

FALL 2022

THE MAGAZINE OF SPES

SCHOOL OF PLANT AND ENVIRONMENTAL SCIENCES



LEARNING BY TEACHING
A Journey to Ghana



COLLEGE OF AGRICULTURE AND LIFE SCIENCES
SCHOOL OF PLANT AND
ENVIRONMENTAL SCIENCES
VIRGINIA TECH

14 COVER STORY**LEARNING BY TEACHING**

Mary Michael Lipford '21 spent a year in Ghana teaching agriculture, while also learning tricks of the trade.

On the cover: Lipford's students in Ghana are all smiles.

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Students help bring new life to the garden's pavilion. Their work enhanced its beauty while also giving them hands-on experience.

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The Hahn Horticulture Garden held its annual art show, with more than two dozen works of art adding to the beauty of the garden.



A student studies on the Ag Quad on a foggy morning.

ENHANCING THE

As summer turns to fall, the Virginia Tech campus is buzzing with activity again, as students return following the summer break.

As we enter our fifth year, the School of Plant and Environmental Sciences continues to grow. We are expanding our programs to prepare graduates for an ever-changing workforce.

This year, we are adding two new majors, Ecological Restoration and Integrated Agriculture Technologies.

Ecological restoration will be vitally important over the next several decades.

In the U.S., there is a big need to bring new life to lands that have been damaged or degraded in the past.

The Bipartisan Infrastructure Law, passed by Congress, provides more than \$19 billion for land management, risk mitigation, and other restoration projects.

The White House anticipates this investment alone will create millions of jobs. With this new major, the School is poised to educate students, so they are well trained and positioned for these exciting and important careers.

We are also preparing our students for the technological revolution with our Integrated Agriculture Technologies (IAT) major.

As the population continues to grow worldwide and with a shortage of workers, industries are turning to technology more than ever before.

Our new IAT major will prepare students to utilize new tools, like drones, satellite imaging, optics, sensors, robotics, and more, to help boost production to meet an increasing need.

To help students learn, we are making large



LEARNING EXPERIENCE

investments in our classrooms and teaching labs.

We are especially updating our teaching facilities, to provide our students with a higher level of hands-on experiences and increasing our use of experiential learning.

All total, over the past two years, we have renovated or created nine teaching spaces in the School. These include a new plant identification lab, a new landscape design teaching studio, new floral design studio, a greenhouse experiential learning lab, and an upgraded soils teaching lab.

To support our new IAT major, we have just finished work on two Tech Learning Sandboxes and a Data Analytics Teaching Lab. We'll tell you more about that program and go more in-depth on those spaces in the Winter edition of the magazine.



This is our first edition of *The Magazine of SPES*. This is something we have wanted to do since the school was formed in 2018, but was delayed as a result of challenges due to COVID-19.

With that mostly behind us, and life starting to return to a new normal, I am excited to use our quarterly magazine to keep our stakeholders, alumni, faculty, staff, and students up-to-date on the happenings of the school, showcasing the great teaching, Extension and research occurring.

Michael Evans
Director and Professor

The *Magazine of SPES* is published four times a year for alumni, faculty, staff, students and stakeholders by the School of Plant and Environmental Sciences at Virginia Tech.

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MODERNIZING THE CLASSROOM Enhancing the Learning Experience

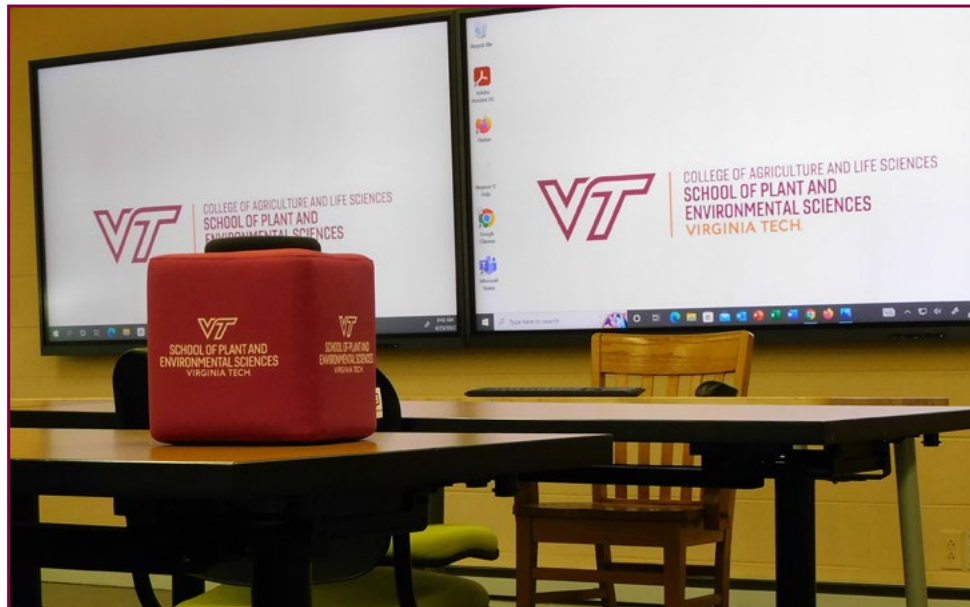
New technology greeted students in one classroom this fall.

The classroom at the University Greenhouse now has three 85-inch flip televisions. All three are touch screens, allowing students and instructors to interact, making lectures dynamic and driven by the discussion.

The three screens can also be used as whiteboards. Instructors can make notes and save them, allowing them to be uploaded to the web for later viewing.

Instructor Josh Kardos was the first instructor to use the new technology in his Indoor Plants class. "It is forcing me to become more comfortable with new technology and will help to keep my teaching methods relevant to the students," Kardos said.

The classroom is also equipped with a soft microphone, which can be passed around the room, allowing everyone to hear,



The portable microphone sits on a table in front of the 85-inch touchscreen monitors.

as students take part in the discussion.

"SPES is working to upgrade its teaching facilities. This classroom was upgraded to bring lectures to life," Michael Evans, director of the School of Plant and Environmental Sciences, said. "Now, students and instructors can interact with presentations to enhance the learning and teaching experience."

Students taking part remotely will have a first-row seat

during presentations. The classroom is equipped with a camera that will track the instructor and can rotate nearly 360-degrees to show everyone in the room.

Kardos believes this will benefit students by providing a more engaging and interactive environment, saying, "The technology helps to connect students to the learning experience much better than the old projector and screen."

STUDENTS ENROLL IN NEW PROGRAM Ecological Restoration

The United States is home to more than 450,000 brownfields, according to the Environmental Protection Agency. These properties may contain hazardous substances and contaminants. Cleaning up these properties increases the local tax base, creates open land, and protects the environment.

Giving students the tools to improve these sites, the Virginia Tech School of Plant and Environmental Sciences has created a major in Ecological Restoration.

The curriculum consists of courses in Biology, Soils, Environmental Science, Statistics, and Geology. "Restoration is a big tent problem that we can draw on lots of different disciplines to try and answer in any context," Associate Professor Leighton Reid said. "There is flexibility for students to focus on plants, or if they are interested in animals, or coral reefs, I feel our program is big enough to support that too."

Twenty-nine students are currently enrolled in the program.



To enhance studies, the Society for Ecological Restoration Student Association at Virginia Tech (SER-VT) was formed. According to Reid, SER-VT provides hands-on restoration opportunities through volunteer projects, guest speakers and field trips.

According to a 2014 study, restoration in the U.S. employs more than 126,000 people, and generates more than \$9.5 billion annually.

The program was designed in consultation with the Society for Ecological Restoration, a leading international organization in the field. Graduates will complete their degrees with a professional certification as Practitioners

In-Training.

After five years of professional experience, full certification can be achieved after planning and implementing three restoration projects, and completing an online course, offered by the Society.

The introduction of the new major is timely as the United Nations has declared 2021-2030 as the 'Decade on Ecosystem Restoration.' The campaign is meant to 'prevent, halt, and reverse the degradation of ecosystems on every continent and in every ocean.' The U.N. believes these measures could help end poverty, combat climate change, and prevent mass extinction.

NEW FACES ON



Emily Unglesbee

Director of Outreach and Extension for GROW (growiwm.org)

- M.A., University of Missouri School of Journalism
- B.A., University of Notre Dame

Unglesbee earned a degree in Classics from the University of Notre Dame in 2009. After two years working on farms and ranches in the U.S. and U.K., she earned a master's degree in journalism from the University of Missouri in 2013. She spent 10 years as a reporter for DTN/The Progressive Farmer, before joining GROW (Get Rid of Weeds) in 2022 to serve as Director of Outreach and Extension. GROW is a publicly led network of scientists working to help farmers and the agricultural industry test and adopt non-chemical alternatives to weed control, to help slow and overcome the industry-wide problem of herbicide-resistant weeds.

Lori Robertson '96

Director, Homefield Farm

- M.S., Soil Science, Clemson
- B.S., Environmental Science, Virginia Tech

Robertson worked for Hampton Roads AREC for 20 years as a Research Specialist in Weed Science for Dr. Jeff Derr, conducting research in herbicide movement, cover crops, and organic pesticide research for specialty crops growers. She is the founder of New River Valley Grape Growers Association, and the former Vineyard Manager of Giles Mountain Vineyard and Winery.



Sanjok Poudel Ph.D. '22

Postdoctoral Research Associate

- Ph.D., Crop and Soil Environmental Sciences, Virginia Tech
- M.S., Animal and Poultry Science, Tuskegee University
- B.S., Agriculture Science, Tribhuvan University, Nepal

Poudel is a postdoctoral research associate at Forage Lab in the School of Plant and Environmental Sciences at Virginia Tech. He completed his Ph.D. in Crop and Soil Environmental Sciences from Virginia Tech in 2022. He is broadly interested in understanding soil-plant-animal interactions in forage-livestock production systems, sustainable forage/livestock production, and agroforestry systems.

THE AG QUAD



Lina Rodriguez Salamanca

Instructor & Plant Disease Clinic Manager

- Ph.D., Plant Pathology, Michigan State University
- M.S., Plant Pathology, Michigan State University
- B.S., Microbiology, Universidad de Los Andes

Lina grew up in Colombia, where her curiosity for microorganisms and passion for learning drew her to Michigan State University, where she completed a Masters and Ph.D. in plant pathology. She worked as a vegetable Extension educator in the field, and shortly after returned to the lab to work as a Diagnostician with the Iowa State Univ. Plant and Insect Diagnostic Clinic. In both roles, she shared with people the complexity of plant health and the impact of proper plant diagnostics. At Virginia Tech, Lina hopes to fulfill her dream to inspire students to be curious about science, discover their strengths, and empower them to seek career paths full of positive contributions to the world.



Patrick McKee

Communications and Marketing Coordinator

- B.S., Atmospheric Science, UNC-Asheville
- B.A., Communications, Elon University

McKee worked for more than two decades in local media as an on-camera meteorologist and news anchor. He has worked at stations in Lawton, Okla. and Roanoke, Va.



Angela Possinger

Assistant Professor

- Ph.D., Soil and Crop Sciences, Cornell University
- M.S., Biological and Environmental Science, University of Rhode Island
- B.S., Biology, Roger Williams University

Possinger is a soil scientist, with a specialization in soil organic matter biogeochemistry. Her research program in SPES will focus on the basic science and applied challenges of building soil organic matter, a foundation for restoring soil functions in disturbed systems. She is passionate about teaching in soil science, and especially hopes to help connect the importance of soils to students' interests across disciplines. Possinger comes to Blacksburg from the Northeast, where she originally became interested in soils through 4-H environmental science activities.

Weeds Team Continues Winning Streak

The Virginia Tech Weeds Team took part in two contests over the summer, receiving top honors in both.

The graduate team won first place at the Northeastern Weed Science Society's contest, held in July in Plattsville, Ontario.

Bringing home individual prizes were Eli Russell who came in first, with Matthew Spoth second.

Russell also placed first in the written calibration and weed identification events. Vipin Kumar won top honors in herbicide identification.

Virginia Tech won the team calibration event. Members include John Peppers, Russell, and Spoth.

The team then traveled to Memphis, Tenn. to compete in the Southern Weed Science Society's contest.

Russell took home first-place honors in the weed identification event.

The team previously won first place, out of 21 teams, at the National Collegiate Soils Contest in April.



Jacob Barney, Vipin Kumar, Prashasti Agarwal, Navdeep Godara, Matthew Spoth, Eli Russell, Cynthia Sias, John Peppers, Tim Shively

Student Wins Scholarships in National Collegiate Landscape Competition

Students from the School of Plant and Environmental Sciences competed at the National Collegiate Landscape Competition in March.

The National Collegiate Landscape Competition is a conference and career fair for students, giving them the chance to meet industry professionals and interview for internships and careers.

The centerpiece of the conference is a 31-event student competition, where they competed in events ranging from driving a skid steer to plant identification and landscape design.



Virginia Tech's Juan Gonzalez collects his \$2,500 cash prize.

Top honors for Virginia Tech at the International Soil Judging Contest

Virginia Tech students, part of Team USA, won first prize at the International Soil Judging Contest, held in Stirling, Scotland, in July.

This marks the fourth consecutive win for the U.S. team.

In the individual competition, Virginia Tech's Clare Tallamy brought home first place honors, with Ben Atkins winning third.

The contest is designed to promote soil science, educating students in field description, classification and interpretation of soil profiles.

Upon arrival in Scotland, participants had a practice day. Local experts showed off a variety of soils, explaining the local geology, soil variety, and soil genesis.

"The contest was an excellent opportunity for the students to meet other young soil scientists from around the world, to learn about the soils of south-central Scotland," said John Galbraith, coach of Team USA and Virginia Tech professor. "This event created new friendships and relationships that will last well into the future. Everyone did well, and everyone is a winner."

The next international contest will be held in 2026 in Nanjing, China.



Coach John Galbraith, Kennadi Griffis, Clare Tallamy, Ben Atkins, Isaac Nollen, Curtis Murphy, Contest Organizer Brian Needelman, and co-coach Jaclyn Fiola.

Juan Gonzales (left) won the \$2,500 Stihl, Inc. Landscape Industry Scholarship.

Gonzales also placed second in the Floral and Foliage Identification event and fourth in Employee Development, with teammate Hannah Burton.

Kevin Painchaud placed second among twenty students in Sales Presentation.

This year, more than 500 students from 43 two- and four-year institutions attended.

Virginia Tech placed 12th overall.



The Virginia Team is all smiles at the competition.

PRESENTING THEIR FINDINGS

Findings shown to Industry Professionals

Students and faculty in the School of Plant and Environmental Sciences presented their research to industry professionals in August, during the 49th Virginia Tech Turfgrass Research Field Day and Expo.

Attendees walked through the fields at the Virginia Tech Turfgrass Research Center, learning the latest findings in golf, sports, and LCO turf research, and variety evaluation, as well as weed, disease, and insect management.

Technical sessions were also offered on pesticide safety, nutrient best management practices, and enhancing pollinator protection.



Participants watch a presentation during the Turfgrass Research Field Day and Expo.



Graduate student Navdeep Godara shares information on how turf protection products influence ultraviolet reflectance and pollinator visits to flowering weeds (left).

Godara shares information on how herbicides influence honey-bee foraging behavior in white-clover infested turf (right).



Graduate student Daewon Koo flies a drone over the field, demonstrating best practices in herbicide applications in turf systems.



After landing the drone, Koo joined Professor Shawn Askew to talk about brush control.



Associate Professor Michael Flessner (center) hosted the Getting Rid of Weeds (GROW) summer meeting. It included tours at farms in Powhatan County, Va. and Nottoway County, Va., as well as the Southern Piedmont Agricultural Research and Extension Center (AREC), where participants viewed some of Flessner's small plot field research trials.



The Virginia Tech Soybean Breeding and Genetics program hosted a Southern Soybean Breeders Tour in Norfolk, Va. It brought together the university and private industry to exchange knowledge and strengthen collaboration. They visited several sites including Hubbard Peanut Company (pictured above) the Port of Virginia, and the Tidewater and Virginia Seafood Agricultural Research and Extension Centers.

The College of Agriculture and Life Sciences held its annual awards ceremony and luncheon. Several Faculty members from the School of Plant and Environmental Sciences were honored.



The Team Award recognizes the achievements and impacts of interdisciplinary teams. Recipients pictured above from left to right are David Haak (SPES), Scott Salom (Ent), Emily Reed (FLSI), Todd Schenk (SPIA), and Jacob Barney (SPES).



Michael Goatley was awarded the Andy Swiger Land-Grant Award. It is given in recognition of accomplishments in teaching, research, or extension which contribute to solving practical problems.

SYLLABUZZ

CSES 4224: Applied Concepts in Precision Agriculture

Applied Concepts in Precision Agriculture is a new course for Fall 2022 and is a major requirement for the new Integrated Agriculture Technologies (IAT) major.

Integrated Plant and Environmental Technologies is an umbrella term for an emerging sub-discipline involving the integration of advanced technologies such as robotics, sensors, and data analytics into plant production practices.

The School of Plant and Environmental Sciences is adding this new course to the IAT curriculum to prepare students for the future, as the use of advanced technologies creates an information revolution in the plant sciences.

Applied Concepts in Precision Agriculture more specifically explores Global Navigation Satellite Systems, Remote Sensing, and Geographic Information Systems for soil sampling and

mapping soil variability. In the end, students will understand the scope of precision agriculture, how to use remote and proximal sensors for data collection, and be able to identify potential sources of yield measurement error, all to help maximize profit and promote sustainability.



ABOUT THE PROFESSOR

Hasan Seyyedhasani joined the SPES faculty in 2021. The goal of his research is to provide engineering and scientific solutions to agricultural production challenges through artificial intelligence-assisted smart farms.

LEARNING BY TEACHING

A Journey to Ghana

By : Patrick McKee

Photos by: Mary Michael Lipford

Mary Michael Lipford '21 wanted to travel the world. She never imagined her journeys would take her around the world to teach others about farming and agriculture.

Growing up near Richmond, Va., her family always had a vegetable garden, so agriculture has been part of her life. "My parents were really into growing your own food and being really sustainable," Lipford recalled.

She entered Virginia Tech as an International Studies major, but quickly discovered political discussions didn't suit her.

After talking to faculty in the School of Plant and Environmental Sciences about study abroad opportunities, Lipford was hooked and quickly changed her major.

BEYOND THE CLASSROOM

A strong work ethic, and curiosity about the world around her, led Lipford to double major in Crop and Soil Sciences and Spanish, and minor in Global Food Security and Health.

With her passion for traveling and foreign languages, Lipford first studied abroad in Ecuador. "I was there for about six months," Lipford recalled. "Everything was taught in Spanish, so that was a good intro into what living abroad would look like."

A trip to Senegal allowed her to use the skills she learned in the classroom.

"Food is the basis of life, and to go further than that, soil is the basis of life," Lipford explained.

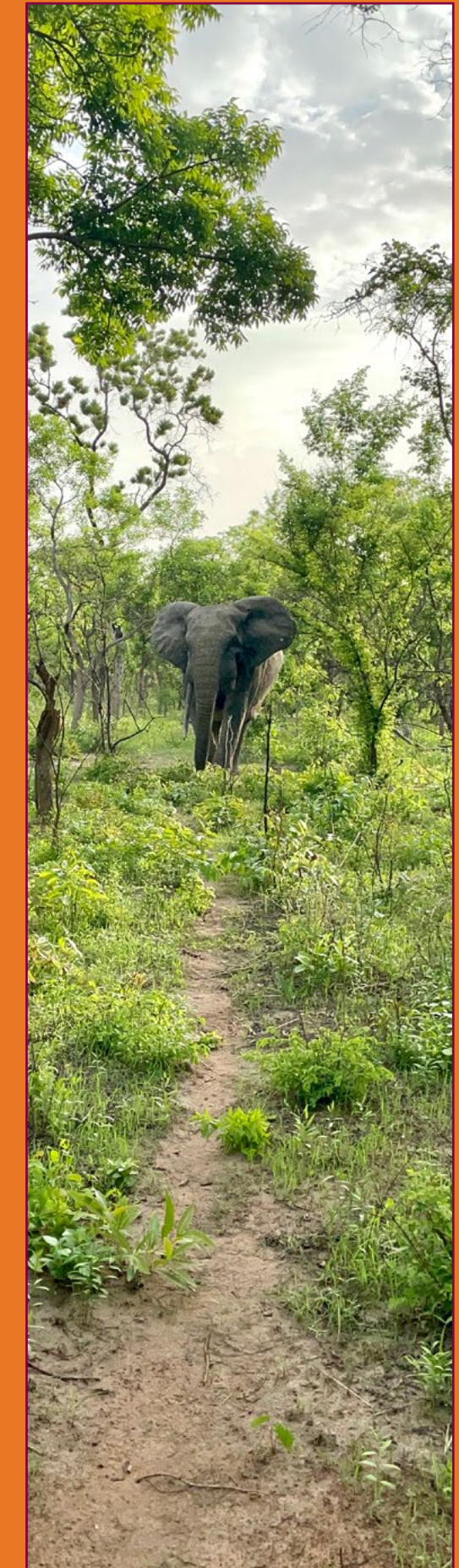
She studied with Professor Ozzie Abaye '92, performing mung bean research. While in Senegal, she presented her findings on mung beans and learned existing practices. But that trip was just the start, as, "It gave me a taste of West African life," Lipford said.

ENTERING THE CLASSROOM

After graduating, Lipford was given an opportunity to travel to Ghana by taking part in a fellowship with the Texas A & M Borlaug Institute.

"This opportunity presented itself three times before I said yes," Lipford said.

After finally accepting, the born traveler was immersed for a year in a new culture. "Africa is so



Mary Michael Lipford '21 poses with her students (top left). Students pose with crops they are selling (bottom left). An elephant walks through the forest (right).

“
 THE JOY THAT
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 WAS
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 THAT WAS ONE OF
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 STUDENTS IS JUST
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 FELT AROUND
 THEM.”

Mary Michael Lipford '21

diverse. I didn't know a lot about Ghana," Lipford said. "Since I had done research in Senegal, I just wanted to know more about it."

The adventure had her serving as a teacher in a middle school and an Extension agent. "I was working with 4-H Ghana [a national organization]," Lipford explained. "So, we were starting 4-H clubs and partnering with the already started clubs, advising them, starting school farms, working with my local farmer group on sustainable agriculture practices, and workshops."

In the classroom, she worked with local teachers in Integrated Sciences classes, going more in-depth than the curriculum.

"My students all greeted me with smiles. I never had a dull moment with them," Lipford described.

After school was 4-H club. She met with the students, helping them to develop leadership skills.

"We had all the executives [of the club] and tried to help them lead their club to give them a sense of leadership, which they really stepped into, which was really cool to see through the whole year, some of the growth in public speaking," Lipford said.

They also spent time on the farm, learning about composting, cover cropping, and mulching.

When funds were available, Lipford took her students on field trips to enhance their knowledge.



One trip, where she took her students to the beach, left a lasting impression. "A lot of them had never touched the ocean or been in it," Lipford recalled. "The joy that comes from watching joy

was astronomical. That was one of the key things about my students is just the joy I always felt around them."

While the work was hard, it was rewarding. "My students brought me so much joy. There were a lot of really hard days there, but at the end of the day, the only reason I kept going a lot of days, was because of my students."

TRADING BEST PRACTICES

Outside of the classroom, Lipford met with local farmers, sharing her knowledge about agriculture.



"If you want to improve all of these hard things I've learned about in the world, you start with basic needs and empowering people to be able to fill their own basic needs, then go out and do what you're passionate about," she said.

But those meetings came with challenges, first among them was the language barrier. The native languages in the village, where she worked, were Fante and Twi. In some cases, Lipford was able to use a translator. In others, she communicated with actions.



The climate was also different than anything she had experienced. Where she worked, it was tropical with two distinct seasons, wet and dry. According to the World Bank, the wet season typically runs from May to September. Temperatures year-round average in the 80s and 90s, but frequently get over 100 in summer.

In addition, Lipford also had to gain the trust of the people. "I had to show that I was there to learn and get to know them before I could jump into a job," she described. "The first few months were a lot of learning for me, and how I fit in there."

ABOUT GHANA



Declared independence from Great Britain in 1957.

President: Nana Akufo-Addo

Population: 32.1 million

GDP: \$73.6 billion USD

Unemployment: 4.7%

Currency: Cedi

Internet Usage: 58%

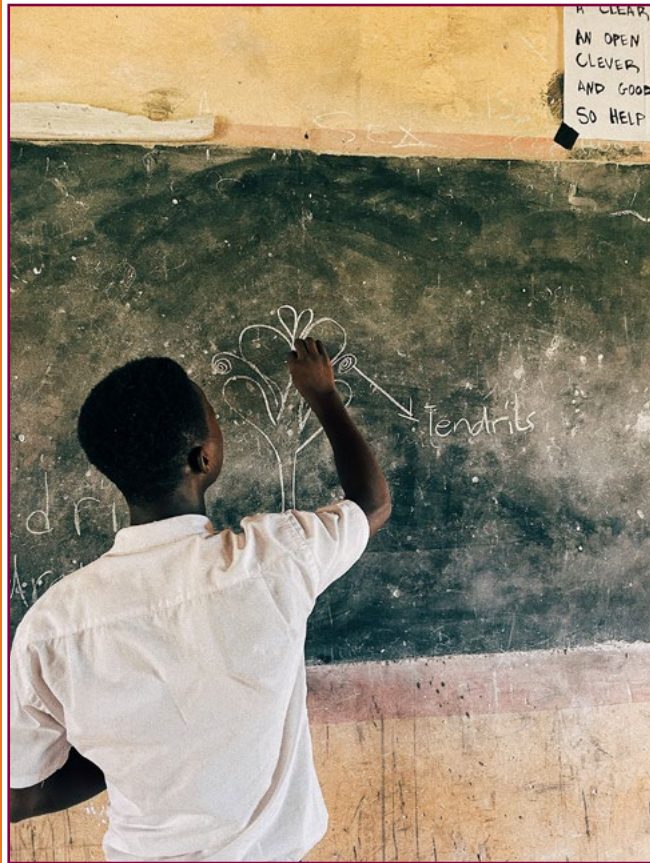
Forest Area: 35.1%

Data Source: World Bank, August 2022

LESSONS LEARNED

While teaching was her primary job, Lipford quickly discovered that learning never stops.

Her students were a source of inspiration for her, where she learned about hard work. Many of them would start their days at 4:30 a.m., working on the farm before going to school, then returning to the farm after their studies.



Another lesson: change takes time, patience, and resources. "This view of development work is so much more complicated that I thought it was when I was an undergrad," Lipford explained. "They are so smart, and so hard working, and they could do anything without any help if they were given the resources."

Finally, she learned the importance of listening to elders, who have learned their skills from previous generations.

"It's not just about helping, because they have so much to offer and I learned more than I offered there," Lipford said.



Summing up a year abroad, Lipford described it as, "...a privilege for me to go over there. Not a lot of people get to go there and know the people of Ghana. Because of that opportunity, and privilege, it is my duty to bring back what I know about them."



A student writes on the blackboard in Lipford's class (far left). Lipford works on the farm with locals.



Undergraduate Student Researches Effects of Fusarium Head Blight, Grows Career

By Max Esterhuizen

Producers around the country work to combat crop diseases, spending time, money, and other valuable resources in their efforts. Fusarium head blight, one such bacterial disease, impacts a variety of plants. If left untreated, the disease affects the head of the plant, where it renders seeds unusable while also spreading the disease throughout the field and infecting the entire crop.

With the help of Nicholas Santantonio, an assistant professor in the School of Plant and Environmental Sciences, and Scott Lowman, director of the Institute of Advanced Learning and Research, Megan Pollok, a sophomore in the Virginia Tech College of Agriculture and Life Sciences, is researching the resistance of winter wheat to the disease to help save producers from its deadly effects.



Megan Pollok is researching the resistance of winter wheat to the disease to help save producers from its deadly effects. Photo by Max Esterhuizen for Virginia Tech.

The damage of fusarium head blight can vary for a producer, mostly depending on how much the head of the plant is lost and the final grade of the wheat. A major outbreak could reduce the crop to being used as animal feed.

“I wanted to do a research project with small grains, specifically wheat, so I reached out to Dr. Santantonio and asked him about a collaboration with the institute,” said Pollok, a Danville, Virginia, native. “We started working out the details that included eight different winter wheat varieties to see if I can inhibit the growth of fusarium head blight.”

Aside from increased costs for producers, it’s not always environmentally friendly to continue treating plants over long periods each year, so it can be beneficial to have biological controls that can take away the need to ever put anything on the plants themselves.

“It’s inspiring to work with such a bright and talented young mind,” Santantonio said. “Megan is developing and testing new innovative solutions to problems that we’ve been working on for a long time, such as with her project on the use of endophytes to provide protection against fusarium head blight. We need innovators like Megan to develop the solutions we would never think to try.”

Even though there are varieties of wheat that have resistance, it’s not always enough, especially in certain areas that are prone to fusarium head blight. Each of the eight varieties of winter wheat

used has a different level of resistance to the disease that has been bred into the plant, ranging from low to high.

Using two groups, one controlled and another with one of two kinds of treatment, Pollok used bacterial endophytes, which are organisms such as bacteria or fungi that live within a plant, that were available at the Institute of Advanced Learning and Research in Danville, Virginia. The control group uses a solution that doesn’t contain any bacteria. The partnership with the center is part of the Center for Advanced Innovation in Agriculture.



At the Institute for Advanced Learning and Research in Danville, Virginia, Pollok is testing eight varieties of winter wheat resistance to fusarium head blight. Photo by Max Esterhuizen for Virginia Tech.

“With the variety of endophytes available at the institute, I wanted to test and see which would be the most effective at preventing fusarium head blight,” Pollok said.

Using different plates for the endophytes, Pollok placed four pieces of filter paper on each plate and placed the pathogen plug on top of each plate. After that, she inoculated each piece of filter paper to make sure that the bacteria could grow.

As the plate is incubated, the bacteria will prevent the growth of the pathogen – in this case, fusarium head blight – and these zones are evident when the plate is flipped over

Pollok created two different mixtures, one of which was a fertilizer to help the plants grow, or a Hoagland solution.

“Placing the bacteria on every individual plant is not feasible for a producer, so for the next part of my project is to look into vertical transmission of the bacteria and see if it is deemed fit to prevent fusarium,” Pollok said. “My goal is to have the bacteria placed on the seed head of the plant and transferred to the seed itself, allowing producers to plant seeds that already contain the bacteria.”

By conducting this research as an undergraduate at Virginia Tech, Pollok found that her true calling is to work with plants themselves.

“There’s a lot of use in seeing what you can do without changing the genetics of the plant, and this has allowed me to figure out exactly the career path I want,” Pollok said. “Creating my own experimental design and working on my project with minimal supervision allowed me to understand exactly what working on research is like and then use that as experience to get started in and further my career.”

BEAUTIFYING THE GARDEN

Students get hands-on experience

Over time, the lawn at the Hahn Horticulture Garden pavilion takes a beating, and starts to look a little less than ideal.

“It gets heavily compacted from the foot traffic and the mower, so we’re constantly aerating and trying to maintain it, and sometimes we have to go to more drastic measures,” garden Director Scott Douglas said.

Those drastic measures include starting from scratch, by clearing off the land and laying down new sod.

It was the perfect opportunity to give students a hands-on lesson.

“They may go into the green industry, where this is a skill they will need to know,” Douglas said.



Students clearing the lawn at the pavilion.



Junior Tyler Croson knows these skills will help him in the future. He wants to own his own landscaping business.

He said, opportunities like this will make him successful in the future.

“Everything I’m learning in the classroom really needs hands-on applications. You can know it in your head, but if you’ve never done it with your hands, how can you tell someone else how to do it?” Croson asked.

The venue is home to numerous events every year, including meetings, parties, and weddings, so keeping it in pristine condition is imperative.



Above: Junior Tyler Croson carrying a roll of sod.
Right: Students getting hands-on experience at the garden.

Simply Elemental 2022

The Hahn Horticulture Garden on the Virginia Tech campus held its annual art show.

Here are some of the entries.



Transcendence
By: Judy Lindberg



Window on the World
By: Matt Gentry



There’s Magic in a Garden
By: Sally Mook



Rising Sun
By: Robert Smith



Sunflower Circle
By: Anne Panella



Garden Greeter
By: Delbert Jones

INTRODUCING THE

CLASS OF 2026

BY MAJOR

BY THE NUMBERS

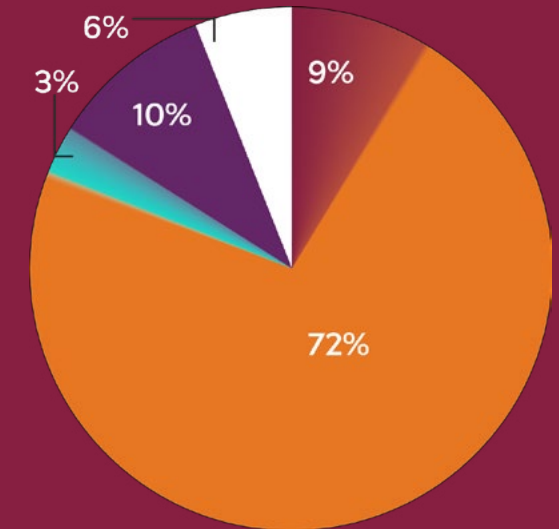
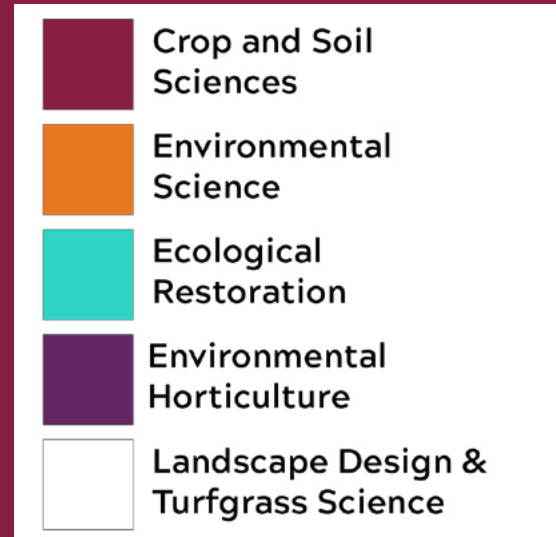
- 111 students
- 10 states
- 5 countries

CLOSEST TO HOME

Pearisburg, Va.

FARTHEST FROM HOME

Camberwell, Victoria, Australia



Class of 2026 with peer mentors.

NEW ALUMNI: AUGUST 2022 GRADUATES

Crop and Soil Environmental Sciences

- Gus Wightman
- Kaleb Hensley
- Tyler Morris

Environmental Horticulture

- Stephanie Hamilton

Environmental Science

- Terrence Haynie

Landscape Contracting

- Charlie Bolte

Volunteers Needed

Alumni volunteers are needed to serve as *Ut Prosim* Profile Essay Readers.

You will assist in the application process for prospective students by reading and evaluating their essays.

There is a brief virtual training session to attend.

For more information, contact Molly Wilson at mollywilson@vt.edu by October 14th.

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Visit alumni.vt.edu/contact.

UPCOMING EVENTS



October 25 - 26, 2022

IALR Institute Conference Center - Danville, VA

Horticulture Industry & Scholarship Dinner

Thursday, November 10th

6 p.m. to 9 p.m.

Squires Student Center, Commonwealth Ballroom A

For information and registration, email Scott Douglas, dsd1@vt.edu

Fall Commencement

Friday, December 16th

University
Commencement Ceremony
10:30 a.m.
Cassell Coliseum

Graduate School
Commencement Ceremony
2:30 p.m.
Cassell Coliseum

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