

Willows for Cuttings

Introduction

Willows (*Salix* spp.), well known for their flexible and vigorous growth, have long been popular in basket and furniture making. A versatile woody plant, various species can also be used for trellises, fencing, floral arrangements, and artistic sculptures. Its fast growth makes willow a popular landscape ornamental, as well as a potential bioenergy crop. This profile will emphasize the production of willows for live cuttings and dried rods.

Marketing

Willow cuttings may be marketed as dried rods for basketry, furniture, and similar uses. Live stems for the floral industry are sold most often when dormant and less frequently when in full-leaf. Willows are also sold as live cuttings for nurseries and landscapes. Depending on the product, marketing possibilities include the Internet, direct sales to craftsmen, craft fairs, farmers markets, floral designers, garden centers, and nurseries.

Market Outlook

Currently there are very few commercial basketry willow growers in the U.S. Much of the willow used for this purpose is imported, generally from the British Isles. The now-retired owners of a commercial willow farm located in Kentucky know firsthand about the high demand for local basketry willow. During their years of operation they were unable to keep up with the increasing demand for domestically grown willow.



WILLOW CUTTINGS DRYING IN ENGLAND (ABOVE) AND WILLOW BASKET (LEFT)

Growers who specialize in less common willow varieties may be able to develop their own niche market. Craftsmen are often willing to pay premium prices for products that are new and different.

Production Considerations

Site selection and planting

Willows thrive in deep, rich soil where there is plenty of water. However, willow is a hardy plant and also tolerates relatively poor soils and windy sites. While a high water table is advantageous, it is not absolutely necessary. The planting site should be well-tilled and free of weeds and large stones.

There are numerous species and hundreds of cultivars that can be grown, depending on the desired use and characteristics preferred by the buyer. Planting material consists of fresh, 10- to 12-inch cuttings taken from 1-year-old willow shoots during dormancy. The cuttings are



planted while still dormant (November through March) by inserting them directly into the soil by hand until 80 to 90 percent of the stem is buried. Some growers use a metal rod to prepare a planting hole when the cuttings cannot be easily poked vertically into the ground. It is important that the bark around the stem not be damaged during the planting process. Planting distances vary depending on the species or cultivar's form and its intended use.

Establishment and maintenance

Full sun and minimal competition are important for the establishment of newly planted willows. After the first year, willows may be cut back to the ground during dormancy to promote multiple stem growth. Thereafter, they may be cut annually or according to the preferred cutting cycle. Once established, willows require relatively low maintenance. Established willow beds used for cuttings may produce for 20 years or more.

Pest management

Deer can become a major problem, possibly requiring an electric fence to protect willow plantings. Rabbits present a problem when they chew around the base of plants. Insect pests include foliage-feeding beetles, aphids, scales, borers, and various others.

It is essential to keep willow beds weed-free from planting until establishment. Methods include cultivation, hand weeding, laying mulch, and applying selected herbicides. The use of black polyurethane is not recommended because cuttings planted into beds with black plastic tend to "cook" under Kentucky conditions. Once established, willows are better able to compete and will generally outgrow the weeds within the beds; areas between the beds can be mowed.

Harvest and processing

Most basketry and floral willows are cut annually when plants are dormant, beginning in late fall and ending at bud break in the spring. This is also the time that cuttings for propagation are taken

to expand the operation or sell to other growers. Freshly cut material intended for planting is sold as individual, unrooted cuttings.

Harvested stems for basketry and related uses are first sorted by length and variety. Rods are then allowed to dry naturally or are processed. Processing can involve steaming or boiling, followed by peeling and drying. Rods are stored under dry conditions until sold.

Basketry, furniture, and floral willow rods are sold by the pound. Rod lengths, which are generally specified by the customer, can vary from one foot to more than 10 feet, depending on the variety and use.

Labor requirements

Labor needs vary by the production system. Estimated per acre labor requirements are approximately 15 to 35 hours for planting, 10 hours for production, 50 hours for harvesting, and 150 hours for sorting, handling, and marketing. Installation of a fence the first year would require additional labor.

Economic Considerations

Site preparation is a key economic consideration for perennial crops like willow. Upgrading soil quality, preparing planting beds, and controlling weeds can be capital-intensive activities. It is advisable for potential producers to experiment with willow production to refine both production costs and marketing strategies for their situation. Producers with a potential deer-feeding problem should be prepared to invest in adequate fencing for deer control. Depending on the type of fence used, from lower-cost portable electric fence to higher-cost permanent fences, this could be the most costly part of willow production. Where permanent fencing is desired, site preparation costs could easily exceed \$6,000 per acre just for fencing. Less expensive electric fence options would decrease this cost.

An acre of well-managed willow could produce 4 to 5 tons of marketable rods. Retail market

prices for basketry willow can range from \$6.50 to \$10 per pound for natural rods and the same to higher for processed rods. If markets are well cultivated and accessible, this could generate significant returns to land, labor, and management. However, markets for a thinly traded commodity like willow can be volatile and difficult to cultivate.

Returns to land, labor and management could vary from \$4,000 to \$40,000 per acre, depending on acreage, production method, type of willow, and market. In Kentucky, it is more likely that willow would be produced in smaller intensive plots (1/4- to 1/2-acre) yielding gross returns of \$12,000 to \$28,000 with returns to land, labor, and management starting from the \$2,000 range.

Selected Resources*

- Nursery Crop Production (University of Kentucky)
<http://www.ca.uky.edu/HLA/Dunwell/Nlgetstart.html>
- American Willow Growers Network (AWGN, English Basketry Willows, NY)
<http://www.englishbasketrywillows.com/Welcome/AWGN.htm>
- Willow Cultivation from Rods and Cuttings (West Wales Willows, United Kingdom)
<http://www.westwaleswillows.co.uk/willowplanting.html>
- Willow Cuttings (JPR Environmental, United Kingdom)
<http://www.jprwillow.co.uk/willow-cuttings.htm>
- Willow Growing and Harvesting (Roy Youdale, Basketmaker, United Kingdom)
<http://www.willowbaskets.biz/willow.htm>
- Willows (Bluestem Nursery, British Columbia, Canada)
<http://www.bluestem.ca/willows.htm>

**Some of the production methods described in the United Kingdom publications are not compatible with Kentucky growing conditions.*

Commercial Web sites listed in the resources are provided for information purposes only and their inclusion does not represent an endorsement of the company or its products by the University of Kentucky.

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Photo by Ken Grainger, Wikimedia Commons

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For additional information, contact your local [County Extension](#) agent