



SMOKIES GUIDE



MOUNTAIN CABINS—PLEASE SEE PAGE 13



THE OFFICIAL NEWSPAPER OF GREAT SMOKY MOUNTAINS NATIONAL PARK WINTER 2013-14



BILL LEA PHOTO

Winter visitors explore Mingus Mill near the Oconaluftee area.

Winter is Best Time for History Hiking

Prior to the establishment of Great Smoky Mountains National Park in the 1920s and '30s, this rugged terrain was populated by over 1,000 families who worked small farms and raised livestock. The relics of their habitation include homes, barns, grist mills, churches, schools, and stone fences.

During winter, these reminders of the past are much easier to see and explore because the leaves are off the deciduous trees. Remember, all historic objects and structures in the park are protected by federal law.

The following trails lead to interesting historic sites. For more information, pick up the \$1 "Historic Areas" brochure or the *History Hikes* guidebook for \$12.95.

Old Settlers Trail
Follow the road into the Greenbrier area and turn at the bridge toward Ramsey Cascades Trail. Old Settlers

Trail starts on the left, just across the bridge. The first 1.5 miles of trail pass through remnants of the old Greenbrier community.

Kephart Prong
The trailhead is located at the footbridge over the Oconaluftee River 7.0 miles north of Oconaluftee Visitor Center on Newfound Gap Road. The first 0.25 mile of trail passes by the site of an old CCC camp and fish hatchery.

Woody House
Follow the Rough Fork Trail from the end of Cataloochee Road 1.0 mile to the Woody place and its 1880s home.

Little Greenbrier
Park at Metcalf Bottoms Picnic Area and walk across the bridge. Take the Metcalf Bottoms Trail 0.6 mile to the Little Greenbrier School. If you wish, you can continue 1.0 mile from the school to the Walker sisters' farmstead.

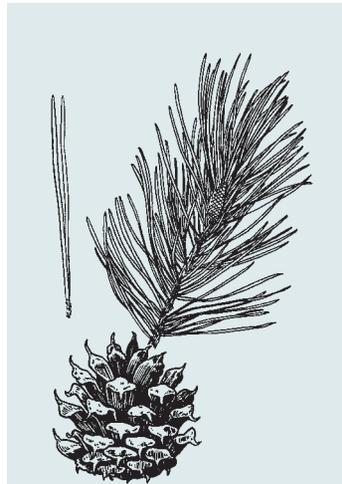


TABLE MOUNTAIN PINE

This tree is native only to the southern Appalachian Mountains. In the Smokies, it is fairly common at the mid-elevations, especially near sunny cliffs and rock outcrops. Botanists think the tree may need major forest fires every few years to thrive. The cones of Table Mountain pines explode during very hot fires and scatter their seeds.



NPS PHOTO

On average, over 80" of snow falls at the higher elevations each year.

Crossing the Mountain

The 33-mile-long Newfound Gap Road (U.S. 441) is the main automobile route through Great Smoky Mountains National Park. It crosses the crest of the Smoky Mountains at Newfound Gap (elevation 5,046') to connect the towns of Gatlinburg, TN and Cherokee, NC. Driving time is typically one hour.

Newfound Gap Road was engineered in the 1920s and '30s specifically so motorists could enjoy the spectacular mountain vistas and tremendous diversity of plant and wildlife habitats along the way. Numerous pullouts are located along the road, offering travelers the opportunity to observe and photograph a variety of views.

At Newfound Gap, where the road reaches its highest point, temperatures are frequently 10-15° F cooler than in Cherokee or Gatlinburg. In addition, the higher elevations of the park receive considerably more precipi-

tation than the surrounding valleys. Annually, Newfound Gap records over five feet of snow.

This combination of low temperatures and high precipitation results in periods of hazardous driving conditions. For the safety of motorists, the Park Service imposes certain restrictions on winter driving when roads are snow- or ice-covered. Typically, Newfound Gap Road is temporarily closed 15-20 times each winter. Signs are posted at both ends of the road informing drivers of restrictions.

✳️ Chains or 4WD Required: only vehicles with tire chains or 4WD may proceed.

✳️ Chains Required: only vehicles with chains on their tires may proceed.

✳️ Road Closed: the road is closed to all vehicles.

For current conditions call (865) 436-1200 or check Twitter at <http://twitter.com/smokiesroadsnps>



indoor activities

There are also plenty of indoor options for exploring the national park

When the weather calls for indoor activities, visitors to the Great Smoky Mountains still have a wide range of options for exploring the natural and cultural histories of the national park. Four quality museums with updated exhibits are located either inside the park or within five miles of its entrances. All are open year-round.



Sugarlands Visitor Center & Museum

PHOTOGRAPH BY BILL LEA & JAMES WALKER

Sugarlands Visitor Center and Museum
 Located on U.S. 441 in Great Smoky Mountains National Park, 2 miles south of Gatlinburg, TN
 Open 8-4:30,
 Closed Christmas Day
 Admission: Free
 (865) 436-1291

Highlights include a 20-minute film is shown on the hour and half hour in a state-of-the-art surround sound theater. The film provides an overview of the park's natural and cultural history. Exhibits in the museum area use intricate re-creations to spotlight the Smokies' rich habitats and diverse plant and animal life. There is a well-staffed information desk and a bookstore inside as well. Outside, several short trails lead to natural and historic points of interest.



Great Smoky Mountains Heritage Center

Great Smoky Mountains Heritage Center
 Located on Hwy 73 in Townsend, TN
 Open 10-5, closed Sundays, holidays
 Admission: \$6 adults, \$4 seniors, \$4 kids 6-17, free for kids 5 and under
 (865) 448-0044

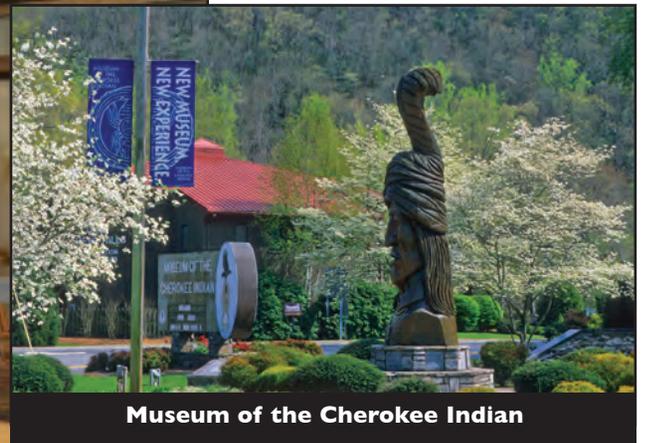
The center is located on six acres and includes both indoor and outdoor exhibits. Subject matter includes east Tennessee American Indian history and the lives of Euro-American settlers from the early 1800s to the establishment of Great Smoky Mountains National Park. Highlights are restored historic buildings, re-creations of log cabin interiors, and quilts and other artifacts from the Great Smoky Mountains National Park collection.



Oconaluftee Visitor Center & Museum

Oconaluftee Visitor Center and Museum
 Located on U.S. 441 in Great Smoky Mountains National Park, 2 miles north of Cherokee, NC.
 Open 8-4:30, Closed Christmas Day
 Admission: Free
 (828) 497-1904

Exhibits include audio recordings of mountain folk, park artifacts, video clips, 3-D maps, historic photographs, and more. There is a well-staffed information desk and a bookstore inside as well. Outside the visitor center over a dozen historic log buildings are preserved on the Mountain Farm Museum. In addition, a walking and bicycling trail follows the river to Cherokee.



Museum of the Cherokee Indian

Museum of the Cherokee Indian
 Located on U.S. 441 in downtown Cherokee, NC
 Open 9-5 daily, except holidays
 Admission: \$10 adults, \$6 children ages 6-12, free for kids 5 and under
 Discounts for AARP, AAA, and groups.
 (828) 497-3481

The Museum of the Cherokee Indian's 12,000 square feet of exhibits combine computer-generated imagery, special effects, and audio with an extensive artifact collection to tell the story of the Cherokee from twelve thousand years ago through the present. Highlights of the museum include the "Story Lodge," where ancient Cherokee myths appear through computer animation and depictions of the Archaic and Woodland periods are presented, including the development of agriculture, trade, and large villages.

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 1

WINTER: December 1

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GSMMA

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Campgrounds at Smokemont and Cades Cove are open all year.

camping in the the national

The National Park Service maintains developed campgrounds at seven 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-serve.

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 2014 operation dates, and maximum RV lengths. **Dates are subject to change.** Visit www.nps.gov/grsm for current information.

ABRAMS CREEK 16 sites, *Will not open in 2014*

BALSAM MOUNTAIN 46 sites, *Will not open in 2014*

BIG CREEK 12 sites, elev. 1,700', \$14, open April ?-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 ?-Oct. 31, reservations required, 31' RVs

COSBY 157 sites, elev. 2,459', \$14, open late April-Oct. 31, 25' RVs

DEEP CREEK 92 sites, elev. 1,800', \$17, open April ?-Oct. 31, 26' RVs

ELKMONT 220 sites, elev. 2,150', \$17-\$23, open March ?-Nov. 30, 32'-35' RVs

LOOK ROCK 68 sites, *Will not open in 2014*

SMOKEMONT 142 sites, elev. 2,198', \$17-\$20, open year-round, 35'-40' RVs

accommodations

Le Conte 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 1-800-438-1601
Fontana 1-800-849-2258
Gatlinburg 1-800-267-7088
Maggie Valley 1-800-624-4431
Pigeon Forge 1-800-251-9100
Sevierville 1-888-766-5948
Townsend 1-800-525-6834



Bicycling Cades Cove in winter.

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.

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.

For biking in national forests, call (828) 257-4200.

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.

road closures

The following roads close for the winter. Listed below are the estimated 2014 opening dates. This schedule is subject to change.

Clingmans Dome—March 28

Rich Mountain—April 4

Roaring Fork—April 11

Straight Fork—April ?

special events

December 14, 2013

Festival of Christmas Past:
Sugarlands Visitor Center

December 21, 2013

Holiday Homecoming at
Oconaluftee Visitor Center

April 25-27, 2014

Music of the Mountains:
Sugarlands Visitor Center

April 15-April 19, 2014

Spring Wildflower Pilgrimage:
parkwide

May 14, 2014

Start of bicycle mornings in
Cades Cove

May 17

Cosby in the Park

picnic areas

Picnic areas open year-round are: Cades Cove, Deep Creek, Greenbrier, and Metcalf Bottoms. Please see pages 8-9 for locations.

other services

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

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.

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 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 in the high country.



Fishing for brook trout is now allowed in most 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 a complete list of all park fishing regulations is available at visitor centers.

DRIVING DISTANCES & ESTIMATED TIMES

Cherokee, NC to:

Gatlinburg: 34 miles (1 hour)
Cades Cove: 57 miles (2 hours)
Newfound Gap: 18 miles
(1/2 hour)
Clingmans Dome:
25 miles (3/4 hour)
Cataloochee: 39 miles
(1 1/2 hours)
Deep Creek: 14 miles (1/2 hour)

Gatlinburg, TN to:

Cherokee: 34 miles (1 hour)
Cades Cove: 27 miles (1 hour)
Newfound Gap: 16 miles
(1/2 hour)
Clingmans Dome:
23 miles (3/4 hour)
Cataloochee: 65 miles (2 hours)
Greenbrier Cove: 6 miles
(1/4 hour)
Deep Creek:
48 miles (1 1/2 hours)

Townsend, TN to:

Cades Cove: 9 miles (1/3 hour)
Newfound Gap: 34 miles
(1 1/4 hours)
Gatlinburg: 22 miles (3/4 hour)
Cherokee: 52 miles (1 1/2 hours)
Look Rock: 18 miles (1/2 hour)
Cataloochee:
87 miles (2 1/4 hours)



Primitive backcountry shelters are located along the Appalachian Trail and near the summit of Mt. Le Conte. Reservations are required.

winter camping in the backcountry

Winter camping 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 which is 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.

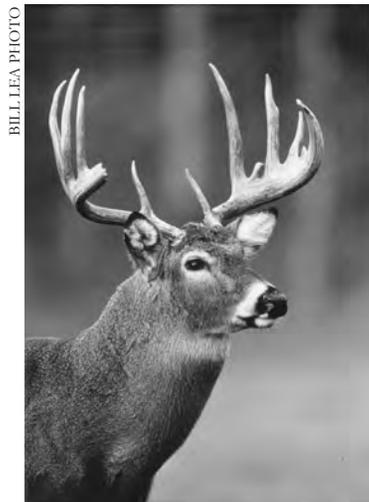
The cost is \$4 per person per night. Reservations may be made up to 30 days in advance.

Winter hikers should be especially aware of the danger of hypothermia—the lowering of body temperature. The combination of rain, cold, and wind is especially dangerous. At the park's higher elevations, hypothermia can be a threat even during summer.

To prevent hypothermia, carry good rain gear at all times. Layer clothing that provides warmth when wet (not cotton). Be prepared for sudden weather changes, especially at the high elevations. Stay dry.

places to go

the national park encompasses over 800 square miles



BILLEA PHOTO

caedes cove

highlights: 🏠 historic buildings
🦌 wildlife viewing

Cades Cove is one of the most popular destinations in the Smokies because it offers an unusual blend of both natural and cultural resources.

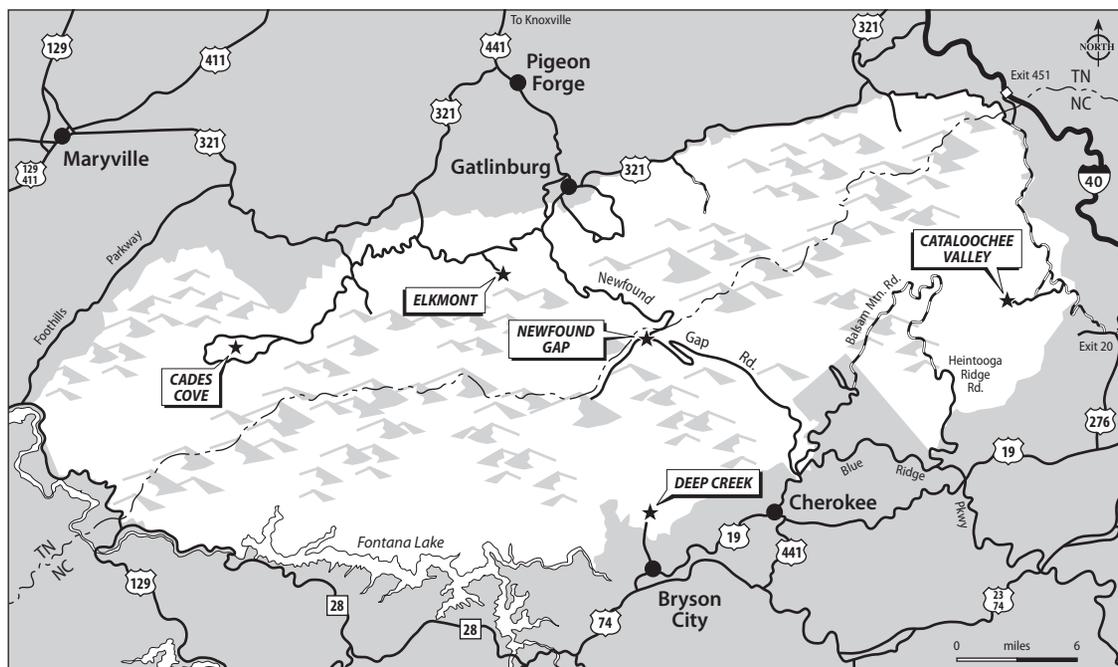
Deer are often sighted in the fields, and their breeding season (or “rut”) continues through early winter. Observations of other wildlife, including bear, Wild Turkey, and coyote are also possible. Please use pullouts when viewing wildlife. Never approach or feed animals.

A wide array of historic buildings, some dating back to the mid-19th century, are preserved throughout the cove. These include a grist mill, a variety of barns, three churches, and a renowned collection of log homes.

An 11-mile one-way loop road takes you around the cove. A visitor center (open daily), restrooms, and the Cable Mill walking tour are located halfway around.

Numerous trails start in the cove, including the 5-mile roundtrip trail to Abrams Falls and the 8.5-mile Rich Mountain loop hike.

Mileage from Townsend—9
from Gatlinburg—27



old elkmont town

highlights: 🏠 historic buildings
🥾 walking trails

The Elkmont area was once a logging boomtown and a bustling enclave of summer vacation homes. Today the National Park Service has restored the Appalachian Clubhouse and Spence cabin and stabilized 17 other historic buildings. The site offers visitors a chance to explore an early 20th century Appalachian summer resort.

Elkmont also has a variety of easy-to-moderate hiking trails, including the Cucumber Gap loop (5.5 miles), Elkmont Self-guiding Nature Trail (0.8 mile roundtrip), Jakes Creek Falls (3.2 miles roundtrip), and Huskey Branch Falls (4.3 miles roundtrip). Little River Trail makes a pleasant streamside stroll.

Anglers have long frequented nearby Little River for its excellent trout fishing.

Mileage from Gatlinburg—7
from Townsend—15
from Cherokee—39

deep creek

highlights: 🥾 walking trails
🚲 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 possible.

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 www.recreation.gov

Mileage from Cherokee—14
from Gatlinburg—48

cataloochee valley

highlights: 🏠 historic buildings
🦌 wildlife viewing

Cataloochee Valley was once a relatively prosperous farming community with fields of corn, tobacco, and wheat as well as hundreds of livestock and sprawling fruit orchards. Prior to park establishment, some 1,200 people lived in Little and Big Cataloochees.

Today several historic buildings have been preserved as reminders of this heritage, including churches, a school, barns and homes. All historic structures are open to the public.

The valley also offers outstanding opportunities for wildlife viewing. Visitors often see elk, Wild Turkey, black bear, birds of prey, and other animals.

Cataloochee is remote and only accessible via a very narrow, winding gravel road. Roads to Cataloochee may be temporarily closed in winter.

Mileage from Gatlinburg—65
from Cherokee—39



NPS PHOTO

newfound gap

highlights: 🏔 mountain views
❄ snow?

In southern Appalachian vernacular, a gap is a low point in a mountain ridge. New Englanders call such places “notches” while westerners refer to them as mountain “passes.”

At nearly a mile high (5,046’), Newfound Gap is significantly cooler than the surrounding lowlands and receives much more snow. On average, 69 inches of snow falls at the gap each year.

When there is snow on the ground, and Newfound Gap Road has not been closed because of it, opportunities do exist for snow sports in the area. Many people use Clingmans Dome Road (closed to vehicles in winter) for walking, snowshoeing, and cross-country skiing. The road starts 0.1 mile south of Newfound Gap.

A trip to Newfound Gap 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.

Mileage from Gatlinburg—16
from Cherokee—18
from Townsend—34

national park news

National Park Service News Briefs

Official Smokies 25-cent Piece Available in 2014

ON JANUARY 29, 2014, the U.S. Mint will release into circulation its Tennessee—Great Smoky Mountains National Park quarter as the latest coin in its “America the Beautiful” series. The 25-cent piece is one of 56 park quarters produced by the Denver and Philadelphia mints. Uncirculated versions of the Smokies quarter and other park quarters will be available for sale in park visitor centers.



Chimney Tops Trail Reopens for Winter

THE VERY POPULAR CHIMNEY TOPS Trail off Newfound Gap Road will remain open daily through early spring 2014. The trail has been closed for reconstruction work from spring through fall so the Trails Forever crew can do some large scale rock work. The two-mile long trail leads to a rocky summit with exceptional views.

Park Improving Scenic Vistas

OVER THE WINTER, the National Park Service and private contractors will continue their long-term effort to clear the scenic vistas that allow visitors spectacular views of the Great Smoky Mountains. Since the park was created some 80 years ago, the forest has healed and massive trees now obscure some of the best roadside views. Winter work will focus on the Foothills Parkway East, upper segments of Newfound Gap Road, Cataloochee entrance road, and, if funding becomes available, Clingmans Dome Road.

Each scenic pullout now has a “prescription” that workers follow based on esthetics, plants and animals of special concern, and sustainability. Work will continue until the end of March when consideration for endangered species limits further work.

Please Leave Firewood at Home

FIREWOOD OFTEN HARBORS non-native insects that can devastate our forests. Please do not bring your firewood into the park.

Park Service Crews Using Pesticides, Predators to Save Hemlock Trees



DON MCCOWAN PHOTO

A park technician uses a pesticide soil drench to adelgid-proof a hemlock tree. Soil drenches can protect trees for five years or more.

Many recent visitors to the Smokies have been shocked to see whole mountainsides littered with the graying skeletons of dead hemlock trees. Tens of thousands have succumbed to the hemlock woolly adelgid, a tiny insect from Asia which arrived in the Smokies around 2000. The non-native insect spread like wildfire, killing trees young and old.

Despite this onslaught, the Park Service has been able to save over 200,000 hemlock trees from the attack. The rangers’ weapons include predator beetles that feed exclusively on adelgids and two types of pesticides.

Rangers have focused their efforts on trees along roadsides, in campgrounds and picnic areas, and at backcountry campsites. In addition, the Park Service has treated major stands of large, old-growth hem-

locks throughout the park’s backcountry. Considering that each hemlock tree must be individually treated every 3-7 years, this is a significant accomplishment.

The Park Service does have a variety of pesticide treatment methods at its disposal. One of the most frequently used is drenching the soil around hemlock trees with a liquid pesticide that the trees absorb through their roots and circulate up into their branches and needles. The treatment kills the adelgids when they tap into the trees at the base of the needle. The chemical is similar to that used on cats and dogs for ticks. The hemlock treatment is generally effective for up to five years.

The second commonly used method is a horticultural spray which rangers apply to the trees themselves using high pressure pumps and

hoses. This method is also effective at killing adelgids but is only practical where vehicles can go, such as campgrounds. It generally must be repeated every year.

Along streams, rangers must use a special injection method to avoid introducing pesticides into the water. In these situations, rangers bore a small hole and inject pesticide directly into the tree’s trunk.

In addition to the pesticide treatments, the Park Service has been working with the University of Tennessee, the U.S. Forest Service, and other organizations to raise and release different species of predator beetles to control adelgids. Over a half million of these black, pinhead-sized beetles have been released in the park over the last ten years. Predator beetles should not be confused with the much larger, orange lady beetles that invade homes.

Rangers believe that eventually populations of predator beetles will reach a level that they will limit the impacts of woolly adelgids on hemlock trees.

Prior to the adelgid invasion, hemlock trees were among the largest and most common trees in the Southern mountains. They form a unique association with other species to create a forest type that’s found nowhere else in the world. Trees over 500 years old and 170 feet tall live in the park.

Hemlocks provide critical habitat for several species of migratory songbirds, including the black-throated blue warbler, and keep streams cool for trout. For more information visit: www.nps.gov/grsm.

behind the scenery

The park receives over 9 million visitors each year

Park Crews Stabilize 17 Elkmont Cottages, Restore Club and Cabin



KENT CAVE PHOTO

The Sneed Cabin is one of 19 historic structures the Park Service hopes to restore in the Elkmont historic district.

Since beginning work in the summer of 2008, National Park Service historic preservation crews have completed the emergency stabilization of 17 summer cottages and associated buildings and have renovated the Appalachian Clubhouse and Spence Cabin in the Elkmont area of the national park.

This work has included patching roofs, shoring up porches and foundations, and rehabilitating two century-old structures to sufficient condition that they can now be rented to the public as special event day-use facilities.

In addition to the renovation work, the park was able to contract for the production of nine historic structure reports, including the Appalachian Clubhouse, Spence Cabin, Levi Trentham Cabin, and Byers (Chapman) Cabin. These reports provide an overview of the history of the buildings and include detailed drawings in case por-

tions ever need to be rebuilt. Eventually Historic Structure Reports will be prepared for most of the historic buildings being preserved and will be used to guide the preservation and restoration processes.

The cost to restore the remaining 17 buildings to such an extent they can also be open to the public as historical exhibits is estimated to be \$5 million. The Park Service and various historic preservation organizations are seeking this funding from public and private sources. The initial \$200,000 to conduct emergency stabilization came from a federal-private Centennial Challenge grant, a program to commemorate the 100th anniversary of the National Park Service in 2016.

The Elkmont historic district encompasses 74 cottages and other structures that date back to the early 1900s. Prior to establishment of Great Smoky Mountains National Park in 1934, the cottages

were used as summer homes, mainly for families from the Knoxville, TN area. Most were occupied until 1992 through a series of leases. The other 55 buildings are slated to be removed and their sites returned to natural habitats when funding for demolition becomes available.

A series of 11 interpretive wayside exhibits will be produced and installed in 2014. The colorful exhibits explain such landmarks as the Wonderland Hotel, the Byers/Chapman house, the architecture of Daisy Town, the logging boom days, and the rare riparian forest habitat beside Little River. The exhibits are being paid for by Friends of the Smokies and Great Smoky Mountains Association.

In addition to the exhibits, the Park Service conducts guided walks in season that reveal the history of old Elkmont town. For details, see the summer and fall park newspapers. Restrooms and parking are available near the Appalachian Clubhouse.

Both the Spence Cabin and the Appalachian Clubhouse can be rented by the public for such events as wedding receptions, family reunions, corporate retreats, and other meetings. The renovated structures are available for day-use only. For information, contact www.recreation.gov or (877) 444-6777.

The Elkmont historic district is situated adjacent to Elkmont Campground. The first quarter-mile of Little River Trail winds past several of the buildings. From 1908 to 1926, the current campground area was the site of Little River Lumber Company operations, including a sawmill, company store, and railroad.



A radio-collared bull elk checks out a calf in Cataloochee Valley.

Record Number of Elk Calves Born in Smokies

Park wildlife biologists are happy to report that the number of elk calves born in the Smokies in 2013 set a new record. Twenty-four calves were confirmed over the summer and 19 had survived as of late fall. Only three adult elk are known to have died in 2013, two from natural causes and one was euthanized. The births and deaths bring the estimated total elk population in the Great Smokies area to greater than 120.

Although most of the elk reside in Cataloochee Valley, small groups now live at Balsam Mountain, Oconaluftee, the Mt. Sterling community, and the Cherokee Indian Reservation. Wandering elk have been reported in several far-flung locations including Cashiers, NC, Newport, TN, and near Cosby.

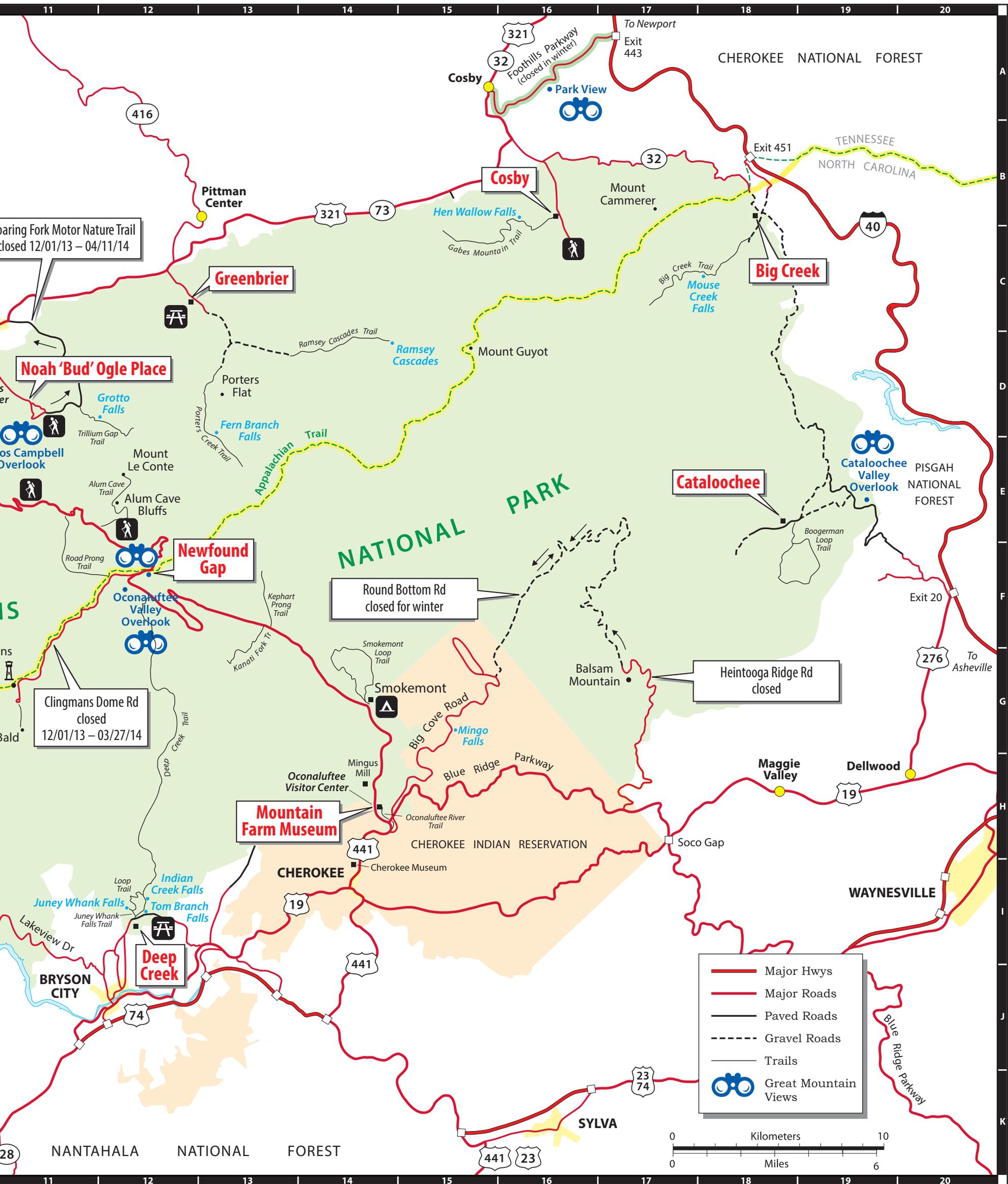
During the fall, park staff conducted controlled burns on nearly 400 acres adjacent to Cataloochee Valley. The prescribed fires are designed to preserve natural oak and pine forests.

According to fire op-

erations supervisor Shane Paxton, the burns should eventually increase "the cover and diversity of native grasses and wildflowers. Over time, this increase in herbaceous vegetation will improve forage for elk."

Elk viewing has become an increasingly popular activity for visitors to the park. In fact, the number of people visiting Cataloochee Valley has more than doubled since elk were reintroduced. During winter, the narrow, winding, gravel roads to Cataloochee may be dangerous to travel. The Park Service temporarily closes the access roads after snow events. For information, visit www.nps.gov/grsm.

The Smokies' experimental elk reintroduction began in 2001 when 25 elk were brought to Cataloochee Valley from Land Between the Lakes on the Tennessee-Kentucky border. Twenty-seven more elk were added to the herd in 2002. Elk are native to the southern Appalachian Mountains but were extirpated during the 19th century.



Comparing Fork Motor Nature Trail closed 12/01/13 - 04/11/14

Noah 'Bud' Ogle Place

Clingmans Dome Rd closed 12/01/13 - 03/27/14

Round Bottom Rd closed for winter

Heintooga Ridge Rd closed

waterfalls in winter

Winter is a good time to hike to waterfalls, if you're careful!

Winter is one of the best times to view and photograph waterfalls in the Great Smoky Mountains. For one, it is the season when streams and waterfalls have their greatest rates of water flow. For another, the absence of leaves on deciduous trees makes falls more visible. In fact, some Smokies waterfalls can only be viewed in winter.

Every year, hikers are killed or seriously injured while trying to climb to the top of waterfalls. Enjoy them safely from a distance. Be aware that fracturing a leg or worse in the park backcountry usually entails a wait of several hours before medical attention can arrive, followed by a long, bumpy ride on a wheeled litter.

1. CROOKED ARM CASCADE:

A moderate 1.4 mile round trip hike. Park at the shelter at the start of Cades Cove Loop Road and walk the Rich Mountain Loop Trail 0.5 mile to the Crooked Arm Ridge Trail. The falls is 0.2 mile along Crooked Arm Ridge Trail.

2. LAUREL FALLS:

A moderate 2.5-mile round trip hike on the Laurel Falls Trail. The trail is paved to the falls. The trailhead is 3.9 miles west of Sugarlands Visitor Center on Little River Road (toward Cades Cove).

3. RAINBOW FALLS:

A strenuous 5.5-mile round trip hike. The trail starts from the Rainbow Falls parking area on Cherokee



With a 105 foot drop, Ramsey Cascades is one of the tallest waterfalls in the national park.

Orchard Road near downtown Gatlinburg, TN.

4. JUNEY WHANK FALLS:

A moderate 0.6-mile round trip hike. The trail starts from the parking area at the end of Deep Creek Road, beyond the side road to Deep Creek Campground.

5. INDIAN CREEK FALLS:

An easy 2.0-mile roundtrip hike.

Take the Deep Creek Trail, which starts at the end of Deep Creek Road (past the side road to Deep Creek Campground), to Indian Creek Trail.

6. MINGO FALLS:

(outside park). A moderate 0.5-mile round trip hike. From

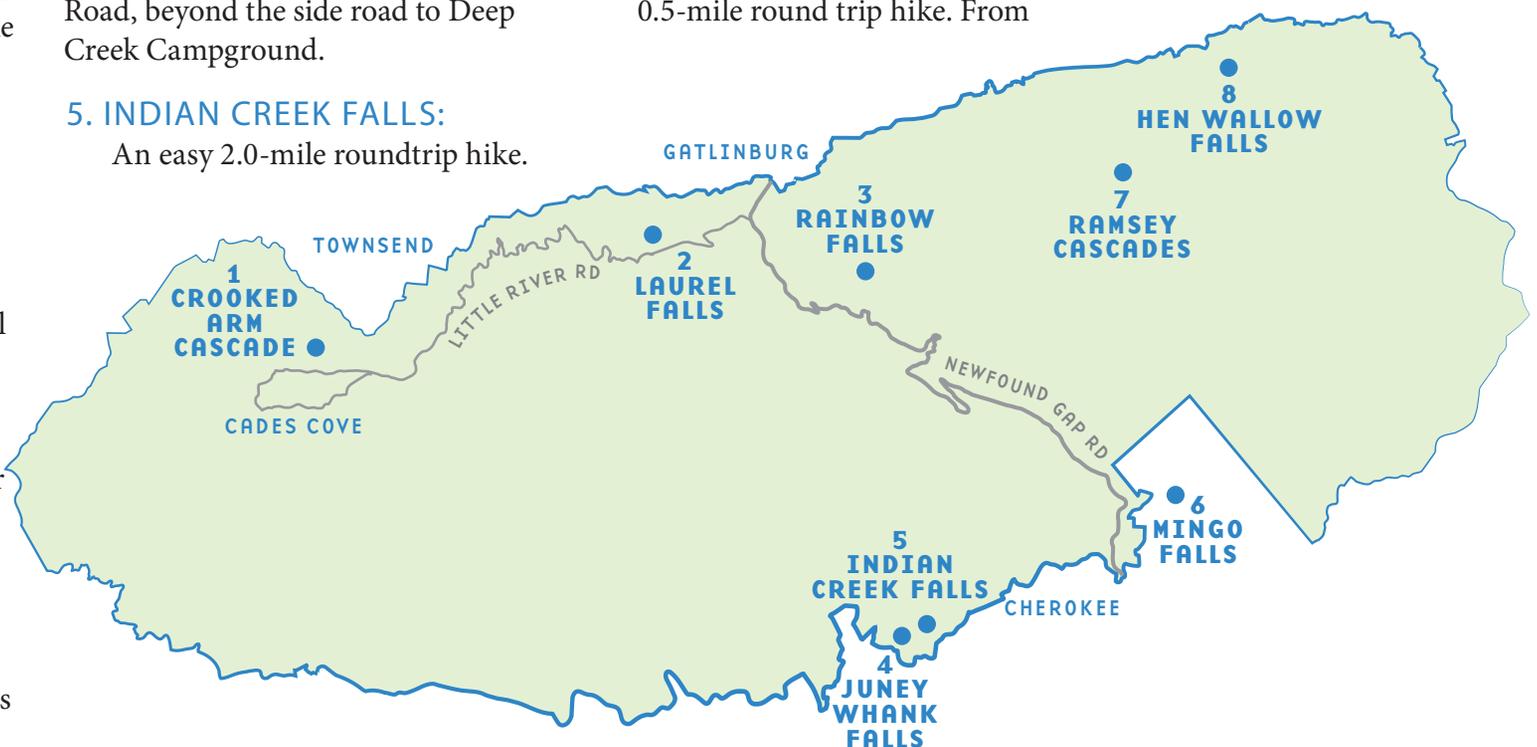
Oconaluftee Visitor Center, drive south on U.S. 441 and take the second left onto Big Cove Road. At the first stop sign, turn left and drive 4.5 miles to Mingo Falls Campground.

7. RAMSEY CASCADES:

A strenuous 8-mile round trip hike. Take Highway 321 6 miles east of Gatlinburg, TN to the Greenbrier entrance to the park. Follow the signs to the Ramsey Cascades trailhead.

8. HEN WALLOW FALLS:

A moderate 4.5-mile round trip hike. Take the Gabes Mountain Trail, which begins from the parking area at the entrance to Cosby Campground. Beyond the falls, Gabes Mountain Trail leads to rich, old-growth forest.





wildlife in winter

The national park protects an amazing diversity of animals



Eastern Chipmunk

Eastern chipmunks are some of the true hibernators in the Smokies. During cold weather they retreat to underground burrows and curl into tight balls. Their body temperatures fall to about 41° F. However, during a warm spell, chipmunks can stir from their slumbers and go out into the forest to forage.

Snowbirds (Dark-eyed Junco)

Two distinct populations of Dark-eyed Juncos inhabit the Smokies. During winter, both populations are found together at the lower elevations of the park. In spring, the local population simply flies up to the Smokies high country to find the spruce-fir forest habitat it prefers for breeding and nesting while the second population migrates 600-700 miles northward seeking similar habitat.

Because Juncos descend from the mountains and show up around people's homes when cold weather approaches, they are nicknamed "snowbirds."



Common Raven

Ravens spend most of the winter in the frigid, high elevation spruce-fir forest that crowns the Smokies. They are the park's largest songbird, soaring on wings spanning nearly four feet. They are most commonly seen around Newfound Gap or along Clingmans Dome Road or from the trails on Mt. Le Conte. Listen for their "cronk, cronk, cronk" call in the still mountain air.



Black Bear

Smoky Mountain black bears generally den up in December and remain there until March or early April. At least half the bears in the park make their dens in standing hollow trees high above the ground. During winter some bears may stir, leave their den, and wander around for a short while—so it is possible to see bears in winter.

Females give birth to cubs (one or two) during denning, usually in January. Cubs weigh less than a pound at birth and are blind. By the time cubs leave the den in spring they weigh around five pounds. Yearling cubs from the previous winter may also den with their mother.



Wood Frog

During warm, rainy spells in winter, these tiny amphibians go into a courtship frenzy. Hundreds of male wood frogs congregate in vernal pools and croak incessantly in an attempt to call in females. Females lay masses of eggs that hatch into tadpoles before the shallow ponds dry up in summer.



illustrations by John Dawson, Joey Heath, and Lisa Horstman

stocking the winter larder

winter was a challenging time for farm families

Farm families in the past not only had to raise enough food to see them through winter, they also had to devise ways to preserve it without refrigerators, freezers, or even plastic bags. Many of the methods they used for preserving food are now being rediscovered as valuable domestic arts.

Although families ate a variety of meats—including fish, wild game, chicken, and beef—pork was the meat found most often on a mountain farm. There were a number of reasons why families preferred pork. For one, hogs were more prolific than other livestock, often producing several large litters each year. The meat was relatively easy to preserve and the lard from the fat was used for cooking and soap making. In addition, hogs were so self-sufficient that most families simply turned them out into the woods to forage and fend for themselves.

About the only time hogs were penned was in the fall to fatten them for butchering. Hog butchering normally took place in late fall or early winter after the weather was cold enough to keep the meat from spoiling until it was cured. Salt was the primary curing ingredient. The meat was covered with salt and placed on shelves or in barrels or boxes in the meathouse. The salt was absorbed into the meat and retarded the growth of bacteria.

If meat was to be smoked, it was hung in the meathouse, or smokehouse, and subjected to a smoky fire for a week or longer. Smoking not only added flavor, but also produced chemical compounds that helped protect the meat from insects and bacteria.

Vegetables & Fruits

The family garden produced much of the fresh food the

NATIONAL PARK SERVICE PHOTO



Hog butchering was often done in November or December after the weather had turned cold.

family ate as well as food that would be preserved for winter. Although the Mason jar was patented in the 1850s, many families continued to use drying and pickling, rather than canning, for preserving food.

Some plants, like potatoes, turnips, and cabbage, stored well for winter use if protected from freezing. Thus, potatoes were often conveniently stored in a “tater hole” right under the floor of the cabin, often near the hearth where they would be retrieved and cooked. Otherwise these foodstuffs could be buried in the garden with straw where they might keep fresh for weeks or months. With cold-tolerant plants like lettuce, turnips, and mustard, it was possible for the garden to produce some fresh “greens” in late fall and early spring.

Apples were the most common fruit grown on mountain farms and most families had at least a few trees. Apples were eaten fresh, but were

also the source of cider, vinegar, applesauce, apple butter, and pies.

If protected from freezing, some varieties stored well through the winter and provided “fresh” apples for several months. Consequently, some farms with large orchards had partially-buried apple houses. Otherwise, apples could be dried for later use. Some families “sulfured” apples to preserve them by exposing slices to sulfur smoke to kill the bacteria.

Saving sweeteners for winter was laborious but very much a labor of love. Sorghum cane, which looks similar to corn and was grown on many farms, was harvested in fall. Sorghum juice was squeezed from the cane and cooked in a large metal pan, pot, or kettle until it thickened, becoming molasses.

Some early winter activities that provided food for the coming year had an additional importance—they provided families the chance

to gather and socialize. Everything from corn shuckings to molasses making and hog butchering was an opportunity for individuals to lighten the load by sharing the work. These activities also helped to strengthen family and community ties.

Wild Greens

During relatively mild winters, families could gather some greens from the wild. Cresses, often called “creasies” or “creasy greens,” was one such plant. A non-native

in the genus *Barbarea*, cresses grow along streams and in fallow fields here in the New World. Back in Europe, they were harvested after St. Barbara’s Day (hence the genus name) which occurs on December 4. In the southern Appalachians, creasies were harvested throughout the winter and were extremely high in vitamin C and A. In fact, one nickname for the plant was “scurvy grass” because its high vitamin content could ward off the disease.

Cresses are similar in appearance to spinach, and could be eaten in similar ways. They could be washed thoroughly and used fresh in salads or cooked the old-fashioned way either by boiling with salt pork or sauteing in bacon grease.

Dandelions, another non-native plant, were a favorite green, especially if picked when the leaves were young and not too bitter. They could be eaten raw in a cold salad or prepared with the recipe below.

If you would like to learn more about preserving food and authentic mountain cooking, pick up a copy of *Food & Recipes of the Smokies* published by Great Smoky Mountains Association. The book includes over 300 recipes and many historic photos. It’s available at park visitor centers or at www.SmokiesInformation.org.

Dandelion Greens & Potatoes

Pick young dandelion greens when they appear in late winter or early spring. Wash the greens thoroughly.

large bowl of dandelion greens	6 c. water
3 cut up potatoes	1 piece salt pork

Bring water to a full boil. Add dandelion greens and salt pork. Simmer 30 minutes. Add cut up potatoes. Simmer another 30 minutes. Taste. Add salt if necessary. Serve in a heated bowl.

mountain cabins

The park preserves the best collection of historic log buildings in the East.



NPS PHOTO

Jane and Arvil Greene stand on the porch of the Davis-Queen log home at Oconaluftee.

Frank Lloyd Wright once said that he could design a house that would cause its occupants to get a divorce. The log cabin was not exactly what he had in mind, but it surely came close. It was the efficiency apartment of its day. Sizewise, the “average” 18' x 20' cabin contained only 360 square feet downstairs. Even with a marginally usable sleeping loft, the space increased to only 720 square feet. Compare that to today’s “starter home” of 1600 square feet. Into the tiny log house, place the “average” mountain farm family of two parents, maybe one grandparent, and five to ten children. Shut the doors and windows in the winter with it pouring rain outside, and everyone up and about. This house was hot in summer, drafty in winter, and crowded all year. That is why their occupants spent so much time on the porch, in the yard, or at the barn.

The forests of the Smokies offered a vast quantity and variety of trees from which to build and furnish a home. The most popular species for construction were: Eastern hemlock, the pines, the oaks, American chestnut, and tuliptree. Important qualities were: the shape of the tree trunk, workability under the tools, and resistance to rot and insect attack.

The top choice, hands down, was tuliptree (also called yellow poplar). It is a fairly soft wood, which works easily under sharp tools; yet it has good strength in large dimensions such as logs, posts, and beams. Kept off the ground and dry, tuliptree does

not suffer much from rot and insect attack. Best of all, its tall, straight, hardly tapered trunks could be found in large stands, and in almost any desired diameter. Overall, it appears that tuliptree was used in 50%-60% of log buildings in the Smokies.

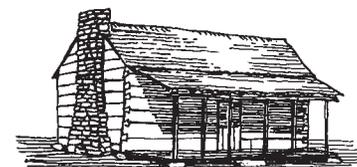
A cabin was generally one of three configurations: single pen, dog-trot, or saddlebag. The saddlebag had two units or pens that efficiently shared a common chimney in the center. The dog-trot had two pens separated by an open breezeway that offered sheltered space and, yes, a place for dogs. Families also made great use of outdoor

space. Much of the domestic work—including spinning, dyeing, weaving, bean stringing, and soap making—was done on the porch or in the yard.

Efforts to tighten the walls against the weather included use of many combinations of materials: mud chinking, mud and rock, mud and bricks, mud and horsehair or straw, mud and wood, exterior battens, interior battens, interior paneling, and wallpaper. Battens were often nailed over the chinks, inside or out, or both. The better log houses had wide hand-planed paneling boards inside, but such finishing was rare.

Single Pen Log House

The rectangular single pen was the most common configuration for a log home. It could be added onto in several ways as time and circumstances allowed. It was usually 1 1/2 stories high, meaning that only two or three rounds of wall logs rose above the loft floor before the roof system began. This provided a normal ceiling height downstairs, and enough headroom upstairs for the kids to sleep and move around. The home had a fireplace with an exterior chimney at one end, a door centered in the front wall, and perhaps a back door aligned with the front one. Window openings were optional at the time of construction, for they could always be sawn out later. The John Oliver cabin in Cades Cove is an example.



Dog-trot House

The dog-trot could be built all at once, or half now and half later. It consisted of two cabins built side-by-side, about 8'-10' apart, with an open breezeway or dog-trot between. All was covered by one continuous roof. This provided a room for cooking and eating on one side, and sleeping and living space on the other. The dog-trot offered sheltered space for working or socializing (and dogs).

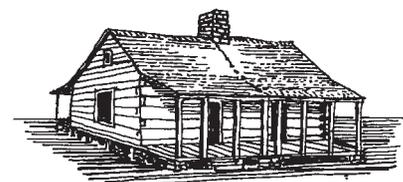
Examples include the Palmer house in Cataloochee and the Ephraim Bales house on Roaring Fork Motor Nature Trail.



Saddlebag House

This style was sort of a reverse of the dog-trot. Instead of two units with a fireplace and chimney at each outer end, the saddlebag consisted of two units so close together that they shared a common chimney. A fireplace in either side of the chimney heated each unit. From a distance this shape apparently reminded one of a pair of saddlebags hanging from the sides of a horse.

The advantage of the saddlebag house was that only one chimney had to be built, and it radiated heat into both units, making the house more thermally efficient. However, it lacked the additional sheltered space of the dog-trot. Examples include the Alfred Reagan house on Roaring Fork.



Interior furnishings could be plentiful or sparse, depending on the family's needs, means, energy, skills, and size. There is plenty of evidence in both directions. Compare the Walker sisters' bewildering array of possessions to those of one poor fellow who moved his family in “three wheelbarrow loads.” Furnishings and utensils were not necessarily a measure of wealth or status, particularly in the earlier years of settlement when tables, chairs, benches, beds, etc., were often handmade of materials from the nearby woods. Certain items did have to be purchased, and thus required cash or goods for barter

at the store. Kerosene lamps and oil, clocks, mirrors, metal buckets, mattress ticking and such were typical of those.

Cabin interiors were utilitarian, but not necessarily Spartan or drab. Kitchens might be hung with strings of beans, red and yellow peppers, sliced rings of pumpkin and apples. Newspaper and magazine pages glued to the wall with a flour paste decorated and insulated some cabins. The pages made the dark interiors brighter and gave parents and children a source for creative word games. Quilts, both fancy and plain, added splashes of color to beds.

if you love the smokies...

help protect the place we all call "home"

become a member



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. In 2013 alone, the association plans to provide more than \$1 million in assistance that includes saving hemlock trees, living history demonstrations, environmental education programs, salaries for backcountry patrols, and historic preservation.

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*;
- Coming soon: Exclusive digital access to the award-winning quarterly park newspaper, *Smokies Guide*, and the association's newsletter, *The Bearpaw*
- A 15-25% discount on books, music, gifts, and other products sold at park visitor centers and at our web store
- Discounts up to 20% at more than 400 national park bookstores across the country
- Special discounts at area rental cabins, inns, restaurants, shops, and attractions
- And most importantly, the satisfaction of helping to preserve nature and history in Great Smoky Mountains National Park

Join today using the coupon to the right or visit www.SmokiesInformation.org. Or call us at 1-888-898-9102 x222.

BILL LEA PHOTO



Great Smoky Mountains National Park is one of the few large natural area parks without an entrance fee. Most parks now charge \$20 or \$25 per vehicle. Without this supplemental income, it is difficult for the Smokies to adequately protect wildlife, preserve historic areas, and provide educational opportunities. You can help by using some of the money you saved to support the park partner programs on this page.

field school

An exciting variety of adventures await 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, wildlife workshops, edible plants, wildflower photography, animal tracking, bird watching, salamanders, mountain cooking, and more. One day programs start at as little as \$35. Contact: (865) 974-0150 or smfs.utk.edu

gsmi 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, naturalist weekends, and photography. Contact (865) 448-6709 or www.gsmit.org

summer camps

Great Smoky Mountains Institute at Tremont offers a variety of summer youth camps in the national park. Camps last from 6-11 days and cost from \$539. Fees include meals, lodging, and most equipment.

Next year's 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 www.gsmit.org

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Stay in Touch with the Smokies All Year Long!

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**covers 2 persons per household*
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SIGN ME UP!

Name(s)* _____

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

support the friends

Friends of Great Smoky Mountains National Park is a nonprofit organization that assists the National Park Service by raising funds and public awareness and pro-



viding volunteers for park projects.

Since 1993, Friends has raised over \$34 million for park projects and programs. These donations help:

- protect elk, bear, brook trout, and other wildlife
- improve trails, campsites, and backcountry shelters
- support educational programs for school children
- improve visitor facilities
- fund special educational services like the park movie
- preserve log cabins and other historic structures.

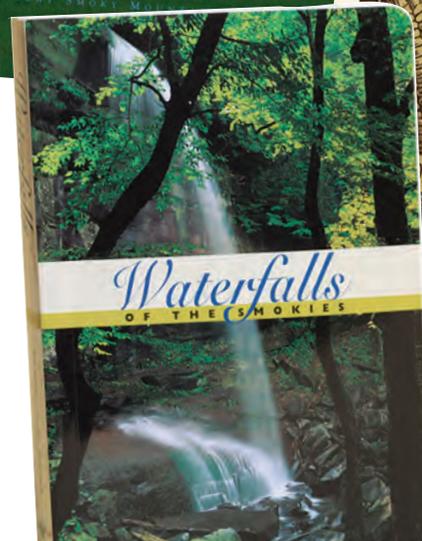
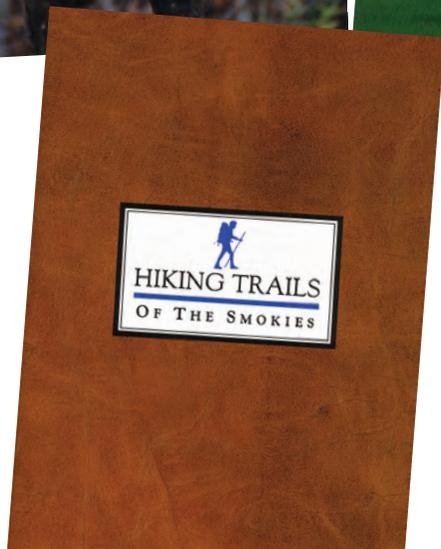
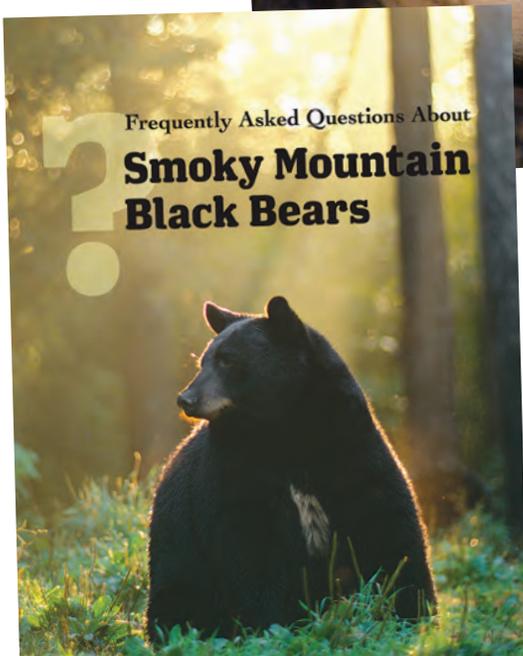
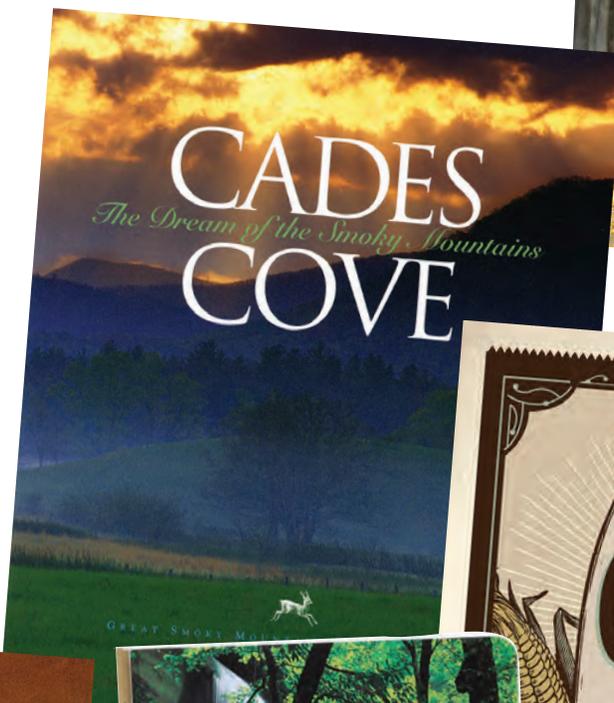
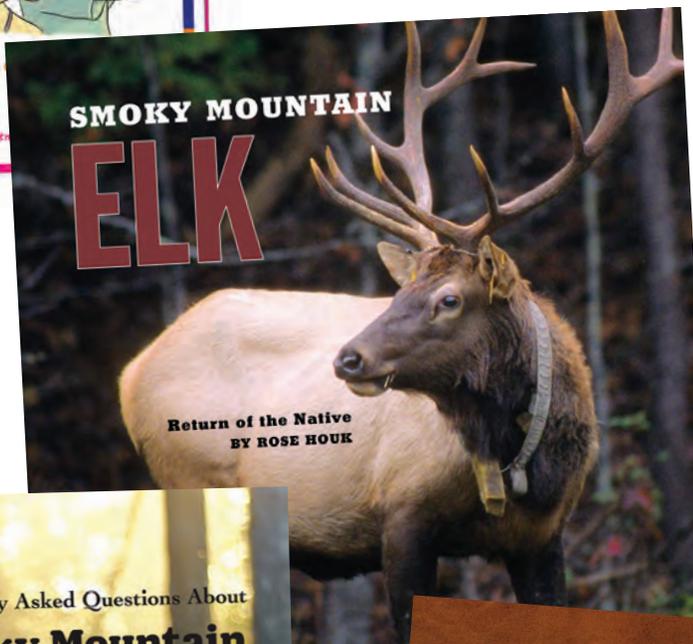
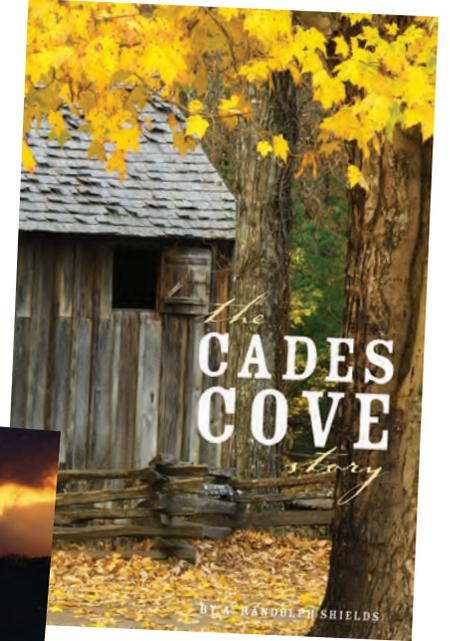
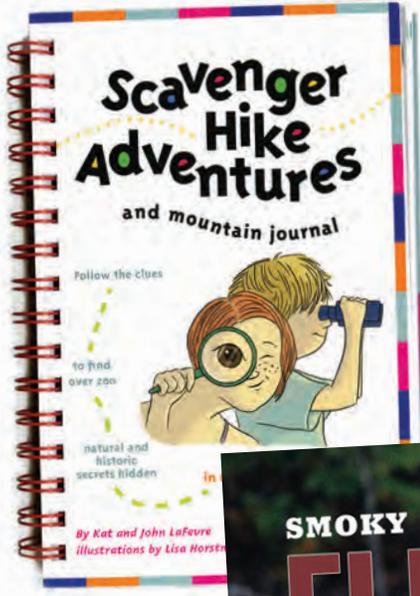
Your donation can help make these projects a reality. Put a few coins or a few dollars in one of the donation boxes located at visitor centers, roadsides, and other locations around the park. Buy the Smokies license plate for your car (available in Tennessee and North Carolina).

However you choose to give, your donation will really help protect the Great Smoky Mountains for many years to come!

Friends of the Smokies
P.O. Box 1660,
Kodak, TN 37764
(865) 932-4794
1-800-845-5665
www.friendsofthesmokies.org



Great Smoky Mountains Association is a private, nonprofit organization that supports education, historic preservation, and scientific research in Great Smoky Mountains National Park. Since 1953 GSMA has provided over \$30 million worth of assistance.



All of these books and hundreds more are available at our eight visitor center bookstores in the Smokies, or contact us at: www.SmokiesInformation.org, (865) 436-7318 x226.

