

Grasslands Conservation

National Park Service
U.S. Department of the Interior
National Capital Region
Manassas National Battlefield Park
Virginia



*A thing is right
when it tends
to preserve the
integrity, stability,
and beauty of
the biotic
community.*

ALDO LEOPOLD, 1948



eastern cottontail



field sparrow nest

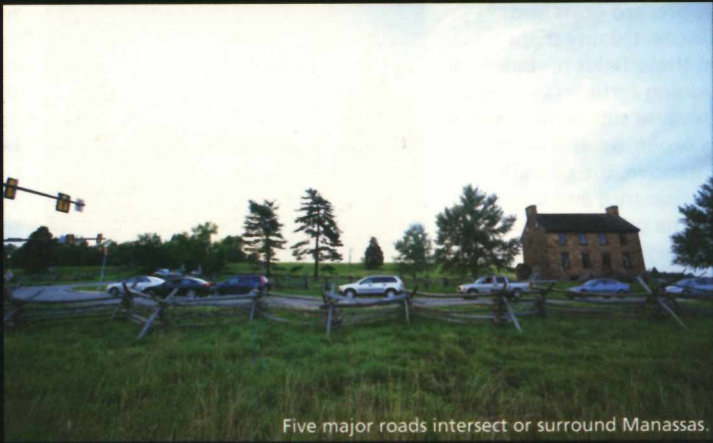


tiger swordtail

little bluestem

Urban Oasis

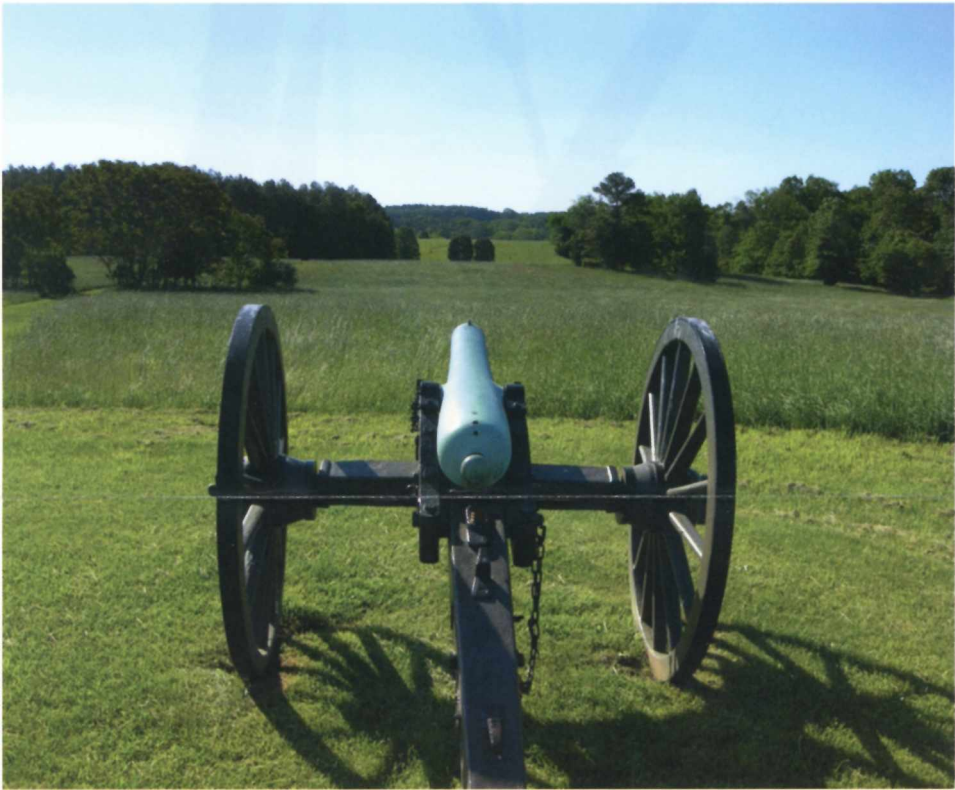
Conservation of the landscape at Manassas National Battlefield Park has safeguarded some of northern Virginia's largest grasslands. While increased development continues to fragment open space throughout the region, these historic fields have become a refuge for diverse plants and animals. As a steward of the nation's most important natural and cultural resources, the National Park Service is working to maintain the Civil War era scene and protect plant and animal habitats through natural resource monitoring, scientific collaboration, and partnerships.



Five major roads intersect or surround Manassas.

Grasslands Conservation

National Park Service
U.S. Department of the Interior
National Capital Region
Manassas National Battlefield Park
Virginia



Habitat of Historic Proportions

Established in 1940, Manassas National Battlefield Park, Virginia, preserves and interprets the sites of the First and Second Battles of Manassas. The battle fought on July 21, 1861, was the first major land battle of the Civil War, leaving 900 dead. Thirteen months later, Union and Confederate forces returned to the same ground and fought a second battle for three days, which resulted in the deaths of 3,300 soldiers.

The National Park Service manages these landscapes by protecting large tracts of land that represent the scene as it existed at the time of the battles. The open fields, wooded areas, ridges, valleys, and streams helped define the fields of battle.

The patchwork of pastures, prairies, woodlands, shrublands, and wetlands of Manassas reminds visitors of important Civil War events and provides habitat for diverse organisms away from the pressures of surrounding development.

Grasslands and Birds

It is estimated that since the mid-1800s, grassland ecosystems in North America have declined by 80 percent. In Virginia, idle grasslands decreased by 55 percent since 1945. This overall decline, especially in the eastern states, is attributed to afforestation (converting open land into forest by planting trees) and the subsequent lack of early successional habitat. Manassas grasslands offset some impacts by providing a refuge for birds and other grassland species. In recent years, Manassas National Battlefield Park restored more than 500 acres to native warm season grasses. An additional 100 acres of previously disturbed lands were restored in collaboration with the Smithsonian Institution.

Manassas was recognized as an **Important Bird Area** by the Audubon Society and selected as a stop on the Virginia Birding and Wildlife Trail because of the quality of park grasslands. Manassas supports one of the best grassland and shrubland species suites in the region, with healthy populations of eastern meadowlarks, grasshopper sparrows, field sparrows, prairie warblers, brown thrashers, and eastern towhees—all state species of conservation concern. Manassas provides habitat for more than 150 bird species throughout the year—54 of them confirmed to breed within the park. Insects, reptiles, amphibians, and mammals also depend on Manassas for important habitat. The park's management of natural and cultural resources provides for the public enjoyment of both with more than 40 miles of hiking and bridle trails.

Today's Battles of Manassas



white-tailed deer

Periodic disturbances by humans and fire once maintained the health of native grasslands. Since European settlement, agriculture, fire suppression, and urban development have altered these ecosystems and affected their integrity.

White-tailed deer were nearly extirpated in this area of Virginia by 1900. Restocking, initiated in 1926, and hunting regulations designed to promote maximum reproductive success resulted in a spectacular recovery. Park forests presently experience extensive overbrowsing by deer, whose population densities in the park are estimated at 160 deer per square mile. A recent study in the park revealed that foraging by deer has suppressed vegetative cover and reduced seedling survival rates of most species studied. Invasive exotic plant populations are also monitored to abate the threats to park ecosystems. Manassas suffers from the invasion of more than 70 non-native plant species, primarily honeysuckle, Japanese stiltgrass, and multiflora rose.

Accelerated urban encroachment also threatens park resources. Located less than 30 miles from Washington, D.C., rapid development continues around Manassas, isolating the park from adjacent natural areas and reducing plant and animal dispersal.



barn owl



prairie warbler



northern harrier

Battlefield Management

Most fields in Manassas have been used for agriculture before and after the Civil War. Recent agricultural practices have focused on the production of hay using non-native cool season grasses such as orchard grass and fescue. Quality crops in these fields require adding fertilizers and lime. Because such maintenance is expensive and labor-intensive, the pastoral appearance and openness of the park is achieved through agricultural leases with local farmers.



Manassas has established native warm season grasses in as many areas as possible because these grasses require no fertilization or lime and are adapted to the acidic soils in

the park. They provide excellent grassland habitat for wildlife species such as quail that are in decline in northern Virginia. Warm season grasses are deep-rooted, which helps to prevent erosion and filter nitrates. They also contribute to maintaining the water quality in the park by providing adequate riparian buffer in areas where trees cannot be planted because of requirements to maintain historic views.

Presently, Manassas has approximately 1,500 acres of managed grasslands and fields that are maintained by different cutting regimes devised to fulfill the varied habitat requirements of important bird populations.

Find Out More

- Virginia Department of Game and Inland Fisheries Birding and Wildlife Trail www.dgif.virginia.gov/wildlife/vbwt/index.asp
- Important Bird Areas Program www.audubon.org/bird/iba
- Manassas Nature and Science www.nps.gov/mana
- Natural Resources Program Manager, Manassas National Battlefield Park, 2521 Lee Highway, Manassas, VA, 20109, 703-754-1859