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WISCONSIN WOODLANDS: Wildlife Management

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Surveys made at regional meetings of Wisconsin woodland owners reveal that many people own woodland for reasons that center around wildlife — observing and photographing wildlife, hunting and trapping are important motivations for woodland ownership. As a result, there is a growing interest in managing woodlands for wildlife.

There is also a growing need for managing for wildlife. About 60% of Wisconsin's forests — over 14.5 million acres — are owned privately (not counting forest industry holdings). There are about 150,000-170,000 individual owners, so the average private woodland contains less than 100 acres. Continuing subdivision of the land among a growing number of owners is reducing the size of individually owned parcels of woodland wildlife habitats even more.

Individual woodland owners benefit from wildlife management, but so does society as a whole. There will never be enough public land to produce the quantity and variety of wildlife needed to satisfy the public's "consumptive" and "nonconsumptive" uses. Thus, private lands are critically important for maintaining Wisconsin's valuable wildlife populations.

Wildlife management can yield returns beyond direct enjoyment and use of wildlife. The woodland owner can harvest useful fruits and nuts from plantings made mainly to feed wildlife. Land managed for game can be a source of income through lease to hunting clubs or other charge for hunting privileges. A woodland trail created to permit wildlife observation and study can serve as a ski trail in winter.

This publication discusses some of the basics of wildlife management. It lists useful management practices and techniques, the steps involved in developing a wildlife management plan, and sources of additional information and assistance. Its aim is to help the woodland owner examine his or her wildlife management options.



What is Wildlife?



Many people consider only large, conspicuous or edible species — mainly mammals and birds — to be “wildlife.” “All animals are equal, but some are more equal than others” is a common viewpoint. Surely, endangered species should receive special attention wherever they are present. And in some situations one or more species of game animal or furbearer may be favored and “pest” species may have to be controlled. However, all species of animal life — mammals, birds, reptiles, amphibians and insects — are important and should be considered “wildlife”.

Some Important Considerations

Different plant communities favor different wildlife communities. The wildlife potentials of a beach-maple forest in Door County, an oak-hickory woods in Iowa County and a spruce-fir forest in Vilas County are very different. Climate, soil type, history of land use and other factors govern wildlife communities in large part by determining the makeup of plant communities. In general, the more diverse a plant community, the more diverse the wildlife. Thus, 80 acres of land containing mature oak woods, brushy openings, grassy fields and a cattail-choked farm pond can support more wildlife species than an 80-acre stand of a single species.

Wildlife needs are both basic and complex. All species require food, water and cover, but each species has its own specific requirements. What’s more, these requirements change with the season. An excellent spring nesting cover for birds may be worthless as winter shelter. An adequate understanding of a species’ basic ecology is necessary for its proper management.

Do not set unreasonable objectives either for a given species or for numbers of animals expected. Be aware that seasonal habits or daily wanderings may make it impossible to keep certain animals on a small property. Wild turkeys, for example, may wander over several thousand acres, so you should be pleased to have them as occasional visitors. Many migrating songbirds will not remain in Wisconsin for the winter no matter what is done in their behalf.

If you are interested in a particular species, find out what its territorial requirements are. You cannot expect more than 4 or 5 rabbits or 1 or 2 pairs of squirrels per acre of good habitat.

Patience is a virtue. It takes a long time to change vegetation and even longer for wildlife to respond to the changes. You can get faster results from some activities, such as setting up a bird feeding station. Remember that severe winters, wet cold springs and natural events may affect wildlife more — in a negative way — than your positive management efforts.

Your woodland’s surroundings may be more important than the woodland itself. Look to neighboring land as a source of wildlife, a barrier to wildlife movement, or to provide a vital habitat requirement you cannot provide.



Abundant wildlife can cause problems. At high population levels, many species become pests that compete with other land uses. Deer can — and do — cause considerable damage in Wisconsin. Your woodland could provide sanctuary for a deer herd that raids a neighbor’s orchard or cornfields. Deer may also make it nearly impossible to establish some of your own plantings such as Christmas trees and fruiting shrubs. You will need to protect gardens and berry patches from a number of species.



Abundant wildlife will also attract potential users of that wildlife — especially hunters — creating safety and trespass problems. Before you consider locking up the wildlife resources on your land by posting, remember that wildlife belongs to everybody. We have a system of private land ownership, but the public as a whole owns wildlife. This arrangement creates problems of access to a public resource on private land. Programs like the Wisconsin Department of Natural Resources' "Project Respect" are designed to help landowners deal with trespass while at the same time providing some access to the public.



Wildlife Management Practices and Techniques

This publication can treat this large subject only briefly. References in For Further Reading contain a great deal of specific information. Keep in mind that any activity intended to benefit one species usually affects a whole group of species — usually beneficially, but sometimes harmfully. Many agricultural and soil conservation practices benefit wildlife in some way. A professional biologist can help you identify practices that are appropriate for you.

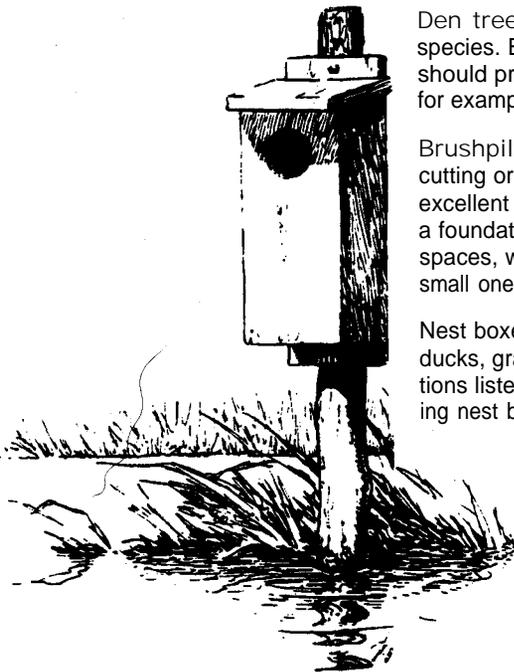
Plantings. You can make special plantings to increase cover and plant diversity and to provide food sources. Common plantings include scattered groups of conifers for escape and winter cover, plots of such food plants as corn, sorghum, millet, clover (or various combinations of them) and such food-producing shrubs as nannyberry, dogwoods, autumn olive and buffalo berry.

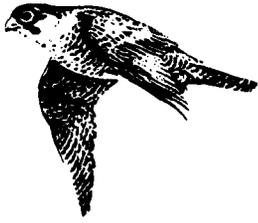
Feeding. Setting up and stocking a bird-feeding station is the best-known example of a wildlife feeding program. Many popular publications describe the "what, when and how" of bird feeding. However, direct feeding of other species — beyond providing food patches and perhaps a salt block for deer — is difficult and, in many cases, not a good idea. Feeding results in tameness and dependence, which are often detrimental to wildlife.

Den trees. Large, hollow or dead trees provide valuable living space for many species. Even if you cut firewood or harvest timber from your woodland, you should preserve at least 2 or 3 of them per acre. Live nut-product trees — oak, for example — that have cavities are doubly valuable for wildlife.

Brushpiles. By constructing brushpiles, you can make good use of slash from cutting or clearing and even discarded Christmas trees — piles of brush provide excellent protection for rabbits, grouse and other species. The piles should have a foundation of crisscrossed logs 4 inches or more in diameter to provide living spaces, with smaller brush and twigs piled on top. Large piles last longer than small ones.

Nest boxes aid wildlife, especially if suitable den trees are in short supply. Wood ducks, gray squirrels, screech owls and some songbirds use nest boxes. Publications listed under For Further Reading contain directions for placing and maintaining nest boxes.





Habitat diversity. If your land is blessed with a variety of moist lowland and upland fields, brush and woods, you may not be able to improve its habitat diversity. But if your land is mainly wooded, consider some clearing or timber harvest to create the openings and early stages of plant succession (characterized by grasses and herbaceous plants) that many species require for feeding and nesting. A farm pond can provide valuable wildlife habitat as well as fishing, swimming, fire protection and other side benefits.

Grazing. While limited grazing in a portion of a woodland might benefit wildlife by opening up dense vegetation, grazing as a general practice is detrimental to wildlife. Cattle remove the valuable cover and food supply from the ground and understory vegetation.

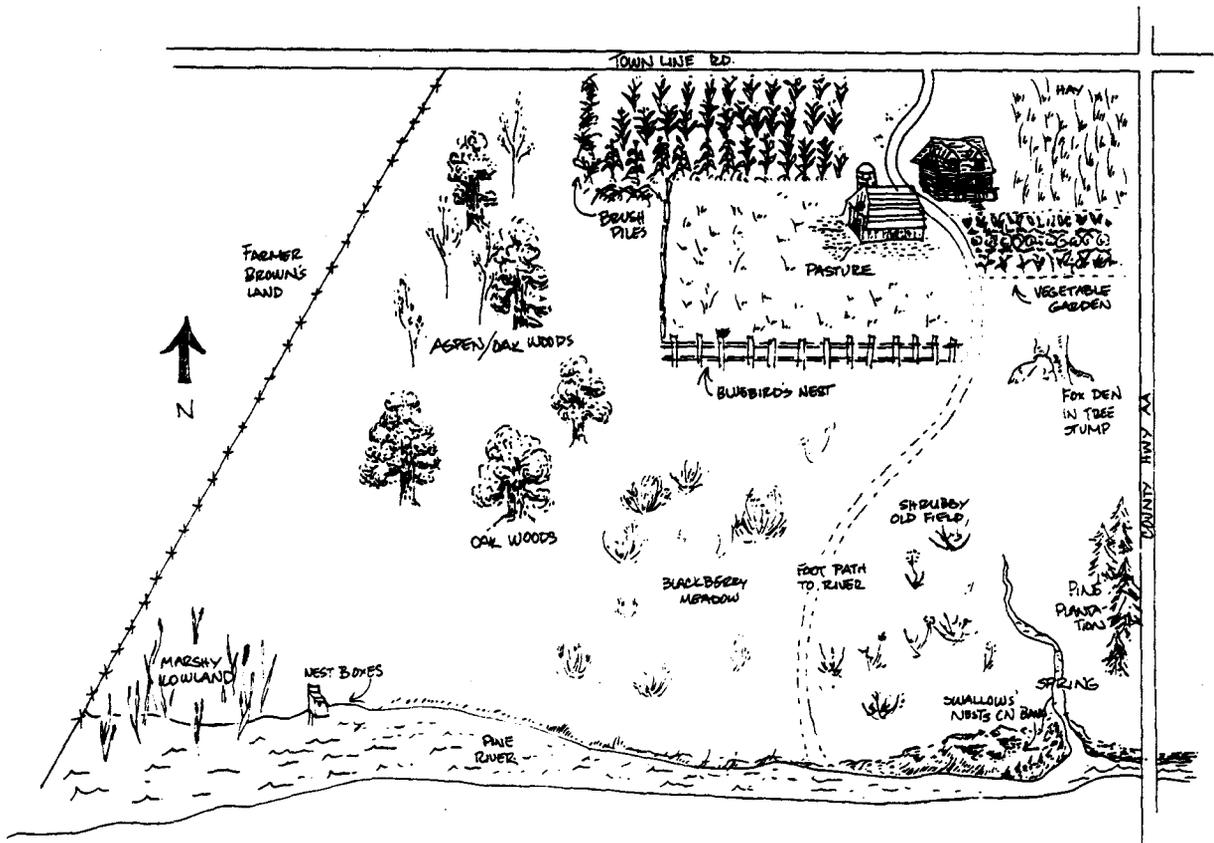
Planning for Wildlife

There is a logical sequence of steps you should follow once you have decided to plan or manage for wildlife.

1. Ask the following questions:

What are my objectives? Decide exactly what you would like to do for wildlife and wildlife habitats. Do you want more individuals of a few game species, more birds at your feeder, or a greater diversity of species in your woods. Write down your objectives.

What do I have to work with? Inventory the species and habitats you already have. Spend some time in the woods learning how to identify both the vegetation and the wildlife. Keep a record of what you find and draw a map of your woods that includes different types of vegetation, water, den trees, springs, cover and other key habitat elements.



What am I willing to trade for wildlife? Diagnose problems and management needs. Decide whether you have the time and money to reach your objectives. Managing for wildlife may require passing up some firewood in a dead tree, modifying existing vegetation, buying some nursery stock for planting, or taking some land away from another use.

2. Design a plan.

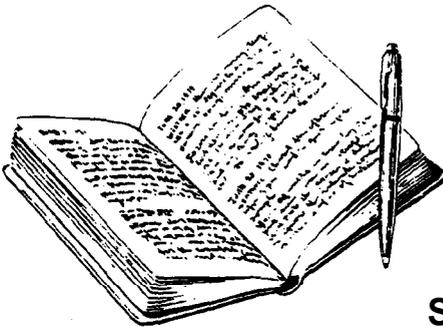
Include the map, a description of the species to be benefited, a summary of planned activities and a timetable for completion. The timetable will help put everything into proper perspective. Consultation with a professional (See Sources of Help) will help you design the right plan for your land.

3. Carry out the plan.

A few basic management techniques were listed earlier in this publication. Many more techniques are described in publications listed under For Further Reading. How you carry out your plan will depend on what species you are interested in and the current status of your land.

4. Evaluate your progress

Keep a journal of your activities and observations. Learn how to count or estimate the abundance of species from reading signs. A journal will not only provide a yardstick by which to measure your success, but it will also be a source of enjoyment as you look back on the development of your land and especially noteworthy wildlife observations.



Sources of Help

Wisconsin Department of Natural Resources. County wildlife managers, district wildlife specialists and staff specialists in Madison can provide advice on management, access problems and wildlife damage as well as information on programs like Project Respect.

University of Wisconsin-Extension. County agricultural or resource agents and staff wildlife specialists (located in the Department of Wildlife Ecology, University of Wisconsin-Madison, Madison, Wis. 53706) can provide advice and information.

Soil Conservation Service (U.S. Department of Agriculture), County, district and state personnel can provide technical, on-site assistance with wildlife habitat development.

Agricultural Stabilization and Conservation Service (U.S. Department of Agriculture). This agency can provide financial assistance (federal cost sharing) for soil conservation and habitat development practices.

4-H clubs. Many local 4-H groups are involved in the "Acres for Wildlife Program." 4-H members assist with basic management practices on land that has been designated as wildlife habitat.

Sportsmen's clubs. Do not overlook experienced, responsible sportsmen as a source of advice and perhaps labor. By exchanging hunting privileges for assistance, you may control flagrant trespass and benefit many non-game species.



For Further Reading

Books

* *Practical Wildlife Management* by George Burger, Winchester Press, New York, N. Y., 1973, \$10.00.

Mammals of Wisconsin by H.H. Jackson, University of Wisconsin Press, Madison, Wis., 1961, \$17.50.

Ducks, Geese and Swans of North America by Frank Bellrose, Stackpole Books, Harrisburg, Pa., 1978, \$17.95.

American Wildlife and Plants by A.C. Martin, H S. Zim and A.L. Nelson, Dover Publications, N. Y., 1951, \$3.95.

**Woodlands and Wildlife* by J. Hassinger, L. Hoffman, M.J. Puglisi, T.S. Rader and R.G. Wingard, Pennsylvania State University, Box 6000, University Park, Pa., 16802, 1979, \$2.00.

Game Management by Aldo Leopold, Charles Scribners and Sons, New York, 1933.

Peterson Field Guide Series: Birds, Mammals, Animal Tracks, Trees and Shrubs, Reptiles and Amphibians, Insects, Houghton Mifflin Co., Boston, about \$5-\$8 each.

***Sand County Almanac and Sketches Here and There* by Aldo Leopold, Oxford Univ. Press, 1949, \$3.95 (less expensive paperback editions may be available in some bookstores).

Guidelines for Increasing Wildlife on Farms and Ranches, Kansas State University, 118 Umberger Hall, Manhattan, KS, 66506, \$27.00 (this 600-page handbook is very detailed; order as "Wildlife Habitat Handbook").

Booklets

**Helping Wildlife: Working with Nature* by D.E. Benson, Wildlife Management Institute, 1000 Vermont Avenue, Washington, D.C. 20005, \$1.00.

The Farmer and Wildlife by D.L. Allen, Wildlife Management Institute, address above, \$1.00.

Placing American Wildlife Management in Perspective, Wildlife Management Institute, same address above, 50 cents.

**Wildlife Habitat Improvement* by J.J. Shomon, B.L. Ashbaugh and C.D. Tolman, National Audubon Society, 1130 Fifth Avenue, New York, N. Y., 10028.

**Making Land Produce Useful Wildlife*. Farmers Bulletin No. 2035, U.S. Department of Agriculture, Superintendent of Documents, Washington, D. C., 35 cents.

**Conservation Education Publications*, National Wildlife Federation, 1412 16th Street, NW., Washington, D.C. 20036 (contains list of useful references).

**Conservation Directory*, National Wildlife Federation, address above (contains addresses of state, federal and private organizations that can provide publications and materials).

A Guide to Urban Wildlife Management by Daniel L. Leedy and Lowell W. Adams, National Institute for Urban Wildlife, 10921 Trotting Ridge Way, Columbia, MD, 21044, materials.

**Wildlife and Timber from Private Lands: A Landowner's Guide to Planning* by D.J. Decker, J.W. Kelly, T.W. Seamans and R.R. Roth, Cornell Cooperative Extension Service, Ithaca, NY, 14850, \$3.95.

**Enhancement of Wildlife Habitat on Private Lands* by Daniel J. Decker and John W Kelly. Cornell Cooperative Extension Service, Ithaca, NY, 14850, \$3.95.

*Especially helpful reference

**Highly recommended



*SCS *Game Management Series*, available from state or district offices of the Soil Conservation Service. Specify species you are interested in:

- | | |
|-------------------------|---------------------|
| (a) Nongame Birds | (h) Grouse |
| (b) Hungarian Partridge | (i) Rabbits |
| (c) Pheasant | (j) Squirrels |
| (d) Quail | (k) Muskrat |
| (e) Deer | (l) Prairie Chicken |
| (f) Doves | (m) Ducks |
| (g) Turkey | |

The Wisconsin Department of Natural Resources offers a wide range of fact sheets on nongame wildlife, endangered species, game animals and furbearers at no charge. Contact your local DNR office or write to the Wisconsin DNR, Information and Education Division, Box 7921, Madison, WI, 53707. The Ruffed Grouse Society, 1400 Lee Drive, Coraopolis, PA, 15108, offers an extensive array of publications on the management of ruffed grouse and other woodland wildlife.

Other Materials

**Gardening with Wildlife Kit, National Wildlife Federation, 1412 16th Street, N.W., Washington, D. C., 20036, \$14.50 (a packet with many helpful booklets, fact sheets, diagrams, tools, seeds, etc.).

Publications Available from County UW-Extension Offices

G1609 *Landscape Plants that Attract Birds* by R. Ellarson.

G2091 *Shelves, Houses, Feeders for Birds and Squirrels* by G. Barquest and R. Ellarson and S. Craven.

G2295 *Wisconsin Farm Fish Ponds* by J.H. Klingbiel, L.C. Strickler and O.J. Rongstad.

*G2818 *Wisconsin Wetlands* by D.A. Yanggen and others.

*G3176 *Birdfeeding: Tips for Beginners and Veterans* by S.R. Craven and R.L. Ruff.

G3252 *The Ecology of the Ruffed Grouse* by S. DeStefano, S.R. Craven and R.L. Ruff.

Bulletins dealing with problems caused by such species as deer, rabbits, moles, skunks, bears, bats and snakes are also available.

*Especially helpful reference

**Highly recommended

Acknowledgement

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