TECH

MNN.com > Earth Matters > Wilderness & Resources

Ginseng demand boosts prices and poaching

Single roots can have thousand-dollar price tags, attracting poachers into protected lands and endangering American ginseng populations.













What is 'social jet lag' and is it making you

The benefits of napping



TRENDING ON MNN

What kind of yoga is right for me?



You can take in a concert 333 feet underground in **Cumberland Caverns**



Why we snore (and how to solve it)



How to microwave a sweet potato



ed by Georgia-Pacific



for as much as \$1,400 per pound, it's hardly surprising.

American ginseng grows primarily in the deciduous forests of the Appalachians and Ozarks, where many people harvest it legally and countless others poach the plant from private land and protected areas, often searching for older roots that can fetch top dollar from buyers in Asia.

Autumn's arrival ushers in crisp weather, colorful foliage and, in many parts of the

eastern U.S., the opportunity to make thousands of dollars digging up a coveted root.

With predictions for this year's American ginseng harvest suggesting roots could go

PHOTO BREAK: 10 water towers that look good enough to eat

Over the past 10 years, prices for wild ginseng have climbed, and in 2007 a single root was auctioned off in China for more than a quarter-million dollars.



Ginseng growing in the Appalachians. (Photo: Forest Farming/flickr)

What makes ginseng so valuable?

Both American ginseng and Asian ginseng are valued as folk remedies to treat everything from cancer to erectile dysfunction, but while some studies have found



WINTER WARMUPS



7 amazing soups for soup weather

The chill in the air means soup should be in your bowl.

Expand your winter squash

squash. Here are just a few to try.





5 super helpful slow cooker

Can this favorite tool of busy families get even better? Yes, it can

5 recipes to fight the winter blues

For a healthier and happier winter, to





How 'hygge' can help you get through winter

The vague cultural concept doesn't translate easily into English, but it

mar ginserig may boost me inimune system and lower blood sugar, mere s no conclusive evidence that it can treat other medical conditions. Still, ginseng roots are highly valued, especially wild American ginseng, which Asian buyers believe to be more potent than cultivated plants.

"Wild American ginseng is considered to be the best in the world and is considerably more valuable than commercially farmed ginseng or Asian varieties," said Sara Jackson of Bat Cave Botanicals. Jackson has been growing and ethically harvesting a population of wild ginseng in western North Carolina for more than 10 years.

U.S. Fish and Wildlife reports show that exports of wild ginseng increased by about 40 percent between 2012 and 2013, with the majority of the roots going to China, where ginseng has been picked to near extinction.

Ginseng buyers in Asia pay a premium for certain types of roots. Those known as "man roots" — ones with a human shape and what appear to be body parts — can go for thousands of dollars.

Currently, one of Jackson's man roots (pictured right) is listed for sale on Etsy for \$7,000.

"The price of ginseng varies from year to year, but the one constant is the demand for wild ginseng roots with potency and character," she said. "This particular ginseng root is a remarkable example of a 'man root,' [which] is quite rare and sought after in the ginseng world.

"An ancient concept called the 'Doctrine of Signatures' theorizes that 'herbs that resemble parts of the body can heal or cure those particular body parts.' A ginseng root with such a resemblance to



mankind makes it very sought after for its highly regarded tonic and curative properties."

Jackson points out that because this particular root has a feminine character and resembles a woman cradling a child, it's particularly precious, especially since ginseng is often used as a fertility aid.

However, Jackson's ginseng may also be considered valuable because of where it comes from.

Some of the most sought-after ginseng is harvested from the hills of the eastern U.S., primarily from North Carolina, Georgia, Tennessee, Kentucky and West Virginia, where ginseng hunters can find older, more valuable roots. Ginseng from these areas can sell for a few hundred dollars in summer, but by fall when the growing season comes to an end, those prices tend to rise above \$1,000.

According to the U.S. Fish and Wildlife Service, the annual wholesale value of the American ginseng trade is \$26.9 million.



Why does the cold bother some people more?

Some people can take a brutal winte in stride while others need a cup of coffee once the temperatu...





10 warming winter dishes from around the world These wintertime favorites will make

Endangered Forest Mapping ored by Georgia-Pacifi







#SeeHer: When Family Comes sored by Georgia-Pacific





Ginseng for sale at a market in Seoul, Korea. (Photo: Wikimedia Commons)

Poaching the plant

There's a long history of ginseng hunting in the United States. In fact, Daniel Boone made his fortune on ginseng, and the plant's roots have been a source of income for traditional diggers — who are often referred to as "sangers" — for generations.

But when the price for a pound of wild ginseng hit \$1,200 in 1998, it triggered a rash of poaching. The popularity of TV shows that feature ginseng poachers, such as "Appalachian Outlaws" and "Smoky Mountain Money," have only exacerbated the problem.

Nineteen states allow ginseng harvesting on private property if the diggers have written permission from the landowner or if they've obtained a permit in certain areas. For example, the U.S. Forest Service annually issues 136 permits to harvest ginseng from North Carolina's Nantahala and Pisgah national forests during a two-week period.

But diggers must abide by certain rules. They're permitted to take only mature plants and required to replant the seeds of ripened berries at the same location. They must also dig up the plant's entire root to prove its age, a practice that's been criticized because traditional diggers leave part of the root, enabling the ginseng to grow back more quickly.

Poachers take plants that are too young to legally sell and they dig up plants from protected areas. Poaching ginseng and trespassing are typically misdemeanors, but poachers can face felony charges if they transport illegally obtained ginseng over state lines or take it from private property without permission in certain states.

However, park and law-enforcement officials say penalties often aren't enough to deter people seeking to make a profit from ginseng, and there's simply not enough manpower to police the millions of acres where ginseng grows.



Photo: Forest Farming/flickr

Protecting ginseng in a national park

With ideal conditions for growing ginseng, the 522,427-acre Great Smoky Mountains National Park is the largest protected wild ginseng reserve in the country. However, the park's size makes it difficult to police, and its ginseng population has suffered from poaching.

Biologists worry the plant's population may never recover in certain areas of the park.

"Poaching has deeply affected populations by deleting viable populations," James

Corbin, a plant protection specialist with the North Carolina Department of

Agriculture, Said, "Poaching is driven by price and penalty. When the reward is greater

than the penalty, poaching occurs, or when fear of penalty no long exists, poaching goes crazy."

With the help of volunteers, park officials have replanted more than 15,000 roots in the park, but they say fewer than half of them will survive.

Despite its large growing range, the plant can be difficult to grow. Ginseng doesn't germinate until it's at least 5 years old, and it requires biodiversity to flourish, which typically means a minimum of 50 plants in an area.

To protect these plants from poachers, rangers use infrared and motion-activated cameras, and they occasionally go undercover to find ginseng poachers. But one of the most effective ways to catch poachers who have harvested ginseng from Great Smoky Mountains National Park is with a dye.

In 1996, Corbin designed a ginseng-poaching prevention program that's been described as "equal parts science, conservation and crime-scene investigation."

Each summer, Corbin and other officials tag 2,000 to 4,000 ginseng roots with a dye that can be seen only under a black light and then replant them.

"The marker is an environmentally based organic material that is coded to the park to give rangers and state inspectors an immediate means to identify illegally collected plants," Corbin said.

If someone attempts to sell a ginseng root that's been marked, the dye will glow under a black light, indicating it's a poached plant. Last year, NPR reported that the dye has helped convict more than 40 ginseng poachers in the last four years.

Learn more about ginseng poaching and how park rangers at Great Smoky Mountains National Park are catching them in the video below.

https://www.youtube.com/watch?v=QbYxT57XMp8

Inset photo of root: Bat Cave Botanicals







Laura Moss writes about a variety of topics with a focus on animals, science, language and culture. But she mostly writes about cats.

Related on MNN:



How to grow ginseng



5 herbal remedies to help you through winter



How your old cellphone could help stop illegal logging and poaching

Related topics: Conservation, Environmental Crime, Extinction

Read this next



What happened to Baby Yoda Cat?



Earth just recorded its hottest January in



A pig named George and his little piglet friend are making life fun again



Meet the newest dog breed of Westminste











Why flying at lower or higher altitudes might reduce the climate impact of air travel Music may motivate you, but it won't necessarily make you better at sports

What would Earth look like if all the ice melted?