

Asters of the Chicago Wilderness Region, USA

(Including members of *Eurybia*, *Doellingeria*, *Ionactis*, *Oligoneuron*, and *Symphyotrichum*)

The Field Museum – Division of Environment, Culture, and Conservation

Produced by: John Balaban, North Branch Restoration Project; Rebecca Collings, The Field Museum.

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version 1

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GROUP 1: HEART-LEAVED ASTERS

Basal (lower) leaves are stalked and cordate (heart-shaped bases). Flower color various.



KEY TO ABBREVIATIONS

H = stem height

D = flower head diameter

L = number of ligulate flowers

1 *A. macrophyllus* (*Eurybia macrophylla*)

BIG-LEAVED ASTER: colonial; large, broadly oval basal leaves; stem leaves few, becoming smaller and stalkless upwards along the stem. Flower cluster broad, relatively flat or domed with glands on flower cluster branches. Rare in the Chicago region, but locally common on shaded dunes and moraines. H=30-120cm; D=25-38mm; L=9-20, pale blue to purple

2 *A. furcatus* (*Eurybia furcata*)

FORKED ASTER: colonial; large, long-stalked, oval to elliptical basal leaves that are absent at flowering; numerous lance-like, rough, stem leaves that become stalkless. Flower cluster broad, relatively flat or domed, without glands on flower cluster branches. Rare, found at the base of wooded slopes often in springy soil. H=30-80cm; D=25-38mm; L=9-18, white to pink



3 *A. sagittifolius* var. *drummondii* (*Symphyotrichum drummondii* *drummondii*)

DRUMMOND'S ASTER: upper stems densely hairy. Shallowly-toothed, hairy below, leaves on winged stalks. Basal leaves with cordate bases. Flower cluster elongated, pyramidal. Common plant of open disturbed woodlands and fields. H=50-120cm; D=25-38mm; L=10-20, blue

4 *A. sagittifolius urophyllus* (*S. urophyllum*)

ARROW-LEAVED ASTER: upper stems glabrous (hairless). Shallowly-toothed, thick leaves on winged stalks. Basal leaves with cordate bases. Flower cluster elongated, pyramidal. Common plants of open woodlands and prairies. H=25-120cm; D=15-20mm; L=8-20, pale blue to white

5 *A. cordifolius* (*S. cordifolium*)

HEART-LEAVED ASTER: upper stems mostly hairless. Oval, thin, sharply-toothed, medium-sized leaves without winged stalks.



5 *A. cordifolius* (cont.) All leaves with cordate bases. Flower cluster conical or pyramidal. Rare in woodlands. H=25-120cm; D=15-20mm; L=8-20, blue to purple

6 *A. shortii* (*Symphyotrichum shortii*) SHORT'S ASTER: clump-forming; long, narrow, smooth, usually toothless leaves. Sometimes-arching cluster of flower heads with many leaf-like bracts, phyllaries (flower bracts) tight. Uncommon in mesic woodlands. H=30-120cm; D=25-38mm; L=10-20, blue

7 *A. azureus* (*Symphyotrichum oolentangiense*) SKY-BLUE ASTER: long, narrow, thick, rough leaves reduced in size upwards along the stem; leaf edges usually toothless; leaves with short to no petiole (leaf stalk). Phyllaries (flower bracts) with short, dark, diamond-shaped tip. Uncommon in dry, sand prairies and savannas. H=60-90cm; D=18-33mm; L=10-25, blue to pink

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GROUP 2: WHITE TO PALE PURPLE, BUSHY, DIFFICULT TO TELL APART ASTERS

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D = Flower head diameter

L = number of ligulate flowers



8 *A. ericoides* (*Symphotrichum ericoides*)
HEATH ASTER: colony-forming; stems hairy. Many, small (less than 1/4" wide), linear, hairy, stalkless leaves. Flower cluster dense, many flower heads mostly on one side of curving, widely-spaced branches; Common in remnants of dry prairies. H=15-90cm; D=13–25mm; L=8-20, white



9 *A. pilosus* (*Symphotrichum pilosum*)
HAIRY ASTER: stems hairy. Upper leaves stalkless, linear to lance-like; lower leaves usually fall off with age. Flower cluster very open, widely-branched, many-headed, leafy. Very common in old fields, weedier than *A. ericoides*. H=30-150cm; D=8-19mm; L=16-35, white



10 *A. simplex* (*Symphotrichum lanceolatum*)
PANICLED ASTER: dense, bushy plant. Stout stems with lines of hairs toward the top. Lance-like to linear, usually toothed, stalkless, slightly clasping, smooth leaves. Flower heads elongated, conical, leafy, branched cluster of many heads. Common in wet meadows. H=60-150cm; D=8-25mm; L=20-40, white to pale blue



11 *A. praealtus* (*Symphotrichum praealtum*)
WILLOW ASTER: Leaves thick, stiff, veins in an obvious network, mostly smooth edges. Very similar to *A. simplex* but with underside of leaves with obvious veins. Flower heads tall, leafy clusters of many heads. Somewhat frequent in moist; low areas. H= 50-150cm; D =10-30mm; L=6-15, blue to purple



12 *A. dumosus* (*S. dumosum*)
RICE-BUTTON ASTER: stem leaves linear to lance-like, stalkless, most with smooth edges, and hairless below.



12 *A. dumosus* (cont.)
Flower heads large, open, with many-branched clusters Uncommon in sandy soil. H=30-100cm; D=8-19mm; L=13-30, pale purple to white



13 *A. lateriflorus* (*Symphotrichum lateriflorum*)
SIDE-FLOWERING ASTER: basal leaves stalked, upper leaves mostly stalkless; hairy only along the lower midrib. Flower clusters loose of many heads mostly on one side of the widely-spreading branches, center turns to purple as flower matures. Common in woodlands and floodplains. H=30-120cm; D=6-13mm; L=9-14, white



14 *A. ontarionis* (*Symphotrichum ontarionis*)
BOTTOMLAND ASTER: stems evenly covered with fine, curly hairs toward the top. Basal leaves stalked, upper leaves lance-like, mostly stalkless, and evenly hairy below. Inflorescence with many flower heads along spreading branches. Locally common in floodplains. H=30-120cm; D=8-10mm; L=9-14, white



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**GROUP 3:
DISTINCTIVE
ASTERS** that should
separate from easily
from others.

**KEY TO
ABBREVIATIONS**

H = stem height

D = Flower head diameter

L = number of ligulate flowers



15 *A. ptarmicoides* (*Oligoneuron album*)

PRAIRIE WHITE GOLDENROD: Very aster-like in appearance. Leaves stiff, lower leaves stalked, sometimes tufted and linear, upper leaves stalkless. Flower heads in open, branched, flat-topped cluster; blooms July-Sept.; Full sun; restricted to calcareous dry prairie and sand flats. H=10-60cm; D=13mm; L=10-25, white



16 *A. umbellatus* (*Doellingeria umbellata*)

FLAT-TOP ASTER, PARASOL WHITETOP: Stems usually hairless below the flower heads. Leaves toothless, mostly stalkless, tapering at both ends. Flower heads mainly occurring in flat-topped, dense, branched clusters. Common in moist meadows and woods. H=30-200cm; D=17-25mm; L=7-14, white



17 *A. sericeus* (*Symphotrichum sericeum*)

SILKY ASTER: Clustered, brittle, wiry stems; inflorescence of several to many heads in widely-branched, open clusters near the ends of the branches. Leaves pale greenish, very silky, entire, and lance-like to oblong. sun; dry; prairies. H=20-60cm; D=20-25mm; L=15-25, violet to purple



18 *A. linariifolius* (*Ionactis linariifolius*)

FLAX-LEAVED ASTER, STIFF ASTER: Short, stiff, needle-like, leaves. Weak, wiry stems. Occasional in sandy soils. H=10-50cm; D=19-35mm; L=10-20, blue-violet



19 *A. borealis* (*Symphotrichum boreale*)

RUSH ASTER: An open, sparse plant with long, narrow, linear leaves curl slightly along the edges.



19 *A. borealis* (cont).

Plants with more than 30 ray flowers. Rare plant of calcareous fens. H=6-32cm; D=25-34mm; L=20-50, white



20 *A. oblongifolius* (*Symphotrichum oblongifolium*)

AROMATIC ASTER: a dense, bushy aster. Stems stiff and slightly hairy. Leaves linear, sessile, and crowded along the stem. Leaves release a pleasant odor when crushed. Flower heads more than 1" across. Uncommon in prairies, glades, and river bluffs. H=10-102cm; D= 19-32mm; L=15-40, blue violet or purple



Asters Not Included in this Guide

- *A. brachyactis* and *A. subulatus* – non-native asters found along interstate highways and other waste places.
- *A. parviceps* – an uncommon aster that resembles *A. pilosus* (pg 2) and is found in similar habitats.
- *A. prenanthoides* – known only from a few collections in the Chicago region.
- *A. schreberi* – very rare, known only from two sites in the Chicago region. This species looks like *A. furcatus* (pg 1) only with smooth or only slightly rough leaves.
- *A. vimineus* – rare in the Chicago region.
- *A. x amethystinus* – hybrid between *A. novae-angliae* and *A. ericoides*
- *A. x lutescens* – hybrid between *A. ptarmicoides* and several *Solidago* spp.

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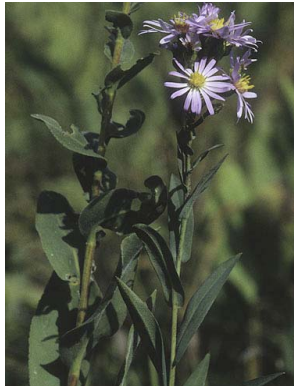
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**GROUP 4:
CLASPING-
LEAVED ASTERS**
Stem leaves clasping
the stem. Flower color
various.



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21 *A. novae-angliae* (*Symphyotrichum novae-angliae*)
NEW ENGLAND ASTER: leaves strongly clasping, dense, usually with smooth edges, mostly broadly-oblong to lance-like. Flower heads in leafy, short clusters; blooms Aug.-Oct., our latest flowering aster. Common in moist meadows and prairies. H=50-200cm; D=19-38mm; L=45-100, purple to rose

22 *A. laevis* (*Symphyotrichum laevis*)
SMOOTH BLUE ASTER: stems reddish; leaves stalkless to clasping, thick, smooth, waxy, stiff; bracts (phyllaries) with a long, dark-green tip. Common in mesic prairies. H=30-90cm; D=17-25mm; L=15-30, blue to purple



**GROUP 5:
ASTER
LOOK-A-LIKES**



23 *A. puniceus* (*Symphyotrichum puniceum*)
SWAMP ASTER: hairy, reddish, thick stems. Leaves narrow, dark green, stalkless to clasping. Flower heads in loose, open clusters with some large leaves. Uncommon in fens, bogs, wet prairies. *A. puniceus* var. *firmis* has smooth stems or lines of hairs along the stem. H=30-210cm; D=25-38mm; L=30-60; pale blue

24 *Erigeron* spp.
FLEABANES: have more ray flowers than *Aster* and have phyllaries that are often the same length and in one line (compare to phyllaries of *A. puniceus*)

25 *Boltonia latisquama* var. *recognita*
FALSE ASTER: differs from *Aster* in conical receptacle and pappus consisting of spines and stiff bristles

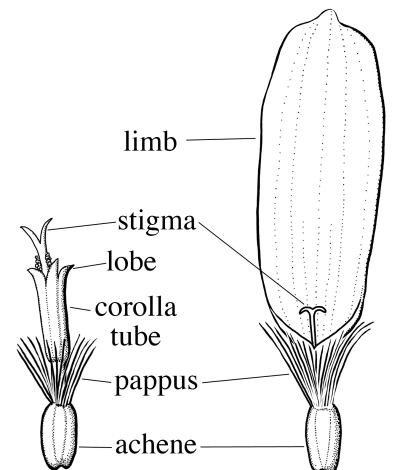
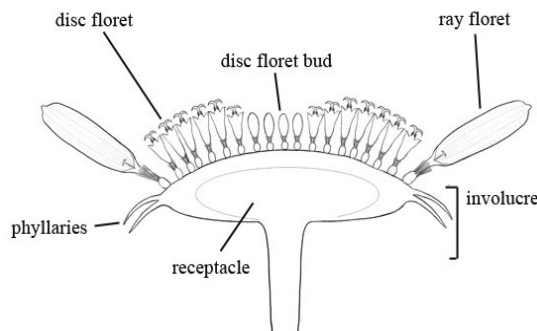
Aster Quotes: from *Michigan Flora* by Edward Voss

“None of the wild plants have read their job descriptions, much less attempted to conform to them, and the student of Aster can expect exceptions to almost any statement in the key.”

“People who go looking for odd and unusual asters often get just what they are looking for: trouble.”

RESOURCES

Robert W. Freckmann
Herbarium:
<http://wisplants.uwsp.edu>



Disk flower

Ligulate flower