Staff Recommendations for Deer Management within the Greater Shawnee Mission Park Area

Presented to the Johnson County Park and Recreation District's Parks and Golf Courses Committee on June 8, 2009

Following the Committee of the Whole meeting on the District's Biodiversity Policy and Resource Management Plan on May 13, 2009, and a subsequent Regular Board Meeting discussion regarding the planning process on May 20, 2009, District staff has developed the recommendations summarized in this report related to deer herd reduction within the 2,230 acre Greater Shawnee Mission Park Area (see Attachment A). Of all the options that have been reviewed (some of which are summarized in Attachment B), staff considers its proposed strategies to be the most viable for the District's current and specific management needs.

The recommendations are based on input from a variety of experts, as well as experiences shared by several other communities and agencies that have dealt with similar situations. The recommendations are supported, in part, by a number of studies, including the spotlight surveys of the deer population in Shawnee Mission Park that the District conducted in 2007 and 2008 with assistance of the Kansas Department of Wildlife and Parks (KDWP). Those surveys resulted in estimates of 204 and 197 deer per square mile respectfully. According to KDWP, these numbers are approximately seven times the normal deer population (30 per square mile) we might expect in the "wild" in this part of the state.

Also factoring into staff's recommendations are statistics related to deer/vehicle accidents in and immediately around the park (see Attachment C), calls from neighboring home owners and commercial businesses complaining of increased plant and landscaping damage, and concerns expressed about diseases associated with ticks that are carried by deer.

Based on all the research and the input provided by experts, staff has concluded a significant herd reduction is required and the only viable alternatives for the initial reduction are by lethal means. One of the non-lethal population reduction options that was considered (translocation) is not allowed by the Kansas Department of Wildlife and Parks (KDWP), and the others (fertility control, fencing, etc.) would not be effective and/or feasible given the urgency and scope of the existing situation.

It is staff's recommendation, therefore, that in the mid to late-fall of 2009 an initial harvesting of the herd by internal sharpshooters should take place. Based on research and expert advice, the most efficient manner to lower the deer population in a rapid manner is through this method.

The details of the harvest, including specific dates and locations, arrangements for processing, and other logistical issues, would be finalized over the next few months. Staff's recommendations for the initial harvesting, however, include the following:

- The sharpshooters would be park police officers and officers from local police departments that undergo training and management by experts in this field.
- The harvest would be limited to controlled, baited sites that would be developed in advance of the harvest to establish a pattern of feeding for the deer.
- The meat would be processed in a manner that would benefit the homeless and/or needy within our community.

By early November, and after the initial harvest has been completed, a follow-up survey should be completed in association with the KDWP staff utilizing the same spotlight methodology as previous surveys. The completed survey will provide the necessary data to determine the success of the initial harvest when compared to the population levels determined in samples taken in 2007 and 2008. If the levels remain above a specified social carrying capacity, secondary harvest(s) would take place in the months of November, December and January. It is staff's recommendation that in this initial stage of deer management the targeted social carrying capacity in Shawnee Mission Park be 50 deer per square mile. That capacity should then be reevaluated on an annual basis, and adjusted as needed, based on ongoing biological research and social considerations.

In accordance with KDWP current practices and policies, the secondary harvest should be a controlled harvest by specially certified archers. The harvest would be managed jointly by Park Police and KDWP. The certified archers would be required to undergo a proficiency examination and pay an access fee to JCPRD as well as any required permits from KDWP. There would be several zones established in the greater Shawnee Mission Park area that could allow for a specific number of archers to utilize elevated stands purchased and installed by District staff. The zones would be established to maximize public safety. It is possible that this harvest will only be able to take place in that area of the park within the corporate boundaries of Shawnee which already has ordinances in place which may allow archers. Any harvest involving archers within Lenexa will depend upon further discussions and negotiations with Lenexa as their current ordinance does not allow this type of activity on "public property."

Following the completion of the secondary harvest, staff would further recommend a winter flyover survey be completed to provide a second method of population estimation. Assuming the population levels continue to exceed the stated social carrying capacity, a similar process could be undertaken in the fall of 2010.

It is further recommended that the District's ongoing deer management efforts include continued consideration of non-lethal management methods. This could include working cooperatively with scientists and allowing related research to be conducted within District parks. As funding allows, any non-lethal option determined to be viable for the District's specific management needs could then be incorporated into the plan as an additional or alternative means of population control.

All the resource management strategies recommended in this report – as well as the overall management of the District's Biodiversity Policy – would be significantly enhanced by the addition of a District Biologist. Staff further recommends, therefore, consideration be given to adding this expertise just as soon as financial resources allow. Public entities and private businesses with large land holdings commonly employ biologists to assist in meeting the land stewardship responsibilities of resource management. This position has been proposed in the past and the Biodiversity Policy includes resource monitoring and data collections this position would be responsible for coordinating.