

Wisconsin Pecans

By Thomas Fox

The pecan is the best tasting nut you can buy at the supermarket! Well, that's my sentiment anyway. No doubt you have your own. Pecans are almost indistinguishable in taste from the sweet hickory nut—which my taste buds tell me is the best tasting nut, period! This shouldn't be surprising. Pecans really are just a type of hickory. Botanists call a pecan tree, *Carya illinoensis*. They call the most common sweet hickory tree, *Carya ovata*. Notice both pecan and sweet hickory have the same first scientific name. This means they are very closely related. (Latin sometimes seems backward!) In fact, I like to think of these delicious nut trees as "pecan hickories" rather than the two syllable five letter word that begins with "p" and ends with "n".

When I first became interested in nut trees, about 30 years ago, I had just purchased about 70 acres of land near Michigan's Baby Food Capital (Fremont.) Sweet hickories (primarily the Shagbark hickory) grew nearby, but not on my property. So I went right out that Fall and picked up wild nuts along the road right-of-way. Even though I had only walked on a public right-of-way, I have a question now if this was legal and don't recommend doing it without first obtaining permission--but back then I didn't even give it a thought!

I planted most of the hickory nuts I picked up in those "gray-area escapades" on my property, only keeping enough tasty hickories to make a couple of recipes of luscious brownies – yum-yum! I then thought why not try growing pecans? Being a semi-intellectual at heart (actually when it comes to growing stuff I'm a hands-on guy with a sprinkling, here and there, of academics), I read up about pecans. I found out some interesting stuff. First, there are three basic strains of pecans: the northern, southern and western. I also discovered that the northern strain is completely hardy in zone 5 (along with parts of Zone 4) as listed in the USDA hardiness map. This means it should be hardy in most of Michigan, including my property. Good! However, I then learned more stuff about pecans. The nut, it was unanimously agreed upon by the experts, would not fill in Michigan or in areas with similar climates. In other words you might get the shell but there would be almost nothing in it! Bad!

When I first became interested in nut growing, especially pecans, about 30 years ago I seldom relied on listening to "experts" about anything unless those experts either agreed with me or they had a hands-on approach in their field of expertise. Thus, I felt, these experts could be wrong! Nonetheless, when I investigated further I quickly became real, real discouraged! This discouragement came from hearing from those who actually tried to grow pecans in Michigan. One interesting pecan planting experiment took place near the Cereal Capital of the world -- Battle Creek Michigan. This planting of northern strains of pecans (from Illinois and possibly southern Iowa) was said to only fill their nuts one year in four! Since the Cereal Capital is nearly a hundred miles south of the Baby Food Capital you can see why I started to think it was a real dumb idea to try and grow pecans at my farm near Fremont Michigan. Well, I still gave it a try and purchased a fairly large quantity of mixed northern varieties of seed pecans. (Seed pecans are simply fresh nuts that were kept properly.) I believe most were from the Major variety of pecan, if my

memory is correct. Since these were seedlings I thought perhaps one out of a hundred would be early enough for central Michigan. The Major variety, as well as Posey, Greenriver, Busseron, Indiana and some other northern cultivars, were first introduced by a group of southern Indiana men, including T.P. Littlepage, the second president (1911-12) of the Northern Nut Growers Association. J. Ford Wilkinson was the group's "climber" who collected the first scions (twigs and branches used in grafting) from several of the original trees, which, I believe, were located along the Ohio river. Others in the group, before 1914, were Mason J. Niblack and nurserymen R. L. McCoy and W.C. Reed. Well, before I tell you what happened with my experiment of planting the seeds from some of the northern cultivars these semi-famous men discovered, I am going to digress a bit...

The year after I planted the so called "northern pecan" nuts, I discovered, in a newsletter from the Northern Nut Growers Association, about an expedition to the Mississippi River valley in southwestern Wisconsin that some of the members were soon going on. I believe this was 1978. Apparently the expedition was successful since they were able to gather enough pecan nuts to sell to members. I purchased about 25 nuts and, in late fall, planted them at my farm. Well, happily, most sprouted the next spring. Looking back now I was really lucky the squirrel population at that time was rather small – otherwise I may have just bought squirrel food!

I now realize I had unbelievable success with that original Wisconsin strain of pecans. I now have over 20 medium to large trees of this original Wisconsin strain and probably over 100 small Wisconsin trees (Michigan grown pecans from the original Wisconsin strain). Most of the original Wisconsin trees are bearing nuts now that are not only completely filled, but deliciously sweet. Several trees have been bearing for over 10 years! While each tree differs in many respects there is no doubt that the nuts are exceptionally tasty–sweeter and more flavor than the typical pecans in stores. In fact, they may even be better than the famous Schleys! These original trees have filled their shells every year we checked even during the cool summer of 2001. However, the nuts are smaller than commercial nuts. Typically it takes between 90 and 110 nuts to make a pound. This is about half the size of the widely grown southern Stuart pecan, which is noted for its size but not its flavor, but just a bit smaller than the widely grown northern Major pecan. By the way, it is interesting to note that the size of seedling nuts throughout the pecan's native range is said to be from 80 to 150. This implies that somewhere out there is the genetic makeup of larger pecans that will ripen in Michigan. One problem here is the unanswered question: Will size go along with flavor?

My original Wisconsin strains of pecan trees have many variations. For instance, one tree ripens its nuts in mid-September while others wait till late October. Our largest tree (almost 40 feet high) starts to ripen its nuts around October 1st but Christmas comes and it still is often dropping delicious filled nuts. There is one tree that is very susceptible to leaf diseases and because of this grew slower than the rest. We avoid using this tree's nuts for a seed source.

Now for the rest of the story... As I mentioned earlier, the year before I planted the Wisconsin strain of pecan nuts, I planted hundreds of nuts from so called 'northern' varieties of pecans, especially nuts from the 'Major' variety. These 'northern' pecans took longer to come into bearing and, as expected, the trees grew well but didn't fill their nuts.

However, in 2002, one tree bore filled nuts! The size of the nuts was slightly larger than the Wisconsin strain (perhaps 80 to a pound) and although they had a very good flavor, I'd have to rate it below the Wisconsin strain in taste, perhaps like the Stuart. Also, interestingly, it had more red color in its shell than the Wisconsin strain. The 2002 summer in Michigan was about normal temperature wise, although drier than normal. However, we had a real bad series of freezes in May. This cold May period delayed the pecans from leafing out. This implies that in a 'normal' year (which is really abnormal in Michigan) the pecans should ripen with ease.

Hints on Growing Pecans

First, you need to get the right strain. The native Wisconsin strain came from trees that thrived in zone 4. This means they are probably as hardy as most apple trees. This right strain is important no matter where you live. Even if you live in the heart of "pecan country" not just any strain will do. For instance, if you live in southern Georgia you don't want to plant a far northern strain. If you do this you will be lucky to get any nuts. In fact, the trees may even die. All pecans need some cold to grow well and those from the far north need lots more cold than those from Mississippi! If you live north of a very fuzzy line from about Des Moines Iowa to Columbus Ohio, you may have trouble reliably growing pecans if you plant standard northern varieties such as Major or Colby. Also, only those in the deep South (Georgia through Texas) should plant southern strains such as Stuart or Schley. If you want to try named grafted varieties from the most northern sources try Fritz and Witte. Several nurseries sell hardy seedling pecans. Pay attention to their seed sources. For northern areas, make sure the seed source is from, in order of preference: Wisconsin, Iowa, Indiana, Illinois or northern Missouri. If you purchase the more expensive grafted varieties, you again should choose northern varieties. Some older northern varieties to try are Colby, Fritz, Hodge, Indiana, Major, Peruque, Posey, Stark's Hardy Giant, Stark Surecrop and Witte. Some newer varieties (I only know the names of these, nothing else) are Bolten's S-24, C.L. McElroy, Canton, Gibson, Lucas, Mullahy, and Norton. No doubt there are even newer varieties that may be even better in many respects.

Locating Where to Plant

Pecans grow best near rivers and streams. However, they are not a swamp tree, although they probably would do well near a swamp. If you have a small lot, probably the best place to plant is in your south yard. You must keep this in mind: It is likely the pecan trees you plant won't only outlive you, your children and grandchildren but still be there (unless they are cut down) long after your house is there. It is not a short lived tree. Many of the pecans Thomas Jefferson planted at Monticello are not only huge, but healthy and still bearing nuts! You also know what this means? Pecan trees get huge! Keep this in mind when planting. If you don't want to have to cut your prized tree down, keep it over 10 feet from your house or other permanent building. If you don't want your kids cutting it down in the future increase this distance to at least 20 feet! Another factor to consider when planting pecans is that their leaves and hulls contain the allelopathic juglone. Some plants, such as tomatoes and potatoes, may be damaged if the soil in which they grow has

juglone in it. Because of this, keep your pecans away from your vegetable garden and don't use their leaves or shells as mulch in it.

Growing Trees From Nuts

This is the easiest and cheapest way of growing pecan trees. Also, if you are able to get good seed, this is the surest way as well—if you can keep squirrels and other hungry rodents away, that is. Here all you do is plant the nut from about two to three and a half inches deep where you want the tree. The best time to plant is in late fall, just before the ground freezes. Alternatively, keep the nuts in a refrigerator over winter and then plant them in April. To make sure you will get a tree where you want it, plant two or three (or more) nuts in the same spot (about 3-5 inches apart). If they all come up you can either dig one or two up and move them or simply let them grow and have a two or three trunk pecan tree bearing two or three different types of pecans!

Grafted Vs. Seedling Trees

Grafted trees are "clones." This means that all grafted trees of a certain variety are really the same tree, only in a different time and place. Thus you know, before you plant the tree, the characteristics of the nut as well as the tree. As an example look at apples. All commercial apples are clones. For instance, the Delicious apple has its characteristic shape and flavor. Delicious apples are clones from the original Delicious tree discovered in Iowa (and originally called Hawkeye) in the late 1800's. In addition to having the advantage of knowing exactly what you are getting and the fact that all grafted trees are named, which means they were selected for the best characteristics of trees and nuts, grafted trees have the advantage of bearing quicker. I've heard you can get nuts from a grafted pecan in 4 to 8 years. This is several years sooner than you can get nuts from seedling trees. I believe the reason for this earlier bearing, is that since grafted trees are clones, they are already relatively old and thus their "effective age" stimulates them into bearing. This helps explain why there are so many problems with cloned animals—remember unlike animals, many trees have life spans measured in centuries and not years and so a hundred year old tree is still really a juvenile while a 10 year old sheep is really old. Thus, what works for trees won't necessarily work for animals because of the huge differences in their natural life spans.

If grafted trees are so great why plant a seedling tree? Well, grafted trees cost a lot more! But there are other reasons to plant seedling trees. For one thing, while I haven't tested them out myself, it seems from the literature that there are no named varieties of pecans that will bear nuts reliably in true snow country. However, as I discovered, there are seedling pecan trees that will bear nuts. It is only a matter of time until one or more of these snow country pecans will get a name and be available as a grafted tree. But until then, it is probably smartest, if you live in snow country, to plant seedling pecans whose parents (or grandparents) grew wild in Wisconsin, Iowa or northern Missouri.

Planting Trees

You can plant pecan trees in late fall or early spring. If you plan on sticking the

tree in the ground, and hoping for the best, fall may be a better time for you. Otherwise, if you plan on giving the tree TLC, Spring is often better.

First, make sure you dig the hole by hand! I once used a tractor run PTO auger to plant about 100 apple trees and, well, let's not talk about those trees... I've had much, much better success with carefully done, hand dug holes. Leave it at that.

When you dig the hole make sure it is big enough and deep enough so you don't have to bend the roots. If it is a grafted tree, make sure the graft is a few inches above the ground level. Otherwise try to plant the tree an inch or so below where you believe it originally grew. If you really want the tree to survive, half fill the hole with good potting soil. Filling it all the way with potting soil is even better and will keep your weed problem way down for a year or two. If you don't want to use potting soil, fill the hole slowly by hand with broken up topsoil. Finish filling in the hole with the subsoil (the soil that came from the bottom of the hole).

Assuming you start with good nursery stock and you planted the tree carefully, there are two more things you can do to make sure the tree will grow. First, you must do something that nearly all people just getting into the gardening scene hate to do--prune! The fact is however, the more you prune, the more likely the tree will survive! However, real drastic pruning isn't essential if you are willing to water the tree well that first spring and summer. This frequent, deep watering, is the second trick to make sure your tree survives. Unless you have experienced flooding rains in the past week, make sure you water once a week.

Taking Care of the Pecan Trees

Water. Make sure your kids don't cut it down, you don't back into it with your vehicle or let your horse or cow eat it!

Harvesting Pecans

It's sad, and a bit annoying, to report that some pioneers harvested pecans by cutting century old pecan trees down! Hopefully, they used the wood from the huge trees to make fine furniture, which it does.

Today, destructive harvesting is rare. Pecans are usually harvested from growing trees in October and November when the shuck loosens from the shell or even splits open. The trees in commercial production are usually harvested with trunk or limb shakers that literally shake the nuts off the tree to be collected by various means. One harvesting technique is to simply wait for nature and let the nuts fall to the ground on their own. However, if you try this "passive" approach you must remember you're competing with hungry squirrels. You will likely harvest few nuts with this method if the squirrel population is high.

If you really want to eat your own pecans you will likely require a more active harvesting technique. Some hungry pecan growers with just a few trees use a long cane pole to whack the nuts down or sometimes throw up basketballs or footballs up at the tree to knock them down. My son Matt came up with a neat idea. He ties a strong string to a 2-foot stick and throws it up into the top of the tree hoping to get it stuck. Once it gets

stuck he simply jerks it back and forth causing the branches to shake. He is able to harvest most of the nuts in a medium sized tree in short time with this method.

Cleaning, Storing and Cracking Them

Unlike walnuts, pecans fall free of their husk and seldom require cleaning. Storing is also simple. Spread them out on newspaper inside (so animals can't get them) and let them dry for a week or two. They then will keep for several months just sitting around. For longer storage keep them in a refrigerator.

Pecans are noted for their relatively thin shells. However, don't think you will be able to easily crack most of the varieties and strains listed here in your fingers. None, would be considered paper-shell pecans! However, I am almost able to crack in my fingers the nuts I have harvested from my Michigan property. I hear the shell crack but am unable to break it open with just my fingers. However, just about any nut cracker works well on these nuts—the same can't be said for Black Walnuts! The best nut cracker for most Black Walnuts is a hammer and an anvil! However, even some strains of Black Walnuts have relatively thin shells — Thomas (a great name!) Black Walnut immediately comes to mind!