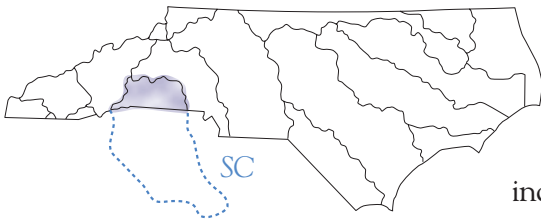


BROAD RIVER BASIN

The scenery and natural heritage of the Broad River Basin have captivated tourists and ecologists alike. Hollywood even memorialized some of these places on the big screen, including in battle scenes filmed for the 1992 movie "Last of the Mohicans" at the 404-foot Hickory Nut Falls.



The Broad River originates in the mountains of western North Carolina and flows southeast through the foothills and Piedmont before entering South Carolina. Major tributaries include the Green, First Broad, Second Broad and North Pacolet rivers. There are also four major man-made lakes, including the popular tourist destination Lake Lure, which was built in 1926 to supply electricity. Other reservoirs include Lake Adger and Kings Mountain Reservoir, also known as Moss Lake. Municipalities in the basin include Forest City, Kings Mountain, Chimney Rock Village, Lake Lure, Rutherfordton, Shelby and Spindale.

Bog turtle



BILL LEA

Some of the best-known natural beauties of the basin are Hickory Nut Gorge, Chimney Rock Park and Lake Lure. Perhaps lesser known is the incredible diversity of flora and fauna within the basin. The Broad

River Basin shelters 111 rare animal and plant species, including the bog turtle, which is federally listed as a threatened species. The green salamander, a state-listed endangered species; mole salamander; and crevice salamander also are among the basin's rare



KEVIN ADAMS



MARK J. BREWER



profile:

Total miles of streams and rivers: 1,513

Total acres of lakes: 1,954

Municipalities within basin: 27

Counties within basin: 8

Size: 1,513 square miles

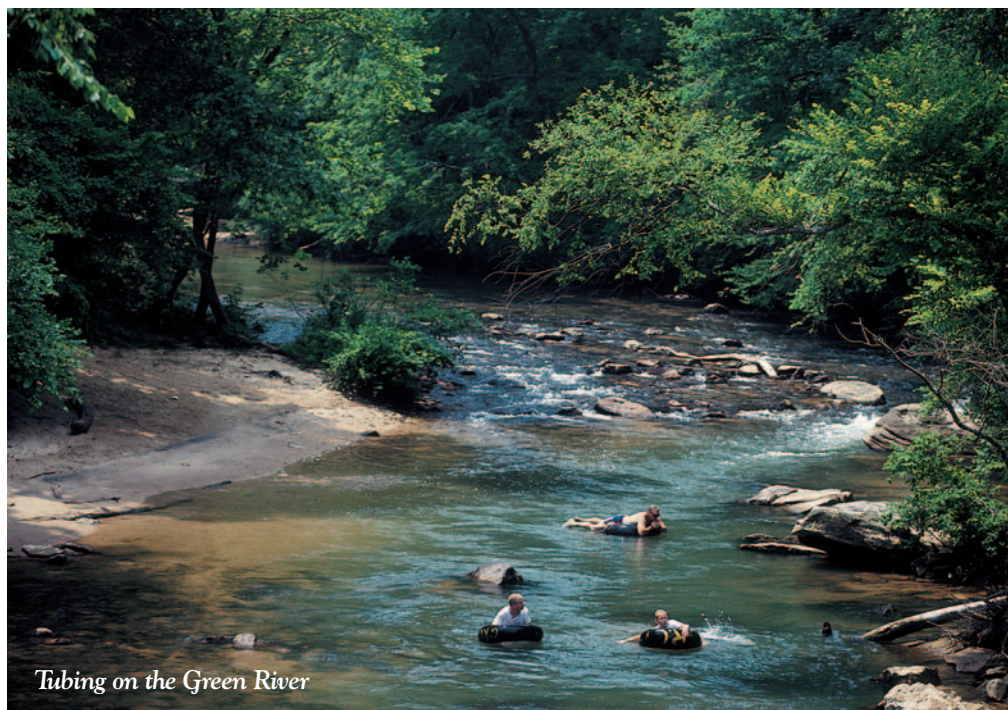
Population: 342,282 (2000 U.S. Census)

Big Bradley Falls (left); Broad River (below)

KEVIN ADAMS



Chimney Rock



Tubing on the Green River

KEN TAYLOR, NCRWC

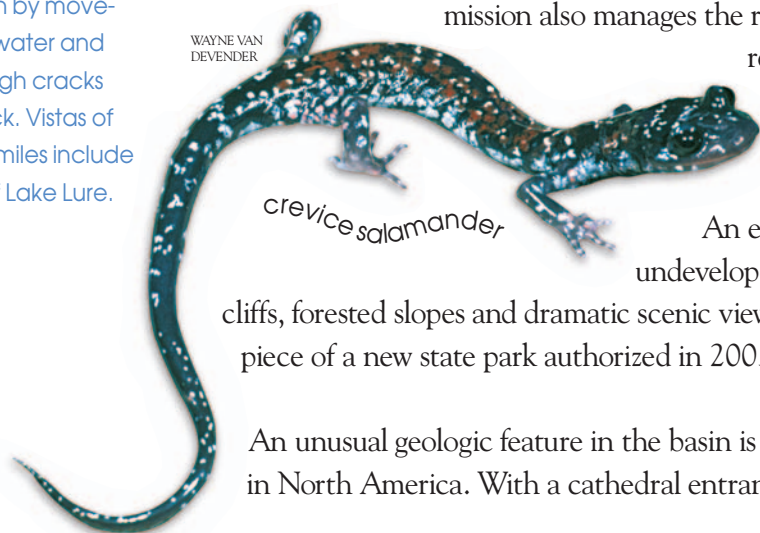
Chimney Rock Park

The upward-jutting rock "chimney" is the showpiece of Chimney Rock Park, a privately operated natural heritage park with trails and a nature center. Towering 900 feet above the Broad River, the natural overlook may be climbed via trails or reached by a 26-story elevator inside the mountain. The chimney—made of gneissic rock—was separated from the rest of the mountain by movement of water and ice through cracks in the rock. Vistas of up to 75 miles include a view of Lake Lure.

residents. A newly discovered crayfish, the Broad River stream crayfish, has been found nowhere else on earth. It is state-listed as a significantly rare species, which means its numbers are so small that populations require monitoring. Another recently discovered species, the Broad River spiny crayfish, is restricted to only a handful of places in North Carolina and South Carolina and is also significantly rare. Dammed streams are a threat to its habitat.

The headwaters of the First Broad River trickle down the south side of the rugged South Mountains. With peaks as high as 3,000 feet and valleys thick with rhododendron and hemlock, these woodlands were saved from logging by citizens in the basin, public and private conservation groups and state government officials. Without this intervention, erosion caused by logging could have impaired water quality in a watershed that supplies drinking water for the City of Shelby and upper Cleveland County. The N.C. Wildlife Resources Commission now manages the 17,829-acre tract as the South Mountains Game Land. The Commission also manages the recently purchased Green River Game Land, a relatively undisturbed wilderness area containing narrow gorges, steep ravines and coves, old-growth forests and mixed hardwood forests.

WAYNE VAN DEVENDER



crevice salamander

An exciting new land acquisition is World's Edge, an undeveloped 1,568-acre tract of sparkling waterfalls, sheer cliffs, forested slopes and dramatic scenic views in Hickory Nut Gorge. It will be the centerpiece of a new state park authorized in 2005 by the General Assembly.

An unusual geologic feature in the basin is Bat Cave, the largest known granite fissure cave in North America. With a cathedral entrance room 300 feet long and 85 feet high, Bat



SUSAN MIDDLETON, DAVID LITTSCHWAGER

The cave-dwelling Indiana bat is on the federal Endangered Species List.

Cave has more than a mile of passageways. Most caves are carved as water dissolves limestone; however, Bat Cave was formed by the splitting and shifting of rock. The Nature Conservancy manages the cave and surrounding preserve, which is open to the public only during special Nature Conservancy field trips. Through the cave, the Conservancy hopes to restore the rare Indiana bat to its former range.

Federally listed as an endangered species, the Indiana bat is imperiled due to its habit of living in large numbers in only a few caves. The bat is extremely sensitive to human disturbance. Also, the crevice salamander, a geographical variant of the large, distinctive Yonahlossee salamander, dwells in crevices among the cave walls.

About 30 percent of streams in the basin are classified as trout waters, which means the state prohibits activities that would harm the fishery. The pristine headwaters of the Green River and most of its tributaries above Lake Summit are classified as Outstanding Resource Waters and given extra protection by the state.

Overall, water quality in the basin is good, but habitat degradation, development for second homes and vacation homes, and stormwater runoff are creating concerns about water quality throughout the basin. Stream habitats become stressed due to runoff from construction sites, residential areas, cropland, pastures and paved areas that don't allow water to soak into the soil (roads, parking lots, driveways and sidewalks). Stormwater (rain and melted snow) transports eroded soil, fertilizer, pesticides, metallic chemicals, and human and animal waste into surrounding waterways. Due to development pressures, there is also the need for efficient municipal wastewater treatment in the Broad River Basin, as well as properly constructed and maintained septic systems.

The success of public, private and nonprofit partnerships in protecting land in the basin—through purchases and easements—has been lauded as a national model for conserving natural resources. Many opportunities exist for citizens to support and get involved in protecting and maintaining public lands, streams, rivers and lakes. Conservation can also begin at home. Learn how to maintain your property to keep polluted runoff from entering your local waterways.

CHARLES BRASWELL JR.



KEN TAYLOR, WILDLIFE IMAGES

Rumbling Bald rises above Lake Lure.

BROAD RIVER BASIN

You may have noticed Broad River Basin signs posted along highways. These were created through a partnership between the Office of Environmental Education and the N.C. Department of Transportation with funding from the Federal Transportation Enhancement Program. Signs in each of the state's 17 river basins call attention to basin boundaries and promote stewardship of public waters.

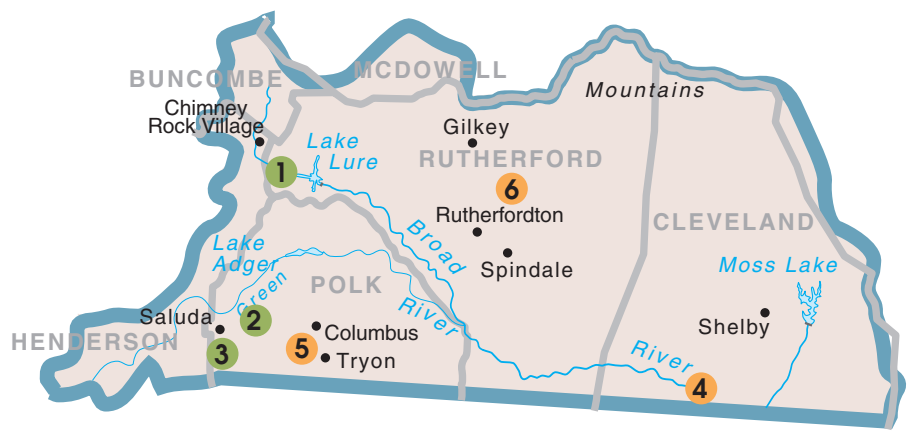
Hickory Nut Gorge

Hickory Nut Gorge is the only Blue Ridge escarpment gorge that can be viewed by car for its entire length, which exceeds 10 miles. The gorge drops some 1,800 feet from Hickory Nut Gap to its end at Lake Lure.

HIKING & BIKING



in the Broad River Basin



- hiking
- hiking and biking

The Broad River Basin offers many opportunities to enjoy and explore nature through walking, hiking and biking. This list includes places with at least a few trails for easy to moderate activity. Keep in mind that at some mountain sites, the steepness of terrain may limit easy activity, other than at an overlook or short path. Many sites include views of streams, rivers, creeks, lakes and/or waterfalls. Remember that some trails are multi-use, serving pedestrians, bicyclists, equestrians and other recreational users. For information about urban and regional bikeways, visit <http://www.ncdot.org/transit/bicycle>.

PHOTO COURTESY OF NC DIVISION OF TOURISM, FILM, AND SPORTS DEVELOPMENT

● HIKING ●

1 Chimney Rock Park

<http://www.chimneyrockpark.com> ● 1,000 acres ● 3.5 miles of trails with a few options for easy hiking that include a trip to the 404-foot Hickory Nut Falls. Follow a network of stair steps and boardwalks to the top of the 2,280-foot “chimney” for views of Hickory Nut Gorge and a 75-mile panoramic vista.

2 Green River Game Land

www.eco-wnc.org/grg/brochure.htm ● 10,000 acres ● 16.25 miles of trails over mostly rugged terrain in relatively undisturbed wilderness—including narrow gorges, steep ravines and coves and old-growth forests. Several easy trails—Long Ridge, Rock Hop and Bishop Branch—cover 4 miles, .5 miles and 2.5 miles, respectively.

3 Norman Wilder Forest

<http://www.pacolet.org/> ● 185 acres ● 2-3 miles of trails on the steep slopes of Little Warrior Mountain. A moderate hike through mixed hardwood forests—including steps and bridges—offers stunning views of sheer rock walls.




PHOTO COURTESY OF NC DIVISION OF TOURISM, FILM, AND SPORTS DEVELOPMENT




● HIKING and BIKING ●

4 Broad River Greenway

 <http://www.broadrivergreenway.com/> volunteer ● 1,500 acres ● About 8 miles of trails on both sides of the Broad River, including a .3-mile interpretive trail. Wheelchair-accessible.

5 Foothills Equestrian Nature Center

 <http://www.fence.org> ● 390 acres ● 6 miles of multi-use trails, including a nature pond with boardwalk and a .3-mile paved, wheelchair-accessible trail.

6 Thermal Belt Rail-Trail

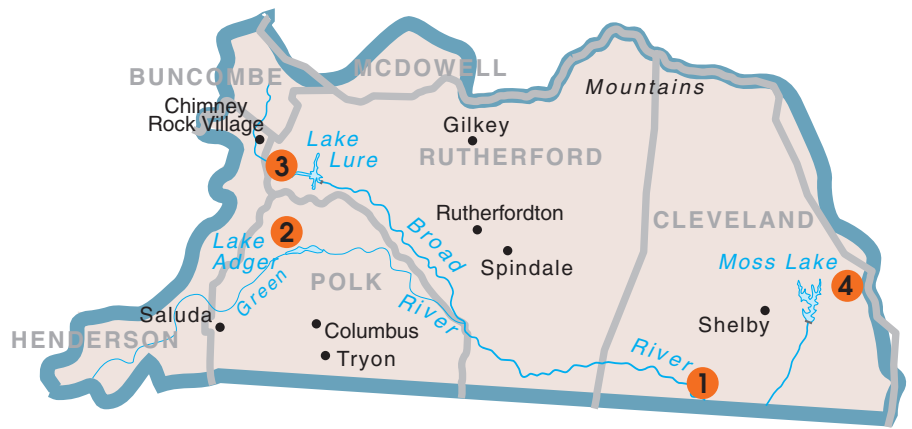
<http://www.ncrail-trails.org/MAPKEYS.HTM> ● 8-mile crushed stone trail along an old railway bed between Spindale and Gilkey.

 = some trails designated as wheelchair accessible

PADDLING



in the Broad River Basin



The Broad River Basin offers many opportunities for paddling creeks, ponds, streams, rivers and lakes. The places included here offer public access areas maintained by state, federal or local governments. Privately operated marinas and boat docks may also be available. This list does not include locations for whitewater adventure. These trails and lakes are suitable for easy to moderate paddling.

1 Broad River Canoe Trail

<http://www.broadrivergreenway.com> ● A canoe trail starts at Broad River Greenway and travels into South Carolina just a few miles downstream. Paddlers often put in upstream of the greenway at N.C. Department of Transportation bridge right-of-ways and float down to the park.

2 Lake Adger

(864) 583-8150 ● 460 acres ● Lake Adger is a privately owned, tranquil lake impoundment on the Green River near the Green River Game Land. One public boat access area is available. Kayaking and canoeing are popular on the scenic lake, as there is a restricted horsepower limit on motorized craft, and no jetskis or waterskiing is allowed.

3 Lake Lure

<http://www.townoflakelure.com/> ● 732 acres ● Now owned by the Town of Lake Lure, the lake was created by the damming of the Rocky Broad River at Tumbling Shoals in 1926 with the intent of establishing a resort community in western North Carolina. The town contracts with a private concessions company to operate a recreational beach and marina. Canoe and kayak rentals are available. Access information is available at <http://www.lakelure.com>.

4 Moss Lake

(704) 482-7926 ● 530 acres ● Moss Lake has two public boat landings. The lake provides drinking water for the City of Kings Mountain, and is also called Kings Mountain Reservoir.

PHOTO COURTESY OF NC DIVISION OF TOURISM, FILM, AND SPORTS DEVELOPMENT



PHOTO COURTESY OF NC DIVISION OF TOURISM, FILM, AND SPORTS DEVELOPMENT



The rare and threatened
dwarf-flowered heartleaf
(left); Broad River (right)



N.C. NATURAL HERITAGE PROGRAM



MARK J. BREWER

WHERE SHOULD I GO

What makes the Broad River Basin so special? See for yourself. Visit these Environmental Education Centers to discover more about your ecological address:

- Chimney Rock Park
- Foothills Equestrian Nature Center (FENCE)

For more information about Environmental Education Centers in North Carolina, call the Office of Environmental Education at (919) 733-0711, or check out the Web site at <http://www.eenorthcarolina.org>

HOW CAN I HELP

You can gain a sense of community pride by learning more and helping to protect streams, rivers and lakes in the Broad River Basin. The contacts listed below can help you do just that.

Broad River Basinwide Plan*

<http://h2o.enr.state.nc.us/basinwide/>
(919) 733-5083

Broad River Greenway

<http://www.broadrivergreenway.com/volunteer>
c/o Town of Boiling Springs
(704) 434-9419

Carolina Mountain Land Conservancy

<http://www.carolinamountain.org/>
(828) 697-5777

Concerned Citizens of Rutherford County

<http://www.ccrnc.org>
(828) 287-4429

ECO (Environmental and Conservation Organization)

<http://www.eco-wnc.org/>
(828) 692-0385

Foothills Conservancy

<http://www.foothillsconservancy.org/>
(828) 437-9930

Friends of Crowders Mountain State Park

<http://www.friendsofcrowdersmountain.org>

Mountain Valleys Resource Conservation and Development Council

<http://www.geocities.com/mtvalleysrcd/about>
(828) 254-0916, ext. 5

N.C. Soil and Water Conservation Districts

<http://www.enr.state.nc.us/DSWC/>
(919) 733-2302

North Carolina Stream Watch

http://www.ncwater.org/Education_and_Technical_Assistance/Stream_Watch/
(919) 715-5433

Pacolet Area Conservancy

<http://www.ctnc.org/landtrusts/pac.htm>
(828) 859-5060

Rutherford Outdoor Coalition

<http://www.rutherfordoutdoor.org/>
(828) 429-3900

Upper Broad River Watershed Protection Program

<http://www.upperbroadriver.org/>
(828) 625-9983, ext. 123

VWIN (Volunteer Water Information Network)

<http://orgs.unca.edu/eqi/vwin.htm>

*Basinwide water quality planning is a nonregulatory, watershed-based approach to restoring and protecting the quality of North Carolina's surface waters. The N.C. Division of Water Quality welcomes community input.

▶ To order additional brochures on any of North Carolina's 17 river basins, a general river basin booklet or a poster, call the N.C. Office of Environmental Education at (919) 733-0711, or order online at <http://www.eenorthcarolina.org>.

State of North Carolina: Governor Michael F. Easley • North Carolina Department of Environment and Natural Resources: Secretary William G. Ross Jr. • Office of Environmental Education: Director Lisa Tolley, Project Manager Rachel Golden • Editor Carla Burgess • Designer Kimberly KC Schott, Red Gate Design • Special Thanks North Carolina Wildlife Resources Commission • Date: 2007 • 10,000 copies of this public document were printed at a cost of \$1,462 or \$0.15 per copy. • This publication was funded through the Clean Water Act's Section 319 Grant Program. • In the coming years, some river basin boundaries will change if the state moves forward with plans to modify them to coincide with federal maps. The Cape Fear, White Oak, Chowan, Pasquotank, Tar-Pamlico and Neuse basins would be the most significantly altered.

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