



Cascara Bark: A Brief Introduction to Harvesting and Marketing for the Medicinal Herb Market from Small Private Forestlands in the Pacific Northwest

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Overview

Cascara sagrada meaning “sacred bark” is a large deciduous shrub/tree found in Pacific Northwest forests. Cascara bark (or “chittum”) has been used by Native Americans for hundreds of years as a natural laxative and has been marketed by the pharmaceutical industry since the late 1800s. Many claim it is the most widely used purgative in the world. Cascara is also used in smaller amounts in sunscreens and as a flavoring in liquors, soft drinks, ice cream, and baked goods. This report provides a brief introduction to Cascara bark as a potential source of supplemental income for small to medium-sized forestland owners and harvesters. It briefly describes how to identify, harvest, process and market Cascara bark for the medicinal herb industry.



Cascara sagrada (*Rhamnus purshiana*)

Identifying Cascara

Cascara (*Rhamnus purshiana*) is commonly found in moist, well-drained soils, such as stream banks, in forests below 5,000 ft. elevation. It ranges from California to British Columbia, and east to Montana. It can occur as a large shrub or small tree (up to 30 ft. tall), with reddish-brown bark that is often mottled from lichen growth. The inner bark, which contains its medicinal properties, is yellow but turns brown when exposed to sunlight. Trunk diameter can grow to an average of 15 inches. It has simple, oval, alternate leaves, shiny on top and dull underneath, 6 inches long with tiny toothed ridges. The leaves are clustered at the end of each branch. Tiny, cup-shaped flowers have five light green petals and bear a small black fruit.

Harvesting and Processing

Cascara bark is collected during the dry season (mid-April through late August). Trees between 15 to 25 years old produce the highest bark output. The bark is normally peeled prior to cutting the tree, but can also be done afterwards. If the goal is to remove the tree, cut it to ground level (or pull it out with a tractor), otherwise allow a few inches (up to 1 ft.) of the trunk to remain to encourage re-sprouting. Moss and lichen should be brushed off of the bark with a stiff brush. Peeling can be done with various types of knives (such as a carpet knife) or peelers. The bark is sliced vertically and then peeled horizontally in sheets. Limbs up to 2 inches in diameter can be peeled—anything smaller is not cost-effective. Never wash the bark, which removes the medicinal properties. Yields can range from 5 lbs. from a 3-inch diameter tree to up to 80 lbs. from a 15-inch diameter tree. Professional harvesters can often collect 100 to 300 lbs. of Cascara in a day. If you are removing an entire tree you may be able to drag it to a processing site, otherwise you can fill gunny sacks with peeled bark and load them into a pickup truck or other vehicle to take to your drying area.



Dried Cascara bark

Peeled Cascara bark can be sold “green” (fresh) to a consolidation buyer or dried and then sold. To dry the bark, place it in a cool, dry, shaded area for drying or in a low temperature oven or drying rack until it snaps when bent. About 50% of the bark weight is lost through drying. Dried Cascara must then be aged for at least

one year and up to three years. The aging process allows anthrone chemicals in the bark to break down. Without aging, the bark can irritate the stomach and induce vomiting.

Marketing

Estimates suggest that about 5 million pounds of Cascara are harvested annually and marketed globally from the Pacific Northwest. Most of the global demand comes from Europe. Currently, demand has been lower as European exports have been reduced; however, many predict that demand will increase as herbal medicines gain popularity.

If you are considering selling Cascara, the first step is to conduct a feasibility assessment. The study should include determining a large enough volume of product to attract a buyer, as well as whether the business will be profitable.¹ There are two types of buyers: consolidation buyers (i.e., brokers) and processors. Consolidation buyers buy raw material and do their own processing or may buy material that is already dried and packaged. Consolidators purchase from many harvesters to fill large orders individual harvesters cannot fill alone. Processors may also purchase from multiple harvesters and/or from consolidators, and are often large pharmaceutical and/or herbal companies. A minimum volume that many processors prefer is 2,000 pounds of dry weight. Smaller amounts of fresh and/or dry material can be sold to consolidation buyers.

As a natural medicine, Cascara is commonly sold in bulk chipped or powdered form, encapsulated powder, or as a liquid extract. Table 1 lists 2012 prices for Cascara. Prices will depend on the amount of time the bark has aged, moisture content, time of year, and volume sold, in addition to global demand and supply. A buyer may also pay a higher price for a producer's reliability in meeting an order and for product cleanliness.

Form	Price/Unit	Source
Fresh (green) bark	\$0.35-\$0.45/lb.	Local buyer
Dried bark	\$0.90-\$1.20/lb.	Local buyer
Dried bark after consolidation	\$1.58-1.60/lb.	Processor
Powdered bark, bulk retail	\$10.00/lb.	Herbal Company
Quartered bark, bulk retail	\$9.50/lb.	Herbal Company
Liquid Extract	\$11.70/oz.	Herbal Company

Because the rate or return for Cascara is currently low, landowners may not be interested in pursuing it as a full-time endeavor. However, if a piece of land with Cascara is to be cleared, it may be worth the effort to sell the bark, rather than having it go to waste. Cascara bark that is properly dried and packaged has a long shelf-life and improves in quality over time. Cascara can also be thought of as one of a suite of nontimber and timber forest products that can be marketed from one's property. Aggregated together, a suite of low value products produced from your property could be quite lucrative over time and mitigate the risks of depending on a single, high value species that is vulnerable to fire, disease and low prices from global competition. Another option for making cascara a viable pursuit economically is to market directly to customers with value-added products. Since cascara is a medicinal product you should be careful to follow guidelines to protect consumers, but there are many small businesses built around medicinals that they harvest, process, and direct market.

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¹ Thomas, M.G. and D.R. Schumann. 1993. Income opportunities in special forest products: Self-help suggestions for rural entrepreneurs. USDA Forest Service Agriculture Information Bulletin 666. Washington D.C.