

Canada Geese *Branta canadensis*

There are two types of Canada geese in the Chicago area, “resident” and “migratory”.

- “Resident” geese are defined as those that nest and breed in the Chicago area; these groups generally stay within 100 miles their whole life, are more adaptable and more persistent to stay in the area.
- “Migratory” geese are those that quickly pass through the area in spring, returning to their nesting grounds in the North. In late fall migratory geese head back south looking for a “hotel and restaurant” stay unless weather conditions change and they are forced to move further south.



Geese consume 3lbs of grass per day, therefore producing 1-2lbs of droppings per day. This causes unsightly fecal matter, damage to turf from over grazing, safety concerns of slipping and falls, aggressive geese attacking patrons, as well as health concerns. Goose droppings have been linked to numerous diseases including: *Cryptosporidiosis, Giardiasis, Salmonella and Hypersensitivity pneumonitis.*

<http://rsh.sagepub.com/content/119/3/146.abstract>

Resulting in high maintenance costs, detrimental and hazardous health risks to the public as well as a liability risk.



WGC’s Border collie chase program of daily “hazing” keeps moving the geese off the parks, letting them know this is not a safe place to stay!

General Biology
Canada Geese
Branta canadensis

11 different recognized races—only 2 are common in Chicago land: giant and interior
Only *Branta canadensis maxima* (Giant) are permanent residents in this area



Giant Canada Geese:

Average weight is 15-17 lbs, can be as big as 24 lbs!

Male and female have similar appearance, but male is slightly larger

Life span ranges from 7-25 years—Urban geese tend to live longer than rural geese

Feeding: prefer young shoots of fertilized grass, but will also eat corn, soybean, etc crops, crabapples and anything else available. A single goose can eat up to 3 lbs of grass and leave 2 lbs of droppings in one day.

Migration:

Chicago land area is located within the Mississippi Flyway—our migratory geese are part of the Mississippi Valley population. Large numbers of interior Canada geese breed and summer in the Hudson Bay area, then migrate down through the Midwest in late fall stopping where they can find open water and grass. Geese will return to the same resting areas year after year. You will often see orange neck bands on interior Canada geese migrating through this area as a result of an ongoing banding program in Canada to help track migration patterns.

Molting:

Every year approximately 8 weeks after goslings hatch, adult Canada geese shed their flight feathers and are unable to fly. They replace their flight feathers at about the same time their young gain the ability to fly.

Breeding and Reproduction

Branta canadensis maxima is the only species of geese to breed in this area. They are able to mate at 2-3 years of age. Geese develop a strong pair bond, only finding a new mate in the event of the death of the first. The pair will return to the same location year after year to nest. Their offspring will also return to the same general location to begin reproduction of their own. Reproduction occurs just once a year in the spring. In this area we typically find the first nest around St. Patrick's Day.

Nesting:

Geese typically nest within 150 feet of water as water offers protection from predators. Goslings must be able to walk to a body of water shortly after hatching. Nests are usually found on the ground in an area with a good view of the surroundings; however it is not uncommon to find them on rooftops, in flower pots, or in broken trees. Islands are a favorite nesting spot as they offer maximum safety from predators. A typical nest is made into an 18 inch diameter bowl using surrounding vegetation and then lined with down plucked from the female's breast.



Egg laying is started shortly after nest construction begins. Geese typically lay one egg per day, at any time during the day. A group of eggs is called a clutch, with the average clutch sizing being slightly over 5 eggs for giant Canada geese. Incubation lasts from 26 to 28 days, and the female does not begin incubation until all eggs are laid, therefore all the goslings will hatch on the same day.



During the entire nesting process, both the male and female vigorously defend the nest territory. If the nest is destroyed early in the process, the female will generally renest in a nearby location.

Egg Depredation as a Control Technique

Regulations:

Due to the fact that giant Canada geese were on the verge of extinction a relatively short time ago, they are strictly protected by the government. Canada geese are protected by the Migratory Bird Treaty Act of 1918, an international treaty protecting all migratory birds. In Illinois it is illegal to use lethal control techniques (i.e. round-up) or to harm a Canada goose in any way without both state and federal permits, which are only given in special circumstances (i.e. airports). While egg depredation is considered a non-lethal control technique, it also requires state and federal permits.

Egg Depredation:

Egg depredation is a process in which eggs are treated in such a way as to render them nonproductive. The three methods are oiling, addling, or pinning. Coating each egg with EPA approved corn oil prevents gas exchange within the egg, thus stopping the embryo from developing. Addling, or vigorously shaking each egg, causes the membrane of the embryo to rupture. Pinning, which is poking a hole in the shell with a strong straight pin, allows bacteria to enter the shell and infect the embryo. All 3 techniques should be done as early in the incubation process as possible. The eggs are treated, and then returned to the nest for the full incubation period. This causes the female to continue to incubate the clutch and thus prevents renesting.

The purpose of using egg depredation as a control technique is to initially stabilize the population, and over time, reduce the resident population without affecting the migratory population. Because of high nesting success and low first year mortality rates, a single pair of Canada geese left unchecked can generate a flock of more than 50 individuals in as little as 7 years.

