

Borough of Rose Valley Deer Management Plan

INTRODUCTION

The Borough of Rose Valley owns several parcels of woodlands and open space that it manages for the benefit of current and future residents of the Borough. It has come to the Borough's attention that, lacking natural predators, the deer population has increased to levels that are not ecologically sustainable. As a result, the natural woodlands have become degraded and the native trees and plants that the deer feed upon are unable to regenerate year on year. This creates opportunities for non-native invasive plants to colonize these areas. These plants also lack natural predators and do not support the other native fauna. Moreover, deer-human conflicts in the form of roadway collisions and the spread of diseases, such as Lyme disease, are present now and are expected to become more prevalent as deer seek food sources on private property. Therefore, the Borough, on the recommendations of the Rose Valley Environmental Advisory Council (EAC), has determined that it is in the best interests of the residents, as well as consistent with prudent land management principles, to set forth a plan to reduce the deer population to an ecologically sustainable level and, once achieved, to maintain it at that level.

SCOPE OF THE PROBLEM

There are three wooded parks in Rose Valley: Saul Wildlife Sanctuary; Long Point (Chadwick) Wildlife Sanctuary; and Todmorden Woods. A precise deer census is impractical and expensive. Based upon observations and known deer populations in comparable local environments, it is estimated that there are approximately 20–48 deer in the parklands and surrounding wooded areas, with the most likely population level being approximately 35. Based upon extensive research by U.S. Forest Service scientists in northwestern Pennsylvania, with adjustments for differences in forest type and the availability of food sources on private lands, the ecologically sustainable level for the deer population in Rose Valley is estimated as 4 to 12.

DEER MANAGEMENT GOALS

It is the consensus of the community that deer sightings, deer-vehicle collisions, new Lyme disease cases and damage to vegetation and wildlife habitat by deer have increased in recent years. Knowing that deer populations, lacking any natural predation, can double each year, it is the sense of the community that it is time to reduce the population to a more reasonable number. Residents would like to see a small, sustainable herd of deer, which will survive on their own but will be limited in number so as not to decimate the forests with overbrowsing and overgrazing. The EAC has recommended that the initial goal should be the removal of approximately 27 deer.¹ This goal is somewhat flexible and may be raised or lowered depending upon observations from the field and the ratio of females to males taken, with 5 does to each buck being optimal. If this goal is met, in recognition of the fact that deer reproduce at a high rate, it is recommended by the EAC

¹ Council is aware that there was unauthorized hunting in the Long Point area in September and October 2010 and that 3 deer were taken. These deer have been counted against the original goal of 30.

that limited hunting be permitted year on year to maintain the population at a level that fosters recovery and maintenance of forest health² on the Borough-owned lands.

MEANS AND METHODS OF REDUCTION

The Borough has two primary options: hunting and culling.³ Due to the lack of areas meeting the applicable safety zone requirements, as well as concerns expressed by some residents, the Borough will not permit the use of firearms in either option. Instead, any hunting or culling permitted by the Borough on Borough-owned lands must be by archery.⁴

A deer hunt involves regular hunting during the times designated by the Pennsylvania Game Commission (PGC) for deer hunting by archery in the Rose Valley area. In 2010, there is an antlerless season from September 18 to October 1; antlered and antlerless from October 2 to November 13; antlerless only from November 15 to November 27; and antlered and antlerless from December 27 to January 29, 2011. Hunting is permitted from sunrise to sunset only and is prohibited on Sundays. Current PGC rules prohibit the use of baiting during hunting. Deer taken are usually owned by the individual hunter and there is generally no cost incurred by the Borough in permitting the hunt.

By contrast, a deer cull takes place only by a special permit issued by the PGC and only when it is demonstrated that the deer population has not been controlled via regular hunting, the occurrence of which is a prerequisite for approval. A cull usually takes place in the off-season for hunting. A cull is not necessarily restricted on any day of the week nor time of day. Baiting is permitted. Deer taken must be dressed and donated to charitable food banks. There is generally a cost to the Borough in contracting with a culling organization to perform the cull.⁵ For 2011, however, no funds have been budgeted for this purpose. Therefore, a cull immediately following the 2010-2011 hunting season will be approved only if private funds can be raised.

SAFETY

Safety is of paramount concern. The Borough will notify all Borough residents of the dates and hours within which hunting or culling may occur by mail and by notices posted at all parkland entrances. The exact location and times of hunter activity will not be publicized to prevent spectators from interfering with the hunt. Particular hazards will be identified by the EAC in meetings with the hunting organization. These will include locations of trails, residences, schools and any frequent use and provision of the attached map showing the permissible areas for hunting/culling by archery. Hunters will be responsible for compliance with all Pennsylvania game and safety laws and take responsibility for their own safety and as well as the safety of the community they are serving. The hunting organization will sign a letter of understanding with Borough Council prior to the hunting season and will provide weekly progress reports. The EAC

² Forest health is quantified using measurable indicators (see *Long Range Planning*, below).

³ Non-lethal methods of control, such as contraception, are of unproven effectiveness and/or are currently illegal in Pennsylvania.

⁴ Except to the extent otherwise restricted by applicable law or PGC regulations, for purposes of this Plan, "archery" and "bow hunting" shall include both long bows and crossbows.

⁵ The Borough has been quoted \$189 per deer taken by Eccologix Biodiversity Consulting Group.

will actively monitor the hunting activity to insure compliance with the approved plan and progress towards the goal.

LONG RANGE PLANNING

It is not the Borough's intent to eliminate all deer, rather the intent is to reduce the deer population to an ecologically sustainable level. For the safety of the residents as well as the ability of residents to use and enjoy the Borough's parklands, it is imperative that the Borough monitor the progress of the project to be able to determine when suspension of hunting and/or culling is advisable. The primary indication of this will be the ability of the native trees and plants to regenerate year on year. The EAC is tasked with developing a plan to monitor this. At a minimum, this will involve training volunteers to periodically observe and record their findings and to report their findings to the Chair of the EAC. Ideally, the monitoring effort will involve the creation of one or more fenced enclosures and comparison areas. This should be done at little or no cost to the Borough. Possible solutions include grants, private donations, use of volunteers, partnerships with local schools and universities and Boy Scout projects to fund, construct and maintain the enclosures and to evaluate the results.

Qualified observers from the EAC or under its supervision will evaluate the success of the deer management program and determine the number of deer to be removed in a given year by tracking indicators of forest health, separately for each of the three parks and for each of the three or four major forest types within the parks. Such indicators and their target ranges may include, for example: density of seedlings 3–5 feet tall of large-seeded native trees (oaks, hickories, walnut)—at least 5 per 100 square feet on average; density of saplings 5–10 feet tall of large-seeded native trees—at least 2 per 100 square feet on average; proportion of native to total forest understory herbaceous plants and shrubs—75–95%; cover of native forest understory shrubs overall—25–75%; survival and spread of the native forest understory species planted by the EAC and other volunteers—75–100% of planted species.

THE MANAGEMENT PLAN

1. Council should approve a limited bow hunt in 2010 by Eccologix Biodiversity Consulting Group and enter into a letter of understanding with them as described above, through such dates and at such times as Council approves and Eccologix agrees. It is recommended that the bow hunt run at least through November 19 to include the fall mating season, as that is a particularly auspicious time for hunting. It is further recommended that the hours authorized for hunting include at least two hours of active hunting after sunrise and at least two hours of active hunting before sunset. Hunters will be authorized to mobilize and demobilize before and after such active hunting hours.
2. As part of Action #1 above, Council should authorize Eccologix to conduct a bow hunt every year on the same conditions as above unless changed by action of the Council; provided that the bow hunt for 2011 and succeeding years should begin no later than the first Monday in October through the third Friday in November. These bow hunts shall continue until Council decides otherwise, with the input of the EAC based upon the EAC's progress-monitoring activities.

The EAC is encouraged to identify other potential bow hunting groups and to develop criteria for evaluating their suitability as potential alternate future providers of hunting and/or culling services.

3. In the event that the goal of 27 deer is not met through the bow hunt on public lands, as supplemented with confirmed reports of deer taken on private lands within the Borough, a cull performed by Eccologix in 2011 shall be authorized for the balance, provided that private funds are found to pay the cost to the Borough of \$189 per deer taken. The dates for the cull shall be as set by Council, but it is recommended that the cull be authorized to take place on January 31 through February 28, excluding weekends. The cull should be performed between sunset and sunrise if feasible. In contrast to the bow hunting, which shall continue from year to year until suspended by Council, the default rule for culls is that there will be no future culls unless authorized by Council each year.

Due to the anticipated length of time it takes for the PGC to approve an application for the cull, Eccologix should be asked to prepare and submit the application now, notwithstanding that the Borough may not have located private funding to have the cull performed. If an application for a cull is prepared by Eccologix, the EAC shall appoint a contact person to assist in that process and to liaise with PGC personnel as needed.

4 The Borough shall notify all residents of the dates that hunts and/or culls may take place. The notice shall encourage residents to report illegal or unauthorized hunting activities to the PGC's regional office in Reading, PA. The notice shall also warn residents that harassment of hunters is a crime under Pennsylvania law. Finally, the notice shall encourage any resident who permits hunting activities on their land to notify the EAC of any deer taken so that such can be counted against the Borough-wide goal. In addition, signs shall be prominently posted at all entrances to the Borough-owned areas where hunting/culling is permitted to provide notice to residents and other visitors that hunting activities may be taking place at that time. These signs will be removed at the conclusion of the hunting and culling periods.

5. Council hereby tasks the EAC to develop a forest vegetation monitoring plan to track the progress and effects of the reduction of the deer population. The monitoring plan shall propose the creation of exclosures at no or low cost to the Borough. EAC shall provide a copy of the plan to Council and shall periodically report on the results, as well as make recommendations for future hunting and/or culling.

6. In order to help prevent any unauthorized hunting on Borough-owned lands, the Borough shall also post additional signage throughout the Borough-owned lands stating that no hunting is permitted without the Borough's advance written consent in accordance with Borough ordinances.