## Blue-Eyed Grass Sisyrinchium albidum (11)

Blue-eyed grass is not a grass at all, but is in the Iris Family. This perennial plant grows 6 to 8 inches in height and the leaves are flat, narrow, long blades. The small blue flowers have three petals and three sepals that are almost identical. The flowers are borne near the top of the plant on slender stalks. It flowers from March to May and is found in Zone 2 and 3.

Flower image contributed by: Darel Hess

## Fame Flower Talinum calcaricum (16)

Limestone Fame flower is in the **Purslane** Family. This miniature perennial (4 to 6 in tall) is easily overlooked even though it may occur in large numbers. The curved, cylindrical in shape leaves are only ¾ inch long. The flowers, with bright purplish petals, are borne in small clusters at the top of slender stems and are only ½ inch wide. The flowers only open a few hours each afternoon. It was described as a new species in 1967 (endemic) and found in **Zone 2**. It blooms from May to August.

Flower image contributed by: Darel Hess

## Prickly-Pear Cactus Opuntia humifusa (9)

This perennial plant is in the Cactus Family. It is the only native cactus in Tennessee. The flattened green stems (pads) are specialized for water storage and photosynthesis. The spines are really greatly reduced leaves. The plants can grow and spread out to be 2 to 3 feet wide in a cluster, but the plant is only 8 inches tall. The plant produces large, yellow flowers with red centers from May to June. It is found in **Zones 2 and 3.** 

Flower image contributed by: Darel Hess

# Gattinger's Prairie Clover Dalea gattingeri (3)

This plant is in the **Bean or Pea Family**. This low-growing plant has 5 to 7 leaflets which are fine, dense, and very pleasantly aromatic when crushed. The elongated cones of rose-purple flowers occur on the tips of wiry, reddish stems. It is in **Zones 2 and 3**. This is often a dominant ground cover and is endemic to the glades. It flowers from May to June.

Flower image contributed by: Darel Hess

#### Gattinger's Lobelia Lobelia gattingeri (15)

This plant is in the **Bell Flower Family**. It is named in honor of the pioneer Tennessee botanist, Dr. Augustin Gattinger. This is a small annual plant (6 to 12 inches tall) with unbranched stems. The leaves clasp the base of the stem. The flowers are on the top portion of the stem and are attached to the stem. The flowers are blue-purple, about ½ inch long or less in size. This plant is endemic to the glades and is found in **Zone 2**. It blooms from May to June.

Flower image contributed by: Darel Hess

#### Glade Sandwort Arenaria patula (7)

Glade sandwort is in the **Pink Family**. The annual plant is also known as Wild Baby's Breath. A small annual 3 to 6 inches tall, it has thin, linear leaves. The white petals are notched and about ½ inch long. This tiny plant is common in limestone soils and flowers from April to June in **Zone 2**.

Flower image contributed by: Darel Hess

#### Glade Savory Satureja glabella (25)

This perennial is a member of the Mint Family. This perennial is only 3 to 4 inches tall. The flower is small and delicate with a prominent calyx (tube) and dark purple spots on the corolla (petals). The leaves are smooth (glabella means smooth). It is found in limestone soils and is endemic to the Interior Low Plateau. It is found in Zone 3 (grassy glades) and flowers June to August. The well known herb, basil, is in this same genus. A useful way to identify members of the Mint Family is to check the stem, most have square stems. Flower image contributed by: Darel Hess

#### Missouri Evening Primrose Oenothera macrocarpa (1)

This showy, low-sprawling perennial plant is from the **Evening Primrose Family**. It has flowers that may measure up to 5 inches across. Leaves are narrow and may grow up to 6 inches long. They often have a silvery look because of the numerous tiny hairs. Blooms may be seen in late spring (May to June). Seed pods are up to 3 inches long with four wing-like parts. It is found in **Zone 2** of cedar glades. East of the Mississippi River, it is found only in Rutherford County, Tennessee.

Flower image contributed by: Darel Hess

# Stonecrop Sedum pulchellum (27)

Known as Limestone Stonecrop, this annual plant is a member of the **Orpine Family**. This is a low growing plant (3 inches tall) with succulent leaves. The tiny white-to-pink flowers are arranged on 3 to 7 curved branches. The leaves are narrow (1/4 inch wide) and cylindrical. The plants form a mat on thin soil over limestone rock. It is found in **Zone 2** and flowers from May to June.

Flower image contributed by: Darel Hess

## Nashville Breadroot Pediomelium subacaulis (6)

This plant is in the **Bean or Pea Family**. This showy wildflower is about 6 inches tall and is easily identified by its palmately compound leaves (think of the palm of your hand) and dense spectacular cluster of purplish-blue flowers. Endemic to the glades, it is found in **Zone 3**. It is called Breadroot because it has a large tuber at the end of a thin root which is very starchy and may have been used by Native Americans for food. It flowers from April to May.

Flower image contributed by: Darel Hess

# Price's Wood Sorrel Oxalis priceae (22)

A member of the **Wood Sorrel Family**, this perennial has leaves typical of the genus (resemble showy clover leaves). The flowers are yellow with red spots at the base of the petals; they are ½ inch wide. This plant is endemic to cedar glades and is found in **Zone**2. The genus name indicates the presence of oxalic acid, which makes the shamrock – shaped leaves taste sour. It flowers April to May.

Flower image contributed by: Darel Hess

#### Sunnybell Lily Schoenolirion croceum (19)

This plant is in the **Lily Family.** The flower has beautiful yellow petals and green leaves coming from the base of the plant. The leaves are 15-24 inches long. It is found in **Zones 2 and 3**, always near water that stands in spring. It is an endangered plant and protected by state law. Interstate construction in Tennessee was rerouted around a rare population of sunnybells. It blooms April to May. Flower image contributed by: Darel Hess

The number in parentheses to the right of each Latin flower name corresponds to the number on the color photograph of the flower. For example, Pyne's Ground Plum is number 10; the color photograph also has a number 10. The reason the names are not listed on the flower cards is to encourage student observation of the flower.

The photographs have limitations in that the entire plant can't be viewed and key structures may be difficult to see. Use the flower cards in combination with the description cards, the flower guide – Flatrock Glades: The Cedar Glade Plant Guide for Elementary Students, and other resources to learn about these beautiful plants.

## Pyne's Ground Plum Astragalus bibullatus (10)

Pyne's Ground Plum is in the **Pea Family**. It grows very close to the ground, it is only about 3 inches tall. The very short stems (1 to 3 inches) have clover-like leaves. The flowers look like tiny pea flowers and are purple-blue in color. The fruit is a fleshy pod that is red above and yellow below. Protected by law, the plant is endemic to Rutherford County, Tennessee. It was discovered as a new species in the early 1980's by a local botanist, Milo Pyne. It blooms from April to May and is found in **Zone 3 or 4**.

Flower image contributed by: Darel Hess

#### Shrubby St. John's Wort Hypericum frondosum (23)

This perennial plant is the **St. John's Wort Family**. It is a shrub with opposite leaves. It grows 3 – 4 feet in height. The flowers have five distinctive yellow petals and numerous stamens in the center. The leaves have characteristic tiny, translucent spots. This plant is in a group of plants with current medicinal applications as antidepressants. It flowers from July to August and is found in **Zone 4**. Flower image contributed by: Darel Hess

# FLOWER CARD DESCRIPTIONS

## Tennessee Coneflower Echinacea tennesseensis (20)

This perennial plant is in the **Sunflower**Family. Thought to be extinct in the 1960s, it was found in a small glade in Rutherford
County, Tennessee in 1968. It is listed as a federally endangered species and is endemic to the glades. This plant is about 18 inches tall. The disk flowers in the center are dark brown and spiky to touch. The ray petals are purple-pink and very narrow. The flower looks like an umbrella that has been turned inside out, the ray petals are bent forward, just the opposite of all other coneflowers. It flowers from May to October. It is found in **Zone 3**. Flower image by: Darel Hess

## Glade Cress or Nashville Mustard Leavenworthia spp. (24)

The Glade Cress or Nashville Mustard is in the **Mustard Family**. The fragrant flowers are on solitary stalks separate from the small, rounded, basal leaves; the white and yellow petals are notched. The plant grows to be 2 – 3 inches tall. It is found in **Zone 2** and is endemic to the glades in the Central Basin of Tennessee. It is an annual that flowers from February to May. Another form (variety) of this plant has all yellow flowers.

Flower image contributed by: Darel Hess

# Tennessee Milk Vetch Astragalus tennesseensis (21)

This perennial plant is in the **Bean or Pea Family**. It is a low-growing plant that grows 4 to 16 inches tall. The compound leaves and flowers are covered with small, soft hairs. The yellowish-white flowers are pea-like and clustered at the end of the stalk; it blooms from April to May. The fruits are yellow hairy pads, the size of peanuts that lay on the ground. Young Tennessee Milk Vetch plants that lack fine hairs and flowers resemble Pyne's Ground Plum. Both of these plants are endemic to the glades. It is found in **Zone 3**. Flower image contributed by: Darel Hess

## Glade or Prairie Larkspur Delphinium carolinianum (2)

This perennial plant is in the **Buttercup Family**. The name Larkspur refers to the single spur formed by one of the five sepals (they resemble petals). The ¾ inch long flowers are usually off white or white with pink or mauve spurs and are clustered along the upper portion of the stem. The plant is 3 to 4 feet tall. The deeply dissected leaves are at the base of the stem. This endemic plant is found in **Zones 2 and 3** and flowers from May to July. Flower image contributed by: Steve Baskauf

# Wild Petunia Ruellia humilis (5)

Wild Petunia is in the Acanthus Family. It grows to be 6 to 12 inches tall. This perennial plant has opposite leaves and blue violet trumpet-like flowers on 1 to 2-foot trailing stalks. The flower has a long tube and five lobe-like petals. The flowers are fragrant and the plant is common to glades. It flowers from May to October and is found in **Zone 2 and 3.** 

Flower image contributed by: David Duhl

## Shooting Star Dodecatheon meadia (18)

The shooting star is a perennial plant in the **Primrose Family**. The unusual flowers look like rockets. Five petals are swept back and are usually white (sometimes pink). The flowers are on a stalk 15 - 25 inches tall. Smooth, oval-shaped leaves form a rosette at the base of the flower stalk. This plant flowers from April to June. Some botanists recognize two ecotypes; one type occurs in full sun **(Zone 3)** and others occur in the shade of shrubs or trees **(Zones 4 and 5)**.

Flower image contributed by: Darel Hess

# Yellow Stargrass Hypoxis hirsuta (26)

Yellow Stargrass is a perennial plant that looks like grass when it is not in flower. It is in the Amaryllis Family, and the plant grows from an onion-like structure called a corm. It is 3 to 6 inches tall, with hairy, grass-like leaves. The pretty star-shaped yellow flowers occur in clusters of three or more; there are three petals and three sepals, giving the flowers their star-like appearance. It occurs in **Zone 3** of the glades and flowers from April to May. Flower image contributed by: Darel Hess

# Hoary Puccoon Lithospermum canescens (13)

This plant is in the **Borage Family**. It is a perennial with alternate leaves. It has up to five unbranched stems 4-16 inches long. The flowers are showy, orange to golden yellow, ½ inch wide or less, and five lobed. Native American used the flowers as a source of yellow dye ("puccoon" is their word for dye). It flowers in April and may and is found in the open rocky areas in **Zones 2 and 3**.

Flower image contributed by: Darel Hess

#### Prairie Purple Coneflower Echinacea simulate (12)

This rare plant of the **Sunflower Family** is a cousin to the federally endangered Tennessee Coneflower and although it occurs in other states, in Tennessee it is found only in Rutherford County. This tall perennial plant (24 to 36 inches) has reflexed (drooping) pink to purple petals; it blooms from late may to July. Another name for this plant is the wavyleaf purple coneflower. The tall stems and narrow leaves are rough and hairy. This plant is found in **Zone 3**.

Flower image by: Kim Cleary Sadler

# Leafy Prairie Clover Dalea foliosa (14)

The perennial Leafy Prairie Clover is also known as the Cedar Glade Prairie Clover and is in the **Bean or Pea Family**. This plant is 12 to 30 inches tall and produces flowers in a dense cylindrical head (1 – 2 inches long) at the tips of the stem. The flowers are purple and then fade to white. The leaves are pinnately compound and smooth. An endemic, it is listed federally as an endangered species. It flowers from June to August and occurs in **Zone 3**.

Flower image contributed by: Darel Hess

# Large Houstonia Houstonia purpurea (4)

This perennial plant is in the Madder Family. Most members of this genus are tiny delicate wildflowers called Bluets. In contrast, this plant grows 6 to 12 inches tall in height. The tiny pinkish or pale violet flowers, ¼ inch wide, are found in clusters above the thin, oblong-shaped leaves. It flowers from April to July. This plant is found in **Zones 2 or 3**.

Flower images contributed by: Darel Hess

#### Prairie Coneflower Ratibida pinnata (8)

This perennial plant is in the Sunflower Family. It is 3 to 4 feet tall and very distinctive. The name 'cone' refers to the center disk flowers, which change from green to dark brown. The 2-inch-long ray petals are much reflexed; the tips often bend back and touch the stem. The leaves are deeply dissected (divided). It grows in **Zone 3** and flowers from May to August.

Flower image contributed by: Darel Hess

## Lyreleaf Sage Salvia lyrata (17)

This perennial is a member of the Mint Family. It grows to be 12 to 18 inches tall and has leaves that grow from the base of the plant. The lobed leaves are shaped like a lyre, an ancient stringed instrument. The tubular flowers range in color from pale blue to lavender and radiate from the top of a central stalk. It flowers from April to June. It is common in fields and clearing; even though it is a native species, it is invasive. It is found in Zones 3 and 4.

Flower image contributed by: Dennis Horn

# Easter Redcedar Juniperus virginiana (28)

Actually a juniper, this coniferous evergreen tree is not a flowering plant. It is a member of the **Cypress Family**. It grows in the deep cracks in the limestone rock (up to 50 feet tall) and commonly forms a ring around open glades; it occurs in **Zone 5**. Female trees bear small, bluish berry-like cones; male trees produce tiny golden cones that produce pollen. Because of their abundance, size, and aromatic properties, redcedar trees of middle Tennessee have been used for making pencils, buckets, cedar chests, and other items.