

Alaska Birch Syrupmakers' Association
BEST PRACTICES
For Producing Quality Birch Syrup

Guidelines and Recommendations

A. Tree Tapping

1. Time to tap varies by location; usually first part of April.
2. Tap holes: 1 ½ - 1 ¾ " deep, slight upward angle, using a 5/16-7/16" bit, depending on spout used.
3. Location of hole: 2-4 feet high, to the side of previous holes, spiraling around tree
4. Tap healthy trees; 8" dbh or larger
5. Do not tap trees that have ever had pesticides sprayed on or around.
6. One tap per tree; no more than five consecutive years. Give trees a 1-2 year rest between tapplings, if possible.
7. Use plastic, nylon, or stainless steel spouts, or tubing supplies commercially available through local and maple syrup equipment suppliers.
8. Do not drive taps too deep – wood can split causing leakage.
9. Sterilize taps before use.
10. Tap trees when the sap flow is continuous.
11. Tap trees only where access is good and equipment will not compromise ground cover. Minimize damage to trails during break-up.
12. Remove spouts at end of season; may spray hole with pure water. DO NOT plug or cork the hole.

B. Sap Collection

1. Use equipment appropriate for trail conditions. On public lands follow regulations.
2. Use stainless or food-grade plastic collection containers and storage tanks. Do not use containers previously containing toxic materials.
3. Use only food grade hose and lines or standard maple tubing (no garden hoses!)
4. Collect sap daily.
5. Clean collection tanks and pumps daily.
6. Discontinue collection when yeast appears on taps and sap turns cloudy. Once sap has begun to turn it should no longer be used for bottled pure birch syrup.

C. Sap Storage

1. Use FDA approved food grade poly, stainless, or glass-lined tanks.
2. Process all sap daily in the order in which it was gathered. Keep stored sap below 42 degrees F and out of direct sun.
3. Clean sap storage tanks daily.
4. Monitor sap brix (sugar content) with refractometer or hydrometer.
5. Filter all sap through 5 micron water filter.

D. Syrup Production – Reverse Osmosis (RO) - optional equipment

1. Follow manufacturer's instructions for operating and cleaning.
2. Keep RO-concentrated sap cool and out of direct sunlight. Process as soon as possible to prevent spoilage and yeast growth. Do not store concentrated sap.
3. Use FDA approved storage tank for concentrated sap.
4. Use food-grade lines, fittings, and valves on RO.
5. Never use chlorine bleach for cleaning tanks or lines – it will compromise RO membranes.

E. Syrup Production – Evaporator

1. Use standard or modified maple syrup evaporators (wood, oil, or gas-fired) with tig welded or lead-free soldered pans.
2. Run sap through hot and shallow, using consistent heat to establish proper gradient.
3. Clean evaporator daily, using standard pan cleaners available through local suppliers.
4. Rinse Rinse Rinse.
5. Filter sap back into cleaned pan.

F. Syrup Finishing

1. Evaporate syrup to minimum of 66 percent sugar (brix scale) by weight using a calibrated refractometer. Using a thermometer, syrup is reached at approximately 11 degrees F above the boiling point of water (variable by barometric pressure).
2. Hand filter through approved rayon and felt filters OR preferably filter press (available from local suppliers).
3. For filter press use food grade filter-aid (diatomaceous earth) matched to the filter papers used.
4. Heat syrup to a minimum of 180 degrees F, and no higher than 190 degrees F; immediately hot pack into approved non-metallic food grade container and seal, or bottle (see below).
5. Record date and/or batch number on container. Note quality: brix, flavor, color.
6. Cool all bottled or packed syrup as quickly as possible and store in a cool, dark place.
7. Bottle syrup between 180-190 degrees F. Use only glass or food grade plastic containers and heat seal lids. Lay container on side for at least 10 seconds after bottling to sterilize lid.

For more information contact:

Dulce and Michael East (Alaska Birch Syrupmakers' Association) 907-373-1309