

Traditional Golf Course Design is Ideal Canada Goose Habitat

The Canada Goose (*Branta canadensis*, note "Canadian" Goose is incorrect) is a large, magnificent water bird native to North America. Habitat loss, egg collecting, and over-hunting in the 1800s brought the species close to extinction by the early 1900s, much to the concern of conservation groups and bird lovers. Today that is hard to imagine – in many urban situations, the Canada Goose has gone from a source of great concern and admiration to a pest with soaring population numbers that has spawned an industry selling deterrent products designed to drive them away. They now frequently cause contamination of water bodies and urban landscapes with their droppings, interfere with aircraft, damage agricultural crops, and their aggressive behavior during nesting season is a human safety issue.

What happened to cause such a dramatic change in population and presence in urban landscapes? It's pretty simple really - they recognized the typical urban landscape as great habitat and adapted to human presence as a trade-off for such ideal surroundings. Canada Geese are herbivores that find well-fertilized, irrigated, mowed grass ideal both because potential predators cannot hide, and because the robust plant growth provides a continuous supply of nutritious young vegetation. Add a pond with a mowed edge and they have all they need to thrive, as evidenced by some southern states that have urban geese populations that no longer migrate.

Unfortunately, this relatively new situation has already become a chronic problem for golf courses and parks throughout North America. A wide array of companies sell deterrent products ranging from streamers, noise cannons, flashing lights and motion sensitive water spigots to vegetation sprays and trained dogs. Most of them suggest "a combined approach" or "routinely changing deterrent strategies" to achieve goose-less success, and few products are guaranteed to work. This is not too surprising; an animal with a constant supply of all it needs to live and raise young will not abandon its home easily.

An alternative method I've seen work well is far less high tech than most anti-goose deterrents on the market. Water fowl hunters, birders, hikers: think about it, many birds hide in taller vegetation, but have you ever seen a Canada goose doing that? Probably not, and that is the essence of this method. If Canada Geese perceive a typical mowed grass landscape as ideal habitat, then providing less goose-friendly landscaping will lead to a reduced goose population.

After the obvious step of preventing well-meaning people from feeding geese directly, letting the grass grow taller in any non-essential areas and making it less nutritious by reducing irrigation and fertilizer application is a good start. Even better, establish a goose-tall fringe of vegetation several feet wide around the edge of water bodies. This causes the geese to be wary of potential lurking predators when entering or exiting the pond or stream, and makes nesting in the area less attractive for the same reason. If human access to the water is desired, a path created at a steep angle to the pond edge can fool geese into perceiving an unacceptable wall of vegetation.

Because geese eat submergent pond vegetation with gusto the shoreline vegetation may need to be protected from herbivory for a growing season before a suitable fringe is established. This can be done by erecting a double-walled fence along the shoreline using construction/snow fencing, chicken wire, or other temporary but light-penetrating fencing material. The two walls should be a foot or two apart, firmly positioned against the ground. Fishing line run zigzag between the walls will prevent geese from grazing

between the fences. If there is no concern about accidentally tripping humans, a less obvious fence made from wooden stakes and fishing line will work also.

Shoreline plant species should be seeded or planted in the protected zone and allowed to grow for one growing season thru the next spring (until sufficient height is obtained), then the fence can be removed. Ideally tall vegetation will extend six or more feet from the edge of the water. The most suitable plants for this landscape are native species, which can be very attractive if care is taken with species selection. It is best to avoid commercial seed mixes if height is a concern; they often contain very tall and rank species. There are additional significant benefits to this style of landscape than just deterring geese: using native species creates habitat for many other birds and animals that won't make a home in non-native plants, many native species are extremely attractive, and once established they are less expensive to maintain and require far less inputs than a mowed, fertilized, and irrigated lawn. A final, and important, benefit: both land mangers and the public can return to admiring, rather than resenting, the majestic Canada Goose.

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Native Plants: The Roots of Iowa