

## National Plan for American Forestry

Section pertaining to nontimber forest products.

Library of Congress URL: <http://lccn.loc.gov/33026292>

The bark of cascara buckthorn, a tree occurring from British Columbia and the southeastern borders of Alaska to western Montana and northern California, is an important item in materia medica. The tree is largely limited to areas along or near streams and to swales and moist slopes, and usually occurs in admixture with other species; probably more than half of the stand is privately owned. In general the bark is best handled as a forest byproduct, but the specific use of certain specially favorable lands for growing cascara, under private ownership, is a possibility worthy of future consideration. Nearly all of the commercial stand of cascara buckthorn is west of the Cascades, where it has been estimated that 75 percent of the region, or about 15 million acres, will produce bark in paying quantities. Full utilization of this resource would be ahead of present consumption but hardly in excess of possible future demand. In removing the bark care must be taken not to girdle the tree, injure the roots, remove more than about a quarter (or at most a third) of the bark, or to have the incised portions too close together. It has been estimated that the average section of 640 acres within the optimum belt of the species will, if properly managed, yield 0.7 ton of medicinal bark annually, worth, according to quality and the season price scale, \$80 to \$200. The cut of bark on six national forests of Washington-Oregon over a period of 13 years has amounted to about 316 tons valued at over \$30,000. Vancouver is a chief port of shipment for cascara, an average of over 30 tons, valued at over \$6,200, being exported therefrom annually. Munger (Journal of Forestry 17(5) : 605-607. 1919) reports that in the Northwest cascara-bark collection is essentially a home industry for spring, when the bark peels readily, and that for many Coast Range settlers it is the chief source of ready cash during the first years of land clearing.

The forest lands of the United States produce an enormous wealth of edible nuts and seeds. For example, the pecan crop of the United States, according to the 1929 census figures, was derived from about 5% million wild and cultivated trees of bearing age, which produced 26,150,546 pounds of nuts whose value, at the conservative retail figure of 20 cents a pound, was \$5,230,109. Over half the bearing trees are wild, chiefly occurring on privately owned land ; the cultivated trees, of course, produce the higher-priced grades of nuts. The pinon industry is confined to the Southwest, from western Texas to central Utah and southeastern California. The juniper-pinon type covers approximately 100 million acres, largely owned by the Federal Government. The harvest is uncertain because of the prolonged periods of drought to which the Southwest is subject, good seed years being attendant upon a proper amount of rainfall. In 1925, a good seed year, 1,200,000 pounds of shelled pinon nuts were shipped out of New Mexico alone, according to available Forest Service records. The gathering of pinon nuts is an important seasonal job

for certain residents, especially the native Mexican and Indian population.

Edible wild fruits are another important byproduct of the forest. Wild blueberry picking, for example, is on a commercial basis in several regions of the country, notably New England, parts of the Middle Atlantic States, the Blue Ridge region of Virginia, and parts of Montana, Washington, and Oregon. Over 30 species of the blueberry genus, most of them widely distributed, occur on the forest lands of the country, more especially in the North and Northeast, the mountainous districts of the South, the Rocky Mountain region, and the Pacific Northwest. Five species of the related huckleberry genus are native in the wooded regions (mostly privately owned) of the Eastern States. Western species of blueberry occur chiefly on Federal, railroad, and State lands. Accurate figures as to the extent of the blueberry-huckleberry industry are lacking, but it furnishes seasonal employment to thousands of people, and many thousands of boxes of fruit are picked annually for table use and the canning trade.

Where it is abundant within its range, southwestern Oregon to central California, the Pacific plum is an important element in local economy; when its excellent fruit ripens in summer other local work is often suspended and it is one of the most important food plants among certain Indian tribes, especially the Klamath Indians.

Accurate figures are largely lacking for values involved in the forest ornamental plant industry. There are enormous numbers of ornamental plants in the wooded sections of the country, many of which now enter the horticultural trade; doubtless many more will ultimately do so. Rhododendrons, azaleas, mountain laurel, and other ericaceous plants are shipped out annually, by the carload, from the mountain forests of North Carolina and other southern States, and the total area of acid soils in the wooded districts of the East where these species occur is probably in excess of 15,000,000 acres, probably the larger part of which is privately owned. The latest figures available, which are for the calendar year 1931 and represent fairly average conditions, show that 17,110 leucothoe plants were removed for horticultural use, under permit at a nominal sum, from the Unaka National Forest, Tenn., while 37,547 other ornamental shrubs (chiefly rhododendron and mount am. laurel),

Erised at \$3,434.41, were sold under permit from three Appalachian national forests, the Pisgah, Monongahela, and Unaka. Removal of rhododendron and mountain laurel, where dense, assists in the establishment of timber reproduction, and clear-cutting or severe burning of timber in bottomlands tends to favor occupancy of such sites by rhododendron. On the other hand, removal of these species from the forest on a large commercial scale has in some cases resulted in local extermination of rhododendron and other ornamental shrubs of the heath family. Extermination (rather than thinning) of these species is objectionable, especially along and near highways, not only on account of their pecuniary value, but because they greatly enhance the beauty of the woods and when

in bloom attract large numbers of visitors. In fact, for some mountain communities these shrubs are an important advertising asset, helping to bring in a seasonal tourist trade which is a vital source of local income.

The Christmas-tree industry is a very large one, the annual consumption in the United States being estimated at about 10,000,000 trees, which, at the very conservative retail figure of 50 cents per tree, would amount to at least \$5,000,000 a year. No other country in the world has such a wealth of native conifers as the United States, and there are possibilities as yet undeveloped in the Christmas-tree trade both as a private business and from a public forest management standpoint. The Christmas-tree business, when properly conducted, involves a selective yearly thinning of the stand with a continuous annual supply as the objective. As conducted on the Pike National Forest in Colorado it largely represents a much-needed thinning of young Douglas fir stands, the reproduction of which ordinarily tends to be thicker than is desirable. The city of Denver, Colo., annually consumes about 40,000 Christmas trees plus 500 tons of boughs (for wreaths and other decorations) cut under permit from the Pike Forest, an operation involving a thinning of about 200 to 400 acres of forest annually. Prior to Forest Service management local Christmas-tree demand in Denver was largely met by promiscuous and destructive cutting on private lands, unsightly lopping of trees along mountain highways, and similar acts of vandalism. Such undesirable practices still largely obtain in many localities where forest management has not been brought to bear on the problem. In the East, one Pennsylvania farmer, on 1,500 acres of woodland, has annually averaged \$5,400 net over a 7-year period from the sale of Christmas trees, handling his crop on a selective-cutting basis.

The pre-Christmas season makes a wide-spread demand for labor to cut and handle not only Christmas trees but a great diversity of evergreens for wreaths and other decorative purposes, nearly all of which are obtained from the forest: Conifers, lycopods, and club-mosses from nearly all parts of the country, mistletoe from the South and the South Central States, holly and kalmia in the Eastern States, toyon, Oregon-grape, and salal from the Pacific States, and so on. As mistletoe is a destructive parasite of timber species its harvesting for decorative purposes is a positive benefit to the forest and is worthy of encouragement. Unfortunately, however, only one of the two native mistletoe genera possesses ornamental values.

Coville (U.S.Dept.Agr. Farmers' Bui. 1693) reports that the coastal portions of Delaware and Maryland are the present center of production for American holly greens and that this center is definitely moving southward. He states that in Maryland, during 1930 and 1931, local retailers paid approximately 15, 25, and 55 cents apiece for 10-, 15-, and 24-inch wreaths, respectively, and that bulk holly, in standard-size boxes (2 by 2 by 4 feet) brought pickers about \$2 per box. District Forester Seigworth, of the Maryland Department of Forestry, estimates that, on the average, 10,000 persons (including many entire families) in the eight counties on the Eastern Shore of

Maryland engage yearly in harvesting holly, from which they obtain an annual income of \$150,000. ^ About 10,000 boxes are shipped annually. The Delaware Commission for the Conservation of Forests reported in 1927 that the holly-products industry of that State amounts to an average annual shipment of about 7,600 cases, valued at about \$400,000 and consisting of 1,500,000 wreaths besides loose sprays and branches. The crop is harvested chiefly by local farmers who receive about \$100,000 for their labor.

As already intimated, these miscellaneous forest byproducts have many valuable sociological relations. They furnish seasonal and local employment to numerous persons in the wooded portions of the country. The tapping and rendering of maple sap comes in late winter and early spring. Cascara peeling is largely a spring occupation. In North Carolina, especially in the region surrounding Marion, the collection of galax leaves furnishes employment to a great number of local people between November and March. Expert pickers, it is reported, gather about 10,000 leaves a day, for which they receive in the neighborhood of \$5. The pre-Christmas season makes a country-wide demand for ornamental forest evergreens. All these sources of seasonal local employment bring in cash returns or obviate expenditures as in the case of individual fuel supply, foods, etc., and render possible not only the maintenance of better standards of living but also in many cases the actual existence of communities in forested areas and elsewhere which otherwise could not survive.

The forest produces a great variety and amount of food available for human consumption and, even at this date, numerous Indian tribes are largely dependent upon the forest for subsistence. This vegetable human food of the forest consists of a wealth of wild fruits, edible seeds and nuts, bulbs, tubers, and farinaceous roots, succulent stalks, "greens", mushrooms and other edible fungi, etc.