


## The Woods in Your Backyard

### Addressing the Challenge of Managing Small Woodlands

Jonathan Kays  
Natural Resources Extension Specialist  
[jkays@umd.edu](mailto:jkays@umd.edu)



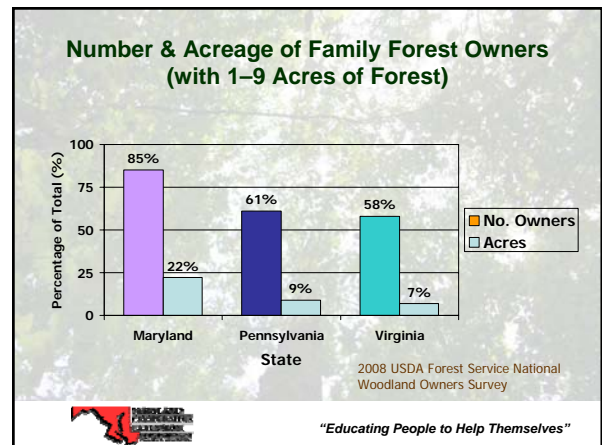
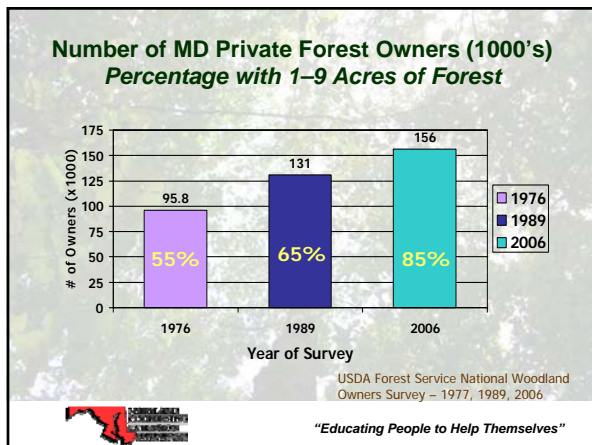
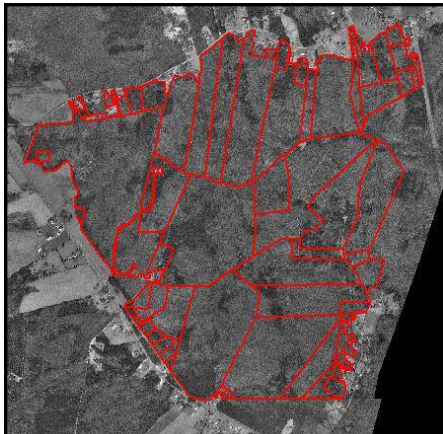
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## Forest Ownership Trends

- ↗ woodland owners
- ↘ ownership tract acreage
- short tenure of ownership
- new/different owner's (land ethic)
- The words we use:  
Forests >  
Woods >  
[Natural Areas]





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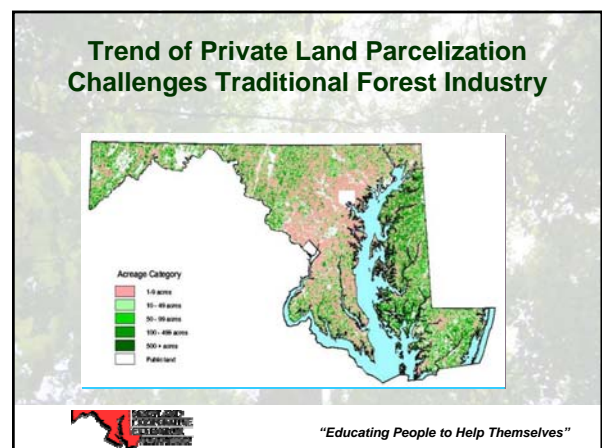
contiguous forest tract  
(Louisa Co, VA)

1 Forest Patch now  
65 Forest Parcels

10 acres average;  
0.1 to 90 ac




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### Negative Effects of Forest Fragmentation

- Disrupts natural wildlife travel corridors
- Decreases amount of interior habitat
- Increases edge effects
- Increases disturbance by humans and domesticated animals
- Encourages exotic and invasive species
- Difficult to manage



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### Landowners: part of the solution

- Especially if neighbors cooperate, they can improve forest habitat
- Motivated by enlightened self-interest.




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### Disconnect With Small Acreage Landowners

- Most professional forestry assistance directed to owners with more than 10 acres
- Urban forestry programs address community forests
- **No specific program for those with 1-10 acre forest landowners that make up the majority of owners**
- There are few service providers at present to work with this audience. Many foresters & loggers not interested!



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### Challenges To Be Addressed



Transition from mowed to natural use for objectives you find important



Enhance existing natural areas for what you want





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### The Woods in Your Backyard Manual

*"A self-assessment for landowners (clients)"*


- 5 Parts
  - Part I - Introduction
  - Part II - Get to Know Your Property
  - Part III - Ecological Principles
  - Part IV - Put Your Knowledge into Practice
  - Part V - Workbook
- 17 Lessons
- 20 Activities
- 4 Appendices
- Resources List
- Glossary

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### Objectives WIYB Program



- Develop self-assessment manual that will educate small acreage owners how to create & enhance natural areas for sustainable outcomes. Apply conventional forestry techniques.
- Develop a local delivery & mentoring system using trained volunteers.
- Train and develop service providers. ←




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### Manual uses a learning approach....


- A lesson...
- Followed by hands-on activities that get the person on their property to gather information...
- Complete the activity sheet that builds on previous lessons.
- User ends up with the basics of a forest stewardship plan and way to implement it.


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### Conceptual Framework of Looking at One's Property – Page 4

- Three types of land use:
  - *Intensive use* – buildings, sheds, paved areas, etc
  - *Intermediate use* – lawns, garden, pasture, orchard
  - *Natural use* – forested, unmowed areas with small trees & shrubs





Paired 3-acre plots



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### Opportunities in backyard woods management must appeal to landowner interests

- Amenity resources
- Forest health
- Wildlife
- Water management
- Fire risk reduction
- Income generation - last

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### Amenity resources

- Scenery
- Trails
- Privacy
- Shade



Typically the MOST important product of personal natural areas



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### Forest health: another opportunity

Insects & Disease

- Emerald Ash borer
- Gypsy moth
- Hemlock Woolly Adelgid
- Etc.

Invasive & Exotic Species

- Tree of Heaven
- Others





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### Improving Wildlife Habitat Value

Getting the message, 'Messy is okay'  
Human – Wildlife conflicts possible





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### Providing and Enhancing Habitat Elements

- Mast trees (produce edible fruits/nuts)
- Rocks (cliffs, outcroppings, piles)
- Snags (dead standing trees)
- Water (stream, pond, wetland, spring)
- Wolf trees (large, spreading, in the open)





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### Providing and Enhancing Habitat Elements

To increase the amount and/or variety of wildlife you host

- Brush piles
- Dense thicket
- Edge
- Forest openings

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### Logging in Large-Lot Suburban Developments with a Good Forester




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### Offering a Menu of Services. Who are the Service Providers?

- Layout a trail network
- Control invasive plants
- Build a brush pile
- Create a campsite
- Reduce hazards (trees)
- Release "crop" trees
- "Build" a natural area
- Merchandise a few logs



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### Who Can Provide Woodland Services to This Clientele?

Those that are already in the neighborhood!

- Arborists, landscape contractors, and other green industry professionals, partnering with foresters & loggers.




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### Professionals can help because ...

- Most landowners are not opposed to managing their land
- Many landowners do not know:
  - possible management options
  - the amount of funds required for management
  - the benefits of management




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### Nelsons' Property Map

Activity 1 (case study), Page 7 in manual

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### What are Your Interests?

Activity 4, Page 10

Table 1 – Determine your Interests

Resource Benefit	Human Values				
	Income Production	Enhance Property Value	Personal Satisfaction	Privacy & Sanctuary	Reduce Lawn Mowing
Natural Area Improvement					
Natural Products					
Wildlife Habitat					1
Water Quality			2		
Recreation					
Aesthetics				3	

- Reduce time spent mowing lawn and improve wildlife habitat.
- Improve the water quality of Oak Creek.
- Improve aesthetic enjoyment and sense of privacy.

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### Patch Characteristics Affect Habitat Value

Figure 2 – Page 18

- Patch size and proximity affect wildlife habitat
- Larger, closer, and connected habitat is more useful to wildlife
- Figure D above is best for wildlife; Figure A is worst

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### Google Earth & Web Soil Survey

"Visualizing the Landscape for Clientele"

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### Designate land management Units

- Add units to hand drawn map or whatever type of map used.
- Tree identification basics

- 1) ...mixed hardwoods of various species, medium-sized
- 2) ...young aspens
- 3) ...mature hardwood
- 4) ...streamside riparian area (tall grass/thicket)
- 5) ...lawn (plant to trees)

Activity 7, Page 23 - 24

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### Tree and Shrub ID

Part II, Lesson 3, Page 25


- What kind of trees and shrubs grow on your land?
- Use simple MD Leaf Key to start. Peterson's Guide to Trees and Shrubs a great resource. Many online resources as well.
- The "manual" covers the bare basics

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### The Nelsons' Most Common Tree and Shrub Species by Land Management Unit

Managed unit	Vegetation type	3 Most common tree species	3 Most common shrub species
1	mixed hardwoods	yellow poplar, hickory, oak, maple	dogwood, musclemwood, green briar
2	aspen	aspen, yellow poplar	dogwood, green briar
3	mature hardwoods	red oak, hickory, yellow poplar	dogwood, cedar, service berry
4	streamside riparian area	n/a	raspberry, green briar
5	lawn	n/a	n/a

Activity 7, Page 23





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### Part III - Ecological Principles

*Ecology: the study of natural communities and how they function and interact*

- Principles of succession
- Principles of forestry
- Water resources and your natural area
- Principles of wildlife ecology

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### Common Invasive & Exotic Species

Do you recognize them? Page 43




### Land Management Techniques

"Taking forestry to the backyard"

- Best management practices
- Brush piles
- Create campfire area
- Firewood cutting
- Food plots
- Mast trees
- Tree planting
- Trails & roads
- Much more...




### Application of Common Forest Management Techniques

Planting trees with shelters for deer protection

Creating a snag by girdling

Firewood thinning







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### Make a Timetable – Spell out Details

Lesson 5, Activity 19, page 74

Management unit	Goal	Project description (Provide details and step-by-step activities)	Priority	Start date	Project completion date	Who will do it?	Cost estimate
5-lawn	convert to trees	Use Roundup herbicide on the grass in the fall before planting in the spring. Use trees and shrubs that flower and/or have great fall color and/or produce wildlife food to reforest lawn in front of garden. Seedlings will include yellow poplar, black walnut, red oak, black cherry and white pine. Order bare root seedlings from state nursery in late fall. Plant on a 10' x 10' spacing in this 7/4-acre area (~225 trees). Install a tree shelter and a wooden stake around each seedling to protect it from deer browsing. Respray the grass between the rows with herbicide in the summer after planting, if needed. Mow between the rows until forest canopy closes because of homeowner association rules.	1	this fall	end of spring 3 years from now (split plot in thirds so the cost and time required per year are less; start closest to the road)	mainly Tim with help from Ellen	\$300 for plants of ~\$1.35 per plant; \$100 for Roundup herbicide and backpack sprayer; \$900 for shelters and stakes at \$4-5 each
4-riparian area	plant a riparian forest buffer to help protect water quality in Oak Creek	Plant trees and shrubs (~440) recommended for riparian buffers throughout area currently in fall grass and thorny shrubs (1 acre). Plants will include river birch, green ash, sycamore, red maple, dogwood and buttonbush. Use tree shelters as described above. Mow grass before planting and frequently thereafter until trees establish. Do not use herbicide next to the stream.	2	next fall	end of following spring	mainly Tim with help from Ellen	\$600 for plants; \$2,200 for tree shelters and stakes



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### Record Your Progress

Lesson 6, Activity 20, Page 76

Activity 20  
Record Your Progress

Management unit	Project	Date completed	Actual cost vs. projected cost	Comments
5-lawn	Conversion of lawn to trees	-	N/A vs. \$1,300	Almost finished. So far cost is a little less than projected.
4-riparian area	Plant riparian forest buffer along Oak Creek	spring 2006	\$3,000 vs. \$2,800	Completed. Cost was a bit more than projected because we slightly underestimated the number of plants needed.
throughout property	Create a trail throughout property	fall 2005	\$68 vs. \$45	Completed. Cost was a bit more than projected because we added some trail drainage features. Finished work two seasons after we planned to, but we are now happily using the trail with the kids.
4-riparian area	Enhance habitat for reptiles and	summer 2005	\$125 vs. \$100	Completed. Cost was a bit more than projected because plants were more expensive than expected. Have seen turtles here.


Important: Take pictures...



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### What Are the Results of this Three-State Effort (MD, PA, VA)?

- Sale of over 3,500 WIYB manuals
- Distribution of over 1,500 resource CD's through programs and partners
- Thousands of hits on website




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### Train the Trainer Workshops 10/06 – 10/07

316 surveys mailed 10/07 – 35% return

- **Makeup of Respondents:**
  - 59% master gardeners, 9% forestry volunteers, 8% NR professionals, 83% are private landowners
  - 82% over 50 years old.
- **Ownership:**
  - 39% less than 1 acre
  - 27% 1-5 acres
  - 17% 5.1 – 10 acres
  - 7% between 10.1 - 20 acres
  - 10% more than 20.1 acres.
- 48% would like to convert additional lawn to natural areas. One-third would like to convert up to 25% lawn area to natural area.
- 13% enrolled in woodland assessment program



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### Impacts for Owners of 1-10 acres

54% of surveys

Workbook Activities Completed


- 50% identified their interests in the land
- 47% assessed wildlife habitat elements
- 37% developed a map for the property
- 22% identified stages of succession
- 15% identified and ranked objectives
- 10% created a schedule for a project



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### Motivation to Action


- 62% initiated a discussion with friends or family members
- 55% used the internet to look for more information
- 20% approached a neighbor about cooperating on an activity
- 15% contacted the state nursery about purchasing seedlings
- 2% contacted extension or other organization to organize local WIYB outreach effort



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### Woodland Activities

Activity	% done	% will pay
Controlling vines, brush piles, hazard trees, recreational trails	55-76%	0-8%
Spray invasives, firewood, plant lawn to seedlings w/shelters, tall grass meadow wildflower meadow	32-42%	5-10%
Cutting a few logs to mill for lumber	10%	17%
Growing non-traditional crops	6%	6%
Cutting a few trees for income	2%	12%



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### Contacts with Professional Service Provider

- **22% contacted a service provider for assistance . Another 8% plan to soon.**
  - 13% tree service company or arborist
  - 10% foresters
  - 5% lawn service companies
  - 5% landscape contractors
  - 1% loggers



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### Survey of Potential Service Providers Fall 2007

**50 surveys provided from attendees at conference sessions on WIYB:**


1. International Society of Arboriculture (14)
2. Chesapeake Conservation Landscaping Council (16)
3. Pest Management for Landscape & Nursery Managers & Arborists (20)



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### Types of Businesses

- **34% landscape architects**
- **26% landscape contractors**
- **26% arborists**
- **14% lawn mowing company**
  
- **36% reported most clients have 1-5 acres**
- **12% have 6-10 acres**
- **52% did not respond**



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### Service Provided by Landscapers & Arborists

Service Provided	Landscapers	Arborists
Planting tree seedlings w/shelters, recreational trails, wildflower meadows, wildlife food plots	36%	18%
Controlling vines, spray invasives, create tall grass meadow w/ less mowing, building brush piles	~30%	~29%
Felling hazard trees, cutting logs to mill for lumber, providing firewood by selective cutting,	0%	80%


### Role of Forester vs. Tree Expert *Issue in Maryland*

**Professional Forester practice:**

- "Forestry" means the application, for compensation, of scientific techniques to the planting, conservation, protection, and management of trees and related resources for their continuing use, whether found in large numbers and areas commonly known as forests, woodlands, and woodlots or in small groupings and individual trees in suburban and urban settings.
- "Forestry" includes: consultation, investigation, evaluation, or planning of any forestry activity

**Tree Expert practice:**

- "Tree expert" does not include: a person engaged in commercial logging or timber harvesting operations or practices and services generally provided by arborists, horticulturalists, etc.



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## Questions?

**Jonathan Kays**  
[jkays@umd.edu](mailto:jkays@umd.edu)  
[www.naturalresources.umd.edu](http://www.naturalresources.umd.edu)



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