Trivia in the Wild will celebrate its 10th anniversary in 2020 (https://cafnr.missouri.edu/2019/12/wild-about-trivia/) with a new goal of raising $10,000. That amount will allow the group to endow the Laura J. Hertel School of Natural Resources Alumni Scholarship, which goes to incoming SNR students.

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HONORS and AWARDS

SNR DIRECTOR’S HONOR LIST
Fall 2019
Semester GPA of 3.75 or Greater

Adrian E Aguilar
Ben Albertson
Clint Alexander
Caitlyn Allen
Parker D Anderson
Brock D Andreasen
Austin J Andrews
Tyler A Badie
Troy G Baker
Avanu N Barber
Renae M Beasley
Catlin M Bender
Daria A Black
Nathaniel H Bock
Dan Breeding
Alexander J Bross
Thomas M Broyles
Elías J Bunting
Noah L Cadwell
Alexis R Chandler
Sky Ciccolini
Henry P Clark
Mikey Clever
Riley S Cole
Justin M Colley
Galloway C Companan
Evon P Day
Mick Deaver
Denton C Diggins
Matt Dmochowski
Hayden M Dorrell
Luke G Eaton
Josh Eitel
Jacob M Esser
Dylan L Evans
Erica M Eyeley
Moses B Farr
Summer J Fisher
Noah M Freemont
Isabelle J Fricano
Elias B Gaffney
Ryan C Galbierz
Owen Gallagher
Tabitha G Gatts
Matthew L Gibbs
Paul D Gomez
Julian P Gray
Erik M Griffen
Arman A Gusewelle
Tyler M Heaton
Sarah J Higgins
Ethan C Hodges
Zoey E Hrabovsky
Kayla L Huesgen
Jenny Hummel
Kendall E Ivey
Isaac D Jones
Maddie Jones
Alyssa G Kaltenbronn
Jessica Kenville
Kelsy A Kobielusz
Katherine G Larson
Clayton M Lieberman
Ethan P Luebbering
Hannah E Mayse
Madeleine M McCann
Daniel P McDonald
Jackson H McSherry
Deanna M Meyer
Josh Meyer
Shae A Meyer
Victoria P Moore
Lauren Mott
Seger M Nelson
Libby J Orr
Richard R Parks
Joshua A Pearl
Cole H Peine
Robert Peterson
Tyler M Peterson
Chase M Phillips
Drew W Phillips
Natalie R Radt
Lily C Ramsay
Maximillian X Richardson
Christian D Ricketts
Samuel B Ritter
Brooke J Robbins
Anna R Roberts
Danielle M Rotert
Luke Rubin
Emma F Schillinger
Cade R Schmitz
Chris Schrader
Elizabeth N Schrader
Lauren M Schroer
Scott G Schwartz
Peter J Smith
Dylan F Stark
Griffin P Stark
Patrick J Teehan
Justin W Thoeni
Hannah E Truitt
Grace E Tvetene
Nicholas G Truitt
Jacob M Vanderpool
Emily VanUnnik
Nicholas C Vignati
Kyle Watkinson
Olivia Wiltz
Benton L Winfrey
Noah A Wood
Jacob A Worsham

Must be academically full time, and grades completed by the end of the semester.
PRESENTATIONS/PUBLICATIONS/RESEARCH HIGHLIGHTS


SNR Professors in Innovations in Agriculture (stories and photographs by Columbia Missourian reporters and photojournalists, January 23, 2020) featuring Pat Guinan and Neil Fox.

Weather stations are providing the latest technology to improve farm life: https://www.columbiamissourian.com/innovations/agriculture/weather-stations-are-providing-the-latest-technology-to-improve-farm/article_57fecb9a-ffd5-11e9-8f21-0bf50c0076de.html


SNR Atmospheric Science Students: Science into Service: When winter weather occurs, only a few degrees difference over distances as small as 50 km or less can mean the difference between ordinary rain, or dangerous conditions such as heavy snow, sleet, or freezing rain. In order to make a forecast for such events it is good to know the atmospheric temperature and moisture conditions between the clouds that generate precipitation and the ground. The National Weather Service launches weather balloons twice a day at approximately 120 locations across the USA. However, the nearest weather stations to mid-Missouri that launch balloons are located in Topeka, KS, Springfield, MO, or Lincoln, IL. Weather models ingest this data and can give us some idea what is happening here in the middle of Missouri. Given the fact that small differences in the temperature of atmosphere over short distances can be crucial to rain or snowfall, it is no wonder forecasting winter weather in Missouri is so difficult.
Dr. Neil Fox and his students Chris Steward and Jon Bongard are studying how temperature and moisture conditions change in the lower part of the atmosphere preceding a rain event. The focus of this work is to examine how dry layers impact the onset of precipitation events. Steward needs to collect data by launching weather balloons to study these events. In wintry conditions, however, a layer of warm air above the surface can have a dramatic influence on whether or not rain or snow falls. Such was the situation with a messy rain-snow event occurring from Wednesday 22 January to Friday 24 January. In the days leading up to this event, weather models and forecasts have not been confident in the type of precipitation that will fall and how much, if any, snow would accumulate.

SNR Atmospheric Science MS student Chris Steward gathered a few student volunteers like Brendan Heaven and Evan Travis to help him launch three weather balloons from the Atmospheric Science South Farm station during the morning and early afternoon on Wednesday 22 January 2020. The information gained from these balloon launches was valuable for weather professionals anticipating a changeover from rain to snow across mid-Missouri and beyond. When Steward launches these weather balloons, he shares this with National Weather Service offices and broadcast meteorologists across the region. The meteorologists use this data in order to determine how well the models are treating the current situation and whether or not the local forecasts need to be refined.

Steward has led balloon launches in order to gather data for his research, but also during times when the weather could turn deadly. The best example is when he and Jon Bongard led a group of students out to South Farm to launch weather balloons on the fateful day of 22 May 2019. While the National Severe Storms Center knew the day would be rough, information Steward and the SNR students shared contributed to the issuance of a tornado watch and the realization that mid-Missouri would get strong storms later that day.
SNR faculty and students, like Dr. Neil Fox, Chris Steward, and Jon Bongard are not only producing ground breaking research that will help improve how we look at weather data, but Chris, Jon, and his fellow students are sharing data in real time with weather professionals. This data will improve weather forecasts and weather warnings that will help enhance public safety.  (Submitted by Tony Lupo.)

A sample of the weather information that is gathered from the weather balloon launches. The red line is temperature (°C) and the blue dashed line is dew point (°C). The y-axis is pressure and the x-axis is temperature. Wind direction (degrees) and speed (kts) are included on the right axis.

EVENTS/MEETINGS/ANNOUNCEMENTS

February 18-21, 2020 | The Lodge of Four Seasons
Save the Date!
Friday, March 20, 2020
LeClaire Room at
Lewis and Clark Community College
NO Nelson Campus, 600 Troy Road
Edwardsville, IL 62025

Native by Design:
Nature at your Doorstep
7:30 a.m. – 12:00 p.m.
Cost: $30 – includes breakfast
CEUs available for Landscape Architects and IL MGA/MNAs

Agenda:
• 7:30 am – Registration & Breakfast, visit exhibitors
• 8:00 am – Keynote Presentation: Kelly Norris
• 9:00 am – Break
• 9:15 am – Keynote Presentation: Dr. Sarah Lovell
• 10:15 am – Break
• 10:30 am – Panel Discussion: A panel of native plant enthusiasts, experts, and backyard gardeners will share their experiences in this field and take questions from the audience on how they can bring nature to their doorstep.
• 12:00 pm – Workshop ends

Presented by the Grow Native! Southwestern Illinois Event Committee:

Kelly D. Norris is an award-winning author and plantsman from Iowa and the director of horticulture and education at the Greater Des Moines Botanical Garden, a revitalized public garden in Des Moines, Iowa. Throughout his career, his work has been featured in The New York Times, Organic Gardening, Better Homes and Gardens, Martha Stewart Living, Garden Design and in numerous local and regional media appearances.

Dr. Sarah Lovell serves as H.E. Garrett Endowed Chair Professor and Director for the Center for Agroforestry at University of Missouri. Her interdisciplinary background include an MS and PhD in Agronomy followed by a Master in Landscape Architecture (MLA). Dr. Lovell’s research program has emphasized whole-farm planning, agroforestry, and urban agriculture.
SPOTLIGHT ON SNR FACULTY, STAFF AND STUDENTS

MU gets into maple syrup making: MU students and faculty will have chances to participate in maple syrup production in February. MU’s maple syrup producing program, run by the College of Agriculture, Food and Natural Resources’ Baskett Wildlife Research and Education Center near Ashland, allows students to make syrup. “It’s not a course but more of an extracurricular learning opportunity,” said Benjamin Knapp, program leader and an MU natural resources professor. Students can earn internship credit, he added.


Nikko turns to nature to find peace with spotlight: When it comes to a prime location to study in Columbia, Reed Nikko knows just the place. The Missouri senior opts for a quiet spot in Capen Park, about a five-minute drive from Mizzou Arena. “I'll bring my hammock out there and that's where I'll do my homework,” the 6-foot-10, 240-pound forward said. That tradition started about two years ago when Nikko began taking energy nature courses as part of being a fisheries and wildlife major.


SNR grad student Jacob Gaskill teaching limnology to Rock Bridge High School students.

https://northcentralwater.org/youth-help-answer-important-water-quality-research-questions-through-the-reservoir-observer-student-scientists-program/

The SNR Monthly Reader will be distributed electronically the last working day of the month (except during breaks). Please send announcements to Cindy Greenwood, Editor (greenwoodci@missouri.edu). If you would like to unsubscribe from the SNR Monthly Reader, please email Cindy.