9/27/06

Anne Archie,
Forest Supervisor
1170 4th Ave. S.
Park Falls, WI 54552

Hi Anne,

It was a pleasure to meet you at South Twin Lake a few weeks ago. And I would like to give you a bird's eye view, actually a report, of the white birch regeneration project in which I have been engaged.

Many people in the area have greatly enjoyed the white birch around the lake over the years and now have become concerned that a few have begun to die. So in 1993, I embarked, via an MOU with the Forest Service, on an effort to regenerate them on the north, east, and south sides of the lake.

In 1996, I formed the South Twin Lake Conservation Society with the help of Bob Hennes and my personal MOU was transferred to the Society.

I discovered that the two ingredients necessary for the germination of white birch seed is sunlight and moisture. Though it was thought that they needed contact with mineral soil, that doesn't seem to be the case. I've found them in low growing moss, in grassy sod, on rotted tree stumps, and, yes, on mineral soil. But they seem to thrive best along with other low growing vegetation. I'm wondering if they have a symbiotic relationship with moss since, more often than not, I find a low growing moss with them.

So that sunshine hits the seed, I have cleared out vegetation that heavily shades the ground - primarily hazel brush, bracken, and young balsam. I have used chainsaws, grass whips, and my two cub cadet mowers with the deck set as high as possible.

Where I find one seedling, I will usually find three or four or a dozen. In one case, in a patch about 40 feet in rough diameter, there are about 35 white birch standing, some over 30 feet high. I've watched them grow from seedlings. I assume the seed was distributed all at the same time, but they seem to keep germinating over a period of 6 or 7 years or more. And in moss.

In another patch, about 20 feet in rough diameter, there are some 25 trees standing, the tallest 3 or 4 are about 12 feet with varying heights down to seedlings.

In another patch, 10 feet in diameter, there are perhaps 15 trees from five feet to seedlings.

These 3 patches are widely scattered. This makes me wonder if only a few mature trees are fertile in any given year.

In areas where natural seeding has not yet taken place, I have done some transplanting. In digging a seedling out, it seems best to circle the cut in a radius the height of the seedling. A 2 by 2 piece of landscaping fabric, that lets air and water through - but prohibits vegetation from growing up from below, was fitted around the transplant in many cases. Now discontinued. In too many instances, ants decided to nest under the fabric to the detriment of the seedling. And in other cases the fabric may have helped and in others not. Istead of fabric, I am now using peat moss and well rotted birch wood as mulch.

I believe that the ground at the bottom of the transplant hole should be well stamped down and the dirt around the edges packed as hard as possible. Moisture cannot percolate in any direction in loose soil, especially upward during a dry spell. So roots dry out. The transplants I packed in especially heavily this year seem to have done exceptionally well.

I've discovered that by grass whipping around mature white birch, so that sunshine hits the base of the trunk, perhaps 75% of them will send up shoots. White birch foliage is very light, with smaller leaves that are more widely spaced than those for other hard woods. Thus, even in a tight cluster of birch, sunshine and light gets through.

In addition to white birch, the intermediate under story of silky dogwood, red osier dogwood, and winter berry (American holly) are also held sacred. Mowing and grasswhipping may seem like a terribly unnatural and destructive procedure. However, bracken (which has a toxin in its roots that inhibits other competing vegetation and also has toxin in its fronds so that neither deer nor rabbits browse on it) heavily shades the ground so nothing else can thrive. Hazel brush also heavily shades the ground and spreads easily. Young balsam often stands in impenetrable thickets with nothing else growing among them. All three seem to follow man made roads so their dominance is not a "natural progression". \

So, to my delight, a totally unexpected low growing ecology has emerged - bunch berry (dwarf dogwood), winter green, wild strawberry, blue and white violets, Canadian may flower, spring beauties, anemones, trilliums, wood sorrel, etc. Taller growing plants such as white bane berry, red bane berry, Solomon's seal, and varieties of aster and daisy are easily noticed and saved.

A variety of birds, even flickers, feed on the blue berries of silky dogwood and the white berries of red osier. Both dogwoods were stripped by the 1st of September. On the first part of July, tiny blossoms emerge on the winter berry and their bright red berries line their branches much later. As the project develops, I can envision people visiting the lake just to see the winter berry. One morning, I saw a doe walking leisurely along, feeding on trillium blossoms and leaves. However, the bucks seem to like to rub the velvet on their horns off on silky dogwood trunks –damaging them and causing some of them to die. With amphibians on a down spiral worldwide, I see many leopard frogs; but whether that is a result of my clearing off the heavily shading vegetation, or the vicinity of the lake, or a combination of both, remains a question.

Other forms of vegetation also like the sunny cleared areas among the white birch.
Golden rod is potentially the most disastrous. It has totally taken over whole fields on the edges of the National Forest. And it has followed along the logging roads into the Forest. But I have kept the areas I've been working in clear by pulling it up. Bracken also follows logging roads, totally taking over whole areas. It has a vast network of roots (some running horizontally a foot beneath the surface of the ground); but two or three cuttings in one summer will make it manageable in following years. Balsam also follows logging roads, often with impenetrable thickets, but, cut at ground level, they don't send up shoots.

Dawn Meier, the ranger in charge of recreation, has been a tremendous help; but, this year, she has lost a chain saw and grass whip summer worker and also a volunteer religious group that didn't show up. In previous years, she has lent some of their time to give me help.

At 90 years of age and recovering from a knee replacement, I feel the need of the equivalent of a hired helper. Next summer, with someone working with me (actually doing most of the work), I hope to get the beauty and the possibilities of the place more visible and thus more irreplaceable.

Other possibilities. For instance, my daughter, Sally, picked a couple buckets of choke cherries from two trees near Beaver Dam (though bears had been there first) and made choke cherry jam and syrup. She also picked 3 or 4 buckets of blueberries near Blueberry Lake and made blueberry pies and jam. And she picked 4 or 5 buckets of cranberries also near Blueberry Lake and made cranberry bread, quarts and quarts of juice, and dried some.

So? It is all totally organic and with flavors that tame varieties cannot match. A realization becomes obvious that nature cannot be humanly improved upon. (1)

So, further? Others might pick as well, and other areas around South Twin can be found. Wouldn't the place be stripped? No. Just as there are limits to the fish caught from the lake so there can be limits to the berries picked. But too many people would clamor to pick? Some 2,200 acres east from South Twin (which STLCS tried, unsuccessfully, to have designated a Semi-Primitive Roadless Area), between forest roads 103 and 102, to the eastern edge of the Forest is riddled with blueberries, cranberries, and choke cherry trees. A bit of casing the area would establish routes and areas in which to pick. Again, So? It would give people an opportunity to learn and appreciate that quality cannot be managed for profit. It would all be part of South Twin as an aesthetic project. Innumerable people have said that a sense of beauty, and the various aspects of the arts, is what will save the planet for our children and grandchildren.

But how could South Twin be kept from eventually being over run? This place must never become a public park. Quiet, meditation, and savoring the beauty of nature, not giddy recreational raring around, must be our goal. Eventually someone monitoring the place may have to limit the number of people visiting the lake on one day. Perhaps take reservations. How? This leads to the fate of the Nelson cabin.

Re: The possibilities for the fate of the cabin.

1. The Forest Service will dismantle the cabin sometime after May, 2008, and build a much smaller one for rental. Though a reading of our MOU seems to allow Janet and me to linger through 2009. This is the Forest Service's current plan.

2. The Forest Service could build a small cabin similar to the Nelson cabin and reuse the upright half logs. Might even put styrofoam panels between the inside and outside half logs instead of paper. Might easily use the current outhouse, fitting it with the proper ventilation pipe and put it on the foundation basement that can be emptied by a sanitation truck. Why? It is built of 4 by 8 plywood - a forest product. Grains and knots are an education. Porcupine gnawing can be noted. Means of protection from porcupines can be seen. Really big screened windows. Easily made by anyone. Corporations unnecessary.

3. Extend the Nelson residence (lease?) in the current cabin while Carl continues his volunteer work on the white birch regeneration project as long as he is able (primarily to supervise). He has plans to get the help needed.

4. The Nelson's and STLCS to repair the present cabin to meet the necessary current building codes. Then to be rented, or become the residence for a volunteer person, or couple, to monitor whatever is necessary.

5. The Nelson's to give, or sell, the cabin to the STLCS (which must maintain it and keep it insured) and the Society to continue the regeneration project and monitoring of the lake. All of the above, of course, with Forest Service approval.

South Twin is unique! The water is crystal clear, fed by rainwater and springs. (Though maps show North and South Twin at the same elevation, yet the bog between them drains into the North Twin, tainting its water. Incidentally the bog is the largest of its kind in the Medford District and it has been designated a State Natural Research Area.) South Twin has a solid shoreline, and eventually can have a walk able trail all the way around. No other lake I know of has that feature.

Indians found the lake to their liking. The road in from the North Twin (that I had bulldozed in 1946) travels over a glacial esker and obliterates a trail (that I have hiked quite a few times) undoubtedly used by Native Americans. Arrowhead flakings have been found on the knoll next to the current boat landing. I have found a number of other locations along the shoreline that seemed ideal for Indian activity.

All of this, and the current status of white birch regeneration, with the intermediate under story trees and the unanticipated resurgence of flowering plants, makes South Twin a jewel that needs continued burnishing. And to further its uniqueness, there are additional possibilities.

Carl Nelson

(1) Another instance. In the early 1970s, I made maple syrup by tapping trees in a maple grove about a quarter of a mile east of the cabin. The Forest Service charged me 10 cents a spout. As for other back woodsmen, my furnace was made out of an old refrigerator laid on its back, the door taken off where the evaporating pan was placed, a smoke stack cut into the former top end, and a replaceable door for feeding the fire fitted in the formerly bottom end. Sap dripped from trees into an assortment of buckets and hauled in 10 gallon cream cans. Everything washed daily. A guest at one of our “sugaring off” parties savored my syrup and then indignantly said, "That wasn't maple syrup that I bought in the store!!!"

When "efficiency" for the bottom dollar enters in with plastic pipe lines, large storage tanks, delayed boilings, etc., the sap ferments. The taste changes. The color changes from my light amber to much darker hues.

So the former Native Americans, and now we back woods syrup makers, are the only ones to savor the real thing. The dollar and big business be damned.

P.S. I'm afraid that when Janet and I have to leave the cabin that the white birch regeneration project will come to an end – and the many developments that are possible. It really requires a full-time volunteer living right here – at least for another ten years or so until things are pretty much on their own. Sally, as president of STLCS, has the acquaintance needed of the place, and the passion for it, but she has a full-time job.