



## UI Extension Forestry Information Series

### Hardwoods in the Pacific Northwest

*Yvonne Carree Barkley and Ron Mahoney*

Regulations and a desire to improve water quality, fish and wildlife habitat, and stabilize marginal farmlands, combined with the threat of global warming, have increased interest in planting trees as one answer to environmental concerns. This, coupled with the need for additional farm/ranch income has led to research on economically attractive, environmentally sound alternative tree crops.

Hardwoods have long been highly valued for everything from firewood to the construction of fine furniture. Hardwoods not only provide timber, but produce fruit and nut crops, contribute to biological diversification and wildlife habitat, stabilize soils, and improve aesthetics.

One of the most attractive reasons for planting hardwood species is economics. At 40 years, an acre of top quality Ponderosa pine would be valued at \$3,000, whereas an acre of top quality black cherry could be valued as high as \$30,000. On-farm processing of certain hardwoods would produce extra income for the landowner, by selling directly to local cabinet or furniture makers.

After reviewing the characteristics of several high-value hardwood species, black cherry (*Prunus serotina*) was chosen for initial experimentation. Black cherry is adapted to a wide range of environmental conditions. Its wood is exceptionally stable and is easily air-dried without shrinking, warping or cracking, making it suitable for on-farm processing. Locally, black cherry sells for \$3.50 a board foot retail. This high price and the low availability of quality black cherry lumber make this species very economically attractive.

Research began with extension field trials located in northern Idaho. Initial observations showed:

- Black cherry is very frost and drought tolerant. Care should be taken with frost pockets, in which unseasonable freezing may damage trees that are leafed out.
- Larger planting stock decreases mortality from transplanting shock.
- Animal depredation can be severe and protection from deer, elk, and rodents is necessary in areas with large populations of these animals.
- Black cherry does not grow well on sites with poorly drained soils.
- Weed control, pruning, and irrigation greatly benefit the early growth of black cherry.

Success with black cherry led to interest in other high-value, multi-use hardwood species. Further extension field trials were established at Research and Extension Centers at Sandpoint, Moscow and Parma, Idaho. Species were chosen for timber value, hardiness, and potential use in wildlife habitat, riparian and windbreak plantings, water quality improvement, and nut and other commercial production. Species include black walnut, Arizona walnut, heartnut, buartnut, Turkish tree hazel, white ash, red oak, Idaho sweet bur oak, English oak, bur oak, pin oak, swamp white oak, shellbark hickory, shagbark hickory, American chestnut,

High value timber. Nut crops. Increased property values. Wildlife habitat. Water quality. Soil conservation. Biodiversification. Awesome beauty and phenomenal grace. Think of these attributes while considering that hardwoods will grow well in the Pacific Northwest.

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**About the Authors:** Yvonne Carree Barkley is an Extension Associate - Forestry and Dr. Ron Mahoney is Extension Forester and Professor at the University of Idaho.