



Purdue University
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Working With Wildlife: Urban Canada Goose Management

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Warmer temperatures and longer days of spring also bring an increase in the activities of many species of wildlife, including Canada geese (*Branta canadensis*). At the turn of the 20th century, Canada geese were almost extirpated from most parts of North America. However, populations of Canada geese have rebounded dramatically, primarily due to the concerted efforts of wildlife managers across the country and the ability of Canada geese to adapt to habitats found in urban and suburban areas. As human populations increase, so do the conflicts associated with urban/suburban sprawl; and because of this, complaints of goose droppings, lawn damage, and aggressive geese are commonplace every year.

Why are there so many Canada geese?

Canada geese prefer open, grassy areas near or adjacent to water. The new shoots in mowed, fertilized grass are an excellent food source. Water provides geese with protection from predators, and the open spaces allow geese to view the approach of potential predators. Thus, golf courses, parks, and residential developments with storm water catchment ponds are often ideal habitats for Canada geese. Hunting has traditionally been the primary means of managing goose populations; however, geese in residential areas are not subject to harvest because it is illegal to discharge firearms within these areas, and there are few natural predators to keep the population of geese in check. The increases in available habitat (i.e., golf courses, housing and business developments with storm water retention ponds) in areas that are protected from legal hunting have resulted in a population explosion of Canada geese over the last 20 years.

What problems do Canada geese cause?

Even though watching geese is enjoyable, urban Canada geese cause problems because they can be aggressive, especially when they are nesting or are protecting their brood. They will aggressively charge people and their pets and possibly bite them. Also, droppings from a group of geese accumulate over time making it extremely difficult to walk across the lawn with clean shoes, and large accumulations of their droppings may have the potential to impact water quality. Finally, geese can cause tremendous damage to lawns and landscaping by pulling up plants and eating them. Homeowners, golf course managers and other business people, and park superintendents spend a lot of time, money, and effort to landscape their property, manage their lawn, and provide a pleasant atmosphere for themselves and their guests or patrons. The feeding habitats of geese can cost money.



(Photo by USFWS/Wyman Meinzer)

Populations of Canada geese have recovered dramatically since the turn of the 20th century.

Golf courses do not want their customers harassed by aggressive geese, their fairways and greens ruined by goose droppings, or the geese feeding on the freshly mowed grass. Homeowners do not want their new shrubs or flowers pulled up by geese, and they don't want to "tip-toe" around the goose droppings in their lawns, or be afraid to let their children play outside. Many people are delighted when a pair of geese show up on their pond so they entice them to stay by feeding the geese. However, it does not take them very long to realize that geese can create many problems, especially after the original pair becomes dozens of geese in a short amount of time.

What can you do if you have a problem with geese?

Before you take action, you should be aware of a few points. Canada geese, like almost all birds, are protected by the Migratory Bird Treaty Act of 1918. This Act made it illegal to harm, take, or possess migratory birds, any parts of the bird, their nests, or their eggs, except during the hunting season, or by special permit. In addition to this Act, state and local laws regulate various control techniques (i.e., harvest methods, approved repellants, etc.). It is your responsibility to know the laws in your area. You can call your local Conservation Officer or Purdue University Cooperative Extension Office. No "magic bullet" will solve your problem. This means that scaring the geese away is not a permanent solution. Not only does this rarely work by itself, but also you may be sending your problem to another, maybe your neighbor. It is seldom possible, and not always desirable, to eliminate all geese in an area.



(Photo by Brian MacGowan)

Canada geese are attracted to open lawns adjacent to water.

Now that you are aware of these facts, you can still do several things to deter geese from using your land. Some of the most common techniques are listed below.

- **DO NOT FEED GEESE.** You may have to work with others in your community to make sure no one else feeds them. Many problems have begun from people innocently feeding a few geese, and then in a couple years, a few geese become over a hundred geese. You don't need to feed geese; they do fine on their own. If they didn't, we wouldn't have problems with them.
- **Reduce fertilizer use.** Geese prefer fertilized grass to unfertilized grass.
- **Reduce lawn size.** Minimizes foraging sites for geese. Some ground covers and fescue are less preferred than other plants (for example, bluegrass); however, geese will readily eat less palatable plants if there are no alternatives available.
- **Reduce or eliminate mowing.** Geese have more difficulty locating new shoots in taller grass (>6 in.). Allowing the grass to grow tall around the pond may act as a vegetative barrier to geese.
- **Vegetative barriers.** Planting shrubs, hedges, or prairie plants around the water (heights >30 inches, and widths at least 20-30 feet are most effective). These physically impede the movements of geese to and from the water, make less new shoots available to the geese, and block their line of site, making it more difficult for geese to see potential predators. Barrier plantings require protection from geese during establishment.
- **Rock barriers.** Large boulders (>2-ft. diameter) placed along the shoreline may discourage goose use and access to grazing sites by making it difficult for geese to get out of the water. Their effectiveness is improved when used in conjunction with vegetative barriers.
- **Fence barriers.** Fences can prevent geese from walking into an area. Fences should be at least 30 inches tall, and have openings no larger than 3 inches in diameter. Woven wire, chicken wire, picket fencing, plastic snow fencing, and construction fencing are examples of effective materials. The effectiveness of fence barriers may be enhanced when used in conjunction with landscaping modifications (vegetative barriers, reducing lawn size, etc.).
- **Repellants.** There are some chemical repellants available to homeowners registered as a goose repellant

(methyl anthranilate, anthraquinone). They are generally most effective by applying them on small areas that you want to protect rather than broad applications. Always follow label directions when applying pesticides.

- **Tall trees.** Establishing tall trees around small ponds (<1/2 acre) may prevent geese from landing since geese are large birds that require a relatively large open space to land and take off. However, shade provided by trees can also be attractive to geese.
- **Hazing.** Noisemaking devices (cracker shells, propane cannons, whistles, etc.) or visual deterrents (Mylar tape, scarecrows, etc.) can help deter geese from an area when used in conjunction with the habitat modification techniques listed above. If used alone, geese will become habituated to hazing. You should be aware that many noisemaking devices require a permit or license, especially within city limits. Projectiles are illegal to fire in some areas.
- **Egg destruction.** It is illegal to harass geese while they have eggs in the nest. You can apply for a permit from the U.S. Fish & Wildlife Service and a state permit from IDNR, Division of Fish & Wildlife to shake the eggs and destroy the embryo. The eggs will not hatch, but the geese will continue to incubate them.
- **Removal.** Geese, like all waterfowl, molt all of their primary wing feathers at once and become flightless for a short period in late summer. You can “round-up” the geese at this time and relocated them. This is a costly and time-consuming process that should be used when all other efforts have failed. Capturing and relocating geese requires federal and state permits.

It is best to use preventative techniques BEFORE geese get established in an area. Once geese are established, it can become very difficult to deter them from a given area, particularly after nesting has begun. Also, you should think long-term. For example, it will likely take several years for your vegetation barrier to mature and become established. Before this time, the vegetation barrier will not be an effective deterrent to geese. In fact, you may have to physically exclude geese from the area since the young, nutritious plants and shoots will likely be an attractive food source for geese.

For more information on goose management alternatives, contact USDA-WS/IDNR Conflicts Information Hotline at 1-800-893-4116, the Indiana Depart-

ment of Natural Resources (317) 232-4080, the Department of Forestry and Natural Resources Extension office at Purdue University (765) 494-3583 or www.agriculture.purdue.edu/fnr/, or your county Extension office.



Technical information for this publication was adapted from:

Smith, A.E., S.R. Craven, and P.D. Curtis. 1999. Managing Canada geese in urban environments. Jack Berryman Institute Publication 16, and Cornell University Cooperative Extension, Ithaca, N.Y. (call 607-255-9946 to order, \$10.50)

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FNR 175W, Assessing Your Land's Potential for Wildlife
ADM-2, Chipmunks
ADM-5, Woodpeckers
ADM-10, Moles
ADM-11, Bats
ADM-16, Woodchucks

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Internet Resources

USDA-APHIS Wildlife Services

www.entm.purdue.edu/wildlife/wild.htm

Purdue Pesticides Programs

www.btny.purdue.edu/PPP/

Purdue University Everything Wildlife

www.purdue.edu/wildlife

IDNR, Division of Fish and Wildlife

www.state.in.us/dnr/fishwild/index2.htm

The Berryman Institute for Wildlife Damage Management, Utah State University

www.berrymaninstitute.org/

University of Nebraska, Internet Center for Wildlife Damage Management

wildlifedamage.unl.edu

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