

[slide 1]

Ginseng Habitat talk at Fayetteville Public Library on June 8, 2016

Intro

[slide 2]

Hi, I'm Madison and this is my husband Rob.

We're here today to show & tell with you about American ginseng and the kinds of places it likes to grow here in the Ozarks.

We own Wild Ozark, a ginseng nursery and nature-influenced small business. We have a website, WildOzark.com, with lots of information about ginseng. I'll post these notes & the slide-show at the website, so if you want to take another look at it later, you can, or you can buy it on USB for \$5.

We're going to go through the pictures maybe a little faster than you might like because there's a lot of them and we have a lot of material to cover.

I'll go through the slides and talk for about an hour, then leave the remaining 30 minutes open for show & tell, and questions.

Before you leave, be sure to pick up one of the ginseng seedlings to take home. If there are plants left over, they're \$5/ea if you'd like to purchase any. I brought a few of the companion plants and those are \$5/ea as well.

The older 3-prong ginseng is not for sale. It's going over to the Compton Gardens in Bentonville where we have a small ginseng habitat under construction.

Here's what we'll cover:

- About what ginseng is & why people dig
- The Habitat - what kind of place does it grow
- How to grow
- Pics of ginseng in the woods
- Show-n-tell, Q & A

We're going to go through the pictures maybe a little faster than you might like because there's a lot of them and we have a lot of material to cover.

I've made a few copies of this slide show on USB. They're \$5 to cover the cost of materials and time. As soon as I can, I'll upload it to YouTube where you can watch it for free, if you prefer.

[slide 3]

About Ginseng

What is Ginseng?

It's a plant surrounded by mystery, desire, greed, and law-breaking.

Ginseng is a slow-growing, long-lived perennial herb that grows in eastern United States. China, Korea, Vietnam, and eastern Siberia also have ginseng species. There is also an herb supplement called "Siberian ginseng", but that is a different plant altogether.

It has narrowly defined habitat requirements.

Ginseng is notoriously hard to spot.

Most wild American ginseng is sold to exporters who sell it to buyers in China. Most cultivated American ginseng finds its way into the supplement and energy drink ingredients.

Ginseng habitat is very fragile. It depends on the trees to provide shade, cooler temps, and ground moisture. Logging activities take a huge toll on habitat.

At our Wild Ozark acreage, ginseng habitat is only found in pockets and never in swaths of acreage.

The reason is because of past logging, long before we bought the property. Our trees have not yet fully rebounded. They don't offer the "tall shade" just yet.

Asia still desires American ginseng and diggers throughout the Ozarks and Appalachia continue to dig the wild roots.

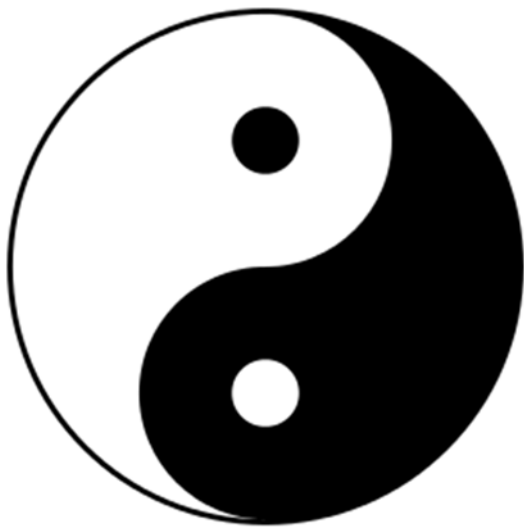
Traditional diggers, those whose fathers learned from their fathers and passed it onto sons, do this in a responsible way, so there are plants for the next generation.

Nowadays women are becoming involved and I'm pleased at how many of my readers who email me for advice and help with identifying plants from their photos, are women. I hope we can bring a nurturing balance to the industry.

What is the difference between American and Chinese ginseng?

[slide 4]

It's all about yin and yang.



Chinese ginseng is considered “yang” and American ginseng is considered “yin”.

According to the Chinese Traditional way of identifying plants, if it grows in a cold climate, as in China, it will be a “yang” plant – possessing the characteristics of “warming, light, action, and energy”.

A hot climate produces plants that are attributed with opposite “yin” characteristics - cooling, calming, cleansing of excess yang.

The active ingredient of ginseng

All ginsengs contain a compound called “ginsenoside”. It is this compound that gives many of the medicinal properties of the plant, though there are other compounds that work synergistically together within the plant as well.

Ginseng root is valued because it:

- enhances the libido
- lends stamina
- improves circulation
- enhances resistance to illness
- revitalizes after illness
- increases blood supply

Ginsenosides are present in ginseng leaves, as well, so it’s not absolutely necessary to use the root (which kills the plant). There is promising research on the berry for diabetes, too.

What you might have heard called “Siberian Ginseng” is actually not ginseng. It has no ginsenosides.

Sustainable Ginseng

[slide 5]

Sustainable

The focus of my writing and Wild Ozark's nursery business is to encourage people to rebuild proper habitat and grow ginseng in a sustainable way that will support harvest for generations to come.

Virtually Wild

The ginseng we grow in the woods to eventually use for roots, leaves, and berries are grown in a way called "virtually wild" or "wild simulated."

What this means is that all we do is plant the seed. We let nature do the rest.

The plants we sell are grown in seedbeds and then transplanted to pots like the ones we brought with us this evening. If you take that seedling and plant it in the woods it will be "wild simulated" as long as you don't fertilize or cultivate around it to remove weed competition.

Genetic Pollution

If you already have wild ginseng populations on your property, then you're faced with a conundrum if you want to avoid genetic pollution.

The Ozarks have a genetically unique ginseng, as do the Appalachians and Wisconsin, and every other region where ginseng grows has plants with a unique genetic profile.

When one strain of ginseng is planted near another strain, they will cross-pollinate. The result is still ginseng, and one strain is visually very much like other strains. It can be impossible sometimes to tell the difference between one strain or another without genetic testing. So this doesn't matter much to many people.

However, from a conservation or environmentalist's point of view it does matter. I don't plant seeds I've bought in habitats where wild ginseng already grows because I don't want to cause genetic pollution of the wild strains. This effort may or may not be effective, I don't know.

The conundrum is caused by the lack of ability to purchase seeds from the strain of ginseng native to our area. It's illegal to gather berries from wild ginseng, except to replant near the mother plant when digging. It's illegal to sell wild ginseng seeds.

So the only seeds you can buy to re-establish or replenish your habitats is from outside sources. Until our own plants are plentiful enough to use our own seeds, we buy seeds.

The closest seed supplier I can find is in Missouri, but his seeds are not Ozark originals either. He started his farm with seeds from West Virginia (I think). His strain of seeds are a closer relative to our native strain than the ones in Wisconsin, at least.

Choosing the right Spot

[slide 6]

So you have some seeds or plants, and you want to pick the best spot to plant them. Or you want to look for true wild ginseng.

Some of you may have acreage with wild areas, but many of you might not. I've seen photos of plants people have successfully grown to maturity in the shade of outbuildings or sheds, or in shade gardens.

But for the sake of showing you what wild habitat looks like, this presentation is about finding proper habitat in forests.

If you're growing specimens in an urban environment, you'll have to adapt the same principles and recreate it at home.

[slide 7]

Habitat Overview

Most importantly, ginseng needs deep shade, moist soil, and cool air.

“Cool” air is a relative term. When you’re walking in the forest you can feel the difference when you enter a space that’s right for ginseng. The air is noticeably cooler because the shade is deeper and the ground is moist.

[slide 8]

Our ginseng nursery is across this creek. The hill slopes upwards just past the trees there and it’s a good environment for ginseng.

[slide 9]

It’s not perfect because the trees aren’t as old as I wish they were and there’s still a lot of undergrowth like poison ivy.

[slide 10]

The hill is north-facing and the shade is deep. This makes up for the other things like too much undergrowth.

[slide 11]

The ground stays pretty moist under the leaves of all those deciduous trees.

[slide 12]

And the air is cooler than some of the other areas nearby.

[slide 13]

This is an area where wild ginseng grows with abandon. The path is filled with nettles, trilliums, trout lilies and green dragons and jack in the pulpit plants.

To the right it slopes downhill toward the same creek as in the previous photo. This is upstream. Toward the right it slopes uphill. This is a north-northeast facing hill.

This area was also logged in the past, and there is still a lot of undergrowth but the ginseng is thriving here along with all of the companion plants that normally occupy the same habitat.

I modeled the nursery area of the first photo on this location.

[slide 14 or Section 2 slide 1]

I mentioned some plants that are growing in that natural habitat in the previous picture.

Those plants are called “companion plants”. Certain trees, shrubs, and smaller plants also prefer the same places as ginseng.

When you find a spot that has a lot of these companions, it’s usually a good spot for ginseng. Finding these plants is often easier than just striking out to look for ginseng.

[slide 15 or Section 2 slide 2]

Companion Trees

[slide 16 or Section 2 slide 3]

A deciduous tree is one that loses its leaves in winter. Ginseng likes to grow under a mix of deciduous trees.

[slide 17 or Section 2 slide 4]

Look for tall trees for a high overhead canopy that filters most of the light. 80% shade is ideal. This is deep shade.

These are the trees that grow in the best habitats around our land.

[slide 18-28 or Section 2 slide 5-15]

Exceptions

[slide 29 or Section 2 slide 16]

All that being said, we have some ginseng patches that are doing well under a mostly cedar canopy and mostly pine. Both of these areas have a few other deciduous trees mixed in there though.

That's a ginseng seedling that came up in one of our experimental plots beneath a mostly pine canopy.

[slide 30 or Section 2 slide 17]

Companion Shrubs

When the conditions are right for ginseng, usually there are other plants common to that environment.

It's often easier to find these plants than it is to find ginseng, so look for them first. That way you'll at least know you're in the right neighborhood.

[slide 31-39 or Section 2 slide 18-26]

Companion Plants

These smaller plants all enjoy the same deep shade and moist soil as ginseng.

[slide 40 or Section 2 slide 27]

Just like the trees and shrubs, though, some of them can grow in more sunlight and drier conditions, too.

So they're not a foolproof indication of great habitat, but when many are present, it's a good clue to pay closer attention.

A few are very strong indicators and those are the maidenhair fern, doll's eyes, and blue cohosh. Anytime I've seen those three plants, it always seems to be in excellent habitat for ginseng.

[slide 41-50 or Section 2 slide 28-37]

[slide 51 or Section 3 slide 1]

Growing & Identifying

Assuming you have the right environment – proper shade and ground moisture, ginseng is relatively easy to grow.

[slide 52 or Section 3 slide 2]

Ordering seeds or rootlets

Order your seeds from as local a source as possible. We use Ozark Mountain Ginseng in Missouri.

[slide 53 or Section 3 slide 3]

The soil

When you're in a good spot, you'll notice the soil is soft. Rake back the leaves and take a look.

You should be able to press your thumb right down into it.

How to plant

To plant, you can either make seed beds and transplant seedlings later, or seed each one in place.

If you're seeding each on in place, you don't need to rake back the leaves. Just put a seed about an inch into the ground. I do this by crawling around with a bag full of seeds.

They make seeders and I've tried making one myself from PVC and a butter knife attached to the end, but in the end it was easier to just crawl around.

[slide 54 or Section 3 slide 4]

To make seedbeds, just rake back the leaves, scatter the seeds, walk back and forth over the seedbed to give the seeds good soil contact, then put the leaves back.

When to harvest

[slide 55 or Section 3 slide 5]

Ginseng is legal to harvest when it is 5 years old but you'll have to wait for the legal season.

Digging season begins Sept. 1 and ends December 1.

If you intend to sell these roots, it's best to wait until the plants are at least 10 years and preferably 20 or older. It takes about 300 plants to make a dry pound.

Too keep your patches sustainable it's best to aim for 100 plants per patch at least and then only harvest $\frac{1}{4}$ to $\frac{1}{2}$ of the mature plants. Replant every berry of the plants you dig.

[slide 56 or Section 3 slide 6]

Identifying Ginseng

The key is learning to tell the difference between what IS ginseng and what is not. Many plants look a lot like ginseng.

And then too, ginseng looks a lot different in the first year as a seedling. It looks nothing like a mature plant.

[slide 57-64]

Pictures of Ginseng

[slide 65]

Review

We talked about ginseng, what kinds of environment it needs to grow and how to grow it. I hope you feel like you learned a thing or two, or at least are interested to know more!

Before you go, come get a ginseng seedling to take home. If you want to ask questions or take a look at some of the things we brought with us to show you, come on up to the front.

[slide 66]

Plant List

- American Ginseng *Panax quinquefolius*
- PawPaw *Asimina triloba*
- Redbud *Cercis canadensis*
- Buckeye *Aesculus glabra*
- Elm *Ulmus spp.*
- Beech *Fagus grandifolia*
- Maple *Acer spp.*
- Oak *Quercus spp.*
- Hickory *Carya spp.*
- Ash *Fraxinus spp.*
- American Hornbeam (Ironwood) *Carpinus caroliniana*
- Red Mulberry *Morus rubra*
- Spicebush *Lindera benzoin*
- Witch Hazel *Hamamelis virginiana*
- Wild Hydrangea *Hydrangea arborescens*
- Black cohosh *Actaea racemose*
- Blue cohosh *Caulophyllum thalictroides*
- Doll's Eyes *Actaea pachypoda*

- False Solomon's seal Maianthemum racemosum
- Giant Solomon's seal Polygonatum biflorum
- American Spikenard Aralia racemose
- Bloodroot Sanguinaria Canadensis
- Goldenseal Hydrastis Canadensis
- Christmas fern Polystichum acrostichoides
- Maidenhair fern Adiantum pedatum
- Wild ginger Asarum canadense
- Trillium Trillium sessile
- Yellow trout lily Erythronium americanum
- Wild geranium Geranium maculatum
- Green Dragon Arisaema dracontium
- Jack in the Pulpit Arisaema triphyllum

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Contact Info

You can find Wild Ozark by searching in any search engine. You can email madison@wildozark.com. Our website is www.WildOzark.com and our shop is at shop.wildozark.com.

We're on the following social medias:

- www.facebook.com/wildozark
- www.twitter.com/wildozark
- www.linkedin.com/in/wildozark