

Gardening the Forest

Tree Care

BY DYKE VAN ET TEN WILLIAMS

**Ever wish you had a white pine growing right *there*?
Have fire or logging hurt what should be your great forest?
Are your birches dying and no hope in sight?**



White pine seedling in the spring planted two years ago.

THE LAKE OF THE WOODS ISLAND that we summer on had a bad fire sometime in the '30s. Most of the big trees were killed, with just 3 white pine and a few large spruce surviving. Today some balsam, ash, pin cherry, scrub oak and birch “volunteers” exist, but most came back in as hazel, willow, mapleleaf viburnum (moose maple), alder, popple, etc. Never has there been land more in need of a resident or rented moose. We have since been planting and transplanting white, red and jack pine, northern white cedar and white spruce to both speed the succession process along and gradually create an upper story canopy which will greatly reduce the scrub bushes that dominate now.

The last articles covered planting tree seedlings, from LOWDPOA's spring seedling sale or other sources. Here are some ideas on additional ways to plant trees where you want them and on how to care for your trees once you have them in the ground. Having tried many forms of planting, transplanting and caretaking,

here's what we think works in this area.

PLANTING SEEDS

Some natural resources agencies, nurseries and seed collectors will sell tree seeds—a bag of thousands of tiny but potent seeds for pines, firs, cedars, etc. It's a lot like planting grass seed. Seeds are at their best when planting on awkward terrain such as cliffs or steep banks where you can broadcast seed over the edge (taking wind into account) rather than disturbing that fragile soil even more with boots and planting bars to plant seedlings. While not as success-oriented as planting seedlings, using seeds is very much easier physically and much, much quicker.

Spring Planting Seeds planted in early spring, while the melt and runoff water is still in the soil, have a good chance of success. The extra moisture is crucial to germination and early growth. Their greatest danger is birds and mice (voles) which consider them excellent food. Some species (including white pine,

white spruce and jack pine) must have their seeds “stratified”—put through a false winter cycle—for most of them to germinate this year. Be sure to ask your supplier about this. For those species, unstratified seeds are best sown in the late fall (mid-October in most places, just before or just after the first snows). The real winter will stratify them and the late sowing means less chance mice and birds will find them. At least one expert tells me that sowing any time other than early spring or late fall is a complete waste of seed, mostly because of their dramatic need for moisture.

To “Broadcast” seed: Strew handfuls of seed widely (a few seeds over a wide area) in a promising setting. Seeds falling in duff will not grow, so try to find or create access to real mineral soil (“dirt”). Not all that many will chance to fall in just the right dirt-and-water spot, but it’s easy and it’s quick. Best done in early spring or late fall. Water if possible.

To “Broadcast with care”: First “scarify” the ground to be sown. Use a rake or stick or your foot to move the duff away and loosen the real dirt underneath. Again strew the seeds widely and sparingly, and reagituate the dirt to cover the seeds with 1/4” of soil. Germination results will be much better than the method above. Water if possible.

To plant individually (recommended method): Pick your spot. Use clippers to “release” the area—prune competing low brush (hazel, alder, etc.) back about 18”–24” so your seed(s) gets most of the water and soil nutrients that are there. Scarify—move duff and debris away and loosen the soil. Poke a 1/4” hole in the dirt, place a seed or two and cover

with dirt. You can plant three or more seeds very close together and thin later depending on which grew the best. Water if possible. Repeat at the next spot. Hint: if you are absolutely sure you will plant the next day, soak the seeds you are sure will go in the ground in clean water for 24 hours prior to planting. This may help increase your germination rate, though it’s not crucial.

Watering: You can use regular hose nozzles, sprinklers, soakers, etc. If you have a water pump or fire hose, a fire nozzle set on mist can water a lot in a short time. Do not be so direct that you blow the seeds back out of the ground.

It’s considered very clever to plant right before you know it will rain gently for the next week.

Don’t expect “instant” trees. Seeds planted in spring might be tiny “puff balls” of needles by late fall. Both seeds and seedlings will grow very slowly the first several years—only inches per year as they acclimatize to their new surroundings. By year six or so they will start adding a foot a year—then a foot and a half or more. Seeds planted from August on may show tiny shoots or nothing at all the first year. Seeds planted from October on won’t even germinate until the next spring.



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- **Web Site** (updated each workday): www.lwcb.ca
Current information & advisories, historic data & more!
 - **Regulation Guide** - Regulation rules & criteria; basin physical features; water level & flow preferences
 - **Before You Build** - Hazard lands and docks; water levels to plan for; determining the level on your shore
- **Recorded Message** (updated weekly): **1-800-667-5922**
Current level and flow information; advisories as needed
- **Staff:** Call: **1-800-661-5922**
Email: secretariat@lwcb.ca
Write: **Lake of the Woods Control Board**
Ottawa ON K1A 0H3

PLANTING POTTED TREES

Local nurseries will sell larger trees, from one foot to several feet tall, that have been grown in their own pots, tubs or even in the ground and have then been “balled and burlapped”. Potted trees can be stored for a while outside in the sun if kept watered, but, as always, plant them as soon as possible. Dig a hole slightly bigger than the pot is wide and tall, with a level bottom so no air pocket develops under the roots. Some folks add peat moss underneath to loosen the soil the roots must penetrate as it takes hold in the new site. Roll the pot on its side and push lightly down while rolling to loosen the dirt inside. Slide the “plug” of dirt and roots out sideways and lift the plug into the hole, trying valiantly *not* to lift or move the tree by the trunk. Fill in the sides of the hole, packing firmly to avoid air pockets. Water for weeks.

Two schools of thought exist on how deep to plant. One school wants the “top” of the root/dirt plug to be at or a tad above the new ground level. My school likes the plug top a tad below ground level. We then hand form a dirt berm around the tree just outside the hole rim so water can collect in the slight depression this forms. I like to move extra leaves, grass or duff back in under the tree inside that berm as mulch to retard evaporation. Why bigger trees? For one, after a wildfire, I have seen several cottage owners buy and effectively plant some larger trees around their sites just so right away there would be something tall and green nearby. Good

way to get that special species specimen planted right there where you always wanted one.

TRANSPLANTING

Personally, I plant much more densely than the 30-ft rule would dictate. That means that right now I have several 1–3 ft red pines within about 8 ft of each other. Some of those trees will either have to be culled out or moved to keep 30 ft between mature tree trunks. Folks who plant seedlings or seeds have the option to plant a nursery of small trees from which they can borrow later on. All of us have the option of sharing what we have in excess—“have these extra white pines in exchange for some of your extra birches”. Most tracts have great seedlings somewhere on them—just not in the exact spot you had in mind. Transplanting can solve all this.

The bigger the tree you attempt to move the lower the likelihood that it will survive. We have moved a few four-footers, but it’s serious work and the odds are not great. The ideal size is a tree whose entire root system and its attendant dirt will fit on your shovel blade or in a small bucket—usually trees from 6 inches to maybe 2 feet in height. Have your new holes already dug and the soil wet. Dig straight down and then a bit inward at or just inside the “dripline, the outermost circle where water would drip off its branch tips. Dig in and *under* the root system. Lift each tree with a spade (never by the trunk or stem). Get almost all of the roots and the dirt it has been growing in. Carry the tree in the shovel or bucket to the new hole

and set it in with the trunk at the same soil level as at its old site, following the rules for potted trees above. Make sure there are no air pockets in the dirt around the roots and tamp the dirt down. Trees being transplanted lose many of their very fine, hair-thin roots that are the moisture uptakers and thus transplants more than any other form of planting should get a lot of water for several weeks if possible, though some may survive on their own.

By the way, white (“paper”) birch trees live roughly 40 years and expire, as do their cousins the “popple” (aka aspen, much beloved by beaver). Through a wonderful survival quirk of nature, most of them are self-regenerating if you work with them. Both species grow “suckers” up from either the tree base or nearby root system. A wild birch usually has several much smaller “shrub-sized” shoots growing at its base. Don’t prune these away—these are the next generation! Instead, study what you see for a bit. There are low ones, medium ones and some higher ones—by comparing leaves you can verify that all are indeed birch (the trunks do not look “birchy” until much later). Thoughtfully prune the higher ones, leaving 3-4 “sapling-sized” trees. Remove the lower branches, any criss-crossing branches and any sideways-growing branches—you’re going for height. Make sure you leave plenty of medium and smaller ones too—they are the generation after that! It’s a form of transplanting without all the risk and work!

**IN THE JULY ISSUE:
AFTERCARE FOR GROWING TREES**

Dyke will complete this article series (March, April, May & July issues) with details on how to care for all the trees you have planted or have growing naturally. Special tips on how to protect white pines from their natural (diseases, bugs and deer) enemies. If you have stories about your family’s efforts to plant, transplant, preserve and renew your forests, Area News would love to hear from you. Write them up and email them to: gerrywilson@kmts.ca.



“Ribes” may be controllable

by Dyke Williams

PROFESSIONAL LAKE AREA arborist CJ Conway believes that the “ribes” family, including our native currant bushes that serve as the “vector” or go-between for blister rust to reach new white pines, *can* be controlled or eliminated in smaller areas! Chris writes:



TOM THOMPSON

Early spring is the best time to identify currant bush since it is the first shrub to leaf in cottage country. It is much more difficult to spot once all the other small plants start to show. It grows in clumps, sometimes large—the size of a picnic table. Other times it is a single strand, the thickness of a phone cord.

The leaves look like miniature maple leaves, with three lobes, a fuzzy underside, and thorns along its stalk. This plant (*Cronartium ribicola*) hosts the spores, through several stages of development, that will do all they can to kill the white pines on your, and your neighbour’s, property.

White pine blister rust is a fungal disease first brought to New England about 1897 likely in reforestation stock from Germany. It is not fatal to European trees—they have immunities. When it hits our native populations, the results are devastating. Early control programs focused on ribes (currant bush and gooseberry) eradication. It did not work on a North American-wide scale. It took the disease many years to move against the prevailing winds and to reach us—the western limit of the white pine range.

White pines are infected when spores are released from the alternate host and enter through the pine needles. To quote another source, “the infection then spreads to the branch stems and forms a canker. The canker eventually encircles the branch, cutting off nutrient flow and killing it. If the disease makes it to the main trunk, the tree dies. However, the disease cannot encircle very large trunks, which is why so many old white pines are seen with dead tops and lateral branches.

The best policy is to yank the plant out by its pink-hued roots, trying to follow every above-ground stalk to earth. Even being extra careful, there will be some returning growth next spring. If you are diligent two years in a row, you will conquer this pest. Remember that the spores growing on the ribes plants will be carried on the breeze and can travel long distances. Survey and clear an area of about 600 meters and your trees may be safe. Another feature of this plant is its thorny spikes. You’ll need gloves!

CJ Conway owns White Pine Restoration, a landscape company on Lake of the Woods specializing in White Pine reforestation, removal, tree maintenance, deer protection and has seedlings up through 10 footers ready to plant. E-mail: cjconway@telus.net, Winter phone: 204-488-6845.

Note from Dyke: We will be trying to clear our island this spring (and next spring too!). Though I hate to, I may try spraying an herbicide down the newly empty ribes root-hole if it is away from the water and not going to rain right away. Let me know what you try and how it works.

The best time to plant a tree was ten years ago

- natural landscaping, tree planting
 - specializing in white pine reforestation
 - professional arborist
 - healthy trees
- (Guaranteed against loss)
- reasonable rates
 - references available

(204) 488-6845