

Detention Ponds and Geese



What's the problem?

The type of Canada goose that lives in Indiana does not typically migrate. In our urban and suburban environments, humans and geese are often sharing the same spaces (detention ponds) which can create issues and lead to conflict..

- Geese can be aggressive during breeding season
- Geese waste doesn't just make a mess of sidewalks and grass areas; it contributes to algae growth (nutrients) and bacteria (coliform, giardia) in ponds.



Managing geese: what works and what doesn't

- Don't feed geese. Food is an incentive, so don't provide a hospitable home for geese.
- Scare tactics (alarms, dog cutouts) are rarely a long term solution as the geese acclimate to their use. This tactic must be used with other management techniques such as barrier fencing.
- Rip rap (white stones along a pond edge) will not deter geese.

The following techniques can be temporarily successful but if the habitat is not changed new flocks will likely visit the site. These practices should be done with environmental changes to discourage geese long term.

- Destroy and remove all nest building attempts daily until egg laying begins.
- Destroying eggs, regulated hunting, and trapping/relocation all require permits from US Fish and wildlife and/or the Indiana Department of Natural Resources. Learn more here: www.in.gov/dnr/fishwild/3002
- Scare tactics (alarms, dog cutouts) are rarely a long term solution as the geese acclimate to their use. This tactic must be used with other management techniques such as barrier fencing.

Mowed turf grass to the pond edge is an invitation for geese to come ashore. Additionally, the short roots on turf grass cannot effectively secure the bank against erosion. This is compounded by the geese climbing in and out at the waters edge and over-grazing on grass resulting in erosion.

- A 4+ foot buffer of native plants around a pond edge serves as an effective deterrent for Canada Geese. The 3-4 feet tall vegetation provides a physical barrier against the geese coming ashore but also serves as a deterrent as they are weary of predators in or on the other side of the planting.



These plantings, often called buffer or filter strips or pond edge enhancements, are often planted from seed and comprised of a mix of various flowers and grasses native to Indiana. As most detention ponds have sloping banks, this vegetation does not block water views and provides a more aesthetically pleasing, natural view. The flowers attract pollinators like birds and butterflies and educational signage, walking paths, trees, and benches can be used to further enhance the recreational and aesthetic value of your pond to your community.

The native plants in the planting have dense, fibrous roots that extend 4-10 feet down into the soil. These roots secure the pond edge, preventing erosion. The planting also helps to clean the water by picking up excess nutrients from surface flow across the grass before they can enter the pond and contribute to algae growth. Filter strips are not a complete solution o algae issues but can help (nutrient loads entering from else where in the community must be reduced). Additionally, edge enhancements can pay for themselves over time be reducing the amount of turf management the HOA pays for.



There are several ways to create a filter strip or barrier for geese around a pond. The easiest, and cheapest, way is to simply stop mowing near the pond edge and let the existing vegetation and grasses grow up. While there would likely be some undesirable vegetation or weeds there may be some desirable species as well. Another option is to eliminate the existing vegetation and plant the area with a specified seed mix of native flowers and grasses. This allows you to choose species for the aesthetic and ecological value.



Lakes at Towne Road—Year Two

Establishing a native buffer from seed is typically done in one of two ways:

No-till drill- Two applications of a herbicide eliminates existing vegetation. A no-till drill is a special planter used to plant native seed at precisely the right depth. This method is ideal because you do not have to till next to the waters edge and the dead turfgrass acts as a mulch for the native seed.

Till and broadcast— Repeated tillage is used to kill existing vegetation. The native seed is broadcast over the area and a erosion control blanket (straw woven in a netting that degrades) is used to cover the area— protecting the seed and securing against erosion. Disturbing soil next to a water source is not ideal and erosion control fabric can add significantly to project costs.

What to expect after planting:

Native flowers and grass plants spend most of their energy the first few growing seasons developing their dense, fibrous root systems. This is what makes them successful in securing the bank against erosion. This means that over the first few growing season, expectations for dense flowering should be low. It is important to convey to all homeowners and stakeholders that a filter strip planting is not an instant solution and takes time to develop. Properly cared for, the planting should be established and flowering well by the third growing season.

Maintenance:

Maintenance the first year focuses on managing annual weeds. Spot treatment via spraying is used on target species. Otherwise, mowing the planting down before annual weeds set seed is critical. The first year, you can expect to cut the planting down to 4-8 inches every time it reaches about knee height (~1/month the first year). In years 2-3 mowing can be used on an as needed basis to combat weeds. By year three, annual maintenance should include spot treating weeds, removing new growth of woody vegetation, and an annual trim. To deter geese through the winter this cut should take place in late winter, just before the new growing season begins.

Please refer to the “Establishing a Native Planting from Seed” handout provided for additional planting and maintenance details.

It is possible for property owners to establish a planting but most HOA’s hire a contractor to perform the prep and installation. There are several restoration companies locally that particularly excel at these types of projects (see provided list). I also highly recommend to HOA to contract out the first 3 years of maintenance to a qualified restoration contractor. Investing in maintenance will help the planting to establish well and save you from headaches in the future—it’s usually well worth the expense.



Ridgefield HOA— Fishers

Other contacts:

I’ve worked with many HOA’s and churches across the county on these types of projects. To speak with an HOA representative who has gone through this process I recommend you contact Dan McCord. Dan is the HOA president at Ridgefield HOA in Fishers. Dan has converted multiple acres of common area and their pond edge to native plantings and has seen great results in reduction in geese, algae, improved water quality, and reduced maintenance costs (mowing). Dan is more than willing to share his experience/knowledge and has some helpful handouts highlighting Ridgefield’s cost savings. He can be reached at dan.mccord@comcast.net.

The Indiana Department of Natural Resources Urban Wildlife program as frequently partners with us on these projects offering additional technical assistance and cost share funds.