

MANAGING BLACK WALNUT IN NATURAL STANDS: THE HUMAN DIMENSION

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ABSTRACT— In managing black walnut, or any forest tree species, the human dimension is often overlooked. As a result, both the number of landowners managing their land and the number of forested acres under management has not significantly increased over the past 30 years. Elements of the human landscape are explored and a roadmap for engaging landowners is proposed.

When asked to write on the subject of managing black walnut (*Juglans nigra* L.) in natural stands, my first response was, "Why?" What had changed since the last overview was presented at the Fifth Black Walnut Symposium (Slusher 1997)? Other than a few new herbicides to control competing vegetation, the answer was "Not much". During my search for new information, I realized just how much information was available to the landowner, especially with respect to managing hardwood stands. Much of this information is contained within the published proceedings from past Central Hardwood Forest Conferences. All papers from the first twelve conferences are now available on-line through the table of contents viewed at <http://www.ncrs.fs.fed.us/pubs/viewpub.asp?key=1065> (Fralish 2002).

But, how extensively has this wealth of knowledge been applied? Forest statistics yield a sobering answer. Within the naturally occurring range of black walnut non-industrial private forest (NIPF) landowners own 86% of the timberland area with black walnut present; 13.2 million acres (Schmidt and Kingsley 1997). But, only an estimated 5% of NIPF landowners have a written management plan (Reed 1998). While many forestland owners indicate that they have a plan, it often is not documented in a way that would allow its easy sharing with others. What is most distressing is that the number of managed acres has not changed in the past 30 years!

Why hasn't the acreage of managed forests increased? Among the most striking feature of NIPF land is its concentration in small tract sizes.

More than 90% of these parcels are less than 100 acres and of those more than 70% less than 10 acres (Reed 1998). Current information additionally suggests that the number and proportion of NIPF landowners who own small parcels will only increase in the coming years.

While some appreciation for the economic value of fine hardwoods in natural stands has been passed from one generation to the next, it is painfully obvious that there is a growing lack of appreciation for this economic value among the new landed gentry. One just has to look around and observe the indiscriminant clearing of small-diameter black walnut and other fine hardwood species as drainages and fencerows are "cleaned out" or in other cases, no management activity occurs as the land sits in a descendant's trust.

THE HUMAN LANDSCAPE

So, today's challenge is actually the same challenge from days past; but, with a twist. The time-honored challenge is how to interest private landowners with walnut in their woodlots to manage this resource. The twist is that the target audience is growing larger each day as land ownership continues to fragment, but the number of professional foresters to generate interest in forest management has remained relatively flat over the past 20 years.

To gain the most effect from limited resources invested in NIPF assistance, identification of submarkets for focus may help accomplish more

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immediate results. Black walnut growing in natural stands, for example, is an appropriate model submarket. Stands that are nearing harvest age could focus landowner attention on the economic value of fine hardwoods for lumber and veneer markets. Immature stands could provide opportunity for showcasing even larger economic return through simple management activities such as thinning and pruning.

By determining who owns or manages land that could contain natural stands of black walnut, foresters could concentrate their outreach efforts on selected audiences. Three distinct groups come to mind: long-time woodland owners, new woodland owners and trust officers. Long-time landowners are older, have more practical experience and rely upon personal relationships in learning new skills. They usually reside on property that has been in the family for generations. Of these three groups, the long-time landowner stands the best chance of recognizing the value of timber, since in all likelihood they have sold timber from their land at some point in time. These individuals are also more likely to know, or at least recognize, named and branded organizations like the Walnut Council or the American Tree Farm System.

New landowners tend to be younger, better educated, and use technology to access and manage information. They also tend to be absentee landowners. Trust officers comprise a new segment of forest “ownership”. While they do not own the land, they serve the interests of their clients. With the need to serve many clients simultaneously, these individuals tend to have many of same attributes of new landowners. Individuals belonging to both of these groups have a much more casual relationship with trees and as such do not fully appreciate the many benefits of a managed forest, let alone see the forest’s economic potential. Mention of the name “Walnut Council” would in all likelihood generate a blank stare.

Even within these narrow subgroups, one size does not fit all when it comes to learning. While there are many learning styles, behavioral scientists have divided these styles into two types: analytical and rational. Individuals possessing an analytical learning style have long attention spans and can resist distractions. They tend to be highly reflective and can concentrate on the activity at hand. They prefer complexity. These individuals also prefer a more formal learning environment and see the instructor as an information giver. They tend to view the learning experience as a nonsocial event.

On the other hand, individuals having a rational learning style have relatively short attention spans and are easily distracted. Simple tasks and

concepts appeal to them. They value learning centered in the self that has personal relevance. People in this group prefer the informal learning setting and see the instructor first as a person.

Up to now, the focus has been on target audiences. What about instructors and their message? While long a foundation of forestry outreach and education programs, foresters need to shift away from one-dimensional prescriptions of basically timber management information and advice. Due in part to the huge and increasing diversity of owners, broader management approaches are needed. Natural resource disciplines can work together. Wildlife biologists and foresters can deliver an integrated, value-added package to landowners so that they see multiple benefits, both in the short-term (improved wildlife habitat) and long-term (higher quality timber). These benefits in turn make their land more valuable in real dollars.

A ROADMAP FOR ENGAGING LANDOWNERS

What do submarkets, learning styles and multi-dimensional delivery programs have to do with managing black walnut in natural stands? Plenty! Foresters and Walnut Council members alike must use their limited resources to speak to the right audiences. If they do not, then as older landowners die and land fragmentation increases, the number of acres of natural black walnut and other fine hardwood stands under management will not increase, but decrease.

How can the number of natural black walnut stands that are actively managed be increased? There are undoubtedly many ways to reach this goal. From my perspective I offer the following four recommendations to motivate the collective “us” to work smarter AND harder. The old cliché, “work smarter, not harder” is a misnomer—it has allowed our society to take the easy way out. We will have to do both if we want to be successful.

First, identify landowners who own natural hardwood stands that might include black walnut. Geographical information systems are becoming more widely used by state and county governments for tracking a wide array of information, including property and timber sale transactions. In many cases, this information can be gathered free of charge; in other cases, data analysts provide this information for a nominal fee. Outreach activities can target these landowners with the primary goal of raising their level of awareness as to the total value of the natural resources on their property. The aforementioned trust officers must not be forgotten. Efforts need to be made to network with

property appraisers and financial institutions and identify those officers who are responsible for managing these land trust accounts.

Second, refine both low- and high-tech information vehicles and make sure they are accessible and relevant to individuals managing hardwood stands. Newsletters need to deliver information in a timely manner that is practical and easily digested so landowners can apply this new knowledge to their land. An emphasis on access to information will offer opportunities to reach a greater number of motivated owners in contrast to the more typical delivery of structured programs. This will be especially helpful for those new, younger landowners and trust officers.

Web sites need to be easily navigable with sophisticated graphics kept to a minimum in order for rapid downloading of information from the site. An excellent example of an easy-to-navigate Web site is Walnut Notes at <http://www.ncrs.fs.fed.us/pubs/viewpub.asp?key=103>. A visitor can quickly download a series of short PDF files on a wide variety of black walnut management topics. However, if net surfers have to wait for dazzling images to appear on their screens or the information they seek is contained in exceedingly large document files, chances are very good that they will not re-visit the site. Case in point, the last proceedings from the 1996 Walnut Symposium is available on-line at <http://www.ncrs.fs.fed.us/pubs/viewpub.asp?key=255>. If one wants information on, for example, top-working black walnut then they would have to download the entire proceedings—all 59.3 MB. This might not appear to be a big issue to residents of metropolitan areas with high-speed internet access. But, to individuals living in rural areas who are constrained by 56K modems, downloading web pages with large embedded files is a big and very real frustration.

Providing technical assistance to NIPF owners has clear results—more active forest management. However, important questions remain about the origin, quality and cost of such assistance. With the number of landowners increasing and the number of resource professionals holding constant at best, the days of multiple one-on-one on-site consultations are clearly numbered.

The third recommendation is shift the paradigm where both landowners and foresters see the role of the local forester less as a “county agent” and more of a “coach”. Among the most innovative technical assistance tools being extensively tried these days is coached planning. This outreach effort redefines technical assistance to utilize professionals as advisers of work that is actually done by the landowners themselves. However, to implement this

team approach, each state will have to come to its own set of terms about the appropriate roles and mix of services by the private consulting sector and public service foresters, as well as the prospective role played by NIPF owners themselves.

The role of NIPF owners as teachers is increasingly recognized. A growing number of successful volunteer programs, such as Master Gardener, have only begun to tap the potential of using private citizens to advance information in their own groups of influence, as well as teach professionals about emerging interests or challenges. Walnut Council members are instrumental in this type of outreach effort. The learning and knowledge based that is accumulated and shared among landowners empowers them to become even more active in the management of their land. It also gives them the confidence to teach other landowners.

The fourth, and final, recommendation is think outside the box when “recruiting” either clients or fellow landowners. Most natural resource professionals have been trained to approach “the big picture” from their own, sometimes rather myopic, perspective. Sure, most professionals endured some cross-training in their collegiate years and they might even interact with others outside their discipline. But, for the most part they still think the best way to approach the problem is through the “enlightenment” that comes through their discipline.

My epiphany came when a consulting forester and avid walnut grower was asked to speak about managing timber for wildlife at a local Quality Deer Management meeting in central Missouri. Over 200 people from the local area came out to learn how they could harvest bigger deer. Wildlife management was the hook, the motivator to get them managing their woods. At the meeting there were large land plat maps posted along one wall. One by one, landowners approached the maps, took the highlighter and colored in their property indicating their willingness to participate in the program. This simple exercise accomplished three things. First, it gave each landowner a view of the bigger picture that managing his or her land would have some impact on neighboring property. Second, it gave them a sense of ownership as they took pen in hand and colored in their parcels. Third, it put subtle pressure on those landowners who were not participating to manage their woods.

The Walnut Council was formed in 1970 by a small group of landowners, foresters, forest scientists and wood processors to promote the proper management and utilization of black walnut. Over the years the Council has grown into an international organization that reaches private

landowners through newsletters, and chapter, state and national meetings. In that time, professional foresters and forest scientists delivered information in a timely manner as it became available from Federal and State agencies, and universities. Yet, after 33 years there are still less than 1,000 members; of which even fewer are landowners if you subtract professional members.

So, the background information and strategy presented here is extremely relevant if we are serious about increasing both the number of individuals actively managing their woodlands and in turn the number of acres under good forest management. Of all the dimensions of cultivating black walnut that have been researched and published over the years, it is time we turn our attention to a key piece of the puzzle often overlooked: the human dimension.

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