MAPLE SYRUP PRODUCTION AT HOME

by Dan McAskill, Donagh

With the approach of spring the mind begins to wander to thoughts of the warm days and crisp nights which bring on the flow of sap in the maples. If you are willing to do a moderate amount of work you can harvest one of nature's finest treats. Much of the equipment required for a small maple operation can be found in the kitchen and the home workshop.

The first task in collecting maple sap is to identify candidate trees to tap. All three of the larger maples on the Island (sugar, striped and red) produce a sap that can be converted into maple syrup. The difference is in the quantity of the sugar in the sap, the quantity of the sap produced and the flavor of the finished product. The candidate tree should be 10 inches in diameter at breast height (many producers go down to 8 in.) and preferably have a large crown. One tap can be placed in a tree from this size up to 14 in., two in a tree of 15-19 in., and three in a tree of 20-24 in.

After the trees to be tapped have been located some equipment should be readied at home. The basic requirements are as follows: a sap spout or spile, a brace and bit (7/16 or 3/8 in.), a water tight container, a collection bucket, containers to boil and finish the sap, and a thermometer with a range of 200-230°F. A home made spile can be made from a length of elderberry stem from which the pith has been removed with a hot metal rod. The collection buckets can range from coffee cans to buckets. Glass should be avoided because of the breakage from freezing and certain plastics must be avoided because they become brittle in the cold.

The time of tapping is determined by the weather. Below freezing temperatures at night followed by above freezing temperatures in the day bring on the sap flow. The flow will vary from day to day depending on the weather and the time of the season. The collection of sap is stopped when the syrup takes on a buddy flavor. This flavor has been compared to the after-taste you get when you chew a red maple bud.

The tapping itself is accomplished by drilling a 7/16 or 3/8 inch hole on a slight downward angle (10°) three inches into the tree. The spile is tapped into the hole and the collection container is hung on it. The rigging of a cover over the container will keep water and debris out of the sap.

Depending on the size of the daily run and the collection container the sap is collected one or more times per day and taken to the stove for boiling. (Note - the amount of time left between trips to empty the containers should be short enough to prevent a buildup of bacteria in the sap. The actual time you can allow depends on the temperature.) The collected sap is placed in a large shallow pan and brought to a full boil. At this point the temperature is taken and recorded. The rapid boiling is continued until the syrup's temperature is 7°F higher than the first boiling temperature. At this point the syrup is finished and ready for straining. If you take longer than a few hours to boil off the water in the sap you should recheck the boiling point with a pan of water. You cannot assume it is 212° since it is dependent on the air pressure at that time and place. If your finishing temperature is one degree too low the syrup will have a higher chance of spoiling in storage and if it's one degree too high the

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