By Adam Fletcher

## SCARECROW SCAREOW



The team at Oakfield Golf Club mounts a multi-prong attack to deal with its goose problems.

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akfield Golf Club is located in Nova Scotia, along the east coast of Canada. Nova Scotia is known for its fresh water lakes and beautiful shore lines and with a total population of 940,000, the province is relatively undeveloped. Oakfield Golf and Country Club is fortunate to be surrounded by wooded areas and is adjacent to the province's largest freshwater lake.

As managers of the property we attempt to integrate our management program with the abundant wildlife in the area. While making decisions as turf managers, the consideration of the environment and wildlife around us often factors into achieving our goals, whether it be pesticide applications or clipping disposal. Because golf is an outdoor game, and it requires a fair amount of space to play, there will always be a conflict between the flora and fauna and playability.

One of the conflicts that we struggle with on a seasonal basis is the persistency at which Canadian Geese frequent the property. These migratory birds nest along the pond edges of the golf course and remain there until the time comes to fly south. The birds mate for life and form broods that return to the same location to reproduce each year. The young birds, unable to fly, seek shelter in the long grass and open water at night from predators.

During the day the wide-open spaces of the course afford the geese the opportunity to see predators from a distance and the proximity of the ponds allow for easy escape. Add in the lush grass as a food supply and the shade of a willow to rest under, you have the perfect goose-producing environment.

Anyone who works a green space in Southern Canada or the Northern U.S. knows that Canada Geese can create several problems. We've seen turf turned over on the greens or tufts ripped out from their ever-present need for food.

They track through the freshly raked sand and ruin the work of the bunker squad. The adults are fearless in their protection of the young, honking and hissing at any perceived threat in the area and in some cases, physically attacking grown men with their wings and beaks.

Aside from the intimidation tactics and the reduction in level of playing conditions, the most significant problem caused by the geese is more about what they leave behind. An average goose can produce 1 to 2 pounds of droppings per day. At last count the geese at Oakfield numbered in the eighties, all congregating around two green sites by the water. In one week that adds up to 560 pounds of droppings, left distributed - in oddly well uniformed spacing - on every type of playing surface on the golf course. Like any fecal matter the droppings do have the potential to cause a health issues in humans, more so in environments where contact with the droppings are more likely. Beaches, parks and golf courses are good examples of the types of outdoor spaces where transfer is quite possible and the droppings pose the greatest health risk. In addition to the bacterial issues, the droppings can become dense enough to actually become slippery, an important point when discussing pond edges and tees.

We approached the goose problem like we would with any pest on the golf course; from a cultural point of view. We spent some time gathering information from the Internet about the habits of the geese and how the golf course might look appealing from their point of view. We spoke with Canada Wildlife Service (CWS), a division of Environment Canada, which is the governing body in Canada responsible for gathering information pertaining to wildlife and maintaining wildlife regulations. It seemed as though there were as many schemes and gadgets to rid us of geese as there were geese.

A large portion of the suggestions involved a loud noise to startle the geese, these ranged from predatory sounds to simulated shotgun blasts. While these might work in a public park or beach, loud noises have a tendency to be frowned upon at the golf course.

At one point, I tried blowing a hockey whistle as hard as I could after wading into a group of geese on the 12th hole. They geese were not phased by the intrusion, only pausing briefly to raise their heads before returning to work. The failure was compounded by a golfer on the 13th tee playfully shouting "Offside!"





After much deliberation the "Goose Committee" decided on a three-stage defense and Operation Scarecrow was born. Our first tactic would be to create a beach head by use of physical barriers at the most likely places of a water invasion. We purchased 600 feet of plastic snow fence that was four feet tall and cut it down to two feet. The fence was placed around the edge of the two ponds where we historically have the largest population of geese. The fence was as close to the edge of the pond as possible and wire-tied to survey stakes driven into the banks roughly four feet apart. The theory was that if the babies couldn't get over the fence then the mothers wouldn't leave them and the whole family would remain in the water. The fence was put in place as soon as the ground had thawed enough to hammer the stakes in.

The second stage would be to prevent an aerial attack. We purchased three eagle silhouettes and made other flags that were suggested to us from CWS. The eagle silhouettes were mounted on 18 foot pole with a swivel that gave the appearing of "flying". The flags were made of black material – we used filter cloth – cut into strips 5 feet by 2 feet. Two T-bars are driven into the ground 2 feet apart and the strip of cloth is fastened to the poles using wire ties.

The remaining 3 feet of cloth is left to blow about in the wind. The idea is that from the air the flags look like predators to the geese and therefore not a safe place to land. Both the flags and eagle silhouettes were moved every two weeks so the geese would not get use to them being in the same position.

The final stage was to police the area and chase off any geese from behind the lines.

Everybody got involved. The maintenance staff, the marshals and the members, but the lion's shared was left to Abby, my golden retriever.

When the young were hatched and mobile we discovered we were fighting a losing battle. The snow fences were ineffectual at keeping the geese from getting

on shore. They would either go around the end of the 1,200-foot fence; look for a hole underneath or in one case a parent would simply sit on the fence and allow the young to climb over. We used many man hours constantly repairing sections of the snow fence or adding stakes trying to improve the barrier. Once inside the barrier, the geese would of course have a hard time getting out, in effect, corralling them exactly where we didn't want them. The flags and silhouettes did little to motivate the geese once the young were born.

The only aspect that worked on a constant basis was Abby chasing the geese off into the water. Unfortunately, Abby can only be at the course when I am so the geese became accustomed to my schedule, crowding on to the greens in the evenings.

As the geese grew bigger and began to practice flying, the fences did appear to disperse them about the golf course, but not enough to be effective.

After many man hours of chasing geese off the property and cleaning up droppings - filling up 5-gallon pails three or four times a day - we began to look at more permanent solutions. Under federal law, Canadian Geese are protected as migratory birds. Any alterations to their life cycle, from egg shaking to a cull must be approved and permitted by Canada Wildlife Services. Prior to taking such measures the applicant must have completed a "goose plan" - you must prove that you have attempted to get rid of the geese using alternative methods.

Within days of applying, CWS granted Oakfield a permit to cull the existing flocks on the property. As it turns out the goose population in Canada has increased tenfold in the last 15 years.

In July of 2010, the population was large enough that CWS initiated an early hunt to reduce the numbers before any crop damage could occur, hence the rapid response to our request.

The permit came with a list of regulated methods for dispatching the birds and how to dispose of the carcasses. A detailed report listing the numbers, dates and the manner in which the carcasses were disposed, must be submitted within two weeks of the termination of the permit.

Although our permit allowed us to cull 100 birds, we felt that slowly reducing the population, at a rate of three or four birds a week, would not only reduce the numbers, but also drive the rest from the property.

In the end we successfully removed 17 birds from the property, and reduced the population by roughly 20 percent.

We intend to apply for the permit next year and hopefully continue to keep the numbers at a manageable level. **GCI** 

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