

# Living with Geese and Protecting Water Quality

Perhaps you've been there: Walking down the slope of a shoreline, only to step in a well-formed reminder of one of Michigan's favorite water-fowl, the Canada goose. You're not alone in your embarrassment, frustration, or resentment in having to clean off the bottom of your shoe. Fortunately, there are things you can do to help remedy such situations.

It is necessary to reflect on human actions that encourage problems with geese. At one point in time, Canada geese were near extinction. This point is important because Canada geese were not always considered a "nuisance," as many people currently label them. Even now, people associate Canada geese with the outdoors and the natural world.

Some human actions, like effective wildlife management, were helpful in saving Canada geese from extinction. However, other human actions have not been so helpful with regard to Canada goose populations. By mowing our lawns directly to the banks of our lakes and rivers, we are creating an ideal habitat for geese to flourish. Well-fertilized lawn provides geese with a nutrient-rich, bountiful feast of grass.

Amidst low-growing plants, geese are comfortably aware of predators because they are able to see long distances. Geese are attracted to such environments in droves.

Construction of barriers alongside stream and lake edges have proven effective, especially if they are installed at the correct time of year when geese are molting, or flight-less, in June and July. Fences are the choice of some, but if you want to preserve the natural landscape, consider vegetative buffers. Buffers of native plants, at least 36" high, will deter geese. The general rule for buffer width and length is the bigger, the better.

Not only do buffers help deter geese, they help protect water quality. Long, deep roots of native plants filter out some pollutants and absorb storm-water during rain events. They also help stabilize shore-lines and reduce erosion. This means water is forced through more of a filtering process before it enters lakes and streams. Further, bank erosion is reduced, which lessens sediment input into waters.

The hard fact is that geese are just like other animals, and after they eat, they poop. Since they eat plants (often well-fertilized turf grass), phosphorus is present in their waste. Phosphorous is also the limiting factor in plant growth. At high levels, phosphorous will have detrimental effects on lake and stream ecology. Goose waste may also contain potentially harmful bacteria - as can animal waste from other warm-blooded animals (including humans). It would be a difficult and extremely messy job to remove goose waste from water and adjacent land areas. A better approach is to prevent geese from depositing it in the first place. A buffer can do just that.

In addition to installing vegetative buffers to deter geese, people can stop feeding them. You might consider posting signs by water features (especially at publicly owned places), encouraging people NOT to feed waterfowl. Feeding waterfowl changes their migration patterns, leads to overfeeding, and keeps water-fowl in a single location - all things that are detrimental for geese and humans.

As with most water quality issues, much hinges on how willing we are to change our own behaviors. Admittedly, installing a vegetative buffer is not a simple project. But, sometimes the best answers to problems are more complex than other alternatives. And, after all, humans have removed vegetation that once existed along the edges of lakes and streams. Returning it would encourage a more balanced environment; creating a better balance benefits humans, geese, and waterways.

