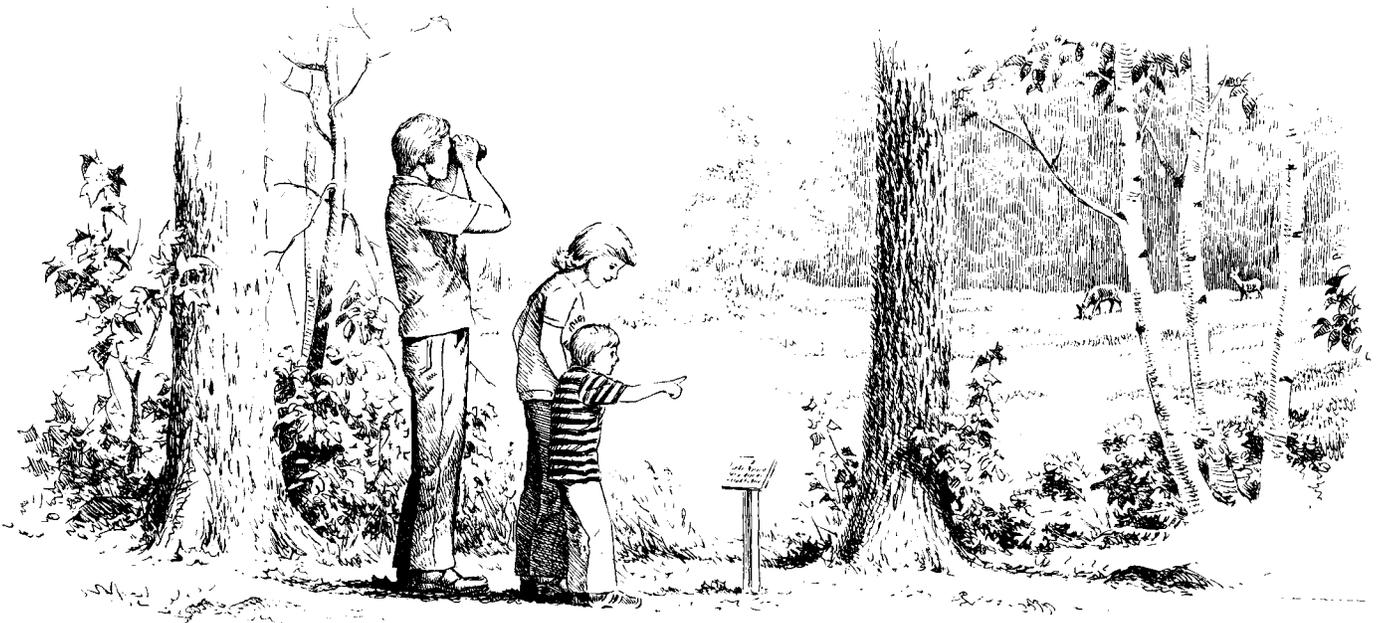




Management Practices for Enhancing Wildlife Habitat



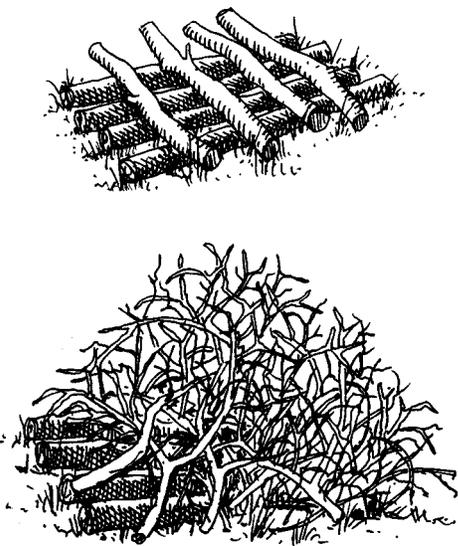
By enhancing wildlife habitat on your property, you can improve the habitat quality for wildlife while increasing wildlife viewing and recreational opportunities. The most common habitat management practices for wildlife are described below. The descriptions are brief and general. For more details about which practices are appropriate for your property, consult a wildlife management specialist.

Brush piles

Brush piles are piles of brush that are assembled to provide resting/escape cover and den sites for wildlife. Brush piles are used for cover by eastern cottontails and other small mammals. Songbirds may use brush piles for perch sites, especially if the piles are located near feeding or nest sites. Also, if brush piles are adjacent to a water source, amphibians and reptiles may use them for breeding, feeding, or resting.

The best brush piles for wildlife start with the largest materials (pole-sized logs) at the bottom and end with the smallest materials (small limbs or shrubs) at the top of the pile. The materials are arranged so that the brush pile is raised slightly above the ground. This makes it easier for animals to get under the brush pile and into cover. Placing the largest materials on the bottom of the pile also slows the brush pile's rate of decay.

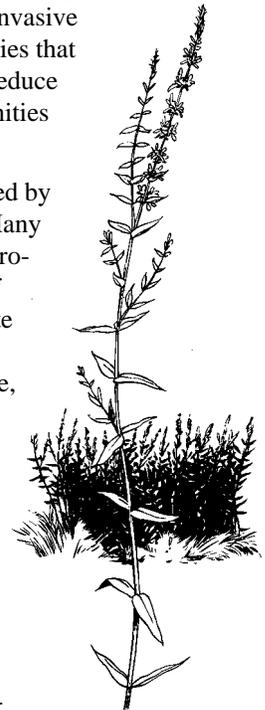
Brush piles are generally placed near food sources and in places where low cover for wildlife may be sparse or absent. Forest openings, forest edges, and timbered areas are good places to build brush piles because many types of wildlife feed in openings and along forest edges, often benefiting from the additional cover provided by the piles.



Controlling noxious weeds and non-native invasive plants

Invasive or aggressive plant species are often easily established, but once established they expand beyond those areas for which they were intended. Invasive species are generally non-native species that can out-compete native species and reduce the diversity of natural plant communities (See Table 1).

Invasive plant species can be dispersed by wildlife, livestock, and/or humans. Many were deliberately or inadvertently introduced by humans. Some examples of invasive species that may out-compete native plants in Pennsylvania are multiflora rose, Japanese honeysuckle, and purple loosestrife. Although some of these species provide benefits for wildlife, they can create problems and, in the long run, have limited value for most wildlife. Consequently, many landowners are experimenting with different techniques to control invasive species and replace them with native plants. Wildlife species in Pennsylvania have evolved with the native plant communities and derive the greatest benefits from the variety of native plants. Controlling the expansion of non-native plant species also contributes to conserving biological diversity.



Purple loosestrife

Some species of invasive plants (e.g., multiflora rose, kudzu vine, and mile-a-minute vine) are classified as noxious weeds in Pennsylvania, and it is illegal to plant them. In areas where you are not sure if a particular species may be invasive, contact local resource professionals to find out as much as possible about which species may be problems in your area. Bureau of Forestry service foresters, Natural Resource Conservation Service personnel, Penn State Cooperative Extension agents, and private natural resource professionals can provide information about the control of non-native species.

TABLE 1 - *Non-native species known to have or suspected of having detrimental effects on native plant communities*

<i>Acer platanoides</i>	Norway maple
<i>Ailanthus altissima</i>	tree-of-heaven
<i>Berberis thunbergii</i>	Japanese barberry
<i>Elaeagnus angustifolia</i>	Russian olive
<i>Elaeagnus umbellata</i>	autumn olive
<i>Lonicera japonica</i>	Japanese honeysuckle
<i>Lonicera maackii</i>	amur honeysuckle
<i>Lonicera morrowii</i>	Morrow honeysuckle
<i>Lonicera tatarica</i>	Tartarian honeysuckle
<i>Lythrum salicaria</i>	purple loosestrife
<i>Polygonum perfoliatum</i>	mile-a-minute vine
<i>Pueraria lobata</i>	kudzu vine
<i>Rosa multiflora</i>	multiflora rose

Creating snags

Snags are dead or partially dead standing trees that provide a number of important benefits to a variety of wildlife (see Table 2). Snags provide cavities for nesting and resting, perches for hunting and displaying, and an abundant supply of food for insect eaters. In Pennsylvania, there are over 35 species of birds and 20 species of mammals that use snags at some point in their life cycles. In addition, many species of reptiles and amphibians also use the cavities in snags.



Gray squirrel and pileated woodpecker

TABLE 2 - *Some of the benefits provided for wildlife by snags*

Cavities	Excavated in snags by primary cavity excavators like woodpeckers Used by woodpeckers for shelter and nesting cover Used for nest sites by secondary cavity nesters (i.e., those species unable to excavate their own cavities) like the wood duck, eastern bluebird, and gray squirrel.
Loose bark	Begins to loosen as a tree dies and forms "bark cavities" Bark cavities are used for cover, as roost sites for forest dwelling bats, and as nest sites for brown creepers.
Insects	Become abundant in the decaying wood of snags Provide a valuable food source for insect eaters like woodpeckers and nuthatches
Perch Sites	Perch sites are provided for many birds including songbirds like the indigo bunting (singing perch), raptors like American kestrel (hunting perch), and kingfishers like the belted kingfisher (fishing perch).

Different species of wildlife prefer different types and sizes of snags in a variety of habitats. Some species prefer hard snags (dead or partially dead trees with fairly sound wood and some limbs remaining) while others prefer soft snags (also called "punkys," in advanced stages of decay, and rarely with limbs). Some species, like wood ducks and barred owls, require large snags simply because they need large cavities in which to nest. Other species, such as the tufted titmouse, will forage and nest in cavities inside smaller snags. To accommodate a variety of species, many landowners try to maintain several types and sizes of snags.

The best method to provide snags for wildlife is to retain existing snags in places where they will not create a dangerous situation for people using the nearby area for outdoor activities like hiking or cutting firewood. There are a number of guidelines suggested for the types, sizes, and numbers of snags that are best for wildlife. A reference where details about snags can be found is *Dead Wood for Wildlife* (number 7 in the Pennsylvania Woodlands series), which is available free of charge from your county extension office. When the abundance or distribution of snags is



Gray squirrel

inadequate or if particular types of snags are desired, snags can also be “created.” Creating snags involves deadening trees so that they remain standing. Success depends on the method used, the tree species you are trying to deaden, the current health of the individual tree, and the specific site characteristics such as the presence of forest pests that may accelerate the tree’s death.

Retaining or creating snags is often incorporated into other habitat management practices. For instance, if clearing is planned to create an opening, some of the trees that could be removed while clearing could instead be deadened and left standing for use by wildlife. If a forest-edge cutting or a tree and shrub release is planned, some of the trees that would be removed can instead be deadened and left standing.

Establishing permanent vegetation for wildlife
 On some properties, trees, shrubs, and herbaceous plants have been planted to provide benefits for wildlife. In most cases, the plants selected provide either food or cover—or both. Examples of the types of vegetation typically established and the benefits they provide to wildlife are listed in Table 3.

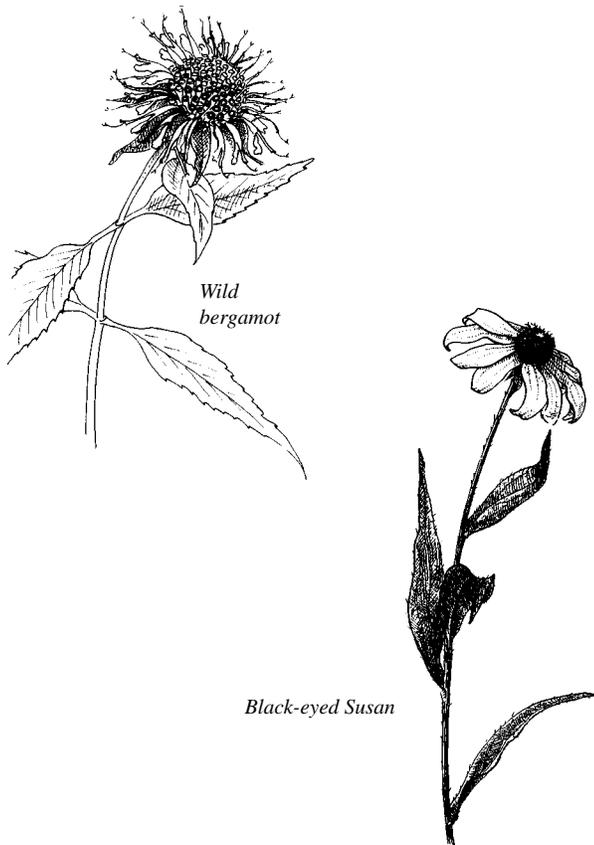


TABLE 3 - *Types of plantings for wildlife*

Plant Type	Examples	Examples of wildlife benefits
<i>Evergreens, conifers</i>	white pine eastern hemlock rhododendron	<ul style="list-style-type: none"> • thermal cover for ruffed grouse • nest sites for mourning dove • food for red squirrel
<i>Nut trees</i>	oak hickory beech	<ul style="list-style-type: none"> • food for wood duck, ruffed grouse, wild turkey, blue jay, black bear, eastern chipmunk, squirrels, white-tailed deer
<i>Fruiting trees, shrubs, and vines</i>	black cherry elderberry blackberry dogwood grape vine	<ul style="list-style-type: none"> • food for wild turkey, gray catbird, cedar waxwing, many songbirds, black bear, gray fox, white-tailed deer, and small mammals
<i>Cool-season grasses and legumes</i>	Kentucky blue-grass orchard grass red clover white Dutch clover birdsfoot trefoil	<ul style="list-style-type: none"> • insects for poult of ruffed grouse, wild turkey • food for meadow vole, eastern cottontail, white-tailed deer • nest sites for field sparrow, song sparrow, meadow vole • hunting sites for hawks, owls, foxes, snakes
<i>Warm-season grasses</i>	switchgrass big bluestem little bluestem indiangrass side oats grama	<ul style="list-style-type: none"> • nesting cover for upland game birds, waterfowl, and ground nesting songbirds • foraging cover for upland game birds, waterfowl, songbirds, eastern cottontail • food (seeds) for songbirds • winter cover for game birds, waterfowl, cottontail rabbits
<i>Wildflowers, forbs</i>	cardinal flower New England aster beebalm joe-pye weed columbine	<ul style="list-style-type: none"> • nectar for butterflies, moths, bees, hummingbirds • seeds for songbirds • forage for white-tailed deer

Fencing and tree shelters

When trying to establish new plants for wildlife, it is sometimes necessary to protect plants from browsing and other damage until the plants are well established. Wildlife species in Pennsylvania that may damage young plants include meadow voles, cottontail rabbits, and white-tailed deer. Meadow voles and cottontails girdle (chew the bark and cambium layer off the stem near the bottom of the plant) woody-stemmed plants while deer browse seedlings, shrubs, and stump sprouts. In agricultural areas, livestock may browse or trample young plants. Consequently, fencing or seedling protectors may be necessary to protect naturally regenerating or newly planted trees and shrubs. Fencing is also used to exclude livestock from streams and wetlands (see *Stream bank fencing*, p. 8).

There are a variety of fence types, including woven wire, high-tensile strength, and electric fences, used to protect seedlings. There are also a number of commercially available tree shelters. These shelters are tall plastic tubes (usually made of polypropylene) and are used to protect seedlings from animal browsing. They may, in some cases, accelerate seedling growth by creating a “greenhouse effect” around the seedling. The use of tree shelters is a relatively new method of seedling establishment and the long-term benefits of use have yet to be determined. One of the initial problems found with tree shelters was that songbirds like eastern bluebirds and house wrens fly inside of them (probably to feed on insects), but cannot open their wings to fly out and then die within the tubes. Because of this, it is necessary to cover the top of the tubes with bird-excluder nets. Apart from commercially available tree shelters, some landowners create their own seedling protectors from galvanized fencing. These protectors are simply mini-fences and can be custom made for single plants or groups of plants. All of these methods for protecting plants from damage by wildlife or livestock can be used on naturally occurring vegetation as well as newly planted stock.

Forest edge improvement

Many species of wildlife use edge habitat for nesting, feeding, and traveling. The main goal of forest edge improvement is to increase available food and cover along a forest edge by providing a variety of vegetation types and layers, from the shortest herbaceous vegetation to the tallest trees. Multiple layers present in vegetation provide more places where wildlife can feed and find nesting, resting, or escape cover. In addition, current research suggests that the nesting success of birds is greater along “complex” edges with multiple layers of vegetation than along “simple” edges with fewer layers of vegetation.



Fox

Edges between forests and fields are used by both species that are typically found within the forest and also by species typically found in fields. For example, the black-capped chickadee, a forest species, may nest along forest edges with the field sparrow, a species typically found in field habitat. In addition, “edge specialists,” such as the indigo bunting, are typically present along forest edges because it is their primary habitat. Other species like the wild turkey, eastern cottontail, or white-tailed deer may feed along a forest edge because they are able to quickly retreat into the forest for safety. Predators like the red fox or long-tailed weasel may be attracted to forest edges because an abundance of prey may be found there.

A number of methods to enhance forest edge habitat are described in this directory, including planting, letting natural succession occur, and cutting. Adding brush piles and nest boxes will also add habitat components along an edge. The result of forest edge improvement work should be a wider edge habitat that provides a gradual transition from the shorter vegetation in the adjacent habitat to the tallest trees in the forest, while providing food and cover for a variety of wildlife species.

Herbaceous forest openings

Herbaceous forest openings are openings in the forest canopy where enough sunlight reaches the forest floor to support herbaceous vegetation. Herbaceous openings can be of varying size and shape. They provide food, nest sites, and cover for selected species of wildlife. Fields, orchards, haul roads, log landings, utility right-of-ways, or openings created within a forested area may all function as herbaceous openings that provide wildlife habitat. Wildlife species that benefit from herbaceous openings are listed in Table 4. Please note that although herbaceous openings in a forest provide many benefits to a number of species, there are times when creating a forest opening can be detrimental to species that require large unbroken expanses of forest (e.g., the pileated woodpecker, northern goshawk, some neotropical migratory songbirds, and amphibians). Trade-offs between benefits and detriments should be carefully considered before creating new openings.



Wild turkey and poults

TABLE 4 - *Wildlife species that may benefit from herbaceous forest openings*

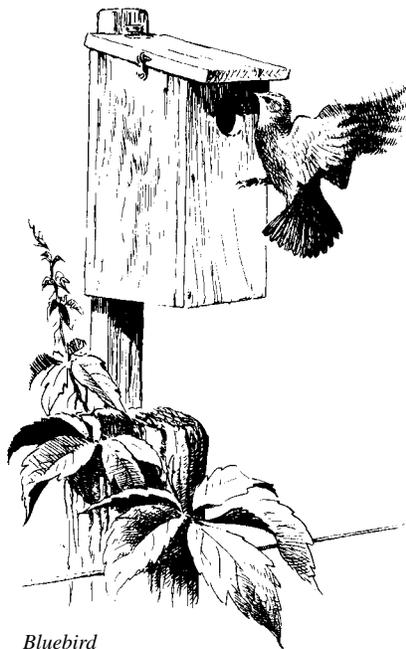
Species	Season *	Use	Species	Season	Use
Reptiles			Songbirds		
<i>Black snake</i>	Sp, S, F	hunting	<i>Eastern bluebird</i>	Sp, S	feeding
<i>Black racer</i>	Sp, S, F	hunting	<i>Indigo bunting</i>	Sp, S	nesting (along edge)
Raptors			<i>Rufous-sided towhee</i>	Sp, S	nesting (along edge)
<i>Great-horned owl</i>	Sp, S, F, W	hunting	<i>Field sparrow</i>	Sp, S	nesting
<i>Cooper's hawk</i>	Sp, S, F, W	hunting	<i>Song sparrow</i>	Sp, S	nesting
<i>Red-shouldered hawk</i>	Sp, S	hunting	Mammals		
<i>Broad-winged hawk</i>	Sp, S	hunting	<i>Eastern cottontail</i>	Sp, S, F, W	feeding, nesting, cover
<i>Barred owl</i>	Sp, S, F, W	hunting	<i>Meadow vole</i>	Sp, S, F, W	feeding, nesting, cover
Game Birds			<i>Woodchuck</i>	Sp, S, F, W	feeding
<i>Wild turkey</i>	Sp, S, F	displaying, feeding, cover	<i>Gray fox</i>	Sp, S, F, W	hunting
<i>Ruffed grouse</i>	Sp, S, F	feeding, cover	<i>Red fox</i>	Sp, S, F, W	hunting
<i>Woodcock</i>	Sp, S	displaying, feeding, nesting	<i>Bobcat</i>	Sp, S, F, W	hunting
<i>Bobwhite quail</i>	Sp, S, F	feeding, cover	<i>White-tailed deer</i>	Sp, S, F, W	feeding, cover

* Sp = Spring F = Fall S = Summer W = Winter

Nest boxes and other nesting structures

One of the most popular ways to improve habitat for wildlife is to provide nest boxes or structures. Nest boxes, platforms, and other types of nesting structures provide nest sites for wildlife in areas where natural nest sites (particularly cavities) are absent or available only in low numbers. They are also used to attract wildlife to specific areas even when nest sites are not limited.

In Pennsylvania, nest boxes are commonly used to provide nest sites for birds such as bluebirds, tree swallows, wrens, and wood ducks. Nest boxes also provide nest sites for mammals like squirrels and bats. Platforms and other structures are used to provide nest sites for species like the eastern phoebe, barn swallow, and some waterfowl.



Bluebird

Releasing trees and shrubs

A tree and shrub release is a technique used to enhance the growth of specific species, individuals, or groups of plants so that they produce more food or cover for wildlife. Releasing a plant involves removing other plants that are shading it and competing for sunlight. Most releases are “crown releases.” However, in some cases, releasing roots from competition may also be used. Crowns of selected species are usually released from overhead shading on at least three sides to help increase growth. When a tree or shrub release is being considered to improve wildlife habitat, the trees and shrubs selected for release should be those that provide quality food or cover for wildlife, such as fruiting shrubs.

The wildlife species that will benefit from a tree or shrub release will depend on the wildlife species present on the property and the types of trees and shrubs selected for release (see Table 5). For example, releases can be planned to improve acorn production that will feed squirrels, deer, and turkey. Releasing can also increase evergreen cover for

ruffed grouse and mourning doves, or develop vertical structure in an understory that will provide nesting and foraging sites for the wood thrush and other songbirds.

Releasing and pruning old fruit trees

Fruit trees provide food for a wide variety of Pennsylvania’s wildlife. For example, white-tailed deer feed heavily on apples in the fall. Other animals that benefit from fruit trees include the black bear, songbirds, and small mammals. Also, as fruit decays on the ground, it creates an environment that is favorable for the presence of earthworms, which is why woodcock can sometimes be seen feeding under fruit trees.

On some properties, old, decadent fruit trees can be found in abandoned fields or young forests. Old fruit trees provide clues to past land use. The property may have been a farm and these fruit trees were part of an orchard or the backyard apple trees. Over time, as other trees grew and shaded these fruit trees, fruit production was greatly reduced. Fruit trees are often still viable, and with a little attention can be returned to fruit-producing condition. “Releasing” these trees may be necessary, especially if a young forest has grown over and around them. Fruit production is very dependent upon light. Removing other trees that are shading the fruit trees will help eliminate competition for sunlight.

TABLE 5 - *Benefits provided by a tree or shrub release*

If you release	you may benefit	by providing
<i>Fruiting species</i>	<i>songbirds</i>	<i>food, nest sites</i>
	<i>small mammals</i>	<i>food</i>
	<i>black bear</i>	<i>food</i>
	<i>wild turkey</i>	<i>food</i>
<i>Nut-producing species</i>	<i>small mammals</i>	<i>food</i>
	<i>white-tailed deer</i>	<i>food</i>
	<i>ruffed grouse</i>	<i>food</i>
	<i>black bear</i>	<i>food</i>
	<i>blue jay</i>	<i>food</i>
<i>Understory shrubs</i>	<i>gray squirrel</i>	<i>food</i>
	<i>songbirds</i>	<i>nest sites, food, cover</i>
<i>Evergreens</i>	<i>small mammals</i>	<i>food, cover</i>
	<i>ruffed grouse</i>	<i>winter thermal cover</i>
	<i>mourning dove</i>	<i>nest sites</i>
	<i>black-capped chickadee</i>	<i>food, cover</i>
	<i>red squirrel</i>	<i>food, cover, nest sites</i>

Spring seep management

Spring seeps are natural water sources where fresh water from below the ground flows to the surface to form small streams or small bodies of water. Spring seeps can be found in forests or fields, but are often located along hillsides or at the bases of mountains where groundwater flows to the surface. These areas usually have a small, year-round source of fresh water. Spring seeps provide a variety of important benefits for wildlife.

Spring seeps are particularly important during the winter when they may be the only source of fresh water and food. In the winter, groundwater is typically warmer (a constant 50 to 55 degrees Fahrenheit) than air and ground temperatures. Even during the coldest weather, seeps typically remain unfrozen with flowing water and support green vegetation at a time when herbaceous vegetation is scarce. During severe winters, when other sources of water are frozen for extended periods of time, spring seeps are used heavily by wildlife. In early spring, seeps are one of the first areas where vegetation grows. Thus, this food source is available at a critical time of year when most other food sources have been depleted.

During periods of deep snow, spring seeps also provide snow-free travel lanes where wildlife can move and feed. Birds and mammals benefit from the herbaceous vegetation that grows and persists around seeps in the winter when other food is scarce. Insects in and around the seeps provide a year-round source of high-protein food. Deer and small mammals find abundant sources of “browse” and other forage growing around seeps. Bears and other berry eaters benefit from fruit-producing species that grow well in moist conditions. Songbirds benefit from the fruit and insects around seeps, often finding nest sites in the dense vegetation surrounding the seep.

Amphibians and reptiles benefit from seeps that contain slow-moving water. Because most spring seeps do not support fish populations, amphibian eggs can develop without high losses to fish predation. Reptiles such as turtles benefit from the fresh spring water and soft mucky bottom of some seeps where they can bury themselves, seeking relief from very hot weather or hibernating during the winter months. Amphibians and reptiles also benefit from the plant and insect food available around seeps.

The most important management practice for spring seeps is to protect them from any activities that could degrade the seep, such as clear-cutting beside the seep or agricultural pollution. Options for enhancing the habitat associated with a spring seep include releasing or planting beneficial trees and shrubs around the seep and encouraging the growth of herbaceous vegetation around the seep’s perimeter.

Stream bank fencing

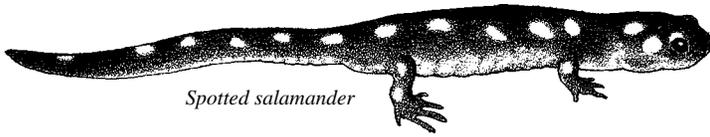
Livestock with free access to streams destroy wildlife and fish habitat, increase erosion and sedimentation, and degrade water quality. Stream bank fencing excludes livestock from sensitive riparian areas. After livestock are excluded, a buffer zone of vegetation grows between the stream and the fence. This new riparian streamside vegetation provides food, cover, and nesting sites for birds and small mammals. Over 80 kinds of birds, including herons, egrets, bluebirds, belted kingfishers, mallards, and pheasants, use streamside vegetation for summer feeding and nesting. Streamside vegetation improves fish habitat by enhancing water quality, providing protective cover, and increasing available food for fish. Stabilized stream crossings provide limited areas where livestock can have access to the stream for drinking and/or crossing the stream.

Temporary pools

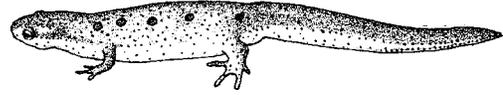
Temporary pools are wetland habitats that fill with water during a rainy season and then dry up later in the year. Most people consider temporary pools to be synonymous with vernal pools. “Vernal” means “of, relating to, or occurring in the spring,” and these pools fill with water in the spring and dry up in the late summer or early fall. However, there are also autumnal pools, which fill with water in autumn. Temporary pools are found where small depressions and swales collect runoff or intercept seasonally high water tables.

Although the water supply from these pools is temporary, it is critical because temporary pools are the breeding and hibernating grounds for amphibians like red spotted newts and spring peepers. Temporary pools do not support fish populations so amphibian eggs can develop without high losses to fish predation. These special circumstances make temporary pools essential for the survival of many amphibian populations. Ecologically, amphibians are both predators that prey on small invertebrates and prey contributing to the survival of many other predators. Since the late 1970s, scientists around the world have been reporting disturbing declines in amphibian populations. This decline makes conservation of temporary pool habitats increasingly important. In addition to providing breeding and hibernating habitat for amphibians, temporary pools also support a complex web of interactions between a variety of organisms that include aquatic insects, salamanders, frogs, turtles, snakes, large and small mammals, waterfowl, and songbirds.

The best way for landowners to provide temporary pools for wildlife is to protect any existing pools from destruction. Many temporary pools have been destroyed during development and other land-use changes. (Unfortunately, temporary pools are difficult to identify during the dry season, and



Spotted salamander



Red-spotted newt



Slimy salamander

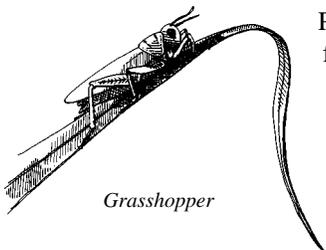
many people don't realize the value of what looks to them like a mud hole.) Temporary pools should be protected from destruction because of the important function they serve within a larger habitat area. Usually, restricting any potentially degrading activities around a temporary pool is all that is necessary to maintain the pool's healthy environment.

Some successful attempts have been made to create temporary pools for wildlife. These newly created temporary pools may help offset some of the losses of natural temporary pools. However, temporary pool creation requires special circumstances that do not exist on all properties.

Warm-season grasses

Native warm-season grasses are prairie grasses that were present when our ancestors settled what was to become the Commonwealth of Pennsylvania. The four main grasses of tall-grass prairie habitat are switchgrass, big bluestem, little bluestem, and indiangrass. Warm-season grasses, also known as "bunch grasses," grow in thick bunches instead of forming mats like many other grasses. These dense bunches of grass interspersed with open spaces between the bunches provide valuable nesting and foraging cover for upland game birds such as turkeys and pheasants, various waterfowl, and other ground-nesting grassland species like savannah sparrows.

Some warm-season grasses may grow to a height of over 6 feet. Because of their growth form and height, these grasses provide excellent cover for wildlife, especially upland game birds and waterfowl. Cottontail rabbits benefit from both the cover and forage produced by warm-season grasses, and many songbirds feed on the small seeds of the plants. Probably one of the most important benefits of warm-season grasses is that, if left uncut, they remain upright throughout the winter, providing valuable cover for many animals at a time of year when most other plants have died or are dormant.



Grasshopper

Planting warm-season grasses for wildlife has recently become a very popular practice due to the high-quality habitat that is provided by a stand of warm-season grasses.

Establishing warm-season grasses requires more patience than effort. After planting, it may take from one to four years for a full stand of grasses to develop.

Because this is a rather recent habitat management practice in Pennsylvania, new information about establishing these grasses is being learned every day. Consequently, if you are interested in establishing warm-season grasses for wildlife, it is best to talk with someone who has planted some themselves before proceeding. There are some very successful methods being implemented throughout Pennsylvania; learning about them will give you first-hand knowledge of what methods might work best on your land.

Wetland restoration

The wetland restoration program in Pennsylvania was initiated by the U.S. Fish and Wildlife Service's Partners for Wildlife Program. Wetland restorations are done on lands that were previously drained (sometimes to make cropland) and which are then restored to their natural state as a wetland by removing the tiles or plugging the ditches that drain them. The resulting wetlands vary in size and usually have an area of open water with emergent wetland vegetation growing around the perimeter of the water. These wetlands provide breeding, nesting, and feeding habitat for amphibians, waterfowl, shorebirds, and songbirds. They are essential "stop-over," resting, and feeding places for migrating species. The excellent cover offered by the prolific growth of vegetation around wetland habitats also provides food and cover for species like the beaver, muskrat, cottontail rabbit, and white-tailed deer. Animals that rely on wetland habitats, as well as animals that are generally considered upland species, benefit from restored wetland sites. Wetlands help to reduce erosion and flooding, also purifying our water supplies by filtering pollutants and sediments out of the water.

For more information about the wetland restoration program, contact your local NRCS office or call the U.S. Fish and Wildlife Service office in State College, Pennsylvania, at (814) 234-4090.

Wildlife corridors

A wildlife corridor is a habitat “patch” that connects two or more areas of undeveloped habitat that are isolated from one another. There are essentially two major types of wildlife corridors, but other areas can mimic these two types on a very local scale.

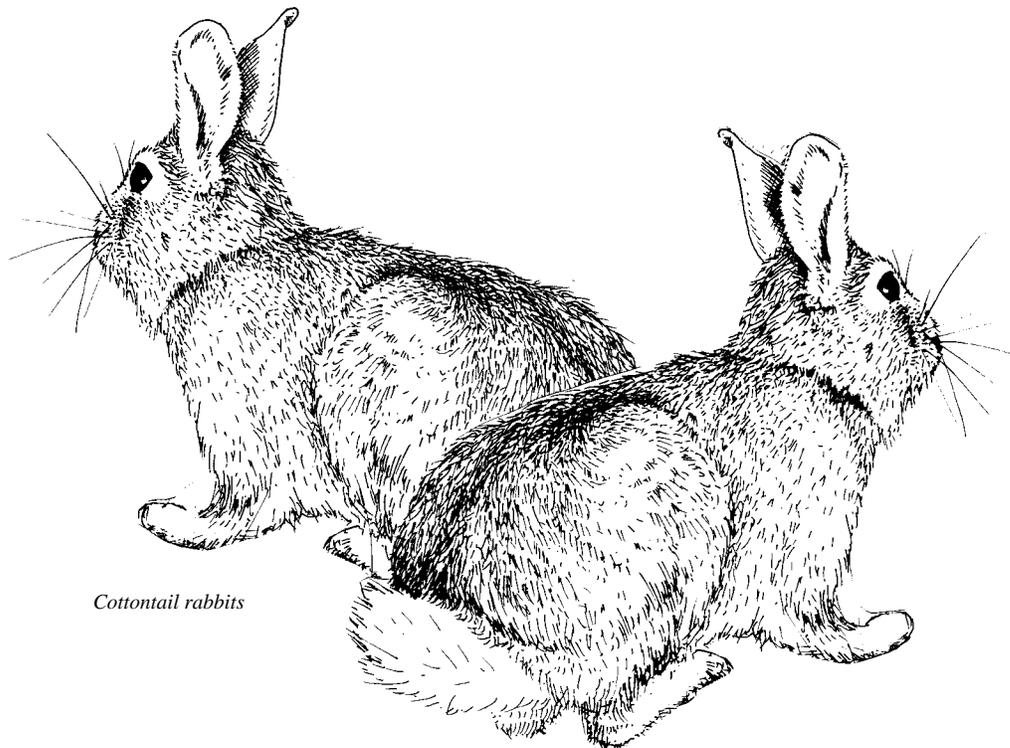
The first type is a corridor that exists on a landscape scale. An example of a landscape-scale corridor is a forested ridge top that connects, like a “bridge” of wilderness, between two or more habitats that are great distances apart. Corridors that are present on the landscape level are generally thought to be serving a connective function, benefiting species that require large expanses of undeveloped habitat because they have large home ranges, disperse over great distances, or need to travel great distances to find mates.

A second type of corridor exists on a smaller scale, usually on a local level, generally connecting two isolated habitats that are not necessarily separated by large distances. In agricultural areas, these types of corridors are often called fencerows or hedgerows. These “strip habitats” provide food and cover for wildlife. If the hedgerow connects two habitats, such as two woodlots on a farm, it may be used as a travel route between the woodlots by some species. This type of corridor can be added to a property, providing additional habitat and potential travel lanes for wildlife.

Another type of wildlife corridor that occurs on a local scale is the buffer strip of vegetation along a stream or river that varies in width. Depending on the length and width of the buffer strip, these areas may function as travel corridors in addition to providing wildlife with valuable food and cover.

Connective corridors established by habitat management practices in Pennsylvania will most likely be wooded patches of habitat that connect two isolated forests or woodlots and will provide additional food and cover for wildlife. Changes in land-use often result in the fragmentation of wildlife habitats, and habitat patches like forests become smaller and more isolated. Perhaps the best reason to plant corridors is that the original landscape was interconnected. New corridors would re-establish some of those past connections. Corridors can also function as a habitat patch, providing wildlife with food and cover whether the animal lives in the corridor or just travels through.

The species of wildlife that will benefit from wildlife corridors in Pennsylvania will depend on what plants and other habitat components exist in the corridor, where it is located, and what species of wildlife are present in the adjacent habitat. Small mammals, such as the gray squirrel and eastern cottontail, and songbirds like song sparrows and gray catbirds are some of the species that may use wildlife corridors for feeding, nesting, or movement.



Cottontail rabbits

ADDITIONAL INFORMATION

The fact sheet series *Pennsylvania Wildlife*, available from all county extension offices, provides additional information on Pennsylvania wildlife and specific habitat management practices. If you are interested in visiting sites where wildlife management practices have been implemented, obtain a copy of *Enhancing Wildlife Habitat: A Directory of Wildlife Habitat Enhancement Demonstration Sites in Pennsylvania* from your local county extension office. The directory includes descriptions of and directions to demonstration sites across Pennsylvania where wildlife habitat enhancement practices have been implemented.

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