

Canada Goose Control Guidelines

Canada geese are an important member of Iowa's native wildlife community. As a migratory bird, Canada geese are protected by the Migratory Bird Treaty Act. The Department cooperates with the U.S. Fish and Wildlife Service (FWS) to manage Canada geese within Iowa. Due to their migratory nature, Canada geese from several different jurisdictions may be present in Iowa. Geese present during the spring and summer are geese that nest in Iowa. During the fall and winter, geese that nest in other jurisdictions arrive in Iowa and intermix with the resident geese, some of which migrate south due to winter weather.

A proactive approach using measures to manage Canada geese within the area, most of which do not require a special permit, are recommended over any actions that would require permission from the Department and reporting to the FWS. Basic steps of reviewing current problems, developing solutions, and evaluating outcomes are all important to include. A one-size-fits-all approach does not work with geese. The most successful long-term approach relies on proactive measures to reduce the attractiveness of certain landscapes while providing education to reduce human-geese conflict.

Canada Goose Biology and Natural History

Several different populations and sub-populations of Canada geese can be found in Iowa during different times of the year. In Iowa, typically discussion with goose conflict is focused on temperate breeding Canada geese, the population of geese that nest in Iowa. Iowa's population of Canada geese was extirpated (locally extinct) from 1907 to 1964. The Iowa Conservation Commission, a precursor to the Iowa DNR, began an effort to restore Iowa's Canada goose population in the early 1960s. This effort was very successful and resulted in a widespread distribution of nesting geese by 1994. At a statewide scale, Iowa's Canada goose population has been relatively stable since the early 2000s and is within the population objectives determined by the Department.

Temperate breeding Canada geese have high adult survival and reproductive rates. They typically begin nesting at three years of age. Female geese normally return to the area where they learned to fly. Nests typically have a clutch of four to seven eggs, but this can vary from one egg to more than a dozen. Embryos do not begin to develop until incubation begins. The female goose begins to incubate after all of the eggs are laid which leads to all of the goslings hatching at about the same time. Depositing all of the eggs in the nest can take longer than a week to occur and incubation time for Canada geese is approximately 28 days. Geese that do not have goslings may make a summer migration out of Iowa (i.e. molt migration), to favorable habitat as far north as Hudson Bay, Canada. Successful nesters and their offspring have strong ties to their natal areas and typically remain near their nest sites until winter weather forces them to leave.

Timing Matters

- **February-May:** Adult goose pairs select pond and nesting sites. These are "local" nesting geese. Nesting and 28 days of incubation occurs. Non-nesting adults move about in loose flocks.
- **May-July:** Goslings hatch and families group together. Protected water sites with close food sources see increased goose numbers. Non-nesting geese may stay in the area or "molt migrate" farther north.
- **July-September:** Goslings gain flight and flocks start moving larger distances to food opportunities.
- **October-January:** Geese migrate into the area from farther north and migrations further south continue depending on food availability, weather, hunting pressure, and access to open water. Goose numbers in the state are at their highest. As weather improves, geese migrate back north.

Geese Act Differently at Different Times of the Year

Goose behavior varies throughout the year to meet the needs of their life cycle and the season. Geese form large flocks during the fall and winter, which typically disperse into pairs and smaller flocks during the spring. Nesting geese seek a safe site that is relatively close to water. Once goslings hatch in mid to late spring the family is flightless until mid to late summer. During this time, geese congregate in small- to moderate-sized flocks in landscapes where short grass is adjacent to open water. These family groups gradually aggregate into the larger flocks observed during the fall and winter. During the growing season, Canada geese are primarily grazers that forage on the new growth of grasses, sedges, and forbs. During fall and winter they feed extensively on waste grains in harvested crop fields. Geese prefer

foraging sites that have good visibility so predators can be easily detected. Geese have strong ties to where they learned to fly and where they have previously nested, generally returning to these areas every year.

Today's Urban Areas Match Goose Habitat Needs

Habitat is the foundation of wildlife populations and activity. Providing attractive habitat creates an opportunity for wildlife use. Goose use of urban areas is an excellent example of a mobile and adaptive wildlife species that has learned to utilize a novel opportunity. Prior to the 1990s goose use of urban areas was relatively uncommon. As goose populations increased and urban development increasingly incorporated waterbodies and short turf grass, geese learned to utilize these areas because they contained all of the things they needed to thrive. The first step in a holistic approach to managing geese in urban environments is the recognition that providing attractive habitat will result in goose use.

There are two common habitats that are particularly attractive to geese in urban environments and agricultural settings: low-disturbance waterbodies and expanses of short vegetation. Low-disturbance waterbodies are places of safety for geese. Geese are naturally attracted to water as a safe place where they can rest. Short vegetation, such as manicured turf grass or a recently planted bean field, is attractive because it provides both safety, due to excellent visibility, and forage. Therefore, the combination of both water and short vegetation is highly attractive to geese. Incorporating landscape features or human activity to make these habitats less attractive to geese will go a long way to reduce human-geese conflict.

Canada geese are very adaptable and have learned to exploit many contemporary habitats that were not historically associated with Canada geese, such as urban areas, artificial open water, and human modified landscapes. Modern-day urban development incorporates small-to moderate-sized waterbodies for both stormwater management and landscape aesthetics; often these waterbodies have extensive areas of short grass immediately adjacent. The combination of open water and short grass is highly attractive to Canada geese. This can lead to conflict between people and geese resulting from fecal deposition, overgrazing, and aggressive behavior that occasionally occurs once geese become habituated to people.

Hunting is the Traditional Method of Control

Hunting is the primary method for managing goose populations. The Department sets hunting seasons within the frameworks established by the FWS and the Mississippi Flyway. Approximately 90% of Iowa's Canada goose harvest consists of temperate-breeding Canada geese, the majority of which originate in Iowa. The Department structures Iowa's goose hunting seasons to encourage harvest of Canada geese in urban settings including increased bag limits and additional seasons in and around metro areas. Recent research found that Canada geese in the Des Moines metropolitan area are susceptible to hunting where it is allowed within city limits as well as in the surrounding areas. Further research and efforts to increase recreational harvest of geese in urban areas is currently underway.

Methods for Addressing Negative Human-Goose Interactions

In this section we discuss a variety of techniques used to address goose use at specific sites and methods of reducing negative human-geese interactions. Any strategy to deter geese will need to incorporate multiple techniques to have the best result.

Hunting Opportunities

Regulated hunting is the primary management action to control goose populations at statewide and regional scales. Any hunting will be during established seasons and follow all state and federal regulations. Allowing hunting in locations of conflict or agricultural damages will help directly remove those specific geese as well as discouraging use by other geese coming into the area. Encourage the landowner to allow hunting during the earliest possible hunting seasons in order to target local birds.

The use of hunting in urban environments is constrained by safety and legal requirements. But, there may be opportunities to incorporate hunting and these opportunities should be utilized. Hunting in areas with human-geese conflict is very beneficial because it directly reduces the survival of the individuals causing conflict and it is the most

extreme form of hazing, thereby resulting in the largest change in behavior. Valuable from that aspect, hunting can also enhance any other hazing techniques used to make areas seem less appealing to geese.

As long as all state and federal hunting regulations are followed, creative hunting techniques can be implemented to focus harvest on urban birds. This will act as an extreme form of hazing and can be very successful at deterring birds from specific locations. Also, this can target specific nuisance birds.

Elimination of Food Handouts

One of the most powerful attractants for wildlife is food. Feeding not only attracts geese to undesirable areas but it changes how geese perceive humans: instead of a predator to be avoided, humans are perceived as a potential source of food handouts. This activity falsely appears as beneficial for geese. However, most food items given to geese by people (e.g. bread, crackers, or popcorn) are inappropriate for their digestive system and not good for their overall health. Furthermore, concentrating birds in high densities has the potential to lead to disease concerns.



By associating people with food, geese will increasingly approach people even when unwanted. Conversely, people may approach geese during times of the year when the birds are more territorial or protective of nests or young, leading to aggressive behavior and subsequent negative interactions. Food handouts should be eliminated.

Habitat Modifications

Geese prefer open spaces where they can see long distances in order to detect predators. In many cases they walk from the water to adjacent open areas to graze. Large expanses of mowed grass or row crop, particularly when near water, attract geese due to the combination of forage and the ability to see long distances.

Landscapes can be designed or modified to reduce the attractiveness of the habitat that they provide. There are many ways to make habitat less attractive to Canada geese without reducing the aesthetic or designed use of the area. Common practices include: un-mowed vegetative buffers, native prairie strips or butterfly gardens, native shrub rows, landscaping design, ornament placement, and rip-rap shorelines.

Vegetative buffers adjacent to waterbodies such as strips of native prairie and wildflowers may reduce the visibility for geese and therefore reduce the attractiveness of a certain area. Areas that are mowed or farmed up to the edge of the water could instead incorporate a tall vegetation buffer. This practice has the added benefit of increased ecological function such as increased water storage, erosion control, nutrient runoff reduction, pollinator habitat, and reduced mowing. Another potential vegetative solution is the use of native shrubs to form a barrier through which geese cannot easily see or walk through. This will limit the ability of geese to access an area. Other habitat features, such as large diameter rip-rap along the water's edge, can reduce the ability of geese to walk up on banks. Building on that concept, retaining walls or landscaped steps create an obstacle to geese. These ledges could be built on the shoreline or incorporated into nearby landscaping. There are a number of ways to alter the look and habitat of an area that can reduce the attractiveness of the site to geese.

Water features such as islands and aerators are very attractive to geese at different times of the year. Islands are desirable for geese as a safe nesting location and often result in multiple successful nests. This results in large numbers of goslings which will likely cause increasing numbers of geese for years to come. Aeration systems create open water during periods when waterbodies would otherwise freeze over. This allows geese to continue using a waterbody when other waterbodies are frozen, thereby increasing the site's attractiveness and value to geese all year. If possible, aeration systems should be turned off and geese hazed to allow the waterbody to freeze, even if only for a temporary period during cold weather. Remove any existing tub nesting structures from any waterbodies.



This is an example of a landscaping layout at a public area that was designed to maximize recreation while deterring geese. Note the layout of beach and swimming features, native flowering plants, rip-rap shoreline, and shrub rows.



Prime urban goose habitat. This site would require alternative goose prevention strategies annually to deter geese because the habitat would continually draw the birds into the area.

Exclusion Techniques

Access between a water feature and feeding sites should be reduced. Geese prefer to graze the fresh growth of grass and young forbs, therefore nearly all mowed areas provide feeding sites. The closer and easier it is to get from a waterbody to any lawn or agricultural area, the more likely it is to be selected as a spring and summer site for geese. Their summer molt process and strong familial ties tend to keep geese localized in these sites: if geese nest near an area with water, they will likely stay in the area all summer with their goslings. If a waterbody is inaccessible then it will not be used.

While habitat alterations such as native vegetative buffers, native shrub plantings, and rip-rap are higher priority and more effective in the long term, exclusion techniques such as fencing at certain sites because they can be utilized temporarily.



Fencing can be effective to keep geese out.

Aversive Conditioning: Scare Tactics and Hazing

Canada geese are a prey species and should therefore be wary of predators such as humans. However, it is common in urban environments that geese become habituated to humans. Aversive conditioning, or hazing the animals through scare tactics and sensory discomfort to create an uncomfortable atmosphere for geese, will decrease goose use, human-geese interactions, and conflict. Simulating predator behavior and hunting, loud noises, and aggravating lighting can all help make a spot less friendly for geese.

Hazing activities are easy to incorporate with all other action steps and should be conducted often so there is not a time when the geese are allowed to feel comfortable. Utilize multiple techniques and note that geese will often associate the look of someone (i.e. clothes, hats, jackets, etc.) with the hazing. Use that visual connection to your advantage to make humans seem less friendly overall and scarecrows an option in the future. As long as geese are not harmed and are not nesting, then hazing is legal without any special permitting. Below are recommended hazing techniques:

- Pyrotechnics and other bird scare noise devices can be alarming to geese and mimic gunshots or other fear generating conditions (such as predatory birds).
- The use of controlled dogs is highly effective at deterring geese from an area.
- Use of dogs can make future use of dog silhouettes or coyote decoys effective. Use of these decoys without any prior use with live canines has mixed results.
- Shining strong lasers at the geese in the evening can be used to keep birds from roosting on certain waterbodies.
- Objects that move, make noise, and reflect light such as large pinwheels, inflatable waving arm men, and mylar tape will make the area less comfortable for geese.
- Combine as many forms of hazing as possible for best results.



Trained dogs can be very effective at deterring geese from an area.

Repellents

Repellents applied to lawns or turf areas can make the grass less palatable to the geese. Goose repellents use a grape extract, methyl anthranilate, which irritates certain receptors and mucous membranes in the geese. The reduction in the food source may encourage the geese to utilize alternative feeding sites. All labels on repellent should be followed and re-application after any weather event or long sun exposure will be needed to maintain effectiveness. This is a short term solution that can be costly, but it can be useful in certain circumstances especially when combined with other efforts. Target problem areas where additional techniques will be implemented. This may be an appropriate technique to incorporate with new seedings, new tall plant buffers, or new waterbodies.

Permitted Actions: Nest Manipulation and Euthanasia

Actions requiring hands-on work with the geese are strictly regulated by the FWS. These actions include nest manipulations such as egg oiling or nest removal, goose round-up and euthanasia, or goose translocations. The Department maintains a permit with the FWS to perform up to a specified number of these actions which are guided by the Iowa DNR Canada Goose Management Plan and Injurious Goose Policy and Procedures (Appendix G).

In cases where proactive and preventative measures have been implemented and significant human-geese conflict or threats to human health and safety persist then municipalities, businesses, or NWCOs hired to do goose work may request the Department allow lethal activities to reduce local goose populations. The requesting entity is required to inform stakeholders and accept public comment. Permitted actions include nest manipulation and lethal removal. Translocations will not be permitted in Iowa. Nest manipulation causes the nest to be unsuccessful thereby no goslings are produced. Adult geese are likely to disperse from the area after the nesting season. Lethal removal involves the capture and euthanasia of geese. All state and federal guidelines shall be followed.



Canada goose on a rooftop nest in Urbandale, IA. This goose was marked and tracked as part of a nest manipulation study.

Any permitted actions will only be implemented with Department approval in conjunction with a Goose Management Plan. After approval, an NWCO may only conduct permitted actions under the direct supervision of a Department Wildlife Biologist until the permittee demonstrates understanding of goose biology, incubation timing, ability to determine egg development stages, and proper handling techniques. When the NWCO meets expectations and demonstrates proficiency then they can conduct permitted actions without direct supervision in accordance with the Goose Management Plan for the site and will be assigned a Special Canada Goose Control Permit in following with IAC 571 114.

Any permitted actions must be reported to the FWS through the Department's Special Canada Goose Permit. All goose work must be recorded and provided to the Department by December 31st of the year it occurs including location, description of work carried out, and final disposition. See Appendix G for required forms and additional information on goose control activities. The Department will provide information and training to NWCOS requesting permitted action approval.

Steps Involving Canada Goose Permitted Actions

- Evaluate the extent of the goose conflict and identify achievable goals
- Develop a plan with the landowner to address the issues
- Utilize hunting, elimination of food handouts, habitat manipulation, exclusion, aversive conditioning, and repellents to their fullest effect
- Contact Department Wildlife Biologist to develop a Canada Goose Management Plan and to discuss additional options including lethal removal if initial attempts are not achieving goals
- Work with landowner to notify applicable stakeholders, local municipality, and accept public comment
- Carry out approved actions under DNR supervision with proper timing and handling
- Record all activities each time actions are carried out
- Adhere to disposal laws and record final disposition
- Report all removal activities to Department Depredation Biologist
- Continue all previous action steps in accordance with the Canada Goose Management Plan
- Monitor the situation

POLICY AND PROCEDURES

FOR ADDRESSING

INJURIOUS GOOSE ACTIVITIES

Revised January 2023 by:

Orrin Jones, Waterfowl Research Biologist
Andy Kellner, Wildlife Depredation Biologist

Revised March 2014 by:

Orrin Jones, Waterfowl Research Biologist
Alan Hancock, Wildlife Research Technician
Bill Bunger, Wildlife Depredation Biologist
Maury Muhm, Wildlife Depredation Technician
Mark Gulick, NW Wildlife District Supervisor

Original document prepared March 1 2000
and edited October 1, 2002 by:

Guy Zenner, Waterfowl Research Biologist, Editor
Ken Herring, Executive Officer, Wildlife Bureau
Neil Heiser, NW Wildlife District Supervisor
Ron Howing, Wildlife Management Biologist
Tom Neal, Wildlife Management Biologist
Doug Harr, Wildlife Management Biologist
Greg Hanson, Wildlife Management Biologist
Doug Janke, Wildlife Management Biologist
Alan Hancock, Wildlife Research Technician
Don Cummings, Executive Officer, Wildlife Bureau

Iowa DNR Wildlife Bureau

Policy for Addressing Injurious Goose Activities

The Iowa Department of Natural Resources (Department) management goal for Canada geese is a stable population that provides recreational, ecological, and aesthetic benefits, while minimizing human-geese conflict. Conflict between geese and humans may occur in a wide range of situations. Some of this conflict may be unavoidable, however there are situations where goose behavior causes or is likely to cause damage or harm. The Department refers to these situations as “injurious goose activities.” Any solutions proposed to control injurious goose activities must be consistent with the Department’s management goal. Department staff will promptly assist with complaints of injurious Canada goose activities primarily by providing guidance that may include population management through regulated hunting, habitat management, aversive conditioning, education, and lethal control outside of hunting seasons.

Strategies and procedures used to control injurious goose activities in Iowa are constrained by policies and regulations established by the U.S. Fish and Wildlife Service (Service) for the management of migratory birds in the U.S. They may further be constrained by management plans developed for Canada goose populations by the 14 state, three provincial and two federal conservation agencies that comprise the Mississippi Flyway Council (MFC).

It is permissible to harass Canada geese without a federal or state permit, provided the geese are not nesting and that the harassment does not result in birds being harmed or handled by a person. Any activity involving the capturing, handling, or harming of migratory birds requires both federal and state authorization. Actions that result in harming migratory birds or their nests could be subject to legal action by the federal government and all permitted activities are tracked by the Department and reported to the Service.

Procedures for Addressing Injurious Goose Activities

It is the intent of the Department to promptly respond to requests for assistance in minimizing human-geese conflict. The responsibility for inspecting properties for goose activity and notifying Department staff lies with the landowner, manager or tenant. In most cases an on-site inspection will be made to determine if the conflict is injurious and if so, developing actions for the site. Except in special situations (see Part II. Special Situations), the person legally responsible for the land on which the damage is occurring will be responsible for implementing and maintaining abatement or exclusion practices. On lands owned or controlled by multiple parties, such as homeowners associations or planned unit developments, a consensus of the members must be reached prior to actions occurring. Local governments (municipal, township and county) have primary responsibility for implementing practices on land they administer (parks, roads, property within city limits).

I. Standard Actions

The following actions can be used in most situations to minimize injurious Canada goose activities.

1. **Increase the recreational harvest of Canada geese.** Landowners should permit hunters to harvest geese on their property, especially early in the season when local geese are most available, and encourage hunting on neighboring properties. In cases where local ordinances prohibit hunting, local governments should consider changing local ordinances or assist affected landowners in implementing other actions to control injurious goose activities within their jurisdiction.
2. **Manage vegetation to make the area less appealing to geese.** Alter landscape maintenance practices or crop rotations to reduce the attractiveness of the site to geese. Create less attractive habitats or develop vegetative barriers or buffers along rivers or wetlands, to inhibit goose access to adjacent land.
3. **Implement aversive conditioning to discourage goose use.** Use scare devices (eg propane cannons, scarecrows, dogs, mylar tape, balloons, lasers, and pyrotechnics) or aversive agents (e.g. repellents) to discourage goose use. When available, the Department may supply equipment to help control injurious goose activities.
4. **Exclude flightless geese from entering the property.** Construct temporary or permanent fences to reduce access to areas where the geese are unwanted.

II. Special Situations

A. Properties Adjacent to State-Owned Wildlife Areas or Lakes

On private lands adjacent to state-managed wildlife areas or lakes where the property owner or tenant has already attempted to increase goose harvest and manage vegetation to reduce injurious goose activities (Actions 1 and 2, Part I), the Department will offer the following additional assistance to control injurious goose

activities:

1. Scare devices such as propane cannons, Mylar tape, and plans for scarecrows will be supplied by the Department to be used and maintained by the property owner or manager.
2. The Department will consider acquiring, through fee title or easement, all or portions of the property rights on acres chronically impacted by geese and manage this land to minimize future damage in the area.
3. Management of state-owned wildlife areas will be adjusted to help reduce goose use of private lands where appropriate state-managed uplands are available and goose management does not seriously compromise the primary management objectives for the area.
4. Where agricultural crops are being damaged by geese, the Department will provide materials and labor to erect temporary fences between state-managed wildlife areas and private lands to reduce the accessibility of private land to flightless geese for up to 3 years. The landowner will be required to check and maintain the fence the first 3 years, and install and maintain the fence thereafter if a temporary fence is desired.
5. In accordance with fencing common law, the Department will construct its half of a permanent fence (the right hand half of the fence when faced from the property) capable of excluding flightless geese on the boundary between the state-owned land and the affected private property, provided the adjacent landowner agrees to construct the other half of the fence in a similar manner. The landowner must also agree to maintain his/her half of the fence. A fence agreement will be prepared by the Department, signed by both parties, and recorded with the landowner's property deed before construction begins. Where environmental conditions significantly increase the difficulty or cost of constructing or maintaining a fence, the portion of the fence to be constructed by one party may be more or less than half the length of the boundary to compensate for this additional cost.
6. Where environmental conditions make it difficult or impossible to construct or maintain a boundary fence, such as along the shore of a meandered lake, a fencing agreement may be used to establish and record a permanent convenience fence. The agreement, which will be recorded as an attachment to the property deed, should state that the line on which the fence is established is not the boundary between the two properties, that the fencing materials are the property of the Department on that portion that is the state's half, and that the landowner agrees to maintain the fence.
7. In cases where there is an existing barbed-wire boundary fence between state-managed wildlife areas and private lands, the Department will provide materials and labor to make the fence a more effective barrier to flightless geese. The adjacent landowner or manager will be responsible for checking and maintaining his/her half of the fence after installation.

B. Properties in Areas Not Open to Canada Goose Hunting (closed areas) by Department Rule.

On private lands in areas not open to Canada goose hunting by Department rule, the Department will offer the following assistance in addition to the previously described actions:

1. Scare devices such as propane cannons, mylar tape, balloons and scarecrows will be supplied and maintained by the Department. Landowners or tenants will be required to inspect their property, locate specific goose damage, inform Department staff of such damage, and assist in operating and maintaining scare devices.
2. Where agricultural crops are being damaged by geese, the Department will provide materials and labor to install and maintain temporary fences, even when the property is not adjacent to state-managed land. The landowner or tenant will monitor the temporary fences to ensure they are functioning and will advise Department staff when and where repairs are necessary.
3. The Department will provide materials and labor for construction of permanent boundary fences adjacent to state-managed wildlife areas that will exclude flightless geese from agricultural crop land. Where environmental conditions make it difficult or impossible to construct or maintain a boundary fence, such as along the shore of a meandered lake, a fencing agreement may be used to establish and record a permanent convenience fence. The agreement, which will be signed and recorded as an attachment to the property deed before construction begins, should state that the line on which the fence is established is not the boundary between the two properties and that the fencing materials are the property of the Department. In this situation, fence maintenance and inspection are negotiable.

C. Areas Within Municipalities

Within municipalities, Department staff will provide advice to individual landowners, organizations or agencies on appropriate techniques to minimize the impacts of injurious goose activities. In addition to the techniques described under Part I, the following practices can also be used to control goose populations and activities in these areas.

1. Municipalities should adopt ordinances prohibiting waterfowl feeding, installing and maintaining goose nesting structures, or engaging in any activities that encourage geese to use areas where goose activities conflict with people or geese create a hazard.
2. Department staff will assist municipalities in formulating guidelines for developing and maintaining landscapes that are unattractive to geese.
3. Municipal authorities should modify ordinances or regulations, where appropriate, to permit hunters to harvest Canada geese during regular hunting seasons in areas where chronic injurious goose activities occur or where geese pose a hazard. Increasing the goose harvest in and around the municipality, when combined with standard abatement practices, can help minimize the impacts of injurious goose activities and reduce numbers of complaints.
4. When all other means of controlling Canada goose conflict and associated injurious goose activities have proven ineffective or unfeasible, or it is determined that the geese pose a significant threat to human health or safety, the Director can authorize lethal control methods outside of the regular hunting season in accordance with the USFWS permit held by the Department. Any lethal control operations must be in accordance with a Goose Management Plan written by Department Wildlife Depredation staff in consultation with the local Department Wildlife Biologist, signed by the Department and the managing entity, approved by the Department Director, approved by the municipality in which it will take place, and be presented to the public for comment. All euthanasia will follow American Veterinary Medical Association standards.
 - a. Initial lethal methods will be limited to nest manipulations unless the threat to human health and safety requires more expedient reduction actions. Nest manipulations may only be carried out by Department staff, appropriately trained Nuisance Wildlife Control Operators, or other government agencies with appropriate credentials and training.
 - i. Nest removal is the preferred action in cases of aggressive geese in inopportune locations or in cases where the nests can be left undisturbed for 14 days of incubation and it is desirable for the adult geese to leave the site for the summer months.
 - ii. Egg oiling may be appropriate in cases where the presence of adults during the summer can be tolerated, or is desired, but reducing recruitment to the population is necessary.
 - b. Situations that require an immediate reduction in goose populations due to human safety and health, may necessitate removal and euthanasia of flightless geese.
 - i. The governing body must submit a written request to the Department at least four months in advance of any proposed action unless immediate action is deemed necessary for human health and safety.
 1. The request must include goose population estimates, details of conflict and injurious goose activities, list of threats to human health and safety, economic impacts, and clearly state proposed actions and anticipated outcomes.
 - ii. Implementation of approved lethal control must be closely coordinated with Department Wildlife Depredation staff and Conservation Officer(s). Department staff will assist with technical advice in accordance with the active Goose Management Plan.
 - iii. All costs of lethal removals will be borne by the requesting entity.
 - iv. Lethal removal of geese will only be carried out by agents approved by the Department with the appropriate level of training, required federal permits, and the proper equipment for the operation.
 - v. When possible, geese may be transported to a meat locker and the meat distributed to charities, public institutions, or families in need for consumption.
 - vi. Geese not being processed for consumption must be disposed of by burying (Paragraph 567 IAC 100.4(2)"b") or incinerating (Rule 567 IAC 100.4(455B)) in accordance with Iowa Code. Landfilling is an approved method of burial.

D. Airports and areas within the Vicinity

On airport and adjacent properties, Department staff will provide advice to individual landowners, organizations or agencies on appropriate techniques to minimize the impacts of injurious goose activities. In addition to the techniques described under Part I, the following practices can also be used to control goose populations and activities in these areas. **An area adjacent to the airport boundary should be considered for these practices.**

1. Airport management administrators, in cooperation with adjoining landowners should adopt rules prohibiting waterfowl feeding, installing and maintaining goose nesting structures, or engaging in any activities that encourage geese to use areas in the vicinity of airport property.
2. Department staff will assist airport management personnel in formulating guidelines for developing and maintaining landscapes that are unattractive to geese.
3. Airport management should work with city administrators to modify ordinances or regulations, where appropriate, to permit hunters to harvest Canada geese during regular seasons in areas where chronic injurious goose activities occur or where geese pose a hazard. Increasing the goose harvest in and around the airport, when combined with standard abatement practices, can help minimize the impacts of injurious goose activities and reduce numbers.
4. In cases where the Canada goose population at an airport and within the adjacent area poses a significant threat to human health or safety, and standard control techniques, including increased harvest during established hunting seasons, have proven unsuccessful or unfeasible, the Director can authorize lethal methods to reduce the goose population within and adjacent to airport boundaries. Lethal methods may include nest manipulation, roundup culling events during the flightless period, and direct removals in conjunction with aversive conditioning.
 - a. The airport proposing the population reduction must determine, in consultation with the Department or agents approved by the Department with the appropriate level of training, required federal permits, and the proper equipment, an appropriate level for the airport's goose population.
 - b. Ongoing nest manipulations should be considered within the area of the airport to reduce local recruitment and buildup of Canada goose populations.
 - i. Nest manipulations may only be carried out by Department staff, appropriately trained Nuisance Wildlife Control Operators, or other government agencies with appropriate credentials, permits, and training.
 - ii. Nest removal is the preferred action in cases of aggressive geese in inopportune locations or in cases where the nests can be left undisturbed for 14 days of incubation and it is desirable for the adult geese to leave the site for the summer months.
 - iii. Egg oiling may be appropriate in cases where nests can remain intact for a prolonged period and the presence of adults during the summer can be tolerated or is desired but reducing recruitment to the population is necessary.
 - c. In situations that require immediate action, the Director may approve lethal removal of geese from the airport property or within the adjacent area.
 - i. Lethal removal of geese will only be carried out by agents approved by the Department with the appropriate level of training, required federal permits, and the proper equipment for the operation.
 - ii. When possible, adult geese will be transported to a locker and the meat distributed to charities or public institutions for human consumption. This processing will be at the expense of the requesting party.
 - iii. Birds not being processed for food must be disposed of by burying (Paragraph 567 IAC 100.4(2)"b") or incinerating (Rule 567 IAC 100.4(455B)) in accordance with Iowa code. Landfilling is an approved method of burial.