December 12, 2012

Mr. Robert Kosin
Village Administrator
Village of Barrington Hills
112 Algonquin Road
Barrington Hills, Illinois 60010-5199

Re: Trout Park Nature Preserve

Dear Bob:

Thank you for the opportunity to revisit this wonderful preserve with you last week. It was my first visit since the mid-1960's when I was a research assistant in the Department of Forestry at the University of Illinois. At that time, I was working with Professor J. J. Jokela who sent me to Trout Park. My mission was to collect seeds from what he described as one of the known remaining sites in the state with a remnant population of the indigenous northern white-cedar (Thuja occidentalis L.).

As we walked through the site, my first recollection of my previous visit was that I was once again looking at a truly unique site with a strong symbiotic relationship between the soil, water, flora, and fauna. My second recollection was that it was much easier to get close to the white-cedar trees in the mid-1960's, than it was on that day last week. It was obvious to me that something had changed in the 45 - 50 years since I was last there. One thing that changed was the density of the deciduous trees and the density of the white-cedar trees. Today there are very few large deciduous trees on the site and there are thousands of small deciduous trees. There are fewer large white-cedar trees and very few small white-cedar trees which. This means that the population of the white-cedar trees will continue to decline.

I suspect that there have also been some changes in the species of the deciduous trees as evidenced by the large number of smaller trees. A description of the park for the dedication of the Nature Preserve in 1972 includes the following "The bluff tops support bur oak, white oak, while the red oak, basswood, white ash, and witch hazel occur on the slopes." "Near the base of the slopes, the woods are dominated by sugar maple, blue ash, chinquapin oak, and rock elm." These species are also evident today. The description also includes a quote by Dr. Henry C. Cowles from 1923 that references "the arbor vitae (northern white-cedar) that occur along the springs and seeps and in shallow depressions at the base of the slopes." A technical report by the Illinois Natural History Survey Center for Biodiversity in 1998 reported "The dominant tree was Acer negundo (box elder). Other trees observed included Fraxinus nigra

(black ash), Fraxinus pennsylvatica (green ash), Juglans nigra (black walnut), Morus alba (white mulberry, and Tilia americana (basswood)". These few brief references to the trees on the site do not provide the depth of information that is available on the studies of the fauna of the site, but they provide a clue as to why the trees on the site are different today. The box elder, ash, elm, and mulberry that dominate the site today are precluding the reproduction of the white-cedar and other more desirable species.

The question is – "what other, less obvious, changes have occurred on this site since 1923?" It is possible the changes in the underlying soils may have occurred, but it is clearly obvious that the introduction of the adjacent toll road has had significant impacts on the site due to the construction and years of maintenance of the road. Much less obvious is the change in the hydrology of the site. The water that freely flows from the springs and seeps does not originate at Route 25. It originates miles to the east. The development that has occurred in this watershed since 1923 has most likely had some impact on the quality and quantity of the water that nourishes the flora and fauna of the preserve.

The changes in the tree species and tree density that are negatively impacting the sustainability of the trees and, therefore, the ecosystem of the preserve can easily be managed. What is not easily managed is the quality and quantity of the water that comes to the preserve. The quality and quantity of the water that enters this site from the springs and seeps is the life blood for the complex ecosystem that has existed here for centuries. The failure to protect this most critical element of the ecosystem will surely result in the demise of an Illinois treasure.

To quote Dr. Henry C. Cowles once again, "The wonderful group of arbor vitae in Trout Park…… is one of the most notable plant colonies in Illinois. I have long known of the place and love it for its beautiful springs and evergreens. There is no place like in the whole state."

Sincerely,
URBAN FOREST MANAGEMENT INC.

Charles A. Stewart
President