FOREST PRESERVE DISTRICT OF WILL COUNTY
2011-2012 Deer Management Plan at Select Forest Preserves

August 11, 2011

Summary

The Forest Preserve District of Will County's 2011-2012 deer management program will use sharpshooting to remove 250 deer from eight (8) forest preserves.

Operational Plan

The District's Operational Plan for Deer Management was adopted by the Forest Preserve Board of Commissioners in September 2010. The District's deer management program goal is to allow for a sustainable relationship between the deer population, biological diversity and habitat structure, with a target deer density of 20 deer per square mile. While the District's Deer Management Program was approved in November 2010, the Board needs to authorize specific program recommendations relative to the number of deer removes and the preserve locations annually.

The specific deer management recommendations are expected to change each year based on the District's monitoring program, which is designed to collect and assess data on deer population levels, habitat recovery, and deer management program effectiveness. The results of the monitoring program will be used to modify and adapt management strategies and targets to existing conditions and insure the ongoing effectiveness of the deer management program. Staff must also consider program effectiveness measured against operational expense, and make the necessary programmatic changes to the deer management program to maintain cost effectiveness and ensure long-term sustainability.

2011-2012 Program Details

The following parameters have been established to ensure that the deer management program supports a sustainable relationship between deer populations, biological diversity and habitat structure. It is anticipated that as staff implements the sharpshooting program, modifications will likely be necessary based on actual field conditions and experience.

1. Removal of female deer (Does) is the most effective means of reducing and maintaining deer population size. Therefore, the sharpshooters will target non-antlered individuals only.

2. The District will focus on preserves with the highest deer densities and/or those preserves with populations of rare, threatened or endangered plant species which are highly vulnerable to excessive deer browse.
3. Sharpshooter candidates are only allowed one attempt at meeting the IDNR marksman qualification standards each year. These standards require hitting a 1.9

inch circular target at 50 yards five times with only five attempts allowed. Unsuccessful candidates must wait twelve months before attempting to qualify again.

4. Approximately five (5) District officers will attempt to qualify as sharpshooters in November. Only a single qualified sharpshooter is needed to implement the program. Sharpshooters must qualify no more than 45 days prior to the start of the 90 day IDNR deer population control permit period.

5. Sharpshooting activities will begin starting at dusk, Monday through Thursday, when the preserves are closed and public access and use is restricted. Preserves will be closed one hour early (4:00 p.m.) to allow for set up. An information campaign will be conducted to keep the public informed about these activities.

6. Pending IDNR permit issuance, sharpshooting activities will occur primarily during the months of December and January, possibly extending into February in order to provide the best chance for marksman success and allow the best conditions to preserve the meat for distribution to food pantries. However the actual completion date for culling activities will be determined by the 90-day permit period as set by the IDNR.

7. The IDNR population control permit application will be submitted in early September with the potential District sharpshooters listed. Only those law enforcement officers who qualify will be allowed to participate in the program as sharpshooters.

8. Sharpshooting activities will be coordinated with other land management activities, particularly prescribed burning, to ensure one activity does not negatively affect the other.

Volunteers

The Operational Plan (September 2010) outlined a process to solicit, complete background checks, train and arrange for IDNR testing and certification of volunteers as sharpshooters. This process will be utilized again in the event qualified volunteers from 2010-2011 are not available. There are currently no vacancies for new deer management program volunteers.

An individual who wants to volunteer for support services can assist in setting up bait stations and tree stands, hauling deer out of the preserve, collecting IDNR-required harvest data, and assisting with dressing/preparing the deer for delivery to the meat processing contractor. Since the support services volunteer will be working near guns, they must meet the following requirements:

1. Must be a minimum of 21 years of age.
2. Must be an Illinois resident, with preference given to Will County residents.
3. Must have a valid Illinois Driver's License and have a good driving record.
4. Must be qualified by the Forest Preserve Police, including the following:

a. Must pass a criminal background test
b. Must pass drug screening test
c. Complete an oral interview

5. Must be physically mobile and in good condition to lift, haul and field dress deer.
6. Must acknowledge and understand that in accordance with IDNR regulations, no part of the deer can be retained; all deer meat must be donated to food pantries.

As the District's top priority is public safety, there will be zero tolerance for any safety lapses. The Forest Preserve Police reserve the right to terminate a volunteer for any inappropriate or unsafe conduct.

Set-Up

Operational meetings will be held at the beginning of each night's culling shift to review safety considerations, distribute information, organize equipment, etc. Up to five officers will be assigned to each culling shift. Additional staff may be needed to serve as a guard at the main preserve gate to prevent unauthorized access into the preserve during culling activities. Sharpshooting teams may be present at different preserves the same night to improve effectiveness and efficiency.

The firearm the sharpshooters will be using is an AR15 0.308 caliber or similar rifle using ballistic tip bullets which disintegrate upon contact with solid objects.

Multiple bait stations and firing locations have been identified within each preserve to ensure an adequate number are available for review and approval by the IDNR and to facilitate the most efficient implementation of the program. Specifically this means that deer may get wary of some of the bait stations after a few evenings, and staff will need to switch to another IDNR-approved station on-site or at a different preserve to insure success.

Bait stations will be baited with corn beginning several days prior to sharpshooting activities to acclimate the deer to begin visiting that specific location regularly. The same location(s) will be baited again immediately prior to the culling activity. Spot lights will be used to limit deer movement and provide a clear line of sight just prior to firing.

Upon completion of each night's sharpshooting activities, harvested animals will be moved to a field station and prepared for delivery to the processing facility.

2011-2012 Fall-Winter Deer Management Recommendations

Table 1 lists areas that have been selected for deer population reduction. The number of deer proposed for removal is 250, and is based on the population size documented in January 2011 and in consideration of the number of deer removed in February and March 2011 if applicable. It is important to note that the population sizes reported in Table 1 do not reflect population increases resulting from the birth of fawns this spring, nor does it reflect any immigration or emigration which may have occurred since the time of the aerial survey. Deer populations within preserves managed last winter may have experienced an influx of animals throughout the year from adjacent properties seeking to

take advantage of the increasingly available rebounding foraging resources and reduced competition with existing resident animals. Aerial deer counts represent only a population estimate based on the presence of deer within the preserve or survey area at the time of the flyover, and do not provide an assessment of the sex ratio within the population. It is very common for deer to exhibit daily movements between District properties and adjacent properties depending on various conditions.

Since the District's program provides for the removal of only antlerless individuals, preserves managed last year may have a sex ratio favoring males. This could result in sharpshooters having difficulty targeting enough antlerless individuals to reach the removal goals. All of these variables are difficult to enumerate or avoid and therefore the removal goals may or may not be feasible at all preserves and may not accomplish the target densities following this culling season.

Due to the late approval of the District's IDNR permit last season and the conditions necessary to perform accurate aerial population counts, this year's deer removal goals were developed using data collected in reverse order from what would be desirable. Completing aerial population surveys immediately following this winter's culling activities (as well as deer management events in any subsequent years) will allow for a more accurate assessment of the remaining population sizes.

IDNR requires deer browse monitoring during the growing season preceding any proposed culling activities when reviewing permit applications. District staff has completed vegetation sampling at each of the areas proposed recommended for culling and have documented ongoing elevated deer browse pressure in support of the permit application to initiate or continue population reduction.

Site Details

The attached maps show the positions of bait/shooting stations and the shooting direction within each preserve. Habitat conditions, access and safety considerations were primary factors affecting the selection of station locations. Firing stations will be in both elevated stands and at ground level. The main determinant in the firing station elevation is natural terrain. Natural terrain was considered at all stations in all preserves to insure an acceptable backdrop for shooting in a downward trajectory at all times over a distance of 50 yards or less (the same distance required for IDNR sharpshooting certification); and shooting into the preserve, not toward or beyond the preserve boundary. Following is a brief description of bait/firing stations at each of the eight preserves.

Messenger Woods Nature Preserve
Messenger Woods is a 407-acre heavily wooded site located north of Bruce Road and west of Parker Road. The preserve is characterized by ravines associated with Spring Creek and its tributaries. Six bait/firing stations are proposed. All firing stations take advantage of natural elevated positions for clear shots and backdrops to minimize the potential flight of the projectiles.

Messenger Marsh Preserve
Messenger Marsh is a 620-acre mosaic of wetland and woodland communities, intermixed with old field areas in various stages of restoration in the Spring Creek Greenway system. The preserve has varying degrees of topographic variation between wooded areas and wetland habitats. Four shooting stations have been proposed with firing directions oriented towards the interior of the preserve.

Lockport Prairie Nature Preserve
Lockport Prairie Nature Preserve is a 254-acre site located along the west bank of the DesPlaines River east of Rt. 53 and south of Rt. 7. The preserve has a relatively flat terrain; it occupies the floor of the river valley which is approximately 40 feet below the west bluff of the DesPlaines River valley along Rt. 53. Four bait/firing stations are proposed and staff intends to use elevated stands. Stations 1, 2 and 3 border the edge of the buffer zones but all shots will be taken into the preserve.

Romeoville Prairie Nature Preserve
Romeoville Prairie occupies over 590 acres of the DesPlaines River Valley north of 135th Street on the west side of the river. It is dominated by prairie, sedge meadow and marsh communities. The preserve has no public access areas and is well buffered from residential and other public spaces. The terrain is very level and the landscape very open. Three firing stations will be placed throughout this preserve. The use of elevated shooting stands will be necessary.

McKinley Woods Forest Preserve
McKinley Woods is a 475-acre site situated on bluffs above the I&M Canal and the DesPlaines River. The I&M Canal State Trail is between the river and the canal. The preserve is characterized by steep wooded bluffs and ravines that provide a very safe backdrop for firing stations. Six bait/firing stations are proposed. Station #6 is proposed to be set up just inside the 100 yard perimeter safety buffer near the Fredrick's Grove campground area. Sharpshooters would fire in a northerly direction, towards the preserve interior and steep bluff face. The rest of the stations utilize natural elevated positions to provide clear shots and backdrops to minimize the potential flight of the projectiles.

Braidwood Dunes and Savanna Nature Preserve
Braidwood Dunes and Savanna is a 314-acre preserve located between Route 113 and Smiley Road, west of Sandridge Savanna. The preserve is dominated by sand prairie, sand savanna and wetland communities. The preserve has significant wooded interior areas well removed from adjacent properties. Four shooting stations have been identified. Staff intends to use a combination of natural elevated shooting positions and tree stands.

Sandridge Savanna Nature Preserve / Kankakee Sands
Sandridge Savanna is a 227-acre site located south of Rt. 113 approximately one mile west of the Kankakee River. The western half of the site is characterized by a series of forested dune ridges and wetlands between the ridges; the eastern portion of the site contains open prairie and wetlands. Four bait/firing stations are proposed. Staff intends to use a combination of natural elevated shooting positions and tree stands.

Goodenow Grove Nature Preserve / Plum Grove
Goodenow Grove is a 900-acre preserve located east of I-394 and north of Goodenow Road. The site is characterized by heavily forested areas along Plum Creek and its tributaries, as well as barrens (shrubby prairies), savannas and grasslands associated with level areas. Seven bait/firing stations are proposed. All stations take advantage of natural elevated positions for clear shots and backdrops to minimize the potential flight of the projectiles.

Deer Preparation and Processing Details

The pole building at Donahue Grove Preserve will again be used as the field station to process or dress deer harvested from the field. This field station will also be used to store equipment and materials associated with the deer management program. All necessary harvest data required by the IDNR will also be collected at the field station. Once prepared, animals will be stored in a walk in cooler donated last year which will allow for greater control of storage conditions for the meat prior to delivery, and should reduce the need for daily meat delivery to the processing vendor, reducing overall program costs.

All harvested animals must be processed by a facility approved by the IDNR. The contractor has the responsibility to document the quantity of deer meat processed and delivered to the food pantries. Meat processing costs will again be $31 per deer based on prices received from Freedom Sausage Company in Earlville, Illinois, which is the closest IDNR approved facility for the acceptance and processing of the harvested deer.

The deer entrails must also be disposed of. Staff will again contract with Kalunzy Brothers of Joliet, Illinois for rendering of the entrails as a sole provider since this is the only rendering service company within a reasonable distance of Will County. Based on 2010-2011 costs, $300 for equipment to be provided and $50 per pick up, and the proposed culling period (December through January) this contract is estimated to be a maximum of $2,300 which assumes 4 pick up events each week for 10 weeks. Costs should be reduced through fewer pick events as a result of the walk in cooler, perhaps only 2 per week.

Public Notification

In all internal and external communications about the deer management program, staff will continue a clear, concise and consistent message about the program need and importance of public safety; provide factual information in an effort to educate the public and to combat misinformation; proactively inform and work cooperatively with the media in regard to promoting the deer management program; facilitate communication with stakeholders; and continue to be responsive to requests from the public. Staff will:

- Update the deer management brochure for general distribution;
- Continue to provide and update information on the District's Web site;
- Provide adjacent landowners (immediately abutting preserve boundary) with a notification letter or postcard about the sharpshooting program;
- Prepare press releases to describe upcoming sharpshooting activities at the select preserves;

- Offer to meet with local municipal agencies to advise of program logistics; and
- Install signs at preserve entrances with the following notice:

PRESERVE CLOSED
Sunset to Sunrise
DEER MANAGEMENT PROGRAM
Monday – Thursday
November – March
DO NOT ENTER OR ATTEMPT
TO ACCESS THIS FOREST
PRESERVE BY ANOTHER ROUTE

The culling period on this notice goes beyond the timeframe proposed in this plan because it is not yet known if or when the 90-day IDNR permit will be issued and therefore when culling activities could actually begin. A delay in the permitting process could extend the culling activities into March.

2011 - 2012 Schedule of Tasks

The schedule of tasks (attached) assumes a 60-day IDNR application review period and proposes an earlier start to culling activities as compared to 2010-2011. An earlier start to culling activities should help address several of the operational problems experienced last year.

Because of the late start in 2010-2011, daily temperature steadily rose during most of the culling period, quickly melting the snow cover and exposing the ground surface. Lack of snow cover provided the deer with better access to the remaining vegetation on the ground. Towards the end of the 2010-2011 program temperatures rose enough to begin thawing the upper soil layers and trigger the vegetation to resume growth. This allowed the deer to scrape into the soil for roots and other buried plant parts and provided access to new growth on the plants, alleviating some of the limited forage opportunities for the deer earlier in the winter. These events resulted in a reduced effectiveness of the bait stations for attracting deer to shooting locations, and therefore reduced culling efficiency. Lack of snow and frozen ground also began to hinder access to and from shooting locations, especially while attempting to move deer.

Completing culling activities earlier in the winter also allows for aerial population counts at deer management sites to be performed immediately after deer removal but before the birth of spring fawns. This is the ideal for assessing the resulting deer population density and determining the need for additional population management the following winter. The late start of the culling activities in 2010-2011 did not allow for this sequence of events and therefore the deer removal targets at some preserves discussed above are somewhat conservative, likely being below what is actually necessary to achieve final density goals and requiring a subsequent year of consecutive deer population management before achieving a maintenance phase for that preserve.