



CITES & LIVELIHOODS CASE STUDY 2022

Wild Harvest and “Forest Farming” of American Ginseng in the USA

SPECIES, USE AND TRADE

American Ginseng is a slow-growing, long-lived herbaceous perennial species that occurs in deciduous forests of the eastern USA and Canada. The roots have been exported from the USA for use as medicine within East Asia since the 1700s. The roots are dried and often used in combination with other plants in a health tonic, and to treat respiratory infections and diabetes.

American Ginseng was among the first species included in CITES Appendix II, due to concerns of over-exploitation of wild roots for international trade. Most American Ginseng in international trade is cultivated rather than wild-sourced, but wild-sourced plants are regarded by Asian consumers as more potent and are thus

sought after and more valuable (up to 100 times the price of cultivated plant roots).

The harvest, possession and sale (domestic and international) of wild American Ginseng is prohibited in Canada but permitted in 19 states of the USA under certain conditions, which vary according to state (USFWS, 2015). Plants have to be at least five years of age before roots can be harvested so they have produced and dispersed seeds. American Ginseng can also be produced through “forest farming” where seeds from cultivated ginseng are planted in natural forests (known technically as “wild-simulated” and classified by CITES as wild).¹

¹ The ginseng industry recognises four types of American Ginseng. In addition to wild-harvested and wild-stimulated (including “forest farmed”) mentioned in this factsheet which are classified by CITES as wild, ginseng can be “cultivated woods-grown” where commercially sourced seeds/seedlings are cultivated in managed and modified woodlands; or “farm cultivated” where commercially sourced seeds/seedlings are cultivate in controlled conditions (both systems classified by CITES as artificially propagated).

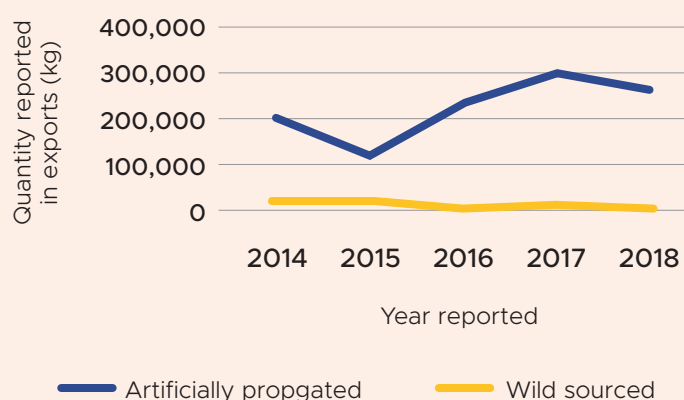


Figure: Exports of artificially propagated and wild-sourced American Ginseng root reported by the USA in the CITES Trade Database in kg / for commercial purposes from 2014-2018 – the latest year for which data has been reported (Source: CITES Trade Database).



UNITED STATES OF AMERICA



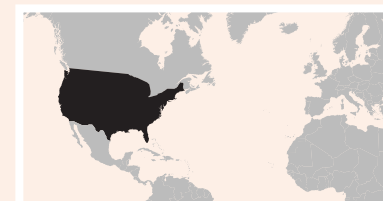
AMERICAN GINSENG
Panax quinquefolius



APPENDIX II



NOT ASSESSED



American Ginseng Root.
Photo: Amy Shumaker.

LIVELIHOOD BENEFITS

In the 19th century, the wild harvest of American Ginseng was a routine source of income for Appalachian families living in remote locations away from other commercial opportunities. Many of today's wild harvesters of American Ginseng are not landowners but harvest ginseng on privately owned lands (with the landowner's permission) or in the US Forest Service National Forests (with a permit). Income from wild harvesting can be important for these households, particularly during more challenging economic times. Most wild harvesters sell the ginseng roots to intermediaries for export to international markets. The harvesters receive around a sixth of the value of the exported product but the contribution to rural economies is still significant.

In other cases, where people own or lease forest land, forest farming provides an alternative to wild harvesting. A certification scheme – Forest Grown Verified (FGV) – gives these farmers access to a premium market for products that meet the requirements of the scheme. Currently most FGV certified ginseng is traded domestically in the USA and so not subject to CITES regulations, but there is evidence indicating that there could be a market for forest-farmed ginseng within Asian markets. This would then offer higher economic returns to farmers in the future. Nevertheless, it is thought that for many forest farmers, the benefits of growing and harvesting American Ginseng are cultural rather than financial including discovering a shared heritage with grandparents and great-grandparents who previously wild harvested American Ginseng.

CONSERVATION IMPACTS

There are concerns about the conservation status of wild ginseng. Illegal harvests of wild ginseng are reportedly common, driven by its high commercial value. To deter poachers and improve successful prosecutions for illegal harvest, the National Park Service marks roots with dyes and inserts microchips in wild ginseng roots. Forest farming appears to offer high potential for continuing international trade while reducing pressure on the wild population – although trade is currently mainly domestic focussed. The FGV scheme is also a mechanism for ensuring minimal environmental damage: the ginseng must be produced in a forest environment using inputs from the forest area (e.g. leaf biomass) or external inputs that ensure minimal environmental impact. Additionally, pest management practices must align with integrated pest management principles. In some cases, the FGV scheme has encouraged individuals to purchase land specifically for forest farming, or to utilise land previously used for cattle for forest farming.



Cleaning and sortign ginseng roots.
Photo: Katie Commender

LESSONS LEARNED AND FUTURE DIRECTIONS

Although there appears to be significant potential for international trade in forest-farmed ginseng, efforts will need to be made to promote it to Asian consumers, including by creating awareness on the status of wild harvested ginseng and the quality of forest-farmed ginseng as an alternative. E-commerce could present a new opportunity for harvesters of forest-farmed American Ginseng to connect directly with consumers in Asia, cutting out the need for intermediaries in exports and increasing profits. However, the currently perceived complexity of processes required to obtain a CITES permit can be a barrier to some forest farmers accessing international markets and would need to be addressed in order to maximise this opportunity. Furthermore, there remains a concern that planting cultivated sourced seeds in a forest environment has the potential to lead to cross-pollination with wild plants and introduce non-local and potentially maladaptive genotypes into wild populations. There is therefore a need to develop seed sources that maintain desired or regionally adaptive traits.

Meanwhile, international trade in wild-harvested ginseng continues and more investment is needed to ensure this method of harvest is conducted sustainably. The organisation Appalachian Sustainable Development (ASD) is piloting a certification programme for wild harvesting to improve harvesting practice and also provide access to premium markets for certified products from trained harvesters.

Case study prepared by Amy Woolloff and Anastasiya Timoshyna (TRAFFIC). **Edited by** Dilys Roe.

IN COLLABORATION WITH:



The presentation of material in this publication does not imply expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory or area, or concerning the delineation of its frontiers or borders. The views of the author(s) do not necessarily reflect those of the CITES Secretariat; the responsibility for the contents rests exclusively with its author.

www.cites.org



For the full case study see
cites.org/eng/prog/livelihoods