



SMOKIES GUIDE

The official newspaper of Great Smoky Mountains National Park • Fall 2018

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Although the Foothills Parkway exists outside park boundaries, it is managed by the NPS just like lands inside the park. *GSMA image*

The Foothills Parkway's 'Missing Link' Found

Final 15-mile section from Walland to Wears Valley is slated to open later this year

Park visitors can soon drive from Wears Valley to Walland on a scenic byway nearly three quarters of a century in the making. The Foothills Parkway, whose construction has been subject to starts and stops since it was first commissioned, will become substantially longer with the finalization of the Missing Link.

Gorgeous views were a priority when the Foothills Parkway was conceived in 1939. Because mountains usually look better from a distance, the parkway was routed outside the park, through the 2,000-3,000-foot-high foothills that front the Great Smoky Mountains like bleachers. Early parkway proponents also foresaw alternate routes relieving congestion on the park's busy main roads.

The Missing Link became infamous in 1989 when construction of the treach-

erous segment was halted due to erosion and retaining wall failures. Work didn't resume until the late 1990s when a new, highly ambitious plan was hatched to complete the span not with a standard roadway, but with a series of cantilevered concrete bridges that minimize environmental damage and offer unfettered views of the Smokies' highest peaks.

When the 15-mile Walland to Wears Valley section opens later this year, it will connect with the 17-mile segment between U.S. Highway 129 at Chilhowee Lake and U.S. Highway 321 in Walland that was opened in 1968. The result will be 32 miles of continuous parkway—without billboards, utility poles, or commercial traffic—offering stunning views of the Great Smoky Mountains and the Tennessee Valley.

FOOTHILLS PARKWAY TIMELINE

- 1939:** Proposal for Foothills Parkway gains National Park Service support
- 1944:** Parkway authorized by Congress
- 1947:** State of Tennessee begins acquiring lands for parkway
- 1966:** Cosby to I-40 section opens
- 1968:** Chilhowee Lake to Walland section opens
- 1979:** State donates land to NPS
- 1989:** Construction on Wears Valley section halted
- 1996:** Environmental Assessment completed and series of bridges and cut-fills solve Missing Link
- 2017:** Final 15-mile section between Walland and Wears Valley paved
- Late 2018:** Walland to Wears Valley section slated to open to public

Words with a Ranger

Not all park rangers do exactly the same job. Although my duties overlap somewhat with those typically associated with a park ranger—such as leading programs for kids or performing search and rescues—my job as visual information specialist is mostly behind the scenes.

I started with the National Park Service in August 2010. I worked at Chattahoochee River National Recreation Area in Atlanta, Georgia, before joining the staff at Great Smoky...

Words with a Ranger continued on page 5

Camping in the national park

The National Park Service maintains developed campgrounds at nine locations in the park. Only Cades Cove and Smokemont are open in winter. There are no showers or hookups other than circuits for special medical uses at Cades Cove, Elkmont and Smokemont.

Campsites at Abrams Creek, Balsam Mountain, Big Creek, Cades Cove, Cataloochee, Elkmont and Smokemont may be reserved. For reservations call 877.444.6777 or contact recreation.gov. Sites may be reserved up to 6 months in advance. Reservations are *required* at Abrams Creek, Balsam Mountain, Big Creek and Cataloochee campgrounds.

Site occupancy is limited to 6 people and two vehicles (a trailer = 1 vehicle). The maximum stay is 14 days.

Special camping sites for large groups are available seasonally at Big Creek, Cades Cove, Cataloochee, Cosby, Deep Creek, Elkmont and Smokemont. Group sites must be reserved.

Call 877.444.6777 or contact recreation.gov. Group sites may be reserved up to a year in advance.

The list below shows number of campground sites, elevations, camping fees and maximum RV lengths.

For current dates of operation, visit nps.gov/grsm.

- **Abrams Creek** 16 sites, elev. 1,125', opens April 27, \$17.50, 12' trailers
- **Balsam Mountain** 42 sites, elev. 5,310', opens May 18, \$17.50, 30' RVs
- **Big Creek** 12 sites, elev. 1,700', opens March 30, \$17.50, tents only
- **Cades Cove** 159 sites, elev. 1,807', open year-round, \$21-\$25, 35'-40' RVs
- **Cataloochee** 27 sites, elev. 2,610', opens March 23, \$25, 31' RVs
- **Cosby** 157 sites, elev. 2,459', opens March 23, \$17.50, 25' RVs
- **Deep Creek** 92 sites, elev. 1,800', opens March 30, \$21, 26' RVs
- **Elkmont** 220 sites, elev. 2,150', opens March 9, \$21-\$27, 32'-35' RVs
- **Smokemont** 142 sites, elev. 2,198',

open year-round, \$21-\$25, 35'-40' RVs.

• **Look Rock** *closed in 2018*

To prevent the spread of destructive insect pests, the NPS has banned outside firewood from entering the park unless it is USDA- or state-certified heat-treated wood. Campers may gather dead and down wood in the park for campfires.

Certified wood may be purchased in and around the park.

Bicycling

Most park roads are too narrow and heavily traveled by automobiles for safe or enjoyable bicycling. However, Cades Cove Loop Road is an exception. This 11-mile, one-way, paved road provides bicyclists with excellent opportunities for wildlife viewing and touring historic homesites.

From May 9 to Sept. 26, on Wednesday and Saturday mornings from sunrise until 10 a.m., only bicycles and pedestrians are allowed on Cades Cove Loop Road. Bicycles may be rented at the Cades Cove Campground store.

Helmets are required by law for persons age 16 and under. However, helmets are strongly recommended for all bicyclists.

Bicycles are permitted on park roads but prohibited on trails except Gatlinburg, Oconaluftee River and lower Deep Creek/Indian Creek.

Accommodations

• **LeConte Lodge** (accessible by trail only) provides the only lodging in the park. 865.429.5704 or lecontelodge.com For information on lodging outside the park:

- **Bryson City** 800.867.9246 or greatsmokies.com
- **Cherokee** 828.788.0034 or cherokeesmokies.com
- **Fontana** 800.849.2258 or fontanavillage.com
- **Gatlinburg** 800.588.1817 or gatlinburg.com
- **Maggie Valley** 800.624.4431 or maggievalley.org
- **Pigeon Forge** 800.251.9100 or mypigeonforge.com

- **Sevierville** 888.766.5948 or visitsevierville.com
- **Townsend** 800.525.6834 or smokymountains.org

Pets in the park

Pets are allowed in front-country campgrounds and beside roads as long as they are restrained at all times. Pets are not allowed on park trails, except for the Gatlinburg and Oconaluftee River trails. Dogs on these trails must be leashed.

Special events

- September 15** Mountain Life Festival: Mountain Farm Museum
- December 8** Festival of Christmas Past: Sugarlands Visitor Center
- December 15** Holiday Homecoming: Oconaluftee Visitor Center

For rent

The Appalachian Clubhouse and Spence Cabin at Elkmont can be rented for daytime events. Contact recreation.gov.

Visitor centers

Fall hours of operation are: Oconaluftee and Sugarlands: 8 a.m.-6 p.m. Cades Cove: 9 a.m.-6:30 p.m. Clingmans Dome 10 a.m.-6 p.m.

Picnic areas

Picnic areas have a table and raised grill for cooking (charcoal fires only). Please see the map on page 16 for locations. Picnic pavilions may be reserved for \$12.50-\$80 at recreation.gov.

Other services

There are no gas stations, showers, or restaurants in the national park.

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P.O. Box 130 • Gatlinburg, TN 37738



Campsites book up fast in the fall! Make sure you plan ahead at recreation.gov. Image by Bill Lea

SMOKIES GUIDE

Printed on recycled paper

Smokies Guide is produced five times per year by Great Smoky Mountains Association and Great Smoky Mountains National Park. Publication dates are roughly as follows:
SPRING: March 15

SUMMER: June 1
LATE SUMMER:
mid-August
AUTUMN: Sept. 15
WINTER: Dec. 1

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MOVING ROCKS HARMS AQUATIC LIFE.

a sunny day in the 70s °F is followed by a wet, bitterly cold one. By mid-to late April, the weather is milder.

- **Summer** - By mid-June, heat, haze and humidity are the norm. Most precipitation occurs as afternoon thundershowers.

- **Autumn** - In mid-September, a pattern of warm, sunny days and crisp, clear nights often begins. However, cool, rainy days also occur. Snow may fall at the higher elevations in November.

- **Winter** - Days during this fickle

season can be sunny and 65°F or snowy with highs in the 20s. At the low elevations, snows of 1" or more occur 3-5 times per year. At Newfound Gap, 69" fall on average. Lows of -20°F are possible at the higher elevations.

Park weather

- **Spring** - March has the most changeable weather; snow can fall on any day, especially at the higher elevations. Backpackers are often caught off guard when

	Gatlinburg, TN elev. 1,462'			Mt. Le Conte elev. 6,593'		
	AVG. HIGH	LOW	PRECIP.	AVG. HIGH	LOW	PRECIP.
Jan.	49°	27°	4.0"	36°	18°	6.7"
Feb.	53°	28°	4.1"	37°	19°	5.6"
March	62°	35°	5.5"	44°	25°	7.0"
April	71°	42°	4.5"	52°	31°	6.7"
May	77°	50°	5.7"	58°	39°	8.0"
June	82°	58°	5.8"	64°	47°	8.7"
July	85°	62°	6.3"	67°	50°	9.0"
Aug.	84°	61°	5.3"	67°	49°	7.6"
Sept.	79°	55°	4.7"	62°	44°	7.2"
Oct.	70°	43°	2.9"	55°	35°	4.7"
Nov.	60°	34°	3.4"	46°	27°	6.8"
Dec.	51°	28°	4.6"	38°	20°	6.4"

These temperature and precipitation averages are based on data for the last 20 years. Temperatures are in degrees Fahrenheit. An average of over 84" (7 feet) of precipitation falls on the higher elevations of the Smokies. On Mt. Le Conte, an average of 82.8" of snow falls per year.

Fishing

Fishing is permitted year-round in the park, and a Tennessee or North Carolina fishing license is required. Either state license is valid throughout the park and no trout stamp is required. Fishing with bait is prohibited in the park. A special permit is required for the Cherokee Reservation and Gatlinburg. Licenses are available in nearby towns.

A free fishing map with a complete list of all park fishing regulations is available at visitor centers.

Camping in the backcountry

Fall camping can be an exciting adventure for persons properly equipped and informed. To facilitate this activity, the National Park Service maintains more than 800 miles of trails and more than 100 backcountry campsites and shelters throughout the park. One of the greatest challenges for backcountry campers is deciding where to go. Here are some tools to help.

1. Go online to view the park's official trail map (nps.gov/grsm/planyourvisit/maps.htm), which shows all park trails, campsites and shelters. Park rules and regulations are also listed here. If you wish, you can purchase the printed version of the trail map for \$1 by stopping at any park visitor center or calling 865.436.7318, ext. 226 or shopping online at SmokiesInformation.org.

2. Call or stop by the park's backcountry office, which is open daily from 8 a.m. to 5 p.m., for trip planning help. The office is located in Sugarlands Visitor Center, two miles south of Gatlinburg on U.S. 441. 865.436.1297.

3. Make your reservation and obtain your permit through the backcountry office at Sugarlands Visitor Center (by phone or in person) or online at smokiespermits.nps.gov.

Reservations and permits are required for all overnight stays in the backcountry. The cost is \$4 per person per night. Reservations may be made up to 30 days in advance.

Fall hikers should be especially aware of abrupt weather changes and the danger of hypothermia—the lowering of body temperature. The combination of rain, cold and wind (especially at the higher elevations) is extremely dangerous.

To prevent hypothermia, carry reliable rain gear at all times. Layer clothing that provides warmth when wet (not cotton). Be prepared for sudden and drastic weather changes. Stay dry.

Driving distances and estimated times

Cherokee, NC to:

Gatlinburg: 34 miles (1 hour)
Cades Cove: 57 miles (2 hours)
Newfound Gap: 18 miles (½ hour)
Clingmans Dome: 25 miles (¾ hour)
Cataloochee: 39 miles (1½ hours)
Deep Creek: 14 miles (½ hour)

Gatlinburg, TN to:

Cherokee: 34 miles (1 hour)
Cades Cove: 27 miles (1 hour)
Newfound Gap: 16 miles (½ hour)
Clingmans Dome: 23 miles (¾ hour)
Cataloochee: 65 miles (2½ hours)
Greenbrier Cove: 6 miles (¼ hour)
Deep Creek: 48 miles (1½ hours)

Townsend, TN to:

Cades Cove: 9 miles (¼ hour)
Newfound Gap: 34 miles (1¼ hours)
Gatlinburg: 22 miles (¾ hour)
Cherokee: 52 miles (1½ hours)
Look Rock: 18 miles (½ hour)
Cataloochee: 87 miles (3 hours)

GREAT SIGHTS TO SEE

1. Clingmans Dome

Highlights: mountain views, access to Appalachian Trail

If you want to reach the highest peak in the Smokies, turn off Newfound Gap Road near Newfound Gap and follow the 7-mile-long Clingmans Dome Road to its end. From the large parking area, a very steep, paved, half-mile trail leads past a visitor center to the observation tower on top of Clingmans Dome. On a clear day, the 360° views are unbeatable.

At an elevation of 6,643', Clingmans Dome is significantly cooler than the surrounding lowlands and receives much more precipitation.

A trip to Clingmans Dome is a trip to the Canadian-zone spruce-fir forest. This fragrant evergreen woodland is similar to the boreal forests of New England and eastern Canada. An inexpensive booklet is available to tell you more about the mountain as you ascend to the top of Old Smoky!

Mileage from Gatlinburg—23
from Cherokee—25
from Townsend—41

2. Goldmine Loop Hike

Highlights: old home sites, lake view, solitude

This moderate, 3.1-mile loop hike is a great way to escape the crowds and enjoy autumn in the Smokies. From the end of Lakeview Drive, hike through the 0.6-mile Lakeshore Trail tunnel (flashlights recommended), and turn onto Goldmine Loop Trail. You'll pass chimneys and other remnants of home sites once occupied by farm families who lived here when Fontana Lake was still the Little Tennessee River. Family names included Hall, Hyatt and Jenkins. After 2.6 miles of hiking, turn right onto the Tunnel Bypass Trail and proceed 0.5 mile to your vehicle at the trailhead.

Mileage from Bryson City—9
from Cherokee—20
from Gatlinburg—54

3. Balsam Mountain

Highlights: mountain views, early fall colors, elk

This mile-high area features a campground (closes October 7; reservations required), picnic area (closes October 10), hiking trails and a scenic drive. To get there, take the Blue Ridge Parkway to Mile 458 and turn onto Heintooga Ridge Road. This paved road (closes October 29) runs the ridge past scenic overlooks for 9 miles to Balsam Mountain Campground and Heintooga Picnic Area. You'll pass the trailheads for two outstanding hiking trails—Hemphill Bald and Flat Creek. Either trail offers the opportunity to hike in a mile or two and return the way you came. From the picnic area, you can continue onto one-way, gravel, beautiful Balsam Mountain Road for 13 miles, then another 14 miles on good roads back to the town of Cherokee.

Mileage from Cherokee—12
from Gatlinburg—45
from Townsend—62

4. Abrams Creek

Highlights: mountain stream, hiking trails

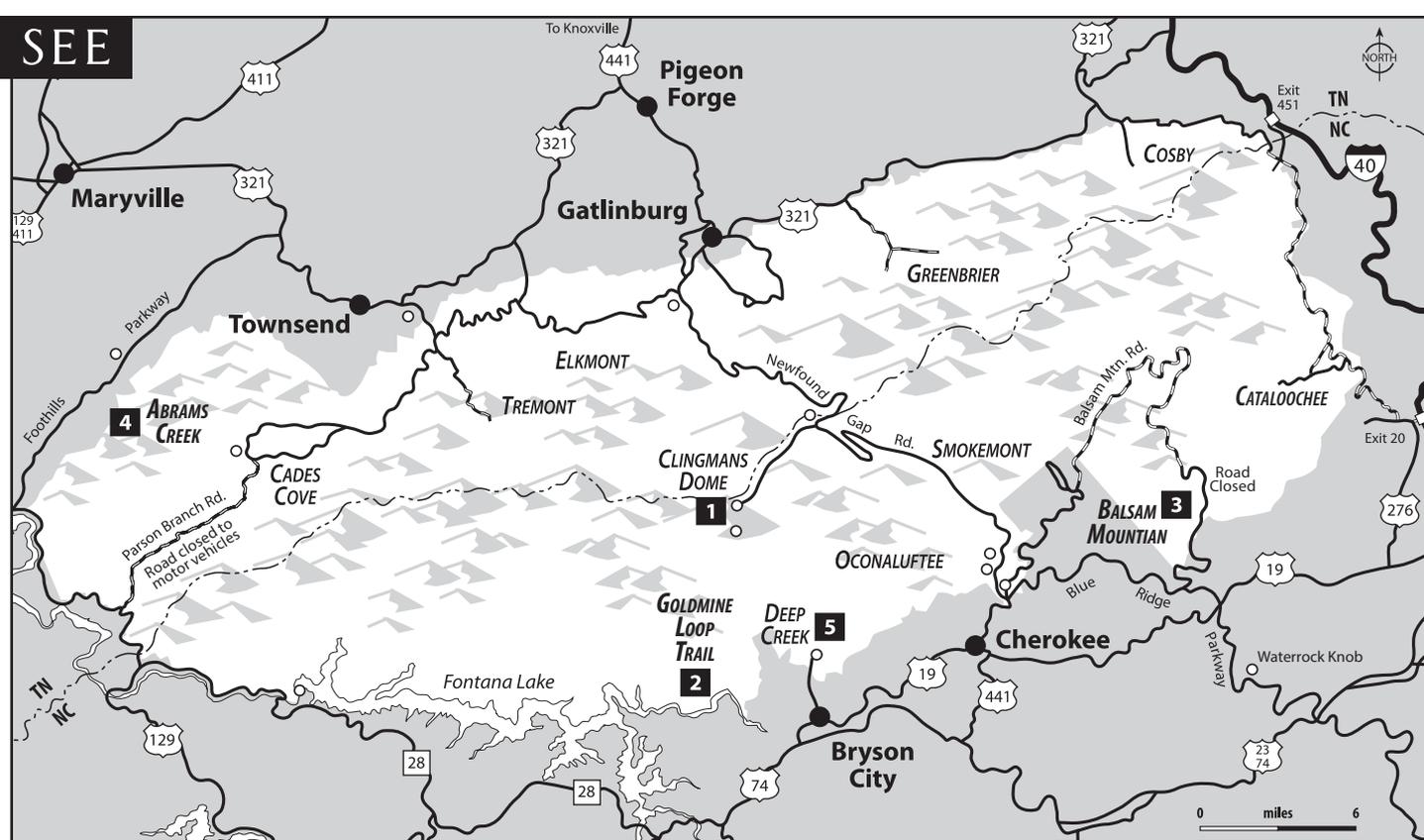
This off-the-beaten-path destination offers access to beautiful Abrams Creek and tiny Abrams Creek Campground (closes October 21; reservations required). Anglers and paddlers enjoy the waters of lower Abrams, near its mouth at Chilhowee Lake. Hiking trails include Cooper Road and Little Bottoms, as well as lower Abrams Creek Trail to popular Abrams Falls. *Note: with the opening of the Wears Valley section of Foothills Parkway (see page 1), this area will be accessible from Wears Valley/Pigeon Forge via 32 miles of scenic parkway.*

Mileage from Townsend—26
from Gatlinburg—46
from Cherokee—78

5. Deep Creek

Highlights: walking trails, waterfalls, mountain biking

The Deep Creek area is an off-the-beaten-path destination in the Great



Smoky Mountains, celebrated for its rushing streams and waterfalls. Hikers enjoy the area because of the waterfalls and because there are several loop hikes to choose from. Mountain bikers can take advantage of one of the few park trails where bicycles are permitted.

Deep Creek area loop hikes include Juney Whank Falls (0.6 mile), Three Waterfalls Loop (2.4 miles), and Deep Creek-Indian Creek Loop (4.4 miles). Longer loop hikes are also available.

Bicycles are allowed on Deep Creek and Indian Creek trails to the points where the old roadbeds end and the trail treads begin.

Deep Creek Picnic Area is open year-round. The picnic pavilion can be reserved at Recreation.gov.

Mileage from Cherokee—14
from Gatlinburg—48
from Townsend—65

Words with a Ranger

continued from page 1

...Mountains National Park in February of 2018.

My duties include managing the Smokies' webpage, webcams, program fliers, and a host of other projects and publications. I work with park managers and supervisors to create content for the web site as well as messaging for staff who meet park visitors. My challenge is to produce quality accessible information that is easy to understand for any audience.

My role can be compared to that of an interpretive ranger; I just communicate the messages and stories in a different medium. I use visual graphics to convey the heritage and the natural and cultural history of the Smokies. Visitors may not see *me*, but they will see my work if they get on the Smokies web site, where I try to create fresh, vibrant and informative content.

In order to support the park in a results-oriented, customer-focused and efficient manner, I must be knowledgeable of park resources and park audiences. I strive to implement the most effective techniques to help our various audiences form their own intellectual and emotional connections to our park.

I also have the important role of conveying clear and effective safety messages throughout the park. My job requires me to collaborate with others to update maps and other projects using park service graphic identity standards. I plan and support NPS headquarters' plans and designs for new interpretive displays for the Smokies.

I love my job because of the mission of the park service, *to preserve unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education and inspiration of this and future generations.* My goal is to convey all of the important messages behind this mission through my graphic and artistic skills.

PARK NEWS

Great Smoky Mountains National Park news briefs

Road Closures are Part of Seasons in the Smokies

Temporary, weather-related road closures occur throughout the year in the Great Smoky Mountains, but they are more frequent in late autumn and winter.

Why? Wind, precipitation and cold are all amplified by mountains. Storms with winds around 100 m.p.h. blast the Smokies almost every year, especially at the higher elevations. Whether these events are linked to hurricane remnants, severe thunderstorms or mountain wave winds, they always result in scores of downed trees that need to be removed.

Newfound Gap receives around five feet of snow during an average winter. Clingmans Dome Road records even more snow and some 88 inches of total precipitation per year.

Rain can make roads impassable, too. In January of 2013, torrential rains caused a 200-foot section of Newfound Gap Road to collapse down the mountainside. Fortunately the National Park

Service had pre-emptively closed the road because of safety concerns.

Extreme cold causes snow and ice to linger on mountain roads much longer than most park visitors realize. Icy patches on shaded curves high on Newfound Gap Road create hazardous conditions even when the weather is warm and sunny in the valleys.

The number of people visiting the

park drops 70 percent in winter, so it is inefficient to keep all 277 miles of park roads open, especially the high-elevation and lesser-used roads that require winter maintenance. Accordingly, seasonal road closures (Clingmans Dome, Balsam Mountain and Rich Mountain) are scheduled. Happily, fewer than 20% of park roads are closed for the entire winter and most reopen by early April.



Balsam Mountain Road closes on October 29. Image by Bill Lea

Smokies Air Getting Clearer, Healthier, but Improvements Still Needed

In 2002, Great Smoky Mountains was named America's most polluted national park by the National Parks Conservation Association. During summer, when 50,000 or more people were visiting per day, the air was hazardous to breathe and views were clouded by a sulfur-laden haze.

"People came to the park for good views and clean mountain air," said Jim Renfro, the park's air resources specialist. "When they found out the air was bad and getting worse, they wanted to know why."

As air pollution worsened, more and more individuals, physicians, organizations, government agencies and elected officials put pressure on pollution-causing industries to abide by the Clean Air Act of 1970. They had 20 years' worth of air quality data collected by Renfro and others to document the bad air and its sources.

A turning point came in 2008 when the Tennessee Valley Authority, responding to legal and public pressure, began installing effective pollution control systems on some of its coal-fired power plants near the park. TVA's investment of over \$5 billion resulted in a 91% reduction in emissions of sulfur dioxide (which obscures views and acidifies streams) and an 87% reduction in nitrogen oxides (a cause of lung-searing ozone pollution). EPA rules requiring cleaner-burning gasoline and diesel fuels and vehicle engines also helped to lower emissions.

"We're now documenting some of our cleanest air to breathe and clearest skies to view our mountains ever recorded," Renfro said. And as additional pollution control equipment and cleaner burning diesel fuels and engines continue to be phased in, "the air is continuing to improve."

Scenic views on the haziest days in the park have gone from an average of 9 miles in the late-1990s to around 36 miles in 2016. Ground-level ozone pollution, the type of smog that can permanently damage human lungs and forested ecosystems, has improved by more than 36 percent.

Still, 12 higher-elevation mountain streams on the Tennessee side of the Smokies are so acidic they are in violation of Clean Water Act standards. Industry, vehicles and power plants will need to continue to lower sulfur and nitrogen emissions in order for those streams, and the fish that live in them, to be healthy again.

You can check out the park's air quality on new webcams at Newfound Gap and Clingmans Dome, and at air quality stations at Purchase Knob and Look Rock. Visit nps.gov/grsm.

Why We Like Lichens in the Great Smoky Mountains

By Becky Nichols

Did you know that if you get down on your belly and look closely at lichens, you can see layered pagodas, red hats, or bubble-gum pink specimens? Taxonomists think lichens are so important to biodiversity in the Smokies that they named one in honor of park champion Dolly Parton.

Lichens come in many colors, sizes and forms. They can grow on surfaces in almost every environment on earth and are found on trees, dead wood, rocks or soil. Globally, there are approximately 20,000 species currently known to science and many more are believed to exist that have not yet been discovered.

Lichens are made up of multiple organisms; the partnership usually involves two types of fungus that live with one or more partners that can photosynthesize. The partner may be a green alga and/or a cyanobacterium.

Lichens are composite units that do not resemble the individual organisms living on their own. The algae or cyanobacteria uses sunlight to make nutrients for the fungus, while the fungus provides minerals, water and shelter.

Lichens are utilized by various animals as food and for shelter. For example, northern flying squirrels eat lichens and also line their nests with them. Humans have used lichens for hundreds of years for food, medicine, cultural purposes and dyes.

More recently, lichens have been used as indicators of environmental change, particularly air quality. Lichens absorb their nutrients directly from the atmosphere, so the more pollution in the air, in rain, or in dust, the more pollution the lichens will absorb. Lichen species have varying tolerances to particular pollutants and they generally are most sensitive to sulphur dioxides and metals.

Prior to the All Taxa Biodiversity Inventory, the park had 341 lichen species recorded and some lichenologists considered this number to be a complete listing of species in the park. Many more species have been found in the last 20 years, including an astounding 531 new records for our park, and 52 species that are new to science. We now have a total of 924 species—nearly three times what we started with.

The park
is home to
924 species
of lichens



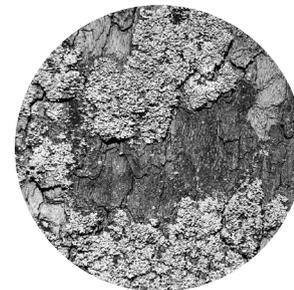
Pileated woodpecker on
lichen-covered tree.
Illustration by Joey Heath



Lichen on a dead branch



Lichen on a rock



Lichen on tree bark

Legacy of the Sycamores

The history behind one of the Smokies' beloved giants

By Shannon Welch

A giant stands behind the Oconaluftee Visitor Center near Cherokee. Another bends over the nearby river, reaching for a cool drink before fanning white limbs to the sky. Park visitors pass cameras and phones to strangers, arranging kids and grandparents for the perfect shot of family and magnificent flora. The year could be 1968 or 2018.

Another more twisted specimen also gives visitors pause near the Sugarlands Visitor Center in Tennessee. This tree's Instagram photos cannot tell its storied

history of feuding landowners, ax attacks and resilience.

Red maples are the most common Smokies trees and tulip poplars are the tallest, but the American sycamore (*Platanus occidentalis*) is, on average, the most massive at ground level. Older sycamores develop hollow trunks, a perfect refuge for both bears and humans. Stories abound of European settlers living inside hollow sycamore trees while building homes nearby. Cherokee people almost certainly did

the same. Stark white upper branches lend the nickname "ghost tree" and make winter identification easy. A row of sycamore trees in a field reveals the presence of water, be it a spring or canoe-ready river.

But what about the ax attack? The gnarly sycamore on Fighting Creek Trail near Sugarlands gets its shape from a dispute between landowners. Trees have historically been used as boundary markers—and this one was chosen for that purpose. Here the drama muddies a bit, with one version telling of friendly branch pruning between neighbors to clearly mark the tree, another portraying a thorough chopping by one who disagreed with the property line. Either way, sycamores are tough, and it re-sprouted. Deliberate cutting in the 1920s combined with the



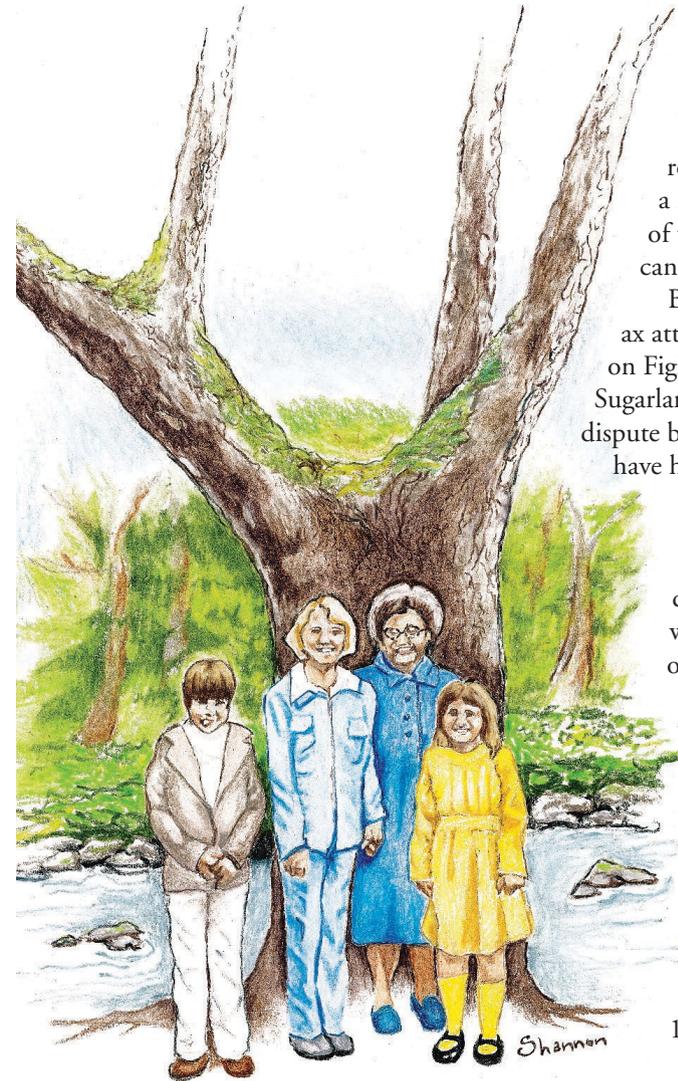
occasional battering flood led to such contortion that a local hiking club gave it the name "Elf Tree."

Rangers at both Oconaluftee and Sugarlands Visitor Centers are frequently asked, "So, how old are those trees?" Since part of the core is rotted, the exact age cannot be determined by counting the rings in a core sample. Sycamores are fast growers. Sun and water bring impressive size before other species, and the beloved trees are likely little more than 150 years old. What is certain is that sycamores are long-lived and can easily surpass 250. The oldest specimens have survived well beyond 400 years.

The three trees aren't the park's oldest, and certainly not the biggest, but proximity to people with cameras has earned them their place in the hearts and digital memories of thousands. Will they live another 200 years? Will the toddlers who pose for today's photos stand with their great-grandchildren and admire the same trees? Future floods, pathogens and windstorms notwithstanding, the legacy of the Smokies sycamores continues to unfold, one camera click at a time.



Top: The massive sycamore that stands beside the river near Oconaluftee Visitor Center. **Below:** The Elf Tree near Sugarlands Visitor Center
Illustration and photos by Shannon Welch



Fall/Winter Facility Closures

Just as deciduous trees start dropping their leaves in fall to get ready for winter, the National Park Service prepares for winter by closing down some of its higher-elevation and more remote facilities. Here's the plan:

Roads

Note that all park roads, including Newfound Gap Road (U.S. 441), may close temporarily for snow or other inclement weather at any time.

- Balsam Mountain Road closes October 29
- Clingmans Dome Road closes November 30
- Forge Creek Road (in Cades Cove) closes December 31
- Heintooga Ridge Road closes October 30
- Little Greenbrier Road (to the Little Greenbrier Schoolhouse) closes November 26
- Parson Branch Road (in Cades Cove) closed due to hazardous trees.
- Rich Mountain Road (in Cades Cove) closes November 12
- Roaring Fork Motor Nature Trail closes November 26
- Roundbottom/Straight Fork roads close October 29

Hiking Trails

All hiking trails are open in winter. However, some trailheads will be inaccessible to motor vehicles because of seasonal road closures. Walking on seasonally closed roads is permitted unless snow plowing or construction work is underway.

Riding Stables

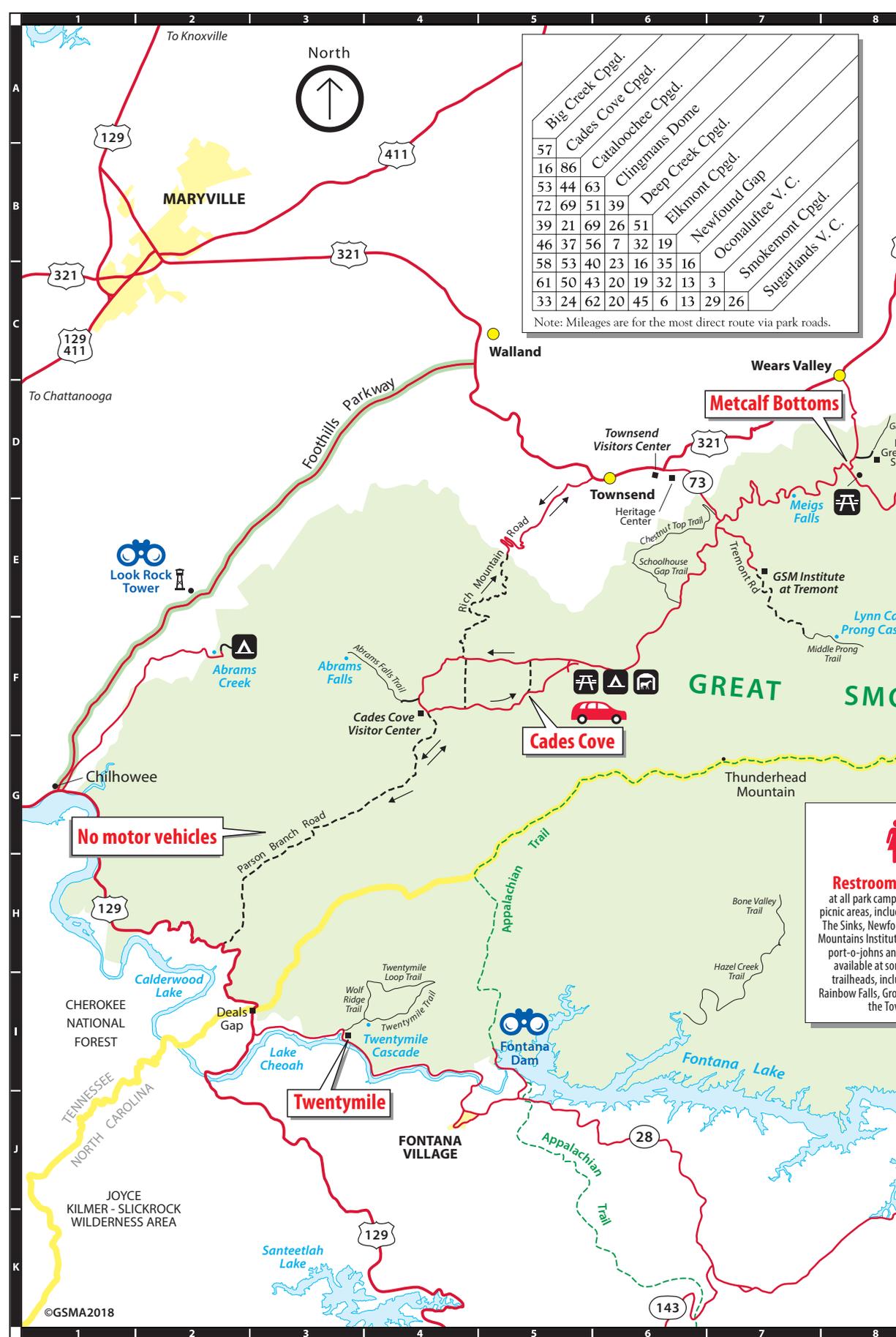
- Cades Cove closes November 30
- Smokemont closes November 4
- Smoky Mountain (on U.S. 321 near Gatlinburg) closes November 25
- Sugarlands closes November 25

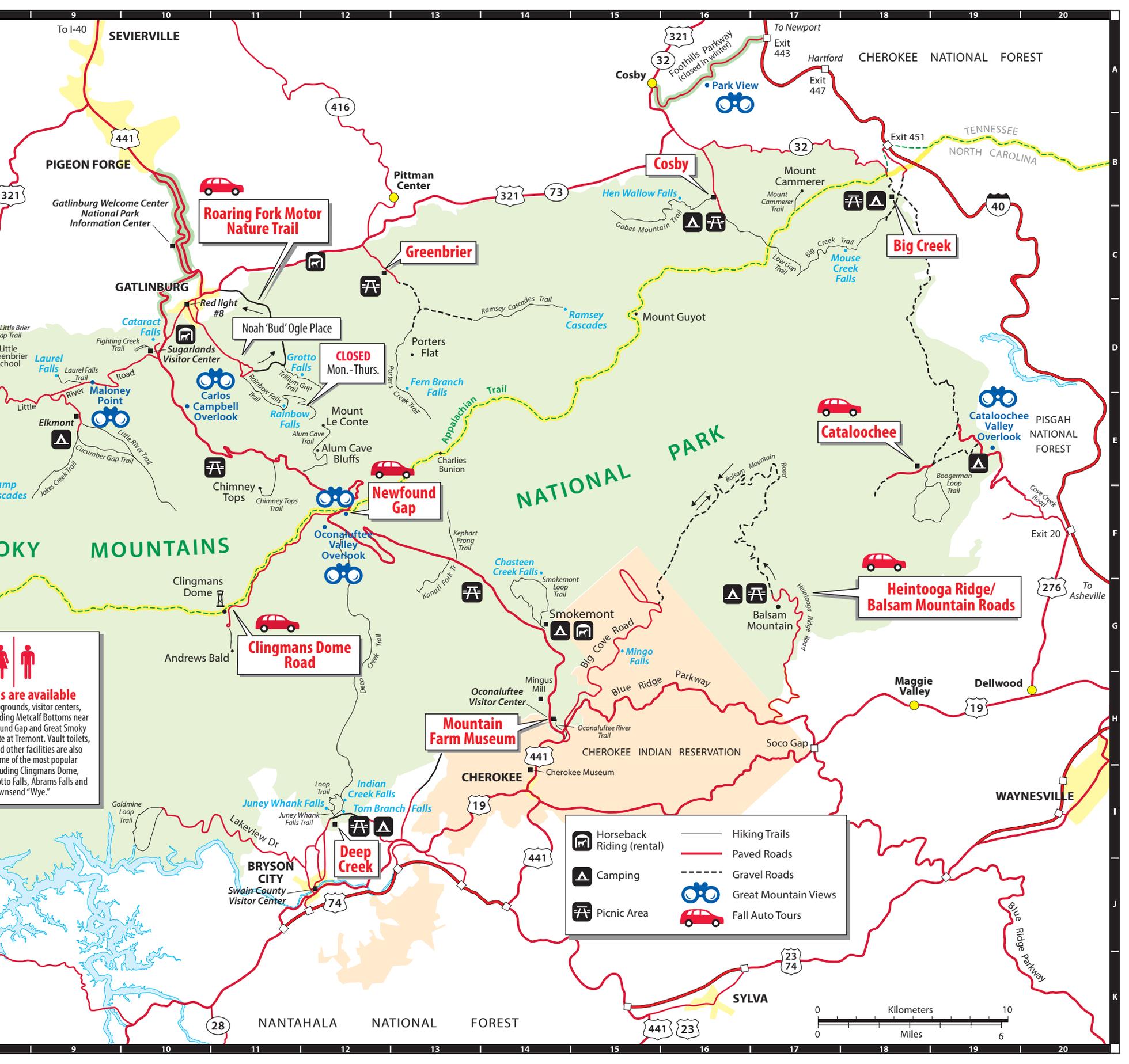
Grist Mills

- Cable Mill (in Cades Cove) closes October 31
- Mingus Mill closes October 31

Lodging

- LeConte Lodge closes November 20





Roaring Fork Motor Nature Trail

Greenbrier

Cosby

Big Creek

GATLINBURG

Newfound Gap

NATIONAL PARK

Cataloochee

Cataloochee Valley Overlook

SMOKY MOUNTAINS

Clingmans Dome Road

**Heintooga Ridge/
Balsam Mountain Roads**

Restrooms are available
Restrooms, visitor centers, and other facilities are also available at Tremont. Vault toilets, and other facilities are also available at Tremont. Vault toilets, and other facilities are also available at Tremont. Vault toilets, and other facilities are also available at Tremont.

Mountain Farm Museum

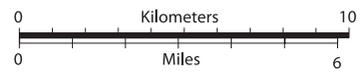
Deep Creek

BRYSON CITY

SYLVA

NANTAHALA NATIONAL FOREST

- Horseback Riding (rental)
- Camping
- Picnic Area
- Hiking Trails
- Paved Roads
- Gravel Roads
- Great Mountain Views
- Fall Auto Tours





Survival of the Fittest

The annual fall frenzy is about food and finding a mate

Photo by Joye Ardyn Durham

By Florie Takaki

Humans have a fair amount of control over what we eat and how we mate, whereas animals have very little. For animals that den or hibernate, it is imperative to have enough nutrients to be able to survive not only the winter season, but also the spring when they emerge to find that only limited food is available.

Snoozing bears

Denning animals like *Ursus americanus*, the American black bear, are not true hibernators in this region, but snoozers. If you disturb their den, they will awaken and stare back at you. In warm winters, they may even walk around a bit.

To prepare for denning, bears in this area often put on as much as 25 percent increased body weight. Many people believe this is to help 'feed' the bear through the winter. Interestingly enough, much of that fat is used after the bears emerge from their dens in the spring when food is scarce.

In late fall, after the mast crop of nuts and berries is gone and the temperatures and sunlight change, a fecal plug develops and the bear no longer eats or drinks for the winter season. In the spring when the bears exit their dens, the first thing they do is drink, releasing the fecal plug, and hunger begins. Here is when it is critical to have consumed enough food the previous fall in order to develop the fat reserves needed to survive early spring.

When you hike during autumn, you may see yellow jackets swarming on the side of the trail. You can be sure a black bear has raided the hive. What the bear is after is the larvae and insects.

Yellow jackets and their larvae are high in protein and a bear can easily use its claws to turn back the dirt and gorge on the nest. How can the bears do this without their mouths getting stung? They do get stung, but enzymes in their saliva counteract the stings, allowing the bear to eat until full.

Rutting elk

While black bear are the animal most visitors come to the mountains to see, elk are a close second. Manitoba elk were reintroduced to the park after three decades of research and public input. Fifty-two elk were brought into

Cataloochee just after the turn of the millennia. There are now elk in the Balsam Mountain and Oconaluftee areas of the park. Although these creatures seem docile during most of the year, by mid-August a change starts and by mid-September the change is dramatic and the rut is on.

Female elk, or cows, are ready to mate in the fall and come into estrus twice, typically between the end of August and the beginning of November. Changing hormones starting in late August cause the neck of the male elk, or bull, to swell significantly. Aggression increases during rut, producing

hormonal changes that can cause them to use their antlers to gore small trees, shrubbery and even the grassy earth.

Antlers fall off each year in March as the next season's antlers are already growing. The new tissue is living, and it looks as if the antler is soft and fuzzy, thus the term 'velvet' is used to describe the new set of antlers. By late summer, the blood flow to the antler closes and the velvet falls off, exposing a bone-like material that is the antler the bull will use to display superiority and ward off other males during rut.

In mid-September, the bull elk is at his prime for mating and will remain in this state for up to 30 days. His desire to mate is so intense that often the bull cannot differentiate another bull from a car or a human. This makes the rut season an exceptionally dangerous time, both for the elk and for visitors.

Cows with calves spend considerable energy keeping themselves and their calves out of the way of bulls in rut. This intense rivalry between males—and moms protecting their calves—allows little time for grazing. Concentration on consuming enough calories is critical for the elk prior to rut season. Bulls add weight to support their increasing neck

size and antlers, but mostly to support the energy used to keep other males away from cows. They often lose up to 200 pounds, or 20 percent of their body weight, during the rut; therefore, the male needs to be in prime condition. Cows must also be in healthy condition to support pregnancy. If a cow is not in peak condition, she may not become pregnant or may not come in to estrus until October, or not at all.

Zooming humans

Bears, and more noticeably elk, live in a constant state of anxiety during the fall feeding and mating frenzy. People can become a hindrance to these animals through their excitement and desire to witness these creatures during such an intense natural spectacle.

Unfortunately, when an animal becomes habituated to humans—eating human food and no longer fearing humans—it can cause that animal's death. So keeping human food away from bears and elk is of utmost importance to their survival. Should they become dependent on human food, they no longer search for their native food, which has the correct nutritional value.

Bears that start to appear regularly

during the day may have often been fed human food and no longer have fear of humans. They may have lost their ability to find enough natural food to survive denning or they may simply find stealing human food is easier than foraging on their own. Becoming desensitized to us, bears will either starve to death over the coming winter and spring, or they will need to be destroyed because they have become a physical danger to people.

The same can be said for elk.

Aggressive bulls are looking to confront anything that looks like a threat to mating. It may be a bush, a young bull, a true dominant bull looking to usurp the current contender, or a person just looking for a better photo. Bulls have even attacked vehicles, causing significant damage.

Nature has prepared creatures with many unique and remarkable abilities to reproduce and prepare for continuing their species. Humans possess a remarkable desire to experience and understand the world in which we live. National parks provide a place for nature to be fully protected while allowing people to connect with the natural world.

But we all have a responsibility—both rangers and visitors—to be aware of and abide by the rules and regulations developed to protect and sustain the natural world.

Through our ability to control our actions, we can help these creatures remain wild. By keeping human food away from them, staying at least 50 yards (half a football field) back, and using the zoom lenses on our cameras and phones to take pictures, we may be saving their lives. This is their home and we are fortunate to be allowed to work and visit here.

References:

The Encyclopedia of Tracks and Scat, by Len McDougal, The Lyons Press, Guilford, Connecticut, 2004

Elk, Jack Ballard, Falcon Guides, Guilford, Connecticut, 2012

Mammals of the Smokies, Great Smoky Mountains Association, Gatlinburg, TN, 2009

Living with Bears Handbook, Linda Masterson, PixyJack Press, Inc, Masonville, CO., 2016

FREE, FUN THINGS TO DO

Programs and activities in Great Smoky Mountains National Park September 16 - October 27, 2018

SUGARLANDS/ELKMONT/COSBY AREA

A Walk in the Woods: Get away from the hustle and bustle on an easy stroll with a ranger to discover stories of history and nature along this scenic, wooded trail.

WHEN?

Daily
10:30 a.m.

MEETING LOCATION

Sugarlands Visitor Center Patio

DURATION/DIFFICULTY

1.5 hours
Easy

Junior Ranger – Porch Talk: Did you know that the Smokies is one of the most diverse places in the world? Join a ranger to learn more during this “Ranger’s Choice” style program.

Daily
2 p.m.

Sugarlands Visitor Center Patio



30 minutes
Easy

Branching Out: The Smokies are home to more than 130 species of trees. Explore the dramatic forest and find out what the trees can tell us about their ecosystem.

Sundays
10 a.m.

Elkmont Nature Trail

1.5 hours
Easy

Nature’s Narrative: The forest is full of stories if you’ll only stop to listen. Learn about the area and discover signs of the past on this moderate, 3/4-mile loop hike.

Sundays
1:30 p.m.

Cove Hardwood Nature Trail
(inside Chimneys Picnic Area)

1 hour
Moderate

A Resilient Forest: Wildlife is an agent of change. Join a ranger to learn about fire’s effect on the landscape.

Sundays
2 p.m.

Carlos Campbell Overlook



45 minutes
Easy

Birding for Beginners: Join a ranger for a morning walk as we look and listen for, and learn more about, the birds of the forest.

Mondays
Times vary

Little River Trailhead

1 hour
Easy

Little River Evening Amble: Join a ranger at twilight to explore intriguing transformations within the Smokies as daylight wanes to darkness. *Limited to 25 participants. Call 865.436.1291 up to 4 days in advance to make reservations.*

Mondays
7:30 p.m.

Little River Trailhead

1 hour
Easy

SUGARLANDS/ELKMONT/COSBY AREA (CONTINUED)

	WHEN?	MEETING LOCATION	DURATION/DIFFICULTY
Sugarlands Night Hike: Challenge your senses and experience the mystery of the Smokies after dark. <i>Limited to 25 participants. Call 865.436.1291 up to 4 days in advance to make reservations.</i>	Tuesdays 8 p.m.	Sugarlands Visitor Center Patio	1 hour Easy
Junior Ranger – Aw Shucks! Come and experience the art of making a simple cornshuck doll while gaining historical insight of the diversity of corn in the region. <i>Limited to 25 participants. Call 865.436.1291 up to 4 days in advance to make reservations.</i>	Wednesdays 1 p.m.	Sugarlands Visitor Center Patio	45 minutes Easy
Crafts of the Smokies: Come watch a ranger demonstrate crafts common to the mountain people of Southern Appalachia. You will learn about the importance of these activities in the lives of those who lived here and maybe even be inspired to do some of your own! All ages are welcome!	Wednesdays 10 a.m.	Sugarlands Visitor Center Patio	1.5 hours Easy
Coffee with a Ranger: Start your morning with a ranger and a cup of joe to hear what's happening in the park and plan your day's activities.	Thursdays & Saturdays 8 a.m.	Locations vary at coffee shops throughout Gatlinburg, TN	1 hour Easy 
Tree Tales: Enjoy a leisurely half-mile hike with a ranger while learning about forest ecology and the importance of trees to the mountain people. End the hike with a leaf rubbing of your own. <i>Limited to 25 participants. Call 865.436.1291 up to 4 days in advance to make reservations.</i>	Thursdays 3 p.m.	Sugarlands Valley Nature Trail	1 hour Easy 
Islands in the Sky: Soak in sweeping views near the summit of the Smokies' highest peak as you learn about this unique environment, discover some of the park's most influential people, or hear stories behind its place names. Topics vary but you're sure to be inspired by the stories behind the scenery.	Fridays 11 a.m.	Viewing area below Clingmans Dome Visitor Center	45 minutes Easy 
Science Behind the Seasons: Fall is a time of great and vibrant change in the Smokies. Come learn the science behind the seasons, why things change and when they do.	Fridays 2:30 p.m.	Newfound Gap	1 hour Easy 
Evening Campfire: Join a ranger for a National Park Service tradition—the evening campfire program. Topics vary but you're guaranteed to learn something new about the Smokies!	Fridays & Saturdays Check at Sugarlands Visitor Center or Campground Office for program times	Elkmont Campground	45 minutes Easy 

METCALF BOTTOMS AREA

Junior Ranger – School Days at Little Greenbrier: Go back in time to discover what it was like to live in a mountain community and go to school in a one-room schoolhouse. Fun for all ages, and great for Junior Rangers. <i>Please arrive 15 minutes before program start; space is limited.</i>	Tuesdays 11 a.m. & 2 p.m.	Little Greenbrier School	1 hour Easy
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OCONALUFTEE AREA

Coffee with a Ranger: Join a park ranger for a cup of coffee and find out what's happening in the park! Topics may vary based on visitor interests and things going on in the park. Coffee provided. Bring a cup if you have one.	Sundays 10:30 a.m.	Oconaluftee Visitor Center Porch	1 hour Easy 
Down on the Farm: Walk down to the Mountain Farm Museum and see what past-time settlers may have been engaged in, such as gardening, woodworking, or other endeavors. Activities vary.	Sundays 2:30 p.m.	Mountain Farm Museum	1 hour Easy 
What's the Rut?: It's time for the elk to get amorous! Learn about the rut and what that means for the elk.	Tuesdays 10:30 a.m.	Oconaluftee Visitor Center Porch	30 minutes Easy 
What's Big, Black and Stinky?: Bears! That's what! Join a ranger to learn how the bears prepare for winter in the Smokies.	Tuesdays 2:30 p.m.	Oconaluftee Visitor Center Porch	30 minutes Easy 
Forecasting the Future with Mother Nature: Nuts were fair, berries were late. Several morning fogs and rings around the moon in August. Does this mean a hard winter or a mild one? What about snow this year? How did people in the past use nature to forecast the upcoming winter? Join park staff and explore the possibilities this year.	Wednesdays 11 a.m.	Oconaluftee Visitor Center Porch	30 minutes Easy 
Long Live the Queen!: Join a park ranger to get the buzz on honeybees, taste a sample of nature's pure food, and size up beehives from then and now.	Thursdays 10:30 a.m.	Oconaluftee Visitor Center Porch	30 minutes Easy 
A History of the White Blaze: Did you know 72 miles of the Appalachian Trail goes through the Great Smoky Mountains National Park? Join a park ranger to learn about this iconic footpath and its pioneers! The Benton MacKaye and Mountains-to-Sea Trails will also be discussed.	Thursdays 2:30 p.m.	Oconaluftee Visitor Center Porch	45 minutes Easy 
Explore the Smokies: Wonder what there is to see and do in the Smokies? Join a park ranger to find out all the park has to offer!	Fridays 10:30 a.m.	Oconaluftee Visitor Center Porch	30 minutes Easy 

OCONALUFTEE AREA (CONTINUED)

	WHEN?	MEETING LOCATION	DURATION/DIFFICULTY
Junior Ranger – Mammal Mania: Otters and beavers and bears, oh my! Join a ranger for a hands-on discovery of mammals in the park.	Fridays 2:30 p.m.	Oconaluftee Visitor Center Porch	30 minutes Easy ♿
A Walk Back in Time – Kephart Prong Hike: The Civilian Conservation Corp helped build this park. Learn about the major impact the CCC had on the development of the Great Smoky Mountains National Park while we explore the remains of 411's CCC camp. Discover visible signs and what life was like.	Saturdays 10:30 a.m.	Kephart Prong Trail	1 hour Easy, 1-mile walk
Salamanders of the Smokies: Discover why the Smokies is considered the “Salamander Capital of the World.”	Saturdays 3:30 p.m.	Oconaluftee Visitor Center Porch	30 minutes Easy ♿

CATALOOCHEE AREA

Junior Ranger – Smoky Mountain Elk: It's all about connection and balance in nature to ensure survival for elk and other species living together in an ecosystem. Learn about the history of the elk through “show and tell” activities. Then stay and watch the elk arrive in the fields!	Sundays 3:30 p.m.	Palmer House Cataloochee Valley	45 minutes Easy ♿
Seasons of the Elk: Join park staff to learn about the largest animal in the park. Discover characteristics, seasonal behaviors and park regulations so you can have a more positive viewing experience.	Saturdays Sept. 22, Oct. 13 & 20 3:30 p.m.	Palmer House Cataloochee Valley	45 minutes Easy ♿

CADES COVE AREA

Because of slow moving traffic it may take over an hour to drive six miles from the start of Cades Cove Loop Road to programs at the Cades Cove Visitor Center/Cable Mill Area. Plan accordingly.

John P. Cable Mill: Experience what it was like to grind corn into meal at the gristmill. <i>Cable Mill area is halfway around the Cades Cove loop road.</i>	Daily 9 p.m. – 5 p.m.	Cable Mill Area	10 minutes Easy ♿
Junior Ranger Program: Join a park ranger for a hands-on exploration of the Smokies. Participation counts towards credit for earning a Junior Ranger badge. <i>Visitor Center is halfway around the Cades Cove loop road.</i>	Saturdays & Sundays 1 p.m.	Cades Cove Visitor Center/ Cable Mill Area	45 minutes Easy ♿
WILD by Design: A talk and hands-on demonstration about the wild things in the park. <i>Visitor Center is halfway around the Cades Cove loop road.</i>	Saturdays & Sundays 2:30 p.m.	Cades Cove Visitor Center/ Cable Mill Area	45 minutes Easy ♿
Precious Memories: Go back in time to discover how the church influenced the Cove and its residents.	Tuesdays 11 a.m. & 1 p.m.	Cades Cove Primitive Baptist Church	30 minutes Easy

SPECIAL PROGRAMS

Back Porch Old-Time Music Jam: Bring an acoustic instrument and join in on this old-time jam. Or just sit back and enjoy the sights and sounds as others play traditional Appalachian music.	Saturdays Oct. 6 & 20, Nov. 17 1 p.m.	Oconaluftee Visitor Center Porch	2 hours Easy ♿
Cades Cove Old-Timers' Day: Listen to first-hand stories and yarns about the Great Smoky Mountains National Park and communities that made the area their home. <i>Wear comfortable shoes.</i>	Saturday, September 29	Cades Cove Visitor Center	Easy ♿
Science at Sugarlands: Join a scientist on the third Friday of the month to learn about and engage in ongoing scientific research happening inside Great Smoky Mountains National Park. Topics vary each month. September 21: <i>Butterflies and Caterpillars in the Smokies</i> ; October 19: <i>Beetles of the Smokies.</i>	Fridays September 21 & October 19 1 p.m.	Sugarlands Visitor Center	2 hours Easy
Cades Cove Star Party with the Smoky Mountain Astronomical Society: Escape the city lights and observe the heavenly objects of the night sky. Join the rangers for an evening of viewing stars with equipment and instruction provided by the SMAS. <i>Orientation shelter is at the beginning of the loop road. Event is weather permitting and will be canceled in case of rain and/or heavy clouds. Call 865.448.4122 for updates. Bring a jacket, red-covered flashlight and comfortable walking shoes.</i>	Saturday, September 15 7:30 p.m.	Cades Cove Orientation Shelter	1.5 – 2 hours Easy, 1-mile walk
Blacksmith Demonstrations: Learn the art of blacksmithing and why it was important in the Cades Cove community. <i>Visitor Center is halfway around the Cades Cove loop road.</i>	Saturdays & Sundays Sept. 22 & 23, Oct. 20 & 21 10 a.m.	Blacksmith building near the Cades Cove Visitor Center/ Cable Mill area	Ongoing 6 hours Easy
Sorghum Making Demonstrations: Meet the mules and learn about the process of making sorghum molasses the old-time way. <i>Visitor Center is halfway around the Cades Cove loop road.</i>	Sept. 1, 2, 3, 14, 15, 16, 21 & 23 10 a.m.	Sorghum Mill near the Cades Cove Visitor Center/ Cable Mill area	Ongoing 6 hours Easy

Great Smoky Mountains Association

Since 1953, Great Smoky Mountains Association has supported the educational, scientific and historical efforts of the National Park Service through cash donations and in-kind services. By the end of 2018



alone, the association will have provided more than \$2 million in assistance that includes saving hemlock trees, living history demonstrations, environmental education programs, historic preservation, and salaries for wildlife personnel.

Association members receive a number of benefits to keep them informed about special events in the park and issues affecting the Smokies:

- Subscription to the semi-annual, full-color magazine *Smokies Life*
- Digital access to the award-winning quarterly park newspaper, *Smokies Guide*, and the association's newsletter, *The Bearpaw*
- A 15-20% discount on books, music, gifts and other products sold at park visitor centers and at GSMA's web store

• Special GSMA "Hiking 101" outings to Twentymile Loop, Porters Creek, Gregory Bald, Boogerman Trail, Charlies Bunion, cemeteries, and more. All hikes are led by knowledgeable staff who love to share the park with others. Groups are limited to 20 people. Also this year, ask us about Gear Fest programs and special gear discounts.

Join today using the coupon to the right, visit SmokiesInformation.org, or call us at 888.898.9102 x349. Memberships start at just \$35 per year.



Smoky Mountain Field School

An exciting variety of adventures awaits

adults who long to get out and explore the park accompanied by expert guides. Programs are offered by the Smoky Mountain Field School and include Mt. Le Conte overnights and workshops on wildlife, edible plants, wildflower photography, animal tracking, bird watching, salamanders and mountain cooking. One-day programs start at as little as \$79. Contact: 865.974.0150 or visit smfs.utk.edu.

Great Smoky Mountains Institute at Tremont

Great Smoky Mountains Institute at Tremont provides residential environmental education programs in Great Smoky Mountains National Park. Up to 5,000 students and adults annually attend

workshops and school programs at the Institute. Tremont's adult workshops include birding, backpacking, environmental education, teacher escapes, naturalist weekends and photography. GSMI at Tremont also offers a variety of summer youth camps in the national park lasting from 6-11 days and starting at \$589. Fees include meals, lodging and most equipment. Upcoming offerings include Discovery Camp (ages 9-12), Wilderness Adventure Trek, Girls in Science (ages 12-15), and Teen High Adventure (ages 13-17). Contact 865.448.6709 or visit gsmit.org.

Discover Life in America

The Smokies are known for their biodiversity and DLIA formed 20 years ago to identify every variety of plant and animal in the park. The organization involves leading biologists from around the globe in collecting specimens in the park and identifying what they found.



GREAT SMOKY MOUNTAINS INSTITUTE AT TREMONT

The information is then logged into a database that shows what's here, where in the park it has been reported and what other creatures are associated with it.

DLIA recruits legions of volunteers and interns to become 'citizen scientists' who help with the work. These participants get an insider's look at the park, as well as firsthand knowledge of biology, field science and laboratory practices. Funding for DLIA comes mostly from donations from individuals and institutions as well as facility support provided by the national park. To learn more, visit DLIA.org.

Friends of the Smokies

Friends of the Smokies is an official nonprofit partner of the National Park Service and Great Smoky Mountains National Park that helps to raise funds and public awareness and provide volunteers for park projects.

Since 1993, Friends of the Smokies has raised \$62 million to support critical park projects and programs including:

- Management and research of bears, elk, native brook trout and other wildlife
- Intensive rehabilitation projects on the park's most-impacted hiking trails like Alum Cave, Chimney Tops and Rainbow Falls

- Hands-on, curriculum-based environmental education for school children in Western North Carolina and East Tennessee

- Facilities and improvements to maintain a world-class visitor experience

- Historic preservation of cabins, churches and mills in Cades Cove and Cataloochee Valley

Your support of Friends of the Smokies makes these projects and so much more possible.

And it's easy to become a Friend! Make a donation and become a member today at FriendsOfTheSmokies.org, purchase a specialty license plate at BearPlate.org, or join FOTS for one of its special events like the Evergreen Ball or Smokies Stomp Barn Party. Your donations help preserve and protect Great Smoky Mountains National Park for generations to come. For more information, visit FriendsOfTheSmokies.org or call toll-free 800.845.5665.



GSMA MEMBERS

Get Rooted in the Smokies!

- Acorn (youth) Membership \$15
- Buckeye Annual Membership \$35
- Chestnut Annual Membership \$100
- Dogwood Membership \$200
- Hemlock Lifetime Membership \$1,000 payable in 5 installments
- Lookout League Business Memberships \$250-\$10,000

SIGN ME UP!

Name(s) _____

Address _____

Email (for Cub Report) _____

Phone # _____

Please include your check with this form.
Mail to: GSMA, P.O. Box 130,
Gatlinburg, TN 37738

Treading Lightly in the Backcountry

Tips from the insiders on how to treat the park

Illustration by Emma DuFort

PARK

Etiquette

Q: How about “travel and camp on durable surfaces”? What does that mean?

A: Since there are so many people that recreate in the Smokies, we have designated trails and campsites in order to concentrate the impact. If we step off a trail or create a new spot for our tent, we are going to impact the vegetation and, once damaged, it often will not grow back.

Q: Oh yuck. “Dispose of waste properly”?

A: Yes, if you are out in the backcountry for an extended period, there are going to be unavoidable

impacts of your adventure. You need to be prepared to bury your solid waste in a cat hole (6-8 inches deep) or use one of the backcountry privies, if available. But, anything we bring with us has the potential to become ‘waste’ if we leave it behind. The key is to “pack it in, pack it out” and that means taking everything out—even crumbs, peels and apple cores. It is also important to keep water clean by not introducing anything like soap or food into the streams.

Q: And “leave what you find”? Does that include rocks and pine cones?

A: Yes, and everything else natural that you see. Leaving things like rocks in place protects our smaller forms of wildlife. Even moving rocks around, especially in streams, impacts habitat. We also want to preserve history by respecting the cultural artifacts that are found throughout the park.

Q: Minimize campfire impacts?

A: Campfires can have lasting impacts on the environment and Leave No Trace promotes the use of candle lanterns and camp stoves rather than fires. Still, Leave No Trace ethics does not say “no”

to campfires, but rather focuses on the ways to minimize the impacts if you are going to have one. It is best to use established fire rings, make mound- or pan-fires, and keep the fires small. Be sure that the fire is completely out and cold before you leave it.

Q: Respect wildlife? Even snakes?

A: Yes, respecting wildlife applies to all the animals that call this place home, even the snakes, which provide us many benefits. It is important to observe larger wildlife from a distance and never approach, feed or follow them. Protecting them from our food and trash and following the pet regulations throughout the park will help to keep them wild.

Q: Be considerate of others? Define “considerate.”

A: Leave No Trace ethics focus on respecting three things—the land, wildlife and other visitors. In a place as busy as the Smokies, the impact of our presence can be very disruptive to others. By avoiding loud noises and letting the sounds of nature prevail, yielding to others on the trail, and just being courteous, we can all do our part.

Many folks who love camping want to go deep into the woods, away from civilization—to the backcountry. But just because these areas of the park are out of sight doesn’t mean they are out of mind where our park rangers are concerned. We asked Backcountry Management Specialist Christine Hoyer to help clarify the importance of following Leave No Trace guidelines.

Q: I know there are seven universal Leave No Trace principals for hiking, camping, and recreating in the backcountry. How does “plan ahead and prepare” apply specifically to the Smokies?

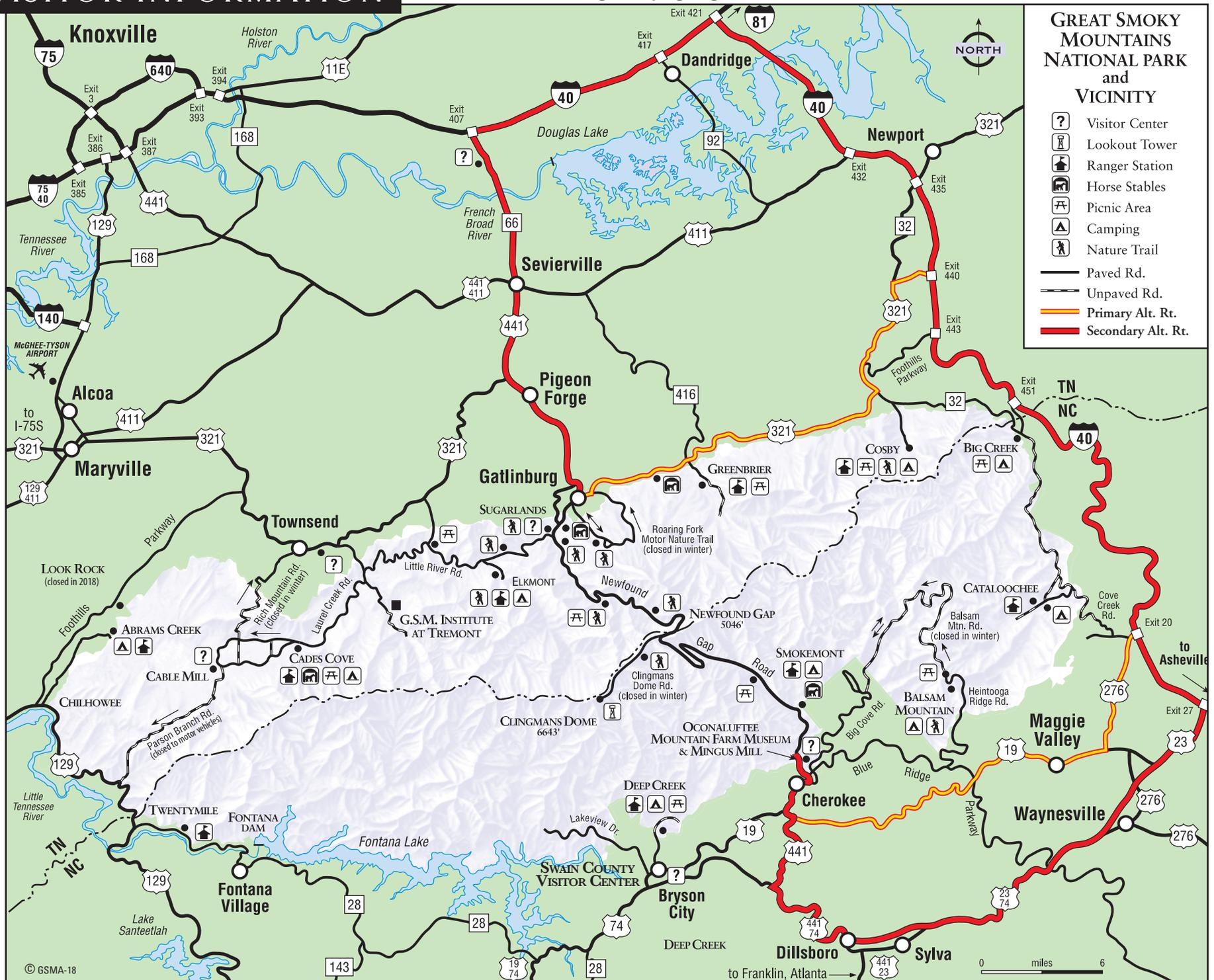
A: It is important to know both what to bring and what to leave behind when planning any kind of outdoor recreation—to keep you safe and ensure you enjoy your adventure. Here in the Smokies, it is important to have clothing for changing weather conditions, to carry food, water and a map, to know your route and its challenges (Are there stream crossings? Is it uphill the whole way?) and think about what to do in an emergency. A great way to plan ahead is visit a park visitor center or call our Backcountry Office (865.436.1297) so we can help you plan your hike, share information about current conditions and answer your questions.



All food, trash, clothing, equipment and personal items must be packed out. Burning food, trash or anything other than dead wood is prohibited.

VISITOR INFORMATION

For more information, go to nps.gov/grsm



Information

General park info:
865.436.1200 • nps.gov/grsm
Backcountry information:
865.436.1297
smokiespermits.nps.gov
To order maps and guides:
865.436.7318 x226
SmokiesInformation.org

Emergencies

For emergencies after hours:
Park Headquarters
865.436.9171
Cherokee Police
828.497.4131
Gatlinburg Police
865.436.5181

Hospitals

Le Conte/Sevier County
865.446.7000
Middle Creek Rd.,
Sevierville, TN
Blount Memorial
865.983.7211
U.S. 321, Maryville, TN

Haywood County

828.456.7311
Waynesville, NC
Swain County
828.488.2155
Bryson City, NC

All-access

Restrooms at park visitor centers (Cades Cove, Oconaluftee and Sugarlands) are fully accessible. Sugarlands Valley all-access nature trail is on Newfound Gap Road just south of Sugarlands Visitor Center.

Avoid the fine

Picking or digging plants is prohibited in the park. Persons feeding wildlife are subject to a \$5,000 fine. Pets are only permitted on the Gatlinburg and Oconaluftee River trails, which allow dogs on a leash.