



## **Fond du Lac Sugar Bush Tapping Guidelines**

The intent of these guidelines is to assure area sugar bush (*iskigamizigan*) resources remain healthy and productive now and into the future. These guidelines are based on published research and on the advice of local experts.

### **Site Selection**

- Choose sites that are accessible throughout the entire tapping season. Dirt roads or woodland trails that may be useable in the beginning of the season can often become very muddy and rutted as the frost goes out of the ground and the ground becomes soft. Select sites with good access that does not require crossing wetlands or other sensitive areas that may be damaged, especially near the end of the season.
- Choose sites with healthy, large-crowned sugar maples (*ininaatig*) and/or red maples (*zhiishiigimiiwanzh*). Avoid selecting areas where the trees show signs of stress or decline (e.g. dead or dying tops, missing bark, trees defoliated by forest tent caterpillars the previous year, etc.).
- Always make sure you have the appropriate permission to tap the trees or to access the land.

### **Tree Selection**

- Select healthy, full-crowned sugar maple, red maple, silver maple, or box elder trees that are at least 10" in diameter at chest height. Tapping smaller trees will yield little sap and risk the long-term health of the tree.
- Expect 9-13 gallons of sap per tree for the season. Flow rates are highest on warm days following cool nights.
- Avoid driving ATV's, tractors, trucks, or other vehicles within 20-30 feet of the base of the tree during the tapping season. The ground is soft and the roots can be damaged, affecting the health of the tree. Instead, carry buckets or bags by hand to vehicles, wagons, or other maintenance equipment. Healthy roots make healthy trees.

### **Spile Selection**

- Smaller spiles are preferable to larger spiles. Research shows smaller spiles will deliver as much sap as larger spiles with less damage to the tree.
- Use 5/16" or 19/64" spiles if possible. These spiles should not be placed more than 1 1/2" deep.
- Older style 7/16" spiles are still acceptable but should be replaced with smaller spiles when possible. This size spile should not be placed more than 2 1/2" deep.
- Do not tap frozen trees as this can cause the bark to split. Only tap trees when the sap has begun to flow.
- Use a drill-bit that is the same size as the tap you are intending to use and wrap a piece of tape around the drill-bit at the desired depth. This will serve as a guide to help avoid drilling too deep.
- Holes should be drilled at a slight upward angle so that sap can flow down and out of the hole.
- Tap the spiles in carefully to avoid damaging the tree. Avoid tapping discolored or damaged looking bark as these areas may have fungal infections and tap holes may serve as entry points.

### **Number of Spiles and their Placement**

- The number of spiles per tree should be based on the diameter of the tree at chest height.
  - Trees smaller than 10" in diameter should not be tapped.
  - Trees 10" – 18" in diameter should have no more than 1 tap per tree.
  - Trees larger than 18" can have up to 2 taps per tree. No tree should have more than 2 taps.
  - Spiles should be spaced at least 6 inches horizontally and 2 feet vertically from previous year's tap hole locations. This assures water and nutrients can still flow between the roots to leaves.
  - Never re-tap existing holes or drill new taps near the end of the season trying to prolong the season.
  - Spiles should be placed in the tree about 2-4 feet above the ground level.

### **When to Start and When to Stop Collecting Sap**

- Sap will start to flow when the days are in the 40F's and the nights are below freezing, typically mid-March in Northern Minnesota. Flow tends to slow or stop when daytime temperatures are cool or below freezing.
- Sap will start to taste "buddy" (bad) when the buds start to expand at the end of the season. When you observe buds expanding, cease collecting sap. Red maples may start to bud before sugar maples.

**\*\*Be sure to remove all spiles from trees and clean up other equipment from the site at the end of the season.\*\***

**\*\*Be careful when boiling sap outdoors. Spring is also wildfire season!\*\***

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