



**U. S. Department of Agriculture
Wildlife Services
&
The Township of Derry**



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Informational Sheet
**MANAGING VULTURE DAMAGE
WITHIN THE TOWNSHIP OF DERRY**

Introduction

Since 2021, USDA Wildlife Services has been actively involved with managing the issues caused by the presence of vultures within the Township of Derry. The purpose of this informational sheet is to inform the public of the damage and health risks associated with having an overabundant established vulture population and provide an outline of the integrated vulture damage management program requested by the Township of Derry. The main goal of the integrated vulture damage management program is to disrupt the local roosting population that currently causes disease concerns for zoo animals, property damage and unsanitary conditions throughout the township to residents. Wildlife Services employs safe and practical techniques to manage the vulture population in an effort to reduce damage and health risks within the township.

Species Background

The turkey vulture (*Cathartes aura*), a historic resident of Pennsylvania, and the black vulture (*Coragyps atratus*), a recent immigrant, are present in the state throughout the year. Turkey vultures have become increasingly abundant throughout the Northeast, and black vultures have extended their range northward into Maryland, Delaware, New Jersey, New York, and Pennsylvania during the past 50 years. Both species nest in abandoned buildings, hollow logs, caves and similar structures and lay 1-3 eggs on a bare surface. Both turkey and black



vultures will roost communally at night in trees or utility towers in groups of sometimes over a hundred vultures. They are often seen in the mornings on tall structures such as rooftops drying their wings. Property damage and nuisance problems have been attributed to both species and are increasing. Livestock predation problems have been attributed to black vultures and both species jeopardize aircraft safety when in or around airport environments and are involved in wildlife-aircraft collisions (bird strikes). Turkey vultures and black vultures are federally protected by the Migratory Bird Treaty Act, administered by the U.S. Fish and Wildlife Service. Both black and turkey vultures are protected non-game birds in Pennsylvania.

Turkey Vultures

The **turkey vulture** is the larger of the two species. They weigh up to 4.5 pounds and have wingspans that can reach 6 feet. It is predominantly dark brown and black with a featherless, bright red (adult) or brown (juvenile) head and a relatively long, narrow tail. The undersides of the wings are often the easiest way to differentiate between turkey and black vultures. Turkey vultures have mostly light gray feathers extending from the body to the wingtips with only the leading edge of the wing being black. In flight, turkey vultures have a slow and fluid wingbeat and a slight V-shape when they soar. Turkey vultures have a seasonal migratory period where they will head south during the winter. Some turkey vultures in the southern United States are year-round residents. Birds in the northeast migrate short distances southward, to North Carolina through Louisiana. Turkey vultures rely on their keen sense of sight and smell to scavenge for food. These birds primarily feed on carrion. Turkey vultures display a feeding hierarchy and have an organized pecking order when feeding.



Black Vultures

The **black vulture** weighs less than 4 pounds and has a wingspan of less than 5 feet. It is also predominantly black including a dark gray to black head (juvenile and adult). The tail is shorter and wider (fanned) than that of the turkey vulture. The undersides of their wings are mostly black with large silver-white patches near the wing tips. The wingtip patches can be seen from behind as well. The wingbeats of the black vulture are quick and choppy, like that of a hawk, and when soaring appear flat. Black vultures have been known to establish temporary loafing sites that can develop into an established roost. When a black vulture establishes a roost, they tend to stay close to it for as long as possible. In many cases, year-round management efforts including harassment is needed to dissuade the birds from wanting to stay near their roost sites. If left unmanaged, black vultures will stay within range of their roost sites year-round. The only time they migrate on their own is due to harsh weather conditions that occur during the winter. For the black vultures that live in the colder northern region or at high altitudes, short-term migration occurs. When conditions become favorable, they return to their original roost sites. Unlike turkey vultures,



black vultures do not have a keen sense of smell when scavenging for food. Black vultures are opportunistic feeders that usually follow turkey vultures to carrion. The more aggressive black vultures then displace the turkey vultures from the carcass. Predation by black vultures primarily occurs to domestic livestock that include newborn piglets, lambs, and calves but can also occur to newborn fawns.

Negative Impacts

Problems for communities involving turkey and black vultures generally fall into 3 categories: damage and health concerns from the accumulation of feces; physical damage to property caused by destructive behavior; and predation of livestock.

1. Human Health and Safety

Vultures pose hazards to aircraft, especially when landfills, roosts, or other congregating sites are located near approaching or departing flight paths. In addition, vultures can cause human health and safety problems by contaminating water sources, private/public property, and walkways/roadways with their droppings. Contamination has been known to occur when coliform bacteria from droppings entered water towers or springs from which residences drew water. Although vultures have strong acids in their stomachs that they can kill many dangerous diseases, they have the potential to contaminate property through physical contact. When vultures clean a carcass that has died of a serious disease, the disease can linger on the feathers and legs of a vulture as it moves around from property to property. So, there is a varying potential to the risk of spreading a disease a vulture can have (what they are exposed to and where they are bringing it).



2. Damage

Large groups of vultures may roost or occupy woodlots near homes and can be destructive. Both black and turkey vultures also affect the quality of life for area residents. The birds' feces and vomit can accumulate rapidly. Vulture feces is not just highly odorous, it is also very acidic and corrosive. Roosting and staging vultures produce vast accumulations of feces on trees and lawns, residential and commercial buildings, electrical and radio transmission towers, and other structures. The droppings can kill trees, shrubs, grass, and flowers; eat the finish off painted or stained surfaces including patios, walkways, and railings; and create unpleasant odors emanating from roost sites. Accumulations on electrical transmission towers have resulted in arcing and localized power outages. Public water supplies have been contaminated with fecal coliform bacteria because of droppings entering water towers, springs, or other sources.



A frequently observed, but not fully understood, characteristic of vultures is their affinity for rubber. Black vultures often damage homes and commercial buildings by tearing window caulking, roof shingles, vent seals, rubber roof liners, and pool covers. Primarily, black vultures will tear and sometimes consume, asphalt shingles, rubber roofing material, seals around chimneys and foam insulation on HVAC units. Damage to vehicles is also common. Black vultures have been known to tear apart windshield wipers, tire valve stems, and the rubber seals around windows and doors in addition to the damage that their talons and feces can do to the vehicle's paint. Other property damage attributed to vultures includes leather upholstery from cars, boats, tractors, and other vehicles, latex window caulking, and plastic flowers at cemeteries. Most damage of this type is attributed to black vultures, although turkey vultures can also cause similar issues. Most property damage caused by the presence of vultures can lead to financial loss through costly repairs and replacements.

3. Predation

Predation of livestock is strictly a behavior of black vultures. While turkey vultures rely almost exclusively on decaying animal carcasses, black vultures will prey upon newborn calves, foals, and lambs. Pecking at newborn livestock not only causes harm to the newborn but also cause damage to the adult female giving birth. Black vultures will also overtake sick or injured adult livestock and domestic fowl. Predation from black vultures is often gruesome, as they prefer to target the eyes, tongue, and anus of their prey causing suffering and slow death.

Management Techniques

Wildlife Services (WS) and the Township of Derry will be implementing an Integrated Damage Management program that includes a variety of safe, practical, effective and legal techniques and approaches to deal with vultures residing within township jurisdiction.

1. Habitat Management

The elimination of vulture food, roost trees, and nest sites will reduce the number of birds in the area. It is encouraged that residents within Derry Township refrain from leaving outdoor food bowls for pets and limit the access of outdoor trash by utilizing trash bins with lids. Removal of roost site trees and pruning of branches will promote birds to abandon a traditional roost site.



2. Patagial Tagging and Tracking

Beginning in 2020, Wildlife Services has worked with Hershey Entertainment & Resorts Co. in conducting bird population surveys to estimate the active vulture population within Derry Township. Wildlife Services has actively trapped and tagged birds to monitor the return rate of tagged black vultures. Understanding the return rate of individual black vultures will allow Wildlife Services to identify problematic individuals within the active population and determine which harassment methods are most effective. This information will then be used in the integrated vulture damage management program to assess where and when specific individuals are traveling within

the township. Wildlife Services has employed nightly post-tag harassment efforts to try and prevent tagged birds from returning to Derry Township properties. While employing the integrated vulture damage management plan, Wildlife Services intends to continue tagging efforts to better understand the movement and abundance of the Derry Township vulture population.

3. Harassment

Harassment of vultures with pyrotechnics, vehicles, air horns, dogs, and other devices can be effective in reducing damage. Success depends on the technique, nature of the problem, the number and habits of vultures present, and the timing and diligence of the harassment.

a. Pyrotechnics.

- Pyrotechnics are noise-making devices (e.g., screamer sirens, bird bangers) fired from a hand-held launcher. Pyrotechnics are effective any time of the day.



b. Lasers.

- Handheld visual deterrent used to prevent vultures from roosting in trees and on properties. Lasers are most effective at night and at other times of low light.



c. Paintball Guns.

- The permitted use of both dry powder and clear non-toxic gel paintballs to assist in moving birds out of Derry Township.

d. Effigies.

- Vultures have also been reported to be repelled by presence of a dead vulture suspended in or near a roost tree or structure. Effigies serve as a visual warning to vulture populations that a specific area is dangerous or unwelcoming. The unnatural display of the bird hanging upside down has been used to dissuade birds from loafing on houses, roosting in trees, and venturing into unwanted areas. Wildlife Services has both federal and state permits allowing the use of effigies.



4. Population Management

Using information gathered from vulture surveys Wildlife Services will seek to remove specific tagged vultures that have on multiple occasions returned to the established roost site within Derry Township. Wildlife Services possesses a migratory bird depredation permit through the U.S. Fish and Wildlife Service and Pennsylvania Game Commission to remove vultures which are causing substantial damage. In those situations where vultures have gotten used to harassment with pyrotechnics, and no longer react to auditory harassment, the lethal removal of a few specified birds will allow the scaring effect of this technique to be reinforced. Vultures are intelligent and respond quickly when one or two members of a flock are lethally removed. Removal of persistent birds from a local population increases the success of harassment programs, ensuring that birds remain responsive to harassment methods. The goal of this technique is to reinforce ongoing harassment methods, not to significantly reduce the local vulture population.

Legal Status

Vultures are non-game migratory birds that are afforded Federal and State protection. Vulture 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. Procedures such as capturing and euthanizing birds, shooting birds to reduce damage, and any other activity that includes handling birds requires a migratory bird depredation permit. Wildlife Services possesses a migratory bird depredation permit through the U.S. Fish and Wildlife Service to remove vultures which are causing substantial damage. Permit applications can be obtained by the public from the USDA Wildlife Services program at the address and phone numbers listed above. The completed application must be submitted to the USFWS, accompanied by a \$100.00 processing fee. Once the permit is obtained, comply fully with its conditions, including the annual report of the number of vultures taken. Carry the permit with you during conduct of control activities.

Goal

USDA Wildlife Services and the Township of Derry are working together to create a healthy environment for both wildlife and the public. The goal of our integrated vulture damage management program is not to eliminate the vulture population, but simply to manage the active population in the region to a biologically and socially acceptable level and relocate the roost to a location that will cause the least damage and conflict. The focus of the integrated vulture damage management program within the Township of Derry is to disrupt the local roosting population which is causing disease concerns for zoo animals, property damage and unsanitary conditions throughout the township, while ensuring that the environment and the public will still benefit from the valuable habits of the vultures. The residents of the Township of Derry are a valuable part of the integrated vulture damage management program. You are requested to remove outdoor pet food and household waste that may attract vultures. Contact the Township office if you are receiving damage by the vultures so that your property may be included in and receive the benefits of the program.