## Appalachian Heritage Summer 2013 BOOK REVIEW

Erik Reece and James J. Krupa. *The Embattled Wilderness: The Natural and Human History of the Robinson Forest and the Fight for Its Future.* Athens: University of Georgia Press, 2013. 184 pages with twenty-one black and white photos, two maps, and a foreword by Wendell Berry. Hardback with dust jacket. \$24.95.

## REVIEWED BY MARY POPHAM

To envision paradise, one must be awakened to its treasure. One must allow imagination to journey through forest lands of oaks and pines, hickories and maples, to climb steep-sloped hillsides while scrambling over rock outcroppings—each "a naturally sculpted piece of art." We step around plants, ferns, lichens and mosses; listen to the water music of riffles, runs, and pools that form the lifeblood of Robinson Forest.

Authors Erik Reece, professor of English and James J. Krupa, special faculty in the Department of Biology, describe Robinson Forest, a four-teen-thousand acre preserve of natural beauty. *The Embattled Wilderness* is their plea to maintain sanctuary for this forest: "It is one of the last and largest examples of the oldest, most biologically diverse ecosystem[s] in North America." Nestled in the corners of Breathitt, Knott, and Perry Counties, it is held in trust by the University of Kentucky. In alternating chapters Reece and Krupa answer two questions: Why is Robinson Forest worth saving? And how should it be managed in the future?

Reece describes a spring excursion into the main entrance of the forest. He travels up Coles Fork, "the cleanest body of moving water in Kentucky." With intimate knowledge of his subject, Reece gives an overview of Eastern Kentucky and then the strip mining of the area. In further chapters, he explores educational opportunities and management of the forest with suggestions of how UK might make the area a premier research model.

Between 1780 and 1797 very few settlers had migrated into the hills and hollows of eastern Kentucky's virgin forest. By the 1830s homesteaders had built homes, and their simple lives changed little until advent of the railroads. Environmental damage of immense proportion began between 1880 and 1920 with commercial logging. Companies erected dams to col-

lect water, then dynamited them systematically to move trees downstream toward the sawmills of Troublesome Creek. Farmers expected nature's flooding, but that was nothing compared to what humans caused. They lost their fields, sometimes their barns and outbuildings. Because of the outcry the practice stopped in 1912.

But then large scale clear-cut logging began in 1913 when F. W. Mowbray and E. O. Robinson bought fourteen thousand acres, and the settlers moved mostly to mill towns. The timber barons built tracks and tram rails, and harvested almost every tree. "The topsoil ended up as sediment in the streams," and in 1923 Mowbray and Robinson deeded the useless land to the University of Kentucky. Named Robinson Forest, it was to be utilized "for agricultural experimentation that would 'tend to the betterment of the people of the mountain region of Kentucky." In the mid-twenties a tent camp cleared trees using less invasive methods as did the Civilian Conservation Corp (CCC) in the mid-thirties as they cut trails and built structures which became classrooms. Ninety years later, Robinson Forest is now once again a spectacular mixed mesophytic (though second-growth) woodland.

James J. Krupa gives the forest's natural history. He expounds on the geography of the region, the rock strata, and the development of the layers of coal. He tells about the formation of the Appalachian Mountains dating back more than 320 million years. He explains the biodiversity: sandstone outcrops, flora and fauna on the slopes, streams which are the habitat of numerous plants, fish, birds and mammals. He describes the endurable streams—Coles Fork has recovered, almost pristine—but what it cannot survive is mountaintop-removal. "Unfortunately, industrial development has churned under the mountains surrounding these fourteen thousand acres, turning Robinson Forest itself into an island of biological diversity surrounded by an ever-expanding desert."

Robinson Forest tells its story through these experts—men of science and the humanities—who listen, look and record for us. Like the explorers, Lewis and Clark, they inform us of the wonders they find. We are absorbed into their fascination with the atmosphere—dry, warm, cold, windy or wet, each condition supporting a multitude of wildlife. They comment on trees growing straight up and battling each other to catch the sun; how the sunlight gets through rock crevices to nourish the low-growing plants and ferns. Krupa's final chapter is a magnificent report on the streams that make up the circulatory system of the forest and the plants, animals, fish, and birds that reside there. For example, he paints a memorable picture of

a common two-lined salamander: "... their internal organs visible through their thin, transparent yellow bellies. One can count a gravid female's eggs right through the skin."

The authors relate personal stories of trips taken with their students: a memorable anecdote of air sickness while flying above to locate outcroppings of rock; a joke played on one by his own former teacher. There's also a funny story of how Krupa was deceived about the Narceus millipede and its emitting a smell like maraschino cherries. These learned men are not afraid to laugh at themselves which gives their opinions more weight.

While writing about an emotionally charged topic—saving Robinson Forest—Reece and Krupa maintain objectivity. However, seeing the facts they lay out and descriptions of the hideous effects of mountaintop-removal, I wonder how many of us can remain calm and controlled.

In October 2007, the University of Kentucky forestry department proposed through the Streamside Management Zone project to "cut nearly a tenth of Robinson Forest to study the effects of logging on streams." When environmentalist Wendell Berry and a group of UK students protested, they were told, "If you stop this logging now, you will be right back here in three years trying to stop the forest from being strip-mined." In other words: blackmail. In 2008, ". . . UK went ahead with its plan to clear-cut eight hundred acres." Reece is careful not to criticize or blame the research team: "I take issue not with the science but with where the project took place and the tenuous argument for its necessity."

Unfortunately, the coal industry currently has its eye on Robinson Forest; millions of dollars worth lie beneath its mountaintops. In the early 1980s UK considered selling all its mineral rights to generate revenue. Held back by activist protests, the threat was raised again in 1990 when Arch Mineral applied to strip mine 105 acres. Again, through petition to the Natural Resources Cabinet, the Board of Trustees "preserved the main block of Robinson Forest . . . [but sold] the mineral rights to all of the outlying parts of the forest that were not protected." Although a scholarship fund for Eastern Kentucky college students was to have benefitted, the money earned was badly managed and "by 2003 the Robinson Scholars endowment was earning less than it cost to sustain the program." Another fight began and again protesters won. Former "UK president Lee Todd said he had no plans to pursue mining here—'at this time."

Observing the ravages of mountaintop-removal, as can be seen from the Robinson Tower, no favor can be found in the method. Job creation? Food on the table? There will be no jobs, no food after the mountains are destroyed, the foundations of homes shaken, leaving no clean water to drink, and no clean air to breathe. Once Robinson Forest is blasted apart to get to the coal, there will be no reclamation. What took millions of years to create will take millions more to rebuild.

In their book, Reece and Krupa offer suggestions. "The 2004 Robinson Forest Management Plan should be rewritten to better reflect a commitment to research instead of revenue." As of now, extensive timber cutting can be continued without regard for protecting the ecosystem. The new plan should also ". . . require final approval from a university-wide committee." It must include faculty from the biological and social sciences and the humanities.

Wendell Berry says in his poem about the coming of spring:

Lift up the dead leaves and see, waiting in the dark, in cold March,

the purplish stems, leaves, and buds of twinleaf, infinitely tender, infinitely

expectant. They straighten slowly into the light after the nights of frost...

Reece and Krupa are also poets bearing witness to the history, inner workings, and importance of Robinson Forest, the jewel of biodiversity in Kentucky. I am glad for the existence of this paradise. For now, it's still here, safe from the encroachment of those who would "burn the future by converting it into money." If we allow desecration through indiscriminate logging and the unthinkable mountaintop-removal to get at coal, all we'll have left will be our poetry. Just as Joyce Kilmer's famous poem "Trees" inspired North Carolinians to preserve a thirty-eight thousand acre old-growth forest, so might the words of Reece and Krupa and other naturalist poets be instruments of saving Robinson Forest for Kentucky.