majors focus on Environmental Science (including soils, water, ecosystem restoration); Environment, Economy, Development, and Sustainability; Forestry, Fisheries, and Wildlife; Natural Resource Management; and Environmental Policy and Decision Making. The ES major continues to attract the most undergraduates (with Ecological Restoration the most popular specialization) followed by EEDS. A new CFAES interdisciplinary major in Sustainable Agriculture (involving SENR, HCS, Entomology, FABE and others) has commenced.

Graduate: The Environment and Natural Resources Graduate Program has 120 graduate students; 60 PhD, 40 MS, 20MENR, and our faculty advise 14 students in the interdisciplinary Environmental Science Graduate Program. One highlight has continued to be steady improvement in quality of new graduate students reflected in continuing success in OSU Fellowship competitions). SENR funds 35-40 graduate students as Teaching Associates to support our instructional program each semester.

COVID has had a major impact on all programs. SENR returned to in-person teaching mode for most classes, and research work in labs and field is generally reestablished..

NCAC1 State Report – Doug Karcher, Horticulture and Crop Science

OSU Leadership

- President Johnson resigning at end of academic year
- Dean of Grad School – Mary Stromburger – CSU soil scientist (Jim Ippolito)

- Dean Kress reappointed to 5-yr term (through June 2027)
- Ann Christy (ag engineer) named as Assoc Dean of Academic Programs
- Andy Michel (ento) director of CFAES Wooster
- Lots of turnover at dept chair level,
 - AnSci, FST, SENR, AEDE

Budget

– faculty lines returned halfway to depts; standard annual proposal period for new faculty lines

Horticulture and Crop Science Faculty -32 TT faculty, 1 PP will onboard 7 more (6 TT)

- Retirements: Mark Loux (agronomic weed extension), Kent Harrison (weed science teaching), Emilee Regnier (weed ecology teaching/research), Mark Sulc (forage extension, fighting glioblastoma)
- Announced 5 faculty positions last Fall 2021
 - Turf Extension – Tyler Carr (1/1/23)
 - Greenhouse Nursery Extension – Garrett Owen (1/1/23)
 - Synthetic Biology – Radin Sadre (3/1/23)
 - Ornamental Plant Germplasm Center Director – Yu Ma (8/15/23)
 - Urban Foods Extension – Offer to be made very soon
 - DEI Initiative
- Announced 4 faculty positions Fall 2022
 - Roots, Rhizosphere, & Resiliency – Florence Sessoms (8/15/23)
 - Weed Extension – application review begins next week
 - Weed Ecology – application review begins next week
 - Director of Chadwick Arboretum / Landscape Mgt – application review begins next week

Facilities

- CEAREC \$30M opened last fall
- Wooster Turf Amenity Project – 2 sports fields, 3 golf holes, updated landscapes
- Centralization of GH facilities at Wooster and then Cbus -

Student Numbers

- Undergraduates
 - Grew from 128 to 137 from previous academic year – most growth in hort and sustainable ag
 - Explain majors and concentration areas
 - New admits restricted by central admissions process (avg ACT 28.9)
 - Seeking campus approval of Controlled Environment specialization (and minor)
 - Have begun process of major name change from SPS to Plant Science

- Accepted applicants for Fall 23 (Up ~ 200% from last year)
- Graduates
 - $37 + 5 = 42$ students ~ evenly split between MS and PhD.