# **FIELD TRIPS 2015**

## Thursday, MARCH 19, 2015

11 am – 5 pm

### FIELD TRIP A: Basic Field Botany with Dr. Dan Pittillo

This basic botany, native plant ecology and plant identification field trip is designed for teachers, wildlife biologists, government regulators, planners, landscape architects, general contractors and other professionals who wish to expand their knowledge of native plants and field-based botany. We will be learning the basic techniques for sorting plants in winter or very early condition. A brief introduction will take place inside the Park Vista Hotel on techniques for identifying winter twigs and bark. This will be followed by an examination of the basic Newcomb Guide to Wildflowers sorting method using a live flower. The last hour we will take a walk outside around the hotel to see examples of morphological features just studied. Please bring Newcomb's Guide to Wildflowers if you have a copy.

Leader, J. Dan Pittillo, Dan is a retired biology professor from Western Carolina University and former curator of their herbarium. He also served many years as director of Highlands Biological Station and the Bartram Trail Society as well as newsletter editor for Southern Appalachian Botanical Society. Author of numerous professional publications, his interests include regional floras, rare plant distributions, conservation, and land development planning.

## FRIDAY, MARCH 20, 2015

7 am – 10 am

## Field Trip B: Birding and Bird Diversity in the Smokies – Tiffany Beachy

This field trip is intended for participants of all levels, from beginner to advanced. It's about bird study, not just bird watching. The pace will be relaxed, and we'll take time to study the birds we see and discuss their natural history. Plenty of time will be allowed to answer participant's questions about birds. An emphasis will be placed upon identifying and learning songs and calls in the field. Though the focus will be birds, we won't ignore other natural history subjects we see. We'll visit the area around the Sugarlands Visitor Center and walk the Fighting Creek Nature Trail (1.25 miles, relatively flat). Meet at the Sugarlands Visitor Center parking lot, rain or shine. Wear comfortable walking shoes and bring binoculars (7 to 10 power), if you have them, but we'll also have a few extra pairs to share.

Leader, **Tiffany Beachy**, Citizen Science Coordinator at Great Smoky Mountains Institute at Tremont, was born and raised in Roanoke, VA. She earned her BS in Wildlife Science from Virginia Tech in 2003 and her MS in Wildlife Science from the University of Tennessee, Knoxville in 2008, where she studied Cerulean Warblers. She lived the life of a bio bum for a while and has participated in avian research in Tennessee, Canada, Mexico, the Galapagos Islands of Ecuador, Venezuela, and Missouri.

# SATURDAY, MARCH 21, 2015

8:30 a.m. - Noon

# Field Trip C: Schoolyard ATBI – Tiffany Beachy

Interested in conducting a schoolyard BioBlitz but just not sure how to make it happen? We'll show you how easy it is by actually conducting a mini-BioBlitz with students from a local elementary school. Meet at the Park Vista Hotel for a brief introduction to schoolyard exploration, and then pile into the Tremont van with us to venture out to Pi Beta Phi Elementary for a morning of fun with students! You will have an opportunity to learn the process while facilitating the activity with kids.



Leader, **Tiffany Beachy**, Citizen Science Coordinator at Great Smoky Mountains Institute at Tremont, was born and raised in Roanoke, VA. She earned her BS in Wildlife Science from Virginia Tech in 2003 and her MS in Wildlife Science from the University of Tennessee, Knoxville in 2008, where she studied Cerulean Warblers. She lived the life of a bio bum for a while and has participated in avian research in Tennessee, Canada, Mexico, the Galapagos Islands of Ecuador, Venezuela, and Missouri.

### 9:00 a.m. – 4:00 p.m.

# Field Trip D: BIODIVERSITY IN THE GSMNP: THE GEOLOGY CONNECTION - Keith Langdon

This field trip will explore the reasons for the high biological diversity of some species groups in the Southern Appalachians, with a focus on the influence of geology, especially karst landscapes. We will start with an introduction indoors including perusing the new super-computer generated species maps, developed from ATBI data by the University of Tennessee's computer lab. We will also peruse the park's new LIDAR imagery and other remote sensing tools that clarify the role of geology. We will go into the field to see some of the different geologies and examine the natural communities of plants and animals that inhabit them. The group is limited to 10 participants; it will be about 2/3 day: bring lunch, water, hiking footwear and outdoor gear. In case of pouring rain / icy conditions we will have an abbreviated discussion at the Twin Creeks Science and Education Center. Van transportation from Twin Creeks will be provided.

Leader, **Keith Langdon**, Retired as Supervisory Biologist with Great Smoky Mountains National Park, after 37 years in several National Parks. A geographer by training, his interests are in vascular plants, several insect orders, geology, land mollusks and the landscape characteristics that create specialized habitats for any rare or endemic species.

### 1-4:00 p.m.

### Field Trip E: Salamander Study – Julianne Geleynse

Great Smoky Mountains National Park staff have been doing citizen science projects with salamanders for many years. Head out into the field to get down and dirty as we collect early spring phenology data along a small creek at the Chimney's Picnic area. The protocols of this activity can be replicated for most natural areas or you can use park data in your classroom for a unique STEM activity. Come prepared to get a bit muddy. We will begin with a short classroom presentation and carpool to the study site in Great Smoky Mountains National Park.

Leader **Julianne Geleynse** is an educator for the National Park Service in Great Smoky Mountains National Park. She has been developing and presenting citizen science education programs for students for a long time.