

# Medicinal Forest Product Trade in the Eastern US

## *Gathering Data From Registered Ginseng Buyers*

The United State's eastern forests are home to a variety of medicinal herbs that have a global market. However, trade is still largely informal, and the market scope and structure are not well understood. One exception is American ginseng, whose legal status as a threatened species requires that buyers apply for a license and keep sales records that are submitted to a state agency. Other marketable medicinal plants collected from the same forests, known colloquially as 'off-roots', are not similarly tracked. To study the characteristics of off-root trade, registered ginseng buyers in 15 eastern states were surveyed in 2015 and 2016 about the market structure, volume, and harvest distribution for 15 off-root species selected for their economic and conservation value. Buyers voluntarily reported harvesting 47 'off-root' non-timber forest product (NTFP) species. The majority of trade volume and trade value came from the roots and rhizomes of two perennial understory plants: goldenseal and black cohosh. The majority of the trade occurred in central Appalachia, especially southwest Virginia, eastern Kentucky, and southern West Virginia. This infographic summarizes the findings of this survey with information taken from the following sources:

Kruger, S.L., J.F. Munsell, J.L. Chamberlain, J.M. Davis, and R.D. Huish. 2020.

Describing medicinal non-timber forest product trade in eastern deciduous forests of the United States. *Forests*. <https://www.mdpi.com/1999-4907/11/4/435>

Kruger, S.L., J.F. Munsell, J.L. Chamberlain, J.M. Davis, and R.D. Huish. 2020.

Projecting medicinal plant trade volume and value in deciduous forests of the Eastern United States. *Forests*. 11(74):1-20. <https://www.mdpi.com/1999-4907/11/1/74>

## Key Facts

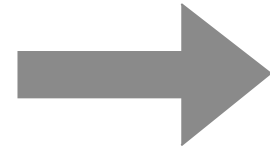
- Nearly 50 percent of U.S. commercial medicinal forest plant and tree species are native to Appalachia.
- Only American ginseng is measured under CITES, requiring buyers to register. (Convention on International Trade in Endangered Species of Wild Fauna and Flora)
- A survey sent to 700 registered ginseng buyers in 2015 and 2016 throughout the Eastern U.S. with a 26 percent response rate revealed that
  - 38 percent bought only ginseng
  - 46 percent of those who bought ginseng also bought off-root species
  - No survey participants reported buying off-root species and not ginseng

## Table of Contents

• Medicinal Forest Product Trade	1
Intro and Key Facts	
• Plants harvested - tracked and not	2
• Reasons for Harvest	2
• Why Analyze Data?	2
Insights and Benefits Gained	
• Herbal Product Value, Market Unknowns and Survey Focus	3
• Top four reported medicinals/value (CHART)	4



Harvested  
Appalachian  
Medicinal Plants  
*(shared supply chain and habitat)*



Ginseng  
*(Tracked by CITES)*

- Buyers must register
- Info gathered can provide insights into off-root species

and

Off-root Species  
*(up to 47 untracked species reported)*

- Goldenseal, Bloodroot, and Black Cohosh were most commonly purchased by buyers

## Why Harvest Forest Medicinal Plants in Appalachia?

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- Largest contiguous tracts of forest/abundant plant habitat
- Economically marginalized region/downturn of coal and timber industries lead to harvesting as a livelihood strategy
- Cultural significance

## Insights To Be Gained From An Annual U.S. Market Analysis of Medicinal Herbs

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- Medicinal species harvested
- Origin within Eastern US forests
- Trade Value
- Market Structure

## Benefits of Forest Medicinal Market Analysis

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- Improve market conditions
- Can help focus management and support for sustainable production and conservation
- Can help shape policies around off-root species
- Reduces barrier to entry for current and future forest farmers





→ With the



## American Herbal Products Industry

Estimated Value at 7.2 billion dollars

*(Total industry value)*

↓  
but so many



## Forest Medicinal Unknowns

- Volume
- Value
- Distribution



## Survey Focus

- Record NTFP market participation and structure
- Tally the volume of off-roots (non-ginseng) purchased
- Determine the point-of-origin for off-roots purchased
- Measure the first-order value for off-roots purchased

← the

could provide the framework  
needed to begin a more comprehensive  
understanding of NTFP mapping and market.



# Top Four Reported Forest Species, Weight, Price Per Pound and Value of Purchase

Data for 2014-2015, collected from a survey conducted in 15 states in the eastern US.

	Total Pounds	Average price/lb dried	% of Total Value	Total Value USD
Black cohosh	264,455	\$3.62	22%	\$957,327
Goldenseal	106,105	\$22.38	55%	\$2,374,630
Bloodroot	21,991	\$10.39	5%	\$228,486
False Unicorn	6,143	\$72.14	10%	\$443,156

