

## ORCHIDACEAE – ORCHID FAMILY

**Plant:** herbs, vines rare

**Stem:**

**Root:**

**Leaves:** simple, usually alternate but rarely opposite or whorled; parallel veined, somewhat fleshy and often forming a sheath at base; no stipules

**Flowers:** perfect; often showy and unusual (irregular) and solitary or in spikes; flower with bract; 3 sepals or 2 by fusion; 3 petals, colored or white, often with 2 lateral petals with a third larger petal modified into a lip, sometimes with a backward spur; stamens usually 1, rarely 2-3; ovary inferior, 3 carpels, many ovules

**Fruit:** capsule, 3-chambered, very small and very numerous seeds, or berry

**Other:** very large family, most abundant in the tropics, many are epiphytic; Monocotyledons Group

**Genera:** 800+ genera; locally *Cypripedium* (lady-slipper); *Epipactis*; *Goodyera*; *Spiranthes*

# Flower Morphology in the Orchidaceae (Orchid Family)



**Dragon's Mouth**



**Orange Fringed Orchid**



**Grass Pink Orchid**



**Downy Rattlesnake Plantain**



**Greater Yellow Lady's Slipper**



**[Broadleaf] Helleborine**



**Nodding Lady's Tresses**



**Snakemouth Orchid [Rose Pogonia]**

## ORCHIDACEAE – ORCHID FAMILY

Dragon's Mouth [Swamp Pink]; *Arethusa bulbosa* L.  
[Tuberous] Grass Pink Orchid; *Calopogon tuberosus* (L.) B.S.P.  
Spring Coralroot [Coral Root]; *Corallorhiza wisteriana* Conrad  
Pink Lady Slipper [Moccasin Flower]; *Cypripedium acaule* Aiton  
White Lady's Slipper; *Cypripedium candidum* Muhl. ex Willd.  
Greater Yellow Lady's Slipper; *Cypripedium parviflorum* Salisb. var. *pubescens* (Willd.) Knight  
[Broadleaf] Helleborine; *Epipactis helleborine* (L.) Crantz (Introduced)  
Downy Rattlesnake Plantain; *Goodyera pubescens* (Willd.) R. Br. ex Ait. f.  
[Yellow] Orange Fringed Orchid; *Platanthera ciliaris* (L.) Lindl.  
Small Green Wood [Club-Spur] Orchid; *Platanthera clavellata* (Michx.) Luer [*Habenaria clavellata*]  
Prairie White Fringed Orchid; *Platanthera leucophaea* (Nutt.) Lindl.  
Snakemouth Orchid [Rose Pogonia]; *Pogonia ophioglossoides* (L.) Ker Gawl.  
Nodding Lady's Tresses; *Spiranthes cernua* (L.) L.C. Rich.  
October [Lesser] Lady's Tresses; *Spiranthes ovalis* Lindl.  
Spring [Grass-Leaved] Lady's Tresses; *Spiranthes vernalis* Engelm. & Gray  
Soldier's [Lawn] Orchid; *Zeuxine strateumatice* (L.) Schltr.

# Dragon's Mouth [Swamp Pink]

*Arethusa bulbosa* L.

Orchidaceae (Orchid Family)

Waterloo Recreation Area, Washtenaw County, Michigan

Notes: flower irregular – 2 petals (fused) and 3 sepals pink (magenta) form an arch over a veined, fringed and ridged lip with bristles; solitary elliptical leaf (after flowering); mostly in sphagnum bogs; late spring to early summer

[V Max Brown, 2009]



# [Tuberous] Grass Pink Orchid

*Calopogon tuberosus* (L.) Britton, Sterns & Poggenb. var. *tuberosus*  
Orchidaceae (Orchid Family)

Kitty Todd Nature Preserve, Lucas County, Ohio

Notes: flower large and very irregular – lip at top with white spot having yellow-tipped bristles or hairs, petals and sepals pink (rarely white); leaves linear and grass-like, strongly veined; species variable; summer to early fall

[V Max Brown, 2007]



# Spring Coralroot [Coral Root]

*Corallorhiza wisteriana* Conrad

Orchidaceae (Orchid Family)

Wilson's Creek National Battlefield, Greene  
County, Missouri

Notes: sepals and petals (6 tepals) are linear and form a hood over a down-turned lip, sepals and petals are purplish-brown with darker lines and dashes, the lip is white with purple marks, somewhat toothed on margins; stem grows from a rhizome; a colorless sheath (leaf) is present at flowering; spring

[V Max Brown, 2010]



# Pink Lady Slipper [Moccasin Flower]



*Cypripedium acaule* Aiton  
Orchidaceae (Orchid Family)

Waterloo Recreation Area, Washtenaw County,  
Michigan

Notes: flower lip forming a large inflated pouch,  
pink with red veins, sepals and lateral petals  
yellowish brown and streaked, subtended by  
one green bract, solitary on scape; usually 2  
elliptical basal leaves; woods and bogs; late  
spring to summer

[V Max Brown, 2009]



# White Lady's Slipper

*Cypripedium candidum* Muhl. ex Willd.

Orchidaceae (Orchid Family)

Goose Creek Grasslands, Lenawee County, Michigan

Notes: flower lip forming an inflated white pouch, sepals and lateral petals yellowish green with dark stripes; leaves narrowly elliptical, somewhat sheathing up the stem and erect, uppermost leaf subtends flower; wet meadows and swamps; late spring to summer

[V Max Brown, 2009]



# Greater Yellow Lady's Slipper

*Cypripedium parviflorum* Salisb. var. *pubescens* (Willd.) Knight  
Orchidaceae (Orchid Family)

Oak Openings Metropark, Lucas County, Ohio

Notes: flower forming a large inflated pouch, yellow, sepals greenish to brown; leaves alternate, ovate to lanceolate, sheathing toward base; a woods flower; spring

[V Max Brown, 2004]



# [Broadleaf] Helleborine

*Epipactis helleborine* (L.) Crantz (Introduced)  
Orchidaceae (Orchid Family)

Maumee River Metroparks, Lucas County, Ohio

Notes: 3 sepals (pinkish white to greenish), 3 petals - 2 lateral and a long cup-shaped lip, purple interior, often a one-sided spike; leaves alternate, elliptical to lanceolate, sessile; summer

[V Max Brown, 2006]



# Downy Rattlesnake Plantain

*Goodyera pubescens* (Willd.) R. Br. ex Ait. f.  
Orchidaceae (Orchid Family)

Oak Openings Metropark, Lucas County, Ohio

Notes: flower white, 1 sepal and 2 petals fused to form a hood over the lower lip, lateral sepals free, on terminal spike; leaves basal and dark green, whitened adjacent to midrib, secondary veins white, leaves present at flowering; plant downy; woods; summer

[V Max Brown, 2006]



# [Yellow] Orange Fringed Orchid

*Platanthera ciliaris* (L.) Lindl.

Orchidaceae (Orchid Family)

Kitty Todd Nature Preserve, Lucas County, Ohio

Notes: flower irregular – petals and sepals orange (yellow), lip not 3-parted but deeply fringed; leaves alternate, linear and long; summer to early fall

[V Max Brown, 2007]



# Small Green Wood [Club-Spur]

## Orchid



*Platanthera clavellata* (Michx.) Luer

[*Habenaria clavellata*]

Orchidaceae (Orchid Family)

Waterloo Recreation Area, Washtenaw County, Michigan

Notes: flower irregular – mostly white and small, lateral petals and upper sepal fused into hood, lateral sepals spreading, lip with 3 lobes, long club-shaped spur at base; leaves alternate, one large sheathing leaf in middle of stem with reduced leaves upward; swamps and bogs; summer to early fall

[V Max Brown, 2009]



# Prairie White Fringed Orchid

*Platanthera leucophaea* (Nutt.) Lindl.

Orchidaceae (Orchid Family)

Waterloo Recreation Area, Washtenaw County,  
Michigan

Notes: flower irregular – petals and sepals fused at base and form a wide hood, white, cream or greenish-white, lip 3-parted and fringed, on elongated spike; leaves alternate, narrowly lanceolate and wrap the stem; swamps and bogs; summer  
(flower shown not complete)

[V Max Brown, 2009]



# Snakemouth Orchid [Rose Pogonia]



*Pogonia ophioglossoides* (L.) Ker Gawl.  
Orchidaceae (Orchid Family)

Waterloo Recreation Area, Washtenaw County,  
Michigan

Notes: flower irregular – petals and sepals pink (white),  
lip with yellow bristles; single larger leaf, elliptical-  
oblong; wet area and bogs, summer to early fall

[V Max Brown, 2008]



# Nodding Lady's Tresses

*Spiranthes cernua* (L.) L.C. Rich.

Orchidaceae (Orchid Family)

Kitty Todd Nature Preserve, Lucas County, Ohio

Notes: flowers in multiple rows on stem, horizontal or nodding, lip white, glandular hairs present, one bract overlays flower; leaves linear and long, upper leaves much reduced; late summer and fall (variable, most common species of Lady's Tresses)

[V Max Brown, 2006]



**October [Lesser]**

## **Lady's Tresses**

*Spiranthes ovalis* Lindl.

Orchidaceae (Orchid Family)

Sam A. Baker State Park, Wayne County, Missouri

Notes: flowers in multiple rows on stem, white with white lip, tightly bound by bracts; basal leaves few, linear; woods; fall

[V Max Brown, 2007]



# Spring [Grass- Leaved] Lady's Tresses



*Spiranthes vernalis* Engelm. & Gray  
Orchidaceae (Orchid Family)  
Cave City area, Stark County, Arkansas  
Notes: flowers in single spiral on stem,  
white, lateral sepals free and usually  
bent up, yellow on interior of flower;  
basal leaves linear; often in grassy  
areas; summer  
[V Max Brown, 2007]



# Soldier's [Lawn] Orchid



*Zeuxine strateumatica*  
(L.) Schltr.

Orchidaceae (Orchid Family)

Destin, Okaloosa County, Florida

Notes: flowers white with yellow lip,  
fleshy, bracts green; leaves linear with  
sheathing base, spirally arranged on  
stem, usually erect, keeled; moist areas  
such as lawns, green houses, etc.,  
weedy; fall and winter (sometimes  
spring)

[V Max Brown, 2012]

