IN THE SOURLANDS

A Tale of Two Landscapes

by Jared Rosenbaum

Ever take a hike through a rather pedestrian natural area, then round a bend and discover a place of surpassing beauty? First, you're slogging along through invasive thornbushes, thinking about where to stop for ice cream on the way home. Then suddenly you're face to face with a forested slope exuberant with ferns, every boulder face scribed with lichen, an abundance of spring wildflowers in full bloom.

This past Saturday, the Sourland Conservancy presented a hike in search of spring wildflowers, the often diminutive but exquisite miniatures of the forest.

Leading a group through the woods in search of natural wonders is never a sure thing. We were in search of bloodroot, rue anemone, hepatica, trout lily, and other native wildflowers at the Sourland Mountain Preserve. I led the group towards a special place deep in the forest. But as we entered the woods we found a grim welcome: a wall of multiflora rose and other invasive, non-native plants.

As we walked, the invasive thornbushes and vines receded, replaced by a boulder-strewn vista. Here, nestled among the rocks, we found Solomon's seal, spring beauty, and others. Yet as we pressed on, much of the woods was invaded with non-native shrubs.

What makes one natural area rich and diverse and another one weedy and species-poor? As a historian by training, and an ecologist by practice, I'm always asking "what happened here"? Why is one forest degraded and lacking plant diversity, while just down the trail is a forest full of surprises and beauty?

These two contrasting landscape types are often the result of land use history. Simplifying a bit, we have two basic kinds of landscapes. The richest possess plant communities pre-dating the rampant development of our area. They are often forested sites that were too rocky, wet, or otherwise forbidding for plowing and development.

The more degraded landscapes are often those that have reverted to a wild state after having their original wild communities obliterated by agriculture and industry. They reverted to wilderness in the 20th century, when numerous non-native plants were already seeding into the landscape, and the pressures of overpopulated deer gave the exotics an advantage over native species that attempted to re-colonize.

As our hiking group passed the weedy tangle of the gas pipeline, a linear gouge smothered in mugwort and Chinese bush clover, the contrast between degraded and intact landscapes could be seen before our eyes.

Just past the pipeline, I noticed two familiar boulders, standing sentinel by the wood's edge. We were getting close to our destination. The trailside became illuminated by the open white blooms of rue anemone, a tiny wildflower of rocky woods.

Shortly thereafter, we arrived. A vast colony of blue cohosh waved airily on thin stems, its rounded leaflets just unfurled in the spring sun. Mixed among the cohosh were wild ginger, Virginia waterleaf, trout lily, slender toothwort, and a few species of violets. A small stream flowed nearby, deeply cleft into the fractured hornfels rock.

An idyllic scene, more or less, but we all noted the Japanese barberry moving in from all sides, low dense bushes that smothered the native herbs beneath them. And no matter how we looked, we found no native shrubs to compete with this and other thorny and viney invaders.

Even at this spot, one of the most notable in the preserve, we asked tough questions and fought the sense that the place was degrading before our eyes. Why were native shrubs lacking, shrubs which might compete with the Japanese barberry and other invasive weeds?

Part of the answer has to do with the overabundant deer population. Without native predators to keep them in check, deer need to be hunted to maintain populations in balance with the carrying capacity of the land. Here at the preserve, and throughout much of central New Jersey, deer are not hunted. The native shrubs and wildflowers suffer, and non-native species planted for their deer resistance and then escaped to the wild, like barberry, form vast monocultures in formerly rich forests.

We huddled over a patch of cohosh, considering. The solutions were not simple. They involved the active role of people, undoing the damage of the past. Managing deer for the health of the forest. Removing invasive plants from rich natural areas, to give the natives a chance to recolonize. We considered the scene, its rare beauty in peril, and left emboldened in our desire to be stewards.

The Sourland Conservancy created the Sourland Stewards program to inspire stewardship through hikes, classes, and media. Learn more at sourland.org/stewardship.