

Bee-Friendly Flowers: Turtlehead



Turtlehead (*Chelone glabra*) is named for its resemblance to, you guessed it, the head of a turtle (minus the eyes). The species name *glabra* means smooth, as it has hairless stems and leaves. On the other hand, the genus name *Chelone* has a mythical origin. *Chelone* is the Greek word for silence. The Greek myth explains that Chelone was a nymph who made the gods angry because she didn't attend the marriage of Zeus and Hera. Zeus punished her by pushing her house on top of her and turning her into a tortoise. She was condemned to silence and doomed to carry her house on her back for all eternity.

When it comes to the plant, turtlehead relies almost exclusively on bumblebees for pollination. When they squeeze into the flower and wiggle around to try to reach the nectar at the base, they cause the front "lips" to open and close as if the flower were trying to speak. The lower lip is lined with furry hairs that help to keep out crawling insects that would steal the nectar without pollinating the flower. Few insects besides bumblebees are strong enough to push open the mouth and wiggle past a sterile stamen that acts like a roadblock to reach the nectar. The bees get well dusted with pollen as they push through to the nectar. It's so fascinating to [watch](#) bumblebees at work in turtlehead flowers!

Turtlehead flowers are **protandric**, which means the male stamens mature first, followed by the female parts. Since the flowers open from the bottom to the top of the stalk, the older, lower flowers are female, and the upper ones are male. The male flowers' lips are closed while the females are slightly open, making it easier for bees to access the flower. This helps to prevent self-pollination.

Besides the bumblebee, another insect that seeks out turtlehead is the Baltimore checkerspot butterfly (*Euphydryas phaeton*), a species of special concern in NJ. The checkerspot uses turtlehead as a host plant. They lay eggs on the leaves, which the caterpillars eat. In the fall, groups of the caterpillars will spin thick webs over a plant and spend the winter huddled together in that protective spider web-like cover. The next spring, the caterpillars continue feeding on the new leaves and then make their chrysalises on the underside of the leaves.



Turtlehead blooms in August and grows to two to three feet tall. It occurs naturally in shades of pink and white. Other common names, all of which refer to the flower's unique shape, include turtlebloom, snakehead, codhead, and fishmouth. Native Americans used it as a laxative and gastrointestinal tonic and early settlers tried it as a cure for worms, jaundice, and tuberculosis. Another interesting name is balmony - referring to its use as a folk medicine as a salve for treating skin wounds and ulcers.

Duke Farms Connection

This flower likes its feet wet and grows well in sun or shade. We find this native perennial growing in wet meadows, and along rivers and streambanks. At Duke Farms look for it in the Great Meadow and the Pollinator Hoop House.

Want to grow turtlehead in your garden? Buy plants or seeds 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.

Questions and Answers

1. What is the origin myth for the genus name Chelone?

Answer: Out of anger, Zeus turned the nymph Chelone into a tortoise.

2. Which insect is the primary pollinator of turtlehead?

Answer: Bumblebees.

3. What is the lower lip lined with? What is their function?

Answer: Furry hairs that prevent crawling insects from stealing the nectar without pollinating the flower.

4. What kind of flower is turtlehead?

Answer: Protandric.

5. What does protandric mean? How does it help the plant?

Answer: The male parts of the flower mature before the female parts; It helps to prevent self-pollination.

6. What other insect seeks out turtlehead, besides bumblebees?

Answer: Baltimore checkerspot butterfly.

7. Why does the Baltimore checkerspot need turtlehead?

Answer: Turtlehead is a host plant on which to lay eggs.

8. When does turtlehead bloom and where can you see it at Duke Farms?

Answer: It blooms in August – you can find it in the Great Meadow and Pollinator House.

*Photos courtesy of Google free images

Additional Resources

- [Johnson Wildflower Center](#)
- [USDA Forest Service Fact Sheet](#)
- [USDA Plants Profile](#)
- [Turtlehead Name Origin Myth](#)