



Solving Problems with Canada Geese

A management plan and information guide



**THE HUMANE SOCIETY
OF THE UNITED STATES**

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The history

Once, Canada geese on a neighborhood pond were unusual. Now, Canada geese are considered a nuisance in many communities. How did this happen?

Decimated by hunting and habitat loss, the giant Canada goose (*Branta Canadensis maxima*) rebounded after wildlife managers found wild and captive flocks in the 1960s. They bred birds in captivity and relocated them throughout the U.S.

Giant geese aren't strong migrants. Captive-bred geese settled year-round in cities and suburbs where expansive lawns, parks, golf courses and artificial ponds made perfect goose habitats.

These resident flocks expanded, and by the mid-1980s, researchers were studying the new phenomenon of "too many" geese. Conflicts reached a point where the same state and federal agencies that had propagated Canada geese called for killing them.

The Humane Society of the United States objects to killing wild animals simply because they are regarded as nuisances. And killing will not solve the problem. The HSUS has helped many communities resolve human-geese conflicts with more humane and effective approaches. This guide offers a road map of these best practices for living with Canada geese.

About Canada geese

Canada geese are grazers and prefer grass, especially fertilized lawn grass. They tend to forage in areas with open sight lines and access to water where they can see and escape predators.

Mated geese pair off in late winter and defend preferred nesting sites—those near water with a good view of the surrounding area—from other geese. Geese strongly prefer to nest on islands and peninsulas and tend to use the same nest site year after year. They will also sometimes nest in less than ideal places, such as landscaped areas in parking lots, planters next to busy building entrances, or flat roofs.

Both parents defend the nest and goslings until the young are 10 weeks old and can fly. Within a day or two of hatching, parents may lead goslings as far as two miles to grass and water if their nest site does not offer these. In any interaction with Canada geese, do no harm to geese, goslings, eggs or even nests except as permitted by the U.S. Fish and Wild Service.

Adult Canada geese molt (completely replace flight feathers) each summer and cannot fly during this six-week period. After adults have completed the molt and young geese grow their first flight feathers, they begin to travel in flocks. Resident Canada geese usually move only short distances for the winter, but bad weather can cause them to move hundreds of miles in search of open water and forage.

Federal law protects Canada geese. It is illegal to harm geese, their eggs, or their nests in the United States without permission from the USFWS. Geese may be harassed or scared away without a permit as long as the geese, goslings, eggs and nests are not harmed. The USFWS allows resident Canada goose eggs to be treated to prevent hatching after registering online (details below).

About the conflicts

Geese graze on lawns. And where geese graze, they also defecate, raising the ire of people who use these areas. Sometimes, people express concerns about health and safety as well. Research has not found any significant health threats from goose feces. However, people want to avoid contact with any animal feces and abundant deposits on playing fields and in high-traffic areas make that difficult. In some places, geese may cross roads or forage near roadsides, creating a potential traffic hazard.

Nesting geese and parents of goslings protect their young. Approach a nest or family of goslings and you will provoke defensive reactions, but you'll rarely be attacked. When people are injured, it nearly always results from a startled person falling down rather than from direct contact with a goose.



You need a plan

To design an effective plan:

- Examine how, when and why geese are using the site.
- Select the best combination and timing of techniques to make your site less attractive to geese.
- Develop a plan for how you will apply these techniques at your site.
- Implement your plan.
- Monitor how it works, adjusting where needed.

The goal is to reduce the nuisance to an acceptable level. It is not possible, even if it were desirable, to eliminate geese from a community. So, solutions need to address the specific conflicts and the sites on which they are occurring—not attack all geese generally.

There is no single quick fix that will resolve human-geese conflicts at every site. But well-designed integrated programs can resolve conflicts.

GeesePeace™, an organization dedicated to building better communities through innovative, effective and humane solutions to wildlife conflicts, has developed an effective template that communities can adopt. This can greatly simplify your planning. See Sources of Additional Information, below, for contact.

Synergy. Effective plans get synergy from combining two or three of the following key components: curtailing reproduction, site aversion (harassing or scaring the geese to teach them the site is not safe) and habitat modification. (See p. 6 for more details.)

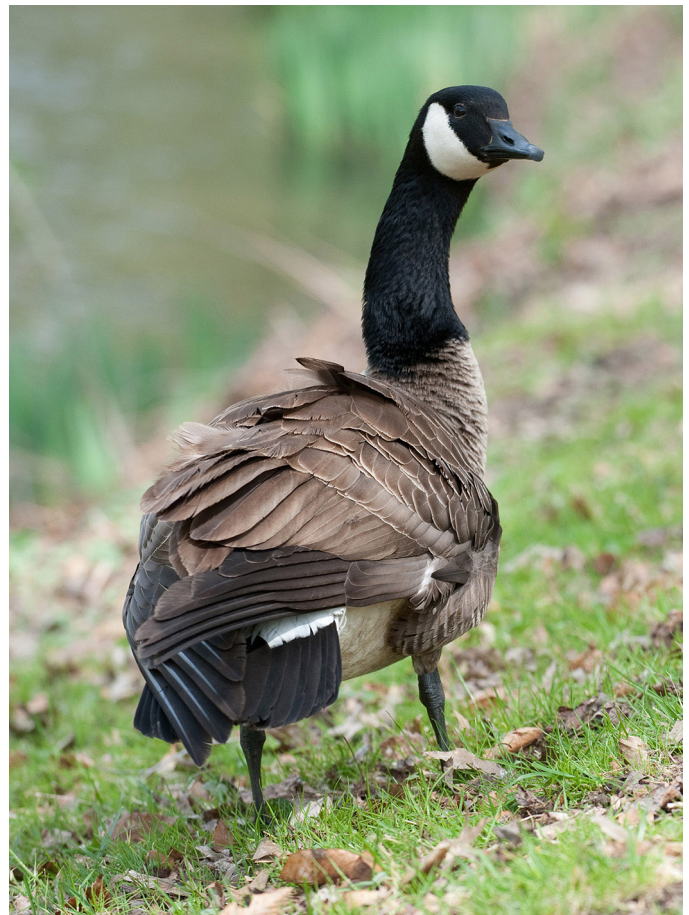
Curtailing reproduction—combined with strong, effective, well-timed site aversion—is the crux of most successful programs. When adult geese are not tied to flightless goslings after the nesting season, these adults can be harassed away from preferred foraging sites before summer brings large numbers of people to those

sites. And clearing open spaces of goose concentrations—with their attendant droppings—prior to the mid-summer molt eliminates the most significant conflicts.

Similarly, modifying habitat makes site aversion, especially with trained dogs (more below), more effective by making geese feel less secure from predators.

Effective goose management programs typically follow a seasonal timeline:

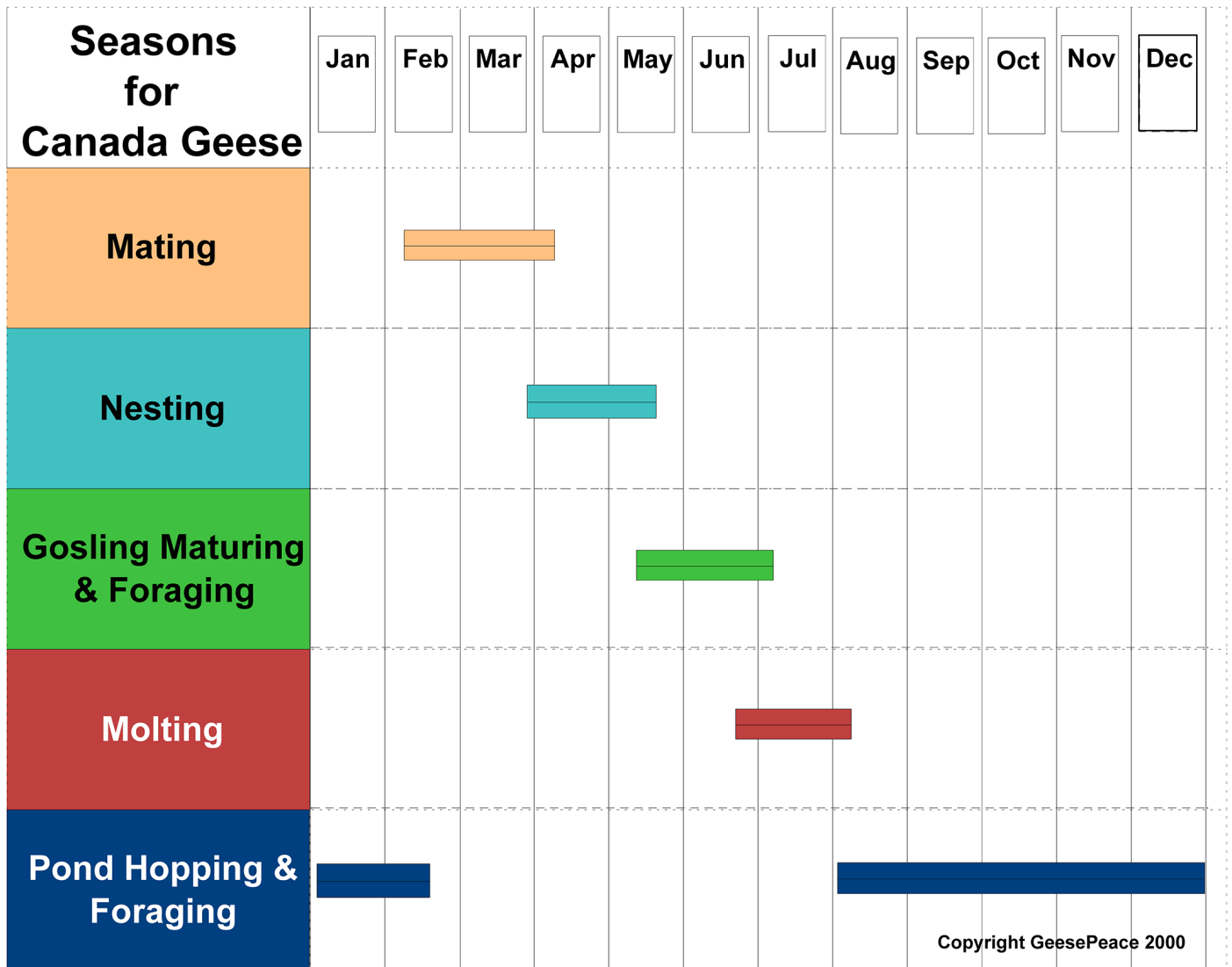
- December to March: Organize community, identify likely nesting sites, and develop plan.
- February to March: Train volunteers or employees to address.



- Late March and April to early May: Locate nests and addle.
- Mid-May to midsummer (up to molt): Harass adult geese so they leave the site.
- Late June to August: No harassment—geese are molting and need to stay where they are. Repellents may be effective.

- Fall: Resume harassment, if needed.
- February to March: If harassment resumed in fall, stop it while geese establish nest sites. You want to know where the nests are so you can addle the eggs later. Harassing geese away from nest sites can result in goslings hatched nearby who contribute to the overall population and interfere with pre-molt harassment.

Short-term versus long-term. Once it is clear that Canada goose issues need to be addressed, you should implement a long-term plan as soon as feasible. While you are getting started, supplementary tools and techniques (below) may offer short-term relief.



Key components

CURTAIL REPRODUCTION

Limiting reproduction requires long-term commitment to have a significant impact on population size. But it also reduces future nesting activity and makes site aversion more effective.

Geese are often philopatric—when sexually mature, they return to nest where they hatched. So, curtailing reproduction can mean fewer geese will nest at a given site in the future. The most immediate benefit from curtailing reproduction is that adult geese are not tied to rearing flightless goslings and can be readily convinced to leave.

Anyone seeking to curtail reproduction of any bird is responsible for complying with all applicable laws and regulations including registering with appropriate agencies and obtaining permits.

Addling commonly refers to any process by which an egg ceases to be viable. Eggs can be humanely addled by oiling, removing them from the nest or replacing them with dummy eggs. For resident Canada geese, the USFWS allows property owners and managers to addle



eggs after registering online. But each state can regulate addling within its borders, so be sure to check your state's requirements. See Sources of Additional Information, below, for links to federal and state information.

Eggs must always be oiled or removed before embryo development is too advanced to humanely stop development. Training is needed to identify mated birds, find nests and humanely treat or remove eggs. See Sources of Additional Information, below.

A contraceptive—nicarbazin sold under the brand name OvoControl—is registered to reduce hatching and manage populations humanely. To use it, you must have a federal permit and should check for state permit requirements. A licensed pesticide applicator must feed it to the birds daily.

SITE AVERSION

Site aversion—harassing or scaring geese away so they learn your site is not a safe place—works better before geese become strongly attached to a site. The longer geese have used a site, the harder it will be to get them to move. Geese are also more willing to relocate before they establish nesting territories in early spring and again after goslings are flighted in late summer.

Using techniques developed to manage livestock, dogs are trained to harass geese. Geese see the dogs as predators and avoid them. Dogs handled properly put geese in flight and the geese leave an area entirely. Handled improperly, they may only put the birds in the water. If not pursued, the geese quickly learn the dog is not a real threat.

Geese may leave when untrained and unhandled dogs roam a property or when family pets give chase. But there are concerns about this. If a dog catches or harms a goose, it is a violation of federal law. If a dog harasses geese who are defending nests or young, either the geese or the dog may come to harm. Without training and handler direction, these dogs will not be as effective and geese may habituate to dogs used this way.

There are other site aversion tools. Some may be useful supplements in specific, limited, short-term situations. See **Supplemental Tools and Techniques**, below.

HABITAT MODIFICATION

The goals are to reduce food, reduce preferred nesting and brood-rearing areas, and increase the sense of wariness or insecurity from danger. See Sources of

Additional Information, below, for complete details.

Reduce the total amount of lawn area and the amount of young shoots geese prefer within lawn areas.

- Replace grass with other plantings or materials.
- Leave areas in grass to “naturalize.”
- End or reduce fertilizer use and watering to reduce young shoots.

Predators stay away from our simplified landscapes that leave them no cover for hunting. This lack of predators is one of the things that attracts Canada geese to these sites.

Reduce sight lines and limit access to open water to increase their wariness and make geese less comfortable at a site. These steps will also make site aversion with dogs more effective.

- Establish long grasses, shrubs or other tall, dense plants along shorelines.
- Make shoreline plantings thick enough to discourage nesting.
- Create a barrier using fences, hedges and a continuous band of emergent aquatic plants at the shoreline.



Complementary components

These complementary components can be very important contributors to successful programs.

TOLERANCE ZONES

Site aversion more easily convinces geese to leave when attractive alternative sites are available. Identify and set aside areas where geese can be tolerated and leave them undisturbed there.

PUBLIC EDUCATION

Understanding geese can help foster greater tolerance, and public education allows the people affected to play an active role in decisions. Successful programs incorporate early, open and ongoing communication between managers and the public they serve.

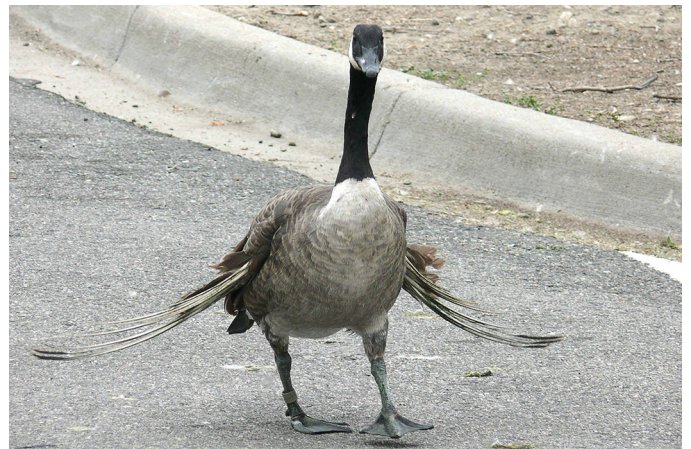
STOP FEEDING

Geese will congregate where food is easy to find. So more geese will stay more persistently where people offer handouts.

Canada geese do not need food from humans. Even in severe weather, these birds move considerable distances to better forage when necessary. Canada geese find nutritionally appropriate food for themselves.

If fed an inappropriate diet, such as human foods and commercial poultry feeds, young waterfowl are prone to develop a wing deformity called angel wing, slipped wing or dropped wing. This permanent deformity prevents or limits flight—a very severe handicap for a wild bird. Inappropriate food can cause other less obvious problems by replacing nutritious food with “empty calories,” much like chips and candy for people.

Anti-feeding ordinances help raise public awareness and may limit casual feeding. Often, people who care about the animals respond more positively to explanations of the potential harm feeding can cause the geese than to negative messages about the birds or the threat of fines.





Supplemental tools and techniques

Supplemental tools and techniques won't resolve conflicts alone. They are most useful for short-term relief. In limited, specific situations, they can be helpful additions to a well-designed integrated program.

SUPPLEMENTAL SITE AVERSION

Devices and techniques to frighten geese must seem threatening to the geese. Geese lose their fear of—or habituate to—many devices and techniques with repeated use.

- Radio-controlled boats harass geese on water. Geese must be effectively harassed on land as well, or they will simply get off the water. Boats are less effective than dogs who swim after the geese or are taken to the geese in a boat.
- Recordings of Canada goose distress calls may help convince geese that a site is unsafe when used to reinforce other harassment. Otherwise, geese may move only short distances.
- Canine effigies (coyote, wolf or dog cutouts or 3D models) may reinforce wariness where geese have reason to fear working goose-dogs or wild canines. Frequently relocating effigies helps.
- Used under low light conditions or at night, lasers specifically designed to harass geese cause the birds enough alarm that they usually leave the site. Flashing or rotating strobe lights may achieve the same goal of denying geese their night roost. You need to be persistent so geese don't simply wait you out.
- Methyl anthranilate repellent dispersed as a fog irritates geese so they leave the area immediately. Since this physically irritates geese, rather than frightening them, they're less likely to habituate. A small mister is available that may convince geese to avoid a high-traffic location when selecting a nest site.

SUPPLEMENTAL HABITAT MODIFICATION

Two chemicals are registered in the United States as Canada goose repellents. Anthraquinone triggers a strong digestive irritation. This compound also absorbs light in the ultraviolet range that geese, but not humans, can see.

Since geese visually recognize treated areas, they learn to avoid them by sight. Methyl anthranilate is a grape-flavored food additive that, when sprayed on grass, makes the grass unpalatable to geese. Geese must try some treated grass before they learn not to eat at the site.

Repellents are washed off during rains and mowed off when grass is cut. Repellents teach geese to avoid a site but it is unclear how long this lesson lasts. Due to cost, few sites will be able to use repellents on large areas frequently enough to be highly effective. Repellents may be useful for small high-priority areas, as a short-term tool (such as during the molt), or when grass is dormant and not being cut.

What doesn't work

Swans have been placed on ponds under the theory that they will keep wild waterfowl, including geese, away from their territory. They don't! And sometimes they become nuisances themselves.

Many simple devices are sold to frighten geese. Some may do so temporarily. Indeed, nearly anything new may frighten geese temporarily. People simply shooing them persistently will move them away for a little while. But geese are smart enough to quickly realize when something doesn't pose a real threat. These types of devices do not work as long-term solutions to Canada geese conflicts:

- Balloons.
- Stationary predator effigies (inflatable snakes, plastic owls).
- Human scarecrows.
- Floating alligator heads.
- Flags.
- Dead-geese decoys.
- Ultrasonics.

Resolving conflicts: A final thought

Conflicts between people and Canada geese will be resolved by individuals and communities that care about the birds, the environment and the well-being of their communities—individuals like you and communities like yours.



Sources of additional information

Humane Canada Goose management

- wildneighbors.org – The HSUS Wild Neighbors program
- humanesociety.org/geese – HSUS Canada goose web resources
- geesepeace.com – GeesePeace

U.S. and Canadian government agencies

- migratorybirds.fws.gov – U.S. Fish and Wildlife Service, Division of Migratory Bird Management
- epermits.fws.gov/eRCGR/geSI.aspx – Register to addle with the USFWS
- epermits.fws.gov/eRCGR/DOC/eRcgrSCL.pdf – Summary of states' current requirements for addling
- ec.gc.ca/mbc-com/default.asp?lang=En&n=6D2B893B-1 – Environment Canada, goose management

Publications

- Doncaster, Deborah, & Keller, Jeff. (2000). Habitat Modification and Canada Geese: Techniques for mitigating human/goose conflicts in urban and suburban environments. Animal Alliance of Canada; available for download at animalalliance.ca/
- The Humane Society of the United States. (2009). Canada Goose Egg Addling Protocol. Available for download at humanesociety.org/geese
- HSUS Canada Goose Conflict Resolution Trainings: humanesociety.org/hwstraining

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We fight all forms of animal cruelty to achieve the vision behind our name: a humane society.
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