



City of Foster City

CANADA GOOSE POPULATION MANAGEMENT PLAN

Overview

In response to the rising concerns about the number of Canada goose and the excrement they leave on Foster City beaches, playfields, parks, and walkways, creating a potential public health hazard and diminishing the community's ability to safely enjoy outdoor recreational amenities, the *Foster City Canada Goose Population Management Plan* is a framework by which the City may respond to public safety issues and work towards reducing overpopulation of Canada Goose. This plan provides an update on actions taken to date and identifies the next steps towards mitigating the geese population in Foster City.

The plan outlines strategies for population reduction and also provides a guide for City staff and members of the public to address Canada goose removal if necessary. It should be noted that the purpose of this plan is to be a guiding document and as such, the techniques prescribed will only be implemented as needed.

Background and Past Efforts

Most regional surveys show that Canada goose numbers are either increasing or stable, but overall they are at unprecedented numbers due to overpopulation. In the City of Foster City, the increasing number of Canada Goose has led to increased conflict and concern among human residents.

To keep the goose population at appropriate levels, for many years the City has implemented several management tactics. Some of these techniques have been implemented independently, as well as in conjunction with others, all with varying degrees of success. The chart below provides a summary of measures attempted through the years.

PAST AND CURRENT EFFORTS TO ADDRESS GEESE POPULATION MANAGEMENT		
Method	Description	Did it Work?
Dog Hazing	Dogs used to harass and 'stalk' geese making them feel less secure from predators.	Yes. This approach is temporary and tends to push geese to other properties.
Strobe Lights	Currently the City uses two strobe lights that were strategically placed at Leo J. Ryan Park.	No. No noticeable effects on the Goose behavior and bothersome to public.
Egg Addling	Keeping goose eggs from hatching curtailing reproduction so fewer geese will nest at a given site in the future.	Yes. Noticeable reduction in goose population can take several years as geese can live for upwards of 20 years.
Fence Barriers	Installation of various fencing to deter geese from entering water, limiting their access.	Yes. Fairly effective, but time-intensive to install and adjust as geese adapt, and barriers detract from parks.
Goose Deterrent	Liquid deterrents applied to lawn areas that is repulsive to geese.	Yes. Minor effectiveness and mixed results for a short-term basis, but strong odor.

While control efforts, both in Foster City and throughout the region, have been extraordinary, the regional non-migratory goose populations continue to increase.

Concerns

Canada Goose present an inherent concern in that they may cause damage to City areas as a result of overgrazing turf grass and landscaping, excessive bird-fecal accumulations, aggressive nesting behavior towards the public, and human health and safety hazards (i.e., disease transmission, traffic hazards when geese cross roads).

The majority of complaints with Canada Goose involve accumulations of feces on lawns and walkways at homes, schools, and public parks, compromising the overall quality of life, and having the potential to pose serious health threats due to the presence of disease-causing organisms.

Due to their inefficient digestive systems, grazing habits and molting patterns, geese do pose a risk to human health and safety. Canada Goose and their fecal matter can cause a deterioration in water quality in the City's surrounding water bodies (i.e., lagoon and beaches).

1.1 General Health and Avian Influenza Risks

Potential health risks posed by the abundant droppings of the Canada goose are a relatively untouched area of study as the urban goose concentrations are a relatively new phenomenon. Locally, high bacteria levels partly attributed to goose droppings have been identified in the Foster City lagoon and beach areas. Since 2017, these findings have resulted in mandatory beach closures after analysis of water samples for beaches at Erckenbrack Park, Marlin Park, and Gull Park.

Due to the fact that it is possible to contract disease from goose fecal matter, there are general recommendations for areas where these droppings may be present.

1. Wash hands, clothes and sports equipment immediately after exposure
2. Small children, pregnant women or immune-compromised individuals should avoid areas with high concentrations of droppings
3. Small children who may put hands in their mouths should not be placed in contact with these areas

Currently there is also concern with a potential pandemic threat of avian influenza (otherwise known as bird flu or the H5N1 virus). At present, there appears to be three likely scenarios for bird flu. From best to worst they are:

1. The virus will lose its virulence and while still spreading be less of a threat to humans and birds. This is hypothetical, based on changes between influenza strains found in the past and current flu outbreaks.
2. The virus will remain as it is and be spread widely by migratory birds. Management of bird/bird and bird/human contacts is and will continue to be required to follow the spread of the virus.
3. The virus will mutate and be transmitted human to human. This could produce a worldwide pandemic and would need to be addressed by the development of effective rapid quarantine methods and production of a vaccine.

1.2 Addressing Water Quality Impacts and Sampling

The City of Foster City, as a component of its Lagoon Management Plan, will contract with a lagoon water management company to help understand the best methods to reduce the bacteria levels in the lagoon. This can be achieved by several different methods including: chemical, mechanical, outreach programs, and wildlife population control. Additionally, lagoon water testing otherwise known as the "Fecal Indicator Bacteria (FIB) Monitoring Program" will continue (at least through March 2022) to provide a baseline data set that will assist in investigating sources of bacteria to Foster City Lagoon and the seasonal variability in such sources. Sampling will also help confirm data collected by County Environmental Health Services (EHS.)

Recommendations

The most effective strategy for alleviating resident Canada goose conflicts is an integrated mitigation plan to reduce the overall local population of geese. This involves curtailing reproduction, site aversion, and habitat modification to discourage and/or limit the number of birds in certain areas. Throughout the year an integrated goose program may include a combination of tactics.

2.1 Goals and Measures

The *Foster City Canada Goose Population Management Plan* is meant to target specific areas, where public health, safety, and property damage are at risk due to increased populations. The City's goal is to systematically work on these aspects to help address these issues.

Staff has identified three goals for implementing a Canada goose management program.

1. The primary goal is to focus annually on the open, green space and water areas in the City of Foster City to reduce the Canada goose population and address community concerns.
2. The second goal is to evaluate and develop strategies annually that employ both short-term and long-term methods, such as creating physical barriers that deter geese from loafing on property and adding eggs to curtail reproduction.
3. The final goal will be to support other community public and private property owners to develop plans and implement processes of their own to reduce the number of Canada Goose on property not owned by the City of Foster City.

Effective geese management plans generally follow a seasonal timeline, and therefore, the City of Foster City will generally implement this plan during the spring, summer, and fall seasons.

2.2 Management Techniques

The options for Canada goose management are varied in type and meeting the goals as outlined will require the implementation of a broad set of techniques. Any one management strategy used alone will likely be ineffective for any significant length of time, since tolerance and habituation will likely occur. As a result, City staff will implement the use of an integrated management approach, where a number of techniques are applied in varying ways at unique times and locations. Staff understands that future reduction plans may require new management strategies that require adjustments or improvements.

2.3 Population Reduction

Nesting Management

Annual nest search and treatment will be conducted in localized areas. The areas to be searched and treated include suitable nesting habitat immediately adjacent to water body areas. Nest searches and treatment protocol will follow methods prescribed by the required U.S. Department of Agriculture and U.S. Fish & Wildlife Service permits. Permit conditions will be followed and reporting will be conducted on an annual basis. To facilitate future nest searches, the City of Foster City will continue to collaborate with the neighboring cities in an egg-adding effort. Over the years, a regional contractor has added thousands of eggs located at Bair Island, which generally won't make a noticeable impact in the population until a span of 20 years.

Removal and Disposition

Capture and removal of flightless, mixed age groups of geese during the spring/summer flightless period is an effective way to reduce localized population of geese during the peak golf course and park use time (May-September). The use of contractors to capture and remove for the disposition of geese is a management option for

consideration. Goose removal and disposition would need to be conducted according to the regulatory permit conditions.

Selective and occasional lethal removal of geese are also an effective complement to other nonlethal measures. Lethal removal of geese by means of euthanization is a management option. Such removal and disposition would also need to be detailed and conducted according to the regulatory permit conditions. Conditions would include the number of geese and the specific information about the methods to be used in their harvest and disposition.

Habitat Modification and Site Aversion

Site Modifications may include but are not limited to: no mowing areas, increase height of vegetation around ponds and creek banks, planting or promoting shrubs by natural willow colonization, landscape plantings, or added temporary or permanent barriers. The use of temporary snow fence, woven wire, fishing line, etc. that limits Canada goose access to the water areas during the spring, summer, and fall season may be considered. Any fencing that is installed would need to be removed prior to the winter season, and should be established in a manner that prevents geese from entering the fenced off area from the water or from the adjacent property areas. Staff may also expand use of strobe lights in and around water areas as well as stay up to date on all new technologies for goose reduction strategies.

Other techniques that may help with site aversion include liquid deterrents applied to lawn areas or fogging of the geese with a non-harmful chemical that will cause irritation and make the treated areas uninviting. The chemicals are not harmful to pets or other wildlife.

2.4 Public Information and Communication Plan

Informing the public about Canada Goose population management activities is an integral part of a successful goose management plan. Information will be shared through community publications, electronic tools, and public meetings. Signage or posted notices may also be developed for certain areas and activities if needed. All persons performing management activities will provide City staff with accurate and thorough information about goose management objectives, strategies, and schedules.

To incorporate early, open and ongoing communication, community engagement efforts may include, but is not limited to, the following means:

- City Webpage: A dedicated webpage on the City's website that will provide information regarding geese, past mitigation efforts, frequently asked questions, and a contact/comment form
- Factsheet: An informational handout summarizing the public health & safety issue, goals of the *Canada Goose Population Management Plan*, and where to learn more
- Brochure/Signage: Brochure for Parks Maintenance staff to hand out, as well as posted signage throughout parks to discourage members of the public from feeding birds
- Educational Video: An informational video that provides perspectives from different community stakeholders on the public health & safety issue
- Clean-Up Event: A community event that encourages public involvement and provides an educational opportunity for participants; related to Earth Day and sustainability efforts
- Press Releases: Periodic press releases advising the community of the public health & safety issues, providing notice and progress updates as different mitigation efforts are employed
- City's e-Newsletter: Sharing of relevant updates through the City's e-Newsletter (as needed)
- Social Media: Frequent posts through the City's social media platforms, including Facebook, Nextdoor, and Twitter (as needed)

2.5 Partner Relationships and Permit Requirements

Under the Migratory Bird Treaty Act (MBTA), Canada Goose are protected and are subject to the regulations of the Code of Federal Regulations, Title 50 - Wildlife and Fisheries. In general, state regulations follow federal regulations for the control of Canada Goose. The MBTA prohibits the "take" of protected migratory bird species without prior authorization (through a depredation permit) by the Department of Interior U.S. Fish and Wildlife Service. A depredation permit is required to control migratory birds that are causing, or if there exists the potential to cause serious damage. Depredation permits should only be sought after other deterrents have proved unsuccessful. They are intended to provide short-term relief for bird damage until long-term, non-lethal measures can be implemented to eliminate or significantly reduce the problem.

Coordination of all Canada geese population management activities will be communicated with the appropriate regulatory agencies, Parks & Recreation Department, Public Works Department, and the City Manager's Office. Population monitoring, permitting, annual reporting for egg addling and/or any other depredation permit, dates/conditions for permits, permit in possession while conducting activities, etc. will be the responsibility of City staff and all contractors employed to implement such services.

Lastly, City staff will explore opportunities for regional collaboration with other jurisdictions along the Peninsula that, too, experience persistent and increasing Canada Goose challenges as the population continues to rise. Foster City and its regional partners are engaged in an ongoing effort to elevate the goose population issue to the San Mateo County Health Department to determine whether the effects of the goose presence in the region constitutes a health emergency, which would expand the mitigation options available.

2.6 Staff Contact Information

Any questions regarding the *Foster City Canada Goose Population Management Plan* can be directed to: geese@fostercity.org.

ADOPTED: November 1, 2021 (via Minute Order No. 1816)

UPDATED: June 3, 2022 (non-substantive changes)