



BEST PRACTICES FOR DESTROYING EGGS OR PREVENTING HATCHING

Canada Goose Management
Canadian Wildlife Service



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These best practices must be attached to any permit issued under Section 26.1 of the *Migratory Bird Regulations*.

Anyone wishing to destroy or sterilise eggs must be able to identify nests of the target species with 100% accuracy.

In most situations, simply destroying the eggs is the preferred option to prevent hatching. It is 100% effective and much simpler to apply than other options. Once the eggs have been removed or destroyed, the geese will usually leave the area within a few days.

The simplest approach is to break the eggs and leave them in the nest. Freezing is also an acceptable way to destroy embryos (Canadian Agri-Food Research Council, 2003); the eggs should be frozen as quickly as possible and remain so for at least 12 hours. If eggs are removed from the nest for the purpose of freezing, or for aesthetic or other reasons, the permissible method of disposal will be specified on the Migratory Birds Damage and Danger permit. The following general principles apply: The following general principles apply:

1. When disposing of bird eggs, public concern must be taken into account.
2. Eggs being transported or temporarily stored in a vehicle should be covered.
3. Eggs may be discarded or buried on the property where they were taken or deposited on another property if approved by that property owner. They will quickly break down and decompose.
4. Eggs may be disposed of in household garbage or directly at landfills. If eggs are placed in garbage receptacles such as dumpsters, they should be placed in opaque bags.

You must have a permit from Environment Canada, Canadian Wildlife Service to destroy eggs or prevent them from hatching.

Preventing hatching may also be accomplished by sterilizing the eggs. Egg sterilization is recommended only for situations where there is reason to believe that birds will re-nest if their eggs are removed or destroyed. If eggs are sterilized, the birds will continue to incubate the eggs until it is too late to re-nest. However, they may continue to aggressively defend their nest site and by the time they eventually abandon the sterile eggs, geese will very likely have begun to moult and may not be able to leave the area until they have grown new feathers, a process that can take up to 6 weeks.

Whether destroying eggs or sterilising them; it is preferred to do it as early as possible in the incubation period before embryos have a chance to develop.

EGG STERILISATION CAN BE ACHIEVED IN VARIOUS WAYS

1. **COATING EGGS WITH OIL.** Oil will block air exchange through the pores in the egg and prevent it from hatching (Blokpoel, H. and Hamilton, R.M.G. 1989). This sterilization procedure involves completely coating each egg with a thin film of non-toxic vegetable oil or mineral oil. Petroleum-based oil is not

- permitted. Oil can be applied by dipping eggs or spraying them on all sides. If spraying, care must be taken not to inhale the vaporized oil.
2. **EGG SHAKING.** Hatch may be prevented by vigorously shaking the egg to disrupt the internal egg membranes. Eggs must be shaken until the internal fluids can be heard slopping around (imagine a small jar almost full of liquid).
 3. **EGG PIERCING.** Hatch may also be prevented by piercing a tiny hole in the egg shell and membrane. This will affect the water balance within the egg, effectively sterilizing it.

Before beginning, please read and ensure that you understand all of the information in this Best Practices guide. For appropriate timing of activities in your area, consult local naturalists or contact your regional office of the Canadian Wildlife Service. The table below provides approximate dates for different regions. Ensure that you are able to accurately distinguish Canada goose nests from nests of other species. If you have doubts, consult a professional experienced in these techniques or contact the Canadian Wildlife Service for additional advice.

STEPS TO SUCCESSFULLY PREVENT HATCHING

- A) **In early spring, identify areas where geese are nesting or where habitat conditions look favourable for nesting geese.** Geese start nesting at different dates in different areas ranging from March through June with peak activity in April and May in most parts of Canada. Nesting generally begins earlier in the south, later in more northern areas. The first step is to locate paired birds in areas where breeding geese are not wanted. Birds seen frequenting the same location and vocalizing usually indicate a nesting territory. After all of the eggs have been laid, the female spends most of her time incubating them and may be well hidden, while the male stands guard near the nest or up to 100 metres away. Finally, geese may move up to several kilometres from nesting sites to feeding areas, so don't restrict searches to the immediate area to be protected, however permit holders may only sterilize eggs on property they own or manage.
- B) **Locate nests.** Canada Geese prefer nest sites near water with a good view of the surrounding area. Preferred areas in natural habitats are islands and along shorelines. Most nests are on the ground; however geese may also nest on structures such as trees, muskrat houses and beaver lodges. Geese may sometimes nest in less than ideal habitats such as landscaped areas in parking lots, on planters, balconies or rooftops. Look for a roughly woven mass of grasses, small sticks, and other material. After the eggs have been laid, down feathers may be visible even though the nest may be camouflaged with vegetation. Look for bits of down and unusual piles of vegetation. Once a nest has been found, identify it with a number, and record its location on a map so it can be found again later. A GPS receiver may be helpful to record nest locations and a nearby landmark can be marked with plastic surveyor's tape or surveyor's spray paint to help find the nest again. When approaching occupied nests, it may be necessary to ward off defensive geese; a canoe paddle or short stick works well. Do not strike the geese; they may peck, but generally they will retreat.

- C) To ensure all eggs are destroyed or sterilised, two visits are recommended, about a week to ten days apart.** When you find a nest, note whether geese are present or not. Also, note whether the eggs are warm or cold – warm eggs tell you that incubation has begun. Geese typically lay 5 or 6 eggs, one per day until the clutch is complete and then begin to incubate. Nests may contain more than six eggs however, so nests should be visited more than once to ensure that any eggs laid after the first visit are also treated or destroyed. If sterilising eggs, on the first visit mark the end of each egg with a large "X" or similar mark, using a soft pencil or felt pen, before oiling or shaking it. Mark and sterilize all eggs, then replace them, in the nest. On the second visit, sterilize newly laid (unmarked) eggs. Eggs sterilized successfully from prior visits should be handled carefully in case they have already begun to decay. If destroying eggs, you may destroy them on the first visit if they are being incubated, but if they are cold, you may wish to wait until the second visit to ensure you destroy the whole clutch.
- D) Data recording — important.** Keeping accurate records is important for several reasons. Permit holders are required to report the number of nests and eggs treated to the Permit Section of the Canadian Wildlife Service. Data must be submitted by the date indicated on the permit or new permits will not be issued in subsequent years. This information is used to measure the effectiveness of this type of program and helps plan future management efforts. Keeping records about nest locations will greatly facilitate finding nests in subsequent years since geese often nest in the same location year after year. Similarly, because timing of nesting is fairly consistent year to year, noting when eggs are laid and when geese begin incubating will be helpful in planning activities in the future. Weather conditions can also affect the timing of nesting, so note those as well.

Activity	Southern B.C., Ontario, Quebec	Maritime Provinces, Southern Manitoba, Saskatchewan, Alberta
Identify Nesting Areas	Early March	Mid to Late March
Locate Nests	Late March to Early April	Early April
First Visit	Mid-April	Mid to Late April
Second Visit	Late April	Late April to Early May

A copy of your permit must be carried at all times whenever destroying or sterilising eggs.

REFERENCES

Blokpoel, H. and Hamilton, R.M.G. 1989. Effects of applying white mineral oil to chicken and gull eggs. *Wildlife Society Bulletin* 17: 435-441

Canadian Agri-Food Research Council. 2003. Recommended Code of Practice for the Care and Handling of Farm Animals "Turkeys, Chickens and Breeders from Hatchery to Processing Plant" 54pp.