BLUE VERVAIN

Most native wildflowers that we observe during the summer are either white or yellow. Some of these native summer wildflowers are also quite large.

However, there is native wildflower species that has both small and blue flowers. That species is the Blue Vervain (*Verbena hastata* L.).

Blue Vervains are members of the Vervain or the Verbena Family (*Verbenaceae*). The generic name, *Verbena*, has several origins. It may be Latin for "holy plant" or "sacred herb". It may also have been a corruption of the Latin names *Herba veneris*, or "herb of Venus", which was an aphrodisiac used to rekindle the flames of dying love; from *Herba bona*, which is "good plant"; from *verberi*, which is "rod", "stick", or "stem"; or from *herbena* or *herbous*, which both mean "green". It may also have been a corruption of the Celtic words *ferfaon* or *ferfaen*, which both mean "to drive away stone", because it was used for bladder disorders. *Fer* was "to drive away" and *faen* was "stone". The specific epithet, hastate, is Latin for "spear-shaped". Vervain is Latin for "sacred bough" because related European species were often used in ancient Greek and Roman sacred ceremonies.

Blue Vervain had other common names. Some of them are American Vervain, American Blue Vervain, Blue Verbena, Common Vervain, False Vervain, Hastateleaf Vervain, Herb of Grace, Herbe Sacree, Indian Hyssop, Ironweed, Purvain, Purvane, Simpler's Joy, Swamp Verbena, Swamp Vervain, Tall Wild Verbena, Vervain, Wild Hyssop, and Wild Vervain.

DESCRIPTION OF THE BLUE VERVAIN

Perennial

Height: Blue Vervains are about 1-7 feet tall.

Stem: Their stems are coarse, erect, stout, 4-sided, grooved, dull green to purplish, and branched. The branches are nearly opposite.

Leaves: Their leaves are simple, opposite, lanceolate or oblong, about 1½-7 inches long, about 2 inches wide, and short-petioled. The lower and larger leaves may have 2 smaller sharp-toothed lobes located upon each side near their base. These leaves are dark green, rough-textured, strongly veined, and finely rough-haired. Their margins are coarsely double-toothed or serrated.

Flowers: The flowers are densely and spirally arranged upon numerous, slender, erect, stiff, pencil-like spikes located atop the plant. These spikes are about 2-6 inches long but can elongate up to 8 inches.

These spiked flowers bloom a few at a time, in small whorls, and begin at the base and end at the tip. A single spike can have flower buds, blooming flowers, and the fruit all at the same time.

Each flower is bilaterally symmetrical, irregular, sessile, blue or violet-blue (rarely pink, lavender, or white), and about 1/8-1/3 inch wide. The petals are united into a tubular corolla with 5 abruptly flaring, rounded, and unequal lobes. The upper lobes are smaller than the lower outer lobes. The sepals are united into a hairy, green calyx with 5 teeth, but with 1 tooth shorter than the others. There are 2 pairs of stamens of unequal

lengths and 1 pistil with a 2-lobed stigma, a slender style, and a 4-parted ovary. Flowering season is usually June to October.

These flowers are insect-pollinated. Some of these pollinating insects consist of Checkered White Butterflies (*Pontia protodice* Boisduval & Leconte), Swallowtail Butterflies (Family *Papilionidae*), Skippers (Family *Hesperiidae*), Bumblebees (*Bombus* sp.), Honey Bees (*Apis* sp.), and Mining Bees (*Andrena* sp.).

Fruit: Each fruit is composed of 4 separate, small, smooth, red-brown, hard, linear, ridged, and oblong triangular-convex nutlets. These nutlets are enclosed in a dried, 4-toothed calyx. Each nutlet is about 1/10 inch long and has only 1 seed.

Many of these seeds persist upon the plant throughout the winter. During the winter months, many species of birds will eat these seeds directly off the spikes. Some of those birds are the Song Sparrow (*Melospiza melodia* Wilson), the Northern Cardinal (*Cardinalis cardinalis* L.), and the Dark-eyed Junco (*Junco hyemalis* L.). These seeds can pass undamaged through the digestive tracts of both songbirds and Cattle (*Bos* sp.).

Rootstocks: The rhizomes are short and the roots are fibrous.

Habitat: Blue Vervains prefer open wet areas, such as swamps, damp thickets, pond and stream shorelines, wet meadows, moist fields, marshes, low pastures, roadsides, and wet prairies.

Blue Vervains are often found singly. They are rarely found in patches.

Range: Blue Vervains are found throughout most of the U.S. and southern Canada.

Edible and Medicinal Uses:

Both the Native Americans and the early European settlers had numerous edible, medicinal, and folk uses for the Blue Vervain. The roots were harvested year-round. The top parts were harvested when the plant was in bloom.

The most edible parts were the seeds. These seeds were either dried or roasted and were ground into a flour substitute. Unfortunately, the flour had a mildly bitter taste. To remove that bitterness, these seeds were soaked in several changes of cold water.

The leaves were used as a beverage tea. However, before using these leaves, they were dried. This tea was made using 1 tablespoon of the leaf to 1 cup of water. That cup of tea was then boiled for about 20 minutes.

For medicinal uses, mostly the roots and the leaves were used. The roots were more potent than the leaves. A leaf tea was also made as a spring tonic, which was called Simpler's Joy. This plant treated colds, colic, coughs, cramps, depression, dropsy, dysentery, epilepsy, fevers, flux, headaches, indigestion, insomnia, kidney ailments, sinusitis, spleen and liver ailments, and stomachaches. This plant was also considered to be an antidote to American Pokeweed (*Phytolacca americana* L.) poisoning. This plant was used internally as an antispasmodic, an aphrodisiac, a diaphoretic, an emetic, an expectorant, a nerve tonic, a sedative, a tranquilizer, a vermifuge, and a vulnerary. However, this plant often interfered with blood pressure medicines and with hormone therapy. The dried, powdered flowers were used as snuff for nosebleeds. This plant was used externally as a poultice for hemorrhoids, sores, ulcers, and wounds.

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