Glossary of Terms

Arch – Firebox that the evaporator pan is placed on. Traditional evaporators were wood fired but there are arches that use oil, natural gas, propane, and even wood chips. Traditionally most arches have been lined with brick, but alternate materials such as ceramic lining or vermiculite are being used in many cases.

Draw-off – Valve where syrup is removed from the evaporator.

Evaporator – A pan placed on the arch designed specifically to concentrate the maple sap into maple syrup. The traditional evaporator employs a flue pan and syrup pan. The flue pan has an uneven or corrugated bottom that allows better heat transfer to the sap by providing increased surface area over a flat bottom pan. The flue pan is where most of the evaporation takes place. The syrup pan usually has a flat bottom and is where the final evaporation takes place before the maple syrup is drawn-off.

Finishing Pan – A small evaporator pan, sometimes gas fired, that is used for the final finishing of sap into maple syrup.

Hydrometer – A graduated instrument used in conjunction with a thermometer to check the specific gravity of a liquid.

Maple Syrup – The liquid food derived by concentration and heat treatment of the sap of the maple tree (Acer) to which nothing has been added at any time before, during or after it is made into the finished product. The density of finished maple syrup should measure 66.5% to 67% by weight (brix) at 68° F.

Niter – **Sugarsand** – The mineral deposits which are concentrated during the evaporation process.

Reverse Osmosis – Or hyper-filtration is the process of filtering maple sap at high pressure through a semi-permeable filter membrane that traps the sugar in the sap into a concentrate on one side and allows the residual permeate (water) to flow out the other side. The use of reverse osmosis allows up to 75-80% of the water to be removed from the sap before it is introduced into the evaporator, saving energy and time.

Sap - A colorless liquid with a light, sweet taste that flows inside the maple tree. It is from this sap that maple syrup is produced. It takes approximately 30-40 gallons of sap to make one gallon of syrup at 66.5-67% sugar, assuming sap is about 2% sugar.

Sap Run - The amount of sap collected in one day.

Spigot – See Spile

Spile – A small tube tapped into a taphole to carry the sap from the tree to a bucket or hooked directly into the sap tubing. Also known as a spout or spigot.

Spout – See Spile

Sugarbush – A group of maple trees used for the production of Maple Syrup, sometimes called a maple grove.

Sugarhouse – Building used to house the equipment used in maple syrup production. Traditionally this building houses an evaporator and has a cupola to allow the evaporating water vapor to escape.

Sugarmaker – Person who makes maple syrup.

Sugar Maple – A maple tree that grows in the northeastern United States and around the Canadian Great Lakes whose sap is used to make maple syrup. (Maple syrup can be made from the sap of several species of native maple trees, but the most common, and most sugarmakes say the best, is the sugar maple, Acer saccharum.

Tapping - The process of drilling into the tree and attaching a method of sap collection.

Taphole – Hole drilled into the tree to facilitate sap collection, usually about 1.5 inches long and 5/16 to 7/16 inches in diameter.