APHIS

Factsheet

Wildlife Services

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OvoControl™ G–Oral Contraceptive Bait for Canada Geese: Questions and Answers

Q. What is OvoControl™ G?

A. OvoControl[™] G is a new bait for resident or urban Canada goose populations that reduces the hatchability of eggs. It was developed by scientists at the U.S. Department of Agriculture's (USDA) Wildlife Services' (WS) National Wildlife Research Center (NWRC) and Innolytics, LLC.

Q. Why are resident Canada geese considered a problem?

A. Large populations of resident Canada geese are often considered a nuisance and can be a potential health risk because they foul land and water with their droppings and can collide with and damage aircraft. Recent studies have also found *Escherichia coli, Listeria* and *Campylobacter* bacteria, strains associated with human disease, in Canada goose feces.

Q. How does OvoControl work?

A. OvoControl contains nicarbazin. Nicarbazin is a compound traditionally given to broiler chickens to prevent the disease coccidiosis, one of the more common and costly diseases in poultry. Coccidiosis causes droopiness, paleness of the comb, diarrhea, and blood in the droppings and can lead to death of both chicks and adults.

A side effect of nicarbazin is decreased egg production and hatching rates. Nicarbazin affects the hatchability of eggs by changing the pH of the yolk and by weakening the yolk membrane, which allows the albumin and yolk to mix. As a result, the embryo cannot develop.

Because of this effect, when OvoControl is fed to Canada geese for the duration of their breeding season, the nicarbazin effectively reduces the hatching success of eggs. When nicarbazin is withdrawn from the diet, egg production and hatchability return to normal within a few days.

Q. What are the health effects associated with OvoControl?

A. The health effects associated with OvoControl are minimal. In pen studies, body weight, blood gases, hemoglobin, hematocrit, and blood cell morphology were similar among birds in treatment and control groups.

In chickens, studies have shown that treatment with nicarbazin reduces the bird's ability to dissipate heat when environmental temperatures and humidity are both high (over 90 °F and 85 percent humidity). Because Canada geese nest in the spring, when the temperature and humidity conditions are not high enough to cause overheating, this side effect has not been observed. Also, Canada geese can modify their behavior (e.g., by sitting in the shade, taking a bath, etc.) to help regulate their body temperature whereas caged chickens are limited in their movements. Overall, it appears that these side effects of nicarbazin in poultry do not apply to geese.

Q. Are there any dangers or secondary hazards to humans or other birds or animals that may eat the bait?

A. OvoControl can reduce egg hatchability and production in all bird species. Because of this, only licensed wildlife specialists or pest control operators are permitted to buy and use OvoControl. They must follow label instructions to minimize the potential for nontarget wildlife species to feed on bait.

There are no known dangers associated with eating geese that have been treated with OvoControl. It has been used extensively in the poultry industry for more than 50 years. Once OvoControl is digested and absorbed by the goose, it is no longer biologically available to a secondary species.

Q. How long do the effects of OvoControl last?

A. When nicarbazin is withdrawn from the diet, egg production and hatchability return to normal within a few days.

Q. Can OvoControl be used with other wildlife species?

A. In addition to Canada geese, OvoControl has proven effective for use with pigeons. However, it is currently registered only for Canada geese. Future research will likely be directed toward registering OvoControl for use with other overabundant bird species.

Q. What are the benefits of OvoControl?

A. OvoControl is a nonlethal, humane method for managing overabundant resident Canada goose populations. It is not harmful to geese, birds, other waterfowl, or people. The breadlike bait is similar in shape and size to a large corn kernel. It can be stored at room temperature for up to 1 year. It can be distributed with broadcast bait feeders or by hand. When conducting Canada goose population-control work for airport safety, field crews can broadcast OvoControl from an automatic feeder.

Q. What are the limitations of OvoControl?

A. In order for the bait to be effective, geese must consume at least 50 grams of the bait per day for at least 21 days prior to the start of the nesting season. The bait must continue to be consumed daily throughout the entire goose nesting period, which lasts from 8 to 10 weeks.

The use of OvoControl is limited to sites in urban areas such as office parks, recreational parks, golf courses, schools, hospitals, restaurants, airports, and commercial and industrial sites. "Urban" is defined as a municipality with a population of 50,000 or more and its adjacent areas.

Q. Who can use OvoControl?

A. Because OvoControl is regulated by the U.S. Environmental Protection Agency (EPA) and is a restricted-use chemical, only licensed wildlife specialists or pest control operators are permitted to buy and use it. All requirements on the drug label must be strictly followed.

Q. What can you expect in terms of population control for resident geese following the first year of use?

A. OvoControl has no effect on the current number of adult or juvenile resident geese. Following the first year of treatment, under ideal conditions, with all mating geese consuming the appropriate dose during the breeding season, no goslings would be expected. Under actual field use, not all geese may consume the bait. Consequently, some goslings may still be observed, but the numbers of goslings would be significantly reduced.

Q. How much does OvoControl cost, and where can I purchase it?

A. Innolytics, LLC, has received regulatory approval from EPA to market and sell the new contraceptive bait. To find out more about the cost, please go to http://hatchcontrol.com on the Web. OvoControl can be purchased directly from Innolytics. LLC

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Q. Who supports the use of OvoControl?

A. OvoControl is a humane, nonlethal alternative to managing overabundant populations of resident Canada geese. Its use is supported by numerous conservation groups, including The Humane Society of the United States, People for the Ethical Treatment of Animals (PETA), and Ducks Unlimited. In 2005, OvoControl received the Best Bird-Friendly Innovation Proggy Award from PETA and the Outstanding Technology Development Award from the Federal Laboratory Consortium (FLC) Mid-Continent Region. The FLC is a nationwide network of Federal laboratories that provides a forum for developing strategies and opportunities that link Federal laboratory expertise with the private sector.

Q. What is the NWRC mission?

A. NWRC is the research arm of USDA's WS program, a nonregulatory program that provides Federal leadership in managing conflicts with wildlife. NWRC applies scientific expertise to the development of practical methods to resolve human—wildlife conflicts and maintain the quality of the environments shared with wildlife.

Q. How do I obtain more information on OvoControl and NWRC?

A. For more information on OvoControl, please go to the WS National Wildlife Research Center Web site at http://www.aphis.usda.gov/ws/nwrc or the Innolytics Web site at http://www.innolyticsllc.com/.

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