Role of the Leaf in Maple Syrup

During the growing season, sugar is produced inside the leaves through photosynthesis*. Sunlight and carbon dioxide are absorbed by the leaves which combine with water to make sugar or glucose. Sap is a mixture of that sugar and the water which is absorbed through the tree's roots. The sap nourishes the tree. The more leaves the tree has, the more sugar it produces.



In the fall, the tree stops growing. Some of the sugar it produced becomes trapped in the leaves; this creates the maple tree's beautiful autumn colors. Sugar is also stored in the sapwood which is the layer of wood just beneath the bark. The sap remains frozen there all winter.

When the days in late winter become warmer, the sap thaws and begins to flow once again. The sap feeds the tree and at the sugary, some of that sap flows through the tapholes. The annual Maple Syrup process begins!

* Photosynthesis is the process by which a plant turns water and carbon dioxide into food when the plant is exposed to light.

I play a very important role in producing that delicious maple syrup.

