

## VNPS Piedmont Chapter WILDFLOWER of the WEEK

### WILDFLOWER #13 answer: Spatterdock (*Nuphar advena*)

Spatterdock's family, the waterlily family (Nymphaeaceae), is the oldest on the flowering plant evolutionary tree. Recent research suggests that they might even have evolved while dinosaurs were still around. Their major pollinators, beetles, were also around then. A remnant of this history is the unusual structure of the stamens, which are flattened like petals.

Perhaps reflecting this very long history, the waterlily beetle is completely dependent on spatterdock, from adults eating nectar and pollen to larvae eating floating leaves and rhizomes. They get not only food from the plant, but also oxygen. Spatterdock has a spongy tissue called aerenchyma, thin-walled cells with lots of space around them. This lets air flow between leaves and roots and keeps leaves afloat.

The seeds germinate best in very low oxygen, which lets spatterdock succeed in deeper water than most other floating aquatic plants. When water flows a bit too fast for spatterdock, it grows more submerged leaves, which slow the current. Sediment accumulates, providing more nutrients.

### WILDFLOWER #14

**Clues:** Enjoy this small tree in the Rose family at high elevations in Virginia, including Shenandoah National Park. Generous clusters of white flowers grow up to four inches wide. Its berry-like fruits flame orange-red.

