

Parks, Recreation and Cultural Affairs Department Nuisance Wildlife Policy

Drafted: July, 2011

Approved: NCC – August 18, 2011

PRPB – October 19, 2011

INTRODUCTION

From time to time, the Parks, Recreation and Cultural Affairs (PRCA) Department receives inquiries from citizens regarding nuisance wildlife. In order to provide consistent, courteous, and informative responses to these inquiries, this policy addresses typical types of nuisance wildlife and what PRCA staff can, or cannot, do to address nuisance wildlife.

DEFINITIONS

Animal shall include all non-human species.

At large, when applied to animals, shall mean that the animal is off the property of its owner and not under the direct control of a competent person, by leash, cord, chain, or other physical device.

Carrion refers to the carcass of a dead animal.

Feral refers to an animal that has escaped, or been released, from domestication and returned, partly or wholly, to a wild state.

Foraging is the act of searching for food.

Forbs are any non-woody flowering plant that is not a grass.

Harm shall mean an act which kills or injures.

Livestock shall include pigs and pig-like animals (Suidae); non-native species of rabbits and rabbit-like animals when there are more than two (Leporidae); cows, sheep, goats and like animals (Bovidae); horses and horse-like animals (Equidae); and chickens (Phasianidae).

Niche shall mean the functional role and position of a species within a community or ecosystem, including what resources it uses, how and when it uses the resources, and how it interacts with other species.



Nuisance Wildlife shall mean an undesirable animal that causes (or is about to cause) property or environmental damage, presents a threat to public safety, or causes an annoyance within, under, or upon a building.

Opportunistic shall mean a species that can take advantage of adverse conditions and thrive in locations where more sensitive species will not survive.

Pet shall mean any animal kept primarily for personal pleasure or companionship rather than to provide labor, food, or products for humans, or for other commercial or utilitarian purposes.

Relocation is the act of moving an animal from one place to another.

Sick or Injured Wildlife is a wild animal that may display signs or symptoms of illness or injury including but not limited to: limping, obvious wounds or bleeding, problems standing or inability to stand, trouble holding the head erect, trouble breathing, lethargic, appearing unable to see or react to stimuli, emaciated, missing hair or fur, drooling, excessive urination or fecal staining on the rear end, signs of neurological trauma such as seizures or walking in circles, or typically nocturnal animal is active during the daytime.

Stray shall mean an animal having no home or having wandered away from home.

Wild shall mean an animal living in a state of nature and not ordinarily tame or domesticated.

Wildlife Rehabilitator shall mean a person who cares for injured, or sick wild animals.

STATE OF FLORIDA RULES AND REGULATIONS

It is illegal to release any nonnative species in Florida without a permit. The following rules from the Florida Administrative Code and the Florida Statutes govern the importation and introduction of nonnative fish and wildlife. The City of Gainesville adheres to applicable state rules and statutes and will coordinate with the appropriate agencies for the enforcement of the following:

- It shall be unlawful for any person to possess, transport or otherwise bring into the state or to release or introduce in the state any freshwater fish, aquatic invertebrate, marine plant, marine animal, or wild animal life that is not native to the state unless such person shall first secure a permit from the Florida Fish and Wildlife Conservation Commission, except fathead minnow, variable platy, coturnix quail, and ring-necked pheasant (*F.A.C.* 68A-5.001).
- No person shall import into the state or place in any of the fresh waters of the state any freshwater fish of any species without having first obtained a permit from the Florida Fish and Wildlife conservation Commission (*F.S. 372.26*).



- It is unlawful to import for sale or use or to release within this state, any species of the animal kingdom not indigenous to Florida without having obtained a permit to do so from the Florida Fish and Wildlife Conservation Commission (*F.S.* 372.265).
- It is unlawful to release nuisance wildlife on public lands (*F.A.C. 68A-9.010*).

More information regarding the Florida Statutes and the Florida Administrative Code can be found at the following websites: http://www.leg.state.fl.us/statutes/ and http://www.flrules.org/default.asp.

In addition, the Florida Fish and Wildlife Conservation Commission (FWC) does not have a wildlife removal service, however if a listed species (endangered or threatened) is causing a nuisance, they can do a site inspection and trap the listed species, if needed. FWC also maintains a list of qualified nuisance wildlife trappers within each county. This list is free to the public; however the trappers themselves may charge a fee for their removal efforts. The City of Gainesville is located within FWC's North Central region and the nuisance wildlife trapper list can be requested from the regional office in Lake City at (386) 758-0525 or found at http://fwc.myflorida.com/fwcwww/fwc_www.nwt_nuisance_wildlife_pkg.nwt_active_trappers_rpt_pr.

ALACHUA COUNTY ANIMAL SERVICES

The Alachua County Animal Services serves the cities of Gainesville, Alachua, High Springs, Newberry, and Archer, as well as the smaller townships and surrounding unincorporated areas of the county. They handle domestic animal control issues, investigate animal neglect and cruelty, hold strays for owner reclaim, and adopt out unwanted animals. They also offer low-cost rabies vaccinations and micro-chipping to the public. The primary function of Alachua County Animal Services is the control of stray and aggressive dogs on the streets. They are limited on what they can do with cats, unless noted as nuisances. The county animal services will become involved when wildlife becomes an immediate threat to the public and will provide trap rentals to people experiencing nuisance wildlife problems. Alachua County Animal Services can be contacted at:

(352) 264-6880 - Services Division (shelter/field operations)

(352) 264-6890 - Director, Dave Flagler

More information about Alachua County Ordinance Title 7, Chapter 72 regarding animal control can be found at: http://library4.municode.com/default-test/home.htm?infobase=10343&doc action=whatsnew.



CITY OF GAINESVILLE

The City of Gainesville does not have an animal control department. The city relies on Alachua County Animal Services to provide services to the citizens of Gainesville. The Parks, Recreation and Cultural Affairs (PRCA) Department does not have staff trained to handle animal control nor nuisance wildlife for private citizens. One staff member is trained and permitted to handle nuisance wildlife or stray pets that may arise on Cityowned lands. It is the policy of PRCA to allow wildlife to come and go on city-owned land as they need to. The only instance where wildlife would be trapped is in the event that wildlife is causing harm to Morningside Living History Farm livestock. In this case, wildlife would be trapped and either humanely euthanized or relocated under the provisions of the approved Florida Fish and Wildlife Conservation Commission guidelines. If a private citizen is having issues related to nuisance wildlife or stray pets, the PRCA policy is to refer the individual to the Alachua County Animal Services or the Florida Fish and Wildlife Conservation Commission.

If a citizen has an unwanted pet, PRCA staff recommends the following options rather than illegally releasing the pet:

- Contact a pet store for proper handling advice or for possible returns.
- Give or trade with another hobbyist or pet owner.
- Donate to a local aquarium or zoo, school, or education center.
- Seal aquatic plants in plastic bags and dispose of them in the trash.
- Contact a veterinarian or pet retailer for humane disposal guidance.
- Check for Pet Amnesty days online at myfwc.com/nonnatives.

PRCA staff can be reached at (352) 334-5067 for any questions related to invasive or nuisance wildlife.

POTENTIAL NUSIANCE SPECIES

In an urban setting, wildlife concerns vary among the population, and conflict resolutions are sometimes hard to agree upon. Nuisance animals create a problem for humans, domesticated pets, and free-roaming wildlife. Some ways to help prevent conflicts include:

- Do not feed or leave food out for wildlife.
- Feed pets indoors, do not leave uneaten food outside, and if you must feed your pets outside bring in the food dish when they are done eating.
- Keep pets indoors at night.
- · Keep cats indoors at all times.
- Call a professional wildlife trapper to remove nuisance wildlife.
- Place garbage in wildlife resistant containers.
- Clean barbecue grills after each use.



Below are also some helpful information and strategies on dealing with specific nuisance wildlife species.

Armadillos

Armadillos are native to South America, therefore are an exotic species in Florida. Over the last 150 years, the nine-banded armadillo has expanded its range northward into the United States. Prior to about 1850, the nine-banded armadillo was not found north of the Rio Grande River. The degree of range expansion per year is nearly ten times faster than the average rate expected for a mammal (Taulman, 1996). The range of the armadillo in Florida has been rapidly expanding due to a lack of natural predators. As its range expands, armadillos increasingly come into conflict with suburban landowners. Armadillos are prolific diggers and prefer to build burrows in moist soil near creeks, streams, and brooks as well as well-watered lawns and hardwood hammocks.

Armadillos typically rest in a deep burrow during the day and become more active during the late evening, night, or early morning. Burrows are usually located under brushpiles, stumps, rockpiles, dense brush, or concrete patios, are about 7-8 inches in diameter, and can be up to 15 feet long (Taulman, 1996). Armadillos often have several burrows throughout their territory, but use only one to raise their young. Armadillos also dig shallow foraging holes, 1-3 inches deep and 3-5 inches long, as they search for food. They feed primarily on insects and their larvae. They also eat earthworms, scorpions, spiders, snails, and small vertebrates and their eggs. Some of this activity can be beneficial in controlling various insect pest species; however, when ornamental plants are uprooted or burrowing causes structural damage, some attention may be required.

PRCA staff recommends trapping and humanely euthanizing armadillos that have become a nuisance to a landowner. Since armadillos typically like moist soil, another method that may discourage armadillos would be to reduce lawn watering and fertilizer applications. In certain instances, fencing may also be an effective method to prevent armadillos from entering a property. For best results, fences should extend 6 to 12 inches below ground level.

Birds

Conflicts with birds of prey such as owls and hawks can occasionally occur in urban settings due to perceived or actual risk they may pose to small domestic animals. With the increase in popularity of keeping chickens in the urban landscape, conflicts with birds of prey are likely to increase. During the breeding season (early spring to midsummer), swooping from adult hawks and owls may occur. This is a seasonal activity that occurs because the adult bird perceives people as a threat to the nest and flightless young. The behavior will stop once the young have fledged. In addition, other native birds may occasionally be a nuisance, such as when woodpeckers drum on buildings. Most native non-game bird species are protected by federal law (Migratory Bird Treaty Act), which provides stiff penalties for capturing or killing most native birds without proper permits from the U.S. Fish and Wildlife Service.



PRCA staff does not recommend trapping or killing nuisance birds. Instead, a number of non-lethal deterrent options are commercially available. To learn more about these options, citizens should consult a professional wildlife trapper.

Coyotes

Prior to the colonization of Florida by European settlers, the red wolf was common throughout the southeast, including Florida. Due to predator control by early settlers, the red wolf was exterminated in the wild. Over the decades, prey animals, such as rodents and other small mammals, were able to increase in numbers throughout the state with the lack of a top predator. At the same time due to lack of competition by the red wolf and the abundance of prey, coyotes were able to migrate from the west and settle in the southeast. Coyotes now fill a niche in the southeastern ecosystem that red wolves once held. They provide a necessary predatory service to natural areas by reducing pest species and maintaining healthy populations of other wildlife. Without their predatory control of other wildlife species, those animals could grow to numbers that cause population density-dependant disease outbreaks (e.g. rabies) or decreased forage that would cause starvation. However, because the coyote is not considered a native species to Florida by the Florida Fish and Wildlife Conservation Commission, there is no harvest season or restrictions for this species.

Coyotes are spreading naturally throughout Florida and are opportunistic predators, where they readily adapt and thrive in cities and other rural areas. Coyotes are also very mobile and can travel large distances to establish a home range. They can vary in their social organization, but typically are made up of resident groups, or packs, which maintain exclusive territories (Gehrt, 2010). Territory size varies in urban settings and is restricted by food abundance, population density, and mortality rates. Because coyotes are very mobile and can travel large distances, localized removal of an individual will not solve human/coyote conflicts. Prevention of the conflict is a more effective answer.

In order to prevent human/coyote conflicts, PRCA staff recommends pet owners keep their pets indoors at night, do not feed pets outside, and do not leave unsecured food or trash outside. If a problem animal is known in a particular area, citizens should call a professional nuisance wildlife trapper as listed on the Florida Fish and Wildlife Conservation Commission approved listing.

Feral Hogs

Swine are not a native North American species. They were introduced by settlers from Spain and Europe and their numbers have grown to an estimated 4 million feral hogs in over 39 states, with over 1 million in Florida alone (DACS-P-01510). Although some of the animals have a distinctive "wild boar" appearance, others may look no different than many breeds of domestic hogs. They can produce up to two litters of 4-8 young per year. They are opportunistic omnivores that eat whatever plants or animals they come into contact with. They eat forbs, grasses, leaves, berries, and other fruits, roots and tubers, corn and other agricultural crops, insects, crayfish, frogs, salamanders, snakes, mice, eggs of ground-nesting birds, young rabbits, fawns and young livestock, such as



lambs, calves, and goat kids (DACS-P-01510). They can also kill larger livestock that are weak from illness or injury. When fresh meat is not available, feral hogs will also readily scavenge carrion.

In Florida, where they survive well, feral hogs have a direct negative impact, causing widespread damage to the natural environment and domestic animals through competition for food, habitat destruction, and potential disease spread (DACS-P-01510). Rooting is a common activity year round in search of food. This behavior contributes to soil erosion, reduces water quality, and damages agricultural crops and hay fields. These animals are also known to tear through livestock and game fences and consume animal feed, minerals and protein supplements (Simmons, 2010). Feral hogs carry several transmissible diseases, including Brucellosis, Pseudorabies, Leptospirosis, Trichinosis, and classical swine fever, which can be transmitted to domestic livestock or humans (DACS-P-01510).

PRCA staff recommends anyone having a conflict with feral hogs should contact a registered trapper. The Florida Department of Agriculture and Consumer Services (FDACS) maintain a list of Feral Swine Dealers who are properly licensed to trap, handle, and remove feral hogs. FDACS can be reached at (850) 410-0900 and additional information about Florida's feral swine regulations can be found at http://myfwc.com/media/150523/Safety_FDACS-FeralSwine.pdf.

Feral/Stray Pets

Feral and free roaming domestic pets are introduced species to North America. As such, they present a potential threat to native wildlife species. These negative impacts are only now beginning to be understood by scientists, but include mortality of small mammals, birds, reptiles, and amphibians. Because many feral and stray pets, especially cats, receive food from humans, they can reach population levels that can create areas of abnormally high predation rates on wildlife.

The Florida Animal Control Association believes the identification and control of stray animals should be a high priority. Stray dogs and cats are a potential threat to the health and safety of the public, a danger to domestic animals and native wildlife, and a leading source of complaints to government officials. If not controlled, these strays could result in a population of feral animals that would weaken the rabies barrier between wild animals and humans (http://floridaanimalcontrol.org/home-stray).

Cats are recognized by the International Union for the Conservation of Nature as one of the "world's worst" invasive species (Lowe et al., 2000). In the United States, the estimated number of outdoor, stray, and feral cats is approximately 117-157 million, where local densities can reach up to 1,580 cats per square kilometer in urban areas (Dauphine, 2011). Cat predation is responsible for an estimated loss of one billion birds annually in the U.S., and may kill twice as many mammals (Dauphine, 2011). In addition, feral and stray cats are capable of spreading infectious diseases to native wildlife and present a disease risk to humans including the spread of rabies, toxoplasmosis, hookworms, and even avian influenza (Gerhold, 2011).



In May 2003, the Florida Fish and Wildlife Conservation Commission (FWC) adopted a specific policy on feral and free-ranging cats. They state "...it is the policy of the FWC to protect native wildlife from predation, disease, and other impacts presented by feral and free-ranging cats" (FWC, 2003). The policy continues to recognize local governments' rights to regulate domestic species, but that those local regulations cannot adversely impact native wildlife. Therefore, FWC will "...strive to minimize or eliminate the impacts of cats where they pose a significant threat to local wildlife populations", but will otherwise leave control of feral cats to local governments (FWC, 2003). FWC recommends various strategies to assist in the implementation of feral cat control, including:

- Development and implementation of an education program to increase public awareness of the impacts of feral and free-ranging cats.
- Elimination of feral and free-ranging cats posing a threat to the viability of local populations of wildlife, particularly listed species.
- Prohibit the release, feeding, and protection of cats on publically owned and managed lands that support wildlife habitat.
- Provide technical advice, policy support, and partnerships to land management agencies to prevent the release, feeding, or protection of cats on public lands that support wildlife habitat.
- Oppose the creation of and support the elimination of trap, neuter, release colonies and similar managed cat colonies wherever they may impact local wildlife populations.
- Evaluate the need for new rules to minimize the impact of cats on native wildlife

The City of Gainesville has an ordinance that prohibits at-large pets (COG 5-2). Keeping pets indoors not only protects them from the various wildlife that live in the city, but it also protects them from people, other stray animals, cars, and disease. PRCA staff recommends that citizens adhere to the State and local regulations regarding feral and/or stray pets and keep their pets confined to their yards, on leashes at all times when outside of their yards, and do not let pets out on their own at night.

Opossums

Opossums are the only marsupial (female has a pouch) in North America. They are a native species that occur throughout the country. Opossums are typically small to medium-sized with long snouts, white, blonde, grey or black fur, and long hairless semi-prehensile tails. They are solitary, nocturnal, and semi-arboreal, meaning they can live in the trees but also come down to the ground to forage for food. They generally live only 2 to 4 years, but can have up to 13 young at a time. They are opportunistic omnivores with a broad diet. They do scavenge on carrion but also eat insects, frogs, birds, snakes, small mammals, and fruit. In an urban setting, opossums can be a nuisance when they forage for pet food left outside or garbage cans containing human food waste; however opossums will typically move on to another area if food is not readily available to them. Because of this behavior, PRCA staff recommends preventative actions such as not feeding pets at night, closing/locking pet doors at night,



and tightly securing any trash cans left outside. By not providing a food source, an opossum will typically move on until it ends up finding food. If these preventative actions don't work and an opossum is living in your house or creating nuisance conditions, PRCA staff recommends contacting a professional nuisance wildlife trapper on the Florida Fish and Wildlife Conservation Commission's approved list to trap and remove the nuisance animal.

Raccoons

Raccoons are medium sized carnivores widely distributed throughout North and Central America. They can be found in most urban areas within their distribution range. Adapted to making use of both vertical and horizontal space, raccoons are easily able to scale and use human structures (Gehrt, 2010). They are generalist feeders, tend to be nocturnal and secretive in nature, and appear flexible in their ability to use a variety of sites for breeding and sleeping. This variety of sites range from rock ledges, brush piles, abandoned ground burrows, hollow trees, and accessible human structures such as chimneys and storm sewers. Raccoons are carriers of disease, particularly of rabies which is easily transmitted from wildlife to domestic/feral pets. Other diseases of concern carried by raccoons include roundworm, canine distemper, and leptospirosis.

PRCA staff recommends contacting a professional nuisance wildlife trapper on the Florida Fish and Wildlife Conservation Commission's approved list to trap and remove raccoons that become a nuisance. Due to the high potential for disease transmission and infection, as well as their highly aggressive nature, it is not recommended to attempt to handle these animals unless you are a professional.

Reptiles/Amphibians/Fish

Non-native reptiles, amphibians, and fish are abundant throughout the state of Florida and are thriving in Florida's climate causing destruction to native wildlife. While some of the non-native herpetological species in Florida are accidental introductions, many more result from the intentional release of a pet that has become too cumbersome to care for. A number of non-native species such as snakes, lizards, geckos, and frogs easily make their home in Florida's native habitats and either directly compete with or consume Florida's native wildlife. The Florida Fish and Wildlife Conservation Commission regularly schedules' Pet Amnesty Days where citizens can turn in their unwanted exotic pets, no questions asked.

PRCA staff recommends anyone with an unwanted reptile, amphibian, or fish attend one of these Pet Amnesty events instead of releasing the pet into a park or conservation area. If there is a nuisance reptile or amphibian in an area, calling a professional trapper is also recommended. Since many of these species can carry diseases, have bacteria filled saliva, or can be poisonous, it is not recommended to handle these animals if you are not a professional.



Alligators

The American alligator is the largest native reptile in Florida, reaching lengths of up to 14 feet and weights of up to 800 pounds. They live in a variety of aquatic habitats including lakes, ponds, rivers, creeks, swamps, and other wetlands. Breeding season typically begins in spring where males will bellow and display to attract a female mate. Female alligators construct vegetative nests to lay and incubate between 20-50 eggs; however male alligators do not participate in rearing the hatched young. Young alligators typically eat invertebrates and small fish. As they grow, they will consume larger fish, frogs, and small mammals. An adult alligator will typically feed on large fish, birds, turtles, snakes, and moderate-sized mammals; however any animal coming to the edge of the water to drink is potential prey for an adult alligator. Alligators were once on their way to extinction in Florida due to habitat destruction and the market for their hides. In 1967, the American alligator was listed as an endangered species and is now currently protected. In 1987, it was removed from the Endangered Species list, but trade of alligator skins and products is federally regulated to ensure the species will not decline in the future. Alligators are generally wary of people, but some people enjoy feeding alligators, which is not only illegal but is also extremely dangerous. Feeding alligators causes them to associate man with food and to lose their fear of man. This activity has potentially life-threatening consequences, for people and for the alligator. Once an alligator has become a nuisance, the Florida Fish and Wildlife Conservation Commission will request a trapper to remove and humanely dispose of the problem animal.

Feeding alligators is illegal. If PRCA staff notice anyone feeding an alligator, said person will be asked to immediately cease and desist that action. Alligators and man can co-exist as long as people continue to have respect for the animal and admire it from a distance. PRCA staff do not have the ability or authority to trap or handle alligators, nuisance or otherwise. In the event an alligator has become a nuisance, the Florida Fish and Wildlife Conservation Commission need to be contacted immediately.

Squirrels

Gray squirrels are a native species to much of the eastern and midwestern United States. They are a very adaptable species and can easily make their home in the country, suburbs, or urban landscape. The gray squirrel should not be confused with the fox squirrel, a listed species. The gray squirrel is smaller with predominantly gray to brown fur, a white underbelly, and a bushy tail roughly the same length as the body. Gray squirrels can breed twice a year with normally 2 to 6 young per litter and can live on average 12 years. Gray squirrels mainly eat seeds, acorns, nuts, and sometimes tree bark and fungi. They are also known to eat bird eggs and insects. They do have a high tolerance for humans and will also raid bird feeders. Squirrels can become a nuisance to homeowners in certain situations. Typically, squirrels will make their nests in forks of trees, however if trees are not available, they can find their way into an attic. If squirrels start breeding in an attic, they can cause damage to the drywall, air ducts, and wiring with their gnawing as well as possible mold issues from their defecation.



PRCA staff recommends first "pest-proofing" your house in an attempt to deter squirrels from entering the home. A local pest control agent can assist in recommending specific pest-proof options. If an infestation does exist, PRCA staff recommends contacting a professional nuisance wildlife trapper on the Florida Fish and Wildlife Conservation Commission's approved list, or a local pest control company, to trap and remove nuisance animal(s).

SICK, INJURED, OR ORPHANED WILDLIFE

From time to time, citizens encounter obviously sick, injured, or orphaned wildlife. It is generally not advisable for citizens to care for these animals on their own for several reasons. In many cases, seemingly orphaned wildlife may actually have parents nearby; different species require special diets; wild animals may carry disease that could be transmitted to humans; and it is illegal to keep many wild animals without permits.

For assistance with sick, injured, or orphaned wildlife, PRCA staff recommends contacting a licensed wildlife rehabilitator. In Alachua County, contact Florida Wildlife Care at (352) 371-4443 or their 24-hour Help line at (352) 371-4400. Outside Alachua County, citizens should contact their nearest Florida Fish and Wildlife Conservation Commission regional office for a list of licensed wildlife rehabilitators.

More information can be found in the UF-IFAS publication http://edis.ifas.ufl.edu/uw069 (Easton et al, 2009).

REFERENCES

COG 5-2 - City of Gainesville Ordinance Chapter 5, Section 5-2, 1(a).

DACS-P-01510 – "Florida Feral Swine Trappers." Florida Department of Agriculture and Consumer Services. 2007. Publication #DACS-P-01510. Retrieved from http://myfwc.com/media/150523/Safety_FDACS-FeralSwine.pdf.

Dauphine, N. and R. J. Cooper. 2011. Pick one: Outdoor cats or conservation, the fight over managing an invasive predator. Wildlife Professional, Vol. 5, No. 1.

Easton, D., L. Straub, and J. Schaefer. 2009. What to do about Orphaned, Injured, and Sick Wildlife. Retrieved from http://edis.ifas.ufl.edu/uw069.

FWC, 2003 – Florida Fish and Wildlife Conservation Commission. 2003. Policy on feral and free-ranging cats. Call 386-758-0525 for a copy of the policy.

Gehrt, Stanley D., Seth Riley, and Brian L. Cypher. 2010. Urban Carnivores: Ecology, Conflict, and Conservation. The Johns Hopkins University Press, Baltimore.



Gerhold, Rick. 2011. Cats as carriers of disease: The potential to spread a host of diseases to humans and wildlife. Wildlife Professional, Vol. 5, No. 1.

Lowe, S., M. Browne, S. Boudjelas, and M. De Poorter, 2000 – 100 of the World's Worst Invasive Alien Species: A Selection from the Global Invasive Species Database. Published by the Invasive species Specialist Group (ISSG) a specialist group of the Species Survival Commission (SSC) of the International World Conservation Union (IUCN). Retrieved from www.issg.org/pdf/publications/worst_100/english_100_worst.pdf.

Taulman, J. F. and L. W. Robbins. 1996. Recent range expansion and distributional limits of the nine-banded armadillo (*Dasypus novemcinctus*) in the United States. Journal of Biogeography 23: 635-648.

Migratory Bird Treaty Act (16 U.S.C. 703-712; Ch 128; July 13, 1918; 40 Stat. 755, as amended).