

Urging Geese to Go— NOW!



By Philip C. Whitford

PHOTOGRAPH: GETTY IMAGES

Expanding urban Canada goose populations have taken over parks, golf courses, sports fields and corporate parks. Preference for short, highly fertilized grass and ponds attract geese to these environs (Smith et al. 1999), making them difficult to disperse and keep away.

Other geese join them, numbers quickly swell, decimating grasses, fouling the waters and covering everything with droppings. The question becomes, "What can one do to get rid of the geese?"

Canada geese are protected by international treaties. Yet many nonlethal control options exist. A review of those options is presented in "Managing Canada Geese in Urban Environments" Smith, et al. (1999). A short summary is presented here, along with options for egg/nest destruction and lethal removal of geese, all methods that may prove helpful for turfgrass managers.

Canada geese are creatures whose lives are dominated by learned traditions and instinctive annual behavior patterns. Goslings learn where to be at each season from their parents, returning to where they hatched; nested; brooded young, or molted flight feathers in past years. Being gregarious, resident geese attract migrants in fall. These same migrants then return yearly once they have established a tradition of proper-

ty use for any given activity but especially past nest sites and territories. Removing such geese requires that you must break them of past traditions and make them establish new ones.

What does all this mean in terms of scaring geese away and keeping geese away? Zero tolerance is the only option for long-term success.

When geese first arrive on unfamiliar grounds they are edgy and easily spooked. Chased off early after arrival, they seldom return. If allowed to stay, they begin creating traditions of property use, raise four to six goslings per pair, and deposit 1.5 pounds of droppings per day per goose — droppings that will mar your well-kept turf.

All animals, including Canada geese, are driven by internal clocks that determine daily and seasonal behaviors. To disperse urban geese, you need to understand these seasonal changes to minimize cost and maximize benefit from dispersal efforts.

Physically removing geese

Goose roundups — removing geese from a property to be killed or relocated — can only be done during the late June flightless period. The cost in Ohio in 2004 was about \$25 per bird removed, plus \$400 or more in set-up and transportation costs. This is a great option to use to remove final

Continued on page 72



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The Andersons offers a wide variety of snow mold protection products in both granular and sprayable formulations. For more information, please visit our Web site at www.andersonsgolf-products.com or contact your local Andersons distributor.

Zero tolerance is the only option for long-term success.

Continued from page 71

birds from properties after harassment and alarm call use, the only options 100 percent effective at removing specific problem geese.

Alarm call playback following removal prevents new geese colonization and maintains a goose-free area with minimal effort thereafter.

Lethal removal and translocation permits must be obtained from a state's Department of Natural Resources (DNR) and can only be granted after demonstrating that several methods to scare geese or reduce property attractiveness to them have been tried.

Special urban hunting seasons also help reduce goose numbers, where legal and conditions will permit such. Golf courses and parks are encouraged to permit restricted morning hunting to eliminate problem geese.

Reducing recruitment

Egg addling (oiling or shaking eggs to prevent them from hatching) requires permits from state and federal wildlife authorities, and may reduce local populations over time.

Putting obstacles, large sticks or rocks in the nest to prevent further egg laying and incubation also proved very effective. We found 100 percent success nest abandonment and prevention of recruitment in our study (Whitford 2004).

Turf attractiveness for geese is reduced by mowing and fertilizing less often. Six-inch grass is far lower in protein and higher in fiber than 1-inch to 3-inch grass. Geese avoid eating it, if possible.

Aversion chemical sprays exist which make grasses unpalatable to geese. While effective, the sprays' relatively high cost, frequent reapplication and personnel to apply them make them cost effective only for small areas.

The Hershey (Pa.) Corp. planted dense, tall prairie grasses and flowers on its new campus. Geese become nervous about predators when they can't see at least 10 meters around themselves and avoid such areas. Geese have not colonized the area.

A 30-foot width of tall grasses/dense flowers, or shrubs around ponds also can be effective.

Techniques for dispersal

Visual scaring devices: Plastic flags/bags on stakes blow in the wind, reflective tape strung around ponds and on fences, eyespot balloons and/or kites mounted on long poles, scarecrows and flashing strobe lights all have shown limited success.

The newest visual scaring devices are lasers (Blackwell, et al. 2002) or spotlights used to disturb geese night roosting on ponds. These are highly effective at moving geese off night roosts



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The Alarm/Alert Goosebuster call playback successfully disperses geese and prevents re-colonization of areas.

PHOTOGRAPH COURTESY: PHILIP C. WHITFORD

but have little effect at moving geese from areas of daylight occupation.

Trained dogs: Dogs, falcons, swans and radio-controlled planes and boats all can be successful at removing transient geese, residents and migrants as long as they are available on demand on short notice. They all require specially trained personnel and often a major investment or commitment to continued control efforts. Geese quickly learn "dog schedules" if not varied daily.

Noise-making devices: Air horns, fireworks, carbide cannons, whistle bombs, and "cracker shells" generally show good short-term results with transient geese in agricultural field. Such approaches are suited primarily for rural use, but may be effective goose deterrents on turf farms.

Alarm/alert calls: Alarm and Alert call-playback units are among the most recent sound production devices applied to goose problems. Alarm and Alert Calls on the Goosebuster (Bird-X Inc.) were recorded under natural conditions and are part of the normal species communication of giant Canada geese (Whitford 1987).

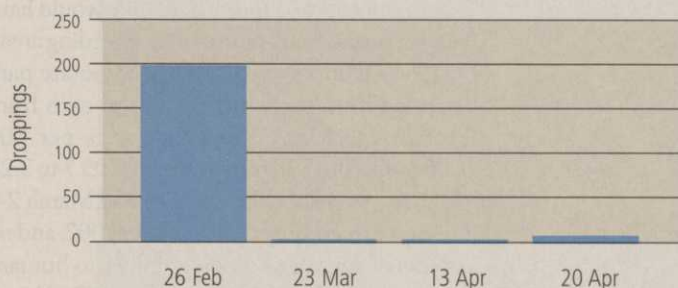
These calls elicit instinctive alert or escape responses from geese hearing them. Use of Alarm/Alert call playback evidenced successful dispersal of geese (when coupled with human harassment effort), and is the only system on the market that prevents re-colonization of areas following resident goose dispersal without further employee time demands and effort. (Whitford 2004). In that study, success at removal of geese was based on reduction in goose use hours per day, reduction in goose aggression/injury complaints, and dropping counts per 100 meter of sidewalk on a 60-acre corporate park in Dayton, Ohio, with ponds, soccer and baseball fields, and six buildings. About 85 to 100 resident geese were present on the main campus and another 80 to 140 on the adjacent properties at the start of the study.

Records indicated 43 to 45 active nests annually for the previous five years on the primary campus. Alarm and alert used for this study were digitally altered and played back in random call sequence patterns to reduce potential for habituation. Call playback and goose harassment (one person chasing geese on foot until they left the property) started Feb. 26, 2002, and only call playback was used May 14 to Aug. 15.

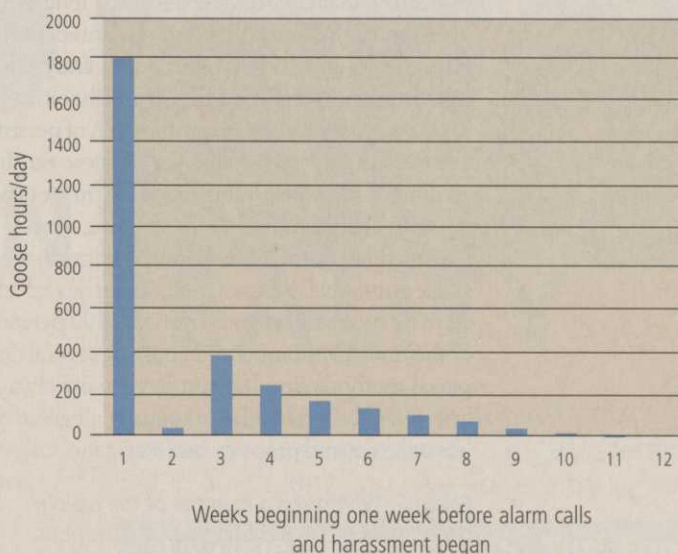
The study (see charts at right) began after breeding territories were established by geese

Continued on page 74

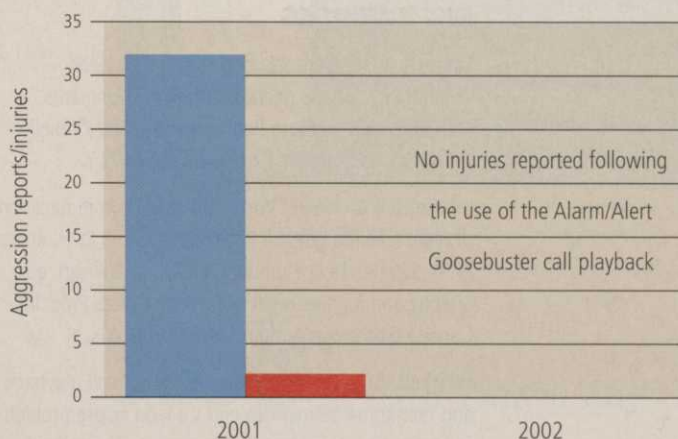
Droppings per 100-meter sidewalk



Estimated goose hours on study site per day



Goose aggression to humans (blue), human injuries (red) 2001 vs 2002



Continued from page 73

that had nested there previously, so geese were more reluctant to disperse than they would have been in summer, fall or from non-breeding areas.

Goose hours per day on the corporate park dropped from more than 1,800 to zero from February to May. Goose droppings per 100 meters of walks fell from a mean of 195.7 to 3.28 per 100 meters between Feb. 26 and March 24. Nesting success dropped to zero in 2002, and no reports of goose aggression or injury to humans occurred, vs. 32 and 2, respectively, in 2001.

Study methods successfully eliminated all geese from the property and geese stayed away eight months after the last use of call playback, indicating that they had developed a long term aversion to the area. New sod replanted annually in 2000 and 2001 around ponds and building entrances remained dense and healthy in 2002 with geese gone. A combination of persistent pursuit and zero tolerance of geese on the grounds was considered essential in getting geese to abandon the site for the long term.

As a final comment, it should be noted that no single non-lethal dispersal method can be expected to be successful at goose removal 100 percent of the time. Combining and applying several dispersal methods simultaneously virtually always improves the probability of getting all geese to leave the desired property and stay gone.

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Milwaukee. He has held the Geist Endowed Chair/Professor of Biology at Capital University since 1993 and is in his 24th year of Canada goose vocal/visual communication and behavioral research. He acknowledges that he has gained research and technical development financial support from Bird-X Inc. and receives royalties from the sales of the Goosebuster unit sold by the company in exchange for call copyright licensure and continued advisory services.

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