

Your New Pitch Pine:

September 2016

Pitch Pine (*Pinus Rigida*) is a "rare" tree in Canada, although it is common from New Jersey to the Carolinas mostly along the Appalachian ridges. In Canada, Pitch Pine is only native to the area bounded by Gananoque, just east of Mallorytown Landing and Westport. These are local seeds, germinated in September 2015. The problem that this project seeks to overcome is that Pitch Pine are generally not regenerating because people don't allow forest fires anymore. Fire controls the grass that is enemy number one for seedling Pitch Pines and also contributes to the potash in the soil which helps these little trees. See "Special Notes" overleaf.

How to plant and care for your new pitch pine:

When: The ideal planting time is from September to late October. This will allow new roots to develop before freeze up.

Where: The soil must be on granite or sandstone rock, not on limestone or crystalline limestone. Soil can be stony and coarse. The soil should be at least 4" or 10 cm deep and well drained. There should be enough soil in the location to fill a 5 gallon, or 20 litre pail and the rock below should be somewhat fractured. Deeper soil of any kind, except basic soil or clay, is OK if well drained.

There must be at least 6 hours of direct summer sunlight per day. Measure this by holding your arms up at right angles in the path of the summer sun. If the sky is continuously visible between your hands, that represents 6 hours of sunlight.

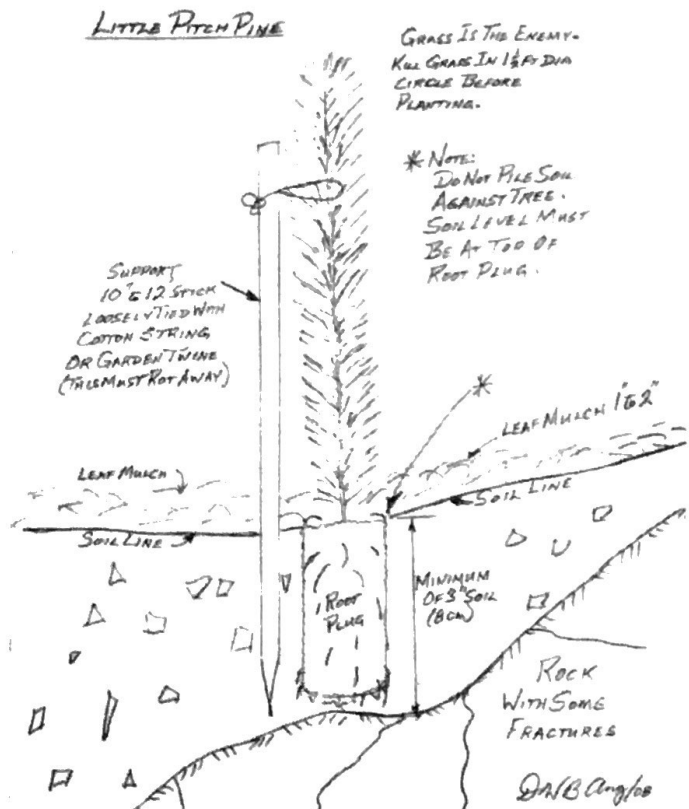
How: Grass and its roots must be killed in about a ½ metre or 1½ foot diameter circle. This can be done by turning over a sod about 18" diameter and planting the little tree in the middle. Broad leafed plants and mosses are no problem. Leave the mesh bag on the root plug. Be careful not to pile any soil against the stem of the tree as this will be fatal. The soil line must

be at the top of the root plug. Support the little tree with a stick and natural fibre string that will rot away in a couple of years. Don't tie it tight around the tree. Apply 1" to 2" of native leaf mulch to hold in the moisture and stop the grass. Any kind of leaves or needles are OK. If the wind will blow the leaves away, put a couple of stones on top of the mulch. After two years the grass won't hurt it.

Caution: Don't ever use a string trimmer anywhere near this or any other tree, young or old.

Note: If your little tree looks dead next spring, just leave it there. Most will sprout from the bottom; clear away any grass.

Watering: Put about two litres or quarts of water on the tree when you plant it. Leave it alone until next spring. If there is a summer dry period when the grass goes brown, put on about 1 litre of water per tree per week. Do not over-water. After two or three summers it should be able to find its own water.



Good Luck, **Doug Bickerton**, Gananoque Urban Forest Committee
613 382 5187

Pitch Pine (*Pinus Rigida*):

Special Notes:

1. **Identification:** You may already have a few old Pitch Pines on your property, perhaps some Red Pines and almost certainly some White Pines. How do you tell the difference? Needle clusters are the key. Pitch Pines have their needles in clusters of three. In fact, they are the only three needle pines in Canada east of the Rocky Mountains. Red Pines and Jack Pines have needles in clusters of two as do some non-native species like Austrian Pines and Mugo Pines. Eastern White Pines have needles in clusters of five. Check your pines to see what they are. All these pines are compatible with each other. White Pines tend to dominate over the others.
2. **Crystalline Limestone:** Pitch Pines need an acid soil and can't tolerate limestone or crystalline limestone. While there is very little chance that you have any sedimentary limestone on property in the 1000 Islands east of Howe or Wolfe Islands, and no chance at Charleston or Gananoque Lakes, you might well have bedrock of crystalline limestone which Pitch Pines cannot tolerate. It is a light grey or white bedrock with prominent crystals and usually is weathered into large rounded shapes. To test for sure if it is Crystalline Limestone and not Quartzite (they look similar), get a small bottle of Muriatic Acid at a paint store and put about ½ teaspoonful on the rock. If it foams up vigorously, you have Crystalline Limestone; if it doesn't foam, you have quartzite. Note: Muriatic Acid is very strong. Wear gloves and don't get any on your skin. Don't breathe the fumes. (Muriatic Acid is used to etch galvanized steel before painting.)
3. **Deer:** Deer love Pitch Pine - - for lunch - - mainly in the winter when they are hungry. If you have deer on your property, the simplest means of defense is Deer Repellent. I have attached a recipe. If you didn't get a copy please call me. Or, you can wrap your Pitch Pine in the winter with bird netting. This is available at most garden supply shops or farm supply stores. The deer can't see the fine black mesh up close and it hurts their noses when they come to eat. Use three or four sticks for support and remove it next spring. Don't use anything with galvanizing (like chicken wire) as the zinc is toxic to small Pitch Pines.
4. **Historic Note:** When Patrick McNiff, a surveyor with the Royal Engineers, surveyed the Gananoque River in April 1787, he made a special note on his survey of the Pitch Pines he saw along the Gananoque River. There was good reason to do so. As the name implies, Pitch Pine is a source of pitch that was needed by the Royal Navy at Kingston and it was also the best wood for making water wheels, dock pilings, wooden boats and even fence posts, because it resists rot. His survey was for the benefit of the United Empire Loyalists (UEL), large numbers of whom were then petitioning the Crown for land grants as they had lost everything in the American Revolution. Pitch Pine was cut for lumber and also rendered into pitch and charcoal, very saleable cash products to sell at Kingston. Cash was in incredibly short supply for the new settlers. Local Pitch Pine populations took the hit. The settlers also put out the forest fires which reduced the germination and survival rates of the little trees.
5. **Official Tree:** Pitch Pine is the official tree of the Town of Gananoque. There is a sample planting of about 20 Pitch Pines in Confederation Park with an appropriate plaque. These, and about 20 others around town, have been planted and cared for by the Gananoque Urban Forest Committee.