Cottontail rabbits, *Sylvilagus floridanus*, are one of the most commonly observed animals in urban and suburban areas, but they can be found throughout Kansas. Their light-brown upper body contrasts with their white fur belly. Long ears and a stubby powder-puff tail are their distinguishing characteristics. Adult cottontail rabbits are 15 to 19 inches long and weigh 2 to 4 pounds.

Cottontail rabbits produce 3 to 4 litters of young a year, beginning in late winter and continuing into early fall. Females build a nest approximately the size of a softball, line it with fur from their bellies, and nurse their young for 2 to 3 weeks before they leave the nest.

Leash laws restricting movements of dogs and cats and laws prohibiting the use of firearms protect cottontail rabbits.

Cottontails prefer brushy cover interspersed with open areas. Abundant growth during the spring and summer provides the rabbits with all the food and cover they need. In the winter, when food is limited, rabbits eat twigs and gnaw the bark of woody plants. This is why young trees and seedlings need to be protected from rabbits during the winter months. Landscaped yards provide excellent rabbit habitats, accounting for the prevalence of cottontails in most suburban and urban areas.

Cottontail rabbits spend their lives in small areas of 10 acres or less. In good habitats where cottontail rabbits are firmly established, efforts to permanently reduce the rabbit population generally are not successful. Once a number of rabbits are removed, cottontails from adjacent areas move in.

### Managing Urban Rabbits

Gnawing marks and twigs cut at an angle, clippings on the nearby ground and round, pea-sized droppings are signs of cottontail rabbits. During snow cover, cottontail rabbit tracks are easily identified (Figure 1, page 2).

### Exclusion

Rabbitproof fences are a practical and inexpensive way to protect valuable plants. Rabbits can be excluded from small areas of vegetable and flower gardens, nurseries and ornamental plants by encircling these areas with 1-inch mesh galvanized wire 18 to 24 inches high (Figure 2, page 2). Permanent posts are not required, but the bottom edge of the wire must be staked to the ground or buried several inches deep to prevent rabbits from burrowing under the fence. Reusable fence panels may easily be constructed to protect a garden. These 18- to 24-inch high panels allow gardeners easy access, yet exclude foraging rabbits. Panel frames can be constructed with 1- by 2-inch or 2- by 2-inch lumber. A lightweight 1-inch mesh galvanized wire, such as poultry netting (18 to 24 inches high), is fastened to one side of the frame.

Panels can be made in various lengths to match the size of the garden or storage facility. Lightweight posts, such as electric fence posts, are sufficient for support. One post should be placed in each corner and at each junction of the panels. They can be fastened to the posts with a light malleable wire. If protected with a good coat of paint, panels should last for several years.

Small trees or seedlings can be protected with cylinder guards made from small mesh hardware wire. These rabbit guards should be 18 to 24 inches high or higher depending on the average snowfall. Cylinders should be large enough around to prevent rabbits from reaching through and damaging trees and should be staked for support.

Vexar is the trade name for a commercially available seedling protector. These protectors are tubes made of polypropylene plastic netting and are easily installed at planting time. Avoid installing them during freezing weather because Vexar becomes brittle and is easily broken.
Various paper and plastic wraps—including tin foil—can be placed directly around the trunks of small trees to prevent cottontail rabbit damage.

Laws and Regulations

Cottontail rabbits are classified as small game in Kansas, but currently they may be taken throughout the year with proper permits and within bag limits. KSA 32-1002, “does not prevent owners or legal occupants of land from killing any animals when found in or near buildings on their premises, or when found destroying property, subject to the following: (A) the provisions of all federal laws and regulations governing protected species and provisions of the Kansas nongame and endangered species conservation act are met; (B) it is unlawful to use or possess with intent to use, an animal so killed unless authorized by rules and regulations of the secretary; and (C) such owners or legal occupants shall make reasonable efforts to alleviate their problems with any such animals before killing them.”

Trapping

Along with exclusion, using wooden-cage traps is probably the most practical means of controlling problem rabbits in urban areas. Live trapping is less effective during the summer months because abundant vegetation makes it more difficult to lure them. During the summer, exclusion is more feasible.

If live traps are used, place them in an area with a lot of rabbit activity, evidenced by tracks and gnawing on woody plants. Use live traps that measure 6 by 6 by 24 inches. Metal traps of this size may be purchased from various sources, such as farm and garden and hardware stores.

A cage-live trap can also be constructed of wood using a few simple hand tools. The design and dimensions for building a wooden trap are included on the opposite page.

To catch cottontails, the cage trap must be placed in or along the trails made by rabbits using these areas. Opinions vary as to the importance of using baits, but some prefer to use them. Always place the bait so the rabbit can see it, with some bait at the outside entrance and the rest inside, beyond the trigger at the back.

These traps seem to catch more rabbits once the first cottontail is captured. When the first one is in the trap, leave it long enough to allow it to leave scent, but not long enough to stress the animal. Check traps daily.

Lettuce, apples, carrots and corn are all good bait.

Repellents

Rabbit repellents are often unsatisfactory for protecting plants from rabbits. The label restrictions on most rabbit repellents limit their use predominately to woody plants and to the winter months when rabbits are
Building a rabbit live trap

Materials list:
All box parts can be built from a single 1" x 8" board 10 ft. long (see diagram).
Lever—¾" x ¾" x 18½"
Pivot—¾" x ¾" x 7½"
Guides—¾" x ¾" x height of side (make 4)
Trigger—⅜" or ½" dowel 11 inches long (see trigger detail)
most likely to cause damage. Snow and rain decrease their effectiveness, so they must be reapplied as necessary.

Repellents must be used according to label instructions. Carefully follow directions on dilution, rates of application, and number of repeat treatments permitted.

In the typical urban situation where problems with cottontail rabbits occur, generally it is garden crops that are damaged. Normally, repellents are not designed or recommended for use on plants grown for human consumption.

Repellents can be classified as area (odor) or contact repellents. Area repellents, which include bloodmeal, ammonium soaps of higher fatty acids (Hinder), bone tar oil (Magic Circle Rabbit Repellent), and other similar repellents, are used during the growing season. Ammonium soaps of higher fatty acids are applied more frequently, especially after rains. Contact repellents applied during the growing season must be reapplied as new growth emerges.

Apply contact repellents such as Thiram, Ropel and Millers Hot Sauce directly to the plants because rabbits are repelled by the taste.

Thiram, one of the safest and most effective contact repellents, generally is used during the dormant season. Thiram is water soluble and a sticker must be added. (Stickers are listed on the Thiram label). Normally, one application of Thiram with a sticker will last the entire dormant season. Repellents can be brushed, sprayed or dipped onto the plants and should be applied 18 to 24 inches above the expected snow depth. Follow label directions closely when handling, applying and storing repellents.

Other Methods
Frightening devices, including electromagnetic and ultrasonic units, have not been proven effective in controlling cottontail rabbit damage. There are no poisons or fumigants for rabbits registered for use in Kansas.

For further information write to Wildlife Damage Control, 131 Call Hall, Kansas State University, Manhattan, Kansas, 66506-1600, 785-532-5734.

Figure of cottontail rabbit on page 1 and paw prints on page 2 reprinted from The Wild Mammals of Missouri by Charles W. and Elizabeth R. Schwartz, by permission of the University of Missouri Press. Copyright 1981 by the Curators of the University of Missouri.

Charles Lee
Wildlife Specialist

Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned.

Publications from Kansas State University are available on the World Wide Web at: http://www.oznet.ksu.edu

Contents of this publication may be freely reproduced for educational purposes. All other rights reserved. In each case, credit Charles Lee, Cottontail Rabbits, Urban Wildlife Damage Control, Kansas State University, September 1992.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service
L-858 September 1992

It is the policy of Kansas State University Agricultural Experiment Station and Cooperative Extension Service that all persons shall have equal opportunity and access to its educational programs, services, activities, and materials without regard to race, color, religion, national origin, sex, age or disability. Kansas State University is an equal opportunity organization. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and United States Department of Agriculture Cooperating, Marc A. Johnson, Director.