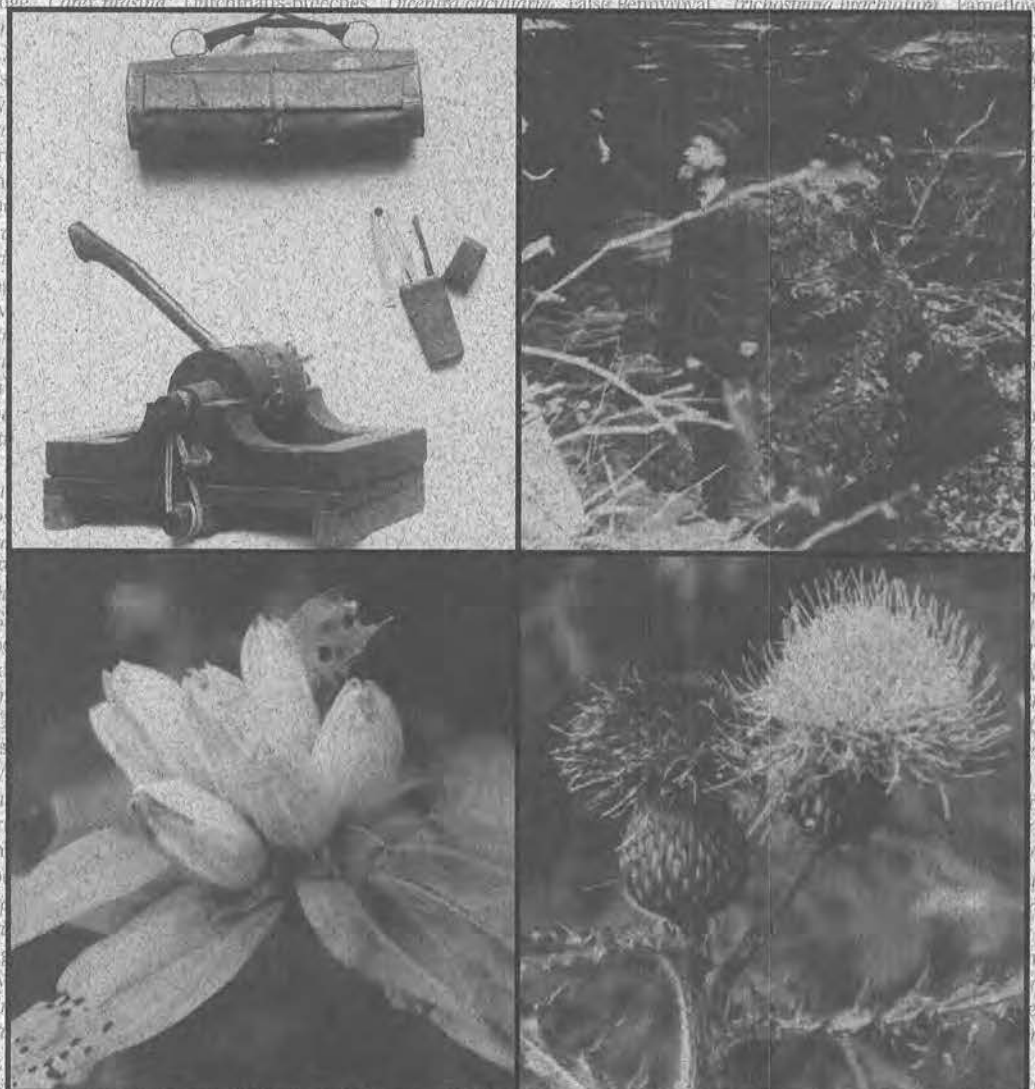

Flora of Sauk County and Caledonia Township, Columbia County, South Central Wisconsin

Technical Bulletin 190
Department of Natural Resources Madison WI 53707
1998

Cover photo credits:

Upper left - Vasculum, rule, and plant press of Increase A. Lapham, Wisconsin's pioneering naturalist. Photo courtesy the State Historical Society of Wisconsin Whi(x3)17665.

Upper right - Lapham botanizing in Taylor's Glen, Wisconsin Dells, in 1869. Photo courtesy the State Historical Society of Wisconsin Whi(x3)35231.

Lower left - White Gentian, a state threatened species, in Devil's Lake State Park, 1969.

Lower right - Hill's Thistle, a state threatened species, in Greenfield Township, 1969.

ABSTRACT

This flora of Sauk County and Caledonia Township, Columbia County, Wisconsin, includes the native, naturalized, and adventive vascular plants authentically known from the study area. It was derived from a number of sources, including vascular plant lists compiled by the author from 1966 through 1994 for a total of 198 localities; vascular plant lists and species records from other individuals, when verifiable; and herbaria, mainly the University of Wisconsin-Madison. The existing literature, including the original land surveys, local newspapers, and local histories, was also consulted.

Introductory sections include a history of botanical investigations in the study area, a discussion of the plant communities of the study area and the origins of the local flora, and a review of the rare native species. The text is complemented by a total of 55 figures and photographs, some of historic interest.

Although a Sauk County flora is included in the checklist, the major emphasis is not on political boundaries, but on the landform and the 2 geographical provinces that occur within the study area—the Baraboo Hills and the Western Upland and Central Plain. They are delineated and their floras compared. This approach was judged to be more meaningful in determining patterns and relationships. The checklist also includes the vascular plants of Devil's Lake State Park; those Devil's Lake State Park species known only from Devil's Lake, including its shoreline; the vascular plants known only from the Wisconsin River bottoms; and the vascular plants known only from Caledonia Township.

This technical bulletin complements the author's survey of the postglacial vegetational history of the same area (Lange 1990).

Key Words: Flora, vascular plants, native species, adventive species, naturalized species, rare species, annotated checklist, Baraboo Hills, Western Upland, Central Plain, Sauk and Columbia counties, Caledonia Township.

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Flora of Sauk County and Caledonia Township, Columbia County, South Central Wisconsin

by Kenneth I. Lange

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Department of Natural Resources
Box 7921
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Dedicated
to the memory of
two very special and treasured friends,

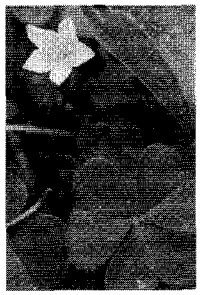
James H. Zimmerman
and
Robert H. Read

*

May their spirits forever enjoy the wildflowers of Spring.

Robert H. Read (1949-1994)
Photo courtesy of Donna Read

James H. Zimmerman (1924-1992)
Photo courtesy of J.H. Zimmerman



Prologue

How does one breathe life into the written page, into, say, a vascular plant list? I have no magic formula, but I do know that my plant lists can be magical, in that they can conjure memory-images of places, of sunlight and shadow, of people, of events, such a kaleidoscope of images that it can be overwhelming. Always I'm reminded of halcyon days in the field, golden days to hold close to the heart.

And the field botanists of the past, what of them and their halcyon days? I think of Increase Lapham, exploring the rocky shoreline of Devil's Lake, just a year after Wisconsin became a state, and of the gentle poet-naturalist of Lake Koshkonong, Thure Kumlien, collecting plants at Devil's Lake just a year before the Civil War began. Especially I think of a young man in his late 20s, recently arrived from Europe, exploring a landscape already being changed by the new immigrants but still nearly virgin, where a "beautiful green carpet, dotted with innumerable flowers of great variety, lay beneath our feet, and stretched away beyond the verge of the horizon" (Lueders 1880:489).

The landscape that Frederick Lueders gazed upon more than a century and a half ago is now a ghost landscape, altered beyond recognition and lost forever, just like his plant specimens in the Columbia River. Human-altered landscapes now are common, and becoming more so. What then of naturalists and their halcyon days? What then of nature and all its glory?

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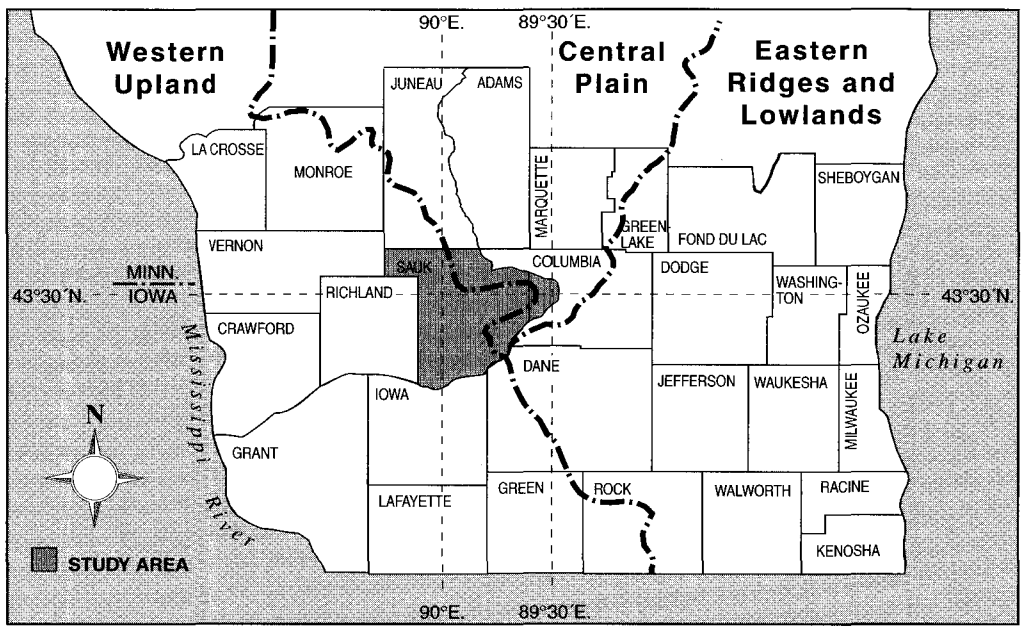


Figure 1. *Location of Sauk County and Caledonia Township, Columbia County, in relation to the Western Upland and Central Plain geographical provinces as described by Martin (1965), with latitude and longitude. The Baraboo Hills are included within the Western Upland in this depiction.*[1]

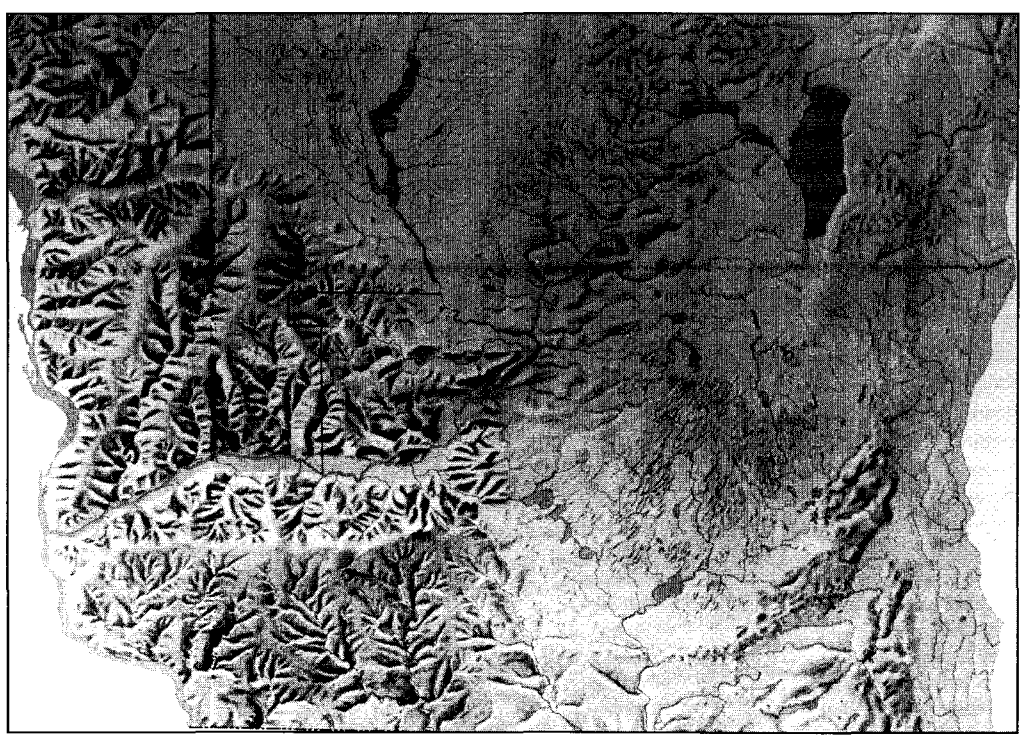


Figure 2. *The study area outlined on a relief map of Wisconsin. Notice the lower ground (the Central Plain) along the Wisconsin River, the higher ground (the Western Upland), and the arrowhead-shaped landform in the east central part of the study area (the Baraboo Hills). Map from the Wisconsin Geological and Natural History Survey.*

[1] In this technical bulletin we use natural divisions as defined by Martin (1965). These divisions are familiar to most Wisconsin natural resources managers. The Wisconsin Department of Natural Resources (DNR) has recently signed the Forest Accord, which is an agreement to use new ecoregions developed by the U.S. Forest Service. Further, the DNR is now basing its planning and management efforts within newly defined Geographic Management Units.

INTRODUCTION

A growing interest in biodiversity (Wisconsin Department of Natural Resources 1995) and in the Baraboo Hills and adjoining lands, typified by the Baraboo Hills Bioreserve of The Nature Conservancy, has prompted the publication of this flora. It includes all species of vascular plants authentically known from the study area, not only the natives but also the "weeds" and those established as escapes from cultivation.[2] The flora totals 1,328 species: 1,087 native species and 241 non-native species, which equals 60% of the entire flora of Wisconsin (approximately 2,200 species). Among the 1,328 species are 71 species on the Wisconsin Rare Vascular Plant Working List: 7 endangered species, 17 threatened species, and 47 species of special concern (Alverson and Iltis [1979]; Wisconsin Department of Natural Resources 1993*a*, with additions), which equals approximately 7% of the native flora of the study area. One species, Wing-stem *(Verbesina alternifolia)*, is herein reported from Wisconsin for the first time. The flora includes the vascular plants of the Baraboo Hills (1,099 species); the vascular plants of Devil's Lake State Park (914 species); those Devil's Lake State Park species known only from Devil's Lake, including its shoreline (51 species); the vascular plants of the Western Upland (972 species); the vascular plants of the Central Plain (1,086 species); the vascular plants in the study area confined to the Wisconsin River and bottomlands (75 species); and the vascular plants known only from Caledonia Township (5 species). The boundaries of the study area—Sauk County and Caledonia Township, Columbia County—are the same as in my postglacial vegetational history (Lange 1990).

The Baraboo Range[3] is a major landform in the study area. This Precambrian monadnock of approximately 124,000 acres has been visited by researchers and educators since the 1840s and is of increasing interest to biologists. Recent studies have begun to demonstrate its rich breeding bird communities (Mossman and Lange 1982) and the diverse communities of aquatic insects in its relatively pristine streams (Lillie and Isenring 1996). As an island of relatively unfragmented deciduous forest in a sea of woodlots and agricultural land, the Baraboo Hills may be a net exporter of surplus animal populations (and plant propagules) to outlying areas. The presence in the Hills of approximately half of all the vascular plants in Wisconsin, as documented in this report, is another indicator of the natural richness of the Hills and yet another scientific reason for protecting as much of this landform as possible. See Tans and Lange (1976) for a natural sites inventory of Sauk County.

A number of county and regional floras for Wisconsin have been published, e.g., Russel (1907), Wadmond (1909), Heddle (1924), Smith (1931), Potzger (1943), Seymour (1960), Nee (1970), Musselman et al. (1971), Nee and Hansen (1973), Judziewicz (1981), Rill (1983), Judziewicz and Koch (1993), and Eddy (1996), but none have covered the study area, nor has any Wisconsin flora, to my knowledge, compared the plants of landforms and geographical provinces, which is the thrust of this report.

Botanists, field ecologists, and restoration biologists should find this report useful. An index for the annotated checklist has been included to make the basic information on the plants of the study area more accessible to the nonprofessional, e.g., the amateur botanist.

STUDY AREA

The study area, Sauk County and Caledonia Township, Columbia County, is shown in Figures 1 and 2 in its southern Wisconsin setting, bordered by Juneau, Vernon, and Richland counties on the north and west and by the Wisconsin River on the south and east. Its size is approximately 580,000 acres: Sauk County totals 537,000 acres (217,321 ha) and Caledonia Township, Columbia County, totals 43,000 acres (17,402 ha). In terms of square miles and square kilometers, Sauk County totals 838 square miles (2,171 square km) and Caledonia Township totals approximately 67 square miles (174 square km). Caledonia Township was included in order to cover the entire Baraboo Range.

The study area includes a number of state-owned public lands: Devil's Lake, Natural Bridge, Mirror Lake, and Rocky Arbor state parks, part of the Dells of the Wisconsin River State Natural Area, part of the Lower Wisconsin State Riverway, the Bakkens Pond Unit of the

[2] The following are not included: prairie species planted for restoration projects, landscaping, and along roads, and other species planted for other projects.

[3] The Baraboo Range is also called the Baraboo Hills or Baraboo Bluffs; these three names are herein used interchangeably.

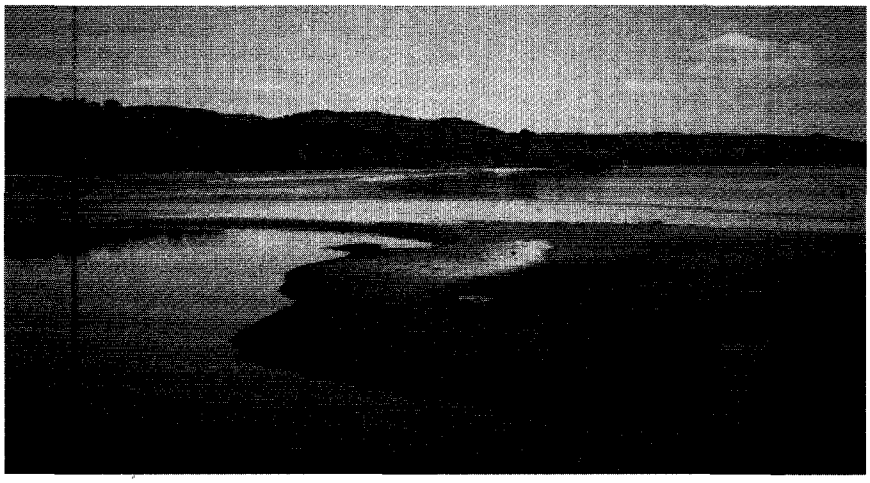


Figure 3.
Wisconsin River in Troy Township, with sandbars and flats, 1974.

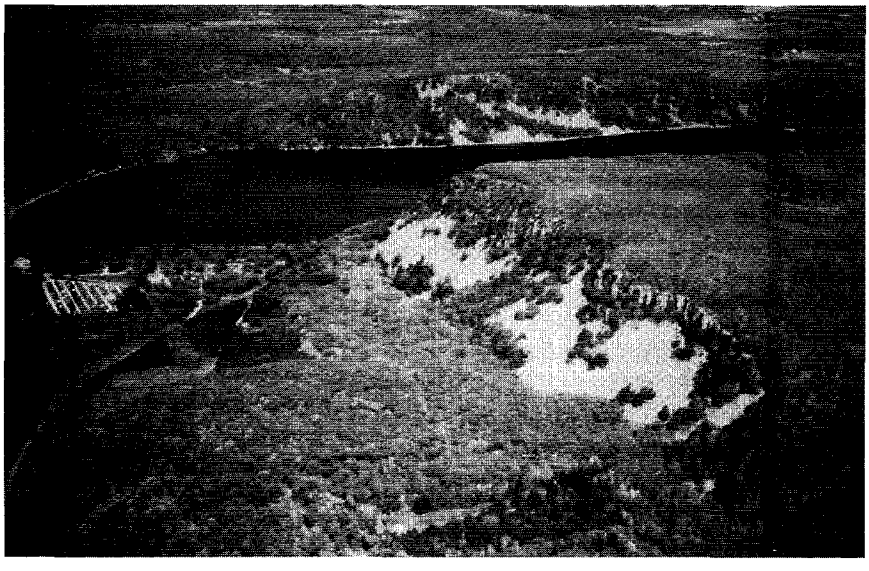


Figure 4.
Aerial view, looking west, of mountainous Devil's Lake in the Baraboo Hills, 1969. The lake is bordered by three 500-ft bluffs: the west bluff (in the distance, center), the east bluff (closer and to the right), and the south bluff (far left). North shore of the lake at upper right, south shore at middle left.

Lower Wisconsin River Wildlife Area, Pine Island Wildlife Area, Dell Creek Public Hunting and Fishing Grounds, Hulburt Creek Fishery Area, McGilvra's Woods near Baraboo, and Cady's Marsh near Reedsburg. Several county parks, such as White Mound near Plain, are also within the area. Privately owned sites of special ecological significance include Durward's Glen, Baxter's Hollow and Klondike, Pine Hollow near Denzer, Hemlock Draw and Honey Creek Valley near Leland, the International Crane Foundation, the Aldo Leopold Memorial Reserve, Lodde's Mill Bluff and Ferry Bluff, and the "Wisconsin Desert" near Spring Green. One of the public lands, Devil's Lake State Park (see Lange 1989), is treated separately in this report.

The major rivers are the Wisconsin (Figure 3) and its main tributary, the Baraboo.

The Baraboo Range is the most prominent topographical feature of the study area. This elliptical outcrop of quartzite, consisting of a North Range and a South Range, extends between the village of Rock Springs in the west and Cascade Mountain in Caledonia Township in the east, a linear distance of 25 miles; the enclosed Baraboo Valley has a width of 1 to 4 miles. Greatest relief is attained at Devil's Lake, where 3 bluffs with associated talus slopes rise 500 ft above the 369-acre lake, which is the main attraction of 11,000-acre Devil's Lake State Park (Figure 4). It should be pointed out that not all of Devil's Lake State Park is in the Baraboo Hills; part of it—the meadow between the east and south bluffs—is in the Central Plain. This meadow is actually the upper end of an extensive lowland that drains southward into Gallus' Slough and the Wisconsin River, west of Merrimac.

The Baraboo Hills are bordered at their eastern end by the Wisconsin River bottomlands of the Central Plain and at their western end by the hills of the Western Upland (Figure 5). The Central Plain and the Western Upland are 2 of the 5 geographical provinces of Wisconsin (Martin 1965). The Western Upland, as its name implies, is a highland region. Mainly it is well dissected, with the greatest relief being in the valleys of the Mississippi and Wisconsin rivers and their tributaries. Sandstones are present, but dolomites and sandy dolomites predominate. In contrast, the Central Plain is mainly flat due to alluvial filling; a rolling or hilly topography occurs

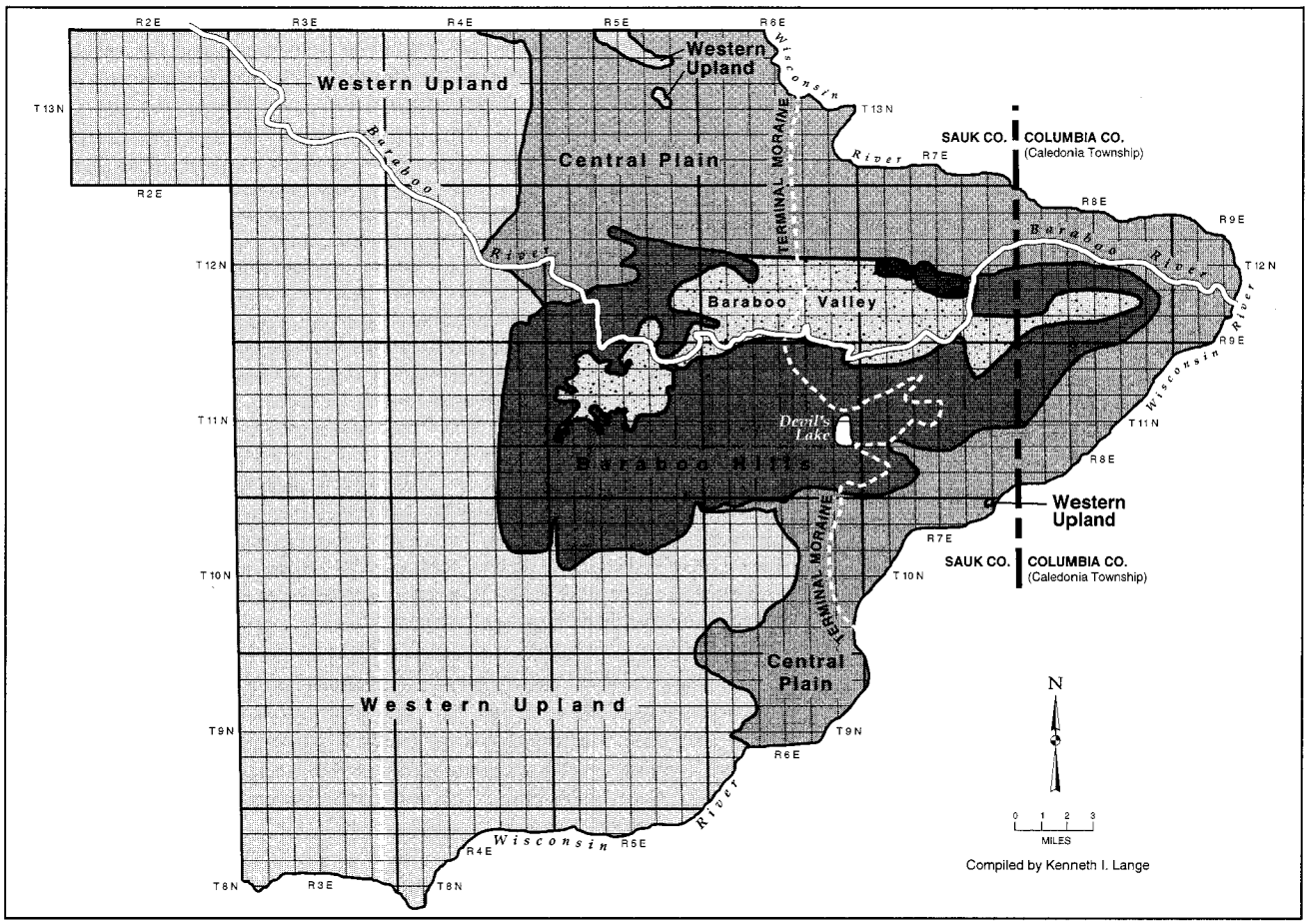


Figure 5. *Landforms and geographical provinces of the study area. For orientation, notice Devil's Lake in T11N, R6E. The Baraboo Hills, Western Upland, and Central Plain are all outlined. The westernmost extent of the Wisconsin Glacier is indicated by a white dashed line running north-south. The Wisconsin River borders the study area on the east and south; its main tributary, the Baraboo River, is indicated by a white line running west-east.*

where there has been less alluvial filling. Nearly all of this province is underlain by Cambrian sandstone.

Martin (1965) mapped the geographical provinces of Wisconsin (Figure 1) by tracing contacts between rock types, insofar as possible. The geographical provinces of Wisconsin have never been mapped in detail; this would be a formidable task, for example when dealing with a dissected landscape of ridges and valleys, such as the Western Upland. Determining the contact between the Western Upland and the Central Plain is further compounded by possible extensions of the Central Plain along the drainageways. The boundaries of the Western Upland and the Central Plain in Figure 5 are therefore approximations. For this report, the Western Upland and the Central Plain are delineated as follows: in northern Sauk County, from north to south, by Dell Creek (and its tributaries), Copper Creek, and Cady's Marsh in T12N, R4E, Sections 13 and 14; and in southern Sauk County, from north to south, by the Otter Creek bluffs along Otter Creek (west of U.S. 12 in Sumpter Township), the historic boundary of the Sauk Prairie (Lange 1990:12-13),[4] and the mouth of Honey Creek in T9N, R6E, Section 20, where Ferry Bluff and other Western Upland landmarks along the Wisconsin River are located (see Figure 6).

The following prominences are regarded as outliers (areas or groups of rocks surrounded by older rocks; Bates and Jackson 1984:362) of the Western Upland within the Central Plain: Badlands, Rattlesnake Knob, Haystack Hills, and Christmas Mountain (Coon Bluff) in Dellona Township, and Owl's Head in Merrimac Township (Clayton and Attig 1990; Figure 6). Some hilly areas with sandstone outcrops in the Central Plain, for example the cliffs along the Wisconsin River at Wisconsin Dells and in Rocky Arbor State Park, are not herein regarded as outliers of the Western Upland and hence are treated for floristic purposes as belonging to the Central Plain.

[4] For the reader's convenience, page numbers are included in textual references for material that might otherwise be difficult to find.

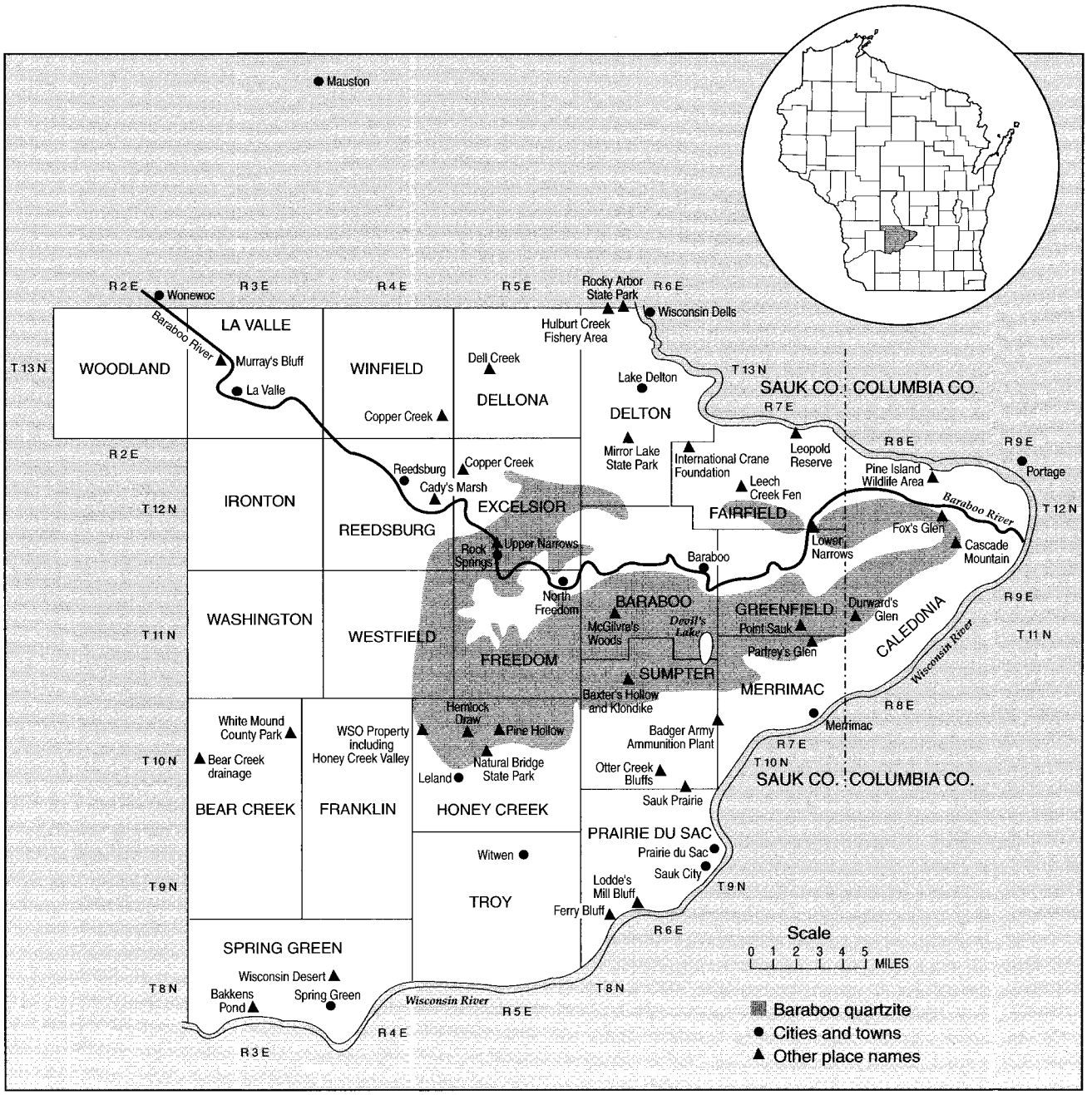


Figure 6. *Townships of the study area and place names mentioned in this report.*

In differentiating the Baraboo Hills and the Western Upland, should one use the quartzite or the foothills of more recent age, and, if the latter, just where should the break be? The quartzite and associated conglomerate ("Parfrey's Glen Formation," Clayton and Attig 1990; "Undifferentiated quartzite conglomerate and conglomeratic sandstone facies deposited near ancient quartzite islands," Dott 1970) are utilized by geologists to delineate the Baraboo Hills and normally would be used here. However, previous studies (notably Mossman and Lange 1982, Lange 1990) have employed a broader boundary for the Hills in the southwestern corner so as to correspond with preservation efforts by the Wisconsin Society for Ornithology (WSO) and The Nature Conservancy, and this approach is essentially used here. The Cambrian-Ordovician sandstone and dolomite hills that *adjoin* the Baraboo Range and associated conglomerate in the southwestern corner of the Range are thus treated as part of the Baraboo Hills. Also included within the Baraboo Range is Honey Creek Valley, from Weidman Falls in T11N, R4E, Section 35, where quartzite is exposed, south to and including the WSO Alder-Black Ash swamp in T10N, R4E, Section 11. Actually the swamp (= WSO Honey Creek bog) and associated wetlands may be closer botanically to the Wisconsin River bottoms and the Central Plain, as suggested by the presence of such

Table 1. *Scientific names of vascular plants (after Kartesz 1994) for species mentioned in the text under their common names.*

Common Name	Scientific Name
Alder	*Alnus rugosa*
Alfalfa	*Medicago sativa*
American Elm	*Ulmus americana*
Asiatic Honeysuckle	*Lonicera tatarica*
Basswood	*Tilia americana*
Beaked Hazel	*Corylus cornuta*
Big Bluestem	*Andropogon gerardii*
Big-leaved Aster	*Aster macrophyllus*
Bird's-foot Trefoil	*Lotus corniculatus*
Black Ash	*Fraxinus nigra*
Black Oak	*Quercus velutina*
Bloodroot	*Sanguinaria canadensis*
Bluegrass	*Poa compressa* and/or *P. pratensis*
Bluejoint	*Calamagrostis canadensis*
Canada Mayflower	*Maianthemum canadense*
Cat-tail(s)	*Typha* sp. (spp.)
Cinnamon Fern	*Osmunda cinnamomea*
Cliff Cudweed	*Gnaphalium saxicola*
Cliff Goldenrod	*Solidago sciaphila*
Colic-root	*Aletris farinosa*
Common Buckthorn	*Rhamnus cathartica*
Common Wood-sorrel	*Oxalis montana*
Creamy Baptisia	*Baptisia bracteata*
Crown-vetch	*Coronilla varia*
Dame's Rocket	*Hesperis matronalis*
Drooping Sedge	*Carex prasina*
Dutchman's-breeches	*Dicentra cucullaria*
False Pennyroyal	*Trichostema brachiatum*
Fameflower	*Talinum rugospermum*
Fragrant Fern	*Dryopteris fragrans*
Garlic Mustard	*Alliaria petiolata*
Gay Feather	*Liatris pycnostachya*
Ginseng	*Panax quinquefolius*
Gray Dogwood	*Cornus racemosa*
Hawthorns	*Crataegus* spp.
Hemlock	*Tsuga canadensis*
Hickories	*Carya* spp.
Hill's Oak	*Quercus ellipsoidalis*
Hill's Thistle	*Cirsium hillii*
Interrupted Fern	*Osmunda claytoniana*
Jack Pine	*Pinus banksiana*
Kalm's St. John's-wort	*Hypericum kalmianum*
Lady's-slippers	*Cypripedium* spp.
Leather-leaf	*Chamaedaphne calyculata*
Little Bluestem	*Schizachyrium scoparium*
May-apple	*Podophyllum peltatum*
Meadow-beauty	*Rhexia virginica*
Moschatel	*Adoxa moschatellina*
Mountain Maple	*Acer spicatum*
Mullein	*Verbascum thapsus*
Northern Monkshood	*Aconitum noveboracense*
Oak(s)	*Quercus* sp. (spp.)
Old-field Cinquefoil	*Potentilla simplex*
Pansy Violet	*Viola pedata*
Pitcher-plant	*Sarracenia purpurea*
Pondweeds	*Potamogeton* spp.
Purple Loosestrife	*Lythrum salicaria*
Purple Milkweed	*Asclepias purpurascens*
Quaking Aspen	*Populus tremuloides*
Red Cedar	*Juniperus virginiana*
Red Elder	*Sambucus racemosa*
Red Maple	*Acer rubrum*
Red Oak	*Quercus rubra*
Reed Canary Grass	*Phalaris arundinacea*
Rock Clubmoss	*Huperzia porophila*
Rue-anemone	*Thalictrum thalictroides*
Saw-grass	*Carex lacustris*
Shaggybark Hickory	*Carya ovata*
Shining Clubmoss	*Huperzia lucidula*
Silky Aster	*Aster sericeus*
Silver Maple	*Acer saccharinum*
Skunk-cabbage	*Symplocarpus foetidus*
Sphagnum Moss	*Sphagnum* spp.
Spotted Touch-me-not	*Impatiens capensis*
Starry Campion	*Silene stellata*
Sugar Maple	*Acer saccharum*
Sullivantia	*Sullivantia sullivantii*
Summer Phlox	*Phlox paniculata*
Tamarack	*Larix laricina*
Toothwort	*Dentaria laciniata*
Trailing Arbutus	*Epigaea repens*
Trembling Aspen	*Populus tremuloides*
Tubercled Orchid	*Platanthera flava*
Water-pennywort	*Hydrocotyle americana*
White Birch	*Betula papyrifera*
White Gentian	*Gentiana alba*
White Lady's-slipper	*Cypripedium candidum*
White Oak	*Quercus alba*
White Pine	*Pinus strobus*
Willow	*Salix* spp.
Wire-grass	*Carex oligosperma*
Woolly Milkweed	*Asclepias lanuginosa*
Yellow Birch	*Betula alleghaniensis*
Yellow-eyed-grass	*Xyris torta*
Yellow Giant-hyssop	*Agastache nepetoides*
Yew	*Taxus canadensis*

species as *Carex emoryi*, *Poa paludigena*, and *Liparis loeselii*.

In the northwestern corner of the Baraboo Hills, should the glacial lake sediments and associated deposits be considered part of the Hills or the Central Plain? The sand deposits in Section 21 in this area have been interpreted as Central Plain, because of the presence of such characteristic plants of the Central Plain as Colic-root and Kalm's St. John's-wort (Table 1).

The soils are primarily silt loams and secondarily loams, clay loams, sand loams, and sands; wet alluvial soils occur along the lower Wisconsin River. The silt loams of the Baraboo Range developed in 20 to 40 inches of loess over quartzite bedrock (Hole 1976:59, 66, 131).

The terminal moraine of the Wisconsin Glacier winds through Sauk County (Figure 5); the eastern third of the study area, including the eastern part of the Baraboo Range, was glaciated, whereas the remainder of the study area was unglaciated. Some glacial sediment was carried beyond the terminal moraine and deposited at varying distances from the wasting ice by glacial meltwater, often forming extensive flats (outwash plains) and outwash terraces. Outwash plains formed just southwest of Baraboo and also just south of the Baraboo Range where the Badger Army Ammunition Plant is presently located. Outwash terraces occur in the Wisconsin River valley in a number of places (Gundlach 1980:2-3).

The climate is characterized by extremes of temperature and precipitation in any season. The average date of the last 32°F freeze in spring is 10 May, and the first in fall is 28 September. The growing season, i.e., the number of days between these dates, averages 142 days (Gundlach 1980:1), but there is considerable variation. Certain landforms, especially the Baraboo Hills, influence precipitation and temperature. For example, when conditions are marginal, rain just outside the Hills often changes to snow as it reaches the Bluffs (Figure 7).

Vegetational changes since the melting of the last glacier have been documented (Lange 1990). In early settlement years (the 1840s), the percentage of land cover in woods and forests was about the same as today, but wetlands (20%) and prairies (6%) were more extensive; the dominant community was oak savanna, now virtually absent, and humans were just beginning to alter the land. For Sauk County today, the estimated percentages for land cover are as follows: woods and forests—37%, wetlands—1%, agricultural land—53%, and urban and industrial land—9% (Lange 1990:19).

History of Botanical Investigations in the Study Area

The first botanist to visit Wisconsin, and the study area, was English-born Thomas Nuttall in 1810 (Lapham 1853:375). Nuttall was a naturalist who investigated the Northwest for Benjamin Smith Barton.[5] Starting from Philadelphia by coach, then on foot, Nuttall soon realized that travel in this region was best by water. On his route to St. Louis he crossed Lake Michigan, then proceeded up the Fox River to the Fox-Wisconsin portage and down the Wisconsin River to the Mississippi (Graustein 1951:68-70, 1967:52-54). The party likely made at least a few landings along the Wisconsin River, when Nuttall would have hurried ashore and gathered specimens, undoubtedly to the amusement and disbelief of the voyageurs. For such endeavors he received a salary of 8 dollars a month and all expenses.

Wisconsin's pioneering naturalist, Increase Allen Lapham (1811-1875; cover photo), apparently was the first botanist to explore Devil's Lake, doing so in 1849 with several companions (Lapham 1849). The year after he died, Lapham's extensive scientific collections, including a herbarium of 24,000 specimens representing approximately 8,000 species, was purchased for $10,000 by the state for the University of Wisconsin (Lange 1984:118-19). Lapham's plant collection apparently was the beginning of today's University of Wisconsin-Madison Herbarium, as the other university botanical collections of the time presumably were consumed by the 1884 Science Hall fire; the exact details are uncertain (Iltis et al. 1986). Lapham's specimens at the University of Wisconsin-Madison Herbarium include the following: False Pennyroyal, collected at the Upper Narrows of the Baraboo Hills in 1865, and a number of species collected at "Kilbourn" (= Wisconsin Dells, no county indicated), in 1858, 1861, 1867, 1869, and 1872 (Lange 1981*b*). Labelling in those years was imprecise: "Kilbourn" or "Kilbourn City" might have encompassed a large area. Kilbourn was so designated because it was the nearest railroad station.

Thomas J. Hale (1858, 1860) was a student at the University of Wisconsin and a collaborator of Lapham. From 1860 to 1862 he worked for the State Geological and Agricultural Survey as an assistant to James Hall, a geologist. His assignment was three-fold: to collect plants and fossils and to map certain sandstones (Musselman 1969). The University of Wisconsin-Madison Herbarium has a number of specimens collected by Hale in the study area: at least 10 species from "Kilbourn," at least 4 species from "Baraboo," and several species from "Sauk City" and "Sauk County." He was familiar enough with the Sauk Prairie to be credited with the statement: "Not less than 800 species" (Hale 1861). A mystery surrounds Hale's subsequent activities, as he abruptly left the state in 1862 and was not heard of again until 1876, when he was referred to as the lamented T.J. Hale (Lange 1981*b*:41).

One of the first foreign visitors in the study area was Frederick George Jacob Lueders (1813-1904), who explored North America for the Society of Natural Science of his native city of Hamburg, Germany (Lueders 1861, 1880; Runge 1932). With letters of introduction from Asa Gray, the eminent botanist at Harvard University, Lueders arrived in July 1841 in Sauk City, a German settlement, and the obvious entry into Sauk County (Lange 1976:119). Lueders spent the next several months "collecting several hundred species" of plants in the Sauk Prairie area. The next spring he left for Missouri and then Oregon, collecting whenever he could, but the loss of virtually all his baggage in the Columbia River from an overturned boat led him to return to Germany in 1844. He hoped to start again, "after having gained some useful experience," but it was not to be. The financial situation in his family had changed, so that he now needed

[5] Benjamin Smith Barton (1766-1815) was a professor of Materia Medica at the University of Pennsylvania; his *Elements of Botany* (1803) was the first botany textbook in this country. He employed Nuttall (and Frederick Pursh) to collect plants for him; Barton himself was frail and unable to travel much (Evans 1993:43-44).

Figure 7.
Snow line in the Baraboo Hills in Sumpter Township, looking north from Groth Road towards U.S. 12, 6 April 1985.

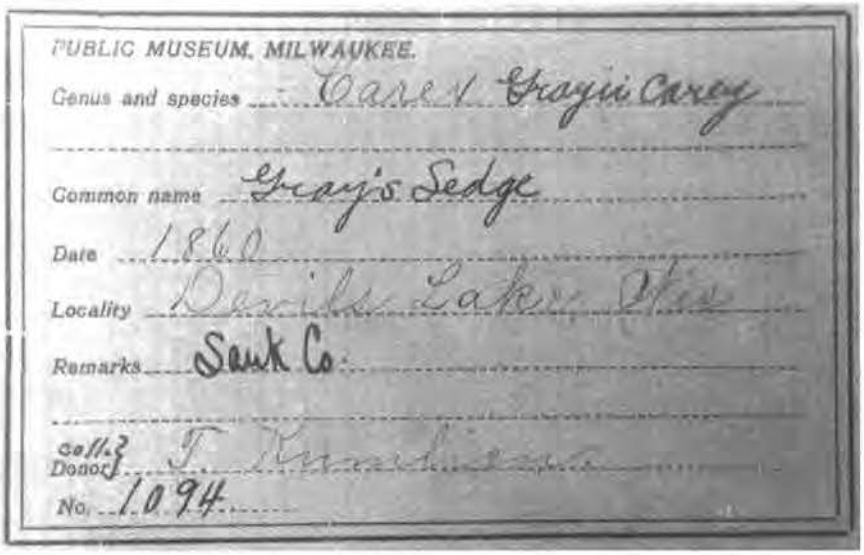


Figure 8.
Milwaukee Public Museum label for a sedge collected at Devil's Lake by Thure Kumlien in 1860.

a more reliable source of income. Lueders returned to America with his young bride to become a gardener and florist, eventually settling in Sauk City in 1851.

Personal correspondence with the University of Hamburg Herbarium (Herbarium Hamburgense) revealed that the University of Hamburg received F.G.J. Lueders' specimens from J.C. Lueders, a brother, shortly before the collector's death. However, the exact whereabouts of these specimens from "Wisconsin" and "Missouri" is now uncertain, as much of the Hamburg Herbarium was "displaced to middle Germany in World War II and was brought to Russia" (Professor K. Walther to K.I. Lange, in letter, 23 February 1973).

F.G.J. and Margaretta Lueders had 4 children, 2 daughters and 2 sons. The youngest child, Herman Frederick (1861-1904), became a teacher and gardener. His special interest was botany, and when still a child he purchased a copy of Gray's *Manual of Botany*. During the warmer months he botanized whenever time permitted, and on Sundays he took longer excursions along the Wisconsin River. His herbarium eventually numbered "4,000 native species" (4,000 sheets?; Lueders 1907). His vegetation of Prairie du Sac Township (Lueders 1895) lists approximately 700 species of vascular plants.

Unfortunately I have been able to locate only one of his specimens, a sheet of *Quercus* at the University of Wisconsin-Madison Herbarium, which was collected at Sauk City in 1884. It was brought to the University of Wisconsin-Madison Herbarium by Hugh H. Iltis from the Missouri Botanical Garden, where apparently it was being discarded. The sheet is labelled "Ex. Herb. William Trelease." Trelease (1857-1945) taught in the University of Wisconsin Botany Department from 1881 to 1885, and Lueders was a student at the University from 1884 to 1887. Trelease left Wisconsin in 1885 for Washington University in St. Louis, where from 1889 to 1912 he was Director of the Missouri Botanical Garden (information about Trelease from the University of Wisconsin Archives). Perhaps he took at least some of Lueders' specimens with him to St. Louis, but there is no record of this (Marshall R. Crosby, Missouri Botanical Garden, to K.I. Lange, in letter 20 February 1981).

Another exceptional naturalist, Swedish-born Thure Ludwig Theodore Kumlien (1819-1888), was the first person to actually collect plants at Devil's Lake, insofar as extant herbarium specimens attest. The Milwaukee Public Museum has Kumlien specimens collected at Devil's Lake in 1860 (Figure 8), and he very likely was here at other times also (Lange 1984:119). In an unfinished letter (Kumlien 1859), he expressed the desire to travel extensively, but remarked that he hadn't the means and could "hardly leave home for a day."

Figure 9. *Lellen Sterling Cheney (left) and Rodney Howard True (right) at Devil's Lake, with part of a plant press between them.*

PHOTO: UNIVERSITY OF WISCONSIN-MADISON HERBARIUM, COLLECTORS' FILES

Figure 10. *John Jefferson Davis, curator of the University of Wisconsin Herbarium, 1911-1937.*

PHOTO: UNIVERSITY OF WISCONSIN-MADISON HERBARIUM

Arlow Burdette Stout (1876-1957) was born in Ohio and grew up on a farm near the Kumliens, where he attended a one-room country school and spent countless hours afield. In 1903 he rescued a number of Kumlien specimens, including a Devil's Lake sedge, *Carex leptalea*, which had been left in the garret of the original Kumlien homestead, a log cabin. These undated specimens, apparently 37 in all, are now at the University of Wisconsin-Madison Herbarium. Stout graduated from State Normal School at Whitewater, then taught science at Baraboo High School from 1903 to 1907, spending weekends and parts of his vacations in field work, mainly in the Baraboo area (Lange 1984:120). The University of Wisconsin and the Milwaukee Public Museum have specimens collected by Stout in Baraboo, Devil's Lake (mostly pondweeds), Greenfield Township, Fairfield Township, the Lower Narrows, and the Lake Delton area.

A number of other collectors appeared on the scene around the turn of the century, including C.H. Sylvester and William Finger, whose herbaria are at the Milwaukee Public Museum; Will Sayer Moffatt, a medical doctor; and Levi M. Umbach (1853-1918), a science instructor at North-Western College (now North Central College) in Naperville, Illinois. H.S. Pepoon's *Flora of the Chicago Region* is dedicated to Umbach, "best of friends and most enthusiastic of plant collectors." Umbach visited Devil's Lake every year from 1895 through 1900, and among his Devil's Lake specimens are the first collections of an uncommon Gerardia *(Agalinis gattingeri)*, now on Wisconsin's threatened list. The Umbach Herbarium of some 45,000 plants was purchased by the University of Wisconsin in 1927 (Lange 1984:122).

Two University of Wisconsin faculty members, Lellen Sterling Cheney (1858-1938) and Rodney Howard True (1866-1940), did field work in the study area from before the turn of the century onward. They collaborated on a flora of the Madison area (Cheney and True 1892) and often took field trips together, e.g., to Wisconsin Dells and Devil's Lake (Figure 9). Cheney was a pioneer of systematic botany in Wisconsin (Cheney 1899, 1900-1901) and in charge of the university herbarium from 1891 to 1903. He initiated botanical surveys of the Lake Superior shore and the Upper Wisconsin River valley via boat in a Wisconsin more primeval than any of us can ever know. Mosses were his main interest; in fact, he was preparing a catalogue of Wisconsin mosses at the time of his death, but he also added many vascular plants to the university herbarium. His vascular plant collections include specimens from Devil's Lake, Durward's Glen, Sauk City, Honey Creek, and Delton Township, dated from 1891 to 1900. True was from Baraboo, a son of John M. True who at one time was a state senator (Lange 1984:122). His specimens, collected in the study area in the 1880s and 1890s, include approximately a dozen species now rare or extirpated, e.g., Pitcher-plant and White Lady's-slipper, and at least one new state record, the Bush-clover *Lespedeza virginica* from Devil's Lake. True collected extensively in the Baraboo-Devil's Lake area and also in North Freedom, Greenfield Township, Fairfield Township, Delton Township, Mirror Lake, and Merrimac.

Edward Kremers (1865-1941) and Rollin Henry Denniston (1874-1957)—also University of Wisconsin faculty members—collected plants in the study area, mainly at Devil's Lake, in the early 1900s. So too did John Ronald Heddle (1887-?), a Nebraskan and University of Wisconsin student.

In 1911, the year that Devil's Lake State Park was established, a retired medical doctor, John Jefferson Davis (1852-1937; Figure 10), embarked on a new career—curator of the University of Wisconsin Herbarium, a position he would hold until his death. His first botanical interest

Figure 11. *Huron H. Smith on his motorcycle near Mauston, Juneau County, in 1922.*

PHOTO: MILWAUKEE PUBLIC MUSEUM

Figure 12. *Norman Carter Fassett, curator of the University of Wisconsin Herbarium, 1937-1954.*

PHOTO: FROM TAXON 4:51 1955.

was in collecting and naming seed plants he observed on his medical travels in the country, but his training as a physician sparked his curiosity about diseases and the fungi producing the diseases. Davis brought his plant collection with him to Madison and supervised the herbarium's growth for the next quarter-century, during which time he became an acknowledged authority on parasitic fungi (Lange 1984:123). His vascular plant collections include specimens from the Portage area, Wisconsin Dells, Reedsburg, LaValle, Baraboo and Devil's Lake, Prairie du Sac, Ferry Bluff, and Spring Green, dated from 1911 to 1936.

Huron H. Smith (1883-1933) and his assistant, Tenus Tuttrup, toured southwestern Wisconsin for 2 months in 1922 in a motorcycle with a side car (Figure 11), collecting plants in a number of counties for the Milwaukee Public Museum. Their collecting gear included the standard equipment of today, e.g., plant presses, but also "a few reams of tea papers, our lanterns to furnish the drying heat, and canvas petticoats to swathe the drying presses and confine the heat to where it would do the most good. . ." (Smith 1922:113). It was a unique expedition. If the engine broke loose, they would "re-cinch it," and "as for scenery, we were not even bothered with a windshield. Of course, now and again we inhaled a little dust, but we didn't know anybody and nobody could have recognized us, so we didn't care" (Smith 1922:114). Their collecting localities included the Ferry Bluff area ("a goodly lot of specimens, 300 sheets on one day"), Prairie du Sac, and the Baraboo Hills near Baxter's Hollow ("We cannot claim to have explored the Baraboo Bluffs well, though we spent three days upon them").

Two other Milwaukee Public Museum botanists of this era, Albert M. Fuller (1899-1981) and Emil P. Kruschke (1907-1976), looked for plants at Devil's Lake State Park, Fuller for orchids and Kruschke for hawthorns (Lange 1984:123-24). In 1930 Fuller collected plants, e.g., Fameflower, at Spring Green.

Arthur Bliss Seymour (1859-1933) collected at Sauk City, Ferry Bluff, and Devil's Lake in 1929, and 20 years later a son, Frank Conkling Seymour (1896-1985), collected at Pine Hollow near Denzer and the Lower Narrows in the Baraboo Hills, and the Wisconsin River bottoms in Caledonia Township. In yet another 20 years the first edition of F.C. Seymour's *The Flora of New England* would be published.

Henry P. Hansen (1907-1989), a palynologist (Heusser 1990), collected throughout the study area from 1930 to 1934 for his bog studies. His specimens are at the University of Wisconsin-Madison Herbarium and the Milwaukee Public Museum.

Two eastern botanists, Edgar T. Wherry (1885-1982) and Arthur N. Leeds (1870-1939), collected in the study area in 1935 for the Academy of Natural Sciences of Philadelphia. Their localities included Delton Township and Parfrey's Glen. Wherry was a renowned researcher and author (Wagner, Jr. 1982; Fogg, Jr. 1983), and Leeds (Pennell 1939, Wherry 1939) was a businessman who in his later years became particularly interested in ferns.

Norman Carter Fassett (1900-1954; Figure 12), followed Davis as Curator of the University of Wisconsin Herbarium. He came to Wisconsin in 1925 as an instructor in botany, after receiving his Ph.D. under Merritt Lyndon Fernald at Harvard University, and became a leader in taxonomic thought in North America and a major figure in the conservation movement in Wisconsin. He collected at some dozen places in the study area. His specimens include a dry woods sedge *(Carex albicans)*, collected in 1926 and 1927 at Devil's Lake State Park, still the only known Wisconsin locality for this species.

Fassett personally added approximately 28,000 specimens to the university herbarium (Lange 1984:124-25).

In the summer of 1946 and under Fassett's guidance, James H. Zimmerman (1924-1992) conducted a botanical survey of Devil's Lake State Park, which included mapping vegetation, locating rare species, and recommending sensitive areas for preservation (Zimmerman 1947). He reported the first park records for a number of species, and also collected here in succeeding years. His compilation of ferns and seed plants (Zimmerman 1962) was the foundation of the park's vascular species list.

Another major contemporary study is Thomas G. Hartley's flora of the "Driftless Area," which was Hartley's Ph.D. thesis under Robert F. Thorne at the State University of Iowa in Iowa City (Hartley 1962, 1966). His list of collecting stations includes a total of 9 sites in Sauk County (Hartley 1962:126-127).

Andy Clark's surveys (1993*a*, 1993*b*) are also noteworthy, in that they have contributed new records and information. Clark, a resident of Green Bay, Wisconsin, has done vascular plant surveys for the Wisconsin Department of Natural Resources, The Nature Conservancy, and environmental consulting firms.

Scientists continue to visit the study area, and in fact the list of recent collectors reads like a "who's-who" of well-known botanists, including John T. Curtis (1913-1961), the pioneering University of Wisconsin plant ecologist (Fralish et al. 1993); Henry C. Greene (1904-1967), who succeeded Davis as the university's authority on parasitic fungi (Backus and Evans 1968); Hugh H. Iltis, who succeeded Fassett as the curator of the University of Wisconsin Herbarium; John W. Thomson, botany professor at the University of Wisconsin-Madison; Philip B. Whitford (1920-1991), botany professor at the University of Wisconsin-Milwaukee; Douglas W. Dunlop, botany professor at the University of Wisconsin-Milwaukee; Donald Ugent, curator of the Southern Illinois University Herbarium in Carbondale; Robert C. Koeppen, of the U.S. Forest Service in Washington, D.C.; Theodore S. Cochrane, a curator at the University of Wisconsin Herbarium; Michael Nee, a curator at the New York Botanical Garden; Robert K. Peet, botany professor at the University of North Carolina in Chapel Hill; W. Carl Taylor, a fern specialist at the Milwaukee Public Museum; and Frederick J. Hermann (1906-1987), a moss specialist (Voss and Reznicek 1988).

METHODS

Although floras of Sauk County and Devil's Lake State Park are included herein, this report is essentially based upon landforms and geographical provinces rather than political boundaries—the traditional approach. A geographical emphasis should be more meaningful in determining patterns and relationships. The Baraboo Hills, Devil's Lake, Wisconsin River, Western Upland, and Central Plain are all treated separately in this report.

Field Records

From 1966 through 1994 I compiled vascular plant lists in the field for a total of 198 localities: 33 in Devil's Lake State Park, 53 in the Baraboo Hills outside of Devil's Lake State Park, 42 in the Western Upland, and 70 in the Central Plain. These are filed by township, range, and section. Some localities were visited just once, others more often. A study in British woodlands (Kirby et al. 1986) concluded that observer experience and additional visits both resulted in finding more species in a given locality.

Species were also noted on numerous outings when official lists were not being compiled.

I also had access to vascular plant lists for another 25 localities for the study area. These were compiled by Wisconsin Department of Natural Resources personnel, mainly Robert H. Read and William E. Tans, and by the following individuals: Iltis (1963, 1964), Greene (1966), Threlfall and Severson (1971), Phelps and Phelps (1977), Henderson (1989), Clark (1993*a*, 1993*b*), and Armstrong (1994). Specimen records from other individuals were also utilized when verifiable.

Herbaria Records

The extensive collections of the University of Wisconsin-Madison Herbarium were checked regularly and were indispensable for this study. The Milwaukee Public Museum Herbarium was also helpful. Local herbaria are located at the International Crane Foundation (Liegel and Weber 1980, Patlak 1981) and the Leopold Reserve (Luthin 1979). The author's herbarium is located at his residence in Baraboo, Wisconsin; it will be donated to the University of Wisconsin-Madison Herbarium. Andy Clark's herbarium, located at his residence in Green Bay, Wisconsin, was also consulted; voucher sheets of his more significant records will be donated to the University of Wisconsin-Madison Herbarium. The total number of herbarium sheets for the study area in all herbaria was not tallied, but it runs into the thousands.

Literature Records

Zimmerman (1947, 1962) and Hartley (1962, 1966) are the major publications for the study area. Tryon et al. (1953), Peck and Taylor (1980), and Peck (1982) were helpful for ferns and fern allies.

Since 1929 a series of papers, entitled Preliminary Reports on the Flora of Wisconsin, has been published in the *Transactions of the Wisconsin Academy of Sciences, Arts and Letters*. The following were most helpful: Fassett (1930*a*, 1930*b*, 1933, 1946), Costello (1933), Fogelberg (1937), J.A. McIntosh (1950), Ross and Calhoun (1951), Salamun (1951), Greene (1953), Koeppen (1957), Noamesi

and Iltis (1957), Urban and Iltis (1957), H.G. Mason and Iltis (1958), Iltis and Shaughnessy (1960), Patman and Iltis (1961), Sauer and Davidson (1961), Schlising and Iltis (1961), Ugent (1962), Barkley (1963), Johnson and Iltis (1963), Salamun (1963), Argus (1964), Hauke (1965), C.T. Mason and Iltis (1965), Beals and Peters (1966), Mickelson and Iltis (1966), Smith and Levin (1966), Tessene (1967-68), Payne (1970), Utech (1970), Utech and Iltis (1970), Gillett and Cochrane (1973), Cochrane and Salamun (1974), Marcks (1974), Salamun (1979), Tans and Iltis (1979), and Richardson et al. (1987). Four Preliminary Reports are unpublished: Lewis [1960], Mathias and Constance [1967], Crosswhite [1969], and Wahl [1970].

The following publications on families, genera, or species occurring within the study area were also consulted: Toole (1920, 1922), Fuller (1933), G.N. Jones (1939), Shinners (1941), Kouba et al. (1948), Fassett (1951, 1961), Wahl (1954, 1955), Melchert (1960), Kilgour (1964), Mangaly (1968), Heiser (1969), Williams (1970), Freckmann (1973), Sheviak (1973, 1974), Catling and Cruise (1974), Catling (1976, 1978), Overlease (1977), Harriman (1980), Jones (1980*a*, 1980*b*, 1989), Maycock et al. (1980), Bayer and Stebbins (1982), Isely and Peabody (1984), Waterway (1986), Case (1987), Reznicek and Catling (1987), and Tans (1987).

Local histories, local newspapers, and the original land surveys were also consulted.

Documentation

All pertinent field records, with herbaria records and literature records, were tabulated on 5 x 8 inch index cards, one for each species; these were filed alphabetically by family and then by genus and species within each family in the appropriate major group—ferns and fern allies, gymnosperms, monocots, or dicots. This is the order followed in the annotated checklist. The information is summarized in the species entries of the annotated checklist.

Virtually all species are represented by herbarium specimens or photographs. This information is also included on the index cards, which are on file at the author's residence in Baraboo, Wisconsin.

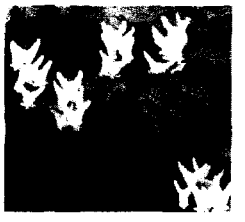
Taxonomy and Nomenclature

The format essentially follows Kartesz (1994), rather than Fernald (1950) or Gleason and Cronquist (1991), with some exceptions. Panic grasses in Poaceae follow Freckmann (1996), and certain genera, which are not recognized by Kartesz (1994), are herein retained. These are as follows: *Camptosorus* in Aspleniaceae; *Smilacina* in Liliaceae; *Cacalia* in Asteraceae; *Dentaria* and *Nasturtium* in Brassicaceae; and *Poinsettia* in Euphorbiaceae. Also, the treatment of certain species differs taxonomically from Kartesz (1994), notably *Acer nigrum* in Aceraceae; the *Aster sagittifolius* complex in Asteraceae; *Melilotus alba* in Fabaceae; *Scutellaria leonardii* and *Stachys hispida* in Lamiaceae; *Potentilla fruticosa, P. palustris,* and *P. tridentata* in Rosaceae; and *Linaria canadensis* in Scrophulariaceae.

Michigan Flora (Voss 1972, 1985, 1996) was a valuable reference; *Plants of the Chicago Region* (Swink and Wilhelm 1994), another classical work of the Great Lakes area, was also consulted.

Some general comments on scientific names might be helpful. The scientific name of a species consists of the following: first the name of the genus (plural genera) to which the plant has been assigned, and then the specific epithet, followed by the authority or authorities, often abbreviated, for the name. One or more related species comprise a genus, and one or more related genera comprise a family. Units below species occur in 3 ranks; these are, in descending order, subspecies, variety, and form. If infraspecific units are used, they must be kept in their established hierarchy; subspecies, for example, may consist of 2 or more varieties, but varieties cannot be divided into subspecies. Finally, a taxon (plural taxa) is any taxonomically recognized unit, regardless of rank, for example species, subspecies, variety.

Every plant has a scientific name, but not every plant has a common name. Common names are also limiting in that a given common name is sometimes used for more than one plant, and a given plant sometimes has more than one common name. Those common names in local usage are generally used herein. An effort was not made to manufacture common names from the scientific name, for example "Broad-leaved Panic Grass" for *Panicum latifolium*.



Results and Discussion

Plant Communities

The land cover of the study area consists of approximately 35% tree communities; 2% prairies, sandy meadows, and wetlands; and 63% disturbed land. The latter category is the land cover type that will continue to increase markedly. See Lange (1990) for more detailed habitat descriptions and further references.

It should be pointed out that today's native communities may differ from those of presettlement time. Today's communities often occur on sites that were judged undesirable for agriculture because of steep topography, thin and rocky soil, or poor drainage, and they have had a different history than presettlement communities. An example is oak forest. Such trees as Red Oak, Red Maple, and Shaggybark Hickory now are more frequent in oak forests of the study area, largely because of fire exclusion (Lange 1990:19-23).

Also, certain vascular plants found today only or mainly in a given habitat (e.g., dry sandy woods) may be there because their optimal habitats (e.g., dry prairie and/or oak savanna) now are rare or extirpated in the study area. Oak savanna was intermediate between oak forest and prairie; it had features of both and graded into them. Prairie grasses and forbs, not underbrush, generally formed the ground cover, and the oaks grew about 100 feet apart. This was the major community in the study area in early settlement time (Lange 1990:14-16). Preliminary lists of indicator species have been generated for oak savanna and oak woodland; the interested reader should consult Pruka (1995).

Forests, Oak Woodland

Tree communities are dominated by oaks, Sugar Maple, coniferous

Figure 13. *Oak forest between the east and south bluffs, east of the railroad track, Devil's Lake State Park, 1978. The woman is standing by a Red Oak, with a White Oak on the right; the understory trees are mainly Red Maple.*

Figure 14. *Oak forest on the west bluff, Devil's Lake State Park, 1987. Mainly White Oak, with a Red Oak on the far left, also Shaggybark Hickory and (center of picture) White Pine.*

Figure 15. *Sugar Maple-Basswood forest in the extensive upland of the western half of the South Range of the Baraboo Hills, 1974.*

Figure 16. *Jack Pine-oak woods in the northwestern corner of the Baraboo Range, 1978.*

Figure 17. *Low sandy woods, Delton Township, 1986. The ground cover is mainly Cinnamon Fern.*

Figure 18. *Dry sand prairie, northwestern corner of the Baraboo Hills, 1978. The ground cover is mainly Little Bluestem.*

species, or a mix of deciduous and coniferous species. The terms "hardwoods" and "hardwood forest(s)" are synonymous with deciduous forest.

Oak forest, the main natural cover, consists primarily of Red and White Oaks, with Red Maple understory (Figures 13-14); Black Oak, often with Jack Pine, occurs on drier sites. The general term "mesic woods" refers to Red Oak woods and/or Sugar Maple forest. Basswood is a common associate of Sugar Maple; Sugar Maple-Basswood forest occurs mainly in the western half of the South Range of the Baraboo Hills and in the heads of ravines and on certain north-facing slopes in the Western Upland (Figure 15). Yellow Birch replaces Basswood in cooler sites; Sugar Maple-Yellow Birch forest is of limited occurrence in the Western Upland on sandstone outcrops along the Baraboo River and some of its tributaries and in the Baraboo Hills in certain gorges and associated slopes. Stands of White Pine occur in boulder fields and rocky bluffsides, whereas Red Pine and Jack Pine are more typical of dry sandstone outcrops and sand plains (Figure 16). Hemlock stands occur in certain gorges and on north-facing sandstone outcrops along the Baraboo River and some of its tributaries. Low sandy woods (= sphagnous woods; Hartley 1962:74-75) is a Central Plain speciality. The dominant trees are Red Maple, White Pine, Red and White Oaks, and White Birch; the ground is generally sphagnous with abundant ferns and sedges (Figure 17).

Some of the land cover in early settlement time might have been oak woodland, a community only recently recognized and not included in the early settlement vegetation map of the study area (Lange 1990:12-13). This community had a closed canopy, described as intermediate between savanna and forest (Pruka 1994:7), but generally an open understory, like oak savanna. The openness was due to running fires, which burned the

underbrush but not the trees. Two plants characteristic of this community, Starry Campion and Yellow Giant-hyssop (Pruka 1995), occur in the eastern end of the Baraboo Hills, suggesting that this area was oak woodland in the past.

Prairies

Virtually all the prairies, with the notable exception of the "Wisconsin Desert" by Spring Green, are one to several acre remnants being overgrown by woody plants. Nearly all these are dry prairies on sand, sandstone, conglomerate, dolomite, or glacial till (Figures 18-19). Cady's Marsh along the Baraboo River southeast of Reedsburg in the Central Plain is exceptional in that it includes remnants of mesic and wet-mesic prairie (Figure 20). The "Wisconsin Desert," an especially dry region of several hundred acres, contains dry sand prairie and sand blows in the lowlands, and dry lime prairie on the south-facing dolomite bluffs (Figure 21).

Glades

Glades (not to be confused with Red Cedar glades; Armstrong 1994) are bedrock communities on quartzite or rhyolite within deciduous forest, characterized by shallow soil, limited weathering of the substrate, and often steep, south- to southwest-facing exposures; the canopy is sparse and consists mainly of scattered and stunted oaks and Shaggybark Hickory, and the ground cover consists mainly of prairie plants (Figures 22-23). Sandstone glades and dolomite glades might also be recognized in the study area; these communities are treated herein as dry prairies.

Sandy Meadows

Sandy meadows, like low sandy woods, is another plant community confined to the Central Plain (Hartley 1962:75-77). The dominant ground cover often is dewberry (mainly *Rubus flagellaris*),

Figure 19. *Dry prairie on limey sandstone, west end of the South Range of the Baraboo Hills, 1993.*

Figure 20. *Cady's Marsh, seen here to the right of a cornfield and a fence, 1978.*

Figure 21. *"Wisconsin Desert," looking north across the sand dunes and flats towards the limey bluffs, 1969.*

Figure 22. *Quartzite glade on top of the south end of the east bluff, Devil's Lake State Park, 1986.*

Figure 23. *Rhyolite glade in the North Range of the Baraboo Hills, looking east towards the Lower Narrows, 1986.*

Figure 24. *Sandy meadow in Delton Township, 1981. The plant in flower is Colic-root.*

Old-field Cinquefoil, and goldenrods (especially *Euthamia graminifolia).* Species such as Colic-root (Figure 24) and Yellow-eyed-grass impart a Coastal Plain aura (see Floristics and Phytogeography). This is a vanishing community in the study area. At least a half dozen sites could still be found in Dellona and Delton Townships into the 1970s, although they were already being overgrown with woody plants. Now, 25 years later, they are virtually contiguous with the adjacent forest cover (Figure 25). Only a few examples of this unheralded community remain, mainly in the Pine Island Wildlife Area in Caledonia Township, and they too are being invaded by shrubs and trees.

Wetlands

Wetlands are represented by a diversity of communities, although often much reduced in size from early settlement time.

Deciduous swamps, characterized by such trees as Silver Maple and American Elm, are found mainly in the Wisconsin River bottoms (Figure 26), whereas Tamarack swamps are best developed along Dell Creek (Figure 27). Shrub swamps are widespread and typified by Alder thickets (Figure 28), willow thickets, and boggy Red Maple thickets. The collective term "low thickets" refers to any combination of these shrub swamps.

A fen is a peaty, calcareous wetland over groundwater discharge that is often under artesian pressure; there is just one fen in the study area, along Leech Creek in Fairfield Township (T12N, R7E, Sections 17 and 18). Bogs, in contrast, are primarily acidic wetlands characterized by such plants as Sphagnum mosses, Leather-leaf, and various orchids; a Leather-leaf bog is found in Fairfield Township (T12N, R7E, Section 3).

Sedge meadows are characterized by such species as *Carex stricta* and *C. lacustris* (Figure 29), and,

Figure 25.
Sandy meadow in Dellona Township being overgrown with White Pine, Red Maple, and Quaking Aspen, 1986.

Figure 26.
Silver Maple-American Elm swamp along the Wisconsin River in Fairfield Township, 1986.

Figure 27.
Tamarack swamp along Dell Creek in Dellona Township, 1986. The shrub is Alder.

Figure 28.
Alder swamp along Dell Creek in Dellona Township, 1986.

Figure 29.
Sedge meadow, mainly Saw-grass, in Fairfield Township, 1986.

Figure 30.
Sedge meadow, mainly Wire-grass, in Delton Township, 1986.

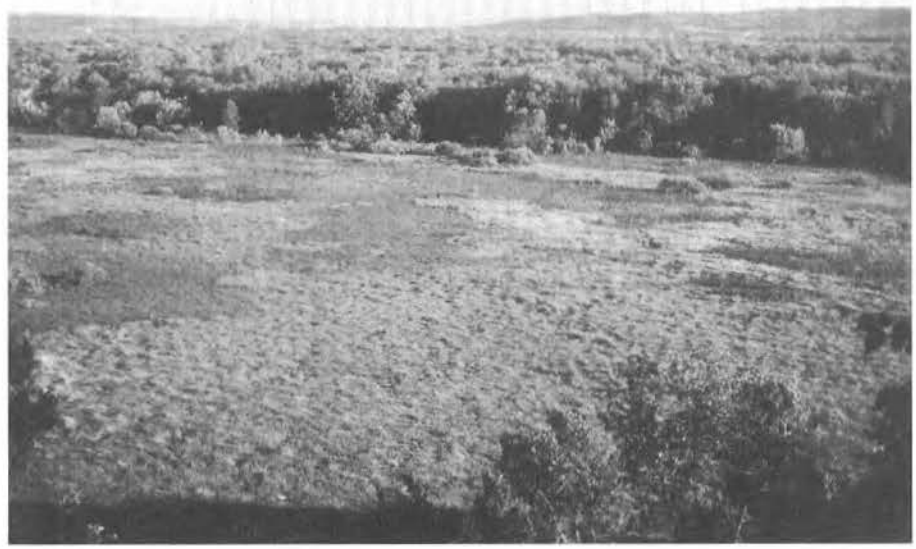


Figure 31.
Marsh along the Wisconsin River in Troy Township, 1973. Most of the cover (the light color) is Reed Canary Grass, which was introduced for stock feed.

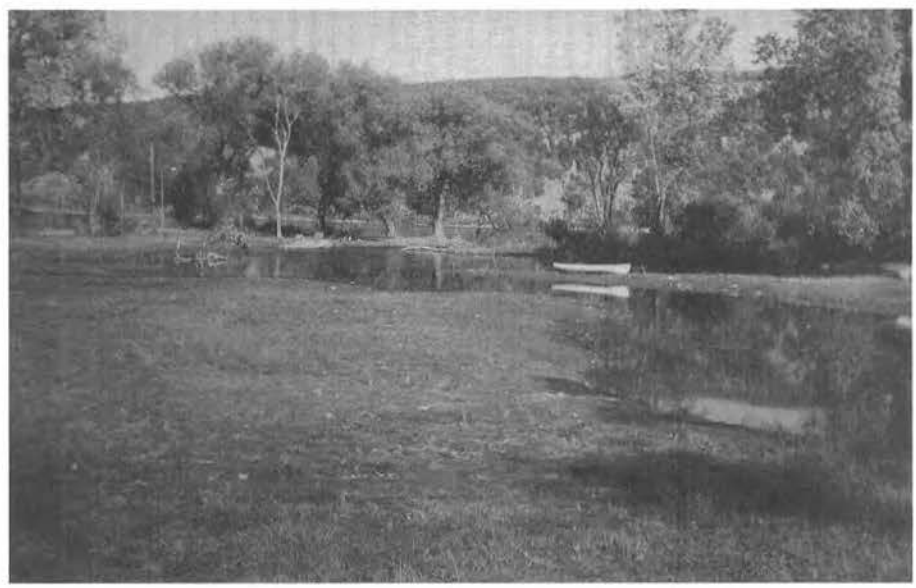


Figure 32.
Southwest corner of Devil's Lake and Messenger Creek in 1974, a low water year. The main species on the mudflats is the sedge Eleocharis acicularis. *See the species entry in the annotated checklist.*

Figure 33.
Glacial kettle in Devil's Lake State Park on the former Johnson farm, 1978.

Figure 34. *Otter Creek in Baxter's Hollow in the Baraboo Hills, 1976.*

Figure 35. *Railroad track and embankment in Baraboo, 1994.*

Figure 36. *Conifer plantation in Prairie du Sac Township, 1986.*

especially in the Central Plain, *C. rostrata* and *C. oligosperma* (Figure 30); both species of *Calamagrostis* in the study area are often co-dominants with the sedges in Central Plain sedge meadows. An alkaline meadow is a sedge meadow with fen plants; a notable example is the meadow extending from the lowland between the east and south bluffs in Devil's Lake State Park, south to Gallus' Slough near Merrimac. Also represented in the study area are Blue-joint meadows and Reed Canary Grass meadows (Figure 31). The collective term "low meadows" refers to any combination of sedge or grass meadows. Cat-tail marshes are widespread, especially along the Wisconsin River and in the Bear Creek drainage.

Riparian habitats are also widespread (Figure 32). Glacial kettles are found in a number of places, notably on the former Johnson farm in Section 18 in Devil's Lake State Park (Figure 33) and on Point Sauk in Greenfield Township.

Open-water habitats are represented by ponds, lakes, sloughs, and drainages. A given pond, lake, or slough, whether natural or artificial, generally contains from 10 to 20 (rarely more) species of aquatic vascular plants. Creeks and brooks (Figure 34) are less diverse, with 6 or so species usually being the maximum number of aquatics (Lange, unpublished data).

Ruderal Areas

Ruderal areas are artificially disturbed sites, the abodes of weeds. Included herein are roadsides, trails, railroad embankments (Figure 35), agricultural workland, fallow fields, old fields (i.e., abandoned fields, often with scattered shrubs and/or trees), quarries and gravel pits, pavement, gardens and lawns, cemeteries, vacant lots, industrial land, construction sites, ditches, landfills, tree plantations (Figure 36), and orchards.

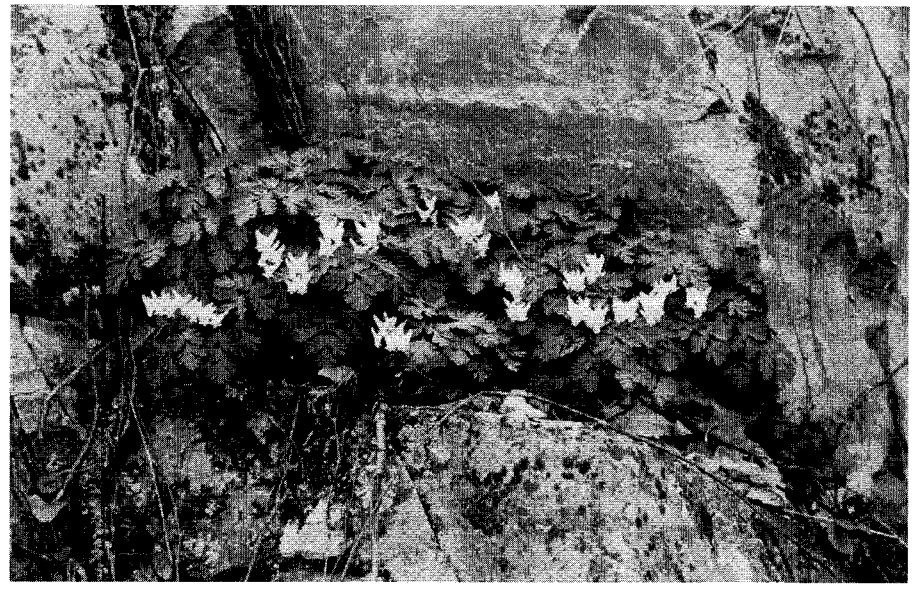


Figure 37.
Dutchman's-breeches on the Devil's Lake State Park bluffs, 1984.

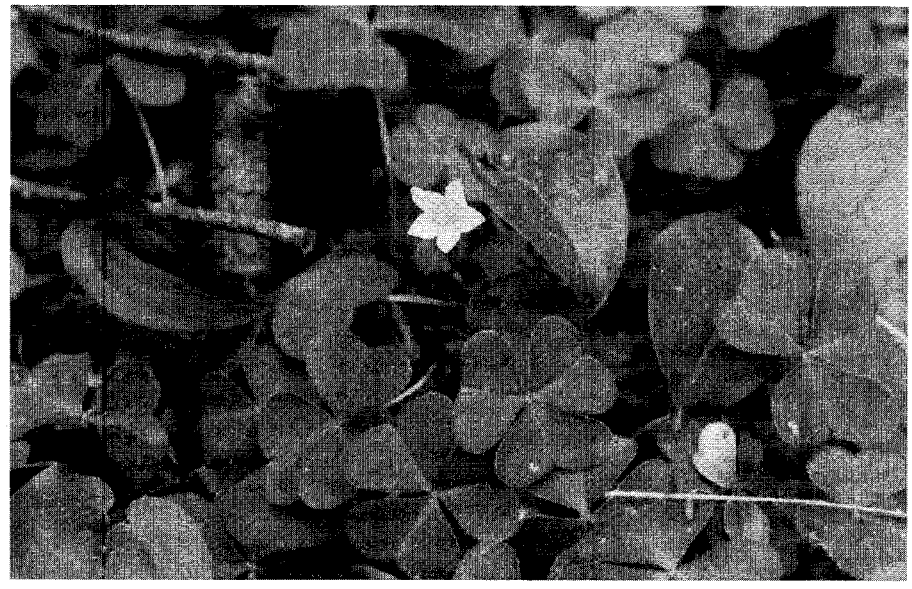


Figure 38.
Common Wood-sorrel, with Canada Mayflower, LaValle Township, 1988.

Figure 39.
Pansy Violet in Devil's Lake State Park, 1967.

Figure 40. *Meadow-beauty; primarily a species of the coastal plain, as photographed here, for example, in Cape May County, New Jersey, in 1964.*

Floristics and Phytogeography

The flora of the study area consists of a number of groups or elements, each of which shares a common geographic range (after Curtis 1959:8-11).

Most common is the deciduous forest group, consisting of Alleghenian and Ozarkian elements comprising some 75% of the native species. The Alleghenian element centers in the Cumberland and Great Smoky Mountains, whereas the Ozarkian element, which is better adapted to drought and fire, centers in the Ozark Mountains of Arkansas and Missouri. Alleghenian woody plants include Sugar Maple, White Oak, and Gray Dogwood; herbaceous plants include Bloodroot, Dutchman's-breeches (Figure 37), and May-apple. Ozarkian trees include Black Oak and the hickories, and herbs include Rue-anemone.

Another group, the Boreal element, consists of northern plants, mainly forest species. Approximately 70 species (= 7% of the native flora), including Shining Clubmoss, Common Wood-sorrel (Figure 38), and Beaked Hazel, are in this group.

The Prairie element includes grassland and Great Plains species. In this group are approximately 140 species (= 13% of the native flora), including Big Bluestem, Silky Aster, and Pansy Violet (Figure 39).

An interesting although minor group is the Coastal Plain-Mississippi Embayment element. These plants typically are found in habitats that simulate the Atlantic and Gulf coastal plains (Peattie 1922, Fernald 1942, Curtis 1959:10, Cushing 1965, Read 1976:7). In the study area they are found in the Central Plain, where they help define this landform botanically. Their disjunct presence in Wisconsin has been explained on the basis of step-wise migration in early postglacial times; however, other hypotheses, for example long-distance dispersal or a combination of dispersal and migration, are also possible, at least for certain species (Richardson et al. 1987:113-14). Still another hypothesis may be the most likely explanation, namely, that these disjunctions are remnants of more extensive populations established during a relatively dry period in the Great Lakes region some 5,000 years ago (Jackson and Singer 1997). Reznicek (1994) lists a total of 62 coastal plain disjunct species for the Great Lakes region; 5 of these occur in the study area: 2 grasses (*Aristida tuberculosa* and *Panicum meridionale*), Yellow-eyed-grass, Meadow-beauty (Figure 40), and a bladderwort (*Utricularia geminiscapa*).

Weeds represent still another element. This group consists mainly of plants of Eurasian origin, but there are also some of tropical derivation and still others of North American origin from outside the study area. Mainly these are from western North America, but some, such as Summer Phlox, originated farther east or south. These plants prospered with the accelerated disturbance of the ground by the white settlers. Their proliferation was being discussed in local newspapers over a century ago, and one local newspaper in 1882 even had an article on "Street Flowers" (Lange 1980*b*). Some species, such as Mullein, were cultivated (Figure 41). Weeds total 241 species (= 18% of the flora).

The flora of the study area obviously has been derived from a number of sources. These sources for native plants indicate migrational routes from eastern North America, northern areas, the Great Plains, and the Mississippi River and Wisconsin River systems. Table 2 lists the 37 native species that are confined in the study area to the immediate corridor of the Wisconsin River, including the lower Baraboo River and lower Honey Creek.

PHOTO: FROM THE COLLECTION OF RALPH MARQUARDT

Figure 41. *These 7 people were photographed in a garden patch of Mullein in the Sauk City area in the early 1900s. Mullein has a long history of extensive medicinal and other uses in both Old and New Worlds.*

Another group of native species occurs only in Devil's Lake and the Wisconsin River and/or along their shores; these 18 species are listed in Table 3.

A few taxa in the study area are known only or mainly from nonglaciated territory; if they occur within glaciated terrain, they do so only rarely and then often marginally. Notable examples are Rock Clubmoss (Wilson 1930), Sullivantia (Fassett 1932), Northern Monkshood (Figure 42), Cliff Cudweed (Beals and Peters 1966), Cliff Goldenrod (Salamun 1963), and Fameflower (Cochrane 1993). With the possible exception of Fameflower, these are all cliff plants. Perhaps they survived on suitable rock outcrops in the Driftless Area during the last glaciation in Wisconsin. However, the probable occurrence of boreal and even tundra conditions in the Driftless Area during glaciation renders this scenario unlikely for most temperate flowering plants; for these species an entry into the Driftless Area after glaciation seems more likely (Pusateri et al. 1993).

Apparently the only Driftless Area endemics are Cliff Cudweed, which is presently known only from sandstone cliffs in southwestern Wisconsin, and Cliff Goldenrod, a fairly common *Solidago* of dolomite and sandstone cliffs that is related to *S. hispida.* Hill's Oak might also qualify (Pusateri et al. 1993:33).

Comparison of the Baraboo Hills, the Western Upland, and the Central Plain

Table 4 lists the total number of species of native vascular plants for each major plant group in the Baraboo Hills, Western Upland, and Central Plain, and the number of species found only in the given landform or province within the study area. These numbers for the Baraboo Hills, Western Upland, and Central Plain, respectively, are as follows: 889 and 72, 823 and 33, and 904 and 80. The species restricted to the Baraboo Hills, Western Upland, and Central Plain are listed in Tables 5, 6, and 7.

The richest geographical entities, both in number of species and number of species found only in the given landform/province within the study area, are the Baraboo Hills and Central Plain. The Western Upland, in contrast, has the fewest species and the fewest such restricted species. This is true even if the limey foothills at the western end of the South Range and Honey Creek Valley are included within the Western Upland, rather than in the Baraboo Hills as in this report; a total of 19 species, including 4 restricted species, would then be shifted to the Western Upland from the Baraboo Hills (Table 8). The Hills are generally regarded as part of the Western Upland; this analysis indicates that the Baraboo Hills should be recognized as a separate entity in terms of vascular plants.

The Baraboo Range is a major center of biological diversity in Wisconsin (Mossman and Lange 1982). The variety of landforms includes terraces and slopes, flat uplands, talus fields and stony hillsides, gorges and valleys, moraines, kettles, and outwash plains (Attig et al. 1990). This diverse topography contains a bewildering array and intermingling of habitats and niches that contain approximately one-half of all the ferns and flowering plants found in Wisconsin, including species found nowhere else in the state and nowhere else in the study area (Lange 1980*a*, 1981*a*). At the same time the significance of the Western Upland and the Central Plain in contributing to the rich flora of the study area should not be overlooked.

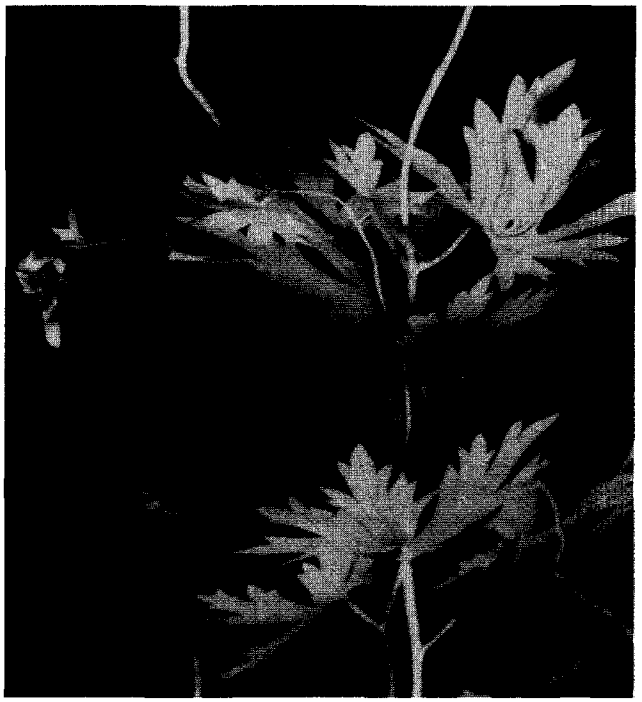


Figure 42.
Northern Monkshood in Parfrey's Glen, 1967.

Table 2. *Native vascular plants in the study area confined to the immediate corridor of the Wisconsin River, including the lower Baraboo River and lower Honey Creek.*[a]

Scientific Name	Common Name
Arabis shortii	—
Azolla mexicana	Mosquito Fern
Boltonia asteroides	—
Brasenia schreberi	Water-shield
Carex alopecoidea	—
Carex davisii	—
Carex emoryi[b]	—
Carex lupuliformis	—
Carex lupulina	Hops Sedge
Carex muskingumensis	—
Echinochloa walteri	—
Eleocharis erythropoda	Spike-rush
Eleocharis intermedia	Spike-rush
Fimbristylis autumnalis	—
Glyceria septentrionalis	Manna Grass
Juncus acuminatus	—
Leersia lenticularis	Catchfly Grass
Lycopus virginicus	Water-horehound
Morus rubra	Red Mulberry
Myosotis laxa	Forget-me-not
Nuphar lutea	Spatter-dock
Panicum rigidulum	Panic Grass
Platanus occidentalis	Sycamore
Polygonum ramosissimum	Bushy Knotweed
Pontederia cordata	Pickerelweed
Quercus bicolor	Swamp White Oak
Rhexia virginica	Meadow-beauty
Rudbeckia subtomentosa	Sweet Coneflower
Rumex salicifolius	—
Rumex verticillatus	Swamp Dock
Sagittaria cuneata	Arrowhead
Scirpus acutus	Hardstem Bulrush
Sicyos angulatus	Bur-cucumber
Stachys tenuifolia	Hedge-nettle
Verbesina alternifolia	Wing-stem
Veronica scutellata	Marsh Speedwell
Zannichellia palustris	Horned Pondweed

[a] Additional species are found only in the Wisconsin River corridor within the Western Upland and/or the Central Plain, but also occur elsewhere in the study area.

[b] Also known from a station in upper Honey Creek.

Table 3. *Native vascular plants in the study area found only in Devil's Lake and the Wisconsin River and/or along their shores.*

Scientific Name	Common Name
Betula nigra	Red or River Birch
Cephalanthus occidentalis	Buttonbush
Cyperus bipartitus	Shining Cyperus
Cyperus squarrosus	Awned Cyperus
Eleocharis engelmannii	Spike-rush
Juncus bufonius	Toad Rush
Juncus nodosus	—
Lipocarpha micrantha	—
Najas flexilis	Water-naiad
Phyla lanceolata	Fog-fruit
Potamogeton robbinsii	Pondweed
Potamogeton spirillus	Pondweed
Potamogeton vaseyi	Pondweed
Rotala ramosior	Tooth-cup
Salix nigra	Black Willow
Scirpus pungens	Threesquare
Scirpus smithii	—
Vallisneria americana	Water-celery

Table 4. *Summary of native vascular plants by landform/province. The number in ( ) is the number of the total species found only in the given landform/province within the study area.*

Major Plant Group	Baraboo Hills[a]	Western Upland	Central Plain
Ferns and Fern Allies	51(6)	41(2)	42(2)
Gymnosperms	9	9	9(1)
Monocots	263(28)	219(7)	270(34)
Dicots	566(38)	554(24)	583(43)
Total	**889(72)**	**823(33)**	**904(80)**

[a] Devil's Lake State Park is herein included in the Baraboo Hills, except for the alkaline meadow between the east and south bluffs, which is included in the Central Plain.

Table 5. *Native vascular plants in the study area restricted to the Baraboo Hills.*[a]

Scientific Name	Common Name
■ Ferns and Fern Allies	
Botrychium matricariifolium	Daisy-leaved Grape Fern
Diplazium pycnocarpon	Glade Fern
Isoetes echinospora	Spiny-spored Quillwort
Isoetes macrospora	Lake Quillwort
Phegopteris hexagonoptera	Broad Beech Fern
Polystichum acrostichoides	Christmas Fern
■ Monocots	
Aplectrum hyemale	Putty-root Orchid
Carex aenea	—
Carex albicans	—
Carex crawfordii	—
Carex digitalis	—
Carex hitchcockiana	—
Carex interior	—
Carex laxiculmis	—
Carex prasina	Drooping Sedge
Carex sartwellii	—
Carex scabrata	—
Carex woodii	—
Cyperus houghtonii	Houghton's Cyperus
Cypripedium candidum	White Lady's-slipper
Cypripedium parviflorum	Small Yellow Lady's-slipper
Cypripedium reginae	Showy Lady's-slipper
Elymus riparius	Wild-rye
Festuca rubra	Red Fescue
Juncus pelocarpus	—
Muhlenbergia sobolifera	Muhly Grass
Panicum meridionale	Panic Grass
Panicum xanthophysum	Panic Grass
Plantanthera leucophaea	Prairie White-fringed Orchid
Poa alsodes	Bluegrass
Poa nemoralis	Bluegrass
Potamogeton diversifolius	Pondweed
Potamogeton strictifolius	Pondweed
Sparganium erectum	Bur-reed

Scientific Name	Common Name
■ Dicots	
Adlumia fungosa	Mountain-fringe
Agastache nepetoides	Yellow Giant-hyssop
Arabis missouriensis	—
Aster shortii	Short's Aster
Callitriche heterophylla	Water-starwort
Cardamine douglassii	Pink Spring Cress
Cerastium nutans	Nodding Chickweed
Conopholis americana	Squawroot
Crataegus holmesiana	Hawthorn
Crataegus schuettei	Hawthorn
Cuscuta indecora	Dodder
Decodon verticillatus	Swamp Loosestrife
Desmodium paniculatum	Tick-trefoil
Geranium bicknellii	—
Geranium carolinianum	—
Geum rivale	Purple Avens
Heliantus decapetalus	—
Impatiens pallida	Pale Touch-me-not
Jeffersonia diphylla	Twinleaf
Lespedeza virginica	Bush-clover
Linnaea borealis	Twinflower
Megalodonta beckii	Water-marigold
Orobanche uniflora	One-flowered Cancer-root
Phytolacca americana	Pokeweed
Prenanthes crepidinea	—
Ribes glandulosum	Skunk Currant
Rubus alumnus	—
Rubus pergratus	—
Rubus rosa	—
Salix amygdaloides	Peach-leaved Willow
Salvia reflexa	Sage
Sanicula trifoliata	Black Snakeroot
Silene stellata	Starry Campion
Symphoricarpos albus	Snowberry
Trichostema brachiatum	False Pennyroyal
Verbena simplex	—
Veronica americana	American Brooklime
Viola septentrionalis	—

[a] Including Devil's Lake State Park, except for the alkaline meadow between the east and south bluffs, which is herein referred to the Central Plain.

Table 6. *Native vascular plants in the study area restricted to the Western Upland.*[a]

Scientific Name	Common Name
■ Ferns and Fern Allies	
Azolla mexicana	Mosquito Fern
Equisetum scirpoides	Dwarf Scouring-rush
■ Monocots	
Carex alopecoidea	—
Carex gravida	—
Carex richardsonii	—
Echinochloa walteri	—
Panicum rigidulum	Panic Grass
Spiranthes magnicamporum	Prairie Ladies'-tresses
Zannichellia palustris	Horned Pondweed
Zigadenus elegans	White Camass
■ Dicots	
Adoxa mochatellina	Moschatel
Amaranthus albus	Tumbleweed
Arabis hirsuta	Hairy Rock Cress
Aster cordifolius	Heart-leaved Aster
Blephilia hirsuta	Wood Mint

Scientific Name	Common Name
Chamaesyce glyptosperma	—
Chenopodium desiccatum	—
Chenopodium standleyanum	—
Crataegus chrysocarpa	Hawthorn
Crataegus crus-galli	Cockspur Thorn
Euthamia gymnospermoides	—
Lactuca ludoviciana	Prairie Lettuce
Morus rubra	Red Mulberry
Oxalis montana	Common Wood-sorrel
Pediomelum esculentum	Pomme de Prairie
Penstemon pallidus	Beard-tongue
Platanus occidentalis	Sycamore
Rhexia virginica	Meadow-beauty
Rubus setosus	—
Sicyos angulatus	Bur-cucumber
Silphium integrifolium	Rosinweed
Symphoricarpos occidentalis	Wolfberry
Taenidia integerrima	Yellow Pimpernel

[a] Some of these species are confined to the Wisconsin River corridor within the Western Upland.

Table 7. *Native vascular plants in the study area restricted to the Central Plain.*[a]

Scientific Name	Common Name
■ Ferns and Fern Allies	
Dryopteris fragrans	Fragrant Fern
Lycopodium tristachyum	Ground-cedar Clubmoss
■ Gymnosperms	
Thuja occidentalis	Eastern White Cedar
■ Monocots	
Aletris farinosa	Colic-root
Aristida longispica	Three-awn Grass
Aristida purpurascens	Three-awn Grass
Calopogon tuberosus	Grass-pink Orchid
Carex aquatilis	—
Carex arcta	—
Carex buxbaumii	—
Carex comosa	Bottlebrush Sedge
Carex disperma	—
Carex echinata	—
Carex lupuliformis	—
Carex lurida	—
Cares sterilis	—
Carex tetanica	—
Carex trisperma	—
Eriophorum angustifolium	Cotton-grass
Eriophorum tenellum	Cotton-grass
Glyceria septentrionalis	Manna Grass
Juncus acuminatus	—
Juncus brevicaudatus	—
Juncus canadensis	—
Juncus torreyi	—
Malaxis unifolia	Green Adder's-mouth
Muhlenbergia glomerata	Marsh Wild-timothy
Panicum wilcoxianum	Panic Grass
Platanthera clavellata	Club-spur Orchid
Platanthera hyperborea	Tall Northern Bog Orchid
Platanthera lacera	Ragged Orchid
Rhynchospora capitellata	Beak-rush
Sagittaria cuneata	Arrowhead
Scirpus heterochaetus	—
Scirpus pendulus	—
Scleria triglomerata	Nut-rush
Xyris torta	Yellow-eyed-grass
■ Dicots	
Asclepias hirtella	Green Milkweed
Asclepias ovalifolia	Oval-leaved Milkweed
Aster borealis	Rush Aster
Aster fragilis	Small White Aster
Bartonia virginica	Screw-stem
Berula erecta	—
Betula pumila	Bog Birch
Brasenia schreberi	Water-shield
Ceratophyllum echinatum	Coontail
Chamaedaphne calyculata	Leather-leaf
Chamaesyce vermiculata	Hairy Spurge
Collinsonia canadensis	Richweed
Crataegus pennsylvanica	Hawthorn
Cuscuta polygonorum	Dodder
Galium labradoricum	—
Gentianopsis procera	Fringed Gentian
Gnaphalium saxicola	Cliff Cudweed
Hieracium umbellatum	—
Houstonia caerulea	Bluets
Hypericum kalmianum	Kalm's St. John's-wort
Lobelia kalmii	Brook Lobelia
Lysimachia quadriflora	—
Melampyrum lineare	Cow-wheat
Mimulus glabratus	Monkey Flower
Nemopanthus mucronatus	Mountain Holly
Nuphar lutea	Spatter-dock
Parnassia glauca	Grass-of-Parnassus
Polygala verticillata	—
Potentilla fruticosa	Shrubby Cinquefoil
Primula mistassinica	Arctic Primrose
Rhamnus alnifolia	Alder-leaved Buckthorn
Rosa blanda	Meadow Rose
Rumex salicifolius	—
Salix pedicellaris	Bog Willow
Salix pyrifolia	Balsam Willow
Sanicula canadensis	Black Snakeroot
Solidago riddellii	Riddell's Goldenrod
Sorbus americana	Mountain-ash
Strophostyles leiosperma	—
Toxicodendron vernix	Poison Sumac
Utricularia geminiscapa	Bladderwort
Vaccinium oxycoccos	Cranberry
Viola nephrophylla	—

[a] Some of these species are confined to the Wisconsin River corridor within the Central Plain.

Table 8. *Native vascular plants in the Baraboo Hills known only from the limey foothills at the western end of the South Range (Group A) or Honey Creek Valley (Group B).*

Scientific Name	Common Name
■ Group A	
Asclepias lanuginosa	Woolly Milkweed
Brickellia eupatorioides	False Boneset
Bromus kalmii	Brome Grass
Carex jamesii	—
Cheilanthes feei	Slender Lip Fern
Comptonia peregrina	Sweet-fern
Draba reptans	—
Hackelia deflexa	Stickseed
Polygala senega	Seneca Snakeroot
■ Group B	
Carex canescens	—
Carex digitalis[a]	—
Carex emoryi	—
Carex granularis	—
Carex laxiculmis[a]	—
Carex trichocarpa	—
Galium obtusum	—
Geum rivale[a]	Purple Avens
Jeffersonia diphylla[a]	Twinleaf
Rubus hispidus	Swamp Dewberry

[a] Known only from this area in Sauk County and Caledonia Township, Columbia County.

Rare Native Plants

Table 9 lists the 7 state endangered species, the 17 state threatened species, and the 47 Wisconsin species of special concern for the study area.

Endangered

Purple Milkweed, here at the northwestern edge of its range, is known from 3 stations, one of which may represent a remnant population that is persisting (and spreading?) from the former Sauk Prairie (Figure 43). *Carex lupuliformis* is known only from the lower Baraboo River. Richweed and Prairie White-fringed Orchid are both known only from collections from the past century. The Bush-clover *Lespedeza leptostachya*, an endemic of the north central states, was thought to be extinct in Wisconsin, as it had not been reported since 1880 (Alverson 1981). Then in the 1970s it was found in several dry prairies in southern Wisconsin and is now known from 3 stations in the study area (Figure 44). The only extant population of Rough White Lettuce in the study area is in the "Wisconsin Desert" by Spring Green (Figure 21). One of the most exciting botanical finds of recent years was made by Andy Clark when in 1992 he discovered a population of approximately 30 deer-nipped stalks of *Prenanthes crepidinea* amid Interrupted Fern along a stream in a Sugar Maple forest in the Baraboo Hills. There are only 2 other Wisconsin records: Lynxville, Crawford County, 1915, and near Brodhead, Green County, 1956 (Johnson and Iltis 1963:306). Only a few plants were found in 1993, perhaps because of high water. In 1994 thousands of immature plants were noted in May, associated with *Carex deweyana* and Toothwort, but in July only several dozen, mainly yellow basal leaves, could be found; the plants were dying back. None could be found in August.

Table 9. *Native vascular plants in the study area listed by the Wisconsin Department of Natural Resources (1993a, with additions) as Endangered, Threatened, or Special Concern.*[a]

Scientific Name	Common Name
■ Endangered	
Asclepias purpurascens	Purple Milkweed
Carex lupuliformis	—
Collinsonia canadensis	Richweed
Lespedeza leptostachya	Bush-clover
Platanthera leucophaea	Prairie White-fringed Orchid
Prenanthes aspera	Rough White Lettuce
Prenanthes crepidinea	—
■ Threatened	
Aconitum noveboracense	Northern Monkshood
Adoxa moschatellina	Moschatel
Agalinis gattingeri	Gerardia
Agastache nepetoides	Yellow Giant-hyssop
Asclepias lanuginosa	Woolly Milkweed
Asclepias ovalifolia	Oval-leaved Milkweed
Callitriche heterophylla	Water-starwort
Carex prasina	Drooping Sedge
Cirsium hillii	Hill's Thistle
Cypripedium candidum	White Lady's-slipper
Gentiana alba	White Gentian
Gnaphalium saxicola	Cliff Cudweed
Lespedeza virginica	Bush-clover
Opuntia fragilis	Brittle Prickly-pear
Platanthera flava	Tubercled Orchid
Poa paludigena	Bluegrass
Polytaenia nuttallii	Prairie-parsley
■ Special Concern	
Adlumia fungosa	Mountain-fringe
Arabis missouriensis	—
Aristida dichotoma	Three-awn Grass
Asplenium trichomanes	Maidenhair Spleenwort
Bartonia virginica	Screw-stem
Botrychium oneidense	Blunt-lobed Grape Fern
Cacalia muhlenbergii	Indian-plantain
Calamagrostis stricta ssp. *inexpansa*	—
Callirhoe triangulata	Poppy Mallow
Carex albicans	—
Carex backii	—
Carex richardsonii	—
Clematis occidentalis	Purple Clematis
Commelina erecta	Dayflower
Corallorhiza odontorhiza	Fall Coral-root
Cypripedium parviflorum	Small Yellow Lady's-slipper
Cypripedium reginae	Showy Lady's-slipper
Dryopteris fragrans	Fragrant Fern
Eleocharis engelmannii	Spike-rush
Eupatorium sessilifolium	Upland Boneset
Gentianopsis procera	Fringed Gentian
Houstonia caerulea	Bluets
Huperzia porophila	Rock Clubmoss
Jeffersonia diphylla	Twinleaf
Lespedeza violacea	Bush-clover
Myosotis laxa	Forget-me-not
Napaea dioica	Glade Mallow
Nothocalais cuspidata	Prairie Dandelion
Orobanche uniflora	One-flowered Cancer-root
Panax quinquefolius	Ginseng
Panicum wilcoxianum	Panic Grass
Pellaea atropurpurea	Purple Cliff-brake
Penstemon pallidus	Beard-tongue
Phegopteris hexagonoptera	Broad Beech Fern
Platanthera hookeri	Hooker's Orchid
Platanus occidentalis	Sycamore
Polystichum acrostichoides	Christmas Fern
Potamogeton vaseyi	Pondweed
Primula mistassinica	Arctic Primrose
Pediomelum esculentum	Pomme de Prairie
Rhus aromatica	Fragrant Sumac
Scleria triglomerata	Nut-rush
Solidago sciaphila	Cliff Goldenrod
Sullivantia sullivantii	Sullivantia
Talinum rugospermum	Fameflower
Triphora trianthophora	Three-birds Orchid
Utricularia geminiscapa	Bladderwort

[a] Endangered, Threatened, and Special Concern are defined in the introduction to the Annotated Checklist.

Threatened

Northern Monkshood (Figure 42) is known from 3 extant stations plus one historic station where it can no longer be found. This taxon represents surviving eastern populations of a once more widespread western species, *Aconitum columbianum* (Iltis 1965). Moschatel is known from one station in the Western Upland (Figure 45). Gerardia—*Agalinis gattingeri*—is known from several stations in the Baraboo Hills plus several others in Devil's Lake State Park and one in the Western Upland. Yellow Giant-hyssop, a species of oak woodland (see Plant Communities), is known from one station in the Baraboo Hills. The status of Woolly Milkweed (Figure 44) is perplexing, as 2 of the 6 known stations could not be relocated in 1992-93. Oval-leaved Milkweed is known from several historic records and 3 recent (1970s and 1980s) records from relatively open sandy woods. The threatened *Callitriche* is known from streams and associated pools in the Baraboo Hills and Devil's Lake State Park. Drooping Sedge (Figure 46) is known from a total of 19 stations, 5 in Devil's Lake State Park and 14 in the Baraboo Hills outside of the park; these are located in Honey Creek, Freedom, Baraboo, Sumpter, Merrimac, and Caledonia townships. In Wisconsin this predominately eastern species has also been found along the Kickapoo River in Vernon County, in the Barron Hills in Barron County, along the St. Croix River in Burnett County, and on Oak Island in the Apostle Islands; its distribution in the Great Lakes region, minus Vernon and Barron counties, is shown in Judziewicz and Koch (1993:130, Figure 24). Hill's Thistle (cover photo) is known from 3 stations. White Lady's-slipper, like Prairie White-fringed Orchid and Richweed, is known only from a collection in the 1800s. White Gentian (cover photo) is known from 4 stations. Cliff Cudweed is presently known

Figure 43. *Purple Milkweed in Devil's Lake State Park, 1993.*

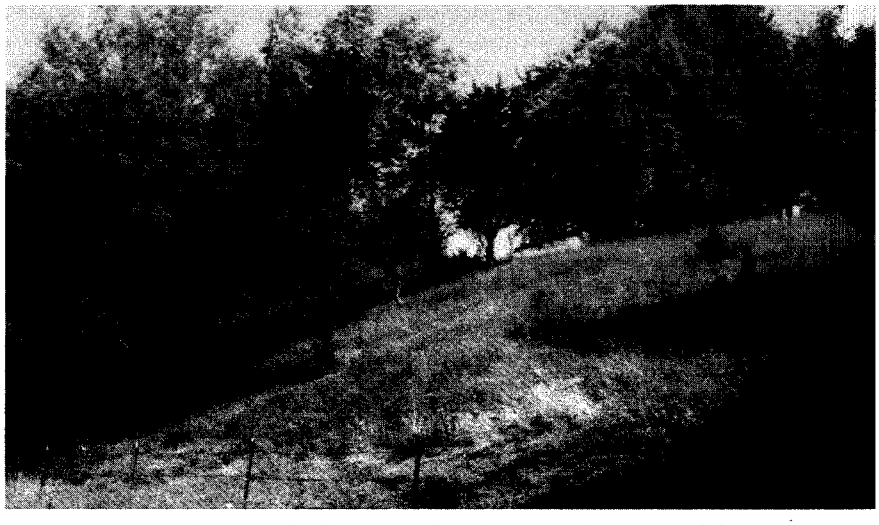


Figure 44. *Several acre patch of prairie sod on the terminal moraine of the Wisconsin Glacier in the Badger Army Ammunition Plant, a station for both the Bush-clover* Lespedeza leptostachya *and Woolly Milkweed, 1993.*

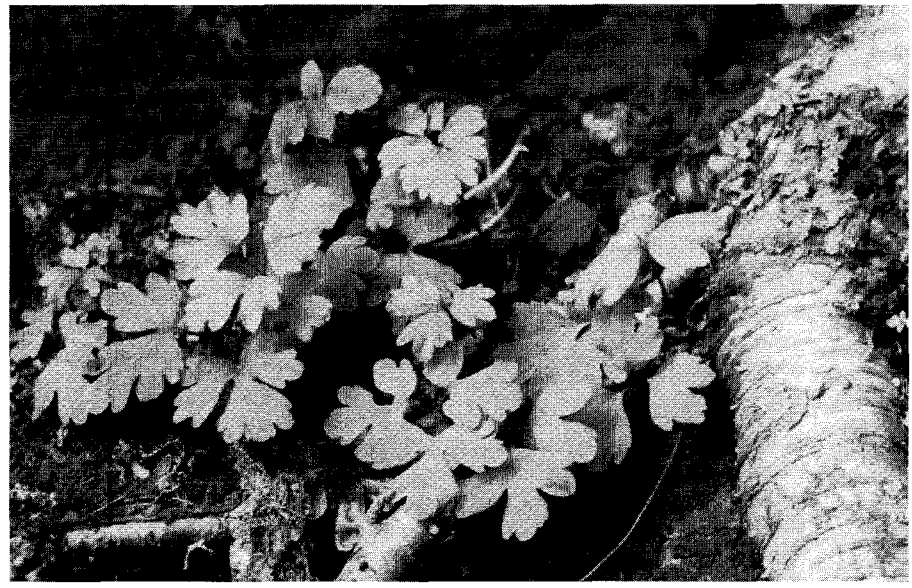


Figure 45.
Moschatel in LaValle Township, 1988.

Figure 46.
Drooping Sedge, with Spotted Touch-me-not, Devil's Lake State Park, 1994.

Figure 47.
Oak woods at the north end of the east bluff, Devil's Lake State Park, a locality for the Bush-clover Lespedeza virginica, *1994.*

only from sandstone cliffs in the Driftless Area of Wisconsin. Another Bush-clover, *Lespedeza virginica*, abundant in southern states, is here confined to the Baraboo Hills and Devil's Lake State Park, where it has been found at approximately 9 stations (Figure 47). Brittle Prickly-pear has been found at approximately 8 stations. Tubercled Orchid is known from 4 stations, 3 of which are in or near Devil's Lake State Park (Figures 48-49). The Bluegrass *Poa paludigena* persists in the Alder-Black Ash swamp on the WSO Honey Creek property and in 1997 was found in an Alder thicket in Mirror Lake State Park. Prairie-parsley is known from several dry prairies and a sandy meadow.

Special Concern

Wisconsin taxa of special concern include 7 ferns and fern allies, 15 monocots, and 25 dicots. Their rarity varies from species such as Mountain-fringe and Twinleaf, which are known from only one station, to species such as Ginseng (Figure 50), Upland Boneset, Cliff Goldenrod, Sullivantia, and Fall Coral-root, which are known from 20 or more stations.

For more information on endangered, threatened, or special concern plants, see the species entries in the annotated checklist.

Figure 48. *Tubercled Orchid, Devil's Lake State Park, 1967.*

Figure 49. *Tubercled Orchid, Devil's Lake State Park, 1967.*

Figure 50. *Ginseng in fruit, Devil's Lake State Park, 1966.*

PHOTO: FROM THE COLLECTION OF KENNETH I. LANGE

Figure 51.
Wonewoc High School botany class, 4 May 1900, gathering wildflowers (Trailing Arbutus?) by the handful and the basketful; some of the students are adorned with flowers.

Local Extinction (Including Species of Ecological Concern)

The study area was a rural society in past years, and it was taken for granted that school children would come home in spring with "handfuls" of wildflowers (*Baraboo Republic* 26 April 1894). Wildflowers were also commonly picked for school projects, shows, and for sale (Figure 51). Trailing Arbutus was especially favored because of its early blooming and fragrance. "Bare footed boys, green grass and trailing arbutus parties" were among the harbingers of spring (*Baraboo Republic* 20 April 1893). This plant actually was regarded as a "crop" to be "harvested." The center of activity was Wisconsin Dells; "large quantities" were shipped via mail pouches to "all parts of the Union" (*Mirror-Gazette*, Kilbourn City, WI, 3 May 1888, 6 April 1889, 25 April 1891, 26 April 1894). Trailing Arbutus was still being heavily picked, for example for May Day baskets, into the 1900s (*Baraboo News Republic* 21 April 1911), but one would be hard pressed today to gather baskets or bouquets of it. Orchids, particularly lady's-slippers, also suffered from overcollecting in the past. In at least one area, located in Troy Township, a local family collected and shipped several dozen lady's-slippers each spring from 1910-1915 to a florist in Chicago; he was "anxious to buy all we could send" (Schmidt 1977:48).

Perhaps a plant cannot be eliminated by excessive collecting, but this practice certainly can cause a given species to become scarce or locally extinct. Overcollecting in the past, for example, may have contributed to the present day scarcity of Fragrant Fern in the Wisconsin Dells area (Lange 1979).

Burgeoning numbers of deer in recent decades are markedly affecting certain species. American Yew, for example, once much more common, especially north of the study area, has been devastated by high numbers of browsing deer (Alverson et al. 1988, Allison 1990).

Local extinction, however, is more likely to occur because of habitat change, degradation, or destruction. The number of flowering stalks of Gay Feather at a station in Devil's Lake State Park, for example, has been decreasing for the past 25 years, as woody growth, mainly Quaking Aspen, Red Maple, and Gray Dogwood, continues to overtake the site. The number of flowering stalks, including those nipped by deer, averaged 72 per year in the 1970s and 51 per year in the 1980s; this species was last seen here in 1991 and 1992, when only a single stalk was noted each year. An increase in woody cover is widespread in the study area (see the discussion of sandy meadows in the section on Plant Communities).

Certain weedy species, notably Crown-vetch and Bird's-foot Trefoil, are spreading from plantings for roadside stabilization and may be of increasing concern. A weed of even greater potential for homogenizing the ground cover of native plant communities, especially forests, is Garlic Mustard. This species was first noted in the study area in 1985 in Devil's Lake State Park in the park amphitheater near the north shore of the lake; by 1990 it had spread through the amphitheater woods and adjoining pine plantation by the Nature Center. By 1993 it was widespread in the park and had been found in several other wooded sites in the Baraboo Hills. By 1995, because of massive dispersion of its seeds by the Devil's Lake-Baraboo flood of July 1993, it had exploded in the park and along the drainage flowing past the park garage. Dame's Rocket did likewise in WSO Honey Creek Valley in 1994 and 1995. One other species of ecological concern, Purple Loosestrife, is another recent arrival, being first noted here in Delton Township in 1974. This wetlands invader also has the potential of converting native plant communities into monocultures. Two woody species, Asiatic Honeysuckle and Common Buckthorn, are also aggressive invaders of native communities, especially oak forests and woodlands.

In past years the landscape was fragmented and made less diverse mainly by agriculture and related activities and fire exclusion (Lange 1990). But now our ever-increasing disturbance of the land has taken on new dimensions. Expanded highway corridors, casino and resort development, subdivisions, and urban and industrial growth can only lead to further impoverishment of the native flora and an increase in weedy cover.

■ THE FLORA ■

Table 10. *Summary of vascular plants by family.*[a]

Family	Genera	Native Species	Adventive and Naturalized Species
■ Ferns and Fern Allies			
Adiantaceae	4	5	
Aspleniaceae	2	3	
Azollaceae	1	1	
Dennstaedtiaceae	1	1	
Dryopteridaceae	10	17	
Equisetaceae	1	7	
Isoetaceae	1	2	
Lycopodiaceae	2	6	
Ophioglossaceae	1	6	
Osmundaceae	1	3	
Polypodiaceae	1	1	
Selaginellaceae	1	1	
Thelypteridaceae	2	3	
■ Gymnosperms			
Cupressaceae	2	4	
Pinaceae	4	5	1
Taxaceae	1	1	
■ Monocots			
Alismaceae	2	5	
Araceae	4	5	
Commelinaceae	2	2	1
Cyperaceae[2]	11	129	1
Dioscoreaceae	1	1	
Hydrocharitaceae	2	3	
Iridaceae	3	2	2
Juncaceae	2	14	
Lemnaceae	3	5	
Liliaceae[9]	18	23	6
Najadaceae	1	2	
Orchidaceae	12	27	
Poaceae[3]	49	97	29
Pontederiaceae	2	2	
Potamogetonaceae	1	15	1
Smilacaceae	1	4	
Sparganiaceae	1	3	
Typhaceae	1	2	
Xyridaceae	1	1	
Zannichelliaceae	1	1	
■ Dicots			
Aceraceae	1	5	
Adoxaceae	1	1	
Aizoaceae	1		1
Amaranthaceae	2	4	3
Anacardiaceae	2	6	
Apiaceae	17	19	4
Apocynaceae	2	2	1
Aquifoliaceae	2	2	
Araliaceae	2	5	
Aristolochiaceae	1	1	
Asclepiadaceae	1	11	
Asteraceae[1]	56	120	42
Balsaminaceae	1	2	
Berberidaceae	4	3	2
Betulaceae	5	9	
Bignoniaceae	1		1
Boraginaceae	6	9	2
Brassicaceae[7]	20	19	17
Cactaceae	1	2	
Callitrichaceae	1	2	
Campanulaceae	3	9	1
Capparidaceae	1	1	
Caprifoliaceae	7	14	4
Caryophyllaceae	14	8	14
Celastraceae	2	2	
Ceratophyllaceae	1	2	
Chenopodiaceae	5	4	7
Cistaceae	3	6	
Clusiaceae	2	8	1
Convolvulaceae	4	6	3
Cornaceae	1	6	
Crassulaceae	2	1	3
Cucurbitaceae	2	2	
Elaeagnaceae	2		3
Ericaceae	11	16	
Euphorbiaceae	5	9	3
Fabaceae[5]	24	30	19
Fagaceae	2	6	1
Gentianaceae	4	7	
Geraniaceae	2	3	1
Haloragidaceae	1	1	
Hamamelidaceae	1	1	
Hippocastanaceae	1		1
Hydrophyllaceae	1	1	
Juglandaceae	2	4	
Lamiaceae[8]	21	23	11
Lentibulariaceae	1	2	
Limnanthaceae	1	1	
Linaceae	1	1	
Lythraceae	3	3	1
Malvaceae	5	2	5
Melastomataceae	1	1	
Menispermaceae	1	1	
Moraceae	3	2	2
Myricaceae	1	1	
Nyctaginaceae	1		2
Nymphaeaceae	3	3	
Oleaceae	2	3	1
Onagraceae	4	11	
Orobanchaceae	2	2	
Oxalidaceae	1	4	
Papavaraceae	5	5	1
Phytolaccaceae	1	1	
Plantaginaceae	1	2	3
Platanaceae	1	1	
Polemoniaceae	2	3	1
Polygalaceae	1	4	
Polygonaceae	3	18	7
Portulacaceae	3	2	1
Primulaceae	5	11	1
Ranunculaceae[10]	12	27	1
Rhamnaceae	2	3	2
Rosaceae[4]	15	55	6
Rubiaceae	4	15	
Rutaceae	1	1	
Salicaceae	2	16	3
Santalaceae	1	1	
Sarraceniaceae	1	1	
Saxifragaceae	8	11	3
Scrophulariaceae[6]	16	29	9
Solanaceae	2	3	3
Staphyleaceae	1	1	
Thymelaeaceae	1	1	
Tiliaceae	1	1	
Ulmaceae	2	3	1
Urticaceae	5	6	
Valerianaceae	1	1	1
Verbenaceae	3	7	
Violaceae	1	16	1
Vitaceae	2	4	
Total 126	**537**	**1,087**	**241**

[a] A superscript number, 1-10, after a given family name, indicates the 10 families with the most species, beginning with Asteraceae.

Analysis of the Flora

The flora totals 1,328 species: 1,087 native species and 241 non-native species; this equals 60% of the entire flora of Wisconsin. Table 10 summarizes the vascular plants by family and indicates the 10 families with the most species. In contrast, Table 11 classifies the flora by abundance code: scanning this table reveals that 23% of the vascular plants are common to abundant, and another 23% are rare or extirpated; the other species fall somewhere in between. The 13 genera with more than 10 species are listed in Table 12. A total of 5 native vascular plants is found in the study area only in Caledonia Township; these species are listed in Table 13.

Table 11. *Vascular plants classified by abundance code.*[a]

	Abundance Code						
Species Type	**0**	**1**	**2**	**3**	**4**	**5**	**Totals**
Native							
Number of species	8	201	268	374	182	54	1,087
Percent of total flora	1	15	20	28	14	4	82
Adventive/naturalized							
Number of species	2	96	46	39	21	37	241
Percent of total flora	—	7	3	3	2	3	18

[a] Defined on page 42.

Table 12. *Genera of vascular plants with more than 10 species in the study area.*

Genus	Common Name	Number of species
Carex	Sedges	96
Aster	Asters	20
Panicum	Panic Grasses	19
Polygonum	Smartweeds	17
Viola	Violets	17
Potamogeton	Pondweeds	16
Solidago	Goldenrods	15
Salix	Willows	14
Juncus	Rushes	12
Asclepias	Milkweeds	11
Crataegus	Hawthorns	11
Galium	Bedstraws	11
Helianthus	Sunflowers	11

Table 13. *Native vascular plants in the study area found only in Caledonia Township, Columbia County.*

Scientific name	Common name
Agastache nepetoides	Yellow Giant-hyssop
Carex lupuliformis	—
Cuscuta polygonorum	Dodder
Glyceria septentrionalis	Manna Grass
Silene stellata	Starry Campion

Annotated Checklist
Format and Abbreviations

- The order in the checklist is alphabetical by family and then by genus and species within each family in the 4 major groups—ferns and their allies, gymnosperms, monocots, and dicots.
- When Wisconsin references exist for a given family or major group, they are listed after the family or group name. Usually these references are Preliminary Reports (PR) in the *Transactions of the Wisconsin Academy of Sciences, Arts and Letters* (Trans. WASAL).
- The distribution of a given taxon is indicated by the symbol ✧ in the appropriate locality column. The locality key is given at the bottom of the first page of the checklist (p. 43).
- Habitat notes and/or special comments are given for each taxon whenever possible.

Certain species have letters just to the left of their scientific names. These letters are keyed as follows:

E = State Endangered. Any native species whose survival in Wisconsin has been determined to be in jeopardy by the Wisconsin Department of Natural Resources on the basis of scientific evidence.

T = State Threatened. Any native species that appears likely to become endangered within the foreseeable future, as determined by the Wisconsin Department of Natural Resources on the basis of scientific evidence.

SC = Special Concern. Potentially endangered or threatened native species.

a = Adventive. Native to North America outside the study area, but now part of the flora.

n = Naturalized. Native outside North America, but now part of the flora. Some transient species may be included here, as it is virtually impossible to know which introduced taxa will persist and spread.

In the final column the abundance of each taxon is expressed by an abundance code (AC) based upon the number of stations for the given taxon in the study area, as determined from herbarium records and field observations. This was arbitrarily defined as follows:

0 = records only for the past century (= extirpated)
1 = 1 to 3 stations (= rare)
2 = 4 to 12 stations (= uncommon)
3 = 13 to 50 stations (= fairly common)
4 = 51 to 100 stations (= common)
5 = more than 100 stations (= abundant)

For extirpated and rare species, the locations of herbarium specimens are indicated, using the following key:

WIS = University of Wisconsin-Madison
MIL = Milwaukee Public Museum
KL = author's herbarium
AC = Andy Clark's herbarium

			Locality and Abundance Code[a]								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
FERNS AND FERN ALLIES: Tryon et al. 1953											
■ **ADIANTACEAE**											
MAIDENHAIR FERN FAMILY											
Adiantum pedatum L.	Northern Maidenhair Fern	Dry and especially mesic woods.	✧	✧		✧	✧			✧	4
Cheilanthes feei Moore	Slender Lip Fern	Limey or limey sandstone cliffs and outcrops; in the Baraboo Hills confined to the west end of the South Range.	✧			✧				✧	2
Cryptogramma stelleri (Gmel.) Prantl	Slender Cliff-brake	Sandstone or dolomite cliffs and outcrops, usually moist, within deciduous forest; in Devil's Lake State Park known only from Parfrey's Glen.	✧	✧		✧				✧	2
SC *Pellaea atropurpurea* (L.) Link	Purple Cliff-brake	Exposed limey or limey sandstone cliffs and outcrops.	✧			✧	✧			✧	3
Pellaea glabella Kuhn	Smooth Cliff-brake	Exposed limey or sandy cliffs and outcrops; may pioneer on bridge abutments.	✧			✧	✧			✧	3
■ **ASPLENIACEAE**											
SPLEENWORT FAMILY											
Asplenium platyneuron (L.) BSP.	Ebony Spleenwort	Drier deciduous and mixed forests, often where rocky; spreading in the Great Lakes region (Wagner and Johnson 1981).	✧	✧		✧				✧	2
SC *Asplenium trichomanes* L.	Maidenhair Spleenwort	Sandstone, quartzite, and rhyolite outcrops; sites vary from dry to moist. Especially numerous on sandstone ledges along the Wisconsin River just outside the study area (Wisconsin Department of Natural Resources 1997:17). North American distribution is shown by Moran (1982:8).	✧	✧			✧			✧	2
Camptosorus rhizophyllus (L.) Link (*Asplenium rhizophyllum* L.)	Walking Fern	Mainly dolomite and sandstone rubble, sometimes quartzite or granite; sites are shaded and vary from dry to moist. In Devil's Lake State Park known only from the south bluff. Local. Listed in Kartesz (1994, 1:4) as *Asplenium rhizophyllum* L.	✧	✧		✧	✧			✧	3
■ **AZOLLACEAE**											
MOSQUITO FERN FAMILY											
Azolla mexicana Presl	Mosquito Fern	Wisconsin River backwaters (Peck 1982:36). UW-La Crosse.				✧		✧		✧	1
■ **DENNSTAEDTIACEAE**											
BRACKEN FERN FAMILY											
Pteridium aquilinum (L.) Kuhn var. *latiusculum* (Desv.) Heller	Bracken Fern	Dry upland woods and adjacent fields, also low sandy woods.	✧	✧		✧	✧			✧	5
■ **DRYOPTERIDACEAE**											
WOOD FERN FAMILY											
Athyrium filix-femina (L.) Roth ssp. *angustum* (Willd.) Clausen	Lady Fern	Dry and mesic woods, also lowland woods and marshy sites.	✧	✧		✧	✧			✧	4

[a] **Key: BH** = Baraboo Hills, **DLSP** = Devil's Lake State Park, **DL Only** = Devil's Lake only, including its shoreline, **WU** = Western Upland, **CP** = Central Plain, **WR Only** = Wisconsin River only, including the bottomlands, within the Western Upland and/or the Central Plain, **C Only** = Caledonia Township only, **Sk Co** = Sauk County, **AC** = Abundance Code

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **DRYOPTERIDACEAE** **WOOD FERN FAMILY** *(continued)*											
Cystopteris bulbifera (L.) Bernh.	Bulblet Fern	Cool, shady, moist ravines and slopes, often rocky; deciduous and mixed forests.	✧	✧		✧	✧			✧	3
Cystopteris fragilis (L.) Bernh. (incl. *C. fragilis* var. *mackayi* Laws. and *C. protrusa* (Weath.) Blasdell)	Fragile Fern	Habitats similar to Bulblet Fern, also in drier sites.	✧	✧		✧	✧			✧	4
Deparia acrostichoides (Sw.) M. Kato (*Athyrium thelypterioides* (Michx.) Desv.)	Silvery Glade Fern	Mesic forests, especially ravines with Sugar Maple; in Devil's Lake State Park known only from Parfrey's Glen.	✧	✧		✧	✧			✧	2
Diplazium pycnocarpon (Spreng.) Broun (*Athyrium pycnocarpon* (Spreng.) Tidestr.)	Glade Fern	Known from 2 stations in the Baraboo Hills: Fox's Glen in Caledonia, where it was first reported in 1933, and a Baraboo River terrace at the base of a sandstone cliff in Freedom Township; rich mucky soil at both stations. In 1992 there were hundreds of plants at the Fox's Glen station and approximately one hundred plants at the Freedom station. WIS, KL.	✧							✧	1
Dryopteris carthusiana (Vill.) H.P. Fuchs (*D. spinulosa* (O.F. Muell.) Watt)	Spinulose Wood Fern	Mainly moist woods.	✧	✧		✧	✧			✧	4
Dryopteris cristata (L.) Gray	Crested Wood Fern	Sedge meadows, Alder thickets, Tamarack swamps, low sandy woods; mainly in the Central Plain.	✧	✧		✧	✧			✧	3
SC *Dryopteris fragrans* (L.) Schott var. *remotiuscula* Komarov	Fragrant Fern	Dry sandstone ledges and cliffs at Wisconsin Dells; distribution and ecology in the Dells discussed by Lange (1979). WIS.					✧			✧	1
Dryopteris goldiana (Goldie) Gray	Goldie's Fern	Ravines, north-facing bluffs, and Baraboo River terraces; ususally in deep, rich soil.	✧			✧	✧			✧	2
Dryopteris intermedia (Willd.) Gray (*D. spinulosa* (O.F. Muell.) Watt var. *intermedia* (Willd.) Underw.)	Glandular Wood Fern	Mainly moist woods.	✧	✧		✧	✧			✧	4
Dryopteris marginalis (L.) Gray	Marginal Shield Fern	Pioneering on sandstone and quartzite rubble; sometimes covering several acres or more of talus. Also forested sandstone and quartzite outcrops.	✧	✧		✧	✧			✧	3
Dryopteris × *triploidea* Wherry [*D. carthusiana* × *intermedia*]		Mapped by Peck and Taylor (1980:263) and Peck (1982:128), based on a 1955 collection from the Leopold Woods in Honey Creek Township. WIS.	✧							✧	1
Gymnocarpium dryopteris (L.) Newm.	Oak Fern	Cool, shady, sandstone and quartzite outcrops and ravines.	✧	✧		✧	✧			✧	3

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **DRYOPTERIDACEAE**											
WOOD FERN FAMILY *(continued)*											
Matteuccia struthiopteris (L.) Todaro	Ostrich Fern	Wooded lowlands, including seepage slopes; formerly at Devil's Lake State Park (Anon. 1906:26).	✧			✧	✧			✧	2
Onoclea sensibilis L.	Sensitive Fern	Wetlands: bogs, marshes, sedge meadows, sandy meadows, lowland thickets and woods, Tamarack swamps, river sloughs.	✧	✧		✧	✧			✧	4
SC *Polystichum acrostichoides* (Michx.) Schott	Christmas Fern	Known only from Pine Glen in Devil's Lake State Park, where discovered in 1978. The Sauk County record for this species cited by Hartley (1962:151, 152; 1966:25) is actually from Columbia County (West Point Township), across the Wisconsin River from Prairie du Sac (Fassett #20840, also Roberts et al., collected 5 June 1940). MIL, KL.		✧						✧	1
Woodsia ilvensis (L.) R. Br.	Rusty Cliff Fern	Exposed sites on sandstone, quartzite, and rhyolite.	✧	✧		✧	✧			✧	4
Woodsia obtusa (Spreng.) Torr.	Blunt-lobed Cliff Fern	Ecologically a shade counterpart (?) of *W. ilvensis*.	✧	✧		✧	✧			✧	4
■ **EQUISETACEAE**											
HORSETAIL FAMILY											
PR 54, 1965, Trans. WASAL 54:331-46											
Equisetum arvense L.	Field Horsetail	Lowland fields and woods, ditches, railroad embankments.	✧	✧		✧	✧			✧	3
Equisetum × *ferrissii* Clute (pro sp.) [*E. hyemale* × *laevigatum*]		Collected on a roadside in Section 11, T9N, R3E. Mapped by Peck and Taylor (1980:264) and Peck (1982:77). WIS.				✧				✧	1
Equisetum fluviatile L.	Water Horsetail	Lowland woods and marshy habitats.	✧	✧		✧	✧			✧	2
Equisetum hyemale L.	Common Scouring-rush	Moister sites in deciduous and mixed woods, also railroad embankments, roadsides.	✧	✧		✧	✧			✧	3
Equisetum laevigatum A. Br. (*E. kansanum* Schaffn.)	Smooth Scouring-rush	Sandy fields, ditches.				✧	✧			✧	2
Equisetum pratense Ehrh.	Meadow Horsetail	Cool, moist to wet, sandy woods.	✧	✧						✧	2
Equisetum scirpoides Michx.	Dwarf Scouring-rush	Known only from Lodde's Mill Bluff in Prairie du Sac Township. WIS.				✧				✧	1
Equisetum sylvaticum L.	Woodland Horsetail	Cool, springy woods, also Tamarack swamps.	✧	✧		✧				✧	2
■ **ISOETACEAE**											
QUILLWORT FAMILY											
Isoetes echinospora Dur. (*I. muricata* Dur.)	Spiny-spored Quillwort	Both species appear to be widespread and common in Devil's Lake, with *I. macrospora* generally in deeper water than *I. echinospora;* disjunct from soft water lakes of northern Wisconsin. WIS, MIL, KL.		✧	✧					✧	1
Isoetes macrospora Dur.	Lake Quillwort			✧	✧					✧	1

(continued on next page)

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **LYCOPODIACEAE** **CLUBMOSS FAMILY** PR 4, 1930, Trans. WASAL 25:169-75											
Huperzia lucidula (Michx.) Trevisan (*Lycopodium lucidulum* Michx.)	Shining Clubmoss	Cool, moist to wet, acidic, and shaded sites; most numerous under Hemlocks and by springs.	✧	✧		✧	✧			✧	4
SC *Huperzia porophila* (Lloyd & Underw.) Holub (*Lycopodium porophilum* Lloyd & Underw.)	Rock Clubmoss	Sandstone outcrops within coniferous or mixed forest; in Devil's Lake State Park known only from Parfrey's Glen.	✧	✧		✧				✧	3
Huperzia lucidula × *porophila*		Mixed populations of *Huperzia lucidula* and *H. lucidula* × *H. porophila* (Rocky Arbor State Park, Parfrey's Glen) and *H. lucidula*, *H. porophila*, and their putative hybrids (Honey Creek cliffs) were studied by Waterway (1986).	✧	✧			✧			✧	1
Lycopodium clavatum L.	Running Clubmoss	Dry sandy woods, low sandy woods.	✧	✧		✧	✧			✧	3
Lycopodium digitatum A. Br. (*L. flabelliforme* (Fern.) Blanch.	Crowfoot Clubmoss	Dry sandy woods, low sandy woods.	✧	✧		✧				✧	2
Lycopodium obscurum L. (incl. *L. dendroideum* Michx.; *L. hickeyi* Wagner, Beitel & Moran)	Groundpine	Dry oak and oak-pine woods, low sandy woods, sphagnous deciduous thickets.	✧	✧		✧	✧			✧	3
Lycopodium tristachyum Pursh	Ground-cedar Clubmoss	Known only from the Lower Dells; dry sandy woods. WIS.					✧			✧	1
■ **OPHIOGLOSSACEAE** **ADDER'S-TONGUE FAMILY**											
Botrychium dissectum Spreng. forma *dissectum* (*B. dissectum* Spreng. var. *dissectum*)	Dissected Grape Fern	Dry upland woods, mesic woods, low sandy woods. Each taxon is usually represented by just (1) 2-6 fronds at a given station; generally the 2 forms grow together, but sometimes (especially *obliquum*) singly.	✧	✧			✧			✧	2
forma *obliquum* (Muhl.) Fern. (*B. dissectum* var. *obliquum* (Willd.) Clute)	Oblique Grape Fern		✧	✧		✧	✧			✧	3
Botrychium lanceolatum (Gmel.) Angs. var. *angustisegmentum* Pease & Moore	Lance-leaved Grape Fern	Along streamlets in mesic woods in the Baxter's Hollow drainage. Usually found as scattered plants, with other grape ferns. AC.	✧							✧	1
Botrychium matricariifolium (Dowell) Koch	Daisy-leaved Grape Fern	Mesic and dry woods; generally in rich soil. May number in the thousands at some stations.	✧							✧	2
Botrychium multifidum (Gmel.) Trev.	Leather-leaved Grape Fern	Upland woods and adjacent fields, including abandoned orchards. UW-La Crosse, KL.	✧				✧			✧	1
SC *Botrychium oneidense* (Gilb.) House	Blunt-lobed Grape Fern	Mesic woods. WIS.	✧	✧						✧	1
Botrychium virginianum (L.) Sw.	Rattlesnake Fern	Dry and mesic woods.	✧	✧		✧	✧			✧	4

			Locality and Abundance Code								
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■ **OSMUNDACEAE** **ROYAL FERN FAMILY**											
Osmunda cinnamomea L.	Cinnamon Fern	Relatively wet sites, including bogs, sedge meadows, low sandy woods, Alder thickets, Tamarack swamps.	✧	✧		✧	✧			✧	3
Osmunda claytoniana L.	Interrupted Fern	Damp sites in dry to mesic woods, also wet thickets, but typically in sites not as wet as those in which Cinnamon Fern grows; colonies often cover wooded hillsides, particularly when they are not too wet or too stony.	✧	✧		✧	✧			✧	4
Osmunda regalis L. var. *spectabilis* (Willd.) Gray	Royal Fern	Relatively wet sites, including sedge meadows, low sandy woods, low thickets, Tamarack swamps.	✧	✧		✧	✧			✧	3
■ **POLYPODIACEAE** **POLYPODY FAMILY**											
Polypodium virginianum L. (*P. vulgare* L. var. *virginianum* (L.) A.A. Eat.)	Rock Fern	Like *Dryopteris marginalis*, Rock Fern pioneers on acidic rock, often covering several acres of rubble; sites vary from damp to dry.	✧	✧		✧	✧			✧	4
■ **SELAGINELLACEAE** **SPIKEMOSS FAMILY** PR 4, 1930, Trans. WASAL 25:169-75											
Selaginella rupestris (L.) Spring	Rock Spikemoss	Acidic, usually rocky sites where sunny and dry: quartzite and rhyolite glades, sandstone outcrops, also sand.	✧	✧		✧	✧			✧	4
■ **THELYPTERIDACEAE** **BEECH FERN FAMILY**											
Phegopteris connectilis (Michx.) Watt (*Dryopteris phegopteris* (L.) C. Christens.)	Narrow Beech Fern	Sandstone cliffs and associated rocky slopes in ravines in mixed forests; in Devil's Lake State Park known only from Parfrey's Glen.	✧	✧		✧	✧			✧	3
SC *Phegopteris hexagonoptera* (Michx.) Fée (*Dryopteris hexagonoptera* (Michx.) C. Christens.)	Broad Beech Fern	Known from 2 stations in the Baraboo Hills: a Sugar Maple-Yellow Birch forest in Devil's Lake State Park, and a mesic woods in a sandstone ravine in Baxter's Hollow; in 1992 there were approximately 300 fronds at the Devil's Lake station and approximately 200 at the Baxter's Hollow station. WIS, KL.	✧	✧						✧	1
Thelypteris palustris Schott var. *pubescens* (Laws.) Fern.	Marsh Fern	Low meadows, sandy meadows, fens, bogs, low sandy woods, low thickets, Tamarack swamps, hardwood swamps.	✧	✧		✧	✧			✧	4

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
GYMNOSPERMS											
■ **CUPRESSACEAE**											
CYPRESS FAMILY											
PR 5, 1930, Trans. WASAL 25:180-82											
Juniperus communis L. (incl. var. *depressa* Pursh)	Common Juniper	Open or thinly wooded, generally dry sites in a variety of soils.	✧	✧		✧	✧			✧	4
Juniperus horizontalis Moench	Creeping Juniper	Dry limey or limey sandstone hills, where typically associated with *J. communis* and *J. virginiana*.	✧			✧	✧			✧	2
Juniperus virginiana L.	Eastern Red Cedar	An invader of fields and hillsides, especially those that have been grazed and then abandoned; stabilized roadcuts. Also quartzite and rhyolite glades, dry outcrops of limestone and sandstone. May form thickets and glades in the absence of fire.	✧	✧		✧	✧			✧	5
Thuja occidentalis L.	Eastern White Cedar	Along the Wisconsin River near the mouth of Dell Creek and in the Wisconsin Dells area; White Cedars elsewhere have been planted and in some places are spreading via seedlings.					✧			✧	1
■ **PINACEAE**											
PINE FAMILY											
PR 5, 1930, Trans. WASAL 25:177-81											
Larix laricina (Du Roi) K. Koch	Tamarack	Along Leech Creek in T12N, R7E, especially in the Lower Narrows swamp, now a muck farm; several places in the Honey Creek drainage; a number of areas in the vicinity of Lake Delton and Wisconsin Dells, Rock Springs, Reedsburg, and LaValle (Figure 27).	✧			✧	✧			✧	2
[n] *Picea abies* (L.) Karst.	Norway Spruce	An ornamental tree, which appears to be spreading from plantings via seedlings.	✧	✧		✧	✧			✧	2
Pinus banksiana Lamb.	Jack Pine	Mainly dry sand, for example barrens in the Central Plains and the northwestern corner of the Baraboo Hills, and Wisconsin River terraces in the Western Upland; also low sandy woods in the Central Plain. Often with scrubby oaks. A few trees of different ages are growing in the woods bordering Steinke Basin in Devil's Lake State Park.	✧	✧		✧	✧			✧	3
Pinus resinosa Ait.	Red Pine	Mainly in the Lake Delton sand country. Numerous at only one locality in the Baraboo Hills: Pine Bluff near the Lower Narrows, an outcrop capped with St. Peter sandstone (Clayton and Attig 1990). In Devil's Lake State Park known only from a quartzite knob overlooking the lower end of Pine Glen. Often planted for windbreaks.	✧	✧		✧	✧			✧	3

			Locality and Abundance Code								
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■ **PINACEAE**											
PINE FAMILY *(continued)*											
Pinus strobus L.	White Pine	Because of its abundance and wide distribution, imparting a northern appearance to much of the study area; characteristic of rock outcrops and boulder fields. Often under White Oaks; also low sandy woods, Tamarack swamps, Alder thickets.	✧	✧		✧	✧			✧	5
Tsuga canadensis (L.) Carr.	Eastern Hemlock	An important dominant of northern forests, considered relic in the study area (after R.P. McIntosh 1950), where the largest stand is located on north-facing slopes on the west side of the Upper Narrows; in the Baraboo Hills also on sandstone outcrops along the Baraboo River above and below North Freedom, and on the south side of the South Range in Pine Hollow, Hemlock Draw, and the Wisconsin Society for Ornithology's Honey Creek Valley. In the Western Upland and Central Plain mainly on sandstone cliffs, rarely Alder thickets.	✧			✧	✧			✧	2
■ **TAXACEAE**											
YEW FAMILY											
PR 5, 1930, Trans. WASAL 25:177-78											
Taxus canadensis Marsh.	American Yew	Most numerous in the Upper Narrows Hemlocks, where extending over a linear distance of approximately one-half mile. In Devil's Lake State Park confined to several stations on the north face of the south bluff, 1 to 6 plants at each station, and in the Western Upland known from sandstone cliffs and associated wetlands, for example Alder thickets.	✧	✧		✧				✧	2
MONOCOTS											
■ **ALISMACEAE (ALISMATACEAE)**											
WATER-PLANTAIN FAMILY											
PR 1, 1929, Trans. WASAL 24:250-56											
Alisma plantago-aquatica L.	Water-plantain	Pioneering in open wet sites, including shallow water.	✧	✧		✧	✧			✧	4
Sagittaria cuneata Sheldon	Arrowhead	Wisconsin River sloughs and shores. WIS, Leopold Reserve Herbarium.				✧	✧	✧		✧	1
Sagittaria graminea Michx. (incl. *S. cristata* Engelm.)	Arrowhead	Mudflats and marshy shores. KL.		✧	✧		✧			✧	1
Sagittaria latifolia Willd.	Arrowhead	Wet sandbars, marshy sloughs, sedge meadows, Alder thickets, cat-tail marshes; often in shallow water.	✧	✧		✧	✧			✧	4
Sagittaria rigida Pursh (*S. heterophylla* Pursh)	Arrowhead	Mudflats and marshy shores; local.	✧	✧	✧	✧	✧			✧	2

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			Locality and Abundance Code									
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■ **ARACEAE**												
ARUM FAMILY												
PR 25, 1937, Trans. WASAL 30:17, 19												
Acorus americanus (Raf.) Raf. (*A. calamus* L.)	Sweet-flag	Marshy shores, sedge meadows, fens; local.	✧			✧	✧			✧	2	
Arisaema dracontium (L.) Schott	Green Dragon	Wisconsin River bottomland forests and associated sedge meadows; Baraboo River lowland forests, upriver to at least Section 17 in LaValle Township; and (an 1892 collection) Devil's Lake.	✧	✧	✧	✧	✧			✧	3	
Arisaema triphyllum (L.) Schott	Jack-in-the-pulpit	Dry and mesic woods, also deciduous swamps, Hemlock stands.	✧	✧		✧	✧			✧	4	
Calla palustris L.	Wild Calla	Lowland sphagnous woods, Tamarack swamps, marshy edges of creeks and lakes in sandy soil. Formerly at Devil's Lake (Anon. 1906:26).				✧	✧			✧	2	
Symplocarpus foetidus (L.) Nutt.	Skunk-cabbage	Seepy, mucky areas in drainageways, including overgrown creek bottoms and wooded ravines, also low thickets, Tamarack swamps, bogs, sedge meadows, fens.	✧	✧		✧	✧			✧	4	
■ **COMMELINACEAE**												
SPIDERWORT FAMILY												
PR 16, 1932, Trans. WASAL 27:228-29												
n *Commelina communis* L.	Dayflower	Weedy sites.		✧			✧			✧	2	
SC *Commelina erecta* L. var. *deamiana* Fern.	Dayflower	Limey or (rarely) sandy bluff prairies, also sandy-gravelly roadsides at bases of limey outcrops. In Wisconsin known only from Sauk County.	✧			✧				✧	2	
Tradescantia ohiensis Raf.	Spiderwort	Prairies in a variety of soils; may persist and flower in the more open oak woods but generally weak-stemmed. Also along railroads and roads.	✧	✧		✧	✧			✧	4	
■ **CYPERACEAE**												
SEDGE FAMILY												
PR 37, 1953, Trans. WASAL 42:47-67; PR 66, 1974, Trans. WASAL 62:261-84												
Bulbostylis capillaris (L.) C.B. Clarke		Dry, sandy, open ground, including Devil's Lake bluff prairies.		✧		✧	✧			✧	2	
Carex aenea Fern.		Known only from Devil's Lake State Park—seepy places in an abandoned quarry. WIS.		✧						✧	1	
SC *Carex albicans* Spreng. var. *albicans* (*C. artitecta* Mackenz.)		In Wisconsin known only from dry woods and quartzite talus in Devil's Lake State Park; first collected in 1926. WIS.		✧						✧	1	
Carex albursina Sheldon		Mesic forests and Hemlock stands.	✧	✧		✧	✧			✧	3	
Carex alopecoidea Tuckerm.		Known only from the Wisconsin River by Ferry Bluff. WIS.				✧		✧		✧	1	
Carex amphibola Steud. var. *turgida* Fern.		Deciduous swamps, mesic woods, Hemlock stands.	✧	✧		✧	✧			✧	3	

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■ **CYPERACEAE**											
SEDGE FAMILY *(continued)*											
Carex annectens (Bickn.) Bickn. (*C. annectens* var. *xanthocarpa* (Kük.) Wieg.)		Low meadows and sandy meadows, also dry sandy fields.	✧	✧			✧			✧	3
Carex aquatilis Wahlenb.		Alkaline meadows in Merrimac Township. KL.					✧	✧		✧	1
Carex arcta Boott		Known only from the Leopold Reserve in Fairfield Township. MIL.					✧	✧		✧	1
Carex arctata Boott		Mesic woods and low sandy woods.	✧				✧			✧	2
Carex atherodes Spreng.		Cat-tail marshes, willow swamps; often in shallow water.		✧			✧			✧	2
SC *Carex backii* Boott		Relatively dry, sandy or limey woods. AC.	✧			✧				✧	2
Carex bebbii (Bailey) Fern.		Low meadows, fens, also ditches, roadsides.	✧				✧			✧	2
Carex bicknellii Britt.		Dry prairies and Red Cedar glades in a variety of soils.	✧	✧		✧	✧			✧	4
Carex blanda Dew.		Dry to wet deciduous woods.	✧	✧		✧	✧			✧	4
Carex brevior (Dew.) Mackenz.		Dry prairies, sandy meadows.		✧		✧	✧			✧	2
Carex bromoides Willd.		Wet woods and swamps.	✧	✧		✧	✧			✧	3
Carex brunnescens (Pers.) Poir.		Damp forests, Tamarack swamps, wet thickets, sedge meadows; southernmost Wisconsin stations are in Sauk County.	✧				✧			✧	3
Carex buxbaumii Wahlenb.		Sandy meadows, sedge meadows, loamy prairies, also sphagnum patches in low sandy woods.					✧			✧	2
Carex canescens L.		Low sandy woods and edges, also Tamarack swamps and Alder thickets. In the Baraboo Hills known only from Honey Creek Valley.	✧				✧			✧	2
Carex cephaloidea (Dew.) Dew.		Mesic forests, wet woods.	✧	✧		✧				✧	3
Carex cephalophora Willd.		Mainly dry deciduous woods and quartzite glades, sometimes lowland woods.	✧	✧		✧	✧			✧	4
Carex communis Bailey		Cooler sites in deciduous and mixed forests; local.	✧	✧		✧				✧	3
Carex comosa Boott	Bottlebrush Sedge	Sedge meadows, cat-tail marshes, marshy drainageways, marshy edges of ponds and lakes.					✧			✧	3
Carex conoidea Willd.		Low meadows, sandy meadows, cat-tail marshes, fens, loamy prairies.		✧			✧			✧	3
Carex crawfordii Fern.		Known only from the marshy border of Devil's Lake, its southern range limit in Wisconsin. J.H. Zimmerman Herbarium.		✧	✧					✧	1
Carex crinita Lam. (incl. var. *gynandra* (Schwein.) Schwein. & Torr.)	Fringed Sedge	Wet woods and deciduous swamps, seepy and wet areas and heads of drainages within deciduous woods, marshy areas bordering low woods.	✧	✧		✧	✧			✧	3

(continued on next page)

		Locality and Abundance Code								
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■ **CYPERACEAE**										
SEDGE FAMILY *(continued)*										
Carex cristatella Britt.	Wooded creek bottoms, damp to wet areas in deciduous woods, low meadows.	✧	✧		✧	✧			✧	3
Carex davisii Schwein. & Torr.	Deciduous swamps along the Wisconsin River, and up the Baraboo River to at least Section 19 in T12N, R9E.				✧	✧	✧		✧	2
Carex debilis Michx. var. *rudgei* Bailey	Tamarack swamps, low thickets, low meadows, sandy meadows, wooded sandstone cliffs.				✧	✧			✧	3
Carex deweyana Schwein.	Deciduous and mixed mesic forests, Hemlock stands.	✧	✧		✧	✧			✧	3
Carex digitalis Willd.	Known only from Honey Creek Valley. WIS.	✧							✧	1
Carex disperma Dew.	Tamarack swamps in Dellona and Delton Townships. KL.					✧			✧	1
Carex eburnea Boott	Limey hill prairies and thinly wooded limey bluffs; often under Red Cedar. Rarely in dry open sand.				✧	✧			✧	3
Carex echinata Murr. ssp. *echinata* (*C. cephalantha* (Bailey) Bickn.)	Low sandy woods and edges, also low meadows.					✧			✧	2
Carex emoryi Dew.	Mainly deciduous swamps along the Wisconsin River and up the Baraboo River for several miles, also (Section 2, SW 1/4 of SE 1/4, T10N, R4E) along Honey Creek in Honey Creek Valley.	✧			✧	✧	✧		✧	2
Carex foenea Willd. (*C. siccata* Dew.)	Dry open woods and fields in a variety of soils.		✧		✧	✧			✧	2
Carex gracillima Schwein.	Moist to wet forests, low sandy woods, Hemlock stands, wooded sandstone cliffs.	✧	✧		✧	✧			✧	4
Carex granularis Willd.	Alkaline meadows and fens; in the Baraboo Hills known only from an Alder-Black Ash Swamp on the Wisconsin Society for Ornithology's Honey Creek property. WIS, KL.	✧				✧			✧	1
Carex gravida Bailey (incl. var. *lunelliana* (Mackenz.) F.J. Herm.)	Sandy fields and roadsides. WIS.				✧				✧	1
Carex grayi Carey	Deciduous swamps along the Wisconsin River and up the Baraboo River to at least the Upper Narrows (T12N, R5E, Sections 29 and 30). An 1860 collection from Devil's Lake.	✧	✧		✧	✧			✧	3
Carex haydenii Dew.	Low meadows, loamy prairies, low sandy woods.	✧	✧			✧			✧	2
Carex hirtifolia Mackenz.	Mesic forests and Hemlock stands.	✧	✧		✧				✧	3
Carex hitchcockiana Dew.	Sugar Maple-Basswood forests. KL.	✧							✧	1
Carex hystericina Willd. (*C. hystricina* Muhl.)	Sedge meadows, marshy edges of creeks and ponds, alkaline meadows and fens, Alder thickets, wet sandstone cliffs.	✧	✧		✧	✧			✧	3
Carex interior Bailey	Low meadows, Alder thickets.	✧	✧						✧	2

			Locality and Abundance Code								
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■ **CYPERACEAE**											
SEDGE FAMILY *(continued)*											
Carex intumescens Rudge		Damp to wet woods, open marshy areas within mesic woods, low sandy areas, Tamarack swamps.	✧	✧		✧	✧			✧	4
Carex jamesii Schw.		Dry limey woods; in the Baraboo Hills known only from the west end of the South Range. KL, AC.	✧			✧				✧	1
Carex lacustris Willd.	Saw-grass	Sedge meadows, low meadows, swales in sandy meadows, alkaline meadows, cat-tail marshes, Tamarack swamps; generally in deeper water (Figure 29).	✧	✧		✧	✧			✧	4
Carex lanuginosa Michx.		Alkaline meadows and fens, loamy prairies, also sedge meadows and associated swamp timber, cat-tail marshes, and (rarely) dry sites.	✧	✧			✧			✧	2
Carex lasiocarpa Ehrh. var. *americana* Fern.	Wire-grass	Sedge meadows and alkaline meadows; mainly in the Central Plain.	✧				✧			✧	2
Carex laxiculmis Schwein.		Rich deciduous woods; known only from the Wisconsin Society for Ornithology Honey Creek area. WIS.	✧							✧	1
Carex leptalea Wahlenb.		Tamarack swamps, Alder thickets, low sandy woods, sedge meadows, fens; mainly in the Central Plain. Known from Devil's Lake State Park only from an early (undated) collection by Thure Kumlien.	✧	✧		✧	✧			✧	3
Carex leptonervia (Fern.) Fern.		Mesic woods and Hemlock stands, usually damp to wet.	✧	✧		✧				✧	2
E *Carex lupuliformis* Dew.		Lower Baraboo River sloughs, where first collected in 1975; still there in 1990—along the edge of a pool in alluvial forest. In Wisconsin also known from the southeastern part of the state (Wisconsin Department of Natural Resources 1993*b*:20). This is one of the 5 native species known only from Caledonia Township (Table 13). WIS, AC.					✧	✧	✧		1
Carex lupulina Willd.	Hops Sedge	Deciduous swamps along the Wisconsin River and up the Baraboo River for several miles.				✧	✧	✧		✧	3
Carex lurida Wahlenb.		Alder thickets, sedge meadows. WIS.					✧	✧		✧	1
Carex meadii Dew.		Dry prairies, mainly sandy, and adjacent thinly wooded sites, also sandy meadows.				✧	✧			✧	2
Carex muhlenbergii Willd.		Dry prairies, mainly sandy, open sand barrens.	✧	✧		✧	✧			✧	2
Carex muskingumensis Schwein.		Deciduous swamps along the Wisconsin River and up the Baraboo River to at least Section 34 in T12N, R6E.				✧	✧	✧		✧	2
Carex normalis Mackenz.		Deciduous forests, often edges or weedy sites.	✧	✧		✧	✧			✧	3
Carex oligocarpa Willd.		Sugar Maple-Basswood forests. KL.	✧							✧	1
Carex oligosperma Michx.	Wire-grass	Sphagnous sedge meadows in Dellona and Delton Townships; sometimes the dominant species (Figure 30).					✧			✧	2

(continued on next page)

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **CYPERACEAE**											
SEDGE FAMILY *(continued)*											
Carex ormostachya Wieg. (*C. laxiflora* Lam. var. *ormostachya* (Wieg.) Gleason)		Dry limey woods. AC.				✧				✧	1
Carex peckii Howe		Dry limey woods. WIS.				✧				✧	1
Carex pedunculata Willd.		Mesic woods, swamps, Hemlock stands.	✧	✧		✧				✧	2
Carex pensylvanica Lam.	Pennsylvania Sedge	The most abundant sedge in the study area: mainly dry sites, rarely moist, in a variety of soils in sun and shade; often the dominant ground cover in sandy woods.	✧	✧		✧	✧			✧	5
Carex plantaginea Lam.		Mesic deciduous and mixed forests.	✧			✧				✧	2
[a] *Carex praegracilis* W. Boott		Pavements and roadsides in the Badger Army Ammunition Plant, where noted in 1993. A salt- and drought-tolerant western species that has been rapidly expanding its range in recent years, largely because of the application of salt for de-icing roads (Catling and McKay 1980:250, Reznicek and Catling 1987). "Exploded" in the 1970s along highways in the Chicago region, especially in areas of high salinity (Swink and Wilhelm 1994:213). AC.					✧			✧	1
Carex prairea Dew.		Fens and cat-tail marshes in Fairfield Township, alkaline meadows in Merrimac Township. KL.					✧			✧	1
T *Carex prasina* Wahlenb.	Drooping Sedge	Seepy, mucky sites with rich black soil along drainages in deciduous and mixed forests. Common associates are Skunk-cabbage, Spotted Touch-me-not, and Water-pennywort (Figure 46).	✧	✧						✧	3
Carex projecta Mackenz.		Deciduous swamps along the Wisconsin River, also drainages in wooded ravines in the Baraboo Hills and sedge meadows in the Central Plain.	✧			✧	✧			✧	2
Carex radiata (Wahlenb.) Small (*C. rosea* Willd.)		Generally wetter habitats, for example lowland deciduous forests and Tamarack swamps, than the closely related *C. rosea* (*C. convoluta*).	✧	✧		✧	✧			✧	3
Carex retrorsa Schwein.		Deciduous swamps, marshy river sloughs, sedge meadows.	✧	✧			✧			✧	2
SC *Carex richardsonii* R. Br.		Dry limey bluff prairies. KL.				✧				✧	1
Carex rosea Willd. (*C. convoluta* Mackenz.)		Dry and mesic deciduous woods.	✧	✧		✧	✧			✧	4
Carex rostrata Stokes		Sedge meadows (the dominant species in some cases), low sandy woods, Tamarack swamps, Alder thickets, cat-tail marshes, fens; mainly in the Central Plain.	✧	✧		✧	✧			✧	3

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **CYPERACEAE**											
SEDGE FAMILY *(continued)*											
Carex rugosperma Mackenz. (incl. *C. tonsa* (Fern.) Bickn.)		Dry, open, sandy plains and blowouts, sand prairies, sandstone ledges, quartzite cliffs and outcrops.	✧	✧		✧	✧			✧	2
Carex sartwellii Dew.		A widely distributed sedge meadow species reported for the Baraboo Hills, but a specimen cannot be found. J.H. Zimmerman herbarium?	✧							✧	1
Carex scabrata Schwein.		Seepy areas in deciduous and mixed woods. J.H. Zimmerman herbarium.	✧							✧	1
Carex scoparia Willd.		Open wet sand, sandy lake shores, low, usually sandy meadows; in the Baraboo Hills known only from Honey Creek Valley, and in Devil's Lake State Park known only from the shoreline of Devil's Lake.	✧	✧			✧			✧	2
Carex sparganioides Willd.		Sugar maple-Basswood forests, also wet woods.	✧	✧		✧				✧	3
Carex sprengelii Spreng.		Moist to dry woods, including Hemlock stands, often on slopes or riverbanks.	✧	✧		✧	✧			✧	3
Carex sterilis Willd.		Fens, sandy meadows. KL.					✧			✧	1
Carex stipata Willd.		Sedge meadows, Alder thickets, Tamarack swamps, cat-tail marshes, Leather-leaf bogs, fens.	✧	✧		✧	✧			✧	4
Carex stricta Lam.	Tussock Sedge	Widespread in acid and alkaline alluvial meadows subject to flooding, also Tamarack swamps, Alder thickets, cat-tail marshes.	✧	✧		✧	✧			✧	5
Carex tenera Dew.		Low meadows, wet woods, especially clearings and borders.	✧	✧		✧	✧			✧	2
Carex tetanica Schk.		Loamy prairies, especially where limey; known only from Cady's Marsh. KL.					✧			✧	1
Carex tribuloides Wahlenb.		Deciduous swamps along the Wisconsin River and up the Baraboo River to at least Section 19 in T12N, R9E, also low meadows, swales in wooded ravines.	✧	✧		✧	✧	✧		✧	3
Carex trichocarpa Schk.		Sedge meadows, alkaline meadows, Alder thickets; in the Baraboo Hills known only from Honey Creek Valley, and in Devil's Lake State Park known only from an alkaline meadow between the east and south bluffs.	✧	✧		✧	✧			✧	3
Carex trisperma Dew.		Tamarack swamps in Dellona Township; common northward and eastward in Wisconsin. KL.					✧			✧	1
Carex tuckermanii Dew.		Deciduous swamps, low sandy woods, wet thickets, marshy ponds and swales.	✧	✧		✧	✧			✧	3
Carex typhina Michx.		Deciduous swamps along the Wisconsin River, including the marshy shoreline of Mirror Lake, and up the Baraboo River to at least Section 24 in T12N, R8E.				✧	✧			✧	3
Carex umbellata Willd. (incl. *C. abdita* Bickn.)		Dry, often rocky sites in a variety of soils.	✧	✧		✧	✧			✧	3

(continued on next page)

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **CYPERACEAE**											
SEDGE FAMILY *(continued)*											
Carex vesicaria L.		Deciduous swamps, pond margins, swales, sedge meadows.		✧		✧	✧			✧	2
Carex vulpinoidea Michx.		Sedge meadows, alkaline meadows, loamy prairies, wet thickets, moist areas in deciduous woods and Hemlock stands.	✧	✧			✧			✧	3
Carex woodii Dew.		Sugar Maple-Basswood forests. J.H. Zimmerman herbarium.	✧							✧	1
Cyperus bipartitus Torr. (*C. rivularis* Kunth)	Shining Cyperus	Sandy shores of the Wisconsin River and Devil's Lake.		✧	✧	✧	✧	✧		✧	3
Cyperus diandrus Torr.	Low Cyperus	Sandy shores of the Wisconsin River and Devil's Lake, also fens.		✧	✧	✧	✧			✧	3
Cyperus erythrorhizos Muhl.	Red-rooted Cyperus	Sandy shores of the Wisconsin River, newly exposed mudflats, sandy meadows.		✧		✧	✧	✧		✧	2
Cyperus esculentus L.	Chufa	Low meadows, fields, and ditches. Weedy in farmland, especially lowland sandy fields.	✧			✧	✧			✧	2
Cyperus houghtonii Torr.	Houghton's Cyperus	Known only from a several acre sand blow in Jack Pine-oak woods in the northwestern corner of the Baraboo Hills (T12N, R5E, se 1/4 of Section 22). WIS, KL.	✧							✧	1
Cyperus lupulinus (Spreng.) Marcks (*C. filiculmis* of many authors, not Vahl, 1806)	Slender-stemmed Cyperus	Disturbed sandy soil, especially dry prairies, also limey sand and rhyolite glades and (an outcrop in the Baraboo Valley in T12N, R7E, Section 32) Dake Quartzite (Clayton and Attig 1990:10-11); not on Baraboo Quartzite. Hybridizes with *C. schweinitzii*.	✧	✧		✧	✧			✧	3
Cyperus schweinitzii Torr.	Schweinitz's Cyperus	Dry sites in sand and limey sand, often with *C. lupulinus*.	✧			✧	✧			✧	3
Cyperus squarrosus L. (*C. aristatus* Rottb.; *C. inflexus* Muhl.)	Awned Cyperus	Wet open sand along the Wisconsin River and Devil's Lake.		✧	✧	✧	✧	✧		✧	3
Cyperus strigosus L.	Straw-colored Cyperus	Sandy and muddy shores, marshy ground and ditches, fens.		✧		✧	✧			✧	3
Dulichium arundinaceum (L.) Britt.	Three-way Sedge	Essentially a bog species, but in the study area in wet hollows, for example glacial kettles and sedge meadows, also edges of low sandy woods.	✧	✧		✧	✧			✧	3
Eleocharis acicularis (L.) R. & S.	Spike-rush	Wet sandy or muddy shores and hollows; pioneering and forming a "green pasture" (Leopold 1949:51-52) along rivers and lakes after the receding of high water. This was the main species on the mudflats at the southwestern corner of Devil's Lake in 1974 (Figure 32), the first year after the receding of high water from a flood year (see *Ranunculus sceleratus*).	✧	✧		✧	✧	✧		✧	3
Eleocharis compressa Sulliv. (*E. elliptica* Kunth var. *compressa* (Sulliv.) Drapalik & Mohlenb.)	Spike-rush	Moist open sand along the Wisconsin River, sandstone ledges inland. KL.	✧	✧			✧	✧		✧	1

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **CYPERACEAE**											
SEDGE FAMILY *(continued)*											
SC *Eleocharis engelmannii* Steud.	Spike-rush	Low open sandy ground. The Devil's Lake record is a sight record: T.S. Cochrane with J.H. Zimmerman, 21 September 1975. WIS.		✧	✧		✧	✧		✧	1
Eleocharis erythropoda Steud. (*E. calva* Torr.)	Spike-rush	Low open ground, for example sandy shores and sandy meadows; often in shallow water.				✧	✧	✧		✧	2
Eleocharis intermedia Schultes	Spike-rush	Wet open sand, also swales and ditches in sandy meadows. KL.				✧	✧	✧		✧	1
Eleocharis obtusa (Willd.) Schultes (incl. *E. ovata* (Roth) R. & S.)	Spike-rush	Wet, open, often disturbed sites, including areas recently logged in deciduous forest.	✧	✧			✧			✧	3
Eleocharis palustris (L.) Roemer & J.A. Schultes (incl. *E. smallii* Britt.)	Spike-rush	Wet open sand, sedge meadows; often in shallow water.	✧	✧		✧	✧			✧	3
Eriophorum angustifolium Honckeny	Cotton-grass	Sedge meadows and Leather-leaf bogs in Dellona, Delton, and Fairfield Townships.					✧			✧	2
Eriophorum tenellum Nutt.	Cotton-grass	Sedge meadows; known only from Delton Township. KL.					✧			✧	1
Fimbristylis autumnalis (L.) R. & S.		Wet open sand along the Wisconsin River.				✧	✧	✧		✧	3
Lipocarpha micrantha (Vahl) G. Tucker (*Hemicarpha micrantha* (Vahl) Pax)		Sandy-muddy shores of Devil's Lake and the Wisconsin River.			✧	✧	✧	✧		✧	3
Rhynchospora capitellata (Michx.) Vahl (*R. glomerata* (L.) Vahl var. *minor* Britt.)	Beak-rush	Swales and edges of ponds in open sandy ground, also sandy meadows.					✧			✧	2
Scirpus acutus Bigelow	Hardstem Bulrush	Wet open sand and standing water along the Wisconsin River. WIS, KL.				✧	✧	✧		✧	1
Scirpus atrovirens Willd.	Black Bulrush	Sedge meadows, sandy meadows, Alder thickets, Tamarack swamps, deciduous swamps, fens and alkaline meadows, ditches, wet roadsides.	✧	✧		✧	✧			✧	4
Scirpus clintonii Gray		Sandy meadows, also dry, sandy, wooded hillsides.				✧	✧			✧	2
Scirpus cyperinus (L.) Kunth. (incl. *S. pedicellatus* Fern.)	Wool-grass	Sedge meadows, sandy meadows, alkaline meadows, Alder thickets, Tamarack swamps; often along borders, such as marshy openings within deciduous forests, edges of Leather-leaf bogs, ditches, wet roadsides.	✧	✧		✧	✧			✧	4
Scirpus fluviatilis (Torr.) Gray	River Bulrush	Marshy shores of lakes and rivers, including associated deciduous swamps, also low meadows, cat-tail marshes, fens.		✧		✧	✧			✧	3
Scirpus heterochaetus Chase		Known only from the International Crane Foundation property in Fairfield Township. International Crane Foundation Herbarium (photocopy of ICF specimen at WIS.)					✧			✧	1

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **CYPERACEAE**											
SEDGE FAMILY *(continued)*											
Scirpus pendulus Muhl. (*S. lineatus* of authors, not Michx.)		Known only from an abandoned roadway bordering a sedge meadow in Merrimac Township. KL.					✧	✧		✧	1
Scirpus pungens Vahl. (*S. americanus* of authors, not Pers.)	Threesquare	Wet shores of the Wisconsin River, where known only from the mouth of Honey Creek (because of limey deposits?), and Devil's Lake. WIS, KL.		✧	✧	✧		✧		✧	1
Scirpus smithii Gray (incl. *S. purshianus* Fern.)		Mudflats and sandy shores of Devil's Lake and the Wisconsin River, especially where the water has receded recently.		✧	✧		✧	✧		✧	2
Scirpus tabernaemontanii K.C. Gmel. (*S. validus* Vahl)	Softstem Bulrush	Wet shores, especially with receding water levels, also shallow water of ponds and ditches, sedge meadows, alkaline meadows and fens, cat-tail marshes, Alder thickets.	✧	✧		✧	✧			✧	3
SC *Scleria triglomerata* Michx.	Nut-rush	Sandy meadows; local.					✧			✧	2
■ **DIOSCOREACEAE**											
YAM FAMILY											
PR 34, 1950, Trans. WASAL 40(1):230, 236											
Dioscorea villosa L.	Wild Yam	Dry woods and thickets, also low woods, forest or marsh borders, railroad embankments.	✧	✧		✧	✧			✧	3
■ **HYDROCHARITACEAE**											
FROG'S-BIT FAMILY											
Elodea canadensis Michx.	Waterweed	Devil's Lake, also artificial lakes and the Wisconsin River.	✧	✧	✧		✧	✧		✧	2
Elodea nuttallii (Planch.) St. John	Waterweed	Sloughs and artificial lakes; more local than the preceding species. KL.				✧	✧			✧	1
Vallisneria americana Michx.	Water-celery	Submersed in lakes and the Wisconsin River; usually rooted in sand. WIS, KL.		✧	✧		✧	✧		✧	1
■ **IRIDACEAE**											
IRIS FAMILY											
PR 34, 1950, Trans. WASAL 40(1):230-31, 236-38											
[n] *Belamcanda chinensis* (L.) DC.	Blackberry-lily	A roadside colony noted in Prairie du Sac Township in 1989 by E.J. Judziewicz; listed by Lueders (1895:522). Rarely persisting.					✧			✧	1
[n] *Iris germanica* L.	Garden Iris	Persisting (and spreading?) from plantings.	✧	✧		✧	✧			✧	3
Iris virginica L. var. *shrevei* (Small) Anders.	Wild Iris	Low meadows, fens and alkaline meadows, cat-tail marshes, Leather-leaf bogs, Alder thickets, Tamarack swamps, hardwood swamps, low sandy woods.	✧	✧		✧	✧			✧	4
Sisyrinchium campestre Bickn.	Blue-eyed-grass	Prairies and dry open sites in limey or sandy soil, quartzite glades.	✧	✧		✧	✧			✧	3
■ **JUNCACEAE**											
RUSH FAMILY											
PR 34, 1950, Trans. WASAL 40(1):231-34, 238-42											
Juncus acuminatus Michx.		Wet open sand, often along pond or slough borders.					✧	✧		✧	2

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **JUNCACEAE**											
RUSH FAMILY *(continued)*											
Juncus brevicaudatus (Engelm.) Fern.		Wet open sand, including ponds and ditches, also sandy meadows.					✧			✧	2
Juncus bufonius L.	Toad Rush	Moist open sand at Devil's Lake and along the Wisconsin River. The Devil's Lake record is a sight record: T.S. Cochrane with J.H. Zimmerman, 21 September 1975, "rare." KL.		✧	✧		✧	✧		✧	1
Juncus canadensis La Harpe		Sphagnous sedge meadows and sandy meadows where often in open muddy places, also ditches and pond margins.					✧			✧	2
Juncus dudleyi Wieg.		Moist open ground, including fens, disturbed places.				✧	✧			✧	2
Juncus effusus L.	Soft Rush	Newly exposed wet shores, sedge meadows, fens, marshy openings within deciduous forests, Tamarack swamps, Alder thickets.	✧	✧		✧	✧			✧	3
Juncus greenei Oakes & Tuckerm.		Sandy meadows, also quartzite and rhyolite glades.	✧	✧		✧	✧			✧	2
Juncus interior Wieg.		Dry sand prairies, sandy roadsides, Wisconsin River sandbars, quartzite glades.	✧	✧		✧	✧			✧	2
Juncus nodosus L.		Moist open ground, for example lake and river shores, low often disturbed meadows.		✧	✧		✧	✧		✧	2
Juncus pelocarpus Meyer		Known only from the shoreline of Devil's Lake, where first collected in 1895. WIS, KL.		✧	✧					✧	1
Juncus tenuis Willd.	Path Rush	Weedy in dry to moist ground, especially roadways, trails, ditches, excavation sites, clearings.	✧	✧		✧	✧			✧	4
Juncus torreyi Cov.		Wet open sand. AC.					✧			✧	1
Luzula acuminata Raf.	Wood Rush	Dry sandy woods, also damp to wet woods, for example ravines and along streams.	✧	✧		✧	✧			✧	3
Luzula multiflora (Ehrh.) Lej. var. *multiflora* (*L. campestris* (L.) DC. var. *multiflora* (Ehrh.) Celak)	Wood Rush	Dry sandy woods and associated openings, sandstone cliffs, quartzite glades, sandy meadows, low meadows.	✧	✧		✧	✧			✧	3
■ **LEMNACEAE**											
DUCKWEED FAMILY											
PR 25, 1937, Trans. WASAL 30:17-20											
Lemna minor L.	Duckweed	Floating on the water surface of lakes, ponds, edges of streams, sloughs and other marshy places. Stranded on wet shores with receding water.	✧	✧		✧	✧			✧	5
Lemna trisulca L.	Star Duckweed	In similar waters as *L. minor*, but in tangled masses beneath the surface, not floating on it.	✧	✧		✧	✧			✧	3
Spirodela polyrrhiza (L.) Schleid.	Greater Duckweed	In similar waters as the other species and often associated with them.	✧	✧		✧	✧			✧	3
Wolffia brasiliensis Wedd. (*W. punctata* Griseb.)	Water-meal	In similar waters as the other species and often associated with them.	✧	✧		✧	✧			✧	3

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ LEMNACEAE											
DUCKWEED FAMILY *(continued)*											
Wolffia columbiana Karst.	Water-meal	In similar waters as the other species and often associated with them.	✧	✧		✧	✧			✧	3
■ LILIACEAE											
LILY FAMILY											
PR 34, 1950, Trans. WASAL 40(1):215-29, 235-36											
Aletris farinosa L.	Colic-root	Sandy meadows (Figure 24).					✧			✧	2
Allium burdickii (Hanes) A.G. Jones (*A. tricoccum* Ait. var. *burdickii* Hanes)	Wild Leek	Mainly rich deciduous woods; usually scattered small clumps. For this species, see Hanes and Ownbey (1946) and Jones (1979).	✧	✧		✧				✧	3
Allium canadense L.	Wild Garlic	Mainly bottomland forests, also rhyolite glades.	✧	✧		✧	✧			✧	2
Allium stellatum Ker.	Wild Onion	Known only from a (1930?) collection from along the railroad at "Merrimac"; adventive? WIS.					✧			✧	1
Allium tricoccum Ait.	Wild Leek	Mesic woods, including floodplains, especially characteristic of Sugar Maple-Basswood forests; usually colonial.	✧	✧		✧				✧	4
n *Asparagus officinalis* L.	Garden Asparagus	Roadsides, railroads, clearings, thickets, open woods; in a variety of soils.	✧	✧		✧	✧			✧	5
Clintonia borealis (Ait.) Raf.	Bluebead Lily	Sandstone ledges and adjoining ground in wooded ravines, low sandy woods, Hemlock stands, Tamarack swamps, Alder thickets.	✧	✧		✧	✧			✧	3
n *Convallaria majalis* L.	Lily-of-the-valley	Persisting and spreading from cultivation.		✧			✧			✧	1
Erythronium albidum Nutt.	White Trout Lily	Rich, often bottomland deciduous forests; more local than the next species.	✧			✧				✧	2
Erythronium americanum Ker	Yellow Trout Lily	Rich, often bottomland deciduous forests.	✧	✧			✧			✧	2
n *Hemerocallis fulva* (L.) L.	Orange Day Lily	Roadsides, generally in wooded areas; spreading from gardens and cemeteries where planted because of its attractive flowers.	✧	✧		✧	✧			✧	3
Hypoxis hirsuta (L.) Coville	Yellow Star-grass	Sandy meadows, fens, loamy prairies, also dry prairies in a variety of soils, quartzite and rhyolite glades.	✧	✧		✧	✧			✧	3
n *Lilium lancifolium* Thunb. (*L. tigrinum* Ker)	Tiger Lily	Spreading from cultivation.					✧			✧	1
Lilium michiganense Farw.	Michigan Lily	Sedge meadows, marshy openings in deciduous woods, Tamarack swamps, Alder thickets.	✧	✧		✧	✧			✧	3
Lilium philadelphicum L.	Wood Lily	Sandy meadows, dry limey prairies. WIS.				✧	✧			✧	1
Maianthemum canadense Desf.	Canada Mayflower	Sites vary from dry to moist, generally in cooler habitats: deciduous and coniferous forests, low sandy woods, Tamarack swamps, Alder thickets.	✧	✧		✧	✧			✧	4
n *Muscari botryoides* (L.) P. Mill.	Grape Hyacinth	Noted in a wooded creek bottom; transient?		✧						✧	1

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **LILIACEAE**											
LILY FAMILY *(continued)*											
[n] *Ornithogalum umbellatum* L.	Star-of-Bethlehem	Noted on a farm in Excelsior Township in 1971; transient?	✧							✧	1
Polygonatum biflorum (Walt.) Ell. (*P. canaliculatum* of authors; *P. commutatum* (Schultes f.) A. Dietr.)	Large Solomon's-seal	Mainly dry woods and their borders, including dry prairies in a variety of soils; sometimes in bottomland forest.	✧	✧		✧	✧			✧	4
Polygonatum pubescens (Willd.) Pursh	Small Solomon's-seal	More apt to be in cooler woods or mesic woods, including Hemlock stands, than the preceding species.	✧	✧		✧	✧			✧	3
Smilacina racemosa (L.) Desf.	False Solomon's-seal	Dry and mesic woods, low sandy woods. *Smilacina* is not recognized in Kartesz (1994); *S. racemosa* is listed therein as *Maianthemum racemosum* (L.) Link.	✧	✧		✧	✧			✧	4
Smilacina stellata (L.) Desf.	False Solomon's-seal	Dry, especially limey woods and edges, limey bluff prairies, fens, also low boggy thickets. *Smilacina* is not recognized in Kartesz (1994); *S. stellata* is listed therein as *Maianthemum stellatum* (L.) Link.	✧	✧		✧	✧			✧	4
Streptopus roseus Michx.	Twisted Stalk	Cool, moist, deciduous and mixed forests, low sandy woods.	✧	✧		✧	✧			✧	2
Trillium cernuum L.	Nodding Trillium	Cool, moist, deciduous and mixed forests.	✧	✧		✧				✧	2
Trillium flexipes Raf. (*T. gleasonii* Fern.)	Midland Trillium	Mesic and lowland woods, occasionally dry woods.	✧	✧		✧	✧			✧	4
Trillium grandiflorum (Michx.) Salisb.	Large Trillium	Generally relatively moist woods, often where limey; mainly in the Western Upland. The Devil's Lake State Park record (by an old cottage site) and the Central Plain record (Leopold Reserve; Leopold Shack Journal, 30 May 1947) represent introductions.	✧	✧		✧	✧			✧	3
Uvularia grandiflora Sm.	Bellwort	Dry to mesic woods, also Hemlock stands.	✧	✧		✧	✧			✧	4
Uvularia sessilifolia L.	Merrybells	More apt to be in dry woods than the preceding species.	✧	✧		✧	✧			✧	3
Zigadenus elegans Pursh ssp. *glaucus* (Nutt.) Hultén	White Camas	Dry limey bluff prairies.				✧				✧	1
■ **NAJADACEAE**											
NAIAD FAMILY											
PR 33, 1951, Trans. WASAL 40(2):109-10											
Najas flexilis (Willd.) Rostk. & Schmidt	Water-naiad	Devil's Lake and Wisconsin River ponds.		✧	✧	✧	✧	✧		✧	3
Najas gracillima (Engelm.) Magnus	Water-naiad	Known only from a 1932 collection from a pool near Wisconsin Dells; "doubtfully native, apparently increasing" (Read 1976:44). WIS, MIL.					✧	✧		✧	1

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **ORCHIDACEAE** **ORCHID FAMILY** Case 1987, Fuller 1933											
Aplectrum hyemale (Willd.) Torr.	Putty-root Orchid	Sugar Maple forests, also Red Oak stands; usually only a half-dozen or so plants at a given station.	✧	✧						✧	2
Calopogon tuberosus (L.) BSP. (*C. pulchellus* (Salisb.) R. Br.)	Grass-pink Orchid	The only herbarium record for this century is a 1975 specimen from a sandy meadow in Delton Township. WIS, KL.					✧			✧	1
Coeloglossum viride (L.) Hartman var. *virescens* (Willd.) Luer (*Habenaria viridis* (L.) R. Br. var. *bracteata* (Willd.) Gray)	Bracted Orchid	Oak-hickory woods, often limey, also Red Oak stands; usually singly or in small groups.	✧	✧		✧				✧	2
Corallorhiza maculata (Raf.) Raf.	Spotted Coral-root	Dry to mesic woods, low sandy woods.	✧	✧		✧	✧			✧	3
SC *Corallorhiza odontorhiza* (Willd.) Nutt.	Fall Coral-root	Dry to mesic woods; sometimes in disturbed sites, for example railroad embankments or bare ground by animal burrows. Populations usually thin and scattered, generally 2 to 10 plants per station.	✧	✧		✧				✧	3
Cypripedium acaule Ait.	Pink Lady's-slipper	Dry sandy upland woods with pines, low sandy woods with pines, sphagnous deciduous thickets, Tamarack swamps.	✧	✧		✧	✧			✧	3
T *Cypripedium candidum* Willd.	White Lady's-slipper	The only herbarium record is an 1885 specimen labelled "Baraboo." See *Platanthera leucophaea*. Formerly at Devil's Lake State Park (Anon. 1906:26). WIS.	✧							✧	0
SC *Cypripedium parviflorum* Salisb. (*C. calceolus* L. var. *parviflorum* (Salisb.) Fern.)	Small Yellow Lady's-slipper	This is the small, dark flowered, mainly western species. The only herbarium record is a 1933 specimen labelled "Baraboo." MIL.	✧							✧	1
Cypripedium pubescens Willd. (*C. calceolus* L. var. *pubescens* (Willd.) Correll)	Large Yellow Lady's-slipper	Deciduous, often Red Oak forests, mixed forests, also loamy prairies, especially where limey; colonies generally number up to 15 plants, sometimes more.	✧	✧		✧	✧			✧	3
SC *Cypripedium reginae* Walt.	Showy Lady's-slipper	The only herbarium record is an 1890 specimen from "Pine hollow near Baraboo." Formerly at Devil's Lake State Park (Anon. 1906:26), and formerly in a Tamarack swamp in Section 7, Prairie du Sac Township (Lueders 1895:514). WIS.	✧							✧	0
Galearis spectabilis (L.) Raf. (*Orchis spectabilis* L.)	Showy Orchis	Deciduous and mixed forests, often in lowland sites; sometimes in grassy fields adjoining a woods. Usually only one or a few plants at a given station.	✧	✧		✧	✧			✧	3
Goodyera pubescens (Willd.) R. Br.	Downy Rattlesnake-plantain	Mainly in oak-hickory and oak-pine woods, also low sandy woods and moist mixed forests.	✧	✧		✧	✧			✧	4

			Locality and Abundance Code							
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **ORCHIDACEAE**											
ORCHID FAMILY *(continued)*											
Liparis liliifolia (L.) Lindl.	Purple Twayblade	Most numerous but transient in pine and spruce plantations, where peak numbers of several thousand plants have been noted, for example in a 19-year-old White Pine Plantation in Devil's Lake State Park in 1967. Curtis and Greene (1953:153) describe a similar situation for the University of Wisconsin Arboretum in Madison. Apart from plantations, usually found in oak woods where often in dry sites but also associated with Red Oak; at these localities generally only a few (2 to 4) plants are noted.	✧	✧			✧			✧	3
Liparis loeselii (L.) Rich	Green Twayblade	Swampy woods and thickets, roadside ditches in wet open sand, also relatively dry areas, but then usually in moister, moderately shaded sites. KL.	✧				✧			✧	1
Malaxis unifolia Michx.	Green Adder's-mouth	Known only from a low sandy woods in Delton Township. KL.					✧			✧	1
Platanthera clavellata (Michx.) Luer (*Habenaria clavellata* (Michx.) Spreng.)	Club-spur Orchid	Sphagnous woods and thickets of White Birch and Quaking Aspen, Red Maple thickets; known from Dellona and Delton Townships. KL.					✧			✧	1
T *Platanthera flava* (L.) Lindl. var. *herbiola* (Ait. f.) Luer (*Habenaria flava* (L.) R. Br. var. *herbiola* (Ait. f.) Ames & Correll)	Tubercled Orchid	Springy creek bottoms or wet grassy areas along the borders of deciduous forest. Also relatively dry areas, but then usually in moister, moderately shaded sites. A total of 7 flowering stalks and 7 non-flowering stalks was noted in 1993 at a station first discovered in 1967, a mucky creek bed with herbaceous vegetation at the edge of an artificial clearing within extensive forest in Devil's Lake State Park (Figures 48 and 49). At another station near Devil's Lake State Park, a wet field adjoining an oak forest, this species appears to be declining, as other herbaceous plants and woody species are advancing outward from the forest. The Central Plain record is a 1973 sight record for a wet, mucky slope bordering Hulburt Creek in Delton Township. Tubercled Orchid apparently requires a relatively open, non-competitive environment. See Alverson (1981) for a review of this species, also Wisconsin Department of Natural Resources (1993*b*:49).	✧	✧			✧			✧	2
SC *Platanthera hookeri* (Gray) Lindl. (*Habenaria hookeri* Gray)	Hooker's Orchid	Cool, moist, deciduous and mixed woods, also relatively dry mixed woods.	✧	✧		✧				✧	2
Platanthera hyperborea (L.) Lindl. (*Habenaria hyperborea* (L.) R. Br.)	Tall Northern Bog Orchid	Marshy, mucky stream borders of Alder-willow thickets.					✧			✧	1

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **ORCHIDACEAE**											
ORCHID FAMILY *(continued)*											
Platanthera lacera (Michx.) G. Don (*Habenaria lacera* (Michx.) R. Br.)	Ragged Orchid	Sandy meadows in Dellona, Delton, Fairfield, and Caledonia Townships.					✧			✧	2
E *Platanthera leucophaea* (Nutt.) Lindl. (*Habenaria leucophaea* (Nutt.) Gray)	Prairie White-fringed Orchid	The only herbarium record is an 1884 specimen labelled "Baraboo." Since both it and the 1885 specimen of *Cypripedium candidum*, also labelled "Baraboo," were collected by the same person (R.H. True), and since these 2 orchids occur in the same habitats, wet prairies and alkaline meadows, it seems likely that both came from the same general area, probably the Baraboo River valley. See Alverson (1981) for a review of this species, also Wisconsin Department of Natural Resources (1993*b*:50). Listed as threatened under the U.S. Endangered Species Act. WIS.	✧							✧	0
Platanthera psycodes (L.) Lindl. (*Habenaria psycodes* (L.) Spreng.)	Purple-fringed Orchid	Marshy habitats, including streamside thickets, sedge meadows, alder swamps.	✧	✧		✧	✧			✧	3
Spiranthes casei Catling & Cruise	Cases' Ladies'-tresses	In the Baraboo Hills mainly in quartzite glades, in the Central Plain in sandy meadows, sphagnous deciduous thickets. For this species, see Catling (1978) and Catling and Cruise (1974).	✧	✧			✧			✧	2
Spiranthes cernua (L.) Rich.	Nodding Ladies'-tresses	Marsh edges, wet open sand, sandy meadows, fens; sometimes weedy in mowed lowlands.	✧	✧			✧			✧	3
Spiranthes lacera (Raf.) Raf. (*S. gracilis* (Bigel.) Beck)	Slender Ladies'-tresses	Dry sandy soil in sun or partial shade, for example old fields, forest clearings. WIS.	✧				✧			✧	1
Spiranthes magnicamporum Sheviak	Prairie Ladies'-tresses	Dry limey bluff prairies. For this species, see Catling (1976) and Sheviak (1973). WIS, KL.				✧				✧	1
SC *Triphora trianthophora* (Sw.) Rydb.	Three-birds Orchid	Deciduous forests, generally in leaf litter in mesic sites; some populations number in the hundreds. Rare or seemingly absent in some years, but such populations actually are concealed in the leaf litter or underground, where they can reproduce asexually by means of tuberoids (Williams 1994).	✧	✧		✧				✧	2
■ **POACEAE (GRAMINAE)** **GRASS FAMILY** Fassett 1951											
[n] *Agrostis gigantea* Roth (*A. alba* L. of authors)	Redtop	Widespread in open to wooded sites, upland and lowland. Cultivated as a forage grass.	✧	✧		✧	✧			✧	4
Agrostis hyemalis (Walt.) BSP. (incl. *A. scabra* Willd.)	Ticklegrass	Dry open sites, including fields, shores, cliffs, also marshy sites.	✧	✧		✧	✧			✧	3

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **POACEAE (GRAMINAE)** **GRASS FAMILY** *(continued)*											
Agrostis perennans (Walt.) Tuckerm.	Upland Bent	Dry to moist woods.	✧	✧		✧	✧			✧	3
Alopecurus aequalis Sobol.	Foxtail	Ponds, lakeshores, wet meadows.	✧	✧	✧		✧			✧	2
n *Alopecurus pratensis* L.	Foxtail	Agricultural fields. MIL.				✧				✧	1
Andropogon gerardii Vitman	Big Bluestem	Prairies, roadsides, railroad embankments, in a variety of soils.	✧	✧		✧	✧			✧	4
Aristida basiramea Vasey	Three-awn Grass	Dry open sand and sandstone, quartzite and rhyolite glades.	✧	✧		✧	✧			✧	3
SC *Aristida dichotoma* Michx.	Three-awn Grass	Quartzite glades in Devil's Lake State Park, where first noted in 1934; also (a 1987 sight record) a sandy meadow in Delton Township. WIS, KL.		✧			✧			✧	1
Aristida longispica Poir. (*A. intermedia* Scrib. & Ball)	Three-awn Grass	Dry open sand, including roadsides. KL, AC.					✧			✧	1
Aristida purpurascens Poir.	Three-awn Grass	Dry open sand. Abundant along the Wisconsin River in 1899 (Cheney 1899:46). KL.					✧			✧	1
Aristida tuberculosa Nutt.	Three-awn Grass	Dry open sand.	✧			✧	✧			✧	3
Bouteloua curtipendula (Michx.) Torr.	Side-oats Grama	Dry limey prairies, also dry sandy ground.	✧	✧		✧	✧			✧	3
Bouteloua hirsuta Lag.	Toothbrush Grass	Dry limey prairies, also dry sandy ground.	✧			✧	✧			✧	3
Brachyelytrum erectum (Roth.) Beauv.	Long-awned Wood Grass	Deciduous woods, dry to damp, also Tamarack swamps.	✧	✧		✧	✧			✧	3
Bromus ciliatus L.	Fringed Brome	Alkaline meadows and fens, sedge meadows, Alder thickets, Tamarack swamps, dry limey prairies, loamy prairies; in Devil's Lake State Park known only from an alkaline meadow between the east and south bluffs.	✧	✧		✧	✧			✧	3
n *Bromus inermis* Leyss.	Smooth Brome	Spreading from plantings in fields and meadows, for example along roads and railroads. A popular hay and pasture grass; has been used extensively in western rangelands.	✧	✧		✧	✧			✧	4
Bromus kalmii Gray	Brome Grass	Dry limey prairies, fens; in the Baraboo Hills known only from the west end of the South Range.	✧			✧	✧			✧	2
Bromus latiglumis (Shear) Hitchc. (*Bromus altissimus* Pursh)	Brome Grass	Floodplain forests, river banks. WIS, MIL.		✧		✧	✧			✧	1

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **POACEAE (GRAMINAE)** **GRASS FAMILY** *(continued)*											
Bromus pubescens Willd. (*B. purgans* of authors, not L.)	Canada Brome	Deciduous forest, dry to damp, also low sandy woods.	✧	✧		✧	✧			✧	2
[n] *Bromus tectorum* L.	Downy Chess	Disturbed ground, especially roadsides and railways. A notorious weed in the intermountain west (Mack 1984).	✧	✧		✧	✧			✧	3
Calamagrostis canadensis (Michx.) Beauv.	Blue-joint	A major species in marshy wetlands.	✧	✧		✧	✧			✧	4
SC *Calamagrostis stricta* (Timm) Koel. spp. *inexpansa* (Gray) C. W. Greene (*C. inexpansa* Gray)		Sedge meadows in the Central Plain (Delton Township) and a rhyolite glade in the Baraboo Hills (Fairfield Township).	✧				✧			✧	2
Cenchrus longispinus (Hack.) Fern.	Sandbur	Dry open sandy ground, roadsides and railways.	✧	✧		✧	✧			✧	3
Cinna arundinacea L.	Wood Reedgrass	Deciduous swamps, marshy openings within deciduous forest, low sandy woods, Tamarack swamps, Alder thickets.	✧	✧		✧	✧			✧	3
Cinna latifolia (Goepp.) Griseb.	Wood Reedgrass	Tamarack swamps, Alder thickets, low ground in cool forests; in the Central Plain known from Dellona and Delton Townships.		✧		✧				✧	2
[n] *Dactylis glomerata* L.	Orchard Grass	Roadsides, trails, railroads, fields, and other weedy places.	✧	✧		✧	✧			✧	4
Danthonia spicata (L.) R. & S.	Poverty Grass	Dry prairies and dry woods on sandstone and dolomite, also quartzite and rhyolite glades, sandy meadows.	✧	✧		✧	✧			✧	4
[n] *Deschampsia cespitosa* (L.) Beauv. ssp. *parviflora* (Thuill.) Jarmolenko & Soó	Hair Grass	Represented by a herbarium specimen collected in 1946 near the site of a cottage; this subspecies was introduced from Europe. WIS.		✧						✧	1
Digitaria cognata (Schultes) Pilger (*Leptoloma cognatum* (Schultes) Chase)	Fall Witch Grass	Dry, often disturbed open ground, usually sandy.	✧	✧		✧	✧			✧	3
[n] *Digitaria ischaemum* (Schreb.) Muhl.	Crab Grass	Dry fields, open weedy woods, fallow farm land, lawns.	✧	✧		✧	✧			✧	3
[n] *Digitaria sanguinalis* (L.) Scop.	Crab Grass	Similar places as the preceding species, but more likely to be in road shoulder gravel and railroad ballast; more salt tolerant?	✧	✧		✧	✧			✧	3
[n] *Echinochloa crusgalli* (L.) Beauv.	Barnyard Grass	Dry to damp often disturbed places, including low meadows, river bars, pond edges.	✧	✧		✧	✧			✧	3
Echinochloa muricata (Beauv.) Fern. (*E. pungens* (Poir.) Rydb.)		More likely to be in damp places than the preceding species, sometimes even in shallow water; also weedy like *E. crusgalli*.	✧	✧		✧	✧			✧	3
Echinochloa walteri (Pursh) Heller		Known only from marshy sloughs along the Wisconsin River in T8N, R4E; local. WIS, KL.				✧		✧		✧	1

			Locality and Abundance Code							
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■ **POACEAE (GRAMINAE)** **GRASS FAMILY** *(continued)*											
Elymus canadensis L.	Wild-rye	Sandy shores and associated woods, dry limey bluff prairies and adjacent thinly wooded slopes; may be weedy, for example railroad ballast.	✧	✧		✧	✧			✧	3
Elymus hystrix L. var. *hystrix* (*Hystrix patula* Moench)	Bottle-brush Grass	Mesic to wet deciduous and mixed woods; sometimes drier woods.	✧	✧		✧	✧			✧	4
Elymus riparius Wieg.	Wild-rye	Moist ground along wooded streams. KL.	✧	✧						✧	1
Elymus trachycaulus (Link) Shinners (*Agropyron trachycaulum* (Link) H. F. Lewis)	Wheatgrass	Mainly dry woods in a variety of soils.	✧	✧		✧	✧			✧	3
Elymus villosus Willd.	Wild-rye	Dry to damp deciduous woods, Alder thickets.	✧	✧		✧	✧			✧	3
Elymus virginicus L.	Wild-rye	Swamps, Alder thickets, marshy sloughs, often along major drainages.	✧	✧		✧	✧			✧	3
[n] *Elytrigia repens* (L.) B.D. Jackson (*Agropyron repens* (L.) Beauv.)	Quack Grass	Weedy along roads and railroads, in fields, clearings, thinly wooded sites, in a variety of soils.	✧	✧		✧	✧			✧	5
Eragrostis capillaris (L.) Nees	Love Grass	Dry open ground. WIS, MIL.		✧		✧				✧	1
[n] *Eragrostis cilianensis* (All.) Mosher (*E. megastachya* (Koeler) Link)	Stink Grass	Agricultural land, roadsides, waste places.	✧	✧		✧	✧			✧	3
Eragrostis hypnoides (Lam.) BSP.	Love Grass	Wet sandy or muddy ground, especially after the receding of high water.	✧	✧		✧	✧			✧	2
[n] *Eragrostis minor* Host (*E. poaeoides* R. & S.)	Love Grass	Waste places, for example railroad ballast (Zimmerman 1947:65).		✧						✧	1
Eragrostis pectinacea (Michx.) Nees	Love Grass	Lake sands, river bars and strands, sandy waste areas, railroad ballast, roadways.		✧		✧	✧			✧	3
Eragrostis spectabilis (Pursh) Steud.	Tumble Grass	Dry sandy and limey prairies, open sandy ground; may be weedy.	✧	✧		✧	✧			✧	3
[n] *Festuca arundinacea* Schreb.	Tall Fescue	A recent introduction from Europe; known only from a 1958 collection from Leland. WIS.	✧							✧	1
[n] *Festuca pratensis* Huds. (*F. elatior* L.)	Meadow Fescue	Often in damp sites, for example wet openings in alluvial woods, also railroad ballast and embankments, roadsides and pavement.	✧	✧			✧			✧	2
Festuca rubra L.	Red Fescue	A 1946 collection from a mowed lawn. WIS.		✧						✧	1
Festuca subverticillata (Pers.) Alexeev (*F. obtusa* Biehler)	Nodding Fescue	Wet woods and deciduous swamps, mesic woods; sometimes drier woods.	✧	✧		✧	✧			✧	3
Glyceria borealis (Nash) Batch.	Manna Grass	Glacial kettles, sphagnous sedge meadows, marshy openings in alluvial woods.	✧	✧			✧			✧	2
Glyceria canadensis (Michx.) Trin.	Rattlesnake Grass	Low meadows, streamside thickets, Alder and Tamarack swamps, sandy meadows.	✧	✧		✧	✧			✧	3

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **POACEAE (GRAMINAE)** **GRASS FAMILY** *(continued)*											
Glyceria grandis S. Wats.	Reed Manna Grass	Low meadows, streamside thickets, wet woods along drainages, Alder and Tamarack swamps.	✧	✧		✧	✧			✧	3
Glyceria septentrionalis Hitchc.	Manna Grass	Known only from an "open waste area, sandy soil, mesic" in T11N, R8E, Section 12. Swink and Wilhelm (1994:373) report it from the "shallow water of pond margins." This is one of the 5 native species known only from Caledonia Township (Table 13). WIS.					✧	✧	✧		1
Glyceria striata (Lam.) Hitchc.	Fowl Manna Grass	Low meadows, streamside thickets, seepy areas in alluvial woods, Alder and Tamarack swamps, cat-tail marshes, fens.	✧	✧		✧	✧			✧	4
Hierochloe odorata (L.) Beauv.	Sweet Grass	Sandy meadows, fens, Tamarack swamps.		✧			✧			✧	2
Hordeum jubatum L.	Squirrel-tail Grass	Mainly a roadside and railway weed, also waste areas; introduced? (Swink and Wilhelm 1994:405).	✧	✧		✧	✧			✧	5
Koeleria macrantha (Ledeb.) Schultes (*K. cristata* of authors, not Pers.)	June Grass	Dry prairies, mainly sandy, sometimes limey, quartzite and rhyolite glades.	✧	✧		✧	✧			✧	3
Leersia lenticularis Michx.	Catchfly Grass	Deciduous swamps along the Wisconsin River and up the Baraboo River to at least Section 19 in T12N, R9E; near its northern range limit (McCormac 1993).				✧	✧	✧		✧	2
Leersia oryzoides (L.) Sw.	Cut Grass	Low meadows, wet depressions such as glacial kettles, riparian thickets; often growing in a distinct zone.	✧	✧		✧	✧			✧	3
Leersia virginica Willd.	White Grass	Seepy and marshy areas within deciduous forests, where often spreading along unimproved roadways, also hardwood swamps and adjoining low meadows.	✧	✧		✧	✧			✧	3
[n] *Lolium perenne* L.	Ryegrass	Weedy along trails and roads, and in lawns, although sometimes an ingredient of the original lawn mix and hence deliberately planted; also a forage grass, whence sometimes escaping into cropland.	✧	✧		✧	✧			✧	2
Milium effusum L.	Milletgrass	Mesic to often moist deciduous woods.	✧	✧		✧	✧			✧	3
[n] *Miscanthus sacchariflorus* (Maxim.) Franch.	Pampas Grass	An escape from cultivation as a garden ornamental; first collected in the study area in 1968. For this species in Wisconsin, see Freckmann (1973).	✧	✧						✧	2
Muhlenbergia frondosa (Poir.) Fern.	Muhly Grass	Open woods and shores, often moist sites.	✧	✧		✧	✧			✧	3
Muhlenbergia glomerata (Willd.) Trin.	Marsh Wild-timothy	Fens, loamy prairies where presumably limey. Known only from Leech Creek fen and Cady's Marsh. KL.					✧			✧	1
Muhlenbergia mexicana (L.) Trin.	Muhly Grass	Alkaline meadows and fens where often on ant mounds (Carpenter and DeWitt 1993), also dry to moist, often limey deciduous woods, especially disturbed sites; in Devil's Lake State Park known only from an alkaline meadow between the east and south bluffs.	✧	✧		✧	✧			✧	3

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **POACEAE (GRAMINAE)** **GRASS FAMILY** *(continued)*											
Muhlenbergia racemosa (Michx.) BSP.	Muhly Grass	Dry open cliffs and bluff prairies, dry sandy prairies.		✧		✧	✧			✧	2
Muhlenbergia schreberi J. F. Gmel.	Nimblewill	Dry to damp woods, especially where disturbed, also weedy in low meadows, along roads.	✧	✧			✧			✧	2
Muhlenbergia sobolifera (Willd.) Trin.	Muhly Grass	Rocky wooded bluffs, also mesic woods, especially clearings.	✧	✧						✧	2
Muhlenbergia sylvatica Torr.	Muhly Grass	Moist ground and stream borders in mesic deciduous woods.	✧	✧		✧	✧			✧	2
Muhlenbergia tenuiflora (Willd.) BSP.	Muhly Grass	Relatively dry deciduous woods.	✧	✧		✧	✧			✧	2
Oryzopsis asperifolia Michx.	Ricegrass	Deciduous and mixed forests, mainly relatively dry sites, also quartzite glades.	✧	✧		✧				✧	3
Oryzopsis pungens (Spreng.) Hitchc.	Ricegrass	Dry sandy deciduous and mixed forests and associated quartzite glades and sandstone outcrops; a northern species, here near the southern limit of its range.	✧	✧		✧				✧	2
Oryzopsis racemosa (Sm.) Hitchc.	Ricegrass	Deciduous and mixed forests, including Hemlock stands, mainly mesic sites and often limey.	✧	✧		✧				✧	3
Panicum acuminatum Sw. var. *fasciculatum* (Torr.) Lelong and var. *lindheimeri* (Nash) Lelong	Panic Grass	Sandy ground, dry to damp.	✧	✧		✧				✧	2
Panicum boreale Nash	Panic Grass	Sandy meadows, drier woods. WIS, MIL.	✧				✧			✧	**1**
Panicum capillare L.	Witch Grass	Dry to moist open ground, generally where disturbed, for example degraded prairies, roadsides, railroads, waste areas.	✧	✧		✧	✧			✧	3
Panicum columbianum Scribn.	Panic Grass	Drier prairies, usually sandy, often where disturbed. WIS.		✧		✧				✧	**1**
Panicum commonsianum Ashe var. *euchlamydeum* (Shinners) Pohl *(P. euchlamydeum* Shinners)	Panic Grass	Dry sandy prairies, sandy roadsides.	✧			✧				✧	2
Panicum depauperatum Muhl.	Panic Grass	Dry sandy open ground, open oak woods.	✧			✧	✧			✧	2
Panicum dichotomiflorum Michx.	Panic Grass	Disturbed open ground, often moist, including lake shores and river bars, also degraded prairies and roadsides.	✧	✧		✧	✧			✧	2
Panicum latifolium L.	Panic Grass	Dry to mesic woods in a variety of soils.	✧	✧		✧	✧			✧	3
Panicum leibergii (Vasey) Scribn.	Panic Grass	Dry limey prairies.				✧	✧			✧	3
Panicum linearifolium Britt.	Panic Grass	Drier deciduous or mixed woods, usually sandy; often in disturbed sites.	✧	✧		✧				✧	2
Panicum meridionale Ashe	Panic Grass	Dry sandy prairies and oak woods, also wet sand, for example the shoreline of Devil's Lake. WIS.		✧						✧	1

(continued on next page)

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **POACEAE (GRAMINAE)** **GRASS FAMILY** *(continued)*											
Panicum oligosanthes Schultes var. *scribnerianum* (Nash) Fern.	Panic Grass	Dry, usually sandy prairies and oak woods.	✧	✧		✧	✧			✧	3
Panicum perlongum Nash	Panic Grass	Dry sandy and limey prairies, open oak woods.	✧	✧		✧	✧			✧	2
Panicum philadelphicum Trin. *(P. tuckermani* Fern.)	Panic Grass	Moist to wet sand of river and lake borders. WIS, AC.		✧			✧	✧		✧	1
Panicum praecocius H. &. C.	Panic Grass	Dry sandy and limey prairies, open oak woods.	✧			✧	✧			✧	2
Panicum rigidulum Nees *(P. agrostoides* Spreng.)	Panic Grass	Sandbars and sloughs; local. WIS, MIL, KL.				✧		✧		✧	1
Panicum virgatum L.	Switch Grass	Dry sandy and limey prairies, sandy shores and sandbars, sandy meadows, also roadsides and railroads.	✧	✧		✧	✧			✧	4
SC *Panicum wilcoxianum* Vasey	Panic Grass	Known only from dry sandy prairie in Prairie du Sac Township. WIS.					✧			✧	1
Panicum xanthophysum Gray	Panic Grass	Known only from a bluff top, "in tufts," a 1937 collection, Marquette University Herbarium.		✧						✧	1
Paspalum setaceum Michx. *(P. ciliatifolium* Michx.)		Dry sandy prairies, also sandy roadsides.				✧	✧			✧	2
Phalaris arundinacea L.	Reed Canary Grass	Widespread in wetlands: low meadows, cat-tail marshes, fens, marshy sloughs, low thickets, Leather-leaf bogs, Tamarack swamps. Widely planted in the 1930s for hay and pasture (Lange 1980*b*), hence both native and naturalized strains are present. Tends to proliferate and form dense monocultures (Apfelbaum and Sams (1987). This species dominated the marsh at the southwestern corner of Devil's Lake 9 years after the high water of 1973 (Figures 31 and 32).	✧	✧		✧	✧			✧	5
[n] *Phleum pratense* L.	Timothy	Disturbed ground generally, including fields, roadsides, and railways, also spreading into woods, sandy meadows; widely cultivated for hay.	✧	✧		✧	✧			✧	5
Phragmites australis (Cav.) Steud.	Reed	Tamarack swamps, low thickets, swales; often in water. WIS.	✧				✧			✧	1
Poa alsodes Gray	Bluegrass	Relatively cool and shaded seepage areas in ravines and along the bases of bluffs.	✧							✧	2
[n] *Poa annua* L.	Annual Bluegrass	Lawns, trails in woods, along shaded sidewalks and roadways, lake shores and river banks.	✧	✧		✧	✧			✧	3
[n] *Poa compressa* L.	Canada Bluegrass	Virtually ubiquitous in drier habitats, generally not in wetter sites.	✧	✧		✧	✧			✧	5
Poa nemoralis L.	Bluegrass	Known only from dry rocky woods in Devil's Lake State Park, where first collected in 1946. WIS.		✧						✧	1

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **POACEAE (GRAMINAE)** **GRASS FAMILY** *(continued)*											
T *Poa paludigena* Fern. & Wieg.	Bluegrass	Known from the Black Ash-Alder swamp on the Wisconsin Society for Ornithology's Honey Creek property, where first reported by Hartley (1962:316 & 317, 126); represented most recently by a 1992 collection. In 1997 found in an Alder thicket in Mirror Lake State Park. WIS, KL, AC.	✧				✧			✧	1
Poa palustris L.	Fowl Meadow Grass	Sedge meadows, Alder thickets, fens.	✧	✧			✧			✧	2
n *Poa pratensis* L.	Kentucky Bluegrass	Virtually ubiquitous except the wettest sites.	✧	✧		✧	✧			✧	5
n *Poa trivialis* L.	Bluegrass	Local in swampy ground, including lowland forests, mucky river shores, Alder thickets.	✧			✧				✧	2
Schizachne purpurascens (Torr.) Swallen	Purple Melic	Deciduous and mixed woods, sandy or limey soil.	✧	✧		✧	✧			✧	3
Schizachyrium scoparium (Michx.) Nash (*Andropogon scoparius* Michx.)	Little Bluestem	Prairies, roadsides and railroads, in a variety of soils.	✧	✧		✧	✧			✧	4
n *Secale cereale* L.	Rye	Mainly along roads and railways; the cultivated crop plant.	✧	✧		✧	✧			✧	3
n *Setaria faberi* Herrm.	Giant Foxtail	Roadsides, agricultural fields; the earliest collection is 1954. This weed of cultivated ground has increased rapidly in recent years in the Chicago region (Swink and Wilhelm 1994:695). WIS, International Crane Foundation Herbarium.	✧				✧			✧	1
n *Setaria glauca* (L.) Beauv. (*S. lutescens* (Wiegel) F.T. Hubb.)	Yellow Foxtail	Widespread in dry open sites in a variety of soils.	✧	✧		✧	✧			✧	5
n *Setaria verticillata* (L.) Beauv.	Bristly Foxtail	Uncommon in dry open places.				✧	✧			✧	2
n *Setaria viridis* (L.) Beauv.	Green Foxtail	Widespread in dry open sites in a variety of soils; more salt tolerant than *S. glauca*?	✧	✧		✧	✧			✧	5
Sorghastrum nutans (L.) Nash	Indian Grass	Dry prairies in a variety of soils, quartzite and rhyolite glades; sometimes in lowlands.	✧	✧		✧	✧			✧	3
Spartina pectinata Link	Cordgrass	Sedge meadows, alkaline meadows, swales in sandy meadows, wet sandy shores.	✧	✧		✧	✧			✧	3
Sphenopholis obtusata (Michx.) Scribn. (incl. *S. intermedia* (Rydb.) Rydb.)	Wedgegrass	Dry woods and ledges, roadsides, also damp sites in deciduous woods, sandy meadows.		✧		✧	✧			✧	2
a *Sporobolus compositus* (Poir.) Merr. (*S. asper* (Michx.) Kunth)	Dropseed	Road shoulders and railroad ballast; first collected in the study area in 1973. WIS, AC.	✧				✧			✧	1
Sporobolus cryptandrus (Torr.) Gray	Dropseed	Dry sandy and limey prairies, also roadsides and railroads, old fields.	✧	✧		✧	✧			✧	3
Sporobolus heterolepis (Gray) Gray	Prairie Dropseed	Dry sandy and limey prairies, quartzite and rhyolite glades, loamy prairies.	✧	✧		✧	✧			✧	3

(continued on next page)

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ POACEAE (GRAMINAE)											
GRASS FAMILY *(continued)*											
Sporobolus neglectus Nash (incl. *S. vaginiflorus* (Torr.) Wood)	Dropseed	Dry sandy and limey prairies, quartzite glades, sandy shores, also road shoulders.	✧	✧		✧	✧			✧	3
Stipa spartea Trin.	Needle Grass	Dry prairies, sandy or limey.	✧	✧		✧	✧			✧	3
[a] *Triplasis purpurea* (Walt.) Chapman	Sand Grass	Collected near Spring Green in 1957 and 1968; adventive from farther west or south. WIS.				✧		✧		✧	1
Vulpia octoflora (Walt.) Rydb. (*Festuca octoflora* Walt.)	Six-weeks Fescue	Dry sandy often disturbed ground, including fields, roadsides, also quartzite and rhyolite glades.	✧	✧		✧	✧			✧	3
[n] *Zea mays* L.	Corn	Occasionally appearing out of cultivation and persisting briefly.	✧	✧		✧	✧			✧	2
Zizania aquatica L.	Wild Rice	Marshy borders of rivers, streams, and ponds; mainly in shallow water. Cited as growing along the Wisconsin River in the original land survey of T12N, R8E in 1845. Still along the Wisconsin in certain places. Also along Honey Creek, for example in the Witwen area, and along the Baraboo River, for example between Reedsburg and LaValle. Certain populations, seemingly native, were actually introduced, for example the upper end of Mirror Lake where this species was planted in approximately 1930 by W.D. Cahoon; apparently it was not here before this time (W.D. Cahoon, personal communication, 1972).				✧	✧			✧	2
■ PONTEDERIACEAE											
PICKERELWEED FAMILY											
PR 16, 1932, Trans. WASAL 27:228-30											
Heteranthera dubia (Jacq.) MacM.	Water Star-grass	Lakes and sloughs.	✧	✧	✧	✧	✧	✧		✧	3
Pontederia cordata L.	Pickerelweed	Ponds and sloughs.				✧	✧	✧		✧	2
■ POTAMOGETONACEAE											
PONDWEED FAMILY											
PR 33, 1951, Trans. WASAL 40(2):93-110											
Potamogeton amplifolius Tuckerm.	Pondweed	Lakes, creeks and associated pools, sloughs.	✧	✧	✧	✧	✧			✧	3
[n] *Potamogeton crispus* L.	Curly Pondweed	Lakes, especially their drainages, also sloughs; tolerant of turbid and polluted water. Known in North America since the mid-1800s and the western Great Lakes region since about 1900 (Stuckey 1979); the first collections for the study area are from 1974.	✧	✧	✧	✧	✧			✧	2
Potamogeton diversifolius Raf.	Pondweed	Known only from Devil's Lake, where collected in 1974. KL.		✧	✧					✧	1
Potamogeton epihydrus Raf.	Pondweed	Lakes, creeks and associated pools, marshy ponds.	✧	✧	✧	✧	✧			✧	2

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ POTAMOGETONACEAE											
PONDWEED FAMILY *(continued)*											
Potamogeton foliosus Raf.	Pondweed	Pools, creeks, sloughs.		✧		✧	✧			✧	2
Potamogeton gramineus L.	Pondweed	Ponds and lakes, Wisconsin River bays.	✧	✧	✧		✧	✧		✧	2
Potamogeton illinoensis Morong	Pondweed	Known only from Devil's Lake and an embayment of Lake Redstone near LaValle. KL.		✧	✧	✧				✧	1
Potamogeton natans L.	Pondweed	Lakes and ponds. WIS.		✧	✧		✧			✧	1
Potamogeton nodosus Poir.	Pondweed	Wisconsin River sloughs, also ponds and lakes.	✧		✧	✧	✧			✧	2
Potamogeton pectinatus L.	Sago Pondweed	Marshy ponds and lakes, sloughs.				✧	✧			✧	2
Potamogeton pusillus L. (incl. *P. berchtoldii* Fieber)	Pondweed	Lakes, marshy ponds, sloughs.	✧	✧	✧		✧	✧		✧	2
Potamogeton robbinsii Oakes	Pondweed	Lakes and marshy ponds. WIS, KL.		✧	✧	✧		✧		✧	1
Potamogeton spirillus Tuckerm.	Pondweed	Lakes and marshy ponds. KL.		✧	✧		✧	✧		✧	1
Potamogeton strictifolius Benn.	Pondweed	Known only from Seeley Lake in Freedom Township, where collected in 1986. KL.	✧							✧	1
SC *Potamogeton vaseyi* Robbins	Pondweed	Lakes, ponds. WIS, MIL.		✧	✧		✧	✧		✧	1
Potamogeton zosteriformis Fern.	Pondweed	Marshy ponds and lakes, sloughs.	✧			✧	✧	✧		✧	2
■ SMILACACEAE											
SMILAX FAMILY											
PR 34, 1950, Trans. WASAL 40(1):228-29, 235											
Smilax ecirrata (Kunth) S. Wats.	Upright Smilax	Low forests and swamps, Sugar Maple woods, oak woods.	✧	✧		✧	✧			✧	3
Smilax illinoensis Mangaly	Carrion-flower	Deciduous woods and thickets. See Mangaly (1968) for a description and illustration of this species.	✧			✧				✧	2
Smilax lasioneura Hook. (incl. *S. herbacea* L.)	Carrion-flower	Deciduous woods, upland and lowland, especially along their borders, also thickets, hedgerows.	✧	✧		✧	✧			✧	3
Smilax tamnoides L. (*S. hispida* Torr.)	Greenbrier	Deciduous woods, upland and lowland, also thickets, hedgerows, clearings.	✧	✧		✧	✧			✧	3
■ SPARGANIACEAE											
BUR-REED FAMILY											
PR 6, 1930, Trans. WASAL 25:186-87											
Sparganium americanum Nutt.	Bur-Reed	Bur-reeds colonize wet shores, marshy areas, and the shallow water of ponds, lakes, creeks, and sloughs. KL.	✧			✧				✧	2
Sparganium erectum L. (*S. chlorocarpum* Rydb.)	Bur-Reed			✧						✧	1
Sparganium eurycarpum Engelm.	Bur-Reed					✧	✧			✧	2

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **TYPHACEAE**											
CAT-TAIL FAMILY											
PR 6, 1930, Trans. WASAL 25:183-84											
Typha augustifolia L.	Narrow-leaved Cat-tail	Lake shores, sloughs, swales. All records are recent (since 1974).		✧	✧	✧	✧			✧	2
Typha latifolia L.	Common Cat-tail	Widespread in wet or seasonally wet open ground, often in shallow water; especially numerous in certain low meadows and marshes along the Wisconsin River and in the Bear Creek drainage.	✧	✧		✧	✧			✧	5
■ **XYRIDACEAE**											
YELLOW-EYED-GRASS FAMILY											
PR 16, 1932, Trans. WASAL 27:227, 229											
Xyris torta Sm.	Yellow-eyed-grass	Damp to wet sandy shores, sandy meadows, open wet sandy ditches.					✧			✧	2
■ **ZANNICHELLIACEAE**											
HORNED PONDWEED FAMILY											
PR 33, 1951, Trans. WASAL 40(2):107, 110											
Zannichellia palustris L.	Horned Pondweed	Sloughs and springy areas; known only from Spring Green Township. KL.				✧		✧		✧	1

DICOTS

■ **ACERACEAE**											
MAPLE FAMILY											
PR 8, 1930, Trans. WASAL 25:195-97											
Acer negundo L.	Box-elder	Mainly lowlands and river bottoms, also weedy in a variety of disturbed sites. The range of this species has been extended by introductions and the escaping of cultivars (Fassett 1930*b*), and probably with the disturbances accompanying historic land settlement.	✧	✧		✧	✧			✧	5
Acer rubrum L.	Red Maple	Characteristic of Red Oak forests, but in a variety of deciduous and mixed woods, upland and lowland, also Tamarack swamps, low thickets and sedge meadows bordering lowland woods.	✧	✧		✧	✧			✧	5
Acer saccharinum L.	Silver Maple	Mainly bottomland forests of the Wisconsin River, Baraboo River, and Honey Creek. It is not known if this species was present at Devil's Lake before 1921, when a number of "soft maple trees from the lowlands of the Wisconsin River" were planted at the lake (*Sauk County News* 10 November 1921).	✧	✧		✧	✧			✧	4

			Locality and Abundance Code							
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **ACERACEAE**											
MAPLE FAMILY *(continued)*											
Acer saccharum Marsh. (incl. *A. nigrum* Michx. f.)	Sugar Maple	Deciduous and mixed forests, typically with Basswood, Yellow Birch, and/or Hemlock, rarely swampy areas. The best developed stands are in sites relatively protected from fire and strong wind. See Lange (1990:17) for a more detailed discussion of the distribution of this species in the study area. Black Maple (*A. nigrum*) is recognized as a full species in Kartesz (1994, 1:30).	✧	✧		✧	✧			✧	4
Acer spicatum Lam.	Mountain Maple	Cool wooded ravines, bases and slopes of north facing timbered bluffs, Hemlock stands; may form thickets, often with Red Elder.	✧	✧		✧	✧			✧	3
■ **ADOXACEAE**											
MOSCHATEL FAMILY											
PR 64, 1974, Trans. WASAL 62:247-51											
T *Adoxa moschatellina* L.	Moschatel	Known only from sandstone bluffs in Yellow Birch-Hemlock stands in LaValle Township; on moss-liverwort beds, with ferns and *Pilea pumila* (Figure 45). WIS, KL.				✧				✧	1
■ **AIZOACEAE**											
CARPETWEED FAMILY											
[a] *Mollugo verticillata* L.	Carpetweed	Open dry sites, including sandy fields, sand blows, sand bars and banks, road shoulders, railroad ballast. First collected in the study area in Baraboo in 1891; adventive from farther south.	✧	✧		✧	✧			✧	4
■ **AMARANTHACEAE**											
AMARANTH FAMILY											
PR 45, 1961, Trans. WASAL 50:75-87											
Amaranthus albus L.	Tumbleweed	Weedy prairies. WIS.				✧				✧	1
Amaranthus blitoides S. Wats. (*A. graecizans* of authors, not L.)	Amaranth	Disturbed sites, including road shoulders, weedy prairie; adventive from western North America? WIS.				✧	✧			✧	1
[n] *Amaranthus hybridus* L.	Green Amaranth	Known only from a 1988 collection from a weedy marsh, mainly in *Phalaris*; adventive? KL.		✧						✧	1
[n] *Amaranthus retroflexus* L.	Pigweed	Weedy in gardens, agricultural land, roadside; first collected in the study area in a Baraboo garden in 1892.	✧	✧		✧	✧			✧	4
Amaranthus tuberculatus (Moq.) J.D. Sauer (*Acnida altissima* (Riddell) Standl and var. *subnuda* (S. Wats.) Fern.)	Amaranth	Damp to wet shorelines of creeks and rivers, lowland fields, wet ditches, roadsides.				✧	✧			✧	3
Froelichia floridana (Nutt.) Moq.	Cottonweed	Dry open sandy ground, especially sites with shifting sand, also sandstone cliffs and hillsides.				✧	✧			✧	3

(continued on next page)

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ AMARANTHACEAE											
AMARANTH FAMILY *(continued)*											
[a] *Froelichia gracilis* (Hook.) Moq.	Cottonweed	Collected in 1956 from a sandy roadside; generally considered native of western America, west of the Mississippi River (Sauer and Davidson 1961:86). WIS.				✧				✧	1
■ ANACARDIACEAE											
SUMAC FAMILY											
PR 29, 1940, Trans. WASAL 32:103-06											
SC *Rhus aromatica* Ait. (incl. *R. arenaria* (Greene) G. N. Jones & *R. trilobata* Nutt.)	Fragrant Sumac	Dry, thinly wooded, limey sandstone cliffs and hillsides in Caledonia Township; in Sauk County represented by a single plant in a hedgerow amid fields and deciduous woods on an old farm in Baraboo Township, where first noted in 1991 (M.C. Barrett and S.P. Weber). Based upon herbarium specimens, known in Wisconsin from a total of 5 counties. WIS, KL.	✧				✧			✧	1
Rhus copallina L.	Winged Sumac	Dry, thinly wooded sandstone, conglomerate, and quartzite outcrops, also dry sandy Black Oak woods. Based upon herbarium specimens, known in Wisconsin from a total of 14 counties.	✧	✧		✧				✧	2
Rhus glabra L.	Smooth Sumac	Widespread in dry, open and semi-open sites, but mainly edge habitats; ranging into drier sites than Staghorn Sumac.	✧	✧		✧	✧			✧	5
Rhus typhina L.	Staghorn Sumac	Widespread in dry, open and semi-open sites, but mainly edge habitats; see Smooth Sumac.	✧	✧		✧	✧			✧	5
Toxicodendron radicans (L.) Kuntze (*Rhus radicans* L.)	Poison-ivy	Woods and thickets and also in full sun, often weedy. A vine or low shrub, rarely tree-like.	✧	✧		✧	✧			✧	5
Toxicodendron vernix (L.) Kuntze (*Rhus vernix* L.)	Poison Sumac	Sedge meadows, Leather-leaf bogs, Tamarack swamps, low sandy woods, fens; in Devil's Lake State Park known only from an alkaline meadow between the east and south bluffs.		✧			✧			✧	3
■ APIACEAE (UMBELLIFERAE)											
PARSLEY FAMILY											
Mathias and Constance [1967]											
Angelica atropurpurea L.	Angelica	Sunny or shady, springy mucky ground, including sedge meadows, fens and alkaline meadows, Tamarack swamps, Alder thickets, ditches.	✧	✧		✧	✧			✧	3
Berula erecta (Huds.) Cov. (*B. pusilla* (Nutt.) Fern.)		Known only from Leech Creek fen. KL.					✧			✧	1
[n] *Carum carvi* L.	Caraway	Occasionally escaping to roadsides. Reported for the late 1800s from the Greenfield bluffs (*Baraboo News Republic* 28 February 1983) and the "wagon road" between Prairie du Sac and Baraboo (Cheney 1899:70). The source of caraway seeds.	✧				✧			✧	2

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **APIACEAE (UMBELLIFERAE)**											
PARSLEY FAMILY *(continued)*											
Cicuta bulbifera L.	Water-hemlock	Low meadows, fens and alkaline meadows, cat-tail marshes, Alder thickets, mucky shores; in Devil's Lake State Park known only from an alkaline meadow between the east and south bluffs.	✧	✧			✧			✧	3
Cicuta maculata L.	Water-hemlock	Low meadows, fens, sandy meadows, Alder thickets, Tamarack swamps, marshy openings in hardwood forests.	✧	✧		✧	✧			✧	4
Cryptotaenia canadensis (L.) DC.	Honewort	Deciduous woods, upland and lowland, often swampy sites; may be weedy in bare ground.	✧	✧		✧	✧			✧	4
[n] *Daucus carota* L.	Wild Carrot; Queen-Anne's-lace	Fields, roadsides, and other disturbed places. The garden carrot is derived from this species.	✧	✧		✧	✧			✧	5
[n] *Eryngium planum* L.	Eryngo	A garden perennial established in lawns at Devil's Lake State Park, where it was first collected in 1946. WIS, KL.		✧						✧	1
Eryngium yuccifolium Michx.	Rattlesnake-master	Once occurred here (Lueders 1895:518), but there are no specimens. Now planted in a number of areas; spreading?	✧				✧			✧	1
Heracleum maximum Bartr. (*H. lanatum* Michx.)	Cow-parsnip	Low meadows and thickets, marshy streamsides, wet borders of woods, moist roadsides.	✧			✧	✧			✧	3
Hydrocotyle americana L.	Water-pennywort	Seepy streamsides and depressions, usually where shaded and cool, also Tamarack swamps, Alder thickets, low sandy woods, sedge meadows.	✧	✧		✧	✧			✧	3
Osmorhiza claytonii (Michx.) C. B. Clarke	Sweet Cicely	Mainly upland forests, including Jack Pine-oak woods and Hemlock stands, also lowland hardwood forests. Often in drier sites than the next species.	✧	✧		✧	✧			✧	4
Osmorhiza longistylis (Torr.) DC.	Sweet Cicely	Often in relatively moist, cool forests, but in a variety of wooded habitats; see *O. claytonii.*	✧	✧		✧	✧			✧	3
Oxypolis rigidior (L.) Raf.	Cowbane	Low meadows and thickets, fens and alkaline meadows, sandy meadows, low sandy woods, wet roadsides.	✧	✧			✧			✧	3
[n] *Pastinaca sativa* L.	Parsnip	Fields, roadsides, and other disturbed places. The plants growing wild have presumably spread from cultivation, as strains are grown for their edible roots.	✧	✧		✧	✧			✧	5
T *Polytaenia nuttallii* DC.	Prairie-parsley	Found in 2 rhyolite glades in the Baraboo Hills in 1968—a total of more than 100 plants, but in 1992 only 2 stems were noted in the larger of these glades. Also in a quartzite glade in Devil's Lake State Park, where 3 plants were noted in 1946 (Zimmerman 1947:90); this station was rediscovered in 1992—a total of 6 non-flowering stems. Also in a sandy meadow in Caledonia Township in 1974.	✧	✧			✧			✧	2
Sanicula canadensis L.	Black Snakeroot	Relatively open deciduous woods and savannas. KL, AC.					✧			✧	1

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ APIACEAE (UMBELLIFERAE) **PARSLEY FAMILY** *(continued)*											
Sanicula marilandica L.	Black Snakeroot	Deciduous woods, dry to mesic, also Hemlock stands.	✧	✧		✧	✧			✧	3
Sanicula odorata (Raf.) K.M. Pryer & L.R. Phillippe (*S. gregaria* Bickn.)	Black Snakeroot	Deciduous woods, upland and lowland.	✧	✧		✧	✧			✧	4
Sanicula trifoliata Bickn.	Black Snakeroot	Deciduous woods, generally mesic.	✧							✧	2
Sium suave Walt.	Water-parsnip	Wet marshy depressions, for example glacial kettles, also sedge meadows, loamy prairies, cat-tail marshes, marshy sloughs, river shores.	✧	✧		✧	✧			✧	3
Taenidia integerrima (L.) Drude	Yellow-pimpernel	Known only from a roadside colony in Westfield Township. KL.				✧				✧	1
Zizia aurea (L.) W.D.J. Koch	Golden Alexander	Deciduous woods, especially swampy or springy sites, also fens and alkaline meadows, loamy prairies, railroads.	✧	✧		✧	✧			✧	3
■ APOCYNACEAE **DOGBANE FAMILY**											
Apocynum androsaemifolium L.	Spreading Dogbane	Dry prairies, forest edges, dry woods, in a variety of soils; also railroad ballast.	✧	✧		✧	✧			✧	4
Apocynum cannabinum L. (*A. sibiricum* Jacq.; incl. *A. cannabinum* L. var. *pubescens* (R. Br.) Woods.)	Indian Hemp	Dry prairies, sandy or limey, sandy meadows; also railroad ballast.	✧	✧		✧	✧			✧	3
[n] *Vinca minor* L.	Common Periwinkle	Occasionally spreading from ground-cover plantings, for example by buildings, cemeteries.	✧	✧		✧	✧			✧	2
■ AQUIFOLIACEAE **HOLLY FAMILY**											
Ilex verticillata (L.) Gray	Winterberry	Swamps, wet pockets in woods, low thickets, marshy borders.	✧	✧		✧	✧			✧	4
Nemopanthus mucronatus (L.) Loes.	Mountain Holly	Low sandy woods, Tamarack swamps, low thickets, sedge meadows, marshy borders.					✧			✧	2
■ ARALIACEAE **GINSENG FAMILY** PR 35, 1950, Trans. WASAL 40(1):83-85											
Aralia hispida Vent.	Bristly Sarsaparilla	Exposed outcrops of sandstone and quartzite, and associated dry sandy woods. A colony in Devil's Lake State Park noted by J.H. Zimmerman in 1946 persisted until 1990.	✧	✧			✧			✧	2
Aralia nudicaulis L.	Wild Sarsaparilla	A widespread ground-cover plant of oak and Jack Pine-oak woods, Sugar Maple forests, Hemlock stands; often forms large colonies. Commonly associated with Big-leaved Aster.	✧	✧		✧	✧			✧	4

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **ARALIACEAE**											
GINSENG FAMILY *(continued)*											
Aralia racemosa L.	Spikenard	Usually mesic and often moist deciduous or mixed forests, Hemlock stands; often along edges.	✧	✧		✧	✧			✧	3
SC *Panax quinquefolius* L.	Ginseng	Deciduous and mixed forests, where often in relatively moist sites, also pine plantations within deciduous forest (Figure 50). The "Sang" of commerce (Schorger 1969).	✧	✧		✧				✧	3
Panax trifolius L.	Dwarf Ginseng	Deciduous and mixed forests, typically swampy or boggy places.	✧				✧			✧	2
■ **ARISTOLOCHIACEAE**											
BIRTHWORT FAMILY											
Asarum canadense L.	Wild Ginger	Moist shaded slopes and associated creek or river bottoms in deciduous and mixed forests, often where limey; in Devil's Lake State Park known only from Parfrey's Glen.	✧	✧		✧	✧			✧	3
■ **ASCLEPIADACEAE**											
MILKWEED FAMILY											
PR 40, 1957, Trans. WASAL 46:107-14											
Asclepias amplexicaulis Sm.	Wavy-leaved Milkweed	Dry sandy and especially limey prairies, abandoned fields where limey.	✧	✧		✧	✧			✧	3
Asclepias exaltata L.	Tall Milkweed	Dry to mesic deciduous and mixed forests, often along their borders, in a variety of soils.	✧	✧		✧	✧			✧	3
Asclepias hirtella (Pennell) Woods.	Green Milkweed	Sandy meadows, sedge meadows, loamy prairies; known from Cady's Marsh in Reedsburg Township, and Delton, Fairfield, and Caledonia Townships.					✧			✧	2
Asclepias incarnata L.	Swamp Milkweed	Low meadows, sandy meadows, cat-tail marshes, fens and alkaline meadows, loamy prairies, Alder thickets, Tamarack swamps, marshy sloughs, marshy openings within hardwood forests.	✧	✧		✧	✧			✧	4
T *Asclepias lanuginosa* Nutt.	Woolly Milkweed	Dry prairies, limey or sandy, also open sandy disturbed areas, for example powerline swaths. In the Baraboo Hills known only from a limey hill prairie at the west end of the South Range, where in 1981 a total of approximately 90 flowering stems was noted; in 1992 and 1993 this species could not be found at this station. In 1993 it also could not be relocated at another station, also a limey hill prairie, where it had been found in 1956. The most recent record (A. Clark) is a total of 7 stems in a several acre patch of prairie sod on the terminal moraine of the Wisconsin Glacier in the former Sauk Prairie in 1993 (Figure 44).	✧			✧	✧			✧	2

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **ASCLEPIADACEAE** **MILKWEED FAMILY** *(continued)*											
T *Asclepias ovalifolia* Dcne.	Oval-leaved Milkweed	Recent (1970s and 1980s) records are from sandy Black Oak woods and Jack Pine-oak woods; associated ground-cover plants include *Carex pensylvanica* and prairie species. Two University of Wisconsin-Madison Herbarium specimens, labelled "N. of Baraboo, Wis., Sandy roadside" (1893) and "Baraboo, Wis." (no date) are of uncertain location; they could be from the Baraboo Hills or the Central Plain, hence are herein regarded as Sauk County only.					✧			✧	2
E *Asclepias purpurascens* L.	Purple Milkweed	In 1966 a total of at least 30 plants was noted in Devil's Lake State Park along and in an approximately 30-year-old White Pine plantation just north of the Badger Army Ammunition Plant; 2 of these plants bloomed that year, and one set seed. In 1978 one plant was in bloom, and in 1985 a group of 4 plants was noted. Then in 1993 single flowering stems were found in 3 different areas along and near the Badger Army Ammunition Plant fence to the east of the plantation (Figure 43), suggesting that this species is spreading. Perhaps this is a remnant population from the historic Sauk Prairie. Also noted in 1993 (a single plant) in an old field bordering deciduous woods in Baraboo Township (M.C. Barrett and S.P. Weber). Sight records also for the Western Upland, for example Troy Township in 1991 (J. Barzen). KL.	✧	✧		✧	✧			✧	1
Asclepias syriaca L.	Common Milkweed	Dry prairies, dry sandy woods, dry weedy places, also sedge meadows, alkaline meadows, loamy prairies, sandy meadows. This milkweed may be expanding its range here, as in the southeastern United States (Wyatt et al. 1993).	✧	✧		✧	✧			✧	5
Asclepias tuberosa L.	Butterfly-weed	Dry prairies in sandy and limey soil, also rhyolite and (rarely) quartzite glades; occasionally in dry woods bordering prairie.	✧	✧		✧	✧			✧	3
Asclepias verticillata L.	Whorled Milkweed	Dry open sites in a variety of soils; weedy, like *A. syriaca*.	✧	✧		✧	✧			✧	5
Asclepias viridiflora Raf.	Green Milkweed	Dry limey prairies, also dry sand; usually just 1-6 stems at a given station.	✧			✧	✧			✧	3
■ **ASTERACEAE (COMPOSITAE)** **COMPOSITE FAMILY** Shinners 1941; PR 48, 1963, Trans. WASAL 52:255-342; PR 49, 1963, Trans. WASAL 52:343-52; PR 50, 1963, Trans. WASAL 52:353-82; PR 55, 1966, Trans. WASAL 55:187-222; PR 56, 1966, Trans. WASAL 55:223-42; PR 62, 1970, Trans. WASAL 58:353-71											
Achillea millefolium L.	Yarrow, Milfoil	Widespread in a variety of sunny disturbed sites.	✧	✧		✧	✧			✧	5
[n] *Achillea ptarmica* L.	Sneezeweed	A roadside colony noted in 1988. KL.		✧						✧	1

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **ASTERACEAE (COMPOSITAE)** **COMPOSITE FAMILY** *(continued)*											
Ambrosia artemisiifolia L.	Common Ragweed	Weedy in agricultural land and other sunny disturbed places, also prairies, open woods.	✧	✧		✧	✧			✧	5
Ambrosia psilostachya DC.	Western Ragweed	Dry open places, including disturbed sites, usually sandy soil, sometimes limey.				✧	✧			✧	2
Ambrosia trifida L.	Giant Ragweed	Low meadows and thickets, marshy sloughs, wet or swampy woods, ditches, occasionally in relatively dry disturbed places.	✧	✧		✧	✧			✧	3
Anaphalis margaritacea (L.) Benth.	Pearly Everlasting	Dry, relatively open and cool oak woods or mixed forests, usually sandy soil.	✧	✧			✧			✧	2
Antennaria howellii Greene (incl. *A. neodioca* Greene and *A. petaloidea* (Fern.) Fern.)	Pussytoes	Species of *Antennaria* occur mainly in dry open ground, such as sandy woods and Red Cedar glades, especially their borders and openings, also fields and other grassy places, prairies, pastures, and road cuts, but sometimes in rich soil or lowland sites. *A. parlinii* and *A. plantaginifolia* are herein recognized after Beals and Peters (1966).	✧			✧	✧			✧	2
Antennaria neglecta Greene	Pussytoes		✧		✧	✧				✧	3
Antennaria parlinii Fern. (*A. fallax* Greene & *A. munda* Fern.)	Pussytoes		✧	✧		✧	✧			✧	4
Antennaria plantaginifolia (L.) Richardson	Pussytoes		✧	✧		✧	✧			✧	3
[n] *Anthemis cotula* L.	Stinking Chamomile	A weed of agricultural land, especially barnyards, also roadsides, railroads.	✧	✧		✧	✧			✧	4
[n] *Arctium minus* Bernh.	Burdock	Weedy in disturbed places, sunny or shady; often in barnyards, waste areas, pastures, and other sites associated with livestock where the soil is high in nitrogen. The earliest reported collection for the study area (Columbia County) is 1926 Johnson and Iltis 1963:278); the earliest historic dates for the study area are 1872 for Wisconsin Dells, 1878 for Prairie du Sac, and 1880 for Baraboo (Lange 1980*b*).	✧	✧		✧	✧			✧	5
[n] *Artemisia absinthium* L.	Absinthe	Spreading from abandoned gardens into agricultural land. KL.	✧							✧	1
[a] *Artemisia biennis* Willd.	Wormwood, Sage	River shores, agricultural land. First collected in the study area in 1940; presumably native to western North America (Mickelson and Iltis 1966:211). WIS, KL.		✧			✧			✧	1
Artemisia campestris L. (*A. caudata* Michx.)	Wormwood, Sage	Dry prairies, sandy or limey, also weedy in disturbed places.	✧		✧	✧				✧	4
Artemisia ludoviciana Nutt. (*A. gnaphalodes* Nutt.)	Wormwood, Sage	Mainly dry sandy sites, especially along the Wisconsin River but also inland; sometimes in railroad ballast, for example Devil's Lake State Park.	✧	✧		✧	✧			✧	3

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			Locality and Abundance Code								
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■ **ASTERACEAE (COMPOSITAE)**											
COMPOSITE FAMILY *(continued)*											
Artemisia serrata Nutt.	Saw-leaf Mugwort	Alluvial meadows, wooded creek borders, Alder thickets, sandy meadows, alkaline meadows; in Devil's Lake State Park known only from an alkaline meadow between the east and south bluffs.	✧	✧		✧	✧			✧	2
Aster borealis (T. & G.) Prov. (*A. junciformis* Rydb.)	Rush Aster	Alkaline meadows and fens, loamy prairies, sandy meadows; in Devil's Lake State Park known only from an alkaline meadow between the east and south bluffs.		✧			✧			✧	2
Aster cordifolius L.	Heart-leaved Aster	Dry to mesic woods and their edges, roadside ditches.				✧				✧	3
Aster ericoides L. (*A. multiflorus* Ait.)	Heath Aster	Dry sandy or limey prairies, sandy meadows, sandy river banks and roadsides; in Devil's Lake State Park known only from a dry prairie on sandstone.		✧		✧	✧			✧	3
Aster fragilis Willd.	Small White Aster	Sandy meadows. For a discussion of this scientific name, see Jones (1980*b*:246).					✧			✧	2
Aster laevis L.	Smooth Aster	Dry prairies and dry open woods in a variety of soils, also sandy meadows; primarily an edge species?	✧	✧		✧	✧			✧	3
Aster lanceolatus Willd. (*A. paniculatus* Lam.; *A. simplex* Willd.)	Marsh Aster	Low meadows, low thickets, Tamarack swamps, low sandy woods, fens and alkaline meadows, cat-tail marshes, marshy sloughs, marshy openings within hardwood forests; more prevalent and numerous than *A. puniceus*, with which it is often associated.	✧	✧		✧	✧			✧	4
Aster lateriflorus (L.) Britt. (incl. *A. tradescantii* L.)	Calico Aster	Upland and lowland woods, shady or sunny, often in edge habitats and often weedy; rare in areas formerly prairie or savanna.	✧	✧		✧	✧			✧	5
Aster linariifolius L.	Flax-leaved Aster	Generally in open sandy sites but also in dry sandy woods, rarely in limey soils; in Devil's Lake State Park known only from Parfrey's Glen.	✧	✧		✧	✧			✧	3
Aster macrophyllus L.	Big-leaved Aster	Dry to mesic, especially Red Oak woods, where often in large colonies, especially after disturbance, for example logging; commonly associated with *Aralia nudicaulis*.	✧	✧		✧	✧			✧	4
Aster novae-angliae L.	New England Aster	Sedge meadows, fens and alkaline meadows, loamy prairies, marshy streamside thickets, low weedy fields and roadsides.	✧	✧		✧	✧			✧	3
Aster oblongifolius Nutt.	Oblong-leaved Aster	Often a dominant aster in dry sandy or limey prairies, quartzite or rhyolite glades.	✧	✧		✧	✧			✧	4
Aster ontarionis Wieg. (*A. pantotrichus* Blake in Wisconsin literature)	Ontario Aster	Primarily a riparian species; characteristic of the wooded bottoms of the Wisconsin and Baraboo Rivers. Also inland, for example swampy woods, edges of low meadows.	✧	✧		✧	✧			✧	3

			Locality and Abundance Code							
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■ **ASTERACEAE (COMPOSITAE)**											
COMPOSITE FAMILY *(continued)*											
Aster oolentangiensis Riddell (*A. azureus* Lindl.)	Azure Aster	Dry sandy or limey prairies and quartzite glades, dry oak woods, sandy meadows.	✧	✧		✧	✧			✧	3
Aster pilosus Willd.	Frost Aster	Weedy and often covering large areas in sunny disturbed sites, for example abandoned farm land.	✧	✧		✧	✧			✧	5
Aster prenanthoides Muhl.	Zig-zag Aster	Lowland hardwood forests and bordering thickets and meadows, marshy openings within deciduous woods.	✧	✧		✧	✧			✧	3
Aster puniceus L. (incl. *A. lucidulus* (Gray) Wieg.)	Red-stemmed Aster	Sedge meadows, Alder thickets, Tamarack swamps, low sandy woods, fens and alkaline meadows, marshy openings within decidous forests; less prevalent and numerous than *A. lanceolatus*, with which it is often associated.	✧	✧		✧	✧			✧	3
Aster sagittifolius Willd. (incl. *A. drummondii* Lindl. and *A. urophyllus* Lindl. as infraspecific taxa)	Arrow-leaved Aster	Mainly relatively dry woods, especially their borders and often in disturbed sites, also roadsides in wooded locales. Often in areas more open in the past; originally a species of oak savanna? The *A. sagittifolius* complex is a taxonomically difficult group, with differing interpretations of relationships; Jones (1980*a*, 1989), for example, includes the name, *A. sagittifolius* (of authors), in the synonymy of *A. cordifolius* L., *A. drummondii* Lindl., and *A. urophyllus* Lindl., and recognizes these 3 taxa as species.	✧	✧		✧	✧			✧	5
Aster sericeus Vent.	Silky Aster	Dry prairies, especially where limey but also sandy; on rhyolite but not quartzite. In Devil's Lake State Park known only from a dry prairie on sandstone.	✧	✧		✧	✧			✧	3
Aster shortii Lindl.	Short's Aster	Dry to often mesic woods.	✧	✧						✧	2
Aster umbellatus Mill.	Flat-topped White Aster	Sandy meadows, low sandy woods, low thickets, Tamarack swamps, alkaline meadows, roadside ditches; mainly in the Central Plain.	✧	✧		✧	✧			✧	3
Bidens cernuus L.	Bur-marigold	Pioneering on newly exposed ground after the receding of high water, also sedge meadows, marshy thickets.	✧	✧		✧	✧			✧	4
Bidens coronatus (L.) Britt.	Bur-marigold	Sedge meadows, alkaline meadows and fens, marshy ponds.				✧	✧			✧	2
Bidens discoideus (T. & G.) Britt.	Bur-marigold	Wet marshy ground. WIS.				✧	✧			✧	1
Bidens frondosus L.	Bur-marigold	Pioneering on newly exposed ground after the receding of high water, also sedge meadows, low sandy woods; sometimes weedy in relatively dry, disturbed places.	✧	✧		✧	✧			✧	3
Bidens tripartitus L. (*B. comosus* (Gray) Wieg.)	Bur-marigold	Pioneering on newly exposed ground after the receding of high water, also sedge meadows, cat-tail marshes.	✧	✧		✧	✧			✧	3

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **ASTERACEAE (COMPOSITAE)** **COMPOSITE FAMILY** *(continued)*											
Bidens vulgatus Greene	Bur-marigold	Sedge meadows and other marshy sites, also weedy in relatively dry, disturbed places.	✧	✧		✧	✧			✧	3
Boltonia asteroides (L.) L'Hér. (incl. *B. latisquama* Gray)		Banks, wet shores, swales and meadows along the Wisconsin River and up the Baraboo River for approximately a mile.				✧	✧	✧		✧	2
Brickellia eupatorioides (L.) Shinners (*Kuhnia eupatorioides* L.)	False Boneset	Dry especially limey prairies, roadsides; in the Baraboo Hills known only from the west end of the South Range.	✧			✧	✧			✧	3
SC *Cacalia muehlenbergii* (Schultz-Bip.) Fern.	Indian-plantain	Lowland and alluvial hardwood forests, also in relatively dry openings in upland deciduous woods. Most numerous (several hundred plants) in a Honey Creek bottomland forest with a history of grazing. *Cacalia* is not recognized in Kartesz (1994); *C. muehlenbergii* is listed therein as *Arnoglossum muehlenbergii* (Schultz-Bip.) H.E. Robins.	✧			✧				✧	2
Cacalia suaveolens L.	Indian-plantain	Alkaline meadows, low meadows, loamy prairies, Alder thickets, hardwood swamps; in Devil's Lake State Park known only from an alkaline meadow between the east and south bluffs. *Cacalia* is not recognized in Kartesz (1994); *C. suaveolens* is listed therein as *Synosma suaveolens* (L.) Britt.	✧	✧		✧	✧			✧	3
[n] *Carduus acanthoides* L.	Plumeless Thistle	First noted in the study area in approximately 1967 in Prairie du Sac Township, and in Devil's Lake State Park in 1971 along the railroad track. See *C. nutans* L.	✧	✧		✧	✧			✧	3
[n] *Carduus nutans* L.	Plumeless Thistle	First noted in the study area in Prairie du Sac Township in 1981, and in Devil's Lake State Park in 1987 in agricultural land. Both species of *Carduus* occur in open disturbed areas, such as old pastures, and both are among the most troublesome weeds of the Great Lakes region. Not yet widespread in the study area, but increasing, especially *C. acanthoides*; neither species was found by Hartley (1962, 1966).	✧	✧		✧	✧			✧	2
[n] *Centaurea maculosa* Lam.	Spotted Knapweed	Open disturbed especially limey places, for example roadsides and railroads.	✧	✧		✧	✧			✧	3
[n] *Cichorium intybus* L.	Chicory; Blue-sailors	Open disturbed places, especially roadsides, pastures.	✧	✧		✧	✧			✧	5
Cirsium altissimum (L.) Spreng.	Tall Thistle	Relatively dry, often limey deciduous woods, especially their borders, also roadsides and railroads, rarely alkaline meadows.	✧	✧		✧	✧			✧	2

			Locality and Abundance Code							
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **ASTERACEAE (COMPOSITAE)** **COMPOSITE FAMILY** *(continued)*											
[n]*Cirsium arvense* (L.) Scop.	Canada Thistle	Weedy in open disturbed places, including upland and lowland fields, roadsides and railways. Already of concern in 1866, when it was reported that a patch in Baraboo Township had increased in several years from a bed of 5-6 ft square to a field of over 2 acres (Lange 1980*b*).	✧	✧		✧	✧			✧	5
Cirsium discolor (Willd.) Spreng.	Prairie Thistle	Loamy prairies, sandy meadows, sedge meadows, alkaline meadows; sometimes persisting (weedy?) in abandoned farm fields.	✧	✧			✧			✧	2
T *Cirsium hillii* (Canby) Fern.	Hill's Thistle	Noted (several hundred plants) in 1969 and 1974 in a loamy pasture in the Baraboo Valley in the former Peck's Prairie (Lange 1990:14), the only station in the Baraboo Hills for this species (cover photo). Also in the Western Upland, where in 1986 a total of approximately 150 plants was noted in a dry prairie at the base of a limey bluff in the "Wisconsin Desert" by Spring Green, and in the Central Plain where in approximately 1970 a station was found in Prairie du Sac Township in sandy soil. KL.	✧			✧	✧			✧	1
Cirsium muticum Michx.	Swamp Thistle	Sedge meadows, fens and alkaline meadows, loamy prairies, Alder thickets, Tamarack swamps.	✧	✧		✧	✧			✧	3
[n] *Cirsium vulgare* (Savi) Tenore	Bull Thistle	Weedy in open and wooded disturbed places, dry to wet. Sites include cultivated areas, pastures, degraded woods, sedge meadows, fens; particularly numerous after major disturbances, such as logging.	✧	✧		✧	✧			✧	5
Conyza canadensis (L.) Cronq.	Horseweed	Widespread in open, relatively dry disturbed areas, such as fallow fields, roadsides, railroads, pavement.	✧	✧		✧	✧			✧	5
[n] *Coreopsis lanceolata* L.	Lance-leaved Tickseed	Railroad and roadside plants presumably represent escaped garden stock, but some populations, for example in dry sandy prairies, might be native.	✧	✧			✧			✧	2
Coreopsis palmata Nutt.	Tickseed	Dry prairies in sandy and limey soil, quartzite and rhyolite glades, also dry sandy woods.	✧	✧		✧	✧			✧	4
[n] *Crepis tectorum* L.	Hawk's Beard	Relatively dry disturbed sites, for example in pavement, along roads, railways, in lawns. First collected in Devil's Lake State Park in 1978.	✧	✧		✧	✧			✧	3
Erechtites hieracifolia (L.) DC.	Pilewort	A widespread weed: sedge meadows, akaline meadows, sandy meadows, oak-pine woods, low sandy woods, sandstone cliffs, gravelly trail borders, waste ground.	✧	✧		✧	✧			✧	4
Erigeron annuus (L.) Pers.	Daisy Fleabane	Disturbed sites, for example along roads and trails in hardwood forests, pastures and fallow fields, railroad ballast.	✧	✧		✧	✧			✧	4

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **ASTERACEAE (COMPOSITAE)** **COMPOSITE FAMILY** *(continued)*											
Erigeron philadelphicus L.	Fleabane	Sites vary from dry, for example fallow fields, to moist, for example marshy lowlands, alluvial woods.	✧	✧		✧	✧			✧	3
Erigeron pulchellus Michx.	Robin's-plantain	Mainly relatively dry deciduous woods, also fallow fields, wet areas.	✧			✧	✧			✧	2
Erigeron strigosus Willd.	Daisy Fleabane	Weedy in dry sunny sites, such as prairies, sandy meadows, fallow fields, roadsides and railroads, sandstone and dolomite cliffs and ledges.	✧	✧		✧	✧			✧	5
Eupatorium altissimum L.	Tall Boneset	Dry limey prairies and associated open woods, railroads.				✧	✧			✧	2
Eupatorium maculatum L.	Joe Pye Weed	Low meadows, fens and alkaline meadows, loamy prairies, Alder thickets, Tamarack swamps, low sandy woods; may form extensive stands.	✧	✧		✧	✧			✧	3
Eupatorium perfoliatum L.	Boneset	Low meadows, fens and alkaline meadows, sandy meadows, loamy prairies, low thickets, Tamarack swamps, low sandy woods, cat-tail marshes.	✧	✧		✧	✧			✧	4
Eupatorium purpureum L.	Joe Pye Weed	Deciduous woods, where usually in relatively moist, open sites.	✧	✧		✧	✧			✧	3
Eupatorium rugosum Houtt.	White Snakeroot	Dry to wet woods, where often numerous in disturbed places; occasionally in open sites, for example dry prairies bordering forests.	✧	✧		✧	✧			✧	5
SC *Eupatorium sessilifolium* L.	Upland Boneset	Characteristic of dry, relatively open woods on limey bluffs, also on all 3 bluffs at Devil's Lake State Park; typically these sites border dry prairies or quartzite glades.	✧	✧		✧				✧	3
Euthamia graminifolia (L.) Nutt. (*Solidago graminifolia* (L.) Salisb.)	Grass-leaved Goldenrod	Dry sandy prairies and associated sandy woods, sandstone cliffs, sandy roadsides, sandy lake and river shores, sandy meadows, sedge meadows, loamy prairies; sites seemingly vary from dry to wet, but usually are at or near the water table.	✧	✧		✧	✧			✧	3
Euthamia gymnospermoides Greene (*Solidago gymnospermoides* (Greene) Fern.)		Dry sandy prairies. Local but numerous where found; a western species here reaching its eastern limit in Spring Green Township. WIS, KL.				✧				✧	1
[a] *Gaillardia aristata* Pursh		Represented by a roadside collection in Reedsburg Township in 1977; native west of the Great Lakes. MIL.				✧				✧	1
[n] *Galinsoga quadriradiata* Cav. (*G. ciliata* (Raf.) Blake)	Peruvian Quickweed	Sunny moist areas, including lake shores, creek margins.	✧	✧		✧				✧	2
Gnaphalium obtusifolium L.	Cudweed	Dry prairies, fallow fields, upland woods, usually sandy soil.	✧	✧		✧	✧			✧	3
T *Gnaphalium saxicola* Fassett	Cliff Cudweed	Local on sandstone cliffs in the Wisconsin Dells and Mirror Lake area; a Wisconsin endemic, insofar as presently known. For this taxon, see Ballard and Kowal (n.d.) and Fassett (1931).					✧			✧	1

			Locality and Abundance Code								
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■ **ASTERACEAE (COMPOSITAE)**											
COMPOSITE FAMILY *(continued)*											
[n] *Gnaphalium uliginosum* L.	Low Cudweed	Sunny moist areas, including lake shores, creek margins, sandstone cliffs near water, low spots in trails.	✧	✧			✧			✧	2
[a] *Grindelia squarrosa* (Pursh) Dunal	Gumweed	Dry open disturbed places, such as gravel pits, railways, lawns, in sandy or limey soil. A western species; presumably adventive. KL.				✧	✧			✧	1
Helenium autumnale L.	Sneezeweed	Low meadows including pastures, also sandy meadows, Alder thickets.	✧	✧		✧	✧			✧	3
[a] *Helenium flexuosum* Raf.	Purplehead Sneezeweed	A 1978 collection from a weedy sandy meadow in Delton Township, with *Liatris pycnostachya* and *Aletris*; a southeastern species. KL.					✧			✧	1
[a] *Helianthus annuus* L.	Common Sunflower	A weed of disturbed ground, such as agricultural land, roadsides, rarely in dry open woods.	✧	✧			✧			✧	2
Helianthus decapetalus L.		Alluvial and swampy woods, roadside ditches, sometimes relatively dry deciduous woods.	✧	✧						✧	2
Helianthus giganteus L.	Big-toothed Sunflower	Loamy prairies, sandy meadows, sedge meadows, Alder thickets, stream borders in riparian woods.	✧	✧		✧	✧			✧	2
Helianthus grosseserratus Martens	Big-toothed Sunflower	Alkaline meadows, low meadows, sandy meadows, roadside ditches; in Devil's Lake State Park known only from an akaline meadow between the east and south bluffs.	✧	✧		✧	✧			✧	3
[n] *Helianthus maximiliani* Schrad.		An 1892 collection from Devil's Lake State Park; presumably a garden escape. WIS.		✧						✧	0
Helianthus mollis Lam.	Ashy or Downy Sunflower	A colony noted in a grassy field in Mirror Lake State Park in 1993; spreading from cultivation or adventive? KL, AC.					✧			✧	1
Helianthus occidentalis Riddell	Naked-stemmed Sunflower	Dry prairies in sandy and limey soil, quartzite glades, dry sandy woods.	✧	✧		✧	✧			✧	3
Helianthus pauciflorus Nutt. (H. *rigidus* (Cass.) Desf.)		Dry sandy and limey prairies, sandy roadsides.	✧			✧	✧			✧	3
[a] *Helianthus petiolaris* Nutt.	Plains Sunflower	Weedy in dry sandy prairies; a western species. WIS, KL.				✧	✧			✧	1
Helianthus strumosus L.	Woodland Sunflower	Relatively dry oak woods and oak-pine woods, especially their borders; appears to advance with oaks into adjoining dry prairies and glades.	✧	✧		✧	✧			✧	4
Helianthus tuberosus L.	Jerusalem-artichoke	Alluvial woods and meadows, also escaping from cultivation and spreading along roads and other moist weedy places; has been grown for its edible tubers.	✧	✧		✧	✧			✧	4
Heliopsis helianthoides (L.) Sweet (and var. *scabra* (Dunal) Fern.)	Early Sunflower	Sedge meadows, alkaline meadows, Alder thickets, relatively dry woods, roadsides; mainly an edge species, like *Helianthus strumosus?*	✧	✧		✧	✧			✧	3

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			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **ASTERACEAE (COMPOSITAE)**											
COMPOSITE FAMILY *(continued)*											
[n] *Hieracium aurantiacum* L.	Devil's Paint-brush	Weedy fields, pastures, forest borders and openings, sandy meadows.	✧	✧		✧	✧			✧	3
Hieracium kalmii L. (incl. *H. canadense* of authors, not Michx.)	Kalm's Hawkweed	Loamy prairies, sandy meadows, dry mainly sandy prairies, dry sandy woods.	✧	✧		✧	✧			✧	3
Hieracium longipilum Torr.	Prairie Hawkweed	Dry sandy, sometimes limey prairies, sandy meadows; also on quartzite, for example weedy Red Cedar glades.	✧			✧	✧			✧	3
[n] *Hieracium piloselloides* Vill. (incl. *H. caespitosum* Dumort. & *H. pratense* Tausch)	King Devil	Dry open places, including roadways, grassy fields, weedy cliffs.		✧			✧			✧	2
Hieracium scabrum Michx.	Bristly Hawkweed	Dry sandy or limey woods, also sandy or limey cliffs and associated prairies, quartzite glades.	✧	✧		✧	✧			✧	3
Hieracium umbellatum L.		Dry sandy woods (Hartley 1962:524).					✧			✧	1
[n] *Hypochaeris radicata* L.	Cat's Ear	Found in 1974, a sandy roadside in Dellona Township, for the second Wisconsin record (Harriman 1980). UW-Oshkosh, WIS, MIL, KL.					✧			✧	1
[n] *Inula helenium* L.	Elecampane	Collected in a weedy field on an abandoned farm in Freedom Township in 1968; cultivated as an ornamental and medicinal plant. KL.	✧							✧	1
Krigia biflora (Walt.) Blake	Dwarf Dandelion	Sandy meadows, mesic and dry prairies, dry open woods.	✧	✧		✧	✧			✧	3
Krigia virginica (L.) Willd.	Dwarf Dandelion	Typically in dry open sand; abundant on an outcrop of Dake Quartzite near Baraboo (Clayton and Attig 1990:10-11), but not on Baraboo Quartzite.	✧			✧	✧			✧	3
Lactuca biennis (Moench) Fern.	Woodland Lettuce	Relatively open and moist sites in upland woods, low sandy woods, Tamarack swamps.	✧	✧		✧	✧			✧	3
Lactuca canadensis L.	Wild Lettuce	Dry prairies in a variety of soils, loamy prairies, weedy fields, dry open woods, sedge meadows, sandy meadows, fens, low thickets, Tamarack swamps.	✧	✧		✧	✧			✧	5
Lactuca floridana (L.) Gaertn.	Blue Lettuce	Dry to mesic woods, where often along edges, for example roadways, trails.	✧	✧		✧	✧			✧	2
Lactuca ludoviciana (Nutt.) Riddell	Prairie Lettuce	Known only from a weedy dry prairie in Merrimac Township. WIS.				✧				✧	1
[n] *Lactuca serriola* L. (*L. scariola* L.)	Prickly Lettuce	Roadsides and railroad beds, vacant lots and other open disturbed places, pavement, degraded prairies and woods. This is the wild ancestor of cultivated lettuce, *L. sativa*.	✧	✧		✧	✧			✧	4
[n] *Lapsana communis* L.	Nipplewort	Found in open disturbed ground in Devil's Lake State Park in 1973. KL.		✧						✧	1

			Locality and Abundance Code								
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■ **ASTERACEAE (COMPOSITAE)** **COMPOSITE FAMILY** *(continued)*											
[n] *Leucanthemella serotina* (L.) Tzvelev (*Chrysanthemum uliginosum* Pers. *fide* Mickelson and Iltis 1966:197; *Tanacetum serotinum* (L.) Schulz-Bip.)	Giant Daisy	A roadside colony noted in Mirror Lake State Park in 1990; still there in 1997. KL.					✧			✧	1
[n] *Leucanthemum vulgare* Lam. (*Chrysanthemum leucanthemum* L.)	Common Daisy	Roadsides, weedy fields, and other dry and open disturbed sites.	✧	✧		✧	✧			✧	3
Liatris aspera Michx. (*L. scariosa* (L.) Willd. × *L. spaeroidea sensu* Shinners, not Michx.)	Blazing Star	Quartzite glades, dry sandy prairies, sandy meadows, sandy roadsides; also in dry limey prairies but less frequently.	✧	✧		✧	✧			✧	4
Liatris cylindracea Michx.	Blazing Star	Dry limey prairies, rarely dry sandy prairies, sandy meadows.	✧			✧	✧			✧	3
Liatris pycnostachya Michx.	Gay Feather	Loamy prairies, sandy meadows, sedge meadows. Known only from the Central Plain (Cady's Marsh in Reedsburg Township, and Dellona, Delton, Fairfield, and Caledonia Townships), except for a station in Devil's Lake State Park. Introduced in Baraboo's Manchester Meadows Nature Study Area at the sewage treatment plant.	✧	✧			✧			✧	2
[a] *Matricaria discoidea* DC. (*M. matricarioides* of authors)	Pineapple Weed	Weedy in barnyards, waste places, lawns, along roads and railways.	✧	✧		✧	✧			✧	4
[n] *Matricaria recutita* L. (*M. chamomilla* L.)	False Chamomile	A 1949 collection from the Prairie du Sac area. WIS.					✧			✧	1
Megalodonta beckii (Spreng.) Greene	Water-marigold	A 1987 collection from Devil's Lake. WIS, KL.		✧	✧					✧	1
SC *Nothocalais cuspidata* (Pursh) Greene (*Agoseris cuspidata* (Pursh) Raf.; *Microseris cuspidata* (Pursh) Schultz-Bip.)	Prairie Dandelion	Dry sandy prairies and sand blows, dry limey prairies; recent records are from Spring Green Township and Owl's Head prairie in Merrimac Township. WIS, MIL, KL.				✧	✧			✧	1
Polymnia canadensis L.	Leafcup	Dry to moist woods, including their borders; often where especially rocky, for example talus slopes. This species appears to pioneer on and near rocks, where it may shade out *Corydalis sempervirens*, a lower growing and primary pioneer in such sites.	✧	✧		✧	✧			✧	3
Prenanthes alba L.	Rattlesnake-root	Upland hardwood forests and associated glades, sandstone cliffs, also lowland woods, low meadows.	✧	✧		✧	✧			✧	3

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■ **ASTERACEAE (COMPOSITAE)** **COMPOSITE FAMILY** *(continued)*											
E *Prenanthes aspera* Michx.	Rough White Lettuce	Known only from the Wisconsin River near Wisconsin Dells, no date (Johnson and Iltis 1963:304, 307), and dry sandy prairie and adjoining dry limey bluff prairie in the "Wisconsin Desert" by Spring Green, 1969 and 1978 collections. Still there in 1994 (*Wisconsin Flora*, No. 4. 1994. Bot. Club Wis.). WIS, KL.				✧	✧			✧	1
E *Prenanthes crepidinea* Michx.		A station discovered along a stream in a Sugar Maple forest in Freedom Township in 1992. Swink and Wilhelm (1994:608) report it from similar habitat: "moist shaded places, such as thickets on floodplains and stream banks." WIS, AC, KL.	✧							✧	1
Prenanthes racemosa Michx.	Glaucous White Lettuce	Loamy prairies, alkaline meadows, sandy meadows. At one station, a sandy meadow in Pine Island Wildlife Area, there were 20 stalks in 1986, 4 in 1991, and 19 in 1993, and at another station, a several acre patch of loamy prairie near Reedsburg, there were approximately 30 stalks in 1993 and 5 in 1994. Known historically (an 1887 collection) from "Baraboo, Wis."	✧				✧			✧	2
Ratibida pinnata (Vent.) Barnh.	Prairie-coneflower	Dry sandy and limey prairies, including disturbed sites, also railways, roadways.	✧	✧		✧	✧			✧	3
Rudbeckia hirta L. (*R. serotina* Nutt.)	Black-eyed Susan	Dry to mesic prairies, sandy meadows, fens, pastures and weedy fields, dry woods, cliffs, dry roadsides.	✧	✧		✧	✧			✧	5
Rudbeckia laciniata L.	Coneflower	Moist woods, especially along creeks, also deciduous swamps, Alder thickets, sedge meadows, fens, loamy prairies.	✧	✧		✧	✧			✧	3
Rudbeckia subtomentosa Pursh	Sweet Coneflower	Confined to low meadows, including sandy meadows, along the Wisconsin River.				✧	✧	✧		✧	2
n *Rudbeckia triloba* L.	Coneflower	The only records are of plants persisting (and spreading?) from plantings. WIS, KL.	✧	✧						✧	1
Senecio aureus L.	Golden Groundsel	Moist woods, especially along creeks, also deciduous swamps, wet thickets.	✧	✧		✧	✧			✧	3
Senecio pauperculus Michx.	Northern Ragwort	Low meadows, loamy prairies, dry prairies; usually limey soil.	✧	✧		✧	✧			✧	2
n *Senecio vulgaris* L.	Common Groundsel	A 1941 collection from a roadside in Prairie du Sac (Barkley 1963:347). WIS.					✧			✧	1
Silphium integrifolium Michx.	Rosinweed	This species can no longer be found at Ferry Bluff, where it was collected in 1922; presumably it is extirpated in the study area. Listed by Lueders (1895:519). WIS, MIL.				✧				✧	1
Silphium laciniatum L.	Compass-plant	Loamy prairies, especially where limey, also dry limey prairies; several populations are persisting as colonies along rural roads.				✧	✧			✧	2
Silphium perfoliatum L.	Cup-plant	Along creeks in wooded ravines, low meadows, alkaline meadows, marshy sloughs, Alder thickets, roadside ditches.	✧	✧		✧	✧			✧	3

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			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **ASTERACEAE (COMPOSITAE)** **COMPOSITE FAMILY** *(continued)*											
Silphium terebinthinaceum Jacq.	Prairie-dock	A total of 3 stations within 3 miles of one another along the outer margin of the South Range of the Baraboo Hills in Merrimac and Caledonia Townships: one along an abandoned road leading into the lower end of Parfrey's Glen, one at a rural cemetery, and one along a rural road. Also a station in Baraboo along the Baraboo River (a total of 16 plants in 1994).	✧	✧			✧			✧	2
Solidago canadensis L. (incl. *S. altissima* L.)	Canada Goldenrod	Weedy fields, dry to mesic prairies where often in disturbed sites, dry open woods, sedge meadows, fens and alkaline meadows, sandy meadows, Leather-leaf bogs, Alder thickets.	✧	✧		✧	✧			✧	5
Solidago flexicaulis L. (*S. latifolia* L.)	Zig-zag Goldenrod	Dry to usually mesic woods, including Hemlock stands.	✧	✧		✧	✧			✧	4
Solidago gigantea Ait. (*S. serotina* Ait.)	Late Goldenrod	Low meadows, fens and alkaline meadows, loamy prairies, sandy meadows, cat-tail marshes, river sloughs, marshy openings in deciduous woods, low thickets, Leather-leaf bogs, Tamarack swamps, low sandy woods; may be weedy.	✧	✧		✧	✧			✧	4
Solidago hispida Willd.	Hairy Goldenrod	Dry to moist mixed woods, also open sandstone outcrops and associated prairie, quartzite glades.	✧	✧		✧	✧			✧	3
Solidago juncea Ait.	Early Goldenrod	Quartzite glades and dry prairies on sandstone, including weedy sites, also loamy prairies, sandy meadows.	✧	✧			✧			✧	3
Solidago missouriensis Nutt.	Missouri Goldenrod	Dry prairies, mainly sandy but also limey.				✧	✧			✧	2
Solidago nemoralis Ait.	Old-field Goldenrod	Often the dominant goldenrod in dry prairies in limey or sandy soils and glades, also sandy meadows, weedy fields, open cliffs.	✧	✧		✧	✧			✧	4
Solidago patula Willd.	Rough-leaved Goldenrod	Low wet ground, including Tamarack swamps, Alder thickets and associated sedge meadows, marshy openings within deciduous forest, low sandy woods, wooded stream valleys; in full or partial sun. In Devil's Lake State Park known only from the wetland complex between the east and south bluffs.	✧	✧		✧	✧			✧	3
Solidago ptarmicoides (T. & G.) Boivin (*Aster ptarmicoides* (Nees) T. & G.)		Dry prairies, mainly limey but also sandy.	✧			✧	✧			✧	2
Solidago riddellii Frank	Riddell's Goldenrod	Fens and alkaline meadows, also loamy prairies where presumably limey; known from Cady's Marsh in Reedsburg Township, Leech Creek fen in Fairfield Township, and an alkaline meadow in Merrimac Township. Apparently at its westernmost limit in Wisconsin in the study area (Salamun 1963: 378, map 25). KL.					✧			✧	1

(continued on next page)

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **ASTERACEAE (COMPOSITAE)** **COMPOSITE FAMILY** *(continued)*											
Solidago rigida L.	Stiff Goldenrod	Dry limey or sandy prairies, sandy roadsides, loamy prairies. The only stations for the Baraboo Hills are located in the former Peck's Prairie (Lange 1990:14).	✧			✧	✧			✧	2
SC *Solidago sciaphila* Steele	Cliff Goldenrod	Open or thinly wooded sandstone and dolomite outcrops; in the Baraboo Hills mainly in the west end of the South Range, with one station in the North Range. Locally common along the Wisconsin River in the Wisconsin Dells region, mainly just outside the study area (Wisconsin Department of Natural Resources 1997:19). A species with a restricted distribution centered in the Upper Midwest (Pusateri et al. 1993:33).	✧			✧	✧			✧	3
Solidago speciosa Nutt.	Showy Goldenrod	Dry prairies and open woods in a variety of soils, but mainly sandy, also quartzite and rhyolite glades.	✧	✧		✧	✧			✧	3
Solidago uliginosa Nutt.		Marshy habitats. WIS.				✧	✧			✧	1
Solidago ulmifolia Willd.	Elm-leaved Goldenrod	Dry to mesic deciduous woods, mixed woods, Hemlock stands, also associated dry prairies and glades, in a variety of soils.	✧	✧		✧	✧			✧	4
n *Sonchus arvensis* L. (incl. *S. uliginosus* Bieb.)	Sow-thistle	Weedy sites, dry to moist, especially along highways.	✧	✧		✧	✧			✧	4
n *Sonchus asper* (L.) Hill	Sow-thistle	Weedy in agricultural land and waste ground; the earliest record is an 1892 collection from Baraboo. WIS.	✧							✧	1
n *Sonchus oleraceus* L.	Sow-thistle	Weedy in farm land, but more so in cities, for example next to buildings and in parking lots and alleys. KL.	✧			✧	✧			✧	3
n *Tanacetum vulgare* L.	Tansy	Escaping from plantings to roadsides and other open disturbed places; common in northern Wisconsin. WIS, KL.		✧		✧				✧	1
n *Taraxacum laevigatum* (Willd.) DC. (*T. erythrospermum* Bess.)	Red-seeded Dandelion	Weedy woods, pastures; undoubtedly more widespread than indicated. WIS.	✧							✧	1
n *Taraxacum officinale* Wiggers	Common Dandelion	Weedy in a great variety of disturbed places, except the wettest. First noted in the study area in Fairfield Township in approximately 1855; numerous and widespread within some 25 years (Lange 1980*b*).	✧	✧		✧	✧			✧	5
n *Tragopogon dubius* Scop.	Goat's-beard	Dry disturbed places, such as roadsides, railroads, grassy fields, weedy prairies, sandstone cliffs.	✧	✧		✧	✧			✧	5
n *Tragopogon pratensis* L.	Goat's-beard	Weedy in dry open places.		✧		✧	✧			✧	3

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ ASTERACEAE (COMPOSITAE)											
COMPOSITE FAMILY *(continued)*											
Verbesina alternifolia (L.) Kearney (*Actinomeris alternifolia* (L.) DC.)	Wing-stem	Hundreds of plants were discovered in 1987 along the Ferry Bluff Road in lowland deciduous forest edge, a first record for Wisconsin; subsequently several other colonies were discovered along roads away from Honey Creek. Swink and Wilhelm (1994:81) report it from similar habitat: "floodplains along streams." WIS, KL.				✧	✧	✧		✧	1
Vernonia fasciculata Michx.	Ironweed	Low meadows, loamy prairies, sandy meadows, low pastures, sometimes weedy in upland woods.	✧	✧		✧	✧			✧	3
n *Xanthium strumarium* L.	Cocklebur	Sandy lake and river shores, sandbars, pond margins, waste places, abandoned fields, cornfields.		✧	✧	✧	✧			✧	2
■ BALSAMINACEAE											
TOUCH-ME-NOT FAMILY											
Impatiens capensis Meerb (*I. biflora* Walt.)	Spotted Touch-me-not	Low meadows, marshy stream borders, Alder thickets, Tamarack swamps, low sandy woods, marshy openings and wet spots in deciduous woods.	✧	✧		✧	✧			✧	4
Impatiens pallida Nutt.	Pale Touch-me-not	Sometimes growing with *I. capensis*, but tending to be in drier, often rocky sites.	✧	✧						✧	2
■ BERBERIDACEAE											
BARBERRY FAMILY											
PR 33, 1946, Trans. WASAL 38:206-08											
n *Berberis thunbergii* DC.	Japanese Barberry	Escaping from cultivation to woods and plantations; immune to wheat rust.	✧	✧		✧	✧			✧	3
n *Berberis vulgaris* L.	Common Barberry	This shrub, the alternate host of wheat rust, was virtually eradicated by the U.S. Department of Agriculture in the 1920s (*Baraboo Weekly News* 14 July 1927) and 1930s (*Baraboo Weekly News* 16 August 1934). A major source of these plants was F.G.J. Lueders of Sauk City (see History of Botanical Investigations in the Study Area), who brought stock with him from Germany (*Baraboo Weekly News* 12 April 1923). The only herbarium record is an 1884 collection labelled "Baraboo." WIS.	✧							✧	1
Caulophyllum thalictroides (L.) Michx.	Blue Cohosh	Generally moist sites in Sugar Maple woods, oak woods, also Hemlock stands.	✧	✧		✧	✧			✧	4
SC *Jeffersonia diphylla* (L.) Pers.	Twinleaf	Known only from a wooded (limey?) stream valley, with the following herbaceous associates: *Cryptotaenia, Osmorhiza claytonii, Geum canadense, Circaea lutetiana, Impatiens capensis, Lysimachia ciliata, Hydrophyllum, Podophyllum, Caulophyllum, Aster lateriflorus* and *A. prenanthoides*, and *Solidago flexicaulis*. Seeds were being shed in 1969 on 7 July. The population in 1992 was estimated by A. Clark to be from 100 to 200 plants. Listed by Lueders (1895:516). KL.	✧							✧	1

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			Locality and Abundance Code									
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ BERBERIDACEAE											
BARBERRY FAMILY *(continued)*											
Podophyllum peltatum L.	May-apple	Sugar Maple woods and oak woods, including their borders; colonies away from forests, for example in fields and pastures, presumably began growing under trees since removed.	✧	✧		✧	✧			✧	4
■ BETULACEAE											
BIRCH FAMILY											
PR 7,1930, Trans. WASAL 25:189-94											
Alnus incana (L.) Moench (*A. rugosa* (Du Roi) Clausen)	Speckled Alder	Along drainages and lakes, and in Tamarack swamps and sedge meadows; forming thickets in low mucky ground.	✧	✧		✧	✧			✧	4
Betula alleghaniensis Britt. (*B. lutea* Michx. f.)	Yellow Birch	Wooded ravines and gorges, lowland forest, north facing slopes and cliffs; generally associated with Sugar Maple and/or Hemlock.	✧	✧		✧	✧			✧	3
Betula nigra L.	River Birch	Devil's Lake, the Wisconsin River, and up the Baraboo River as far as the SH78 bridge but in numbers only to the SW 1/4 of Section 20, T12N, R9E.		✧	✧	✧	✧	✧		✧	3
Betula papyrifera Marsh. (incl. *B. cordifolia* Regel)	Paper Birch	Pioneering after disturbance, especially in uplands; also in low sandy woods and boggy sites. Old trees sometimes persist in successional forests.	✧	✧		✧	✧			✧	5
Betula pumila L. (incl. hybrids)	Bog Birch	Alkaline meadows, sedge meadows, Tamarack swamps, Leather-leaf bogs.					✧			✧	3
Carpinus caroliniana Walt.	Blue Beech	Wooded ravines and moist slopes, also uplands, in deciduous and mixed forests, Hemlock stands.	✧	✧		✧				✧	3
Corylus americana Walt.	Common Hazel	Dry deciduous and mixed woods, including their borders and adjoining fields, also hedgerows, low sandy woods.	✧	✧		✧	✧			✧	4
Corylus cornuta Marsh. (*C. rostrata* Ait.)	Beaked Hazel	Cooler sites in deciduous and mixed forests and their borders.	✧	✧		✧	✧			✧	2
Ostrya virginiana (Mill.) K. Koch	Ironwood	A characteristic understory tree of oak woods and Sugar Maple forests, also mixed deciduous woods, Hemlock stands. Especially numerous in disturbed woods; probably more numerous now than in early settlement time (Lange 1990:22).	✧	✧		✧	✧			✧	5
■ BIGNONIACEAE											
BIGNONIA FAMILY											
[n] *Catalpa speciosa* (Warder) Engelm.	Northern Catalpa	Apparently established and spreading in lowland sites, for example a wooded ravine and a Wisconsin River sand terrace. Burk and Prabhu (1988) report a similar situation in Massachusetts.	✧	✧			✧			✧	2
■ BORAGINACEAE											
BORAGE FAMILY											
PR 32, 1944, Trans. WASAL 36:273-90											
[n] *Cynoglossum officinale* L.	Common Hound's-tongue	Pastures and weedy fields.	✧	✧			✧			✧	2

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **BORAGINACEAE**											
BORAGE FAMILY *(continued)*											
Hackelia deflexa (Wahlenb.) Opiz var. *americana* (Gray) Fern. & I.M. Johnston (*H. americana* (Gray) Fern.)	Stickseed	Sandy and especially limey thinly wooded outcrops; in the Baraboo Hills known only from the west end of the South Range.	✧			✧				✧	2
Hackelia virginiana (L.) I.M. Johnston	Virginia Stickseed	Dry weedy woods in a variety of soils, uplands and lowlands.	✧	✧		✧	✧			✧	4
Lappula squarrosa (Retz.) Dumort. (*L. echinata* Gilib.; *L. myosotis* Moench)	Stickseed	Weedy in dry sandy or gravelly places, for example railroads.		✧		✧	✧			✧	2
Lithospermum canescens (Michx.) Lehm.	Hoary Puccoon	Dry prairies, mainly limey, also sandy; noted in rhyolite but not quartzite glades. In Devil's Lake State Park known only from a dry prairie on sandstone.	✧	✧		✧	✧			✧	3
Lithospermum carolinense(Gmel.) MacM. (incl. *L. croceum* Fern.)	Puccoon	Dry prairies, mainly sandy, also limey.	✧			✧	✧			✧	3
Lithospermum incisum Lehm.	Puccoon	Dry prairies, mainly limey.	✧			✧	✧			✧	3
Mertensia virginica (L.) Link	Bluebells	Alluvial woods in the Western Upland, in Devil's Lake State Park naturalized from a garden planting. WIS.		✧		✧				✧	1
SC *Myosotis laxa* Lehm.	Forget-me-not	Wooded sloughs, moist sandbars, and other wet places along the Wisconsin River; often associated with cold water springs.				✧	✧	✧		✧	2
[n] *Myosotis scorpioides* L.	True Forget-me-not	Shaded seepages, sloughs, river banks, and other wet mucky sites. WIS, KL.	✧			✧				✧	1
Myosotis verna Nutt. (*M. virginica* of authors, not (L.) BSP.)	Forget-me-not	Dry prairies on sandstone, quartzite and rhyolite glades.	✧	✧		✧	✧			✧	3
■ **BRASSICACEAE (CRUCIFERAE)**											
MUSTARD FAMILY											
PR 44, 1961, Trans. WASAL 50:17-72											
[n] *Alliaria petiolata* (Bieb.) Cavera & Grande (*A. officinalis* Bieb.)	Garlic Mustard	First noted in the study area in Devil's Lake State Park in 1985; by 1993 it was widespread in the park and had also been found in several other wooded sites in the Baraboo Hills. Numerous in Mirror Lake State Park, for example Echo Rock Trail, and the Leopold Reserve by at least 1997.	✧	✧			✧			✧	2
[n] *Alyssum alyssoides* (L.) L.	Pale Alyssum	Railways, gravelly road shoulders. WIS, MIL, KL.				✧				✧	1
Arabis canadensis L.	Sicklepod	Mainly in relatively dry oak woods, including adjacent prairies and glades, also Hemlock stands, in a variety of soils.	✧	✧		✧	✧			✧	4
Arabis drummondii Gray	Drummond's Rock Cress	Dry woods and associated prairies and glades, Wisconsin River sandbars, alluvial woods.	✧	✧			✧			✧	3

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **BRASSICACEAE (CRUCIFERAE)** **MUSTARD FAMILY** *(continued)*											
Arabis glabra (L.) Bernh.	Tower Mustard	Dry often weedy places, including disturbed prairies, abandoned farm fields, sandy barrens.	✧				✧			✧	2
Arabis hirsuta (L.) Scop.	Hairy Rock Cress	Thinly wooded, especially limey sites. WIS.				✧				✧	1
Arabis laevigata (Willd.) Poir.	Smooth Rock Cress	Upland and floodplain forests, low meadows.	✧	✧		✧	✧			✧	3
Arabis lyrata L.	Lyreleaf Rock Cress	Mainly dry sandy and limey outcrops and associated prairies, also open sand including sand blows.	✧	✧		✧	✧			✧	4
SC *Arabis missouriensis* Greene var. *deamii* (M. Hopkins) M. Hopkins		Known only from a 1937 collection from Parfrey's Glen. WIS.		✧						✧	1
Arabis shortii (Fern.) Gl. (*A. dentata* (Torr.) T. & G.)		Wisconsin River floodplain forest. Listed by Lueders (1895:516). KL, Leopold Reserve Herbarium.					✧	✧		✧	1
n *Armoracia rusticana* Gaertn., Mey, & Scherb.	Horseradish	Escaping from cultivation to roadsides; cultivated for a condiment derived from the roots.	✧							✧	1
n *Barbarea vulgaris* R. Br.	Yellow Rocket	Weedy along roads and railways, in old fields, pastures, degraded prairies, shores, disturbed woods.	✧	✧		✧	✧			✧	5
n *Berteroa incana* (L.) DC.	Hoary Alyssum	Dry weedy places, including roadsides and railroads, open sandy ground, shores, disturbed prairies and woods.	✧	✧		✧	✧			✧	5
n *Brassica nigra* (L.) Koch	Black Mustard	Weeds mentioned as common in the streets and along the sidewalks of Prairie du Sac by 1882 included "mustard" (Lange 1980*b*), which was probably this species. Waste places and cultivated ground, dry to moist; cultivated for its seeds. WIS.	✧				✧			✧	1
n *Brassica rapa* L.	Field Mustard, Turnip	Weedy in agricultural land and along roads (Clark 1993*b*, Hartley 1962:570). Turnip, celery cabbage, and bok choy were all developed from this species.	✧				✧			✧	1
n *Capsella bursa-pastoris* (L.) Medic.	Shepherd's-purse	Weedy in old fields, pastures, lawns, gardens, waste places, open woods, roadsides.	✧	✧		✧	✧			✧	4
Cardamine bulbosa (Muhl.) BSP.	Spring Cress	Sedge meadows, fens, deciduous bottomlands, marshy thickets, muddy shores, springy places.	✧	✧		✧	✧			✧	3
Cardamine douglassii Britt.	Pink Spring Cress	Moist slopes and seepy areas in loamy deciduous woods. KL.	✧							✧	1
Cardamine parviflora L.		Mainly dry rocky woods and exposed outcrops in a variety of soils.	✧	✧		✧	✧			✧	3
Cardamine pensylvanica Willd.		Mainly moist to wet places, for example wooded creek bottoms, including rocks in streams, also low thickets, deciduous swamps, low meadows, open sand along the Wisconsin River, ditches.	✧	✧		✧	✧			✧	4

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **BRASSICACEAE (CRUCIFERAE)** **MUSTARD FAMILY** *(continued)*											
Dentaria laciniata Willd.	Toothwort	Mainly Sugar Maple or Red Oak forests, sometimes river forests, also drier oak woods where rarely spreading into adjoining prairie. *Dentaria* is not recognized in Kartesz (1994); *D. laciniata* is listed therein as *Cardamine concatenata* (Michx.) Sw.	✧	✧		✧	✧			✧	3
Descurainia pinnata (Walt.) Britt.	Tansy Mustard	Railways and along wooded trails.	✧	✧		✧				✧	2
Draba reptans (Lam.) Fern.		Dry sandy prairies, open sandy fields, sandstone outcrops, dry limey prairies and associated Red Cedar glades; in the Baraboo Hills confined to the west end of the South Range.	✧			✧	✧			✧	3
[n] *Erysimum cheiranthoides* L.	Wormseed Mustard	Sandbars and islands, sandy shores. Leopold Reserve Herbarium.					✧			✧	1
[a] *Erysimum inconspicuum* (S. Wats.) MacM.	Treacle Mustard	Dry open disturbed sites, especially railroads, also waste places, degraded prairies; native to western North America.	✧	✧		✧	✧			✧	3
[n] *Hesperis matronalis* L.	Dame's Rocket	Persisting from plantings and spreading to roadsides, railroad embankments, streamsides.	✧	✧		✧	✧			✧	3
[n] *Lepidium campestre* (L.) R. Br.	Peppergrass	Dry open disturbed places, usually sandy or gravelly.				✧	✧			✧	2
Lepidium densiflorum Schrad.	Peppergrass	Dry open usually disturbed ground, sandy or gravelly.	✧	✧		✧	✧			✧	4
Lepidium virginicum L.	Peppergrass	Dry open usually disturbed ground, sandy or gravelly.	✧	✧		✧	✧			✧	4
[n] *Nasturtium officinale* R. Br.	Watercress	Margins of creeks and rivers, ditches, seepages, cat-tail marshes; mainly cold spring-fed waters. *Nasturtium* is not recognized in Kartesz (1994); *N. officinale* is listed therein as *Rorippa nasturtium-aquaticum* (L.) Hayek.	✧	✧		✧	✧			✧	3
Rorippa palustris (L.) Bess.	Yellow Cress	Mudflats, especially after the receding of high water, also wet open sand along drainages and lakes, low meadows, marshy swales and kettles; sometimes weedy, for example moist places along roadways in deciduous woods.		✧		✧	✧	✧		✧	3
[n] *Rorippa sylvestris* (L.) Bess.	Yellow Cress	Moist to wet, open sandy disturbed places. KL.				✧		✧		✧	1
Sinapsis arvensis L. (*Brassica kaber* (DC.) Wheeler)	Charlock	Weedy in old fields, cultivated land, pastures, waste places. Generally thought to have been introduced from Europe, but actually present in the northeastern United States for at least 8,000 years before European settlement (Jacobson et al. 1988).	✧	✧			✧			✧	3
[n] *Sisymbrium altissimum* L.	Tumble Mustard	Dry weedy areas, including waste places, roadsides, railroad ballast, old fields.	✧	✧		✧	✧			✧	4
[n] *Sisymbrium officinale* (L.) Scop.	Hedge Mustard	Dry disturbed ground, including agricultural land, waste places, roadsides, railroad ballast. Listed by Lueders (1895: 516).	✧	✧		✧	✧			✧	3

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ BRASSICACEAE (CRUCIFERAE)											
MUSTARD FAMILY *(continued)*											
n *Thlaspi arvense* L.	Penny Cress	Open disturbed sites, such as farmland, waste places, ditches.	✧	✧		✧	✧			✧	3
■ CACTACEAE											
CACTUS FAMILY											
PR 47, 1962, Trans. WASAL 51:128-34											
T *Opuntia fragilis* (Nutt.) Haw.	Brittle Prickly-pear	Quartzite and rhyolite glades, limey sandstone and conglomerate outcrops, also a pasture in Caledonia Township, where presumably spread by cattle. Mainly in western North America.	✧				✧			✧	2
Opuntia macrorhiza Engelm. (*O. compressa* var. *macrorhiza* (Engelm.) Benson)	Plains Prickly-pear	Dry sandy and limey prairies and outcrops, rhyolite glades. Rarely on quartzite; in Devil's Lake State Park known only from a dry prairie on glacial till. Primarily a southwestern species.	✧	✧		✧	✧			✧	3
■ CALLITRICHACEAE											
WATER-STARWORT FAMILY											
PR 21, 1933, Trans. WASAL 28:184-86											
T *Callitriche heterophylla* Pursh	Water-starwort	Cold water creeks and pools in wooded ravines.	✧	✧						✧	2
Callitriche palustris L. (*C. verna* L.)	Water-starwort	Cold water creeks in wooded ravines, recently exposed mudflats along shores and banks, also relatively warm water of sloughs.	✧	✧		✧	✧			✧	3
■ CAMPANULACEAE											
BLUEBELL FAMILY											
(incl. LOBELIACEAE-LOBELIA FAMILY)											
PR 3, 1929, Trans. WASAL 24:357-61											
Campanula aparinoides Pursh (*C. uliginosa* Rydb.)	Marsh Bellflower	Low meadows, fens and alkaline meadows, loamy prairies, Alder thickets, Tamarack swamps.	✧	✧		✧	✧			✧	3
n *Campanula rapunculoides* L.	European Bellflower	Persisting from plantings and spreading.		✧			✧			✧	2
Campanula rotundifolia L.	Harebell	Open to partly shaded dry sandy and limey bluffs, quartzite and rhyolite glades.	✧	✧		✧	✧			✧	4
Campanulastrum americanum (L.) Small (*Campanula americana* L.)	Tall Bellflower	Dry to especially moist deciduous and mixed woods, Alder thickets; often in disturbed sites and borders.	✧	✧		✧	✧			✧	3
Lobelia cardinalis L.	Cardinal Flower	Alluvial woods and low meadows along creeks and rivers. This species "exploded" (thousands of stalks) at the southwestern corner of Devil's Lake in the second year after the receding of high water from a flood year; it was also numerous during the third year, but then greatly reduced.	✧	✧		✧	✧			✧	3
Lobelia inflata L.	Indian-tobacco	Dry to moist woods, dry prairies, often in disturbed places.	✧	✧		✧	✧			✧	4

			Locality and Abundance Code							
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **CAMPANULACEAE**											
BLUEBELL FAMILY *(continued)*											
Lobelia kalmii L.	Brook Lobelia	Known from Leech Creek fen in Fairfield Township and an alkaline meadow in Merrimac Township. A specimen at the University of Wisconsin labelled "Probably Baraboo, Wis." is herein regarded as of uncertain location. WIS, KL.					✧			✧	1
Lobelia siphilitica L.	Great Blue Lobelia	Marshy borders of creeks, fens and alkaline meadows, low meadows and pastures, seepage areas in deciduous woods.	✧	✧		✧	✧			✧	4
Lobelia spicata Lam.	Spike Lobelia	Dry sandy and limey prairies, loamy prairies, sandy meadows, dry open deciduous woods.	✧	✧		✧	✧			✧	4
Triodanis perfoliata (L.) Nieuwl. (*Specularia perfoliata* (L.) A. DC.)	Venus' Looking-glass	Dry often weedy prairies in a variety of soils, also pastures, railroads.	✧	✧		✧	✧			✧	3
■ **CAPPARIDACEAE**											
CAPER FAMILY											
Polanisia dodecandra (L.) DC.	Clammyweed	Railroad gravel, roadsides, sand barrens, sandbars and banks.	✧			✧	✧			✧	2
■ **CAPRIFOLIACEAE**											
HONEYSUCKLE FAMILY											
PR 68, 1979, Trans. WASAL 67:103-29											
Diervilla lonicera Mill.	Bush Honeysuckle	Dry to moist woods, sandy or limey, Hemlock stands, cliffs and other rock exposures; often along borders and in disturbed sites.	✧	✧		✧	✧			✧	4
Linnaea borealis L. ssp. *longiflora* (Torr.) Hultén	Twinflower	The only record is an 1882 collection labelled "Baraboo, Wis."; presumably this came from the Baraboo Hills and possibly from Pine Hollow in Devil's Lake State Park (Lange 1984:121). WIS.	✧							✧	0
[n] *Lonicera* × *bella* Zabel [*L. morrowii* × *L. tatarica*]	Bell's Honeysuckle	More widespread than records indicate?	✧				✧			✧	1
Lonicera dioica L.	Vine Honeysuckle	Dry to moist woods and their borders, thickets.	✧	✧		✧	✧			✧	3
[n] *Lonicera morrowii* Gray	Morrow's Honeysuckle	Disturbed sites; more widespread than records indicate? Widely naturalized in the eastern United States.					✧			✧	1
Lonicera reticulata Raf. (*L. prolifera* (Kirchn.) Rehd.)	Vine Honeysuckle	Dry to mesic woods and their borders, thickets.	✧	✧		✧				✧	3
[n] *Lonicera tatarica* L.	Asiatic Honeysuckle	Escaping from landscape plantings and now widespread in dry open woods and their borders, pastured woods, cliffs and ledges, hedgerows and roadsides, railroad embankments, Alder thickets; Hartley (1966), who did his field work from 1956-1961, referred to this species as "rare."	✧	✧		✧	✧			✧	5

(continued on next page)

			Locality and Abundance Code							
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **CAPRIFOLIACEAE** **HONEYSUCKLE FAMILY** *(continued)*											
[n] *Lonicera xylosteum* L.	European Fly Honeysuckle	Disturbed sites. More widespread than records indicate?					✧			✧	1
Sambucus canadensis L.	Common or Black Elder	Sedge meadows and alkaline meadows, low thickets, Tamarack swamps, low sandy woods, roadside ditches, dry to moist woods.	✧	✧		✧	✧			✧	4
Sambucus racemosa L. ssp. *pubens* (Michx.) House (*S. pubens* Michx.)	Northern or Red Elder	Dry to moist woods including ravines, also Hemlock stands, sandstone cliffs; often in areas of cold air drainage, where typically forming thickets with Mountain Maple.	✧	✧		✧	✧			✧	3
Symphoricarpos albus (L.) Blake	Snowberry	Apparently (and inexplicably) confined to dry woods and their borders on the Devil's Lake bluffs. WIS, KL.		✧						✧	1
Symphoricarpos occidentalis Hook.	Wolfberry	A western species known only from dry limey bluffs and dry sandy areas in Spring Green township. KL.				✧				✧	1
Triosteum aurantiacum Bickn. *(T. illinoense* (Wieg.) Rydb.)	Tinker's-weed	Dry to often moist, mainly deciduous woods.	✧	✧		✧	✧			✧	3
Triosteum perfoliatum L.	Tinker's-weed	Relatively dry, mainly deciduous woods, brushy fields; generally in more open sites than *T. aurantiacum?*	✧	✧		✧	✧			✧	3
Viburnum acerifolium L.	Maple-leaved Viburnum	Oak woods and associated glades, Sugar Maple forests.	✧	✧		✧	✧			✧	4
[n] *Viburnum lantana* L.	Wayfaring Tree	Persisting from plantings; spreading?		✧						✧	1
Viburnum lentago L.	Nannyberry	Sedge meadows and alkaline meadows, Alder thickets, marshy openings in deciduous woods, wet woods, low pastures, upland woods and dry prairies; mainly where limey?	✧	✧		✧	✧			✧	4
Viburnum opulus L. var. *americanum* Ait. *(V. trilobum* Marsh.)	Highbush-cranberry	Alluvial woods, creek borders in low meadows, Alder thickets; also persisting after plantings.	✧	✧		✧	✧			✧	2
Viburnum rafinesquianum Schultes	Downy Arrow-wood	Mainly upland oak woods and associated glades, also adjoining creek bottoms.	✧	✧		✧	✧			✧	3
■ **CARYOPHYLLACEAE** **PINK FAMILY** PR 46, 1961, Trans. WASAL 50:89-139											
[n] *Arenaria serpyllifolia* L.	Thyme-leaved Sandwort	Open disturbed sandy and gravelly sites, for example logged woods, abandoned quarries. KL.	✧	✧						✧	1
[n] *Cerastium fontanum* Baumg. *(C. vulgatum* L.)	Mouse-ear Chickweed	Dry open disturbed ground, spreading into woods and low ground.	✧	✧		✧	✧			✧	5
Cerastium nutans Raf.	Nodding Chickweed	Dry to moist woods, creek margins, open rocky ground.	✧	✧						✧	2
[n] *Dianthus armeria* L.	Deptford Pink	Roadsides, forest roads, fallow fields, pastures, dry prairies; in a variety of soils but often sandy.	✧	✧		✧	✧			✧	3

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **CARYOPHYLLACEAE**											
PINK FAMILY *(continued)*											
[n] *Gypsophila paniculata* L.	Baby's Breath	Known only from Devil's Lake State Park, a 1944 collection; a garden plant that sometimes becomes naturalized (Schlising and Iltis 1961:125). WIS.		✧						✧	1
Minuartia michauxii (Fenzl) Farw. (*Arenaria stricta* Michx.)	Rock Sandwort	Dry sandy and limey outcrops and associated prairies and Red Cedar glades.	✧			✧	✧			✧	4
Moehringia lateriflora (L.) Fenzl (*Arenaria lateriflora* L.)	Woodland Sandwort	Dry to moist woods, mainly oak woods, also floodplain forests, in sandy, limey, or loamy soils.	✧	✧		✧	✧			✧	3
[n] *Myosoton aquaticum* (L.) Moench (*Stellaria aquatica* (L.) Scop.)	Giant Chickweed	Margins of wooded streams, damp places in woods, low thickets, damp cliffs, roadside ditches, pastures.	✧	✧		✧	✧			✧	4
Paronychia canadensis (L.) Wood	Whitlow-wort	Dry open woods and associated openings and rock outcrops on sandy and limey bluffs.	✧	✧		✧				✧	2
Paronychia fastigiata (Raf.) Fern.	Whitlow-wort	Thinly wooded to open sandstone bluffs and ledges, open sandy ground and sandbars.				✧	✧			✧	2
[n] *Saponaria officinalis* L.	Bouncing Bet	Dry open sandy areas, roadsides and railroads, old fields, waste places.	✧	✧		✧	✧			✧	5
[n] *Scleranthus perennis* L.	Perennial Knawel	Dry sandy disturbed areas. Collected at Lake Delton in 1941 "... for the first time ... in Wisconsin, and it appears, for the first time in North America as well" (Schlising and Iltis 1961:98). WIS.					✧			✧	**1**
Silene antirrhina L.	Sticky Catchfly	Dry prairies in a variety of soils but mainly limey; often weedy, for example railroad ballast.	✧	✧		✧	✧			✧	3
[n] *Silene csereii* Baumg.	Bladder Campion	Railroad gravel and embankments, sandbars.		✧		✧	✧			✧	2
[n] *Silene dichotoma* Ehrh.	Forking Catchfly	Dry disturbed places. Noted in the Badger Army Ammunition Plant in 1993 (Clark 1993*b*).					✧			✧	1
[n] *Silene latifolia* Poir. ssp. *alba* (P. Mill.) Greuter & Burdet (*Lychnis alba* P. Mill.; *S. pratensis* (Rafn) Godr. & Gren.)	Campion	Disturbed ground, usually dry but also moist, including roadsides and railroads, agricultural land, weedy fields, degraded prairies.	✧	✧		✧	✧			✧	5
Silene stellata (L.) Ait. f.	Starry Campion	Dry sandy woods in the eastern end of the North Range of the Baraboo Hills; a species of oak woodland (see Plant Communities). This is one of the 5 native species known only from Caledonia Township (Table 13). KL.	✧						✧		1
[n] *Silene vulgaris* (Moench) Garcke (*S. cucubalus* Wibel)	Bladder Campion	Dry disturbed places. International Crane Foundation Herbarium.					✧			✧	1
[n] *Spergularia rubra* (L.) J. & C. Presl	Sand-spurrey	Collected on a rocky bluff top in Devil's Lake State Park in 1975. KL.		✧						✧	1

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ CARYOPHYLLACEAE **PINK FAMILY** *(continued)*											
Stellaria longifolia Willd.	Long-leaved Chickweed	Sedge meadows, fens and alkaline meadows, low woods.	✧	✧		✧	✧			✧	3
[n] *Stellaria media* (L.) Vill.	Common Chickweed	Lawns, pastures, roadsides and railroads, waste places, rock outcrops, disturbed woods.	✧	✧		✧	✧			✧	5
[n] *Vaccaria hispanica* (P. Mill.) Rauschert *(Saponaria vaccaria* L.; *V. pyrimidata* Medic.)	Cow Herb	The only herbarium specimen is an 1885 sheet labelled "Baraboo." Listed by Lueders (1895:516). Apparently this was once a common weed of dry disturbed ground and grain fields but is now rare or absent (Schlising and Iltis 1961:124). WIS.	✧							✧	0
■ CELASTRACEAE **BITTERSWEET FAMILY**											
Celastrus scandens L.	Bittersweet	Decicuous and mixed woods, especially their openings and borders, also river and stream banks, thinly wooded and prairie bluffs, fencerows and hedgerows, railroad embankments and roadsides.	✧	✧		✧	✧			✧	3
Euonymus atropurpurea Jacq.	Wahoo	Lakeshores, river banks, alluvial woods, also wooded hillsides (especially where limey?).		✧	✧	✧	✧			✧	2
■ CERATOPHYLLACEAE **HORNWORT FAMILY** PR 33, 1946, Trans. WASAL 38:192-94											
Ceratophyllum demersum L.	Coontail	Lakes, ponds, sloughs, backwaters of creeks.	✧	✧	✧	✧	✧			✧	3
Ceratophyllum echinatum Gray	Coontail	More acidic water than the preceding species; known only from the Wisconsin Dells area. WIS.					✧			✧	1
■ CHENOPODIACEAE **GOOSEFOOT FAMILY** Wahl [1970]											
[n] *Atriplex patula* L.	Spearscale	Roadsides and railroads, cultivated ground, rarely in woods, for example rocky stream banks.	✧			✧	✧			✧	2
[n] *Chenopodium album* L. (incl. *C. missouriense* Aellen)	Lamb's-quarters	Weedy in dry prairies and open woods in a variety of soils, also rock outcrops, waste places; sometimes in low ground.	✧	✧		✧	✧			✧	5
[n] *Chenopodium ambrosioides* L.	Mexican-tea	Represented by 2 collections, one in a campground in 1968 and one in dry open sand in 1974. Has been used as a vermifuge. WIS, KL.	✧				✧			✧	1
[n] *Chenopodium berlandieri* Moq. var. *bushianum* (Aellen) Cronq. (*C. bushianum* Aellen)		Represented by a 1956 collection from a sandy roadside in LaValle Township. WIS.				✧				✧	1

			Locality and Abundance Code							
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ CHENOPODIACEAE											
GOOSEFOOT FAMILY *(continued)*											
Chenopodium desiccatum A. Nels. *(C. leptophyllum* of authors, not Nutt.; incl. *C. atrovirens, sensu* Hartley 1966:76, not Rydb., and *C. foggii* Wahl)		Represented by a 1953 collection from a sandy prairie (*C. atrovirens*), and a 1956 collection from a roadside (*C. foggii*). WIS.				✧				✧	1
n *Chenopodium glaucum* L.	Oak-leaved Goosefoot	A 1977 collection from open sandy ground in Prairie du Sac; adventive rather than naturalized? KL.					✧			✧	1
Chenopodium simplex (Torr.) Raf. (*Chenopodium gigantospermum* Aellen)	Maple-leaved Goosefoot	Weedy in dry often limey places, for example dolomite bluffs, also along trails in rocky exposed sites, fencerows.	✧	✧		✧	✧			✧	2
Chenopodium standleyanum Aellen		A 1959 collection from a limey bluff. WIS.				✧				✧	1
Cycloloma atriplicifolium (Spreng.) Coult.	Winged Pigweed	Dry open sandy ground, including dunes and shores; adventive from farther west?	✧			✧	✧			✧	2
n *Kochia scoparia* (L.) Schrad.	Summer-cypress	Weedy in dry open disturbed places, especially where limey, for example along roads and railways. KL.					✧			✧	1
n *Salsola kali* L. var. *tenuifolia* Tausch	Russian-thistle	Lueders (1890:515) found a single specimen but no others, and this species was noted in the 1890s along railroad tracks in Baraboo, Wisconsin Dells, and Portage (Lange 1980*b*). Yet for some reason this weed did not prosper here, and now seems to be confined to the Spring Green area in dry open sandy ground. WIS, KL.				✧				✧	1
■ CISTACEAE											
ROCKROSE FAMILY											
Helianthemum bicknellii Fern.	Frostweed	Dry usually sandy prairies and open woods, sandstone ledges.	✧	✧		✧	✧			✧	3
Helianthemum canadense (L.) Michx.	Frostweed	Dry prairies and open woods, sandstone ledges; apparently in a greater variety of soils than the preceding species.	✧	✧		✧	✧			✧	3
Hudsonia tomentosa Nutt.	Beach-heath	Shifting sand, for example dunes and blow-outs, also open sandstone ledges.				✧	✧			✧	2
Lechea intermedia Britt.	Pinweed	Dry sandy prairies, quartzite glades, open ledges, dry sandy woods.	✧	✧			✧			✧	3
Lechea stricta Britt.	Pinweed	Dry sandy prairies and woods, sandstone ledges.	✧			✧	✧			✧	3
Lechea tenuifolia Michx.	Pinweed	Dry sandy prairies and woods, sandstone ledges.	✧	✧		✧	✧			✧	3
■ CLUSIACEAE (HYPERICACEAE)											
ST. JOHN'S-WORT FAMILY											
PR 61, 1970, Trans. WASAL 58:325-51											
Hypericum ascyron L. (*H. pyramidatum* Ait.)	Giant St. John's-wort	Low ground along drainages, sedge meadows, and alkaline meadows, loamy prairies, Alder thickets, roadside ditches.	✧	✧		✧	✧			✧	3

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			Locality and Abundance Code									
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ CLUSIACEAE (HYPERICACEAE)											
ST. JOHN'S-WORT FAMILY *(continued)*											
Hypericum boreale (Britt.) Bickn.	Northern St. John's-wort	Muddy or sandy shores, sedge meadows. WIS, KL.				✧	✧			✧	1
Hypericum gentianoides (L.) BSP.	Orange-grass	Exposed sandstone and quartzite outcrops, dry open sand, sandy meadows.	✧			✧	✧			✧	2
Hypericum kalmianum L.	Kalm's St. John's-wort	Sandy meadows, low sandy woods, openings in pine-oak woods.					✧			✧	2
Hypericum majus (Gray) Britt.		Wet shores, open moist sand and sandstone ledges, sedge meadows, fens, Alder thickets.		✧	✧	✧	✧			✧	3
Hypericum mutilum L.		Low meadows, especially open muddy places, sandy shores, creek and river margins.		✧	✧	✧	✧			✧	3
[n] *Hypericum perforatum* L.	Common St. John's-wort	Weedy fields, pastures, dry prairies, Red Cedar glades, roadsides; in a variety of soils. Usually in upland sites but occasionally in low ground; sometimes covering large areas. First collected in the study area in 1886 (Utech and Iltis 1970:330, map 6).	✧	✧		✧	✧			✧	5
Hypericum punctatum Lam.	Dotted St. John's-wort	Marshy ground, Alder thickets, dry to damp fields.	✧	✧			✧			✧	2
Triadenum fraseri (Spach) Gl. (*Hypericum virginicum* L. var. *fraseri* (Spach) Fern.)	Marsh St. John's-wort	Marshy creek borders, low sandy woods, sedge meadows, cat-tail marshes.		✧			✧			✧	2
■ CONVOLVULACEAE											
CONVOLVULUS FAMILY (incl. CUSCUTACEAE - DODDER FAMILY)											
PR 26, 1937, Trans. WASAL 30:21-25											
Calystegia sepium (L.) R. Br. (*Convolvulus sepium* L.)	Hedge Bindweed	Weedy fields, low meadows, pastures, prairies, roadsides and railroads.	✧	✧		✧	✧			✧	3
Calystegia spithamaea (L.) Pursh (*Convolvulus spithamaeus* L.)	Low Bindweed	Dry upland woods, oak savannas.	✧	✧		✧				✧	2
[n] *Convolvulus arvensis* L.	Field Bindweed	Roadsides and railroads, weedy prairies. The earliest herbarium record is 1892.	✧	✧		✧	✧			✧	3
Cuscuta cephalanthi Engelm.	Dodder	Generally lowland sites, open or shady, on a variety of herbs.	✧			✧	✧			✧	2
Cuscuta gronovii Willd.	Dodder	Mainly lowlands, including sedge meadows, marshy creek bottoms, low sandy woods, but also drier often disturbed sites, on a variety of herbs.	✧	✧		✧	✧			✧	3
Cuscuta indecora Choisy	Dodder	Known only from the "Baraboo Bluffs" — no habitat data. WIS, MIL.	✧							✧	1
Cuscuta polygonorum Engelm.	Dodder	Known only from Long Lake near Portage. This is one of the 5 native species known only from Caledonia Township (Table 13). WIS.					✧	✧	✧		1
[n] *Ipomoea nil* (L.) Roth	Morning-glory	Known only from a station that at the time of collection was a campground. WIS.	✧							✧	1
[n] *Ipomoea purpurea* (L.) Roth	Morning-glory	Known only from a 1976 collection from a landfill in Prairie du Sac. KL.					✧			✧	1

			Locality and Abundance Code								
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■ CORNACEAE											
DOGWOOD FAMILY											
PR 22, 1933, Trans. WASAL 28:187-90											
Cornus alternifolia L. f.	Pagoda Dogwood	Widely scattered in deciduous and mixed forests, especially moister oak woods, Sugar Maple woods, also Hemlock stands.	✧	✧		✧	✧			✧	3
Cornus amomum Mill. (*C. obliqua* Raf.)	Silky Dogwood	Low meadows, sandy meadows, marshy bottoms, hardwood swamps, Tamarack swamps; some records represent plantings.	✧	✧		✧	✧			✧	3
Cornus canadensis L.	Bunchberry	Low sandy woods, boggy thickets, Tamarack swamps, sandstone outcrops in shaded ravines; mainly in the Central Plain.	✧			✧	✧			✧	2
Cornus racemosa Lam.	Gray Dogwood	Drier deciduous and mixed woods and their borders, low sandy woods; spreading into dry prairies, weedy fields, and sedge meadows. Often forming dense thickets.	✧	✧		✧	✧			✧	5
Cornus rugosa Lam.	Round-leaved Dogwood	Deciduous and mixed forests and Hemlock stands, especially their borders, also rock outcrops and boulder fields.	✧	✧		✧				✧	3
Cornus stolonifera Michx.	Red-osier	Sedge meadows, fens and alkaline meadows, deciduous swamps, Tamarack swamps, Alder thickets, cat-tail marshes, wet sandy places, rock outcrops, and boulder fields. The nomenclature of this species follows Voss (1985:679).	✧	✧		✧	✧			✧	4
■ CRASSULACEAE											
ORPINE FAMILY											
Penthorum sedoides L.	Ditch Stonecrop	Sedge meadows, marshy hollows such as glacial kettles, cat-tail marshes, Tamarack swamps, stream and lake borders.	✧	✧		✧	✧			✧	3
[n] *Sedum sarmentosum* Bunge	Stonecrop	Escaping to open sandstone ledges, roadsides. WIS, MIL, KL.		✧			✧			✧	1
[n] *Sedum spurium* Bieb.	Stonecrop	Escaping to dry sandstone ledges. KL.					✧			✧	1
[n] *Sedum telephium* L. (*S. purpureum* (L.) Schult.)	Stonecrop	Escaping to open sandstone and limey cliffs, roadsides, forest roads.	✧	✧		✧	✧			✧	2
■ CUCURBITACEAE											
GOURD FAMILY											
PR 3, 1929, Trans. WASAL 24:360-61											
Echinocystis lobata (Michx.) T. & G.	Wild-cucumber	Low meadows, alluvial woods, swampy thickets, upland open deciduous woods, borders of woods, including fencerows and hedgerows, roadsides.	✧	✧		✧	✧			✧	3
Sicyos angulatus L.	Bur-cucumber	Edges of deciduous bottomlands. Listed by Lueders (1895:518). KL.				✧		✧		✧	1
■ ELAEAGNACEAE											
OLEASTER FAMILY											
PR 47, 1962, Trans. WASAL 51:86-87, 89											
[n] *Elaeagnus angustifolia* L.	Russian-olive	Escaping to weedy fields.					✧			✧	1
[n] *Elaeagnus umbellata* Thunb.	Autumn-olive	Escaping to weedy fields, dry oak woods, roadsides. Both species of *Elaeagnus* have been planted for food and cover for wildlife and for erosion control. KL.	✧	✧		✧	✧			✧	2

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			Locality and Abundance Code							
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **ELAEAGNACEAE**											
OLEASTER FAMILY *(continued)*											
[n] *Shepherdia argentea* (Pursh) Nutt.	Buffalo-berry	Noted at the Devil's Lake boat landing in 1985. KL.		✧						✧	1
■ **ERICACEAE (incl. MONOTROPACEAE and PYROLACEAE)**											
HEATH FAMILY											
PR 2, 1929, Trans. WASAL 24:257-68											
Arctostaphylos uva-ursi (L.) Spreng.	Bearberry	Dry sandy prairies and sandy Jack Pine-oak woods, dry sandstone and quartzite exposures; in Devil's Lake State Park known only from one station on top of the east bluff. Elsewhere often in limey sites; the only known Baraboo Hills station is an outcrop of limey sandstone in the west end of the South Range.	✧	✧		✧	✧			✧	2
Chamaedaphne calyculata (L.) Moench (*Cassandra calyculata* (L.) D. Don)	Leather-leaf	Sedge meadows, sphagnum bogs, Tamarack swamps, glacial kettles.					✧			✧	2
Chimaphila umbellata (L.) Bart. ssp. *cisatlantica* (Blake) Hultén	Pipsissewa	Dry sandy oak or oak-pine woods, sometimes damp sites where associated with *Lycopodium lucidulum;* rarely dry limey woods. Local; widespread farther north.	✧	✧		✧	✧			✧	3
Epigaea repens L.	Trailing Arbutus	Sandy oak and oak-pine woods, dry to moist, also low sandy woods; sometimes in openings. Often associated with *Gaultheria procumbens.*	✧	✧		✧	✧			✧	3
Gaultheria procumbens L.	Teaberry	Sandy oak and oak-pine woods, dry to moist, also low sandy woods, boggy sphagnous thickets. Often associated with *Epigaea.*	✧	✧		✧	✧			✧	3
Gaylussacia baccata (Wang.) K. Koch	Black Huckleberry	Dry sandy woods and their borders and openings, sandstone ledges, low sandy woods, boggy sphagnous thickets, Tamarack swamps, sandy meadows, sedge meadows; often where swampy woods grade into sedge meadows. Mainly in the Central Plain.	✧	✧		✧	✧			✧	4
Ledum groenlandicum Oeder	Labrador-tea	Sandstone cliffs along the Wisconsin River at Wisconsin Dells and along the Baraboo River in LaValle Township, sandstone outcrops in cool wooded ravines, low sandy woods.				✧	✧			✧	2
Monotropa hypopithys L.	Pine-sap	Sandy to loamy deciduous and mixed forests.	✧	✧			✧			✧	2
Monotropa uniflora L.	Indian-pipe	Sandy to loamy deciduous and mixed forests, low sandy woods, Tamarack swamps.	✧	✧		✧	✧			✧	3
Orthilia secunda (L.) House (*Pyrola secunda* L.)	Shinleaf	Dry sandy woods. An 1884 specimen labelled "Baraboo" is of uncertain location. WIS.				✧	✧			✧	1
Pyrola americana Sweet (*P. rotundifolia* L. var. *americana* (Sweet) Fern.)	Shinleaf	Sandy woods, dry to moist.	✧	✧		✧	✧			✧	2

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ ERICACEAE											
HEATH FAMILY *(continued)*											
Pyrola elliptica Nutt.	Shinleaf	Dry to moist oak and mixed woods, low sandy woods.	✧	✧		✧	✧			✧	3
Vaccinium angustifolium Ait.	Early Blueberry	Dry sandy woods and associated glades, sandstone ledges, sandy meadows, sedge meadows, boggy sphagnous thickets, low sandy woods.	✧	✧		✧	✧			✧	4
Vaccinium macrocarpon Ait.	American Cranberry	Associated with sphagnum moss in Tamarack swamps and sedge meadows; apparently confined to a single station in Delton Township. A several acre "natural cranberry marsh," apparently of this species, was formerly located in the Baraboo Valley at North Freedom (Canfield 1861-1901:61, Templin n.d.:33, Toole 1920: 104). WIS, MIL, KL.					✧			✧	1
Vaccinium myrtilloides Michx.	Velvet-leaved Blueberry	Sandy oak and mixed woods, quartzite boulder fields and dry sandstone ledges, Tamarack swamps, low sandy woods; common in northern Wisconsin, where apparently more in lowland sites than *V. angustifolium.*	✧	✧		✧	✧			✧	2
Vaccinium oxycoccos L.	Cranberry	Confined to the Leather-leaf bog in Fairfield Township (see Plant Communities). KL.					✧			✧	1
■ EUPHORBIACEAE											
SPURGE FAMILY											
PR 69, 1987, Trans. WASAL 75:97-129											
Acalypha virginica L. var. *rhomboidea* (Raf.) Cooperrider (*A. rhomboidea* Raf.)	Three-seeded Mercury	Generally in disturbed places, dry to moist, for example weedy woods, roadsides, pastures, waste places in cities, also marshy ground, river bottoms.	✧	✧		✧	✧			✧	3
Chamaesyce geyeri (Engelm.) Small (*Euphorbia geyeri* Engelm.)	Geyer's Spurge	Dry open sandy places. A western species reaching its easternmost range limits mainly in western Wisconsin (Richardson et al. 1987:116); in the study area ranging eastward to T9N, R6E, Section 6. WIS.				✧	✧			✧	1
Chamaesyce glyptosperma (Engelm.) Small (*Euphorbia glyptosperma* Engelm.)		Dry open weedy places; known only from the Spring Green area. KL.				✧				✧	1
Chamaesyce maculata (L.) Small (*Euphorbia maculata* L.; *E. supina* Raf.)	Milk-purslane	Weedy in dry open places in a variety of soils, including sandy prairies, quartzite Red Cedar glades, railroad ballast, roadsides, also pioneering in the crevices of driveways, sidewalks.	✧	✧		✧	✧			✧	3
Chamaesyce nutans (Lag.) Small (*Euphorbia maculata* L. *sensu* Wheeler and others; *E. nutans* Lag.; *E. preslii* Guss.)	Eyebane	Weedy in lawns, gravel pits, disturbed sand, railroads, roadsides.			✧	✧	✧			✧	3

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **EUPHORBIACEAE**											
SPURGE FAMILY *(continued)*											
Chamaesyce vermiculata (Raf.) House (*Euphorbia hirsuta* (Torr.) Wieg.; *E. rafinesquii* Greene)	Hairy Spurge	Open disturbed places; known only from the Sauk City area. KL.					✧			✧	1
Croton glandulosus L.	Croton	Dry open sandy places, often where disturbed, for example dunes and blow-outs, also sandy cultivated fields.				✧	✧			✧	2
Euphorbia corollata L.	Flowering Spurge	Dry prairies in a variety of soils, quartzite and rhyolite glades, open sandstone ledges, dry open woods, sandy meadows, weedy fields, railroads, roadsides.	✧	✧		✧	✧			✧	4
[n] *Euphorbia cyparissias* L.	Cypress Spurge	Persisting at rural cemeteries and abandoned rural homesites and spreading to weedy fields, roadsides, railroads. The earliest collection is from 1903 (Richardson et al. 1987:121, map 18).	✧				✧			✧	3
[n] *Euphorbia marginata* Pursh	Snow-on-the-mountain	Escaping to waste places, for example roadsides, landfills; known only from Spring Green Township. WIS.				✧				✧	1
[n] *Poinsettia cyathophora* (Murr.) Kl. & Gke. (*Euphorbia heterophylla* of most American authors)	Painted-leaf	Relatively open limey bluffs and sandy lowlands in the Wisconsin River valley, also roadsides. Especially numerous at Twin Bluffs in T9N, R5E, Section 35; spreading from a planting in the nearby cemetery? Listed in Kartesz (1994, 1:265) as *Euphorbia heterophylla* L. WIS, KL.				✧				✧	1
Poinsettia dentata (Michx.) Kl. & Gke. (*Euphorbia dentata* Michx.)	Toothed Spurge	Bluff prairies, railroads; adventive from the Great Plains? Listed in Kartesz (1994, 1:265) as *Euphorbia dentata* Michx. KL.				✧	✧			✧	1
■ **FABACEAE (LEGUMINOSAE)**											
LEGUME FAMILY											
Fassett 1961											
Amorpha canescens Pursh	Leadplant	Dry prairies and adjoining open woods in a variety of soils.	✧	✧		✧	✧			✧	4
Amorpha fruticosa L.	False-indigo	Shorelines and alluvial thickets along the Wisconsin River at least as far upriver as the Pine Island Wildlife Area in Caledonia Township, also along the railroad track in Devil's Lake State Park.		✧		✧	✧	✧		✧	2
Amphicarpa bracteata (L.) Fern.	Hog-peanut	Dry to damp deciduous and mixed woods, deciduous swamps, Hemlock stands; mainly oak forests.	✧	✧		✧	✧			✧	4
Apios americana Medic.	Groundnut	Alluvial woods, low meadows, sandy meadows, Alder thickets.	✧	✧		✧	✧			✧	2
Astragalus canadensis L.	Milk-vetch	Local on wooded dolomite bluffs; often in disturbed sites, for example degraded limey prairies, weedy fields, along trails and roads.	✧			✧				✧	2

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **FABACEAE (LEGUMINOSAE)**											
LEGUME FAMILY *(continued)*											
Baptisia alba (L.) Vent. var. *macrophylla* (Larisey) Isely (*B. lactea* (Raf.) Thieret; *B.leucantha* T. & G.)	White Baptisia	Loamy prairies, sandy meadows, dry open sandy slopes, quartzite glades; mainly in the Central Plain.	✧	✧			✧			✧	2
Baptisia bracteata Ell. var. *leucophaea* (Nutt.) Kartesz & Gandhi (*B. leucophaea* Nutt.)	Creamy Baptisia	Mainly a species of mesic prairie, now nearly an extinct community in the study area (see Plant Communities); occurs today in dry prairies in a variety of soils, quartzite glades, and dry sandy open oak woods.	✧	✧		✧	✧			✧	3
[n] *Cercis canadensis* L.	Redbud	Spreading from plantings.		✧						✧	1
Chamaecrista fasciculata (Michx.) Greene (*Cassia fasciculata* Michx.)	Partridge-pea	Dry open weedy places. Listed for the Baraboo Hills on the basis of an undated specimen labelled "Baraboo."	✧			✧	✧			✧	2
[n] *Coronilla varia* L.	Crown-vetch	Spreading from plantings along roads for erosion control. Hartley (1966:107) referred to this species as a "rare weed."	✧	✧		✧	✧			✧	2
[a] *Crotalaria sagittalis* L.	Rattlepod	Collected "on the railroad tracks" at Spring Green in 1930 (Fassett 1961:31). A southern species; presumably adventive. WIS.				✧				✧	1
Dalea candida Willd. (*Petalostemon candidum* (Willd.) Michx.)	White Prairie-clover	Dry prairies in a variety of soils, rhyolite glades. Not on quartzite; in Devil's Lake State Park known only from a dry prairie on sandstone.	✧	✧		✧	✧			✧	2
Dalea purpurea Vent. (*Petalostemon purpureum* (Vent.) Rydb.)	Purple Prairie-clover	Dry prairies in a variety of soils. Not on rhyolite or quartzite; in Devil's Lake State Park known only from a dry prairie on sandstone.	✧	✧		✧	✧			✧	3
Desmodium canadense (L.) DC.	Tick-trefoil	Dry prairies, dry oak woods including their borders, dry roadsides.	✧	✧		✧	✧			✧	3
Desmodium cuspidatum (Willd.) Loud. (*D. bracteosum* (Michx.) DC.)	Tick-trefoil	Dry to mesic deciduous woods, mainly oak woods.	✧	✧		✧				✧	2
Desmodium glutinosum (Willd.) Wood (*D. acuminatum (Michx.)* DC.)	Tick-trefoil	Dry to mesic deciduous and mixed woods, mainly oak woods.	✧	✧		✧	✧			✧	4
Desmodium illinoense Gray	Illinois Tick-Trefoil	Dry prairies in a variety of soils. Not on rhyolite or quartzite; in Devil's Lake State Park known only from a dry prairie on sandstone.	✧	✧		✧				✧	2
Desmodium nudiflorum (L.) DC.	Tick-trefoil	Dry to mesic deciduous and mixed woods, mainly drier oak woods, also low sandy woods.	✧	✧		✧	✧			✧	3
Desmodium paniculatum (L.) DC. (incl. *D. dillenii* Darl. & *D. glabellum* (Michx.) DC.)	Tick-trefoil	Dry oak woods, including their borders and openings.	✧	✧						✧	2
Gleditsia triacanthos L.	Honey Locust	Noted in several places; adventive or spreading from plantings?	✧	✧		✧	✧			✧	2

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **FABACEAE (LEGUMINOSAE)** **LEGUME FAMILY** *(continued)*											
n *Lathyrus latifolius* L.	Perennial Pea	An ornamental rarely escaping from cultivation. WIS.					✧			✧	1
Lathyrus ochroleucus Hook.	Vetchling	Mainly drier oak woods, including associated glades, also relatively moist woods, loamy prairies.	✧	✧		✧	✧			✧	4
Lathyrus palustris L.	Vetchling	Sedge meadows, alkaline meadows and fens, loamy prairies, cat-tail marshes, Alder thickets.	✧	✧		✧	✧			✧	3
Lathyrus venosus Willd.	Vetchling	Drier oak woods, prairies.	✧	✧		✧	✧			✧	4
Lespedeza capitata Michx.	Bush-clover	Dry praries in a variety of soils, quartzite and rhyolite glades, sandy meadows, dry sandy roadsides, dry open woods.	✧	✧		✧	✧			✧	4
E *Lespedeza leptostachya* Engelm.	Bush-clover	Found in the 1970s in 2 dry sandy prairies in Sauk County, one near Prairie du Sac and one near Spring Green. Only a single plant was noted at the latter station, but in 1986 M. A. Martin found approximately 475 plants at the former station. A third station was discovered in 1993, when A. Clark found a single stalk in a several-acre patch of prairie sod in the Badger Army Ammunition Plant (Figure 44). The status of this species in Wisconsin was reviewed by Alverson (1981). Listed as threatened under the U.S. Endangered Species Act. WIS, KL.				✧	✧			✧	1
SC *Lespedeza violacea* (L.) Pers.	Bush-clover	Dry oak woods, including prairie openings, in a variety of soils, also quartzite glades. Known from approximately 8 stations; populations at a given station generally number from 20 to 200+ plants.	✧	✧		✧				✧	2
T *Lespedeza virginica* (L.) Britt.	Bush-clover	Quartzite glades and dry oak woods on quartzite and quartzite conglomerate. First collected in Wisconsin in 1893 on the west bluff in Devil's Lake State Park. Also on the east (Figure 47) and south bluffs in the park, and in approximately another half-dozen stations in the Baraboo Hills. In Wisconsin known also from Observatory Hill, a rhyolite monadnock in Marquette County approximately 30 miles northeast of Baraboo; the University of Wisconsin has specimens collected in 1951 and 1955, but A. Clark could not find it in 1990.	✧	✧						✧	2
n *Lotus corniculatus* L.	Bird's-foot Trefoil	Planted as a forage crop and also for erosion control and spreading along roadways and in other disturbed sites; recently established (Hartley 1966:109).	✧	✧		✧	✧			✧	5
Lupinus perennis L.	Lupine	Dry sandy prairies and dry sandy woods, dry sandy roadsides.	✧			✧	✧			✧	2
n *Medicago lupulina* L.	Black Medick	Dry open disturbed places. Undoubtedly more abundant than indicated.	✧	✧		✧	✧			✧	3
n *Medicago sativa* L. (incl. *M. falcata* L. and hybrids)	Alfalfa	Escaping to weedy fields, dry prairies, roadsides, waste places.	✧	✧		✧	✧			✧	4

			Locality and Abundance Code							
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **FABACEAE (LEGUMINOSAE)**											
LEGUME FAMILY *(continued)*											
[n] *Melilotus alba* Medic.	White Sweet-clover	Dry disturbed places, including weedy fields, roadsides, railroads, weedy woods; already abundant along roadsides in the Sauk City-Prairie du Sac area by 1900 (Lange 1980*b*). This taxon is synonymized with *M. officinalis* in Kartesz (1994:1:300).	✧	✧		✧	✧			✧	5
[n] *Melilotus officinalis* (L.) Pallas	Yellow Sweet-clover	Dry disturbed places, including weedy fields, roadsides, railroads, weedy woods; already abundant along roadsides in the Sauk City-Prairie du Sac area by 1900 (Lange 1980*b*). Both sweet-clovers have been planted for forage, honey production, and, since they fix nitrogen, as soil enhancers.	✧	✧		✧	✧			✧	5
SC *Pediomelum esculentum* (Pursh) Rydb. (*Psoralea esculenta* Pursh)	Pomme de Prairie	Found in a dry limey prairie near Spring Green in 1970. A western species here reaching its easternmost range limits (Fassett 1961:46, Hartley 1966:110, Nee 1970:22). KL.				✧				✧	1
[n] *Robinia pseudoacacia* L.	Black Locust	Spreading from plantings for conservation projects and windbreaks, especially in dry sandy soil. The original range of this species is uncertain because of widespread human dissemination (Isely and Peabody 1984:196).	✧	✧		✧	✧			✧	4
Strophostyles leiosperma (T. & G.) Piper		Collected in a dry, sandy, weedy field in Mirror Lake State park in 1972 and 1974; still there in 1996. KL.					✧			✧	1
Tephrosia virginiana (L.) Pers.	Goat's-rue	Dry sandy prairies and adjoining dry sandy woods.	✧			✧	✧			✧	2
[n] *Trifolium arvense* L.	Rabbit-foot Clover	Dry sandy roadsides, gravelly trailsides. Records date from 1980 and 1993. KL.		✧			✧			✧	1
[n] *Trifolium aureum* Pollich (*T. agrarium* L. of American authors)	Yellow or Hop Clover	Weedy woods, especially roadways and other disturbances, also degraded dry open places.	✧	✧			✧			✧	2
[n] *Trifolium campestre* Schreb. (*T. procumbens* L. of American authors)	Low Hop Clover	Disturbed places, including roadsides, pastures, plantations.	✧			✧				✧	2
[n] *Trifolium hybridum* L.	Alslike Clover	Disturbed ground, including weedy fields, pastures, roadsides.	✧	✧		✧	✧			✧	5
[n] *Trifolium pratense* L.	Red Clover	Disturbed ground, including weedy fields, pastures, cultivated land, weedy prairies, roadsides, edges of woods, in woods along trails.	✧	✧		✧	✧			✧	5
[n] *Trifolium repens* L.	White Clover	Disturbed ground, including weedy fields, pastures, roadsides, along wooded trails.	✧	✧		✧	✧			✧	5
Vicia americana Willd.	American Vetch	Grassy areas, including prairies, also wooded sites, especially their borders.	✧			✧	✧			✧	2
Vicia caroliniana Walt.	Wood Vetch	Drier deciduous woods and associated prairies.	✧	✧		✧	✧			✧	2
[n] *Vicia cracca* L.	Tufted Vetch	Weedy areas, for example roadsides. Listed by Lueders (1895:517).					✧			✧	1

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **FABACEAE (LEGUMINOSAE)** **LEGUME FAMILY** *(continued)*											
[n] *Vicia sativa* L. (incl. *V. angustifolia* Reichard)	Common Vetch	Disturbed ground, including roadsides, pastures.				✧	✧			✧	1
[n] *Vicia villosa* Roth	Hairy Vetch	Disturbed ground, including roadsides, railroads, weedy fields. Undoubtedly more abundant than indicated.	✧	✧		✧	✧			✧	2
■ **FAGACEAE** **BEECH FAMILY** PR 13, 1931, Trans. WASAL 26:275-79											
[a] *Castanea dentata* (Marsh.) Borkh.	Chestnut	Progeny (saplings) from plantings in a school forest noted in 1991. KL.	✧							✧	1
Quercus alba L.	White Oak	With other oaks, mainly red, also mixed hardwood stands and Jack Pine-oak woods, mainly upland sites but also lowland, for example low sandy woods, boggy thickets.	✧	✧		✧	✧			✧	5
Quercus bicolor Willd.	Swamp White Oak	Floodplain forests and swamps along the Wisconsin River and up the Baraboo River to at least Section 20 in T12N, R9E.				✧	✧	✧		✧	2
Quercus ellipsoidalis E.J. Hill	Hill's Oak	Dry sandy plains and sandstone hills; essentially a tree of the forest-prairie border of midwestern North America (Maycock et al. 1980:283). Regarded as a small-fruited form of Scarlet Oak (*Q. coccinea* Muenchh.) by Overlease (1977). May be more widespread and common than indicated. WIS.	✧			✧				✧	1
Quercus macrocarpa Michx.	Bur oak	Dry sandy or limey prairies and borders, open dry deciduous woods, also wooded bottomlands.	✧	✧		✧	✧			✧	3
Quercus × *paleolithicola* Trel. [*Q. ellipsoidalis* × *velutina*]		Specimens so identified by R. Jensen (in letter to K.I. Lange, 18 March 1991). WIS.	✧			✧				✧	1
Quercus rubra L. (*Q. borealis* Michx. f.)	Red Oak	Mesic woods, also dry oak woods and Jack Pine forests, Hemlock stands, mainly upland sites but also lowland, for example low sandy woods, boggy thickets, deciduous swamps.	✧	✧		✧	✧			✧	5
Quercus velutina Lam.	Black Oak	Dry sandy and limey woods, with other oaks and Shaggybark Hickory, Jack Pine.	✧	✧		✧	✧			✧	4
■ **GENTIANACEAE** **GENTIAN FAMILY** PR 53, 1965, Trans. WASAL 54:295-329											
SC *Bartonia virginica* (L.) BSP.	Screw-stem	Low sandy woods, boggy thickets, Tamarack swamps, sandy meadows.					✧			✧	2
T *Gentiana alba* Nutt. (*G. flavida* Gray)	White Gentian	Upland grassy (limey?) meadows within deciduous forest, for example Steinke Basin in Devil's Lake State Park (cover photo), 18 stalks at one station and 24 at another in 1992, also limey hillsides and wooded roadsides.	✧	✧		✧				✧	2

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **GENTIANACEAE**											
GENTIAN FAMILY *(continued)*											
Gentiana andrewsii Griseb.	Bottle Gentian	Sedge meadows, alkaline meadows and fens, loamy prairies, sandy meadows, marshy stream bottoms, Alder thickets.	✧	✧		✧	✧			✧	4
Gentiana puberulenta (*G. puberula* of authors, not Michx.)	Prairie Gentian	Dry sandy and limey prairies.	✧			✧	✧			✧	2
Gentianella quinquefolia (L.) Small ssp. *occidentalis* (Gray) Gillett	Stiff Gentian	Open woods and dry prairies on dolomite or limey sandstone, shaded railroad embankments.	✧	✧		✧	✧			✧	3
Gentianopsis crinita (Froel.) Ma	Fringed Gentian	Marshy creek bottoms where limey, sedge meadows and low shrubby thickets in limey areas, shaded railroad embankments.	✧	✧		✧				✧	2
SC *Gentianopsis procera* (Holm) Ma	Fringed Gentian	Known only from an alkaline meadow in Merrimac Township. KL.					✧			✧	1
■ **GERANIACEAE**											
GERANIUM FAMILY											
PR 21, 1933, Trans. WASAL 28:175-76											
n *Erodium cicutarium* (L.) L'Hèr.	Storksbill	A lawn weed at Devil's Lake State Park, where collected in 1984. KL.		✧						✧	1
Geranium bicknellii Britt.		Dry open sandy or gravelly ground, quartzite glades, also (an 1891 record) "cleared land."	✧	✧						✧	2
Geranium carolinianum L.		Dry rocky prairies in a variety of soils, rhyolite glades, dry rocky woods.	✧	✧						✧	2
Geranium maculatum L.	Wild Geranium	Deciduous forest, dry to moist, also Jack Pine-oak woods, Hemlock stands.	✧	✧		✧	✧			✧	4
■ **HALORAGIDACEAE**											
WATER-MILFOIL FAMILY											
PR 10, 1930, Trans. WASAL 25:201-03											
Myriophyllum spicatum L. (incl. *M. exalbescens* Fern.)	Water-milfoil	Devil's Lake, where first collected in 1974, and the Wisconsin River. Listed by Lueders (1895:518). Likely to be found in other aquatic systems, as it is readily spread by people. As herein treated, this taxon includes both native (*M. exalbescens*) and naturalized (*M. spicatum*) material. There has been disagreement over the distinctness of the American and Eurasian forms; see Voss (1985:638-39). Nichols (1984) separates them phytochemically and morphologically.		✧	✧	✧	✧	✧		✧	2
■ **HAMAMELIDACEAE**											
WITCH-HAZEL FAMILY											
Hamamelis virginiana L.	Witch-hazel	Dry deciduous woods, also cooler, moister woods, for example north-facing slopes, ravines.	✧	✧		✧	✧			✧	3

(continued on next page)

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ HIPPOCASTANACEAE **BUCKEYE FAMILY**											
[a] *Aesculus glabra* Willd.	Ohio Buckeye	Progeny (saplings) from plantings noted in an alluvial thicket in 1991. AC.	✧							✧	1
■ HYDROPHYLLACEAE **WATERLEAF FAMILY** PR 58, 1966, Trans. WASAL 55:255-59											
Hydrophyllum virginianum L.	Waterleaf	Moister deciduous woods, alluvial forests, Hemlock stands; may become weedy with disturbance.	✧	✧		✧	✧			✧	4
■ JUGLANDACEAE **WALNUT FAMILY** PR 17, 1932, Trans. WASAL 27:231-34											
Carya cordiformis (Wang.) K. Koch	Bitternut Hickory	Moist woods, including deciduous swamps, also dry woods, sometimes grassy fields next to wooded areas.	✧	✧		✧	✧			✧	4
Carya ovata (Mill.) K. Koch	Shaggybark Hickory	Mainly dry woods, with oaks, sometimes in nearly monotypic stands, also damp woods, including alluvial forests.	✧	✧		✧	✧			✧	5
Juglans cinerea L.	Butternut	Dry upland woods, ravines, alluvial forests.	✧	✧		✧	✧			✧	4
Juglans nigra L.	Black Walnut	Upland woods where sometimes in relatively open sites, also lowland forests. Both species of *Juglans* seem to be most prevalent in limey soil.	✧	✧		✧	✧			✧	3
■ LAMIACEAE (LABIATAE) **MINT FAMILY** PR 41, 1957, Trans. WASAL 46:115-40											
T *Agastache nepetoides* (L.) Kuntze	Yellow Giant-hyssop	A station with 25 stalks discovered in oak woods in the eastern end of the North Range of the Baraboo Hills in 1992; a species of oak woodland (see Plant Communities). This is one of the 5 native species known only from Caledonia Township (Table 13). WIS, AC.	✧						✧		1
Agastache scrophulariifolia (Willd.) Kuntze	Purple Giant-hyssop	Streamsides and pond margins in wooded ravines, low meadows where marshy and semi-shaded, wet edges of roads and railroads in wooded areas.	✧	✧		✧				✧	2
[n] *Ajuga genevensis* L.	Bugleweed	A 1979 collection from a dry roadside. KL.				✧				✧	1
Blephilia hirsuta (Pursh) Benth.	Wood Mint	Deciduous, usually moist woods, especially their borders and openings.				✧				✧	2
E *Collinsonia canadensis* L.	Richweed	Only 2 Wisconsin records: "valley of the Wisconsin River near Baraboo," Sauk County, 1865, and Walworth County, 1940 (Koeppen 1957:139). The notation on the Sauk County specimen suggests a floodplain forest, although an upland site is also possible. WIS.					✧			✧	0

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ LAMIACEAE (LABIATAE)											
MINT FAMILY *(continued)*											
[n] *Elsholtzia ciliata* (Thunb.) Hylander		In Wisconsin known only from Devil's Lake State Park, where first collected in 1946 at the northeastern corner of the lake near cottages, since removed, and the railroad. Within 20 years it had spread to other north shore localities, and by 1968 it was found at the south end of the lake on a pile of chips and sawdust from cut elm trees. UW-Oshkosh, WIS, KL.		✧						✧	1
[n] *Galeopsis tetrahit* L.	Hemp-nettle	Deciduous woods, especially along trails and roadways in moister sites. Listed by Lueders (1895:521).	✧	✧			✧			✧	2
[n] *Glechoma hederacea* L.	Ground-ivy	Weedy in lawns, especially where shaded, also moist woods, alluvial forests.	✧	✧		✧	✧			✧	5
Hedeoma hispida Pursh	Rough Pennyroyal	Dry prairies, often where rocky, in a variety of soils, quartzite and rhyolite glades, also open sandy ground.	✧	✧		✧	✧			✧	3
Hedeoma pulegioides (L.) Pers.	American Pennyroyal	Dry rocky places; may be weedy. A Milwaukee Public Museum specimen, dated 1860, from "Sauk City, Sauk Co.," is of uncertain location; it could be either Central Plain or Western Upland.	✧	✧						✧	2
[n] *Leonurus cardiaca* L.	Motherwort	Weedy woods, waste places, hedgerows, usually where shaded.	✧	✧		✧	✧			✧	4
Lycopus americanus Bart.	Water-horehound	Low meadows, especially sedge meadows, also alkaline meadows and fens, loamy prairies, cat-tail marshes, sandy meadows, low thickets, low sandy woods, marshy openings in deciduous woods.	✧	✧		✧	✧			✧	4
Lycopus uniflorus Michx.	Water-horehound	Sedge meadows, alkaline meadows and fens, low thickets, low sandy woods, Tamarack swamps, marshy sloughs; often in wetter places than *L. americanus*.	✧	✧		✧	✧			✧	4
Lycopus virginicus L.	Water-horehound	Floodplain forests.				✧	✧	✧		✧	2
Mentha arvensis L.	Field Mint	Sedge meadows, alkaline meadows and fens, Alder thickets, marshy depressions such as kettles.	✧	✧		✧	✧			✧	3
[n] *Mentha* × *gracilis* Sole (pro sp.) (*M. cardiaca* (S.F. Gray) Baker)		Marshy creek margins (Hartley 1962:635, 126; 1966:105); a hybrid of *M. arvensis* and *M. spicata*.	✧							✧	1
[n] *Mentha spicata* L.	Spearmint	Escaping to marshy creek banks, ditches. The source of spearmint oil.		✧		✧	✧			✧	2
[n] *Monarda didyma* L.	Oswego-tea, Beebalm	A 1946 collection from Devil's Lake State Park. WIS.		✧						✧	1
Monarda fistulosa L.	Wild Bergamot	Dry often disturbed areas in a variety of soils; most characteristic of weedy fields, also pastures, prairies, open woods and their borders, roadsides.	✧	✧		✧	✧			✧	5
Monarda punctata L. var. *villicaulis* (Pennell) Palmer & Steyermark	Spotted Wild Bergamot	Dry sandy prairies and adjoining Jack Pine-oak woods, open sandstone ledges, dry limey prairies.	✧			✧	✧			✧	3

(continued on next page)

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **LAMIACEAE (LABIATAE)** **MINT FAMILY** *(continued)*											
[n] *Nepeta cataria* L.	Catnip	Dry disturbed ground, including waste places, pastures, open woods and their borders, roadsides, rock outcrops; a common weed in Prairie du Sac by 1882 (Lange 1980*b*).	✧	✧		✧	✧			✧	4
Physostegia virginiana (L.) Benth.	False Dragonhead	Lake shores, river banks, marshy sloughs, alluvial woods, Tamarack swamps, low meadows.	✧	✧		✧	✧			✧	3
Prunella vulgaris L.	Self-heal, Heal-all	Dry to damp woods, marshy openings in deciduous woods, Alder thickets, sandy meadows, low sandy woods, open cliffs. Native in Eurasia and apparently also in North America; varieties or subspecies of this plastic taxon are not herein recognized (after Voss 1996:168).	✧	✧		✧	✧			✧	4
[n] *Pycnanthemum flexuosum* (Walt.) BSP.	Mountain Mint	A roadside colony noted in Devil's Lake State Park in 1988. KL.		✧						✧	1
Pycnanthemum virginianum (L.) B.L. Robins. & Fern.	Mountain Mint	Alkaline meadows and fens, sedge meadows and Alder thickets, loamy prairies, sandy meadows; sometimes in drier sites. In Devil's Lake State Park known only from an alkaline meadow between the east and south bluffs.	✧	✧		✧	✧			✧	3
[a] *Salvia reflexa* Hornem.	Sage	Known only from a "grazed creek bed" and a nearby site which at the time of collection was a campground; native west of the Great Lakes. WIS.	✧							✧	1
Scutellaria galericulata L. (*S. epilobiifolia* A. Hamilton)	Common Skullcap	Alkaline meadows and fens, sedge meadows, loamy prairies, Alder thickets, Tamarack swamps, low sphagnous ground, Leather-leaf bogs. In Devil's Lake State Park known only from the wetland complex between the east and south bluffs. Mainly in the Central Plain.	✧	✧		✧	✧			✧	3
Scutellaria lateriflora L.	Mad-dog Skullcap	Marshy shores, sedge meadows, fens, boggy thickets, floodplain forests, marshy openings in deciduous woods.	✧	✧		✧	✧			✧	3
Scutellaria leonardii Epling	Small Skullcap	Dry prairies in a variety of soils, but mainly limey, also quartzite and rhyolite glades, dry sandy woods. Regarded as a variety of *S. parvula* Michx. by Kartesz (1994, 1:353).	✧	✧		✧	✧			✧	4
Scutellaria ovata Hill ssp. *ovata* (*S. ovata* var. *versicolor* (Nutt.) Fern.)	Heart-leaved Skullcap	In the Western Upland on dolomite and limey sandstone in oak woods, in the Baraboo Hills and Devil's Lake State Park on quartzite, quartzite conglomerate, and Galesville sandstone in oak woods and Sugar Maple forests.	✧	✧		✧				✧	2
Stachys hispida Pursh	Hedge-nettle	Low meadows, alkaline meadows, loamy prairies, Alder thickets, sandy meadows. Synonymized with *S. tenuifolia* in Kartesz (1994, 1:354); also treated as a variety of *S. tenuifolia* by some authors.	✧	✧		✧	✧			✧	4

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **LAMIACEAE (LABIATAE)** **MINT FAMILY** *(continued)*											
Stachys palustris L.	Hedge-nettle	Low meadows, alkaline meadows, sedge meadows, loamy prairies, Leather-leaf bogs, marshy kettles, cat-tail marshes, floodplain forests, Tamarack swamps.	✧	✧			✧			✧	4
Stachys tenuifolia Willd.	Hedge-nettle	Low meadows and floodplain forests along the Wisconsin River and up the Baraboo River for approximately a mile.				✧	✧	✧		✧	2
Teucrium canadense L.	Germander, Wood-sage	Sedge meadows, alkaline meadows, sandy meadows, floodplain forests, marshy openings in deciduous woods, Tamarack swamps, Alder thickets, also dry weedy oak woods and dry weedy fields.	✧	✧		✧	✧			✧	4
Trichostema brachiatum L. (*Isanthus brachiatus* (L.) BSP.)	Fālse Pennyroyal	Known only from an 1865 collection from the Upper Narrows of the Baraboo Hills and a 1992 collection from a dry rocky prairie on glacial till in Devil's Lake State Park. WIS, KL.	✧	✧						✧	1
■ **LENTIBULARIACEAE** **BLADDERWORT FAMILY** Tans 1987											
SC *Utricularia geminiscapa* Benj.	Bladderwort	Collected in a pool in a *Carex rostrata — Calamagrostis canadensis* meadow in Dellona Township in 1974. The range of this species may be more extensive than presently documented (Haber 1979). KL.					✧			✧	1
Utricularia macrorhiza Le Conte (*U. vulgaris* L.)	Bladderwort	Kettle ponds, river sloughs, pools in creek bottoms.	✧	✧		✧	✧			✧	2
■ **LIMNANTHACEAE** **FALSE MERMAID FAMILY**											
Floerkea proserpinacoides Willd.	False Mermaid	Seepages and vernally moist places in deciduous and mixed woods, damp wooded stream sides, Alder thickets; mainly in the Baraboo Hills.	✧	✧		✧				✧	3
■ **LINACEAE** **FLAX FAMILY** PR 21, 1933, Trans. WASAL 28:171-73											
Linum sulcatum Riddell		Dry prairies in a variety of soils, rhyolite glades; mainly in the Western Upland.	✧			✧	✧			✧	3
■ **LYTHRACEAE** **LOOSESTRIFE FAMILY** PR 47, 1962, Trans. WASAL 51:87-92											
Decodon verticillatus (L.) Ell.	Swamp Loosestrife	Known only from the margin of a glacial kettle (Lost Lake) in lowland deciduous forest in the Baraboo Hills, where forming a zone, 15-30 ft in width; it in turn is bordered by a band of Alder, 50-100 ft in width.	✧							✧	1

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **LYTHRACEAE** **LOOSESTRIFE FAMILY** *(continued)*											
Lythrum alatum Pursh	Loosestrife	Alkaline meadows, alluvial meadows, loamy prairies. Listed for the Baraboo Hills on the basis of an 1885 collection labelled "Baraboo." In Devil's Lake State Park known only from an alkaline meadow between the east and south bluffs.	✧	✧			✧			✧	2
n *Lythrum salicaria* L.	Purple Loosestrife	Escaping from garden plantings to become a weed of wet places. First noted in the study area in Delton Township in 1974, and at Devil's Lake in 1976; especially numerous along the Wisconsin River. Stuckey (1980) discusses the distributional history of this wetlands invader (Henderson 1987).	✧	✧	✧	✧	✧			✧	3
Rotala ramosior (L.) Koehne	Tooth-cup	Sandy and mucky shores, wet open sand.		✧	✧	✧	✧	✧		✧	2
■ **MALVACEAE** **MALLOW FAMILY** PR 60, 1970, Trans. WASAL 58:301-23											
n *Abutilon theophrasti* Medic.	Velvet-leaf	Agricultural land, often corn fields, also roadsides, edges of woods, waste places.	✧	✧		✧	✧			✧	3
SC *Callirhoe triangulata* (Leavenw.) Gray	Poppy Mallow	Dry sandy prairies and sand barrens; known from Spring Green and Prairie du Sac Townships. WIS, KL.				✧	✧			✧	1
n *Hibiscus trionum* L.	Flower-of-an-hour	Waste places, roadsides, agricultural land.	✧	✧			✧			✧	2
n *Malva moschata* L.	Musk Mallow	Dry weedy places; collected at Devil's Lake State Park in 1981. KL.		✧						✧	1
n *Malva neglecta* Wallr.	Common Mallow	Roadsides, railroads, agricultural land, lawns.	✧	✧		✧	✧			✧	2
n *Malva rotundifolia* L.		Roadsides and other weedy areas. WIS (a 1966 collection) and Leopold Reserve Herbarium (a 1940 collection).	✧				✧			✧	1
SC *Napaea dioica* L.	Glade Mallow	Wooded river margins, along creeks in sedge meadows, wet roadsides in woods.	✧	✧		✧				✧	2
■ **MELASTOMATACEAE** **MEADOW-BEAUTY FAMILY** PR 47, 1962, Trans. WASAL 51:93, 95											
Rhexia virginica L.	Meadow-beauty	Known only from a 1930 collection from Spring Green (Figure 40). WIS.				✧		✧		✧	1
■ **MENISPERMACEAE** **MOONSEED FAMILY** Cochrane 1990											
Menispermum canadense L.	Moonseed	Moist woods and bottomland forests, also dry timbered ridgetops; may be weedy, for example along railroad tracks.	✧	✧		✧	✧			✧	3

			Locality and Abundance Code								
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■ **MORACEAE (incl. CANNABINACEAE - HEMP FAMILY)**											
MULBERRY FAMILY											
PR 23, 1933, Trans. WASAL 28:192-94											
[n] *Cannabis sativa* L.	Marijuana, Hemp	Weedy in disturbed sites. Most wild plants represent escapes from cultivation; introduced for its fibers.	✧	✧		✧	✧			✧	3
Humulus lupulus L. (incl. *H. americanus* Nutt.)	Common Hops	Low sandy woods, Alder thickets, bottomland forests, also upland sites; records include both native plants and plants escaped from cultivation.	✧	✧		✧	✧			✧	2
[n] *Morus alba* L.	White Mulberry	Escaping from cultivation; introduced to supply leaves for silkworm culture.	✧	✧		✧	✧			✧	2
Morus rubra L.	Red Mulberry	Known only from Red Oak-Silver Maple forest at Ferry Bluff (T9N, R6E, SW1/4 of section 20), where collected by H.H. Iltis in 1985; first collected here by N.C. Fassett in 1937. WIS, MIL.				✧		✧		✧	1
■ **MYRICACEAE**											
SWEET-FERN FAMILY											
PR 17, 1932, Trans. WASAL 27:231, 233											
Comptonia peregrina (L.) Coult. (*Myrica aspleniifolia* L.)	Sweet-fern	Sandy plains and fields, drier oak woods, Jack Pine-oak stands, rarely in sandy loam; in the Baraboo Hills known only from the west end of the South Range.	✧			✧	✧			✧	3
■ **NYCTAGINACEAE**											
FOUR-O'CLOCK FAMILY											
[a] *Mirabilis hirsuta* (Pursh.) MacM.	Four-o'clock	Dry sandy prairies and sandy roadsides in the northwestern corner of the Baraboo Hills and adjacent lands, and railroad ballast in the Western Upland; a Great Plains species.	✧			✧	✧			✧	2
[a] *Mirabilis nyctaginea* (Michx.) MacM.	Four-o'clock	Railroad ballast and roadsides, dry sandy prairies, blufftop prairies; native south and southwest of the study area.	✧	✧		✧	✧			✧	3
■ **NYMPHAEACEAE**											
WATER-LILY FAMILY											
PR 33, 1946, Trans. WASAL 38:189-94											
Brasenia schreberi Gmel.	Water-shield	Ponds and lakes. WIS, KL.					✧	✧		✧	1
Nuphar lutea (L.) Sm. ssp. *advena* (Ait.) Kartesz & Gandhi (*N. advena* (Ait.) Ait. f.)	Spatter-dock	Bays, ponds, lakes. WIS, KL.					✧	✧		✧	1
Nuphar lutea (L.) Sm. ssp. *variegata* (Dur.) E.O. Beal (*N. variegata* Dur.)	Spatter-dock	Bays, ponds, lakes. WIS, KL.					✧	✧		✧	1
Nymphaea odorata Ait. (*N. tuberosa* Paine)	White Water-lily	Bays, ponds, lakes, sloughs, sandy brooks.				✧	✧			✧	2
■ **OLEACEAE**											
ASH FAMILY											
Fraxinus americana L.	White or American Ash	Dry to moist woods, Hemlock stands.	✧	✧		✧	✧			✧	4

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **OLEACEAE**											
ASH FAMILY *(continued)*											
Fraxinus nigra Marsh.	Black Ash	Alluvial woods, damp wooded slopes and ravines, Tamarack swamps, Alder thickets.	✧	✧		✧	✧			✧	3
Fraxinus pennsylvanica Marsh.	Red Ash, incl. Green Ash	Mainly lowland and mesic forests, also dry woods.	✧	✧		✧	✧			✧	4
[n] *Syringa vulgaris* L.	Common Lilac	Characteristic of rural cemeteries and abandoned homesteads; spreading, or merely persisting from plantings?	✧	✧		✧	✧			✧	3
■ **ONAGRACEAE**											
EVENING-PRIMROSE FAMILY											
PR 47, 1962, Trans. WASAL 51:93-127											
Circaea alpina L.	Enchanter's-nightshade	Relatively cool and damp woods, Hemlock stands.	✧	✧		✧				✧	3
Circaea lutetiana L. ssp. *canadensis* (L.) Asch. & Mag. (*C. quadrisulcata* (Maxim.) Franch. & Sav. ssp. *canadensis* (L.) A. & D. Löve)	Enchanter's-nightshade	Dry to moist woods, low sandy woods, pine-oak woods, Hemlock stands.	✧	✧		✧	✧			✧	4
Epilobium angustifolium L.	Fireweed	"Disturbed open places in sandy soil" (Zimmerman 1947:89); common in northern Wisconsin. WIS.		✧			✧			✧	1
Epilobium ciliatum Raf. (incl. *E. adenocaulon* Haussk. × *E. glandulosum* (Lehm.)		Marshy and swampy ground, including fens, also sandy meadows.	✧	✧			✧			✧	3
Epilobium coloratum Biehler		Wet places, including Alder thickets, Tamarack swamps, also dry prairies, dry limey woods.	✧	✧		✧	✧			✧	3
Epilobium leptophyllum Raf. (*E. lineare* of authors, not Muhl.)	Linear-leaved Willow-herb	Fens, alkaline meadows, sedge meadows; in Devil's Lake State Park known only from an alkaline meadow between the east and south bluffs.	✧	✧			✧			✧	3
Ludwigia palustris (L.) Ell.	Water-purslane	Margins of rivers, for example sandbars, and lakes, also sedge meadows.		✧	✧	✧	✧			✧	3
Ludwigia polycarpa Short & Peter	Water-purslane	Swampy and marshy ground, including sedge meadows.				✧	✧			✧	2
Oenothera biennis L. (incl. *O. parviflora* L. & *O. villosa* Thunb.)	Evening-primrose	Dry sandy or gravelly, often disturbed places, including weedy fields, roadsides, railroad ballast.	✧	✧		✧	✧			✧	4
Oenothera clelandii Dietrich, Raven, & W. L. Wagner (*O. rhombipetala* of authors, not Nutt.)	Evening-primrose	Dry sandy or gravelly, often disturbed places, including weedy prairies, river margins, roadsides.	✧			✧	✧			✧	3
Oenothera perennis L.	Sundrops	Generally in relatively moist ground, such as seepages, wet sand, ditches.	✧	✧		✧	✧			✧	4

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **OROBANCHACEAE**											
BROOM-RAPE FAMILY											
Conopholis americana (L.) Wallr.	Squawroot	Dry to moist oak woods. A root parasite of oaks; probably more widespread than indicated.	✧	✧						✧	3
SC *Orobanche uniflora* L.	One-flowered Cancer-root	Upland and lowland deciduous woods. A total of approximately 90 plants in 1991 along the trail on top of the west bluff in Devil's Lake State Park, a locality first noted in 1966.	✧	✧						✧	2
■ **OXALIDACEAE**											
WOOD-SORREL FAMILY											
PR 21, 1933, Trans. WASAL 28:172-76											
Oxalis dillenii Jacq. (*O. stricta* L. *sensu* American authors)	Wood-sorrel	Dry disturbed places, including roadsides and railroads, gardens and lawns, weedy fields, weedy woods.	✧	✧		✧	✧			✧	4
Oxalis montana Raf. (*O. acetosella* L. ssp. *montana* (Raf.) D. Löve)	Common Wood-sorrel	Northern forests of Yellow Birch-Hemlock-Yew in LaValle Township (Figure 38). Rare in southern Wisconsin; apparently disjunct from Marathon County, Wisconsin, 100 miles to the north. KL.				✧				✧	1
Oxalis stricta L. (after Eiten; *O. europaea* Jordan)	Wood-sorrel	Dry disturbed places, sunny and shady.	✧	✧		✧	✧			✧	4
Oxalis violacea L.	Violet Wood-sorrel	Dry prairies in sandy and limey soils, quartzite and rhyolite glades and associated dry woods.	✧	✧		✧	✧			✧	3
■ **PAPAVERACEAE (incl. FUMARIACEAE)**											
POPPY FAMILY											
SC *Adlumia fungosa* (Ait.) BSP.	Mountain-fringe	"I have only found it wild among the ferns, hemlocks and rocks at the Upper Narrows of the Baraboo River" (Toole 1922:49). It still is at this locality, on east and north-facing talus slopes and cliffs. Listed by Lueders (1895:516). KL.	✧							✧	1
[n] *Chelidonium majus* L.	Celandine	Weedy in woods, roadsides; the Baraboo Hills record is based upon an 1886 specimen labelled "Baraboo." WIS, KL.	✧				✧			✧	1
Corydalis sempervirens (L.) Pers.	Pale Corydalis	Open rocky areas, dry woods and quartzite and rhyolite glades. See *Polymnia*.	✧	✧		✧	✧			✧	3
Dicentra canadensis (Goldie) Walp.	Squirrel-corn	Deciduous and mixed, usually moist woods; in Devil's Lake State Park known only from Parfrey's Glen.	✧	✧		✧	✧			✧	2
Dicentra cucullaria (L.) Bernh.	Dutchman's-breeches	Deciduous woods, dry to moist, also damp mixed woods. This species lights up the Devil's Lake bluffs in late April-early May (Figure 37).	✧	✧		✧	✧			✧	4
Sanguinaria canadensis L.	Bloodroot	Dry to mesic forests, lowland forests, Hemlock stands.	✧	✧		✧	✧			✧	4
■ **PHYTOLACCACEAE**											
POKEWEED FAMILY											
Phytolacca americana L.	Pokeweed	Dry weedy woods and borders; a 1985 collection. KL.	✧							✧	1

(continued on next page)

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ PLANTAGINACEAE											
PLANTAIN FAMILY											
PR 59, 1967-68, Trans. WASAL 56:281-313											
[a] *Plantago aristata* Michx.	Bracted Plantain	Dry open sandy places; a Great Plains species.				✧				✧	2
[n] *Plantago lanceolata* L.	Ribgrass	Weedy in lawns, fields, roadsides, and other open disturbed places.	✧	✧		✧	✧			✧	3
[n] *Plantago major* L.	Broad-leaved Plantain	Weedy in lawns, fields, roadsides, railroad ballast, gravel pits, and other open disturbed places.	✧	✧		✧	✧			✧	5
Plantago patagonica Jacq. (*P. purshii* R. & S.)	Indian-wheat	Dry open sandy places, gravelly roadsides, railroad tracks, pavement.		✧		✧	✧			✧	3
Plantago rugelii Dcne.	Rugel's Plantain	Weedy in deciduous forests, including lowlands, for example along trails, also dry open disturbed places.	✧	✧		✧	✧			✧	5
■ PLATANACEAE											
SYCAMORE FAMILY											
SC *Platanus occidentalis* L.	Sycamore	Along the Wisconsin River at least as far upriver as the Prairie du Sac area, for example a double-trunked tree, apparently native, just below the Prairie du Sac dam in Columbia County, West Point Township (another native sycamore is growing directly across from Derleth Park, Sauk City, in this township). Listed by Lueders (1895: 521). The University of Wisconsin has specimens from Spring Green. WIS.				✧		✧		✧	1
■ POLEMONIACEAE											
PHLOX FAMILY											
PR 57, 1966, Trans. WASAL 55:243-53											
Phlox divaricata L.	Blue or Woodland Phlox	Floodplain forests, wooded ravines, moist deciduous forests.	✧	✧		✧	✧			✧	3
[n] *Phlox paniculata* L.	Summer Phlox	Native farther east and south. Persisting in old gardens and abandoned cemeteries, and spreading to roadsides, ditches, railroad embankments, and other disturbed places.	✧	✧		✧	✧			✧	3
Phlox pilosa L.	Downy or Prairie Phlox	Limey and sandy hill prairies, loamy prairies, open oak woods; stations vary from dry to damp.	✧	✧		✧	✧			✧	3
Polemonium reptans L.	Jacob's-ladder	Mainly damp to wet shady places, such as lowland woods, Alder thickets, Tamarack swamps, also fens, alkaline meadows, loamy prairies; sometimes in drier sites.	✧	✧		✧	✧			✧	4
■ POLYGALACEAE											
MILKWORT FAMILY											
PR 21, 1933, Trans. WASAL 28:175, 177-78											
Polygala polygama Walt.	Milkwort	Dry open sand, shifting or stable, also sandy meadows, quartzite outcrops.	✧			✧	✧			✧	3
Polygala sanguinea L.	Milkwort	Dry open sand, dry sandy prairies, quartzite and rhyolite glades, sandy meadows.	✧	✧		✧	✧			✧	3

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **POLYGALACEAE**											
MILKWORT FAMILY *(continued)*											
Polygala senega L.	Seneca Snakeroot	Thinly wooded limey bluffs; in the Baraboo Hills known only from the west end of the South Range. WIS, KL.	✧			✧				✧	1
Polygala verticillata L.		Sandy meadows, also open wet sand. Listed by Lueders (1895:517). WIS, AC.					✧			✧	1
■ **POLYGONACEAE**											
BUCKWHEAT FAMILY											
PR 15, 1932, Trans. WASAL 27:207-25											
Polygonella articulata (L.) Meisn.	Jointweed	Dry open sand, shifting or stable.				✧	✧			✧	2
Polygonum amphibium L. var. *emersum* Michx. (*P. coccineum* Willd.)	Water Smartweed	Lake and river shores, sedge meadows, swales in sandy meadows.		✧	✧	✧	✧			✧	3
Polygonum amphibium L. var. *stipulaceum* Coleman (*P. natans* Eaton)	Water Smartweed	Lake shores, sedge meadows.		✧	✧	✧	✧			✧	3
Polygonum arifolium L.	Halberd-leaved Tearthumb	Sedge meadows, Tamarack swamps, low sandy woods, marshy openings in deciduous woods, wet ground along streams and lakes.	✧	✧		✧	✧			✧	3
[n] *Polygonum aviculare* L.	Knotweed	Dry often calcareous ground, including roadsides, railroad ballast, lawns and gardens, sidewalk cracks, waste land.	✧	✧		✧	✧			✧	5
Polygonum cilinode Michx.	Climbing Buckwheat	Mixed often northern woods, low sandy woods.	✧			✧				✧	2
[n] *Polygonum convolvulus* L.	Black Bindweed	Disturbed ground, including cultivated fields, weedy prairies, railroad ballast, degraded woods.	✧	✧		✧	✧			✧	3
[n] *Polygonum cuspidatum* Sieb. & Zucc.	Japanese Knotweed	Persisting and occasionally escaping from plantings. KL.	✧	✧			✧			✧	1
Polygonum hydropiper L.	Water-pepper	Sedge meadows, marshy shores, swales in sandy meadows, fens; often weedy.	✧	✧		✧	✧			✧	3
Polygonum hydropiperoides Michx.	Smartweed	Sedge meadows, marshy shores; often in shallow water.	✧	✧		✧	✧			✧	3
Polygonum lapathifolium L.	Nodding Smartweed	Sedge meadows, marshy hollows, fens, low sandy woods; generally in damp ground, often where disturbed.	✧	✧		✧	✧			✧	3
Polygonum pensylvanicum L.	Pinkweed	Sedge meadows, marshy hollows, marshy shores, wet open sand, sometimes dry ground; often where disturbed.	✧	✧		✧	✧			✧	3
[n] *Polygonum persicaria* L.	Lady's-thumb	Disturbed sites, for example roadsides; sometimes in relatively dry ground.	✧	✧		✧	✧			✧	3
Polygonum punctatum Ell.	Smartweed	Wetlands, including shady sites: sedge meadows, fens, bogs, Alder thickets, Tamarack swamps, low sandy woods, deciduous swamps, river sandbars.	✧	✧		✧	✧			✧	4
Polygonum ramosissimum Michx.	Bushy Knotweed	Sandy and gravelly shores and strands.				✧	✧	✧		✧	2

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **POLYGONACEAE**											
BUCKWHEAT FAMILY *(continued)*											
Polygonum sagittatum L.	Arrow-leaved Tearthumb	Low meadows, sandy meadows, fens, low thickets, bogs, Tamarack swamps, low sandy woods, deciduous swamps, marshy openings in forested uplands.	✧	✧		✧	✧			✧	4
Polygonum scandens L.	Climbing False Buckwheat	Marshy shores, sedge meadows, loamy prairies; sometimes in drier sites.		✧		✧	✧			✧	2
Polygonum tenue Michx.	Knotweed	Dry prairies in a variety of soils, quartzite and rhyolite glades; sometimes weedy in pavement and along roads and railroads.	✧	✧		✧	✧			✧	3
Polygonum virginianum L. (*Tovara virginiana* (L.) Raf.)	Jumpseed	Floodplain forests, moister woods, Alder thickets, Hemlock stands; often along borders.	✧	✧		✧	✧			✧	4
[n] *Rumex acetosella* L.	Sheep Sorrel	Dry sandy fields, such as old bluegrass pastures, and adjoining disturbed woods, also weedy prairies and Red Cedar glades in a variety of soils.	✧	✧		✧	✧			✧	4
Rumex altissimus Wood	Pale Dock	River shores, also roadsides and railroad embankments.		✧		✧	✧	✧		✧	2
[n] *Rumex crispus* L.	Curly Dock	Disturbed ground, dry or damp: abandoned fields and pastures, roadsides, railroad embankments, waste areas, weedy clearings, marshy shores; sometimes persisting in woods.	✧	✧		✧	✧			✧	5
[n] *Rumex obtusifolius* L.	Bitter Dock	Disturbed, usually moist ground, including roadsides, borders of woods, open woods.	✧	✧						✧	3
Rumex orbiculatus Gray (*R. britannica* of American authors, not L.)	Water Dock	Sedge meadows, marshy ground.	✧	✧			✧			✧	3
Rumex salicifolius Weinm. var. *mexicanus* (Meisn.) C.L. Hitchc. (*R. mexicanus* Meisn.; *R. triangulivalvis* (Danser) Rech. f.)		Sandy and marshy shores. WIS.					✧	✧		✧	1
Rumex verticillatus L.	Swamp Dock	Deciduous swamps and marshy ground along the Wisconsin River and up the Baraboo River to at least Section 19 in T12N, R9E.				✧	✧	✧		✧	2
■ **PORTULACACEAE**											
PURSLANE FAMILY											
Claytonia virginica L.	Spring Beauty	Moister forests, also relatively dry woods; may persist (and spread) with moderate grazing.	✧	✧		✧	✧			✧	4
[n] *Portulaca oleracea* L.	Common Purslane	Weedy along roads and railroads, in pavement, waste ground, open rocky hills, excavations. For this species in North America, see Matthews et al. (1993).	✧	✧		✧	✧			✧	5

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **PORTULACACEAE**											
PURSLANE FAMILY *(continued)*											
SC *Talinum rugospermum* Holzinger	Fameflower	Dry prairies in sandy and limey soils and glacial till, rhyolite glades; sometimes in disturbed places, for example right-of-ways through sandy woods. Not an endemic of the Upper Midwest, as once thought (Cochrane 1993).	✧	✧		✧	✧			✧	3
■ **PRIMULACEAE**											
PRIMROSE FAMILY											
PR 43, 1960, Trans. WASAL 49:113-35											
Androsace occidentalis Pursh		Dry open sand, for example glacial terraces of the Wisconsin River floodplain, roadsides; local. Listed for the Baraboo Hills on the basis of an 1861 specimen labelled "Baraboo."	✧				✧			✧	2
Dodecatheon meadia L.	Shooting Star	Mainly dry prairies and glades in a variety of soils and rock types, also adjoining dry woods.	✧	✧		✧	✧			✧	4
Lysimachia ciliata L.	Fringed Loosestrife	Sunny or shady, damp to wet places, such as lowland woods, marshy banks and sloughs, deciduous swamps, Alder thickets.	✧	✧		✧	✧			✧	4
Lysimachia hybrida Michx.	Lowland Loosestrife	Marshy areas along drainages and lakes, marshy hollows such as glacial kettles, seasonally wet swales and ditches, in sun or shade.	✧	✧		✧	✧			✧	3
Lysimachia lanceolata Walt.	Upland Loosestrife	In habitats generally not as wet as *L. hybrida*: dry sandy prairies, sandy meadows, sedge meadows, dry oak woods, low sandy woods.	✧	✧		✧	✧			✧	3
[n] *Lysimachia nummularia* L.	Moneywort	Low damp ground, especially alluvial bottomland woods, also marshy shores, sloughs, mudflats, Alder thickets, moist weedy places.	✧	✧		✧	✧			✧	4
Lysimachia quadriflora Sims		Fens and alkaline meadows; in Devil's Lake State Park known only from an alkaline meadow between the east and south bluffs.		✧			✧			✧	2
Lysimachia quadrifolia L.	Whorled Loosestrife	Usually relatively dry deciduous or mixed woods, including Hemlock stands and Red Cedar glades, but also moister sites, such as low sandy woods and boggy Red Maple thickets.	✧	✧		✧	✧			✧	4
Lysimachia terrestris (L.) BSP.	Swamp Candles	Marshy lake shores, sandy meadows, sedge meadows, Tamarack swamps, low sandy woods.		✧	✧	✧	✧			✧	3
Lysimachia thyrsiflora L.	Tufted Loosestrife	Alkaline meadows, sedge meadows, marshy hollows such as glacial kettles, cat-tail marshes, Alder thickets, Leather-leaf bogs, Tamarack swamps; in Devil's Lake State Park known only from an alkaline meadow between the east and south bluffs.	✧	✧		✧	✧			✧	3
SC *Primula mistassinica* Michx.	Arctic Primrose	Known only from a damp sandstone cliff near the mouth of Dell Creek; a total of approximately 50 green rosettes covering a linear area of 2 ft in 1977. KL.					✧			✧	1

(continued on next page)

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **PRIMULACEAE**											
PRIMROSE FAMILY *(continued)*											
Trientalis borealis Raf.	Star-flower	Cooler damp woods, deciduous and mixed, also low sandy woods, Tamarack swamps, boggy Red Maple thickets.	✧	✧		✧	✧			✧	3
■ **RANUNCULACEAE**											
BUTTERCUP FAMILY											
PR 11, 1930, Trans. WASAL 25:205-14; PR 33, 1947, Trans. WASAL 38:193-206											
T *Aconitum noveboracense* Cov.	Northern Monkshood	Cool, damp, shady sandstone cliffs. In Devil's Lake State Park known only from Parfrey's Glen (Figure 42), where in 1976 the population was estimated at 100-150 plants (Read 1977:20), and in 1992 at 75-100 plants by A. Clark. In the Western Upland known from Lodde's Mill Bluff, 5 miles downriver from Sauk City, where approximately 70 plants were noted in 1976 (Read 1977:20) and approximately 100 in 1984 (E. Epstein), and Horse Bluff in LaValle Township; at Horse Bluff this species is growing at the base of the outcrop, with mosses and 5 species of ferns (approximately 12 plants in 1988). Also known from Pewit's Nest in the Baraboo Hills, a gorge southwest of Baraboo, where it was collected in 1927 (Fuller 1927:177; annotated as *A. uncinatum)* and 1948 (University of Wisconsin Herbarium). It could not be found here in 1967, 1970, or 1991; these cliffs may have become too dry for this species. Listed as threatened under the U.S. Endangered Species Act.	✧	✧		✧				✧	2
Actaea pachypoda Ell. (*A. alba* of authors, not (L.) Mill.)	White Baneberry	Deciduous woods, relatively dry to relatively damp, but often drier than the localities for *A. rubra,* also Hemlock stands.	✧	✧		✧	✧			✧	3
Actaea rubra (Ait.) Willd.	Red Baneberry	Deciduous woods, relatively dry to relatively damp, but often moister than the localities for *A. pachypoda,* also Hemlock stands.	✧	✧		✧	✧			✧	3
Anemone canadensis L.	Canada Anemone	Sedge meadows, alkaline meadows, loamy prairies, alluvial deciduous bottomlands; mainly in the floodplain of the Wisconsin River.	✧	✧		✧	✧			✧	3
Anemone cylindrica Gray	Thimbleweed	Dry limey and sandy prairies, sandy pine-oak woods; in Devil's Lake State Park known only from a dry prairie on sandstone.	✧	✧		✧	✧			✧	3
Anemone quinquefolia L.	Wood Anemone	Dry to wet deciduous and mixed woods, low sandy woods.	✧	✧		✧	✧			✧	4
Anemone virginiana L. (incl. *A. riparia* Fern.)	Virginia Anemone	Dry to mesic woods, including their borders, also fens.	✧	✧		✧	✧			✧	4
Aquilegia canadensis L.	Wild Columbine	Dry to mesic oak woods, Hemlock stands, Red Cedar glades, sunny or shady rock outcrops, including adjoining prairies.	✧	✧		✧	✧			✧	5

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **RANUNCULACEAE**											
BUTTERCUP FAMILY *(continued)*											
Caltha palustris L.	Marsh-marigold	Sedge meadows and alkaline meadows, fens, mucky creek beds, Alder thickets, Tamarack swamps, low sandy woods.	✧	✧		✧	✧			✧	4
SC *Clematis occidentalis* (Hornem.) DC. (*C. verticillaris* DC.)	Purple Clematis	Cooler woods, where often associated with sandstone or quartzite outcrops; known from approximately 8 stations.	✧	✧		✧	✧			✧	2
Clematis virginiana L.	Virgin's-bower	Dry to damp woods and thickets, including weedy sites; often in edge habitats.	✧	✧		✧	✧			✧	4
Coptis trifolia (L.) Salisb. ssp. *groenlandica* (Oeder) Fassett (*C. groenlandica* (Oeder) Fern.)	Goldthread	Tamarack swamps, boggy Red Maple thickets, low sandy woods, also cool, damp, shady sandstone cliffs.				✧	✧			✧	2
Hepatica nobilis Mill. var. *acuta* (Pursh) Steyerm. (*H. acutiloba* DC.)	Hepatica	Mainly moist woods, Hemlock stands. The Central Plain record is from the Leopold Reserve, 1978. In 1944 Aldo Leopold noted in his journal, "We have none on the place"; in 1947 he brought Hepaticas to the Reserve from at least 2 localities, Blue Mound State Park by Mt. Horeb, Wisconsin, and the Baraboo Hills (Leopold Shack Journal, 23 October 1944, 16 and 30 May 1947). Both varieties occur on the Reserve, so Leopold must have introduced both *acuta* and *obtusa*.	✧	✧		✧	✧			✧	4
Hepatica nobilis Mill. var. *obtusa* (Pursh) Steyerm. (*H. americana* (DC.) Ker.)	Hepatica	Dry to moist woods, Hemlock stands, White Pine stands. Several records for the Central Plain; apparently more widespread than variety *acuta*. See comments under variety *acuta*.	✧	✧		✧	✧			✧	4
Isopyrum biternatum (Raf.) T. & G.	False Rue-anemone	Moister woods; local.	✧	✧		✧				✧	3
Pulsatilla patens (L.) P. Mill. (*Anemone patens* L. var. *wolfgangiana* (Besser) Koch)	Pasque Flower	Dry limey and sandy prairies.	✧			✧	✧			✧	3
Ranunculus abortivus L.	Small-flowered Crowfoot	Dry to swampy woods, including their openings, also Alder thickets, Hemlock stands; often where disturbed.	✧	✧		✧	✧			✧	5
[n] *Ranunculus acris* L.	Tall Buttercup	Known only from marshy ground by Devil's Lake, where collected in 1946 and 1967. WIS, KL.		✧	✧					✧	1
Ranunculus fascicularis Bigelow	Early Buttercup	Dry prairies in a variety of soils, quartzite and rhyolite glades, sandy oak woods.	✧	✧		✧	✧			✧	4
Ranunculus flabellaris Raf.	Yellow Water Crowfoot	Forest pools, sloughs, ponds, willow swamps.	✧		✧	✧	✧			✧	2
Ranunculus hispidus Michx. (*R. septentrionalis* Poir.)	Swamp Buttercup	Deciduous swamps, moister woods, marshy borders of streams, sloughs, Alder thickets, loamy prairies.	✧	✧		✧	✧			✧	3
Ranunculus longirostris Godr.	White Water Crowfoot	Lakes, ponds, creeks, pools.	✧			✧	✧			✧	2
Ranunculus pensylvanicus L. f.	Bristly Crowfoot	Marshy pond margins, lake shores, Alder thickets, Tamarack swamps.	✧	✧		✧	✧			✧	3

(continued on next page)

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ RANUNCULACEAE											
BUTTERCUP FAMILY *(continued)*											
Ranunculus recurvatus Poir.	Hooked Crowfoot	Damper places in a variety of woods, also adjoining open wetlands; often where disturbed, for example along trails.	✧	✧		✧	✧			✧	3
Ranunculus rhombiodeus Goldie	Prairie Buttercup	Dry open sandy places; in the Baraboo Hills known only from the northwestern corner.	✧				✧			✧	2
Ranunculus sceleratus L.	Cursed Crowfoot	Wet muddy shores, sandbars, pools. This species was abundant on the mudflats at the southwestern corner of Devil's Lake in 1975-76, the second and third years after the receding of high water from a flood year (see *Eleocharis acicularis;* Figure 32).		✧	✧	✧	✧			✧	3
Thalictrum dasycarpum Fisch. & Avé-Lall.	Purple Meadow-rue	Low meadows, alkaline meadows and fens, loamy prairies, cat-tail marshes, Alder thickets, Tamarack swamps, low sandy woods.	✧	✧		✧	✧			✧	4
Thalictrum dioicum L.	Early Meadow-rue	Deciduous woods, mainly mesic but also dry.	✧	✧		✧	✧			✧	4
Thalictrum thalictroides (L.) Eames & Boivin (*Anemonella thalictroides* (L.) Spach)	Rue-anemone	Deciduous woods, mainly mesic but also dry.	✧	✧		✧	✧			✧	3
■ RHAMNACEAE											
BUCKTHORN FAMILY											
PR 30, 1940, Trans. WASAL 32:107-09											
Ceanothus americanus L.	New Jersey Tea	Dry prairies and dry oak woods in sandy soils, quartzite glades; often in openings and borders, including roadsides.	✧	✧		✧	✧			✧	3
Ceanothus herbaceus Raf. (*C. ovatus* of authors, not Desf.)	Redroot	Jack Pine woods, including their borders, also pine plantations in sandy soil; in the Baraboo Hills known only from the northwestern corner.	✧				✧			✧	2
[n] *Frangula alnus* P. Mill (*Rhamnus frangula* L.)	Glossy Buckthorn	Open weedy places, for example vacant land; a 1968 collection. KL.	✧							✧	1
Rhamnus alnifolia L'Hèr.	Alder-leaved Buckthorn	Tamarack swamps, boggy meadows; often in openings and edges. Formerly in a Tamarack swamp once located in Prairie du Sac Township(Lueders 1895:514). KL.					✧			✧	1
[n] *Rhamnus cathartica* L.	Common Buckthorn	Widespread in drier woods and pine plantations (edge and interior), Red Cedar glades, vacant land, along roads and railroads, also in wet ground, for example swampy places, fens.	✧	✧		✧	✧			✧	5
■ ROSACEAE											
ROSE FAMILY											
PR 42, 1958, Trans. WASAL 47:65-97; Lewis [1960]											
Agrimonia gryposepala Wallr.	Agrimony	Dry to wet woods, often where disturbed, for example along roads and trails, pastures; also marshy ground, for example alkaline meadows.	✧	✧		✧	✧			✧	3
Agrimonia pubescens Wallr.	Agrimony	Dry to mesic woods, often where disturbed, such as along trails and roads, pastures.	✧	✧		✧	✧			✧	3

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **ROSACEAE**											
ROSE FAMILY *(continued)*											
Amelanchier arborea (Michx. f.) Fern. (incl. *A. laevis* Wieg.)	Juneberry	Mainly drier woods and their borders, also swamps, shorelines, rocky places.	✧	✧		✧	✧			✧	3
Amelanchier humilis Wieg. (incl. *A. spicata* (Lam.) K. Koch & *A. stolonifera* Wieg.)	Juneberry	Mainly drier woods and sandy plains, but also low ground, for example marshy creek bottoms.	✧	✧		✧	✧			✧	3
Amelanchier sanguinea (Pursh) DC.	Juneberry	Mainly drier woods, including their borders, also swampy ground.	✧	✧		✧	✧			✧	3
Aronia prunifolia (Marsh.) Rehder	Chokeberry	Sedge meadows, sandy meadows, low thickets, low sandy woods, Tamarack swamps, also quartzite, sandstone, and dolomite outcrops, relatively dry woods. The nomenclature of this species follows Voss (1985:377-78).	✧	✧		✧	✧			✧	4
Crataegus calpodendron (Ehrh.) Medic.	Hawthorn	Mainly alluvial woods.	✧				✧			✧	2
Crataegus chrysocarpa Ashe	Hawthorn	Mainly borders of woods, clearings, pastures. WIS.				✧				✧	1
Crataegus crus-galli L.	Cockspur Thorn	Generally low ground, including river bottoms, ditch banks. WIS.				✧				✧	1
Crataegus holmesiana Ashe	Hawthorn	Recorded only from Devil's Lake State Park, including Parfrey's Glen. WIS.		✧						✧	1
Crataegus macrosperma Ashe (*C. roanensis* Ashe)	Hawthorn	Mainly drier woods, including their borders.	✧				✧			✧	2
Crataegus pedicellata Sarg.	Hawthorn	Mainly lowland woods, low pastures.	✧	✧			✧			✧	2
Crataegus pennsylvanica Ashe	Hawthorn	Mainly lowland woods, low pastures. MIL.					✧			✧	1
Crataegus pruinosa (Wendl.) K. Koch	Hawthorn	Mainly drier woods, pastures.	✧			✧				✧	2
Crataegus punctata Jacq.	Dotted Hawthorn	Mainly lowland woods.	✧			✧				✧	2
Crataegus schuettei Ashe	Hawthorn	Wooded areas. MIL.	✧							✧	1
Crataegus succulenta Link (*C. macracantha* Lodd.)	Hawthorn	Wooded areas, including openings and borders, also fields, pastures.	✧			✧	✧			✧	2
Fragaria vesca L.	Woodland Strawberry	Dry to wet woods, including edges and openings.	✧	✧		✧	✧			✧	3
Fragaria virginiana Mill.	Wild Strawberry	Widespread in virtually all habitats except the very wettest.	✧	✧		✧	✧			✧	5
Geum aleppicum Jacq.	Avens	Sedge meadows, alkaline meadows, loamy prairies, marshy thickets along creeks, also wetter places in deciduous woods.	✧	✧		✧	✧			✧	3
Geum canadense Jacq.	White Avens	Dry to wet woods, in shade or sun, also marshy ground.	✧	✧		✧	✧			✧	4
Geum laciniatum Murray	Avens	Mainly low meadows, including weedy sites.	✧	✧		✧	✧			✧	3

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **ROSACEAE**											
ROSE FAMILY *(continued)*											
Geum rivale L.	Purple Avens	Swampy places, for example Black Ash-Alder thickets (Hartley 1962:779, 780, 126). Known only from the swamp on the Wisconsin Society for Ornithology's Honey Creek property. WIS.	✧							✧	1
Geum triflorum Pursh	Prairie Smoke	Dry prairies and dry oak woods, mainly sandy soil, also loamy prairies.	✧			✧	✧			✧	3
Malus ioensis (Wood) Britt. (*Pyrus ioensis* (Wood) Bailey)	Wild Crab	Drier woods, especially their edges and openings, hedgerows, dry prairies.	✧			✧	✧			✧	3
n *Malus sylvestris* (L.) Mill. (*Pyrus malus* L.)	Apple	Persisting from plantings in orchards and by abandoned homesteads; also roadsides, railroad embankments, weedy fields, open woods (mainly via humans discarding cores?).	✧	✧		✧	✧			✧	3
Physocarpus opulifolius (L.) Maxim.	Ninebark	Fens, open cliffs and rocky hill prairies, gravelly roadsides in deciduous woods, Alder thickets, marshy shores, mucky stream bottoms in wooded ravines, low sandy woods, sandy meadows.	✧	✧		✧	✧			✧	3
n *Potentilla argentea* L.	Silvery Cinquefoil	Dry disturbed places, including railroad ballast, roadsides, bare sand, pastures, weedy fields, pavement rock outcrops; may invade dry sandy prairies and pastured woods.	✧	✧		✧	✧			✧	4
Potentilla arguta Pursh	Tall Cinquefoil	Dry prairies in a variety of soils, quartzite and rhyolite glades.	✧	✧		✧	✧			✧	3
Potentilla fruticosa L.	Shrubby Cinquefoil	Fens and marshy thickets in Delton and Fairfield Townships. Often grown as an ornamental. Listed in Kartesz (1994, 1:525) as *Pentaphylloides floribunda* (Pursh) A. Löve. WIS, MIL, KL.					✧			✧	1
Potentilla norvegica L.	Rough Cinquefoil	Dry places, usually disturbed, including weedy fields, roadsides, railroad grades, also moist ground, for example lowland pastures.	✧	✧		✧	✧			✧	3
Potentilla palustris (L.) Scop.	Marsh Cinquefoil	Sedge meadows, marshy places in low sandy woods, Tamarack swamps. Listed for the Baraboo Hills on the basis of a R.H. True 1885 collection labelled "Baraboo"; a H.P. Hansen 1934 collection, also labelled "Baraboo," probably came from the Lower Narrows swamp, outside the Hills (Hansen 1937). This taxon is listed in Kartesz (1994, 1:515) as *Comarum palustre* L.	✧				✧			✧	2
n *Potentilla recta* L.	Rough-fruited Cinquefoil	Roadsides, railroad gravel, weedy fields, disturbed prairies, pastures, dry waste ground, dry open woods.	✧	✧		✧	✧			✧	3
Potentilla simplex Michx.	Old-field Cinquefoil	Weedy fields, sandy meadows, loamy prairies, sandstone cliffs and associated prairies, dry oak woods, low sandy woods.	✧	✧		✧	✧			✧	5

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■ **ROSACEAE**											
ROSE FAMILY *(continued)*											
Potentilla tridentata Ait.	Three-toothed Cinquefoil	Open sandstone ledges, open sandy ground. Listed in Kartesz (1994, 1:536) as *Sibbaldiopsis tridentata* (Ait.) Rydb. WIS, MIL, KL.				✧	✧			✧	1
Prunus americana Marsh.	Wild Plum	Roadsides, hedgerows, old fields, borders of woods, open woods, marshy streamsides; typically forming thickets.	✧	✧		✧	✧			✧	4
Prunus nigra Ait.	Canada Plum	Dry to moist deciduous woods, including their borders, also old fields, low meadows; typically growing as scattered individuals.	✧	✧		✧				✧	3
Prunus pensylvanica L. f.	Pin or Fire Cherry	Dry woods, including their borders, also sandy plains, dry limey bluffs, quartzite boulder fields, lowland woods.	✧	✧		✧	✧			✧	4
Prunus pumila L.	Sand Cherry	Sandy plains, dunes, beach ridges, also dry limey bluffs; rarely on quartzite.	✧			✧	✧			✧	2
Prunus serotina Ehrh.	Wild Black Cherry	Usually dry but also damp deciduous and mixed woods, forest borders, hedgerows, weedy fields, Red Cedar glades, low sandy woods, Hemlock stands, Tamarack swamps, boggy Red Maple thickets. Often a significant forest species.	✧	✧		✧	✧			✧	5
Prunus virginiana L.	Choke Cherry	Mainly borders of deciduous and mixed woods, hedgerows, roadsides, weedy fields, dry open woods; also Hemlock stands, low sandy woods, Tamarack swamps, Alder thickets. Generally not a significant forest species.	✧	✧		✧	✧			✧	5
Rosa arkansana Porter	Prairie Rose	Dry limey prairies, gravelly roadsides. In the Baraboo Hills known only from the west end of the South Range.	✧			✧				✧	2
Rosa blanda Ait.	Meadow Rose	River banks, edges of woods, fields; may be more common and widespread than indicated. Leopold Reserve Herbarium.					✧			✧	**1**
Rosa carolina L.	Pasture Rose	Dry woods, including their borders, also dry prairies, dry weedy fields, fencerows, roadsides, railroad embankments.	✧	✧		✧	✧			✧	4
n *Rosa multiflora* Murray	Multiflora Rose	Persisting and spreading from plantings for erosion control and hedgerows. Mainly edges, for example hedges, borders of woods, roadsides; usually in dry places but also in low ground.	✧	✧		✧	✧			✧	3
Rosa palustris Marsh.	Swamp Rose	Low meadows, open boggy places in low sandy woods, shores of ponds. In Devil's Lake State Park known only from an alkaline meadow between the east and south bluffs.	✧	✧		✧	✧			✧	3
Rubus allegheniensis Porter	Common Blackberry	Characteristic of woods recently disturbed, for example by logging or windthrow, mainly uplands but also lowlands; persisting for some time after the initial disturbance. Also hedgerows, roadsides, weedy fields; occasionally in wet ground, including Alder thickets, Leather-leaf bogs.	✧	✧		✧	✧			✧	5

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **ROSACEAE**											
ROSE FAMILY *(continued)*											
Rubus alumnus Bailey		Weedy fields. WIS.		✧						✧	1
Rubus flagellaris Willd. (inc. *R. plicatifolius* Blanch.)	Northern Dewberry	Sandy plains, dry rocky prairies and sandy meadows, low sandy woods, low thickets; mainly in drier sites than the next species.		✧			✧			✧	3
Rubus hispidus L.	Swamp Dewberry	Tamarack swamps, low sandy woods, low thickets and meadows; also in high ground, for example dry sandy woods, but mainly in wetter sites than the previous species. Both dewberries are found mainly in the Central Plain.	✧				✧			✧	3
Rubus idaeus L. (incl. *R. strigosus* Michx.)	Red Raspberry	Dry to moist, mainly disturbed woods, weedy prairies and fields, open rocky cliffs, also wet ground, including low thickets, Tamarack swamps.	✧	✧		✧	✧			✧	5
Rubus occidentalis L.	Black Raspberry	Dry to moist, mainly disturbed woods, especially their borders, also hedgerows, roadsides, railroad embankments, low thickets, Tamarack swamps, sedge meadows.	✧	✧		✧	✧			✧	5
Rubus pergratus Blanch.		A collection from forest edge. WIS.		✧						✧	1
Rubus pubescens Raf.	Dwarf Raspberry	Sandy meadows, sedge meadows, alkaline meadows, Alder thickets, low coniferous woods; mainly in the Central Plain.	✧	✧		✧	✧			✧	3
Rubus rosa Bailey		Known from 2 collections. WIS.	✧							✧	1
Rubus setosus Bigelow (incl. *R. stipulatus* Bailey)		A collection from the LaValle area. MIL.				✧				✧	1
[n] *Sorbaria sorbifolia* (L.) A. Br.	False Spiraea	Persisting and spreading from cultivation. WIS.	✧	✧						✧	1
Sorbus americana Marsh.	Mountain-ash	Known only from the Wisconsin Dells area; no habitat data. Harvard University Herbarium.					✧			✧	1
[n] *Sorbus aucuparia* L.	European Mountain-ash, Rowan	Sandstone cliffs in the Wisconsin Dells area. KL.					✧			✧	1
Sorbus decora (Sarg.) K.C. Schneid.	Mountain-ash	Sandstone cliffs, especially in cooler sites, also mixed woods on quartzite talus, especially openings and edges.	✧	✧		✧	✧			✧	2
Spiraea alba Du Roi	Meadowsweet	Low meadows, sandy meadows, cat-tail marshes, loamy prairies, Alder thickets, Tamarack swamps, low sandy woods.	✧	✧		✧	✧			✧	4
Spiraea tomentosa L.	Hardhack, Steeplebush	Sedge meadows, sandy meadows, Alder thickets, Tamarack swamps, low sandy woods, sandy borders of ponds and lakes, open sandstone cliffs along rivers; mainly in the Central Plain. Ranging into more acidic habitats than *S. alba*.	✧	✧		✧	✧			✧	3

			Locality and Abundance Code								
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■ **RUBIACEAE**											
MADDER FAMILY											
PR 38, 1957, Trans. WASAL 46:91-104											
Cephalanthus occidentalis L.	Buttonbush	Low meadows, margins of sloughs and ponds, and wet woods along the Wisconsin River and up the Baraboo River to at least Section 19 in T12N, R9E; also the shoreline of Devil's Lake.		✧	✧	✧	✧	✧		✧	3
Galium aparine L.	Cleavers, Goosegrass	Deciduous woods, mainly mesic but also relatively dry and relatively wet;sometimes weedy, for example disturbed prairies, low meadows.	✧	✧		✧	✧			✧	4
Galium asprellum Michx.	Rough Bedstraw	Wet woods, low sandy woods, Tamarack swamps, Alder thickets, sedge meadows, alkaline meadows.	✧	✧		✧	✧			✧	4
Galium boreale L.	Northern Bedstraw	Loamy prairies, low meadows, fens, deciduous swamps, also dry woods.	✧	✧		✧	✧			✧	4
Galium circaezans Michx.	Wild Licorice	Mainly dry woods and associated hill prairies,also mesic woods; often where limey.	✧	✧		✧	✧			✧	3
Galium concinnum T. & G.	Shining Bedstraw	Mainly in relatively dry woods, including associated glades, also mesic woods, Hemlock stands, Alder thickets.	✧	✧		✧	✧			✧	4
Galium labradoricum (Wieg.) Wieg.		Fens, alkaline meadows, and Tamarack swamps in Fairfield and Merrimac Townships. KL.					✧			✧	1
Galium lanceolatum Torr.	Wild Licorice	Deciduous and mixed woods, dry to moist, mainly moist; local, like *G. circaezans*.	✧	✧		✧	✧			✧	3
Galium obtusum Bigelow		Low meadows, Alder thickets, loamy prairies, marshy sloughs; in the Baraboo Hills known only from Honey Creek Valley.	✧			✧	✧			✧	2
Galium tinctorium L.		Sedge meadows, alkaline meadows, fens, cat-tail marshes, Alder thickets, Tamarack swamps, low sandy woods.	✧	✧		✧	✧			✧	4
Galium trifidum L.	Small Bedstraw	Sedge meadows, alkaline meadows, marshy creek beds.	✧	✧			✧			✧	3
Galium triflorum Michx.	Sweet-scented Bedstraw	Mainly dry-mesic and mesic woods, also low sandy woods, deciduous swamps, riparian thickets.	✧	✧		✧	✧			✧	4
SC *Houstonia caerulea* L. *(Hedyotis caerulea* (L.) Hook.)	Bluets	Sandy meadows; known only from Delton Township. MIL, KL.					✧			✧	1
Houstonia longifolia Gaertn. *(Hedyotis longifolia* (Gaertn.) Hook.)		Dry open sandstone and conglomerate outcrops and associated prairies, quartzite and rhyolite glades, sandy meadows.	✧			✧	✧			✧	2
Mitchella repens L.	Partridge-berry	Dry to mainly moist, often sandy deciduous and mixed woods, low sandy woods, Hemlock stands, Tamarack swamps.	✧	✧		✧	✧			✧	3

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			Locality and Abundance Code								
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■ **RUTACEAE**											
CITRUS FAMILY											
PR 21, 1933, Trans. WASAL 28:175-77											
Zanthoxylum americanum Mill.	Prickly-ash	Deciduous woods, dry to wet but usually wet, riparian swamps, also Hemlock stands. Judged to be "common" on Wisconsin River islands in the early 1900s (Thwaites 1907:250).	✧	✧		✧	✧			✧	4
■ **SALICACEAE**											
WILLOW FAMILY											
PR 51, 1964, Trans. WASAL 53:217-72											
[n] *Populus alba* L.	White or Silver Poplar	Escaping to fields and roadsides.	✧	✧			✧			✧	2
Populus balsamifera L.	Balsam Poplar	A grove in Mirror Lake State Park; native or planted? KL.					✧			✧	1
Populus deltoides Marsh.	Cottonwood	Mainly riparian swamps, river banks, sand dunes, lake shores, Alder thickets, also low damp places in deciduous woods and low weedy fields.	✧	✧		✧	✧			✧	5
Populus grandidentata Michx.	Big-toothed Aspen	Dry and mesic woods, rarely low sandy woods and sedge meadows; typically pioneering after disturbance such as logging or windthrow, and persisting as the forest matures.	✧	✧		✧	✧			✧	5
Populus tremuloides Michx.	Quaking Aspen	Dry and mesic woods, dry sandy prairies, also deciduous swamps, Tamarack swamps, low meadows, sandy meadows; typically pioneering after disturbance, like Big-toothed Aspen.	✧	✧		✧	✧			✧	5
[n] *Salix alba* L.	White Willow	By abandoned farmsteads, especially along streams. KL.		✧						✧	1
Salix amygdaloides Anderss.	Peach-leaved Willow	Lake shores and stream banks. KL.		✧						✧	1
Salix bebbiana Sarg.	Bebb's Willow	Low meadows, alkaline meadows, low thickets, marshy lake shores and stream beds, damp roadsides.	✧	✧		✧	✧			✧	4
Salix candida Willd.	Sage-leaved Willow	Alkaline meadows, damp gravelly roadsides. In the Central Plain known only from Merrimac Township. KL.		✧			✧			✧	1
Salix discolor Muhl.	Pussy Willow	Sedge meadows, low thickets, marshy shores, stream banks, ditches, also prairies.	✧	✧		✧	✧			✧	4
Salix eriocephala Michx. (*S. cordata* Muhl., not Michx.; *S. rigida* Muhl.)		Sedge meadows, low thickets, marshy shores, stream banks.		✧		✧	✧			✧	2
Salix exigua Nutt. (*S. interior* Rowlee)	Sandbar Willow	Stream and river shores and banks, dunes, lake shores; forming large dense thickets.	✧	✧		✧	✧			✧	3
[n] *Salix fragilis* L.	Crack Willow	Escaping from cultivation to shores and banks. WIS.	✧				✧	✧		✧	1
Salix humilis Marsh.	Prairie or Upland Willow	Dry sandy or limey prairies, cliffs and ledges, dry oak woods.	✧			✧	✧			✧	4
Salix lucida Muhl.	Shining Willow	Low wet ground, including sedge meadows, marshy sites.		✧			✧			✧	2

			Locality and Abundance Code								
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■ **SALICACEAE**											
WILLOW FAMILY *(continued)*											
Salix nigra Marsh.	Black Willow	Wisconsin River floodplain and up the Baraboo River to at least Section 24 in T12N, R8E, also the Devil's Lake shoreline and marshy kettles.		✧	✧	✧	✧	✧		✧	3
Salix pedicellaris Pursh	Bog Willow	Sphagnous sedge meadows in Dellona and Delton Townships. KL.					✧			✧	1
Salix petiolaris Sm. (*S. gracilis* Anderss.)	Slender Willow	Marshy ground, including low meadows, alkaline meadows, low thickets.	✧	✧		✧	✧			✧	4
Salix pyrifolia Anderss.	Balsam Willow	Sphagnous sedge meadows and Tamarack swamps in Dellona and Delton Townships.					✧			✧	2
■ **SANTALACEAE**											
SANDALWOOD FAMILY											
Comandra umbellata (L.) Nutt. (*C. richardsiana* Fern.)	Bastard-toadflax	Dry prairies in a variety of soils, quartzite and rhyolite glades, loamy prairies, sandy meadows, dry sandy woods.	✧	✧		✧	✧			✧	4
■ **SARRACENIACEAE**											
PITCHER-PLANT FAMILY											
PR 18, 1932,Trans. WASAL 27:235-36											
Sarracenia purpurea L.	Pitcher-plant	Represented by an 1886 collection labelled "Baraboo." Formerly in a marshy area in southern Prairie du Sac Township (Lueders 1895:512). WIS.	✧				✧			✧	0
■ **SAXIFRAGACEAE (incl. GROSSULARIACEAE and HYDRANGEACEAE)**											
SAXIFRAGE FAMILY											
PR 19, 1932, Trans. WASAL 27:237-46											
Chrysosplenium americanum Hook.	Golden Saxifrage	Cold-water creeks and springs, Alder thickets; in Devil's Lake State Park known only from Parfrey's Glen.	✧	✧		✧	✧			✧	3
Heuchera richardsonii R. Br.	Alum-root	Dry prairies in a variety of soils, quartzite and rhyolite glades, sandstone cliffs and boulders, dry sandy woods, Red Cedar glades, loamy prairies. The closely related *H. americana* L. apparently does not occur in Wisconsin.	✧	✧		✧	✧			✧	4
Mitella diphylla L.	Bishop's-cap	Mesic deciduous and mixed woods, often in wet pockets and stream valleys, also Hemlock stands.	✧	✧		✧				✧	3
Parnassia glauca Raf.	Grass-of-Parnassus	Leech Creek fen in Fairfield Township and an alkaline meadow in Merrimac Township. Formerly in a marshy area in southern Prairie du Sac Township (Lueders 1895:512). KL.					✧			✧	1
[n] *Philadelphus coronarius* L	Mock-orange	Persisting (and spreading?) from ornamental plantings.		✧		✧	✧			✧	2
Ribes americanum Mill.	American Black Currant	Alder thickets and assoicated sedge meadows, Tamarack swamps, low sandy woods, deciduous swamps.	✧	✧		✧	✧			✧	3
[n] *Ribes aureum* Pursh (*R. odoratum* Wendl. f.)	Clove Currant	Native west of the Great Lakes; widely cultivated as an ornamental and rarely escaping. WIS.		✧						✧	1

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			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **SAXIFRAGACEAE**											
SAXIFRAGE FAMILY *(continued)*											
Ribes cynosbati L.	Prickly Gooseberry	Dry to mesic woods, low sandy woods, Hemlock stands, Red Cedar glades; may be weedy.	✧	✧		✧	✧			✧	5
Ribes glandulosum Grauer	Skunk Currant	A 1942 collection from the south end of the west bluff in Devil's Lake State Park (T.F. Kouba to K.I. Lange, in letter 22 July 1978). WIS.		✧						✧	1
Ribes hirtellum Michx.	Hairy-stem Gooseberry	Tamarack swamps, Alder thickets including their borders, alkaline meadows, mesic woods.	✧	✧		✧	✧			✧	2
Ribes missouriense Nutt.	Missouri Gooseberry	Dry woods, also Tamarack swamps, Alder thickets, alkaline meadows; may be weedy.	✧	✧		✧	✧			✧	3
[n] *Ribes rubrum* L. (*R. sativum* Syme)	Red Currant	Cultivated for its fruit; escaping to fields and woods. WIS.	✧	✧						✧	1
Saxifraga pensylvanica L.	Swamp Saxifrage	Sedge meadows, alkaline meadows and fens, loamy prairies, Alder thickets, seepy mucky areas in deciduous and mixed woods.	✧	✧		✧	✧			✧	4
SC *Sullivantia sullivantii* (Torr. and Gray) Britt. (*S. renifolia* Rosend.)	Sullivantia	Sandstone outcrops, usually shaded and moist. Virtually confined to the Driftless Area (one station—Durward's Glen in the Baraboo Hills—in glaciated territory).	✧			✧	✧			✧	3
■ **SCROPHULARIACEAE**											
FIGWORT FAMILY											
PR 36, 1951, Trans. WASAL 40(2):111-38; Crosswhite [1969]											
Agalinis aspera (Dougl.) Britt. (*Gerardia aspera* Dougl.)	Gerardia	Dry limey prairies; rarely quartzite glades.	✧			✧				✧	2
T *Agalinis gattingeri* (Small) Small (*Gerardia gattingeri* Small)	Gerardia	Dry prairies on sandstone and limey sandstone, quartzite glades. In 1987 the population at one glade, the south end of the east bluff in Devil's Lake State Park, was estimated at more than 500 plants, whereas only 8 plants could be found at another glade near Rock Springs in the Baraboo Hills. Occurs just outside the study area on open sandstone ledges along the Wisconsin River in the Upper Dells (Wisconsin Department of Natural Resources 1997:17).	✧	✧		✧				✧	2
Agalinis purpurea (L.) Pennell (*Gerardia purpurea* L.)	Gerardia	Moist sandy swales and ditches, open wet sand. WIS, KL.				✧	✧			✧	1
Agalinis tenuifolia (Vahl) Raf. (*Gerardia tenuifolia* Vahl)	Gerardia	Marshy shores, open wet sand, sandy ditches, alkaline meadows and fens, sedge meadows, sandy meadows, sandstone cliffs along rivers.	✧	✧		✧	✧			✧	4
Aureolaria grandiflora (Benth.) Pennell (*Gerardia grandiflora* Benth.)	False Foxglove	Drier oak woods, including their borders; appears to advance with oaks into adjoining dry prairies and glades.	✧	✧		✧	✧			✧	4
Aureolaria pedicularia (L.) Raf. (*Gerardia pedicularia* L.)	False Foxglove	Drier oak woods and associated dry prairies and quartzite glades.	✧	✧		✧	✧			✧	2

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **SCROPHULARIACEAE**											
FIGWORT FAMILY *(continued)*											
Castilleja coccinea (L.) Spreng.	Scarlet Painted-cup	Sandy meadows, dry to moist weedy fields, openings in upland deciduous woods on quartzite and sandstone.	✧	✧			✧			✧	3
Castilleja sessiliflora Pursh	Downy Painted-cup	Dry limey prairies.				✧	✧			✧	2
n *Chaenorrhinum minus* (L.) Lange	Dwarf-snapdragon	Dry weedy sites, especially railroad ballast, also pavement. A premier example of a railroad weed (Arnold 1981*a*, 1981*b*).		✧		✧	✧			✧	2
Chelone glabra L.	Turtlehead	Sedge meadows, alkaline meadows, Alder thickets, Tamarack swamps, low sandy woods.	✧	✧		✧	✧			✧	3
Gratiola neglecta Torr.	Hedge-hyssop	Open wet ground, including sandy shores, muddy stream sides, seepy areas.	✧	✧		✧	✧			✧	3
Linaria canadensis (L.) Dum. Cours.	Old-field Toadflax	Dry open sand, stable and shifting; in a number of areas but not locally numerous, like *Androsace*. Listed in Kartesz (1994, 1:581) as *Nuttallanthus canadensis* (L.) D.A. Sutton.				✧	✧			✧	3
n *Linaria dalmatica* (L.) Mill. (*L. macedonica* Griseb.)	Dalmatian Toadflax	Dry weedy places. WIS.	✧							✧	1
n *Linaria vulgaris* Mill.	Butter-and-eggs	Dry weedy areas in a variety of soils and rock types; once established, may persist in shade.	✧	✧		✧	✧			✧	3
Lindernia dubia (L.) Pennell (incl. *L. anagallidea* (Michx.) Pennell)	False Pimpernel	Open wet ground, including sandbars, muddy banks and shores, marshy hollows such as glacial kettles.	✧	✧		✧	✧			✧	3
Melampyrum lineare Desr.	Cow-wheat	Low sandy woods, including their borders; Delton Township only. KL.					✧			✧	1
Mimulus glabratus Kunth var. *jamesii* (Benth.) Gray (*M. geyeri* Torr.; *M. glabratus* var. *fremontii* (Benth.) Grant)	Monkey Flower	Known only from Leech Creek fen in Fairfield Township, and the sandy bed of a drainage of Mirror Lake in Delton Township. KL.					✧			✧	1
Mimulus ringens L.	Monkey Flower	Marshy shores, sandbars, sedge meadows, alkaline meadows and fens, Alder thickets, Tamarack swamps.	✧	✧		✧	✧			✧	3
Pedicularis canadensis L.	Common Lousewort	Dry prairies in a variety of soils, quartzite glades, dry open woods, sandy meadows.	✧	✧		✧	✧			✧	3
Pedicularis lanceolata Michx.		Mainly fens and alkaline meadows, also Alder thickets, Tamarack swamps.	✧	✧		✧	✧			✧	3
Penstemon digitalis Sims	Beard-tongue	Dry sandy prairies, dry open woods. Sometimes locally abundant, for example at least a half-million plants at the Lake Delton airstrip in 1963 (Crosswhite [1969]).	✧	✧		✧	✧			✧	2

(continued on next page)

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **SCROPHULARIACEAE** **FIGWORT FAMILY** *(continued)*											
Penstemon gracilis Nutt. (incl. var. *wisconsinensis* (Pennell) Fassett)	Beard-tongue	Dry sandy prairies, Jack Pine-oak woods, sandy roadsides, limey hill prairies and Red Cedar glades, loamy prairies. The locality for the University of Wisconsin specimen, labelled "Elephant Back, Devil's Lake, Sauk Co., Wisconsin" and collected in 1926, is uncertain, but may be the hill so named in Adams County, Wisconsin, north of Wisconsin Dells.	✧			✧	✧			✧	3
Penstemon grandiflorus Nutt. (*P. bradburii* Pursh)	Beard-tongue	Collected along the railroad track between Devil's Lake and Merrimac in 1903 (MIL), and a sight record for the Ferry Bluff area along the Wisconsin River (Hartley 1962: 839, 127). A western species; adventive?				✧	✧			✧	1
SC *Penstemon pallidus* Small	Beard-tongue	Dry sandy soil, usually with Jack Pines, also dry limey prairies; known only from Spring Green Township. WIS.				✧				✧	1
Scrophularia lanceolata Pursh	Figwort	Dry prairies and dry woods, often where limey, also dry, open rocky places, railroad beds.	✧	✧		✧	✧			✧	3
Scrophularia marilandica L.	Figwort	Moist woods, especially their borders, Hemlock stands, Alder thickets, alkaline meadows.	✧	✧		✧	✧			✧	3
[n] *Verbascum blattaria* L.	Moth Mullein	Weedy fields, including pastures; may invade dry prairie.	✧			✧	✧			✧	2
[n] *Verbascum phlomoides* L.		Weedy along roads. WIS.	✧			✧				✧	1
[n] *Verbascum thapsus* L.	Common Mullein	Weedy fields, disturbed prairies, pastures, degraded woods, roadsides and railroad beds; sometimes in damp ground. An early arrival; already in Wisconsin Dells by 1872 (Lange 1980*b*; Figure 41).	✧	✧		✧	✧			✧	5
Veronica americana (Raf.) Benth.	American Brooklime	Known only from an 1887 collection labelled "Baraboo." WIS.	✧							✧	0
Veronica anagallis-aquatica L. (*Veronica catenata* Pennell)	Water Speedwell	Sloughs along the Wisconsin River, alkaline creeks. WIS, KL.				✧	✧			✧	1
Veronica arvensis L.	Corn Speedwell	Dry to moist woods, rock outcrops, pastures.	✧	✧		✧	✧			✧	3
[n] *Veronica officinalis* L.	Common Speedwell	Weedy, for example along wooded trails. KL.					✧			✧	1
Veronica peregrina L.	Purslane Speedwell	Weedy sites, including disturbed woods, roadsides.	✧	✧		✧	✧			✧	2
Veronica scutellata L.	Marsh Speedwell	Low meadows, wet sandy ground, pond borders.				✧	✧	✧		✧	2
[n] *Veronica serpyllifolia* L.	Thyme-leaved Speedwell	Disturbed areas, especially where moist, for example stream banks, trails.	✧	✧		✧	✧			✧	3
[n] *Veronica verna* L.		Known only from a weedy quartzite outcrop in Caledonia. WIS.	✧						✧		1
Veronicastrum virginicum (L.) Farw.	Culver's-root	Sunny and shady places, wet or dry, often where limey; sites include alkaline meadows, dry limey prairies and associated woods, loamy prairies.	✧	✧		✧	✧			✧	4

			Locality and Abundance Code							
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **SOLANACEAE**											
NIGHTSHADE FAMILY											
PR 31, 1943, Trans. WASAL 35:105-12											
Physalis heterophylla Nees	Ground-cherry	Dry sandy and limey ground, including prairies; may be weedy.	✧	✧		✧	✧			✧	3
Physalis virginiana Mill.	Ground-cherry	Dry sandy and limey ground, including prairies; may be weedy.	✧	✧		✧	✧			✧	3
[a] *Solanum carolinense* L.	Horse-nettle	Weedy fields, roadsides, railroad beds; native to the southeastern United States.	✧				✧			✧	2
[n] *Solanum dulcamara* L.	Deadly Nightshade	Waste ground, fencerows, rock outcrops, weedy fields; also widespread in lowlands, including Tamarack swamps, deciduous swamps, sedge meadows, cat-tail marshes, low thickets, low sandy woods.	✧	✧		✧	✧			✧	5
Solanum ptychanthum Dunal (incl. plants previously referred to *S. nigrum* L.; after Voss 1996:191-92)	Black Nightshade	Dry to damp woods, Hemlock stands, rock outcrops and associated prairies; sites may be weedy, for example railroad embankments.	✧	✧		✧	✧			✧	3
[a] *Solanum rostratum* Dunal (*S. cornutum* of authors, not Lam.)	Buffalo-bur	Open disturbed ground, including landfills, barnyards. First reported for the study area in 1937 and suspected of being transported with alfalfa seed (Lange 1980*b*); native west of the Great Lakes. WIS, KL.				✧				✧	1
■ **STAPHYLEACEAE**											
BLADDERNUT FAMILY											
Staphylea trifolia L.	Bladdernut	Deciduous and mixed woods, including borders, Hemlock stands; often in lowland sites, for example stream valleys and gorges, river banks.	✧	✧		✧	✧			✧	3
■ **THYMELAEACEAE**											
LEATHERWOOD FAMILY											
PR 47, 1962, Trans. WASAL 51:85-86, 89											
Dirca palustris L.	Wicopy, Leatherwood	Deciduous, especially mesic woods, including their borders.	✧	✧		✧				✧	3
■ **TILIACEAE**											
BASSWOOD FAMILY											
PR 60, 1970, Trans. WASAL 58:301-06											
Tilia americana L.	Basswood, Linden	Mainly rich upland deciduous forests, with Sugar Maple and oaks, also drier woods, Hemlock stands; sometimes deciduous swamps.	✧	✧		✧	✧			✧	5
■ **ULMACEAE**											
ELM FAMILY											
PR 23, 1933, Trans. WASAL 28:191-93											
Celtis occidentalis L.	Hackberry	Dry to moist woods, deciduous swamps, marshy sloughs, wooded stream valleys and gorges, Hemlock stands; often where limey.	✧	✧		✧	✧			✧	4

(continued on next page)

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ ULMACEAE											
ELM FAMILY *(continued)*											
Ulmus americana L.	American or White Elm	Mainly bottomlands, including deciduous swamps, marshy sloughs, low sandy woods, Tamarack swamps, low thickets, sedge meadows and alkaline meadows, stream valleys and gorges; also upland deciduous forest, dry to moist.	✧	✧		✧	✧			✧	5
[n] *Ulmus pumila* L.	Siberian or Dwarf Elm	Spreading from plantings into waste ground, roadsides, railroad beds, pavement.		✧			✧			✧	2
Ulmus rubra Muhl. (*U. fulva* Michx.)	Slippery or Red Elm	Deciduous forest, dry to moist, also deciduous swamps but more in uplands than *U. americana.*	✧	✧		✧	✧			✧	5
■ URTICACEAE											
NETTLE FAMILY											
PR 23, 1933, Trans. WASAL 28:194-96											
Boehmeria cylindrica (L.) Sw.	False Nettle	Deciduous swamps, marshy ground, low sandy woods, Tamarack swamps, Alder thickets, sedge meadows; mainly in the floodplain of the Wisconsin River.	✧	✧		✧	✧			✧	4
Laportea canadensis (L.) Wedd.	Wood Nettle	Floodplain forests, mesic woods, Hemlock stands, Alder thickets; often dominating the herbaceous ground cover in summer.	✧	✧		✧	✧			✧	5
Parietaria pensylvanica Willd.	Pellitory	Optimum sites are bare, damp, and shady, for example rock outcrops, gravel roadsides in forests, moist woods.	✧	✧		✧	✧			✧	4
Pilea fontana (Lunell) Rydb.	Clearweed, Richweed	Alkaline meadows and fens, sedge meadows, marshy streamsides, Alder thickets, Tamarack swamps, deciduous swamps; in Devil's Lake State Park known only from an alkaline meadow between the east and south bluffs.	✧	✧		✧	✧			✧	3
Pilea pumila (L.) Gray	Clearweed, Richweed	Marshy ground, Alder thickets, Tamarack swamps, deciduous swamps, moist woods, Hemlock stands, damp cliffs.	✧	✧		✧	✧			✧	5
Urtica dioica L. (incl. *U. gracilis* Ait. & *U. procera* Willd.)	Stinging Nettle	Damp to wet ground, often where disturbed, for example deciduous swamps, Tamarack swamps, Alder thickets, low meadows, marshy streamsides, ditches, spoil banks.	✧	✧		✧	✧			✧	5
■ VALERIANACEAE											
VALERIAN FAMILY											
Valeriana edulis T. & G. var. *ciliata* (T. & G.) Cronq. (*V. ciliata* T. & G.; *V. edulis* of authors, not Nutt.)	Valerian	Collected at "Baraboo" in 1884 and in a "Marsh near Baraboo" in 1892; now known only from Leech Creek fen in Fairfield Township where collected in 1975 and 1978. KL.	✧				✧			✧	1
[n] *Valeriana officinalis* L.	Garden-heliotrope	Spreading from plantings to roadsides, fields.	✧	✧		✧	✧			✧	2

			Locality and Abundance Code								
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **VERBENACEAE**											
VERVAIN FAMILY											
PR 67, 1979, Trans. WASAL 67:78-94											
Phryma leptostachya L.	Lopseed	Mainly oak woods, also mixed woods, Sugar Maple forests, Hemlock stands.	✧	✧		✧	✧			✧	4
Phyla lanceolata (Michx.) Greene (*Lippia lanceolata* Michx.)	Fog-fruit	Wet open sand along the Wisconsin River and (a 1976 collection) Devil's Lake.		✧	✧	✧	✧	✧		✧	2
Verbena bracteata Lag. & Rodr.		Pavement, sidewalks, roadsides, railroad beds, dry open sand, open rocky ground.	✧	✧		✧	✧			✧	3
Verbena hastata L.	Blue Vervain	Low meadows, alkaline meadows and fens, sandy meadows, loamy prairies, cat-tail marshes, streamside thickets, marshy openings in mesic woods; sometimes weedy, for example pastures.	✧	✧		✧	✧			✧	4
Verbena simplex Lehm.		Known only from an 1861 specimen labelled "Baraboo." WIS.	✧							✧	0
Verbena stricta Vent.	Hoary Vervain	Dry sandy and limey prairies, forest edges, also disturbed ground, such as weedy fields, pastures.	✧	✧		✧	✧			✧	4
Verbena urticifolia L.	White or Nettle-leaved Vervain	Dry to damp, often disturbed sites, including their borders, for example edges of woods, roadsides, pastures, stream banks, Alder thickets.	✧	✧		✧	✧			✧	3
■ **VIOLACEAE**											
VIOLET FAMILY											
Viola adunca Sm.	Sand Violet	Dry sandy ground, open or semi-shady.	✧			✧	✧			✧	2
Viola affinis Le Conte (*V. missouriensis* Greene; after Ballard 1994:179)		Moist woods, low meadows. WIS.	✧			✧				✧	1
n *Viola arvensis* Murray	Field Pansy	Sandy cultivated fields. WIS, MIL.	✧							✧	1
Viola blanda Willd. (*V. incognita* Brainerd)	Sweet White Violet	Cool, damp, deciduous and mixed woods, shady ravines and gorges.	✧	✧			✧			✧	3
Viola canadensis L. (incl. *V. rugulosa* Greene)	Canada Violet	Cool, damp, deciduous and mixed woods, low sandy woods.		✧			✧			✧	2
Viola cucullata Ait.	Marsh Violet	Swampy ground, low wet woods, springy , areas, Alder thickets, alkaline meadows and fens, sedge meadows.	✧	✧		✧	✧			✧	4
Viola labradorica Schrank (*V. conspersa* Reichenb.; after Ballard 1994:161)	Dog Violet	Deciduous and mixed woods, including their borders, usually in moist or swampy ground, often where disturbed.	✧	✧		✧	✧			✧	4
Viola lanceolata L.	Lance-leaved Violet	Sandy meadows, sedge meadows, also open wet sand, for example ditches; mainly in the Central Plain.				✧	✧			✧	2
Viola macloskeyi F.E. Lloyd (*V. pallens* (DC.) Brainerd)	Smooth White Violet	Wet ground, including lowland woods, Tamarack swamps, Alder thickets, shady shady gorges, open sand.	✧	✧		✧	✧			✧	3

(continued on next page)

			Locality and Abundance Code							
			BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co	AC
■ **VIOLACEAE**											
VIOLET FAMILY *(continued)*											
Viola nephrophylla Greene		Known only from the Wisconsin River levee near Portage; a species of wet places, especially where limey. WIS.					✧			✧	1
Viola pedata L. (incl. var. *linearíloba* DC.)	Pansy Violet	Dry prairies in sandy and limey soils, quartzite glades, dry open woods (Figure 39).	✧	✧		✧	✧			✧	4
Viola pedatifida G. Don	Prairie Violet	Dry sandy and limey prairies and adjoining open woods.	✧			✧	✧			✧	3
Viola pubescens Ait. (incl. *V. eriocarpa* Schw. and *V. pensylvanica* Michx.)	Yellow Violet	Deciduous and mixed woods, dry and mesic, rarely deciduous swamps, also Hemlock stands.	✧	✧		✧	✧			✧	4
Viola sagittata Ait.	Arrow-leaved Violet	Quartzite and rhyolite glades, dry sandy prairies, sandy meadows, loamy prairies, edges of ponds and swamps.	✧	✧		✧	✧			✧	4
Viola selkirkii Goldie	Selkirk's Violet	Cool, damp, deciduous and mixed woods; often on mossy boulders.	✧	✧		✧	✧			✧	2
Viola septentrionalis Greene		Rocky wooded slopes, including cold air pockets. WIS.	✧	✧						✧	1
Viola sororia Willd. (incl. [n] *V. papilionacea* Pursh forma *albiflora* Grover)	Hairy Blue Violet	Floodplains, for example wooded river bottoms, also uplands, for example dry woods or grassy openings. The taxon, *V. papilionacea* forma *albiflora*, Confederate Violet, persists and spreads from plantings.	✧	✧		✧	✧			✧	4
■ **VITACEAE**											
GRAPE FAMILY											
PR 30, 1940, Trans. WASAL 32:108-11											
Parthenocissus inserta (Kern.) Fritsch	Virginia Creeper, Woodbine	Upland and lowland woods, especially their borders, also rock outcrops, talus slopes; generally in more open situations than the next species.	✧	✧		✧	✧			✧	3
Parthenocissus quinquefolia (L.) Planch.	Virginia Creeper, Woodbine	Upland and lowland woods, including their borders, also conifer plantations; essentially a forest species.	✧	✧		✧	✧			✧	4
Vitis aestivalis Michx.	Summer Grape	Drier woods, including their borders and openings, also bluff prairies, talus slopes, rarely Tamarack swamps.	✧	✧		✧	✧			✧	4
Vitis riparia Michx.	River-bank Grape	Upland woods, especially their borders, also bluff prairies, Hemlock stands, low sandy woods, Tamarack swamps, Alder thickets.	✧	✧		✧	✧			✧	4

	BH	DLSP	DL Only	WU	CP	WR Only	C Only	Sk Co
Total number of species	1,099	914	51	972	1,086	75	5	1,323

Excluded Species

The following species are excluded for reasons stated with each species. The list follows the same sequence as the annotated checklist.

FERNS AND FERN ALLIES

■ **OPHIOGLOSSACEAE**
ADDER'S-TONGUE FAMILY

Ophioglossum vulgatum L.	Adder's-tongue Fern	Reported from Devil's Lake (An appeal for the preservation of the Devil's Lake region. 1906:26). Most likely in the marshes and wet meadows along the lake shore; these areas were altered by the first white settlers, and have been further modified in recent years. More recently this fern was discovered in 1991 in bare ground along a stream in Baraboo Township, 1 mile north of Devil's Lake, by Aaron Armstrong; it could not be relocated in 1995, probably because of the massive flooding of 1993 and the proliferation of Garlic Mustard at the site. No specimens.

GYMNOSPERMS

■ **PINACEAE**
PINE FAMILY

Abies balsamea (L.) Mill.	Balsam Fir	According to L.S. Cheney (in Fassett 1930*a*), this species ranges southward along the Wisconsin River to Wisconsin Dells, but there are no specimens.

MONOCOTS

■ **CYPERACEAE**
SEDGE FAMILY

Carex laeviconica Dew.		To be expected in the study area, but not yet verified.
Carex molesta Mackenz.		To be expected in the study area, but not yet verified.

■ **LILIACEAE**
LILY FAMILY

Allium cernuum Roth	Nodding Wild Onion	Planted (2 plants) in a quartzite glade near Devil's Lake State Park in 1981; a total of 5 clumps and 17 flowering stalks in 1997. Permanently established and spreading? Native in Wisconsin south and east of the study area.

■ **ORCHIDACEAE**
ORCHID FAMILY

Pogonia ophioglossoides (L.) Ker	Rose Pogonia	The University of Wisconsin has an 1861 specimen labelled "Kilbourn" (Wisconsin Dells), but this could have come from outside the study area. Listed by Lueders (1895:522); no specimens.

■ **POACEAE**
GRASS FAMILY

Calamovilfa longifolia (Hook.) Schribn.		Reported from The Nature Conservancy's Spring Green Preserve (Henderson 1989); no specimens.

■ **POTAMOGETONACEAE**
PONDWEED FAMILY

Potamogeton alpinus Balbis	Pondweed	Cited for Sauk County (Devil's Lake?) (Ross and Calhoun 1951:105, map 21), but specimens have not been located.
Potamogeton pulcher Tuckerm.	Pondweed	Reported from the study area, based on specimens collected in Otter Creek in Baxter's Hollow in 1946 by N.C. Fassett; this material has been reannotated as *P. amplifolius*.

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DICOTS

■ ASTERACEAE **COMPOSITE FAMILY**		
Senecio plattensis Nutt.	Prairie Ragwort	Cited for Sauk County (Barkley 1963:347, map 5), but all specimens from the study area have been annotated as *S. pauperculus* by R.R. Kowal.
■ BORAGINACEAE **BORAGE FAMILY**		
n *Echium vulgare* L.	Viper's Bugloss	Listed by Lueders (1895:520); no specimens.
■ BRASSICACEAE **MUSTARD FAMILY**		
n *Draba verna* L.	Whitlow-grass	Reported from The Nature Conservancy's Spring Green Preserve (Henderson 1989); no specimens.
■ CARYOPHYLLACEAE **PINK FAMILY**		
n *Agrostemma githago* L.	Purple Cockle	Listed by Lueders (1895:517); no specimens. May have been a weed of Rye fields (Schlising and Iltis 1961:127); now rare or absent from Wisconsin.
n *Silene armeria* L.	None-so-pretty	Listed by Lueders (1895:516), and collected in Baraboo in 1967; judged as transient.
■ CLUSIACEAE **ST. JOHN'S-WORT FAMILY**		
Hypericum canadense L.	Canadian St. John's-wort	To be expected in the study area, but not yet verified.
■ CRASSULACEAE **ORPINE FAMILY**		
n *Sedum acre* L.	Mossy Stonecrop	The University of Wisconsin has an 1891 specimen from Wisconsin Dells, but a county is not indicated. Listed by Lueders (1895:518); no specimens.
■ DROSERACEAE **SUNDEW FAMILY**		
Drosera rotundifolia L.	Round-leaved Sundew	Both the University of Wisconsin and the Milwaukee Public Museum have specimens from Wisconsin Dells without county designation; possibly these were collected in Juneau County, where this species occurs today.
■ ERICACEAE **HEATH FAMILY**		
Andromeda polifolia L. var. *glaucophylla* (Link) DC.	Bog-rosemary	Reported (Winkler 1985:160) from Washburn Bog in the Central Plain (T12N, R7E, Section 3, Sauk County); no specimens.
■ FAGACEAE **BEECH FAMILY**		
Quercus sp.		A specimen at the University of Wisconsin, collected December 1884 by H.F. Lueders, Ex. Herbarium William Trelease, at "Sauk City, Wis." is of uncertain identity; it may be *Q. muehlenbergii* Engelm., as indicated on the original label, but more likely is *Q. bicolor.*
■ HIPPURIDACEAE **MARE'S-TAIL FAMILY**		
Hippuris vulgaris L.	Mare's-tail	Listed by Lueders (1895:518); no specimens.
■ LAMIACEAE **MINT FAMILY**		
Blephilia ciliata (L.) Benth.	Wood Mint	Reported from The Nature Conservancy's Spring Green Preserve (Henderson 1989); no specimens.

■ **MALVACEAE**
MALLOW FAMILY

[n] *Alcea rosea* L. (*Althaea rosea* (L.) Cav.)	Hollyhock	Occasionally in waste places and roadsides, but transient and not spreading.

■ **MENYANTHACEAE**
BUCKBEAN FAMILY

Menyanthes trifoliata L.	Buckbean, Bogbean	Formerly in a marshy area in southern Prairie du Sac Township (Lueders 1895:512); no specimens.

■ **POLYGONACEAE**
BUCKWHEAT FAMILY

Polygonum achoreum Blake	Knotweed	To be expected in the study area, but not yet verified. A species of uncertain origin; native?

■ **RANUNCULACEAE**
BUTTERCUP FAMILY

Hydrastis canadensis L.	Golden-seal	Reported from a woods near Reedsburg; no specimens.

■ **ROSACEAE**
ROSE FAMILY

Crataegus mollis Scheele	Hawthorn	Reported from a quartzite glade near Devil's Lake State Park (Armstrong 1994:363); no specimens.
Rubus bellobatus Bailey		University of Wisconsin specimens from Devil's Lake and the Lower Dells (Sauk County) are "probably" this taxon (A.M. Fuller).
Rubus multifer Bailey		A University of Wisconsin specimen from T8N, R3E, Section 13, may be this taxon.
Rubus steelei Bailey		Specimens from the Baraboo Hills, Devil's Lake State Park, and the Western Upland are probably this taxon (A.M. Fuller; M.P. Widrlechner).

■ **SOLANACEAE**
NIGHTSHADE FAMILY

[n] *Datura stramonium* L.	Jimsonweed	Listed by Lueders (1895:520); no specimens.

■ **ULMACEAE**
ELM FAMILY

Ulmus thomasii Sarg. (*U. racemosa* Gray)	Rock Elm, Cork Elm	Reportedly in Sauk County (Costello 1933:193, map 2; from L.S. Cheney), but there are no specimens.

■ **VERBENACEAE**
VERVAIN FAMILY

Verbena officinalis L.		Attributed to Sauk County (for example Hartley 1966:162), but reannotated as a hybrid, *V. bracteata* × *V. urticifolia*, by H.N. Moldenke (Tans and Iltis 1979:80,92).

■ **VIOLACEAE**
VIOLET FAMILY

[n] *Viola tricolor* L.	Johnny-jump-up	Listed by Lueders (1895:516); no specimens.

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About the Author

Kenneth I. Lange was the Naturalist at Devil's Lake State Park for the Wisconsin Department of Natural Resources Bureau of Parks and Recreation from 1966 until his retirement in 1996. He received a B.S. from the University of Wisconsin in 1956 and an M.S. from the University of Arizona in 1958, then worked for the Smithsonian Institution for a number of years, including a one-year assignment in Madagascar. Other major publications by the author are a human history of Devil's Lake State Park (with Ralph T. Tuttle), a human history of Sauk County, a survey of the breeding birds of the Baraboo Hills (with Michael J. Mossman), a natural history of Devil's Lake State Park, and a postglacial vegetational history of Sauk County and Caledonia Township, Columbia County. His address is 1530 East Street, Baraboo, WI 53913.

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