

Calling All Wildlife!

Wildlife Management Basics

It's 6 a.m. and the dog's whimpering to be let out. So, reluctantly, you stumble downstairs toward the back door, turn the latch—click—and open it. WHOOSH, flap! You're startled by a rapid flapping and whistling of wings as a flock of mourning doves flies off. And there, at the edge of the woods, stands a lone doe. She eyes you squarely in the face and darts off into a thicket of dogwood. It's another good morning and the chickadees and wrens are singing all about it.

You know the feeling well... nothing quite compares with the experience of watching a wild animal. Somehow, wildlife gives us all something we need: a connection with nature, a sense of wonder, peacefulness and beauty. Whatever your specific reasons, you are not alone. Over 85 percent of Wisconsinites participate in “watchable wildlife” activities such as backyard feeding, bird watching, or wildlife photography, while hundreds of thousands enjoy the challenge of matching their hunting skills to the survival skills displayed by their quarry. In fact, just about everyone gets some kind of benefit or enjoyment from wildlife. If wildlife gives us so much, why not give something back to wildlife?



The *Wildlife and Your Land* series is designed to offer suggestions to you, the private landowner, on how to manage for wildlife, whether you own a 160-acre farm, a small woodlot, a large rural homesite, a suburban tract, or a tiny urban lot. Each part of the series focuses on management practices that you can apply to your land. But first, let's start by getting to know some of the *basics* of wildlife management.

As a landowner, *you*—as well as your neighbors—are in the best position to help wildlife survive and prosper. Did you know that about 74 percent of Wisconsin's total land area is owned by private landowners like you? That's a lot of land. *If all of us work together, wildlife will flourish.*



What's Wildlife?

When you hear the word “wildlife,” what comes to mind? If you're like most people, you think of deer, bear, ducks, geese and songbirds — basically, the large mammals and showy birds. But that's not all. Snakes are also part of the wildlife family, and so are butterflies, earthworms, salamanders, frogs, ants, turtles and more. In fact, wildlife includes all birds, mammals, reptiles, amphibians, fish and invertebrates. So, don't restrict your appreciation and observation to the old favorites.

Habitat is Where It's At!

When a red fox vixen trots home after a long day in the field, where does she go? Furthermore, how does she survive? Well, think about what you need to survive: food to eat, water to drink, shelter, and space to live and roam. Not surprisingly, red foxes, and *all* wildlife, need the same things. The term wildlife managers use for this combination of factors is called *habitat*. Habitat is where an animal lives, eats, establishes and defends its territory, mates and produces offspring. In short, it's the animal's home. The four components of habitat are food, water, shelter and space.

What's Wildlife Management All About?

Wildlife management is really *habitat management*, and that's what this *Wildlife and Your Land* series is all about. To attract certain animals to your property you will need to manipulate the type, arrangement and availability of the four components of habitat on your land: food, water, shelter and space. How the four are arranged on your property is very critical to the success of your efforts. Habitat is the single most important concept in wildlife management. Master an understanding and appreciation of habitat,

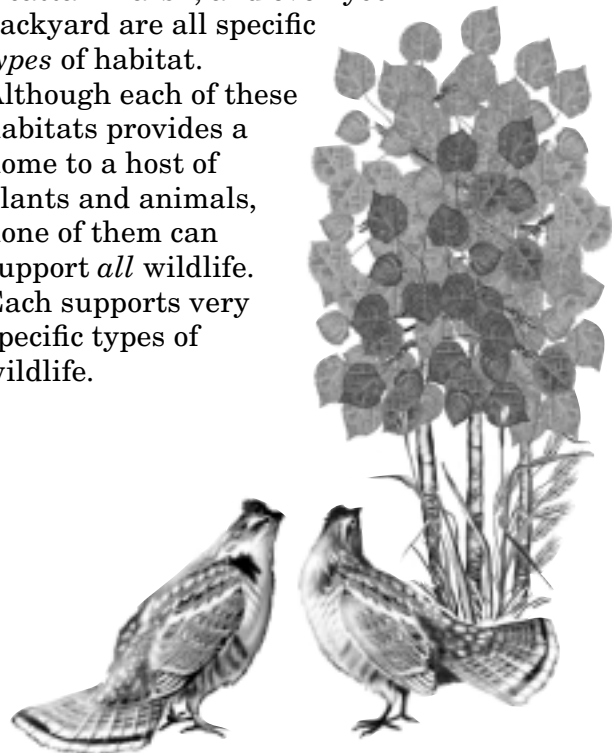
and you will be able to make great strides toward managing your land for wildlife. Let's take a closer look at this important concept.

Becoming a “Wildlife Realtor”

When you're in the market for a new home, your realtor asks many questions in order to match your wants and needs to the available housing stock. Some people prefer city life and will choose a low maintenance condo, while others yearn for a sprawling farm house. So, too, every animal has different housing needs. The ruffed grouse prefers aspen forests with dense alder thickets and scattered openings; the meadowlark is drawn to grasslands; and the garter snake loves to hang out on sunny rock piles. Remember, what grows or exists on the land determines what animals live there.

You can learn to spot habitat types by looking at the plants that grow there. For example, an alder thicket, a grassy field or pasture, a patch of prairie, an oak woodland, a cattail marsh, and even your backyard are all specific *types* of habitat.

Although each of these habitats provides a home to a host of plants and animals, none of them can support *all* wildlife. Each supports very specific types of wildlife.



Getting to Know Your Land



Getting to know your land is like getting to know a person; it takes a little time and effort, but in the end it pays off. So, put on your boots and get ready to take a closer look at the four major components of habitat on your property: food, water, shelter, and space.

As you walk, note what's there and what you think might have been there. Keep in mind that it's important to periodically walk your property because not all plants are visible during each season, and animals continually fly, walk, or sprint across it. The more you walk your land, the better you'll get to know it and its inhabitants.

Habitat's Four Major Components

Food: *Supermarkets vs. "The Back 40"*

We have supermarkets, wildlife has the land—your land and your neighbors' "Back 40." Make your land a *supermarket for wildlife* by creating food sources and enhancing existing sources. Some projects include: installing bird feeders or planting trees, shrubs, crops, grasses and flowers. But before you make these decisions, find out what's already growing on your land. While every animal has its own food requirements, there are certain *basic seasonal food types*. (See *But what is it???*, page 6.) Note these as you walk your land.

Water: *The Fountain of Life*

We need water to survive, and so does every living thing. As you walk along, note the

wetlands, rivers, creeks, springs, ponds and other low, wet, areas on your property. For those of you living in urban areas, don't forget birdbaths, garden sprinklers, fountains and ponds if you have them. Maintaining existing water sources, restoring wetlands and building wildlife ponds may be your biggest wildlife management challenges.

Shelter: *Split-levels For Wildlife*

Wildlife seek cover for the same reasons we do—to protect themselves from predators and severe weather, and to provide a safe place for rearing young. Wildlife shelter takes many forms, just like our housing stock of apartments, condos and split-levels. So, think creatively as you walk along...

Imagine standing dead trees, or snags, as apartments for woodpeckers, chickadees and squirrels; piles of brush or rock as split-levels for snakes, chipmunks and rabbits; hollow logs as winter condos for bear and fox; downed trees as summer cottages for salamanders, and dense shrubs, clusters of hardwoods and conifers as winter havens for deer and countless birds.

Gravel pits, cliffs, cut banks, caves, ravines, sand flats, barren gravel bars, and abandoned buildings also provide valuable cover for special kinds of wildlife. Remember, what appears brushy and unkempt, often makes very good wildlife habitat, so resist the urge to "clean" the wilder portions of your property.

Remember that certain animals require different shelter types at different times of the year. Find out what animals are appropriate for your location then start collecting specific habitat information about these critters.

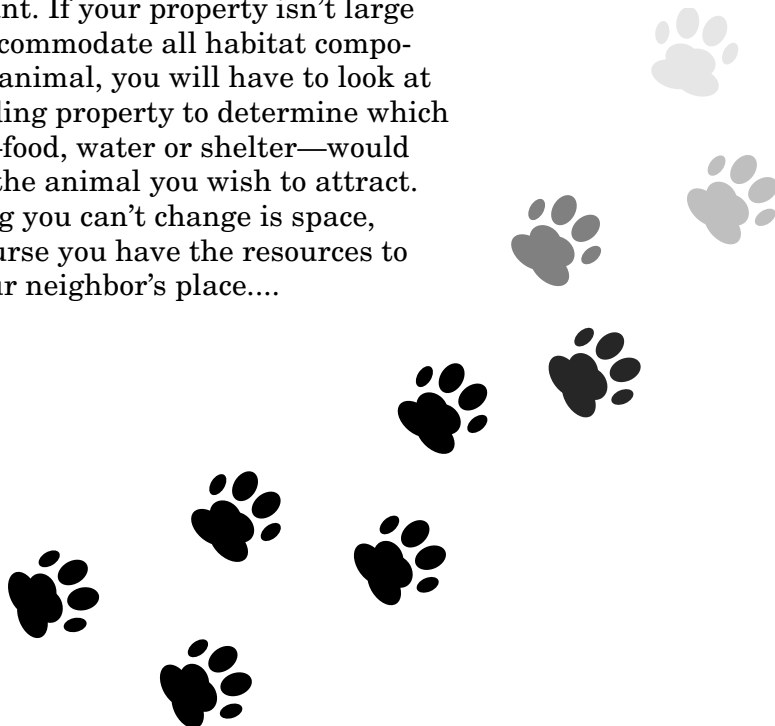
☑ Space: Room to Roam

Most of us need a little “elbow-room” to live comfortably. Animals are no different. Furthermore, the arrangement of that space is important. For example, the average gray wolf pack requires a territory of 50 to 150 square miles of northwoods wilderness (that’s about one-fifth the size of a typical county). White-tailed deer need a habitat mix of woods and openings with young, brushy growth to satisfy their food and cover needs. While this arrangement of habitat is available nearly everywhere in the state, your land may not be large enough to provide all habitat components within the deer’s optimal range of one-square mile. On the other hand, a wild turkey flock prefers a mix of oak/hickory woodlands interspersed with grasslands or farm fields. Wild turkey range is variable—about 500 to 2,000 acres—and is generally restricted to the southern part of the state. On a smaller scale, red squirrels require less than an acre of pines, spruces, or balsam firs which provide them with seeds and den sites.

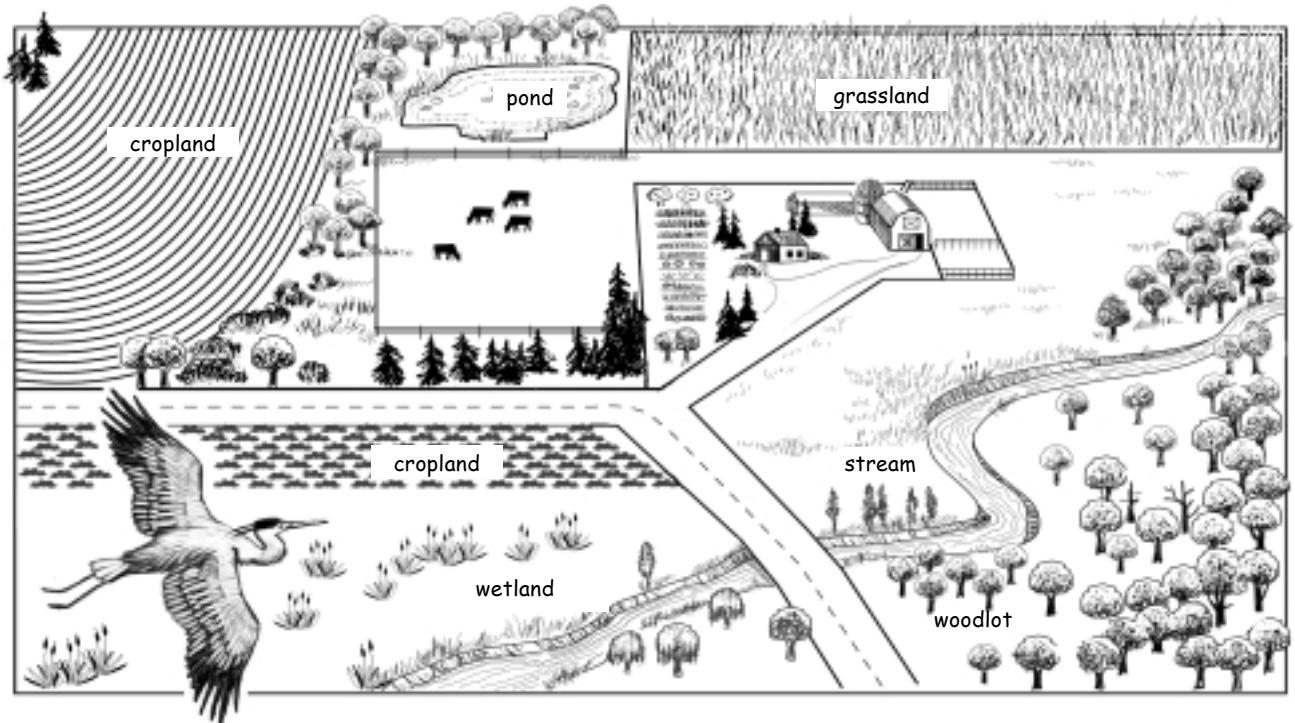
Understanding an animal’s space needs and how your property fits into the equation is very important. If your property isn’t large enough to accommodate all habitat components for an animal, you will have to look at the surrounding property to determine which component—food, water or shelter—would best benefit the animal you wish to attract. The one thing you can’t change is space, unless, of course you have the resources to *purchase* your neighbor’s place....

The Big Picture

And speaking of your neighbor’s property, take a look around you. What do you see? Farmland? Suburbs? Small woodlots? Tracts of forest? Whatever you find, your wildlife plan must *complement* and enhance the neighboring landscape. For example, if your land is in southern Wisconsin, chances are you are surrounded by farm fields and small woodlots. It may make sense to manage for pheasants, wild turkeys, bluebirds, red-tailed hawks and rabbits. This could include a prairie or wetland restoration, oak management and nestbox placement. In northern Wisconsin, where the landscape is forested with aspen, birch, pine, spruce, and maple and other hardwoods, think about enhancing shelter types and food sources for grouse, pileated woodpeckers or pine martens, depending on the tree types and ages, of course. The point is, *complement* what already exists, grow plants within their natural ranges, and your success in attracting wildlife will increase.



The Big Picture



Complement the habitat that already exists on your land, grow plants within their natural ranges, and your success in attracting wildlife will increase.

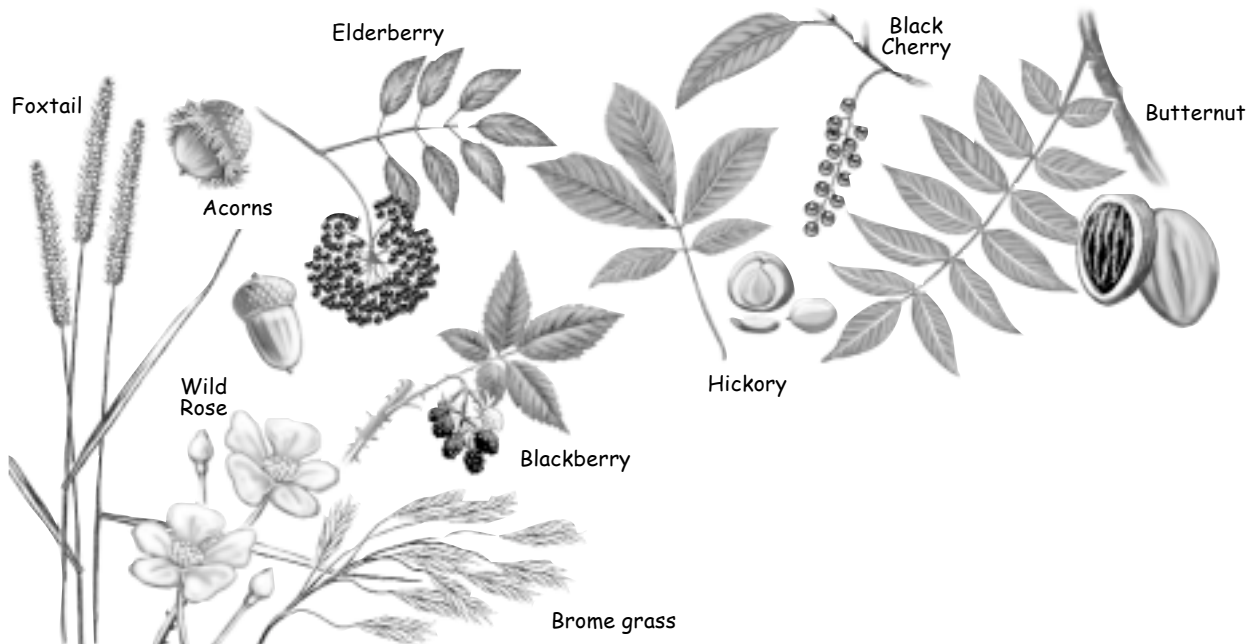
The Nitty Gritty of Soils and Topography

As you look over your property, take time to notice soil type and land characteristics. Is your soil mostly clay, sand, or a mixture? Is your land high and dry or low and soggy? Are there steep hills or rolling fields? If so, what kinds of plants grow on the slopes facing north and those facing south? Is there a difference? These observations will help determine what kinds of vegetation to manage for or to plant. If you are unsure, ask for help before making a large investment in trees, shrubs, grass seeds or prairie flowers. Contact your county Natural Resources Conservation Service office, garden center or County Extension office for more information about soil testing, planting, or county soil survey maps.

But what is it???

Not sure about that leafy plant with the red berries?? Not to worry. Many good field guides are available at your local library or bookstore to help you. You can also clip a sample or note its characteristics and contact your county Extension office, DNR forester or wildlife manager for help.

Throughout summer, wildlife find an abundance of food: fruits, berries, grain, seeds, nectar-rich flowers, grasses, legumes and aquatic plants. Many animals also feed on insects, fish, frogs, snakes, worms, small mammals and birds, so look for signs of these animals on your property: chewed leaves, cocoons, small tunnels in matted grasslands created by field mice, and exposed soil rich with earthworms. During fall, nuts and acorns, late ripening berries and waste agricultural crops abound. In winter and early spring, food is scarce. Woody twigs and buds, weed seeds, waste field crops not covered by snow, backyard bird feeders and, in some cases, food plots help keep animals alive. So seek out those oaks, hickories, walnuts, black cherries, blackberries, alders, blueberries, raspberries, hawthornes, sumacs, wild roses, red cedars, service berries, elderberries and a host of other wildlife shrubs and trees that may be growing in some corner of your property.

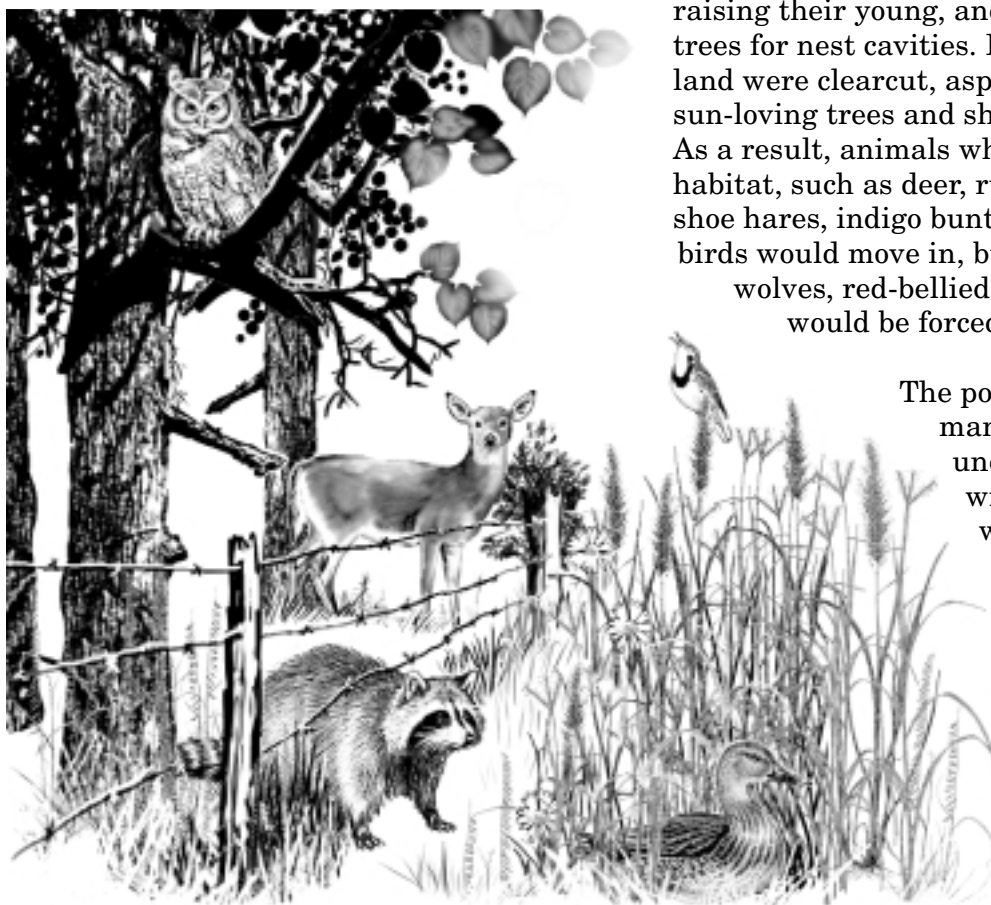


Life On The Edge

Where Two Habitats Meet

Most people have lived on the “edge” at one time or another in their lives. While it can be unpredictable, life on the edge also offers lots of variety and excitement. Wildlife *edge* is very similar. *Edge* is where two or more different habitat types—such as an old field and woodlot or wetland and woodland—meet.

At the edge, there’s a wider variety of food and cover; this means that edge habitat will attract more varieties of wildlife, especially game animals, than either type of habitat alone. This is an important concept given the amount of edge habitat in Wisconsin.



Wildlife at the woodland/grassland edge is diverse, but risk of predation can be high for ground nesters such as the meadowlark and mallard.

The Drawbacks of More Edge

But not all wildlife need edge. Many birds, some mammals, and a few reptiles, amphibians and invertebrates prefer the interior of large (100 acres or more) tracts of forests, grasslands or wetlands. For them, the edge means less space for breeding and nesting, greater threats from edge-loving predators and parasites, and more disturbance from humans.

For example, goshawks, gray wolves, fishers, red-bellied snakes, pileated woodpeckers, ovenbirds, and solitary vireos prefer large, mature, unbroken tracts of forest. They need the seclusion of the woodland interior for raising their young, and some need mature trees for nest cavities. If this same tract of land were clearcut, aspen, birch and other sun-loving trees and shrubs would spring up. As a result, animals which prefer *this* habitat, such as deer, ruffed grouse, snowshoe hares, indigo buntings, and hummingbirds would move in, but the goshawks, wolves, red-bellied snakes and company would be forced to move on.

The point is, any wildlife management activity you undertake will affect wildlife—for better or worse. Every action encourages or discourages wildlife. Keep this in mind as you develop your wildlife plans.

Too Much Of A Good Thing

Carrying Capacity

The maximum number of animals that can live comfortably on a given parcel of land is called the land's *carrying capacity*. Too many individuals of any given type of animal can result in a lot of damage: trees, shrubs and other plants may be severely browsed, animals that are being crowded out of an area can cause collisions with cars, or water sources can become fouled and disease-ridden. When the land has too many animals to support, we say that the animal's population has exceeded the land's carrying capacity. The carrying capacity also changes from season to season, with late winter and early spring having the lowest capacity to carry animals.

Within your geographic and soil limitations, you can increase your land's carrying capacity for certain animals by manipulating the amount of food, water and cover on your property. For example, if you would like more cottontails, consider planting shrubs for winter food and shelter, or build a brush pile or two. If you'd like to encourage herons, frogs or salamanders, you'll need to enhance or restore wetland habitat. But remember, the one thing you *can't* change (without considerable expense), is space. This means that you must consider the size of your property *and surrounding property* when setting your wildlife goals.



Severe browsing is a sign that your land has exceeded its carrying capacity for deer.

A Never-Ending Cycle

Succession

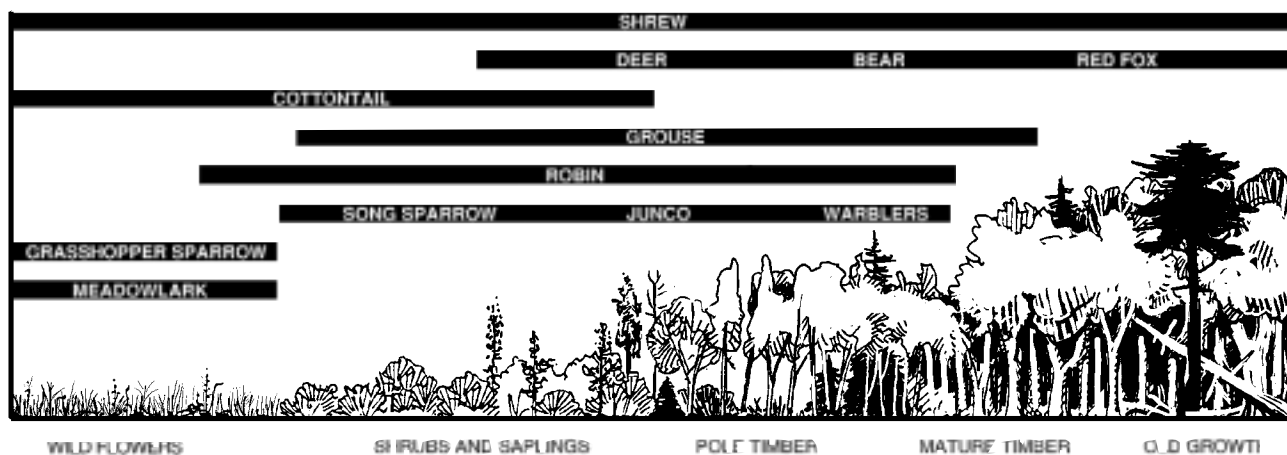
Nothing ever stays the same. The natural world, just as the human world, grows in predictable stages over time. While humans grow from infant, toddler, adolescent, teenager, young adult, mature adult and finally elderly adult, so, too, do natural communities mature. A typical Wisconsin woodland, for instance, proceeds through these growth stages: grassland, shrub, sapling, young woods, mature woods and finally old growth. The whole process is called *succession*.

Succession occurs in all natural communities, including wetlands, lakes and ponds. As lakes age, they fill with sediments and turn into marshes which are invaded by alder, willow and other wet-loving trees such as white cedar, black spruce or tamarack. How fast this occurs depends on the depth, width, and location of the lake or pond.

Every acre of soil and water has a definite sequence of plant cover that occurs over

time. Each stage grows into the next—if not set back to an earlier stage by fire, logging or windthrow—until a final stage, or “climax,” is reached. Climax stage vegetation tends to be stable and remains the same for long periods of time. In Wisconsin, forest climax vegetation includes sugar maple, hemlock and beech. If disturbed by human or natural causes, parts or all of the climax forest will return to an earlier stage, where the cycle begins again.

Succession is a very important wildlife management concept. By manipulating the vegetation on your property through timber harvesting, mowing, or controlled burning, you can set back or maintain your property at a certain successional stage. By planting trees and shrubs, you can speed up the process. By doing nothing, you allow the natural, never-ending cycle of succession to move along at its own deliberate pace. Since different animals prefer different stages of succession, when you turn back or speed up the succession clock, you will be affecting the types of animals you find on your property.



Forest succession is illustrated by a plowed field surrounded by a forest. The field is invaded quickly by annual weeds, then, in time, perennial flowers, grasses and shrubs. These, in turn, are replaced by saplings and pole timber until a mature stand develops. Adapted by permission from material provided by the Minnesota Department of Natural Resources.

What to do?

If you want a wide variety of common birds and mammals that prefer edge habitats, then you will need to encourage as many different stages of succession as possible. Creating openings and trails, improving fencerows and hedgerows are some techniques.

If you are interested in managing for early successional animals, such as grassland songbirds, ground squirrels, or butterflies then you will need to constantly work against the forces of succession. Depending upon where you live in the state, you could manage for meadowlarks, bobolinks, upland sandpipers, or northern harriers by maintaining a regular schedule of burning, mowing or spot treatment of herbicides.

If your interests and land lean toward managing for animals found in old woodlands, you may consider simply watching wildlife populations change as a result of natural succession or adopt a low-impact timber cutting strategy.

Now that you know some of the important wildlife management concepts and you've looked your land over to see what habitat components exist, you're ready to develop a wildlife management plan for your property.







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