# **WELCOME TO SEVEN ISLANDS STATE BIRDING PARK**

2809 Kelly Lane **Kodak, TN 37764** 

**Park GPS Coordinates** 35.9539, -83.6867

**Hours: Sunrise to Sunset** 

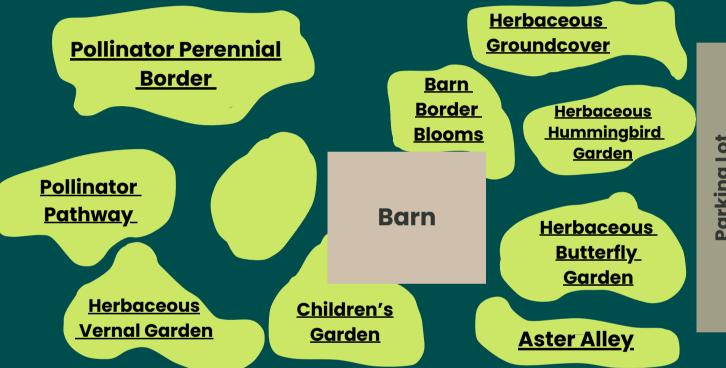
Species marked with a brown sign have a placard in the garden that links to additional information.





THIS IS A GUIDE TO THE PLANTS IN THE WILD YARDS GARDEN.

Click on the map of the garden section below that you would like to explore to view the guide to that area.



Click here for a list of the species covered in this guide.

This guide was created by undergraduate & graduate Field Botany students.



**EVOLUTIONARY BIOLOGY** 

# ASTERALLEY



Follow this flow chart to find out what plant you are meeting!

- Aster Alley lies in a ditch on the left-hand side of the walkway between the parking lot and the barn. Its soil is a bit rocky and many plants growing here are tolerant of rough conditions.
- A majority of the plants growing here are in the Aster family, which is the 2nd largest plant family with over 30,000 species!
- The Asters have flowers arranged in heads, with many small disk flowers in the center and ray flowers with larger petals around the edges. It looks like a single flower but is really many.
- The colorful flowers help them stand out to pollinators, attracting butterflies and bees. In the fall, the flowers transform into small fruits (achenes) that are topped white hairs that help them fly on the wind like a dandelion!



# **Shrubby St. Johns Wort**

Hypericum prolificum ~ Hypericaceae





- When it Flowers: Mid to Late Summer
- **Flower:** 1 in. across, 4-5 yellow petals 0.4 inches long, many <u>stamen</u>.
- Leaves: Opposite, simple, dark green, narrow, 1-4 inches long
- **Fruit:** 1/2 inch brown ovoid capsule with 3 fruits at the end of each branch.
- Other Features: Grows up to 7 feet tall, somewhat woody.
- Fun Fact: Host plant for butterfly and moth larvae, bird food source in winter.

# Panicledleaf ticktrefoil

Desmodium paniculatum ~ Fabaceae



- When it Flowers: Late Summer to Early Fall
- Flower: Small purple flower having a <u>banner wing and keel</u> with green spots that resemble eyes.
- **Leaves:** Alternate, compound leaves in groups of three with smooth edges.
- Fruit: Loments that break into individual triangles.
- Other Features: Tall herbaceous plant with fruits are sticky and hard to remove from clothing.
- Fun Fact: Loments are primarily animal dispersed. Some may be stuck to your pants right now!

# **Eastern Gamagrass**

Tripsacum dactyloides ~ Poaceae





- When it Flowers: Spring to Early Fall
- Leaves: Alternate, simple, long arching leaves that loosely sheath the stem and taper to a point.
- Flower: Small flowers lacking petals; purple at the base of the flowering stalk and yellow/orange further up.
- Fruit: Grain-like fruit that breaks off in pieces.
- Other Features: The inflorescence resembles fingers.
- **Fun Fact:** The scientific name comes from the <u>inflorescence</u>'s bone-like appearance.

# **Swamp Sunflower**

Helianthus angustifolius ~ Asteraceae



- When it Flowers: Late Summer into Fall
- **Leaves:** Alternate, simple, finely serrated, roughly hairy, 6 inches long.
- Inflorescence (Head): 1-3 inches across yellow and showy
- Fruit: Achene.
- Other Features: Grows to be around 5-8 feet tall, leaves are alternate close to the ground but opposite higher up.
- Fun Fact: Sometimes called mountain daisy because it looks like a mountain of daisies.

# **Frost Aster**

Symphyotrichum pilosum ~ Asteraceae



- When it Flowers: Late Summer to Early Fall
- Leaves: Alternate, simple, slender, sessile.
- Inflorescence (Head): 0.5 to 0.75 inches wide, 15 to 35 slender ray flowers, yellow disk flowers
- Fruit: Achene with pappus.
- Other Features: Extremely hairy stems and leaves
- Fun Fact: Leaves decrease in size the higher up the plant grows.

# White Crownbeard

Verbesina virginica ~ Asteraceae



- When it Flowers: Late Summer to Early Fall
- **Leaves:** Alternate, simple, <u>serrated</u>, middle vein of the leaf by the stem is winged.
- Inflorescence (Head): Cluster of white to gray flowers, outer petals are irregularly spaced and have 3 points.
- Fruit: Achene.
- Other Features: Grows up to 7 feet tall. Has winged stems.
- Fun Fact: This plant exudes water that freezes in the winter, creating an icy structure right above the ground.

References: <u>www.Growitbuildit.com</u> - <u>www.missouribotanicalgarden.org</u> - <u>www.newmoonnursery.com</u>

# HERBACEOUS BUTTERFLY GARDEN

### **FLUTTERING WITH IMPORTANCE!**

Butterfly gardens are essential for supporting native pollinators. These bright blooms provide nectar for butterflies as well as habitat for developing caterpillars.

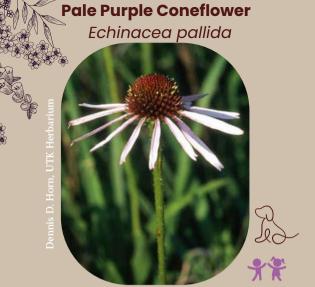
Planting butterfly friendly species promotes biodiversity and adds a colorful pop to the environment.



# **Helpful Hints**

- Leaf arrangement How the leaves are oriented on the stem.
  - **Opposite** Leaf stalks (petiole) extend on opposites of the stem from same location .
  - Basal Leaves extending in a circular formation from the ground.
  - Alternate Leaves stalks extend from different positions on each side of the stem.
- Ray Floret Linear petals that extend from the center of the flower. If you have ever picked petals off a sunflower that's a ray floret.
- Disk Floret Tiny flowers located at the center of the flower
  head.
  - Pappus White fluffy tissue that aids in seed dispersal.
  - Achene A small breakable fruit. (Sunflower seed)
  - **Dicot Vs Monocot** A dicot has netted veins while a monocot has parallel veins.
  - Fragrant Has a notable smell.
  - **Sheathing** Plant tissue that surrounds the stem and can be peeled away.
  - Poaceae Grass family! This family has sheathing tissue on the stems, leaf connecting points that appear swollen. This family is a monocot.
- Asteraceae Sunflower family! This family has unique ray and disk florets. The fruit is an achene with fluffy pappus. This family is a dicot.
  - Lamiaceae Mint family! This family has opposite leaves and a fragrant smell. The stem has a square shape and appears to have tiny hairs.





Asteraceae
Height: 2-3 ft tall
Brown cone center with long, skinny
pink/purple ray flowers, Basal leaves
When it Flowers: June-July

# Anise Hyssop Agastache foeniculum Anise Hyssop Agastache foeniculum Anise Hyssop Agastache foeniculum

Lamiaceae
Height: 2-4 ft tall
Upright spike of clustered purple flowers
with opposite, <u>serrate</u> leaves. Hairy & aromatic
When it Flowers: June-September

# Pink Muhly Grass

Muhlenbergia capillaris



Poaceae
Height: 3-4ft tall
Pink, cloudlike clumps of grass with partial
sheathing around the stem
When it Flowers: September-November

#### **Autumn goldenrod**

Solidago sphacelata



Asteraceae
Height: 1-1.5 ft tall
Yellow flowers clustered between
heart shaped, serrate leaves
When it Flowers: August-September

# **Iron Butterfly Ironweed**



Asteraceae
Height: 2-3ft tall
Pink/purple showy disk flowers
Highly branching with hair like foliage
When it Flowers: July-October

# Dense Blazing Star



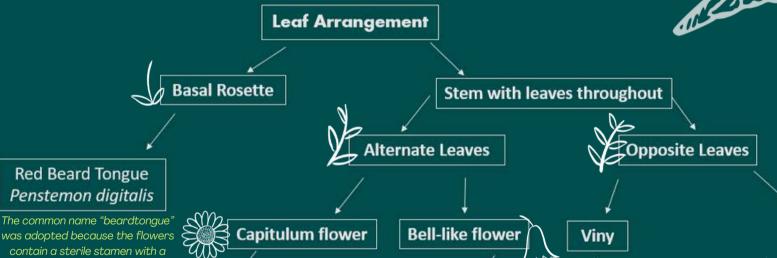
Asteraceae
Height: 3-6ft tall
Alternate narrow leaves
Dense purple disk flowers (stalk like)
When it Flowers: July-September

# HERBACEOUS HUMMINGBIRD GARDEN

#### Ever wonder why hummingbird beaks are so long?

Hummingbirds are specialized nectar-eaters and are believed to have coevolved with the flowers that they feed from. Since the flowers that hummingbirds favored were in colors that were less appealing to insects, the flowers continued to evolve into a trumpet shape. This protected their nectar and made them more appealing to the hummingbird pollinators. The hummingbirds' long beaks evolved in response to continue allowing them access to the nectar. Be on the lookout for Ruby-Throated Hummingbirds and observe their interactions with these native flowers!

# What do you see in the garden?



# **New England Aster** Symphotrichum novae-analiae

In the legend, the aster came into being from the tears of the Greek goddess Asterea that fell as she looked at the Earth and could not find any stars.

# Wild Columbine Aquilegia canadensis

Genus "Aquilegia" comes from the latin word "aquila" which means eagle, referring to the talon shaped petals of the flower.

# Coral Honeysuckle Lonicera sempervirens

Host plant for Spring Azure Butterflies and Snowberry Clearwing moth larvae

### Hot Lips Salvia Salvia microphylla

This plant is called "Hot Lips" because of its red lipstick color.

# **Bilateral** Symmetry

Shrub

Radial Symmetry

Prairie Petunia Ruellia humilis

R. humilis is quite hardy! It can grow in nearly any soil, wet or dry conditions, and full or partial sun.

Reference Sources:

Wildflowers of the Tennessee and the Ohio Valley and the Southern Appalachians NewMoonNursery.com

Ohio State University NewEnglandAster.pdf

hairy or "bearded" stalk

North Carolina State University Extension

#### **Prarie Petunia** Ruellia humillis

IMG: Dennis D. Horn, UTK Herbarium



- In Flower: May September
- Opposite, hairy leaves
- · Flowers growing in leaf axils
- Five petal lobes

# **New England Aster** Symphyotrichum novae-angliae

IMG: Grace Maddox



- In Flower: August October
- · Alternate leaves, clasping bases
- Yellow disk/purple ray flowers
- 2-6 feet tall

# **Wild Columbine** Aquilegia canadensis

IMG: Marty Silver, UTK Herbarium



- In Flower: March May
- 3-lobed leaves
- Flowers ~1.6 inches long
- Many yellow stamen

## Husker's Red Beardtongue Penstemon digitalis 'husker red'

IMG: Missouri Botanical Garden | Grace Maddox



- In Flower: April-June
- · Foliage with reddish tinge
- Both basal and stem leaves
- Flowers white with 5 stamen; one hairy

# **Hot Lips Salvia** Salvia microphylla

IMG: Maggie Clark



- In Flower: April September
- Opposite leaves
- Strong, minty fragrance
- Flowers red, white, or both

# **Coral Honeysuckle** Lonicera sempervirens

IMG: Ray Matthews, UTA



- In Flower: May June
- Vining with opposite leaves
- Bright red flowers, tube ~2 inches

# **HERBACEOUS GROUNDCOVER**

# Plants commonly found in fields

Welcome to the Herbaceous Groundcover garden section! Within this corner of the garden lies a dedicated space to showcase the many plants found in prairies across the Southeast. As you experience the natural beauty of these flora, characterized by their bright colors and warm scents, join us in appreciating and learning about these beautiful native plants and their significance within the landscape of Tennessee!

Which plant did you find? How are the leaves Start here! arranged along the **Northwind** stem? Is the plant a tall grass? Yes No **Switchgrass** (leaves up to 6 ft tall and (Panicum narrow, with parallel virgatum) lines) 2 or fewer leaves 3-7 leaves attached at one attached at each point point Yellow What color are the flowers? How tall is the plant? **Black root** (Veronicastrum virginicum) White and yellow White No more than 3 feet tall Up to 7 feet tall **Narrowleaf Mountain Orange** Canadian **False Chamomile** Coneflower goldenrod Mint (Boltonia (Rudbeckia (Pycnanthemum (Solidago asteroides) altissima) tenuifolium) fulgida)

# **Black Root**

Veronicastrum virginicum





Historically used by Native Americans as a laxative, but it can be toxic in larger amounts! Plantain family (Plantaginaceae)

#### **Key Features:**

- This plant was named from plants in Virginia, which gives it the specific epithet, virginicum.
- Finely toothed leaves, in a whorl of 3 to 8 leaflets.
- Many types of bees commonly visit this plant for collecting pollen and drinking nectar.
- In Flower: June-September

#### **Narrowleaf Mountain Mint**

Pycnanthemum tenuifolium





Leaves historically used in tea to treat headaches, fevers, or colds. Mint Family (Lamiaceae)

#### Key Features:

- Opposite leaves, very narrow and needle-like
- Square stems (distinctly 4-angled)
- 2-3 feet tall with a shrub-like growth form
- During summer, it has small clusters of white flowers
- All parts of this plant are aromatic when crushed
- In Flower: June-September

#### **Key Features:**

• Grows is dense clumps, upright, and columnar

Good for cow foraging, also an important

component of soil conservation and can

drastically reduce soil erosion!

• Olive- to bluish-green, long, narrow foliage

**Northwind Switchgrass** 

Panicum virgatum 'Northwind'

- In late summer, flowers are pink-and-green spikelets arranged in branched panicles
- In fall, foliage is yellowish-beige
- In Flower: August-November

# Orange Coneflower <u>Rudbeckia fulgida</u>





The roots of this plant were used in tea to treat indigestion and snakebites by Native Americans.

#### Key Features:

- The leaves are basal rosette and simple
- Summer: ray flowers are a bright yellow with a brownish-purple center
  - Winter: the seed heads persist and are a great food source for birds and other small mammals
- In Flower: July-October

# Tall Goldenrod <u>Solidago altissima</u>



A common plant in North America often found in prairies, grasslands, and road sides.

Often mistaken for Ragweed as a cause of fall allergies.

#### **Key Features:**

- Commonly grows to the height of 2.5-6.5ft
- Flowers arranged in 1 or 2 heads (capitulum)
- Leaves are alternately arranged, commonly 2.5-3.5 inches long and 0.5-1 inches wide
- In Flower: August-November

# False Chamomile Boltonia asteroides



This plant is native to wet soils in the eastern sections of North America. Butterflies love this plant's flowers!

#### **Key Features:**

- Usually grows to height of 5-6 feet
- Yellow flowers at the center, white flowers at the edge
- Plant is a perennial (comes back year after year)
- In Flower: July-October

# **BARN BORDER BLOOMS**

The Barn Border Blooms garden is the elongated area wrapping around the side of the barn. Many of the plants here are a good source of nectar for local wildlife that attracts many pollinators. The barn provides a rustic background for the colorful fall-flowering species of plants. Even when they are not flowering, they still have many different shapes and sizes that keep them interesting and unique. These plants creep like vines, stand tall and straight, or have many shoots from the ground like grass. They are hardy perennials and will likely keep sprouting yearly with little interference needed.

# **Glossary terms** Click to link to pg 20

- o calyx
- o margins
  - entire

    - serrated
- o perennial

- o raceme
- <u>sepals</u>
- o sessile
- o spike

**Erect** 

Start Here for plant **Identification!** 

Grass-like

# **Cardinal Flower** Lobelia cardinalis

**Opposite leaves** 



The Cardinal Flower is an upright growing herbaceous perennial that has alternately arranged lance-shaped leaves with a toothed margin. They have distinct, vibrant red flowers displayed on a raceme, flowering from July to September. They get their name because of their resemblance to the red worn by Roman Catholic priests.

# **Ohio Spiderwort** Tradescantia ohiensis

Alternate leaves



The Ohio Spiderwort grows upright with smooth, purplish stems and has alternate, lance-shaped leaves that resemble grass. Purplish-blue flowers with 3 ovate petals and 3 hairy sepals grow in clusters, flowering from May to September, with each flower opening only for one day. The flowers turn to jelly when touched during the heat of the day.

Square stem

**Leaves with serrated** margins

Leaves with entire margins

**Rounded stem** 

Creeping

Tall and erect

**Obedient Plant** Physostegia virginiana

**Wild Petunia** Ruelia humilis Virginia Buttonweed Diodia virginiana

**Turtlehead** Chelone glabra









The Obedient Plant grows upright and has lance-shaped leaves that are oppositely arranged on square stems. They are topped with pink and white flowers with fused petals, providing late summer and early fall food for pollinators from August to September. It is called the obedient plant because the flowers will stay whichever way they are turned.

The Wild Petunia is an upright, branching herbaceous perennial. They have simple, sessile leaves arranged oppositely on square flowers have a hairy calyx and will bloom in the morning and fall by evening. The flowering season is from May to October. Notice the distinct bee guide-lines on the inside of the flower.

Virginia Buttonweed has tiny white flowers with 4 petals that bloom from June through December. Its leaves are lance stems. The funnel-shaped purple shaped and arranged opposite of each other with a reddish stem, commonly creeping along the ground. This species is often visited by several bee species. Its name comes from the tiny, white flowers that resemble buttons.

The Turtlehead is a tall, upright herbaceous perennial. The leaves are lance-shaped with a serrate margin and are arranged alternately. It is most easily recognized by the spike of white to pink, 2-lipped flowers that resemble the head of a turtle, which is where its common name originates. It is the main host plant for the endangered Baltimore Checkerspot butterfly.



# Pollinator Perennial Garden



# Why are pollinators important?

The Pollinator Perennial Porder Garden attracts many different types of pollinators in our area, including bees, butterflies, and birds.

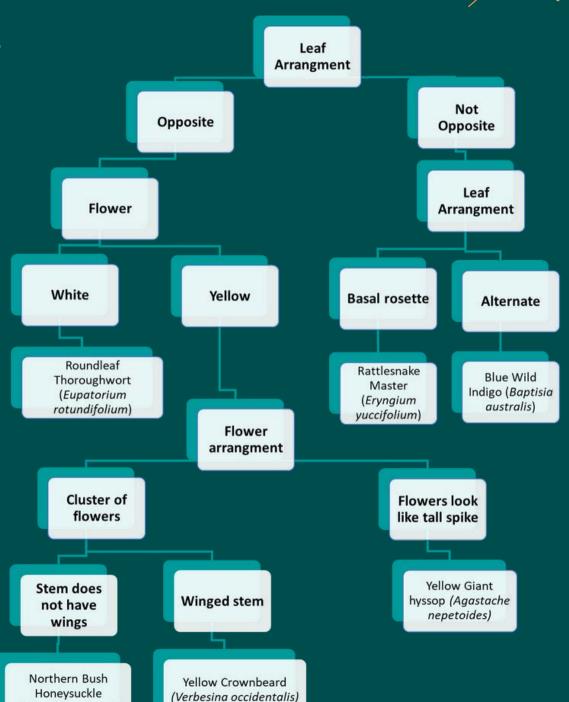
Pollinators are key to the survival of many flowering plant species.

The perennial part of the garden's name refers to fact that these plants will overwinter underground and then grow new stems and leaves each year.

#### References

plants.ces.ncsu.edu
www.wildflower.org
www.gardenia.net
www.bluestemnatives.com
https://herbarium.utk.edu/

(Diervilla lonicera)







# **Pollinator Perennial Garden**



# Blue Wild Indigo Baptisia australis



**Key features:** Blue to purple banner/wing/keel flowers in a raceme, alternate trifoliate leaves.

In Flower: Spring

Pollinators: Bees, hummingbirds,

butterflies

Fun fact: Can be used in place of true

indigo as a blue dye.

# Yellow Giant Hyssop *Agastache nepetoides*



**Key features:** Quadrilateral (4 angled) stem, serrated leaves in opposite arrangement, <u>terminal spike inflorescence</u>

**In Flower:** Late Summer. **Pollinators:** Bumble bees.

**Fun fact:** If you roll the stem between your fingers, you will feel 4 edges that make up the square stem.

Rattlesnake Master Eryngium yuccifolium



**Key features:** Thick, spiny leaves, ball shaped thistle-like flower heads.

In Flower: Summer

**Pollinators:** Bees, butterflies, wasps. **Fun fact:** The common name comes from the plant's reputation to treat snake bites. \*If you are bitten by a snake, please seek medical attention.

Northern Bush Honeysuckle

Diervilla lonicera



**Key features:** Mounded growth form, yellow honey suckle flowers in a <u>cyme</u>, opposite leaf arrangement.

In Flower: Summer.

Pollinators: Bumble bees.

**Fun fact:** The flowers will turn from yellow to red after they have been

pollinated.

Roundleaf Thoroughwort Eupatorium rotundifolium



**Key features:** 5 white <u>disk flowers</u> in an <u>umbel, serrated ovate</u> leaves in opposite arrangement, stem is pubescent (hairy).

**In Flower:** Summer-Fall

**Pollinators:** Native bees and butterflies. **Fun fact:** The name 'rotundifolium' is from the Latin 'rotund' which means round and foli means leaf, describing the leaf type.

# Yellow Crownbeard Verbesina occidentalis



**Key features:** Ovate leaves in an opposite arrangement, winged stem, yellow <u>ray and disk flowers</u> in a <u>corymb.</u>

In Flower: Late Summer-Fall.

**Pollinators:** Native bees, honey bees, bumble bees.

**Fun fact:** This plant can be used in the home garden for insect control.



# **POLLINATOR PATHWAY**





The pollinator pathway sits between the vernal pool and the walking path. This section of the garden is full of plants that attract pollinators, like bees and hummingbirds. Let's learn more about some of the species in the Pollinator Pathway!

#### Dense Blazing Star Liatris spicata





#### **Facts and Features**

- Flowers from July to August
- Habitat is moist/marshy areas
- Native to the eastern United States and can be found as far south as the Gulf of Mexico and as far North as Ontario, Canada
- The plant is also commonly called "Dense Gayfeather" because its flowers are featherlike in appearance

# Identifying *Liatris spicata*

- Bright purple flowers arranged in a spike
- Only disc flowers are present
- Leaves are grass-like, and densely concentrated towards the bottom of the stem
- 2-6 feet in height

#### Tall Goldenrod Solidago altissima



#### **Facts and Features**

- Flowers from August to September
- Prefers drier soils
- Native to the eastern United States
- Produces allelopathic compounds, which are chemicals that suppress other plants from growing
- Commonly mistaken for Ragweed (Ambrosia sp.), which is known for causing allergies
  - Goldenrod won't cause allergies because it's pollen is insect-, rather than wind-dispersed

#### Identifying Solidago altissima

- Yellow flowers arranged in clusters
- Both disc and ray flowers are present
- Leaves are alternate, and the bottoms of the leaves are covered in hairs
- 2-6 feet tall

# Clustered Mountain Mint Pycnathemum muticum



#### **Facts and Features**

- Flowers from July to September
- Prefers moist, well-drained soils
- Native to the eastern US
- Can be planted directly into the ground because it does not spread via underground stems like many other mints
- Deer-resistant, but attractive to other pollinators

# Identifying Pycnathemum muticum

- Pink lipped flowers arranged in clusters
- Leaf-like bracts subtend the flowers
- The plant is aromatic and smells like spearmint
- Leaves are opposite and hairy
- 1-3 feet tall

# Swamp Sunflower Helianthus angustifolius





**Facts and Features** 

- Flowers in October
- Has adapted to live in a variety of soils
- Native to the eastern United States
- Deer eat the stems because they are high in protein
- Indigenous groups use the flowers to create dye fo<u>r textiles</u>

# Identifying Helianthus angustifolius

- Yellow flowers arranged in a capitulum infloresence
- Both disc and ray flowers are present
- Leaves are alternate
- 3-6 feet tall





# **POLLINATOR PATHWAY**





## Pale Purple Cone Flower Echinacea palladia



#### **Facts and Features**

- Flowers from June to July
- Grows in medium to dry soils

# Identifying *Echinacea palladia*

- Purple flowers arranged in a capitulum infloresence
- Both disc and ray flowers are present
- Leaves are present at the base of the plant
- 2-3 feet tall

#### Purple Love Grass Eragrostis spectabilis



#### **Facts and Features**

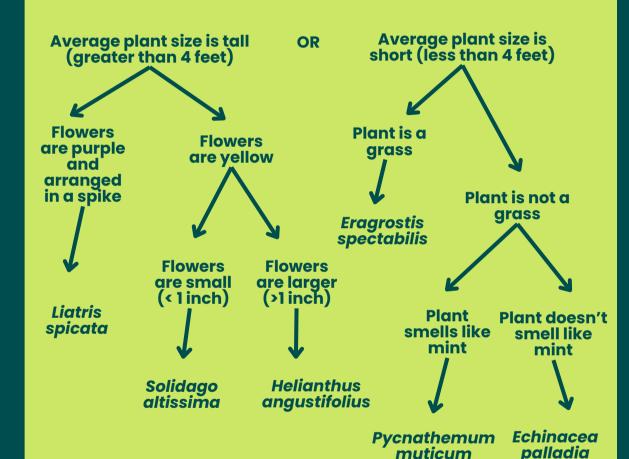
- Flowers in August
- Grows in medium to dry soils
- Spreads slowly due to underground stems called rhizomes

# Identifying Eragrostis spectabilis

- A grass that has pink/purple flowers that float above the leaves in plumes
- Leaves are blade-like and extend from the ground
- 1-2 feet tall

Want to read more about these plants? Click <u>here</u> to view the sources used in creating this guide.

Now that you know more about these plants, use this key to identify them!



These are just a few questions to ask when determining what plant you are looking at. Check out the rest of the guide for more information about these species!

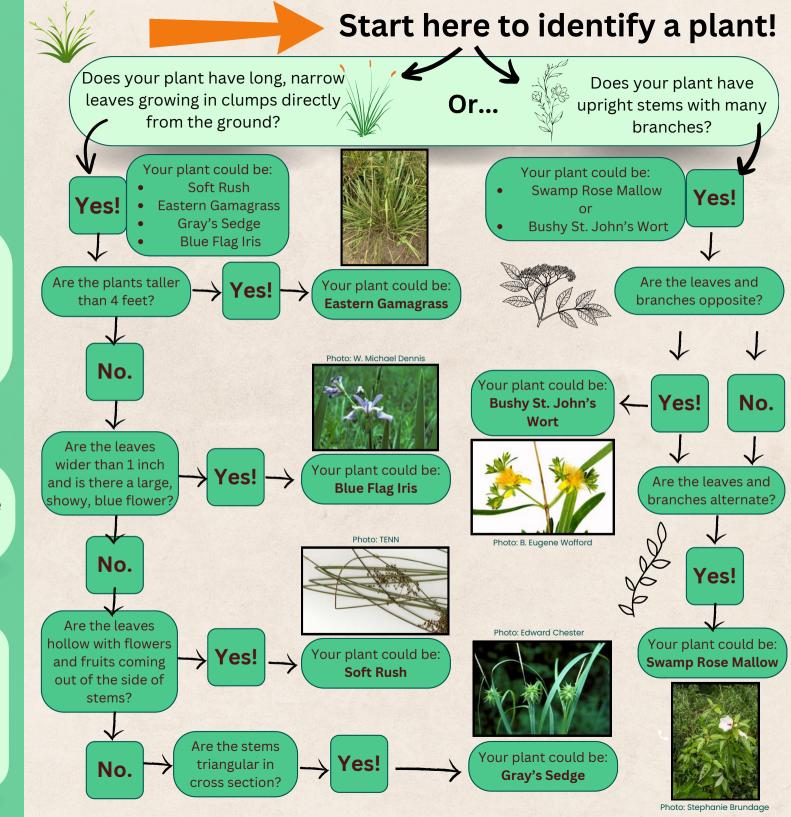
# Guide to the plants of the herbaceous vernal pool

The vernal pool section of the garden is located past the barn and to the left if heading into the park. Look for a low, wet area with short bushes and grass-like plants in clumps.



Vernal pools form in depressional areas during the spring and fall. They usually dry up for part of the year.

They provide critical habitat for organisms like the wood frog, the spotted salamander, and many invertebrates such as the fairy shrimp and snails.



# **Herbaceous Vernal Pool Plants**



Hibiscus mocsheutos Swamp Rose Mallow

An upright, shrub-like perennial with very large, showy white flowers. Leaves are arranged alternately. It is a relative of the marsh mallow, the roots of which were the original source for today's "marshmallow".



Tripsachum dactyloides Eastern Gamagrass

A tall, clump-forming perennial grass with long, flat leaves. Leaves can be up to 30 inches and have a prominent midrib. It has separate male and female flowers. Female flowers have red, fuzzy stigmas (picture above, left). It can live for over 50 years and is a relative of corn.



Hypericum densiflorum Bushy St. John's Wort

A bushy perennial shrub that prefers wet conditions. The branching is opposite with dense clusters of yellow, five-petaled flowers. The bark is cinnamon-colored and peels off in large flakes. This plant is a favorite of bees.



Juncus effusus Soft Rush

A perennial common to wet areas. The round green stems form small clumps and grow from buried stems called rhizomes. The seeds and flowers emerge from the side of the stem, rather than the end as in most other rush species.



Photo: Edward Chester

# Carex grayi Gray's Sedge

A small, clump-forming perennial found in wet areas. The flowers and fruits form very distinct large, star-like clusters. The plant is named for Asa Gray, an important American botanist of the 1800s.



Photo: W. Michael Dennis

hoto: B. Eugene Wofford

# *Iris virginica*Southern Blue Flag Iris

A dense clump forming perennial that prefers boggy wet areas. Leaves are sword-like and tend to arch outward and fall into the water or soil. The brilliant blue, white, and yellow flowers are usually around 3 inches across and form in late spring. The name "iris" comes from the Greek goddess of rainbows.

#### **Does your** Are they white? plant No have flowers? Are they umbels? or racemes? You may have Queen Anne's lace! You may have pokeweed! Are they yellow? Do they have Or purple? ray and disc flowers? Or is it 5petaled? Is it growing on You may a climbing have a vine? cup-Or herbacious plant! ground cover? You may have **American** wisteria! You may have You may sensitive have partridge smooth pea! tick-trefoil!

# Children's Garden

# Pokeweed Phytolacca americana

- This shrub-like plant can be identified via its smooth, hot pink to red stalk, alternate lanceolate leaves, and its small green to white flowers that ripen into round, dark purple berries with hot pink juice. These berries are a food source to many native birds such as the grey catbird, cardinal, and Tennessee's State bird, the northern mockingbird.
- It can grow up to ten feet tall and is native to North America. Early American pioneers used the red juice of the berries to make ink.
   While this plant is beautiful, be aware that all parts of it are toxic and it should not be consumed.

# Cup-Plant Silphium perfoliatum



**Edward W. Chester** 

- This plant can grow up to 6 feet in height and gets its name from its <u>perfoliate</u> leaves, which meet in the center at the stalk of the plant and form a cup shape.
- This plant can be identified via its square stem and yellow ray-and-disc flowers.
- If you visit the plant after a rainstorm, you
  may find the leaves holding water, just like a
  cup. Small birds such as goldfinches are
  attracted to this plant because they can
  drink water from its cup and eat its seeds.
  Bumblebees, honeybees, and other insects
  also visit this plant for its pollen and nectar
  and some may even use parts of the plant to
  build their nest.





**Edward W. Chester** 



# American Wisteria Wisteria frutescans

- This high-climbing, woody vine can be spotted climbing up the barn. It bears beautiful, drooping clusters of purple flowers that grow 6-9 inches long and have a distinctive floral scent.
- In the absence of flowers it can be identified by its shiny, dark green leaves. It is in the bean family (Fabaceae) and bears long pods that typically persist on the plant until winter.
- You may be familiar with fast-growing non-native Asian varieties of wisteria, however, this species is native to North America and does not spread as aggressively as its Asian cousin.
- This vine attracts butterflies and acts as a host for several butterfly varieties.

# Children's Garden



Sensitive partridge pea - Chamaecrista nictitans
An annual ground cover plant grows up to a foot tall
and can be identified by its pinnate alternate leaves
and 5-petaled yellow flowers. Its <u>legumes</u> look like
miniature versions of domestic garden beans.

The sensitive partridge pea gets its name from a special ability—if you run your finger down its leaf, the leaf will slowly close up.

#### Smooth tick-trefoil - Desmodium glabellum

 This perennial herbaceous plant flowers from June - September and that range from pink to purple. It grows to about 3 feet in height and has smooth hairless stems and ovate leaves.

This plant's fruits are called loments—they break apart into triangular segments and stick to clothing like Velcro. These fruits are dispersed by animals—if you have a pet that spends time outdoors you may have even had to pick these off their fur before!



## Small-flower White Aster Symohyotrichum racemosum

- This perennial plant grows small white, <u>ray</u> and pinkishyellow, <u>disc</u> flowers. They may remind you of tiny sunflowers and that's because they are both members of the Asteraceae family, which includes sunflowers, daisies, and black-eyed Susan's.
- You can identify this Aster by its smooth purplish stem and flower heads that cluster mainly on one side.



# **GLOSSARY** <sup>°</sup>

# Definitions modified from A Botanist's Vocabulary By Susan K. Pell (ISBN: 978-1604695632)

- **Banner/Wing/Keel** Distinct flower consisting of five petals in an asymmetrical arrangement. The upper petal, or banner, curves back from the rest of the flower. The two wing petals cover the reproductive parts. The two keels wrap around the reproductive parts from below.
- Basal At, attached to, or of the base, as with leaves attached to the base of a plant.
- Calyx The outermost whorl of the flower, which are the sepals.
- Capitulum A type of flower, common to the asters, containing both ray and disk flowers.
- **Corymb**-branched inflorescence with flowers borne on an elongated axis and having lower branches longer than the upper to present flowers as a rounded or flat plane at the top.
- **Cyme** Unbranched or branched inflorescence with the axis terminating in the oldest flower that is basally or centrally located.
- Disk flowers- Small centrally located flowers with reduced petals in a capitulum/head inflorescence.
- Entire margin A leaf with smooth edges.
- Inflorescence Branched or unbranched axis upon which flowers are arranged.
- Lanceolate Lance-shaped, broadest near the base and narrow at the tip.
- Leaf axil Upper angle where a leaf attaches to the stem.
- Legume A dry fruit that opens along two lines to release the seeds.
- Loment A type of legume fruit with constrictions between the seeds that break into one-seeded units.
- Ovate Describing the leaf shape, egg-shaped, broadest at the base
- Perfoliate Leaf bases that completely surround the stem, the stem appears to perforate the leaf.
- Perennial A plant that lives for multiple years. Above-ground portions may die off every year.
- Raceme Inflorescence with one unbranched axis and flowers on stalks.
- Ray flowers Flowers with elongated, fused petals in a capitulum/head inflorescence.
- Sepals The outer whorl of the flower that encloses the petals. Typically green and small.
- Serrated Describing the leaf margins, having teeth pointing up toward the apex.
- Sessile When the structure is attached directly at the base.
- Spike Inflorescence with one unbranched axis and flowers that are sessile.
- Stamen Male part of a flower that produces pollen.
- Terminal At the apex or tip, as of leaflets or inflorescence.
- Trifoliate Used to refer to leaves with three leaflets.
- Umbel Inflorescence with flowers or branches that all attach at a single point, like an umbrella.

# LIST OF SPECIES INCLUDED IN THE GUIDE

Agastache foeniculum (Anise Hyssop)Pages <u>4 &amp; 5</u>	Muhlenbergia capillaris (Pink Muhly Grass)Pages 4 & 5
• Agastache nepetoides (Yellow Giant Hyssop)Pages <u>12 &amp; 13</u>	• Panicum virgatum (Northwind Switchgrass)Pages <u>8 &amp; 9</u>
• Aquilegia canadensis (Wild Columbine)Pages <u>6 &amp; 7</u>	• Penstemon digitalis (Husker's Red Beardtongue)Pages <u>6 &amp; 7</u>
Baptisia australis (Blue Wild Indigo)Pages <u>12 &amp; 13</u>	Physostegia virginiana (Obedient Plant)Pages 10 & 11
Boltonia asteroides (False Chamomile) Pages 8 & 9	Phytolacca americana (Pokeweed)Pages <u>18 &amp; 19</u>
• Carex grayi (Gray's Sedge)Pages <u>16 &amp; 17</u>	• Pycnathemum muticum (Clustered Mountain Mint)Pages <u>14 &amp; 15</u>
• Chamaecrista nictitans (Sensitive Partridge Pea) <u>Pages 18 &amp; 19</u>	• Pycnathemum tenuifolium (Narrowleaf Mountain Mint)Pages <u>8 &amp; 9</u>
Chelone glabra (Turtlehead)Pages <u>10 &amp; 11</u>	Rudbeckia fulgida (Orange Coneflower)Pages <u>8 &amp; 9</u>
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• Desmodium paniculatum (Panicledleaf Ticktrefoil)Pages <u>2 &amp; 3</u>	• Salvia microphylla (Hot Lips Salvia)Pages <u>6 &amp; 7</u>
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• Diodia virginiana (Virginia Buttonweed)Pages 10 & 11	• Solidago altissima (Tall Goldenrod)Pages <u>8 &amp; 9, 10 &amp; 11, 14 &amp; 15</u>
• Echinacea pallida (Pale Purple Flower)Pages 4 & 5, 14 & 15	• Solidago sphacelata (Autumn goldenrod)Pages <u>4 &amp; 5</u>
• Eragrostis spectabilis (Purple Love Grass)Pages <u>14 &amp; 15</u>	• Symphyotrichum novae-angliae (New England Aster).Pages <u>6 &amp; 7</u>
• Eryngium yuccifolium (Rattlesnake Master)Pages <u>12 &amp; 13</u>	Symphyotrichum pilosum (Frost Aster)Pages <u>2 &amp; 3</u>
• Eupatorium rotundifolium (Roundleaf Thoroughwort)Pages <u>12 &amp; 13</u>	Symphyotrichum racemosum (Small-flower White Aster)
• Helianthus angustifolius (Swamp Sunflower)Pages <u>2 &amp; 3</u> , <u>14 &amp; 15</u>	Pages <u>18 &amp; 19</u>
• Hibiscus moscheutos (Swamp Rose Mallow)Pages <u>16 &amp; 17</u>	• Tradescantia ohiensis (Ohio Spiderwort)Pages <u>10 &amp; 11</u>
• Hypericum densiflorum (Bushy St. John Wort)Pages <u>16 &amp; 17</u>	• Tripsacum dacyloides (Eastern Gamagrass)Pages <u>2 &amp; 3</u> , <u>16 &amp; 17</u>
• Hypericum prolificum (Shrubby St. John Wort)Pages <u>2 &amp; 3</u>	• Verbesina occidentalis (Yellow Crownbeard)Pages <u>12 &amp; 13</u>
• Iris virginica (Southern Blue Flag Iris)Pages <u>16 &amp; 17</u>	Verbesina virginica (White Crownbeard)Pages <u>2 &amp; 3</u>
• Juncus effusus (Soft Rush) Pages <u>16 &amp; 17</u>	Vernonia lettermanii (Iron Butterfly Ironweed)Pages 4 &5
• Liatris spicata (Dense Blazing Star)Pages <u>4 &amp; 5</u> , <u>14 &amp; 15</u>	<ul> <li>Veronicastrum virginicum (Black Root)Pages <u>8 &amp; 9</u></li> </ul>
• Lobelia cardinalis (Cardinal Flower) <u>Pages 10 &amp; 11</u>	• Wisteria frutescens (American Wisteria)Pages <u>18 &amp; 19</u>

• Lonicera sempervirens (Coral Honeysuckle) ......<u>Pages 6 & 7</u>



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