



SMOKIES

GUIDE

The Official Newspaper of
Great Smoky Mountains National Park
Autumn 2016



INSIDE
RANGER PROGRAMS
Pages 10-13
FALL COLORS Page 7
PARK MAP Pages 8-9



BILL LEA PHOTO

Both gray (pictured) and red fox live in the Great Smoky Mountains.

This Fox is Perfectly Suited for the Forest

Of all the canids that live (or once lived) in the Great Smoky Mountains, including the coyote, red fox, gray wolf, and red wolf, none is better adapted for life in the woods than the gray fox. Not only does the gray fox hunt for a dizzying array of foods that abound in a forest environment, this fox also has the special ability to climb a tree to reach some of them.

One example is an observation made in Cades Cove by field biologists of a gray fox climbing into a persimmon tree to eat the fruit. Other foods the gray fox might go out on a limb to procure include apples, wild grapes, hickory nuts and cherries. Tree climbing, made possible by the fox's curved claws and pivoting paws, has other advantages as well, namely eluding predators.

Several animals prey on

gray fox, including coyotes and bobcats. Many are also killed by automobiles.

When gray fox aren't climbing trees to find fruit, they might be seen prowling the forest floor in search of rabbits, mice, voles, and insects.

The best times to see gray fox are dawn, dusk, and at night. They are found from the lowest elevations in the park up to about 4,000 feet. In recent years their populations have been pressured by the natural migration of coyotes from the West to the Smokies. Coyotes were first observed in Great Smoky Mountains National Park in the 1980s and their population has grown substantially since.

Gray fox often den in ground hog burrows they have taken over and modified. Females give birth to 3-4 pups in early spring.



BLACK BEARS

During fall, bears depend heavily on acorns, hickory nuts, and other types of hard "mast" to gain weight for winter. If the trees provide plentiful mast, bears will not need to wander far and wide in search of food and females will give birth to plentiful tiny bear cubs over the winter.



MARS HILL COLLEGE PHOTO



Peeling apples was a social event and a prelude to delicious apple pies.

Autumn Was Time of Plenty & Plenty to Do

Fall was a busy, but hopefully bountiful time on a mountain farm. Families depended on their large, labor-intensive gardens for nearly all their year-round produce. They cultivated an impressive array of vegetables and other foods, including cabbage, peppers, cucumbers, beets, onions, sunflowers, turnips, peas, carrots, tomatoes, beans, squash, melons, and pumpkins.

In the fields, corn was king, especially tall sturdy varieties like Hickory Cane, which is still grown at the Mountain Farm Museum at Oconaluftee. A few farmers grew other grains as well, including wheat, oats, rye, and sorghum cane.

Apples and other fruits were also ripening around this time of year. Families nurtured a variety of apples, including Cullasaga, Brushy Mountain Limbertwig, Buff, and Early Harvest. They also grew peaches and plums.

Autumn was not only harvest time, it was the crucial time for putting food by, as well. Without refrigeration (other than the springhouse)

farmers had to rely on other means of preserving their food for future consumption. Some foods, such as potatoes, cabbage, and onions would keep for a time just by dry storage or burying with straw. Beans could be dried.

Other vegetables might be pickled or preserved in crocks as slaw or chowchow. When store-bought jars became widely available in the 1860s, home canning became an option.

Sorghum making was an autumnal ritual of turning sorghum cane into delicious sorghum molasses. This historic practice is kept alive in the national park today through demonstrations at Cades Cove Visitor Center and the Mountain Farm Museum (see pages 12-13 for a schedule). Visitors can watch cane being squeezed through the horse-powered mill and the juice carefully cooked down to molasses.

If you would like to learn more about life on a mountain farm, an audio tour called "From Field to Fork" is now available for a small fee at the Mountain Farm Museum.



smokies trip planner

to order maps and guides: www.SmokiesInformation.org

smokies guide

Smokies Guide is produced four 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

AUTUMN: September 15

WINTER: December 1

CONTRIBUTING EDITOR

Steve Kemp

NPS COORDINATOR

Stephanie Sutton

EDITORIAL BOARD

Joy Absher

Lynda Doucette

Kristine Johnson

Mike Maslona

Laurel Rematore

CONTRIBUTORS

Lisa Horstman, Karen Key,

Emma Dufort

© 2016 Great Smoky Mountains Association

GSMA

P.O. Box 130

Gatlinburg, TN 37738



printed on recycled paper

BILL LEA PHOTO



Nine campgrounds will be open in the national park this fall.

camping in the the national park

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

Campsites at Elkmont, Smokemont, Cataloochee, Cosby, and Cades Cove may be reserved. For reservations call 1-877-444-6777 or contact www.recreation.gov. Sites may be reserved up to six months in advance. Reservations are required at Cataloochee Campground. Other park campgrounds are first-come, first-served.

Site occupancy is limited to six 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 1-877-444-6777 or contact www.recreation.gov. Group sites may be reserved up to one year in advance.

The list below shows number of sites, elevations, fees, approximate 2016 operation dates, and maximum RV lengths. **Dates are subject to change.** Visit www.nps.gov/grsm for current information.

ABRAMS CREEK 16 sites, elev. 1,125', \$14, open May 27-Oct. 10, 12' trailers
BALSAM MOUNTAIN 46 sites, elev. 5,310', \$14, open May 27-Oct. 10, 30' RVs
BIG CREEK 12 sites, elev. 1,700', \$14, open April 8-Oct. 31, tents only
CADES COVE 159 sites, elev. 1,807', \$17-\$20, open year-round, 35'-40' RVs
CATALOOCHEE 27 sites, elev. 2,610', \$20, open March 25-Oct. 31, **reservations required**, 31' RVs
COSBY 157 sites, elev. 2,459', \$14, April 8-Oct. 31, 25' RVs
DEEP CREEK 92 sites, elev. 1,800', \$17, open April 8-Oct. 31, 26' RVs
ELKMONT 220 sites, elev. 2,150', \$17-\$23, open March 11-Nov. 27, 32'-35' RVs
LOOK ROCK *Closed*
SMOKEMONT 142 sites, elev. 2,198', \$17-\$20, open year-round, 35'-40' RVs

accommodations

LeConte Lodge (accessible by trail only) provides the only lodging in the park. Call (865) 429-5704.

For information on lodging outside the park:
Bryson City 1-800-867-9246
Cherokee 1-828-788-0034
Fontana 1-800-849-2258
Gatlinburg 1-800-588-1817
Maggie Valley 1-800-624-4431
Pigeon Forge 1-855-716-6199
Sevierville 1-888-889-7415
Townsend 1-800-525-6834

MARY ANN KRESSIG PHOTO



Bicycle and pedestrian morning on Cades Cove Loop Road.

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 viewing wildlife and historic sites.

Helmets are required for persons age 16 and under and are strongly recommended for all bicyclists.

From mid-May through mid-Sept., on Wednesday and Saturday mornings, only bicycles and pedestrians are allowed on Cades Cove Loop Road. Bicycles may be rented at the Cades Cove Campground store next to Cades Cove Campground.

pets in the park

Pets are allowed in frontcountry 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.

opportunities

Youth & adult programs at TREMONT: gsm.it.org; (865) 448-6709.

Educational programs from the SMOKY MOUNTAIN FIELD SCHOOL: smfs.utk.edu; (865) 974-0150.

Join GREAT SMOKY MOUNTAINS ASSOCIATION at SmokiesInformation.org; 1-888-898-9102
Support the park with FRIENDS: friendsofthesmokies.org; 1-800-845-5665.

special events

September 17
Mountain Life Festival
Mountain Farm Museum

December 10
Festival of Christmas Past
Sugarlands Visitor Center

December 17
Holiday Homecoming
Oconaluftee Visitor Center

picnic areas

Please see pages 8-9 for locations of picnic areas. All have charcoal grills for cooking. Look Rock picnic area will not open this year.

visitor centers

Fall hours of operation for park visitor centers are; Oconaluftee & Sugarlands, 8-6:30. Cades Cove, 9-6:30. Clingmans Dome, 10-6.

other services

There are no gas stations, showers, or restaurants in the national park. Mt. LeConte Lodge is the only lodging.

park information

for additional information, visit www.nps.gov/grsm

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"

The above 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.

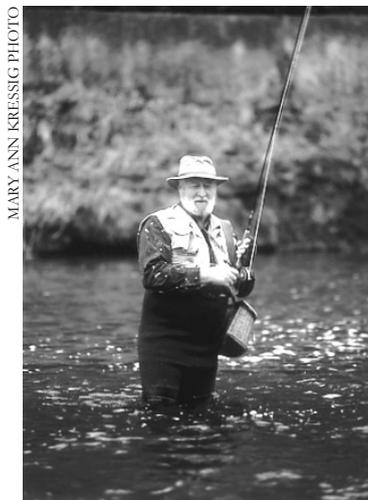
horse riding

Horseback riding is generally available from early March into November. Rates are \$30 per hour. Most stables have maximum rider weight limits of 225 or 250 pounds and age restrictions for children. Please call the stables below or stop at a visitor center for detailed information.

CADES COVE (865) 448-9009
cadescovestables.com
 SMOKEMONT (828) 497-2373
smokemontridingstable.com
 SMOKY MTN (865) 436-5634
smokymountainridingstables.com
 SUGARLANDS (865) 436-3535
sugarlandsriddingstables.com

Hayrides and carriage rides (\$12 per person) are available from Cades Cove Riding Stable. Wagon rides (\$10 per person) are offered at Smokemont. Souvenir photos, tee-shirts, hats, and ice may be available. Soft drink vending is available.

The Park Service operates horse camps at Cades Cove, Big Creek, Cataloochee, and Round Bottom. Call 877-444-6777 or visit www.Recreation.gov for reservations.



Fishing for brook trout is now allowed in park streams.

fishing

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

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

DRIVING DISTANCES & 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 (2 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 (2¼ hours)



Primitive backcountry shelters like this one at Double Springs Gap are located along the Appalachian Trail and near the summit of Mt. Le Conte. Reservations are required for all campers in the backcountry.

Backcountry Camping in the Smokies

Camping at a backcountry campsite or shelter can be an exciting adventure for persons properly equipped and informed. To facilitate this activity, the National Park Service maintains over 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 (www.nps.gov/grsm/plan-yourvisit/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 x226 or shopping online at www.SmokiesInformation.org.
2. Call or stop by the park's backcountry office (open every day from 8:00 a.m. to 5:00 p.m.). The office is located in Sugarlands Visitor Center, two miles south of Gatlinburg on Newfound Gap Road (U.S.

441). (865) 436-1297.

3. Make your reservation through the backcountry office at Sugarlands Visitor Center (by phone or in person) or online at www.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.

Rangers will need to rescue over 100 people in the backcountry this year. If you don't want to be one of them:

- **Ditch the sandals.** Sturdy hiking boots are the best way to prevent a lower leg injury.
- **Know when the sun sets.** Many hikes turn into rescues because people get caught out on trails after dark without flashlights or headlamps.
- **Know your limits.** Don't plan a 15-mile hike unless you are in spectacular physical condition and have done such hikes in mountain terrain recently.
- **Prepare for the weather.** These mountains are green because it rains a whole lot here. Always carry rain gear. Stay dry.

great sights to see

A dozen must-see places in the Great Smoky Mountains



KENT CAVE PHOTO

The observation tower atop the Smokies highest peak, 6,643'.

1. clingmans dome

A paved, but very steep, 0.5 mile trail leads to an observation tower that offers 360° views of the Great Smoky Mountains and beyond. To get there: turn off Newfound Gap Road 0.1 mile south of Newfound Gap and follow the 7-mile-long Clingmans Dome Road to the large parking area at the end. A visitor center is located along the trail to the tower.

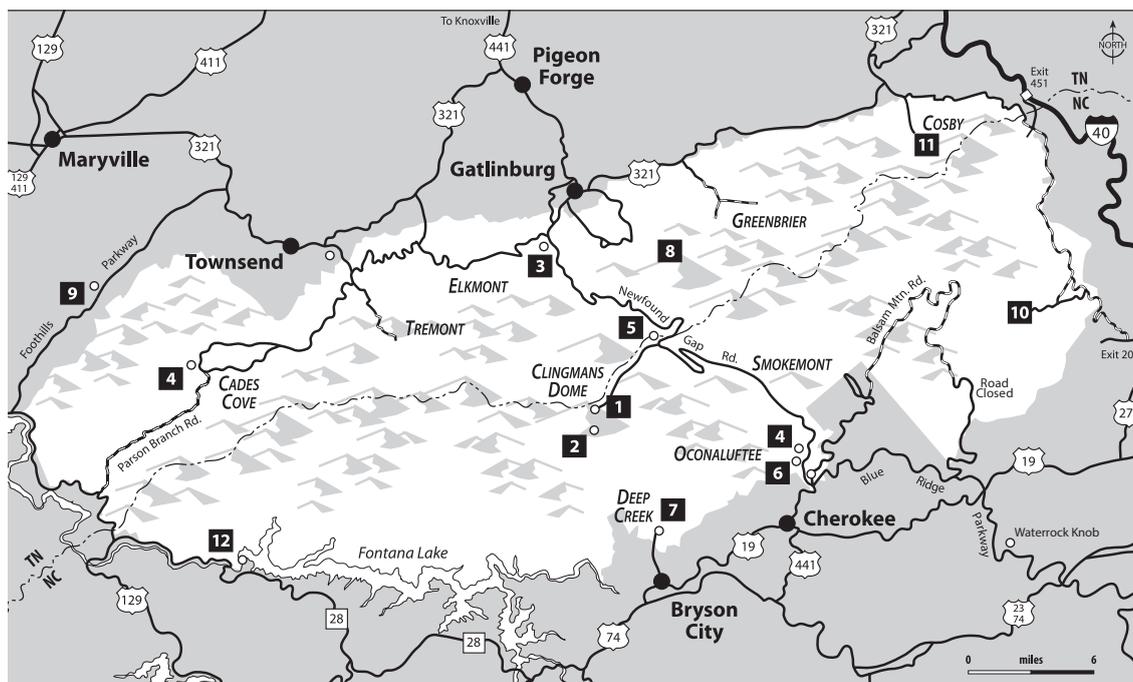
The road to Clingmans Dome is closed from December 1 through March 31 due to weather.

2. andrews bald

"Balds" are mountaintop meadows of mysterious origin. Andrews offers panoramic mountain views in favorable weather. The 3.6 mile roundtrip hike to Andrews Bald is along Forney Ridge Trail and starts from the end of Clingmans Dome parking area. The trail leads through high elevation spruce-fir forest with evergreen trees and unusual flora and fauna.

3. sugarlands visitor center

It's fun, it's free, and it's easy to find. Sugarlands Visitor Center is located 2 miles south



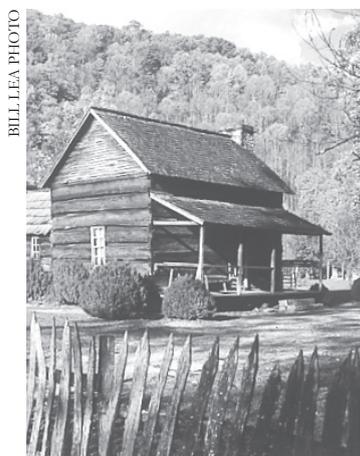
of Gatlinburg, TN on U.S. 441. Highlights include flora and fauna exhibits, a 20-minute film in the surround-sound theater, an information desk, and bookstore. Several short nature trails also begin at the center, as do ranger-led walks and talks. Open every day except Christmas.

4. water-powered grist mills

Two historic, water-powered grist mills operate from 9-5 daily, grinding corn into corn meal. Cable Mill sits in Cades Cove (halfway around the one-way loop road). Mings Mill is 2 miles north of Cherokee, NC on U.S. 441 (Newfound Gap Road). Corn meal is available for purchase.

5. newfound gap

This gap is a low point in the mountain range and straddles the boundary of North Carolina and Tennessee. From here one can enjoy spectacular views into both states and take a short stroll along the famous Appalachian Trail. There are also restrooms and the historic Rockefeller Memorial.



BILL LEA PHOTO

The Davis-Queen house at the Mountain Farm Museum.

6. oconaluftee history museums

This history buff's paradise now offers free indoor and outdoor museums. It also features old-time breeds of livestock (seasonally) an heirloom garden and row crops and occasional historic demonstrations. The new visitor center and mountain farm museum are located on U.S. 441 (Newfound Gap Road), 2 miles north of Cherokee, NC. A new audio tour of the farm can be rented at the visitor center for a small fee. Open every day except Christmas.

7. deep creek waterfalls

Around 2 miles of walking will acquaint you with beautiful Deep Creek and three pretty waterfalls (Juney Whank, Tom Branch, and Indian Creek). The trails to the waterfalls start from the large parking area at the end of Deep Creek Road (across the creek from Deep Creek Campground). Deep Creek also features a picnic area.

8. mt. le conte

The Alum Cave Trail to Mt. Le Conte and LeConte Lodge will be closed Mondays-Thursdays for trail repairs through late November. However, there are plenty of alternatives for hikers to this popular peak. The Boulevard Trail starts from Newfound Gap and runs 8.1 miles to LeConte Lodge. Bull Head and Rainbow Falls trails begin from Cherokee Orchard (near downtown Gatlinburg) and are 6.9 and 6.7 miles respectively. From the Greenbrier area, Brushy Mountain and Trillium Gap trails lead 9.1 miles to the summit.

WHERE TO BEAT THE CROWDS

If you want to beat the October crowds, try some of these off-the-beaten-path destinations.

9. Look Rock walking trail and tower. Great views, just off the Foothills Parkway West, 18 miles from Townsend, TN.

10. Catalochee Valley. This remote area is accessible only by narrow, winding secondary roads. But when you arrive, there are elk to watch, historic buildings to explore, and plenty of trails to walk. 39 miles from Cherokee; 65 miles from Gatlinburg.

11. Cosby Campground, Picnic Area, and hiking trails. The campground rarely fills, and there are short and long trails to waterfalls, views, and Mt. Cammerer fire tower. The campground is 20 miles from Gatlinburg, TN.

12. Fontana Dam and Lake. A TVA visitor center and tours highlight the highest dam in the East. Fontana Marina offers boat rentals and shuttles for access to remote, historic areas like Hazel Creek and Eagle Creek. 33 miles from Bryson City.

park news

Great Smoky Mountains National Park protects over 800 square miles of land

National Park Service New Briefs



Park Garners \$10 Million for Road

IT LOOKS LIKE THE NATIONAL PARK SERVICE, Federal Highways Administration, and state of Tennessee at long last have the funding in place to complete the 33-mile long section of the Foothills Parkway west between Walland, TN and Wears Valley. The parkway runs outside the main boundaries of Great Smoky Mountains National Park and offers spectacular views of the Smokies. In July the Park Service and other agencies received word they would receive a special \$10 million federal grant, which when combined with state and Park Service funds, will be enough to finish the project in 2018.

Visitors Can Become Field Scientists This Fall

VISITORS TO THE SMOKIES can now help scientists learn how plants respond to changes in climate locally, regionally, and nationally. Scientists are looking for information on things like when tree leaves change color, when they fall off, and when they unfurl in the spring. Visitors can help by sending in observations on any plant they see here, or by reporting on 10 species of common trees found in the Smokies.

To get started, simply pick up observation forms at Sugarlands or Oconaluftee visitor center or download the app called Mobile Budburst (app.budburst.org). Then you just need to observe, record, and report to budburst.org.

Tree Hazards Close Parson Branch Road

PARSON BRANCH ROAD, A NARROW, ONE-WAY graveled roadway which connects Cades Cove Loop Road and highway 129, has been temporarily closed due to the large number of dead eastern hemlock trees along the roadside. Most of the trees were killed by the hemlock woolly adelgid, a non-native pest which has wiped out more than half the park's hemlocks.

Please Leave Your Firewood at Home

WOOD-BORING INSECTS FROM EUROPE and Asia have the potential to devastate over 40 species of hardwood trees in the Great Smoky Mountains. To help prevent this catastrophe from ever happening, the National Park Service has imposed restrictions on the type of firewood that can be brought into the national park. Only certified, heat-treated firewood may now be brought into the park, though dead and down wood may still be collected inside the park for campfires here. Certified wood is now available for sale both inside and outside the park. For more information visit www.nps.gov/grsm.

Crews Use Fire to Help Native Plants, Wildlife, and Park History



Controlled burns in Cades Cove help maintain historic landscapes by burning the young trees that would otherwise reforest the meadows.

Although most people think of the Great Smoky Mountains as a rainy place resplendent with waterfalls and rushing mountain streams, some 30-40% of the park is actually dry pine and oak covered ridges that depend on fire for health and regeneration.

Since 1996, Great Smoky Mountains National Park has been using prescribed fire, also called controlled burns, to help restore pine and oak forest, maintain grassy meadows and historic landscapes in Cades Cove, and protect life and property. Prescribed fires are only conducted under specific weather conditions when favorable fire behavior and personnel and public safety goals can be achieved.

Many Great Smoky Mountains species depend on fire or use fire for their benefit. Table Mountain pine, only found in the Appalachian Mountains, would not reproduce without fire. Fire melts the resin on Table Mountain pine cones to release the seeds in nutrient-rich beds of ash where seeds will then germinate and grow.

Fire consumes decaying vegetation and releases nutrients that promote new growth, improves habitat, and increases food sources. By burning intensely in some areas and cooler in others, prescribed fire can create a puzzle-like mosaic of diverse habitats for plants and animals.

Hawks and other birds of prey hunt along the edges of burns and find cover in unburned areas. Deer feed on nutritious, succulent new shoots of grasses and shrubs that appear after fire. Fire reduces shade tolerant trees and shrubs, like maples, which encroach on oak forests. Fire reduces maples, allowing young oaks to survive. The oaks in turn produce acorns which sustain elk, black bear, turkey, and other wildlife that depend upon acorns for food.

Regular, low-intensity prescribed fires protect the

landscape from out-of-control wildfires that can wreak havoc on people and property. Regular fires keep forests and grasslands open and healthy. Over the past two decades, over 20,000 acres have been burned to maintain Smokies health and diversity.

Fires Planned for 2016

Over 3,800 acres in Great Smoky Mountains National Park are planned to be treated with prescribed fire this fall. In Cades Cove the goals are to maintain open meadows and improve critical habitat for wildlife. In addition, the fires will maintain the historic landscape of Cades Cove, and reduce woody intrusion and non-native plants in grassy meadows. Resource managers plan to burn 1,200 acres in Cades Cove in September and October 2016.

Cataloochee Plans

In Cataloochee, crews use fire to invigorate the remaining fire-adapted oak and pine forests and improve oak woodland habitat to sustain numerous diverse plant and animal species (including elk). The fires should also reduce the density of shade tolerant trees and shrubs which

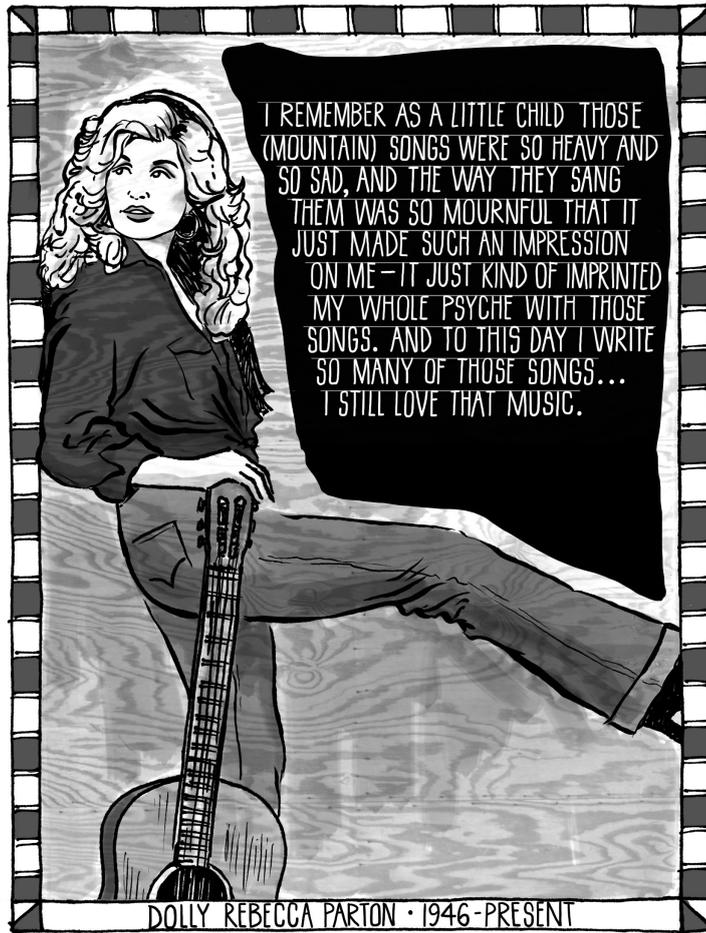
threaten natural communities and lower the risk of wildfires by reducing burnable vegetation. Resource managers plan to burn approximately 2,600 acres in the Cataloochee area in November 2016, weather permitting.



Fire helps plants like Table Mountain pine and many types of wildflowers and grasses regenerate.

Women of the Smokies

Life stories of 19 women who shaped and were shaped by the Smoky Mountains



Women of the Smokies is available at all park visitor center stores and through mail order at 1-888-898-9102 x226. www.SmokiesInformation.org. 294 pages; \$14.95.

the nurses to be called out in the middle of the night to ride and hike deep into the mountains to administer antitoxin to a baby with diphtheria. "The child couldn't have lived until morning, so there was no waiting to get a doctor..." she recalled.

As demanding as the job was, both Chalmers and Higginbotham found the work more rewarding than difficult. "...with the hill folk I have found a wealth of good things—faith and courage, wit and wisdom, and a kindness that shares even 'the widow's mite.'"

The chapter on hikers Margaret Stevenson and Gracie McNicol is another highlight of the book. Both women started hiking as treatment for their different ailments and became Smoky Mountain legends, especially on the trails leading to the summit of Mt. Le Conte.

Stevenson overcame severe back pain by hiking rugged mountain trails. She was 52 years old when she started hiking in the Smokies. Author Lix reports "The more she hiked, the happier she was. In 1976, she became the first woman to hike all 150 trails in the park."

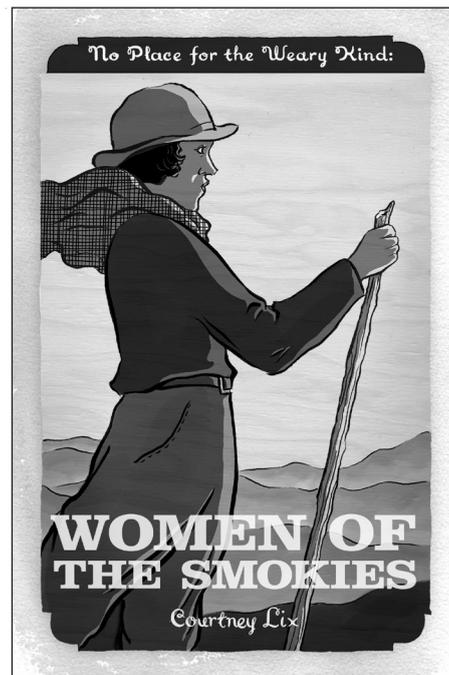
On her 80th birthday Stevenson made her 602nd hike to the top of Le Conte. It was nowhere near her last.

McNicol was not as young as Stevenson when she became an avid Le Conte hiker. She was 62 and had spent a decade or more of her life as a near invalid. As her number of ascents to the lodge atop the mountain grew into the hundreds, she endured still more physical challenges, including a broken back and stroke.

Undeterred, McNicol con-



Above: Phyllis Higginbotham (far left) with Dr. Christenberry, two nurses, and Dr. John Massey at the Pi Beta Phi Settlement School, circa 1920.



tinued hiking Le Conte into her 90s.

No doubt the most famous woman featured in *Women of the Smokies* is Dolly Parton. Dolly's origins were humble. Many of her relatives grew up in the Great Smoky Mountains on farms that later became incorporated into the national park. Dolly and her ten siblings were raised in a one-room cabin about ten miles from the park. Their father was a share cropper and their mother entertained the whole family on rainy winter nights by singing old ballads like "Barbara Allen" and "Pretty Polly."

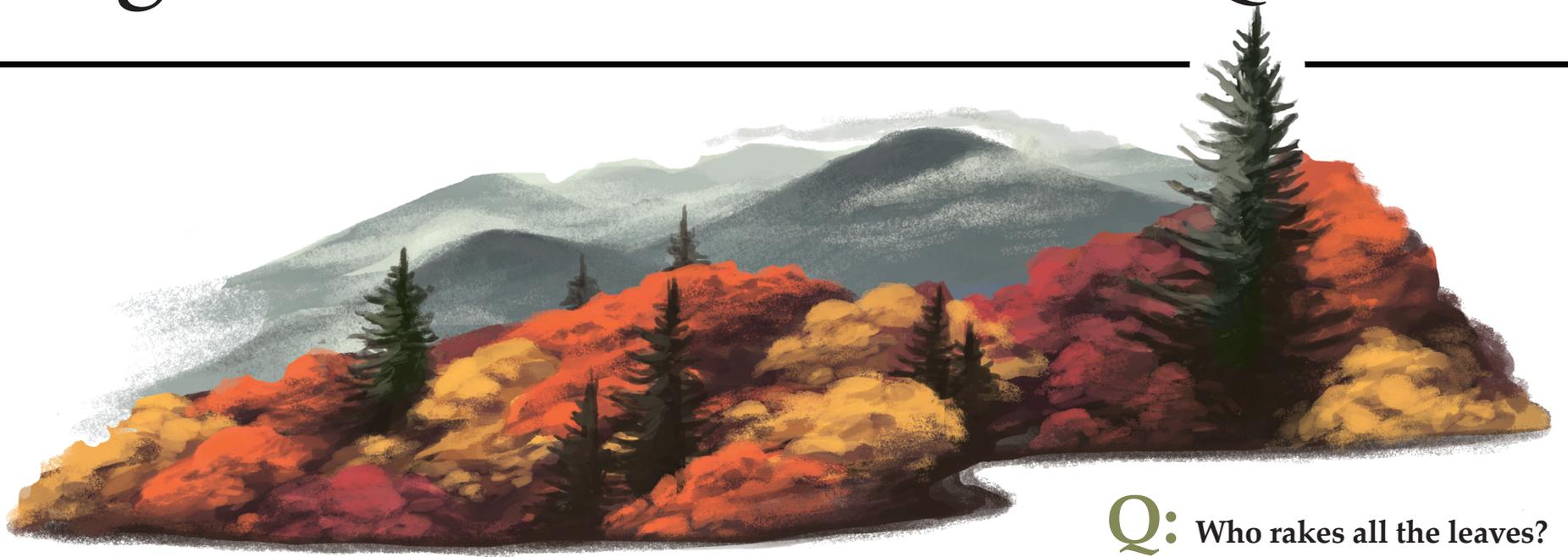
"I remember as a child those mountain songs," Dolly said, "...so heavy and so sad, and the way they sang them was so mournful that it just made such an impression on me."

Dolly was writing and performing music at a very young age, for anyone who would listen, including the chickens in her yard. Her journey from a little barefoot girl on a mountain farm to one of the biggest superstars of her generation was the result of her own determination and perseverance, as well as support from her family.

Even though Dolly's economic status has changed dramatically over her lifetime, her mountain roots are still apparent in her music, speech, and attitudes. In albums like *HeartSong*, *The Grass is Blue*, and *Little Sparrow* she returns to the ballads of her childhood, many with origins that run straight through the Smokies all the way back to the British Isles. As her biographer Alanna Nash wrote, "...her songs with the greatest depth have for the most part been those culled from her storehouse of memories of her native region."



great smokies' fall color Q & A



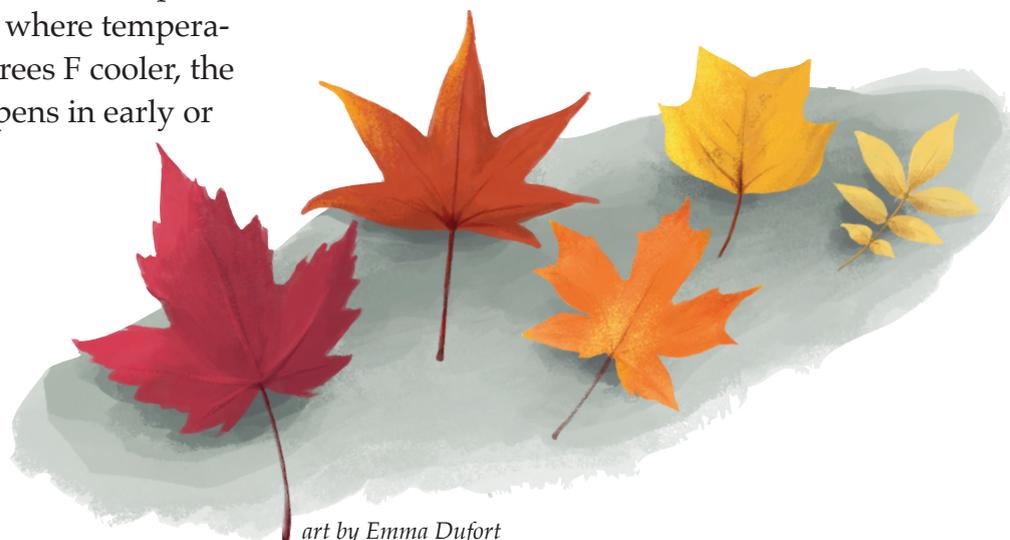
Q: When do fall colors in the park reach their peak?

A: That depends. THE grand finale of fall colors in the Smokies is usually during the last week of October or the first week of November. Remember though, it's better to be a little early than a little late to the show. The absolute peak of colors is often followed by a cold front and accompanying high winds that strip many leaves from the trees.

Also, trees like dogwood and backgum start showing good color in mid September. And at the park's highest elevations, where temperatures are 10-20 degrees F cooler, the peak of colors happens in early or mid October.

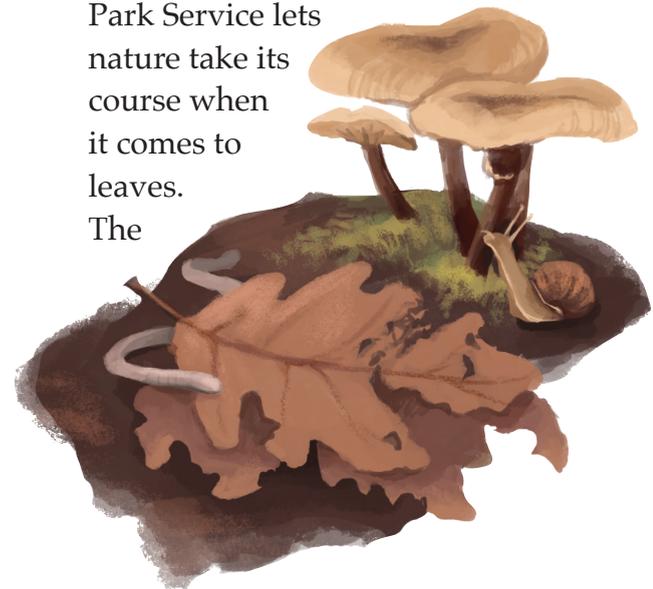
Q: What trees display the best fall colors?

A: In the Smokies, the all-stars include maples, birches, oaks, hickories, ash, tuliptree, sourwood, sweetgum, dogwood, and blackgum. The hemlock, pines, and other evergreens provide the dramatic dark green backdrop. Because there are 100 different species of native trees in the park, plus more than 100 shrubs, the fall color display is diverse and dynamic.



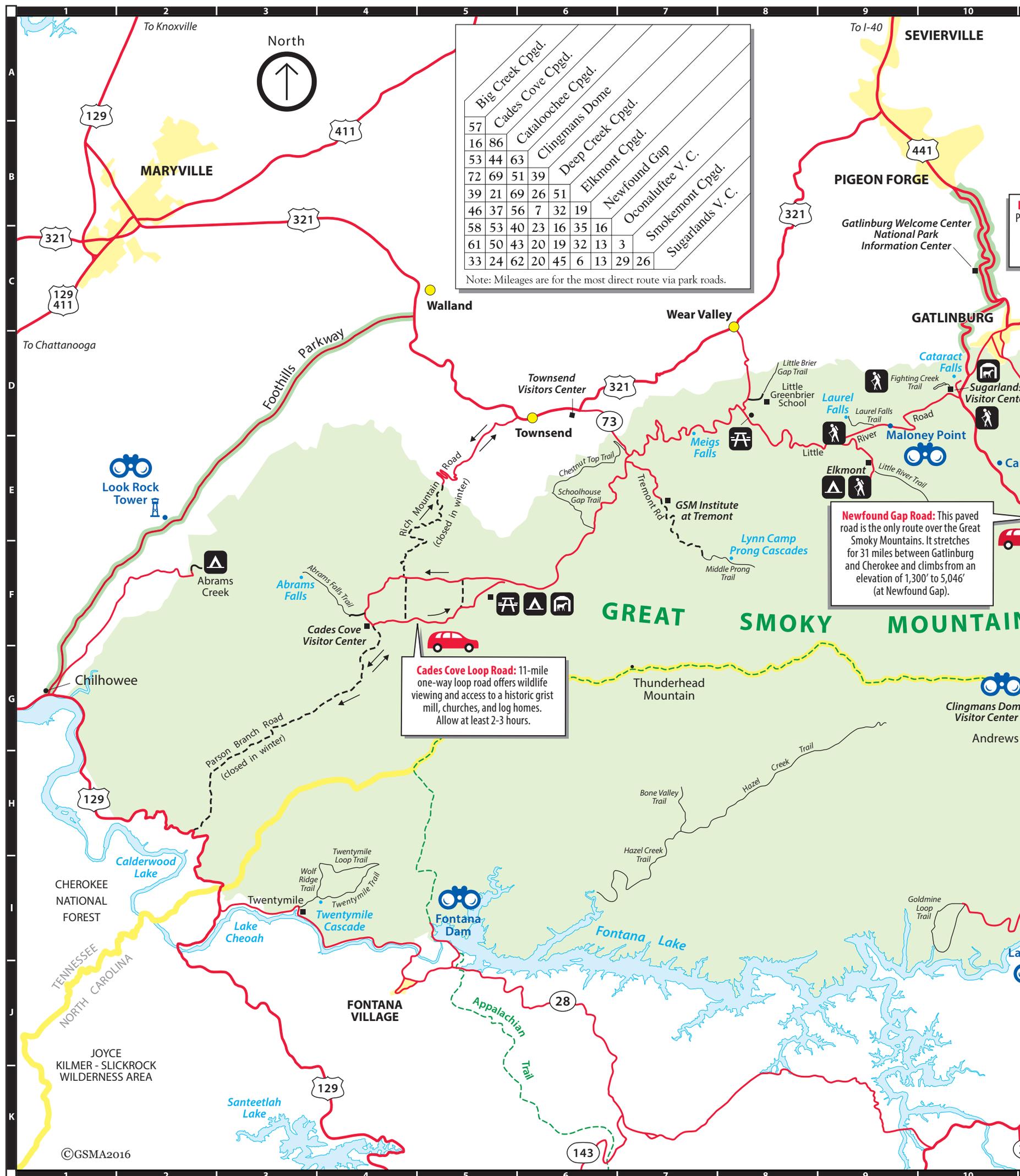
Q: Who rakes all the leaves?

A: Because the Smokies are preserved as a national park, the National Park Service lets nature take its course when it comes to leaves. The



approximately 13 trillion leaves that fall from trees here every year provide food for mushrooms (please see page 15), slime molds, beetles, snails, millipedes, springtails, and worms. These organisms recycle the leaves into nutrients that can then be used by other plants and animals. By next summer, there will be nary a trace of all those leaves.

GREAT FALL DRIVING TOURS AND SCENIC VIEWS IN THE SMOKIES

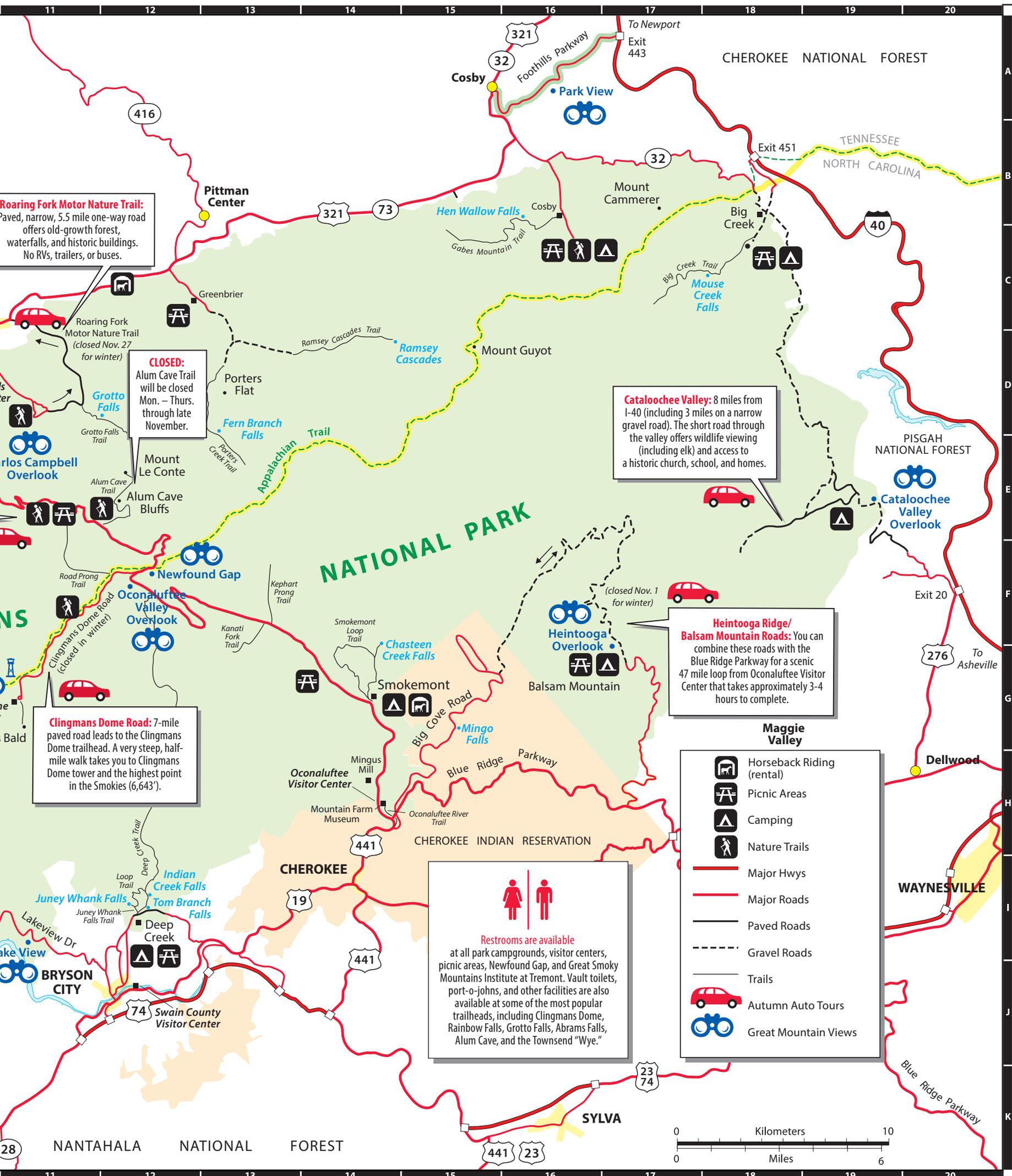


	Big Creek Cpgd.		Cades Cove Cpgd.		Cataloochee Cpgd.		Clingmans Dome		Deep Creek Cpgd.		Elkmount Cpgd.		Newfound Gap		Oconalufee V. C.		Smokemont Cpgd.		Sugarlands V. C.		
57																					
16	86																				
53	44	63																			
72	69	51	39																		
39	21	69	26	51																	
46	37	56	7	32	19																
58	53	40	23	16	35	16															
61	50	43	20	19	32	13	3														
33	24	62	20	45	6	13	29	26													

Note: Mileages are for the most direct route via park roads.

Newfound Gap Road: This paved road is the only route over the Great Smoky Mountains. It stretches for 31 miles between Gatlinburg and Cherokee and climbs from an elevation of 1,300' to 5,046' (at Newfound Gap).

Cades Cove Loop Road: 11-mile one-way loop road offers wildlife viewing and access to a historic grist mill, churches, and log homes. Allow at least 2-3 hours.



Roaring Fork Motor Nature Trail: Paved, narrow, 5.5 mile one-way road offers old-growth forest, waterfalls, and historic buildings. No RVs, trailers, or buses.

CLOSED: Alum Cave Trail will be closed Mon. - Thurs. through late November.

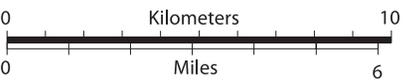
Clingmans Dome Road: 7-mile paved road leads to the Clingmans Dome trailhead. A very steep, half-mile walk takes you to Clingmans Dome tower and the highest point in the Smokies (6,643').

Cataloochee Valley: 8 miles from I-40 (including 3 miles on a narrow gravel road). The short road through the valley offers wildlife viewing (including elk) and access to a historic church, school, and homes.

Heintooga Ridge/ Balsam Mountain Roads: You can combine these roads with the Blue Ridge Parkway for a scenic 47 mile loop from Oconaluftee Visitor Center that takes approximately 3-4 hours to complete.

Restrooms are available at all park campgrounds, visitor centers, picnic areas, Newfound Gap, and Great Smoky Mountains Institute at Tremont. Vault toilets, port-o-johns, and other facilities are also available at some of the most popular trailheads, including Clingmans Dome, Rainbow Falls, Grotto Falls, Abrams Falls, Alum Cave, and the Townsend "Wye."

- Horseback Riding (rental)
- Picnic Areas
- Camping
- Nature Trails
- Major Hwys
- Major Roads
- Paved Roads
- Gravel Roads
- Trails
- Autumn Auto Tours
- Great Mountain Views



free, fun things to do

explore the Smokies with a ranger or park volunteer

SUGARLANDS/ELKMONT AREA	MEETING LOCATION	DURATION	DIFFICULTY
Autumn Amble: Join a ranger to discover the wonderful world of the Smokies in fall. Locations will vary as the leaf color peaks at different elevations.	Varies	2.5 hours	Moderate
Hike to Andrews Bald: Toss your day pack in the car and join a ranger on a 3.6 mile round trip stroll through one of the Smoky Mountains' most interesting ecosystems. This moderate hike will take you out to Andrews Bald, a beautiful meadow on a mountaintop. You can hike leisurely back to the parking lot on your own after reaching the bald or return with the ranger.	Forney Ridge Trailhead	3 hours	Moderate
A Walk in the Woods: Do you have a few minutes? Get away from the hustle and bustle by taking an easy stroll and discover stories of history and nature along this scenic, wooded trail.	Sugarlands Visitor Center	1.5 hours	Easy
Creation of a Park: Drop in anytime between 12 p.m. and 2 p.m. to chat with a ranger about how the Smokies was created. This unique story is sure to intrigue the whole family.	Newfound Gap	2 hours	Easy
Geology Rocks! Amaze your friends with newfound knowledge about how these mountains were born and how they have changed over time	Clingmans Dome Visitor Center	1 hour	Easy
Highland Homeland: Sit a spell on the front porch of the Ogle cabin and learn about the families who once lived here. Demonstrations and activities will vary throughout the season.	Noah Bud Ogle Cabin	1.5 hours	Easy
Slimy Salamanders: Join a Ranger to explore the damp, dark world of the park's most popular amphibian. Be prepared to get a little wet and even a little dirty as we search for this slimy creature. Closed-toed shoes recommended.	Chimneys Picnic Area near Cove Hardwood Nature Trail	1 hour	Easy
Junior Ranger: Creature Feature: Did you know that thousands and thousands of different kinds of plants and animals live in the Smokies? Join a ranger to learn about some of the creatures that live here during this "Ranger's Choice" style program.	Sugarlands Visitor Center	30 minutes	Easy
Evening Campfire: Join a ranger for a National Park tradition—the evening campfire program. Topics vary, but you're guaranteed to learn something new about the Great Smoky Mountains.	Elkmont Campground	1 hour	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. Please arrive 15 minutes before program start; space is limited.	Little Greenbrier School	1.5 hours	Easy
CADES COVE AREA			
Cades Cove Evening Hayride: Enjoy a ranger-led open air hayride viewing wildlife and discovering the diversity of Cades Cove.	Cades Cove Riding Stables	1 ½ - 2 hours	Easy
Cades Cove Night Hike: Join a park ranger for an evening walk discovering the night creatures of the Cove. Children under 14 must be accompanied by an adult. Bring a flashlight.	Cades Cove Orientation Shelter at the Entrance to the Loop Road	1.5 hours	Easy
Junior Ranger Program: Join a park ranger for a hands-on exploration of the Smokies. Participation counts towards earning a Junior Ranger badge and certificate.	Cades Cove Visitor Center	30 - 45 minutes	Easy
WILD by Design: A short talk and demonstration about the wild things in the Smokies.	Cades Cove Visitor Center/Cable Mill Area	30 minutes	Easy

PROGRAMS AND ACTIVITIES IN GREAT SMOKY MOUNTAINS



**PROGRAMS AND ACTIVITIES IN GREAT SMOKY MOUNTAINS
NATIONAL PARK—SEPTEMBER 18-OCTOBER 29, 2016 ONLY**

ACCESSIBLE	MON.	TUES.	WED.	THURS.	FRI.	SAT.	SUN.	SPECIAL CONSIDERATIONS
No				9:00 A.M.		9:00 AM		Limited to 20 participants. Call (865) 436-1291 up to 4 days in advance to make reservations. Sturdy footwear, snacks, and water recommended.
No				10:00 A.M.				Sturdy footwear, a lunch, and water recommended.
No	11:00 A.M.	11:00 A.M.	11:00 A.M.	11:00 A.M.	11:00 A.M.	11:00 A.M.	11:00 A.M.	
Yes			12:00 P.M. to 2:00 P.M.	12:00 P.M. to 2:00 P.M.	12:00 P.M. to 2:00 P.M.			
yes		1:00 P.M.					1:00 P.M.	
No		1:30 P.M.		1:30 P.M.			1:30 P.M.	
No	2:00 P.M.		2:00 P.M.			2:00 P.M.		Limited to 25 participants. Call (865) 436-1291 up to 4 days in advance to make reservations.
Yes	2:30 P.M.	2:30 P.M.	2:30 P.M.	2:30 P.M.	2:30 P.M.	2:30 P.M.	2:30 P.M.	
Yes					*	*		*Check at Sugarlands VC or Campground Office
No		11:00 A.M. & 2:00 P.M.						
Yes			4:00 P.M.					Hayride Fee: \$14.00/person
No					7:30 P.M.			
Yes						1:00 P.M.	1:00 P.M.	
Yes						2:30 P.M.	2:30 P.M.	

NATIONAL PARK—SEPTEMBER 18-OCTOBER 29, 2016



OCONALUFTEE AREA	MEETING LOCATION	DURATION	DIFFICULTY
Porch Talk: Salamanders of the Smokies: Discover why the Smokies is considered the Salamander Capital of the World.	Oconaluftee Visitor Center Porch	30 minutes	Easy
Smokemont History Walk: Join a Ranger for a short history walk exploring the local Smokemont area in the early 1900s.	Smokemont Nature Trail in the Smokemont Campground	1 hour	Easy to Moderate
Logging in the Smokies: Join a ranger to enjoy a short nature walk and uncover Smokemont's logging history. Half mile walk.	Smokemont Nature Trail in the Smokemont Campground	1 hour	Easy to Moderate
Junior Ranger: River Ramble: Relax and cool off along a mountain stream. This easy walk with a ranger offers you an amazing opportunity to explore the Smokies only minutes from your car.	Oconaluftee River Trailhead	1 hour	Easy
Junior Ranger: Porch Program: Join a Ranger on the porch of the Oconaluftee Visitor Center to discover what makes Great Smoky Mountains National Park so special. Topics vary so feel free to come more than once!	Oconaluftee Visitor Center Porch	30 minutes	Easy
Longing for the "Good Ol' Days": You've heard it before but was it really the "good ol' days?" Join a ranger for a walk on the Mountain Farm Museum and learn about the "new comers" who settled here and farmed this land.	Mountain Farm Museum	45 minutes	Easy
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 come into in the fields!	Palmer House, Cataloochee Valley	45 minutes	Easy

SPECIAL PROGRAMS

Hike Bradleytown to Campground: Join Park Volunteer Dick Sellers for an easy 2 hour stroll through time from early Bradleytown to the present campground. Learn how this area transformed from a forested haven to a barren wasteland and back again. Afterwards visitors may choose to hike to the Bradley Fork Cemetery with Dick.	Smokemont Baptist Church (near Smokemont Campground entrance)	2 hours	Easy to Moderate
Blacksmith Demonstration: Learn the art of blacksmithing and why it was important in the Cades Cove community.	Cades Cove Visitor Center	Ongoing 6 hours	Easy
Science Friday: Join a scientist on the 3rd Friday of the month to learn about and engage in ongoing scientific research happening inside Great Smoky Mountains National Park. Topics vary each month.	Sugarlands Visitor Center	2 hours	Easy
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.	Oconaluftee Visitor Center Porch	2 hours	Easy
Sorghum Making Demonstration Watch horses and humans combine their efforts to transform sorghum cane into delicious sorghum molasses.	Cades Cove Visitor Center	2 hours	Easy

PROGRAMS AND ACTIVITIES IN GREAT SMOKY MOUNTAINS



ACCESSIBLE	MON.	TUES.	WED.	THURS.	FRI.	SAT.	SUN.	SPECIAL CONSIDERATIONS
Yes	2:00 P.M.							All ages welcome.
No		11:00 A.M.						
No			1:00 P.M.					
Yes				1:00 P.M.				
Yes					1:00 P.M.			
Yes						11:00 A.M.	2:00 P.M.	
Yes							5:30 P.M.	

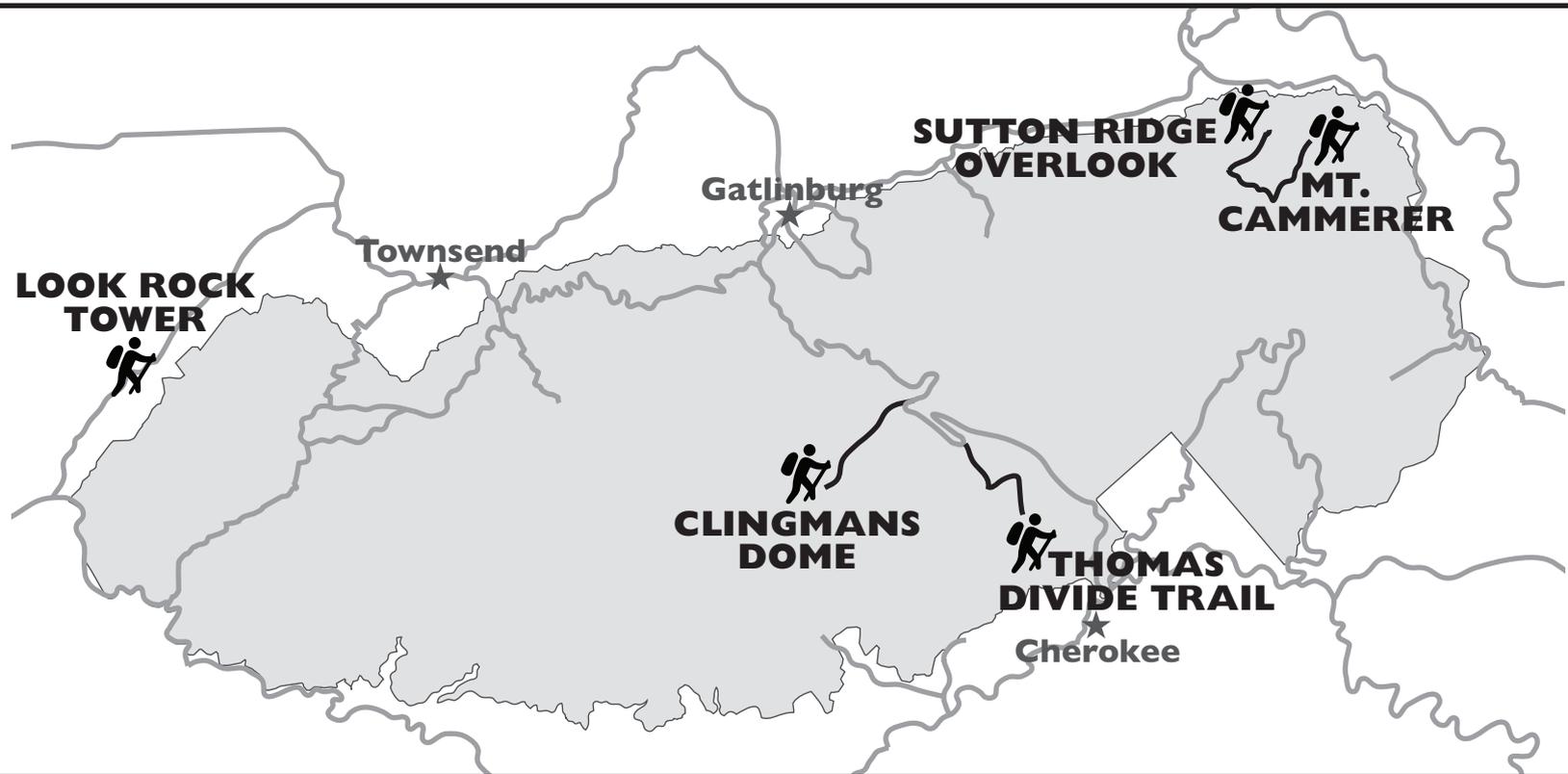
No						9:00 A.M. Oct. 1, 15, 29		Walking shoes & water bottle recommended.
Yes						10:00 A.M. – 4:00 P.M. October 15	10:00 A.M. – 4:00 P.M. October 16	
Yes					1:00 P.M. Sept. 16 October 21			
Yes						1:00 P.M. Oct. 1, 15 Nov. 19		
Yes					Sept. 16, 23 Nov. 4, 11, 18, 25	Sept. 17 Nov. 5, 12, 19, 26	Sept. 18, 25 Nov. 6, 13, 20, 27	

NATIONAL PARK—SEPTEMBER 18–OCTOBER 29, 2016



top five fall hikes

Hike the Smokies!



SUTTON RIDGE OVERLOOK

Roundtrip distance: 2.9 miles

Difficulty: Moderate

Trailhead: The Lower Mt. Cammerer Trail starts from the Cosby Picnic Area near Cosby Campground.

Highlight: Late fall view from Overlook

MT. CAMMERER

Roundtrip distance: 11.2 miles

Difficulty: Strenuous

Trailhead: Low Gap Trail starts from the Cosby Picnic Area near Cosby Campground. Follow it to the Appalachian Trail and the A.T. to the Mt. Cammerer Trail.

Highlight: Views from the historic firetower

LOOK ROCK TOWER

Roundtrip distance: 1.0 mile

Difficulty: Easy

Trailhead: Foothills Parkway West between Chilhowee Lake and Walland.

Highlight: Late fall views from the observation tower

CLINGMANS DOME TOWER

Roundtrip distance: 1.0 mile

Difficulty: Strenuous

Trailhead: The parking area at the end of Clingmans Dome Road.

Highlight: Views from the observation tower

THOMAS DIVIDE TRAIL

Roundtrip distance: 3.6 miles

Difficulty: Moderate

Trailhead: Thomas Divide Trail starts 3 miles south of Newfound Gap on Newfound Gap Road. Hike 1.8 miles to jct. with Kanati Fork Trail and return the way you came.

Highlight: Early fall views from ridgetop

PACK YOUR PACK

Going for a day hike in the park this fall? Your pack should include the following items:

- Drinking water (*at least two quarts if you'll be hiking all day*).
- Trail map
- Rain gear
- Snacks (*high energy foods like nuts and trail bars*)
- Jacket

Remember, your cell phone will not find service at most locations in the park.



HIKE 100 IN THE SMOKIES

There's still time to earn your Hike 100 pin. All you need to do is hike 100 miles in the Smokies between January 1, 2016 and December 6, 2016 as a way of celebrating the 100th anniversary of the National Park Service. The 100 miles can be logged on any officially maintained park trail. All trail miles count, whether they're on the same trail over and over or on 50 different trails.

Successful 100-milers will be rewarded with a commemorative Hike 100 pin and be recognized at a special ceremony with the park superintendent on December 8. Hikers will also have the opportunity to hike four miles with Superintendent Cassius Cash on the Oconaluftee River Trail on December 3.

For more information on the Challenge, and to download a free Hike 100 log sheet, please visit www.nps.gov/grsm. Those who have already reached the 100 mile mark should send an email to: gsmnp_hike_100@nps.gov.

foxfire

Magical mushrooms that glow in the dark

Mushrooms like places with lots of rain and lots of trees. Doesn't that sound like the Great Smoky Mountains? According to Discover Life in America, the organization that coordinates the park's inventories of flora and fauna, there are at least 2,798 species of mushrooms and other fungi in the national park. In fact, researchers have counted over 30 species of fungi on the bark of a single tree in the Smokies!

Of the thousands of mushrooms that flourish here, some of the most interesting are those with **bioluminescence** (they glow in the dark). Nobody knows for sure why mushrooms glow, but one interesting theory is that the light attracts insects that help spread the species around.

Honey agaric mushrooms (*Armillaria mellea*) can be found from August through October at places like Rainbow Falls Trail and Cades Cove. Its mycelium (root-like strands) infiltrate rotting wood and makes it glow with a yellow, green or bluish light. This glow can be quite bright in some cases. An ancient term for this phenomenon is "fox fire."

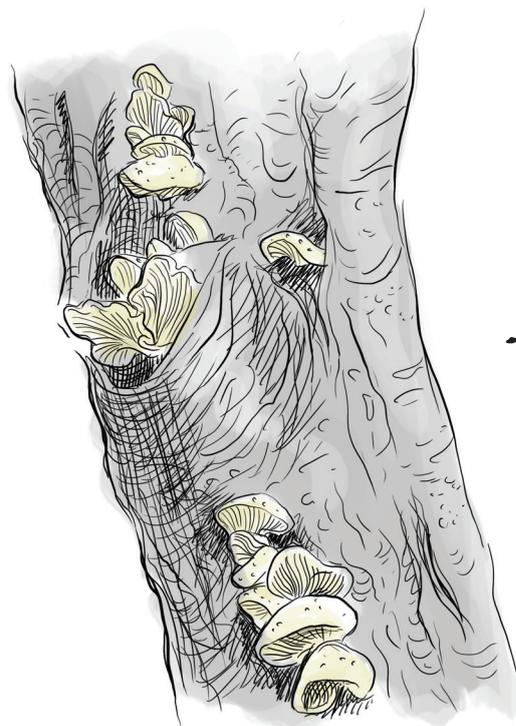
The **jack-o-lantern** (*Clitocybe illudens*) is an attractive orangish-red mushroom that appears in the park in summer and fall. It often grows from oak or chestnut stumps. The jack-o-lantern has ridges (called gills) beneath the cap that emit a soft, dim light.

Several parts of the **Astringent panus** (*Panus stypticus*) mushroom glow, including the cap, gills, and mycelium. This small species grows on wood in such places as Elkmont and Cades Cove.



Honey agaric mushroom
Armillaria mellea

Jack-o'-lantern mushroom
Clitocybe illudens



Astringent panus mushroom
Panus stypticus

visitor information

for more information, www.nps.gov/grsm

information

General park information:

(865) 436-1200
www.nps.gov/grsm

Backcountry information

(865) 436-1297
www.smokiespermits.nps.gov

To order maps and guides

(865) 436-7318 x226
www.smokiesinformation.org

emergencies

Listed below are some numbers to call **for emergencies** that arise 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.

regulations

- Picking or digging plants is prohibited.
- Persons feeding wildlife are subject to a \$5,000 fine.
- Pets are not permitted on most park trails. Only the Gatlinburg and Oconaluftee River trails allow dogs on a leash.

accessibility

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

