

LIVING WITH URBAN WILDLIFE



PIMA COUNTY
NATURAL RESOURCES,
PARKS AND RECREATION
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By design or by accident your home and yard provide some element of wildlife habitat. Wildlife interactions are a part of everyday life in the Sonoran Desert. Coyotes, bobcats, and javelina are common visitors to residential neighborhoods along with a rich assortment of songbirds, raptors, rabbits, squirrels, reptiles, and scores of other desert dwellers.

Living in a place that is welcoming to wildlife can enrich our lives while enhancing habitat for wildlife. But for some, living in close proximity to wildlife offers a mixture of joy and consternation.

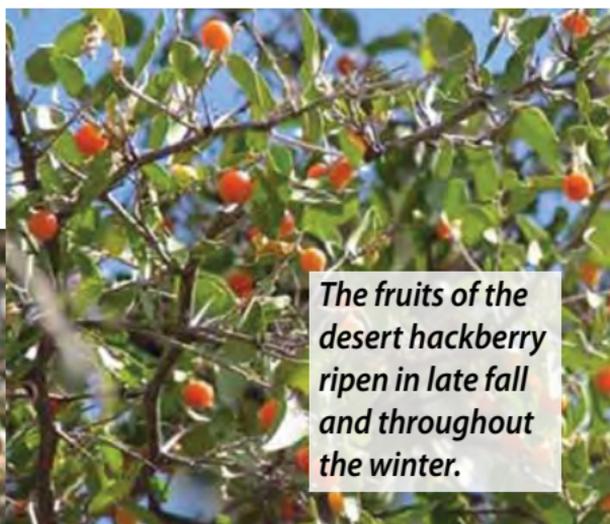
This publication provides practical tips to address common urban wildlife conflicts so that in the balance, living with wildlife is a positive experience.

Wildlife Habitat

Simply put, habitat is the place where an animal finds food, water, shelter, and space in an appropriate arrangement. The size and configuration of these basic elements of habitat will vary greatly depending on the species.

Food

The seasonal cycles of plants in the Sonoran Desert provide food for wildlife throughout the year.



The fruits of the desert hackberry ripen in late fall and throughout the winter.

Flowers provide nectar and protein-rich pollens. Many desert plants bloom in the spring and again after the summer rains.



In May, birds, nectar feeding bats, and bees feast on the nectar and pollen in the saguaro flowers. Javelina, coyotes, squirrels, and many other animals eat the fruits and seeds that drop to the ground in late summer.

Water

Water scarcity is a fact of life in the desert. The wildlife that visit your yard and those in wildlands are well equipped to survive with limited access to surface water. Just as with human desert dwellers, conservation is key to stretching water resources.



Some animals get the water they need from the food they eat.

The nectar in flowers is a source of water. Condensation on the leaves of plants can be an important source of water for insects and small animals.



Cactus and other desert plants produce fruits that contain water. The desert tortoise has the ability to concentrate its urine and reduce the amount of water excreted as waste.



Shelter

Your yard can be an attractive source of shelter for wildlife. With proper planning you will be able to view wildlife up close without intrusion into your living spaces.



Mesquite, palo verde, ironwood, and desert hackberry trees provide shelter and food for birds and make an attractive choice in your landscape.



Eaves, flowerpots, or light fixtures are common nesting sites for doves and quail. If the site is a problem for you, wait until the young have left the nest before wiring off or otherwise excluding the birds.



Burrowing in the ground is one way that desert wildlife avoid extreme temperatures and predators.

Break the Cycle – Don't Feed

Human and wildlife conflicts often begin with this typical scenario: A person sets out a feeder to get a closer look at the local bird life. Soon after, they notice pack rat droppings on the porch and nest building activity in the woodpile. There was never an intention to feed pack rats, but by putting seeds out for birds you are indeed providing food for seed-eating rodents. If that artificial food source attracts birds and rodents, the animals that prey on birds and rodents will find the yard appealing. Drawing predators such as rattlesnakes, bobcats, mountain lions, and coyotes to the neighborhood could be a safety issue for you and your pets, and has resulted in broader safety issues in other communities.

Wildlife does not need you to provide food. Desert animals are adapted to this environment and will move about as food is available. Drawing wildlife near by offering food is dangerous. Arizona Law prohibits knowingly feeding wildlife in ways that attracts large wildlife and predators.



Resolve Wildlife Conflicts

Be it the early morning drumming of a woodpecker on the cooler or a squirrel burrow undermining the patio, nuisance wildlife issues present perplexing problems for many people living in rural and urban neighborhoods. A few simple steps can resolve common nuisance wildlife issues.

The key to prevent conflicts with wildlife is to never feed wildlife. But if the problems already exist take these next steps toward a solution.

Step #1 – Remove Food

Remove all artificial sources of food. This is an essential first step. In some cases this may be all that is necessary to prevent or resolve a nuisance wildlife problem. Depending on the circumstances and proximity you may want to encourage your neighbors to do the same in their yards.

Feed pets indoors or remove leftover food immediately. Secure garbage so the cans cannot be opened or dumped over. If possible don't put trash containers out until the morning of pickup.

Replace feeders with native landscape plants to attract a variety of wildlife. With proper planning you can have colorful flowers and lush foliage throughout the year arranged in a way that you can enjoy close observations of wild visitors.

Thorny shrubs, cactus, and agave are good rabbit and javelina resistant

plants. There are also several native varieties of sage and salvias which are attractive to hummingbirds and butterflies but do not appeal to rabbits.





Step #2 – Change Watering Habits

Water is a major attractant to wildlife. To resolve conflicts with wildlife you may need to make changes in the way that you water your landscape plants and remove other water sources. Large vessels of water can present hazards for desert wildlife and can provide habitat for mosquitoes. A safer alternative to large bird baths, fountains, and pools is to create a trickle drinker. To do this, place an irrigation emitter so that it trickles into a shallow vessel with the overflow directed to your landscape plants. This source of water will be attractive to birds, lizards, and butterflies but will not be a major attractant for coyotes and other large animals.





Step #3 – Discourage Wildlife

This could be as simple as clapping your hands or spraying the hose to chase the animal away every time you see it. Or use a more permanent deterrent such as a strategically placed windsock to frighten the woodpecker as it flies in to drum on your house.



Step # 4 – Exclude Wildlife

If the first three steps are not successful you may want to employ methods to exclude wildlife thereby removing the sheltering elements of habitat.

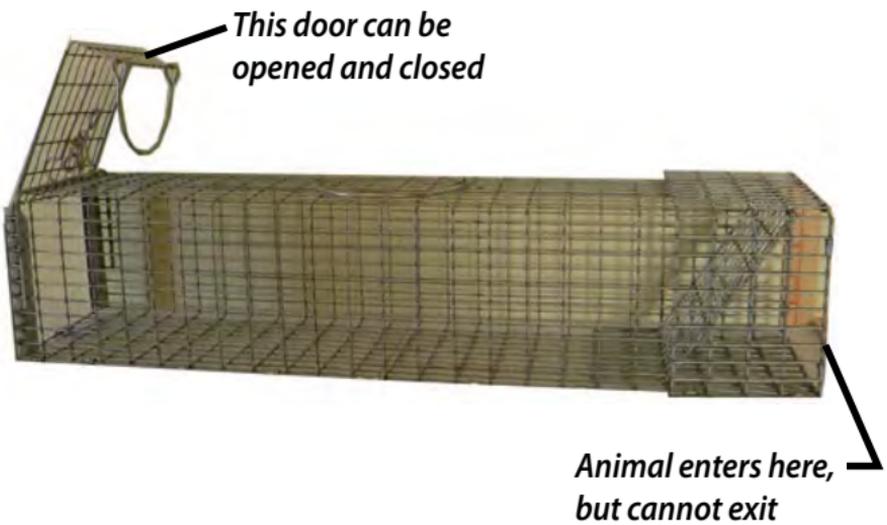
The theory of excluding wildlife from your living spaces is simple. Find where the animal is getting in and install a barrier. The achievement of that objective will take some ingenuity. But if it is done correctly you will find that you can enjoy wildlife close to home while avoiding conflicts and property damage.

❖ Evaluate the situation. What is the nature of the problem and what type of animal is causing the problem?



❖ Assemble the supplies and materials you will need to close the access point or other means to keep the animal out.

❖ Evict the animal or consider the possibility of waiting until the animal has moved out on its own. For example, if there is a bird nest in an inconvenient place; wait until the nesting season has passed before installing some netting or other means to prevent future nest building in that location. If you suspect that an animal has young in a den or nest, do not disturb the site.



This is a humane live animal exclusion trap. Place at the opening of a hole so the animal can leave but cannot get back in. There is an option to contain the animal until you release it or allow it to walk through and not be caged within the trap.



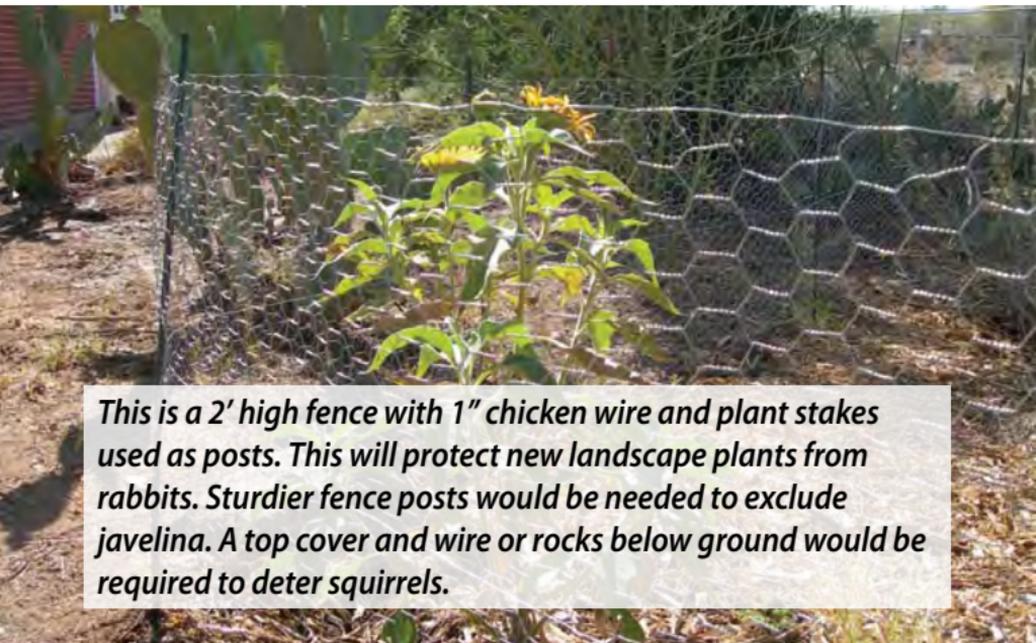


❖ Once the site is clear of animals, close off the access points. This is where you need to spend the extra time to get it done right. Make sure that the closures are secure. For example: to exclude digging animals such as squirrels and skunks you will need to install heavy gauge wire mesh or concrete footer 12"-18" under the surface of the ground and back fill with rocks and dirt. Or when closing off a vent or other above ground access points you will need to use 1/4" mesh and tack the mesh down at 1/2" intervals.

Protect Garden Plants

Landscaping with native plants is one way to provide cover and natural food sources for desert wildlife. Landscape plants will need to be protected until they become established. Have the materials ready to protect your garden before you begin planting.

Cottontails, jackrabbits, and javelina are notorious for eating or digging up newly planted garden beds. The best way to deter wildlife and protect your plants is to install baskets around each plant or a fence around the entire garden area.



This is a 2' high fence with 1" chicken wire and plant stakes used as posts. This will protect new landscape plants from rabbits. Sturdier fence posts would be needed to exclude javelina. A top cover and wire or rocks below ground would be required to deter squirrels.

Javelina do not climb well but they are very strong. A walled yard or 2'-3' fencing will keep them out as long as the fence posts are sturdy and anchored in firm ground or cement. A well designed electric fence with the "hot" wire 8"-10" off the ground can be a less obtrusive but humane means for excluding javelina.

Relocation of Wildlife

One method of ridding yourself of nuisance wildlife is to live trap the animal and take it some distance away for release. This will give you relief in the short term since that one animal will be gone from your yard. But if you have not done the work of removing the attractants from your yard, another animal will likely move in.

Don't be lulled into the belief that relocation is a kindness to the animal. Recent research into the effect of relocation on selected wildlife species indicates that the survival rate is low. This method should be used only as a last resort and in consultation with the local wildlife agency or licensed wildlife service professional.

Throughout this brochure we provide tips to deter and exclude wildlife which are more humane methods to evict wildlife from your home and yard.



Caution!

Before you consider using rodenticide or other poisons to control or eliminate nuisance wildlife keep in mind that poisons used as directed on the product label can kill non-target animals. This means that if a bobcat eats a pack rat that consumed rodenticide the bobcat may die as the result of secondary poisoning. If your cat eats a rodent that consumed poison bait it may become sick or even die from ingesting the poison-tainted rodent. There is ample documentation of secondary poisoning from correctly and legally dispensed rodenticide and poisons commonly used to control animal pests.



Cats and Dogs are Predators

Free roaming cats and dogs routinely kill wildlife. Your role as a responsible pet owner is to control your pet so it does not cause harm to wildlife.

The solution is to keep your pets in a securely fenced yard, in the house or on a leash. The same methods that you use to keep your pet safe will have the added benefit of saving wildlife.



There are more than 90 million pet cats in the U.S., the majority of which roam outside at least part of the time. In addition, millions of stray and feral cats roam our cities, suburbs, and rural areas. Scientists estimate that free-roaming cats kill hundreds of millions of birds, small mammals, reptiles, and amphibians each year. Cat predation is an added stress to wildlife populations already struggling to survive habitat loss, pollution, pesticides, and other human impacts. Free-roaming cats are also exposed to injury, disease, parasites, getting hit by cars, or becoming lost, stolen, or poisoned. (American Bird Conservancy – Cats Indoors Campaign)

Pet Safety

Enjoying wildlife close to home and caring for your pets' well being need not be mutually exclusive activities. But a peaceful, healthy coexistence with wildlife takes forethought and vigilance. This publication offers some general guidelines and specific methods for keeping your pet safe from wildlife intruders and to protect wildlife from predation by domestic cats and dogs. Safe pet enclosures exclude wildlife and give you and your pet a comfortable outdoor space.

Cats and small dogs need to be protected from predators such as coyotes and bobcats that can jump, climb, and dig. There is also a danger of predation by hawks and owls that swoop in from above. Sonoran Desert toads excrete toxins from glands on their skin. If your pet ingests the poison it can have serious or deadly consequences. And certainly excluding rattlesnakes is another high priority consideration.



Cat and small dog enclosure - Structural support to anchor the enclosure, withstand weather, and provide a surface to attach mesh wire. Attach wire mesh a minimum of 16 gauge on sides and top. Underwire entire enclosure or put a skirting 12"-18" below the surface and another 12"-18" at 90° under the ground.

Fencing

Fenced yards need to be a minimum of 6' high. To effectively exclude coyotes and bobcats, walls and chainlink fences may need to be even higher than 6' or have modifications to prevent animals from landing on top of the wall or climbing over the fence.



A Coyote Roller will keep animals from jumping on top of the wall or fence.



Mature cactus can extend the height of a fence to keep animals from jumping over.

Fence-out Snakes and Toads

There are several ways to exclude snakes and toads, including a solid flat surface around the bottom 2'-3' of the enclosure. Cover any gaps or openings. Hardware cloth attached to a large mesh wire will work on fences and can be useful in closing gaps at gates and other openings.



1/4" hardware cloth will keep snakes and toads out

Close gaps at gate closures



ANIMAL TROUBLE	REMOVE FOOD AND WATER	USE DETERRENTS	USE EXCLUSION TACTICS	OTHER NOTES
Packrat nests and damage to property	Stop feeding birds. Bring pet food and water indoors.	Turn lights on at night. Open hood of car and put light on at night.	Move wood piles and debris 100' from home or enclose in a storage box. Use exclusion traps to get packrats out of spaces in your house. Install ¼" mesh wire over access points once packrats are out of the space.	Look for rat droppings and make changes to that area to eliminate sheltering opportunities.
Woodpecker damage to property or creating a nuisance	Remove hummingbird feeders and stop feeding other birds.	Hang windsock or other objects that move in areas where woodpeckers have been working. Chase woodpeckers away as often as possible.	Patch holes only after there has been three weeks or more with no activity. Leave deterrents in place.	Owl decoys and other static objects will not discourage woodpeckers.
Javelina damage to landscape and other damage	Stop feeding birds. Remove quail blocks. Do not scatter food or table scraps. Secure trash cans and don't put out until morning of pickup. Adjust times of watering and do not let pools develop in plant wells.	Chase javelina away with loud noises or spray with hose.	Fence areas to keep javelina out. There are several fencing and barrier options: 1) Install sturdy 3' fence around landscape plants. 2) Install electric fencing with hot wire at 8"-10" height. 3) Lay down 3' border of fist sized jagged rock cobbles around landscape plants or other areas to exclude javelina.	Javelina move about as food is available; if your yard is a source of food they will continue to return. Javelina also enjoy the cool moist dirt around irrigation systems.
Coyote visiting yard or presenting a threat to pets	Remove all artificial sources of food – bird food and pet food. Remove sources of water – pet water dishes and bird baths. Lower the level of swimming pool so wildlife cannot drink from pool.	Chase coyotes away with loud noises or spray with hose.	Enclose yard with fence or wall yard a minimum 6' height. Plant cactus around fence perimeter to extend jumping distance. Extend shorter fences and walls with the use of wrought iron, Coyote Rollers or angled fence extension. Bury the bottom of the fence 12"-18" underground and add apron underground at the base extending an additional 12"-18" out from the fence and top apron with rocks to prevent the coyote from digging underneath.	Coyotes are predators but they eat almost anything. Take precautions with cats and small dogs. If you are attracting birds, rodents, and other small animals your yard will be attractive to predators. To avoid conflicts with coyotes and other predators you must remove all artificial sources of food and water in addition to the deterrents and exclusion methods.
Bobcat visiting yard or presenting a threat to pets	Stop feeding birds. Remove pet food and water.	Chase bobcats away with loud noises or spray with hose. Once denned up in yard turn on a radio outside and bobcat may move kittens.	Enclose yard with 6' fence or wall. Plant cactus around fence or wall perimeter to extend jumping distance. For fence less than 6' add 15" angled extension. Walls less than 6' should have barrier to prevent animal from stopping on top of the wall. Enclose sheltered spots such as the housing for pool pumps or open areas under deck, shed, or spa.	Bobcats are known to den-up in cave-like structures within quiet walled yards, especially if there is no dog and very little activity in the yard.
Squirrels digging under structures, in ceiling, or damaging landscape plants	Stop feeding birds. Bring pet food and water indoors. Put wire baskets or small mesh fence with top around precious garden plants.	Chase squirrels from yard with loud noises.	Use exclusion traps to get squirrels out of living spaces. After squirrels have been excluded wire off access points with heavy gauge small mesh wire. Reinforce foundations with wire, concrete blocks, or rocks 12" below the ground.	Watch for signs of digging and take quick action to exclude the squirrels. Reduce future damage to plants by using native plants in your landscape and basket or fence off new plantings for first growing season.
Rattlesnakes near paths and around outdoor living areas	Remove bird feeders and quail blocks.	Clear vegetation at least 3' from pathways to remove shaded shelter for snakes. Light paths and doorways.	Add small (1/4") mesh fencing along bottom 30" of fences and on any openings in walls and gates. Make sure there are no gaps in mesh. Another option is a solid wall or smooth surface at least 30" around perimeter.	There are some local fire departments and wildlife services operators (fee for service) that will relocate rattlesnakes that are within a walled yard or other enclosed area.
Scorpions and kissing bugs getting inside your house	Replace outdoor lights with yellow bulb to reduce night active arthropods.	Turn off outside lights as much as possible.	Secure or replace weather stripping around all windows and doors.	Scorpions take shelter in dark places and tiny cracks and crevices; you should always look where you are putting your hands and feet.



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www.azgfd.gov



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