

Web Resources for Master Gardeners

Compiled by [John P. Loegering](#), Wildlife Ecologist, University of Minnesota

Below I have compiled several web links that may be useful. The list is not comprehensive, but will be a good start. If you find other links that you believe warrant inclusion, please email them to me.

Several sites are commercial enterprises (i.e., .com) that had good information at the time I viewed them. Most of these sites are honorable; however, some may have marketing objectives that conflict with good gardening or wildlife objectives, or may modify their pages in the future. Please alert me to any of these when you find such conflicts. There also are several highly commercial sites that I found or that other gardeners recommended that I chose not to include because of their aggressive, commercial nature.

My criteria for inclusion was that they 1) have good science-based content, 2) are stable and not likely to change (no one likes a bunch of dead links), and 3) are reasonably objective in their presentation. Most sites satisfy these criteria; however some do not. I am assuming that the reader is astute enough to see that a raccoon trap manufacturer is likely to strongly recommend trapping as an animal damage solution. It might be one solution, but not THE solution.

Several sources are in Portable Document Format (.pdf) and require Acrobat Reader for viewing.



General Sites

- ε [Minnesota Department of Natural Resources](#) has several interesting and important sites to visit about wildlife. It lists several species that are likely to be found in gardens or be involved in human/wildlife conflicts and provides information about the biology, damage assessment and possible solutions. This is a great 'go to' site when you want to learn more about wildlife.
 - [Living with Wildlife](#) has several sections on specific wildlife as well as nuisance wildlife issues.
 - [Nature Snapshots](#) features natural history about many animals, butterflies to wolves.
- ε [Minnesota Extension Service](#) has several publications available via a searchable database such as [Managing Your Land for Wildlife](#). They also have a fabulous WebBoard titled [Ask a Master Gardener](#) that includes a wildlife segment. The [Extension Center for Natural Resources & Environment](#) takes a more comprehensive look at these issues.
- ε After you have finished your Master Gardener training, you might want to consider becoming a [Minnesota Master Naturalist](#).
- ε [eXtension.org](#) is a national site with ties to many state extension programs. They have a treasure trove of [Wildlife Damage Management](#) information.
- ε [Natural Resources and Environmental Management](#) (NREM) Program, Cooperative Extension Service System lists several [Flagship Programs](#) that deal with wildlife.
- ε [Minnesota Agricultural Experiment Station](#) focuses on agriculture issues with some information on wildlife.
- ε [Natural Resources Conservation Service](#) and the Wildlife Habitat Management Institute has produced nearly three dozen leaflets on a variety of wildlife species and topics.
- ε [The National Gardening Association](#) has several articles dealing with many different aspects of

gardening, including enhancement and wildlife damage control of various species.

- ε [Wildlife and Gardening, Suite101.com](#) addresses many different garden topics from butterfly gardening to various control options.

Presentations that I have recorded for various audiences.

- ε University of Minnesota Extension Service's [Master Gardener Program](#) Training.
 - [Living With Wildlife](#), 59 slides, 1 hour, 24 minutes.
 - [Gardening For Wildlife](#), 77 slides, 1 hour, 5 minutes.
- ε [Urban Wildlife](#), 2008 Shade Tree Short Course presentation, 32 slides, 39 minutes.

Attracting Wildlife



- ε [Wild about Gardening](#), Canadian Wildlife Federation, is a multiple topic site.
- ε [Landscaping for Wildlife](#), Connecticut Agriculture Experiment Station, notes the basics.
- ε [Landscaping for Wildlife: Trees, Shrubs, and Vines](#); [Penn State College of Agricultural Sciences](#).
- ε [National Wildlife Federation](#) has a [Backyard Wildlife Habitat](#) program that is first-rate!
- ε Garden plans can focus on developing [bird-friendly gardens](#).
- ε Using [native plants](#) can have several advantages.
- ε [Landscaping with native plants](#), Environmental Protection Agency.



Attracting Birds to your Yard and Garden

- ε The topic of Garden Habitat Development for butterflies and birds has really exploded in the past few years. You might start at several general web sites such as <http://gardening.about.com/>, http://www.birds-n-garden.com/attract_wild_birds.html, [Shrubs, Trees and Brambles for Birds](#), or [Trees for Birds](#)
- ε [Blue Jays](#)
- ε [Birds and garden insect control](#)

Coping with Nuisance Wildlife



- ε [Wildlife Damage Management Internet Café](#) hosts the widely-used [Prevention and Control of Wildlife Damage](#), University of Nebraska-Lincoln. This is the single most important site for wildlife damage with hundreds of .pdf files available. 
- ε [Living with Wildlife](#), Minnesota Department of Natural Resources.
- ε [Barryman Institute for Wildlife Damage Management](#).
- ε [Urban pest problem solvers](#), Pennsylvania State University.
- ε [Wildlife Damage publications and Fact Sheets](#) (near the bottom, free downloadable .pdf files ) , Cornell University Extension Service
- ε [Vertebrate Pest Control](#), University of Arizona Master Gardener Manual,
- ε [Wildlife Management Information](#) source containing links on most species of interest (e.g., [bats](#), [moles](#), [opossums](#), [hares](#), [rabbits](#), and [shrews](#)). Remember to always consider the source of the various links.
- ε [Wildlife Damage Control](#) is a private company that specializes in controlling wildlife-human interactions.
- ε [Control of Mammals and Birds in the Vegetable Garden](#), Alabama Cooperative Extension Service,



is a general, quick reference.

- ε [The Kemper Center for Home Gardening](#) at the [Missouri Botanical Garden](#) has several suggestions for Integrated Pest Management of several pest animal species. Most of their information is good.
- ε [Wildlife MG Decision Support Guide for Wildlife](#), North Carolina State University.
- ε [Havahart](#) is a trap and feeder manufacturer that has several 'kinder, gentler' methods of dealing with nuisance wildlife (deer, chipmunks, cats, rabbits, raccoons, squirrels, etc.).
- ε [Gardens Alive!](#) promotes "environmentally responsible products that work". I don't know if they really work, but I pass this along to anyone who might try them. Please let me know.

Woodlands and Wildlife (not really a Master Gardener topic, but of interest to some readers)

- ε [Trees & Woodlands](#), University of Minnesota Extension.
- ε [Woodland Advisor Program](#), University of Minnesota Extension.
- ε [Cloquet Forestry Center](#), College of Natural Resources, University of Minnesota.
- ε [Department of Forest Resources](#), University of Minnesota Extension Service.
- ε [Department of Wood and Paper Science](#), University of Minnesota Extension Service.
- ε [Sustainable Forestry Education Co-operative](#), College of Natural Resources, University of Minnesota.
- ε [USDA Forest Service Field Office](#), St. Paul.
- ε [Managing Woodlands for Wildlife Part 1](#) from University of Illinois Urbana-Champaign. 
- ε [Managing Woodlands for Wildlife Part 2](#) from University of Illinois Urbana-Champaign. 

Species-Specific Materials

Bats

- ε [Bats](#), Minnesota Department of Natural Resources.
- ε [Bats](#), University of Minnesota Extension Service.
- ε [Bat Conservation International](#), Austin Texas -- this is a HUGE information source.
- ε [Bat Conservation and Management](#) is a commercial site that is definitely trying to sell you bat boxes, and detectors, etc. Generally you can make many of the houses and other products if you are handy but these folks have proven designs and the quality of at least 1 house I have seen is good. They also have several nice videos on bat research.

Bird Control

- ε [Crows](#), Project Wildlife, San Diego, CA.
- ε [Bird Control for Fruit Producers](#), Ontario Ministry of Agriculture and Food.

Bluebirds

- ε [Attracting Bluebirds and Other Cavity Nesting Songbirds in North Dakota](#), [Northern Prairie Wildlife Research Center](#), [U.S. Geological Survey](#).
- ε [North American Bluebird Society](#) has a wealth of information from biology, to nest boxes, to feeding meal worms (a pretty exciting activity).
 - Mealworms can be purchased from Rainbow Mealworms, 1-800-777-9676 or [Grubco](#), Hamilton, Ohio. 1-800-222-3563. (Usually I do not recommend commercial sources, but it is tough to find these sources and there just are not that many available. Nonetheless, this should not be considered an



endorsement as I have not personally ordered from these companies)

Beaver

- ε [Beavers: Wetlands & Wildlife.](#)

Deer

Both urban and rural deer present a huge challenge to gardening (or forestry, for that matter). There are several sites out there and we post only a few here. Remember, some of these are private sites that are not necessarily the best science; however, they do have some effective techniques listed.

- ε [Controlling Deer Damage](#), Oklahoma State University Extension. 
- ε [Reducing Deer Damage to Home Gardens and Landscape Plantings](#). Cornell University Cooperative Extension Service.
- ε [Deer Fact Sheet](#), Cornell University Cooperative Extension Service. 
- ε [Minimizing Deer Damage to Residential Plantings](#) from Montana State University Extension Service.
- ε [Deer in the Garden](#), University of Rhode Island Extension.
- ε [Stanly Park Ecological Society](#) has a section on Urban Wildlife issues.
- ε [My Deer Garden](#) has several links of interest.
- ε [Deer Busters](#) sells many products and is offered here as an example, not an endorsement. You need to do your homework before you believe all the marketing!
- ε [Organic Gardening and Deer](#), [Organic Gardening](#) magazine.
- ε [Wireless Deer Fences](#) -- This one is just too odd not to pass along, Ingenious, yes, but effective? Who knows?
- ε Deer Resistant Plant lists published in [Garden Gate Magazine](#), [Deer Resistant Landscape Nursery](#), and from [Vermont](#).

A recent peer-refereed scientific wildlife study has evaluated a variety of deer repellents and found Plantskydd and Deer Away Big Game Repellent were generally the most effective for long-term repellent properties. For more details, see

Wagner, K. K. and Dale L. Nolte. 2001. Comparison of active ingredients and delivery systems in deer repellents. Wildlife Society Bulletin 29:322-330.



Hummingbirds and Butterflies

Your local nursery or garden store could be the best source for you to find locally-adapted hummingbird and butterfly plants that thrive in your area. Moreover, Landscaping for Wildlife is a good reference.




- ε [Butterfly Gardening](#) by Vera Krischik is a [University of Minnesota Extension Service](#) Publication that is fully available on the web.
- ε [Backyard Wildlife: To Feed A Hummingbird](#), University of Nebraska-Lincoln Extension Service. A good introduction to hummingbird gardening, including a plant list, which may be somewhat applicable to Minnesota.
- ε [Hummingbird site](#) that includes good information and a nice map of the northward migration (i.e., so when do I put my feeder out?).
- ε Several plant lists can be found by simply using an internet search engine such as Yahoo or Google to search for the words “attract humming bird” (no quotes). You will get more hits than you realize and may want to refine your search to Minnesota or the surrounding states.

Moles

- ε [Moles and Shrews](#), University of Minnesota Extension Service.
- ε [Moles, Prevention and Control of Wildlife Damage](#), University of Nebraska - Lincoln. 
- ε [Controlling Moles In The Home Lawn](#), Ohio State University Extension Fact Sheet.
- ε [Controlling Moles](#), Oregon State University Extension Service. 
- ε [Managing Wildlife Damage: Moles](#), Virginia Cooperative Extension Service.
- ε [Integrated Pest Management Manual](#), Wisconsin, has several pages on outdoor vertebrate pests including [moles](#).
- ε [Animal Damage Management – Moles](#) from Purdue University. (You will need to have Adobe Acrobat on your computer to use this information.).
- ε [The MoleMan](#) is not from a university source, but has reliable information.
- ε [Wildlife Damage Control](#) is a commercial site that both peddles its wares, as well as provides some nice photographs of mole damage.
- ε [Molecatchers](#) is a commercial outfit with good information about moles (with a bit of wry humor mixed in). They are based in OH and don't likely make house calls, but they do offer helpful hints and dispel several myths.



Pocket Gophers

- ε [Guide to Pocket Gopher Control in Montana](#), Montana State University Extension Service
- ε [Rodents](#) in [Prevention and Control of Wildlife Damage](#). This is the single most important site for wildlife damage with handouts available in .pdf files format. 

Porcupines

- ε [Rodents](#) in [Prevention and Control of Wildlife Damage](#). This is the single most important site for wildlife damage with handouts available in .pdf files format. 


Rabbits

- ε [Protecting Gardens and Landscape Plantings from Rabbits](#), University of Wisconsin Extension Service. 
- ε [Cottontail Rabbits](#) in [Prevention and Control of Wildlife Damage](#). This is the single most important site for wildlife damage with handouts available in .pdf files format. 
- ε Interesting [Plans for Excluding Rabbits](#) using a simple chicken wire barrier.

Raccoons

- ε [Raccoons--Discourage raccoons from pillaging the yard and garden](#), Oregon State University Extension short article
- ε [The Kemper Center for Home Gardening](#) at the [Missouri Botanical Garden](#) has several suggestions for Integrated Pest Management of several animal species including [raccoons](#).


Squirrels

- ε [Rodents](#) in [Prevention and Control of Wildlife Damage](#). This is the single most important site for wildlife damage with handouts available in .pdf files format. 
- ε When the Squirrels at your bird feeder have you at wits-end and your spouse is wondering which one of you is smarter, consider that it [could be worse](#) (wildlife biologist humor; source unknown).

Skunks

- ε [Skunks](#), University of Minnesota Extension Service.
- ε [Skunks](#), University of Wisconsin Extension Service.
- ε [Coping with Skunks](#), Colorado State University.
- ε [Controlling Skunks](#), Michigan State University Extension Service.
- ε [Striped Skunk fact sheet](#), Connecticut Division of Wildlife. 
- ε [Living with Skunks](#), University of California, Santa Cruz.
- ε [Skunk fact sheet](#), Project Wildlife, California.

Snakes

- ε [Reptiles and Amphibians](#) section in [Prevention and Control of Wildlife Damage](#). This is the single most important site for wildlife damage with handouts available in .pdf files format. 


Voles

- ε [Rodents](#) in [Prevention and Control of Wildlife Damage](#). This is the single most important site for wildlife damage with handouts available in .pdf files format. 

Woodchucks

- ε [Controlling Woodchucks](#), University of Missouri Extension Service.

Woodpeckers

- ε [Birds](#) section in [Prevention and Control of Wildlife Damage](#). This is the single most important site for wildlife damage with handouts available in .pdf files format. 

Various Conservation Organizations have programs and information targeted at integrating wildlife into backyards and gardening.

- ε [Audubon](#)
- ε [Cornell Laboratory of Ornithology](#) has several programs.
- ε [National Wildlife Federation](#) has a [Backyard Wildlife Habitat](#) program.
- ε more to come

[Prairie Restorations](#), Inc is a private corporation with a long history of planting prairies throughout Minnesota. I generally try to avoid recommending commercial resources, but these folk will lay some nice groundwork in your understanding of what is involved, what it will cost, and what factors play into your decision on establishing a native prairie community. Nonetheless, this is personal, not an official endorsement.

Published Materials that may be quite helpful



Henderson, C. 1987. **Landscaping for Wildlife**. Minnesota Department of Natural Resources. Available from MN DNR. A great resource with wonderful plant lists. Cost: ~\$12.



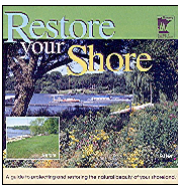
Henderson, C. L., C. Dindorf, and F. Rozumalski. 1998. **Lakescaping for Wildlife & Water Quality**. Minnesota Bookstore. 176pp. ISBN: 0964745127 Cost: ~\$20.



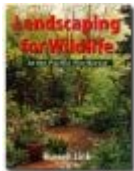
Henderson, C. 1995. **Wild about Birds: The DNR Bird Feeding Guide**. Minnesota Department of Natural Resources.



Henderson, C. **Woodworking for Wildlife**. Minnesota Department of Natural Resources.



The [Restore Your Shore](#) instructional CD ROM is a powerful multimedia program for shoreland owners and professionals to use in implementing shoreland restoration and protection projects.



Landscaping for Wildlife in the Pacific Northwest by Russel Link. 1999. University of Washington Press. Cost: ~\$30. Note that the concepts are applicable but some recommended plants will not make it in Minnesota



[Prevention and Control of Wildlife Damage](#) by Scott E. Hygnstrom, Robert M. Timm, and Gary E. Larson. 1994. University of Nebraska Cooperative Extension
This is the 'bible' for managing a variety of wildlife-human interactions.
Cost: Books (\$45), CD-ROM (\$43), or both (\$65).

Many of the Minnesota publications are available from:
[Minnesota's Bookstore](#)
660 Olive Street
St. Paul, MN 55155
(651) 297-3000 Twin Cities metro, or nationwide toll free (800) 657-3757
TTY: (651) 282-5077 or (800) 657-3706
fax. (651) 215-5733

Search Terms

Although sites on the internet vary substantially in quality and appropriateness of information, we have found the following search term or strings helpful. Use them in your favorite search engine (e.g., Google, Yahoo, etc.). Note that we have left off suffixes to make the searches as broad as possible. Good luck.

Wildlife Gardening

Gardening bird
Butterfly garden
Bird garden (or hummingbird garden)
Deer proof
Urban deer control
Deer resistant plants
Animal control (i.e. rabbit control)

For Extension Educators:

- ε [Living With Wildlife](#) presentation delivered to Master Gardener Core courses throughout the state (2006, 2Mb).
 - ε [Landscaping For Wildlife](#) delivered as an advanced course to Master Gardeners (2005, 1.4 Mb)
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Disclaimer: This site reflects the opinions of the author and not that of the Regents of the University of Minnesota. [Feedback is encouraged.](#)

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