The Story of American Ginseng

Margot Wulfsberg
I would like to give a special thanks to Alyssa Hakes and Brigid Vance for their guidance during the research and writing of this project. I also thank Cindy Duckert and Deb Gibbons for their help in the creation and formatting of this book.
A rare wild herb in the forests of the Eastern U.S. is hidden in obscurity to the average American, but for those who know of it, this herb can represent an enormous profit, a cure to an illness or a conservation crisis. American ginseng is a plant that has been adopted by Chinese medicine, and now subsequently suffers the curse of a highly valued organism. Just as elephants are hunted for their valuable tusks and tigers for their valuable furs, American ginseng is harvested for its root which can be sold for hundreds and sometimes even thousands of dollars per pound. In the process of overharvesting, it has become a vulnerable plant, and if this continues, it may become extinct in the wild.
Although American ginseng is commonly sold as a medicinal product today, it was only introduced and integrated into Chinese medicine in the 1700s. Before then, a related plant, Asian ginseng (*Panax ginseng*) played a significant role in China. Asian ginseng is first mentioned in medicinal texts in 100 CE and since then has grown to become one of the most important herbs in Chinese medicine. However, wild Asian ginseng populations receded with continuous harvesting. By the late 1400s, the plant was all but extinct in central China, and harvesters had to venture to increasingly inaccessible forests in northeast China and Manchuria to find it. Around this time, people began to cultivate Asian ginseng, but wild roots would always be more valuable.
In 1716, with the help of Mohawk women, Jesuit missionary Joseph-François Lafitau identified American ginseng and recognized its resemblance to Asian ginseng. Lafitau thought that American ginseng was part of a larger migration of plants and people from the Old World to the New World and was fascinated by the intellectual implications of this resemblance. But he unintentionally uncovered a global trade opportunity with his findings, due to the demand for ginseng in China. A huge ginseng rush began, and merchants had little regard for its role in the lives of Native Americans. Large quantities of ginseng, much more than present day, were shipped to a port in Hong Kong. At the height of the trade in 1841, over 64 million roots were sent to China.
The wild ginseng trade was quite successful, but the rate of harvest was unsustainable. By 1975, American ginseng was listed on Appendix II of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora), which includes species that are deemed to be susceptible to extinction if there are no trade controls implemented. But the CITES regulations did not fix everything. Many laws on ginseng harvesting are nearly impossible to enforce. In addition, these laws have faced much resistance with local ginseng harvesters. For many of these people, harvesting ginseng is an important family tradition passed down from father to son. In impoverished areas of Appalachia it also provides a source of much-needed supplementary income.
One of the reasons why the harvest of American ginseng has been so unsustainable is the relatively long life cycle of the plant. Compared to other plants, ginseng has a relatively low reproductive output and few seeds that make it to the germination stage take one or two years to even begin to germinate. Smaller plants have a mortality rate of 69-92%. More established plants have a mortality rate of 10% and are often seen to live up to 25 years. This leads to populations that are relatively stable, but take a long time to replace themselves.

One study shows evidence that the ginseng harvest has implications for the evolution of the plant. Plants in areas with a high rate of harvest have shorter stems and smaller leaves. There are also implications for reproductive fitness as these plant have a lower seed count.
Unsustainable harvesting isn’t the only factor threatening wild ginseng. Unusual weather patterns associated with climate change have led to frost damage in some populations, and these weather patterns are predicted to become more frequent as climate change continues. As the global temperature rises, ginseng’s habitat will also be pushed north, but because of ginseng’s slow propagation and rarity in the wild, it may not be able to disperse to new northern habitats.

Habitat loss and fragmentation also has an important role to play. With the establishment of mines and suburban development, ginseng habitat is both lost and fragmented. Fragmented habitat is less ideal for ginseng as there are higher amounts of competitive, invasive plant species and white-tailed deer which browse ginseng.
The demand for wild ginseng roots remains high, especially as China’s middle and upper classes grow. Ginseng that is grown in America is perceived to be cleaner and safer than ginseng from China, and since wild Asian ginseng is so rare now, the United States is one of the only sources of wild roots. The aesthetics of ginseng are important to consider. Wild roots have a more gnarly shape than cultivated roots, and are sometimes even shaped like people. Along with the age of the root, these characteristics are highly valued by consumers. The beauty of these roots is placed in such high regard that particularly old and nicely shaped roots will be displayed in frames as status symbols rather than be consumed for medicinal purposes.
There is no single solution to stop the decline of American ginseng in the wild. Preventing habitat loss and fragmentation will help, but a change in the ginseng trade is also needed. The consumption of wild ginseng should be discouraged, and alternatives should be considered. One alternative is cultivated ginseng. Although the appearance of cultivated ginseng is quite different from wild ginseng, it is much more sustainable.

Another alternative is wild-simulated ginseng. This is ginseng that is planted in natural forest habitats, rather than in fields with artificial shading. This kind of ginseng may satisfy the demand of wild roots by the Chinese market while still providing extra income in areas that are in need.
Further Information

On American ginseng conservation: www.wildginsengconservation.com

On the history and trade of ginseng: *Ginseng, The Divine Root* by David A. Taylor