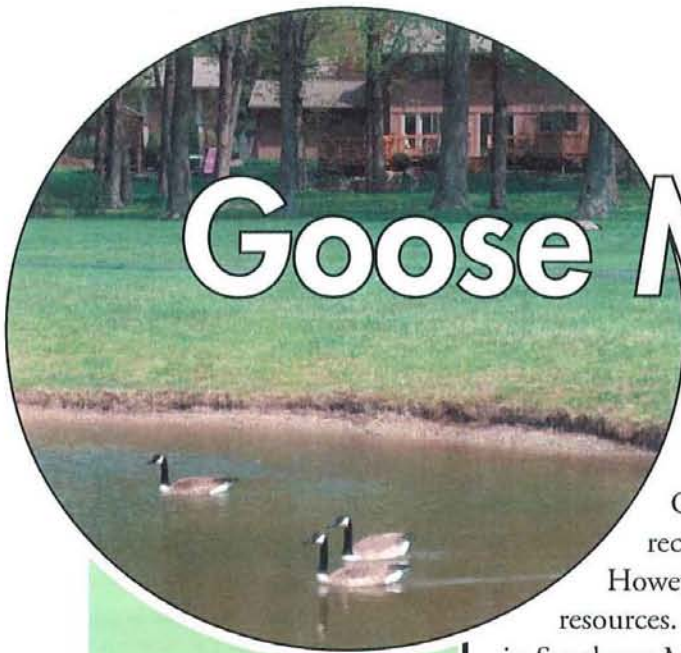


# Goose Management



## What's the Problem?

Canadian Geese are a valuable animal species that provide recreation and enjoyment for birdwatchers, the public, and hunters. However, geese waste contributes to the pollution of our water resources. Added to that, the goose population has increased significantly in Southeast Michigan.

## Low-cost solutions

Add "Do not feed the geese," signs in public areas.

Add an unmowed 6-foot wide shoreline buffer of tall native grasses or a hedge row 20 to 30 inches tall around water features.

When establishing a new lawn, consider planting fescues instead of Kentucky blue grasses, since they are less attractive to feeding geese.

## Impacts on the Environment

**Aesthetics:** Most complaints about geese are from residents and businesses frustrated with goose droppings. When geese concentrate at a site, droppings become an aesthetic problem particularly on lawns, beaches, docks, sidewalks, and golf courses. Another problem is damage to lawns from the droppings and overgrazing of turf.

**Water quality:** Goose droppings can pollute ponds, lakes, and streams and clog infiltration systems. On average, one goose produces a pound of droppings per day. This can result in elevated bacteria and nutrient levels, which can contribute to excessive algal growth and closure of public swimming areas.

**Nesting behavior:** Occasionally geese nest in inappropriate sites, such as in shrubbery near buildings, parking lots, or on roofs. They can demonstrate aggressive behavior towards people while defending their nesting territory.

## Methods to Manage Geese

**Think like a goose!** Geese choose areas to feed that provide suitable food, visibility, and proximity to water. Canadian Geese are grazers and they prefer lawn grass in urban areas. They tend to choose open areas with few obstructions to give them views of potential predators. Geese also prefer highly manicured lawns, rich in nutrients. So, to stop geese from entering an area, consider disturbing this balance.

**Develop a comprehensive program.** Most successful goose management programs incorporate multiple methods. The combined effects of two or more of the following techniques will provide a much more satisfactory result than relying on one method alone.

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**Rock Barriers, Decks, & Boardwalks:** The aesthetics of lakes and ponds make them every bit as attractive to people as they are to geese. Thus, in parks or other human use areas, it is not desirable to create shoreline barriers that completely eliminate access to water. The objective then becomes one of providing physical and visual access for people while at the same time precluding access for geese. Rocks, decks, and boardwalks with sufficient vertical rise (> 12-18 inches) from the water to any surface on which geese can stand are effective for limiting goose access to shore. Flat quarry stone is recommended as opposed to jagged types of rock to address safety issues near the waterbody.

## Goose Management Techniques

### *Eliminate public feeding*

Feeding waterfowl is a popular pastime for many people, but it is also a major cause of the high urban bird populations. Canadian geese are grazers and do not need handouts to exist. Feeding waterfowl encourages them to congregate in an area and may make geese more aggressive towards people. Thus, reducing handouts may help make an area less attractive to geese, ducks, and other birds.

Both education and regulations may help decrease feeding of waterfowl. Signage at public locations that explain the rationale for not feeding the geese, along with working through other media outlets to promote this message may be effective. Some local communities also pass an ordinance banning feeding of geese on public land.

### *Landscape modifications*

**Aesthetics:** Most geese prefer a large, unobstructed lawn area next to open water. Making the landscape less attractive to geese can reduce goose use. An un-mowed 6-foot wide shoreline buffer of tall native grasses or a hedge row 20 to 30 inches tall around water features can discourage geese from utilizing this area. It is important, however, to maintain public access to the water body. Also, turn off aerators in the winter and allow the pond to freeze. Open water is extremely attractive in the winter when many ponds are frozen over.

**Grass Height:** Allowing lawns used by geese to grow taller can also discourage geese from using these sites. Geese are especially attracted to lawns that are heavily fertilized, watered, and mowed. Letting the lawn grow longer (around 6 inches) and not fertilizing or watering it will make it less attractive to geese. When establishing a new lawn, consider planning fescues instead of Kentucky blue grass, since they are less attractive to feeding geese.

**Modify Shoreline Vegetation:** Create a buffer strip of plants and trees between the lake or pond edge and the grass. Geese do not like to nest in or walk through tall grasses, plants, or shrubs. They also prefer open areas to watch for predators.

**Aquatic Bench:** The installation of aquatic vegetation along the shoreline of a waterbody can create a physical as well as a visual barrier to geese. Aquatic benches are typically shallow areas immediately adjacent to the shoreline and should grade out to a depth of 12 to 15 inches before sloping to deeper water. Wider benches that utilize Giant Burreed (*Sparganium eurycarpum*) and River Bulrush (*Scirpus fluviatilis*) are more effective than shorter material such as Pickerelweed (*Pontedaria cordata*). These structures also serve as important filters for nutrients.

**Replace Open Lawns with Low Shrubs & Meadows:** Native grassland/wildflower meadows and low shrubs used in combination or as separate plantings can be very effective in reducing nuisance levels of geese, especially when combined with other landscape treatments. The use of meadows and low shrubs can be even more effective when used in conjunction with aquatic plantings/benches. Visual access to the water for humans is not impaired. To a goose looking toward the shoreline from the water, plantings should present a solid mass.

**Trees:** Research has shown that barriers created by stands of tall trees can effectively prevent geese from landing in grazing areas by increasing the angle of ascent (flight clearance). However, stands of trees must be dense enough that geese cannot maneuver easily through the canopy. Stands of trees that meet these criteria are usually those that have been in place for some time. Creation of tall tree barriers must be considered as a long-term objective in an overall habitat modification program.

### *Other goose management techniques*

**Barrier fencing:** Fence barriers constructed at least 30 inches high, can exclude molted (non-flighted) geese from lawns in June and July. Barriers can be constructed from plastic snow fence, chain link, woven wire, string, mylar tape or chicken wire. Barrier fencing works most effectively when placed along shorelines, but it has to be used at times when young birds would not be trapped on land.

**Dogs.** Dogs trained to chase, but not harm geese have been used effectively to disperse geese from golf courses, parks, athletic fields, and corporate properties. Border collies or other breeds with herding instincts tend to work best. The dogs must be closely supervised during this activity. Dogs generally should not be used when geese are nesting or unable to fly, such as during the molt or when goslings are present. Initially, chasing must be done several times per day for several weeks, after which less frequent but regular patrols will be needed. Geese will not become acclimated to the threat of being chased by dogs. Trained dogs can be purchased for use by the community or hired out with a handler from private companies. Although this technique is effective, it can be expensive and labor intensive.

**Scare devices.** Scare devices can be a cost-effective way to repel geese when applied consistently as soon as geese arrive on the property. A combination approach that includes both noise and visual devices (distress calls, shell crackers, plastic flags, scarecrows) is more effective than depending on just one method. These techniques are permissible without a state or federal permit, but can present some problems such as: birds becoming accustomed to the devices, influence on other animal species, failure of the birds to leave the general vicinity, and complaints from neighbors about the noise made by the devices.

**Chemical repellent.** Repellents made from grape extract can be applied on lawns to deter geese from feeding on the grass. Chemical repellents are an attractive tool because they are visually and acoustically unobtrusive, may be applied directly to the problem area, and may not harm the geese permanently. Limitations on the repellent include high costs (over \$100 per acre), necessity to reapply frequently, affect on plant life, and influence on the behavior of other wildlife.

**Egg replacement.** Egg replacement could prove to be a useful tool for controlling goose numbers in urban areas. Once an active nest is located, the defending parents must be chased off and the eggs are replaced with artificial eggs of the same size. Simply removing or destroying eggs will not control goose populations because geese will often lay a new clutch of eggs. Both egg control methods are currently experimental and require a special permit. Contact the Michigan Department of Natural Resources Wildlife Division for more information.



**Cover photo:** Courtesy of City of Farmington Hills.

**Top left and back photo:** Modifying shoreline vegetation creates a buffer that will discourage geese from the area.

**Top right photo:** Signage at public locations can explain the rationale for not feeding geese.

## Goose Management Techniques (continued)

**Hunting.** Where permitted by law, hunting is an effective and economical tool to control goose populations. Michigan has special goose hunting seasons established in cooperation with the U.S. Fish and Wildlife Services (FWS) in early September and January to target resident geese. The annual Michigan Waterfowl Hunting Guide contains season dates, bag limits, and licensing requirements, but it is important to check about local firearm ordinances before hunting geese in urban settings.



Source: Michigan Department of Environmental Quality

## Goose Management

### Resources

Doncaster, D. and Keller, J. *"Habitat Modification & Canada Geese: Techniques for Mitigating Human/Goose Conflicts in Urban & Suburban Environments."*

*Managing Canada Geese in Urban Environment: A Technical Guide.*  
Cornell Cooperative Extension Office. (Available from SEMCOG for loan).

**Michigan Department of Natural Resources, Rose Lake Field Office**  
Southeastern Management Unit (Macomb, Monroe, Oakland, St. Clair and Wayne Counties), 734-953-0241

**Michigan Department of Natural Resources, Rose Lake Field Office**  
South Central Management Unit (Livingston and Washtenaw Counties), 517-641-4903

*Suburban Goose Management: Searching for Balance (28 minute video).*  
Cornell Cooperative Extension Office. (Available from SEMCOG for loan).

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