

Discovering Hidden Treasures: A Rare Plant Inventory at Cuyahoga Valley National Park

[Cuyahoga Valley National Park](#)

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At Cuyahoga Valley National Park (NP), a rare plant inventory is helping park managers understand and protect the park's hidden ecological gems.



Yellow lady's slipper, *Cypripedium parviflorum* (left), toothed spurge, *Euphorbia dentata* (top right), twisted sedge, *Carex torta* (bottom right).

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Why a Rare Plant Inventory?

Cuyahoga Valley NP spans nearly 33,000 acres and is home to a diverse array of plant species, many of which face growing threats from invasive species, human activity, and habitat changes. Rare plants, in particular, are highly sensitive to environmental disruptions and show significant declines in some of the park's most visited areas.

Recognizing this, park managers needed updated information to guide conservation strategies and

protect these plants from further harm. The last comprehensive survey of rare plants was decades old, making a fresh look essential for effective conservation.

Mapping a Path to Conservation

In response, staff from the National Park Service's [Inventory & Monitoring Division](#) arranged for a rare plant inventory to assess which rare species are in the park and where they're located. Botanists carefully explored the park along planned paths and within high-priority spots, ultimately covering about 1,443 acres. In doing so, they identified 98 rare species across 675 locations. The rare species included those officially recognized by the state as threatened or endangered, species that are uncommon in the region, and others of particular ecological interest.

The study revealed that many rare plants coexist with invasive species like garlic mustard, Japanese knotweed, autumn olive, and common reed. Although they are coexisting now, the rare plants may eventually be edged out by the invasives. The plants also face excessive disturbances from deer, invasive earthworms, and soil erosion, which are common in the valley.

Many rare plant species thrive in naturally disturbed areas. But heavier disturbances that compact or remove topsoil can damage native seeds and tend to promote the more resilient invasive plant species.

—Doug Marcum, Biological Technician

Results Driving Action

The rare plant inventory provided park managers with vital information to address threats to these vulnerable species. Some highlighted achievements from the study include:

- The park updated its rare plant list.
- They documented the rapid spread of detrimental invasive species into areas where several rare species are found. These areas will be targeted for invasive plant removal.
- They identified local sources of rare plants that can be used for propagation, enabling the park to cultivate native species for restoration projects.
- The study offered valuable insights for refining survey techniques, which will help researchers find elusive species in future inventories.
- Now that the park knows where rare plants are located, they can reroute trails and focus patrolling efforts to reduce risk of trampling and poaching.
- Management can now steer events with large groups of people, like orienteering trainings, away from sensitive areas to prevent trampling.



Small woodland sunflower, *Helianthus microcephalus* (left), round-leaved trailing tick-trefoil, *Desmodium rotundifolium* (middle), compass plant, *Silphium laciniatum* (right).

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A Call to Conserve

Cuyahoga Valley NP's rare plant inventory highlights the importance of preserving these vital yet fragile species. Visitors play a key role in this effort by staying on marked paths, avoiding sensitive areas, and learning about the unique flora that make the park a natural treasure.

With ongoing conservation efforts, improved survey methods, and public support, the park will continue to safeguard its native plant species.

Want to learn more?

Visit the [final report](#) from this project and [discover more about Cuyahoga Valley's plants](#)