

GUIDE TO NATURAL LANDSCAPING 2002 Edition





PUBLIC SERVICES DEPARTMENT

Solid Waste & Recycling 415 Stockbridge Avenue Kalamazoo, Michigan 49001-2898

Dear Kalamazoo Resident:

Thank you for your interest in natural landscaping. Many of us are beginning to realize the ecological, economic and aesthetic benefits from natural landscaping. In order to support and encourage citizen efforts to create a more beautiful urban environment through natural landscaping, this guide has been assembled. Ralph Waldo Emerson noted, "nature always wears the colors of the spirit—it is the organ through which the universal spirit speaks to the individual, and strives to lead back the individual to it."

In order to assist you, a bibliography of resources related to natural landscaping has been compiled and updated in this year's edition. A commentary on the pleasures and benefits of natural landscaping, as well as a few tips for getting started with natural landscaping is included with this year's edition. Tom and Nancy Small deserve our thanks for putting together this wonderful resource.

For those of you interested in the topic, a copy of the City of Kalamazoo Ordinance, which addresses weeds, lawn maintenance, and vegetation requirements for properties within the City of Kalamazoo is available, free, upon request. If you have any questions, concerns, comments, suggestions, or if you would like a copy of Kalamazoo's weed ordinance, please take the opportunity to call us at 337-8199 or 337-8343.

We are looking forward to another year of witnessing the beauty of natural landscaping.

Sincerely,

Kris Martin
Environmental Programs Specialist

Linda Tanksley Environmental Inspector

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III. PLEASURES AND BENEFITS OF NATURAL LANDSCAPING

There are many pleasures and benefits to natural landscaping. There's the pleasure of seeing more birds and butterflies, attracted to the native plants that they adapted to over thousands of years of evolution. There's the pleasure of learning about the natural history of the place where we live and getting a glimpse of what the Native Americans lived with and what our ancestors saw when they arrived—and learned how to use for food and medicine. There's the wonderful pleasure of a continual succession of colors, from March to October, not just the colorful blossoms of prairie smoke, butterflyweed, purple coneflower, hoary vervain, queen of the prairie, or New England aster, but also the ever—changing greens, blues, purples, golds, and reds of native grasses—big bluestem, bottlebrush grass, switchgrass, Indian grass.

What are the benefits of natural landscaping? Once they're established, native prairie grasses and wildflowers require little water: their roots go down as much as ten or even twenty feet, and they've adapted, since the glaciers departed 10,000 years ago, to the extremes of Michigan climate. Native plants don't require fertilizers to make them grow or pesticides to protect them from insects. They don't require constant mowing.

You'll have both the pleasure and the benefit of contributing to the health of the land (the prairie plants created the rich midwestern soil that feeds our nation), the purity of the water, and the health of the entire community. Best of all, you'll know that you left your part of the earth better than you found it—with richer soil, supporting a greater diversity of plants and creatures, more in harmony with the history and ecology of the place where we live.

There are many ways to engage in natural landscaping. Some people choose to turn a whole yard into a season-long succession of prairie grasses and wildflowers, from the pale lavender cups of pasqueflower in March to the vivid golds and blues of asters in October. Others set aside only a small area and specialize, for example, in wildflowers particularly attractive to hummingbirds and butterflies. People with shady yards can grow the delicate spring wildflowers which bloom before the trees leaf out as well as plants which tolerate shade, such as woodland sunflowers, royal ferns, bottlebrush grass, and zigzag goldenrod—to name just a few possibilities. People with wet areas on their property—and the proper amounts of sun and shade—can introduce a host of spectacular plants, such as Joe Pye Weed, white turtlehead, cardinal flower, and gentians.

Some homeowners fill their yards with native shrubs whose bright, edible berries are attractive to both birds and humans. There are hundreds of attractive plants native to Michigan, and many of them are available locally. The possible combinations are endless, and many native plants are amazingly tolerant of less than ideal conditions.

Will it take some work to get started? Yes indeed. But once well-established, native plants will pretty well take care of themselves. To help you get started and keep going, there are books, organizations, magazines and newsletters, websites, and local experts—a network, in short, of people all over the country who are engaged in the same effort. And every bit of that effort has its own rewards—the thrill of planting in your own yard a plant that has been growing in Michigan for thousands of years; the pleasure of seeing it flower for the first time; the joy of seeing it feed a migrating Monarch butterfly or a goldfinch; the delight of gathering a few seeds to share with neighbors and friends; the comfort—while looking at the dried

remains of flowers and grasses bending gracefully above snow--of knowing that these tough, beautiful plants will re-emerge in the spring, stronger than ever and better able to support the wildlife dependent on them.

Growing native plants puts you more in touch with the seasonal cycle, makes you feel more a part of nature, makes you feel more alive.

IV. NATURAL LANDSCAPING: GETTING STARTED

<u>Involve your neighbors</u>. Tell them what you're planning and try to enlist their support. Assure them that goldenrod doesn't cause hayfever-common ragweed is the culprit--and that tall grasses don't attract rats. Ask them to bear with you until your plants come into bloom and can speak for themselves. Once your planting is established, share flowers and extra plants, and report sightings of the wild creatures they attract.

Make sure that your natural plantings look deliberate and "cared-for." A "frame" or border may help accomplish this. Some possibilities: stones, a low fence, an edging of low branches (for an especially rustic look). A bird feeder and birdbath give a planting a central focus and suggest a reason for your natural landscaping. Signage which identifies your planting as a prairie garden, or your yard as wildlife habitat, is also useful. If necessary, keep attractive buffers between your yard and adjacent yards.

<u>Start slowly</u>--unless you have no neighbors to consider and unlimited time, money, and energy. Enlarge existing beds, start new beds along sidewalks or hedges, or create "islands" for native plants.

<u>If you want to start FAST</u>—establish half an acre of prairie, for example, or create a functioning wetland—get professional help (see the section listing nurseries and consultants).

To create areas for planting, remove the sod by using an implement designed for this purpose or a sod-cutting machine. A better way is to smother the grass with topsoil, compost, woodchips, or fallen leaves (or some combination of these materials). Purchased topsoil and compost originate somewhere, perhaps in a natural area (though one hopes not), and may also contain weed seeds. So may your own compost, for that matter, unless your pile is "hot"; but at least you have some idea what weeds it's likely to contain. Cover the sod with at least ten inches of soil or compost. Fallen leaves (or woodchips) probably work best, but they're slow, taking at least a year to break down. Rake together a deep pile of leaves for the new bed, and use evergreen branches or soil to hold them down. By the following fall, the new bed will be ready for planting. The addition of soil or compost to the leaves (or woodchips) helps break them down faster.

Getting rid of lawn grass helps the environment. Lawn grass absorbs only 17 percent of a rainfall. But the deep roots of native plants can help prevent urban runoff, thus reducing the pollution carried into lakes and streams, and even help recharge groundwater. Lawns consume valuable resources, e.g., water and energy (including our own), but have almost no value for wildlife.

If you're dealing with something other than lawn grass, say, a field once devoted to agriculture and covered with weeds, get expert advice (see the section listing nurseries and consultants).

Use plants and seed native to Michigan (see list of nurseries). These plants are adapted to our soils and climates and thrive without fertilizers, pesticides, or unusual amounts of water. They're strong as well as beautiful. What's more, they provide our native fauna--insects, amphibians, birds, and mammals--with better food and shelter than non-native plants do. Don't remove plants from natural areas unless the plants are about to be destroyed. Don't

even collect seed without permission—and then do so only sparingly. Always purchase nursery-propagated native plants, not plants which may have been removed from the wild.

Buy wild plants, not cultivars. A plant labeled Echinacea purpurea (Purple coneflower) claims to be wild; whereas, one labeled Echinacea purpurea 'Magnus' is a named cultivar. The trouble with cultivars is that they have been selected and bred for particular traits, e. g., the color and size of their flowers, and along the way may have lost traits that make them valuable to wildlife.

<u>Don't fight your site</u>. Let the characteristics of your site--sunny, shady, wet, dry, sandy, clay--determine which native plants you try to establish. You may eventually decide to alter parts of your site in order to grow a wider range of plants; but it's a good idea to start out with plants which favor your growing conditions. Sun-loving or prairie wildflowers tend to be less fussy about soil than woodland wildflowers, which need soil rich with organic matter.

Embrace diversity. Within the limits of your site and budget, try to achieve as much variety as possible in your plantings. Include small trees as well as large ones; deciduous plants as well as evergreens; shrubs of various shapes and sizes; vines and grasses; and wildflowers of different heights and colors which bloom at different times.

The more varied your plants, the more attractive and interesting you'll find them--and the more helpful they'll be to wildlife (and the less vulnerable to damage by insects). The more varied the "amenities" you provide for wildlife--a year-round source of water, dead trees, a brush pile, warm rocks and a mud puddle (the latter two especially for butterflies)--the more varied your animal visitors will be.

<u>Don't introduce invasive exotic plants</u> (see list near the end of this booklet). They take up space and nutrients—and may end up taking over your yard. A still greater danger is that their seeds may be carried into natural areas and destroy their ecosystems.

For quick results, start with young plants rather than seed--or with some combination of plants and seed. You'll have some flowers the first year (and can then use their seed to start new plants). Locate plants no further than 12 inches apart--and closer if you can afford to--so as to cut down on weeds. For the "wildest," most "natural" look, arrange plants in small, same-species groups--no more than three plants in a cluster--with no regard for height or color. (If plants are very large, like cup plants, even three together may be too many.) For a "tamer," more "organized" look--and for the sake of small plants, which might be obscured or overwhelmed by larger ones--put plants of the same species in larger groups. Groups of small plants should probably be placed at the edges of beds.

Until they get established, native plants need care, just as other young plants do. They need to be watered frequently and weeded. An area that has been seeded with native plants shouldn't be weeded by hand for fear of disturbing the roots of the tiny plants. To keep the seedlings from being overwhelmed by faster-growing weeds, cut or mow the area in accordance with expert advice.

Once established, native plants require little care, except over an unusually hot, dry summer when--like other plants--they benefit from an occasional watering. (They'll also produce more seed if watered a little.) They don't need to be mulched or fertilized. In woodland areas, plants are mulched by the leaves which fall on them.

One benefit of not mulching--and of weeding conscientiously in areas small enough to weed by hand--is that seeds will fall on bare ground and produce still more plants. These seedlings you can leave in place, transplant to other areas of your yard, or share with friends and neighbors.

At the end of the growing season, leave dried grasses and flower stalks standing. They provide shelter for insects and food for birds, and make beautiful patterns against the snow.

In early spring, before growth begins, remove dead vegetation by cutting or mowing it down and raking it off planted areas. (Before attempting to remove dead vegetation by fire, consult restoration experts and your local fire department.)

<u>Work with nature whenever possible</u>. Don't use herbicides, pesticides, or fungicides in your yard for fear of killing beneficial organisms, e.g., ladybugs, which eat aphids.

Make use of "yard waste" whenever possible. After cutting down the stalks of flowers and grasses in the early spring, pile them neatly at the edges of beds in order to enrich the soil—and to preserve insects which may have wintered over in them. Use fallen leaves to create new beds, and downed branches to outline or define beds, or to build a brush pile which will shelter small animals, birds, and butterflies.

Leave twigs and small sticks on your lawn for nesting birds and even in your flowerbeds, for they--and dead leaves--serve as food for organisms that enrich the soil. Woodland plants must have leaf litter in order to thrive. Leave some portion of dead trees standing in order to provide food and shelter for birds and other creatures.

Compost yard waste for which you can find no other use, along with appropriate kitchen scraps. Don't, however, compost sunflower seed or hulls; they contain chemicals which inhibit the growth of other plants.

Protect resident and visiting wildlife. In addition to providing food, water, and shelter—and not using "chemicals" in your yard—try to protect wildlife from cats, which are heavy predators of birds and small mammals. Keep your cat(s) indoors, and strongly encourage your neighbors to do the same. Keep bird feeders clean by washing them periodically in a solution of ten parts water to one part bleach, and rinsing them well. Affix hawk silhouettes to some of your windows so that birds will not crash into them.

Enjoy the wild plants and animals in your yard and let them bring you and your family closer to nature. Observe your plants carefully not only when they're flowering but throughout the seasons. They're constantly changing and always interesting. Be sure to note the fall and winter beauty of grasses, flower stalks, and seed structures. The story of how these plants were used by Native Americans and settlers—for ritual, food, and medicine—is fascinating too.

Take time to watch the behavior of the animals, from insects to small mammals—which ones inhabit and visit your yard, which native plants make your yard more appealing to them. A significant increase in wildlife is one of the rewards of natural landscaping, and keeping track of animals and their behavior is a year-round activity the whole family can enjoy.

Keep a journal and a photographic record. Such records have practical value: they tell you what you planted; when and where you planted it; and when it usually comes up in the spring—a good thing to know so that you won't plant anything on top of it. Still more important, written and photographic records show you how much progress you have made—even in a short time—in moving yourself and your yard closer to nature.

V. WHAT TO PLANT--AND WHERE

Unfortunately, there is no convenient list of trees, shrubs,

perennials, etc., recommended for landscape use in southwest Michigan and accompanied by growing instructions for each plant. One must improvise a little.

The closest thing to this ideal list is a series of beautiful, wonderfully helpful booklets published by the Ann Arbor Parks Department. There are five in all: "Your Landscape and our Natural Areas"; "Native Wildflowers of Southeastern Michigan"; "Native Shrubs of Southeastern Michigan"; "Native Vines, Grasses, Sedges, and Ferns of Southeastern Michigan"; and "Native Trees of Southeastern Michigan." For \$4.00, you can get all five--by mail--from the City of Ann Arbor Parks and Recreation Dept., Natural Area Preservation Division, 1831 Traver Rd., Ann Arbor, MI 48105, tel. (734) 996-3266. The soil and climate on the other side of the state are not that different from ours.

Listed in the "Resources" section of this handbook are books which are themselves "lists" of plants, or which contain useful lists-and include information about how to grow the plants. Full references for each book are given in the "Resources" section. For trees, Norman Smith's <u>Trees of Michigan and the Upper Great Lakes</u>, which describes in detail the habitats of various trees. For trees, shrubs, and vines, Gary Hightshoe's <u>Native Trees</u>, <u>Shrubs and Vines for Urban and Rural America</u>—an expensive but very detailed book which you'll probably want to consult at a library.

A couple of other books pertinent to our area, group plants in especially helpful ways, telling you at the same time how to grow them. Carolyn Harstad, Go Native! Gardening with Native Plants and Wildflowers in the Lower Midwest, has organized her book into helpful chapters like "Plant a Biohedge: Using Native Shrubs"; "Dig into History: Creating Prairies and Meadows"; "Get Wet Feet: Plants for Wet Places"; and "Stroll in the Shade: Developing Woodland Gardens." Within each chapter, individual plants and their needs are described in detail. Lorraine Johnson organizes her book, Grow Wild! Low-Maintenance, Sure-Success, Distinctive Gardening with Native Plants, regionally, the relevant sections for us being "The Prairies" and "The Northeast." Each section is packed with information: description and history of an ecosystem, personal accounts of growing native plants, and lists everywhere of plants and their requirements. "Gorgeous Grasses for the Prairie Gardener," divided into "Short to Medium-High Grasses" and "Tall Grasses"; "Fall-Blooming Natives for the Prairie Gardener"; "Ferns for the Woodland Gardener"; "Shrubs for the Northeastern Gardener" (in other words, shrubs which tolerate shade); and many, many more.

The best list of plants which grow along the shores of lakes is found in <u>Lakescaping for Wildlife and Water Quality</u>, by Carrol L. Henderson and others. A very extensive list which includes everything from trees to rushes and sedges, it indicates the plants' usefulness to wildlife as well as their horticultural requirements.

Then there are nursery catalogs, which can be extremely helpful. The Prairie Nursery, in Westfield, WI--a pioneer in prairie restoration--publishes a catalog full of beautiful photographs and helpful information, including LISTS, e. g., "Prairie Plants for Loamy Medium Soils in Full Sun to One Half Day Sun"; "Plants for Light Shade"; "Plants for Full Shade"; and several others. Their catalog can be obtained by calling 1-800-476-9453; their web site is www.prairienursery.com/.

Prairie Moon Nursery--also in Wisconsin--publishes a catalog with more extensive lists of plants and more details as to how to grow them, but the lists are alphabetical by the plants' botanical names.

VI. A FEW WONDERFUL PLANTS YOU SHOULD HAVE

Bur oak (Quercus macrocarpa) -- A magnificent tree, which the settlers found scattered across the prairies of southwest Michigan. Plant one (or more) of these noble, long-lived trees for yourself and your descendants. Don't plant it close to a house but in a sunny, open area where it can grow undisturbed. A tree tube, available from Oikos Nursery (see list of sources of native plants), will protect a young tree and help it grow faster. Important to wildlife, the acorns of bur oak--as well as its large leaves and rugged branches--are distinctive.

Juneberry, Shadblow, Serviceberry (<u>Amelanchier spp.</u>)—These graceful shrubs and small trees bloom early in the spring, before the woodland leafs out, and for the rest of the growing season can tolerate considerable shade. The delicate white flowers are succeeded by dark berries, which ripen in early summer and are consequently extremely valuable to wildlife. More than 40 species, including many songbirds, eat them.

Michigan Holly, Winterberry (Ilex verticillata) -- A deciduous holly particularly beautiful in winter when its bare branches are lined with bright red berries. At least one male plant is needed if female plants are to produce berries. Michigan Holly grows in sun or partial shade but must have a reasonable amount of moisture. The plant normally reaches about 6 feet in height but may grow several feet higher. Only in late winter or early spring, after the plant's berries have frozen and thawed many times, do they become attractive to wildlife; and then they become an important source of food for resident and returning songbirds. During the cold spring of 2002, a female plant in our yard fed a robin which came back too early.

Spicebush (Lindera benzoin) -- Another medium-to-large shrub for which both male and female plants are necessary if berries are to develop. Berries, leaves, and twigs--all are valuable to wildlife: the berries, for example, to fall-migrating songbirds; the leaves to the caterpillars of the Spicebush Swallowtail butterfly. Spicebush seems to tolerate most growing conditions except extreme dryness and has many other attractive features: in earliest spring, bursts of tiny yellowish-green flowers on bare branches; in summer, smooth green leaves, paler on the underside; and in fall, small oval berries of brightest red followed by yellow leaves. The whole plant is aromatic. It grows in sun or partial shade but must have a certain amount of moisture.

Milkweeds (Asclepias spp.)—Native milkweeds are attractive and easy to grow. Common milkweed (A. syriaca) is a sturdy, medium—sized plant with large leaves and clusters of downy, pinkish—gray flowers. It tolerates most conditions except deep shade or constantly wet soil. Butterfly Weed, or Orange Milkweed (A. tuberosa) prefers a dry, sunny site, where its low, more delicately leaved plants produce clusters of striking orange flowers. Graceful and more "willowy" than Common Milkweed, Swamp Milkweed (A. incarnata) has flower clusters of a brighter pink. With some watering during dry spells, and significantly more sun than shade, this species, too, will grow in your yard. In late summer and fall, milkweeds "bloom" again as their pods open to release myriad "feathered" seeds. Still another reason to plant milkweeds is that they are the larval plant of Monarch butterflies, whose caterpillars eat only milkweed leaves. The flowers of the milkweed provide adult Monarchs and other butterflies with nectar.

New England aster (Aster novae-angliae) -- A tall, graceful plant, attractive even when not in bloom because its stems are thick with slender, arching leaves. In late summer, it bears large, showy clusters of bright pink or purple flowers which provide nectar for many butterflies, including Monarchs on their way south. Though it prefers a location which is both sunny and damp, it will tolerate somewhat shadier and drier conditions.

Wild columbine (<u>Aguilegia canadensis</u>) -- Biennial rather than perennial (unlike the other wildflowers listed here), wild columbine re-seeds itself so copiously that you don't have to worry about losing it. A plant whose delicate, airy foliage is almost as attractive as its red-and-yellow flowers, it tolerates everything from sun to shade as long as the soil is neither extremely wet or dry. Only this native columbine has its flower shaped in such a way that hummingbirds of our region can gather its nectar.

Plants with daisy-like flowers--Usually yellow, but in the case of purple coneflower (Echinacea purpurea) pink, these flowers are attractive in their own right and extremely valuable to wildlife. Many butterflies nectar on them; many birds eat their seeds. Most of them are sun-loving, and some--like compass plant (Silphium laciniatum), prairie dock (S. terebinthinaceum), and rosinweed (S. integrifolium)--demand full sun or something very close to it. But others, including some perennial sunflowers like downy sunflower (Helianthus mollis) and woodland sunflower (H. divaricatus), will tolerate more shade. The same is true of black-eyed Susan (Rudbeckia hirta) and yellow coneflower (Ratibida pinnata). These daisy-like flowers which shout "Summer!" start blooming in early June, with black-eyed Susans, and come to an end in fall, with Maximillian's sunflower (Helianthus maximilliani and brown-eyed Susan (Rudbeckia triloba).

The most spectacular of them are members of the Silphium Family. Compass plant has the largest flowers but may not come into bloom for five or six years while it is establishing itself. Cup plant (Silphium perfoliatum) is my favorite: it tolerates less than full sun, takes only a couple of years to come into bloom, and forms a dramatic clump the size of a shrub. However, it requires a little more moisture than the other Silphiums. Its large leaves oppose one another and meet the stem in such a way that they hold rainwater, hence the plant's name. Birds sometimes drink from these "cups." Its large yellow flowers occur in sprays at the top of the plant, which (flowers included) may reach 8 feet. The flowers, which even smell like summer, attract Eastern Tiger Swallowtail butterflies, among others, sometimes in numbers.

Grasses—Some of our native grasses are eminently suited to the small urban yard. Prairie dropseed (Sporobolus heterolepis) forms a small fountain of narrow green leaves from which rise, on three—foot stems, the delicate, airy plumes which are its flowers. It needs a sunny, well—drained location, and is extremely attractive even before reaching its full beauty in four or five years. Bottlebrush grass (Elymus hystrix, Hystrix patula) will grow in partial shade, where it stands tall or curving slightly. Its head—large, delicate, and stiffly "bristled"—looks very much like a brush you'd use on the inside of a bottle. This is another elegant grass.

VII. SOURCES OF NATIVE PLANTS AND SEEDS; RESTORATION SERVICES

Native plants should never be removed from the wild unless they are on the point of being destroyed. Seeds should be collected only with the permission of the property-owner, and then, only sparingly.

The list below is not exhaustive. A few of the nurseries listed here sell plants which are not native to Michigan (or even North America) as well as plants which are. Nurseries marked with an asterisk sell plants (and seed) which, as well as being native to Michigan, derive from documented wild Michigan populations. These nurseries make up the Michigan Native Plant Producers Association.

In addition to selling native plants, many nurseries will advise you about native plantings and help you design, install, and maintain them. There are also independent experts—and I list a few—who offer these and related services.

Cold Stream Farm (Mike and Kay Hradel) 2030 Free Soil Rd. Free Soil, MI 49411 (231) 464-5809 e-mail: csf@jackpine.com Community Wildlife Program (Steve Allen) -- Consulting, ecological design Kalamazoo Nature Center 7000 N. Westnedge Ave. Kalamazoo, MI 49004 (616) 381-1574 www.naturecenter.org Fertile Crescent Nursery (Leila Bradfield) 8110 West ML Ave. Kalamazoo, MI 49009 (616) 372-1598 Grass Roots Landscaping, Inc. (Tom Smith) -- Design, construction, management P. 0. Box 4001 East Lansing, MI 48826 (517) 337-2405 e-mail: grassroots@voyager.net Grow Wild Nursery (Theresa Carter) P. 0. Box 401 Byron, MI 48418 (810) 266-9453 J. F. New & Associates (Neil B. Myers) -- Design, restoration, management, & 708 Roosevelt Rd. Walkerton, IN 46574 (219) 586-3400 e-mail: info@jfnew.com www.jfnew.com

*Michigan Native Plant Producers Association (Made up of nurseries on this list which are marked with an asterisk. Their joint catalog of Michigan natives deriving from wild populations is available on the website below.) www.for-wild.org/michigan/sources.html *Michigan Wildflower Farm (Esther and Bill Durnwald) -- Consulting, installation, and maintenance 11770 Cutler Rd. Portland, MI 48875 (517) 647-6010 e-mail: wildflowers@voyager.net Native Connections (Jerry Stewart) -- Design, restoration, management, and more 62791 Shaffer Rd. Constantine, MI 49042 (616) 580-4765 e-mail: jerry@nativeconnections.net *The Native Plant Nursery (Greg Vaclavek and Mike Appel) -- Design, consulting, and restoration P. 0. Box 7814 Ann Arbor, MI 48107 (734) 667-3260 e-mail: plants@nativeplant.com www.nativeplant.com Nativescape (Chris Lehr) -- Design, restoration, management, and more P. O. Box 122 Manchester, MI 48158 (734) 428-8457 e-mail: lehr@corecomm.net *Nesta Prairie Perennials (Stephan Keto) Van Bochove's Greenhouse Direct 1019 Miller Rd. Kalamazoo, MI 49001 (616) 343-1669; (800) 233-5025 Oikos Tree Crops (Ken Asmus) P.O. Box 19425 Kalamazoo, MI 49019 (616) 624-6233 e-mail: oak24@aol.com Plantwise Native Landscapes (David Mindell) -- Consulting, design, restoration 224 Charles St. Ann Arbor, MI 48103 (734) 665-7168 e-mail: plantwise@aol.com *Sandhill Farm (Cheryl Smith Tolley) -- Consulting, installation, and maintenance 11250 Ten Mile Rd. Rockford, MI 49341 (616) 691-8214 e-mail: cherylt@iserv.net

*Wetlands Nursery, Inc. (Jewel Richardson)--Consulting and installation P.O. Box 14553
Saginaw, MI 48601
(989) 752-3492
e-mail: JewelR@Wetlands-Nursery
www.Wetlands-Nursery.com

*Wildtype Design, Native Plants & Seed (Bill Schneider)--Design, consultation, restoration
900 N. Every Rd.
Mason, MI 48854
(517) 244-1140
e-mail: wildtype@msu.edu

OTHER SOURCES OF NATIVE PLANTS AND SEEDS

www.msu.edu/~wildtype/

Grassroots Native Plant Rescue Program (Tom Smith) P.O. Box 4001
East Lansing, MI 48826 (517) 337-2405
e-mail: grassroots@voyager.net

Kalamazoo Nature Center (Periodic sales of native plants) 7000 N. Westnedge Ave.
Kalamazoo, MI 49004
(616) 381-1574
www.naturecenter.org

Michigan Association of Conservation Districts (Every county has a conservation district, and many, if not all, districts sell native plants and seeds at low cost.)

P. 0. Box 539

101 Main St.

Lake City, MI 49651
(616) 839-6161

www.mcad.org



VIII. LANDSCAPING WITH NATIVE PLANTS: RESOURCES

The list below is selective and includes only books and pamphlets which we know to be helpful. Some entries are followed by annotations. In the first section of the bibliography, works are arranged in descending order of importance; elsewhere, they are alphabetical.

The first section (immediately below) singles out thought-provoking books which strongly encourage individuals and groups to landscape their property in environmentally-friendly ways, restore native plant communities, turn their land into refuges for native wildlife, and limit the spread of exotic plants which invade natural areas. All but one (Stalking the Wild Amaranth) also contain a great deal of practical information.

WHY BOTHER AND WHAT'S AT STAKE: RATIONALE AND IMPLICATIONS OF NATURALIZED LANDSCAPING

- Stein, Sara. Noah's Garden: Restoring the Ecology of Our Own Backyards.

 Boston: Houghton Mifflin, 1993. A wonderfully inspiring and informative book, whose recommendations of specific native plants are in large part applicable to southwest Michigan. If you read one book about natural landscaping--its great rewards and far-reaching implications--this should be it.
- Wasowski, Andy, with Sally Wasowski. The Landscaping Revolution: Garden with Mother Nature Not Against Her. Lincolnwood, IL: The Contemporary Gardener, 2000. Offers a sensible and attractive alternative to conventional American landscaping, which he shows to be boring and even dangerous.
- Stein, Sara. Planting Noah's Garden: Further Adventures in Backyard Ecology.

 Boston: Houghton Mifflin, 1997. Perhaps less exciting than her earlier book (see first entry) but packed with her own and others' experiences with naturalized landscaping, native plants, and invasive exotic plants. The book includes a detailed, illustrated guide to planting and landscaping procedures and techniques.
- Marinelli, Janet. Stalking the Wild Amaranth: Gardening in the Age of Extinction. New York: Henry Holt and Co., 1998. Maintains that gardeners must reinvent themselves as conservationists and ecologists but not lose their sense of creativity.
- Randall, John M. and Janet Marinelli. <u>Invasive Plants: Weeds of the Global Garden</u>. Brooklyn: Brooklyn Botanic Garden, 1996. Tells how non-native species of plants invade and destroy natural areas and provides details (and photos) about the worst offenders.

LANDSCAPING WITH NATIVE PLANTS--GENERAL or INCLUSIVE WORKS

- Ann Arbor Department of Parks and Recreation. <u>Native Shrubs of Southeastern</u>
 <u>Michigan</u>. Your Landscape and our Natural Areas. Ann Arbor Department of Parks and Recreation, 1997.
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- . Your Landscape and our Natural Areas. Ann Arbor Department of Parks and Recreation, 1996. The five extremely helpful pamphlets listed above tell us exactly which plants we should be planting and how to grow them. The set of pamphlets can be obtained for \$4.00 from the Natural Area Preservation Staff, Ann Arbor Department of Parks and Recreation, 1831 Traver Rd., Ann Arbor, MI 48105, tel. (313) 996-3266.
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- Johnson, Lorraine. Grow Wild: Low-maintenance, Sure-success, Distinctive Gardening with Native Plants. Golden, CO: Fulcrum Publishing, 1998.
- Harstad, Carolyn. <u>Go Native: Gardening with Native Plants and Wildflowers in</u> the Lower Midwest. Bloomington: Indiana University Press, 1999.
- Hightshoe, Gary. Native Trees, Shrubs, and Vines for Urban and Rural America:

 A Planting Design Manual for Environmental Designers. New York: John Wiley and Sons, 1988. The usefulness of this large and expensive book, meant for landscape designers (but available at Portage Public Library), cannot be praised too highly. It contains a wealth of information about each plant, including its wildlife value, range in the U.S., and associated plants. Includes wonderful drawings of the plants in winter
- Marinelli, Janet, ed. <u>Going Native</u>: <u>Biodiversity in Our Own Backyards</u>. Brooklyn: Brooklyn Botanic Garden, 1994.
- Ottesen, Carole. The Native Plant Primer: Trees, Shrubs, and Wildflowers

 for Natural Gardens. New York: Harmony Books, 1995. A beautiful and inspiring book which lists perennials, annuals, grasses, sedges, rushes, reeds, ferns, water plants, vines, shrubs, and trees native to our region—the upper Midwest—and others.
- Packard, Stephen, and Cornelia F. Mutel, eds. <u>The Tallgrass Restoration</u>

 <u>Handbook: For Prairies, Savannas, and Woodland</u>. Society for Ecological Restoration. Washington, D. C.: Island Press, 1997. The "bible" for prairie, savanna, and woodland restoration.

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- Prairie Moon Nursery. 2002 Catalog and Cultural Guide. The value of this catalog, issued by a nursery in Winona, MN, is hard to over-estimate. It lists an amazing range and number of plants--including trees, shrubs, perennials, vines, grasses, sedges, and rushes--which are native to the upper Midwest. And its brief but thorough instructions on how to grow each species it sells are most helpful. (For a catalog: (507) 452-1362, or www.prairiemoonnursery.com).
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- Stein, Sara. (See first section of the bibliography for listings of her invaluable books, as practical as they are inspiring.)
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RESTORING SPECIFIC PLANT COMMUNITIES

PRAIRIE

- Kurtz, Carl. A Practical Guide to Prairie Reconstruction. Iowa City: University of Iowa Press, 2001.
- Ladd, Doug, and Frank Oberle. <u>Tallgrass Prairie Wildflowers</u>. Helena, MT: The Nature Conservancy/Falcon Press, 1995.
- Packard, Stephen, and Cornelia Mutel. <u>The Tallgrass Restoration Handbook</u>. See main entry and note in "Landscaping with Native Plants--General or Inclusive Works."
- Prairie Nursery. Wildflowers and Native Grasses: 2002 Catalog and Growing Guide. N.p., 2002. This catalog, issued by Prairie Nursery, a pioneer in prairie restoration, is treasured for its beautiful photographs of prairie plants and detailed instructions about how to start and maintain prairie plantings. (For a catalog: 1-800-476-9453, or www.prairienursery.com).
- Runkel, Sylvan T., and Dean M. Roosa. <u>Wildflowers of the Tallgrass Prairie:</u>
 The Upper Midwest. Ames: Iowa State University Press, 1996.
- Wasowski, Sally. Gardening with Prairie Plants: How to Create Beautiful Native Landscapes. Minneapolis: University of Minnesota, 2002. An essential book for anyone interested in the natural landscaping of open or mostly open areas. Beautiful photographs, comprehensive plant lists which address the whole continent (and different types of grasslands), many other helpful features.

WETLAND

Chadde, Steve W. <u>A Great Lakes Wetland Flora</u>. Calumet, MI: Pocketflora Press, 1998.

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- Henderson, Carrol, et al. <u>Lakescaping for Wildlife and Water Quality</u>. St. Paul: Minnesota Department of Natural Resources, n. d.
- Thunhorst, Gwendolyn A. <u>Planting Guide for the Northeastern United States:</u>

 <u>Plants for Wetland Creation, Restoration, and Enhancement</u>. St.

 <u>Michaels, MD: Environmental Concern, Inc., 1993.</u>

WOODLAND

- Birdseye, Clarence and Eleanor. <u>Growing Woodland Plants</u>. New York: Dover, 1972.
- Burrell, C. Colston, ed. <u>Woodland Gardens: Shade Gets Chic</u>. Brooklyn: Brooklyn Botanic Garden, 1995.
- Eastman, John. The Book of Forest and Thicket: Trees, Shrubs, and Wildflowers of Eastern North America. Harrisburg, PA: Stackpole Books, 1992.
- Packard, Stephen, and Cornelia Mutel. <u>Tallgrass Prairie Restoration</u>. See main entry and note in "Landscaping with Native Plants--General or Inclusive Works."

PROPAGATING NATIVE PLANTS

- Bir, Richard E. Growing and Propagating Showy Native Woody Plants. Chapel Hill: University of North Carolina Press, 1992.
- Cullina, William. The New England Wild Flower Society Guide to Growing and Propagating Wildflowers of the United States and Canada.

 Boston: Houghton Mifflin Company, 2000. Readable, personal; packed with valuable information of all kinds and beautiful photos.
- Phillips, Harry. <u>Growing and Propagating Wildflowers</u>. Chapel Hill: University of North Carolina Press, 1985. Detailed instructions for propagating many woodland and prairie wildflowers.
- Rock, Harold W. <u>Prairie Propagation Handbook</u>. 6th ed. Milwaukee County Department of Parks, Recreation and Culture, 1981.

GARDENING FOR WILDLIFE

- Buchanan, Carolyn. <u>The Wildlife Sanctuary Garden</u>. Berkeley: Ten Speed Press, 1998. Pleasant reading, helpful features.
- Dennis, John V. The Wildlife Gardener: How to Create a Refuge for Birds and Other Wildlife in Your Own Backyard. New York: Ballantine Books, 1988.

 Overflowing with personal observations about the food and shelter preferences of birds, mammals, insects, and other creatures. Helpful index and lists.

- Ernst, Ruth Shaw. The Naturalist's Garden: How to Garden with Plants that

 Attract Birds, Butterflies, and Other Wildlife. Old Saybrook, CT: Globe
 Pequot Press, 1993.
- Henderson, Carrol L. <u>Landscaping for Wildlife</u> (Minnesota Department of Natural Resources). St. Paul: Minnesota's Bookstore, 1987. Once you figure out the charts, this book is extremely helpful. It tells you which plants are most useful to wildlife and during which seasons.
- Kress, Stephen W. <u>Bird Gardens: Welcoming Wild Birds to Your Yard</u>. Brooklyn: Brooklyn Botanic Garden, 1998.
- Hummingbird Gardens: Turning Your Yard Into Hummingbird Heaven. Brooklyn: Brooklyn Botanic Garden, 2000.
- Lewis, Alcinda. <u>Butterfly Gardens: Luring Nature's Loveliest Pollinators</u> to Your Yard. Brooklyn: Brooklyn Botanic Garden, 1995.
- Mahnken, Jan. Hosting the Birds: How to Attract Birds to Nest in Your Yard. Pownal, VT: Garden Way Publishing, 1989.
- Pitcher, Emma Bickham. <u>Birdiversity: Support Birdiversity; Change Your Yard from Landscape to Birdscape; Increase Bird Populations in Your Yard.</u>
 Kalamazoo, MI: Audubon Society of Kalamazoo, 1994.
- Terres, John K. Songbirds in your Garden. Chapel Hill: Algonquin Books, 1994.
- Redington, Charles B. <u>Plants in Wetlands</u>. Dubuque, 1994. An illuminating book which shows just how key plants of various wetland communities are used by wildlife.
- Tufts, Craig. The Backyard Naturalist. Vienna, VA: National Wildlife Federation, 1988.
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IX. USEFUL ADDRESSES

Organizations

Organization	Website/phone
Wild Ones-Natural Landscapers	www.for-wild.org
A national organization for people wanting to	
landscape their property with native plants. A	
newsletter (six issues a year), a national	
conference.	
Wild Ones-Kalamazoo Chapter	e-mail: yard2prairy@aol.com
Kalamazoo Nature Center	www.naturecenter.org
Advice and ideas on native planting; dates of	
plant sales and list of plants available.	(616) 381-1574
Wildflower Association of Michigan	www.wildflowersmich.org
Wonderful yearly conference, Lansing.	
Quarterly newsletter.	
Michigan Invasive Plant Council	www.invasiveplants.net
Ladybird Johnson Wildflower Center	www.wildflower.org
An important source of information on native	
plants.	
National Wildlife Federation	www.nwf.org
Well-developed, valuable programs using native	
plants: 1) Backyard Wildlife Habitat, and 2)	
Schoolyard Habitats.	

Publications

Name	Website/address/phone
Wildflower. A beautiful magazine published by the	www.wildflowermag.com
North American Native Plant society and devoted to	Box 335
the study, conservation, restoration, and	Postal Station F
cultivation of the wildflowers of North America	Toronto, ON
	Canada M4Y 2L7
Prairie Nursery (Wisconsin). Extremely helpful	www.prairienursery.com
catalog with beautiful photos of native plants. A	
way to start getting acquainted with native	(800) 476-9453
plants. Buy plants locally, though.	
Prairie Moon Nursery (Minnesota). Another very	www.prairiemoonnursery.com
helpful catalog, which contains detailed	
information about the horticultural requirements	(507) 452-1362
of a host of native plants.	

Miscellaneous Sources of Information

Source	Website
Green Landscaping with Native Plants. Information	www.epa.gov/greenacres/
on which native plants have been successfully used	
in landscaping and how to establish native plants	
on your property.	
A fabulous, ever-expanding website based on the	www.Enature.com
National Audubon Society Field Guide series:	
native birds, flowers, butterflies, shrubs and	
trees, etc.	
National Plant Conservation Initiative. Plant	www.nps.gov/plants
conservation, invasive exotics.	
Raingardens. The use of rainwater to irrigate	www.raingardens.org
constructed wetlands.	

X. Alien Plant Species

These non-native plants, mostly from Europe or Asia, have been found to invade natural areas and destroy them by changing ecosystem processes, e.g., shrinking supplies of surface water, shading out and/or crowding out native species, and hybridizing with native species and potentially eliminating native genetic strains.

Such plants threaten all types of natural or semi-natural areas, including rangelands, grasslands, wetlands, and forests. In national parks and nature preserves, they threaten some of the very species these lands are intended to preserve. These invasive, non-native plants should not be planted even in yards, for fear that they will escape to and infest nearby natural areas.

Characteristic of most of these plants is the production of many small seeds, which are dispersed by birds and other wildlife—a process we cannot control except by not planting these dangerous plants in our yards and not allowing them to be planted in our cities, counties and states.

Alien Trees

Amur Maple
Norway maple
Tree-of-heaven
Paper mulberry
White poplar, Silver poplar
Black locust*
Tamarisk**

Siberian elm Wayfaring tree Acer ginnala
Acer platanoides
Ailanthus altissima
Broussonetia papyrifera
Populus alba
Robinia pseudoacacia
Tamarix ramosissima
T. chinensis
T. parviflora
Ulmus pumila

Viburnum lantana

* Native to N.A. but not Midwest

** Can invade northern wetlands

Alien shrubs

Japanese barberry Berberis thunbergii Russian olive (infests 17 western states) Elaeagnus angustifolia

Alien shrubs (continued)

Autumn olive Winged Euonymus, Burning bush Wintercreeper, Climbing Euonymus Privet

Amur honeysuckle Bella honeysuckle Morrow's honeysuckle Tatarian honeysuckle White mulberry Common buckthorn, European buckthorn, Hart's thorn, European waythorn, Rhineberry

Smooth buckthorn, Glossy buckthorn Alder buckthorn, Columnar buckthorn European alder, Fen buckthorn,

Tall hedge Multiflora rose

European high bush cranberry,

Japanese spirea (pink spirea) Japanese yew (already a problem in N.E.) Taxus cuspidata Guelder rose

E. umbellata Euonymus alatus E. fortunei

Ligustrum vulgare

L. sinense L. japonicum Lonicera maackii L. x bella L. morrowii L. tatarica

Morus alba

Rhamnus cathartica

R. frangula

Rosa multiflora Spirea japonica

Viburnum opulus var. opulus

Alien vines

Porcelain berry Oriental bittersweet, Asiatic bittersweet Celastrus orbiculatus Japanese honeysuckle, Hall's honeysuckle Lonicera japonica Mile-a-minute * Kudzu

Ampelopsis brevipedunculata Polygonum perfoliatum Pueraria lobata

Alien herbaceous plants

Garlic mustard Cornflower, Bachelor's button Spotted knapweed Lily-of-the-valley Crown vetch Ox-eye daisy Queen Anne's Lace Cut-leaf teasel Teasel Leafy spurge

Japanese knotweed

Baby's breath Dame's rocket Common St. John's wort Bird's-foot trefoil, Deer vetch Money plant, Chinese money Moneywort Purple loosestrife

Alliaria petiolata Centaurea cyanus C. maculosa Convallaria Coronilla varia Chrysanthemum leucanthemum Daucus carota Dipsacus laciniatus D. sylvestris Euphorbia esula Fallopia japonica or Polygonum cuspidatum Gypsophila paniculata Hesperis matronalis Hypericum perforatum Lotus corniculatus Lunaria annua Lysimachia nummularia Lythrum salicaria

^{*} already a problem in Northeast

Alien herbaceous plants (continued)

White sweetclover
Yellow sweetclover
Wild parsnip
Sulfur cinquefoil
Mexican bamboo
Bouncing Bet
Vinca, Periwinkle, Myrtle

Meliotus alba
M. officinalis
Pastinaca sativa
Potentilla recta
Polygonum cuspidatum
Saponaria officinalis
Vinca minor

Alien Grasses

Quack grass

Smooth brome

Bromus inermis

Tall fescue, Taller fescue, meadow fescue

Festuca arundinacea (F. Elatior)

Reed canary grass

Johnson grass

Sorghum halepense

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Marinelli, Janet. Stalking the Wild Amaranth: Gardening in the Age of Extinction. New York, 1998.

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Randall, John M., and Janet Marinelli (eds.). <u>Invasive Plants: Weeds of the Global Garden</u>. Brooklyn Botanic Garden, 1996.

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