

Meadows recreate history at Valley Forge

At Valley Forge National Historical Park (Pennsylvania), 1,400 acres was once managed as lawn. When one mowing over the entire park was finished, the maintenance crews would start over again from the beginning, managing 10 passes a season. The lawns always had a “rough” look, but that was before the current Field Management Plan was implemented in 1994. Now, half of the acreage is mowed 15 times a season while the other half is left to grow up into meadow. Not only do the mowed areas look neater, but also the grassy meadows recreate the “sense of place” at historical Valley Forge, which is the reason the management plan was adopted.

In 1777, General Washington and his troops camped at Valley Forge in farmland where wheat, barley, and rye were cultivated. Some of the old 18th century farmhouses still stand. Today, because of the change in management that allows for high grasses waving in the breeze, the landscape resembles the farming community that existed just before the encampment.

The current management program does not reduce maintenance costs, and mowing is still done continuously. But now it is used to enhance historical interpretation. For example, where the boundaries of the 18th century farms are known, a meadow indicates the area of one farm while the adjacent lawn represents the neighboring farm. Thus, visitors get a sense of the size and relationship of the 18th century farms that was not apparent when mowing was more comprehensive.

Mowing also serves practical purposes. Mowed borders 50 feet wide frame the meadows and show visitors that these fields are here by design. Along the roads, the mowed borders allow motorists to see deer approaching. Between the fields and stands of trees, borders 20 feet wide serve as firebreaks. And, to invite visitors to walk in the meadows, there are mowed paths 15 feet across where people can exercise their dogs or jog without being surprised by snakes or being bitten by ticks.

The public heavily uses the park. Two million visitors a year come not only to see the historic sights but also for recreation in a densely urban region. Park managers were hesitant to reduce the lawn acreage when the plan to create the meadows was first implemented in 1994, so they introduced the change slowly, a hundred acres a year. Public reaction was at first undecided, but now it is very favorable; people like the more authentic setting and there are still 700 acres of lawn for picnics, volleyball, badminton, and other games.

To create the meadows, the regular mowing cycle simply stopped, and grasses already in place were left to

mature; no additional seeding was done. What came up is about half native perennial grasses, mainly little bluestem (*Andropogon scoparius*) and purpletop (*Tridens flavens*), and half exotics, including sweet vernal grass (*Anthoxanthum odoratum*), orchard grass (*Dactylis glomerata*), and creeping red fescue (*Festuca rubra*). The latter is being closely monitored. It spreads via underground stolons with which it invades clumps of existing grasses. At present the native grasses seem to be competing well. If the creeping fescue or other invasive nonnatives should begin to take over, the park would need to periodically kill all vegetation in a field with herbicide and then seed the native grasses. Current management includes mowing the meadows once a year to prevent succession of woody plants that would lead to brushy cover and ultimately to forest. Mowing is accomplished before April 15 to prevent disturbing ground-nesting birds.



The “new” mowing program at Valley Forge allows some areas to grow up as meadows that are similar-looking to the farming community as it existed in 1777. Fifteen-foot-wide swaths maintain visitor access and enhance safety.

The change in management from lawn to meadow has undoubtedly affected the wildlife population at the park. Unfortunately, baseline population information was not collected before the meadows were established, so no data are available to show that populations of small mammals, snakes, frogs, songbirds, and raptors might have increased. However, that is the impression of frequent visitors to the park. Wildlife inventories are now under way.

An unquantifiable factor in the current Field Management Plan is the aesthetic one. The meadows covering the rolling hills of Valley Forge are beautiful. The largest field is 180 acres in an area in the middle of the park called the Grand Parade. In late summer when the purpletop blooms, the whole field has a purple cast, and close viewing reveals speckles of wildflowers among the grasses. Even in the winter, when the stalks are dead, little bluestem colors the landscape, not blue, but a warm, red ochre. **P**

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