BURNSVILLE DEER MANAGEMENT PROGRAM

Prepared by: City of Burnsville Natural Resources Staff

2024-2025 Program Year Annual Report

Introduction

The City of Burnsville (City) prepared a Natural Resources Master Plan in 1999 which identified the need for a citywide deer management program, especially for areas where woodland restoration or regeneration is a high priority objective. This, along with concerns regarding the biological integrity of the City's natural areas, increasing complaints about nuisance deer, car/deer crashes, and concern over the long-term health of the deer herd, initiated the preparation of a deer management program for Burnsville.

The Burnsville Deer Management Program (Program) was adopted in September 2001 to minimize conflicts between deer, habitat, and residents. The Program provided recommendations in four key areas: education, monitoring, population control, and deer feeding issues. The Program runs from April 1st of one year to March 31st of the following year. This schedule allows Program activities (archery hunts, aerial counts, sharpshooting removals, etc.) to coincide with the appropriate seasons (aerial counts completed with snow cover, archery hunts during the deer rut, sharpshooting completed during the winter to minimize the impact on residents who use the parks).

This annual report has been prepared to document the Program activities during the 2024-2025 Program Year. This report also provides recommendations for the 2025-2026 Program year.

Education

The Program made a number of recommendations regarding education – including use of the City's website, City's newsletter, and a neighborhood workshop. The intent of the education component is to disseminate information to the community regarding the Program, feeding ban, and other deer related topics, and to provide residents with tools to cope with deer on their property.

Program information is available in the Wildlife Section of the City Natural Resources Department's webpage within the City's website (www.burnsvillemn.gov). Information regarding the Program and feeding ban is periodically included in the City's newsletter, the *Burnsville Bulletin*.

Monitoring

Annual monitoring of the deer population, car/deer crashes, depredation complaints, and habitat diversity are all components to managing the deer population within the City. The following section presents the monitoring data collected during 2024 through early 2025.

Aerial Counts

Typically, an aerial deer survey is conducted every winter to count the deer population within Burnsville. Since 2018, this survey has been conducted by Three Rivers Park District staff. The Park District also flies surveys within Murphy Hanrehan Park Reserve and for other Cities in the metro area.

Park District staff conducted the Burnsville deer survey on February 21, 2025. There were 265 deer counted within the survey area. The approximate locations of deer seen during the survey are mapped in **Figure 1**. **Table 1** shows a comparison of the aerial count data per management unit from 2014 through early 2025.

Table 1: Comparison of Annual Aerial Count and Population Estimate Data for past 10 program vears

| Units | Aerial Counts or Population Estimate | | | | | | | | | | |
|-------|--------------------------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|-----------------|-------|
| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 |
| NW | 45 | 1 | 1 | 64 | 12 | 50 | 67 | 20 | 11 | 14 | 41 |
| WC | 17 | 0 | 0 | 17 | 6 | 0 | 0 | 12 | 0 | 0 | 13 |
| SW | 49 | 29 | 30 | 70 | 32 | 67 | 68 | 53 | 28 | 20 | 33 |
| NE | 37 | 12 | 16 | 83 | 34 | 62 | 73 | 37 | 41 | 33 | 102 |
| EC | 12 | 14 | 12 | 39 | 30 | 19 | 12 | 32 | 26 | 1 | 62 |
| SE | 12 | 0 | 0 | 40 | 21 | 23 | 10 | 36 | 0 | 0 | 14 |
| Total | 172 ^b | 56 ^b | 59 ^a | 313 ^b | 135 ^b | 221 ^b | 230 ^a | 190 ^b | 106 ^b | 68 ^a | 265 b |

^a Represents a population estimation based on previous year's count (as no aerial count was completed due to poor snow conditions).

From the beginning of the deer management program through 2018, City staff conducted the aerial deer surveys. Since 2019, Three Rivers Park District staff have conducted surveys for the City. The survey methods used by City staff and the Three Rivers Park District staff are similar and subject to the same limitations. Large differences in aerial deer counts from year to year are often the result of a combination of variables, such as observational bias and the distribution of the local herd at the time the counts were undertaken. In some years, the deer herd may temporarily concentrate in areas adjacent to but outside of the City limits. Combined with other factors such as weather severity and snow depths, these seasonal movements can impact the aerial deer count numbers. The aerial survey is intended to represent the minimum number of deer present, not provide an exact count of the deer population within the City. The aerial count provides the baseline data from which management decisions can be made.

Crash Data

The total minimum number of car/deer crashes for each year is determined by combining Police Department records with non-overlapping records from the City's animal control contractor, who retrieves deer carcasses reported along roadways (some are from incidents that the Police responded to, others are not). The total car/deer crashes are considered a minimum number due to the likelihood that some accidents go unreported.

In 2024, the total minimum number of car/deer crashes was 52. A summary of the 2024 crash data by management unit is provided in **Table 2**. **Figure 2** shows the distribution of car/deer crashes and/or deer carcass removals within the City.

Table 2: Comparison of Car/Deer Crash Data for past 10 program years

| Units | Crashes ^a | | | | | | | | | |
|-------|---------------------------|---------------------------|------|------|------|------|------|------|------|------|
| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
| NW | 0 | 0 | 0 | 3 | 1 | 1 | 1 | 3 | 1 | 2 |
| WC | 4 | 2 | 1 | 8 | 5 | 2 | 4 | 5 | 3 | 3 |
| SW | 13 | 9 | 11 | 14 | 14 | 15 | 16 | 14 | 12 | 10 |
| NE | 4 | 5 | 3 | 6 | 5 | 3 | 1 | 5 | 5 | 6 |
| EC | 7 | 6 | 7 | 11 | 17 | 8 | 13 | 11 | 15 | 14 |
| SE | 2 | 12 | 5 | 12 | 13 | 11 | 9 | 15 | 15 | 17 |
| Total | 30+2 ^b = 32 | 34+1 ^b =3 5 | 27 | 54 | 55 | 40 | 44 | 53 | 51 | 52 |

^a Crash numbers include reported crashes and non-overlapping carcass removals.

^b Aerial count includes incidentally observed deer within 0.25 miles of the city limits. Deer observed as part of a systematic search of areas outside the City were not included.

^b Indicates carcass collection data that could not be identified by location due to incomplete information.

Monitoring Report Forms

The City created a Deer Monitoring Report Form in October 2001 to provide supplemental information on the deer population. The monitoring form includes four categories for reporting information. The categories are deer depredation (i.e., damage to vegetation), general observation of deer presence and behavior, deer carcass reports or vehicle/deer crash reports, and "other." The "other" category has included past comments regarding the Program, feeding ban violations, offers to provide hunting access, and miscellaneous information related to deer management.

Forms are generally submitted electronically through an online form on the City website. City staff also submit monitoring reports on behalf of residents who call or email staff directly with general observations or complaints related to deer.

In 2024-2025, 1 report was submitted to or recorded by the City. The report was for landscape depredation issues in the east central unit.

Depredation Complaints and Observations Units 2015-2016-2017-2018-2019-2020-2021-2022-2023-2024-NW WC SW NE EC SE Total

Table 3: Comparison of Depredation Complaints for past 10 program years

Exclosure Data

Since 2001, the City has conducted a demonstration study on deer impacts to vegetation in Terrace Oaks Park. To look at impacts by deer, some study plots are fenced (exclosed) to prevent deer browse and other study plots are unfenced (non-exclosed) so deer can browse freely. It is important to note that the deer population has been managed throughout the course of the study, and the study results do not represent the potential deer impacts that might occur if the deer population was completely unmanaged.

In an analysis of the survey results from 2001 through 2015, the City found that deer were impacting native vegetation at the park. The average yearly percent cover of native understory plant species was much higher in the fenced plots versus the unfenced plots, indicating that deer browse may have reduced the native vegetative cover in unfenced plots. Specific plant species also showed differences between fenced and unfenced plots, such as the native gooseberry shrub which showed higher yearly percent cover in the fenced plots compared to the unfenced plots. This may indicate deer are preferentially feeding on some plant species more than others. Plant species preferred by deer are more negatively impacted than those that are less preferred.

During the 2016-2017 Program year, the City modified the study to look at additional factors that impact vegetation growth at the park. An active savanna restoration project has been initiated adjacent to the current study plots. This restoration has involved the removal of fire intolerant weedy tree species (e.g. - box elder, elm), the introduction of controlled burns and the supplemental seeding of a diverse mixture of native wildflowers and grasses. These restoration practices were expanded to the study plots so they can be used to test the impacts of various restoration techniques (e.g. - controlled burns, supplemental native seeding), as well as to continue to test the impacts of deer.

In winter of 2015-2016, fire intolerant trees were removed from the vicinity of the study plots. In fall of 2017, a controlled burn and supplemental native seeding occurred within study plots that have been selected for those treatments. This has been the fourth year of data collection for the re-designed study.

The findings so far have been similar to previous results. In general, more overall native plant cover is still being observed in the fenced plots when compared to the unfenced plots. Certain plant species are still more prevalent in unfenced plots. Growth of native tree saplings has increased significantly since fire intolerant trees were removed from the vicinity of the plots. No major difference in woody sapling growth was noticed between fenced and unfenced plots. This may indicate that while deer are impacting tree sapling growth at Terrace Oaks Park, available light may be more of a limiting factor in tree regeneration in some situations than deer browse.

The exclosure plot study is expected to be discontinued after 2025 due to sufficient data having been collected through the lifetime of the project.

Population Control

The Program approved two primary population control strategies: archery hunting and sharpshooting. Based on the projected population for November 2024 (as presented in the 2023-2024 Annual Report), the harvest range for potential deer removals during winter 2024-2025 was 0-24 deer.

Since the November 2024 population projection showed the population within the goal ranges for all management units, the City did not conduct any sharpshooting removals or host any archery hunts during winter 2024-2025.

Table 5: 2024/2025 Removal Results

| Units | Recommended Fall/Winter 2024/2025 Harvest ^a | Fall 2024 Archery Hunting | Winter 2024/2025 Sharpshooting | Total Deer Removed in Fall/Winter 2024/2025 | |
|-------|--|------------------------------|-----------------------------------|---|--|
| NW | 0-8 (No Access) | 0 | 0 | 0 | |
| WC | 0 | 0 | 0 | 0 | |
| SW | 0-2 | 0 | 0 | 0 | |
| NE | 0-14 | 0 | 0 | 0 | |
| EC | 0 | 0 | 0 | 0 | |
| SE | 0 | 0 | 0 | 0 | |
| Total | 0-24 | 0 | 0 | 0 | |

^a Based on adjusted 2024 deer counts, projected population for November 2024, and program goal of 15-25 deer per square mile of preferred habitat (as presented in the 2023-2024 Annual Report).

Feeding Ban

A feeding ban ordinance was approved by the City on September 17, 2001. The purpose of the feeding ban is to discourage residents from placing corn or other grains in amounts and locations that would attract deer to the area. No violations to the feeding ban ordinance were reported and followed up on in 2023-2024. Violations are followed up on with a notification letter and further enforcement action if needed. **Table 6** identifies the number of feeding ban violations per program year.

Table 6. Feeding Ban Violations for the past 10 program years

| Program Year | Feeding Ban Violations |
|--------------|------------------------|
| 2015-2016 | 0 |
| 2016-2017 | 2 |
| 2017-2018 | 1 |
| 2018-2019 | 2 |
| 2019-2020 | 2 |
| 2020-2021 | 1 |
| 2021-2022 | 3 |
| 2022-2023 | 0 |
| 2023-2024 | 0 |
| 2024-2025 | 0 |

Recommendations for Program Year 2025-2026

Education

It is recommended that the City continue to provide information via the website and the *Burnsville Bulletin*. Information regarding the deer feeding ban should be a focus of education efforts.

Monitoring

It is recommended to continue collecting annual aerial counts and crash/carcass pickup data. Rather than producing a longer summary report, in future years, it is recommended to move towards a shorter, 1-2 page summary report.

Population Control

Utilizing the aerial survey count from February 2025, a population projection was calculated for November 2025. The fall projection accounts for typical reproduction and mortality factors and is similar to methods used by the DNR. The population projection was then used to determine Program Year 2025-2026 harvest goals.

Table 7 provides a breakdown (by management unit) of the Program's ongoing deer management density goals, the 2025 aerial count (February), the projected 2025 population (November), and the minimum removal recommendations for the 2025-2026 Program.

Table 7: Program Year 2025-2026 Population Control Recommendations

| Units | Management Program Goal (15-25 deer/mi²) | 2025 Population Count (February) | Projected 2025 Population (November) | Potential Fall/Winter 2025-2026 Harvest Range ^a | Recommended Minimum Fall/Winter 2025-2026 Harvest |
|-------|---|---|---|---|---|
| NW | 11-19 | 41 | 56 | 37-45 | NO ACCESS |
| WC | 3-6 | 13 | 18 | 12-15 | 12 |
| SW | 25-42 | 33 | 45 | 3-20 | 3 |
| NE | 31-52 | 102 | 139 | 87-108 | 87 |
| EC | 12-20 | 62 | 84 | 64-72 | 64 |
| SE | 4-7 | 14 | 19 | 12-15 | 12 |
| Total | 86-146 | 265 | 361 | 215-275 | 178 |

^a Based on the projected population for November 2025, and the program goal of 15-25 deer per square mile of preferred habitat.

It is recommended that archery hunting be organized at Kelleher Park within the Southwest Unit. It is recommended that the focus for sharpshooting efforts be the Northeast, East Central and Southeast Units. Sharpshooting could be considered in the West Central Unit but it is recommended that this unit be lower priority due to the lower population and fewer deer related conflicts in this area.

Feeding Ban

No changes to the deer feeding ban are recommended. It is recommended to continue to provide information to the public regarding the ban and continue to monitor and follow-up on feeding complaints as they occur.







