Como Outdoor Classroom
Plant Identification Guide
Fall 2007

Index

	page number
Woody Plants	4
Vines, shrubs, trees	
Herbaceous Plants	5
Graminoids, forbs	
Visual Guide to Forbs	6 - 10
Flower Color	*6 - 7*
Berries	*7*
Seeds	*8*
Growth Habit	*9*
Leaf and Stem Arrangement	*10*
Visual Index of Forbs by Family	11 - 16
Key to Graminoids	17 - 19
Grasses	*17 - 18*
Sedges	*19*
Key to Woody Plants	20 - 22
Vines	*20*
Shrubs	*21 - 22*

Woody Plants

Look at the stem. Is it hard, covered with bark and woody? If so, it can be classified as a tree, shrub or vine:

Vines climb or trail as they grow, often clambering up and around other plants	go to **Key Page 20** for vines
Shrubs are woody plants that are shorter than trees (25 feet or less). They typically have more than one stem (trunk)	go to **key page 21** for shrubs
Trees are woody plants that typically have one main stalk, called a trunk	refer to your *Minnesota Trees* book for help identifying trees

Herbaceous Plants

Herbaceous plants "die back" in the winter and start all over again in the spring. You may notice that as winter approaches, the plants begin to turn from green to yellow, red or brown, much like tree leaves. The foliage of some plants will have entirely died back by the time see them.

In this guide, herbaceous plants are divided into two groups:

Graminoides, or "grass-like"plants, typically have narrow, linear leaves with parellel veins	go to **Key Page 17** for graminoides
Forbs are "broadleaf" plants. The veins of forb leaves are usually branched and intersect each other to form web-like structures	see below for forbs

Typically, forb keys and guides rely heavily on flower structure or flower color to differentiate plants. Because so few of the plants in the Como Outdoor Classroom are in flower in late fall, this key will organize photos into many categories. To use this key:

1. Find a category that your plant seems to fall into because of its leaf arrangement, berries, etc.

2. Examine the photos within this category to find a photo that looks like your sample.

3. Flip to the Master Page indicated below the photo to read a description of the plant and verify that your choice was correct.

continue to the next page to identify forbs...

Visual Guide to Forbs

Flower Color

Yellow

Solidago canadensis
MP 39

Solidago flexicaulis
MP 39

Helianthus strumosus
MP 23

White

Aster sp
MP 8

Eupatorium rugosum
MP 17

Silene alba
MP 36

Flower Color, cont.

Purple

Arctium minus
MP 6

Green

Arctium minus
MP 6

Berries

Red berries in clusters

Solanum sp
MP 38

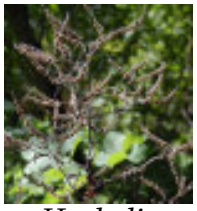
Red berries spread along the inflorescence

Maianthemum racemosa
MP 26

Seeds/Seed-bearing Structures

Velcro-like seeds ("hitch-hikers")

Circaea lutetiana
MP 12



Hackelia virginiana
MP 22

Arctium minus
MP 6

Seeds with "fuzz" (distributed by wind)

Eupatorium rugosum
MP 17

Cirsium sp
MP 13

Solidago sp
MP 39

Seeds with explosive seed pods

Impatiens sp
MP 24

Growth Habit

Vining/Climbing

Convolvulus arvensis
MP 14

Smilax sp
MP 37

Solanum sp
MP 38

Groundcover/ Carpet-forming

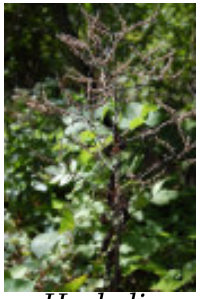
Toxicodendron radicans
MP 40

Glechoma hederacea
MP 21

Alliaria petiolata
MP 1

Leaf and Stem Arrangement

Primarily Alternate



Hackelia virginiana
MP 22

Maianthemum racemosa
MP 26

Solidago sp
MP 39

Primarily Opposite

Leonurus cardiaca
MP 25

Eupatorium rugosus
MP 17

Helianthus strumosus
MP 23

Whorled

Galium sp
MP 18

VISUAL INDEX OF FORBS BY FAMILY

Apiaceae

Sanicula canadensis?
MP 35

Araliaceae

Aralia nudicaulis
MP 5

Asteraceae

Ambrosia artemisiifolia
MP 2

Arctium minus
MP 6

Aster sp
MP 8

Cirsium sp
MP 13

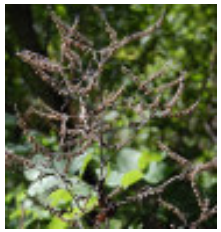
Helianthus strumosus
MP 23

Solidago sp
MP 39

Balsaminaceae

Impatiens sp
MP 24

Boraginaceae



Hackelia virginiana
MP 22

Caryophyllaceae

Silene latifolia
MP 36

Chenopodiaceae

Chenopodium album
MP 11

Convolvulaceae

Convolvulus arvensis
MP 14

Fabaceae

Melilotus sp
MP 27

Geraniaceae

Geranium maculatum
MP 19

Lamiaceae

Glechoma hederacea
MP 21

Leonurus cardiaca
MP 25

Lilaceae

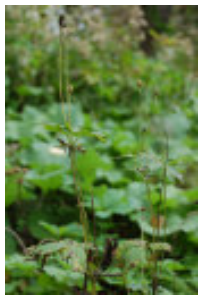
Asparagus officinalis
MP 7

Maianthemum racemosa
MP 26

Onagraceae

Circaea lutetiana
MP 12

Ranunculaceae



Anemone virginiana
MP #

Amysterius plantii var. Comowoodsii
MP 4

Rosaceae

Geum sp
MP 20

Rubiaceae

Galium sp
MP 18

Smilacaceae

Smilax sp
MP 37

Solanaceae

Solanum sp
MP 38

Violaceae

Viola sp
MP 41

Vitaceae

Vitis riparia
MP 42

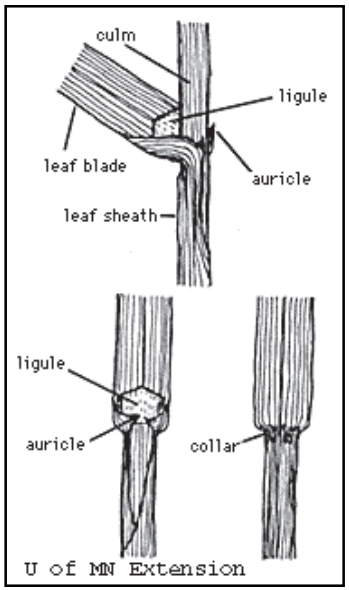
Key to Graminoides

Graminoides in the Como Outdoor Classroom can be divided into two categories:

Grasses have hollow main stems, and rounded or flattened leaves	see below for grasses
Sedges have triangular main stems that are usually solid. Roll the base of the graminoid between your fingers to feel the edges of the triangular stem - "sedges have edges!"	go to **Key Page 19** for sedges

GRASSES

Many grasses can easily be identified by the shape and color of their **ligule**, a thin structure that grows out of the leaf blade where the blade meets the stem (see right). Grasses can also be identified by the way the leaf sheath attaches to the stem.



***Elymus canadensis* MP 16**

Ligule is smooth and short. Leaf sheath is open, forming a long V.

Ligule is long, stiff and opaque white.

***Phalaris arundinacea* MP 29**

***Bromus inermis* MP 9**

Collar, where the blade attaches to the culm very prominent. W-shaped crinkles on the leaf blades

In addition to the grasses above, there are many escaped turf grasses in the Com Outdoor Classroom. Some of these grasses have fine leaves and a "floppy" growth habit. For more on turf grasses, to to **MP 30**.

Sedges belong to the family Cyperaceae. They have solid, triangular stems. Properly identifying sedges often requires a microscope, as the differences between species can be very subtle.

There are at least two species of sedge in the Como Woodlots:

Carex #1 has very thin leaves. This is probably *Carex pensylvanica*.

Carex #2 has wider leaves and is typically shorter than Carex #1.

Key to Woody Plants

VINES

Lobed, simple leaves

Vitis riparia
MP 42

Lobed, compound leaves

Rubus sp
MP 33

Unlobed, compound leaves

Parthenocissus quinqufolia
MP 28

Toxicodendron radicans
MP 40

SHRUBS

Alternate branching *go to page #*

Opposite branching

Leaves simple
bark smooth

Cornus racemosa
MP 15

Leaves Compound
bark warty

Sambucus pubens
MP 34

SHRUBS, cont.

Alternate branching

Simple Leaves

Leaves simple
Lobed

Ribes sp
MP 32

Leaves simple
Unlobed

Rhamnus cathartica
MP 31

Compound Leaves

Leaves Compound
Lobed

Rubus sp
MP 33