



is a slow-moving warmwater stream. Chain pickerel, smallmouth bass and sunfish thrive in these waters along with beaver and mink. The complex nature of this watercourse, however, caters to other species as well.

Sleepy Creek has a healthy population of wood turtles. These Eastern panhandle natives find winter refuge in the creek's deep pools. In the springtime, "woodies" venture from the water to lay their eggs and spend the growing season foraging in adjacent fields, meadows, forests and even front yards. Wood turtles generally spend most of their lives within a few hundred yards of their parent stream. Despite their omnivorous nature, they depend on an intact riparian zone and excellent water quality for food, shelter, and sites for hibernating and breeding.

Clean water is also essential for harperella, another Eastern panhandle native. This diminutive semi-aquatic plant grows in the upturned cracks of exposed bedrock and on sheltered gravel bars. It tolerates short periods of inundation and actually requires seasonal high water to scour away competing vegetation.

When the stream contains excessive silt or algae (from nutrients), these pollutants are deposited on the harperella plants during high water. As the water recedes, the plants are encased in dried mud (or algae), photosynthesis is restricted, and many plants die.

Harperella is only found on 13 streams in the United States. Three of those streams are in West Virginia — Back Creek, Cacapon River and Sleepy Creek. In 1988, the U.S. Fish and Wildlife Service

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Sleepy Creek in Morgan County has much to protect.

By Kieran O'Malley

Sleepy Creek. The name itself brings to mind an image of what it really is: a small, picturesque stream that meanders 42 miles through Morgan County to its confluence with the Potomac River. This scenic waterway carves its way through rolling farmland and riparian forest, and around steep shale ridges. Its sinuous nature

Sleepy Creek is great place to find wood turtles.

provides constantly changing scenery and supports a diverse array of animal and plant communities.

The idyllic scenery hits you first. Razorback ridges, sandstone and shale rock outcrops, and long pools shaded with silver maple, sycamore, river birch and yellow poplar. This

listed this plant as an endangered species. Currently Sleepy Creek has the largest harperella population in the country!

Like harperella, mussel distribution on Sleepy Creek is dictated by the geology and stream topography. In 2004, Division of Natural Resources biologists identified eight species of freshwater mussels occupying the isolated beds of fine gravel. One species, the eastern lamp mussel, represented the first record of that species in West Virginia. The gravel beds are interspersed with less suitable (for mussels) substrates including large sandstone "plates," shale bedrock and deep silty pools.

Mussels require extremely clean, well-oxygenated water for respiration and serve as a barometer for the health of the stream.

Reductions in dissolved oxygen levels or increases in pollutants or silt can kill off entire mussel beds. They also require a healthy fish population to serve as hosts for their young.

Recognizing the need to keep Sleepy Creek healthy, a group of concerned residents formed the Sleepy Creek Watershed Association (SCWA) in the 1990s. The group realized that, because the Sleepy Creek watershed is located in the fourth fastest-growing county in the state and comprises 60 percent of the county's land mass, increased development could impact water quality and degrade the natural features that make it special. The Association is dedicated to protecting and preserving the watershed while engaging and educating the public.

The Association's member-

ship has been extraordinarily active. In 2006, the West Virginia Department of Environmental Protection named SCWA as the Watershed Association of the Year. They conduct numerous and varied projects aimed at accomplishing their six goals which are listed on the group's web site listed at the end of this article.

One major project involved working with Shepherd University and Canaan Valley Institute to produce a complete watershed assessment. They participate in hands-on projects including annual stream cleanups and stabilizing stream banks. They have conducted a workshop to demonstrate best management practices to construction companies and

recognize those contractors that meet those standards. Outreach projects include teaching stream monitoring techniques to schools and publishing brochures on topics related to watershed management and natural history.

The SCWA is successful because they are concerned residents that



Harperella, one of the state's federally listed endangered plants, needs streams such as Sleepy Creek to survive.

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A rare Eastern lamp mussel was recently found in Sleepy Creek.

M. Windsor/ NC State Park System

take advantage of funding opportunities available for learning more about their stream and how to protect it. They consult with natural resource agencies, such as the DNR Wildlife Resources Section, on identifying threats, developing public education programs, and initiating restoration projects. Association members are also neighbors in a community. Their success is attributed to initiative, public education, positive reinforcement, and collaboration with government agencies, local organizations, and their neighbors.

For more information on the Sleepy Creek Watershed Association, go online to: <http://www.sleepycreekwatershedassociation.org>.

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Volunteers with the Sleepy Creek Watershed Association work on a stream bank restoration project.

Photo courtesy SCWA