## Birth control-nature's way

By Dan Gibbard Chicago Tribune staff writer July 11, 2005

By day, Canada geese are the bossy bane of the suburbs, fouling lawns and sidewalks with droppings and tying up traffic as they waddle across busy roads.

But by night, they live in fear as another suburban scourge—the coyote—raids their nests and snatches their eggs for dinner.

The phenomenon, uncovered by scientists from the Max McGraw Wildlife Foundation in Dundee, may be partly responsible for the surprising fact that the growth in the number of geese is slowing.

"People think the population is growing really fast ... because the urban areas are seen as safe and perfect goose habitat," said Charlie Paine, who did a census for McGraw from 2000 to 2002. The permanent resident goose population went from 34,000 the first year to 22,000 in 2001 before rebounding to 27,000 in 2002.

"Despite all of our goose complaints and problems, the overall goose population is not growing rapidly," Paine said. "It does look very much like predators are actually a check on the population."

With hunting of Canada geese prohibited and plenty of food and prime nesting space available, biologists began to suspect something was amiss with the breeding cycle. They found many eggs were being eaten, but initially they couldn't tell by what: raccoons, skunks, coyotes or something else.

That's where the night shift took over.

Justin Brown, a graduate student at Ohio State University, tried to capture the nest raiders on film in 2004. It quickly became evident that coyotes were the main culprits, but catching them in the act with conventional camera equipment proved to be a problem.

Shy and nocturnal, coyotes are hypersensitive to sound. Even the click of the sensors that set off still cameras caused them to run, leaving scientists with flash photos showing the hindquarters of fleeing animals.

"We had hardly any nests taken by coyotes where there were cameras," Brown said.

Time-lapse video cameras with infrared lenses were the answer, giving Brown and adviser Stan Gehrt, who has been studying coyotes at McGraw since 2000, a bird's-eye view of the coyotes in action.

Their cameras monitored 270 nests the last two years and captured dozens of raids. Each was different, Brown said, but there was one common factor: The birds always knew they—or at least their eggs—were cooked.

"The geese are always looking around, constantly aware," Brown said. "All of a sudden you'll see the goose stand up. Sometimes we'll see a goose run away and a coyote come sprinting in. Other times the geese walk away and the coyote comes sauntering in five minutes later" and takes the eggs.

The coyotes rarely ate the eggs where they stole them, preferring to carry them a short distance, crack the shells and gulp down the contents, Brown said. Sometimes they attacked and killed adult geese, but coyotes prefer to eat whatever gives them the least trouble, researchers say.

Canada geese generally have five to seven eggs in a nest, and the coyotes generally did not eat all of them. But that did not mean any of the eggs survived. Always opportunistic raccoons sometimes were nearby.

"As soon as a coyote leaves, if there is a raccoon in the vicinity, it's basically a race between the raccoon and the goose to see who can get back to the nest first," Gehrt said.

The study was the first indication that coyotes were eating goose eggs, in part because the eggs don't show up in animal feces. Still, scientists say they're not surprised.

"They'll eat about anything that's not nailed down, from mulberries and wild plums to deer fawns and June bugs," said Bob Bluett of the Illinois Department of Natural Resources. "The flexibility in their diet is amazing and one reason they've been so successful."

Researchers also found that when predators take eggs, it can be a double whammy for geese.

Those that fail to hatch goslings in spring often fly away to Canada in May or June, not returning until September. On the way, they pass through hunting-happy areas of Michigan, Wisconsin and Minnesota, greatly hurting their chances of survival, Paine said.

"A bird from DuPage County, if it's going to be harvested, that's probably where it's going to happen," he said.

Around the Chicago suburbs, though, it's almost a perfect goose habitat, experts say. Industrial parks and subdivisions have detention ponds ringed by well-manicured lawns, excellent for grazing. They also let the geese nest on the banks without fear of being surprised by predators.

"We've created our own problem," said Chris Anchor, a wildlife biologist for the Cook County Forest Preserve District.

Even in winter. Many of those ponds have aerators or other fountains, which keep them from freezing over.

"And we've protected them from hunters," Anchor said. "It's a perfect situation."

As they have made themselves at home, geese have become more of a nuisance. Their droppings can seem to cover every square inch of some golf courses and yards, and it can be hard to get through the parking lot of an office park without soiled shoes.

Goose feces also are a health hazard that has been linked to beach closings. One gram can contain 10,000 E. coli bacteria, said Mike Adam, a biologist with the Lake County Health

Department. And the nutrient-rich droppings hurt pond ecosystems by promoting algae growth, he said.

Coyotes have public-relations problems of their own, mostly due to their occasional attacks on family pets, especially cats and small dogs.

"They do a lot of good," argued Adam, citing the goose eggs and helping control the rodent population. "They get a bad rap, I think."

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