

Integrating Production of Nontimber Forest Products with Timber Management

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Workshops that educate landowners about forest management are commonly held throughout the Northeast. The purpose of this article is to describe a workshop about nontimber forest products held at Telstar High School in Bethel, ME, in 2006. Landowners Ernest and Alberta Angevine were featured in the workshop as models for other landowners because of their excellent work in integrating the production of nontimber forest products with their ongoing timber management. The workshop was the result of a partnership between member organizations of the Forest Working Group in Maine, including the Maine Forest Service, Small Woodland Owners Association of Maine, University of Maine Cooperative Extension, Resource Conservation and Development Councils of Maine, Soil and Water Conservation Districts of Maine, USDA Natural Resources Conservation Service, and the Northeastern Area State and Private Forestry unit of the Forest Service, U.S. Department of Agriculture. This coalition of agencies may also serve as a model for other States in providing forest workshops to woodland owners and others over large geographic areas. The working group meets regularly to plan for and provide these workshops.

The workshop was designed to provide basic information to landowners so they can better enjoy and appreciate their woodlands, and educate landowners about the nontimber forest products (NTFP) that can be derived from their woodlands in addition to the traditional timber benefits. The morning workshop sessions included 1) an introduction to the type of NTFP that are marketed in Maine; 2) basic information about woodland ecology with specific information about plants (for example, trees, shrubs, berries, and



Ernest and Alberta Angevine demonstrate walking sticks made from material thinned out during a timber stand improvement project.

herbs) and mushrooms that can be utilized as NTFP; 3) identification and selection of specialty woods; and 4) how to market NTFP using a specific case study (potted cranberry plants with their brilliant red fruits attached).

In the afternoon, the group adjourned to the nearby woodlot of Ernest and Alberta Angevine. Ernest and Alberta were great hosts. With the help of family, friends, and neighbors, the Angevines established



Judy Coolidge speaks about an Environmental Day held annually at the Angevine woodlot for elementary students in the Bethel, ME, area.

several field stations showcasing nontimber forest products that came from their forest and nearby woodlands. These products were often harvested in conjunction with traditional timber stand improvement methods, a great example of integrating nontimber with timber production objectives.

The 14-acre stand that we visited had been clearcut in the 1920s, and the logs were floated out on the adjacent Androscoggin River. Spruce and fir were the dominant species at the time of the clearcut. After the Angevines purchased the stand in 1973, they conducted a series of thinnings that favored the white pine, red oak, and red spruce. In 2006, the stand was about 80 years old and dominated by towering white pine, including a few very large residual pines left over from the original clearcut. There is a heavy midstory layer of balsam fir, beech, and birch that is overtopping the abundant white pine regeneration

currently growing in the lower understory. Ernest made an oral agreement with a friend, Frances Palmer, to remove the competing hardwoods and balsam fir, while retaining some red oak and spruce for future crop trees. The brush that is cut is mostly left on the site to decay and provide soil nutrients, but some is used for making nontimber forest products. For example, as part of the agreement, Mr. Palmer may harvest some of the balsam fir from April to June (when the sap is running and the bark is easy to peel) to make weather sticks, which he and his wife sell to local outlets. Ernest himself has made hundreds of these weather sticks to give to family and friends. Weather sticks respond to the humidity of the air, flex when the humidity is high, and are popular among homeowners interested in monitoring the vagaries of weather in New England and elsewhere. Weather sticks are made by cutting the stem both above and below a particular branch node, and stripping the bark from the main stem and one of the side branches. The main stem is cut in half vertically to produce the distinctive form of the weather stick. In addition to weather sticks, Mr. Palmer can supplement his income by using balsam fir tips from the Angevine woodlot to make Christmas wreaths for family and friends as well as for local markets. These branch tips are harvested in late fall without killing the trees because the tips soon grow back.



Ernest Angevine discusses using white pine boards sawn from rough pasture pine for rustic furniture (benches, tabletops, and coffee tables, among others).



Richard Angevine shows a coffee table made from rough pasture pine.

Hardwoods also make useful products. For example, Ernest makes walking sticks from some of the competing white birch trees that are removed to benefit the pine regeneration. Ernest gives these sticks to family and friends, and burns their initials into the wood. These sticks are a potential sales item that can be sold directly at local fairs or farmers' markets, or sold to local retail outlets.

The maples on the property are also being tapped by family members and a neighbor, Ira Gibson, who uses the sap for maple syrup production. During the woodlot tour, Mr. Gibson discussed the process he uses to make his syrup. The boles of certain trees are also used for wood sculpturing by local carvers such as Steve Stone. Steve discussed how he makes sculptures with his chainsaw, and showed many examples of his work, including bears, the most popular subject. Bob Kenniston, a local wood turner, and his wife Virginia displayed beautiful bowls that he made from burls collected from a variety of loggers.

The Angevine's son Richard and family friend Richard Cross displayed benches, a coffee table, and other items made from wood collected and sawn out on the home farm property. Large pasture pine with poor form was sawn to produce some of the unique furniture that they make for family members. These pasture pine boards are approximately 2 $\frac{3}{8}$ inches



Frances Palmer (left) and Ernest Angevine demonstrate how to cut out a weather stick from a balsam fir. Also shown is a Christmas wreath made from balsam fir tips.



Steve Stone (right) shares some of his wood sculpture products.

thick and were sawn out in 8-, 10-, 12-, 14-, and 16-foot lengths. Benches similar to those made from the Angevine's woodlands can be seen at the forestry exhibit at the Fryeburg Fair held in Fryeburg, ME, each fall.

In addition to the many activities described above, the Angevines also prune their white pine trees to remove side branches up to 17 feet off the ground. In time, this will help produce a high-quality butt log.



Bob Kenniston (right) showcases his beautiful wooden bowls made from burls.

Finally, educational opportunities for adults and youth are an important product from private woodlands, and here, too, the Angevines shine. The tour highlighted in this article is obviously a great example of adult education. Their daughter, Judy Coolidge, who is a second grade teacher at the local Crescent Park School in Bethel, shared information about an Environmental Day that she conducts each year for all second grades within the MSAD#44 district. She has been doing this for more than 17 years, and it has been a highlight not only for the students and teachers but for all of the parents that attend. She establishes educational stations on the Angevine property by bringing in local experts who help explain forest values and management as well as other environmental issues. There are nine stations, and the presenters share ideas, knowledge, and activities with the children. Also, as they journey through the property to the various stations, the children read different clues and questions about nature for them to ponder with their parents. In today's age, when many children seem divorced from the land more than ever, these educational efforts are critical for helping our kids maintain connections to the land.

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Ernest and Alberta Angevine, Bethel, ME

In closing, the Angevines are obviously fully engaged and deeply connected to their woodlands, and ably demonstrate their deep love of the land. Their activities have added immeasurably to their own enjoyment of their land. In addition, the Angevines are producing not only valuable timber that is important for the local and State economy but creative, intriguing nontimber forest products emblematic of the entrepreneurial spirit of the small landowner in Maine and throughout the entire Northeast.



This black bear sculpture was created by Steve Stone.

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