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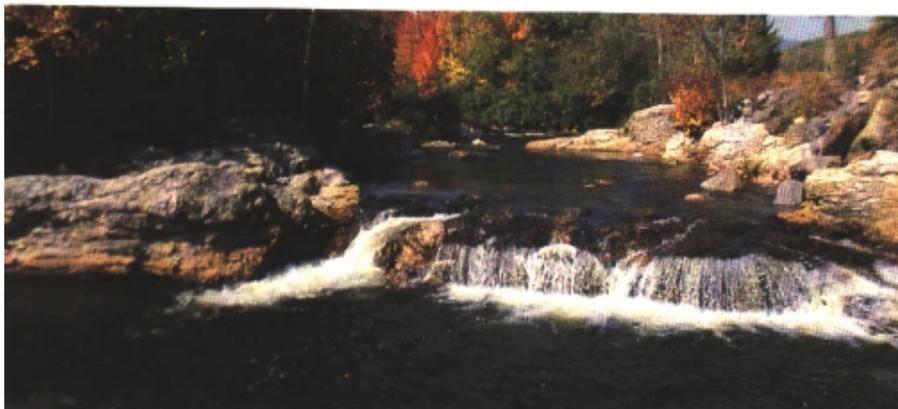
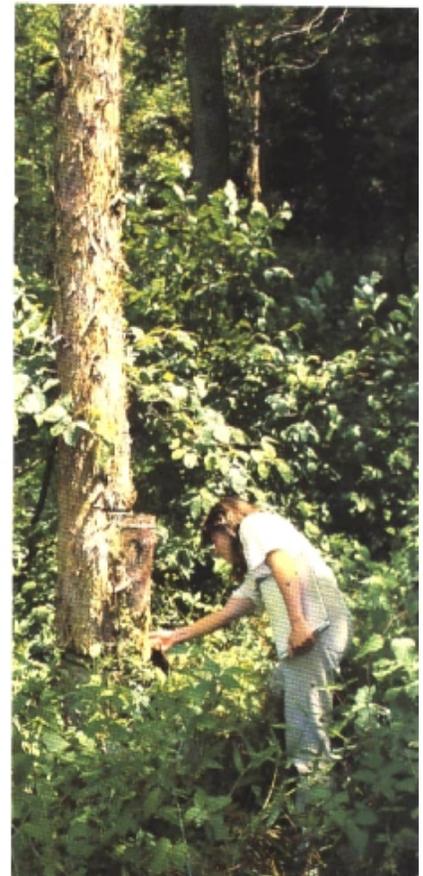
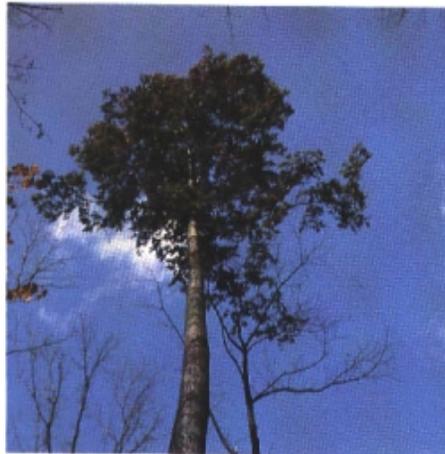
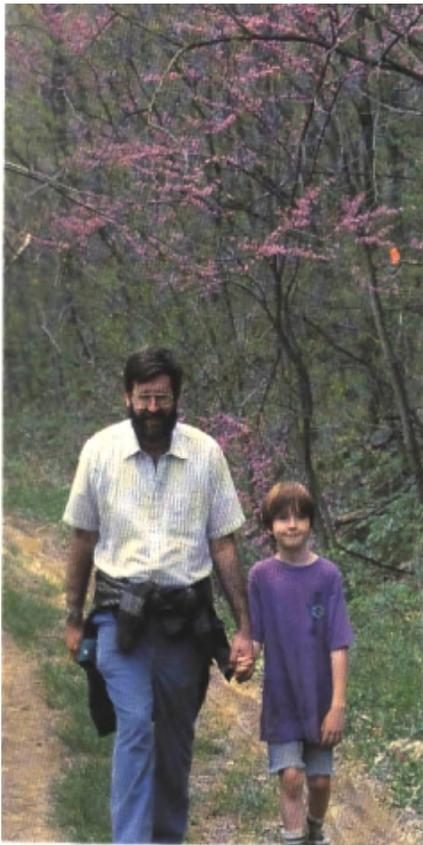
Northeastern Area  
State & Private Forestry

Forest Resources  
Management

Morgantown, WV

NA-TP-19-93

# Crop Tree Management In Eastern Hardwoods



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Much of the timber management information in this publication is based on long-term crop tree release research conducted by the Timber Management Research Project at the Fernow Experimental Forest in Parsons, West Virginia. This work was started in the mid 1960's.

Integration of wildlife and aesthetic concepts began in Morgantown in 1987 when Forest Resources Management personnel of the Northeastern Area, State and Private Forestry, were looking for a means of accomplishing multiple landowner objectives on the private, non-industrial forest. In 1990, the Crop Tree Management concept was expanded to include accomplishment of water-quality objectives.

It is our intent that this publication be used as a guide by forestland managers working on private, non-industrial forests in the eastern United States. We have written it, however, so that the information it contains may also be shared with landowners interested in the management of their woodlands.



**Photographer:** *Arlyn W. Perkey*

**Editor:** *Brenda L. Wilkins*

**Editorial Assistance:** *J. Howard Knotts*  
*Kelsey L. Wilkins*

**Publication Design and Layout:** *Brenda L. Wilkins*

**Desktop Publishing Assistance:** *Nancy A. Lough*

**Cover Design:** *Victoria D. Watkins*

**Computer Graphics:** *Nancy A. Lough*

**Illustrations:** *Brenda L. Wilkins, Victoria D. Watkins, and Nancy A. Lough*

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# **Crop Tree Management**

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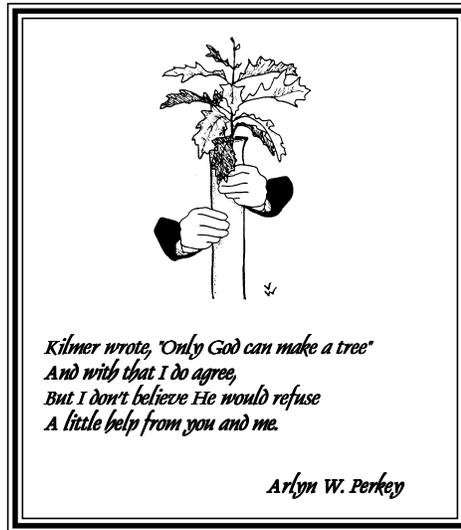
Arlyn W. Perkey  
and  
Brenda L. Wilkins

Forest Resources Management  
Northeastern Area  
State & Private Forestry  
USDA Forest Service  
Morgantown, WV

and

H. Clay Smith

Forest Management Research  
Northeastern Forest Experiment Station  
USDA Forest Service  
Parsons, WV



*This publication is dedicated to all the service foresters and consultants who tirelessly work to manage the private, non-industrial forests of the eastern United States. It is our hope that it will help them better serve this landownership which is so critical to future generations of Americans.*

#### Acknowledgments

We would like to thank several people for their assistance in making this publication possible. In our Morgantown Forest Resources Management Group, the combined skills of Nancy Lough, Vicky Watkins, and Jamie Knotts contributed greatly to the overall project. Nancy spent several hours at the computer assisting with desktop publishing and preparation of the camera-ready copy. She also did the computer graphics. Jamie organized and scanned all the photographs and helped edit text. Vicky designed the front and back covers, in addition to rendering some freehand artwork within the publication. Helen Wassick assisted with production of drafts, and Gretchen Hanna donated her time to provide valuable proofing assistance.

Watershed Planners in our Morgantown office, Karen Sykes and Roxane Palone, were contributing authors for Section VI, *Managing Water-Quality Crop Trees*. Karen also compiled the information contained in Appendix D, *Flood Tolerance of Specific Tree Species*.

Our thanks also goes to Toni McLellan from the Durham, NH, S&PF field office for providing input regarding management of wildlife habitat.

We appreciate all the time and hard work these devoted and talented professionals contributed to the finished product. Their help made our jobs easier.

Arlyn, Brenda, and Clay

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## *Childhood Memories*

*"Take my hand," my father said.  
"Walk through the woods with me.  
I'll show you things that other folks  
Might never chance to see."*

*So I skipped along at Daddy's side,  
And saw sights to behold.  
The hoot owl with his eyes so wide,  
And leaves of red and gold.*

*I saw bees and their honey tree,  
We took a careful look.  
We dug sassafras for tea, and  
Watched deer by the brook.*

*We came across a tiny pine,  
I said it was so small.  
My Dad said in a few more years  
It would be very tall.*

*He said, "You may be bigger now,  
But that won't always be.  
It will pass us up somehow,  
Then dwarf both you and me."*

*We watched a squirrel on a limb,  
Consume an acorn treat.  
It didn't seem to bother him,  
That we should watch him eat.*

*A rabbit jumped out of the brush,  
I asked my father, "Why?"  
"That hawk made the rabbit flush."  
He pointed toward the sky.*

*"Nature has to balance things.  
You'll understand some day.  
That rabbit could be eaten,  
If he doesn't get away."*

*I didn't want to leave that glen,  
When Daddy said, "Let's go."  
He promised we'd come back again.  
So more that he could show.*

*Like the pine, I've now grown tall,  
But I recall that wonderland.  
And how I learned about it all  
In the clasp of my father's hand.*

*Brenda L. Wilkins*