## Identification of Common Wisconsin Weeds

### Annual Broadleaves

#### BUCKWHEAT FAMILY

**Wild buckwheat (51)***  
*Polygonum convolvulus*

<table>
<thead>
<tr>
<th>Trait</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cotyledon</strong></td>
<td>oblong oval with granular waxy surface</td>
</tr>
<tr>
<td><strong>Ocrea</strong></td>
<td>at leaf axils; small</td>
</tr>
<tr>
<td><strong>Stems</strong></td>
<td>trailing vines</td>
</tr>
<tr>
<td><strong>Leaves</strong></td>
<td>heart-shaped with pointed tips</td>
</tr>
<tr>
<td><strong>Flowers</strong></td>
<td>greenish-white, small and inconspicuous</td>
</tr>
<tr>
<td><strong>Seeds</strong></td>
<td>3-sided</td>
</tr>
</tbody>
</table>

* indicates the page in *Weeds of the North Central States* that describes the plant

![Wild buckwheat seedling](image1)

![Wild buckwheat ocrea](image2)

![Wild buckwheat plant](image3)

#### BUCKWHEAT FAMILY

**Pennsylvania smartweed (52)**  
*Polygonum pensylvanicum*

<table>
<thead>
<tr>
<th>Trait</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cotyledon</strong></td>
<td>lanceolate to oblong, rounded tips</td>
</tr>
<tr>
<td><strong>Ocrea</strong></td>
<td>at leaf axils; smooth top</td>
</tr>
<tr>
<td><strong>Stems</strong></td>
<td>reddish, branched swollen nodes</td>
</tr>
<tr>
<td><strong>Leaves</strong></td>
<td>rounded at base; pointed at tip</td>
</tr>
<tr>
<td><strong>Flowers</strong></td>
<td>pink, terminal flower clusters</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>seed black, shiny, flattened, circular with pointed tip</td>
</tr>
</tbody>
</table>

![Penn. smartweed ocrea](image4)

![Penn. smartweed seeds](image5)

![Pennsylvania smartweed flowering plants](image6)

#### BUCKWHEAT FAMILY

**Ladysthumb smartweed (52)**  
*Polygonum persicaria*

<table>
<thead>
<tr>
<th>Trait</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cotyledon</strong></td>
<td>lanceolate to oblong, rounded tips</td>
</tr>
<tr>
<td><strong>Ocrea</strong></td>
<td>at leaf axils; hairy top</td>
</tr>
<tr>
<td><strong>Stem</strong></td>
<td>reddish with swollen nodes branched</td>
</tr>
<tr>
<td><strong>Leaves</strong></td>
<td>pointed at both ends, often have “thumb print”</td>
</tr>
<tr>
<td><strong>Flowers</strong></td>
<td>pink, terminal flower clusters</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>seeds black, most triangular</td>
</tr>
</tbody>
</table>

![Ladysthumb ocrea](image7)

![Ladysthumb seeds](image8)

![Ladysthumb smartweed plants](image9)
GOOSEFOOT FAMILY
Common lambsquarters (57)
Chenopodium album

Cotyledon: linear, small
Leaves: often have whitish, ‘mealy’
Covering: shape is triangular or “goosefoot” shaped
Stems: have reddish streaks, branched
Seed: shiny, black, disk-shaped, 1/16 inch in diameter
Other: many biotypes, some resistant to herbicides

PIGWEED FAMILY
Redroot pigweed (65)
Amaranthus retroflexus

Cotyledon: linear, smooth
Root: often reddish-pink taproot
Leaves (stems): notch in tip of first leaves; finely pubescent; reddish-purple color on underside of leaves
Seedhead: somewhat spiny, small, black, shiny seeds
Other: also called rough pigweed

PIGWEED FAMILY
Smooth pigweed (64)
Amaranthus hybridus

Cotyledon: linear, smooth
Root: often reddish-pink taproot
Leaves (stems): generally smooth
Seedheads: longer than redroot pigweed; rarely branched
Other: resistant biotypes
**PIGWEED FAMILY**

**Waterhemp**  
*Amaranthus tuberculatus*

**Cotyledon:** linear; egg-shaped  
**Leaves:** nick in tip of first leaves; long-petioled; 3 to 6 in. long; somewhat shiny  
**Stems:** smooth, often with colored stripes  
**Inflorescence:** small greenish flowers, male and female flowers on separate plants  
**Other:** several species of waterhemp in the region; resistant biotypes

---

**PURSLANE FAMILY**

**Purslane (71)**  
*Portulaca oleracea*

**Cotyledon:** linear or oblong, smooth  
**Leaves:** fleshy, rounded, opposite  
**Stems:** fleshy, prostrate, reddish, branched  
**Flowers:** 5 yellow petals; small; numerous  
**Seeds:** small, flattened, oval, glossy black  
**Other:** plants can establish from stem pieces

---

**MUSTARD FAMILY**

**Wild mustard (89)**  
*Brassica kaber*

**Cotyledon:** heart or kidney-shaped; smooth  
**Leaves (stems):** few bristly hairs  
**Lower leaves:** large, triangular and lobed (not to midrib)  
**Upper leaves:** reduced in size; no petioles  
**Flowers:** 4 bright yellow petals  
**Seed pods:** “beak” of seed capsule 1/3 length of whole capsule; open to release round seeds
MUSTARD FAMILY
Wild radish (100)
Raphanus raphanistrum

- **Cotyledon:** heart or kidney-shaped, smooth
- **Lower leaves:** rounded lobes often reach to midrib
- **Leaves (stems):** stiff, scattered hairs
- **Flowers:** 4 yellowish-white petals; sometimes with purplish veins
- **Seed pods:** form constrictions and break into small segments with seed inside
- **Other:** fruits contaminate oats and barley grain

Shepherd’s purse (91)
Capsella bursa-pastoris

- **Cotyledon:** ovate to rounded
- **Rosette leaves:** starlike branched hairs on upper surface; leaf lobes point to leaf tip
- **Stalk (stems):** elongated stalk; leaves clasp stem
- **Flowers:** small with 4 white petals
- **Seed pod:** small, triangular-shaped

Field pennycress (104)
Thlaspi arvense

- **Cotyledon:** round, bluish-green
- **Leaves:** rosette and stem leaves; ear-like lobes that clasp stems on upper leaves
- **Flowers:** flowers with 4 white petals; in clusters
- **Seed pod:** notch in top of pod and flat wing around edge
- **Other:** garlic-like odor in crushed leaves and stems
**MALLOW FAMILY**

**Velvetleaf (122)**  
*Abutilon theophrasti*

- **Cotyledon:** round or heart-shaped  
- **Leaves:** very large, heart-shaped, softly hairy  
- **Stem:** pubescent  
- **Flowers:** yellow with 5 petals  
- **Seed capsules:** 13-15 segments; resembles “butterprint”

**NIGHTSHADE FAMILY**

**Jimson weed (157)**  
*Datura stramonium*

- **Cotyledon:** lanceolate, smooth  
- **Leaves:** ovate (egg-shaped) with pointed tip lobes; wavy margins  
- **Stems:** hollow, purplish, and smooth  
- **Flower:** white tubular flowers  
- **Seed capsules:** spiny, golf ball sized with many seeds  
- **Other:** strong, foul odor in leaves and stems; poisonous

**NIGHTSHADE FAMILY**

**Eastern black nightshade (162)**  
*Solanum ptycanthum*

- **Cotyledon:** ovate, smooth, small  
- **Leaves:** purplish color on underside; often with “shot holes”  
- **Stems:** erect or spreading; widely branched  
- **Flowers:** 5 white reflexed petals  
- **Fruits:** green, turning black at maturity; contaminate harvested products
**NIGHTSHADE FAMILY**

**Hairy nightshade**  
*Solanum physalifolium*

- **Cotyledon:** ovate, hairy  
- **Leaves:** ovate to nearly triangular; finely hairy, especially veins & margins  
- **Stems:** finely hairy  
- **Flowers:** 3-9 flowers on short stalk; 5-petaled; white or tinged with purple  
- **Fruit:** turns yellowish brown when ripe

---

**GOURD FAMILY**

**Bur Cucumber (178)**  
*Sicyos angulatus*

- **Cotyledon:** large; spoon-shaped, thick with dense short hairs  
- **Stems:** long, ridged vines; sticky-hairy; branched tendrils allow plants to climb over crops  
- **Leaves:** 3 to 5 shallow lobes (pentagon-shaped), alternate, petioled  
- **Flowers:** male and female flowers arise at separate axils; 5 greenish-white fused sepals and petals  
- **Fruits:** in clusters of 3 to 20 egg-shaped, barbed, prickly pods; each pod with one seed

---

**COMPOSITE FAMILY**

**Common ragweed (181)**  
*Ambrosia artemisiifolia*

- **Cotyledon:** oval to spatulate, thick  
- **Leaves:** lacy, finely divided, opposite initially, then alternate; first leaves with 5 lobes  
- **Stems:** rough, hairy and branched  
- **Flowers:** male flowers in terminal clusters; female flowers in leaf axils
COMPOSITE FAMILY

**Giant ragweed (183)**
*Ambrosia trifida*

Cotyledon: oval to spatulate  
Leaves: opposite, large and 3-5 lobed; upper leaves often simple; roughly hairy  
Stems: woody and 1-2 inches thick; tough, hairy; 6-14 feet tall  
Flowers: male flowers in terminal clusters; female flowers in leaf axils

---

**Horseweed (204)**
*Conyza canadensis*

Cotyledon: round to ovate  
Leaves: many leaves, no petioles; hairy; entire or toothed  
Stems: covered with bristly hairs; branched at top  
Flowers: many small flowers on axillary branches  
Other: also called marestail; common in no-till sites

---

**Smallflower galinsoga (210)**
*Galinsoga parviflora*

Cotyledon: oval to squarish, hairy; abruptly tapered at base  
Leaves: opposite, toothed  
Stems: branched, hairy  
Flowers: 4-5 white ray flowers surrounding yellow disk flowers
### Prickly Lettuce (224)
*Lactuca serriola*

- **Cotyledon:** ovate to spoon-shaped
- **First leaves:** rosette of pale green leaves; no spines
- **Later leaves:** lobed with spiny edges and spines on midrib of underside of leaves; leaf bases clasp the stem
- **Stems:** hollow; top very branched when mature
- **Flowers:** pale yellow flower heads that release seeds attached to a pappus
- **Other:** leaves and stems with milky sap

### Cocklebur (240)
*Xanthium strumarium*

- **Cotyledon:** lanceolate, thick
- **Leaves:** large, triangular and lobed; 3 prominent veins
- **Stems:** rough texture, dark purple spots
- **Leaves (stems):** sandpaper-like textured surface
- **Flowers:** small, male and female separate but borne together in clusters in axils of upper leaves; two female flowers are enclosed in each oval bur

### Burdock (187)
*Arctium minus*

- **Taproot:** large, thick, and fleshy
- **Rosette leaves:** huge with heart-shaped base; white-woolly below
- **Leaves:** alternate, prominent veins
- **Stems:** tough; much branched
- **Flowers:** red-violet color; 3/4 - 1 inch across
- **Fruit:** a bur with hooked spines

### Biennial Broadleaves

## COMPOSITE FAMILY

### Burdock (187)
*Arctium minus*

- **Taproot:** large, thick, and fleshy
- **Rosette leaves:** huge with heart-shaped base; white-woolly below
- **Leaves:** alternate, prominent veins
- **Stems:** tough; much branched
- **Flowers:** red-violet color; 3/4 - 1 inch across
- **Fruit:** a bur with hooked spines

### Cocklebur (240)
*Xanthium strumarium*

- **Cotyledon:** lanceolate, thick
- **Leaves:** large, triangular and lobed; 3 prominent veins
- **Stems:** rough texture, dark purple spots
- **Leaves (stems):** sandpaper-like textured surface
- **Flowers:** small, male and female separate but borne together in clusters in axils of upper leaves; two female flowers are enclosed in each oval bur

### Prickly Lettuce (224)
*Lactuca serriola*

- **Cotyledon:** ovate to spoon-shaped
- **First leaves:** rosette of pale green leaves; no spines
- **Later leaves:** lobed with spiny edges and spines on midrib of underside of leaves; leaf bases clasp the stem
- **Stems:** hollow; top very branched when mature
- **Flowers:** pale yellow flower heads that release seeds attached to a pappus
- **Other:** leaves and stems with milky sap
### COMPOSITE FAMILY

**Musk thistle (199)**  
*Carduus nutans*

**Leaves:** smooth, waxy; grey-green margin with a white, hairless midrib; spiny edges that extend down stem

**Stems:** spiny from leaf bases except right below flower head

**Flowers:** 1-½ to 2 inches in diameter; rich pink color; head often tips downward

- ![Musk thistle flowerbud](image1)
- ![Musk thistle leaf](image2)
- ![Musk thistle flower](image3)

### COMPOSITE FAMILY

**Plumeless thistle (198)**  
*Carduus acanthoides*

**Leaves:** leaves deeply divided; hairy esp. lower surface midrib; decurrent

**Stems:** spiny from base to flower head due to decurrent leaves

**Flowers:** ¾ to 1 ½ inches in diameter; pinkish

- ![Plumeless thistle rosette](image4)
- ![Plumeless thistle flowerbuds](image5)
- ![Plumeless thistle flower](image6)

### COMPOSITE FAMILY

**Bull thistle (202)**  
*Cirsium vulgare*

**Leaves:** deeply cut, spiny margins with a wrinkled surface; hairy

**Spines:** prominent; needle-like

**Stems:** spiny with decurrent leaves (extend down the stem)

**Flowers:** 1-2 inches in diameter; are flask-shaped; pink to pink-lavender

- ![Bull thistle rosette](image7)
- ![Bull thistle stem](image8)
- ![Bull thistle flower](image9)
Perennial Broadleaves

HORSETAIL FAMILY
Horsetail (11)
Equisetum arvense

- Spreads: by spores and rhizomes
- Fertile stems: stems hollow, not branched; easily separated joints
- Vegetative stems: "leaves" in whorls at joints; looks like small pine trees
- Other: most common in wet areas

BUCKWHEAT FAMILY
Curly dock (55)
Rumex crispus

- Taproot: fleshy, branched, and yellow
- Ocrea: long; prominent
- Basal leaves: 6-12 inches with wavy edges
- Stems: smooth, erect, reddish
- Flowers: small greenish becoming reddish brown at maturity, found in dense clusters on branches at tip of stem

PINK FAMILY
White cockle (74)
Lychnis alba

- Leaves: hairy and opposite, with no petiole; softly hairy
- Stems: softly hairy
- Flowers: white; male & female parts on separate plants (dioecious)
- Fruit: seed pods with 10 short teeth
**MUSTARD FAMILY**

**Yellow rocket (86)**

*Barbarea vulgaris*

- **Rosette leaves:** pinnate with large terminal lobe
- **Stem leaves:** smooth with waxy surface
- **Upper leaves:** clasp stem
- **Flowers:** 4 yellow petals, similar to wild mustard but smaller

---

**Hoary alyssum (87)**

*Berteroa incana*

- **Leaves (stems):** grey-green in color; rough hairs on whole plant
- **Flowers:** white with 4 deeply-divided petals
- **Fruit:** seed pods small with short “beak”

---

**SPURGE FAMILY**

**Leafy Spurge (118)**

*Euphorbia esula*

- **Roots:** deep and spreading
- **Stems:** smooth
- **Leaves:** alternate, strap-shaped, ¼ inch wide, usually drooping
- **Flowers:** small and borne above greenish-yellow bracts
- **Fruit:** explode when ripe, shooting 3 seeds, from parent plant
- **Other:** all plant parts have milky sap
**DOGBANE FAMILY**

**Hemp dogbane (134)**  
*Apocynum cannabinum*

- **Roots:** deep and branched  
- **Leaves:** opposite, narrow and pointed tips  
- **Stems:** smooth, reddish  
- **Flowers:** 5 greenish white petals that are slightly longer than green sepals  
- **Fruits:** long, slender pods; occur in pairs  
- **Other:** all plant parts have milky sap

---

**MILKWEED FAMILY**

**Common Milkweed (137)**  
*Asclepias syrica*

- **Roots:** deep and branched  
- **Leaves:** opposite, thick, oblong, rounded tips, prominent veins  
- **Flowers:** pink to white in large many-flowered ball-like clusters at tip of stem and in axils of upper stems  
- **Other:** all plant parts have milky sap

---

**MORNINGGLORY FAMILY**

**Field bindweed (139)**  
*Convolvulus arvensis*

- **Roots:** deep and spreading  
- **Stems:** trailing or climbing  
- **Leaves:** “arrowhead”-shaped leaves with 3 “points”  
- **Flowers:** white or pink, funnel-shaped, 1 inch or less in diameter, found in axils of leaves  
- **Other:** flower stalks have 2 stipules below flowers
**MORNINGGLORY FAMILY**

**Hedge bindweed (140)**

*Convolvulus sepium*

**Roots:** deep and spreading

**Stems:** trailing or climbing (similar to field bindweed)

**Leaves:** “arrowhead”-shaped leaves with 5 “points”

**Flower stalks:** no stipules below flowers

**Flowers:** large, 1 ½ to 2 inches, white or pinkish

**PLANTIN FAMILY**

**Blackseed Plantin (171)**

*Plantago rugelii*

**Roots:** fibrous, tough

**Leaves:** in rosette, broad, ovate with 3 to 5 prominent veins; smooth; petioles purplish; egg-shaped, wavy margins

**Flowering stems:** leafless with many small inconspicuous flowers

**Other:** broadleaf plantain similar but lacks purple petioles and has smaller leaves

**NIGHTSHADE FAMILY**

**Horsenettle (160)**

*Solanum carolinense*

**Root:** spreading, deep with adventitious buds

**Leaves:** with yellow prickles on the petioles, veins and midribs; hairy; oblong with wavy edges (like oak leaf)

**Stems:** with sharp, stout spines; simple or branched

**Flowers:** potato-like with 5 fused white to purple petals; prominent anthers

**Fruits:** smooth green berries to 0.5” diameter, becoming yellow; become wrinkled and hang on plants most of winter

**Other:** plants poisonous
### COMPOSITE FAMILY
**Canada thistle (200)**
*Cirsium arvense*

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roots</td>
<td>deep and branched</td>
</tr>
<tr>
<td>Stems</td>
<td>smooth</td>
</tr>
<tr>
<td>Leaves</td>
<td>crinkled edges and spiny margins; smooth</td>
</tr>
<tr>
<td>Flowers</td>
<td>pink to purple, flash-shaped rarely white, ¾ inches wide; male and female flowers on separate plants</td>
</tr>
</tbody>
</table>

### COMPOSITE FAMILY
**Perennial Sow Thistle (234)**
*Sonchus arvensis*

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roots</td>
<td>spreading; shoots arise from buds</td>
</tr>
<tr>
<td>Leaves</td>
<td>prickly toothed, lobed; milky sap</td>
</tr>
<tr>
<td>Stems</td>
<td>milky juice; hollow; branch near top</td>
</tr>
<tr>
<td>Flower heads</td>
<td>branched with yellow ray flowers</td>
</tr>
<tr>
<td>Seeds</td>
<td>ribbed; with feathery pappus</td>
</tr>
</tbody>
</table>

### COMPOSITE FAMILY
**Dandelion (237)**
*Taraxacum officinale*

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roots</td>
<td>deep taproot with many buds</td>
</tr>
<tr>
<td>Leaves</td>
<td>lobes point to base of plant; watery, milky juice</td>
</tr>
<tr>
<td>Flowers</td>
<td>bright yellow with many seeds</td>
</tr>
<tr>
<td>Seeds</td>
<td>ribbed with barbs to aid in soil penetration; pappus aids in seed spread</td>
</tr>
</tbody>
</table>