PENN LAKE PARK BOROUGH ORDINANCE NO. ____ OF 2017 AN ORDINANCE OF THE BOROUGH OF PENN LAKE PARK LUZERNE COUNTY, PENNSYLVANIA PROHIBITION OF WATERFOWL FEEDING

Definitions:

Waterfowl- Any bird that frequents the water, or lives about rivers, lakes, etc., or on or near the ocean; an aquatic fowl, including but not limited to ducks, geese, swans, heron, and egrets.

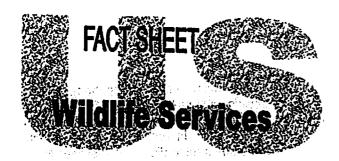
Feed- To distribute, place, deposit, or dump any type of food in any manner, whether or not an animal is in the vicinity at the time the food is distributed, placed, deposited, or dumped.

- (A) Prohibition: No person may feed waterfowl on private or public property in Penn Lake Park Borough, or place or permit to be placed on the ground, shoreline, water body, or any structure food, food by-products, garbage or animal food, which may reasonably be expected to intentionally result in waterfowl feeding, unless such items are screened or protected in a manner that prevents waterfowl from feeding on them.
- **(B)** Exceptions: This prohibition shall not apply to:
 - 1. Veterinarians, animal control officers or county, state or federal game officials who are in the course of their duties, have waterfowl in custody or under their management;
 - 2. Persons authorized by Penn Lake Council to implement a Canada goose management program and any future waterfowl management programs approved by council;
 - 3. Any food placed upon the property for purposes of trapping or otherwise taking waterfowl and other waterfowl where such trapping or taking is pursuant to a permit issued by the appropriate US or state department of natural resources;
 - 4. This ordinance does not prohibit the feeding of songbirds.
- (C) Penalty: Any person who violates this ordinance shall be subject, upon summary conviction for a first offense, to a fine of \$250 and upon summary conviction of any subsequent offense, to a fine of \$1000, plus the costs of prosecution in each case. The borough shall prosecute all violations hereunder.

PENN LAKE PARK BOROUGH COUNCIL:

COUNCIL MEMBER APPROVED BY: Debra My secks

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CAUTION!

Feeding Waterfowl May Lead to a Number of Problems

Regular feeding of waterfowl can cause:

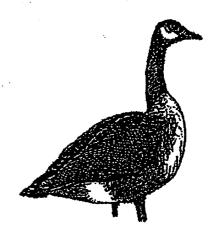
- ☐ Dependency on people
- ☐ Increasing numbers of geese at feeding sites
- Buildup of fecal droppings at and near feeding sites
- Aggressive behavior by waterfowl
- ☐ Safety hazards on roads at and near feeding sites
- ☐ May potentially be harmful to their health
- All of the above

Over the centuries waterfowl have developed patterns of seeking out and feeding on highly nutritious plants and grain. These preservation patterns are passed on to each succeeding generation. Survival of waterfowl ultimately depends upon their ability to make use of food and habitat sufficient to maintain healthy populations.

In northern regions of the United States the extreme cold and blanketing snow of the fall and winter months severely reduces the quality and quantity of natural foods for waterfowl. Each fall migratory waterfowl fly tremendous distances south in search of food and habitat to carry them through the winter months. In the spring they again migrate, this time returning to their northern breeding grounds. However, resident Canada geese, which are the geese commonly seen in urban areas during the summer and are the geese that nest in Pennsylvania, typically fly only a short distance south as cold weather and snow reduce the availability of natural foods.

Many people who enjoy observing these magnificent wild birds also feed them. Regrettably, people who feed waterfowl unknowingly entice larger numbers of

the birds to reside in urban environments for a longer period throughout the year.



While in some cases the food offered is in the form of small grains such as com and wheat, most often in an urban setting it is in the form of "junk foods" such

as popcom, potato chips and white bread. Unfortunately for the birds these handouts, while filling, do little to satisfy their nutritional needs for survival. Over a period of time the birds become accustomed to these easily attainable handouts at the expense of a well-balanced natural diet.

Another problem is that food handouts result in large numbers of birds competing for very limited food supplies in small areas. This results in the build up of droppings, which is often viewed as a nuisance. Crowding and competition for food may encourage birds to be more aggressive towards each other and

the humans who are feeding them. Such crowding and competition for food combined with the stresses of non-nutritious food and harsh weather increases their susceptibility to life threatening diseases; diseases like avian cholera, duck plague, and avian botulism which have the potential to kill off large numbers of waterfowl. The end result of this seemingly kind and generous act of feeding waterfowl by caring, but misinformed people, leads to a continuing cycle of the birds becoming a nuisance and potentially being subjected to diseases that can spread like humans spread the common cold.

IF YOU care for waterfowl, here's what YOU can do to reduce problems associated with large concentrations of the birds:

- STOP feeding them! Help them retain their "wildness" and maintain their health. They do not understand the problem. You do.
- Learn more about waterfowl by visiting a library, nature center, zoo, museum, Pennsylvania Department of Natural Resources office, Pennsylvania Game Commission office or a National Wildlife Refuge. Then teach others what you know.
- If you would like information about ways to reduce conflicts associated with urban waterfowl, contact the U.S. Department of Agriculture, Wildlife Services program at 1-866-487-3297 or 717-236-9451.



United States Department of Agriculture Animal and Plant Health Inspection Service Wildlife Services

1-866-487-3297

Eastern District 253 Snyder Road Reading, PA 19605 (610) 916-1415 State Office PO Box 60827 Harrisburg, PA 17106-0827 (717) 236-9451 Fax (717) 236-9454 Western District 4820 Route 711, Suite A Bolivar, PA 15923-2420 (724) 238-7320 Fax (724) 238-7274

Fact Sheet

A COLLABORATIVE COMMUNITY-BASED APPROACH TO MANAGING CANADA GOOSE DAMAGE IN PENNSYLVANIA

April 2014

Introduction

Many Pennsylvania communities support large and increasing populations of "resident" Canada geese. An abundance of lush manicured lawns, landscaped water bodies, and food handouts from people, along with a relative lack of predators and hunters, has contributed to the rapid growth of goose populations in urban and suburban areas around the Commonwealth. Geese are extraordinarily adaptable to human presence and altered landscapes. They nest on rooftops and in parking lots, roadway medians, doorsteps, planters, and other



structures near homes, businesses, hospitals, and schools. Canada geese are a valuable component of the urban and suburban environment, and their presence provides many Pennsylvanians with enjoyable wildlife viewing opportunities. However, growing numbers of resident geese also mean more conflicts with human interests. Many times, a large goose population raises concerns about risks to human health and safety and also damage to residential, commercial, and public property. Common concerns include reduced water quality and general health risks due to excessive concentrations of fecal material, injury to people due to aggressive behavior of nesting geese, and damage to landscape plantings and turf grass from overgrazing geese. Furthermore, a large, year-round population of grazing and defecating geese can seriously impede the public's ability to enjoy properties such as parks, beaches, golf courses, and school yards for their intended use. Resident Canada geese tend to be very mobile and move frequently among properties, which can create widespread damage. Many property owners conduct goose control activities solely within their property boundaries and are able to effectively alleviate damage. However, sometimes this

approach may only displace the problem temporarily. Greater success can be achieved by managing widespread goose damage collaboratively on a large scale or community level.

Collaborative, Community-Based Damage Management

The term "community" refers not only to a residential area, but also generally to any group of public or private property owners, land managers, or any other concerned stakeholders within the same geographic area.

Wildlife Services recommends using an Integrated Wildlife Damage Management approach, in which multiple techniques may be implemented simultaneously or consecutively to reduce wildlife damage or accomplish a management goal. Most of our cooperators, including



private property owners and professional property managers, routinely and successfully conduct goose damage management activities solely on their own properties, due mainly to economic reasons—why give your neighbor a benefit he/she did not pay for. Unfortunately, this approach can lead to simply transferring the problem from one property to another and does not address the underlying problem of too many geese in the area. Given that wildlife does not acknowledge human boundaries and is unpredictable, wildlife damage management actions need to follow the problem and also be adaptable. Therefore, Wildlife Services also recommends that coordinating management actions across property lines and collaborating with your "neighbors" in a community-based damage management framework is a more efficient and effective approach to reducing goose damage. Working together and sharing the financial burden may provide large cost savings for those involved and also may enable the use of measures that would normally be too costly for the individual property owner. Furthermore, conducting large scale, community-based management not only provides widespread relief from goose-related damage, but also bolsters the success of management conducted on individual properties.

Recommended Actions

- 1. Make Contact with Your "Neighbors", Describe the Problem, and Define a Goal. Talk to surrounding property owners. Determine the extent and nature of problems associated with Canada geese, including the number of landowners affected and locations and impact of damage. Develop a consensus within the community regarding the preferred actions to take to reduce damage to a tolerable level. Some communities may want to develop a working group or task force of people willing to deal with the problem and propose solutions.
- **2. Enact and Enforce a No Feeding Ordinance or Rule.** Establishing a municipal ordinance or property-wide rule that prohibits the feeding of wild and domestic ducks and geese is a necessary first step in reducing goose damage. Allowing supplemental feeding will most likely result in the failure of any management efforts and will also limit the available management



techniques that can be implemented. Furthermore, feeding can be detrimental to the health of the birds.

- **3. Conduct Goose Damage Management Activities.** Techniques and approaches described in a separate Wildlife Services fact sheet, "Managing Canada Goose Damage in Pennsylvania," including habitat modification, harassment, sport hunting, use of repellents, and other methods, should be applied as appropriate. Contact your local Wildlife Services Office for more information.
- **4. Review and Update Land Use Policies.** Local land use practices that encourage the development of lawns, artificial ponds and reservoirs, and that discourage hunting, exacerbate problems associated with Canada geese. In communities with goose problems, these policies and practices should be revised and discontinued.
- **5.** Reduce or Eliminate Goose Reproduction (Online registration required, see Legal Status section). Elimination of goose reproduction by destroying and/or treating nests and eggs will reduce the number of geese associated with the problem site during the spring and summer, increase the effectiveness of harassment, and reduce human safety concerns associated with aggressive nesting geese.
- **6. Shoot Geese to Reinforce Non-lethal Actions (Permit required).** On large properties such as parks, golf courses, corporate properties, and farms, shooting a limited number of geese periodically may substantially enhance the scaring effect of non-lethal methods, especially pyrotechnics. To conduct this activity in Pennsylvania, a Federal/State depredation permit, landowner permission, and relief from municipal firearm discharge and/or noise ordinances are required.

As early in the process as possible, the community should develop an integrated goose damage management program that includes most of these six actions. A written Canada Goose Damage Management Plan should describe the program by listing goals, objectives, responsibilities, timelines, and costs. In some communities, conduct of these actions will substantially and satisfactorily reduce problems associated with Canada geese. In other communities, however, goose problems may continue despite careful application of the actions. Therefore, communities should employ, monitor, and document the effectiveness of these actions and revise their Management Plan as appropriate.



Goose Population Management

In cases where the community wishes to capture and remove geese to reduce the local goose population, a permit is required and the following guidelines should be followed.



- 1. Obtain community support of the problem assessment and proposed goose population management program.
- 2. Document the implementation and effectiveness of all previously applied techniques.
- 3. Ensure total compliance with all laws pertaining to goose management and use of specific techniques. Submit a Federal Fish and Wildlife Permit application to the Pennsylvania Game Commission and the US Fish and Wildlife Service for authorization to conduct the population reduction activity. In most cases, the technique would be to capture and euthanize geese during the June/July flightless period.

Other Considerations

- 1. The community is responsible for writing the Management Plan and conducting goose damage management actions, although some aspects of the Plan may be written and/or conducted by Wildlife Services or private service providers pursuant to funded agreements or contracts.
- 2. Costs to conduct all aspects of the integrated goose damage management program are the responsibility of the community.
- 3. Public opinion regarding geese, goose-related problems, and solutions vary widely.
- 4. Goose population reduction programs are usually accompanied by media and legal interest.

Legal Status

Canada geese are migratory game birds that are afforded Federal and State protection. Goose populations are managed by the US Fish and Wildlife Service and the Pennsylvania Game Commission pursuant to the Migratory Bird Treaty Act (16 USCS 703-711), Federal Regulations (50 CFR 10, 13, 20 & 21), Pennsylvania Statutes Annotated Title 23, the Pennsylvania Game Code, and other Federal and State laws, regulations, policies, and court rulings.

Special Note: a permit is no longer required to treat Canada goose nests. To obtain authority register online with the US Fish and Wildlife Service (USFWS):

https://epermits.fws.gov/eRCGR/geSLaspx, or go to http://www.fws.gov/permits and click on "New: Resident Canada Goose Nest Egg Registration."

Procedures, such as capturing and euthanizing birds, shooting birds to reduce damage, and any other activity that includes handling birds require a depredation permit. The permit application is available from Wildlife Services or the USFWS (413-253-8643) and includes a fee. Prior to submitting the application, a Wildlife Services Form 37 (Migratory Bird Damage Report) must be completed by Wildlife Services. The permit request, Form 37, and payment should first be submitted to the Bureau of Wildlife Protection, Pennsylvania Game Commission. Your application will be reviewed for completeness and contingent upon agency concurrence with your damage



assessment, it will be forwarded to the USFWS Migratory Bird Permit Office in Hadley, Massachusetts for final approval and processing. Application processing times may range from six to eight weeks.

Agency Contacts

To obtain permit applications, goose damage control recommendations, assistance in developing and conducting control activities, etc., contact Wildlife Services:

Eastern District	State Office	Western District
253 Snyder Road	PO Box 60827	4820 Route 711, Suite A
Reading, PA 19605	Harrisburg, PA 17106-0827	Bolivar, PA 15923-2420
(610) 916-1415	(717) 236-9451	(724) 238-7320
A	Fax (717) 236-9454	Fax (724) 238-7274

→ To check on the status of State permit applications, contact:

Pennsylvania Game Commission Bureau of Law Enforcement 2001 Elmerton Avenue Harrisburg, PA 17110-9797 (717) 787-5529

More information about goose hunting seasons, possession limits and waterfowl management zones can be obtained by going online at the Pennsylvania Game Commission official website: www.pgc.state.pa.us

→ To obtain permit applications and to check on the status of Federal permit applications, contact:

U.S. Fish and Wildlife Service 300 Westgate Center Drive Hadley, MA 01035-9587 (413) 253-8643/Fax (413) 253-8480

Special Note:

Recommendations in this fact sheet should not be implemented if they would be in conflict with the Endangered Species Act of 1973.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.





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Fact Sheet MANAGING CANADA GOOSE DAMAGE IN PENNSYLVANIA

April 2014

Introduction

Canada geese are an important part of Pennsylvania's rich natural heritage and their presence provides many citizens with recreational opportunities, including wildlife viewing and hunting. During the past 50 years, populations of non-migratory or "resident" geese have grown tremendously in urban and suburban environments in Pennsylvania and in many other areas across the United States. The phenomenon of resident geese started when the practice of hunting with live decoys was outlawed in the 1930s; subsequently hunters liberated their decoy flocks, releasing thousands of semi-



domesticated birds into the wild. Also, populations were boosted by highly successful government and private stocking and relocation programs which ran from the 1950s through the 1990s. Having been bred in captivity, these birds did not learn the traditional migratory routes nor did their offspring. Escaping the perils of migration has clearly benefited the resident goose, with results such as increased survival and productivity rates. Geese are highly adaptable and have flourished in human-altered landscapes. Urban and suburban habitat typified by large expanses of manicured lawns and an abundance of water bodies provides an optimal mix of conditions: plentiful natural food sources, hand-outs from people, relative protection from natural predators and harsh climate conditions, and relief from most hunting pressure. Although most people may enjoy sharing their local environment with wildlife, living in close proximity to a rapidly increasing population of geese will test human tolerance and inevitably create human-wildlife conflicts.



Identification and Biology

Canada geese are one of the most readily recognized and observable birds in Pennsylvania. It is a large bird, measuring 2-3 feet tall and weighing 10-12 pounds. Among North American waterfowl, Canada geese are second only to swans in size. Males and females are similar in appearance, with males being slightly larger. They have dark brown wings and backs; tan fronts; white undersides; black tails, feet, and bills; and black heads with distinctive white cheek patches. Geese are herbivores; they eat leaves, roots, fruits, seeds, and especially prefer browsing protein-rich new plant growth. Geese start breeding at 2-3 years of age and nest every year for the rest of their lives. They mate for life, but if one member of the pair dies the other will mate again. Geese lay an average of 5 eggs per nest and may renest if the first attempt fails. One goose can produce more than 50 young over her entire lifetime.

The annual goose life cycle is generally described in successive stages running from breeding to wintering. In late February or March adult pairs return to their breeding grounds. Egg laying and incubation run through April with the peak of hatching in late April or early May, depending on latitudes. During this period, juvenile geese often remain nearby in feeding flocks. After nesting season, geese undergo an annual molt which is a 4-5 week flightless period when they shed and regrow their flight feathers. Molting occurs from mid-June to mid-July and most birds regain flight in August. Of note, many non-breeding juveniles and unsuccessful breeding adults undertake northward movements prior to the molt, presumably in search of more favorable conditions. This seasonal movement pattern is referred to as "molt migration". After the molt and through the fall, resident geese gather into very large flocks and spend most of their time grazing and "pond hopping" or exploring. These activities continue until snow and freezing conditions eliminate feeding areas and open water refuge areas, at which time resident birds move further south or to other local water bodies which do not freeze over. Resident geese remain in these winter areas until milder temperatures return and nesting grounds open up.

Population Status

The Canada goose is the most widely distributed goose in North America; they occur in every state except Hawaii, in every province of Canada, and in some states of Mexico. In Pennsylvania there are two behaviorally-distinct types of Canada goose populations: resident and migratory.

1. Resident Canada Geese in Pennsylvania

Resident Canada geese are those that nest in the state. In the winter, resident geese may move south short distances or to other open bodies of water, but generally do not embark on long distance migrations. Likewise, resident geese from states further north may move into Pennsylvania at these times. Currently, the resident goose population in Pennsylvania is estimated at approximately 231,780 birds and they can be observed in every county. There are approximately 1 million resident Canada geese in the Atlantic Flyway with more residing in Pennsylvania than any other state. In the Northeastern United States, the resident goose population increased 3-fold between 1990 and 1999.



2. Migratory Canada Geese in Pennsylvania

Migratory geese pass through or remain in Pennsylvania from October through March. Migratory Canada geese observed in Pennsylvania belong to the North Atlantic population and the Atlantic population, both of which nest in Canada. During the early 1990's these populations were in decline; however, conservation efforts and changes to state game laws appear to have stabilized these populations.

Negative Impacts

Common concerns related to overabundant Canada goose populations include risks to human health and safety; damage to residential, agricultural, commercial, and public property; and degradation of natural resources.

1. Human Health and Safety

The majority of goose damage complaints in Pennsylvania involve the accumulation of feces on lawns and walkways at private residences, schools, hospitals, corporate campuses, and public parks. An average goose deposits 1 pound of feces every day. Goose droppings may pose a health threat due to the presence of disease-causing organisms, particularly E. coli. Large amounts of goose droppings in water bodies can severely reduce water quality and has on occasion caused swimming areas to be closed. Some safety concerns include slipping on goose droppings and being attacked by an aggressive



goose. Combative geese are a common occurrence in the spring and may injure adults, children, or pets that approach a nest too closely. Also, waterfowl such as Canada geese pose a serious flight safety hazard at civilian and military airports. Due to their large body size, flocking behavior, and relative abundance in urban and suburban areas, geese have the potential to be involved in damaging bird-aircraft strikes that may result in loss of human lives, injuries, and substantial financial losses.

2. Damage

Excessive accumulations of goose droppings can physically damage property and also make using an area difficult or unpleasant. Clean up efforts can be costly in facilities such as a swimming pool or practically impossible in places such as a soccer field. Grazing geese trample and damage turf grass and landscape plantings which impacts aesthetics and creates erosion hazards. Natural resources such as native wetland habitats (e.g., wild rice), wetland restoration sites (e.g., moist-soil impoundments), and the wildlife that depend on those resources also may be negatively affected by goose grazing. In addition, Canada geese depredate, or damage, agricultural crops including sweet and field corn, soybeans, winter wheat, rye, clover, sod, and vegetables. This damage reduces yield and may increase erosion.



Recommended Actions

Reducing problems associated with Canada geese requires the development of an Integrated Wildlife Damage Management program that includes a variety of safe, practical, effective and legal techniques and approaches. It is the responsibility of the landowner or manager to develop and implement the control program, although certain aspects of the program may be conducted by Wildlife Services or private service providers pursuant to funded agreements or contracts.

1. No Feeding Policy or Rule

Cessation of feeding is a necessary and important first step in reducing goose damage. Establishment of municipal ordinances and association policies are sometimes necessary to accomplish this objective. Allowing supplemental feeding will most likely result in the failure of management activities despite the application of time-consuming and expensive control techniques. Geese that are fed by people are difficult or impossible to harass away, tend to congregate in large numbers, have a higher incidence of disease transmission (e.g., avian botulism), and may suffer from deformities and poor health due to nutritional deficiencies.

2. Domestic Ducks and Geese

Domestic ducks and geese serve as decoys, or attractants, for wild waterfowl. Since geese may learn to locate food resources by following the behavior of other birds, the presence of human-fed domestic waterfowl encourages wild birds to congregate in unnatural concentrations and adopt detrimental foraging behavior. In addition, domestic waterfowl (as well as wild geese) can act as disease reservoirs, or continuous sources of potential disease outbreak. For example, domestic ducks and geese on a small pond may harbor a virus such as avian influenza and thus transmit it to any migratory waterfowl that stop at the pond.



Removing all domestic waterfowl is recommended to minimize disease concerns. Also, doing so may reduce the extent that wild waterfowl are attracted to an area and make enforcement of "No Feeding" ordinances easier to accomplish. No Federal or State permit is necessary to remove domestic waterfowl, but county and municipal laws and regulations must be adhered to. Removal techniques must comply with all applicable laws, regulations, and policies. It is also extremely important to be sure that the birds being removed are truly domestic birds and not wild or wild hybrids. Contact your local Pennsylvania Game Commission (PGC) Wildlife Conservation Officer if you have questions regarding bird identification. Wildlife Services can assist with the removal of domestic ducks and geese if requested.

3. Habitat Management and Exclusion

Habitat modification is considered a long term management practice and typically involves altering vegetation and water bodies to reduce their attractiveness to geese. Occasionally, habitat management and exclusion techniques aimed at reducing goose damage may conflict with the intended purpose of the property or negatively impact its aesthetic value.



a. *Vegetation*. Geese are grazers, and prefer to feed on short grass in areas that are open and within sight of water. Geese prefer Kentucky bluegrass or almost any mowed, short grass or legume. Replacement of lawns with unpalatable, non-preferred vegetation (e.g., native groundcovers) reduces forage quality and makes a site less attractive to geese. Long grass management, which entails maintaining grass at approximately 10 inches, may also deter geese, because tender new growth is not easily browsed in a mature grass stand. However, geese have been observed in tall vegetation when seed heads are present. For this reason, it is recommended to cut grass back prior to seed development. In addition, tall vegetation can be used to create visual barriers which may discourage geese from a site—geese are more comfortable in open areas with good visibility so they can watch for predators. Special consideration should be given to choosing native plant species for turf replacement groundcovers and vegetative barriers.

b. *Water*. Geese prefer to land on water and then walk up to nearby grassy areas to graze. Additionally, geese tend to concentrate nesting and brood rearing activities near water. Water management options include removing or modifying (covering) retention basins, installing grid wires over ponds (3 feet high and spaced no greater than 20 feet apart), installing perimeter fencing around ponds and lakes, and other options that reduce the attractiveness of water features. These activities make the water difficult to access and/or remove it from the bird's line of sight.



Eliminating wetlands to reduce goose damage is not generally recommended or desirable since it may adversely impact protected wildlife and could be in violation of Federal and State laws. Guidance from Federal and State agencies should be sought and adhered to prior to wetland modification.

c. Fencing. Fencing and other barriers can limit goose access especially when geese have goslings which cannot fly, and when adults are flightless due to summer molting, generally late April through mid-July. Perimeter fencing is commonly used around ponds, lakes, playgrounds, picnic areas, and other sensitive sites. Fences should be sturdy, firmly affixed to the ground, and completely encircle the area to be protected. Fences can be constructed of chicken wire, snow fence, dense hedges, tall vegetation, or other commercially available materials. Fences should be 3-5 feet tall, and installed between February and March to deter geese from the area prior to nesting and molting. Single and double-wire "string" fences made out of rope, string, wire, monofilament or other thin line have been used, but with unpredictable success. These types of fences are often difficult to see and may cause injury to people or pets.

4. <u>Visual Deterrents</u>

In general these techniques and supplies are very cost-effective, safe, readily obtainable, quiet and convenient for urban and suburban use, and can be easily implemented with other harassment techniques. Habituation to visual deterrents is normal and they should be moved periodically, as well as integrated with other management techniques.



a. Mylar Tape. Mylar is a thin reflective tape that is usually silver on one side and red on the other. It is available in various widths, but is most commonly applied in suburban goose control situations as a perimeter "fence" using the 1/2-inch width tape attached to stakes around the boundary of the protected area. Mylar should be twisted and left somewhat slack to permit movement in the wind. Mylar generally is stapled to wooden stakes which are pushed into the ground so the tape is approximately 2 feet above the surface of the ground. Wider widths (6 inches) are more typically used on farms, golf courses, and other large acreage areas. With both widths, reinforce the ends and attachment points with strapping tape to reduce shredding and tearing. Effectiveness of mylar tape varies greatly, and may be most effective when it is strung as a single line "fence" to guide geese towards alternate loafing and feeding areas. If no such areas exist nearby, mylar tape may be ineffective in deterring geese.

b. Flagging. Flags constructed of plastic trash bags or other material (cut to a 2-by-3 foot size) stapled or nailed to wooden stakes have been effective in reducing goose presence on agricultural fields, and other large acreage areas. Stakes should be placed in the ground at an angle so the flags move with the slightest breeze, and they should be moved to new locations in

the field every few days to prevent habituation by geese. Flags can be placed in the yard or along the water's edge (1 per 25 feet of frontage).

c. Balloons. Large, helium-filled balloons with decals resembling eyes have also been used with limited success in deterring geese from small areas. Geese may be reluctant to remain beneath an object hovering above them, and may move to an area without this disturbance. Balloons should be hung or tethered so they float about 40-50 feet in the air.



5. Repellents

Chemical repellents are designed to reduce goose grazing by reducing palatability of treated vegetation. Generally repellents are favored by the public because they are not visually detracting and do not harm the geese permanently. However, they need to be reapplied at varying frequencies and do not prevent geese from loafing and swimming in a treated area. Repellents may not be cost effective for widespread use on private lawns, but applications on smaller, high-priority areas (around picnic tables, parking lots, driveways, and swing sets) may provide some relief. Two chemical formulations are registered with the US Environmental Protection Agency (EPA) as Canada goose taste-based repellents: anthraquinone (AQ) and methyl anthranilate (MA).

a. Anthraquinone. AQ is a naturally occurring substance, found in many plants. It is the active ingredient in the product Flight Control® PLUS and causes temporary digestive irritation. In addition it is believed that birds can see the chemical in the ultraviolet spectrum, which adds a visual aspect to the negative experience. EPA considers any toxicological risks associated with this chemical to be negligible.



b. Methyl anthranilate. MA is a non-toxic taste aversion agent made from grapes that renders grass unpalatable or distasteful to geese. Also, MA is approved by the US Food and Drug Administration (FDA) for human consumption and commonly used as a food additive. It is generally recognized as safe, and poses no harm to people or pets. MA is the active ingredient present in multiple products including RejeX-iT® Migrate TM, Bird-X® Goose Chase TM, Liquid Fence®, and others. Be sure to note differences in percent or concentration of active ingredient between products.

6. Harassment

Harassment of geese with pyrotechnics, propane cannons, trained dogs, vehicles, horns, and other devices can be effective in reducing goose damage. Success depends on the technique, nature of the problem, the number and habits of geese present, and the timing and diligence of the harassment. In general, the best results are obtained when harassment is initiated as soon as the problem is detected. Also, it is necessary to vary the location of devices and use more than one harassment device each day to avoid habituation. During the molt period when geese are flightless (mid-June through mid-July) and when goslings are present, harassment efforts are ineffective and should be discontinued. Being less accustomed to disturbance, migratory geese may be more responsive to harassment than resident geese. Another factor influencing the success of harassment techniques is the availability of alternate loafing and feeding sites. Displacing geese off of one site to alleviate goose damage unfortunately may cause similar problems and damage at an alternate site. Harassment can be more effective when there are multiple property owners in a local setting who are working together. This coordinated harassment may discourage a nuisance flock from flying from one property to the next. For more information on working with your neighbors, please refer to the Wildlife Services fact sheet entitled "A Collaborative Community-Based Approach to Managing Canada Goose Damage in Pennsylvania".

a. Pyrotechnics. Pyrotechnics are noise-making devices shot from a starter pistol (e.g., screamer sirens, bird bombs, bird bangers) or a 12-gauge shotgun (e.g., shell crackers). For technical advice and safety instructions on the use of pyrotechnics, please refer to the Wildlife Services fact sheet entitled, "Pyrotechnics for Bird Control".



<u>Important Safety Rule</u>: Pyrotechnic launchers and pyrotechnics should be treated with respect and handled as if they are firearms, with the potential to cause injury and death.

Screamers and bangers shot from the pyrotechnics pistol have a range of approximately 30-80 yards, and are best suited for suburban areas with an ample buffer zone to prohibit devices from entering neighboring properties and causing harm to people and/or property. Shell crackers, used with a break action 12-gauge shotgun, have a range of up to 100 yards, and are typically used on large areas such as agricultural land, airports, county parks, estates, corporate properties, and schools. The discharge of pyrotechnics may be inappropriate or prohibited in some areas, since they have the potential to start fires, ricochet off buildings, pose traffic



hazards, cause dogs to bark excessively, and may injure or disturb people. **See Harassment Notes Below.**

- b. Propane Cannons. Propane cannons are machines that ignite propane gas to produce loud explosions at timed or random intervals. They should be located in areas of high goose activity, and moved around the field or location every 2-4 days. The noise is extremely loud, and may not be appropriate or permitted in urban and suburban areas. **See Harassment Notes Below.**
- c. Trained Dogs. The use of trained dogs, usually Border Collies or Labradors, to harass geese away from damaged areas is becoming an increasingly popular technique. Dogs may be purchased or the service may be provided by Wildlife Services, a dog handler, or a private business. Companies that provide the service may be located in the yellow pages and/or on the Internet. It may be advisable to obtain a demonstration of the service to make sure the technique will be appropriate for your site. Harassing geese with trained dogs appears to be most effective in areas with no or limited water bodies (less than 2 acres), since geese will be forced to go elsewhere to find refuge. As with all harassment approaches, the use of dogs usually requires an ongoing program that is augmented with other control techniques. The handler is also liable for violations of Federal and State laws if the dog inadvertently harms or kills a goose. See Harassment Notes Below.
- d. Other Harassment Devices. The use of vehicles, horns, distress calls, electronic sound generating devices, and other noise-making devices have mixed success in harassing geese away from problem situations. Mute swans are not effective in preventing Canada geese from using and nesting on a pond or lake, in fact they serve as decoys which can attract additional geese or waterfowl to the area. Furthermore, mute swans, which are an invasive species in North America, pose several negative ecological impacts and may present as many damage problems as Canada geese. See Harassment Notes Below.

Harassment Notes:

- 1. Beginning May 1, 2011 the BATFE will start enforcing regulations that would require any individual that is not a representative of the federal, state, local, or a municipal government to obtain a permit to receive and use pyrotechnics. Individuals and companies who want to acquire a Federal explosives license or permit or learn more about ATF regulation of Explosive Pest Control Devices (EPCDs) are encouraged to visit the ATF website at http://www.atf.gov/explosives/how-to/explosive-pest-control-device-requirements.html.. Additional information on pyrotechnics use, storage, and transportation may be obtained from US 18 Chapter 40 http://www.atf.gov/regulations-rulings/laws/
- 2. Depending on your location a State permit may be required to conduct harassment activities; check with your regional PGC office before initiating any harassment efforts.
- 3. Private contractors may also be required to obtain a State permit to provide harassment services when working on private property, again check with your regional PGC office.
- 4. When implementing harassment techniques, it is imperative to contact your local police department and municipality and comply with all use, possession, and transport regulations and permit requirements they identify. Inform your neighbors of your intentions to use



harassment devices, since they make considerable noise, may disturb people, frighten pets, and may be mistaken for gunshots.

7. <u>Population Management</u>

Resident goose population management can be viewed simply as stabilizing population growth by limiting reproduction and reducing the population by removing adult birds.

a. Reproductive Control. Ovocontrol® G is the only contraceptive registered with the US EPA for management of Canada geese. Nicarbazin is the active ingredient and it reduces the hatchability of eggs. However, you must check the registration status in PA prior to use. EPA

registration is only valid for 1 year and may lapse if the demand is not sufficient. To check the current status or to request the registration be renewed contact: **Innolytics LLC**, Rancho Santa Fe, CA 92067, Telephone: 858.759.8012. Reproduction control can be accomplished through other activities such as nest/egg treatments. Depending on the exact damage situation, goose nests and eggs are either removed and destroyed (i.e., buried) or eggs are treated and returned to the nest. Removal of nests and eggs is typically done when nests are located in areas



of heavy human traffic such as entryways, decks, patios, and playgrounds, or in highly sensitive areas such as airports. The removal of nests is intended to deter the geese from nesting again in the same area. Nest/egg removal may need to be conducted repeatedly throughout the nesting season, and over several years. Nest/egg treatment entails coating an egg with 100% food-grade corn oil, which effectively stops embryo development by preventing air from passing through the shell. Treated eggs are returned to the nest and the adult geese will remain attached to the nest site, but goslings will not be hatched.

Special Note: A permit is no longer required to treat nests. To obtain authority register online with the US Fish and Wildlife Service (USFWS):

 $\frac{https://epermits.fws.gov/eRCGR/geSLaspx}{New: Resident Canada Goose Nest Egg Registration."} and click on the substitution of the substitution$

Nest/egg treatment is typically done where the current number of geese is tolerable, but additional birds would not be. Treatment or removal of eggs will not reduce the overall goose population, but will slow its growth and make adult geese (not attached to goslings) more responsive to harassment. Additionally, fewer geese will be associated with your property throughout the spring and summer. Wildlife Services will provide a fact sheet and instructions entitled "Management of Canada Goose Nesting in Pennsylvania" to interested landowners, organizations, and agencies who have registered with the USFWS for nesting control activities.

b. Regulated Sport Hunting. Although most research indicates that regulated sport hunting will not reduce resident Canada goose populations, sport hunting may reduce or redistribute goose



damage to tolerable levels. Legally hunted geese may become more responsive to pyrotechnics and other harassment techniques and be dispersed easier. In Pennsylvania, geese can be hunted during three seasons. More information about goose hunting seasons, possession limits, and waterfowl management zones may be obtained online at www.pgc.state.pa.us or by contacting your regional PGC office.

c. Shooting Geese Under a Depredation Permit. Occasional shooting of a few geese may improve the effectiveness of other harassment efforts, and is generally referred to as "lethal reinforcement". A Federal and State permit is required, and must be carried with you while conducting permitted activities. This technique is typically employed on agricultural areas, airports, golf courses, and other expansive areas away from homes and residential development. Shooting may be impractical and/or prohibited in most urban and suburban goose damage situations, due to safety concerns, local noise/discharge ordinances, and adjacent land uses. Consult with your neighbors, municipal offices, and local police departments to determine if shooting could be implemented on your site. Applications for depredation permits are available from Wildlife Services and the USFWS.

d. Capture and Remove Geese. Reduction of the local goose population could be accomplished by capturing and removing geese, pursuant to authorities listed in a Federal and State permit. Geese are most easily captured during the molt period when they are flightless (mid-June through mid-July). Geese can be captured with netted panel traps during the molt, or at other times of the year with swim-in traps, rocket/cannon nets, decoy traps, dip nets, and by hand. Once geese are captured, they are placed into poultry crates, transported off site, euthanized and buried/incinerated, or donated as a food source to charitable organizations. Euthanization of captured geese should be conducted only by trained individuals and carcasses must be processed and donated according to State and Wildlife Services guidelines. This approach may be controversial, and should be preceded by most of the above mentioned techniques. Also the surrounding community should be involved in the decision-making process. Population management is a last resort management option and is only used when other harassment techniques have been fully exhausted. Refer to the Wildlife Services fact sheet entitled, "A Collaborative Community-Based Approach to Managing Canada Goose Damage in Pennsylvania" for additional guidance in developing an effective integrated goose management plan for your community.

The relocation of geese, or any other nuisance wildlife, is not permitted in Pennsylvania due to the risk of the translocated animal causing damage and/or possibly spreading disease at the new site.

Legal Status

Canada geese are migratory game birds that are afforded Federal and State protection. Goose populations are managed by the US Fish and Wildlife Service and the Pennsylvania Game Commission pursuant to the Migratory Bird Treaty Act (16 USCS 703-711), Federal Regulations (50 CFR 10, 13, 20 & 21), Pennsylvania Statutes Annotated Title 23, the Pennsylvania Game Code, and other Federal and State laws, regulations, policies, and court rulings.



As described earlier, a permit is no longer required to treat nests. To obtain authority register online with the USFWS: https://epermits.fws.gov/eRCGR/geSI.aspx, or go to https://epermits.fws.gov/eRCGR/geSI.aspx, or go to https://epermits.fws.gov/eRCGR/geSI.aspx, or go to https://www.fws.gov/eRCGR/geSI.aspx, or go to https://www.fws.gov/eRCGR/geSI.aspx, and any other activity that includes a fee. Prior to submitted to reduce damage, and any other activity that includes a fee. Prior to submitted to reduce damage afee. Prior to submitted to the USFWS (413-253-8643) and includes a fee. Prior to submitted to the Bureau of Wildlife Services Form 37 (Migratory Bird Damage Report) must be completed by Wild

Sources of Supply

Pennsylvania Wildlife Services Offices can provide technical advice on supplies and also sources of equipment and supplies upon request. Wildlife Services **does not** endorse or promote any company or product.

Agency Contacts

To obtain permit applications, goose damage control recommendations, assistance in developing and conducting control activities, etc., contact Wildlife Services:

Eastern District	State Office	Western District
253 Snyder Road	PO Box 60827	4820 Route 711, Suite A
Reading, PA 19605	Harrisburg, PA 17106-0827	Bolivar, PA 15923-2420
(610) 916-1415	(717) 236-9451	(724) 238-7320
	Fax (717) 236-9454	Fax (724) 238-7274

→ To check on the status of State permit applications, contact:

Pennsylvania Game Commission Bureau of Law Enforcement 2001 Elmerton Avenue Harrisburg, PA 17110-9797 (717) 787-5529

More information about goose hunting seasons, possession limits and waterfowl management zones can be obtained by going online at the PGC official website: www.pgc.state.pa.us

→ To obtain permit applications and to check on the status of Federal permit applications, contact:

U.S. Fish and Wildlife Service 300 Westgate Center Drive



Hadley, MA 01035-9587 (413) 253-8643/Fax (413) 253-8480

Special Note:

Recommendations in this fact sheet should not be implemented if they would be in conflict with the Endangered Species Act of 1973.

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