

Health of the Casperkill, Dutchess County, New York

February 2009

Vassar College Environmental Research Institute
Cornell Cooperative Extension (CCEDC) Environment Program
Casperkill Watershed Alliance



Photo taken at the site where Rt. 9 crosses the Casperkill

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Preface: Our Lovely Casperkill

By Dr. A. Scott Warthin, Jr., Prof. of Geology, Vassar College

Once upon a time a little stream began, clear and sweet, in a swamp where the green herons perched in the buttonbushes, and the marsh wrens nested in the long cattails. What this stream may have been called by the Wappinger Indians we do not know, but early Dutch settlers called it the Casperkill. Along its banks the mink and otter hunted and played, while the deer came through the forest to quench their thirst.

The Indians, never of great number, used the stream in small ways; but these ways were in truth so small that they had no visible effect. Some four thousand years of habitation by Indians left the stream and its denizens as little changed as the forests along its banks.

But when the land was granted in patents and sold to settlers the great change began. Forests fell to clear fields, and to furnish lumber and fuel. The Casperkill suffered its first conspicuous indignity in the construction of a mill in its lower reach. Less obvious changes also occurred. Spring rains washed soil from the bare wheat fields, muddying at times the once clear spate. The hot rays of the summer sun warmed the waters that had been sheltered by trees along the banks. And other misfortunes came, at first slowly but at last in a crescendo of disaster. Beneath the headwater swamp lay beds of clay; this was used for the bricks that built much of old Poughkeepsie and the early buildings of Vassar College. When the brick plant closed in 1932 nearly half the swamp had been replaced by a pit, soon full of water. That phase of history remains today only in the name of Brickyard Hill, east of the swamp.

But that hole full of water? What a marvelous place to dump garbage! So a citizen with foresight bought the worthless hole and leased it to the Town of Poughkeepsie for a dump, and the waters that flowed from the swamp down the Casperkill became rich with the organic material of the decaying garbage and charged with iron from the rusting cans. The decay process used up the oxygen normally dissolved in the water; many kinds of life that had swarmed in the stream were drowned in the waters that once nourished them. Some life, however, survived and found that the waters, though fetid, were richer than ever with the decaying organic matter; these things flourished. So the Elodea and waterlilies that once grew in Sunset Lake on Vassar College campus, were replaced by ugly mats of algae. The coliform count of the water grew so high that the Vassar girls had to give up the kayaks in which they once sported. As the sunfish and bass that swam in the lake were replaced by goldfish and carp, so the water loving plants around its edge gave way to Yellow Flags and Sagittaria. And for years, when the Town burned its dump thrice weekly, a north wind brought a snow of burnt paper ashes on the water.

A few atrocities were corrected; a gravel miner was required to settle the mud from his wash water before returning it to the stream. Vassar College ceased to use Sunset Lake as a cooler for condenser water from the power plant. And in time more people protested the Monday-Wednesday-Friday smog from the burning dump, so dumping at that spot ceased.

Of course, it was coincidence that the dumping space had by then all been filled up well above water level, and was now valuable land. So we come to the era of industry and the supermarket, surrounded by acres of parking lots, where rainfall must be drained away at once or business suffers. And where can the storm sewers most cheaply discharge? Poor Casperkill! Today, even a modest rain promptly produces a brown turbid fluid discharge, courtesy of Shoprite and the Great Atlantic and Pacific Tea Company. It is not, however, tea, and it is (slowly, we hope) filling Sunset Lake, which is the first settling basin in its path. And nestling in this unlovely mud are other artifacts – item, two auto tires; item, an estimated 300 beer cans and assorted bottles. How the few surviving Painted Turtles can find a place to burrow for the winter it is hard to imagine. Snug indeed, between Schlitz and Rheingold, in mud spiced with fuel oil released into the Lake by mistake. Why is it that nearly all mistakes made with water are detrimental?

The New York State Water Resources Commission, in effect, has declared the situation hopeless above the Sunset Lake dam, giving that portion a “D” classification. On the theory that running water will gradually cleanse itself, and with the septic tank action in Sunset Lake as an assist, the Commission placed a rating of “C” on the Casperkill below Sunset Lake. This would permit fishing, except for trout, which require more dissolved oxygen than the panfish. This is hardly realistic today, but may come to pass when the organic debris in the Town dump has wasted away.

But will the Casperkill ever return to its early state? No, my friend, the marsh wren can never replace the supermarket, so let us have a care for what is left to us before it is too late.

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