

Chicago Wilderness

Position Statement on White-tailed Deer Management

POSITION: As a regional alliance dedicated to protecting nature and enriching life, Chicago Wilderness members believe that the natural communities in our region need to be actively managed and conserved based on scientific principles and best management practices. Chicago Wilderness members recognize that white-tailed deer (*Odocoileus virginianus*) are an important component of the biodiversity within the region and have significant economic, ecological, and social value. However, many factors associated with this species—such as the high reproductive output of white-tailed deer and the limited and varying abilities of natural limiting factors such as predators, disease, food, and cover to suppress deer population growth—can lead to problems, including the potential for an overabundance of deer to damage ecosystem health and negatively impact human safety. Conversely, in areas of the Chicago Wilderness region where active, sustained deer management occurs, native vegetation flourishes, habitat quality is high, and conflicts between deer and human populations have been reduced (e.g., some forest preserves and at Fermilab). As a result, white-tailed deer populations should be maintained to 1) promote a properly managed, sustainable deer population; 2) retain the number of deer that a landscape can support while still remaining healthy over the long-term (this relates to ecological carrying capacity); and 3) minimize negative deer–human interactions.

BACKGROUND: The white-tailed deer populations within the Chicago Wilderness region share a similar history as other populations across North America. White-tailed deer were nearly extirpated from the region in the late 19th and early 20th centuries, at which time conservation measures were enacted to establish sustainable populations. White-tailed deer populations have recovered from historic lows and today, with few remaining predators and low disease mortality, deer numbers continue to increase. With growing populations of humans and deer, the frequency of negative deer-human interactions, such as deer-vehicle accidents, damage to landscaping and garden vegetation, and damage to agricultural crops, has increased to problematic proportions in many areas.

Deer–vehicle accidents (DVAs) in Illinois ranged from a low of 22,933 reported incidents to a high of 25,847 per year from 2001 to 2008. Although the trend in number of DVAs during the five years prior to 2008 was not increasing, more recent accident numbers were considerably higher than during the 1990s when accident levels averaged about 17,000 per year. According to the Deer-Vehicle Collisions Analysis in Illinois from 1994-2008, Cook County ranks highest among Illinois counties in the number of reported deer-vehicle accidents on state highways, with an average of 873 collisions per year. Lake County had an average of 576 collisions. Kane County had an average of 510. Will County had an average of 505 collisions. For more information about DVAs and their relationship to deer populations see <http://livingwithdeer.extension.illinois.edu>.

The negative impacts associated with an overabundance of or excessive browsing by deer is well-documented:

- A deer population that is out of balance with its native ecosystem has detrimental impacts by directly and indirectly affecting native plant and wildlife populations, habitat quality, and ecosystem processes.
- When deer become overabundant, they cause a decline in biodiversity (the number and variety of species of living organisms) in natural areas and reduce the ability of rare plants to survive and reproduce. Deer browsing reduces the height, vigor, and reproduction of plants through the repeated removal of stems, leaves, and flowering parts of plants.

- Deer browsing negatively impacts wildlife that needs woodland understory for forage, nesting, and cover. Deer browsing can, for instance, significantly reduce vegetation that birds use for foraging, escaping predators, and nesting.
- Deer browsing and antler rubbing can cause economic losses in many agricultural operations including row crops, orchards, nurseries, tree farms, and commercial forestry, as well as causing substantial damage to landscape and garden vegetation, cemeteries, golf courses, and restored natural areas.
- An overabundant deer population causes a reduction in the availability of forage, which leads to the decline in the health of individual animals and deer herds.
- Overabundant deer populations hasten the spread of diseases that impact deer (e.g., chronic wasting disease) and humans (e.g., Lyme disease).
- An estimated 1.5 million reported deer-vehicle accidents occur in the United States each year and result in approximately 29,000 injuries and 200 human deaths annually.

RECOMMENDATIONS: The Chicago Wilderness alliance supports the following points in regard to the management of conflicts and damage resulting from overabundant populations of white-tailed deer:

- Alliance members recognize that white-tailed deer are an important component of biodiversity within the region.
- We recognize that reducing wildlife damage is an important part of present-day wildlife management.
- We recognize that recommended deer population levels depend on the situation and management objectives, and factors such as the health of the deer population, ecological impacts from deer, and social tolerance of deer often contribute to determining whether a deer population is overabundant.
- We recognize that when browsing by deer causes habitat deterioration, appropriate deer densities are best determined by site-specific reduction of deer numbers. Areas with low to moderate impacts to plant and animal populations may require a lower degree of herd management than areas with heavy browsing and the appearance of a browse line.
- It is important that information be disseminated to municipalities, residents, and other interested parties regarding deer management, including information on deterrents, fencing, and plants resistant to deer browsing.
- It is critical to develop and implement education efforts that foster an understanding of the biological, social, and economic consequences of not managing deer populations.
- Wildlife biologists and land managers within the Chicago Wilderness region should be encouraged to continue to assess deer populations and monitor and conduct research on effective techniques that limit wildlife damage and population growth.
- We support active control of deer populations (*i.e.*, hunting) on public and private lands in accordance with state and local regulations.
- We support other safe management techniques that are deemed most appropriate based on the best science currently available. This may include sharpshooting or live capture/euthanasia as effective and safe management tools when carried out by qualified professionals.

- Deer density in forests and woodlands should be reduced to a level that, in combination with controlled burns, would allow for the reproduction of canopy tree species and for the shrub and herbaceous understory layers to return to a healthy condition.

SUMMARY: White-tail deer management is a critical component of a comprehensive, science-based land management strategy designed to restore a high degree of biodiversity and protect the long-term health and resilience of natural communities in the Chicago Wilderness region. White-tailed deer have the potential to negatively impact native plant and animal communities. Overabundant deer populations also results in increased numbers of deer-vehicle accidents, as well as an increased potential for disease and parasite transmission. In the absence of management, deer populations can increase beyond the capacity of habitats to support them in the long term, and the quality of habitats deteriorate significantly before any natural mechanisms take effect in limiting herd growth, causing deer health and productivity to eventually suffer. Deer management programs support an ecosystem balance that sustains a full range of native plants and provides diverse habitat for birds and other animals. Human intervention is necessary to maintain deer population numbers at levels compatible with healthy ecosystems and human safety.

Resources:

Illinois Department of Natural Resources Urban Deer Project Manager, Marty Jones, (847) 798-7620

Living with White-Tailed Deer in Illinois – <http://livingwithdeer.extension.illinois.edu>

Management Guidelines for Illinois Nature Preserves: Control of Animal Populations: White-Tailed Deer – <http://dnr.state.il.us/INPC/VMG/Deer%20management%20guidelines%20updated%2010-18-05.pdf>

Recommendations for Deer Management in Michigan: Report of the Michigan Deer Advisory Team to the Director of the Michigan Department of Natural Resources – http://www.michigan.gov/documents/dnr/DAT_recommendation_report_final.doc_303029_7.pdf

Wisconsin Department of Natural Resources Fish, Wildlife and Habitat Management Plan – Guidance for Fish and Wildlife Conservation, Management and Recreation Related Activities in the Wisconsin Department of Natural Resources: <http://dnr.wi.gov/fish/documents/fwhplan.pdf>

Indiana Comprehensive Wildlife Strategy – http://www.in.gov/dnr/fishwild/files/CWS_MANUSCRIPT.pdf

Indiana Department of Natural Resources: White-tailed Deer – <http://www.in.gov/dnr/fishwild/3359.htm>