



FROM THE CITY MANAGER'S OFFICE

For the week of December 26, 2016

Inside the city

Information on latest happenings, items of interest.

To see events posted on the city wide calendar please visit our [website](#).

Council follow-up

Resolution of action items or requests from previous meetings.

Mayor Ford inquired about the city's liability for providing a raccoon habitat in the storm system.

According to the city's risk manager, the City would not have any liability for personal injury or property damage as a result of raccoons in the City's infrastructure. If the animal is in the storm drainage system or sewer and is not destroying property, residents cannot legally trap the animal as it is not on their property.

The City has a current contract with Animal Pest Control to provide wildlife capture, relocation, or disposal services. Animal Pest Control works with the Colorado Division of Wildlife, who has responsibility for managing, conserving, and protecting wildlife, on needed relocations but recommends destroying the animal so that it does not become a menace elsewhere. The only City ordinance pertaining to this subject states that citizens cannot poison prairie dogs, squirrels, and wild rodents.

The state sent several attached brochures for council reference. This information has been used for previous newsletter articles and also will be provided as a website resource with direction to contact the public works department with any raccoon nuisance concerns. Staff will evaluate the necessity of removal, with the City's contractor, on a case-by-case basis.

Chambers Road Trail & Bridge Widening Project Update.

Contractor Taylor-Kohrs completed pile driving on both the north and south sides of the bridge the week of December 12. Next week, the contractor will begin the installation of the bridge beams and begin constructing the retaining wall needed for a portion of the trail. The bridge widening is expected to be complete by the end of January to allow for weather conditions. City crews will then construct the trail pending full acquisition of the right-of-way and weather.

ACMYA award nominations due Jan. 27 for youth overcoming adversity

Recognize a local youth who has shown exceptional courage and perseverance when faced with a difficult situation through the Adams County Mayors and Commissioners Youth Award (ACMYCA). Businesses, community and civic leaders have an opportunity to nominate youth in grades 6-12 or under 21 years of age who have overcome personal adversity to create positive change in their life. Last year there were three nominees from Commerce City.

Nomination forms are due Jan. 27, 2017 and are available online at c3gov.com/recreation. Contact Shannon Whitmer at 303-289-3674 or swhitmer@c3gov.com with questions.



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Naming contest for recreation centers begins Jan. 1, 2017.

Consistent with council policy, the Parks, Recreation and Golf Advisory Committee discussed the facility naming process and established timelines for a contest to name the new and existing recreation centers. The contest is designed to give the public the opportunity to submit names that promote city unity and generate excitement for the grand opening of the new recreation center in spring 2018. The naming contest will run Jan. 1-April 1, 2017. The public can submit the name of their choice (within the parameters of council policy) at <http://www.c3gov.com/QCL> or using paper forms at the recreation center.

The Parks, Recreation & Golf Advisory Committee will review submitted ideas and submit a recommended name (or their top choices) to City Council in May 2017 for approval. Upon selection, the committee will use the names to promote the projects. The contest winners will see the winning names unveiled during the centers' dedication ceremonies and win a free family recreation pass for the year.

Councilman Amador stated the mobile home near 69th Avenue remains out of compliance and other structures appear to add to the blight of our community.

Ownership and legal issues are complicating immediate action on the mobile home. Neighborhood Services condemned the structure, which provides the owner an opportunity to obtain permits within 30 days to completely restore to habitable condition. Upon completion of the 30 day timeframe, an additional order can be issued requiring the removal of the structures from the Morningside Mobile Home Park and city within 30 days. The City's property maintenance code requires owners have an opportunity to remedy code violations before issuing an order to demolish/remove, which is the reason for the 60 day delay in removing the units.

Overall, the Morningside Mobile Home Park is in significant disrepair. Last week, Neighborhood Services issued 44 different Notice of Violations to the park owner and mobile home owners covering 88 different violations. Neighborhood Services expects difficulty in achieving reasonable compliance on correcting violations as the park owner is claiming financial insolvency and many of the home owners claim they are financially unable to make repairs. Neighborhood Services is meeting with the park owner to discuss these issues in detail and outline processes moving forward.

Staff also investigated the shed within the mobile home park and found a single male living in the structure. A Notice of Violation was issued to the mobile home owner, requiring the shed to be vacated within 24 hours or an administrative fine will be issued.

Mayor Ford expressed concerns with speed limit in the north segment of Highway 2 and requested it be lowered.

The project team adjusted the speed limit to 35 mph in this area and added additional reduced speed ahead warning signs consistent with traffic standards.

Mayor Ford expressed concerns about landscaped medians on eastbound 104th and southbound Peoria Street that limit visibility.

The parks division is responsible for the maintenance of landscaped medians, which were designed to be compliant with sight distance requirements. To address the mayor's concerns, staff removed portions of the landscaping and will replace with shorter-height plants next spring.



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Mayor Ford requested staff evaluate the barricades at 104th Avenue & Florence Street. This concern was also raised by a citizen at the December 5 Council meeting.

The barricades are in place to restrict movement in the westbound left turn lane of the intersection. The citizen's concern was that westbound traveling vehicles who wish to make a left turn into the property, south of 104th Avenue, must now sit in the through lane which poses a safety concern.

The barricades were installed in response to an issue initially raised by Councilmember Douglas and observed by staff. Specifically, eastbound vehicles were using this left-turn lane to access the recycling center and the barricades are an attempt to curtail this very unsafe movement. While this does require westbound vehicles turning left at the intersection to use the through lane, the number of vehicles making this movement is very low. The Police Department was notified of this concern and will be patrolling the area to cite drivers who attempt to make this movement.

Staff recently conducted a traffic signal warrant study at this intersection and found it meets warrants. The Colorado Department of Transportation agreed to modify the signal to make it fully-operational signal and will need to install a mast arm for the westbound approach before modifying the signal heads and timing, a process that likely will take several months.



Raccoons



Colorado Division of Wildlife
6060 Broadway, Denver, Colorado 80216
Northeast Region Service Center
303-291-7227

RACCOONS – Humane Solutions

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Urban Wildlife Rescue

HUMANE SOLUTIONS TO WILDLIFE CONFLICTS

The following solutions have proven to be very successful for humanely evicting urban wildlife species from attics, chimneys, porches, etc. However, no solution is better than plain ol' common sense.

Think about these questions when deciding upon a course of action:

What is the bottom line goal?

---protect a garden?

---secure an attic?

---prevent interaction with domestic animals?

Defining a specific goal will enable you to choose the best solution. In many cases, the best solution is to learn about the animal. What are the realities and the myths about its behavior? What should one worry about?

When you have chosen a humane solution, keep these thoughts in mind for all species:

Am I dealing with a single adult, or are babies involved? Will my solution adversely affect another person or wildlife species? Is my action in the best interest of the animal?

An animal lives where it lives because it feels safe and comfortable there. If you make the animal feel unsafe and/or uncomfortable, it will simply move.

POTENTIAL PROBLEMS OF TRAPPING AND RELOCATING

From a biological standpoint, trapping nuisance animals can cause a problem as far as population growth is concerned. The effects of trapping apply not only to squirrels but also to most forms of wildlife. However, since squirrels can breed two times a year and are highly visible, the results of trapping them can be noticed relatively quickly.

Low or moderate levels of trapping (or predation) can actually cause a wildlife population to increase. How quickly this occurs is dependent upon a wide variety of factors such as food availability, quality of habitat and weather.

RACCOONS

Raccoons can breed anytime from December to June, but most of them breed around February. Gestation is 63-65 days, with most babies being born in April or May. Litter size is usually 2-5 babies. At about 8 weeks old, the young usually leave the den and follow the mother to a new location. Young are weaned at about 12 weeks and disperse in the fall or early winter; or they may stay with the mother until the following spring. Raccoons are nocturnal animals.

When eviction techniques are used, do not expect the raccoon to leave until well after dark.

RACCOON REPELLANTS

Cayenne pepper

Repel® Granules - A commercial dog and cat repellent, available at most pet stores or garden centers. The active ingredient is nonyl methyl ketone. Some other brands are *Boundary*® and *Dog Gone*®.

Hot Pepper Repellent Recipe

You need:

1. One chopped yellow onion
2. One chopped Jalapeno pepper
3. One tablespoon of Cayenne Pepper

Boil ingredients for 20 minutes in two quarts of water. Then let it cool and strain the mixture through cheesecloth. You can apply this with a pesticide sprayer or a spray bottle. This will deter just about any animal from an area where it is applied. The only draw back is that it only lasts for three to five days.

Mechanical Repellants

Scarecrow® by Contech is a motion-activated sprinkler. It works great for keeping most animals out of yards or large areas. For more information, visit [Contech](#) or call them at 1-800-767-8658.

Electronic Pest Control

We have recently started using this type of method. So far, we have had great success in repelling raccoons with the *0700 Deluxe Dual Speaker Pest Repellent*® from [Weitech Inc.](#) They can be reached at 1-800-343-2659, if you would like to call.

Note: Raccoons are very intelligent animals, so these exclusion tactics usually work quite well. If a raccoon tries to get food or shelter and not only can't get to it, but also feels uncomfortable, then after a couple of attempts, they will stay away and find an alternative source.

RACCOONS ON THE PREMISES

Be sure to eliminate all outside food sources, such as pet food, birdseed, etc. in the evening. If your pets must be fed outside, then remove all food at night.

Use metal or heavy plastic trash containers. Keep the lids securely fastened to prevent odors from escaping. If needed, secure lids with bungee cords, ropes, etc. that have been soaked in *Talisco sauce*® or the commercial repellent, *Repel*®, available at garden, hardware, pet or feed stores. If they still get in, you can pour about one cup of ammonia in the trash can every week, after the trash has been picked up. *Rubbermaid*® makes a trash can with a screw on the lid. You should always try to store trash in a garage or a shed.

Repel® Granules, which is a dog and cat repellent, can be sprinkled around any area where the raccoons gather, be it roof, attic, trash area etc.

Keep BBQ grills clean or stored in a secure place.

When you see a raccoon in the yard, turn on the lights, run outside yelling and swinging a broom and scaring them off. You can also spray them with a hose. **CAUTION:** Do not corner a raccoon, thereby forcing them to defend themselves.

Use an electric fence around the perimeter of the premises. Run the wire around the tops of all fences. If the raccoons can go under the fence, you will need to run a wire along the bottoms of the fence as well. The electric fence should be high voltage, low amperage, so that no harm can be done to any animal or person. We recommend the *Fido Shock Electric Fence*®. It comes in a kit with everything you need and it is very versatile and easy to set up. It is available at many pet and hardware stores.

Use a Scarecrow

Use the Hot Pepper Recipe

Light the area with flood lights or motion detector lights. Motion detector lights usually work the best.

RACCOONS IN CHIMNEYS (FIRE BRICK)

It is best to leave the raccoons alone until mom takes the babies out. Raccoons do not build a nest and they do not bring food back to the den. When the babies are about 8-10 weeks of age, the mother will start weaning them. She will take them out of the chimney and not return.

If you can't wait, place a bowl of ammonia in the fireplace, and if needed, leave the flu open 1/8 in. Most flues are not airtight. If you don't smell ammonia in the room where the fireplace is, then the flu is not airtight. This in itself usually works.

Place a radio in the fireplace. Tune it to a talk program. Do this during the day, and use it in combination with the ammonia; or, you might want to use an ultra sonic device. Give the raccoons two to three nights to move out.

Scare them out (only if the ammonia & the radio does not work) by using a broom or pole. Try yelling. As a precaution you might want to use gloves.

After the raccoon is gone, secure the chimney with a chimney cap so this does not happen again.

NOTE: Under no circumstance should a fire be used to evict any animal. Starting a fire will only burn and/or kill the animal.

RACCOONS IN CHIMNEYS (METAL INSERT)

In metal chimney pipes, the raccoon may not be able to climb out on its own.

From the roof, drop down a thick rope or cloth, such as old blankets or sheets, so the raccoon can climb out. It is a good idea to tie a knot in the rope or cloth about 1 ft. apart, this will provide a more secure climbing surface. You may have to tie 2 or more together to reach the bottom of the chimney. Tie something to provide weight to the bottom of the rope or cloth, such as a hammer, pair of pliers, etc. Be sure to lower slowly. This will help you to feel the bottom, especially if the pipe is curved. Also, it will provide stability when the raccoon climbs up and out.

Make sure it reaches the bottom. Then secure the rope or cloth at the top. Raccoons are heavy, so secure it well.

Leave the area completely alone. The raccoon climb out in 1-24 hours.

After the raccoon is gone, secure the chimney with a chimney cap, so this does not happen again.

RACCOONS IN THE ATTIC

It is best to leave them alone until mom moves the babies out.

Scare them out. Use caution! Just making your presence known will usually do it. Go into the attic a

few times a day with a flashlight. Shine the light on them and talk to them. But if touched or threatened, by being cornered or feeling boxed in, they will defend themselves and they are quite adept at doing so.

If there are babies, give the mother 1 or 2 nights to relocate the family. Roll some rags into a tight ball and tie with twine to keep them tight. Soak the rag balls in ammonia. Toss them into the area of the attic where the raccoon is located.

If you can, sprinkle Cayenne pepper or *Repel*® *granules*, a commercial dog and cat repellent, around the entry hole, both inside and out, if this is possible. During the day, place a radio in the attic tuned to an all talk station.

Use floodlights to keep the area where they are living well lit.

Once the raccoon has moved out, secure their entry point. Use hardware cloth or welded wire. They usually won't come back. If you want to use a repellent, then you can either Sprinkle *Repel*® *granules* or Cayenne pepper around the entrance area, if that is possible; or use a repellent, such as *Ropel*®, sprayed around the entrance area.

RACCOONS ON THE ROOF

Sometimes spraying water from a hose will scare them off. If it is a constant problem, then sprinkling *Repel*® on the roof works great!

RACCOONS IN THE GARDEN OR FISH POND

Use a Scarecrow

Use an electric fence, such as *Fido Shock*®, which is high voltage, low amperage, and it will not hurt the animal or you.

Light the area with floodlights or motion detector lights.

If you have a small pond, build a wooden frame to cover the pond. Cover the frame with 1" x 2" welded wire. Secure it to the ground. This frame can be left on permanently or removed daily. Since the raccoons are nocturnal, just be sure the pond is covered at night.

RACCOONS COMING THROUGH PET DOORS

Mount floodlights or motion detector lights above the pet door. Lock and secure the pet door at night.

Place a piece of plywood or cardboard outside of the pet door; sprinkle a liberal amount of Cayenne pepper or *Repel*® *granules*. Be sure to lock the pet door that night and remember to do so for several nights. During the day, you can remove the repellent so that your pets can use the door. Usually, after a couple of visits, the raccoon will stay away from the pet door. The easiest method is to simply lock your pet door every night at sunset. Usually, after just a few nights, the raccoons will stop coming to your pet door. According to a study done in Colorado, the #1 reason raccoons die is from starvation. Once the raccoon realizes he can't access your pet door for food, he will not want to waste time or energy coming to your house.

NOTE: If you live in raccoon habitat, a pet door for dogs or cats is not a good idea. If the raccoons discover it, they will use it to come into your home in search of food. Not only will wildlife use

them, but also small humans can enter them and what they take will be more valuable than what the wildlife wants.

RACCOONS IN THE TRASH

The easiest method is to get a good trash can with a secure lid. If they still get in, you can pour about one cup of ammonia in the trash can every week after the trash has been picked up. You should try to store trash in a garage or shed. *Rubbermaid*[®] makes a trash can with a screw on the lid. Put trash out the day of pick-up instead of the night before.

Also, try sprinkling a repellent around the trash can area. Such as, *Repel*[®] *granules*, Cayenne pepper, or Hot Pepper spray.

RACCOONS

Edward K. Boggess, Wildlife Program Manager
Prevention and Control of Wildlife Damage – 1994

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Species:

Raccoons

(*Procyon lotor*)

Damage Prevention and Control Methods

Exclusion

Usually the best method for coping with almost all types of raccoon damage.

Habitat Modification

Remove obvious sources of food or shelter around the premises; usually not practical as a sole method of controlling damage.

Frightening

Several methods may be effective, but only for a short time.

Repellents, toxicants, and fumigants:

None are registered.

Trapping

Cage traps, body gripping, and foothold traps are very effective, especially in conjunction with exclusion and/or habitat modification.

Shooting

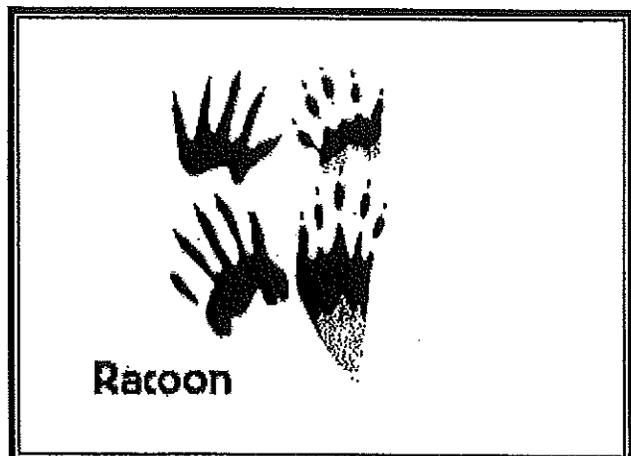
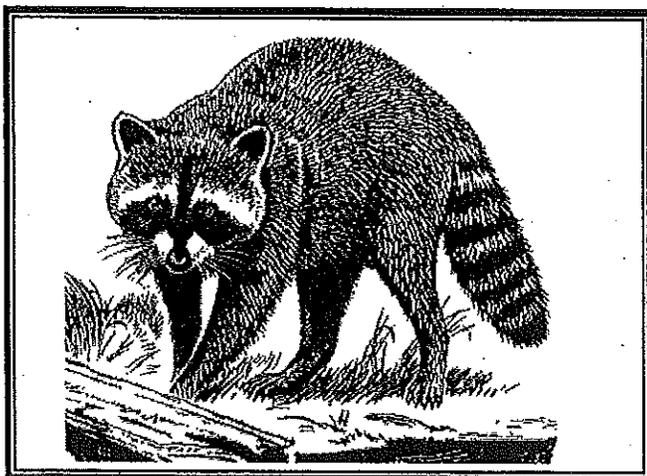
Can be very effective, particularly if trained hounds are used to tree the raccoons. Local regulations may apply.

Identification

The raccoon (*Procyon lotor*), also called "coon," is a stocky mammal about 2 to 3 feet (61 to 91 cm) long, weighing 10 to 30 pounds (4.5 to 13.5 kg); (rarely 40 to 50 pounds [18 to 22.5 kg]). It is distinctively marked, with a prominent black "mask" over the eyes and a heavily furred, ringed tail. The animal is a grizzled salt-and-pepper gray and black above, although some individuals are strongly washed with yellow. Raccoons from the prairie areas of the western Great Plains are paler in color than those from eastern portions of the region.

Range

The raccoon is found throughout the United States, with the exception of the higher elevations of mountainous regions and some areas of the arid Southwest. Raccoons are more common in the wooded eastern portions of the United States than in the more arid western plains.



Habitat

Raccoons prefer hardwood forest areas near water. Although commonly found in association with water and trees, raccoons occur in many areas of the western United States around farmsteads and livestock watering areas, far from naturally occurring bodies of permanent water. Raccoons den in hollow trees, ground burrows, brush piles, muskrat houses, barns and abandoned buildings, dense clumps of cattail, haystacks, or rock crevices.

General Biology, Reproduction, and Behavior

Raccoons are omnivorous, eating both plant and animal foods. Plant foods include all types of fruits, berries, nuts, acorns, corn, and other types of grain. Animal foods are crayfish, clams, fish, frogs, snails, insects, turtles and their eggs, mice, rabbits, muskrats, and the eggs and young of ground-nesting birds and waterfowl. Contrary to popular myth, raccoons do not always wash their food before eating, although they frequently play with their food in water.

Raccoons breed mainly in February or March, but mating may occur from December through June, depending on latitude. The gestation period is about 63 days. Most litters are born in April or May but some late-breeding females may not give birth until June, July, or August. Only 1 litter of young is raised per year. Average litter size is 3 to 5. The young first open their eyes at about 3 weeks of age. Young raccoons are weaned sometime between 2 and 4 months of age.

Raccoons are nocturnal. Adult males occupy areas of about 3 to 20 (8 to 52 km) square miles compared to about 1 to 6 square miles (3 to 16 km) for females. Adult males tend to be territorial and their ranges overlap very little. Raccoons do not truly hibernate, but they do "hole up" in dens and become inactive during severe winter weather. In the southern United States they may be inactive for only a day or two at a time, whereas in the north this period of inactivity may extend for weeks or months. In northern areas, raccoons may lose up to half their fall body

weight during winter as they utilize stored body fat.

Raccoon populations consist of a high proportion of young animals, with one-half to three-fourths of fall populations normally composed of animals less than 1 year in age. Raccoons may live as long as 12 years in the wild but such animals are extremely rare. Usually less than half of the females will breed the year after their birth, whereas most adult females normally breed every year.

Family groups of raccoons usually remain together for the first year and the young will often den for the winter with the adult female. The family gradually separates during the following spring and the young become independent.

Damage and Damage Identification

Raccoons may cause damage or nuisance problems in a variety of ways, and their distinctive tracks often provide evidence of their involvement in damage situations.

Raccoons occasionally kill poultry and leave distinctive signs. The heads of adult birds are usually bitten off and left some distance from the body. The crop and breast may be torn and chewed, the entrails sometimes eaten, and bits of flesh left near water. Young poultry in pens or cages may be killed or injured by raccoons reaching through the wire and attempting to pull the birds back through the mesh. Legs or feet of the young birds may be missing. Eggs may be removed completely from nests or eaten on the spot with only the heavily cracked shell remaining. The lines of fracture will normally be along the long axis of the egg, and the nest materials are often disturbed. Raccoons can also destroy bird nests in artificial nesting structures such as bluebird and wood duck nest boxes.

Raccoons can cause considerable damage to garden or truck crops, particularly sweet corn. Raccoon damage to sweet corn is characterized by many partially eaten ears with the husks

pulled back. Stalks may also be broken as raccoons climb to get at the ears. Raccoons damage watermelons by digging a small hole in the melon and then raking out the contents with a front paw.

Raccoons cause damage or nuisance problems around houses and outbuildings when they seek to gain entrance to attics or chimneys or when they raid garbage in search of food. In many urban or suburban areas, raccoons are learning that uncapped chimneys make very adequate substitutes for more traditional hollow trees for use as den sites, particularly in spring. In extreme cases, raccoons may tear off shingles or fascia boards in order to gain access to an attic or wall space.

Raccoons also can be a considerable nuisance when they roll up freshly laid sod in search of earthworms and grubs. They may return repeatedly and roll up extensive areas of sod on successive nights. This behavior is particularly common in mid-to late-summer as young raccoons are learning to forage for themselves, and during periods of dry weather when other food sources may be less available.

The incidence of reported rabies in raccoons and other wildlife has increased dramatically over the past 30 years. Raccoons have recently been identified as the major wildlife host of rabies in the United States, primarily due to increased prevalence in the eastern United States.

Legal Status

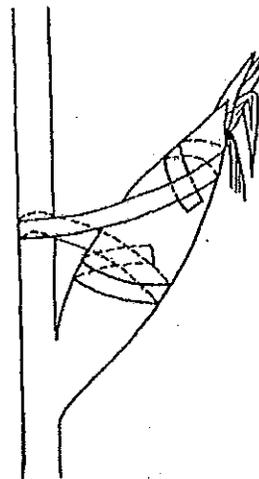
Raccoons are protected furbearers in most states, with seasons established for running, hunting, or trapping. Most states, however, have provisions for landowners to control furbearer that are damaging their property. Check with your state wildlife agency before using any lethal controls.

Damage Prevention and Control Methods

Exclusion

Exclusion, if feasible, is usually the best method of coping with raccoon damage. Poultry damage generally can be prevented by excluding the raccoons with tightly covered doors and windows on buildings or mesh-wire fences with an overhang surrounding poultry yards. Raccoons are excellent climbers and are capable of gaining access by climbing conventional fences or by using overhanging limbs to bypass the fence. A "hot wire" from an electric fence charger at the top of the fence will greatly increase the effectiveness of a fence for excluding raccoons.

Wrapping a ripening ear of sweet corn with reinforced filament tape as shown can reduce raccoon damage by 70% to 80%. It is important that each loop of the tape be wrapped over itself so that it forms a closed loop that cannot be ripped open by the raccoon.



Damage to sweet corn or watermelons can most effectively be stopped by excluding raccoons with a single or double hot-wire arrangement. The fence should be turned on in the evening before dusk, and turned off after daybreak. Electric fences should be used with care and

appropriate caution signs installed. Wrapping filament tape around ripening ears of corn or placing plastic bags over the ears is an effective method of reducing raccoon damage to sweet corn. In general, tape or fencing is more effective than bagging. When using tape, it is important to apply the type with glass yarn filaments embedded within so that the raccoons cannot tear through the tape. Taping is more labor-intensive than fencing, but may be more practical and acceptable for small backyard gardens.

Store garbage in metal or tough plastic containers with tight-fitting lids to discourage raccoons from raiding garbage cans. If lids do not fit tightly, it may be necessary to wire, weight, or clamp them down to prevent raccoons from lifting the lid to get at garbage. Secure cans to a rack or tie them to a support to prevent raccoons from tipping them over.

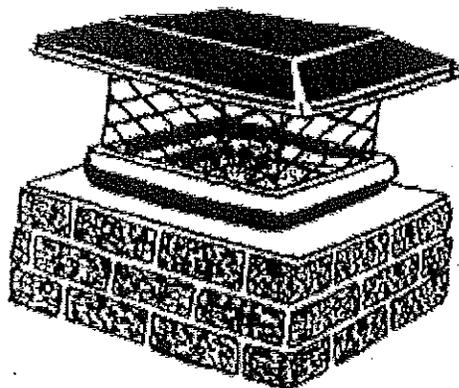
Prevent raccoon access to chimneys by securely fastening a commercial cap of sheet metal and heavy screen over the top of the chimney. Raccoon access to rooftops can be limited by removing overhanging branches and by wrapping and nailing sheets of slick metal at least 3 feet (90 cm) square around corners of buildings. This prevents raccoons from being

able to get a toehold for climbing. While this method may be practical for outbuildings, it is unsightly and generally unacceptable for homes. It is more practical to cover chimneys or other areas attracting raccoons to the rooftop or to remove the offending individual animals than to completely exclude them from the roof.

Homeowners attempting to exclude or remove raccoons in the spring and summer should be aware of the possibility that young may also be present.

Do not complete exclusion procedures until you are certain that all raccoons have been removed from or have left the exclusion area. Raccoons frequently will use uncapped chimneys as natal den sites, raising the young on the smoke shelf or the top of the fireplace box until weaning. Homeowners with the patience to wait out several weeks of scratching, rustling, and chirring sounds will normally be rewarded by the mother raccoon moving the young from the chimney at the time she begins to wean them. Homeowners with less patience can often contact a pest removal or chimney sweep service to physically remove the raccoons. In either case, raccoon exclusion procedures should be completed immediately after the animals have left or been removed.

A cap or exclusion device will keep raccoons and other animals out of chimneys. These are available commercially and should be made of heavy material. Tightly clamp or fasten them to chimneys to prevent raccoons from pulling or tearing them off.



Raccoon access to rooftops can be eliminated by pruning back overhanging limbs and tacking slick sheets of metal at least 3 feet square around corners of buildings.

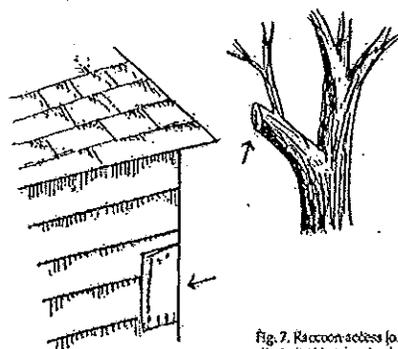


Fig. 7. Raccoon access to rooftops can be eliminated by pruning back overhanging limbs and tacking slick sheets of metal at least 3 feet square around corners of buildings.

Habitat Modification

There are no practical means of modifying habitat to reduce raccoon depredations, other than removing any obvious sources of food or shelter, which may be attracting the raccoons to the premises. Raccoons forage over wide areas, and anything other than local habitat modification to reduce raccoon numbers is not a desirable technique for reducing damage.

Raccoons sometimes will roll up freshly laid sod in search of worms or grubs. If sodden areas are not extensive, it may be possible to pin the rolls down with long wire pins, wooden stakes, or nylon netting until the grass can take root, especially if the damage is restricted to only a portion of the yard, such as a shaded area where the grass is slower to take root. In more rural areas, use of electric fences may be effective. Because the sod-turning behavior is most prevalent in mid-to late-summer when family groups of raccoons are learning to forage, homeowners may be able to avoid problems by having the sod installed in spring or early summer. In most cases, however, removal of the problem raccoons is usually necessary.

Frightening

Although several techniques have been used to frighten away raccoons, particularly in sweet corn patches, none has been proven to be effective over a long period of time. These techniques have included the use of lights, radios, dogs, scarecrows, plastic or cloth streamers, aluminum pie pans, tin can lids, and plastic windmills. All of these may have some temporary effectiveness in deterring raccoons, but none will provide adequate long-term protection in most situations.

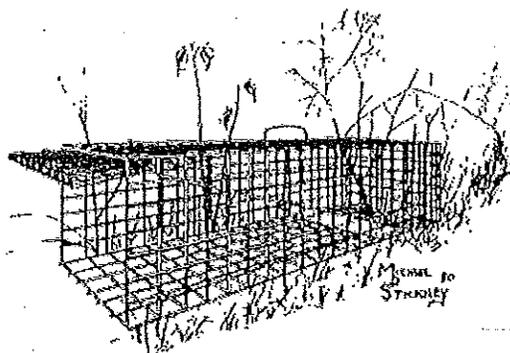
Repellents, Toxicants, and Fumigants

There are no repellents, toxicants, or fumigants currently registered for raccoon control.

Trapping

Raccoons are relatively easy to catch in traps, but it takes a sturdy trap to hold one. For homeowners with pets, a live or cage-type trap is usually the preferable alternative to a leg trap. Traps should be at least 10 x 12 x 32 inches (25.4 x 30.3 x 81.3 cm) and well constructed with heavy materials. They can be baited with canned fish-flavored cat food, sardines, fish, or chicken. Place a pile of bait behind the treadle and scatter a few small bits of bait outside the opening of the trap and just inside the entrance.

A cage-type live trap, although bulky and expensive, is often the best choice for removing raccoons near houses or buildings where there is a likelihood of capturing dogs or cats.

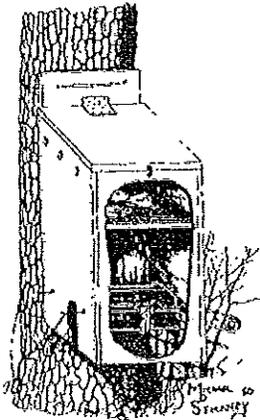


Traps with a single door should be placed with the back against a wall, tree, or other object. The back portion of the trap should be tightly screened with one-half inch (13 cm) or smaller mesh wire to prevent raccoons from reaching through the wire to pull out the bait.

Conibear® type body-gripping traps are effective for raccoons and can be used in natural or artificial cubbies or boxes. Because these traps do not allow for selective release of nontarget catches, they should not be used in areas where risk of nontarget capture is high. Box or leg traps should be used in those situations instead. It is possible, however, to use body-gripping traps in boxes or on leaning poles so that they are

inaccessible to dogs. Check local state laws for restrictions regarding use of Conibear® type traps out of water.

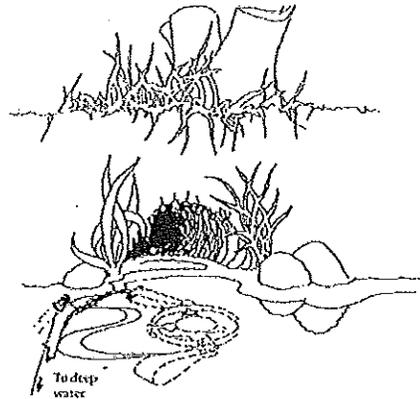
A "raccoon box" is suspended 6 inches above the ground and is equipped with a Conibear®-type trap. Suspended at this level, this set is dog proof.



Raccoons also can be captured in foothold traps. Use a No. 1 or No. 1-1/2 coilspring or stoploss trap fastened to a drag such as a tree limb 6 to 8 feet (1.8 to 2.4 m) long. For water sets, use a drowning wire that leads to deep water. The D-P trap and Egg trap are new foot-holding devices that are highly selective, dog proof, and show promise for reducing trap-related injury. They are available from trapping supply outlets.

The "pocket set" is very effective for raccoons, and is made along the water's edge where at least a slight bank is present. Dig a hole 3 to 6 inches (7.6 to 15.2 cm) in diameter horizontally back into the bank at least 10 to 12 inches (25.4 to 30.5 cm). The bottom 2 inches (5.1 cm) of the hole should be below the water level. Place bait or lure (fish, frog, anise oil, or honey) in the back of the hole, above the water level. Set the trap (a No. 1 or 1-1/2 coilspring, doublejaw or stoploss, is recommended) below the water level in front of or just inside the opening. The trap should be tied to a movable drag or attached with a one-way slide to a drowning wire leading to deep water.

The pocket set is very effective for raccoons and mink. Place a bait in the back of the hole above the water level and attach the trap to a one-way slide on a drowning wire leading to deep water, or to a movable drag such as a large rock or a section of tree limb 5 to 6 feet long and 3 to 5 inches in diameter.



Dirt-hole sets are effective for raccoons. Place bait or lure in a small hole and conceal the trap under a light covering of soil in front of the hole. A No. 1 or 1-1/2 coilspring trap is recommended for this set. It is important to use a small piece of clean cloth, light plastic, or a wad of dry grass to prevent soil from getting under the round pan of the trap and keeping it from going down. If this precaution is not taken, the trap may not go off.

The leaning-pole set for raccoons is another dog-proof set. The trigger should be on top to prevent the trap from being sprung by squirrels or chipmunks. Bait should be beyond the trap and covered so that it cannot be seen by birds. The set is more effective if a few drops of fish oil or other lure are placed along the pole from the ground level up to the trap.



Shooting

Raccoons are seldom seen during the day because of their nocturnal habits. Shooting raccoons can be effective at night with proper lighting. Trained dogs can be used to tree the raccoons first. A .22-caliber rifle will effectively kill treed raccoons.

Many states have restrictions on the use of artificial light to spot and shoot raccoons at night, and shooting is prohibited in most towns and cities. It is advisable to check with state and local authorities before using any lethal controls for raccoons.

Economics of Damage and Control

Statistics are unavailable on the amount of economic damage caused by raccoons, but the damage may be offset by their positive economic and aesthetic values. In 1982 to 1983, raccoons were by far the most valuable furbearer to hunters and trappers in the United States; an estimated 4.8 million raccoons worth \$88 million were harvested. Raccoons also provide recreation for hunters, trappers, and people who enjoy watching them. Although raccoon damage and nuisance problems can be locally severe, widespread raccoon control programs are not justifiable, except perhaps to prevent the spread of raccoon rabies. From a cost-benefit and ecological standpoint, prevention practices and specific control of problem individuals or localized populations are the most desirable alternatives.

Acknowledgments

Although information for this section came from a variety of sources, I am particularly indebted to Eric Fritzell of the University of Missouri, who provided a great deal of recently published and unpublished information on raccoons in the central United States. Information on damage identification was adapted from Dolbeer et al. 1994.

Figures by: Schwartz & Schwartz, Jill Sack Johnson, Conover, Michael D. Stickney, Tom Parker & F. R. Henderson.

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Check with your local and state wildlife agencies for regulations.

<http://wildlifedamage.unl.edu/handbook/handbook/>

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Raccoons



Widespread throughout the United States and Canada, where they continue to expand their range northward.

Can be found in attics, chimneys, crawl spaces, outbuildings, yards, gardens and wherever else humans provide something to peak their curiosity.

This "solitary" mammal has been found in winter dens containing more than twenty animals.

WITH THEIR BANDIT'S MASK and ringed tail, raccoons are recognized by just about everyone, even if not frequently seen due to their nocturnal habits. Raccoons are one of a very few species of wild animal that appears to have actually benefited from contact with humans, and they have shown no trouble adapting to

suburban and even urban environments. Such *synanthropes* (animals able, or even preferring, to live with humans) are usually generalists, tolerating widely different habitats and eating many different foods. If the few studies that have been conducted on urban and suburban raccoons are representative, then the densities they achieve in urban areas can be up to twenty times that typical of rural environments. This inevitably leads to conflicts with humans because raccoons are smart enough to defeat any but the most determined defense of garbage cans or home gardens. It has also led to many cherished moments, as homeowners became enthralled by a glimpse of these fascinating animals. Among those who know them well, there is a strong sentiment that raccoons could easily share honors with the bald eagle by being declared our national mammal.

Natural History

Classification and Range

Raccoons (*Procyon lotor*) are truly New World animals, with only a debatable relationship to Asian animals such as the giant and red pandas. The fossil evidence suggests that essentially modern-looking raccoons ranged coast to coast throughout the United States as much as a million years ago. Today they are found in almost every major habitat (*biome*) throughout the forty-eight contiguous states and have made recent inroads into southern Canada as well. There are several species of raccoon found throughout the Americas, some of them restricted to small offshore islands. There are more than twenty subspecies living on the U.S. mainland, most being named back in the days when it was more fashionable to "discover" new types of animals than it is today. Whether there are real differences between any of them is something that still needs to be determined.

The raccoon may be as long as a small dog (2 to 3 feet from nose to end of tail), but actually weigh much less. The average adult male may weigh anywhere from 10 to 15 pounds and tend to be slightly larger than the female, who will weigh anywhere from 6 to 12 pounds. Raccoons in the northern parts of their range may be larger, and even exceed 60 pounds, as will animals that have been fed (or overfed) by humans. Coat color varies from dark, almost black, to sandy or pale. Although sometimes less noticeable on pale animals, the mask and ringed tail are the hallmarks by which we know them best. Raccoons are probably color blind, although they have excellent night vision. Their tapetum (the layer of the eye that reflects light) sometimes reflects light in a greenish glow.

Raccoons are at least as intelligent as cats or dogs and possess far greater manual dexterity. In fact their sense of touch may be as fully or more developed than their other senses. The scientific name of the raccoon refers to the "washing" behavior, once thought to be instinctive and mandatory in these animals. In truth, raccoons do not wash everything they eat. They manipulate food, dunking and soaking it when water is available, and so appear to be washing it. When water is not available, however, they use much the same motions in handling food, and the behavior probably more accurately reflects a need to tactually experience things than it does to clean them.

Habitat

Although they prefer mature woodlands, there are raccoons that thrive along seashores or that live in prairie grasslands. The range of this species has expanded quite recently into parts of Canada and deep into the American Midwest, largely through human beneficence in providing barns and outbuildings as shelter and crops as nourishment. Cities and suburbs provide both natural foods and abundant castoffs from human tables. Shelter can frequently be found in unused chimneys, in attics, under porches or in outbuildings along back alleys. Of course, the old standby hollow tree will be used if available, even if it is right next to a busy street. All cities provide extensive travel corridors for raccoons, who are quite at home using storm sewers when these are not too flooded.

Diet

The raccoon's diet is so highly varied that it almost seems easier to describe the foods they don't eat rather than those they do. Small pieces of tinfoil, newspaper and even

an occasional cigarette butt in raccoon scats testify to the use of human refuse. The mainstays of the diet, however, are fruits, vegetables, high-energy mast foods, such as acorns, and earthworms in early spring when other foods are scarce. Fish and aquatic animals, such as crayfish, are eaten when available, but most urban streams are no longer of high enough quality to support these forms of life. Raccoons will eat small animals such as birds, amphibians and mice on an opportunistic basis, but are generally not regarded as effective or efficient hunters. Their appetite for foods such as grapes and sweet corn lead to frequent conflicts with home gardeners.

There is often a pattern to raccoon feeding activity. In the mid-Atlantic states, for example, an early-spring diet of insects and earthworms is followed by meals of mulberry, the first of the ripening fruits. Following that, the summer diet follows the order of ripening fruits: blackberries, cherries, grapes and, last, the persimmons that may not be available until late fall. Between September and the end of December raccoons gorge themselves on whatever fruits remain and acorns, which are a dietary staple. As much as 30 percent to the summer body weight can be added before the start of winter, and make up critical fat reserves that the animals live on during the coldest periods of the year. In severe cold or when deep snows are on the ground, raccoons will remain in dens in a state of general torpor for days on end. They do not, however, go into a state of true hibernation like bears and woodchucks.

Dens and Shelter

Raccoons are usually active at night, although along coastal areas they will often forego this to be active at low tide. By day, raccoons retire to denning or resting sites. Dens are made above ground in tree cavi-

ties, chimneys and attics, and underground in old woodchuck burrows, storm sewers or crawl spaces under buildings. When they feel secure enough, raccoons may simply lie up in thickets or swamps on open ground. Unusual day beds range from squirrel leaf nests to log and brush piles or, on occasion, even large bird nests such as those built by magpies. Sharing of den sites may be common in suburban areas among adult raccoons. Even in rural areas, wintertime dens with more than twenty animals have been found.

Reproduction

Breeding seasons vary from north to south, and in the far South breeding may occur year-round. If a line were drawn, bisecting the United States from east to west, raccoons north of it would generally mate from January to March. Below it raccoons would mate later, perhaps March through June. Whenever breeding occurs, births follow about sixty-three days later, around the same time as for a cat or dog. Occasional late litters occur in early fall, apparently to females that have lost a litter or had a failed pregnancy. In the North, these late births place young raccoons at a distinct disadvantage because in order to survive the winter, a certain amount of weight should be gained. These late-arriving young have trouble putting on the weight in time. Litter size ranges from one to seven, with three to five usual. Young are weaned at about two months and may remain with the mother through the first winter. The travel and exploratory activities of young that are moving out of the area in which they were born are formally known as *dispersion*. These movements often lead to conflicts with people, as the exploring young break into garages, occupy chimneys, get into the trash or engage in other behavior that draws human attention.

Public Health

The raccoon is one of four wild animals (including the fox, skunk and bat) considered to be primary carriers of the rabies virus in the United States, and classifiable as a rabies vector species (RVS). Most of the eastern United States is where raccoon rabies occurs. Raccoon rabies was first documented in 1977 in West Virginia and Virginia, where it was apparently imported along with a shipment of animals from Florida brought in to repopulate a hunting area. Raccoon rabies has been known in Florida since at least the 1950s, and is now enzootic (present at low levels, but definitely within the population) there and in many eastern states. Raccoon rabies is spreading northward toward Canada and west toward Ohio.

A serious public health concern involving raccoons derives from the roundworm (*Baylisascaris procyonis*) that can infect humans who accidentally ingest or inhale eggs that are passed through raccoon feces. Raccoons are also hosts for the zoonotic disease leptospirosis and giardiasis.

Problems and Their Solutions

Problems

Raccoons can cause both real damage, as when they get into crops, or simply be nuisances, as when they occupy the family chimney or panhandle at campgrounds. They are often blamed for more damage than they really do, while the neighborhood dogs or crows that have scattered trash make off blameless.

Short of actually seeing the animals themselves, tracks are one of the best ways to identify raccoon presence. In gardens the characteristic hand and footprints will dis-

play themselves if the ground is damp. On hard surfaces or in dry weather, flour, lime or other suitable powder can be used to record prints. Raccoons that are using attics or chimneys usually begin to make noise at dusk and just before dawn, while squirrels will be active by day and quieter at night (except when the less common flying squirrels, which are nocturnal, are involved). Even mice in or near chimneys can make considerable amounts of noise, and it is important to make sure what the source of any unknown scratching or tapping noises really is. One clue could be found in the noisy vocal exchanges of raccoons, especially family members, which are usually not to be mistaken for anything else.

Solutions

TOLERANCE

As with any human-wildlife conflict the first course of action is to decide what level of damage is occurring, how long it may be likely to persist and whether the damage requires an immediate response or can be dealt with on a non-emergency basis. Because they are generally secretive, raccoons do not often alarm people by their presence enough to cause them to seek immediate control measures. A careful and calm approach to encouraging a raccoon to abandon an attic or chimney is by far preferable to the excited and demanding first response people often have upon discovering these animals are present. On the other hand, the first observation of raccoon damage to crops such as sweet corn demands an immediate reaction because the animal can be expected to revisit the garden and to continue attacking the crop as long as it is available.

EXCLUSION

The only long-term, permanent means of coping with troublesome raccoons is to exclude

them from areas where they are unwanted. Raccoons are intelligent animals with routines that are dictated by their needs; if they cannot get a meal at one place they will look elsewhere, and they will remember where they can and cannot expect to have their hunger satisfied. Tragically, unthinking individuals will feel the only solution is to put out a live trap, catch the raccoon and destroy or relocate it. Before too long, another raccoon moves into the area and the cycle begins all over again.

DEALING WITH RACCOON YOUNG

Many situations with raccoons in chimneys and attics involve raccoon families. Raccoons are born blind and helpless, but noisy, and frequently the first indication that raccoons are present is when these kits begin to make noise. They are entirely unable to fend for themselves for a long period of time after birth and usually do not even venture out of the den until eight or nine weeks of age. For many weeks after that the mother is the teacher and protector, and she must be allowed to remain with them. Like cats, mother raccoons will carry their young to a new den if the old is uninhabitable. In virtually all habitats, but especially cities and suburbs, raccoons have alternate den sites to which they will move if disturbed. The mother will move young even when not disturbed; as they become mobile she takes them to new places as part of their general education.

When a mother raccoon with young is present, the recommended course of action is to leave them alone for the few weeks that the young are helpless, monitor them to determine when they have moved on their own accord and deal with the issue of securing or preventing entry and use of the chimney or attic after the family has left. In emergencies, gentle harassment may cause the mother to relocate her young, but there

is always the chance that one or more youngsters may be abandoned in this process. Trapping and moving the family will almost inevitably lead to separation and the probable death of the young. And invasive techniques, including the use of smoke or fire to drive animals out of chimneys, can lead to the mother's abandonment of the site and death of young, who are physically unable to climb.

CHIMNEYS

Raccoons will use uncapped chimneys for denning and to give birth and raise young. The fireplace flue, because it has a horizontal smoke shelf just above the damper, is usually preferred. All flues should be checked, monitored and secured preferably prior to their ever being occupied. The steps in inspecting and capping a chimney are described in Chapter 3. Because raccoons are nocturnal, the best time to use repellents or frightening strategies to get them out of a chimney is right before the animal would normally start its nightly routine. Driving an animal out of a chimney or attic during the day should be avoided. During the day, raccoons are more easily confused and more vulnerable than at night, as well as more likely to come into contact with people or their pets should they be evicted.

ATTICS

The attic should be inspected to determine where access is occurring, and the opening should be sealed once the raccoon is evicted or leaves the premises. Where raccoons have long been in residence and feces (scats) have accumulated in an attic or crawl space, care must be taken to avoid exposure to the eggs of the roundworm described previously. Protective clothing and a dust mask should be worn and scat material as little disturbed as possible until the raccoons have left. Then, a thorough cleanup is recommended,

following the procedures described in Chapter 2.

INSIDE THE HOUSE

Occasionally, raccoons will enter a house through a pet door and be unable to find their way out. Because they can cause considerable damage when they are panicked, it is advisable upon encountering such a situation to keep both yourself and the raccoon as calm as possible. Move slowly, if it can be done safely, close doors providing access to other parts of the house, open windows and doors through which the raccoon could exit and wait quietly for the animal to make its escape. If for any reason the animal does not leave, call animal control for assistance. The capture and handling of live raccoons should be attempted only by properly equipped professionals.

YARDS

Besides eating plants, tipping over garbage cans and climbing on and around houses, raccoons can also damage lawns by digging in search of earthworms and grubs. The most easily damaged lawns are those that have been recently sodded. Because new lawns have to be well irrigated, lots of worms and grubs collect under the sod. This attracts raccoons and sometimes skunks. Often they may simply reach under the strips and feel around for their meal, pulling out the grubs and worms without any disturbance at all. Occasionally, they tear up the sod and cause significant damage. On a small area, an application of a hot sauce (capsaicin) repellent (see "Chemical Repellents" in Chapter 3) may be effective.

GARDENS

Raccoons often cause considerable damage to garden fruits and vegetables, such as grapes and corn. Attacks often occur just before foods are ready to be picked, so ex-

tra vigilance at these times (chasing animals away and using lights or radios to create disturbances) may drive them off long enough to harvest the crop. Single-strand electric fencing can be used effectively where damage is frequent and raccoons are numerous.

PONDS

With the increasing popularity of ornamental ponds in many yards, problems with raccoons are mounting. Naturally attracted to water, visiting raccoons will catch and eat fish, frogs or other aquatic life that a homeowner may be trying to raise. They will further tear up plants in search of food and generally make a mess of most small ponds once they have discovered them. Depending on the size of the pond, fish can be provided with protection by using stacking cinder blocks (the kind with the holes) next to one another in groups of three or four, piling rocks so that shelters are created or sinking sections of the ceramic tile that is used to line chimneys so that fish can take refuge when the raccoon visits. Ponds should be at least 3 feet deep at places in order for shelters to work effectively. Disturbance of plants and other unwanted activities can be deterred in extreme cases by erecting single-strand electric fencing around the pond at anywhere from 4 to 8 inches off the ground (see Figure 25, page 158).

RACCOONS AND DOMESTIC ANIMALS

On occasion raccoons will kill small animals housed outside, such as chickens and rabbits, and they will sometimes get into scraps with dogs and even cats. Pets such as cats and dogs should not be let out unsupervised and, preferably, should be kept on a leash and controlled. Encounters between raccoons and pets should be treated very seriously, with consultation with the animal's veterinarian and local animal control officials

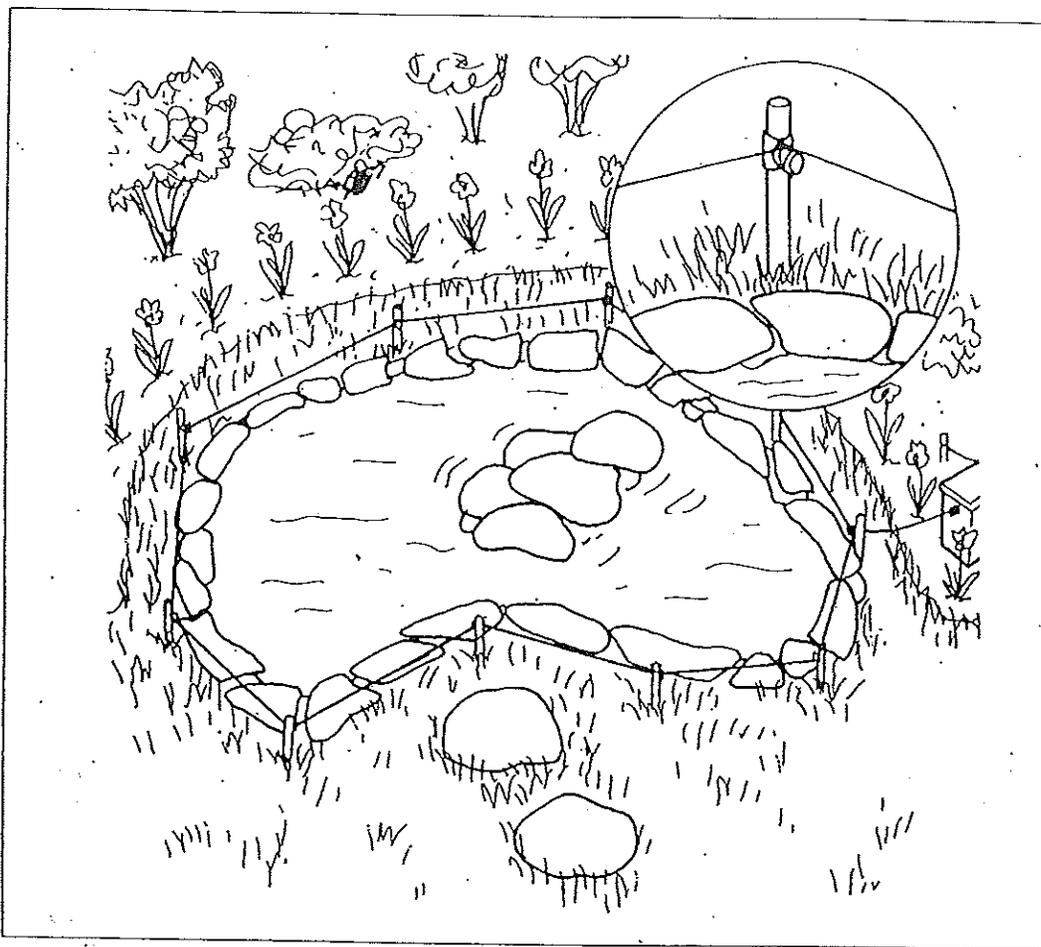


Figure 25. This homeowner has installed a single-strand electric fence to deter nightly visits from raccoons. Once the local raccoons have been exposed to it a time or two, the fence very likely can be deactivated until signs of new visits occur. A pile of rocks in the center of this pond also provides a refuge for the fish being kept there, which is always a good idea.

to ensure that pets either have proper protection or that follow-up procedures to a potential exposure are adequate.

When rabbits or other small animals are housed outdoors, proper protection is absolutely necessary. Heavy-gauge welded wire (see Chapter 3) can be used to protect rabbit hutches if it is firmly enough attached with metal staples. Finer mesh wire should be laid on top of the welded wire wherever a raccoon could reach in. If possible, pets should be brought into the house or a secure outbuilding at night to avoid any chance of raccoon attack.

A Last Word

The advantage and success we have indirectly given raccoons by changing the landscape in their favor comes at a cost to them. Both rabies and canine distemper take a toll on urban raccoon populations. They currently have no protection against canine distemper, other than the gradual process of selection that undoubtedly will favor animals that have some degree of natural immunity. There is a vaccine that can be delivered to raccoons in the form of fish meal baits that will immunize them against

rabies. It is being tried experimentally in a few places, but has not yet been considered for wide-scale use. The reason for this is partly economics, partly the sort of "who cares" attitude that exists toward urban wildlife and partly that our resources in the field of public health are urgently needed elsewhere at the current moment. Again, it is likely that some naturally immune raccoons will escape rabies and that their populations will rebuild quickly. Several

future scenarios will tell where the interaction between this wild animal and the diseases might go, but none of these predict the demise of the raccoon. If any animal is here to stay, it is this one.

Additional Source

MacClintock, D. 1981. *A Natural History of Raccoons*. New York: Charles Scribner's Sons. 144 pp.

Raccoons

Many people in the suburbs and rural areas have enjoyed making pets of raccoons, though it may be illegal to do so without a special permit. But these cute, cuddly furbearers have caused a variety of problems, even in urban districts. They will sometimes kill poultry and other farm-raised animals. They will also take advantage of pets, and both domestic and wild ducks. One Indiana study showed raccoons were responsible for raiding several nests and eating the eggs of wood ducks. They also destroy wild turkey

Carnivorous Animals

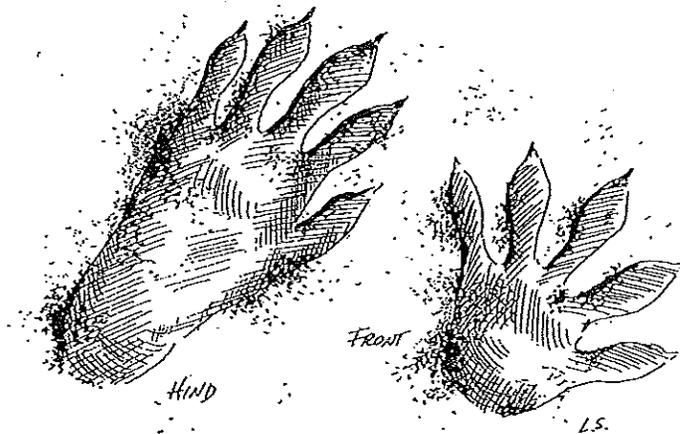


Figure 5-8. The hind foot of a raccoon is longer than the front. The tracks of a raccoon resemble that of the skunk. Illus. by Larry Smal.

nests and eat the eggs when opportunity strikes.

Raccoons are found within the boundaries of all the lower 48 states, and in the southern portions of many provinces in Canada. They adapt to a variety of habitats, from low-lying marshes to high-ridge woodlands, but raccoons usually prefer to be near water.

Known as the animal that wears the black mask, the raccoon varies in color from gray to reddish-brown. It also has several unmistakable black rings on the tail. Adult raccoons commonly weigh 20 pounds or more. These nocturnal tree dwellers prefer to lie amongst the limbs or den in hollow trees during the daylight hours, feeding and traveling primarily at night. They are not true hibernators, though they move less in the cold winter months than they do during the spring, summer and fall.

The raccoon's carnivorous diet consists of birds, crayfish, fish, frogs and many small rodents. For this reason it does much of its feeding around water. However it is also omnivorous, eating acorns, fruits and vegetation. I have watched them feed on acorns in

NUISANCE ANIMALS

towering oaks for hours at a time. Many have claimed that the masked animal washes its food before it eats it, but this is true only some of the time.

Though many animals cause damage to crops, the raccoon, a close relative to the bear, is often the blame. They love corn and will not hesitate to feed on this agricultural handout whenever possible. Unfortunately, for those who have gardens, the raccoon seems to prefer sweet corn over all other varieties. Their damage to a corn crop is often unmistakable. Usually, they will climb up the stalk, often breaking it in half. They also peel back the husks with their finely designed front feet.

You can easily identify tracks of the raccoon since they have five toes on each foot, and longer toes on the hind feet. The track of the front foot resembles a small hand print (Figure 5-8). They also have an unmistakable way of walking flatfooted. Raccoons will occasionally walk along logging roads and trails, defecating on small open surfaces or atop rocks.

Since the raccoon will eat almost anything, it will not hesitate to raid a garbage can. Many believe that metal garbage cans attract them because they are shiny. It is a fact that the curious raccoon is attracted to bright items. Their sense of smell is not superb but their eyes quickly recognize food sources. They can easily turn over unsecured garbage cans and remove the lids with their handlike feet. Some claim they can even remove the lids from jars. Once they have made a habit of feeding on garbage, poultry or in gardens near a home, they will likely set up residence close by. They may even enter an uncapped chimney or use a nearby outbuilding to stay put until dark.

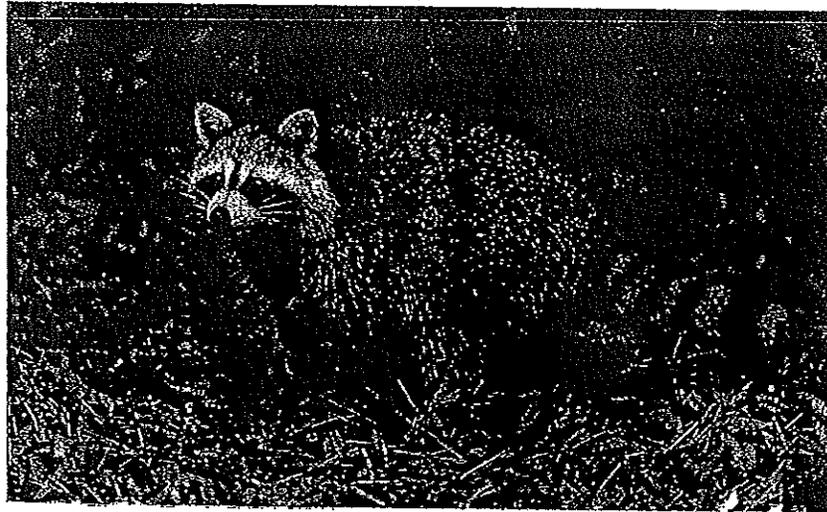
Jerry Joe Barnett, an Indiana trapper for more than 40 years, often works in controlling nuisance animals. He claims that he received far more reports of raccoons damaging property than preying upon poultry. He claims they often tore shingles off roofs or siding from dwellings in an attempt to get inside.

In some areas where raccoons are around people, they lose

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fear of them and become dangerous. ADC assistance was requested during 1994 at a park in San Luis Obispo County, California, after raccoons began harassing and biting park visitors. It seems the raccoons also damaged camping equipment while they searched for food. However, ADC officials resolved the problem after they placed cage traps in the area for several nights in a row to capture the hostile animals.

If you have ever visited Cades Cove in the Great Smoky Mountains National Park, you may have seen a raccoon or two along the roadway. Since visitors often feed the raccoons (park officials frown on this), they will not hesitate to approach humans. On one occasion while photographing deer, however, a raccoon came up and began begging for a handout. Once I did not respond to its request, it grabbed the cuff of my pants and snarled furiously. I finally shook the coon from my leg (before it bit me) and left the scene to report the aggressive critter to a park ranger.



Live traps made of heavy wire are often used to remove nuisance raccoons. Once trapped, you should transport the animal several miles from the location of capture.

NUISANCE ANIMALS

When raccoons feed on poultry and ducks, they often eat the breasts and leave the entrails nearby. You will sometimes find leftover portions near water though they often eat everything.

Since the raccoon is a furbearing animal, special hunting and trapping seasons have been set in most states/provinces. Raccoons often provide income for trappers and hunters. The prices of their hides have varied over the past couple of decades, from all-time highs to all-time lows. Hunters often use dogs to get raccoons. I might add, some take their hunting seriously, paying thousands of dollars for a qualified hound.

It is often more practical to keep a raccoon away than it is to remove it from a problem area. Electric fencing is particularly beneficial around open gardens. However, overhanging tree limbs will allow the culprit to bypass the hot wire and drop into the garden. Therefore, you should consider removing any overhanging limbs before placing an electric fence.

A hot wire may also keep a raccoon away from poultry. The best prevention is to put the wire at the top of the poultry fence. Then, as the raccoon climbs the field fence, it will come into contact with the hot wire.

Garbage cans should be staked or tied down with metal wire. For the lid of the can, I would suggest you use a wire or stretch cord, placing it over the top of the lid and fastening it to each handle.

If it becomes mandatory to remove a nuisance raccoon, a proper set trap will work almost immediately. Since the raccoon is a very curious animal, live traps (No. 3 or 3A) work well when baited with irresistible foods such as corn, fish, or sweets. However, you must use a sturdy trap. Raccoons are very strong and could tear up a trap made of light wire. Finally, secure the trap with rocks or brush to keep it from tipping.

Leg-hold and Conibear traps may also be effective but you must take into consideration that a pet could become the victim when used in residential areas. A Size 1 ½ leg hold or Size 220 Conibear trap will work effectively when baited with fish. The

trapper must use strong stakes, however. Place the trap at points of entry when the problem occurs near buildings.

If you have successfully live-trapped a raccoon, I would recommend you use extreme caution. They may not hesitate to use claws and teeth on a human if they feel it necessary. They could also carry parasites and diseases. Finally, when transporting a raccoon, you should take it a few miles from the trapped location. Otherwise, they could return and cause future problems.

WILDLIFE DETERRENTS

WILDLIFE REPELLENT RECIPE by Carol Martino

1 whole spanish onion
1 jalepeno pepper
1 tbs cayenne pepper

Chop up the onion and pepper. Mix all ingredients together and boil in 2 quarts of water for about 20 minutes. Let cool, and then strain water through a cheesecloth, into a container.

Using a garden sprayer, spray any area outside that wild animals or even neighborhood pets are being a nuisance.

This process may have to be carried out for a period of 2 weeks to assure success.

This mixture is non-toxic and safe, it will not harm the animal but will succeed in keeping mammals away.

This is supposed to work very well for many mammals:

THE MAGIC FORMULA by Jerry Baker

Simple and safe

8 oz of any liquid dish soap
8 oz of Castor Oil
1 gallon of water

Mix the Castor Oil and soap well. Be sure that it is mixed. Then add to one gallon of water and spray entire area:

Also available:

"Scarecrow" - a motion-activated water "sprinkler"

This shoots a 3 second blast of water when motion is sensed. It uses 2 cups of water each time and has a daylight sensor. It does cost somewhere around \$120 and is manufactured by Contech Electronics in British Columbia (800-767-8658. Local area stores that carry this product are:

- 1) Echter's Garden Center - Arvada (303)424-7979
- 2) Arapahoe Acres - 470 & Santa Fe (303)791-1660
- 3) McGuekin Hardware - Boulder (303)443-1822

This works especially well for squirrels, raccoons, etc.

RO-PEL®

ANIMAL, RODENT and BIRD REPELLENT



Animals, both wild and domestic, can and do cause untold browsing damage. In most cases, we do not want to harm the animals in any way (some of the most destructive ones are family pets). We simply want to curtail the damage they might cause, and in the case of wild animals, discourage them from returning.

Unlike most other animal repellents, RO-PEL is essentially non-toxic to plant and animal life. Yet, when applied correctly, RO-PEL can keep animals away for a year or longer. It is an ecologically sound and environmentally safe method for preventing foliage destruction and many other forms of property damage.

HOW DOES RO-PEL WORK?

Ropel works on an entirely new principle. The vilest, most bitter substance ever discovered, is combined into a special solvent system which allows it to penetrate into the bark of trees and the surface of many other objects, and to remain, despite rain, snow, dust, wind, dirt or other atmospheric conditions. Thus, when any attempts to bite, lick, nibble or chew are made, the animal gets a "bitter reminder" that this property is off limits.

Often the animal's sense of smell will be conditioned to avoid areas treated with RO-PEL. Yet, there is no offensive smell as with other animal repellents.

WHICH ANIMALS DOES RO-PEL REPEL?

RO-PEL is incredibly effective against most animals, large or small, which have gustatory and/or olfactory senses. Among those on whom it has already been tested are:

bears	elks	monkeys	seagulls
beaver	foxes	moose	sheep
cats	goats	opossum	skunks
cattle	gophers	porcupines	squirrels
coyotes	horses	rabbits	voles
crows	mice	raccoons	wolves
deer	moles	rats	woodpeckers
dogs			

WHAT CAN BE TREATED WITH RO-PEL?

RO-PEL is safe and effective, when used as instructed, on siding, fences, posts, telephone poles, unpainted furniture, trees, plants, bulbs, seedlings, saplings, seeds, seeded areas, even garbage bags and cans.

HOW IS RO-PEL APPLIED?

RO-PEL can be applied by brush or sprayer. It should be used full-strength and should never be mixed with other chemicals. Stainless steel or poly sprayers are recommended for industrial or professional use.

Annual reapplication is recommended, but is not always necessary. For deer and other browsing animals, the optimal time for application is just prior to the onset of the browsing season. Application on dry surfaces is preferable, but not essential. Additional application may be necessary on new growth of seedlings and saplings, or on non-porous surfaces.

WHAT PRECAUTIONS ARE NECESSARY?

Although RO-PEL is essentially non-toxic to plant and animal life, certain precautions are necessary. Painted surfaces, plastics and fabrics should be tested first, since some could be affected by the special solvents. While RO-PEL is non-phytotoxic, it should not be used on diseased plants or trees.

RO-PEL is not recommended for use on edible crops and plants, on the fruits or nuts of trees, or on sugar maple trees. (RO-PEL could possibly affect the taste of the product.) For experimentation in this area, application should be limited to the dormant period only. No warranties, express or implied, are made for this product if it is used on food-bearing plants or trees. The user assumes all such risks for improper usage.

AVOID TASTING! RO-PEL has a truly vile, awful, bitter, lingering taste.

KEEP OUT OF REACH OF CHILDREN!

RO-PEL is available in 1 quart (946 ml.) spray bottles, 1 gallon (3.78 lit.) bottles, 5 and 55 gallon drums.

For additional information and technical service contact:



BURLINGTON BIO-MEDICAL & SCIENTIFIC CORP.

91 CAROLYN BLVD., FARMINGDALE, N.Y. 11735, U.S.A. • TEL: 516-694-9000 • TLX: 6852289 or 14-4612 • CABLE: BURLING NEWYORK

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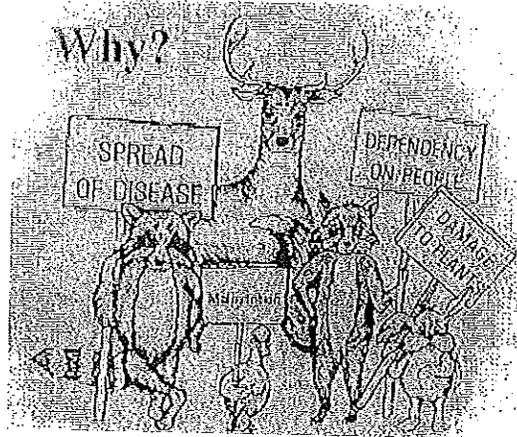
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Feeding Wildlife is Harmful

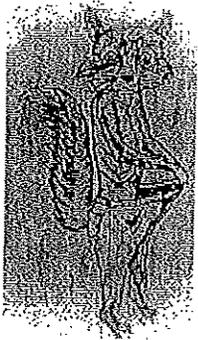


How Can Feeding Wildlife Be Harmful?

A wild animal's survival depends upon its ability to make use of natural foods. Unfortunately, many people feed wildlife.

Waterfowl, deer, raccoons, squirrels, foxes and other wildlife quickly learn that people who provide food are not threatening. Wild animals that are fed, lose their fear of people and develop unnatural behaviors and habits which result in conflicts with humans.

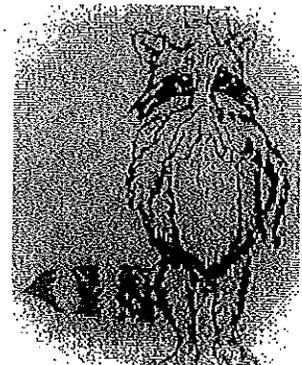
Malnutrition



Handouts of food, even those we consider to be healthy, rarely meet all the nutritional needs of wildlife. In fact, handouts may cause many animals to gather and remain in a small area. As a result, wildlife deplete the healthy natural foods in that area and must turn to less nutritious food to eat. By not feeding the wildlife, you help to protect the health of the animals as well as their food supply.

Disease

Crowding and competition for food, combined with the stresses of less nutritious food, can increase the susceptibility of individual animals to diseases and parasites. This is especially true with waterfowl, as many cases of botulism have been documented in New York.



Concentrating mammals, such as raccoons and foxes, by feeding can spread diseases such as distemper, mange, and rabies. These diseases result in slow,

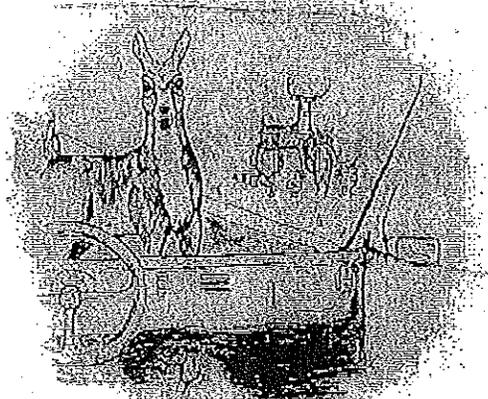
agonizing death for the infected animals. Many wildlife diseases can be transmitted to pets, and some, such as rabies and raccoon roundworms, to humans.

People who feed wildlife risk being bitten. Bites can cause substantial injury and trauma. There is the risk of a person becoming infected with rabies if bitten or scratched by a rabid animal. If left untreated, rabies is fatal.

Wildlife/Human Conflicts

Wildlife that have lost their natural fear of humans are more likely to cause nuisance problems. Feeding of wildlife attracts them to residential areas, exposing them to harassment or attacks by family pets. Deer can cause extensive damage to landscape plantings.

Concentration of animals caused by feeding can present a hazard to motorists. Animals fed from vehicles lose their natural fear of them and may even approach or chase cars when seeking food. Obviously such animals have a greater risk of being struck by a vehicle.



What you can do:

- Please do not feed wildlife in our parks or elsewhere.
 - Discourage others from feeding wildlife.
 - Do not touch young wild animals. An animal that appears orphaned most often is not; the mother is usually nearby.
 - Teach children not to feed, play with or pet wild animals.
 - Learn how natural wildlife food supplies can be improved by habitat management.
 - Learn about wildlife by visiting a library, nature center, museum, state wildlife management area or National Wildlife Refuge ... then teach others what you know.
-
-

Rabbits

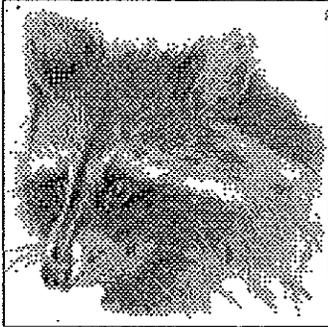
Rabbits can be kept out of the garden or away from ornamental plants and small trees by using repellants or by placing a 2-foot poultry fence around the area. It is important to bury the fence at least 6 inches beneath the surface of the ground. For information about taste repellants, check your local garden or farm center.

Raccoons

Raccoons are attracted to easy food sources, like garden produce, garbage, and pet food. To help prevent scavenging, use metal trash cans that are fastened to a pole or to another solid

object. A strap or latch that secures the lid of the garbage can is also helpful. To keep raccoons out of the garden, use two strands of electric livestock fence.

The strands should be placed 4 and 8 inches off the ground and surround the entire garden. Exercise caution when implementing this exclusionary method in urban areas. Raccoons will also readily inhabit attics, chimneys, and sheds. Use metal flashing and 1/2-inch-mesh hardware cloth to block entrances.



Raccoon

Snakes

The best way to keep snakes out of your house and yard is to seal cracks and openings around doors, windows, water pipes, attics, and foundations. Removing logs, woodpiles, and high grass and controlling insects and rodents are also helpful. Remove nonpoisonous snakes from inside buildings by placing piles of damp burlap bags in areas where snakes have been seen. After the snakes have curled up beneath the bags, remove the bags and snakes from the building. To remove dangerous snakes, call a professional pest control company.

Woodpeckers

These birds damage buildings by drilling holes into wooden siding, eaves, or trim boards, especially those made of cedar or redwood. If the pecking creates a suitable cavity, the bird may use it for nesting. Effective methods of excluding woodpeckers include placing lightweight mesh nylon or plastic netting on the wooden siding beneath the eaves, covering pecked areas with metal sheathing, and using visual repellants like "eye-spot" balloons.

Deer

Deer feed on row crops, vegetables, fruit trees, nursery stock, stacked hay, and ornamental plants and trees. Deer can be discouraged by removing supplemental food sources and by using scare devices and repellants. The only sure way to eliminate deer damage is to fence the deer out. A wire-mesh fence is effective if it is solidly constructed and at least 8 feet high. Electric fencing also helps reduce damage.

Coyotes and Foxes

These animals may carry rabies and sometimes prey on domestic pets, rabbits, ducks, geese, chickens, young pigs, and lambs. Coyotes also kill calves, goats, and deer. Net-wire and electric fencing will help exclude foxes and coyotes; however, because they are good climbers, a roof of net wire on livestock pens may also be necessary. For more information about fencing, contact your local county extension office.

The protection of livestock and poultry is most important during the spring denning period. Foxes and coyotes will often den close to farm buildings, under haystacks, or inside hog lots or small pastures used for lambing. Shed lambing and farrowing in protected enclosures can be useful in preventing predation on young livestock. Additionally, noise- and light-making devices, such as the Electronic Guard, may keep these predators away. Guarding dogs are also useful in preventing predation on sheep. Regrettably, dispersal methods are not effective in all situations, so other methods, including trapping or snaring, may have to be used.

Mountain Lions and Bears

As bear and lion habitat continue to decrease, interactions between these animals and humans continue to increase. Bears are noted for destroying cornfields and trees, scavenging in garbage cans, demolishing the interiors of cabins and campers, and killing livestock. Lions are serious predators of sheep, goats, domestic pets, large livestock, poultry, bighorn sheep, and deer. Typical bear and lion predation on sheep leaves 10 or more killed in a single attack, and both species are known to attack humans.

Prevention is the best method of controlling bear and lion damage. Heavy woven and electric fencing can effectively deter bears and lions from attacking livestock and damaging property. Loud music, barking dogs, exploder cannons, fireworks, gunfire, nightlights, scarecrows, and changes in the position of objects in the depredation area often provide temporary relief. The best way to protect pets is to keep them inside an enclosed kennel or shelter. Using guarding dogs, removing garbage and dead carcasses, and placing crops and beehives at considerable distances away from timber and brush may reduce damage by bears. Mountain lions also prefer to hunt where escape cover is close by; removal of brush and trees within a quarter of a mile of buildings and livestock may reduce lion predation.

Professional relocation of damaging mountain lions and bears is sometimes necessary. For more information about State laws and regulations concerning relocation or lethal control of mountain lions and bears, contact your State wildlife agency.

Additional Information

You may obtain more information about how to solve these and other wildlife problems from any State APHIS, WS office. For the address and telephone number in your area, call the WS Operational Support Staff at (301) 734-7921.

FACTSHEET

Wildlife Services

United States
Department of
Agriculture

Animal and
Plant Health
Inspection
Service

October 1997

Living With Wildlife



the backyard pool, that woodpecker off the siding, and that swooping bat out of the attic. Caution should always be taken to avoid overly aggressive animals.

Some wildlife are protected by Federal or State laws and regulations. For information about protected and endangered species and trapping and relocation regulations, contact your State wildlife agency.

Squirrels and Other Rodents

To keep these animals from becoming a permanent part of the family home and yard, screen louvers, vents, and fan openings; keep doors and windows in good repair; tighten eaves; replace rotten boards; cap the chimney; trim overhanging trees; remove bird feeders or use squirrel-proof feeders; and remove acorns and other nuts from the yard. Chipmunks can be deterred by removing denning habitat, which includes logs, rock walls, and stones.

Woodchucks

These animals, also known as groundhogs, sometimes burrow near buildings, browse in gardens, and damage fruit trees and ornamental shrubs. Fencing can help reduce woodchuck damage. The lower edge of the fence should be buried at least 10 inches in the ground to prevent burrowing. The fence should be 3 to 4 feet high, with a surrounding electric hot-shot wire placed 4 to 5 inches off the ground.

Opossums and Skunks

Opossums and skunks become a problem to homeowners by raiding garbage cans and bird feeders; eating pet foods; and living under porches, low decks, open sheds, and any other areas that provide shelter. Skunks also dig holes in lawns, golf courses, and gardens. Both animals sometimes kill poultry and eat eggs. To keep opossums and skunks from denning under buildings, seal off all foundation openings with wire mesh, sheet metal, or concrete. Chicken coops can be protected by sealing all ground-level openings into the buildings and by closing the doors at night. Foraging in garbage cans may be eliminated by providing tight-fitting lids and straps.

Bats

Bats prefer to avoid human contact; however, they are known to establish roosts in attics and abandoned buildings. Building and attic roosts can be eliminated by sealing entry and exit holes (after the bats have left) with such materials as 1/4-inch hardware cloth, caulking, or wire mesh. If a bat makes its way into the house, you can usually encourage it to leave after dark by turning on lights and opening windows and doors.

Tips for Keeping Wildlife at Bay

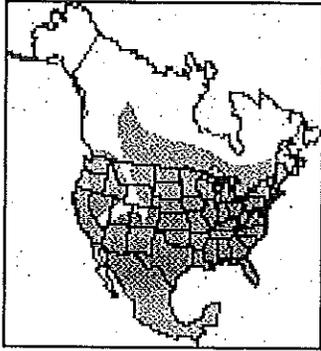
Wild animals contribute to our enjoyment of nature and outdoor recreation, but they can also damage property, agriculture, and natural resources and threaten human health and safety. The Wildlife Services (WS) program of the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (APHIS) assists in solving problems created by wildlife.

Equipped with the right information and tools, most homeowners can solve their own problems and learn to live with wildlife. For example, trimming trees and shrubbery are ways of changing a habitat to make it less attractive to unwanted flocks of birds, or even snakes.

The following information may assist in keeping that curious raccoon out of the garbage can, that persistent rabbit or deer out of the garden, that goose or duck out of

LIVING with WILDLIFE

Raccoons



North America Range

Raccoons are found throughout the United States. However, they are not found at the higher elevations of mountainous regions and in some areas of the arid Southwest. Raccoons are common in the wooded eastern part of the United States.

IDENTIFICATION

Raccoons are mammals with a distinctive black mask over the eyes and rings on their bushy tails. Raccoons weigh from 10 to 30 pounds and are two to three feet long. Raccoons are salt and pepper gray and black although some appear washed with a yellow color.

HABITAT

Raccoons are commonly found in areas with water and trees. Raccoons den in hollow trees, ground burrows, brush piles, muskrat houses, barns, abandoned buildings, dense clumps of cattails, haystacks or rock crevices. Raccoons also live successfully in urban areas.

HABITS

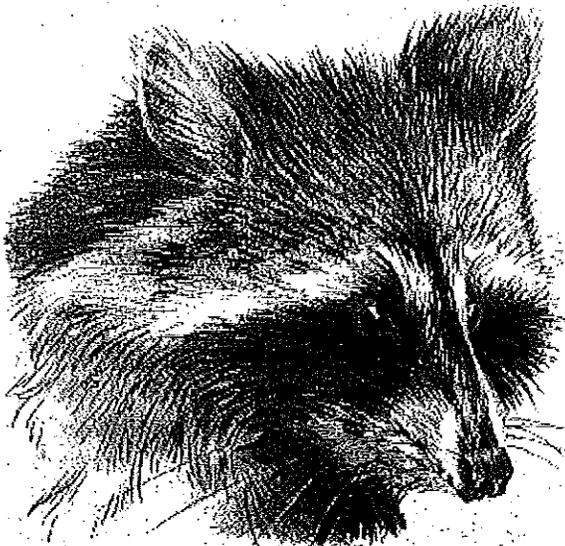
Raccoons are omnivores. This means they eat both plants and animals. Plant foods include all types of fruits, berries, nuts, acorns, corn and other types of grain. Animal foods are crayfish, clams, fish, frogs, snails, insects, turtles, turtle eggs, mice, rabbits, muskrats and the eggs and young of ground-nesting birds.

Raccoons normally breed in February or March. Gestation period is about 63 days. Most litters are born in April or May. Only one litter of young is raised each year. Average litter size is three to five kits. The young open their eyes at about three weeks and are weaned between two and four months. The female, called a sow, and her young will usually remain together for the first year and the young will often den for the winter with her. The following spring the yearlings go off on their own.

Raccoons are nocturnal.

This means they are most active at night. Adult males, called boars, travel an area of three to 20 square miles. A female raccoon will travel one to six square miles. Raccoons do not hibernate, but they do "hole-up" in dens and become inactive during severe winter weather.

Raccoon populations are made up mostly of young animals. In the fall, one-half to three-fourths of the raccoons are less than one year old. On very rare occasions a raccoon can live to be 12 years old in the wild.



Procyon lotor

Contrary to popular myth, raccoons do not always wash their food before eating, although they frequently play with their food in water.

Living in Harmony, Living in Conflict

Living in harmony . . .

Most of the time, raccoons and humans live in harmony.

- people enjoy watching raccoons in the wild
- raccoons provide millions of dollars to the economy by those hunting them
- raccoons have excellent fur, making it very valuable for clothing and it is a renewable resource
- raccoons provide a food resource in some parts of the U.S.

Living in conflict . . .

- raccoons sometimes carry rabies
- raccoons prey on poultry, quail, pheasants, turkeys, young and eggs of waterfowl
- raccoons cause damage to crops such as corn, melons, fruits, vegetables and grains
- raccoons are an urban pest when they get into trash, into people's homes and chimneys
- raccoons can spread parasites like roundworms from fecal droppings to pets and humans
- raccoons spread distemper to pets and other animals

Preventing Damage Done by Raccoons

The best way to prevent damage by raccoons is to keep them out of an area. Fence them out by using an electric fence turned on at night. Store garbage in cans with tight fitting lids. Cans should be secured to a rack to keep raccoons from tipping them over.

To keep raccoons out of chimneys, fasten a heavy screen or cap designed to keep birds and mammals out of the chimney.

It is difficult to scare raccoons away by modifying their environment or by using devices to scare raccoons. There are no repellents that work to persuade raccoons to stay away from an area. Because they have a fairly large territory, a neighborhood or community-wide effort may be needed to solve raccoon

problems. First step is to remove sources of food, water and shelter. Do not feed raccoons!

Raccoons are easy to catch in live traps, but it takes a sturdy trap to hold one. Studies show relocated raccoons tend to cause problems in new areas. Regulated trapping and hunting are the most effective control techniques in managing raccoons. However, shooting in most towns and cities is illegal.



Hind foot is 4 1/2 inches

Because they will eat just about anything, raccoons almost never starve.

Economics of Damage

Raccoons can be serious pests. They have been known to prey on pets and can damage crops. Raccoons may carry diseases such as canine distemper, trichinosis, rabies, leptospirosis, tularemia and Chagas' disease.

A big concern with raccoons is that they might carry and spread rabies. A new rabies vaccine for raccoons has been developed. Now just how do you go about vacci-

nating raccoons in the wild? Researchers have found that they can drop food with the vaccine in it from airplanes. The raccoons find the food and eat it and become vaccinated against rabies.

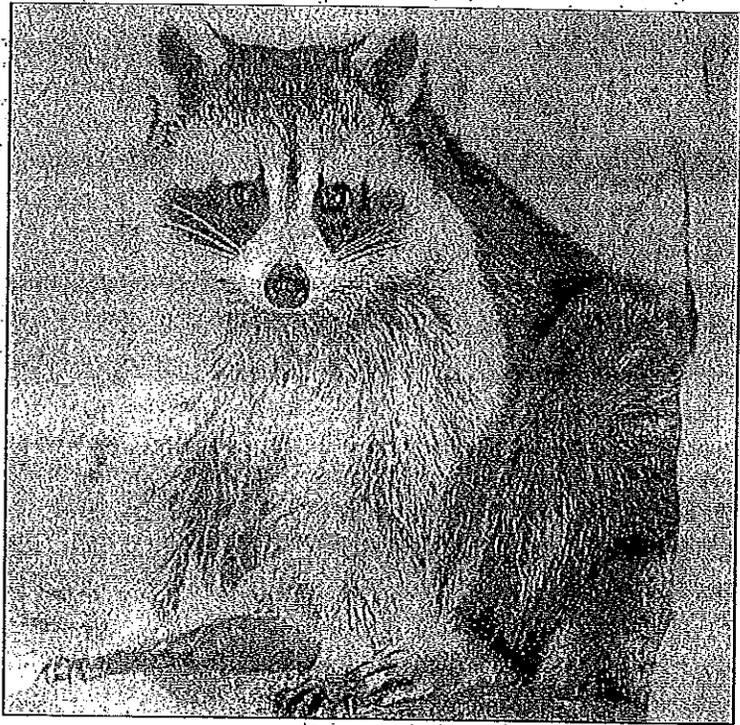
Unfortunately, raccoons will sometimes eat the eggs and young of endangered animals like the sea turtle.

Legends and Folklore

The name raccoon comes from the Algonquian Indian word arakun, meaning "scratches with his hand." The species name, *lotor*, is Latin for "washer" and refers to the raccoon's habit of washing food with its front paws.

In the United States, raccoons have been harvested for fur through regulated trapping. Raccoon fur harvesting generated \$400,000 in 1934 and \$5.1 million in 1980. The raccoon is the most economically important of all the furbearing animals harvested.

During the roaring 20s and the 30s, the "coon skin coat" was in style. In the 1950s when Davy Crockett and Daniel Boone were made popular through television and movies, the "coon skin cap" was very popular among young children.



Your turn . . .

Suffix "vore" means . . .

"Vore" comes from the suffix "vorous" which means eating. "Omni" means all. Raccoons are omnivores. This means they eat both plants and animals. List five other omnivores.

Use a dictionary and define carnivore.

List two carnivores:

Use a dictionary to define herbivore.

List two herbivores:

ACROSS: 3. renewable, 5. sow, 6. repellents, 8. kits, 10. furbearer, 11. omnivore
DOWN: 1. herbivore, 2. rabies, 3. raccoon, 4. carnivore, 7. litter, 9. urban

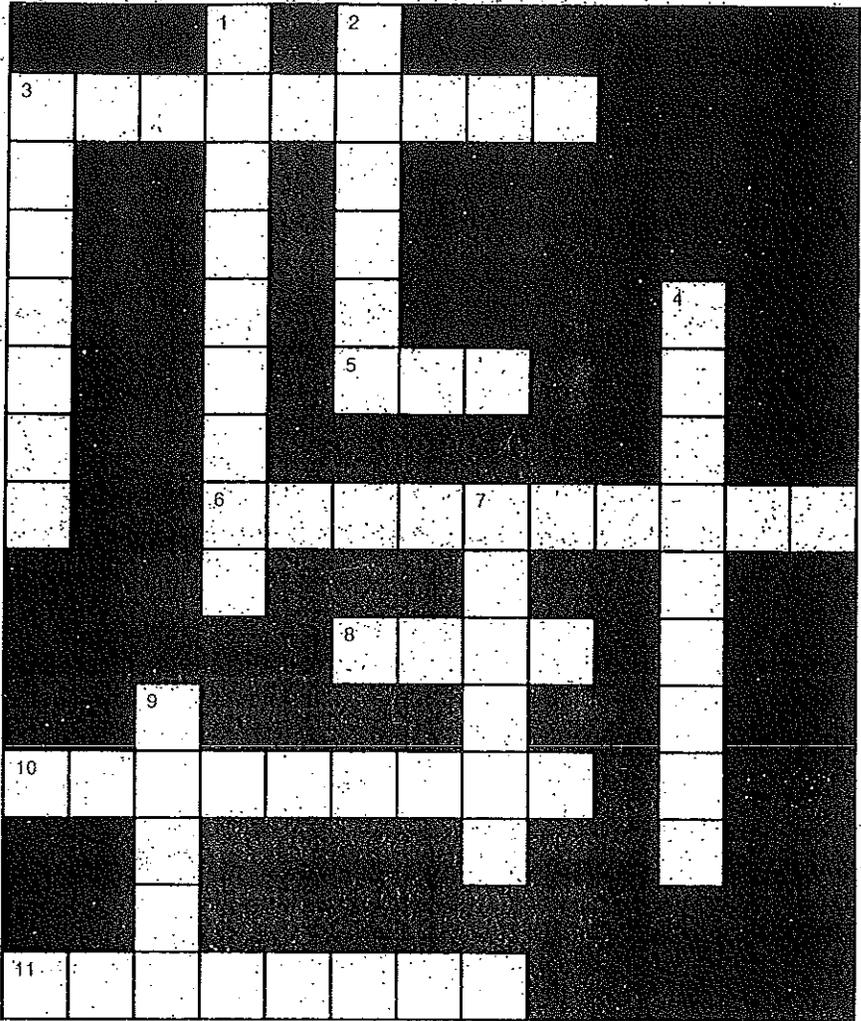
CROSSWORD REVIEW

ACROSS

3. resource that grows or is replaced
5. female raccoon
6. chemicals used to repel animals
8. young raccoons
10. animal that is important for its fur
11. animal that eats both plants and animals

DOWN

1. an animal that eats plants
2. disease raccoons often carry
3. *Procyon lotor*
4. an animal that eats other animals
7. group of young born to a raccoon
9. opposite of rural

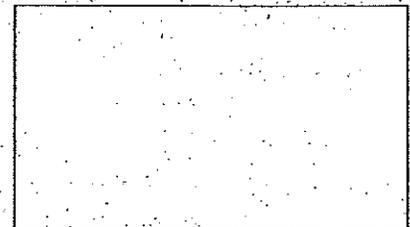


Additional Resources

Wildlife Activity Book and
1998 Wildlife Issue of the
Colorado Reader
Colorado Foundation for
Agriculture
P.O. Box 10
Livermore, CO 80536

Prevention and Control of
Wildlife Damage CD ROM
or Handbook
202 Natural Resource Hall
University of Nebraska
P.O. Box 83819
Lincoln, NE 68583

Jack H. Berryman Institute
for Wildlife Damage
Management
Utah State University
Logan, Utah 83431-5210



This activity sheet has been developed by USDA Wildlife Services. For more information about raccoons, contact your state's Wildlife Services office or USDA Wildlife Services at 361-7345-7921.



Nuisance Wildlife Laws in Colorado

Following are summaries of Colorado's most common regulations and statutes pertaining to nuisance wildlife questions. The laws and regulations in this handout are paraphrased for easier understanding and are intended only as a guide. Colorado's wildlife statutes and regulations can be viewed in their entirety at Colorado Parks and Wildlife (CPW) offices or online at <http://cpw.state.co.us/aboutus/Pages/RulesRegs.aspx>. Please keep in mind that these laws note what is restricted by state statutes and permitted by CPW regulations; however, local laws and ordinances may be more specific about what is allowed at a certain location. It is your responsibility to determine whether it is legal to use a particular method of take in your city or county. CPW does not require nor request the removal of wildlife deemed a nuisance; the determination that a species has become a nuisance and should be removed is the prerogative of the landowner. There are many non-lethal methods for discouraging the presence of wildlife. For information about co-existing with wildlife, please contact your local CPW office or visit our website at www.cpw.state.co.us.

1.) WHAT CAN I DO IF WILDLIFE IS CAUSING DAMAGE ON MY PROPERTY?

Statute 33-6-107(9) and Wildlife Commission Regulations (WCR) 306(A), WCR 1000(A)(5), WCR 313(C) & WCR 327
If wildlife is causing damage to crops, real or personal property, or livestock - a person (or any employee or agent of the landowner) may hunt, trap, or take the following wildlife on lands owned or leased by the person without securing a license to do so:

- Black-billed magpies, common crows, starlings, English or house sparrows, common pigeons, coyotes, bobcats, red foxes, raccoons, jackrabbits, badgers, marmots, prairie dogs, pocket gophers, Richardson's ground squirrels, rock squirrels, thirteen-lined ground squirrel, porcupines, crayfish, tiger salamanders, muskrats, beavers, exotic wildlife, and common snapping turtles.
- Additional species include: tree squirrels, cottontail rabbits, marmots, porcupines, bats, mice (except Preble's meadow jumping mouse), opossums, skunks, voles, rats, and ground squirrels.
- Any person may kill rattlesnakes when necessary to protect life or property.
- The pelts or hides of any mammal taken under these provisions may be transferred, possessed, traded, bartered, or sold by any person who holds an appropriate small game or furbearer license. (For information on the possession and/or disposal of pelts and hides of animals NOT listed above, including bear and lion, please contact CPW for permission.)

2.) WHAT METHODS CAN I USE TO TAKE WILDLIFE WHEN THEY ARE CAUSING DAMAGE ON MY PROPERTY?

Statute 33-6-203(1), WCR 303(A)(3), WCR 303(B), WCR 303 (E) & WCR 306

Trapping and or shooting are the most common methods.

- If using firearms, check with your local authorities on the laws that apply to discharging a firearm.
- If trapping, the ONLY types of traps that may be used are LIVE (cage or box traps). (See #5 for exceptions.)
- Small game and furbearers captured in live traps cannot be moved from the capture site and must be killed or released on site when the trap is checked. (See #3 and #4 following for exceptions.)

3.) WHICH WILDLIFE SPECIES CAN I RELOCATE WITHOUT A PERMIT?

WCR 303(A)(3)

Tree squirrels, cottontail rabbits and raccoons can be relocated without a permit, provided that:

- CPW has been notified in advance.
- The relocation site is appropriate habitat for the species.
- Permission has been obtained from the landowner or managing agency where the animal will be released.
- The relocation must occur within 10 miles of the capture site for squirrels and rabbits and within 2 miles for raccoons.

4.) WHAT IF I WANT TO RELOCATE AN ANIMAL OTHER THAN TREE SQUIRRELS, COTTONTAIL RABBITS OR RACCOONS? WCR 303(A)(3) & WCR 304(E)

If you want to relocate any other species, you must first obtain a Relocation Permit from CPW.

5.) WHEN CAN I USE BODY-GRIPPING/DEATH TRAPS?

Amend.14, Statute 33-6-203, Statute 33-6-204, Statute 33-6-207, Statute 33-6-208, WCR 303(A)(2) & WCR 303(E)(5)
In November 1996, Amendment 14 was passed by ballot initiative. This banned the use of traps such as snares, Conibears, leghold traps, etc. for the recreational take of wildlife.

- You can use body-gripping/ death traps for mice and rats without a permit (as listed in #1).
- Landowners, and others authorized by statute, may be eligible for a 30-day trapping permit where certain body-gripping/death traps can be used in order to protect commercial livestock and/or commercial crop production.
- Specifications on traps are found under WCR 303(E).

6.) WHAT HOURS CAN I TRAP AND WHEN MUST I INSPECT THE TRAPS?

WCR 302(B), Department of Agriculture (DOA) Statutes Title 35 and DOA Regulations

The following information below applies to anyone who is trapping (whether they are permitted to use body-gripping traps or live traps):

- Small game (except game birds), game reptiles and furbearers may be trapped day or night.
- All traps and snares **MUST** be visually checked **AT LEAST ONCE EVERY DAY**.
- Under 30 day exemption-regulations could vary. Persons can consult DOA statutes and regulations.

7.) CAN I KEEP ANY OF THE WILDLIFE THAT I CAPTURE?

WCR 009(A), WCR 020(B) & WCR 1000(A)(6)

Up to four individuals of each of the following species and/or subspecies of reptiles and amphibians may be taken annually and held in captivity, provided that no more than twelve in the aggregate may be possessed at any time:

- Woodhouse's toad, plains spadefoot, boreal chorus frog, painted turtle, ornate box turtle, common sagebrush lizard, ornate tree lizard, common side-blotched lizard, prairie lizard, plateau fence lizard, gophersnake/bullsnake, terrestrial gartersnake, plains gartersnake, common lesser earless lizard, tiger whiptail, racer and plains hog-nosed snake.
- Snapping turtles may also be taken.
- If these species have not been in contact with species from other geographic areas, they may be returned to the wild but shall not be returned in a distance over 10 miles from where they were captured.
- No other live wildlife can be taken from the wild and held in captivity unless you are authorized/licensed by CPW.

8.) CAN I EVER USE TOXICANTS/POISONS ON WILDLIFE?

Statute 33-6-130, Statute 33-6-209 & WCR 303(B)

Some toxicants are legal for Richardson's ground squirrel, rock squirrel, thirteen-lined ground squirrel, pocket gopher, marmots, black-tailed, white-tailed, and Gunnison prairie dogs when causing damage on private property. Most rats and mice also fall under this category. **Some poisons are available over the counter. You must follow label instructions. Poisons may only be used for species indicated on the box, and application directions must be followed in order for poison to be lawful. Regardless of whether a poison or toxicant is legal by statute, it is your responsibility to check with local authorities about restrictions on specific poisons and toxicants at your location.**

9.) CAN I SHOOT A BLACK BEAR OR MOUNTAIN LION IF IT IS ATTACKING MY DOG OR MY LIVESTOCK? Statute 33-3-106

- Black bears and mountain lions **CAN NOT** be destroyed when they are causing damage to **personal property**, including pets.
- Black bears and mountain lions **CAN be killed** when it is **NECESSARY** to prevent them from inflicting death, damage or injury to livestock, human life, real property, or a motor vehicle. Any wildlife killed shall remain the property of the state, and such killing shall be reported to the division within five days. "Real property" means land and generally whatever is erected or growing upon or affixed to land. (Note: "Personal Property" means everything that is subject to ownership, other than real estate. Personal property includes moveable and tangible things such as pets, furniture and merchandise.)

10.) DOES CPW MANAGE DOMESTIC "WILDLIFE?"

Statute 33-1-102 (51), WCR 1103(A) & WCR 1103(B)

CPW does not manage domestic species of ducks, geese, rats, mice, European ferrets, pigeons, guinea fowl or peafowl. Check with your county or city's municipal code for restrictions on domestic animals.

For more information on Colorado's wildlife, contact the Denver CPW Headquarters at (303) 297-1192 or visit our website at www.cpw.state.co.us.