

We have revised the program on our website to highlight the number of spots left in each; red indicates those that are currently full, yellow those with limited spots (5 or fewer) and green to show the programs with >5 positions left. Please know the highlighted colors on the online program are approximations and not necessarily absolute.

No.	Session Name	Start	End	Description	Transportation	Meeting Location (Codes, e.g., AG, correspond to locations on our website map and contain GPS coordinates that might be entered into navigation tools like phones.)
Wednesday All Day						
2	Birding Motorcade on Cades Cove Loop Road	7:00 AM	2:00 PM	Look for and listen to the signs of spring in Cades Cove. Stops will include Sparks and Hyatt Lanes, Burchfield Woods (where you might spot the red-headed Woodpecker) and sewage ponds. Short, easy walk. Bring binoculars and rain gear. DT: 60 min.	None provided. Carpool as needed.	E - Cades Cove at Information Kiosk Before Loop Road Entrance
3	A Musical Walk Through the Woods	7:00 AM	4:30 PM	Come join naturalist Kevin Barry on an all-day workshop to learn to identify birds based on song! You'll begin in the morning in a field classroom setting at the UT Field Station where you will use the Cornell University Ornithology App to study songs and pictures of many of the Park's most common birds, paying particular attention to warblers as they are some of the most interesting and confusing to identify. Bring a notebook/journal, pencil, binoculars, and a smartphone if you have one (but they are not required). After lunch, you will put what you have learned to practice as you take an afternoon hike along Old Settlers Trail near Greenbrier. DT: 20 min.	None provided. Leaders and pilgrims may elect to organize a carpool to Old Settlers Trail in the afternoon after the workshop at UT Field Station.	AH - UT Field Station at Greenbrier. Directions: Just south of Greenbrier Rd, turn left (north) onto Old Hills Rd from Hwy 321. Make left on Tudor Rd, find a place to park, and walk on up the road to the field station. Be aware that the walk up to the station is strenuous, but it is very short. Logistics: After a class at the field station travel to Old Settlers Trail in Greenbrier for an afternoon hike.

4	Wildflower and Wildfire Walk at the Chimney Tops	8:00 AM	4:30 PM	The November 2016 Chimney Tops 2 Fire originated on the north peak of Chimney Tops, spreading northward into the Sugarlands Valley over several days. Follow the trail as it ascends through an unburned northern hardwood forest with a splendid display of spring wildflowers, ending at an observation platform 1/4-mile from the peaks. Elevation gain 1,400 ft. Strenuous, 3.5 mile walk. DT: 10 min.	Vans provided	AC - Sugarlands Visitor Center - Bus Parking Lot. Logistics: Provided transportation will drop you off at the Chimney Tops Trail Trailhead and then pick you back up at the end of the day to return you to Sugarlands Visitor Center.
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5	Wildflower Hike from Maddron Bald Trail to Gabe's Mountain Trail to Hen Wallow Falls	9:00 AM	4:30 PM	An 8.1-mile, moderate, one-way hike passing through many wildflower displays and old-growth forests from Maddron Bald Trail to Cosby Picnic Area with a visit to 90' Hen Wallow Falls. At the intersection of Maddron Bald and Gabes Mountain Trail, leaders and pilgrims may elect to take a side trip toward Albright Grove to experience some of the largest tulip poplars in the Park. Gabes Mountain Trail is north-facing and as such will be slightly cooler. You'll see mesic species like fraser magnolia, yellow buckeye, hemlock, silverbells, and American beeches and xeric species like pines, oaks, and mountain laurel on drier sites. Wildflowers like strawberries, showy orchids, and jack-in-the-pulpits are sure to be seen and if you have a keen eye you might get to see golden saxifrage! Several small creek crossings await as well as some foot bridges, rhododendron tunnels, and lung lichen, Elevation change: 1,400'.DT: 60 min	Van shuttle provided.	J - Cosby Picnic Area--Off TN Rt. 32, hiker parking lot on left. Logistics: Provided transportation will shuttle you to Maddron Bald Trailhead because there is no parking available. A one-way hike will return you to your car.
Wednesday AM						
6	Aquatic Insect Diversity Walk at Twin Creeks	9:30 AM	11:45 AM	Learn to collect and identify a variety of insects in pristine streams. Enjoy short walks on different order streams to learn about the preferred habitats of different insects with Park entomologist (= someone who studies insects) Becky Nichols. Short, easy walk. DT: 10 min.	None provided.	AG - Twin Creeks Gravel Parking Lot off of Cherokee Orchard Road

7	Birding from Sugarlands to Newfound Gap	7:30 AM	11:30 AM	Join expert birders to search for spring migrants and Appalachian residents starting at Sugarlands and ending at Newfound Gap. Bring binoculars and rain gear. Short, easy walks. DT: 5 min.	None provided. Carpool needed.	G - City Parking Lot on Regan Drive By Gatlinburg Fire Station
8	Birding from Sugarlands to the Cove Hardwood Nature Trail	7:30 AM	11:30 AM	Join expert birders to search for spring migrants and Appalachian residents at Sugarlands Visitor Center and look for the blackthroated blue warbler at Cove Hardwood Nature Trail. Bring binoculars and rain gear. Short, easy walks. DT: 5 min.	None provided. Carpool needed.	G - City Parking Lot on Regan Drive By Gatlinburg Fire Station
9	Birding on School House Gap Trail	7:30 AM	11:30 AM	Scan the trees along a stream for warblers, vireos, American goldfinch, and the scarlet tanager. You'll look and listen for these notable spring birds, their nests, and songs. Bring binoculars, water, rain gear, and comfortable walking shoes. DT: 45 min.	None provided. Carpool needed.	AD - Townsend Wye on Little River Road. Leaders may elect to travel from here and if so will organize carpooling.
11	Edible Mushroom Walk at Chimneys Picnic Area	8:00 AM	11:15 AM	Learn the do's and don'ts about recognizing edible mushrooms and their habitat preferences with field and culinary mycologist, Rachel Swenie and University of Tennessee at Chattanooga graduate student Caleb Powell. Short, easy walk. DT: 25 min.	None provided.	F - Chimneys Picnic Area. Logistics: Meet at Cove Hardwood Nature Trail.

12	Fern Walk at Little River above Elkmont	8:30 AM	11:45 AM	Have you ever seen an adder's tongue, sang pointer, or the hitchhiking southern lady? Do you understand what parts of ferns or fern allies are leaves and what parts are stems? Come see a variety of the Park's more common ferns and fern allies and learn about their structures, how they grow, reproduce, and about their biodiversity in the Park. Bring a hand lens. A 2-mile, easy walk. DT: 30 min.	None provided.	S - Little River Trailhead passed Elkmont Campground
13	Native People's Use of Nature's Garden at Twin Creeks Pavilion	8:15 AM	11:30 AM	Gather at the cook fire with Native American, Karen LaMere (Ho-Chunk), and listen to an oral history that has been passed down through the generations by America's indigenous people. Taste and discover ingenious uses of native plants. Short, easy walk. DT: 10 min.	None provided.	AG - Twin Creeks Pavilion off Cherokee Orchard Road. Pilgrims and Leaders will share this large Pavillion with another group.

14	Photography of Birds at Cades Cove	7:00 AM	11:30 AM	<p>Smoky Mountain Bird Photographer, Barry Spruce, will instruct the group in finding bird subjects in their natural habitat, teach participants how to have success in approaching these birds, and how use their surroundings for more pleasing compositions. After the field walk, we move to the Spruce Gallery in Townsend for technical guidance on enhancing compositions. Bring your digital camera and binoculars (please, no cell phone or iPad cameras). DT: 60 min.</p> <p>http://barrysprucephotography.com/h https://www.facebook.com/Barry-Spruce-Photography-177079628992433/</p>	None provided.	Cades Cove Gallery, 7843 E. Lamar Alexander Pkwy, Townsend TN
15	Beginner Photography Workshop	8:15 AM	11:30 AM	<p>This program starts with a short visual presentation, then goes outdoors for hands-on instruction in composition and photo techniques by authors Jack Carman (Wildflowers of Tennessee) and Robert Hutson (Great Smoky Mountain Wildflowers: When and Where to Find Them). Bring hiking boots, a camera, and a tripod. A 2-mile, easy walk. DT: 15 min.</p>	None provided.	AB - Sugarlands Visitor Center Training Room - park in 3rd lot on right. Logistics: Meet at Training Room in basement of bathroom facility adjacent to the Sugarlands Visitor Center.

16	Tour the GSMNP Natural History Museum at Twin Creeks	9:30 AM	11:00 AM	Come tour the natural history collections that have been used to document the biodiversity of the GSMNP since its beginnings. In this "behind locked doors" tour of the GSMNP Natural History Museum, you will see specimens of mammals, birds (including the now-extinct passenger pigeon), fungi, insects, and plants and learn about how they are prepared, stored, cataloged, and their importance to the Park! DT: 10 min.	None provided.	AF - Twin Creeks Science and Education Center off Cherokee Orchard Road. Logistics: Park in the Twin Creeks Public Parking Area, cross the street, and walk up the short trail to the south end of the Science and Education Center.
17	Skills of a Naturalist: Observing Nature	8:30 AM	11:45 AM	Nature is a remarkable teacher, and naturalists tap into their knowledge with observational methods of study. Through patience, awareness, and the five senses, you can discover a great deal about the natural world. Valuable tips and simple tools explored in this program will help cultivate and sharpen those skills needed to derive the greatest benefit from time spent outdoors and begin your journey as an amateur naturalist. Please bring a small notebook or journal and writing implement of choice. DT: 10 min.	None provided.	AG - Twin Creeks Pavilion off Cherokee Orchard Road. Pilgrims and Leaders will share this large Pavillion with another group.

18	Trees and Wildflowers of Metcalf Bottoms	8:30 AM	11:45 AM	Did you know that species of trees, shrubs, and wildflowers associate into different communities across the landscape? Come on this event to learn the technical differences between trees and shrubs and which species of wildflowers associate with them. You'll learn to identify some trees, shrubs, and associated wildflowers on this walk with experts. A 2-mile, easy walk. DT: 40 min.	None provided.	U - Metcalf Bottoms Picnic Area off Little River Road (South Parking Area)
19	Wildflower Hike at Chestnut Top Trail	9:00 AM	11:45 AM	One of the grandest wildflower displays in the Smokies! This narrow trail offers lots of wildflower species in great abundance and has become a leader favorite. A 2-mile, moderate walk. DT: 45 min.	None provided.	AD - Townsend Wye on Little River Road
20	Wildflower Hike at Cucumber Gap Trail - Short version	8:30 AM	11:45 AM	Walk through a secondary cove hardwood forest and enjoy the rich diversity of wildflowers. This trip begins on Jakes Creek and terminates near Tulip Branch on Cucumber Gap Trail, then returns. A 2-mile, moderate walk. DT: 30 min.	None provided.	R - Jakes Creek Trailhead passed Elkmont Campground. The upper parking area that is 0.1 mile passed the main parking area.
21	Wildflower Hike at Huskey Gap Trail	8:00 AM	11:45 AM	Walk the old trail that connected the settlers of Sugarlands Valley and Little River as you view the wildflower displays and homesites along the way. Elevation change: 500'. A 2-mile, moderate walk. DT: 10 min.	Vans provided	AC - Sugarlands Visitor Center - Bus Parking Lot. Provided transportation will drop you off at the Husky Gap Trailhead off of US 441 and then return you to Sugarlands Visitor Center at the end of your hike.

22	Wildflower Hike at Porters Creek Trail - Short version	8:30 AM	11:45 AM	Spend a few hours on one of the Park's most famous wildflower trails. Hike up Porters Creek trail to either Brushy Mountain Trail (at 1 mile) or continue on to Fern Branch Falls (just short of two miles) before turning around. See abundant wildflowers including painted trillium and many more. Pass old homesteads and a cemetery along this popular trail which leads to an old-growth cove hardwood forest. A 2-4 mile easy walk. DT: 30 min.	None provided.	N - Greenbrier Road Terminus at Porters Creek Trailhead--4.5 Miles from Route 321
23	Wildflower Hike at Spruce-fir Nature Trail	8:30 AM	11:45 AM	Enjoy an abundant display of wildflowers under the spruce and fir trees along the very short, easy-walking Spruce-fir Nature Trail! An easy 1 mile trail. DT: 45 min.	None provided. Carpool needed.	AA - Rockefeller Memorial at Newfound Gap. Logistics: After meeting at the Memorial, carpool in as few cars as possible up Clingman's Dome Road ~2.5 miles to the Spruce-fir Nature Trail Parking Area on your left (very limited parking).
24	Wildflower Hike on the Riverview Quiet Walkway	8:00 AM	11:45 AM	This easy walk from Newfound Gap Road to West Prong Little Pigeon River has a rich diversity of wildflowers, trees and shrubs, and plant communities. the trail follows the level flood plain of the river through groves of hard-woods and passes some seepages. This is one of the only places in the Park to see silky willow. A 2-mile, easy walk. DT: 10 min.	Vans provided	AC - Sugarlands Visitor Center - Bus Parking Lot. Logistics: Meet your group at Sugarlands in the bus parking lot and take provided transportation to the Riverview Quiet Walkway, across from Husky Gap Trail on Newfound Gap Road. After hiking the loop trail transportation will return you to your car at Sugarlands Visitor Center.

25	Yoga Class at Walker Sisters Cabin	8:45 AM	11:45 AM	Join a yoga instructor and biologist on a 2-mile journey to the Walker Sisters Cabin on the Metcalf Bottoms Trail to exercise and relax in this serene environment before hiking 2-miles back. Bring an exercise mat or large towel and water. Beginners welcome! A 4-mile moderate hike. DT: 40 min.	None provided.	U - Metcalf Bottoms Picnic Area off Little River Road (North Parking Area)
Wednesday PM						
27	Come learn about how our National Science Foundation is monitoring long-term climate change in the GSMNP using NEON!	1:00 PM	3:00 PM	Learn about the National Ecological Observatory Network (NEON) Program and what we are doing around the Great Smoky Mountains. Join us for a demonstration of sampling techniques for measuring Plant Diversity. We will walk about 600 yards in total, some of it off the trail. DT: 60 min.	None provided.	Meet at the third parking lot on Newfound Gap Rd (441) for the Riverview Quiet Walkway, across from the Huskey Gap Trailhead. This location does not have a code or GPS associated with it.
28	Black Bear and Wild Hogs in the Smokies - Jakes Creek	1:30 PM	4:30 PM	Walk with David Whitehead, retired Tennessee Wildlife Resources Agency Manager, and Dr. Tim Gaudin, mammalogist at the University of Tennessee at Chattanooga, as they describe the life history, tracking signs, human impacts, and environmental issues of black bears and wild hogs in the Southern Appalachians. A 2 to 3-mile, easy walk. DT: 30 min.	None provided.	R - Jakes Creek Trailhead passed Elkmont Campground. The upper parking area that is 0.1 mile passed the main parking area.

29	Butterflies in Cades Cove	1:00 PM	4:00 PM	National Park Service Volunteer Warren Bielenberg and Outdoor Educator Wanda DeWaard have been chasing butterflies in Cades Cove for over 20 years. Join them to explore a variety of habitats to identify butterflies on the wing in Cades Cove. Bring a butterfly field guide, binoculars, water, dress for the weather. Short easy walks. DT: 60 min.	None provided.	D - Cades Cove Campground Store Parking Lot
30	Spiders Glorious!	1:15 PM	4:45 PM	Join Kefyn Catley, professor emeritus of Western Carolina University, to meet and greet some of the amazing spiders of the Smokies. Come explore the world's dominant terrestrial predators and learn about their role in maintaining healthy ecosystems. Learn to identify spiders in the field by morphology, web structure, and behavioral characters and discover how their unique use of silk and venom has driven their impressive diversity throughout time. A 10 or 14X hand lens will be very useful. DT: 25 min.	None provided.	O - Greenbrier Road at picnic pavillion, 3.5 miles from Route 32. Logistics: Meet at pavillion to discuss spiders in their natural habitat, then explore the area surrounding the pavillion and nearby trails (Old Settlers, Porters Creek, and Grapeyard Ridge)
31	Going Natural in the Garden at Walker Sisters Cabin	1:30 PM	4:30 PM	Explore the principles of Mother Nature's aesthetic design in wild landscapes, and discover ways to incorporate her natural beauty into your garden. Led by Nancy Rennie, a retired landscape designer and horticultural consultant and Margie Hunter, author of Gardening with Native Plants of Tennessee. A 2-mile easy walk. DT: 40 min.	None provided.	U - Metcalf Bottoms Picnic Area off Little River Road (North Parking Area). Logistics: Two programs will meet here, check with the leaders to make sure you are with the correct group.

32	Fungal Roles in Forest Ecology at Cosby Picnic Area	1:30 PM	4:30 PM	Fungi are essential organisms in the nutrient and life cycles within ecosystems. Learn from expert mycologists about fungal biology, reproduction, natural history and their importance in the forest ecosystem. Leaders will also discuss classification and edible vs. poisonous fungi. A 2 to 3-mile, easy walk. DT: 60 min.	None provided.	J - Cosby Picnic Area off TN Route 32--Hiker Parking lot on left. Logistics: After meeting, leaders will decide on a trail to use. Two programs will meet at this location, check with the leaders to make sure you are with the correct group.
33	Moss Walk Along Injun Creek Trail in Greenbrier	1:30 PM	4:30 PM	Discover the elegant forms of moss, liverwort, and hornwort and how to distinguish between these three ancient lineages of land plants! We will also discuss ways to separate some of the species that we encounter as well as how they reproduce in the Park! Bring a hand lens if you have one. At most, a 3-mile easy walk. DT: 30 min.	None provided.	M - Greenbrier Ranger Station.
34	Nature Journaling at Metcalf Bottoms Picnic Area	1:15 PM	4:30 PM	Art Stupka and Aaron Sharp were early naturalists who documented the biological diversity of the Smokies by keeping journals. Today's nature journals combine sketching, writing, and mixed media to record observations and reflections. Bring an unlined journal and join Mary Priestley, an avid nature journalist, to make a lasting memory of the Pilgrimage and other natural world experiences. DT: 40 min. Art supplies can be obtained at Arrowmont School of Art and Crafts in Gatlinburg.	None provided.	U - Metcalf Bottoms Picnic Shelter off of Little River Road (North Parking Area). Logistics: Two programs will meet in this area, check with your leader to make sure you are on the correct hike.

35	Sketching Birds of the Smokies	1:15 PM	4:30 PM	Wildlife artist Chris Myers discusses ways to capture bird morphology and behavior on paper. Bring your sketchbook, pencils, pens, or watercolors. DT: 15 min. https://www.facebook.com/Chris-Myers-Art-702564893092139/?fref=ts	None provided.	AB - Sugarlands Visitor Center Training Room - park in 3rd lot on right. Logistics: Meet at Training Room in basement of bathroom facility adjacent to the Sugarlands Visitor Center.
36	Smoky's Salamanders; From Peaks to Seeps	1:15 PM	4:30 PM	Join us as we travel from high to mid elevation in search of Tennessee's slimy jewels. Hikes are short, but time will fly as we discover a true diversity of salamanders on this motorcade through the Smokys. Learn why Tennessee is the salamander capital of the world! Meet at the City Parking Lot in Gatlinburg to carpool, travel to our first stop at the Chimneys Picnic area to see high elevation salamander communities and the Smoky's mountain only endemic amphibian species. We'll conclude at the Sugarlands Visitor Center (Ash Hopper Branch) to see a vastly different community of mid-low elevation salamanders. We'll be out rain or shine and be prepared for wet/muddy condition. Every amphibian-based hike will begin and end with decontamination, and a short discussion of survey protocols/ethics in order to protect these species from the spread of dangerous pathogens. DT: 5 min.	None provided. Carpool needed.	G - City Parking Lot on Regan Drive By Gatlinburg Fire Station

37	Tree and Shrub Identification Walk at Metcalf Bottoms	1:15 PM	4:30 PM	More than an introduction to terms, you'll learn characters used in the identification of woody plants - trees, shrubs, and woody vines. You learn how to observe and differentiate different leaf and bark characteristics to distinguish between genera and species of common and lesser common woody species in the Park. If you have them, bring your field guides and hand lenses (but they are not required!). A 2-mile, easy stroll among lots of woody species. DT 40 min.	None provided.	U - Metcalf Bottoms Picnic Area off Little River Road (South Parking Area)
38	What's in a name: Botanical Latin for Beginners	1:30 PM	4:30 PM	On this leisurely hike we will not only identify a variety of beautiful wildflowers but also learn the story of the names behind the beauties. We'll discuss the importance of botanical names and why learning them can be as much fun (or more so!) as knowing the common ones. We'll show how a little basic Latin helps to better understand various aspects of the plant and its relationship to others. And pronunciation? No more difficult than saying Geranium, Iris, and Magnolia! Previous experience not required. DT: 25 min.	None provided.	F - Chimneys Picnic Area. Logistics: Meet at the outdoor classroom.

39	Wildflower Motorcade of Greenbrier	1:15 PM	4:30 PM	Greenbrier Cove was once home to a community with working farms, pastures, and hunting lands in the surrounding mountains. Today, there are many prized hiking trails that leave the cove and wind through different plant communities. Join expert botanists on a short motorcade-style tour of Greenbrier Cove, stopping at a different trailheads, river benches, homesteads, or other locations to observe at a wide variety of wildflowers, trees, and shrubs that have reclaimed this once populated area. DT: 30 min.	None provided. Carpool needed.	M - Greenbrier Ranger Station. Logistics: Leaders will choose different sites to visit throughout Greenbrier Cove.
40	Wildflower Hike at Abrams Falls Trail - Short Version	1:15 PM	4:30 PM	Stroll along this river trail to discover wildflowers like gay wings, which flourish in this limestone valley. Elevation change: 500' ascent. A 2-mile up and back, moderate hike. Pilgrims will turn around before reaching the waterfall. Bring snacks, water, rain gear, and comfortable walking shoes. DT: 75 min.	None provided.	A - Abrams Falls parking Area in Cades Cove
41	Wildflower and Cascades Walk Along Lynn Camp Prong	1:45 PM	4:45 PM	Stroll with expert botanists and conservationists along Middle Prong Trail on your way to Lynn Camp Prong Cascades while you stop to enjoy many of the spring ephemeral wildflowers, ferns, and flowering trees of the Smokies. A 4-mile moderate walk. DT: 45 min.	None provided.	AE - End of Tremont gravel road. From the Townsend Wye take Laurel Creek Rd to Tremont Rd, continuing after it turns to gravel until it terminates at the Lynn Camp Prong Trailhead.

42	Wildflower Hike at Cucumber Gap Trail - Short version	1:30 PM	4:30 PM	Walk through a secondary cove hardwood forest and enjoy the rich diversity of wildflowers. This trip begins on Jakes Creek and terminates near Tulip Branch on Cucumber Gap Trail, then returns. A 2-mile, moderate walk. DT: 30 min.	None provided.	R - Jakes Creek Trailhead passed Elkmont Campground. The upper parking area that is 0.1 mile passed the main parking area.
43	Wildflower Hike at Old Settlers Trail - Short version	1:30 PM	4:45 PM	Walking through these former homesteads and cemeteries, discover the many wildflowers now growing in the abandoned fields and among the stone chimneys and fences. Hike up the trail to near Copeland Divide, then return. Elevation change: 200' ascent. A 3 mile, moderate walk. DT: 30 min.	None provided. Carpool needed.	Q - Greenbrier Road. Logistics: Meet at picnic area 2.5 miles from Route 321, carpool in as few cars as possible to the Old Settlers Trailhead. Hike out and back and carpool back to your cars at the picnic area.
43.5	Lady Slippers at Bud Ogle	1:30 PM	4:45 PM	Walking through these former homesteads, you'll see a splendid variety of wildflowers and American chestnut tree remnants in the reforested fields. Pink and Yellow Lady's slippers are often found along this trail in abundance and are sure to delight seekers of these standouts! Leaders will discuss the differences between these species (other than color) and their life histories and pollination syndromes. Short, easy walk with one creek crossing at the beginning - caution, the rocks there are often very slippery. DT: 10 min.	None provided.	X - Noah "Bud Ogle" parking area of Cherokee Orchard Road

44	Wildflower Hike at Porters Creek Trail - Short version	1:30 PM	4:45 PM	Spend a few hours on one of the Park's most famous wildflower trails. Hike up Porters Creek trail to either Brushy Mountain Trail (at 1 mile) or continue on to Fern Branch Falls (just short of two miles) before turning around. See abundant wildflowers including painted trillium and many more. Pass old homesteads and a cemetery along this popular trail which leads to an old-growth cove hardwood forest. A 2-4 mile easy walk. DT: 30 min.	None provided.	N - Greenbrier Road Terminus at Porters Creek Trailhead--4.5 Miles from Route 321
45	Wildflower Hike at Ramsey Cascades Trail - Short version	1:30 PM	4:45 PM	A 4 to 6-mile round trip (not going all the way to the falls) will allow you to hike among the rich forests of the Ramsey Cascades Trail. You will hike along the mountain rivers and experience a rich display of wildflowers, ferns, and Fraser's sedge. Try to make it at least 2.5-miles to a hobbit-like tunnel of rhododendrons that canopy the trail. Should the group decide to continue up the steep ascent you will enter the older growth forest of large tulip poplar, black cherry, eastern hemlock, yellow birch, and silver bells untouched by selective logging in the area. Elevation gain: ~1000 ft. DT: 30 min.	None provided. Carpool needed.	P - Greenbrier Road. Logistics: Meet at first parking lot on the right, 200 ft from 321. From there, carpool to Ramsey Cascades Trailhead

46	Wildflower Hike on the Appalachian Trail from Indian Gap to Newfound Gap	1:30 PM	4:45 PM	Pass from the closed canopy of the old growth spruce-fir forest into the open canopy of a pristine beech gap forest where early spring ephemeral wildflowers, like trout lilies, more spring beauties than you can imagine, white phacelia, various trilliums, and more abound because of protections afforded from feral hog exclosures. A 1.5-mile moderate walk. Elevation change 500'. DT: 45 min.	None provided. Car shuttle needed.	AA - Rockefeller Memorial at Newfound Gap. Logistics: Leave as many cars as possible at Newfound Gap and take a few cars to Indian Gap Rd Parking / Road Prong Trailhead, which is up Clingmans Dome Road about one mile and on the right.
48	NEON: Terrestrial and Aquatic Instrumentation Sites Tour	12:00 PM	2:00 PM	Tour will visit the Terrestrial Instrumentation site (149 foot tall tower) and Aquatic Instrumentation sites where automated instruments are deployed to continuously collect meteorological, soil, phenological, surface water, and groundwater data where these instrument data provide an unprecedented opportunity to study ecosystem-level change over time. Short walk from Twin Creeks Pavilion. DT: 10 min.	None provided.	AG - Twin Creeks Pavilion off Cherokee Orchard Road. Meet at the Twin Creeks Pavillion and walk to sites.

49	How do we Measure the Impacts of Climate Change?	1:30 PM	4:45 PM	Ever wonder how scientists make predictions about how plants will respond to a changing climate that includes warming, altered rainfall patterns, and elevated carbon dioxide levels? Will such changes force the Wildflower Pilgrimage organizers to change the dates and locations of their hikes because plants respond differently to future climates? In this program, Dr. Howard Neufeld, from Appalachian State University, will demonstrate the use of easy-to-use scientific instruments for measuring the photosynthesis, water expenditure, and plant stress. After a brief introduction and explanation, pilgrims will have the opportunity to use or observe these instruments to make their own measurements on a variety of plants in the Park, then we'll discuss the findings and the future! DT: 45 min - 60 min.	None provided	I - Collins Creek Pavilion on Newfound Gap Road
50	Wild about Ants! Discovering Ants of the Smokies	1:30 PM	4:30 PM	It is estimated that there are over 20,000 ant species worldwide. Approximately 133 of those species live in Tennessee! Come explore the fascinating world of ants with Dr. DeAnna Beasley from the University of Tennessee at Chattanooga. We'll set up stations to observe food preferences, learn about different ant behaviors, and conclude with a short hike to seek out different ant homes. DT: 60 min.	None provided	J - Cosby Picnic Area, off TN Route 32--Hiker Parking lot on left. Logistics: Meet at pavillion for classroom-like discussion before your hike. Two programs will meet at this location, check with the leader to make sure you are with the correct group.
Wednesday Evening						

50.5	The Rocks Beneath the Leaves	6:00 PM	8:30 PM	Join retired geologist, Annie Holmes from University of Tennessee at Chattanooga, for an exciting overview of the geologic history documented in the Appalachian Mountains in general and in the Great Smoky Mountains National Park, in particular. Three land-mass collisions and one rifting event are recorded by and preserved in the rocks that hold up the thin mountain soils and diverse plant communities of the Appalachians. This program is sure to rock your world.	AG - Twin Creeks Pavilion off Cherokee Orchard Road	
51	Artist-of-the-Year Reception at Arrowmont School of Arts and Crafts	5:30 PM	7:00 PM	Arrowmont School of Arts and Crafts is proud to feature Alex Foster, the Spring Wildflower Pilgrimage's Artist-of-the-Year. Alex is a fiber-based artist from Richmond, Virginia, who uses natural dyes and printing with plants and fabric to better understand the natural world. For the Pilgrimage, she created a piece that combines the mountains with her medium and it is this piece that is being used for this year's Pilgrimage website, T-shirts, and other merchandise. Her artwork will be exhibited in the Geoffrey A. Wolpert Gallery from March 20 through April 25, 2020. A reception will be held on Wednesday, April 22, 5:00-7:00 pm. Refreshments provided. DT: 15 min. No daily Pilgrimage fee or registration required.	None provided. No parking on site. Please park in the City Parking Garage: 526 Parkway, Gatlinburg, TN 37738	C - Arrowmont School of Arts and Crafts Turner Auditorium. No parking on site. Please park in the City Parking Garage: 526 Parkway, Gatlinburg, TN 37738

52	Bugs at Light at Ash Hopper Branch	8:30 PM	10:30 PM	If you want to see a lot really cool insects, join University of Tennessee at Chattanooga entomologist Stylianos Chatzimanolis (Dr. C) as he attracts nocturnal moths, beetles and a wide diversity of other insects using a black light. Dress warmly, bring a headlamp or flashlight with a red cover, and hand lens if you have them. No trail walking. This is a great event for people of all ages and any who are interested! DT: 10 min.	None provided.	AC - Sugarlands Visitor Center - Bus Parking Lot. Logistics: Meet here to follow your leader to the trailhead.
53	Spiders Glorious!	7:30 PM	9:30 PM	Join Kefyn Catley, professor emeritus of Western Carolina University, to meet and greet some of the amazing spiders of the Smokies. Come explore the world's dominant terrestrial predators and learn about their role in maintaining healthy ecosystems. Learn to identify spiders in the field by morphology, web structure, and behavioral characters and discover how their unique use of silk and venom has driven their impressive diversity throughout time. A 10 or 14X hand lens will be very useful. DT: 35 min.	None provided.	B - Alum Cave Trailhead--8.7 miles south on US 441 from Sugarlands Visitor Center

54	Lichens at Night in the Smokies	8:00 PM	10:30 PM	Come explore the fascinating world of lichens at night! Many lichens produce secondary chemicals and metabolites that fluoresce brightly under UV light. Using handheld UV lights to scan tree trunks and rocks we will search for lichens with brilliant colors of yellow, orange, electric blue, and more on this unique lichen night walk. Bring a flashlight, warm clothes and comfortable walking shoes. There will be 4-5 UV lights that may be borrowed but if you have one bring it along. This will be a short, easy walk. DT: 10 min.	None provided.	AC - Sugarlands Visitor Center - Bus Parking Lot. Trail to be determined after reconnaissance by the Leaders.
55	Nighttime Bat Walk in the Twin Creeks Area	7:30 PM	9:30 PM	Follow chiropterologist (= person who studies bats) Gary McCracken and his bat team to learn about bats, their ecology, distributions, feeding, mating behaviors, and why it is important and economically beneficial to preserve them. You'll use some high-tech gadgetry that will allow you to listen to them echolocating to hunt insects. Short, easy walk. Bring warm clothes and a flashlight (preferably with a red light). DT: 10 min.	None provided.	AG - Twin Creeks Pavilion off Cherokee Orchard Road
56	Owl Prowl at Mynatt Park	9:00 PM	10:30 PM	In one of our most popular events, you'll listen and learn about the night predators that reign supreme after the sun goes down. This 2-hour Owl Prowl is guided by Karen LaMere. Bring warm clothes and flashlight (preferably with a red light). Short, easy walk. DT: 15 min. Meet at vending/ bathroom area.	None provided. Carpool needed.	W - Mynatt Park parking area off of Cherokee Orchard Road to begin carpool to Roaring Fork and Rainbow Falls Trailhead parking area.

Thursday All Day						
57	Birding and Wildflower Motorcade from Sugarlands to Cades Cove	7:30 AM	1:00 PM	Plant and bird naturalists will lead this motorcade from Sugarlands to Cades Cove with stops along the loop to explore birds and wildflowers in their varied habitats, including pine-oak forests, streams and wetlands, and open fields. Several short, easy walks. Bring binoculars, lunch, water, rain gear, and comfortable walking shoes. DT: 10 min.	None provided. Carpool needed.	AC - Sugarlands Visitor Center - Bus Parking Lot
58	Birding from Newfound Gap to Clingmans Dome	7:00 AM	1:00 PM	Join experienced birders to look and listen for spring migrants and Appalachian residents at high elevations along Clingmans Dome Road. Short, easy walks. Bring binoculars, lunch, water, rain gear, and comfortable walking shoes. DT: 45 min.	None provided. Carpool needed.	AA - Rockefeller Memorial at Newfound Gap to rendezvous and discuss carpool.
59	Forest Forensics at Fighting Creek Gap	8:30 AM	4:30 PM	Join John Johnson and Ken McFarland as they analyze clues of natural and human-induced impacts on trees and forests. The journey will include stops at different vegetation biomes to discuss their distributions on the landscape and evaluate their long-term survival in the wake of factors such as climate change or fire. Short, easy walks en route. Bring lunch, water, rain gear, and comfortable walking shoes. DT: 15 min.	Vans provided	L - Fighting Creek Gap. Logistics: Provided transportation will pick you up at Fighting Creek Gap and take you along US 441 to Carlos Campbell Overlook, Chimneys Picnic Area, Chimney Tops Trailhead, Newfound Gap, Indian Gap, and the Spruce-fir Trail.

60	"Tom Trillium" Patrick Memorial Trillium & Violet Tour	8:30 AM	4:30 PM	<p>Tom Patrick was a botanist with the Georgia Department of Natural Resources from 1986 until his passing last year, 2019. He was well-known for his deep knowledge and love of the native flora and habitats of the Southeast and he loved to share his knowledge with others. He led hikes during the Wildflower Pilgrimage for over 40 years, from his grad school days at The University of Tennessee in the 1970's, until his passing. Trilliums were Tom's special interest and his research topic in grad school, so much so that friends called him "Tom Trillium." This pilgrimage event is one that Tom Trillium developed over the years and would lead every year. Onward, we will continue to offer it and dedicate it to his memory; but, as he wouldn't really like us fussin' over him, we will spend the day happily searching for and learning about lots of different Trillium and Violet species at sites that he strung together for pilgrims to see the most species! It will be led by some of Tom's friends and colleagues who led hikes with him in the past. This trip has short, easy walks. Bring a hand lens, lunch, water, rain</p>	None provided. Carpool needed.	P - Greenbrier Road-Carpool from first parking lot on the right 200 feet from Route 321
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61	Wildflower and Wildfire Walk at the Chimney Tops	8:00 AM	4:30 PM	The November 2016 Chimney Tops 2 Fire originated on the north peak of Chimney Tops, spreading northward into the Sugarlands Valley over the next several days. Follow the trail as it ascends through an unburned, northern hardwood forest with a splendid display of spring wildflowers, ending at an observation platform 1/4-mile from the peaks. Elevation gain 1,400 ft. Strenuous, 3.5 mile walk. DT: 10 min.	Vans provided	AC - Sugarlands Visitor Center - Bus Parking Lot. Logistics: Provided transportation will drop you off at the Chimney Tops Trail Trailhead and then pick you back up at the end of the day to return you to Sugarlands Visitor Center.
62	Wildflower Hike at Abrams Falls Trail - Long Version	9:30 AM	4:30 PM	Stroll along this river trail to discover wildflowers like gay wings, which flourish in this limestone valley. View one of the Park's more picturesque waterfalls. Elevation change: 500' ascent. A 5-mile, moderate hike. Bring lunch, water, rain gear, and comfortable walking shoes. DT: 75 min.	None provided.	A - Abrams Falls parking Area in Cades Cove

63	Wildflower Hike at Meigs Creek and Curry Mountain Trails Loop	8:30 AM	4:30 PM	Numerous species of wildflowers are scattered along this trail as you intermittently pass through several wet and dry habitats with the many stream crossings. On the upper, drier ridges you'll see short-leaf pine, white pine, mountain laurel, huckleberries, oaks, maples and their associated wildflowers; but, as you move through the wetter coves and across creeks you'll see hemlock, pawpaw, lots of ferns, and seersucker sedge (plantain-leaved sedge). An 8.7-mile, strenuous one-way hike from the Metcalf Bottoms to the Sinks via Meigs Mountain and Curry Mountain trails. Sixteen non-bridge stream crossings and waterfalls await! Elevation change: 1,400' ascent. Bring lunch, water, rain gear, and comfortable walking shoes. DT: 40 min.	None provided. Carpool needed.	U - Metcalf Bottoms Picnic Shelter off of Little River Road (North Parking Area). Logistics: Meet at Metcalf Bottoms, carpool in as few cars as possible to The Sinks. Drive back to Metcalf Bottoms and begin your hike up Curry Mountain Trail over Meigs Mountain, and down Meigs Creek trail.
64	Wildflower Hike at Old Settlers Trail - Long version	8:30 AM	4:30 PM	Walking through these former homesteads and cemeteries, discover the many wildflowers now growing in the abandoned fields and among the stone chimneys and fences. In this longer version of the hike, if you make it as far as Lindsey Cemetery before you turn around, you will have done 9 miles in the end! Elevation change: 700' ascent. A 6 to 9-mile, strenuous hike. Bring lunch, water, rain gear, and comfortable walking shoes. DT: 30 min.	None provided. Carpool needed.	Q - Greenbrier Road. Logistics: Meet at picnic area 2.5 miles from Route 321, carpool in as few cars as possible to the Old Settlers Trailhead. Hike out and back and carpool back to your cars at the picnic area.
Thursday AM						

66	Birding at the Townsend Wye - Chestnut Tops Trail and more	7:30 AM	11:30 AM	Explore different habitats around the Townsend Wye from the perspective of a bird. We will watch the antics of northern rough-winged swallows by the bridge, check on the eastern phoebes who nest along the river, search the banks for little tail-bobbing Louisiana water thrushes, and venture up the Chestnut Tops trail to look for and listen to a variety of spring migrants. Bring binoculars, water, rain gear, and comfortable walking shoes. DT: 45 min.	None provided.	AD - Townsend Wye on Little River Road
67	Birding from Sugarlands to Newfound Gap	7:30 AM	11:30 AM	Join expert birders to search for spring migrants and Appalachian residents starting at Sugarlands and ending at Newfound Gap. Bring binoculars and rain gear. Short, easy walks. DT: 5 min.	None provided. Carpool needed.	G - City Parking Lot on Regan Drive By Gatlinburg Fire Station
68	Birding on Schoolhouse Gap Trail	7:30 AM	11:30 AM	Scan the trees along a stream for warblers, vireos, American goldfinch, and the scarlet tanager. You'll look and listen for these notable spring birds, their nests, and songs. Bring binoculars, water, rain gear, and comfortable walking shoes. DT: 45 min.	None provided. Carpool needed.	AD - Townsend Wye on Little River Road. Leaders may elect to travel from here and if so will organize carpooling.
69	Aquatic Insect Diversity Walk at Twin Creeks	9:30 AM	11:45 AM	Learn to collect and identify a variety of insects in pristine streams. Enjoy short walks on different order streams to learn about the preferred habitats of different insects with Park entomologist (= someone who studies insects) Becky Nichols. Short, easy walk. DT: 10 min.	None provided.	AG - Twin Creeks Gravel Parking Lot off of Cherokee Orchard Road

70	Black Bear and Wild Hogs in the Smokies - Jakes Creek	8:15 AM	11:30 AM	Walk with David Whitehead, retired Tennessee Wildlife Resources Agency Manager, and Dr. Tim Gaudin, mammologist at the University of Tennessee at Chattanooga, as they describe the life history, tracking signs, human impacts, and environmental issues of black bears and wild hogs in the Southern Appalachians. A 2 to 3-mile, easy walk. DT: 30 min.	None provided.	R - Jakes Creek Trailhead passed Elkmont Campground. The upper parking area that is 0.1 mile passed the main parking area.
71	Fern Walk at Little River above Elkmont	8:30 AM	11:45 AM	Have you ever seen an adder's tongue, sang pointer, or the hitchhiking southern lady? Do you understand what parts of ferns or fern allies are leaves and what parts are stems? Come see a variety of the Park's more common ferns and fern allies and learn about their structures, how they grow, reproduce, and about their biodiversity in the Park. Bring a hand lens. A 2-mile, easy walk. DT: 30 min.	None provided.	S - Little River Trailhead passed Elkmont Campground

72	Hikin' for Lichens on the Spruce-Fir Nature Trail	8:30 AM	11:45 AM	Come explore the fascinating world of lichens and the surprising roles these symbiotic organisms play in our world. Estimated to cover a respectable 7%-8% of the Earth's land surface, these organisms are largely unknown to most people, even though they are found all around us. We will introduce the basics of lichen growth forms, habitats, functions, and morphology as we hike along the trail. Participants will learn how to identify the major lichen growth forms and will be shown basic collecting techniques to assist them in discovering these interesting organisms for themselves. Bring a hand lens and comfortable walking shoes. An easy 1 mile walk. DT: 45 min.	None provided. Carpool needed.	AA - Rockefeller Memorial at Newfound Gap. Logistics: After meeting at the Memorial, carpool in as few cars as possible up Clingman's Dome Road ~2.5 miles to the Spruce-fir Nature Trail Parking Area on your left (very limited parking).
73	Nature Journaling at Metcalf Bottoms Picnic Area	8:30 AM	11:30 AM	Art Stupka and Aaron Sharp were early naturalists who documented the biological diversity of the Smokies by keeping journals. Today's nature journals combine sketching, writing, and mixed media to record observations and reflections. Bring an unlined journal and join Mary Priestley, an avid nature journalist, to make a lasting memory of the Pilgrimage and other natural world experiences. DT: 40 min. Art supplies can be obtained at Arrowmont School of Art and Crafts in Gatlinburg.	None provided.	U - Metcalf Bottoms Picnic Shelter off of Little River Road (North Parking Area)

74	Spiders Glorious!	8:45 AM	11:45 AM	Join Kefyn Catley, professor emeritus of Western Carolina University, to meet and greet some of the amazing spiders of the Smokies. Come explore the world's dominant terrestrial predators and learn about their role in maintaining healthy ecosystems. Learn to identify spiders in the field by morphology, web structure, and behavioral characters and discover how their unique use of silk and venom has driven their impressive diversity throughout time. A 10 or 14X hand lens will be very useful. DT: 15 min.	None provided.	L - Fighting Creek Gap on Fighting Creek Road. Logistics: Meet at Fighting Creek Gap Trailhead.
75	Photography of Flowers Using Point and Shoot	8:15 AM	11:30 AM	Learn how to improve your wildflower images with a point and shoot camera. Authors Jack Carman (Wildflowers of Tennessee) and Robert Hutson (Great Smoky Mountain Wildflowers: When and Where to Find Them) give hands-on instruction in composition and photo techniques. Bring hiking boots, a point and shoot camera, and a tripod. A 2-mile, easy walk. DT: 15 min.	None provided.	AB - Sugarlands Visitor Center Training Room - park in 3rd lot on right. Logistics: Meet at Training Room in basement of bathroom facility adjacent to the Sugarlands Visitor Center.

76	Photography of Landscapes	7:00 AM	11:30 AM	<p>Join local Nature and Wildlife Photographer Barry Spruce for a morning of landscape photography in the beautiful Cades Cove valley. Meet in Townsend and carpool up to the cove, and capture picturesque, early-morning landscapes, including Sparks Lane, Abrams and Mill Creeks, Rich Mountain and early morning fog if present that day. Barry can help you with setup at key locations and tips for better results with the current lighting. He will move the group from one location to another during the morning capturing each spot and moment in time. Please be sure to wear appropriate hiking shoes and apparel suited for the season and terrain of creeks, trails, and fields. You may want to also prepare by having bug spray, sunglasses, hat and water. For best results bring the following photography gear - Tripod, camera, wide angle and shorter telephoto lenses. DT: 45 min.</p>	None provided. Carpool needed.	Cades Cove Gallery, 7843 E. Lamar Alexander Pkwy, Townsend TN
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77	Them Crazy Bones	9:30 AM	11:45 AM	<p>What's the difference between antlers and horns? Did you know moles have a fake thumb? Can you tell what an animal eats based on its teeth? Who has a bigger head, a cow or a pig? Explore vertebrate biology in a new way by examining the skulls and skeletons of native and domesticated fauna. Look under a turtle's shell, see what it takes for a bird to fly, pet a vulture; all without the risk of getting bitten or sprayed. Come discover the exciting world of osteology with biologist Chris Brown's bone collection. DT: 20 min.</p>	None provided.	<p>AH - UT Field Station at Greenbrier. Directions: Just south of Greenbriar Rd, turn left (north) onto Old Hills Rd from Hwy 321. Make left on Tudor Rd, find a place to park, and walk on up the road to the field station. Be aware that the walk up to the station will be strenuous, but it is very short.</p>
78	Tour the GSMNP Natural History Museum at Twin Creeks	9:30 AM	11:00 AM	<p>Come tour the natural history collections that have been used to document the biodiversity of the GSMNP since its beginnings. In this "behind locked doors" tour of the GSMNP Natural History Museum, you will see specimens of mammals, birds (including the now-extinct passenger pigeon), fungi, insects, and plants and learn about how they are prepared, stored, cataloged, and their importance to the Park! DT: 10 min.</p>	None provided.	<p>AF - Twin Creeks Science and Education Center off Cherokee Orchard Road. Logistics: Park in the Twin Creeks Public Parking Area, cross the street, and walk up the short trail to the south end of the Science and Education Center.</p>

79	Become Trained as a GSMNP Citizen Scientist	8:30 AM	11:45 AM	Tennessee and North Carolina are home to approximately 1.5 million plant specimens. To make a permanent record of a plant species location, a specimen is collected, pressed, mounted on a paper sheet, and stored in a herbarium. To make each plant's information available globally, a local and international digitizing effort is underway. This program introduces you to this National Science Foundation-sponsored effort to digitize and make available these specimens. Come and learn about these specimens and how to properly handle them, become trained on their digitization (anyone can do it!), and contribute to this massive effort. DT: 10 min.	None provided.	AF - Twin Creeks Science and Education Center off Cherokee Orchard Road. Logistics: Park in the Twin Creeks Public Parking Area, cross the street, and walk up the short trail to the south end of the Science and Education Center.
80	Wildflower Hike at Cove Hardwood Nature Trail	8:30 AM	11:30 AM	Cove Hardwood Forests are one of the most biologically diverse communities in North America and this easy to access old growth example is a great place to see a lot of different wildflowers as well as trees, shrubs, and vines. There are more species of wildflowers along this short, easy walk than just about any place else in the Park, making it a must for those wanting to see and learn about spring wildflowers like dwarf ginseng, showy orchis, fringed phacelia, several trillium species, golden saxifrage (can you spot this tiny little plant?), wild ginger, and the list goes on... Short, easy walk. DT: 25 min.	None provided.	F - Chimneys Picnic Area. Logistics: Meet at Cove Hardwood Nature Trail.

81	Wildflower Hike at Kanati Fork Trail	8:45 AM	11:45 AM	An exceptional site to see a lot of different species of spring ephemeral wildflowers including painted trillium, Clinton lily, foam flower, Indian cucumber root, brook lettuce, and Canada mayflower as well as many of the more common species in the Park. Before you reach Thomas Divide, turn around after a mile or so, when the group is ready. A 2-mile, moderate walk. DT: 45 min.	None provided. Carpool recommended.	AA - Rockefeller Memorial at Newfound Gap to Rendezvous. Logistics: After rendezvousing with your fellow hikers at the Gap, drive 8.4 miles west along Newfound Gap Road to the Kanati Fork Trailhead, which parking will be on your left. Since there are only ~15 parking spots at the Kanati Fork Trailhead, you need to carpool from Newfound Gap.
82	Lady Slippers at Bud Ogle	8:15 AM	11:45 AM	Walking through these former homesteads, you'll see a splendid variety of wildflowers and American chestnut tree remnants in the reforested fields. Pink and Yellow Lady's slippers are often found along this trail in abundance and are sure to delight seekers of these standouts! Leaders will discuss the differences between these species (other than color) and their life histories and pollination syndromes. Short, easy walk with one creek crossing at the beginning - caution, the rocks there are often very slippery. DT: 10 min.	None provided.	X - Noah "Bud Ogle" parking area of Cherokee Orchard Road

83	Wildflower Hike on the Appalachian Trail from Indian Gap to Newfound Gap	8:30 AM	11:45 AM	Pass from the closed canopy of the old growth spruce-fir forest into the open canopy of a pristine beech gap forest where early spring ephemeral wildflowers, like trout lilies, more spring beauties than you can imagine, white phacelia, various trilliums, and more abound because of protections afforded from feral hog exclosures. A 1.5-mile moderate walk. Elevation change 500'. DT: 45 min.	None provided. Carpool needed.	AA - Rockefeller Memorial at Newfound Gap. Logistics: Leave as many cars as possible at Newfound Gap and take a few cars to Indian Gap Rd Parking / Road Prong Trailhead, which is up Clingmans Dome Road about one mile and on the right.
84	Wildflower Hike on the Riverview Quiet Walkway	8:00 AM	11:45 AM	This easy walk from Newfound Gap Road to West Prong Little Pigeon River has a rich diversity of wildflowers, trees and shrubs, and plant communities. the trail follows the level flood plain of the river through groves of hard-woods and passes some seepages. This is one of the only places in the Park to see silky willow. A 2-mile, easy walk. DT: 10 min.	Vans provided	AC - Sugarlands Visitor Center - Bus Parking Lot. Logistics: Meet your group at Sugarlands in the bus parking lot and take provided transportation to the Riverview Quiet Walkway, across from Huskey Gap Trail on Newfound Gap Road. After hiking the loop trail transportation will return you to your car at Sugarlands Visitor Center.
85	Yoga Class at Walker Sisters Cabin	8:45 AM	11:45 AM	Join a yoga instructor and biologist, Kelly Daniels, on a 2-mile journey to the Walker Sisters Cabin on the Metcalf Bottoms Trail to exercise and relax in this serene environment before hiking 2-miles back. Bring an exercise mat or large towel and water. Beginners welcome! A 4-mile moderate hike. DT: 40 min.	None provided.	U - Metcalf Bottoms Picnic Area off Little River Road (North Parking Area)
Thursday PM						

86	Fern Walk at Greenbrier Cove	1:30 PM	4:30 PM	Come join expert pteridologists (people who study ferns) on this walk to learn more about the fern species in the Park. Leaders will show you the parts of ferns, how to distinguish different forms, and their life cycle and ecology in the Southern Appalachian Mountains. Bring a hand lens, if you have one. A 2-mile, easy walk. DT: 30	None provided. Carpool needed.	M - Greenbrier Ranger Station. Logistics: Leaders will choose different sites to visit throughout Greenbrier Cove.
87	Fungi of Alum Cave Trail	1:30 PM	4:30 PM	Fungi are essential organisms in the nutrient and life cycles within ecosystems. Learn from expert mycologists about fungal biology, reproduction, natural history and their importance in the forest ecosystem. Leaders will also discuss classification and edible vs. poisonous fungi. A 2 to 3-mile, easy walk. DT: 35 min.	None provided.	B - Alum Cave Trailhead--8.7 miles south on US 441 from Sugarlands Visitor Center
90	Become a Pioneer Pilgrim by learning how to use the iNaturalist App!	1:15 PM	4:45 PM	iNaturalist is a free app that was created by workers at California Academy of Sciences. If you've been to the Pilgrimage over the last couple of years, you have certainly seen pilgrims using it. It simultaneously helps users to determine what organisms they are observing while at the same time collects biodiversity data that can be used by scientists, conservation workers, and land managers in the GSMNP. Bring your smart phones and come join us to learn how to use the app to discover the natural world around you and collect data for the Park! DT: 5 min.	None provided.	G - City Parking Lot on Regan Drive By Gatlinburg Fire Station. Logistics: You will meet in the City to download the app and discuss the basics before heading up to Cherokee Orchard and Baskins Creek Trail.

91	How do we Measure the Impacts of Climate Change?	1:30 PM	4:45 PM	Ever wonder how scientists make predictions about how plants will respond to a changing climate that includes warming, altered rainfall patterns, and elevated carbon dioxide levels? Will such changes force the Wildflower Pilgrimage organizers to change the dates and locations of their hikes because plants respond differently to future climates? In this program, Dr. Howard Neufeld, from Appalachian State University, will demonstrate the use of easy-to-use scientific instruments for measuring the photosynthesis, water expenditure, and plant stress. After a brief introduction and explanation, pilgrims will have the opportunity to use or observe these instruments to make their own measurements on a variety of plants in the Park, then we'll discuss the findings and the future! DT: 45 min - 60 min.	None provided.	I - Collins Creek Pavilion on Newfound Gap Road.
93	History of Fighting Creek and Forks of the River	1:30 PM	4:30 PM	Hike with a GSMNP Ranger to learn the history of these communities and see remnants of days gone by. A 2-mile easy walk. DT: 15 min.	None provided.	R - Jakes Creek Trailhead passed Elkmont Campground. The upper parking area that is 0.1 mile passed the main parking area.

94	History of the Walker Sisters Cabin and Little Greenbrier School	12:30 PM	4:30 PM	Meet National Park Service volunteer Pat Carbone at Metcalf Bottoms and walk to the Little Greenbrier Schoolhouse. There, join long-time school marm Robin Goddard on a stroll back in time to discover the history of the schoolhouse and the famous Walker Sisters. A 3.4-mile moderate hike. DT: 40 min.	None provided.	U - Metcalf Bottoms Picnic Area off Little River Road (South Parking Area)
95	Lore of the Herbs of Appalachia in the Smokies	1:00 PM	4:30 PM	Several hundred years ago, European settlers came to the mountains bringing their plant-lore, and plants, with them. When those settlers arrived in the Appalachias, they found that the indigenous peoples had their own traditions, like sassafras tea as a spring tonic. It's estimated that the Cherokee have identified around 600 medicinal plants, around 250 or so which have crossed into general knowledge. Discover some of the herb lore of many plants that have been passed down through the ages with expert naturalists! DT: 40 min.	None provided.	U - Metcalf Bottoms Picnic Area off Little River Road (North Parking Area)
96	Moss Walk Along Sugarlands Mountain Trail at Mt. Collins	1:30 PM	4:30 PM	Discover the distinctive flora of the high elevation mosses and liverworts along the trail. Learn about their adaptations to higher elevation habitats and how they differ from low elevation species. Bring a hand lens. A 1 to 2-mile, moderate walk. DT: 45 min.	None provided. Carpool Needed.	AA - Rockefeller Memorial at Newfound Gap to Rendezvous to carpool. Logistics: Carpool in as few cars as possible to the Fork Ridge Trailhead parking area along Clingman's Dome Rd. Get onto the Appalachian Trail to walk a short ways to Sugarlands Mountain Trail for your hike.

97	Parasites! An Important Component of Our Hidden Biodiversity	1:30 PM	4:30 PM	Parasite Ecologist Ricky Fiorillo from Georgia-Gwinnett College will discuss the natural history and ecology of a too often unappreciated component of our hidden biodiversity while guiding you through a hands-on dissection searching for worm parasites in a natural host. Each participant will examine the heart, liver, and digestive tract of common freshwater fish species for these fascinating organisms. See for yourself just how interesting, and beautiful parasites can be! And, why they are an important component of our ecosystem. (Minimum age to perform dissections is High School, but anyone can watch!) DT: 20 min.	None provided.	AH - UT Field Station at Greenbrier. Directions: Just south of Greenbriar Rd, turn left (north) onto Old Hills Rd from Hwy 321. Make left on Tudor Rd, find a place to park, and walk on up the road to the field station. Be aware that the walk up to the station will be strenuous, but it is very short.
98	Explore the Wonders of Animal Communication at Twin Creeks	12:30 PM	3:30 PM	Why do birds sing? Did you know that some fireflies lie to each other? Do bees do the tango or fox trot when they are excited? Loren Hayes and Monica Miles will lead a discussion, games, and walk focused on why and how animals communicate in the Great Smoky Mountains National Park. Bring your dancing shoes (hiking boots). DT: 25 min.	None provided.	O - Greenbrier Road at picnic pavillion, 3.5 miles from Route 321. Two hikes will meet at this location, check with the leaders to make sure you are with the correct group.

99	Photography of Flowers Motorcade	1:15 PM	4:30 PM	Travel with authors Jack Carman (Wildflowers of Tennessee) and Robert Hutson (Great Smoky Mountain Wildflowers: When and Where to Find Them) to nearby wildflower locations to learn basic to advanced techniques for photographing wildflowers. They provide hands-on instruction and assistance. Short, easy walks. DT: 5 min.	None provided. Carpool needed.	G - City Parking Lot on Regan Drive By Gatlinburg Fire Station
100	Streams, Springs, and Leaves; What Hides Beneath?	1:15 PM	4:30 PM	Meet at the main picnic shelter for a short herpetology discussion on identification, life history, and ethics before embarking on a hike to search for some of Tennessee's greatest treasures (salamanders of course!). Hopefully, we'll get a chance to spot some of their scaly relatives along the way in this mid-elevation environment where densely forested streams and seeps meet open woodlands. Lots of fun for pilgrims of all ages! Every amphibian-based hike will begin and end with decontamination, and a short discussion of survey protocols/ethics in order to protect these species from the spread of dangerous pathogens. DT: 60 min.	None provided.	J - Cosby Picnic Area off TN Route 32--Hiker Parking lot on left. Logistics: After meeting, leaders will decide on a trail to use. Share this large pavillion with another program.

101	Wild about ants! Discovering ants of the smokies	1:30 PM	4:30 PM	It is estimated that there are over 20,000 ant species worldwide. Approximately 133 of those species live in Tennessee! Come explore the fascinating world of ants with Dr. DeAnna Beasley from the University of Tennessee at Chattanooga. We'll set up stations to observe food preferences, learn about different ant behaviors, and conclude with a short hike to seek out different ant homes. DT: 60 min.	None provided.	J - Cosby Picnic Area, off TN Route 32--Hiker Parking lot on left. Logistics: Meet at pavillion for classroom-like discussion before your hike. Share this large pavillion with another program.
102	Sketching Wildflowers at Twin Creeks Pavillion	1:15 PM	4:30 PM	View wildflowers through the eyes of botanist-artist Maurice Edwards, featured artist at the 2013 Spring Wildflower Pilgrimage. Bring your own art materials. Short, easy walk. DT: 10 min. medwards@netscape.com.	None provided.	AG - Twin Creeks Pavilion off Cherokee Orchard Road
103	Tree Identification for Beginners at Greenbrier Picnic Pavilion	1:15 PM	4:30 PM	This event is aimed at novices who want to be able to look at trees and shrubs and better understand these ubiquitous organisms. Here, you will spend a little time in a classroom-like tutorial at picnic tables where you will learn the basics of leaf shapes and patterns. Then, you'll take a short hike to apply and reinforce what you have learned. Bring a hand lens or magnifying glass, if you have them (they are not required). A moderate 1.5-mile walk. DT: 25 min.	None provided.	O - Greenbrier Road at picnic pavillion, 3.5 miles from Route 321. Two hikes will meet at this location, check with the leaders to make sure you are with the correct group.

104	Wildflower and Cascades Walk Along Lynn Camp Prong	1:45 PM	4:45 PM	Stroll with expert botanists and conservationists along Middle Prong Trail on your way to Lynn Camp Prong Cascades while you stop to enjoy many of the spring ephemeral wildflowers, ferns, and flowering trees of the Smokies. A 4-mile moderate walk. DT: 45 min.	None provided.	AE - End of Tremont gravel road. From the Townsend Wye take Laurel Creek Rd to Tremont Rd, continuing after it turns to gravel until it terminates at the Lynn Camp Prong Trailhead.
105	Wildflower Hike at Cove Hardwood Nature Trail	1:30 PM	4:45 PM	Cove Hardwood Forests are one of the most biologically diverse communities in North America and this easy to access old growth example is a great place to see a lot of different wildflowers as well as trees, shrubs, and vines. There are more species of wildflowers along this short, easy walk than just about any place else in the Park, making it a must for those wanting to see and learn about spring wildflowers like dwarf ginseng, showy orchis, fringed phacelia, several trillium species, golden saxifrage (can you spot this tiny little plant?), wild ginger, and the list goes on... Short, easy walk. DT: 25 min.	None provided.	F - Chimneys Picnic Area. Logistics: Meet at Cove Hardwood Nature Trail.
106	Wildflower Hike at Kanati Fork Trail	1:30 PM	4:45 PM	An exceptional site to see a lot of different species of spring ephemeral wildflowers including painted trillium, Clinton lily, foam flower, Indian cucumber root, brook lettuce, and Canada mayflower as well as many of the more common species in the Park. Before you reach Thomas Divide, turn around after a mile or so, when the group is ready. A 2-mile, moderate walk. DT: 45 min.	None provided. Carpool recommended.	AA - Rockefeller Memorial at Newfound Gap to Rendezvous. Logistics: After rendezvousing with your fellow hikers at the Gap, drive 8.4 miles west along Newfound Gap Road to the Kanati Fork Trailhead, which parking will be on your left. Since there are only ~15 parking spots at the Kanati Fork Trailhead, you need to carpool from Newfound Gap.

107	Wildflower Hike at Little River Above Elkmont	1:30 PM	4:45 PM	Walk up this former logging railroad bed and discover the tenacity of nature in recovering from the massive logging operations which cleared this valley early in the 20th century. Many species of wildflowers, ferns, and trees dot the landscape and are easily observable. Elevation change: 200' ascent. A 2-mile, very easy walk. DT: 30 min.	None provided.	S - Little River Trailhead passed Elkmont Campground
108	Wildflower Hike on the Appalachian Trail from Indian Gap to Newfound Gap	1:30 PM	4:45 PM	Pass from the closed canopy of the old growth spruce-fir forest into the open canopy of a pristine beech gap forest where early spring ephemeral wildflowers, like trout lilies, more spring beauties than you can imagine, white phacelia, various trilliums, and more abound because of protections afforded from feral hog exclosures. A 1.5-mile moderate walk. Elevation change 500'. DT: 45 min.	None provided. Carpool needed.	AA - Rockefeller Memorial at Newfound Gap. Logistics: Leave as many cars as possible at Newfound Gap and take a few cars to Indian Gap Rd Parking / Road Prong Trailhead, which is up Clingmans Dome Road about one mile and on the right.
109	Wildflower Hike on the Riverview Quiet Walkway	1:00 PM	4:45 PM	Accompany an all-star team of botanists and plant ecologists on a hike that has become a Pilgrimage tradition! This easy walk from Newfound Gap Road to West Prong Little Pigeon River has a rich diversity of wildflowers, trees and shrubs, and plant communities and all along the way you'll be treated to the musings of this notable cast. A 2-mile, easy walk. DT: 10 min.	Vans provided	AC - Sugarlands Visitor Center - Bus Parking Lot. Logistics: Meet your group at Sugarlands in the bus parking lot and take provided transportation to the Riverview Quiet Walkway, across from Huskey Gap Trail on Newfound Gap Road. After hiking the loop trail transportation will return you to your car at Sugarlands Visitor Center.

110	Wildflower Identification for Beginners at Chimneys Picnic Area	1:15 PM	4:30 PM	If you are new to this scene, or still don't understand the parts of flowers, leaves, and stems or how to look at and understand them on the trail, then this is the event for you! Come learn basic parts of flowers and leaves and how to use them for identifying wildflowers and trees. Bring pencil, paper, and hand lens (not required). Short, easy walk. DT: 25 min.	None provided.	F - Chimneys Picnic Area. Logistics: Meet at outdoor classroom above parking lot.
Thursday Evening						
111	Bugs at Light at Twin Creeks	8:30 PM	10:30 PM	If you want to see a lot really cool insects, join University of Tennessee at Chattanooga entomologist Stylianos Chatzimanolis (Dr. C) as he attracts nocturnal moths, beetles and a wide diversity of other insects using a black light. Dress warmly, bring a headlamp or flashlight with a red cover, and hand lens if you have them. No trail walking. This is a great event for people of all ages and any who are interested! DT: 10 min.	None provided.	AG - Twin Creeks Pavilion off Cherokee Orchard Road

112	Lichens at Night in the Smokies	8:00 PM	10:30 PM	Come explore the fascinating world of lichens at night! Many lichens produce secondary chemicals and metabolites that fluoresce brightly under UV light. Using handheld UV lights to scan tree trunks and rocks we will search for lichens with brilliant colors of yellow, orange, electric blue, and more on this unique lichen night walk. Bring a flashlight, warm clothes and comfortable walking shoes. There will be 4-5 UV lights that may be borrowed but if you have one bring it along. This will be a short, easy walk. DT: 10 min.	None provided.	AC - Sugarlands Visitor Center - Bus Parking Lot. Trail to be determined after reconnaissance by the Leaders.
113	Wildflowers By Light: Sights and Sounds at Night on Porters Creek Trail	7:00 PM	9:30 PM	Experience the Smokies like the folks who lived here. Join naturalists Annette Ranger and Doris Gove on a walk at dusk to the hiker's cabin to enjoy dinner on the porch. Along the way, you'll observe wildflowers closing along the trail as night falls and discuss why this happens. Also, see the sights and listen to sounds of the night wilderness as you eat. Bring your own food and beverage (NOT REQUIRED, but none supplied), warm clothes, flashlight (with red light/lens, if you can) and hand lens. Moderate 2-mile walk. DT: 30 min.	None provided.	N - Greenbrier Road Terminus at Porters Creek Trailhead--4.5 Miles from Route 321

114	The Hikers and Campers Who First Envisioned a National Park in the Smokies	7:30 PM	8:30 PM	Never underestimate hikers and wildflower lovers. Although prominent Asheville and Knoxville residents like David Chapman are given credit for pushing through a national park in the Great Smoky Mountains in 1934, backpacker Paul Fink, hikers Carlos Campbell, Dutch Roth, and the women of the Smoky Mountain Hiking Club changed history with their words, photography, and passion for these beautiful mountains. DT: 15 min.	None provided. No parking on site. Please park in the City Parking Garage: 526 Parkway, Gatlinburg, TN 37738	C - Arrowmont School of Arts and Crafts Turner Auditorium. No parking on site. Please park in the City Parking Garage: 526 Parkway, Gatlinburg, TN 37738
Friday All Day						
115	Birding and Wildflower Motorcade from Mynatt Park to Newfound Gap	7:30 AM	1:00 PM	Starting at a low elevation, plant and bird naturalists Fred Holtzclaw and Mary Feely guide the group to sites along US 441 to observe a diversity of birds and wildflowers as elevation increases. Short, easy walks. Bring binoculars, lunch, water, rain gear, and comfortable walking shoes. DT: 15 min.	None provided. Carpool needed.	W - Mynatt Park parking area off of Cherokee Orchard Road to begin carpool

116	Birding on Alum Cave Trail	7:00 AM	2:00 PM	Follow birders as you look and listen for early spring warbler migrants at Alum Cave. Along the way look and listen black-throated blue, black-throated green, and possibly blackburnian. This trail is great for early blue-headed vireos, and Southern Appalachian residents: black-capped chickadee, red-breasted nuthatch, winter wren. At the cave, we'll look and listen for peregrine falcons which nest in the area. Elevation change 1100'. A 4.6 mile strenuous hike. Bring binoculars, lunch, water, rain gear, and comfortable walking shoes. DT: 35 min.	None provided.	B - Alum Cave Trailhead--8.7 miles south on US 441 from Sugarlands Visitor Center
117	Wildflower and Wildfire Walk at the Chimney Tops	8:00 AM	4:30 PM	The November 2016 Chimney Tops 2 Fire originated on the north peak of Chimney Tops, spreading northward into the Sugarlands Valley over the next several days. Follow the trail as it ascends through an unburned northern hardwood forest with a splendid display of spring wildflowers, ending at an observation platform 1/4-mile from the peaks. Elevation gain 1,400 ft. Strenuous, 3.5-mile walk. DT: 10 min.	Vans provided	AC - Sugarlands Visitor Center - Bus Parking Lot. Logistics: Provided transportation will drop you off at the Chimney Tops Trail Trailhead and then pick you back up at the end of the day to return you to Sugarlands Visitor Center.
118	Wildflower Hike at Abrams Falls Trail - Long Version	9:30 AM	4:30 PM	Stroll along this river trail to discover wildflowers like gay wings which flourish in this limestone valley. View one of the Park's more picturesque waterfalls. Elevation change: 500' ascent. A 5-mile, moderate hike. Bring lunch, water, rain gear, and comfortable walking shoes. DT: 75 min.	None provided.	A - Abrams Falls Parking Area in Cades Cove

119	Wildflower Hike at Cucumber Gap Trail - Long version	8:30 AM	4:30 PM	Hike up Jakes Creek Trail to Cucumber Gap Trail and return via the Little River Trail where you will encounter a cove hardwood forest and enjoy many wildflowers along the way, like painted trillium, Dutchman's pipe, yellow-wood and pawpaw. Elevation change: 400'. A 5.4-mile, moderate hike. Bring lunch, water, rain gear, and comfortable walking shoes. DT: 30 min.	None provided.	R - Jakes Creek Trailhead passed Elkmont Campground. The upper parking area that is 0.1 mile passed the main parking area.
120	Wildflower Hike at Porters Creek Trail - Long version	8:30 AM	4:30 PM	Spend the day on one of the Park's most famous wildflower trails. See abundant wildflowers including painted trillium, vasey's trillium, phacelias, toothworts, spring beauties, liverleaf, bloodroots, showy orchis, phlox, black and blue cohosh, golden alexanders, foam flower, bishops cap, golden saxifrage, hearts-a-bustin, and many more. Pass old homesteads and a cemetery along this popular trail which leads to an old-growth cove hardwood forest. Follow Porters Creek Trail to its terminus at back country campsite number 31, before turning around and hiking out. A 7.2-mile moderate walk. DT: 30 min.	None provided.	N - Greenbrier Road Terminus at Porters Creek Trailhead--4.5 Miles from Route 321

121	Wildflower Hike on Huskey Gap, Cucumber Gap to Jakes Creek trail and the Avent Studio Cabin	8:15 AM	4:30 PM	PHYSICALLY CHALLENGING. Follow Doris Gove, author of Exploring the Appalachian Trail: Georgia, North Carolina, Tennessee, on a one way trek on Huskey Gap to Little River Trail to Cucumber Gap to Jakes Creek trail. Hikers may elect to take a short detour to the Mayna Treanor Avent Studio Cabin, once used as a retreat for the noted artist. Maximum elevation change 1,500'. A 6-mile strenuous one way hike. Bring lunch, water, rain gear, and comfortable walking shoes. See Backcountry Hike Suggestions. DT: 10 min.	Vans provided	AC - Sugarlands Visitor Center - Bus Parking Lot. Logistics: Provided transportation will drop you off at the Huskey Gap trailhead off 441 and pick you up at Jakes Trailhead in Elkmont to return you to your car at Sugarlands.
Friday AM						
122	Birding on Schoolhouse Gap Trail	7:30 AM	11:30 AM	Scan the trees along a stream for warblers, vireos, American goldfinch, and the scarlet tanager. You'll look and listen for these notable spring birds, their nests, and songs and signs. Bring binoculars, water, rain gear, and comfortable walking shoes. DT: 45 min.	None provided. Carpool needed.	AD - Townsend Wye on Little River Road. Leaders may elect to travel from here and if so will organize carpooling.
123	Birding the East End of Cades Cove	7:30 AM	10:00 AM	Explore bird diversity in a variety of habitats along the Loop Road at the east end of Cades Cove. See and hear birds of the forest and streamside. Birders of all levels welcome. Bring binoculars. A 1.5-mile easy walk. DT: 60 min.	None provided.	D - Cades Cove Campground Store Parking Lot

124	Skills of a Naturalist: Observing Nature	8:00 AM	11:15 AM	Nature is a remarkable teacher, and naturalists tap into their knowledge with observational methods of study. Through patience, awareness, and the five senses, you can discover a great deal about the natural world. Valuable tips and simple tools explored in this program will help cultivate and sharpen those skills needed to derive the greatest benefit from time spent outdoors and begin your journey as an amateur naturalist. Please bring a small notebook or journal and writing implement of choice. DT: 10 min.	None provided.	AG - Twin Creeks Pavilion off Cherokee Orchard Road. Pilgrims and Leaders will share this large Pavillion with another group.
125	Become a Pioneer Pilgrim by learning how to use the iNaturalist App!	8:15 AM	11:45 AM	iNaturalist is a free app that was created by workers at California Academy of Sciences. If you've been to the Pilgrimage over the last couple of years, you have certainly seen pilgrims using it. It simultaneously helps users to determine what organisms they are observing while at the same time collects biodiversity data that can be used by scientists, conservation workers, and land managers in the GSMNP. Bring your smart phones and come join us to learn how to use the app to discover the natural world around you and collect data for the Park! DT: 5 min.	None provided.	G - City Parking Lot on Regan Drive By Gatlinburg Fire Station. Logistics: You will meet in the City to download the app and discuss the basics before heading up to Cherokee Orchard and Baskins Creek Trail.

126	Native People's Use of Nature's Garden at Twin Creeks Pavilion	8:15 AM	11:30 AM	Gather at the cook fire with Native American Karen LaMere (Ho-Chunk) and listen to an oral history which has been passed down through the generations by America's indigenous people. Taste and discover ingenious uses of native plants. Short, easy walk. DT: 10 min.	None provided.	AG - Twin Creeks Pavilion off Cherokee Orchard Road. Pilgrims and Leaders will share this large Pavillion with another group.
127	Sketching Wildflowers at Collins Creek Pavilion	8:45 AM	11:45 AM	View wildflowers through the eyes of botanist-artist Maurice Edwards, featured artist at the 2013 Spring Wildflower Pilgrimage. Bring your own art materials. Short, easy walk. medwards@netscape.com.DT: 45 min - 60 min.	None provided.	I - Collins Creek Pavilion on Newfound Gap Road
128	Tour the GSMNP Natural History Museum at Twin Creeks	9:30 AM	11:00 AM	Come tour the natural history collections that have been used to document the biodiversity of the GSMNP since its beginnings. In this "behind locked doors" tour of the GSMNP Natural History Museum, you will see specimens of mammals, birds (including the now-extinct passenger pigeon), fungi, insects, and plants and learn about how they are prepared, stored, cataloged, and their importance to the Park! DT: 10 min.	None provided.	AF - Twin Creeks Science and Education Center off Cherokee Orchard Road. Logistics: Park in the Twin Creeks Public Parking Area, cross the street, and walk up the short trail to the south end of the Science and Education Center.
129	Black Bear and Wild Hogs in the Smokies - Jakes Creek	8:15 AM	11:30 AM	Walk with David Whitehead, retired Tennessee Wildlife Resources Agency Manager as he describes the life history, tracking signs, human impacts, and environmental issues of black bears and wild hogs in the Southern Appalachians. A 2 to 3-mile, easy walk. DT: 30 min.	None provided.	R - Jakes Creek Trailhead passed Elkmont Campground. The upper parking area that is 0.1 mile passed the main parking area.

130	Aquatic Insect Diversity Walk at Twin Creeks	9:30 AM	11:45 AM	Learn to collect and identify a variety of insects in pristine streams. Enjoy short walks on different order streams to learn about the preferred habitats of different insects with the University of Tennessee at Chattanooga's entomologist (= someone who studies insects) Stelios Chatzimanolis. Short, easy walk. DT: 10 min.	None provided.	AG - Twin Creeks Gravel Parking Lot off of Cherokee Orchard Road
131	Forest Foods and Pharmacy at Metcalf Bottoms Picnic Area - North	8:30 AM	11:30 AM	Learning wild plants that are used for medicines, foods, dyes, and tools is known as the study of ethnobotany, the relationship between plants & people. Hike along a moderate trail in the Metcalf Bottoms Picnic Area with expert naturalists to discover the identity of many plants and trees that were used by the people of the Smoky Mountains as part of their daily lives. DT: 40 min.	None provided.	U - Metcalf Bottoms Picnic Area off Little River Road (North Parking Area)

132	Photography of Landscapes	7:00 AM	11:30 AM	Join local Nature and Wildlife Photographer Barry Spruce for a morning of landscape photography in the beautiful Cades Cove valley. Meet in Townsend and carpool up to the cove, and capture picturesque, early-morning landscapes, including Sparks Lane, Abrams and Mill Creeks, Rich Mountain and early morning fog if present that day. Barry can help you with setup at key locations and tips for better results with the current lighting. He will move the group from one location to another during the morning capturing each spot and moment in time. Please be sure to wear appropriate hiking shoes and apparel suited for the season and terrain of creeks, trails, and fields. You may want to also prepare by having bug spray, sunglasses, hat and water. For best results bring the following photography gear - Tripod, camera, wide angle and shorter telephoto lenses. DT: 45 min.	None provided. Carpool needed.	Cades Cove Gallery, 7843 E. Lamar Alexander Pkwy, Townsend TN
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133	Wildflower Hike at Rainbow Falls	8:15 AM	11:30 AM	Join expert botanists on Rainbow Falls Trails to experience a variety of wildflower diversity. Begin your trip by walking along an area that was once home to the apple orchard owned by M.M. Whittle from 1930 to 1960. A few old trees still bloom and produce apples. After about a mile you will begin to follow Le Conte Creek passed rosebay rhododendron, galax, and tea berry. Once along the creek, begin to lookout for other interesting wildflowers that reside in this area! At about 2.0 miles you will hit a walking bridge and turn around. A 4-mile, steep walk, but you may turn around anytime you like. DT: 20 min.	None provided.	AI - Rainbow Falls and Trillium Gap Parking Area. From the parkway in Gatlinburg, turn at traffic light #8 and follow Historic Nature Trail into Great Smoky Mountains National Park. Continue passed the Noah "Bud" Ogle homesite to the clearly signed Rainbow Falls parking area. Logistics: Meet the group at the Rainbow Falls Trailhead.
134	Wildflower Hike at Trillium Gap Trail	8:15 AM	11:30 AM	Explore the Trillium Gap Trail with expert botanists and conservationists. Along the way you will cross creeks and wind through a forest of locusts, maples, and tulip trees. During your hike you will experience a variety of wildflower diversity including, toothwort, hepatica, putty root orchids, striped pipsissewa, and downy rattlesnake plantain. A 2.8 mile, moderate walk. DT: 20 min.	None provided.	AI - Rainbow Falls and Trillium Gap Parking Area. From the parkway in Gatlinburg, turn at traffic light #8 and follow Historic Nature Trail into Great Smoky Mountains National Park. Continue passed the Noah "Bud" Ogle homesite to the clearly signed Rainbow Falls parking area. Logistics: Meet the group at the Rainbow Falls Trailhead.
135	Wildflower Hike at Chestnut Top Trail	8:30 AM	11:45 AM	One of the grandest wildflower displays in the Smokies! This narrow trail offers lots of wildflower species in great abundance and has become a leader favorite. A 2-mile, moderate walk. DT: 45 min.	None provided.	AD - Townsend Wye on Little River Road

136	Lady Slippers at Bud Ogle	8:15 AM	11:45 AM	Walking through these former homesteads, you'll see a splendid variety of wildflowers and American chestnut tree remnants in the reforested fields. Pink and Yellow Lady's slippers are often found along this trail in abundance and are sure to delight seekers of these standouts! Leaders will discuss the differences between these species (other than color) and their life histories and pollination syndromes. Short, easy walk with one creek crossing at the beginning - caution, the rocks there are often very slippery. DT: 10 min.	None provided.	X - Noah "Bud Ogle" parking area of Cherokee Orchard Road
137	Wildflower Hike at Old Settlers Trail - Short version	8:30 AM	11:45 AM	Walking through these former homesteads and cemeteries, discover the many wildflowers now growing in the abandoned fields and among the stone chimneys and fences. Hike up the trail to near Copeland Divide, then return. Elevation change: 200' ascent. A 3 mile, moderate walk. DT: 30 min.	None provided. Carpool needed.	Q - Greenbrier Road. Logistics: Meet at picnic area 2.5 miles from Route 321, carpool in as few cars as possible to the Old Settlers Trailhead. Hike out and back and carpool back to your cars at the picnic area.
138	Wildflower Hike on the Appalachian Trail from Indian Gap to Newfound Gap	8:00 AM	11:45 AM	Pass from the closed canopy of the old growth spruce-fir forest into the open canopy of a pristine beech gap forest where early spring ephemeral wildflowers, like trout lilies, more spring beauties than you can imagine, white phacelia, various trilliums, and more abound because of protections afforded from feral hog exclosures. A 1.5-mile moderate walk. Elevation change 500'. DT: 45 min.	None provided. Carpool needed.	AA - Rockefeller Memorial at Newfound Gap. Logistics: Leave as many cars as possible at Newfound Gap and take a few cars to Indian Gap Rd Parking / Road Prong Trailhead, which is up Clingmans Dome Road about one mile and on the right.

139	Wildflower Hike on the Riverview Quiet Walkway	8:00 AM	11:45 AM	This easy walk from Newfound Gap Road to West Prong Little Pigeon River has a rich diversity of wildflowers, trees and shrubs, and plant communities. the trail follows the level flood plain of the river through groves of hard-woods and passes some seepages. This is one of the only places in the Park to see silky willow. A 2-mile, easy walk. DT: 10 min.	Vans provided	AC - Sugarlands Visitor Center - Bus Parking Lot. Logistics: Meet your group at Sugarlands in the bus parking lot and take provided transportation to the Riverview Quiet Walkway, across from Huskey Gap Trail on Newfound Gap Road. After hiking the loop trail transportation will return you to your car at Sugarlands Visitor Center.
140	Land Navigation with Maps and GPS for Beginners on Lumber Ridge Trail	8:30 AM	11:45 AM	Learn land navigation using a variety of techniques such as tried and true paper maps, compass, and pace counts and also more modern methods, like GPS devices and smart phones. During this event you'll also learn how to navigate, record routes, find waypoints and destinations. Bring your GPS device or smart phone and a compass and we'll bring the paper maps! A 1-2 mile, east walk. Limit 25 people. DT: 40 min.	None provided.	AJ - Lumber Ridge Trailhead, near the Great Smoky Mountains Institute at Tremont
141	Wildflowers, Folklore and History of Big Greenbrier	8:30 AM	11:45 AM	Discover a diversity of wildflowers and hear stories of days gone by with Park Volunteer Frances Hensley, also known as Granny Frannie. A 3.5-mile, moderate hike. DT: 30 min.	None provided.	N - Greenbrier Road Terminus at Porters Creek Trailhead--4.5 Miles from Route 321

142	Them Crazy Bones	9:30 AM	12:00 PM	<p>What's the difference between antlers and horns? Did you know moles have a fake thumb? Can you tell what an animal eats based on its teeth? Who has a bigger head, a cow or a pig?</p> <p>Explore vertebrate biology in a new way by examining the skulls and skeletons of native and domesticated fauna. Look under a turtle's shell, see what it takes for a bird to fly, pet a vulture; all without the risk of getting bitten or sprayed. Come discover the exciting world of osteology with biologist Chris Brown's bone collection.</p> <p>DT: 20 min.</p>	None provided.	<p>AH - UT Field Station at Greenbrier. Directions: Just south of Greenbriar Rd, turn left (north) onto Old Hills Rd from Hwy 321. Make left on Tudor Rd, find a place to park, and walk on up the road to the field station. Be aware that the walk up to the station will be strenuous, but it is very short.</p>
Friday PM						
143	Birding Along Cades Cove Loop Road	1:00 PM	4:30 PM	<p>Explore bird diversity in a variety of habitats along the Loop Road at the east end of Cades Cove. See and hear birds of the forest and streamside. Birders of all levels welcome. Bring binoculars. A 1.5-mile easy walk. DT: 60 min.</p>	None provided.	D - Cades Cove Campground Store Parking Lot

144	How do we Measure the Impacts of Climate Change?	1:30 PM	4:45 PM	<p>Ever wonder how scientists make predictions about how plants will respond to a changing climate that includes warming, altered rainfall patterns, and elevated carbon dioxide levels? Will such changes force the Wildflower Pilgrimage organizers to change the dates and locations of their hikes because plants respond differently to future climates? In this program, Dr. Howard Neufeld, from Appalachian State University, will demonstrate the use of easy-to-use scientific instruments for measuring the photosynthesis, water expenditure, and plant stress. After a brief introduction and explanation, pilgrims will have the opportunity to use or observe these instruments to make their own measurements on a variety of plants in the Park, then we'll discuss the findings and the future! DT: 45 min - 60 min.</p>	None provided.	I - Collins Creek Pavilion on Newfound Gap Road
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145	Become Trained as a GSMNP Citizen Scientist	1:30 PM	4:45 PM	Tennessee and North Carolina are home to approximately 1.5 million plant specimens. To make a permanent record of a plant species location, a specimen is collected, pressed, mounted on a paper sheet, and stored in a herbarium. To make each plant's information available globally, a local and international digitizing effort is underway. This program introduces you to this National Science Foundation-sponsored effort to digitize and make available these specimens. Come and learn about these specimens and how to properly handle them, become trained on their digitization (anyone can do it!), and contribute to this massive effort. DT: 10 min.	None provided.	AF - Twin Creeks Science and Education Center off Cherokee Orchard Road. Logistics: Park in the Twin Creeks Public Parking Area, cross the street, and walk up the short trail to the south end of the Science and Education Center.
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146	Parasites! An Important Component of Our Hidden Biodiversity	1:30 PM	4:30 PM	Parasite Ecologist Ricky Fiorillo from Georgia-Gwinnett College will discuss the natural history and ecology of a too often unappreciated component of our hidden biodiversity while guiding you through a hands-on dissection searching for worm parasites in a natural host. Each participant will examine the heart, liver, and digestive tract of common freshwater fish species for these fascinating organisms. See for yourself just how interesting, and beautiful parasites can be! And, why they are an important component of our ecosystem. (Minimum age to perform dissections is High School, but anyone can watch!) DT: 20 min.	None provided.	AH - UT Field Station at Greenbrier. Directions: Just south of Greenbriar Rd, turn left (north) onto Old Hills Rd from Hwy 321. Make left on Tudor Rd, find a place to park, and walk on up the road to the field station. Be aware that the walk up to the station will be strenuous, but it is very short.
147	Wild about ants! Discovering ants of the smokies	1:30 PM	4:30 PM	It is estimated that there are over 20,000 ant species worldwide. Approximately 133 of those species live in Tennessee! Come explore the fascinating world of ants with Dr. DeAnna Beasley from the University of Tennessee at Chattanooga. We'll set up stations to observe food preferences, learn about different ant behaviors, and conclude with a short hike to seek out different ant homes. DT: 60 min.	None provided.	J - Cosby Picnic Area, off TN Route 32--Hiker Parking lot on left. Logistics: Meet at pavillion for classroom-like discussion before your hike. Two programs will meet at this location, check with the leaders to make sure you are with the correct group.

148	Native People's Use of Nature's Garden at Twin Creeks Pavilion	1:15 PM	4:30 PM	Gather at the cook fire with Native American Karen LaMere (Ho-Chunk) and listen to an oral history which has been passed down through the generations by America's indigenous people. Taste and discover ingenious uses of native plants. Short, easy walk. DT: 10 min.	None provided.	AG - Twin Creeks Pavilion off Cherokee Orchard Road
149	Photography (Advanced) of Flowers with SLR Cameras	1:15 PM	4:30 PM	Learn how to improve your wildflower images with SLR. Authors Jack Carman (Wildflowers of Tennessee) and Robert Hutson (Great Smoky Mountain Wildflowers: When and Where to Find Them) give a short visual presentation, then migrate outside for hands-on instruction in composition and photo technique. Bring hiking boots, a SLR camera, and a tripod. A 2-mile, easy walk. DT: 15 min.	None provided.	AB - Sugarlands Visitor Center Training Room - park in 3rd lot on right. Logistics: Meet at Training Room in basement of bathroom facility adjacent to the Sugarlands Visitor Center.
150	Fern Walk at Little River above Elkmont	1:30 PM	4:30 PM	Have you ever seen an adder's tongue, sang pointer, or the hitchhiking southern lady? Do you understand what parts of ferns or fern allies are leaves and what parts are stems? Come see a variety of the Park's more common ferns and fern allies and learn about their structures, how they grow, reproduce, and about their biodiversity in the Park. Bring a hand lens. A 2-mile, easy walk. DT: 30 min.	None provided.	S - Little River Trailhead passed Elkmont Campground

151	Fungal Roles in Forest Ecology at Cosby Picnic Area	1:30 PM	4:30 PM	Fungi are essential organisms in the nutrient and life cycles within ecosystems. Learn from expert mycologists about fungal biology, reproduction, natural history and their importance in the forest ecosystem. Leaders will also discuss classification and edible vs. poisonous fungi. A 2 to 3-mile, easy walk. DT: 60 min.	None provided.	J - Cosby Picnic Area off TN Route 32--Hiker Parking lot on left. Logistics: After meeting, leaders will decide on a trail to use. Two programs will meet at this location, check with the leaders to make sure you are with the correct group.
152	Moss Walk Along Injun Creek Trail in Greenbrier	1:30 PM	4:30 PM	Discover the elegant forms of moss, liverwort, and hornwort and how to distinguish between these three ancient lineages of land plants! We will also discuss ways to separate some of the species that we encounter as well as how they reproduce in the Park! Bring a hand lens if you have one. At most, a 3-mile easy walk. DT: 30 min.	None provided.	M - Greenbrier Ranger Station.

153	Smoky's Salamanders; From Peaks to Seeps	1:15 PM	4:30 PM	Join us as we travel from high to mid elevation in search of Tennessee's slimy jewels. Hikes are short, but time will fly as we discover a true diversity of salamanders on this motorcade through the Smokys. Learn why Tennessee is the salamander capital of the world! Meet at the City Parking Lot in Gatlinburg to carpool, travel to our first stop at the Chimneys Picnic area to see high elevation salamander communities and the Smoky's mountain only endemic amphibian species. We'll conclude at the Sugarlands Visitor Center (Ash Hopper Branch) to see a vastly different community of mid-low elevation salamanders. We'll be out rain or shine, and be prepared for wet/muddy conditions. Every amphibian based hike will begin and end with decontamination, and a short discussion of survey protocols/ethics in order to protect these species from the spread of dangerous pathogens. DT: 5 min.	None provided. Carpool needed.	G - City Parking Lot on Regan Drive By Gatlinburg Fire Station
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154	Tree and Shrub Identification Walk at Metcalf Bottoms	1:15 PM	4:30 PM	More than an introduction to terms, you'll learn characters used in the identification of woody plants - trees, shrubs, and woody vines. You learn how to observe and differentiate different leaf and bark characteristics to distinguish between genera and species of common and lesser common woody species in the Park. If you have them, bring your field guides and hand lenses (but they are not required!). A 2-mile, easy stroll among lots of woody species. DT 40 min.	None provided.	U - Metcalf Bottoms Picnic Area off Little River Road (South Parking Area)
156	Wildflower and Cascades Walk Along Lynn Camp Prong	1:45 PM	4:30 PM	Stroll with expert botanists and conservationists along Middle Prong Trail on your way to Lynn Camp Prong Cascades while you stop to enjoy many of the spring ephemeral wildflowers, ferns, and flowering trees of the Smokies. A 4-mile moderate walk. DT: 45 min.	None provided.	AE - End of Tremont gravel road. From the Townsend Wye take Laurel Creek Rd to Tremont Rd, continuing after it turns to gravel until it terminates at the Lynn Camp Prong Trailhead.
157	Wildflower Hike at Chestnut Top Trail	1:30 PM	4:30 PM	One of the grandest wildflower displays in the Smokies! This narrow trail offers lots of wildflower species in great abundance and has become a leader favorite. A 2-mile, moderate walk. DT: 45 min.	None provided.	AD - Townsend Wye on Little River Road

158	Wildflower Hike at Cove Hardwood Nature Trail	1:30 PM	4:30 PM	Cove Hardwood Forests are one of the most biologically diverse communities in North America and this easy to access old growth example is a great place to see a lot of different wildflowers as well as trees, shrubs, and vines. There are more species of wildflowers along this short, easy walk than just about any place else in the Park, making it a must for those wanting to see and learn about spring wildflowers like dwarf ginseng, showy orchis, fringed phacelia, several trillium species, golden saxifrage (can you spot this tiny little plant?), wild ginger, and the list goes on... Short, easy walk. DT: 25 min.	None provided.	F - Chimneys Picnic Area. Logistics: Meet at Cove Hardwood Nature Trail.
159	Wildflower Hike at Kanati Fork Trail	1:30 PM	4:45 PM	An exceptional site to see a lot of different species of spring ephemeral wildflowers including painted trillium, Clinton lily, foam flower, Indian cucumber root, brook lettuce, and Canada mayflower as well as many of the more common species in the Park. Before you reach Thomas Divide, turn around after a mile or so, when the group is ready. A 2-mile, moderate walk. DT: 45 min.	None provided. Carpool recommended.	AA - Rockefeller Memorial at Newfound Gap to Rendezvous. Logistics: After rendezvousing with your fellow hikers at the Gap, drive 8.4 miles west along Newfound Gap Road to the Kanati Fork Trailhead, which parking will be on your left. Since there are only ~15 parking spots at the Kanati Fork Trailhead, you need to carpool from Newfound Gap.

160	Wildflower Hike at Porters Creek Trail - Short version	1:30 PM	4:45 PM	Spend a few hours on one of the Parks most famous wildflower trails. Hike up Porters Creek trail to either Brushy Mountain Trail (at 1 mile) or continue on to Fern Branch Falls (just short of two miles) before turning around. See abundant wildflowers including painted trillium and many more. Pass old homesteads and a cemetery along this popular trail which leads to an old-growth cove hardwood forest. A 2-4 mile easy walk. DT: 30 min.	None provided.	N - Greenbrier Road Terminus at Porters Creek Trailhead--4.5 Miles from Route 321
161	Wildflower Hike at Ramsey Cascades Trail - Short version	1:30 PM	4:45 PM	A 4 to 6-mile round trip (not going all the way to the falls) will allow you to hike among the rich forests of the Ramsey Cascades Trail. You will hike along the mountain rivers and experience a rich display of wildflowers, ferns, Fraser's sedge. Try to make it at least 2.5-miles to a hobbit-like tunnel of rhododendrons that canopy the trail. Should the group decide to continue up the steep ascent you will enter the older growth forest of large tulip poplar, black cherry, eastern hemlock, yellow birch, and silver bells untouched by selective logging in the area. Elevation gain: ~1000 ft. DT: 30 min.	None provided. Carpool needed.	P - Greenbrier Road. Logistics: Meet at first parking lot on the right, 200 ft from 321. From there, carpool to Ramsey Cascades Trailhead

162	Explore the Wonders of Animal Communication at Collins Creek	12:30 PM	3:30 PM	Why do birds sing? Did you know that some fireflies lie to each other? Do bees do the tango or fox trot when they are excited? Loren Hayes and Monica Miles will lead a discussion, games, and walk focused on why and how animals communicate in the Great Smoky Mountains National Park. Bring your dancing shoes (hiking boots). DT: 45 min - 60 min.	None provided.	I - Collins Creek Pavilion on Newfound Gap Road. Logistics: This large pavillion will be shared with another program.
Friday Evening						
163	Elegant Terrain: A Celebration in Music & Verse of the People, Flora & Fauna, and Landscapes of the Southern Highlands	7:30 PM	8:30 PM	Listen to renowned folk musician, singer & storyteller Lee Knight weave his magic with the assistance of nature-related poems written and read by the well-known naturalist, regional historian & poet George Ellison. The Great Smokies & Southern Appalachians are not so high & intimidating as the much younger Rockies & Himalayas, but this 250 million year old mountain range is a wealth of biodiversity unsurpassed by any other mountain range in North America. Join Lee and George as they pay homage to this exceptional region. DT: 15 min.	None provided. No parking on site. Please park in the City Parking Garage: 526 Parkway, Gatlinburg, TN 37738	C - Arrowmont School of Arts and Crafts Turner Auditorium. No parking on site. Please park in the City Parking Garage: 526 Parkway, Gatlinburg, TN 37738

164	Nighttime Bat Walk in the Twin Creeks Area	7:30 PM	9:30 PM	Follow chiropterologist (= person who studies bats) Gary McCracken and his bat team to learn about bats, their ecology, distributions, feeding, mating behaviors, and why it is important and economically beneficial to preserve them. You'll use some high-tech gadgetry that will allow you to listen to them echolocating to hunt insects. Short, easy walk. Bring warm clothes and a flashlight (preferably with a red light). DT: 10 min.	None provided.	AG - Twin Creeks Pavilion off Cherokee Orchard Road
165	Owl Prowl at Mynatt Park	9:00 PM	10:30 PM	In one of our most popular events, you'll listen and learn about the night predators that reign supreme after the sun goes down. This 2-hour Owl Prowl is guided by Karen LaMere. Bring warm clothes and flashlight (preferably with a red light). Short, easy walk. DT: 15 min. Meet at vending/ bathroom area.	None provided. Carpool needed.	W - Mynatt Park parking area off of Cherokee Orchard Road to begin carpool to Roaring Fork and Rainbow Falls Trailhead parking area.
166	Bugs at Light at Ash Hopper Branch	8:30 PM	10:30 PM	If you want to see a lot really cool insects, join University of Tennessee at Chattanooga entomologist Stylianos Chatzimanolis (Dr. C) as he attracts nocturnal moths, beetles and a wide diversity of other insects using a black light. Dress warmly, bring a headlamp or flashlight with a red cover, and hand lens if you have them. No trail walking. This is a great event for people of all ages and any who are interested! DT: 10 min.	None provided.	AC - Sugarlands Visitor Center - Bus Parking Lot. Logistics: Meet here to follow your leader to the trailhead.

167	Star Gazing at Foothills Parkway	8:30 PM	10:30 PM	Experience the natural history of the universe in a truly dark sky and with Richard and Stephen Clements of the Barnard Astronomical Society of Chattanooga. Learn the basics of skywatching, star names, and constellations. Then examine the wonders of the deep sky through a variety of optical instruments. Bring warm clothes but not a flashlight. Bring binoculars if you have them. Very short, easy walk. (Not recommended for children under 10.). DT: 60 min.	None provided.	AK- Foothills Parkway pull off: Pull off is located 27 miles from Sugarlands along Foothills Parkway on the left. See Meeting Location Sheets on the website for satellite images of the meeting location.
Saturday All Day						
168	Birding for Wood Warblers of the Smokies	7:30 AM	1:00 PM	Join a group of Tennessee birders to study behaviors, habitats, and songs of this often brilliantly colored family of birds as we search low and mid elevations. Bring binoculars, lunch, water, rain gear, and comfortable walking shoes. Short, easy walks. DT: 5 min.	None provided. Carpool needed.	G - City Parking Lot on Reagan Drive By Gatlinburg Fire Station

169	Birding on Alum Cave Trail	7:00 AM	2:00 PM	Follow birders as you look and listen for early spring warbler migrants at Alum Cave. Along the way look and listen black-throated blue, black-throated green, and possibly blackburnian. This trail is great for early blue-headed vireos, and Southern Appalachian residents: black-capped chickadee, red-breasted nuthatch, winter wren. At the cave, we'll look and listen for peregrine falcons which nest in the area. Elevation change 1100'. A 4.6 mile strenuous hike. Bring binoculars, lunch, water, rain gear, and comfortable walking shoes. DT: 35 min.	None provided.	B - Alum Cave Trailhead--8.7 miles south on US 441 from Sugarlands Visitor Center
170	Fungi, Lichen, and Wildflower Hike at Ramsey Cascades Trail	8:30 AM	4:30 PM	Join professional mycologists, ecologists, and botanists to discover the rich diversity of wildflowers, fungi as well as how these unrelated organisms interact in the forest. An 8-mile strenuous hike. Elevation gain: ~1000 ft. Bring lunch, water, rain gear, and comfortable walking shoes. DT: 30 min.	None provided. Carpool needed.	P - Greenbrier Road. Logistics: Meet at first parking lot on the right, 200 ft from 321. From there, carpool to Ramsey Cascades Trailhead

171	Lost Grasslands of the Smokies	9:30 AM	3:00 PM	<p>This all day field trip will discuss and highlight the grasslands and historically open woodlands of Great Smoky Mountains National Park. The first part of the day will include a hike along the Goldmine Trail to view the Lynn Hollow prescribed burn unit to see old-growth shortleaf pine-oak woodlands that are in the process of being restored to their historical open, grassy condition. Next we will visit the restored meadows at the southwest end of Cades Cove. Finally, we'll stop at a roadside vantage point to discuss high-elevation grass balds. Leaders will highlight plant diversity and incorporate thorough discussions of fire ecology, tree-ring records, native grassland wildlife. DT: 60 min.</p>	None provided. Carpool needed.	E - Cades Cove at Information Kiosk Before Loop Road Entrance
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172	A Salamander Picnic	10:00 AM	3:00 PM	<p>Come with us on this all-day event as we hunt for the Smoky's hidden treasures just out of site. This hike starts out at Chimneys Picnic area, where we hope to find the Smoky's only endemic salamander (and many more!). Bring a lunch and join us for part two at the Metcalf Bottoms Picnic area. Our main focus will be the broad diversity of Tennessee's salamanders from high to low elevation, how to identify them, their life history, and threats to their long-term viability. Depending on the weather, we also hope to find some scaly friends as we move from mountains to foothills. Come armed with questions, and shoes you don't mind getting wet. Every amphibian-based hike will begin and end with decontamination, and a short discussion of survey protocols/ethics in order to protect these species from the spread of dangerous pathogens. DT: 5 min.</p>	None provided. Carpool needed.	G - City Parking Lot on Reagan Drive By Gatlinburg Fire Station
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173	Appalachian Trail off Clingmans Dome to Goshen Prong down to Little River and finish at Elkmont - 13 miles.	8:00 AM	4:30 PM	PHYSICALLY CHALLENGING! Come join Joey Shaw and Ed Lickey for a one-way hike from one of the highest elevations in the Park to one of the lowest. These two younguns have always led some of the most physically challenging events of the Pilgrimage. After a three year hiatus, they are once again ready to take pilgrims on cardiovascular, wildflower-identifying, fungi learnin', ecological journey from spruce fir forests and their wildflowers, through rich cove hardwoods, seepy communities, and dry ridges. You might be treated to a trailside song by Ed while you eat your lunch. DT: 10 min.	Vans provided	AC - Sugarlands Visitor Center - Bus Parking Lot. Logistics: Provided transportation will drop you off at Clingmans Dome and pick you up at the end of the day at the Little River Trailhead at Elkmont to return back to the Sugarlands Visitor Center.
174	Wildflower Hike from Sweat Heifer Trail to Kephart Prong	8:45 AM	5:30 PM	PHYSICALLY CHALLENGING. After a short 1.7-mile uphill climb along the Appalachian Trail, descend along Sweat Heifer Creek Trail to Kephart Prong Trail and back to 441. Along this 2600 ft. descent you'll pass from spruce-fir forests through incredibly rich cove-hardwood forests and ultimately end with a stroll along the Oconaluftee River. Elevation change: 400' ascent and 2,650' descent. In total, this is a 7.5-mile, strenuous hike. Bring lunch, water, rain gear, and comfortable walking shoes. DT: 45 min.	None provided. Carpool needed.	AA - Rockefeller Memorial at Newfound Gap. Before beginning this hike, some people need to volunteer to shuttle cars to the take out while others wait. Take some cars to Kephart Prong Trailhead, near mile marker 23 along 441 (as many as will be required to bring everyone back to Newfound Gap) and return to Newfound Gap to begin your hike. After your hike, return everyone to Newfound Gap.

175	Big Trees Hike at Albright Grove	8:00 AM	4:30 PM	Hike to one of the most magnificent groves of large, old-growth trees in the park. See massive tulip poplars, fraser magnolias, silverbells, maples, and hemlocks (the latter, unfortunately mostly now dead because of the adelgid). Pass wonderful displays of wildflowers and an 1889 cabin made of chestnut and see if you can spot any epiphytes, like the elderberry way up in the canopy of a large tree! Elevation change: 1,600' ascent. A 6.5-mile, moderate hike. Bring lunch, water, rain gear, and comfortable walking shoes. DT: 10min.	Van shuttle provided.	AC - Sugarlands Visitor Center - Bus Parking Lot. Logistics: Provided transportation will take you to the Maddron Bald Trailhead, off of Hwy 321. Between 4:00-4:30 you'll return to the Maddron Bald Trailhead where your shuttle will be waiting to return you to Sugarlands.
Saturday AM						
176	Birding from Sugarlands to the Cove Hardwood Nature Trail	7:30 AM	11:30 AM	Join expert birders to search for spring migrants and Appalachian residents at Sugarlands Visitor Center, and look for the blackthroated blue warbler at Cove Hardwood Nature Trail. Bring binoculars and rain gear. Short, easy walks. DT: 5 min.	None provided. Carpool needed.	G - City Parking Lot on Reagan Drive By Gatlinburg Fire Station
177	Black Bear and Wild Hogs in the Smokies - Jakes Creek	8:15 AM	11:30 AM	Walk with David Whitehead, retired Tennessee Wildlife Resources Agency Manager, and Monica Miles, University of Tennessee at Chattanooga, as they describe the life history, tracking signs, human impacts, and environmental issues of black bears and wild hogs in the Southern Appalachians. A 2 to 3-mile, easy walk. DT: 30 min.	None provided.	R - Jakes Creek Trailhead passed Elkmont Campground. The upper parking area that is 0.1 mile passed the main parking area.

178	Photography Workshop	8:15 AM	11:30 AM	This program starts with a short visual presentation, then goes outdoors for hands-on instruction in composition and photo techniques by authors Jack Carman (Wildflowers of Tennessee) and Robert Hutson (Great Smoky Mountain Wildflowers: When and Where to Find Them). Bring hiking boots, a camera, and a tripod. A 2-mile, easy walk. DT: 15 min.	None provided.	AB - Sugarlands Visitor Center Training Room - park in 3rd lot on right. Logistics: Meet at Training Room in basement of bathroom facility adjacent to the Sugarlands Visitor Center.
179	Birding on Schoolhouse Gap Trail	7:30 AM	11:30 AM	Scan the trees along a stream for warblers, vireos, American goldfinch, and the scarlet tanager. You'll look and listen for these notable spring birds, their nests, and songs and signs. Bring binoculars, water, rain gear, and comfortable walking shoes. DT: 45 min.	None provided. Carpool needed.	AD - Townsend Wye on Little River Road. Leaders may elect to travel from here and if so will organize carpooling.
180	Become a Pioneer Pilgrim by learning how to use the iNaturalist App!	8:15 AM	11:45 AM	iNaturalist is a free app that was created by workers at California Academy of Sciences. If you've been to the Pilgrimage over the last couple of years, you have certainly seen pilgrims using it. It simultaneously helps users to determine what organisms they are observing while at the same time collects biodiversity data that can be used by scientists, conservation workers, and land managers in the GSMNP. Bring your smart phones and come join us to learn how to use the app to discover the natural world around you and collect data for the Park! DT: 5 min.	None provided.	G - City Parking Lot on Reagan Drive By Gatlinburg Fire Station. Logistics: You will meet in the City to download the app and discuss the basics before heading up to Cherokee Orchard and Baskins Creek Trail.

181	What's in a Name: Botanical Latin for Beginners	8:30 AM	11:30	On this leisurely hike we will not only identify a variety of beautiful wildflowers but also learn the story of the names behind the beauties. We'll discuss the importance of botanical names and why learning them can be as much fun (or more so!) as knowing the common ones. We'll show how a little basic Latin helps to better understand various aspects of the plant and its relationship to others. And pronunciation? No more difficult than saying Geranium, Iris, and Magnolia! Previous experience not required. DT: 25 min.	None provided.	F - Chimneys Picnic Area. Logistics: Meet at the outdoor classroom.
182	Wildcrafting Walk in the Smokies	8:00 AM	11:30 AM	Wildcrafting is a term for the age-old practice of collecting plant materials in their natural habitat for food, medicine, and craft. Originally such activity was the only grocery store, medicine chest, and hardware store, available to man. But eventually the "found materials" became a source of income to buy what could not be "gleaned" from nature. Walk with expert naturalists on one of the easy 'quiet walkways' to an old homelace, and discover plants along the way that have been used for medicines, foods, dyes, crafts, and tools by the people of the Smoky Mountains. DT: 10 min.	Vans provided.	AC - Sugarlands Visitor Center - Bus Parking Lot. Provided transportation will take you to the Big White Oak Quiet Walkway on Little River Road.

183	Sketching Wildflowers at Collins Creek Pavilion	8:45 AM	11:45 AM	View wildflowers through the eyes of botanist-artist Maurice Edwards, featured artist at the 2013 Spring Wildflower Pilgrimage. Bring your own art materials. Short, easy walk. medwards@netscape.com. DT 45 min - 60 min.	None provided.	I - Collins Creek Pavilion on Newfound Gap Road
184	Them Crazy Bones	9:30 AM	11:45 AM	What's the difference between antlers and horns? Did you know moles have a fake thumb? Can you tell what an animal eats based on its teeth? Who has a bigger head, a cow or a pig? Explore vertebrate biology in a new way by examining the skulls and skeletons of native and domesticated fauna. Look under a turtle's shell, see what it takes for a bird to fly, pet a vulture; all without the risk of getting bitten or sprayed. Come discover the exciting world of osteology with biologist Chris Brown's bone collection. DT: 20 min.	None provided.	AH - UT Field Station at Greenbrier. Directions: Just south of Greenbrier Rd, turn left (north) onto Old Hills Rd from Hwy 321. Make left on Tudor Rd, find a place to park, and walk on up the road to the field station. Be aware that the walk up to the station will be strenuous, but it is very short.
185	Moss Walk Along Injun Creek Trail in Greenbrier	8:30 AM	11:30 AM	Discover the elegant forms of moss, liverwort, and hornwort and how to distinguish between these three ancient lineages of land plants! We will also discuss ways to separate some of the species that we encounter as well as how they reproduce in the Park! Bring a hand lens if you have one. At most, a 3-mile easy walk. DT: 30 min.	None provided.	M - Greenbrier Ranger Station.

186	Fungal Roles in Forest Ecology at Cosby Picnic Area	8:30 AM	11:30 AM	Fungi are essential organisms in the nutrient and life cycles within ecosystems. Learn from expert mycologists about fungal biology, reproduction, natural history and their importance in the forest ecosystem. Leaders will also discuss classification and edible vs. poisonous fungi. A 2 to 3-mile, easy walk. DT: 60 min.	None provided.	J - Cosby Picnic Area off TN Route 32--Hiker Parking lot on left. Logistics: After meeting, leaders will decide on a trail to use.
187	Exotic Plants and Wildflower Walk on the Gatlinburg Trail	8:30 AM	11:30 AM	Since the 1700s, botanists have used the term "exotic" to describe plant species from elsewhere introduced into a new area. During this hike you'll focus on learning to identify exotic plant species, the differences between naturalized exotic species and those that aren't, what makes a species "invasive," and about the negative impact these species have on our native plants and animals. A 2-3 mile, easy walk. DT: 15 min.	None provided.	Z - End of Park Headquarters Road--Outside of gated area
188	Wildflower Hike at Chestnut Top Trail	8:30 AM	11:45 AM	One of the grandest wildflower displays in the Smokies! This narrow trail offers lots of wildflower species in great abundance and has become a leader favorite. A 2-mile, moderate walk. DT: 45 min.	None provided.	AD - Townsend Wye on Little River Road

189	Wildflower Hike at Cove Hardwood Nature Trail	8:30 AM	11:30 AM	Cove Hardwood Forests are one of the most biologically diverse communities in North America and this easy to access old growth example is a great place to see a lot of different wildflowers as well as trees, shrubs, and vines. There are more species of wildflowers along this short, easy walk than just about any place else in the Park, making it a must for those wanting to see and learn about spring wildflowers like dwarf ginseng, showy orchis, fringed phacelia, several trillium species, golden saxifrage (can you spot this tiny little plant?), wild ginger, and the list goes on... Short, easy walk. DT: 25 min.	None provided.	F - Chimneys Picnic Area. Logistics: Meet at Cove Hardwood Nature Trail.
190	Wildflower Hike at Cucumber Gap Trail - Short version	8:30 AM	11:45 AM	Walk through a secondary cove hardwood forest and enjoy the rich diversity of wildflowers. This trip begins on Jakes Creek and terminates near Tulip Branch on Cucumber Gap Trail, then returns. A 2-mile, moderate walk. DT: 30 min.	None provided.	R - Jakes Creek Trailhead passed Elkmont Campground. The upper parking area that is 0.1 mile passed the main parking area.
191	Wildflower Hike at Huskey Gap Trail	8:00 AM	11:45 AM	Walk the old trail that connected the settlers of Sugarlands Valley and Little River as you view the wildflower displays and homesites along the way. Elevation change: 500'. A 2-mile, moderate walk. DT: 10 min.	Vans provided	AC - Sugarlands Visitor Center - Bus Parking Lot. Provided transportation will drop you off at the Husky Gap Trailhead off of US 441 and then return you to Sugarlands Visitor Center at the end of your hike.

192	Wildflower Hike at Little River Above Elkmont	8:30 AM	11:45 AM	Walk up this former logging railroad bed and discover the tenacity of nature in recovering from the massive logging operations which cleared this valley early in the 20th century. Many species of wildflowers, ferns, and trees dot the landscape and are easily observable. Elevation change: 200' ascent. A 2-mile, very easy walk. DT: 30 min.	None provided.	S - Little River Trailhead passed Elkmont Campground
193	Lady Slippers at Bud Ogle	8:15 AM	11:45 AM	Walking through these former homesteads, you'll see a splendid variety of wildflowers and American chestnut tree remnants in the reforested fields. Pink and Yellow Lady's slippers are often found along this trail in abundance and are sure to delight seekers of these standouts! Leaders will discuss the differences between these species (other than color) and their life histories and pollination syndromes. Short, easy walk with one creek crossing at the beginning - caution, the rocks there are often very slippery. DT: 10 min.	None provided.	X - Noah "Bud Ogle" parking area of Cherokee Orchard Road

194	Wildflower Hike at Porters Creek Trail - Short version	8:30 AM	11:45 AM	Spend a few hours on one of the Park's most famous wildflower trails. Hike up Porters Creek trail to either Brushy Mountain Trail (at 1 mile) or continue on to Fern Branch Falls (just short of two miles) before turning around. See abundant wildflowers including painted trillium and many more. Pass old homesteads and a cemetery along this popular trail which leads to an old-growth cove hardwood forest. A 2-4 mile easy walk. DT: 30 min.	None provided.	N - Greenbrier Road Terminus at Porters Creek Trailhead--4.5 Miles from Route 321
195	Wildflowers and Forest Ecology at Rainbow Falls	8:30 AM	11:45 AM	Did you know that the dominant tree species build soils, alter moisture regimes, and ultimately determine which wildflowers are present beneath them? Come on this hike to learn about forest ecology and how dominant trees and shrubs shape and change the landscape. Both Rainbow Falls Trail and Trillium Gap Trail are located near one another, it's up to the discretion of the leaders and pilgrims which hike you'd like to take. Short, easy walk through a couple of forested communities. DT: 20 min.	None provided.	AI - Rainbow Falls and Trillium Gap Parking Area. From the parkway in Gatlinburg, turn at traffic light #8 and follow Historic Nature Trail into Great Smoky Mountains National Park. Continue passed the Noah "Bud" Ogle homesite to the clearly signed Rainbow Falls parking area. Logistics: Meet the group at the Rainbow Falls Trailhead.
Friday PM						

196	Moss Walk Along Injun Creek Trail in Greenbrier	1:30 PM	4:30 PM	Discover the elegant forms of moss, liverwort, and hornwort and how to distinguish between these three ancient lineages of land plants! We will also discuss ways to separate some of the species that we encounter as well as how they reproduce in the Park! Bring a hand lens if you have one. At most, a 3-mile easy walk. DT: 30 min.	None provided.	M - Greenbrier Ranger Station.
197	Fern Walk at Little River above Elkmont	1:30 PM	4:30 PM	Have you ever seen an adder's tongue, sang pointer, or the hitchhiking southern lady? Do you understand what parts of ferns or fern allies are leaves and what parts are stems? Come see a variety of the Park's more common ferns and fern allies and learn about their structures, how they grow, reproduce, and about their biodiversity in the Park. Bring a hand lens. A 2-mile, easy walk. DT: 30 min.	None provided.	S - Little River Trailhead passed Elkmont Campground
198	Land Navigation with Maps and GPS for Beginners	1:30	4:45 PM	Learn land navigation using a variety of techniques such as tried and true paper maps, compass, and pace counts and also more modern methods, like GPS devices and smart phones. During this event you'll also learn how to navigate, record routes, find waypoints and destinations. Bring your GPS device or smart phone and a compass and we'll bring the paper maps! A 1-2 mile, east walk. Limit 25 people. DT: 40 min.	None provided.	AJ - Lumber Ridge Trailhead, near the Great Smoky Mountains Institute at Tremont

199	Wildflower Hike on the Appalachian Trail from Indian Gap to Newfound Gap	1:30 PM	4:45 PM	Pass from the closed canopy of the old growth spruce-fir forest into the open canopy of a pristine beech gap forest where early spring ephemeral wildflowers, like trout lilies, more spring beauties than you can imagine, white phacelia, various trilliums, and more abound because of protections afforded from feral hog exclosures. A 1.5-mile moderate walk. Elevation change 500'. DT: 45 min.	None provided. Carpool needed.	AA - Rockefeller Memorial at Newfound Gap. Logistics: Leave as many cars as possible at Newfound Gap and take a few cars to Indian Gap Rd Parking / Road Prong Trailhead, which is up Clingmans Dome Road about one mile and on the right.
200	Wildflower Hike at Porters Creek Trail - Short version	1:30 PM	4:45 PM	Spend a few hours on one of the Park's most famous wildflower trails. Hike up Porters Creek trail to either Brushy Mountain Trail (at 1 mile) or continue on to Fern Branch Falls (just short of two miles) before turning around. See abundant wildflowers including painted trillium and many more. Pass old homesteads and a cemetery along this popular trail which leads to an old-growth cove hardwood forest. A 2-4 mile easy walk. DT: 30 min.	None provided.	N - Greenbrier Road Terminus at Porters Creek Trailhead--4.5 Miles from Route 321
201	Wildflower Hike at Old Settlers Trail - Short version	1:30 PM	4:45 PM	Walking through these former homesteads and cemeteries, discover the many wildflowers now growing in the abandoned fields and among the stone chimneys and fences. Hike up the trail to near Copeland Divide, then return. Elevation change: 200' ascent. A 3 mile, moderate walk. DT: 30 min.	None provided. Carpool needed.	Q - Greenbrier Road. Logistics: Meet at picnic area 2.5 miles from Route 321, carpool in as few cars as possible to the Old Settlers Trailhead. Hike out and back and carpool back to your cars at the picnic area.

202	Wildflower Hike at Kanati Fork Trail	1:30 PM	4:45 PM	An exceptional site to see a lot of different species of spring ephemeral wildflowers including painted trillium, Clinton lily, foam flower, indian cucumber root, brook lettuce, and Canada mayflower as well as many of the more common species in the Park. Before you reach Thomas Divide, turn around after a mile or so, when the group is ready. A 2-mile, moderate walk. DT: 45 min.	None provided. Carpool recommended.	AA - Rockefeller Memorial at Newfound Gap to Rendezvous. Logistics: After rendezvousing with your fellow hikers at the Gap, drive 8.4 miles west along Newfound Gap Road to the Kanati Fork Trailhead, which parking will be on your left. Since there are only ~15 parking spots at the Kanati Fork Trailhead, you need to carpool from Newfound Gap.
203	Wildflower Hike at Cove Hardwood Nature Trail	1:30 PM	4:30 PM	Cove Hardwood Forests are one of the most biologically diverse communities in North America and this easy to access old growth example is a great place to see a lot of different wildflowers as well as trees, shrubs, and vines. There are more species of wildflowers along this short, easy walk than just about any place else in the Park, making it a must for those wanting to see and learn about spring wildflowers like dwarf ginseng, showy orchis, fringed phacelia, several trillium species, golden saxifrage (can you spot this tiny little plant?), wild ginger, and the list goes on... Short, easy walk. DT: 25 min.	None provided.	F - Chimneys Picnic Area. Logistics: Meet at Cove Hardwood Nature Trail.
204	Wildflower Hike at Chestnut Top Trail	1:30 PM	4:30 PM	One of the grandest wildflower displays in the Smokies! This narrow trail offers lots of wildflower species in great abundance and has become a leader favorite. A 2-mile, moderate walk. DT: 45 min.	None provided.	AD - Townsend Wye on Little River Road

Saturday Evening

205	Star Gazing at Foothills Parkway	8:30 PM	10:30 PM	Experience the natural history of the universe in a truly dark sky and with Richard and Stephen Clements of the Barnard Astronomical Society of Chattanooga. Learn the basics of skywatching, star names, and constellations. Then examine the wonders of the deep sky through a variety of optical instruments. Bring warm clothes but not a flashlight. Bring binoculars if you have them. Very short, easy walk. (Not recommended for children under 10.). DT: 60 min.	None provided.	AK- Foothills Parkway pull off: Pull off is located 27 miles from Sugarlands along Foothills Parkway on the left. See Meeting Location Sheets on the website for satellite images of the meeting location.
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