



DENVER
THE MILE HIGH CITY

Canada Goose Management

DENVER PARKS & RECREATION/NATURAL RESOURCES

Presented by: Vicki Vargas-Madrid - Wildlife Program Administrator



FOR CITY SERVICES VISIT [DenverGov.org](https://denvergov.org) | CALL 311

Canada Geese in Colorado

- ▶ As many as 20,000 Canada geese are year-round residents in the Denver Metro and Front Range area, and no longer migrate. As many as 250,000 geese are present in Colorado during the winter migration.
- ▶ Only migrate within short distances - generally stay within their state of birth or neighboring state.
- ▶ Migratory birds are more wary of human activities than resident geese.
- ▶ No need to migrate: We have created the perfect HABITAT:
 - ▶ Park land, golf courses, cemeteries, expansive bluegrass lawns, water features, and few natural predators.



Goose Biology

- ▶ Diet consists of:
- ▶ Grass
- ▶ Fallen grain and seed
- ▶ Wild rice
- ▶ Sedges
- ▶ Aquatic plants
- ▶ Insects and larvae
- ▶ Crustaceans
- ▶ Small mollusks
- ▶ In urban areas, unnatural food from humans feeding



Goose Biology



- ▶ Breeding And Reproduction:
 - ▶ Geese begin nesting at around 3 years of age
 - ▶ Mating season starts in late February, early March
 - ▶ Female builds the nest -
 - ▶ On ground in open areas
 - ▶ Generally near water
 - ▶ Pairs usually stay together for life. If one dies, goose will find another mate

▶ NESTING

- ▶ Generally nest within 150 feet of a water feature
 - ▶ Water provides protection, access to food, and an escape from predators
 - ▶ A goose will lay from 3-15 eggs
 - ▶ Average clutch size is 5-7
 - ▶ 27-30 day incubation period
 - ▶ Male stands guard - very protective of nest



Goose Biology

▶ FEEDING

- ▶ Parents will often move their brood to areas of suitable habitat - food, proximity to water, shelter that provides visibility.
- ▶ Canada geese are grazers - prefer fresh mowed green grass - urban areas.
- ▶ Choose areas with few obstructions - allowing ability to see predators.



Laws and Regulations:

- ▶ Canada geese are a protected species under the Federal Migratory Bird Treaty Act of 1918.
- ▶ Illegal to harvest waterfowl and migratory birds, except during hunting seasons or by a special permit.
- ▶ Treaty gives local state agencies authority to set harvest limits, regulations, and issue permits to harvest or take waterfowl.
- ▶ Local laws and regulations (municipal, city and county) may be more restrictive, and may affect the use of control techniques, firearm closures, chemical use, the use of auditory and visual scaring devices, etc.
- ▶ Laws and regulations can change periodically - important to keep up with the latest and be familiar with them.

Management Strategy Considerations



- ▶ Denver Parks & Rec gets their authority to manage geese from State & Federal wildlife agency. (CPW and USFWS)
- ▶ Considerations for developing Integrated Management Strategies (before we do anything we must consider the following)
 - ▶ Time(s) of year when problems occur,
 - ▶ Available control options - given the biology of the geese and the area involved,
 - ▶ Probable effectiveness of the technique, and results.
 - ▶ Acceptability, cost, and legality of control methods, partnerships, and -
 - ▶ Community support.



Why are they here?

▶ Identify reasons for why geese are here -

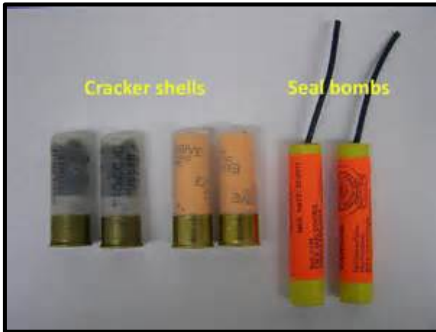
▶ Site characteristics:

- ▶ Security/shelter
- ▶ Food source
- ▶ Nesting sites available
- ▶ Water features
- ▶ Landscape
- ▶ No predators



Then choose appropriate technique.

Management Options



- ▶ Hazing methods (nonlethal)
 - ▶ Don't require a permit
 - ▶ Can not harm or kill the geese
- ▶ Noise makers/Pyrotechnics/Sirens/Airhorns/Whistles
 - ▶ Know your city/county ordinances - may be more restrictive
 - ▶ 12 gauge "cracker shells"
 - ▶ Ultra sonic devices
 - ▶ May need to let neighbors know in advance
- ▶ Trained Dogs
 - ▶ Use is limited to certain times of the year. (April 1 - July 31)
 - ▶ Dogs cannot harm geese
 - ▶ Leash laws may apply

Management Techniques

- ▶ Visual Frightening Devices
 - ▶ Scare crows, balloons, reflective Mylar tape, strobe lights, kites with “eye spots”
- ▶ Landscape Habitat Modifications
 - ▶ Create undesirable habitat
 - ▶ Introduce visual barriers between ponds/water and feeding areas
 - ▶ Plant trees, thick bushes, dense hedges, tall grasses, and wild flowers (native vegetation)
 - ▶ Eliminate straight shorelines and islands
 - ▶ Consider placement of walking paths and grassy areas from the water



Management Techniques

▶ Chemical Repellents:

- Several commercial varieties available

▶ Follow label instructions

- ▶ Most have to be reapplied twice a week and after moisture
- ▶ Biodegradable/nontoxic to birds, cats, dogs, other wildlife and humans

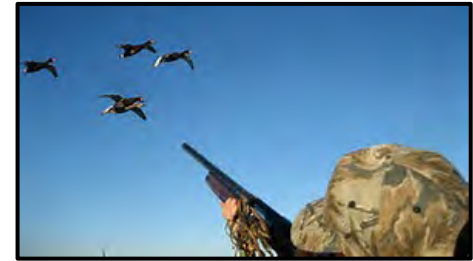
Has it been approved by EPA?

- ▶ ReJeXiT and Bird Shield
- ▶ Made from natural, nontoxic biodegradable food ingredients - methyl anthranilate (MA)



Other Management Strategies

- ▶ Hunting - but only allowed in hunting areas.
- ▶ Special Population Control Hunts (USFWS and CPW approval)
- ▶ Michigan, Minnesota, Wisconsin, Massachusetts, Maryland, New Jersey, have harvested surplus adult Canada geese to provide food for shelters.
 - ▶ Requires federal and state permission to kill geese, and a federal permit must be issued.
 - ▶ Costs involved in holding and processing geese for human consumption can be great. (Who incurs the cost? In some cases, the cost of testing and processing goose meat for donation to food banks will come out of the community's budget, i.e. taxpayers.)
 - ▶ Requires numerous partner participation. (USFWS, CPW, APHIS/USDA, Meat Processors, local agencies, EPA, FDA, etc.)
 - ▶ Acceptance by DPR management, the city, and the public. (Not an approved program for DPR at this time, but is a topic of discussion and we continue to research the possibility)



Denver Parks

Current Goose Management Strategies



- ▶ Multi-Strategy approach - Use of various techniques:
 - ▶ Goosinator Program - Hazing
 - ▶ Stationary Decoys on lakes
 - ▶ Egg Oil Program
 - ▶ Landscape Alterations
 - ▶ Repellants - ReJexIt - Migrate
 - ▶ Coyote silhouettes - Mylar tape flagging

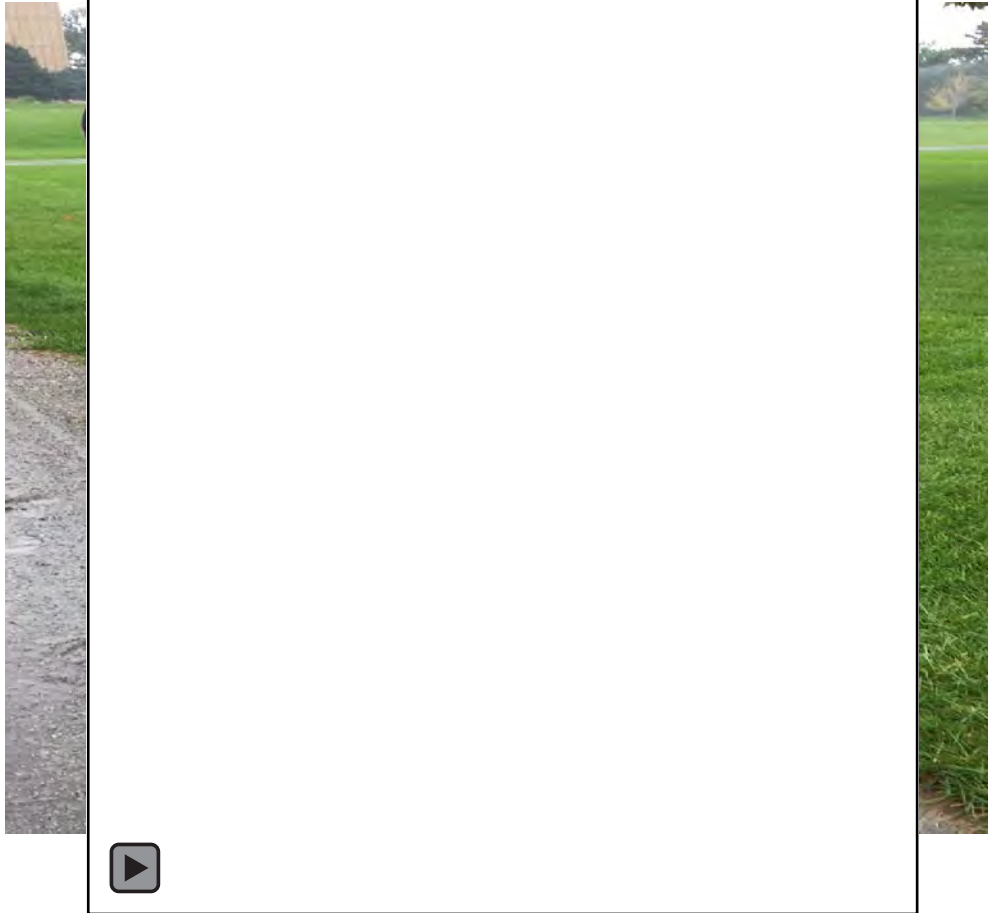
Goosinator Program

- ▶ Goosinator Program - is somewhat effective. Hazes the geese away from the turf and lakes and scatters them elsewhere. Acts like a predator. The amount of time they stay away varies.
- ▶ Goal is to keep the geese moving. Instill their natural instinct to migrate.
- ▶ Haze from **Sept - March**



How the Goosinator works...

On
Grass,



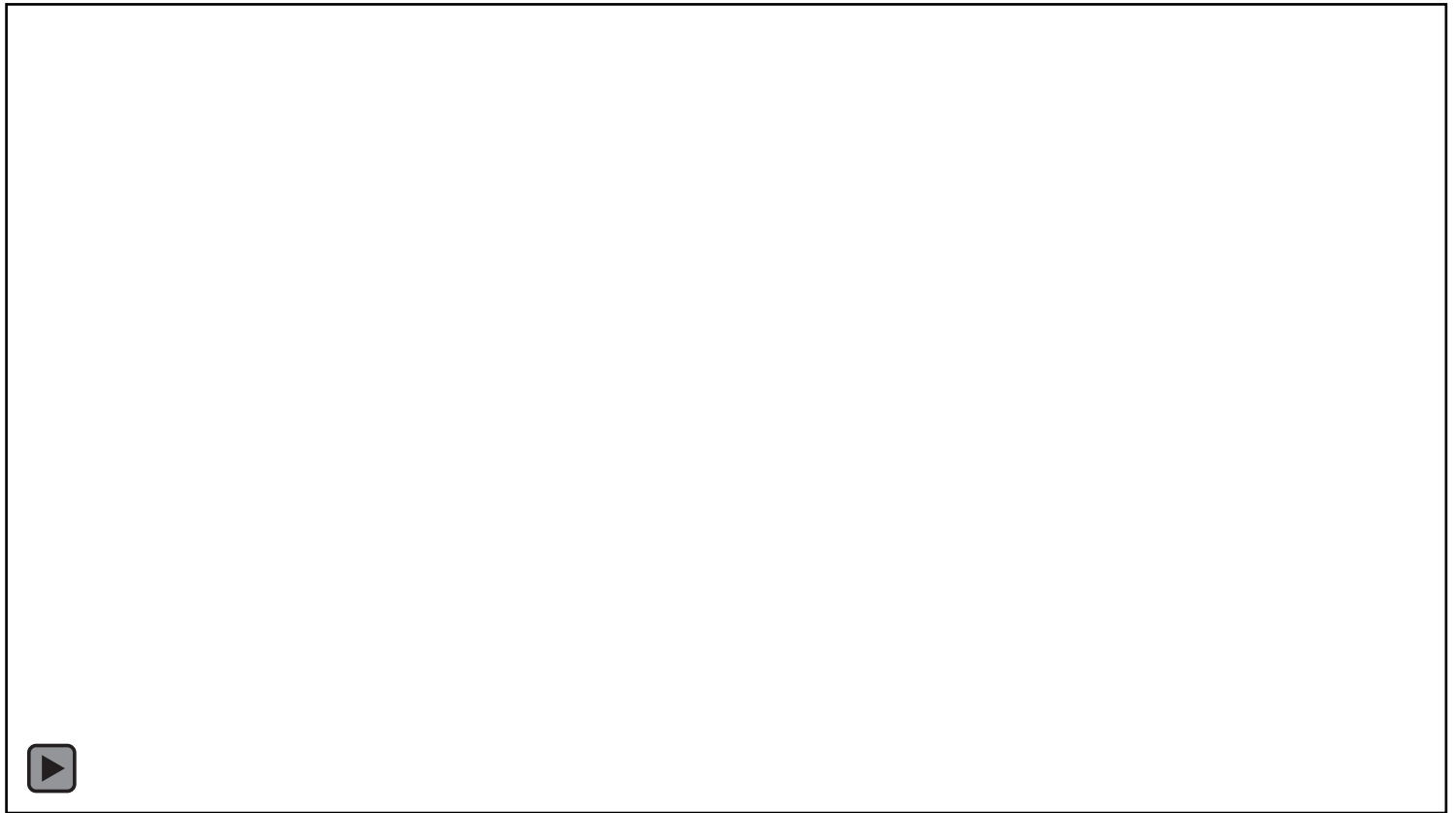


Goosinator In Action . . .

In the
Water,
and on
the
Snow...



...And
sometimes
you don't
even have
to turn it
on...



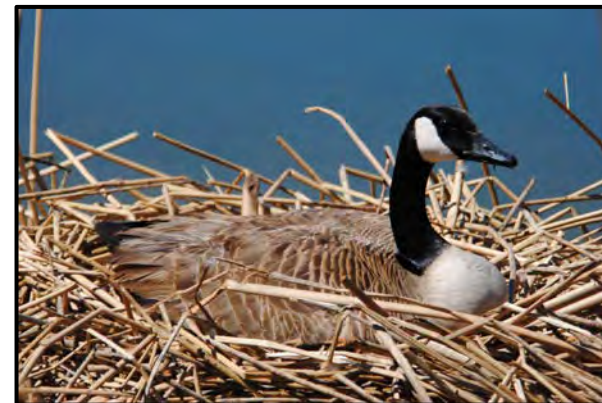
Egg Oil Program

- ▶ Egg Oil Program - DPR is a subpermittee under CPW's Special Permit to control goose populations. Allows DPR to oil goose eggs on our respective properties. Goal is to reduce reproduction success. (March - August)
 - ▶ This strategy is performed during the breeding Season: March - July.
 - ▶ Acceptable and humane form of lethal control.
 - ▶ Treat Denver parks and golf courses with water features and large goose populations.
 - ▶ Regulated by Federal and State permit.
 - ▶ Inexpensive.
 - ▶ Less labor intensive than other methods that require direct contact of the eggs or nests.
 - ▶ According to the National Wildlife Research Center, egg oiling is 95-100 % effective in preventing the hatching of treated eggs.
- 2015-Oiled approx. 1,000 goose eggs.
-2016-Oiled approx. 2,000 goose eggs.
-2017-Oiled approx. 3,835 goose eggs.



"No one strategy will eliminate geese from our parks. There is no "silver bullet" that will "fix" the goose problem."

- ▶ Can we do more? Is what we're doing enough?
 - ▶ Should we go the next step - lethal control?
 - ▶ What is the social capacity? Who determines that?
 - ▶ Should we be concerned? Should we leave it to the State or Feds?





DENVER
THE MILE HIGH CITY

DPR/Natural Resources

Thank You!



Questions?

Discussion

Vicki Vargas-Madrid
Wildlife Program Administrator
Denver Parks & Rec/Natural
Resources

vicki.vargas-madrid@denvergov.org
720-865-4334

FOR CITY SERVICES VISIT | CALL
DenverGov.org | **311**