Our Faculty and Staff

Center Faculty

Dave Moorhead, PhD Forestry – Co–Director – Warnell School of Forestry and Natural Resources
Outreach – Silviculture, Invasive Plants, Herbicides, Prescribed Fire

Michael Toews, PhD Entomology – Co–Director – College of Agricultural & Environmental Sciences
Department of Entomology
Research, Teaching, and Extension – Insect Ecology and Pest Management

Chuck Barger, MS Computer Science – Associate Director – Information Technology and Invasive Species

Joe LaForest, MS Entomology/Plant Pathology – Associate Director
Integrated Pest Management and Forest Health
Co-Director – Southern IPM Center

Center Staff

Salina McAllister, AS Business Administration – Administrative Assistant II

Karan Rawlins, MS Biology – Invasive Species Coordinator

Rebekah Wallace, MS Crop & Soil Sciences – EDDMapS Coordinator

Liz Moss, MS Forestry – Forest Health Coordinator

Rachel Carroll, MS Natural Resource Ecology and Management – Citizen Science Coordinator

Sarah Jean Swain, BS Ag Communication – Communications Coordinator

Jordan Daniel, BS Computer Science – Smart Phone Application Programmer

Bilal Bush, BS Computer Science – Web Application Programmer

Krunal Patel, BS Computer Engineering, MS Computer Science – Smart Phone Application Programmer

Sai Dasari, MS Computer Science – Web Application Programmer

Michaela Lubbers – Student Assistant
2018 Highlights by the Numbers

**Bugwood Image Database Additions**
- 9,677 Images
- 1,662 Subjects
- 69 Photographers

**Georgia Activities**
- 4,763 confirmed invasive species and pest reports on 190 species from 161 reporters in 103 counties added to EDDMapS
- Center faculty and staff presented 25 outreach programs totaling 49 hours of instructions to 935 participants in Georgia

**Active Grant Totals**
- 31 active outreach/extension = $2,545,496
- 26 active research = $912,614
- 10 service contracts = $78,129

**EDDMapS**
- 1,404,917 Reports
- 1,721 Species
- 3,210 Users

**Outreach Materials**
- 93 Presentations
- 14 Publications

**Online Resources**
- 75 websites that received 210,631,529 page views

**EDDMapS Data by Source Type**
- 18,070 Web
- 14,820 iPhone
- 8,208 Android
- 1,350,373 Bulk Data
- 13,254 API Data

**Smartphone Apps**
- 76 smartphone apps downloaded 53,428 times
FEATURED PROJECT

WILD SPOTTER - INVASIVE SPECIES MAPPING ON NATIONAL FORESTS

The Wild Spotter website and app were launched on June 27, 2018 and the project includes 12 forests located across the U.S. The website has received 11,956 page requests and the apps have been downloaded 547 times. As part of this effort, the existing U.S. Forest Service invasive plant database was integrated into EDDMapS, adding 670,949 new records.

The Wild Spotter project has added 34 partners since the launch to help promote and expand the program. Several presentations were also given at such meetings as the Neobiota 2018 international conference, the Association of Fish & Wildlife Agencies annual meeting, the Upper Midwest Invasive Species Conference and the River Management Society symposium. Webinars were created for the National Association of Invasive Plant Councils and Idaho Invasive Species Council.

CENTER CO-DIRECTOR RETIRES

Dr. Dave Moorhead, Professor of Silviculture and Co-Director of the Center, retired this January after an impressive 35-year career with the University of Georgia. A Louisville, KY native, he received a B.S. in Forestry from the University of Kentucky, an M.S. in Silviculture/Soils from Mississippi State University and his Ph.D. in Forest Ecophysiology from the University of Missouri-Columbia.

Throughout his career, Dr. Moorhead has provided statewide and regional outreach programs for county extension agents, private landowners, foresters and natural resource managers on silviculture, forest vegetation management, invasive species and forest health issues, forest regeneration, prescribed fire and forest management. He also assisted in developing an invasive species awareness and management program, conducting workshops across the South on invasive plant pathways in forested/natural ecosystems, as well as on management and control techniques. He has been active in the Southeastern Exotic Pest Plant Council and the North American Invasive Species Network, served on the Board of Directors for the North American Invasive Species Management Association and was their President in 2017.

In just his last decade at UGA, Moorhead received multiple awards: 2007 Outstanding Service Award in Forest Health Protection from the GA Forestry Commission; 2009 Award of Excellence in Public Education in Technology Transfer from the Southeastern Society of American Foresters; 2016 Walter Barnard Hill Award for Distinguished Achievement in Public Service and Outreach from UGA; 2017 National Technology Transfer Award from the Society of American Foresters; and 2018 Forest Landowner Association’s Extension Forester of the Year Award.

The Center for Invasive Species and Ecosystem Health owes Dave a debt of gratitude—he will be sorely missed!
Joe LaForest, Associate Director for the Center, was promoted to Public Service Associate in July 2018. He received a BS from The Ohio State University followed by dual Masters degrees in plant pathology and entomology from the same. Following two years as pest manager for Dow Gardens in Midland, Michigan, LaForest joined the Center in 2006. He contributes to all aspects of the Bugwood Center for Invasive Species and Ecosystem Health systems and projects through team leadership, programming, database design, server administration, coordination with external partners, and grant writing. In 2012, he was asked to be a director for the Southern IPM Center in addition to leading the Bugwood programs.

Since joining the Center, Joe has developed 20 collaborative projects for over $19.6 million with $2.5 million to the University of Georgia. Current outreach and project areas include development of tools to identify pests at US ports of entry, expanding the sharing of pest and invasive species data, providing extensions with visualizations to better utilize pest information in their outreach, and facilitating the development and adoption of IPM in the Southern Region.

Salina McAllister, Administrative Assistant for the Center, received the 2018 University of Georgia Center for Invasive Species and Ecosystem Health Award of Excellence. This inaugural award could not have gone to a more deserving candidate.

The Tifton, Georgia, native has been employed at UGA since 2001, beginning as secretary for Dr. Keith Douce and Dr. Dave Moorhead in the Department of Entomology and Warnell School of Forestry & Natural Resources, respectively. With the formation of the University’s Center for Invasive Species and Ecosystem Health in 2008, Salina’s administrative role expanded. She earned her Associate Degree in Business from Abraham Baldwin Agricultural College, which she completed in 2009.

The Center grew from two faculty and three staff when Salina was hired as the administrative assistant to the current four full-time faculty, seven full-time staff and four part-time staff. She serves as sole administrative and clerical support for the Center, providing programmatic duties and support for externally funded contract projects of the Center, such as assisting in preparation of grant submissions, interaction with other Contracts and Grants, Accounts Payable, Procurement and other UGA Departments.

To this day, Salina is the sassy grease that keeps the Center’s wheels turning, and we are grateful for her continued service!
Silverleaf whitefly is one of the world’s most serious insect pests. More effort is necessary to coordinate whitefly suppression efforts across agricultural commodities in the region. Due to direct feeding and indirect factors such as transmission of new viruses to vegetable crops, economically sustainable production will become untenable if current trends continue and insecticide resistance appears.

The most significant result of research conducted in 2018 was a statewide assessment of whitefly distribution and abundance. Researchers travelled more than 40,000 miles to service a network of 125 traps that extended from Dothan, AL, to Vidalia, GA. More than 50,000 whiteflies were captured during the year. The population began rapidly increasing during the first week in August, resulting in a statewide peak of nearly 50 whiteflies per trap at the end of September, which coincided with cotton defoliation. Populations were most abundant in Ben Hill, Colquitt, Cook, Tift and Worth counties.

Additional work of primary importance this year was an assessment of important agronomic and non-crop whitefly hosts. That work suggested that whitefly captures always increased when traps were adjacent to cotton, vegetables, morning glory, Cypress vine, and lantana. Further, a naturally occurring entomopathogen, *Isaria fumosorosea*, was identified and ultimately cultured from dead whiteflies in cotton. Subsequent work with the wild strain shows that this isolate is at least as effective as commercially available *Isaria* strains and more virulent than other types of entomopathogens against silverleaf whitefly. Understanding the environmental conditions and annual lifecycle of this fungus may be critical to our ability to predict whitefly outbreaks in the future. Work is ongoing in support of testing insecticide resistance, cultural control techniques and using chemigation to manage whitefly populations.
Graduate Students & PostDoctoral Research Associates

Dr. Apurba Barman is a post doc working on the distribution and management of silverleaf whitefly in cotton and vegetable production.

Dr. Sriyanka Lahiri is a post doc working on the ecology and management of the sugarcane aphid in grain sorghum, forage sorghum and sweet sorghum.

Dr. Shaohui Wu is a post doc working on ecology and virulence of entomopathogens for control of silverleaf whitefly.

Ms. Sarah Hobby is a current Master of Plant Protection and Pest Management (MPPPM) graduate student working on distribution and abundance of brown marmorated stink bug.

Ms. Lauren Perez is a current MS graduate student working on temporal abundance of stored product insects in peanut storage and shelling facilities.

EDDMapS Strategic Planning Workshop for Western Weeds

The Utah Department of Agriculture and Food hosted a strategic planning workshop on September 25-26, 2018, to discuss the further development of EDDMapS in the western U.S. Goals included identifying common EDDMapS products currently in use in some localities that should be part of the core EDDMapS program, identifying gaps in existing EDDMapS functionality, and prioritizing for future UGA development.

A 5-year strategic plan for future development and implementation was devised that identifies shared western state priorities and the process by which they will be realized (including education and outreach) and allows for the flexibility to serve a number of end users. The plan was presented at the Western Weed Coordination Committee meeting in December 2018. Representatives from nine states, two federal agencies and two counties attended this meeting.
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