Maple syrup production steps outlined

HONESDALE - The month of March is a busy month for Wayne County maple syrup producers. Thousands of gallons of sweet, water-like sap from maple trees are transformed into gallons of sweet, amber-colored maple syrup.

1860, maple syrup Since production has declined each year. Reasons for the decline include the seasonal requirements of time and labor involved in maple syrup making. In recent years, Pennsylvania has produced over 60,000 gallons of maple syrup each year. Pennsylvania is one of the top five states for total maple syrup and maple products produced each year.

The decline in production has not been due to a scarcity of maple trees to top. Less than five percent of the available maple trees are being used for maple syrup production.

Anyone who has access to maple trees or a source of maple sap can make maple syrup. Making maple syrup can be a fun-filled family project with family members sharing the finished maple syrup over a meal of pancakes, waffles or French toast.

Whether you tap five maple trees in your backyard or five hundred trees, there are a few essential items of equipment to use for successful mapel syrup production. Maple syrup can be produced on a small scale with a minimum of equipment. This equipment will increase the efficiency of the syrup making process and also the quality of the syrup. Some of the equipment suggested for a "backyard" or small-scale maple producer would include a carpenter's brace with a 7/16 inch bit,

plastic or metal spiles for years are sub-place distributing sap to pails or plastic tubing, a shallow pan or evaporator plus a heat source to "boil-down" the sap, a thermometer to help determine when to remove the concentrated syrup from the heat source, some type of cloth, heavy paper or wool filter to clean the hot maple syrup, and suitable containers for packaging and storing the finished maple syrup.

Maple trees are usually tapped in late February to early March before weather conditions favor a sap flow or "run". Only trees that are ten inches or more in diameter should be tapped. Use one tap for ten to fifteen inch trees, two taps for sixteen to twenty inch trees, three taps for twenty-one to twenty -five inch trees and no more than four taps for larger maple trees.

Tapholes should be drilled three inches deep into sound wood at a height of from two to five feet above the ground. The tapholes should be drilled at a slight upward angle to help sap flow into the pails or plastic tubing. If the trees have been tapped before, try to locate the new taphole six inches to one side and four inches higher or lower than the previous taphole.

Once the tapholes have been drilled, the metal or plastic spile can be placed in the taphole and tapped lightly with a hammer to be sure the spile fits snugly. A pail or the plastic tubing is then attached to the spile and the sap should begin to drip into the pail or the plastic tubing line.

Tapping causes only slight damage to healthy trees, and normal growth heals the injuries. Trees which have been tapped continuously for over one hundred

. and growing viporously.

Sap flow from maple trees will not occur every day during the maple syrup season. Sap flow occurs on those days when a rapid warming trend in early to midmorning follows a freezing night. A single taphole can produce from one quart to two gallons or more of sap at each "run". Each taphole has the potential to produce up to twelve gallons of sap during the season or roughly about one quart of finished maple syrup. Sap should be collected and

boiled down as soon as possible to get high-quality maple syrup.

The amount of sap required to produce one gallon of maple syrup varies, depending on its sugar concentration. Maple sap averages about two percent sugar. At this concentration, about forty-three gallons of maple sap would be needed to produce one gallon of maple syrup. If the maple sap contains a higher sugar concentration, less sap will be requied to make a gallon of maple syrup, and vice versa.

The process of producing maple syrup is essentially one of evaporating water from the sap. Heat is used to concentrate the sugar and is also responsible for the characteristic color and flavor of maple syrup.

Rapid boiling of sap will result in higher quality maple syrup. As the sap boils, it may be necessary to occasionally skim the surface to remove foam. Finished syrup boils at seven and one half degrees Fahrenheit above the boiling point of water. The boiling point will vary with elevation and at-mospheric pressure. Check the local boiling point to determine the proper temperature of finished syrup and maple products. As the temperature of the sap approaches 219.5 degrees Fahrenheit (at sea level), boiling should be carefully controlled to prevent burning and overheating.

Once the proper temperature has been reached, the proper density will also have been attained since boiling point and liquid density are related. The maple syrup is now described as 'finished off" and ready for filtering and packaging. Hot maple syrup should be poured through a filter to improve the appearance and remove suspended particles such as sugar sand. After filtering and while it is still hot, the maple syrup should be packaged and containers sealed tightly. A

packaging temperature of at least 180 deg. Fahrenheit will assure sterilization of the containers used and also safe storge of the syrup.

Many different maple products can be made from maple syrup. Some of these are: crumb sugar, maple butter or maple cream, maple sugar and many more. Information and directions on how to make these maple products can be obtained by contacting the Wayne County Extension Office at 253-5970, ext. 114.

Maple syrup production here in Wayne County has been a tradition for many years with many producers. These producers enjoy the work and challenge of producing some of the best maple syrup and maple products in Pennsylvania.

Potato stocks down

potatoes stored in Pennsylvania on February 1 totaled 1,700,000 hundredweight (cwt.), 40 percent less than a year ago, according to the Crop and Livestock Reporting Service. February 1 potato stocks represented 40 percent of production, compared with 49 percent a year ago.

Stocks are defined as the quantity remaining in storage for all purposes and uses, including shrinkage and waste and other losses that occur after the date of each report. Stocks may also include potatoes produced in other states and potatoes already sold. Sales of fall potatoes for all purposes generally account for about 90 percent of the total fall production. Shrinkage, loss and

HARRISBURG - Stocks of home use account for the remaining ten percent.

February 1, 1984 potato stocks are estimated at 135 million cwt. for the 15 major fall producing states. This is down ten percent from last February and down two percent from two years ago. The February stocks accounted for 48 percent of production in these states, compared with 50 percent a year ago. Of total stocks in the 11 objective yield states, 75 percent were russets, 22 percent whites, and three percent reds.

Future **Farmers of** America

BIG CLOVER...BIG ALFALFA YIELDS Plant OLYMPIC. Plant MorRed. Olympic Alfalfa's high resistance to disease and overall hardiness MorRed Red Clover possesses the qualities that lead toward a

top yielding, short rotation hay and grazing legume

Combined resistance to both Northern and Southern Anthracnose

Northern and southern anthracnose can kill or greatly reduce the stand life of red clover

High resistance to powdery mildew

Contributes to early fade-out and reduces feed quality

Higher yield potential than Kenland or Kenstar



At \$100 per ton for hay that s \$18 00 per year per acre more for MorRed

has made Olympic a preferred variety among growers seeking high alfalfa yields.

Proven high yields over a wide area

Olympic Alfalfa has produced over 10 tons/acre in several trials

High resistance to anthracnose

Anthracnose is a hidden blight in alfalfa that s a threat wherever warm humid conditions persist during the growing season. It can reduce forage yields by as much as two tons per acre per year Olympic Alfalfa's resistance to this yield stealer is as good as any variety needs to be in any environment

Excellent overall disease and insect protection

Anthracnose	Bacterial Wilt	Pea Aphid	Spotted Alfalfa Aphid	Resistance
				Very High
r.		·		High
i i	• •			Mod High
			int was	Moderate

Improved winterhardiness

The tougher a variety the better chance the crop has to produce throughout its expected rotation

Vigorous growth and quick recovery

The higher the disease resistance the better the chance for the crop to fully express its potential

Seeding versatility

MorRed Red Clover is ideal for No-till pasture and meadow seedings in old grass stands. Alone for hay and pasture. MorRed can also be seeded in standing small grain or on an early prepared seed bed alone. MorRed can be mixed seeded with grasses and small grains as part of a rotation or seeded in combination with other legumes-especially white clover along with grasses for hay and pasture Farmers find that when used as part of a rotation red clover is helpful in building the nitrogen level for the grain fraction of the rotation



Mod Low 18 B Low Very Low

Moderate winterhardiness

For its primary area of adaptation. Olympic Alfalfa's winterhardiness is fully adequate

Fast growth; early maturity

Olympic Alfalfa matures about 5 days ahead of Vernal



