

## Controlling Damage by Giant Canada Geese

**Most people enjoy seeing Canada geese.** However, the big birds often wear out their welcome when they become too numerous and when yards, beaches and docks become fouled with their feces. This guide explains why problems with geese arise and how landowners can reduce these problems.

**GIANT CANADA GEESE** (*Branta canadensis maxima*), the largest race of Canada geese, are native to the prairie region of the midwestern United States and Canada. They nest in over one-half of Arkansas counties, most commonly in northern and western regions and along the Arkansas River. Canada geese have adapted to civilization and are firmly established in cities such as Fort Smith, Clarksville, Russellville, Ozark, and Little Rock.

Canada geese are highly prized game birds and are enjoyed by birders, photographers and casual observers. Their presence in some locations, however, may result in problems. Goose flocks near airports are an aviation hazard, and in rural areas geese can damage crops. Most problems result from goose droppings in urban or semi-residential locations. Lawns, golf courses and community or subdivision lakes provide ideal loafing, roosting and grazing areas for geese. Droppings on shorelines, swimming beaches and docks are a nuisance and vegetation can be damaged by too much grazing or trampling.

### Identification

Canada geese can be distinguished from other geese by their black bill, legs and feet and by the distinctive black head and neck with a white cheek patch. Giant Canada geese are the only wild goose to commonly nest in Arkansas.

### General Biology

Canada geese are extremely prolific. Able to reproduce at 2 or 3 years of age and living to over 10 years, a pair of adult geese raises an average of about 4 young per year. At normal reproduction and mortality, a pond or lake with 3 pairs of adult geese can multiply to nearly 50 birds within 5 years and to over 300 in just 10 years. Being social birds geese congregate in "flocks," except during the nesting season. Most birds in these flocks are related and return to the same nesting and feeding areas every year. Pairing may occur at one or two years of age, but few individuals will nest prior to three years of age. Pairs disperse widely during the spring in search of nesting sites. Islands, peninsulas and artificial nesting structures are preferred, but geese may also nest along shorelines, in abandoned raptor nests or on the tops of tree stumps and even on roofs of buildings. Nests are almost always near water.

Nesting begins during early March but the date may vary a week or two depending on spring temperatures. Giant Canada geese normally lay five or six eggs (some nests can have 8) and hatching occurs about 28 days later. Goslings leave the nest within a day

or two but remain flightless for ten weeks. Adult geese molt their primary flight feathers and become grounded during the latter portion of the brood-rearing period. Adult geese regain flight about the time goslings first begin to fly. During an average year, goslings are present and flightless during May through early July, and adult geese are flightless from mid-June through early July.

Feeding is the predominant activity during the summer. Goslings require large amounts of high protein food to achieve rapid growth, and adults replace weight lost during breeding and molting. Geese are primarily grazers during the warm months. Young, tender shoots of new grass are preferred because of their high protein and low fiber content. Grasses that have been mowed or grazed are ideal. Native aquatic plants and seedheads of grasses also are eaten when available.

Agricultural crops become more important during fall and winter. Winter places high-energy demands on geese and browse may be less available because of snow cover and ice. Waste grain in stubble fields is preferred but standing crops will also be used, particularly in partially harvested fields. During winter, geese concentrate where food and open water are available. During the fall hunting season, geese often move to areas where hunting and disturbance are minimal. Observations of marked birds indicate that even small wintering flocks often consist of a mixture of local birds and migrants.

## **CONTROL**

Prevention is the best way to avoid problems with geese. A key ingredient for alleviating damage is for neighbors or affected property owners to cooperate. A compromise between those who attract geese and those who do not want them around is often the best practical solution. The following section offers advice on methods of controlling damage by geese once a problem develops.

- **Legal Status.** Giant Canada geese are migratory waterfowl and subject to U.S. Fish and Wildlife Service jurisdiction. It is unlawful to kill, hunt, sell, purchase or possess migratory birds except as permitted by federal regulations. Federal law also prohibits the destruction of the eggs or nests of migratory waterfowl. Permits are not required to harass or scare depredating waterfowl.
- **Eliminate Attractions.** Most problems develop when geese are encouraged by feeding, clean shorelines and when artificial nesting structures are constructed. Control has little chance of sustained success unless attractants are eliminated.
- **Feeding must be stopped.** Neighboring property owners must agree to stop feeding before control is initiated. Some communities and homeowners' associations have passed regulations prohibiting the feeding of waterfowl in their jurisdictions. This prevents feeding by a few well-meaning individuals from nullifying the control efforts of the majority of the neighborhood. Artificial nesting structures should be removed to reduce production of more geese. Woven wire fencing, or planting closely spaced trees

or shrubs and allowing shoreline vegetation to grow will also discourage geese from walking to nearby mowed areas.

➤ **Harassment.** Although federal permits are not required to scare waterfowl, neighbors or members of a homeowners' association must agree that there is a problem and that harassment should be initiated. Intensive harassment is often sufficient to solve typical problems. Areas that are habitually used by geese will require more intense and persistent efforts than sites that are used sporadically. Geese that have been fed may not respond to harassment. The objective of harassment is to force birds from the problem area. Scaring them from a single yard or swimming beach will only relocate the problem. Harassment should be intense and persistent enough to disrupt established use patterns or the birds will likely return when harassment stops. Several consecutive days initially and periodic harassment thereafter may be required to ensure that geese will avoid a particular location. The disruption of roosting patterns often causes geese to relocate. Do not allow even a few birds to remain, as they will attract other birds.

**Scaring devices** such as fireworks, gas exploders, firearms, pistol-launched whistle bombs, dogs, balloons, flags, reflective tape, swan or eagle decoys, spotlights, lasers and Canada goose distress tapes are used to harass geese. Chasing and rock throwing may also be effective. Active forms of harassment usually are better but passive devices (balloons, flags, etc.) can be effective if used in combination with other methods. **Shellcrackers** (12-gauge shotgun shells that shoot an exploding projectile), pistol-launched whistle bombs and noise bombs can be very effective when fired over the heads of geese. Whistle bombs make a continuous whistling noise and shell crackers travel up to 100 yards before exploding. The above devices were developed specifically for animal damage control but before using any exploding scare device, check with law enforcement authorities to make sure no local ordinances are being violated. Information about availability of the above **scare devices** can be obtained from **Animal Damage Control Agents of the U.S. Department of Agriculture**. Firearms, fireworks and blank pistols are more readily available and can also be effective. Safety is a consideration when using firearms or fireworks. Firearms should be used only for scaring. Care must be taken to shoot in a safe direction and not directly at the problem birds. Automatic exploders produce a loud blast but no projectile is fired. They can be purchased or, if available, borrowed from state and federal wildlife personnel. A source of propane gas is needed for the gas exploders. Propane tanks used with barbeque grills and campers will fit scare cannons. If a propane tank is not readily available to you they can usually be rented locally. Gas exploders are most effective if timed to fire once every five to 10 minutes. They will fire at a set interval for up to two weeks but this is seldom necessary or desired because birds will become conditioned to regularly spaced blasts. Disturbance to neighbors should also be considered when setting the frequency and timing of blasts. Exploders should be moved every two or three days. In open areas such as fields or golf courses one exploder will protect up to 40 acres. Balloons, flags and reflective tape are most effective when used in combination with exploders. Place them on posts around the shoreline or over water to discourage geese from landing on a pond or lake. They may also be used in feeding areas such as lawns or around gardens. Flags made of inflated black plastic trash bags and tied onto a six-foot post are inexpensive and have produced good results. Tomato stakes or metal fence posts make

good anchors for flags. Helium filled balloons tied onto posts with monofilament line are also effective. Reflective silver or red balloons are more visible and durable than rubber balloons. Other passive scare devices such as scarecrows, dangling pie plates, wind chimes, etc. can be used. **To remain effective, scare devices must be moved frequently.**

➤ **Barrier fences.** Barrier fencing is a very effective method for excluding walking geese from your yard. This method consists of placing a physical barrier that geese cannot pass through between the water and the area to be protected. Barrier fences can be constructed from woven wire, chicken wire, plastic snow fence, corn cribbing, chainlink, netting, or a picket fence. An effective barrier fence for walking Canada geese uses durable material with openings no larger than 3 inches by 3 inches that is at least 30 inches high. Before you build any fence, check local ordinances at your planning and zoning office.

Bird scare tape. Bird scare tape or bird flash tape is a short-term or emergency strategy to reduce problems from geese walking onto your yard. Bird scare tape is most effective with small numbers of geese that have other mowed grass areas they can move to. Bird scare tape is not effective if geese are flying into your yard. Bird scare tape is thin shiny ribbon of mylar about ½ inch wide. It is silver on one side and colored, usually red, on the other. When properly used, the tape flashes in the sun and rattles in the breeze. The flashing and rattling frightens geese. Inspect and repair the tape daily. Pets, people, wind, and animals can break the tape. A broken bird scare tape "fence" is not effective. Locate the tape where it is visible to the geese. The fence should be long enough so geese cannot walk around it into the yard.

➤ **Landscaping.** Landscaping your shoreline to make it less attractive for Canada geese and their broods is considered the most effective long-term and environmentally sound method of reducing goose problems to individual yards and lawns. Canada geese avoid using areas where plants obstruct their view of the surrounding area. Temporary measures such as fences or repellents may be necessary to keep geese from your yard until landscaping is established. A hedge near the water with a gate to allow access can be decorative as well as effective at reducing goose access to your lawn. The hedge should be 30-36 inches tall and must be thick enough to exclude geese. Check with your local nursery or greenhouse for shrubs that will work in your yard. Leave a dense strip of naturally occurring trees and shrubs (20-30 feet wide) along the shoreline. A narrow (3-4 feet wide) S-shaped footpath can provide access to the lake. A continuous band of emergent aquatic plants such as cattails or bulrush in the water in front of your shoreline may reduce goose use of your yard. An unmowed shoreline buffer of native grasses and wild flowers that grow 20-30 inches tall in a strip 20-30 feet wide along the shoreline can discourage goose visits. Native grasses generally remain standing even after winter snows have compacted most other grasses. Use a mowed S-shaped footpath (3-4 feet wide) to provide access from your yard to the shoreline.

➤ **HUNTING.** Where permitted by law, hunting should be encouraged to alleviate goose problems. The objective is to achieve long-term benefits by sensitizing geese to scare tactics. Geese that are never hunted do not respond to exploders or to harassment because they perceive no danger. Birds that have been exposed to hunting are more likely to respond to scare devices outside the fall hunting season. If nuisance problems are not solved using the above techniques, additional measures may be necessary. Arkansas Game and Fish Commission or Department of Agriculture (Animal, Plant and Health Inspection Service) personnel may recommend techniques such as nest destruction and egg shaking which require a federal permit. An accurate documentation of the problem will greatly enhance the probability and timeliness of receiving a permit. Record the number of geese present and dates, whether or not geese use the area for roosting, number of nests and young produced, whether or not feeding takes place, and if hunting is permitted. When describing the habitat, include the size and number of water bodies present, number of landowners involved, vegetation type and description of the problem. This information will allow a better and more timely assessment of the problem and will streamline possible solutions. Your Arkansas Game and Fish Commission Regional Office will help you contact the appropriate Animal Damage Control Personnel.

## **POPULATION MANAGEMENT**

The main drawback of avoidance methods is that they merely cause geese to move to another property. Increasing goose populations will eventually create a larger "demand" for habitat. This demand, often called "pressure," causes geese to become increasingly resistant to avoidance techniques. Hunting is the most effective way to control goose populations. Special hunting seasons that target local geese in areas where populations are high have been established by the Arkansas Game and Fish Commission. Controlled hunting can be successful in populated areas. Local governments are encouraged to allow goose hunting where possible. Citizens concerned with growing goose populations are encouraged to support local government efforts to limit restrictions on hunting where possible. The Arkansas Game and Fish Commission will provide technical assistance in starting and managing hunts.

**Giant Canadas** are beautiful birds enjoyed by thousands of Arkansas citizens. Although their attractions are significant, they occasionally create problems which must be addressed in a realistic manner to be resolved. It is hoped that the techniques described will assist Arkansas property owners in solving problems caused by giant Canada geese.

