Quebec Run Wild Area

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Quebec Run Wild Area

The Quebec Run Wild Area is a densely forested, 7,441 acre section of the Forbes State Forest located on Chestnut Ridge in southern Fayette County, Pennsylvania just north of the Mason and Dixon Line and Pennsylvania’s border with West Virginia. The site is bisected by fast running, rocky streams (including Quebec Run, Tebolt Run, and Mill Run) all of which flow into Big Sandy Creek. Big Sandy Creek, in turn, flows to the southwest and empties into the Cheat River in West Virginia. The Cheat River, then, flows back to the north and joins the Monongahela River just over the Pennsylvania/West Virginia border.

According to their journals, Charles Mason and Jeremiah Dixon passed through this area (actually three miles to the south) on September 4, 1767. Unknown to them at the time, they were but 20 miles and a little over a month away from the spot where their Mohawk and Onondaga guides, upon crossing the well used Catawba Indian Trail (a north-south warrior path), halted them with the statement “not one step further!” In his summary memorandum that was appended to the journal, Mason wrote about this area’s landscape and the vegetation (all from Mason 1969):

“.... desert, woodland Barren soil with Very sudden deep bottoms immediately rising again nearly perpendicular The tops of the ridges chiefly chestnut, even to the top of Laurel Hill.”

“ Laurel Hill (or rather Mountain) is a wild of wildes: the laurel overgrown, the rocks gaping to swallow up, over whose deep mouths you may step. The whole is a deep melancholy appearance out of nature.”

“There is a remarkable quantity of The large tall spruce trees,” and “laurel swamps, dark vales of Pine Through which I believe The Sun’s rays never penetrated.”

The great tall trees are gone. They were cut for firewood, or milled into props for mines and lumber for houses and factories, or cooked and processed for their chemicals. What we see in their place is a chaotic patchwork of successional forest stages. The forests are filled with abundant trees of similar sizes and ages and are often dominated by fast growing “pioneer” species. The tall chestnut trees that stood on the ridges are gone, replaced by a shrub layer of sprouting chestnuts. The hemlocks (Mason’s “large tall spruce trees”) are also greatly reduced. We can find remnants of their massive forests in acre-sized patches that fell in between reliable survey lines and thus escaped the saw and axe. Some new hemlocks are scattered among the oaks and maples especially in the deep, wet ravines.

The landscape, though, is still here. Mason’s “very sudden deep bottoms” that are “immediately rising up again near perpendicular” still exist to challenge leg muscles and knee joints. These eroded, ancient ridges stand as both barriers and lures to minds of different intents. The laurel is still “overgrown” and the “rocks gaping” at the openings of many small (and a few very large) caves. This landscape is still even in its altered state, a place that is “wild of wildes.”

W.E. Hamilton, Penn State University 2008
Human use of this site following Mason and Dixon’s exploration has included timber harvesting (the entire site was cut in the late 1800’s and again in 1938-1940), mining, farming, and, utilization of the considerable water power of the streams to power grist mills. The area was acquired by the Western Pennsylvania Conservancy from the Summit Lumber Company in 1940 and transferred to the state of Pennsylvania. Most of the trees in the area are part of the third growth forest that developed following the last near clear cutting event. Older trees are not very common, but some can be seen in deep ravines and in some of the less accessible sections of the area.

There are seven parking areas scattered around the periphery of the wild area. Some of these have access roads that are barely adequate for regular road vehicles and should be used with caution. The two parking areas on the northern boundaries of the area serve as the starting points for our hikes. We reach these parking areas from US 40 by turning on SR 2001 (”Skyline Drive”) just past the Summit Inn and then by following the signs to Laurel Caverns. We drive past the parking area for the caverns until we reach a left turn onto Mud Pike Road (also referred to on some maps as “Quebec Road”). The turn is six and a half odometer miles from the US 40 junction. The first parking area for the wild area is about a mile and a quarter down Mud Pike Road. The second parking area is about two and a half miles down the road. Mud Pike Road is dirt and gravel and is extensively rutted from recent rains. I drive my five year old Corolla very carefully around and over the deep ruts.

The parking area is empty. During the three hours we hike in the area we see no other people. The trails throughout the area are well kept and have obvious evidence of foot traffic, but the intensity of use of the site seems to be quite low.

We start out on the red blazed Miller Trail that heads south out of the parking area. The surface of the trail is covered with shed yellow poplar flower petals. There are a good number of even aged yellow poplars in the vicinity of the parking lot. The woods are very open, and it is quite easy to see fifty to seventy-five yards in all directions through the stands of trees. Patches of shade and surprisingly brilliant sunshine are striped across the path and throughout the surrounding forest floor. The yellow poplars give way to abundant oaks. Chestnut, black, white, and red oaks are intermixed with red and sugar maples and black cherry. There is a great uniformity to the diameters and the heights of all of the trees reflecting, undoubtedly, the previously mentioned lumbering history of the area. The understory is densely filled with a rich mixture of seedlings representing almost all of the over-story tree species.
There is also abundant mountain laurel (left) along this part of the trail. The shrubs are covered with clusters of small, white, red-speckled, saucer-shaped flowers. June is a wonderful time to be in these woods!

A northern oriole high up in the branches of the oaks is singing his territory loudly, making himself as conspicuous and visible as possible. He has probably already mated but is making sure that his territory is well marked for all other orioles (and, just maybe, he will be able to convince another female to enter his domain!). Soon, a brood of nestlings will require continuous feeding. It will be a quiet time in the forest then, a time to be as invisible as possible. There will be no singing then.

In the understory growth there are a surprising number of American chestnut seedlings. These tiny trees have out of proportionally large, saw toothed leaves (right) that stand out sharply against the softer looking leaves of the oaks and maples. The American chestnut was the dominant tree not only on this ridge (which, of course, still bears its name) but also all across the drier, hill and ridge ecosystems of the state. The American chestnut was notable not so much for its height (although mature trees did reach heights of one hundred feet) but for its astoundingly large girth and extensive spread of its crown branches. A single, mature American chestnut filled an incredibly large volume of forest! It was a tree much valued for its shade and protection (“Under the spreading chestnut tree the village smithy stands”) and also for its strong wood and for its excellent, food quality nuts. Many birds and small mammals relied on the chestnut for shelter and for food. It was the signature tree of these eastern, hardwood forests. The American chestnut, of course, succumbed to a massive fungal pestilence from Asia called the “chestnut blight.” First observed in New York City in 1904, the chestnut blight spread rapidly, covering as many as fifty miles a year, throughout the Eastern and Midwestern distribution of the tree. By the early 1950’s, even the most remote stands of the chestnuts had become infected and had begun to fall due to the rot. The fungus that causes the blight (Cryphonectria parasitica) is spread by both the wind and by birds and insects. It enters the tree through wounds or cracks in the bark and proliferates in the cambium layer of the tree. The tree responds to the infection by growing a thick callus layer around the cambium. The combination of the fungus and the callus block nutrient transport in the infected trees causing the above ground tissues to die. The roots, however, are not affected by the fungus. So, even though the tree dies, the roots remain intact and viable and are able to re-sprout. A new American chestnut, which will eventually be killed by the fungus, then, begins to grow. Some of these sprouting chestnuts reach ages and heights sufficient to allow nut production and, thus, carry out non-vegetative reproduction. In time, though, all of the chestnut trees will become infected with the fungus and die back to their roots.

The American chestnut, then, is no longer able to reach anywhere close to its former size or dominance in these forests. The fungus has pushed this great tree species closer and closer to a size categorization of a shrub. The evidence of the abundance of these seedlings throughout the understory speaks to the fecundity of the species, but the inevitability of the infection and the lethal rot are irresistible, ecological forces.

W.E. Hamilton, Penn State University 2008
We head down a slope and sassafras and yellow birch become more abundant. Occasionally, a large red maple or oak (often red oaks) stand out against the uniformly sized mass of trees. One of our hiking guides, written back in the early 1980’s, describes this forest as dominated by “pole trees,” but in the past 25 years they have grown past that adolescent tree stage into fairly substantial, foot and foot-plus diameter individuals. Going further down the slope we pass (right after I made a comment to Deborah concerning their absence thus far on the trail) two large eastern hemlocks. Twenty or forty more feet further along the trail we pass several more, even larger hemlocks, and then we enter a dense stand that is also tightly packed with rhododendrons. The hemlocks in the stand are twelve to fifteen inches in diameter and between thirty and forty feet tall. Down in the very cool, very damp ravine there are also a large number of hemlock seedlings (ranging from four or five inches to three or four feet tall) in the understory. Around the hemlock seedlings are dense growths of clubmoss and low growing blueberry bushes.

We take a water break in the shady ravine, and I look closely at the club mosses. The club moss shown in the picture to the left is commonly called ground cedar. Club mosses are the miniaturized descendents of the giant, tree-like lycophytes that grew here in abundance with giant tree ferns some 340 million years ago. Back then, “Pennsylvania,” riding on the bedrock of the North American tectonic plate, was oriented ninety degrees clockwise with its present day eastern boundary pointing toward the south. The North American plate straddled the equator and the climate of this “future Pennsylvania” was
tropically warm and wet. This “Pennsylvania” part of the North American plate was just above sea level and was densely covered by steamy, swampy forests of the giant lycophytes and tree ferns. As these great plants went through their life cycles, they inevitably senesced and fell into the oxygen-poor waters of the muddy swamps forming massive deposits of peat. The rising and falling of the land mass and of the level of sea itself alternatively exposed and then sealed away these peat deposits under an accumulation of sediments. Time and the weight of the sediments themselves slowly transformed the organic materials of the peat into the fossilized carbons of coal, petroleum, and natural gas (the “fossil fuels”).

The ancient lycophytes and tree ferns had to contend with both the massive climatic changes that resulted from the drift of the North American plate northward into more temperate climate zones, and also with the evolution of increasingly efficient types of competing plants. The development of plants that made seeds and which had more efficient internal vascular structures and leaves (like our present day trees, for example) slowly relegated the lycophytes and ferns into narrower and narrower ecological niches and smaller and smaller ecological spaces. The vastly reduced sizes of the present day club mosses and ferns, and their decidedly less awe-inspiring masses and morphologies should be thought of, though, as evolutionary “victories” in that they allowed survival of some of the species.

I am laying on my stomach on the damp soil of the trail looking closely at an n-gauge miniature of the ancient Paleozoic swamp forest. A green tiger beetle crawls across the miniature canopy like a replica of a ranging predaceous dinosaur. Two deer flies land on one of the tops of the club moss and then flit away. In the moist debris under the lycophytes is a teeming community of fantastic mites and collembola, tardigrades and tiny worms. Complex food webs and sudden events of prey capture and narrow survival are going on but in a world too small for the naked eye to perceive. These plants and their supported communities can still inspire awe, but you just have to get very close to see it.

Wood thrushes are singing in this lower section of the Miller Trail. Their flute-like songs echo through the dark, wet forest. Some large rocks, probably great pieces of Pottsville sandstone from the hard capping rock of the Chestnut Ridge, surround the trail standing like tall islands in the dense crush of a sea of hemlocks. Many of these rocks have mosses, papery lichens, ferns, and even one or two tall hemlocks growing on them. The tallest individual plants on the rock islands grow in the middle of the vegetative mass. The plants get shorter and shorter as you move toward the edges. If you stand just right you can see the great bell-curve of the plant growth profile. Moisture, well conserved in the middle of the vegetative mass sustains plant growth. The drier and drier edges begin to limit it.

Dogwood and witch hazel and increasingly larger and larger numbers of ferns fill up the understory beneath the hemlocks. Mill Run is roaring louder as we get close to the bottom of the ravine. There are two surprisingly large American chestnuts down here. They are thirty feet tall and have diameters of ten to twelve inches. I

W.E. Hamilton, Penn State University 2008
don’t see any chestnut burrs on the trail, though. There are quite a few acorns and even some hickory nuts on the trail. There are scattered red oaks and a few bitternut hickories mixed in with the hemlocks. Some of these trail sections are very steep (this section of the trail gets a “strenuous” rating in the Sierra Club hiking guide). We climb down a natural stair of exposed rocks and fit our feet into small, often wet and slippery, spaces. I grab onto the trunk of a dogwood growing next to a very steep “down” and shake a small rain storm of water from its umbrella-shaped crown of leaves.

Red maples are increasingly common in the ravine. Lots of tree seedlings (mostly red maple and hemlock) are mixed in with abundant wild flowers (including wild ginseng, false Solomon’s seal, and twin flower) and club mosses. Rhododendron thickets make it difficult to see the Mill Run stream even though its nearby roar fills the spaces around the trail.

Even small changes in the topography of the trail cause noticeable differences in the vegetation. Hillsides facing the north are wetter and rich with hemlocks and rhododendrons. Hillsides with even a slight southern sky exposure are drier and have hickories, black cherry, maples, and varying mixtures of all four of the oaks (black, red, chestnut, and white). Mountain laurel and witch hazel fill in the drier understory. On both slope exposures, abundant tree seedlings cover the forest floor. At the crest of one of the small hills several pitch pines are growing among the oaks.

Pitch pine is a hardy, fast growing tree that thrives in poor soils and rocky places. It is often a pioneer species after disturbance and may even form pure stands. These trees, though, like most pines, are very sensitive to shading, and the emergence of slower growing, shade tolerant hardwood species (like oaks) over their crowns inevitably leads to their demise. The pitch pines we see here on the Miller Trail look a bit limb-pruned and lean of needles. The shading of the surrounding oaks is slowly squeezing them out of the ecosystem. In the event, though, of a fire or other site disturbance, their seed reservoirs and also their potential to sprout from roots and stumps could lead to their rapid re-establishment.

We join up with the Mill Run Trail and continue on it south for a short distance until we junction with the Rankin Trail. We turn right on the Rankin Trail and head west following Quebec Run upstream. We rock hop across several small streams that feed into Quebec Run and cross and then re-cross Quebec Run itself on two wooden bridges built by the Pennsylvania Conservation Corps in 1996 and 1997. In between the bridges we walk past a very straight stream cut whose evenly mounded banks and extreme linearity make it look decidedly like a human-made structure. Possibly this is one of canals

W.E. Hamilton, Penn State University 2008
that were dug in the 1800’s to direct the fast flowing water into the water wheels of the site’s various grist mills.

Rhododendron thickets are extensive along this section of the trail and extend well up the cut of Quebec Run. Some of the bushes have a fungus that makes white, bubbling lesions in the leaves. Later on, hiking on the Hess Trail, we cross through a thicket of dead, leafless rhododendron trunks and branches that borders both banks of a small stream. Were these bushes killed by the fungus? Had there been a fire or some insect pest? Had a flood killed the plants?

Along the Rankin Trail there are a few, small American beech trees growing among the large numbers of poplars and maples. Isolated patches of skunk cabbage grow in the restricted, wet flats along the stream. We look for pitcher plants and sundews in the marshy areas but do not see any.

We cross Quebec Road. This is one of the eight miles of abandoned country roads that crisscross through the wild area. The roads can be used to shorten hikes or to make creative interconnections between the hiking trails. The road surface is graveled and is well rutted by erosion cuts made by the runoff from the heavy spring rains. It would be easy walking along the road (its breadth, after several miles of walking on the eighteen inch wide paths through the woods, feels more like a great boulevard than a single lane-plus road), but we choose to stay in the confines of green, wet forest.

Back among the trees, the path follows close above Quebec Run. The stream is loud and crashing over its exposed bed of sandstone boulders and flat slabs of shale. Passing the infrequent breaks in the surrounding rhododendron and mountain laurel, you can feel a spray rising from the waterfalls and cascades. The rocks on the stream side of the trail are covered with mosses. We start to climb steadily up and the path becomes increasingly rocky and irregular.

The undergrowth here is dominated by hemlock seedlings, club mosses, Indian cucumber root, and false Solomon’s seal. As we climb yellow poplar, black cherry, yellow birch, red maple, and white oak seedlings replace the hemlocks. Tiny, white violets grow along the edges of the trail and even out into the path itself. Ferns (including bracken fern, hay scented fern, and interrupted fern) grow thickly along the trail side.

We turn north onto Hess Trail and start a long, steady climb up. Red oaks, chestnut oaks, and black oaks become increasingly abundant. Witch hazel is the dominant shrub. The woods gradually open up as the trees become more widely spaced and the taller understory vegetation thins out. Visibility increases from just a few feet to fifty to seventy five yards. The air moves more and more steadily through the woods, and the claustrophobic sense of “greenness” that dominated the ravines begins to fade.
We pass an area in which an old mine shaft is marked on our map. Piles of mine tailings are said to mark the shaft entrance just to the right of the trail. One of our maps refers to this site as the “gold mine” in honor, I am sure, of the local legend of the Confederate Army gold that was allegedly buried here at the end of the Civil War. We are concentrating on our climb up, though, and forget to explore the surroundings for the mine shaft (or the gold!).

We hike on several well spaced “ups” and follow curving trails that have been cut into faces of the long, rocky hill sides. The trail is passing through increasingly dry forest that is almost completely dominated by the mixture of oaks. The views down into the passing hollows are beautiful. The deep, wet greens of the ravines and the scent of the flowing water of the streams fill the senses. Suddenly, we are back at Quebec Road and can see the metallic glint of our car in the parking area.

We climb into the car. We have been hiking for three hours and have covered about four and a half miles. We slowly drive back out on Mud Pike Road straddling and by-passing the large ruts and puddles. In twenty minutes we are sitting in a small restaurant on Route 40, drinking iced tea, waiting for our hamburgers and French fries to be served. After lunch, we will go back to the Summit Inn for a soak in the hot tub and a swim in the pool.