

Deer Management in Conservation Parks

OVERVIEW

A healthy deer population is in balance with the natural habitat. When European settlers first came to southern Wisconsin in the 1830's it's estimated that there were 5-10 deer per square mile. Today without natural predators in our urban environment deer populations can increase dramatically. In 1993, the Wisconsin DNR established the Madison Metropolitan Deer Management Unit to manage a population estimated to be 35 deer per square mile on lands around Dane County's urban core. At that time, the DNR established a deer population goal of 10 per square mile. Excessive deer numbers profoundly impact native plant and animal communities through heavy browsing that does not allow plants to reproduce or grow. One of the primary missions of the City of Madison Conservation Parks is to preserve and restore diverse native plant communities and the variety of wildlife that they support. In the absence of natural predators, it is necessary to be responsible stewards by managing deer numbers at levels appropriate to sustain the few diverse natural habitats that remain in our urban environment. The Madison Park Commission at the recommendation of the Cherokee Deer Task Force, adopted a deer management policy (sharp shooting) for Cherokee Marsh Conservation Park in December 1996. Implementation began in January 1997 and has successfully brought the deer population into balance with the natural habitats in Cherokee Marsh. Native plant populations have responded positively since this program was instituted.

SANDBURG WOODS CONSERVATION PARK

Sandburg Woods is a 30-acre oak woodland that preserves a diverse assortment of oak woodland wildflowers. Deer were an occasional visitor in the park until 3-4 years ago. Today, deer are observed in the park on a regular basis with 4-6 animals present during the growing season. In the winter more deer congregate in the park with 24 deer counted via an aerial count by Dane County Regional Airport staff in March 2011. That equates to a winter deer population of approximately 480 per square mile. And a summer population of 80-120 deer per square mile based on observations by Parks staff.

The current deer population level is severely impacting some native plants to such a degree that their long term survival in this ecosystem is in doubt. Degradation of the native plant community impacts insects, birds, and animals that depend on them. In a qualitative assessment of the park vegetation, staff has noticed a severe decline in some native plant species populations. Jewel Weed (*Impatiens* sp.) is an annual plant that once grew so prolifically in the park that it over grew into the trails (requiring it to be trimmed back to keep the trails open). Over the past two years, this plant has become so rare that summer maintenance is no longer necessary to trim it back along the trails where it once was abundant. On a recent site visit with DNR staff, it was noted that native shrubs like Gray Dogwood show signs of heavy deer browsing reaching a height of less than 4 ft. (8-10 ft. is normal). Under this type of browse pressure, oak and other tree seedlings will not grow to become saplings for the next generation in the woodland. Additionally in the past two years some neighborhood residents have expressed concerns regarding the increase in deer numbers. Specifically, they noted landscape plant damage, traffic safety, and possible transmission of Lyme disease.

RECOMMENDATION

The City of Madison is not unique in dealing with the challenge of managing deer populations at an ecologically sound level in an urban environment. The UW Arboretum has managed the deer population using sharp shooters (safely) for over 20 years to preserve the ecological communities that make it a special place. Milwaukee has been managing the deer herd at Whitnall Park with a sharp shooting program since 1996.

Staff recommends a deer population goal where they are a transient member of the park (an occasional visitor). As sharp-shooting is the most humane and effective means to manage the deer population, staff met on site with Madison Police to assure its safe implementation in Sandburg Woods. Madison Police determined harvesting in this manner can be done safely. Therefore Parks staff recommends implementation of this program in January/February 2012. Signs will be posted at all trail access points prior to the implementation of this activity to alert park visitors that a deer harvest program is in effect.

Further, Parks staff recommends that the above method of managing deer populations be implemented in other city parks where deer populations are out of balance and severely impacting native plant communities.