

# **Bee-Friendly Flowers: Joe-Pye Weed**

Who was Joe Pye and why is there a weed named after him? The truth is lost to the ages, but the name is of Native American origin. One enduring legend is that this plant was named for Joe Pye, a tribal herbalist who befriended New England settlers and shared his knowledge of herbal medicines with them. He became famous for using his weed to treat typhoid fever. A recent historical deep dive by scientists from the Royal Botanical Gardens in Canada concludes that Joe Pye was Joseph Shauquethqueat, an early 19th-century Mohican sachem, who lived successively in the Mohican communities near Stockbridge, Massachusetts, and near white communities in New Stockbridge, New York. He may not have been a practicing herbalist in the tribal community, but nevertheless, he used and shared his herbal knowledge with the people in the area.



Joe wasn't the only Native American to use the robust summer bloomer as strong medicine. The Chippewas used infusions of all the plant parts to treat swollen joints. The Potawatomis made poultices from the leaves for burns and used the flowers as good luck charms. The Ojibwas used Joe-Pye weed to bless babies. Children were given baths in herb water to soothe and calm them. European settlers used the knowledge handed down from the Native Americans and kept Joe-Pye weed in the "medicine cabinet". Later 19<sup>th</sup> century Americans used it for kidney and urinary infections. Modern herbals still recommend the tea as a kidney tonic and as a diuretic.



There are three Joe-Pye weeds that are common in the Eastern US; spotted (Eupatorium or Eutrochium maculatum), sweet (E. purpureum) and hollow (E. fistulosum) - but the genus is huge with some 500 other plants like bonesets, thoroughworts, and snakeroots in the mix. The rich folklore about these fuzzy florals does not stop with Joe Pye. The scientific name of the genus (Eupatorium, now changed to Eutrochium) is attributed to an ancient Asian ruler named Mithridates Eupator. Again, stories abound as to why this king was selected to represent the genus. One story has it that he discovered a *Eupatorium* that was an antidote to poison, and he drank non-lethal doses of it to keep himself from being poisoned by his enemies as his father was. He was using it like a vaccine! He was eventually captured by his enemies and tried to poison himself but had so much antidote in his system that he did not die. He asked a friend to stab him instead. Once again, the truth is shrouded in mist, but the king's story endures.

Joe-Pye weed is not poisonous, but there are poisonous relatives in the *Eupatorium* genus. White snakeroot, *Eupatorium rugossum* is a notorious plant that killed many early settlers via their cattle. Cows that grazed on it would become weak, have seizures, and stagger to their deaths. The milk of cows could be contaminated as well and when consumed by humans, would cause vomiting, seizures, delirium, and death. The disease was called milk sickness. One of the most famous victims of milk sickness was Nancy



Hanks Lincoln, mother of Abe. She and her aunt, uncle, and several other families died in the summer of 1818. She was thirty-four years old and little Abraham was only nine. One can only wonder how this plant changed the course of history by how it affected his family. Milk sickness remained a scourge all the way until the 1920's when white snakeroot was finally proved to be the cause.

Luckily, Joe-Pye weed is not a threat in any way and is in fact one of the most attractive native flowers for pollinators in meadow habitats. It blooms from July all the way to September, providing a long period of nectar production. The most common variety, *E. fistulosum* is a member of the composite family and as such has no flat, ray flowers like those of sunflowers. All its flowers are tubular, disc flowers that provide large quantities of easily-accessible nectar in clouds of pink and purple. It has whorls of hairy leaves on stems that grow to be seven to eight feet tall, and provides a buffet that is yummy for bees, beetles, wasps, moths, and butterflies. Tiger swallowtails adore this flower so much, it could be called *tiger of the meadow*.

#### **Duke Farms Connection**

Joe-Pye weed likes its "feet wet" and grows in sunny wet meadows and lowlands along streams and rivers. At Duke Farms, we find big clumps of it growing in the Great Meadow, along Railroad Way, down in the bottomlands along the river, and in the Pollinator Hoop House.

Joe-Pye weed makes a wonderful addition to any sunny perennial border. If you grow the tall native, make sure you've got a lot of room for it to grow and spread. If you can't accommodate a plant of this size, then shorter cultivars are now available. There are even miniatures with names like little Joe and baby Joe-Pye weed. All of them are deer resistant, easy to grow, and a pollinator magnet in any garden. Plant the meadow king Eupator and the pollinators will come!

Want to grow Joe-Pye weed in your garden? Buy plants from native nurseries and never collect them from the wild! The Native Plant Society of New Jersey is a great resource to help you find where to buy them or to get more information.

### Photos credits:

- Bumble Bee on Joe-Pye weed courtesy of Arnold Arboretum, Harvard University, Boston Ma
- Tiger Swallowtails on Joe-Pye weed courtesy of Mrs. Bird's pollinator garden



### **Questions and Answers**

1. Why is this plant named Joe-Pye weed?

Answer: Legend has it that a Native American locally referred to as Joe Pye shared his treatment for typhoid fever with New Englanders and the plant was named after him.

2. How else did Native American tribes use Joe-Pye weed?

Answer: For swollen joints, to treat burns, to bless babies, to soothe children, and for good luck charms.

3. How did people use the herb in the 19<sup>th</sup> century?

Answer: For kidney treatments and urinary tract infections.

4. How is Joe-Pye still used as herbal medicine today?

Answer: As a diuretic and for kidney tonics.

5. The name of the genus for Joe-Pye weed has recently been changed to *Eutrochium*, but for many years, the name of the genus was *Eupatorium*. Who was represented in the name, *Eupatorium*? What is his legend?

Answer: The name referenced an ancient Asian ruler named Mithridates Eupator. He used a poisonous relative of Joe-Pye weed to inoculate himself from poison.

- 6. Which poisonous relative of Joe-Pye weed killed Lincoln's mother? What was the illness called? *Answer: White snakeroot and milk sickness.*
- 7. Is Joe-Pye weed poisonous? What insects are attracted to it?

Answer: No, it is not poisonous and pollinators of all kinds are attracted to the disc flowers full of nectar.

8. Which butterfly is particularly attracted to the flowers?

Answer: Tiger swallowtails.

9. Where does Joe-Pye weed grow naturally?

Answer: In wet meadows, along streams, and river bottoms.

10. Joe-Pye weed blooms from July to September. Where can you see it blooming at Duke Farms? Answer: In the Great Meadow, along Railroad Way, down along the river and planted in the Pollinator Hoop House.

## **Additional Resources**

- Johnson Wildflower Center
- Spotted Joe-Pye weed fact sheet
- Hollow Joe-Pye weed fact sheet
- Wicked Plants- The Weed that Killed Lincoln's Mother and Other Botanical Atrocities, Amy Stewart; Algonquin Books of Chapel Hill, 2009
- Mt. Cuba video about ecobenefits of Joe-Pye weed
- Origin of Joe-Pye weed name