Q&A For New York Goose Capture-Removal (Round-ups) – June/July 2013

Q: Why does Wildlife Services manage Canada geese?

A: The U.S. Fish and Wildlife Service, in the Interior Department, manages Canada geese under the Migratory Bird Treaty Act. It sets the rules for how the public and other agencies can interact with geese and other birds.

Wildlife Services (WS) helps manage *damage* related to Canada geese. As part of the Animal and Plant Health Inspection Service in the U.S. Department of Agriculture, Wildlife Services' mission is to safeguard agricultural and other resources.

Wildlife Services only responds to local requests for assistance. It follows the rules set by wildlife management agencies.

Q: What is the problem with Canada geese?

A: Canada geese are beautiful waterfowl and their resurgence is a conservation success story. Generally problems arise when resident Canada goose numbers or density has increased to a level incompatible with the size of a property. Problems include: overgrazing of grass, ornamental plants and agricultural crops; accumulation of droppings and feathers; attacks on humans by aggressive birds; and the fouling of reservoirs, swimming areas, docks, lawns, and recreational areas.

For aviation, Canada geese are among the most hazardous birds. Although goose-aircraft strikes aren't common, more than half are with multiple geese and three-quarters have an effect on the flight or cause damage.

Q: What are resident Canada geese?

A: Resident Canada geese are those Canada geese that breed and nest in the United States. The population of these residents increased 16-fold from 1970 to 2009 (from 230,000 to 3.89 million). Goose strikes to aviation and damage complaints regarding resident Canada geese increased at the same time. In urban areas, they have few predators and hunting cannot be used to control the population.

- The Atlantic Flyway Council has found resident Canada geese to be the most numerous waterfowl population in the Atlantic Flyway and declared them overabundant.
- The Atlantic Flyway goose population is 25% greater than the population goal.
- New York contains 23% of the Atlantic Flyway resident Canada geese.
- New York has the second largest resident goose population in the entire Atlantic Flyway.
- New York state wildlife authorities estimate a population of 206,000 geese, far above the population objective of 75,000.

Q: How does Wildlife Services manage damage from resident Canada geese?

A: Wildlife Services works with individuals, local governments, and businesses to resolve damage posed or threatened by wildlife including migratory and resident Canada geese. WS recommends *integrated damage management* that complies with rules set by the Federal and State wildlilife management agencies. It suggests techniques ranging from no-feeding policies to depredation permits, depending on the situation. Integrated methods include no-feeding, landscape modification, barriers, light and sound scaring devices, herding dogs, egg-and-nest treatment, and oral contraceptives, among others. No single technique used exclusively provides a solution.

In 2012, Wildlife Services in New York responded to almost 200 requests about damage related to resident Canada geese. Information was provided on the varied ways to reduce damage, from no feeding policies, egg treatment, and harassment to other methods. The program also chased more than 8,000 geese from locations where they threatened human safety or caused property damage, and treated more than 1,900 eggs to prevent hatching.

When geese are unable to fly (during the molt), Wildlife Services can collect the Canada geese and transport them to poultry facilities, where they are processed and meat donated to local food charities. About 5,000 were euthanized this way in 2012 throughout the state.

Nationally in 2012, WS dispersed 96% of the Canada geese encountered.

Q: Are most Canada geese captured and euthanized?

A: In FY12, Wildlife Services dispersed 96% of the Canada geese it encountered. That means more than 589,000 were chased away and 24,768 were euthanized. At airports, more than 90% of the wildlife encountered are dispersed, or chased away, nonlethally.

Hunters also harvest geese and the U.S. Fish and Wildlife Services also approves other depredation permits, for agriculture protection for example.

Q: How are the geese killed?

A: In 2012, all geese collected by Wildlife Services in New York in a capture-removal, or round-up, were transported to a poultry processing facility. The meat was donated to food charities.

[Option: In the past, the geese are euthanized in accordance with American Veterinary Medical Association (AVMA) Guidelines on Euthanasia (June, 2007) which allows for carbon dioxide, gunshot and inhalant anesthetics. Most often they are transported in a poultry or turkey crate, which is placed in a chamber to which carbon dioxide is added. Carbon dioxide does not accumulate in tissue in food-producing animals and it has rapid depressant, analgesic, and anesthetic effects.

AVMA defines euthanasia as the act of inducing humane death in an animal when its life must be taken.]

Q: Do new geese repopulate areas where geese are removed?

A: A total of 290 resident Canada geese were removed from New York City-owned property in 2012, a decrease of 285 geese from 2011. The number of resident Canada geese surveyed on City property has decreased since 2010.

Of 77 City-owned sites surveyed in 2012, 13 were identified as appropriate for goose removals. Geese were collected at nine sites; due to absence of geese or inability to access geese on the day of removal none were removed at four sites. In 2010, 23 sites were identified as appropriate for goose removals.

Looking at three City-owned sites where collections were made in several different years, the number of geese removed was 70% lower in 2012 than in 2009. Although a scientific analysis has not been completed, it appears that these properties are not repopulating with the same number of geese.

Q: Why can't you just move the birds somewhere else?

A: New York does not allow relocation of wildlife.

Geese can return naturally to their capture site or cause similar problems in the new site. When appropriate and with management agency approval, WS does relocate geese in a limited number of locations.

Q: Does goose feces really cause any problem?

A: In simple terms, most people prefer not to walk, play, or eat in areas covered with feces, and would not let their children do these things. Canada geese deposit ½ to 1 pound of feces per bird per day, which can significantly accumulate during molt season or on small properties with large flocks. In comparison, an average size dog drops about ½ pound, which responsible owners clean up.

While no direct link between contact with goose feces and human illness has been made, increasing evidence suggests human virulence forms are present in goose feces. Also research studies showed E.coli presence in goose droppings, including human virulence forms. It was found to be more common in warm months and among resident Canada geese. Recent studies have found that 95% of a disease-causing bacteria called fecal coliform found in urban watersheds comes from animals.

Waterfowl, including Canada geese, were the largest source of *E. Coli* identified in water, sand, and sediment in a study of two beaches in the Great lakes. In 2012, Wildlife Services captured and euthanized 1,425 geese in order to protect water quality in the Lake Eire and Lake Ontario watersheds. This operational program, under the Great Lakes Restoration initiative, seeks to reduce non-point source pollution.

Q: Why can't people eat the goose meat?

A: The Canada goose meat can be eaten; in fact hunters in the U.S. harvested at least a half-million resident Canada geese during the special September hunt in 2009. In some locations the recommendation is that people eat no more than two meals per month of wild waterfowl. Wildlife

Services programs in the eastern United States donated about three tons of goose meat to charity in 2008.

Q: Do geese really cause airplane strikes?

A: The FAA/USDA database of wildlife strikes with civil aircraft show 134 strikes with Canada geese in New York state, 17% of which caused substantial damage to or destroyed the aircraft (1990 to2012). (At Stewart Airport two Canada goose strikes have been recorded, one involved ingestion into the engine and necessitated an emergency landing.)

Nationally from 1990 through 2012, the database showed 1,400 confirmed Canada goose strikes: 43% of the strikes were with multiple Canada geese and 78% caused an effect on flight and/or damage, totaling \$116.3 million in reported costs.

One Canada goose strike caused two civilian deaths in a civilian aircraft and a collision between a Canada goose flock and a Boeing 707, operating as a military AWACS in Alaska, resulted in the loss of the entire crew of 24.

Q: Aren't migratory geese the real problem for aviation?

A: According to the FAA strike database, more than 46% of reported strikes involving Canada geese and civil aircraft occurred during the months of May-September when the vast majority, if not all, would be by resident (non-migratory) geese. Researchers believe that about 80% of civil aircraft strikes with Canada geese annually involve resident birds.

Q: Can't radar or engine shields solve the goose-aircraft strike problem?

A: WS operations staff and researchers have been involved with the use of and research on small mobile radar systems since at least 2001. Radar is a bird-detecting system. Its use as a way to avoid strikes is still under investigation and it does not help birds avoid airports or aircraft.

More than a dozen other research projects are underway in habitat management, wildlife control, and technologies to reduce strikes. WS is collaborating with private companies to conduct research on lighting systems to help birds detect and avoid aircraft as well as bird-detecting radar systems at airports.

Bird-aircraft strikes can involve an aircraft's windshield, engine, nose, wing/rotor and radome (the top aircraft components struck or damaged). Questions regarding the engineering of aircraft are best answered by aeronautical experts.

Q: Does egg treatment and capture/removal make any difference?

A: In one Northeastern U.S. city, on an island location, WS began egg treatment in 2001 and capture-removal in 2004. Each year, the number of eggs to be oiled and the number of resident Canada geese to be removed, has decreased. In 2009, additional habitat management took place. In the 7 years

prior to the first capture-removal there were 16 Canada goose strikes at an adjacent airport compared to 5 Canada goose strikes in the 7 years since.

Q: Why aren't goose eggs just oiled or addled?

A: Wildlife officials estimate that to stabilize resident Canada goose populations, each state would need to destroy 15,740 nests annually. Statewide, WS and others destroyed just 1,205 nests.

In locations where individuals and agencies enter into cooperative service agreement with WS, staff does conduct egg-and-nest treatment. WS can also advise individuals on how to successfully oil eggs themselves. In some locations, however, the concern and damage relates to the number of geese currently on the property. Oiling eggs can affect the growth of the flock, not the number already there. An advantage can be that resident Canada geese without goslings may respond better to dispersing techniques.