Creating a Wildlife-Friendly Landscape

The Woods in Your Backyard Workshop

What We’ll Cover Today

• Elements of wildlife habitat management
• Creating or enhancing habitat elements
• Attracting wildlife to your property
• Planning your own wildlife enhancements

Messy is Okay!

• Natural areas will increase habitat
• New natural areas will attract wildlife that will increase wildlife-human conflicts (i.e. deer)
• Don’t mow under trees or remove understory vegetation.

Wildlife/Human Interaction

Where to Start??

Understand Size Requirements

• Grassland and forest interior species need BIG habitat blocks (10’s to 1000’s of ac)
• Young forest species
• Smaller properties can provide connectivity and habitat diversity

www.lincolnne.com
The Basics
Understand Size Requirements

- Woodland, edge and ‘successional’ species can use smaller, more diverse habitat blocks
- Migratory birds use any good habitat as ‘stopover’ habitat
  - Forest interior bird
  - Young forest species

Understand Habitat Requirements

<table>
<thead>
<tr>
<th>Non-breeding</th>
<th>Breeding</th>
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</thead>
<tbody>
<tr>
<td>Attracting Wildlife – Habitat Arrangement</td>
<td></td>
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<tr>
<td>Food</td>
<td>Water</td>
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</tbody>
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Focus on Wildlife Habitat Elements

What is limiting?

- **Cover** – caves & ledges; cavity trees; snags, tree tops; dense vegetation
- **Food** – hard & soft mast; wolf trees; apple trees; food plots
- **Water** – wetlands; riparian zones; spring seeps
- **Space** – all elements in home range; landscape features present;

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)

Attracting Wildlife – Mast Trees

- Oak, hickory, walnut, beech
- Cherry, crabapple, hackberry,
Attracting Wildlife – Habitat Features

Wildlife Love Dead Wood!

Den Tree
Deadfall
Dead Branches
Standing Snag

Providing and Enhancing Habitat Elements

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

- Brush piles
- Dense thicket
- Edge
- Forest openings

Building a Brush Pile

- Base - logs, rocks, fence posts – anything you have around
- 6" openings
- Top - finer brush and branches
- Near water and other habitat features

Attracting Wildlife – Habitat Elements

Create dense thickets
- Allow brush to develop in understory
- Only mow those areas that you need

Attracting Wildlife – Habitat Elements

Brush Piles
- Cover
- Nest Sites
- Loafing

Attracting Wildlife

Understand Edge Effect

- Interface between two or more cover types
- Zones of high wildlife activity

Hard Edge
Soft Edge
Management Strategies
Edge Feathering

A soft edge will benefit many wildlife species

Field or pasture  Shrubs  Saplings  Mature forest

EARLY SUCCESSIONAL HABITAT

Attracting Wildlife - Field Borders

- 50'-100' border strips provide cover & food
  - Between normal crop production or lawn and forest
  - Create on forest side or field side
  - Little reduction in productivity
  - Can easily be returned to production

Managing & Creating Edge

Create Edge Habitat in Fields

Mow every 3 years in strips - habitat for turkeys, quail, etc

Habitat Requirements
Nesting Habitat

Large blocks / wide buffers are best

Nest at base of "bunch grasses"
Attracting Wildlife – Habitat Features

Water is a Huge Draw – especially running water

Maintain Existing Old Field Succession

• Many existing old fields can be maintained by killing trees that establish themselves. Provides unique habitat

Habitat Changes with the Season!

Abundance & Home Range of Common Eastern Wildlife

<table>
<thead>
<tr>
<th>Animal</th>
<th>Abundance</th>
<th>Home Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robin</td>
<td>~70 per 100 sq mi</td>
<td>Female: 6-19 sq mi, Male: 60-100 sq mi</td>
</tr>
<tr>
<td>Black Bear</td>
<td>~70 per 100 sq mi</td>
<td>Female: 6-19 sq mi, Male: 60-100 sq mi</td>
</tr>
<tr>
<td>Chipmunk</td>
<td>2-4 per acre</td>
<td>0.5 acre</td>
</tr>
<tr>
<td>Rabbit</td>
<td>Several per acre</td>
<td>10-25 acres</td>
</tr>
<tr>
<td>Raccoon</td>
<td>~1 per 10 acres</td>
<td>380-1150 acres</td>
</tr>
<tr>
<td>Red fox</td>
<td>~1 per 100 acres</td>
<td>640-1280 acres</td>
</tr>
<tr>
<td>Skunk</td>
<td>Up to 31 per sq mi</td>
<td>160-320 acres</td>
</tr>
<tr>
<td>Squirrel</td>
<td>1-5 per acre</td>
<td>Up to 10 acres</td>
</tr>
<tr>
<td>Turkey</td>
<td>10-100 per 1000 acres</td>
<td>600-1000 acres</td>
</tr>
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Attracting Wildlife – Stay on Top of Invasives

• Always control invasives first
• Fill in behind with natives or encourage natives to grow
• Requires ongoing maintenance

Common Lawn & Pasture Invasives

Japanese Honeysuckle

English Ivy
Native Plants Just Produce More Food for Wildlife

From: Bringing Nature Home
Doug Tallamy

Many more caterpillar species on native woody plant genera in the mid-Atlantic states.

Uninvaded Invaded
22 times fewer caterpillars in the invaded hedgerows.

Attracting Wildlife – Think Connectivity

- Wildlife need connected habitats to safely disperse, breed, forage, maintain genetic diversity - survive
- Stream corridors are ideal
- Small properties can buffer larger blocks of habitat

Attracting Wildlife - Create New Habitat

Plant native trees that are good for wildlife – think flowers, berries, fruits or nuts
- Dogwoods
- Hollies
- Spicebush
- Sumac
- Serviceberry (early spring berries for migrant birds!)
- Viburnums (deer resistant!)
- Oaks, Hickories, Walnuts
- Black Gum

Build onto existing forest and stream corridors.

Attracting Wildlife - Create New Habitat

Encourage Natural Tree Recruitment
- Park the mower
- Allow new trees to come up in natural areas

Convert Lawn to Natural Cover
- Even small areas can attract lots of wildlife

Attracting Wildlife - Create New Habitat

Create Habitat Islands
- Adds diversity of niches
- Provides escape cover

Attracting Wildlife

Variety of options exist for lawn or field conversion.
Keep or Create Snags

- Most woodlots have them – keep them around
- Can create snags if they are under-represented:
  - Mechanical girdling – at least ½" groove for small trees, 1-1.5" groove for larger trees; or
  - Herbicides

Local Application of Herbicide Effective

- Cut Stump
- Hack 'n Squirt
- 50% mixture of Roundup, Garlon, 2,4-D. Use a good ax

Attracting Wildlife - Pollinator Habitat

Pollinators Need:
- A diversity of native plants that flower all season
- A place to nest and lay eggs nearby
- Maintain old field areas

Pollinator Nest Types

- 70% of native bees nest in the ground – 30% nest in wood
- Faced east into the morning sun

What should you Manage for?

- Landscape perspective + your own interests will help you determine what types of wildlife to manage for
- Easier to manage for habitat than individual species
- Cannot manage for everything
- Avoid attracting deer!

Young Forest Structure Declining

- Forest maturation/natural plant succession
- Decline in farmland abandonment
- Increased suppression of wildfires
- Impact of invasive plant species
Cooperate with your Neighbors

Together you can provide more habitat niches, larger blocks of habitat and increased connectivity.

Create A Plan

- Draw a Map with habitat areas
- Determine habitat needs of groups of species you are interested in.
- Identify some projects that will change the habitat

How would wildlife change on these properties?

Keeping Wildlife Safe

Keep cats indoors! Outdoor and feral cats kill 100’s of millions of birds and billions of small mammals each year.

They are NOT a natural predator.

For more information: www.abcbirds.org

Enhancing Recreation & Aesthetics

Examples of Other Young Forest Species

- American Woodcock
- Abundance Declining

Alder Flycatcher
- Appalachian Cottontail
- White-throated Sparrow
- Wood Turtle
- Blue-winged Warbler
- American Robin
- Golden-winged Warbler
- American Redstart
Creating a Trail or Road

• Visually interesting and variable terrain
• Follow natural contours and meander
• Use BMP’s to reduce erosion potential
• Lay it out first with ribbon and then adjust before cutting

Build The Trail and Tell The Tale

• Access
• Sanctuary
• Campfire or camping areas
• Wildlife viewing areas
• Aesthetically pleasing areas

Privacy and Shade

• Vegetation visual & acoustic buffers
  – Vegetation performs poorly as an acoustic buffers
• Shade can significantly reduce
  – temperature (10-15 degrees)
  – cooling costs (10-80%)
• Shade can direct/block cooling breezes

Trees, Old Fields, Privacy Screens

Questions???