



## "Wild-simulated ginseng: an option for underutilized forest land"

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Watauga County (Boone, NC)

# American Ginseng

## (*Panax quinquefolius*)

- The most valuable of our forest botanicals.
- Strong Asian market.
- Used regularly in traditional Chinese medicine.
- In many product supplements and energy drinks in US.
- Grows extremely well in Appalachians.

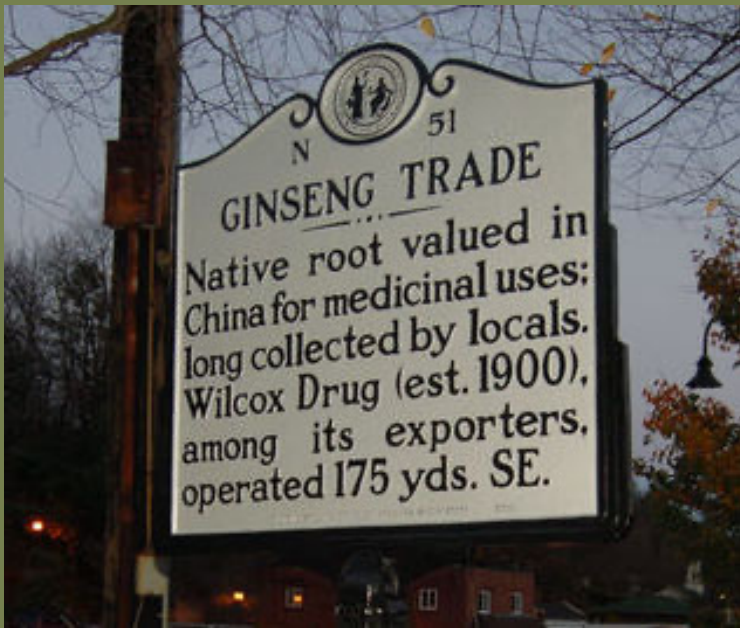
# Wisconsin and Ontario shade-grown ginseng: #1 producers of ginseng in North America



Very mechanized and very productive-high yields  
(much lower price per pound than wild/wild-sim)



# Historic Ginseng Area



**Ginseng Marker in  
Downtown Boone**



**Wild ginseng harvest is still  
actively practiced**

# Ginseng Huntin'...reality





# Wild Roots



## Prices:

- 2013 \$1,300/lb
- 2014 \$800
- 2015 \$500
- 2016 \$700
- 2017 \$850
- 2018-2023 \$900-950



Wild root



# Wild-simulated roots



Prices: similar to wild  
8-10 years....





# Ginseng is challenging to grow

- woods grown/wild-simulated.
- How it is grown affects its value.
- Ginseng is valued on how it looks.
- Over 50 different 'grades' of ginseng based on age/shape
- 8-10 + years for optimum marketability



How to grow ginseng...  
(and the other forest medicinal herbs that  
have commercial value)

Site selection is critical



- Shaded, sloped site.  
Open 'cove forest' woods  
w/ rich, moist soil
- Mixed hardwood forest;  
some pines/old white pine  
stands okay. Stay away  
from rhododendron
- In less than optimal sites,  
ginseng may germinate &  
survive, but not "yield"
- Check woods in late  
May/early June...  
companion plants



Ideal site:

Not as important which way the slope is facing...

More important how the woods look, shade/sun, etc!

Moist woods with yellow-poplar, sugar maple, cucumber-tree, green ash, black walnut, northern red oak





# Companion plants:

- bloodroot
- Jack-in-the-pulpit
- Maidenhair fern
- Doll's eye
- blue & black cohosh
- Solomon's seal
- Trillium
- Goldenseal



Trillium (left); Bloodroot  
(above)



## The “High Country” Companion Plant Top 3

- Maidenhair fern
- Blue cohosh
- Bloodroot





<https://www.cazimihealing.com/black-cohosh-harvest-2/>

# Black Cohosh

**\$8-\$12 lb**

Taken for hot flashes and other menopausal symptoms. It's also been promoted for other conditions, including menstrual cramps and premenstrual syndrome, and to induce labor



# Bloodroot

Common companion plant  
\$6-\$10 lb

Traditionally used  
to treat flu,  
common colds,  
sinus infections,  
and lung  
infections,  
dermatological  
treatment for cuts,  
sores, and poison  
ivy. Used as a  
dye...





# Blue cohosh

Common companion plant  
\$4-10 lbs

used for  
stimulating the  
uterus and starting  
labor; starting  
menstruation;  
stopping muscle  
spasms; as a  
laxative; and for  
treating colic, sore  
throat, cramps,  
hiccups, epilepsy,  
hysterics....  
But otherwise toxic



**\$25-\$80 per lb**

# Goldenseal

**Great companion crop for ginseng**

**Proliferates on its own**

**Natural fungicide**

A popular natural treatment for upper respiratory tract infections, including the common cold.

Berberine, one of the compounds in goldenseal, may help fight infections caused by bacteria and viruses.



# Solomon's seal

And FALSE Solomon's seal

used for lung disorders, swelling (inflammation), and skin conditions such as bruises, boils, and hemorrhoids





### Pikeville Office

MONDAY to Friday 9AM-4PM  
Saturday  
763 Drift Branch Pikeville, Ky  
41501 (606)437-9578

### Evarts Office

Monday Wednesday Friday 1 to 4  
Other times appointment only  
101 Main Street Evarts, KY 40828  
(606)437-9578

Spring 5-23-2022

Item	Fresh	Dry	Quality Notes
Black Cohosh	\$ 1.40	\$ 7.00	Unwashed dirt beat out and broken
Blood Root	\$ 3.00	\$ 10.00	NO MOLD
Indian Turnip (Jack in the Pulpit)	\$ 10.00	\$ 20.00	Please Call for Handling
Stone Root	\$ 1.00	\$ 3.50	
Solomon Seal Root	\$ 2.00	\$ 5.50	WHITE ONLY
Wild Yam Root	\$ 2.00	\$ 5.00	Unwashed \$1.50
Cranesbill Root	\$ 2.00	\$ 4.00	
Spignet Root	\$ 1.50	\$ 4.00	
Wild Hydrangea Root/ SevenBark	\$ 2.00	\$ 3.00	Unwashed \$1.00
Birch Bark	\$ 0.50	\$ 3.00	
Mayapple Root	\$ 1.50	\$ 4.00	
Goldenseal Root	\$ 20.00	\$ 60.00	
Goldenseal Herb	\$ 3.00	\$ 9.00	
Black Indian Hemp Root	\$ 2.50	\$ 9.00	
Beth Root	\$ 3.00	\$ 5.00	Fresh/Frozen
Pleurisy Root	\$ 5.00	\$ 15.00	
Slippery Elm	\$ 1.75	\$ 6.00	
Wild Ginger Root	\$ 2.00	\$ 5.00	
Witch Hazel Bark	\$ 3.00	\$ 6.00	
Sassafras Root Bark Natural	\$ 3.00	\$ 8.00	
Sumac Root Bark	\$ 3.00	\$ 6.00	

\* Unwashed prices are for material that has had all dirt removed with method other than water. All material is subject to inspection and must be approved as good material. We offer training to help you sell material for more money ! Follow us on Facebook for more information. Unwashed black cohosh root for material that has been broken, excess dirt removed.



# Soil Amendments

- Ginseng likes calcium rich soil and a pH of about 5.0-6.0.
- Soils here typically low pH and phosphorus poor
- Can add gypsum (for Ca) and a phosphorus fertilizer... bonemeal or 0-45-0.



- No compost, manure, nitrogen, etc!!

Not necessary in an ideal site...

Ginseng seeds: no 'wild' seed available...  
99% of all seed sold is from cultivated & woods  
grown operations



Seeds have stratification  
requirements.





# How we're doing it...



Cleaning and clearing site

Raking & planting beds.  
Adding gypsum (for Ca) and  
phosphate fertilizer 0-45-0



Obtaining high quality, stratified  
seed....Expensive, but usually well  
worth it.





# Seeding rates for Wild-Simulated

- 1 oz. seed for 100 sq. feet
- ~5-7 lbs seed for  $\frac{1}{2}$  acre
- ~10-14 lbs seed for one acre
- Ideally 1 plant per sq ft



43,560 sq. feet per acre...probably half of that is plantable



# High Density

- 40+ lbs of seed per acre
- Density requires fungicides to prevent disease
- Labor intensive







Which one is  
ginseng?





# Seedlings



# Yields for Wild-Simulated Ginseng...

## IGNORE THIS INFORMATION

SIMPLY NO WAY TO ESTIMATE  
YIELD...TOO MANY VARIABLES!!!!!!

- 7,000 seed/lb
- 70,000 plants on one acre (with 10 lbs)
- 50% mortality?
- = 35,000 roots
- ~300 roots per dried pound
- = 116 dry pounds
- \* \$400/lb
- \$46,400 ?





# Voles

- Other than thieves and disease, this rascal is your biggest problem.
- Feed & mate year-round...5-10 litters per year
- Population cycles fluctuate



# Deer

Become a problem year 3 and beyond





# “Poaching”

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## Man Arrested for 2nd Time in Two Weeks for Poaching Ginseng on Private Property in Watauga

PUBLISHED THURSDAY, SEPTEMBER 24, 2015 AT 11:51 AM

     16

By Jesse Wood

A Deep Gap man who was arrested about a week ago for poaching ginseng on private property was back at it again on last night.

Officers found Eric Moretz, 27, of Deep Gap, and Marshal Lawrence, 33, in a wooded area near Dell Coffey Road and Roby Green Road in the dark, equipped with head lamps and long knives and in possession of ginseng roots, according to an incident report from the Watauga County Sheriff's Office.

Deputies responded to the area after received a phone call from a Dell Coffey Road residence about suspicious four wheelers and motorcycles frequenting the property and staying for hours in the evening. The caller, according to the report, was concerned people were poaching ginseng or making moonshine.

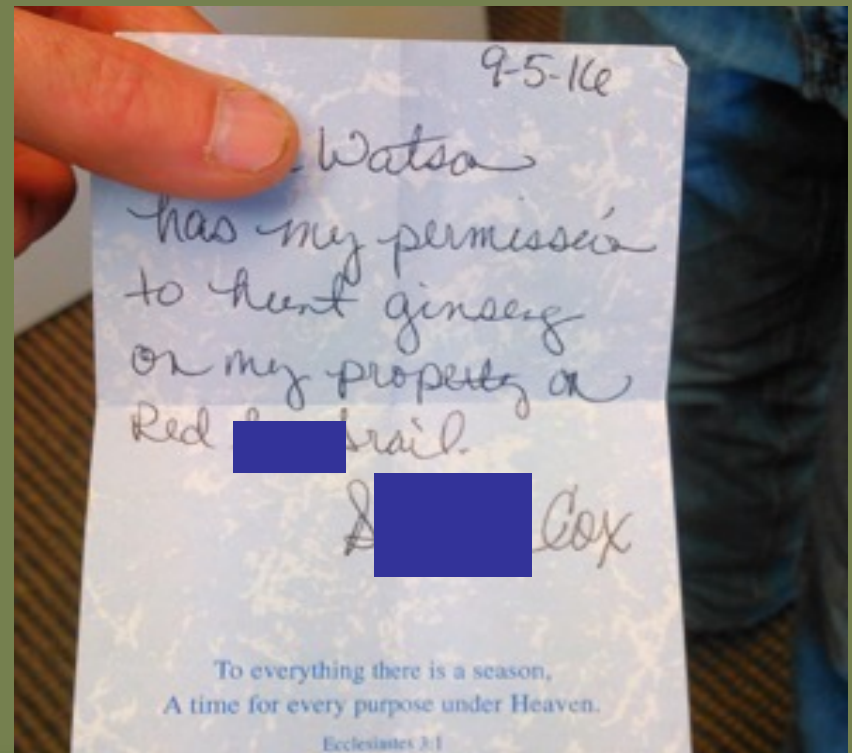
Deputies found a fourwheeler in the woods and eventually made contact with Moretz, who was arrested on Sept. 12 near Blowing Rock poaching ginseng, and Lawrence.



Moretz

# Ginseng Rules: Wild Harvest

- The harvest season is Sept. 1- Dec. 31. (used to be April 1).
- There are no exceptions to this harvest season (e.g., collection from one's own land).
- Cannot SELL WILD ginseng out of season.
- If you collect on someone else's land you must have landowner's written permission with you.





# Cultivated ginseng

- In NC, you can dig and sell it any time with a nursery license, but it must be certified as “Cultivated Ginseng” by a NCDAemployee.
- State export certificates not required as long as a copy of the certified as cultivated record accompanies it.

# Questions?

