

Other Animals: Vertebrates as Pests

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A vertebrate is an animal that has a backbone or spinal column. Mammals, birds, reptiles, amphibians, and fish are all vertebrates.

People often disagree about when an animal becomes a pest. To many people a regal, ten-point buck and a raccoon are appealing parts of nature. However, both can damage property and crops. Aside from the damage they may cause, purposefully encouraging these animals to visit your property may be dangerous for members of your family and for the animals and likely will annoy your neighbors.

Be sensitive to the different values that people assign to animals. Any animal can become bothersome at certain times or locations and many species cause damage or endanger human health and safety. At the same time, all animals have value, whether it is ecological, aesthetic, or economic. Bird watchers enjoy their hobby; hunters enjoy theirs. All interactions with wildlife have consequences and, as much as you may believe that your actions are benign (e.g., feeding activities), unintended negative repercussions can and often do emerge for others as a result.

In general, vertebrates become pests when they damage property, agriculture, and/or natural resources. Pests also may threaten human health and safety. In Virginia, most vertebrate pest complaints involve birds and mammals. One guiding principle embodies Virginia's laws and regulations regarding vertebrate pest control: try to eliminate the damage and its underlying cause, not the animals. If the damage can be controlled, people usually can tolerate the animal(s) involved.

Thus, prevention is the key objective. Other important considerations:

- In many places and situations, it may not be safe or legal to use certain damage management tactics.
- Some human-wildlife problems are best handled by professionals.

Laws Regulating Vertebrate Pest Control

The Code of Virginia, the Virginia Administrative Code (VAC), and the Code of Federal Regulations (CFR) all contain restrictions designed to protect wildlife. The Code of Virginia includes wildlife laws passed by the General Assembly and, in general, carries more authority than regulation. State agencies cannot modify these laws on their own; they must seek legislative action to modify, adjust, or eliminate items promulgated as Code of Virginia. In contrast, the VAC is a collection of regulations passed by state agencies that have specific legal authority to do so. The Virginia Department of Game and Inland Fisheries (VDGIF) is the regulatory agency responsible for most state wildlife regulations. The U.S. Congress or designated federal agencies have passed federal laws and regulations that protect some wildlife species. These are listed in the CFR. Finally, in some communities, local ordinances may regulate or impose further limitations on methods used to manage human-wildlife conflicts. Local communities cannot override or eliminate federal and state standards, but they can extend or strengthen such limitations.

It is challenging to keep current on all these laws and regulations. This is one reason to consult with local and state authorities regarding human-wildlife conflict issues. You should consider hiring a professional if the most efficient, legal management tactics to remove unwanted pests involve special equipment or required certifications.

Nuisance Species

Although the Code of Virginia, the VAC, and the CFR contain laws and regulations that protect most animals, they do not protect nuisance species. In Virginia, the term "nuisance species" has specific legal meaning, and refers to an animal, primarily a non-native, exotic, or introduced species, that may be controlled without the need to obtain a state or federal permit. Animals that meet the definition of being a nuisance species may be "taken" at any time, but take must be conducted by lawful means. Virginia has classified the European starling, house sparrow, and rock pigeon to be "nuisance" birds; the U.S. Fish and Wildlife Service (USFWS) has added the monk parakeet and mute swan to this list of nuisance birds. Mammals designated as "nuisance species" in Virginia are the house mouse, Norway rat, black rat, coyote, feral hog, nutria, and woodchuck (4 VAC 15-20-160).

In addition to those specifically listed, other animals may be considered "nuisance species" only in certain situations (Code of Virginia §29.1-100). Brown-headed cowbirds, red-winged blackbirds, and common grackles maybe considered "nuisance species" when they damage ornamental or shade trees, agricultural crops, wildlife, livestock, or other property. They also may be considered nuisance species when they congregate in such numbers that they cause a health hazard (50 CFR 21.43). Where shooting these birds is deemed necessary, it must be done only with a "depredation order" (50 CFR 21.42 and 21.43), and only at sites where use of a firearm is legal and safe.

8-2 Other Animals: *Vertebrates as Pests*

Permits Required for Trapping and Shooting

It is legal to trap or shoot wildlife classified as “game” and “furbearer” species during established hunting and trapping seasons for those who possess a valid license. Some wildlife species have a continuous open season in certain areas. Landowners generally do not need a license to hunt or trap on their own property. Sometimes, landowners (and/or their agents) need a special permit to “take” certain animals during the closed season. The type of damage, the species involved, and the person who conducts the trapping or shooting determines whether a special permit is required. The following information reviews permit information.

Currently in Virginia, there is a continuous open season to trap beaver (4 VAC 15-60-20), muskrat (4 VAC 15-140-20), opossum (4 VAC 15-160-31), and raccoon (4 VAC 15-210-51) within the incorporated limits of any city or town in the Commonwealth. These regulations also extend to the counties of Arlington, Chesterfield, Fairfax, Henrico, James City, Loudoun, Prince William, Spotsylvania, Stafford, Roanoke, and York.

In Virginia, groundhogs (woodchucks), nutria, and coyotes can be “taken” at any time. There is a continuous open season to take striped skunks (4 VAC 15-220-10). Landowners and their tenants may take spotted skunks when they are committing or are about to commit depredation (4 VAC 15-220-20). Landowners can kill (or hire someone else to kill) foxes on their own property at any time (4 VAC 15-110-80) without a permit. However, if an individual performing the “take” is not the landowner or an immediate family member, he or she must possess a valid hunting or trapping license.

There are several sections in the Code of Virginia that relate to the “take” of problematic wildlife species. In some cases, these provisions partly overlap or appear to contradict those provided by VAC regulations. For example, landowners (including their agents or tenants) can kill beavers at any time and without need for a permit if the animals are damaging crops or lands (Code of Virginia 29.1-518). This is more permissive than the regulation that restricts year-round trapping of beavers only to incorporated cities and towns. Code also allows landowners to shoot or trap other furbearing animals (except muskrats and raccoons) on their own land during closed season (Code of Virginia 29.1-517 and 29.1-530). **This specific provision applies to landowners only, not their agents or designees.** If muskrats and raccoons are damaging crops or dams, the landowner must obtain a permit from a conservation police office before “take” can occur (Code of Virginia 29.1-517)

Landowners and tenants (with written permission of the landowner) may kill rabbits and squirrels for their own use (i.e., consumption) at any time (Code of Virginia 29.1-516). However, where squirrels are damaging crops or property, landowners (and/or their tenants) must obtain a permit from a conservation police officer before “take” occurs. In areas that prohibit discharge of firearms, landowners or agents may trap and “dispose of” (i.e., euthanize) problematic squirrels at any time (Code of Virginia 29.1-530).

Although Virginia laws and regulations are permissive regarding “nuisance species,” this does not apply universally to all wildlife. A conservation police officer can provide specific information on and assistance with other common wildlife conflicts where special permits would be required, such as the following:

- Killing bear and deer (and most other game animals) outside of established seasons requires a kill permit.
- Trapping raccoons and muskrats in areas without the continuous open trapping season also requires a permit.
- It is illegal in Virginia to kill any species of snake (4 VAC 15-360-10), unless the snake poses an imminent health or safety threat. Landowners are allowed to capture and possess up to five LIVE snake specimens for personal use. However, captured snakes must be released alive at the point of capture within 30 days of capture.
- Non-game animals, such as bats, may be taken without a permit ONLY if there are so many that they pose a health hazard or other nuisance. However, with bats, it is possible that endangered or threatened animals may exist within the colony, and special precautions must be implemented to identify and avoid harming any endangered or threatened species before a colony is removed (Code of Virginia 29.1-100).
- Individuals who regularly perform nuisance wildlife trapping services need a Commercial Nuisance Animal Permit. This permit, available from VDGIF, eliminates the need for some site-specific damage permits. It allows wildlife managers to trap certain wildlife outside the trapping season without a permit. It also permits managers to transport live captured animals to a euthanasia site.

Laws and regulations regarding the “take” of problematic wildlife can be quite confusing. Contact VDGIF with any questions, or hire a professional.

Migratory Birds and Endangered Species

Certain animals are protected by restrictions that require special permits for their control. These animals include:

- migratory birds
- threatened and endangered species.

For more information about permits to “take” protected mammals and non-migratory birds, contact the Law Enforcement Division of VDGIF. To learn about permits to take migratory birds, contact USDA-Wildlife Services or the USFWS.

Migratory Birds

Migratory birds are birds that move substantial distances each year from their northern breeding areas to southern wintering grounds. Examples of migratory birds include most perching songbirds, blackbirds, waterfowl (e.g., tundra swans), and many birds of prey (e.g., hawks). Migratory birds are protected by the USFWS, the Migratory Bird Treaty Act, and Migratory Bird Treaties.

The Migratory Bird Depredation Order (50 CFR 21.43) allows “taking” of certain bird species without a permit if they are “committing or about to commit depredations upon ornamental or shade trees, agricultural crops, livestock, or wildlife, or when concentrated in such numbers and manner as to constitute a health hazard or other nuisance.” In Virginia, this order covers ONLY red-winged blackbirds, brown-headed cowbirds, crows, and grackles. In most circumstances, to “take” any other birds protected by the Migratory Bird Treaty Act, a migratory bird depredation permit from the USFWS is needed.

Because resident Canada geese have become such a problem, in September 2006, the USFWS issued a regulation, the Canada Goose Nest and Egg Depredation Order, that allows landowners to destroy the nests and eggs of resident Canada geese without need for a federal permit. However, before performing such activities, landowners must register online with the USFWS (50 CFR 21.50). An annual report that summarizes all actions taken to destroy eggs or nests is required. Landowners or their agents may oil, puncture, or addle (shake) the eggs and physically destroy or remove the nests containing these eggs.

This depredation order was supplemented in 2009 with the Agricultural Depredation Order, which allows landowners engaged in commercial agricultural production to “take” resident Canada geese that are causing damage on land under their direct ownership. “Take” under this order may occur only during the period of May 1 to August 31, but use of attraction tactics typically used in recreational hunting (e.g., use of decoys or calls) is prohibited. Before attempting any “take” of geese, landowners must register with the USDA-Wildlife Services to obtain this no-fee permit. Similar to the Nest and Egg Depredation Order, permit holders are required to file an annual report that summarizes how many geese were destroyed on their property that year.

Birds without federal protection include European starlings, pigeons, monk parakeets, mute swans, and house sparrows. Be aware of current state and federal laws and regulations before using a control method on any animal.

Threatened and Endangered Species

Threatened species are animals heading toward endangerment and possible extinction. Endangered species are animals that are likely to become extinct. The federal Endangered Species Act of 1973 and the Virginia Endangered Species Act protect threatened and endangered species. It is illegal to take a species designated as threatened or endangered without a permit. Contact the USFWS for lists of federally threatened and endangered animals and a list of migratory birds. VDGIF and the Virginia Department of Conservation and Recreation (DCR) maintain online databases of threatened or endangered species (http://www.dcr.virginia.gov/natural_heritage/infoservices.shtml#lists). Final decisions on approval and limitation of pesticide applications regarding threatened and endangered species are the responsibility of the Environmental Protection Agency.

8-4 Other Animals: *Vertebrates as Pests*

Decision Making

Good decision-making is critical in vertebrate pest control. To effectively address a problem, follow these five steps:

Identify and assess the problem. Identify the offending species involved and determine if the conflict warrants some kind of applied control.

Evaluate potential control methods. Where intervention is deemed necessary, assess the suite of legally available options and consider the impacts of each. When deciding which methods to use, consider the following:

- Which method has the fewest harmful consequences?
- Which method is the most cost-effective?
- Which method has the greatest public acceptance?

Discover what permissions are necessary to apply the management tactic(s) you are considering. Seek professional help to handle the problem if necessary.

Implement one or more control method(s). Select and carry out the most suitable method(s), but only after having obtained all necessary permits or authorizations.

Monitor the results. Evaluate whether the action was effective. Decide if and when another treatment is necessary.

Table 8.1 - Vertebrate Pest Management Recommendations for Homeowners

Species	Comments	Cultural control	Mechanical control	Chemical control Repellents ¹
Mammals:				
Bats	Beneficial for nuisance insect control	No effective methods	Exclusion; repellents; trapping	Yes ²
Bears		Eliminating access to food; sanitation	Fencing; frightening devices; aversive conditioning methods; legal harvest; shooting ³	Yes
Beavers		No effective methods	Fencing; water leveling; legal harvest; trapping; shooting ³	Yes
Coyotes		Protecting pets and young livestock; eliminating access to food	Fencing; corrals (night penning); frightening devices; trapping; shooting ³ ; destruction of den	No
Deer		Selective planting; early harvesting	Fencing; frightening devices; legal harvest; shooting ³	Yes
Flying squirrels (southern)		No effective methods	Exclusion; trapping	Yes ²
Foxes		Protecting pets and other domestic animals	Fencing; corrals (night penning); frightening devices; legal harvest; trapping; shooting ³ ; destruction of den	No <i>*for gray fox only²</i>
Groundhogs		No effective methods	Fencing; legal harvest; trapping; shooting ³	Yes ²
Moles		Packing the soil; killing white grubs ²	Fencing; trapping	Yes ²
Muskrats		Drawdown; covering dams in concrete or riprap	Fencing; legal harvest; trapping; shooting ³	No
Opossums		Sanitation; plugging burrows	Fencing; trapping; shooting ³	No
Rabbits		Selective planting; early harvesting	Fencing; legal harvest; trapping; shooting ³	Yes

¹ Properly-certified commercial pesticide applicators who work for-hire are able to apply pesticides not available to homeowners, including toxicants and mating disrupters. Firms using pesticides when providing vertebrate pest control services must have a VA Pesticide Business license and employ VA-certified applicators.

² Repellent is registered for the animal, but is largely ineffective or has not been proven effective.

³ Observe ordinances concerning the discharge of a gun and heed VDGIF hunting regulations (if applicable). Obtain all *necessary permits*.

Table 8.1 - Vertebrate Pest Management Recommendations for Homeowners (cont.)

Species	Comments	Cultural control	Mechanical control	Chemical control Repellents ¹
Mammals (cont.):				
Raccoons		Eliminating access to food; sanitation	Exclusion; frightening devices; legal harvest; trapping; shooting ³	Yes ²
Skunks (striped)		Rodent-control program; sanitation	Exclusion; trapping; shooting ³	Yes ²
Tree squirrels		Tree pruning	Exclusion; trapping; shooting ³	Yes
Voles		Selective planting; grounds maintenance; removal of synthetic weed barriers; limit amount of mulch applied to landscaped beds to no more than 1 inch	Exclusion; trapping	Yes ²
Birds:				
Blackbirds		Planting main crops away from roost; timing of harvest	Exclusion; frightening devices; trapping	Yes
Crows		Sanitation; decoy foods; thinning trees	Exclusion; frightening devices; trapping; shooting ³	Yes
European starlings		Sanitation; habitat modification	Exclusion; frightening devices; trapping	Yes
Gulls		Sanitation; removing food sources; habitat management	Exclusion; frightening devices; egg treatment; trapping ³	Yes
House sparrows		Habitat alteration; roosting site destruction; nest destruction	Exclusion; egg treatment; trapping; shooting ³ ; catwalks	Yes
Pigeons		Sanitation; nest destruction	Exclusion; egg treatment; frightening devices; trapping; shooting ³	Yes
Vultures		Sanitation; removing food sources; protecting pets and livestock	Exclusion; frightening devices; trapping; shooting ³ ; physical harassment	No
Waterfowl		Timing harvest; discouraging feeding; lure crops; habitat modification	Exclusion; frightening devices; dogs; egg treatment; trapping; shooting ³	Yes
Woodpeckers		Siding color and material selection	Exclusion; frightening devices; harassment	Yes ²
Reptiles:				
Snakes	State laws protect snakes except when they constitute a health hazard	Finding and destroying hiding places/refuges. Cleaning or removing brush piles, rock piles, and other debris. Keeping shrubs away from building foundations and cutting high grass. Eliminating snakes' source of food (especially mice and rats). To get rid of rodents, remove their food and harbor-age. Mow grass short to expose rodent runs.	Trapping, and shooting; however, note that in most sites and situations, snakes are protected animals. Fencing: In an area infested with poisonous snakes, install a snake-proof fence around a backyard or livestock pen. To do this, bury galvanized hardware cloth 6 inches in the ground. The cloth should be 36 inches wide with 1/4-inch mesh. Slant the hardware cloth outward at a 30° angle. Keep all vegetation away from the fence.	Yes ²

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² Repellent is registered for the animal, but is largely ineffective or has not been proven effective.

³ Observe ordinances concerning the discharge of a gun and heed VDGIF hunting regulations (if applicable). Obtain all *necessary permits*.

Selective Planting Recommendations for Deer Management

Planting trees, shrubs, and ornamental flowers that deer don't like to eat frequently is suggested as a way to reduce deer foraging damage. Although this may provide temporary relief where deer populations are low, it will not provide relief where deer density is moderate to high. Nevertheless, homeowners may want to experiment with different plantings to reduce damage, but don't be surprised if a plant found on the "less likely to eat" lists is eaten.

Marigolds, daffodils, chrysanthemums, barberry, potentilla, American holly, boxwood, ornamental grasses, junipers, and some spruce and pine trees (see Table 8.2), are less palatable to deer. Azaleas, pansies, peonies, hostas, roses, and fruit trees (see Table 8.3) are deer favorites. Deer are quite selective and will seek out plants that are the most palatable or provide vital nutrients first. Harvesting garden crops as early as possible also reduces the time that they are exposed to deer. In addition, consider planting palatable crops and ornamentals as far away from wooded areas as possible.

Table 8.2 - Ornamental plants less palatable to deer

Common name	Scientific name
Barberry	<i>Berberis</i> spp.
Beautybush	<i>Kolkwitzia amabilis</i>
Beech (European)	<i>Fagus sylvatica</i>
Birch (paper, European white)	<i>Betula papyrifera</i> , <i>B. pendula</i>
Boxwood (common)	<i>Buxus sempervirens</i>
Carolina allspice	<i>Calycanthus floridus</i>
Cherry (Japanese flowering)	<i>Prunus serrulata</i>
Chrysanthemum	<i>Chrysanthemum</i> spp.
Daffodil	<i>Narcissus</i> spp.
Dogwood (flowering, red osier, kousa)	<i>Cornus florida</i> , <i>C. sericea</i> , <i>C. kousa</i>
Drooping leucothoe	<i>Leucothe fontanesiana</i>
Enkianthus (redvein)	<i>Enkianthus campanulatus</i>
Ferns	Phylum <i>Pteridophyta</i>
Forsythia	<i>Forsythia</i> spp.
Hawthorne (English)	<i>Crataegus laevigata</i>
Holly (American, Chinese, inkberry)	<i>Ilex opaca</i> , <i>I. cornuta</i> , <i>I. glabra</i>
Japanese pieris	<i>Pieris japonica</i>
Juniper (Chinese)	<i>Juniperus chinensis</i>
Lilac (common)	<i>Syringa vulgaris</i>
Locust (honey)	<i>Gleditsia triacanthos</i>
Marigold	<i>Tagetes erecta</i> , <i>T. patula</i>
Ornamental grasses (True grasses, sedges, rushes)	Families Gramineae (Poaceae), Cyperaceae, Juncaceae
Pine (Austrian, pitch, mugo, red, scotch)	<i>Pinus nigra</i> , <i>P. ridgida</i> , <i>P. mugo</i> , <i>P. sylvestris</i>
Potentilla	<i>Potentilla fruticosa</i>

Russian olive	<i>Elaeagnus angustifolia</i>
Sassafras (common)	<i>Sassafras albidum</i>
Spirea (bluebeard)	<i>Spirea</i> spp.
Spruce (Colorado blue, Norway, white)	<i>Picea pungens</i> , <i>P. abies</i> , <i>P. glauca</i>
Willow (corkscrew)	<i>Salix matsudana</i> "Tortuosa"

Table 8.3 - Ornamental plants often damaged by deer

Common name	Scientific name
Apple	<i>Malus</i> spp.
Arborvitae (American)	<i>Thuja occidentalis</i>
Atlantic white cedar	<i>Chamaecyparis thyoides</i>
Azalea (evergreen, pinxterbloom)	<i>Rhododendron periclymenoides</i> (<i>nudiflorum</i>)
Burning bush	<i>Euonymus alatus</i>
Cherry, plum	<i>Prunus</i> spp.
Clematis	<i>Clematis</i> spp.
Daylily	<i>Hemerocallis</i> spp.
Dogwood (Cornelian)	<i>Cornus mas</i>
Fir (balsam, fraser)	<i>Abies balsamea</i> , <i>A. faseri</i>
Hosta	<i>Hosta</i> spp.
Hydrangea (panicle, smooth)	<i>Hydrangea arborescens</i> , <i>H. paniculata</i>
Ivy (English)	<i>Hedera helix</i>
Kerria	<i>Kerria japonica</i>
Lilies (Asiatic)	<i>Lilium</i> hybrids
Maple (Norway)	<i>Acer platanoides</i>
Mountain ash (European)	<i>Sorbus aucuparia</i>
Pansy	<i>Viola x wittrockiana</i>
Peony	<i>Paeoniaceae</i> spp.
Redbud (eastern)	<i>Cercis canadensis</i>
Rhododendron	<i>Rhododendron</i> spp.
Rose (hybrid tea)	<i>Rosa x hybrid</i>
Viburnum (doublefile, Korean spice, leatherleaf)	<i>Viburnum plicatum</i> var. <i>tomentosum</i> , <i>V. carlesii</i> ,
Wintercreeper	<i>Euonymus fortunei</i>
Yew	<i>Taxus</i> spp.

What To Do About Suspected Rabid Wildlife

Any mammal potentially can become infected with the rabies virus and thus represents a possible personal health threat to those who may come in direct contact with that animal. Persons who observe an animal that is exhibiting odd or uncharacteristic behaviors, especially aggressive or antagonistic advances, should be cautious and maintain a safe distance from that animal. Not all such behaviors indicate that the animal is sick or infected with the rabies virus — such animals may feel threatened by one's proximity and simply are attempting to defend space or resources. However, in situations where the animal cannot maintain an upright balance, demonstrates circling behavior, exhibits a pronounced downward position of the head, is dragging or having difficulty using the rear legs, or is gasping or showing evidence of labored breathing, disease should be suspected. Not all symptoms are indicative of rabies infection, though, and other diseases display similar outward signs. Nevertheless, caution is advised and any attempt to physically handle such animals is not recommended for individuals not trained to do so.

However, if a person has had direct contact (i.e., bitten, scratched, or had bodily fluid contact) or is suspected to have had such contact with an animal exhibiting these symptoms, he/she should seek immediate consultation with the family physician or a health provider for determination of proper course of action. In the case of direct physical encounters, the only way to reliably confirm exposure to rabies is to capture and test the animal for the presence of the virus, usually via a sample of the animal's nervous system tissue, so it is imperative that the animal's head not be damaged or destroyed during capture. Where the suspected animal cannot be captured and tested, prophylactic treatment usually is started as if the animal were rabid, so quick consultation with health providers is essential.

Due to legal restrictions, many local community and county animal control departments are restricted to handling only domestic animals and are not allowed to capture or dispense wildlife species; such authority often is restricted to animal control units in some of the larger metropolitan areas or where the animal control unit is housed within the community's police department. If you know that your community's animal control unit is authorized to provide service for wildlife situations, they often can assist with securing wild animals involved in direct encounters. Otherwise, assistance may be available from the Department of Game and Inland Fisheries Conservation Police Officer assigned to the region. In any case, if there has been a suspected direct encounter with a wild animal, confirmation can be obtained only through testing and/or quarantine and observation.

Additional guidance on addressing rabies issues is available in the extension publication, *Rabies: Its Ecology, Control, and Treatment*, available at <https://pubs.ext.vt.edu/420/420-036/420-036.html>.

Links to Useful Sources of Information

Virginia Tech Department of Fish and Wildlife Conservation Publications:

Managing Wildlife Damage

Beavers <http://pubs.ext.vt.edu/420/420-202/420-202.pdf>

Black Bear <http://pubs.ext.vt.edu/420/420-200/420-200.pdf>

Canada Goose <http://pubs.ext.vt.edu/420/420-203/420-203.pdf>

Moles <http://pubs.ext.vt.edu/420/420-201/420-201.pdf>

Snakes <http://pubs.ext.vt.edu/420/420-021/420-021.pdf>

Other Wildlife

Coyotes <http://pubs.ext.vt.edu/420/420-050/420-050.pdf>

Virginia Center for Human-Wildlife Conflict Resolution <http://www.humanwildlife.org/>

Index

A

Amphibian..... 8-1
 Apple, *Malus* spp. 8-7
 Arborvitae (American), *Thuja occidentalis* 8-7
 Atlantic white cedar, *Chamaecyparis thyoides* 8-7
 Azalea (Evergreen, pinxterbloom)..... 8-7

B

Barberry, *Berberis* spp. 8-6
 Bats 8-2, 8-4
 Bear 8-2, 8-7
 Beautybush, *Kolkwitzia amabilis* 8-6
 Beaver 8-2, 8-4
 Beech (European), *Fagus sylvatica* 8-6
 Birch 8-6
 Blackbirds 8-5
 Black rat 8-1
 Boxwood (Common), *Buxus sempervirens* 8-6
 Brown-headed cowbirds 8-1, 8-3
 Burning bush, *Euonymus alatus* 8-7

C

Canada geese..... 8-3
 Carolina allspice, *Calycanthus floridus* 8-6
 Cherry (Japanese flowering), *Prunus serrulata* 8-6
 Cherry (Plum), *Prunus* spp. 8-7
 Chrysanthemum, *Chrysanthemum* spp. 8-6
 Clematis, *Clematis* spp..... 8-7
 Code of Federal Regulations (CFR) 8-1, 8-3
 Coyotes 8-2, 8-4, 8-7
 Crows 8-5

D

Daffodil, *Narcissus* spp..... 8-6
 Daylily, *Hemerocallis* spp. 8-7
 Deer 8-2, 8-4, 8-6
 Dogwood..... 8-6
 Flowering, *Cornus florida* 8-6
 Kousa, *C. sericea*..... 8-6
 Red osier, *C. kousa* 8-6
 Dogwood (Cornelian), *Cornus mas* 8-7

Drooping leucothoe..... 8-6

E

Endangered animals 8-3
 Enkianthus (Redvein), *Enkianthus campanulatus* 8-6
 European starlings..... 8-3, 8-5

F

Feral hog 8-1
 Ferns, *Phylum Pteridophyta*..... 8-6
 Fir (Balsam, fraser), *Abies balsamea*, *A. faseri* 8-7
 Flying squirrels, southern 8-4
 Forsythia 8-6
 Foxes 8-2, 8-4
 Frightening devices 8-4, 8-5
 Furbearing 8-2

G

Groundhogs..... 8-2, 8-4
 Gulls..... 8-5

H

Hawthorne (English), *Crataegus laevigata* 8-6
 Holly
 American, *I. glabra* 8-6
 Chinese, *I. comuta* 8-6
 Inkberry, *I. glabra* 8-6
 Hosta 8-7
 House sparrows..... 8-1, 8-5
 Hydrangea 8-7

I

Ivy (English), *Hedera helix*..... 8-7

J

Japanese pieris 8-6
 Juniper (Chinese), *Juniperus chinensis*..... 8-6

K

Kerria 8-7

10 Other Animals: Vertebrates as Pests

L

Lilac (Common), <i>Syringa vulgaris</i>	8-6
Lilies (Asiatic)	8-7
Locust (Honey), <i>Gleditsia triacanthos</i>	8-6

M

Maple (Norway), <i>Acer platanoides</i>	8-7
Marigold, <i>Tagetes erecta</i> , <i>T.patula</i>	8-6
Migratory Birds	8-3
Moles	8-4, 8-7
Mountain ash (European), <i>Sorbus aucuparia</i>	8-7
Muskrats	8-4

N

Nuisance species	8-1, 8-2
Nutria	8-1, 8-2

O

Opossums	8-4
Ornamental grasses, Families gramineae (Poaceae)	
sedges, <i>Juncaceae</i>	8-6
true grasses, <i>Cyperaceae</i>	8-6

P

Pansy, <i>Viola x wittrockiana</i>	8-7
Parakeet	8-1
Peony, <i>Paeoniaceae</i> spp.	8-7
Pigeons	8-1, 8-3, 8-5
Pine	8-6
Austrian, <i>Pinus nigra</i>	8-6
Mugo, <i>P. mugo</i>	8-6
Pitch, <i>P. rigida</i>	8-6
Red, <i>P. sylvestris</i>	8-6
Scotch	8-6
Potentilla, <i>Potentilla fruticosa</i>	8-6

R

Rabbits	8-2, 8-4
Rabies	8-8
Raccoons	8-2, 8-5
Redbud (Eastern), <i>Cercis canadensis</i>	8-7
Red-winged blackbirds	8-1, 8-3
Rhododendron, <i>Rhododendron</i> spp.	8-7
Rock pigeon	8-1
Rose (Hybrid tea), <i>Rosa x hybrid</i>	8-7

Russian olive, <i>Elaeagnus angustifolia</i>	8-6
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S

Sassafras (Common), <i>Sassafras albidum</i>	8-6
Shooting	8-2, 8-4, 8-5
Skunks	
striped	8-5
Snakes	8-5, 8-7
Spirea (Bluebeard), <i>Spirea</i> spp.	8-6
Spruce	
Colorado blue, <i>Picea pungens</i>	8-6
Norway, <i>P. abies</i>	8-6
White, <i>P. glauca</i>	8-6

T

Trapping	8-2, 8-4, 8-5
Tree squirrels	8-5

V

Vertebrates	8-1
Viburnum	8-7
Virginia Administrative Code (VAC)	8-1, 8-2
Voles	8-5
Vultures	8-5

W

Waterfowl	8-5
Willow (Corkscrew)	8-6
Wintercreeper, <i>Euonymus fortunei</i>	8-7
Woodchuck	8-1, 8-2
Woodpeckers	8-5

Y

Yew (<i>Taxus</i>)	8-7
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