



Turkey Vulture in Letchworth State Park in the Portage Canyon below Middle Falls. 4 Feb, 1988. Photograph by the author.

WINTERING TURKEY VULTURES IN LETCHWORTH STATE PARK

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For at least the second year, several Turkey Vultures have spent the winter at 42° 35' 15" north latitude. Throughout the 1980's there have been sporadic winter sightings of Turkey Vultures in Letchworth State Park during the mild weather of January thaws. There are at least three January records as far north as Monroe County (43° north latitude), all within the last decade. I began wondering how far south these birds might be overwintering, and started paying attention to the location of December sightings.

Typically during the summer, 100-200 vultures use the twenty-two miles of the Genesee River Valley within Letchworth State Park between the villages of Portageville and Mt. Morris in Wyoming and Livingston Counties. I have observed cavity nests in all three of the canyons within the park ("Portage Canyon," the narrowest canyon; "Great Bend Gorge," the deepest; and "Mt. Morris Canyon," the longest). In the last five years, vulture sightings have increased in neighboring north-south valleys. During the summer of 1988, the group using the Oatka Valley in Warsaw contained 40-50 birds compared to 30-35 birds in 1987, 25-30 in 1986, 15-20 in 1985 and 10-15 in 1984. Usually by early November, all of these sites have been vacated.

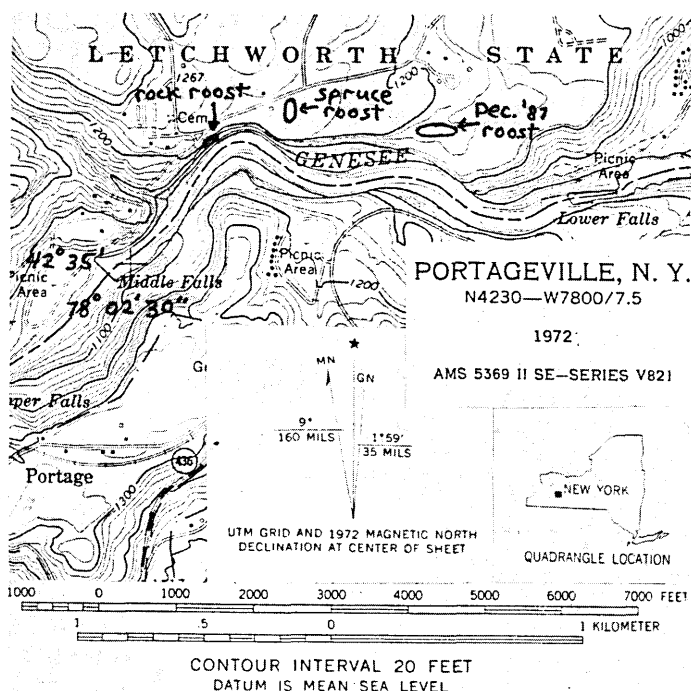
Were the vultures overwintering in the upper reaches of the Genesee River south of the park? Were they traveling here all the way from Pennsylvania during the winter warm spells? Could they be hiding within the park boundaries? In December of 1987, I had a chance to find out. Several vultures were spending their nights in the tops of White Pines (over 100 ft tall) on a shelf north of the Portage Canyon just south of the Administration Building. During the day they usually were seen in the prominent trees below the shelf on the north bank of the canyon. One snowy day late in the month they were in the night-roosting trees around noontime. I lost track of them for a week and then in early January 1988, relocated them three-eighths of a mile to the west in a plantation of Norway Spruce. There was a deer carcass at the south end of the spruce stand and they had cleaned the frozen flesh from the bones within a week. Tracks in the snow indicated fox and crows also had joined the feast.

Over the next two months I strived to make several observations each week to determine how many were here and how they were faring.

During the day, especially in the late afternoon, two to three hours before sunset, they regularly could be found on a vertical rock cliff in the Portage Canyon. This cliff, at 78° 02' 18" west longitude, towers over 300 ft above the river. The Portage Canyon at this narrowest point is 400-600 ft wide and 325 ft deep. The vultures use the upper 40 ft of the cliff which begins 25 ft below the rim of the canyon. On this cliff which faces 137° southeast, the vultures get a good exposure to the sun and are sheltered from the prevailing southwest winds. The irregularly coarse-fractured Nunda Sandstone provides many shelves and outcroppings for vulture-sized footholds. The lowest ledge that they use is heavily whitewashed, suggesting many years of use prior to my first observations. On milder days some of the vultures can be found perching on the ground above the cliff or in some overhanging dead tree snags. During the worst windchill, they seem to hug the cliff, sitting less upright or lying horizontally tight to the rocks. Frequently on sunny days, especially in the morning after leaving their night roost, several can be seen in their "sunning" posture with outstretched wings.

As the time for their daily departure from the cliff approaches, there seems to be an increase in alertness and preening activity. About half of the birds can be recognized as individuals due to feather loss, or when perched, by various head markings. Complete evacuation from the cliff usually takes five to ten minutes and seems to be initiated by no one particular bird. After five to ten minutes of soaring within the canyon and a few hundred feet above, the vultures retire to their night roost in the Norway Spruce. The spruce trees are only one quarter mile east of the vultures' rocky day roost. The whole process of leaving the day roost to settling in the night roost is usually completed within fifteen minutes. This evening show is their most spectacular behavior and is often in concert with the squadrons of 75-100 Rock Doves that have a year-round home in the canyon. This area is known as Inspiration Point, and this aerial show is yet another dimension to the emotional view of the Middle and Upper Falls.

The vultures are usually in their spruce roost forty-five minutes before sunset. This timing varies from two hours to one-half hour before sunset and seems to be earlier on the bleakest days. In the summer, vultures frequently retire after sunset, sometimes by as much as forty minutes to an hour afterward. When the vultures enter their night roost they land in the tops of the trees. Gradually they shift their positions, sometimes from tree to tree but usually to lower branches and positions closer to the trunks, but remaining in the upper fourth of the trees. Typically only three to six trees are used any particular night. Like on



USGS map showing Turkey Vulture roosts in Letchworth State Park during the winters of 1988 and 1989.

their rock roost, there does not seem to be any individual ownership of a specific perch other than by the one that gets there first. Once situated, the vultures continue their preening until they are quite settled down by nightfall. Sometimes during this preening period, skiers, or hikers, or people who stop and get out of their car to watch the deer will scare some of the vultures out of the roost. These vultures return, usually after five or more minutes of soaring. In addition to the vultures, the spruce roost is used regularly by crows and red squirrels and occasionally by a Red-tailed Hawk.

The trees in this spruce plantation average about 100 ft in height. The trees were planted in 1912 in block number 18 of an arboretum desired by the park's benefactor, William Pryor Letchworth. Planted in a grid with four foot spacing, the trees have grown tall and slender. Today the trees average fifteen feet apart and have diameters at breast height of eighteen inches. The Norway Spruce most used in the winter of 1988 is the largest tree in the stand and measures 105 ft in height, two feet in

diameter and spreads its branches thirty feet. This tree is located on the leeward side of the stand and is within forty yards of the main park road. The stand as a whole is fifty yards wide and one hundred thirty yards long (1.7 acres).

The vultures usually leave the spruce roost within an hour after sunrise. Some snowy mornings, several birds may linger for another hour or more. Although they usually all leave the roost within fifteen minutes, they generally go their separate ways. Sometimes there is a gathering on the rock roost before the morning dispersal while on other days most of the vultures disperse directly.

Fifteen vultures spent the winter of 1988. Two of these birds were immatures showing red heads but with the tips of their bills blackened in the outer two-thirds. Both birds had lighter edgings on their feathers but one seemed a little duskie colored. During the winter of 1989, twenty birds were using the same roosts as the previous year. Again, there were two red-headed immatures, with one being more drably feathered. At least three of the adults seemed to be individuals that I could recognize in 1988 by facial markings.

Pooling all the sightings from both years, all the feeding observations have been within three to five miles of the roosts. Deer carcasses, primarily from roadkills, seemed to be the standard menu. Generally, less than half of the birds have been at a dining site at the same time. Rabbit, squirrel, raccoon and woodchuck also have drawn the vultures. During the coldest period and deepest snows the vultures seemed to stay near their roosts and may have gone a week or more without eating.

Sightings of birds in flight have been within the ten to fifteen mile range and generally were oriented along the river. Flight sightings ranged from the Mt. Morris Canyon in Livingston County to south of Wiscoy in Allegany County.

Several dozen observers have seen the vultures during the last two winters. One of the most interesting observations, reported to me by Jane Salminen of Rochester, New York, occurred in the early afternoon of a 40°F. day in the middle of January 1989. Fourteen vultures were seen along the river below their rock roost, several with outstretched wings bathing their backs in the sunlight. Three of the birds were dunking themselves in the river facing upstream and in water up to their necks. One of the birds was completely submerged for several seconds. These birds joined the others on the rocks along the river's rapids and began sunbathing. The fourteen were still at the river's edge at the end of the half-hour observation. I have seen vultures in the river before, but not in

the company of so large a group and not in the winter, nor an individual submerged for so many seconds.

The Turkey Vulture has several favorable factors to assist overwintering in Letchworth State Park: a day roost with a sunny exposure that is protected from the prevailing winds; a nearby night roost in tall, dense trees which serve as a windbreak; a winter concentration of several hundred deer as a potential food source; easy sailing in the regular air currents circulating through the canyon; roosts already situated in prime nesting habitat.

I expect the Turkey Vulture to continue its wintering efforts in the park and foresee future wintering populations that may exceed fifty birds. (I observed more than fifty vultures using the rock roost during the summer of 1988.) Also, I am curious to know if Turkey Vultures have wintered farther north than Letchworth State Park, perhaps somewhere east of Lake Michigan?

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