

Manassas National Battlefield Park

National Park Service
U.S. Department of the Interior

Manassas National Battlefield Park
12521 Lee Highway
Manassas, Virginia 20109



White-Tailed Deer Management Plan Frequently Asked Questions



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What is the deer management plan?

The deer management plan is a multi-park effort to control the wild white-tailed deer populations in three National Parks within the region: Antietam National Battlefield, Monocacy National Battlefield, and Manassas National Battlefield Park. The final management plan will manage the deer populations in order to prevent adverse impacts on native vegetation, forest regeneration, and cultural and historic landscapes. The plan also aims to protect habitat and wildlife species, including the white-tailed deer.

Why does the National Park Service need to manage the deer populations within the parks?

Browsing by an overabundant deer population prevents the natural regeneration of trees, shrubs, and other native vegetation. A healthy forest ecosystem will have numerous seedlings and saplings of various sizes that will eventually replace the larger, mature trees. With excessive browsing by a large deer population, very few young plants will grow to maturity, and the wildlife that depend on forest understory vegetation for habitat and shelter will be not able to survive. In addition to affecting natural forest regeneration, excessive browsing of seedlings also affects the ability of National Parks like Antietam, Monocacy, and Manassas to preserve and restore historic landscapes that may include woodlots and agricultural crops. A management plan will also allow for preventative measures to reduce the risk of spread of Chronic Wasting Disease into the deer population of the area.

**How many deer are currently at the parks?
What is the 'natural' level of deer in this area?**

Population density estimates are calculated by spotlighting surveys performed by park staff each fall since 2001. Deer densities range from 91 – 136 deer per square mile at Antietam, 121 – 201 deer per square mile at Monocacy, and 86 – 190 deer per square mile at Manassas.

It is difficult to say what the 'natural' level of deer is in Maryland and Virginia. Before European settlement of this region of the United States, white-tailed deer populations were less than 20 deer per square mile. Deer populations decreased and were nearly extirpated (complete species removal from an area) after European settlement. However, with increasing timber removal, agriculture, and rural development, favorable edge habitat for deer began to increase. Throughout most of the 20th century, deer populations were legally protected and deforested edge habitat continued to increase, allowing for a huge rebound in the local population. Currently, the local populations are much higher than the recommended levels that allow healthy forest regeneration. U.S. Forest Service and National Park Service biologists estimate approximately 20 deer per square mile is a healthy density for Maryland forests. Additional scientific literature suggests a population below 40 deer per square mile would allow for successful forest regeneration. The target densities for deer populations at Antietam, Monocacy, and Manassas will be discussed throughout the development of the management plan.

**When will the management plan be ready to put into action?
Will the public get a chance to voice their opinions and participate?**

The deer management plan is developed in accordance with the National Environmental Policy Act (NEPA) of 1969, which requires all federal agencies to analyze the possibility of environmental impacts of major management actions and decisions. NEPA requires the completion of an Environmental Impact Statement (EIS), which includes specific steps during the planning process and the inclusion of public participation throughout the development of the plan. A Notice of Intent was published in the Federal Register to announce the preparation of the plan and the associated EIS. Each park has also held public scoping meetings and had a 160-day open comment period to encourage input from the public on the plan. A preliminary draft of the plan/EIS should be completed and released to the public in the winter of 2012 – 2013, with additional public meetings and an open comment period. A final draft of the plan/EIS is expected to be completed and released to the public in 2013 – 2014.

What is CWD and why are Maryland and Virginia deer populations at risk?

Chronic Wasting Disease (CWD) is a highly transmissible neurologic disease that affects large mammals in the Cervidae family (white-tailed and mule deer, moose, elk). CWD is a prion or protein disease, otherwise known as transmissible spongiform encephalopathies, that ultimately destroys the brain. Although similar in nature to mad cow disease and Creutzfeldt-Jakob disease, it is unknown whether CWD can be transmitted to humans or if the disease causes deer meat to be unsafe for human consumption. In wild animal populations, CWD is fatal, incurable, and easily transmitted by saliva, feces, or urine.

Due to the ease of transmission of CWD between deer, densely populated herds are more likely to contract and spread the disease. CWD has also been found adjacent to Antietam, Monocacy, and Manassas, which increases the risk of transmission to park populations (Allegany County, MD, Frederick County, VA, and Hampshire and Hardy Counties, WV).



Chronic Wasting Disease Alliance, 2011

The National Park Service is supposed to protect native species like deer. How will a management plan help protect deer?

Overabundant white-tailed deer populations will greatly benefit from active management. As discussed above, high density populations are much more susceptible to diseases such as CWD which can cause large-scale mortality throughout an area. In addition, as deer populations reach their upper density limit, starvation may occur without the availability of forage vegetation and mast. With appropriate management actions, deer-motor vehicle collisions will likely decrease, competition among deer for food resources should decrease, and the population will not be as susceptible to outbreaks of diseases like CWD and others.

How does the NPS plan to manage the deer population? What alternatives are being considered?

The National Park Service will consider any and all plausible management options during the development of this plan. The following management options have been considered, but preliminarily dismissed from further analysis due to various reasons: capture and relocation, widespread use of repellents, supplemental feeding to avoid overbrowsing, reintroduction of predators, chemical pesticides, and managed public hunts. Currently, Antietam, Monocacy, and Manassas are considering the following options to manage the resident deer populations: reproductive control, large-scale exclosures, changing land use strategies, deer displacement or passive relocation, aversive conditioning with the use of auditory deterrents, and lethal removal of individual deer. Public opinions on alternative strategies were submitted during the first open comment period, and park staff will be discussing the feasibility of the remaining management options.

Coyotes, bobcats, and black bear are all native species. Why not reintroduce these natural predators to control the deer population?

Coyotes, bobcats, and black bears are able to prey on deer, but they generally focus on sick or very young deer, and do not have the ability to reduce and maintain the resident deer population at a healthy level. Studies have shown that these natural predators may have the ability to maintain a stable deer population, but at exceedingly high levels unsuitable for natural forest regeneration. Wolves and mountain lions are also known predators of deer, but the reintroduction of any of these large predators would be infeasible and possibly dangerous in rural and urban areas such as Maryland and Virginia. As all these predatory animals are generalists, they may just as likely feed on livestock, pets, and other native wildlife species, and the safety of park visitors and nearby residents would be jeopardized.

GonaCon™ was recently approved as a reproductive control agent for deer in Maryland. Is this being considered as an option?

GonaCon™ is a gonadotropin-releasing hormone (GnRH) vaccine that produces a contraceptive effect in white-tailed deer. This vaccine prevents female deer from producing sex hormones. Sufficient research in the adverse effects of the agent on wild deer populations is not yet available. In addition, the long-term feasibility of this vaccine is unknown, and individual deer may need to be treated annually. As the agent cannot be administered remotely, capturing deer for treatment may result in higher mortality. Treated deer must be identified, as consumptive effects on human populations who may feed on venison is unknown. The overall cost of vaccine administration may also be prohibitively expensive. GonaCon™ and other immunocontraceptives (porcine zona pellucida) will be further researched by park staff in the development of the plan.

Why doesn't the NPS just recruit local hunters and volunteers to reduce the deer population?

Public hunting is not authorized in units of the National Park Service system and is prohibited by federal regulations as well as NPS policies. Unless specifically mandated by Congress, public hunting is not allowed at Antietam, Monocacy, or Manassas. A program including lethal removal of deer may be possible, which could include the use of a contracting agency, skilled volunteers, or park staff. This management option would require strict surveillance and control to ensure safety of all participating staff, visitors, and nearby residents. The feasibility of this management option will be further researched and discussed by park staff in the development of the plan.

Who do I contact if I have additional questions or concerns?

Further comments on the deer management plan can be submitted after the preliminary draft is released, in the winter of 2012 – 2013. Comments can then be submitted during the open comment period either through the National Park Service Planning, Environment & Public Comment online system (see link below), or in person at the next series of public meetings.

If you have any questions regarding the deer management plan or the EIS process, or would like to be included in the mailing list regarding public meetings and comment periods, please contact:

Antietam – Ed Wenschhof at Ed_Wenschhof@nps.gov

Monocacy – Andrew Banasik at Andrew_Banasik@nps.gov

Manassas – Bryan Gorsira at Bryan_Gorsira@nps.gov

The following is a list of additional resources with useful information:

National Park Service Planning, Environment & Public Comment (PEPC): <http://parkplanning.nps.gov>

Antietam National Battlefield: <http://www.nps.gov/anti>

Monocacy National Battlefield: <http://www.nps.gov/mono>

Manassas National Battlefield Park: <http://www.nps.gov/mana>

Chronic Wasting Disease Information – Maryland Department of Natural Resources: http://www.dnr.state.md.us/wildlife/Hunt_Trap/deer/disease/cwdinformation.asp

Chronic Wasting Disease Alliance – General Information: <http://www.cwd-info.org>

National Park Service Management Policies (2006): <http://www.nps.gov/policy/mp2006.pdf>

Code of Federal Regulations. 36 CFR Chapter 1: <http://www.law.cornell.edu/cfr/text/36/chapter-1>

