# City of Commerce City Wildlife Management Plan



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## **Overview**

Wildlife and its habitat are significant factors in the quality of life enjoyed by the citizens of the City of Commerce City. The presence of various species of wildlife provides numerous biological, economic, recreational, psychological, and spiritual benefits to the community. The wildlife species found in Commerce City are more than local amenities; they are an integral part of the ecology that sustains life in Commerce City while helping define the character of the region. The responsibility for protecting Commerce City's wildlife resources is a joint one, shared by elected officials, City of Commerce City staff, and others.

The purpose of the City of Commerce City Wildlife Management Plan is to establish a specific framework for the humane management of wildlife within the City of Commerce City.

This Plan recognizes the programs and the regulations of the Colorado Division of Wildlife. The intent of the Plan is to build on this existing foundation, and in no way to supersede it.

## **Wildlife Management Goals**

The overall wildlife management goal in Commerce City is to manage city-owned land (park, trail, open space) as natural systems, encouraging and enhancing healthy, balanced ecosystems.

## **Conservation and Management of Native Wildlife Populations**

The City will strive to sustain native animal life in a suitable habitat with population numbers that do not exceed the carrying capacity of that habitat;

#### **Integrated Pest Management**

Pests (i.e. non-native plants or animals that interfere with the natural life cycles of species native to natural areas within Commerce City) will be considered for control to reduce the unfavorable conditions they may create.

The public may perceive many native plants, fungi, insects, rodents, and other species as pests. They will be considered for control only if the species:

- Harms or destroys natural resources in parks or open space area;
- Poses a human health hazard as defined by the Centers for Disease Control, Colorado Department of Health, or the Tri-County Health Department;
- Threatens public safety.

## **Specific Species Management**

### **Prairie Dog Management**

In accordance with the Commerce City wildlife management goals, prairie dog populations will be managed with the following objectives:

- 1. Maintain healthy prairie dog colonies;
- 2. Minimize degradation of natural resources;
- 3. Minimize damage to public and private property;
- 4. Minimize possibilities for future conflicts between prairie dogs and humans;
- 5. Minimize human health or safety hazards.

## **Background Information**

Prairie dogs occur only in North America. They are rodents within the squirrel family. Generally, the black-tailed prairie dog (Cynomys ludovicianus) occurs east of the other four species in a habitat with more moisture, and this is the only species found in Commerce City.

Prairie dogs are small, stout ground squirrels. The total length of an adult black-tailed prairie dog is approximately 14-17 inches. The weight of an individual ranges from 1 to 3 pounds. Individual appearances within the species vary in mixed colors of brown, black, gray, and white.

#### Location

The historic range of the black-tailed prairie dog included portions of 11 states, Canada, and Mexico. Today it occurs from extreme south-central Canada to northeastern Mexico and from approximately the 98<sup>th</sup> meridian west to the Rocky Mountains. The species is currently present in 10 States including Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming.

In Colorado, black-tailed prairie dogs live in suitable habitats throughout the eastern half of the state, east of the Rocky Mountain foothills. The black-tailed prairie dog has experienced a precipitous decline from its historic numbers, but has been stable to increasing over the past 40 years.

Black-tailed prairie dogs spend most of the day above ground and they do not hibernate. The species is very social, living in population aggregations called colonies, towns, or villages.

## **Ecology**

Prairie dogs act in several roles. They prey, provide shelter, modify vegetation, and influence ecological processes in a manner not entirely duplicated by other prairie herbivores. At least nine other wildlife species depend directly on prairie dogs or their activities to some extent; the most obligatory species of this group is the endangered black-footed ferret, which relies almost solely on prairie dogs for sustenance.

In accordance with the Commerce City wildlife management goals, prairie dog populations will be managed under the following guidelines:

## **Guidelines for managing a prairie dog colony**

- 1. Prairie dog population exceeds carrying capacity and/or results in destruction of natural resources. When there is 20% bare ground within a colony's boundary, this indicates the carrying capacity within that specific geographic area may have been met or exceeded. If the population exceeds 50 prairie dogs per hectare (20 per acre), this is also a good indicator that the carrying capacity has been exceeded in an area (Seery 1997). Site-specific analysis with guidance from the Colorado Division of Wildlife will determine if natural resources are being destroyed. The lack of predators, high levels of outdoor recreation use of parks and open space, and conflicts with adjacent residential and commercial properties dictate that prairie dog populations be best managed at 80% or less of the carrying capacity for that specific site.
- 2. Destruction of the City of Commerce City landscaping. The City of Commerce City Parks Maintenance Staff may manage colonies if prairie dogs are damaging or encroaching on city-owned and maintained landscaping.
- 3. *Human health hazard*. The City of Commerce City staff will monitor prairie dog colonies for evidence of sylvatic plague. If any evidence is noted, it will be reported to the Colorado Division of Wildlife and to the Centers for Disease Control, Colorado Department of Health, and the Tri-County Health Department.
- 4. *Trail safety*. Trails will be monitored to identify any human safety risks resulting from burrows. Burrows that could result in bodily injury will be noted for possible management.
- 5. Noxious weed invasions of prairie dog towns. Prairie dog colonies on city owned land can present ideal conditions for noxious weed growth. Noxious weeds will be dealt with in accordance with the City's Open Space Maintenance Plan. Trimming, removal of weeds, and other mechanical control methods will be the primary means of eradicating noxious weeds in and around prairie dog towns, Use of herbicides will be considered on a case-by-case basis after consulting with the Colorado Division of Wildlife.
- 6. *Planned Development*. Removing a prairie dog colony, when deemed necessary by the City of Commerce City, may occur up to one year before an area is developed or slated for any construction activity including trails, parks, streets and utility improvements.

### **Management Options: Prairie Dogs**

### **Burrow Flushing**

Permits required

- Colorado Division of Wildlife: 120-day relocation permit.
- Landowner Permission: Written permission of landowner of receiving sites.

## Methodology

- Survey town to estimate number of prairie dogs and locate centers of activity.
- Flea dusting of burrow entrances (using Pyraperm7 pyrethroid insecticide) must take place 7 days prior to flushing. Application will be consistent with any insecticide BMP's in the City's Stormwater Plan. Notification (posting of property) must take place a minimum of 24 hours before application.
- Participants handling prairie dogs must have tetanus vaccinations.
- Contact receiving location, inform participants one day in advance.

## **Live Trapping**

Permits required

- Colorado Division of Wildlife: 120-day relocation permit.
- Landowner Permission: Written permission of landowner of receiving sites

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## Methodology

- Flea dusting of burrow entrances (using Pyraperm7 pyrethroid insecticide) must take place 7 days prior to flushing. Notification (posting of property) must take place a minimum of 24 hours before application.
- Participants handling prairie dogs must have valid tetanus vaccinations.
- Three days prior to trapping multiple traps will be placed at the entrance of each burrow showing signs of recent prairie dog activity. Traps will be prebaited and secured open for 3 nights/days (rebaiting as necessary).
- Contact receiving location, inform participants one day in advance

## **Prairie Dog Fencing or Visual Barriers**

Visual barriers help control the movement of prairie dogs by providing a visual blockage that the prairie dog is hesitant to approach. Although they are not a complete solution to the problem of confining prairie dogs to specific areas, they are an important component of an effective integrated prairie dog management program. In contrast with other techniques, visual barriers can provide a humane and passive means of controlling the prairie dogs movement. Visual barriers are constructed from burlap, woven plastic material or windrows of small pine trees.

#### **Lethal Control**

If none of the options described above are effective or practical, to the discretion of the City, then the City may retain the services of a professional exterminator to eradicate all or part of a prairie dog colony on City Open space or other City-owned or City-managed land. Acceptable methods are currently limited to fumigation. No other means of lethal control such as poison bait or shooting shall be used to eradicate prairie dog colonies on City-owned or City-managed lands. The City shall not approve any exterminator with a prior violation of a State permit.

Extermination of a prairie dog colony by the City shall be performed by a licensed exterminator. Only toxicants approved by the U. S. Environmental Protection Agency (EPA) shall be used. Currently, these toxicants include zinc phosphate (an oral toxicant), aluminum phosphide pellets (a fumigant), and carbon monoxide gas cartridges (a fumigant).

## **Canada Goose Management**

## **Background Information**

Overview

There are 11 subspecies of geese and most migrate and nest exclusively in northern Canada. The bird that is most commonly a problem is the "giant Canada goose". Known for its large size and long neck, it can weigh 14 to 20 pounds and is the largest of all Canada goose species. This species was once hunted so extensively that it almost became extinct in the 1920's. Wildlife management, including hunting restrictions and captive breeding and restocking programs, and agricultural practices are largely responsible for today's healthy populations.

#### Food

Geese are grazing birds that eat a varied diet. They eat the roots, shoots, stems, seeds, and leaves of grass, sedges, grain, bulbs, and berries. They also eat insects and aquatic invertebrates. Geese often spend the winter in agricultural areas where they feed on post-harvested grain and foliage. Geese generally feed in early morning and late afternoon.

#### **Guidelines for Managing Canada Geese**

The local resident goose population has had a different impact on the public's perception of these birds. Too many geese on public parks, ball fields, beaches, golf courses, and residential lawns can create nuisance problems and occasionally public health problems. Geese can litter an area with their droppings. Large flocks of geese can impact water quality. Large nutrient and fecal bacteria loads from geese droppings can contribute toe algal blooms and elevated bacterial counts in waterways. Geese can cause economic damage when feeding on newly planted farm crops, winter cover crops, and pasture areas. Such nuisance problems can cause the public's attitude toward geese to change from regarding them as an asset to a liability.

There are no easy solutions to nuisance goose problems. Canada geese are persistent when they have become habituated to an area.

#### Feeding Sites

Geese may have between 5 and 12 feeding sites where they can travel to graze and forage. These can generally be identified by small or large concentrations of geese feeding in a given area at a specified time during the day and generally not at sunrise or sunset. Geese choose feeding sites because of an attractive, plentiful food source and the perceived safety of the site.

## **Management Options: Geese**

#### **Turf Treatment**

Chemicals, such as Flight Control and Liquid Fence, when applied to the feeding site can deter geese from feeding, encouraging them to abandon the feeding site. Eating treated turf makes the geese experience a temporary yet effective digestive irritation minutes to hours after feeding. Eventually geese associate the UV absorbing material on grass leaves with the digestive irritation.

#### **Habitat Modification**

Since geese prefer areas where they have easy access between food, water, and nesting sites, barriers can be an effective deterrent in discouraging resident geese.

Barriers (Vegetative, Rock, Fences, Grids)

- a) Vegetative barriers can be established by simply reducing mowing.
- b) Rock barriers consisting of boulders at least two feet in diameter can be placed along the shoreline of a body of water.
- c) Fence barriers will physically prevent geese from walking out of the water into feeding areas.
- d) Grids are a network of parallel or criss-crossed lines or wires that are supported over the top of the body of water.

### **Noisemaking Devices**

Noise harassment has proven to be effective in moving geese out of an area when implemented correctly. Visual harassment has been less successful. Any use of noisemaking devices must comply with City ordinance.

- a) Air horns or whistles
- b) Blank pistols
- c) Bangers, screamers and whistlers-specialized projectiles
- d) Cracker shells-fired from a 12 gauge Shotgun
- e) Propane cannons-produces a loud blast
- f) Fireworks
- g) Recorded goose distress calls
- h) Ultrasonic devices

#### Visual Devices

- a) Motion sensor lights
- b) Flags or eye spot balloons
- c) Dead goose or predator decoys
- d) Mylar tape
- e) Scarecrows
- f) Dogs- work well, but are costly
- g) Remote controlled boats, cars or planes
- h) Hand held lasers

#### **Water Spray Devices**

- a) Garden Hose or sprinkler
- b) Motion activated sprayer

#### **Combined Strategy Approach**

The most successful goose management programs incorporate multiple methods. The combined effects of two or more of the techniques listed above may provide a much more satisfactory result than relying on a single method.

## **Other Wildlife Management Challenges**

This section will deal with wildlife species of which individuals or groups may represent a management issue or "problem" for the City. Examples include animals that represent a health or safety hazard to humans, cause significant property damage or loss on Cityowned lands, or consume significant amounts of staff time and City budgets to address. In considering the management of wildlife problems, it is important to remember the following:

- Concerns that exist will be addressed at the level of the individual animal, family group, or population; that is, no entire species is a problem.
- Problems that occur on City lands or consume staff time and budgets can often be the direct or indirect result of conditions or actions by citizens on private lands.
- City staff should not take responsibility for dealing with problem wildlife on
  private land, unless the problem is the direct result of an action taken by the city.
  However, the city should refer citizens to the Colorado Division of Wildlife for
  information on how best to avoid, minimize, or deal with problems related to
  wildlife.
- Many wildlife problems in Commerce City are the result of species adapting to, and in many cases thriving in, urban or suburban environments.
- Wildlife problems also occur as a result of new developments expanding into wildlife habitat, but these are generally transitory until the individual animals or populations adjust to or relocate to avoid the human presence and changed environment. This could be an issue in Commerce City's Northern Range area.

A variety of wildlife species could become a management issue in the future including moles, beavers, pocket gophers, voles, coyotes, foxes, birds, aquatic organisms, etc. Management of these species will be consistent with the wildlife management goals set forward in this plan. This plan is a working document and may be amended if additional species need to be addressed individually, if new management techniques become available or if other updates are necessary.