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

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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.

6 A. shortii (Symphyotrichum shortii) **SHORTS 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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8 A. ericoides (Symphyotrichum 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 (Symphyotrichum 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 (Symphyotrichum 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 (Symphyotrichum 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, mostly 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 (Symphyotrichum 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=6-15mm; L=9-14, white

14 A. ontarianis (Symphyotrichum ontarianis)
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.

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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 (Symphyotrichum 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 (Symphyotrichum boreale)
RUSH ASTER: An open, sparse plant with long, narrow, linear leaves curl slightly along the edges. Rare plant of calcareous fens.
H=6-32cm; D=25-34mm; L=20-50, white

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.
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 leave)
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

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