Dakota Projects

ATTRACTING WILDLIFE

Why Is Attracting Wildlife Important?
For many of us, our outdoor environment is an important ingredient in our quality of life. Individuals and organizations work hard to landscape homes, schools, and businesses to make them more attractive and inviting. In recent years, more U.S. residents have been incorporating the needs of wildlife in their landscaping plans.

A 1991 survey by the U.S. Department of Interior revealed that more than 73 million adults enjoy wildlife experiences other than hunting. Of these, 85% feed birds, 74% observe wildlife, 35% feed wildlife other than birds, and 13% maintain natural areas near their residences. More than 40% of South Dakota's enjoy these same activities.

People care about wildlife and wildlife needs. Correctly carried out, natural areas in a yard, school, or other small acreage provide the essentials for any wild animal: food, water, shelter, and space to raise offspring. Natural areas can be a positive counterbalance to the habitat loss occurring on a large scale across the globe. Landscaping small acreages can't replace large tracts of altered lands or the natural diversity of native habitats. But these areas can weave a web of mini-habitats to support wildlife seeking daily travel routes, migration corridors, and places to raise young.

People also benefit by landscaping with wildlife in mind. A landscaped area is a more relaxing and enjoyable place to spend time. If you use native plants, you'll save time and conserve water, since native plants are adapted to living in this climate. Tree and shrub plantings provide windbreaks for buildings and play areas, help reduce noise, and increase privacy.

An environment that is healthy for wildlife is also healthy for humans. Minimizing pesticide use, or using environmentally safe controls for unwanted plants and animals, makes a yard safer for you and your family. And a great benefit is your ability to share the fruits and berries from the trees and shrubs planted for wild creatures. Your landscaped area can be as individual as you are, as you add such features as a butterfly garden, hummingbird feeders, a backyard pond, and nest boxes for birds and bats. A landscaped area is a place where your family can spend time together learning about nature.

This fact sheet is a brief overview on ways to share your outdoor environment with wildlife. This

information is condensed form a South Dakota Department of Game, fish and Park's publication, Sharing Your Space - A Homeowner's Guide to Attracting Backyard Wildlife, listed in the "Selected Resources" section.

What Planning Is Necessary?
Just as you plan a vegetable or flower garden, when landscaping for wildlife you add another consideration -- wildlife needs. Keep the four basic habitat components of food, water, shelter, and space in mind, and remember to provide these components year-round to attract year-round wildlife visitors. Assess where you are and where you want to be by considering:

- Which birds or other wildlife are usually found in your area?
- Which of these animals do you want to attract, and what attracts them?
- Are you starting from scratch, or does your property already have plants or other features that benefit wildlife?
- What about your neighbors? Can wildlife landscaping be a neighborhood project? Does a neighbor have a prized flower garden or orchard that could be jeopardized by the wildlife you attract?
- Where can you locate plantings so you can view and photograph wildlife without disturbing the animals?
- What are your property=s primary uses? Will your current activities and uses be compatible with your planned wildlife enhancements?
- Have you investigated whether any laws or regulations prohibit any of your plans?
- Do you have a source of native plants?
- Do you know which plants are noxious weeds in your area?
- Are there any properties in your area that can serve as models for your landscaping plans?

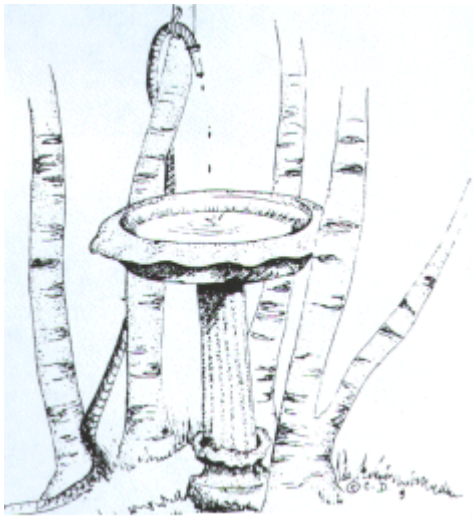

Figure 1. Dripping Water Attracts Wildlife.

What Habitat Needs Do Wildlife Have?
Keep in mind that wildlife needs water, food, cover, and space. Different wildlife species and groups have differing requirements.

Water: Wildlife needs water for drinking, bathing, and preening. Amphibians mate and lay eggs in water, and some butterfly species use nutrients found in puddles as a food source. You can provide water by maintaining the health of your natural wetlands and by creating artificial water sources, such as

birdbaths, water drips, or artificial ponds. If you choose to construct an artificial pond, be aware of pertinent community statues.

Food: Decide which wildlife species you want to attract, determine their food preferences during the season they are present or active, and provide these foods during that time. A variety of plant species, ages, arrangements, and layers hold the greatest potential to produce many food sources. Predatory mammals, reptiles, and amphibians find prey in areas with diverse cover. Bird diets vary tremendously and may include other birds, mammals, rodents, insects, fruits, seeds, or nectar.

Fruit- and berry-producing shrubs, trees, and vines provide summer food. Some native plant choices include wild plum, chokeberry, gooseberry, currants, and riverbank grape. Fall food plants include grains, buffaloberry, red-osier dogwood, and American mountain-ash. Some of the best winter food plants have persistent fruits, which remain on the plant until the tough times of late fall and winter. Winter food plants include eastern red cedar, smooth sumac, hackberry, and buckbrush.

Cover: Match your wildlife "wish list" with cover needs. You may be able to provide bird nesting cover; nesting and escape cover for small mammals; and rotting logs, mulch, and low-growing plants for herps. Some property owners may have room for a small shelterbelt. Dead or dying trees, called snags, can be important providers of nesting and roosting cover. Nest boxes can help make up for a lack of snags on your property.

Conifers, or evergreens, furnish year-round cover, particularly important to winter wildlife residents. Brush piles and rock piles can be important for small mammals, herps, and even birds. Be sure to combine cover with other wildlife attractants, such as birdbaths and bird feeding stations.

Space: Space can be places for wildlife to roost, hibernate, establish a territory, nest, brood young, and search for food. Trees, both living and dead, provide homes for many insects, which are gleaned from trunks and branches. Open areas provide foraging space for aerial hunters, such as bluebirds, kingbirds, and bats.

Figure 2: White-breasted Nuthatch.

How Do You Feed Birds?

With all the outdoor activities there are to choose from, bird watching and bird feeding are two of the most popular in the U.S. More that 63 million people feed birds. South Dakota has a variety of habitats and is centrally located on the continent, so we can at times attract birds of both eastern and western North America. Over 400 species have been recorded within our borders. Birds are easy to attract and

usually cause few problems for a property owner.
Feeding birds can be as easy as mounting a feeder on a tree or pole. As you plan feeder types and locations, consider the following:

- Do you care which species visit, or will you welcome one and all?
- Are you tolerant of inconveniences, such as bird droppings or squirrels at the feeders?
- Do plan to photograph birds?
- How large is your property? Does it have habitats that attract birds?
- Do your neighbors appreciate birds as much as you do?
- How much time and money can you devote to maintaining attractants, such as feeders and birdbaths?
- Are you ready to accept responsibility for ensuring clean, healthy, and safe feeding areas?

Because of the large variety of bird species that travel through or reside in South Dakota, you can easily attract several of them. Which birds find you feeders depend on where you live and what habitats are nearby. Winter bird feeding can attract many birds of several species. Summer birds are territorial, and only a few individuals of nesting species may visit feeders. If you maintain feeders during spring and fall, you can attract local immature birds and migratory visitors not found in your area during summer or winter.

Each species has food preferences and needs. Food choices can vary with individuals within a species. Some birds are selective, while others eat almost anything. Seed-eating birds are easy to attract with commercial bird food, such as black-oil sunflower, niger seed, or millet. Fruit-eating birds can be hard to entice without fruit trees. Insect-eating birds frequent areas with a variety of plants that harbor a variety of insects.

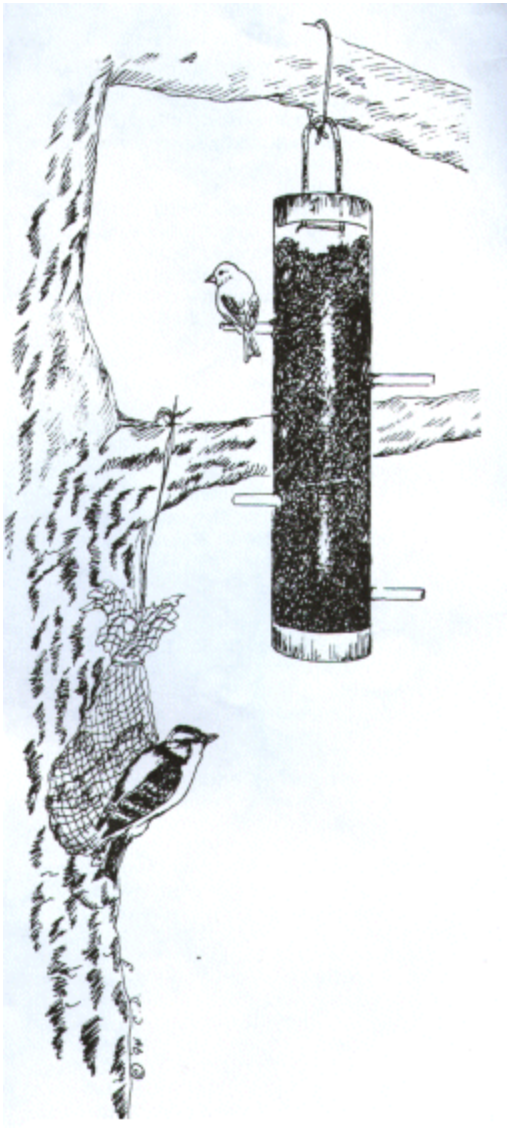

Figure 3: Hanging Niger (Thistle) and Suet Bird Feeders.

Most insect-eating birds migrate form South Dakota for the winter, but suet attracts many that remain.

A few reminders will help you provide a safe and inviting outdoor menu for visiting birds:

- Offer seed in feeders and on the ground to increase visitor variety;
- Supply suet as winter protein for woodpeckers, chickadees, and nuthatches;
- Place feeders where birds aren't vulnerable to predators or window collisions;
- Move ground-feeding sites regularly to discourage diseases;
- Discard moldy or wet food immediately;
- Disinfect feeders regularly with a diluted bleach solution to prevent diseases;
- Store seed in rodent-proof containers and clean up spilled seed.

How Can You Attract Butterflies?

There are 172 butterfly species in South Dakota. Several are rare enough to be considered candidates for

the federal endangered and threatened species list. Butterfly gardens can supplement remaining habitat and help ensure that other species do not decline. Watching and photographing butterflies can provide hours of enjoyment.

To be able to maintain a butterfly garden you will need:

- An area that receives full sun for at least half a summer day;
- An area protected from wind either naturally or through building or growing a wind screen;
- An interest in growing native plants;
- A willingness to reduce or eliminate the use of insecticides and other pesticides from your yard.

Adult butterflies require high energy food sources such as flower nectar. Butterflies visit several plant species for the nectar they need, so a garden with a diversity of plants attracts more butterflies. Pink, purple, red and yellow flowers are more attractive to butterflies than white flowers. Butterflies gather the nectar with their proboscis (a thread-like tube) so they prefer flowers with flat tops or short tubes. A butterfly garden should also include plants that flower at different times of year to provide a continuous food supply. Some native flower species that attract many butterflies are:

- black-eyed Susan (Rudbeckia spp.)
- aster (Aster spp.)
- butterfly weed (Asclepias tuberosa)
- gay feather (Liatris pycnostachya)
- rough blazing star (Liatris aspera)
- purple coneflower (Echinacea angustifolia)
- wild bergamot (Monarda fistulosa)

Unlike birds, which can make use of open water sources such as bird baths, butterflies need moist areas of mud and sand or shallow puddles, Sink a shallow pan in your butterfly plot and fill it with sand. If this is kept moist, butterflies will be able to drink from it.

Two other important needs of butterflies are a place to bask in the sun and shelter from the wind. Your butterfly garden should be sheltered form the wind but still have sunny areas. Place light-colored stones in the garden and align them perpendicular to the morning sun to provide early morning basking sites.

Which Plants Are Best?
When landscaping for wildlife, try to match your potential plant choices with the wildlife needs they provide. You'll also match plant species to your property's environmental conditions. Plant selection hinges on space available for growth, potential for expansion, and compatibility with your landscape's overall design and function. Remember that plants furnish wildlife visitors with food, cover, and space; needs that vary for different wildlife species. Environmental conditions include such factors as moisture preference, soil type and drainage, and pH range.

The following list includes some of the best native plant species that provide South Dakota's wildlife with their basic habitat needs.

- coniferous trees: Rocky Mountain juniper, eastern red cedar, Black Hills spruce, Ponderosa pine.
- deciduous trees: boxelder, silver maple, sugar maple, hackberry, green ash, black walnut, prairie crabapple, cottonwood, bur oak, mountain-ash.
- coniferous shrubs: common juniper, creeping juniper.

- deciduous shrubs: Juneberry, redosier dogwood, filbert or hazelnut, hawthorns, silverberry, American plum, common chokecherry, smooth sumac, American black currant, Missouri gooseberry, western snowberry.
- vines: American bittersweet, Virginia creeper (woodbine), riverbank grape (wild grape).

Figure 4. Bats, Moths, and Butterflies Can Be Attracted to Your Yard

Management Considerations
As you no doubt already know, the outdoor world is an interesting and sometimes unpredictable place. You may not always appreciate the creatures attracted by your habitat enhancements.

Insects: Insects, both harmful and beneficial, are part of a landscape=s living community. Reconsider your early conditioning that bugs are bad, since more than 90% of insects are useful. They pollinate plants, decompose dead plants and animals, produce such things as honey and silk, prey on harmful insects, and serve as food for other animals. But some insects are problems for us as they destroy fruit and vegetable crops and infest trees and lawns.

Concern for the health and safety of people and the environment has heightened interest in pesticide alternatives. Many general precautions and strategies concerning pest problems are part of Integrated Pest Management, commonly abbreviated as IPM.

IPM practitioners use a broad approach to pest control, with an emphasis on selecting a safe control matched to particular pest problem and the creation and enhancement of a healthy environment. The type of infestation and its severity, the degree of damage, and desired results should all be considered. IPM incorporates cultural, physical, biological, and chemical pest controls. In general, cultural controls have fewer environmental impacts than physical controls, which have fewer environmental impacts than biological controls, and so on.

Wildlife: What if your efforts to attract wildlife prove too successful? As with any endeavor, proper planning can help avert many headaches. Look beyond your property. Is depredation by deer, turkeys, or

blackbirds a problem in your area? If so, don't add to the problem by providing food that further concentrates these animals. Do not feed wildlife, except for safe and sanitary songbird feeding. If a neighbor has a prized flower garden or orchard that might be threatened by your wildlife-attracting efforts, carefully consider the implication before proceeding. A few additional precautions to consider:

- Keep your home and property tidy. Store garbage, pet food, and wild bird seed neatly and securely.
- Close all access points to your buildings by screening vents, sealing cracks and holes, and covering window wells.
- Use barriers, such as screening, netting, and fencing to protect gardens and fruit trees.
- Be aware that attracting wildlife may expose people and pets to a greater risk of disease. Use caution with any animal acting in an unusual or aggressive way.
- Be aware of legal responsibilities associated with wildlife control and pesticide use.
- Don't try to solve problems beyond your abilities. Contact trained professionals when needed.

Glossary

Amphibians - the group of vertebrate animals that includes frogs, toads and salamanders, which must lay their gelatinous eggs in water.
Coniferous - those plants that reproduce through the production of cones, such as pines and spruce.
Deciduous - plants that lose their leaves each fall.
Herps - a short hand way of referring to reptiles and amphibians.
Hibernate - to spend the winter in a dormant state.
pH - a measure of acidity or alkalinity, ranging from 1 (very acid) to 14 (very alkaline).
Proboscis - nose; in insects this refers to the tubular sucking organ used for feeding.
Reptiles - the group of cold-blooded vertebrates that include snakes, turtles and lizards, which lay shelled eggs and have scaly skin.
Roost - to rest, sit or sleep on a perch.
Suet - animal fat, often put in feeders to attract birds such as woodpeckers and nuthatches.
Vertebrates - those animals that have an internal skeleton of bone or cartilage; animals in this group include fish, amphibians, reptiles, birds and mammals.

Selected Resources For Teachers

You can find many resources on attracting wildlife in your local library. The following specific references for our region can introduce you to this topic.

Common Feeder Birds of North America, 1993 by Cornell Laboratory of Ornithology, 159 Sapsucker Woods Rd., Ithaca, NY 14850. This is a set of 2 color posters, one for eastern states and one for western ones that illustrates common birds that come to feeder. They are available for less than $2 each if you call 607-254-2411.
Landscaping for Wildlife. 2nd ed. 1994. by Carrol L. Henderson, Minnesota Dept. of Natural Resources, St. Paul, MN. Stock No. 9-15; Cost $10.95. plus shipping.
Sharing Your Space - A Homeowner's Guide to Attracting Backyard Wildlife. 1995. by Eileen Dows Stukel, Douglas C. Backlund, Maggie E. Hachmeiser, and Terry Wright, South Dakota Dept. of Game, Fish and Parks, Pierre, SD. Available from the South Dakota Department of Game, Fish and Parks, 523 E. Capitol, Pierre, SD 57501.
Wildlife Habitat Improvement Guide. 1991. NEBRASKAland Magazine, Nebraska Game and Parks Commission, Lincoln, NE. Can be purchased for $5.00 by calling Nebraska Game and

ParksCommission; phone (800) 632-5263.
Wildlife About Birds - The DNR Birds Feeding Guide. 1995. by Carrol L. Henderson, Minnesota Dept. of Natural Resources, St. Paul, MN. Stock No. 9-24; Cost $19.95, plus shipping.
Woodworking for Wildlife. 2nd ed. 1992. Author: Carrol L. Henderson, Minnesota Dept. of Natural Resources, St. Paul, MN. Stock No. 9-14; Cost $9.95, plus shipping. For sake by Minnesota=s Bookstore, 117 University Avenue, St. Paul, MN, 55155; phone (612) 297- 300/(800)657-3757.

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