August 10—13 • Counce, TN

Welcome Letter

Dear Biodiversity Scholars,

Welcome to the inaugural Summer Institute for the Upper Delta Region Biodiversity Scholarship. I am thrilled that you are a biodiversity scholar, and I look forward to getting to know you this weekend and over the next three years.

The Upper Delta Region Biodiversity Scholarship is a federally-funded scholarship program to support students in their development toward becoming professionals in biodiversity science. Through this scholarship program you will receive scholarship funding; you will be able to take specific, relevant coursework for maintaining natural history specimen collections and conducting research with natural history specimens; you will develop and implement original research that you will be able to present at scientific meetings; you will have a support network of faculty mentors to help guide your research; you will have programmatic support through our Program Manager; you will receive professional development through seminars and the summer institute.

Our hope is that you will build a network of friends and support through this scholarship opportunity that will allow you to perform your very best in your undergraduate or graduate program, learn as much as you possibly can, and enjoy your experiences to the fullest. We want to see you develop as contributing scientists, and our goal is to provide what you need to help make that dream a reality.

Earth is facing a great number of stressors due to a tremendous human population and development activities. We are certainly entering the sixth mass extinction on this planet, and as scientists (that is, biologists, botanists, taxonomists, ecologists, evolutionary biologists, etc.), we need to be asking and answering the important questions related to biodiversity conservation. Important work in the field of natural history helps us know with which species we share our environment and how we can best conserve species and habitats for their future and for ours.

We want to educate you over the next few years to be the future of a diverse biodiversity science workforce, committed to making our planet a better place. All the while, we will be working with you to hone your professional development skills to make sure you are developing effectively into scientists and meeting your educational and professional development needs.

We have an exciting weekend planned to kick off our program. Again, welcome to the Biodiversity Scholarship, and welcome to the Summer Institute!

My sincerest,

Travis D. Marsico, Ph.D. Project Director, Upper Delta Region Biodiversity Scholarship Program Associate Professor & Associate Chair Department of Biological Sciences Curator, Arkansas State University Herbarium (STAR) Arkansas State University

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Agenda

THURSDAY, A	UGUST 10	
4р	Meeting registration	Conference Room C
5—5:30р	Introduction Dr. Travis Marsico, Arkansas State University	
5:30—6:30p	Assessment presentation and administration Dr. Jessica Crowe, Southern Illinois University at Carbondale Sheila Stowers, Arkansas State University	
6:30—7:30p	Dinner	
8p	Group bonfire	Shelter 2
FRIDAY, AUG	UST 11	
8—9a	Breakfast buffet	Main Dining Room
9—10:30a	Learning about the Delta Region Theo Witsell, Arkansas Natural Heritage Commission Dr. Brook Fluker, Arkansas State University Brittney Magness, Pickwick Landing State Park	Conference Room C
10:30a—12:30p	Guided hike Meet in Pickwick Inn lobby for transportation!	Slate Rock (Port & Round House)
12:30—1:30p	Lunch buffet	Main Dining Room
1:30—2p	Break	
2—4р	Guided hike Meet in Pickwick Inn lobby for transportation!	Island Loop Trail (near Cabin 9)
4-6р	Observation discussion	Shelter 1
6—7р	Dinner buffet	Main Dining Room

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SATURDAY,	AUGUST 12	
8—9a	Breakfast buffet	Main Dining Room
9a—12p	Professional development workshop Theo Witsell, Arkansas Natural Heritage Commission Dr. Dustin Lynch, Arkansas Natural Heritage Commission	Conference Room C
12—1p	Lunch buffet	Main Dining Room
1—2р	Break	
2—4р	Collections hikes in groups Meet with your group # in Pickwick Inn lobby for transportatio	n!
4—5р	Break	
5—6р	Dinner buffet	Main Dining Room
6—9р	Collections exercises Logo design and program naming discussion	Shelter 1
SUNDAY, AU	JGUST 13	
8—10a	Farewell breakfast	Conference Room C
10—11a	Sample poster presentations	

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Invited Speakers



Photo credit: Naples Herald

Theo Witsell Senior Botanist and Ecologist Arkansas Natural Heritage Commission

Theo Witsell is the senior botanist and ecologist for the Arkansas Natural Heritage Commission and a Research Associate at the Botanical Research Institute of Texas. He has also worked as a contract botanist for a number of federal agencies and private organizations including the USDA Forest Service, the National Park Service, the United States Department of Defense, The Nature Conservancy, NatureServe, the U.S. Army Corps of Engineers, the Lady Bird Johnson Wildflower Center (University of Texas at Austin), and the Gates Rogers Foundation. He is co-editor of the recently published Atlas of the Vascular Plants of

Arkansas, and is currently working on a number of research projects including an inventory of the plants of the Grand Prairie Region of eastern Arkansas and the description of several undescribed species. He serves as a regional reviewer for the Flora of North America Project. He is a native Arkansan and holds a Masters degree in botany from the University of Arkansas at Little Rock. His research interests include the ecology and conservation of rare plants and their habitats, restoration of degraded ecosystems, and anything to do with the shale barrens of the Ouachita Mountains. He is also an avid native plant gardener.

Dustin Lynch Aquatic Ecologist Arkansas Natural Heritage Commission

Dustin Lynch is the aquatic ecologist for the Arkansas Natural Heritage Commission. He holds a PhD in biological sciences from the University of Arkansas, Fayetteville, and a Masters degree in zoology from Oklahoma State University. He most recently worked as a post-doctoral research associate and collections manager at the Oklahoma State University Collection of Vertebrates, overseeing the renovation and re-curation of ~500,000 specimens in the museum's fish, reptile, and amphibian collections. Current research projects include studying the impact of drought on environmental flow relationships in Ozark



Highland streams and quantifying the effects of flow alteration on stream communities in the region. Some past research projects have included using mesocosm experiments to simulate the effects of drought disturbance on Ozark stream communities, determining occupancy and detection probability in an imperiled darter endemic to Arkansas, and studying the effects of urbanization and impoundment on prairie fish assemblages in Oklahoma. His research interests include ichthyology, herpetology, astacology, stream ecology, phylogenetics, natural history collections and curatorial science.

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Participating Faculty



Dr. Frank Anderson Invertebrate zoology Southern Illinois University at Carbondale



Dr. Travis Marsico Evolutionary ecology and plant taxonomy Arkansas State University

Southern Illinois University at Carbondale



Dr. Than Boves Ornithology Arkansas State University



Dr. Michael Flinn Aquatic ecology and Freshwater invertebrates Murray State University



Dr. Brook Fluker Aquatic ecology Arkansas State University



Dr. Thomas Risch Animal ecology Arkansas State University

Dr. Tanja McKay

Dr. Kurt Neubig Plant systematics

Arkansas State University

Entomology



Dr. Dayle Saar Plant biology Murray State University



Dr. Nancy Garwood Plant systematics and ecology Southern Illinois University at Carbondale



Dr. Agustin Jimenez Parasitology Southern Illinois University at Carbondale



Dr. Sedonia Sipes Plant-pollinator interactions Southern Illinois University at Carbondale



Dr. Timothy Spier Fisheries Murray State University

August 10—13 • Counce, TN Logo Design & Program Name



We want YOUR designs and names for the scholarship program!

Unlock your creative side this weekend to help us choose a logo and official name for the program. As the inaugural cohort, you have the opportunity to be part of this decision! Use the space below to draw or write your ideas and give your finished product to Molly Alexander, program manager, by Saturday, August 12 at 6 p.m.

Upper Delta Region Biodiversit 2017 Summer II	y Scholarship Program nstitute	
August 10—13 • Counce, TN	Meeting Notes	