

AG News Today



University of Kentucky
College of Agriculture,
Food and Environment
Cooperative Extension Service

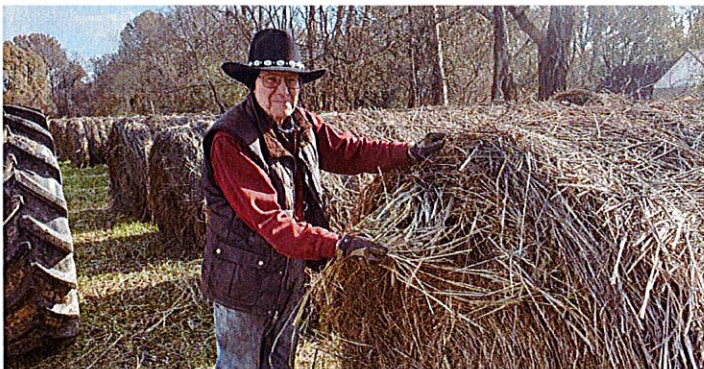
AGRICULTURE & NATURAL RESOURCES

Newsletter August 2022

Happy August! Hope everyone is staying cool on the farm! make sure to give your livestock extra water during this hot streak we are experiencing. Be sure to check out the attached flyer about our hay sampling contest. There are two categories to enter: Lugume hay and Mixed grasses. All samples brought in are analyzed free compliments of Livingston County Extension District Board.

As always Livingston County Extension Offers up to Twenty-Five free soil samples for field and garden per Livingston County producers. If you have any questions about sampling please stop by or give us a call at 1-270-928-2168 Mon-Fri 8:00am-4:30pm.

Livingston County CEA for ANR



Cooperative Extension Service

Livingston County

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Heat Stress In Cattle

Keeping cattle cool and comfortable is important for maintaining weight gain, milk production and reproductive performance. The temperatures that cattle prefer, 40 and 65oF, are cooler than what humans prefer, which means cattle display signs of heat stress even in what we would call "cool" temperatures. Signs of severe heat stress can range from slobbering, high respiratory rate (panting), open mouth breathing, lack of coordination, and trembling. Dairy cows can exhibit decreases in milk production due to heat stress at temperatures as low as 72o F and 45% humidity while beef cattle can begin to show signs of heat stress at 77o F. In Kentucky, beef cattle can display signs of heat stress in early spring while dairy cows may show signs much earlier. Cattle need a period of time to acclimate to the ambient temperature.

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LEXINGTON, KY 40546



Disabilities
accommodated
with prior notification.

Heat stress has many negative effects on cattle which result in significantly decreased animal performance. Heat stress affects the reproductive performance of females and males. It takes six weeks after removing the effects of excessive heat for the animal to recover reproductively. Cows often show decreased conception rates, decreased duration and intensity of estrus, decreased calf birth weight, and increased early embryo mortality when experiencing heat stress. Milk production and weight gains are also considerably decreased. Heat stressed cattle spend less time grazing resulting in less feed consumed which partially explains the observed reduction in performance. Any and all operations can be negatively impacted by heat stress. It is important to look ahead in early spring and prepare to reduce heat stress for the grazing season.



Cattle should not be worked during times of extreme heat, and during the summer months they should only be worked during early morning while it is cooler.

Even when temperatures cool off in the evening, it is not a good idea to work cattle because their core body temperature peaks two hours after the high for the day and it takes cattle at least six hours to dissipate the heat load gained. For instance, if the peak ambient temperature is reached at 4:00 pm, cattle will not have dissipated their heat load until midnight or later.

Cattle worked in the early evening will have a greater chance to overheat. Cattle grazing endophyte-infected tall fescue can experience more intense heat stress than cattle grazing other forages. Blood flow to peripheral tissues or skin is reduced which diminishes the animal's ability to dissipate body heat. A rough hair coat and failure to shed winter coats are common symptoms of fescue toxicity. Body temperature and subsequently respiration rates are increased, increasing maintenance energy needs. Taking steps to reduce fescue toxicity, such as removing livestock from endophyte-infected fescue fields during periods of extreme heat, can also help reduce the severity of heat stress in the herd.

Dairy producers often have fans in their barns and holding pens that circulate air and help keep cattle cooler. These fans can be put on a thermostatic switch where they are activated at a certain temperature, and several producers have already seen those fans come on this year.

These fans accompanied with sprinkler systems are effective ways in helping keep cattle comfortable while being confined in a barn. These sprinkler systems are designed to wet the cattle's hair coat completely within 2 minutes and remain off for the remaining 12 to 15 minutes of the sprinkler cycle and fans run continuously to help evaporate the water from the cow's hair coat. A "mist"-type system is not recommended in Kentucky because with our humidity the mist creates a steam bath effect which increases heat stress.



Allowing cattle access to shade, and cool water at all times is vital to reduce heat stress. Trees are a valuable source of shade that is inexpensive to producers. Cattle need a minimum of 20 to 40 square feet of shade per animal to be comfortable. The height of artificial shade structures should be at least eight feet tall to allow sufficient air movement

under the shade. Another option is to turn cattle out to pastures without shade at night, and allow access to pasture fields with shade during the day. Reducing heat stress in the herd will increase animal performance and overall profitability. For more information on fan and sprinkler systems see

<http://www2.ca.uky.edu/agc/pubs/aen/aen75/aen75.pdf>

Summer Reminders

The hot summer weather is now in full swing. Certain precautions need to be taken to avoid problems in grazing systems during these hot months. At this time, cool-season species begin to decrease in production and animals begin suffering from heat stress. Keep these key management practices in mind to reduce economic loss and other negative effects during this time.

- **Do not graze forages too closely**
- **If grazing warm-season annuals, allow for adequate establishment before grazing**
- **Clip pastures for weeds and seed-heads if needed**
- **Provide animals with shade and cool, clean water to reduce heat stress and maintain animal gain**
- **Limit access to ponds and streams to reduce negative environmental impacts and health effects on the cattle themselves**
- **Reduce risk of pinkeye by knowing and managing risk factors**
- **Provide animals with easy access to complete mineral feeders at all times**

SMALL WOODS, BIG OPPORTUNITIES SERIES

This series serves as an introduction to issues and practices common to small family forest owners.

Get More Animals to Call Your Woodland Home

Christopher Reeves, Forestry

Woodlands may already be home to birds, bats, snakes, salamanders, turkeys, white-tailed deer, and many other types of wildlife. But how can woodlands be improved



Copperheads eat a wide variety of animals including mice, birds, small reptiles and amphibians.

to make them more attractive to wildlife? Like most things in life, a plan is paramount. Do woodland owners want to attract more game species such as deer and turkey or more songbirds for bird watching? Narrowing down objectives can help determine the management activities that need to be implemented to meet goals.

In general, all wildlife need three basic things: food, cover, and water. It's just that each species needs different types of food, cover, and water. That's where contacting a natural resources professional such as a Private Lands Biologist with the Kentucky Department of Fish and Wildlife Resources or a Service Forester with the Kentucky Division of Forestry can help. These individuals can provide guidance on how to attract the kinds of wildlife desired in a woodland.

Food

Woodlands provide various types of food for animals. Berries and fruits (referred to as 'soft' mast) and nuts and acorns ('hard' mast) are produced by numerous shrub and tree species. Thus, having a wide variety of these food producing plants in the canopy and understory of woodlands can attract a wide range of wildlife. Proper timber management and wildlife management usually go hand in hand. Consider thinning young stands with an emphasis on enhancing the dominance of a variety

of mast-producing species in the main canopy. Thinning also opens the canopy allowing light to reach the forest floor. This light will allow for the development of more abundant cover and food in the understory.

Although larger trees typically produce more mast than smaller ones, size alone is not a good indicator of acorn or nut production. Individual trees success at producing large mast crops for several years is the best indicator of future success. Reduce competition around the crowns of these high mast-producing trees to ensure their survival and enhance their mast-production capabilities (see Making Your Favorite Trees Bigger and Better factsheet [FORFS17-06]).

Cover
'Cover' refers to any type of habitat that an animal considers their temporary or permanent home. Salamanders need streams, golden-winged warblers need open shrubby areas, cerulean warblers need older forests, frogs need ponds, and white-tailed deer can thrive in varying types of habitats. To attract a wide va-

Cover

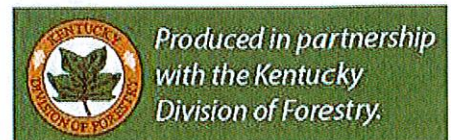
'Cover' refers to any type of habitat that an animal considers their temporary or permanent home. Salamanders



Certain animals will prefer pine stands (R) over hardwood stands (L) and vice versa.

Christopher Reeves, UK Forestry Extension

ders need streams, golden-winged warblers need open shrubby areas, cerulean warblers need older forests, frogs need ponds, and white-tailed deer can thrive in varying types of habitats. To attract a wide va-



riety of animals to a woodlands, a wide variety of cover is required. If a specific animal is desired, increase that species' specific habitat.

Wildlife's specific habitat needs may depend on the age of the woodlands. Young woodlands are covered in thousands of tree seedlings, bushes, and vines. As woodlands age they provide different types of habitat structures that are desirable for wildlife. Golden-winged warblers nest



Golden-winged warblers need shrubby thickets for breeding but mature forests to raise their young.

and lay eggs in densely packed young stands of tree seedlings and brush. After the young can fly, they move to mature forests. Distur-

bances can change the age or successional stage of the woodlands. Natural disturbances such as ice storms, fires, major wind events, or tornadoes may reset the age of the woodlands and attract wildlife that was not present before. Timber harvests and thinnings may be implemented to artificially create disturbance to attract a woodland owner's desirable species.

Dead trees (snags) serve as significant sources of cover and food for wildlife. Woodpeckers and bats use cavities and bark or dead trees to shelter themselves and their young. Dead trees attract large amounts of insects, feeding on the decaying wood, which attracts birds and other animals to feed on the insects. If nature is not creating enough snags, consider creating some through girdling or herbicide application. But follow proper safety protocols (using chemicals or chainsaws), and don't create a hazard tree that could harm life or property.

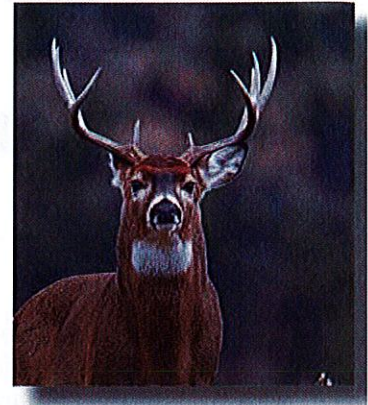
Water

Whether it is vital for survival (fish) or necessary for drinking (deer), water is an important factor when at-

tracting wildlife. Constructing a large pond or lake could attract a huge amount of wildlife if water sources are not common in the area. But significant water features are expensive to construct and may fall under government regulations particularly where wetlands are concerned. However, constructing a small, shallow pond, one that only holds water in spring, can be valuable breeding habitat for numerous amphibians. Such ephemeral pools can be constructed with small equipment of even by hand. Shallow water impoundments can also be constructed and can provide valuable habitat for waterfowl, wading birds, and furbearers.

Woodland owners should be concerned about the protection of water resources during forest management activities. Leaving strips of undisturbed woodlands next to streams and lakes is advised to prevent sediment from reaching water bodies and potentially harming aquatic wildlife. Road and trail construction, ATV and horseback riding, and any chemical applications should take place a safe distance away from water.

Woodlands are already a great place for wildlife to live. Small woodland owners should review what habitats are present in their woodlands and compare them to their neighbors. By focusing on improving access to food, cover, or water, landowner's can attract even more of their favorite birds, frogs, bats, deer, or any other animals.



White-tail deer and all wildlife species need access to water.



Frogs and other amphibians will be attracted to woodland waterbodies.

For More Information

Kentucky Department of Fish and Wildlife:
fw.ky.gov

Kentucky Division of Forestry: forestry.ky.gov

References

Improving Woodland Wildlife Habitat: Kentucky Woodlands Magazine 2(3):6-9

Attract Wildlife: Backyard Woods 6:1-4



Managing Mole Problems in Kentucky

Thomas G. Barnes, Extension Wildlife Biologist

Moles are remarkable animals known for their specialized abilities for life underground. They are seldom seen by humans and are often mistaken for pocket gophers, mice, or shrews. In fact, the mole is not closely related to any small mammal except the shrew, both belonging to the mammalian order *Insectivora*. Moles often come into conflict with homeowners when they burrow in yards.

Identification

Moles are not rodents and do not have characteristic rodent features such as large, sharp front teeth. Rather, they have sharp, pointed teeth (like a cat) used for catching and eating grubs and earthworms. The mole's most remarkable features are its adaptations for life underground. It has greatly enlarged paddle-like front feet and enlarged toenails uniquely adapted for digging. Mole fur is short, soft, and velvety, and when brushed, offers no resistance in either direction. These two adaptations allow moles to literally swim forward and backward through the soil. Other adaptations for this life include a cylindrical body, a long, tapered snout, and eyes and ears so tiny they almost appear to be missing. The hind legs are very small, enabling the mole to turn with ease in a narrow passage. Fully grown moles measure 4 to 7½ inches long complete with a very short tail. Fur color varies from black to brownish to grayish with silver highlights.

Mole Facts and Biology

The eastern mole (*Scalopus aquaticus*) is the most common and abundant mole in Kentucky and can be found in a variety of habitats dominated by loose, well-drained soil. Moles are found in suburban lawns, cemeteries, golf courses, pastures, meadows, woodlands, sandy soils near streams, and light, loamy soils in the Bluegrass region. Since they are adapted for life underground, they construct extensive underground tunnels, using two types: shallow surface tunnels in the spring, summer, and fall and deep permanent tunnels used year-round as the main avenues of travel. Nest cavities and home areas, 6 inches in diameter and lined with vegetation, can be found 12 to 18 inches beneath the soil surface connecting the deep tunnels. Moles are antisocial, solitary animals; they live alone except to breed. Males and females come together only for a brief encounter during February to mate. In



April, after a 45-day gestation period, two to five large, hairless, helpless young are born in the underground nest chamber. They are about half grown at five weeks and leave the next week to fend for themselves. They become sexually mature in one year.

Eastern moles are active any time of the day but are most active from 4 to 7 a.m. and 6 to 9 p.m. all year. Moles must be very active to meet high energy requirements. In fact, they can burrow as fast as 1 foot per minute. High-energy mole food comes as grubs, earthworms, beetles and beetle larvae, insects and insect larvae, snails, and spiders. Moles eat small amounts of plant parts occasionally. Their appetite is almost insatiable, and captive moles eat constantly as long as suitable food is put in the cage. If captive moles do not get suitable nourishment, they die within several hours. Thus, one mole can be responsible for considerable damage to a lawn or garden.

A mole typically travels 1/5 acre. No more than three to five moles live on each acre; two to three moles is a more common number. Thus, one mole will usually use more than one person's yard. For effective control, several neighbors may need to cooperate.

Moles live three to four years in the wild. Predators such as fox, skunk, owls, and even dogs and cats kill and eat moles. One method of control may be to get a good dog.

Burrowing and Tunnels

As mentioned previously, moles create shallow and deep tunnels. It is the only animal that creates a surface tunnel. These tunnels are usually temporary feeding burrows. Some may be used as travel lanes, while others may be travelled infrequently or abandoned immediately after being dug. Surface tunnels are most abundant after a warm rain or during the spring and fall when moles are actively searching for insects or earthworms. Underground tunnels are

often deep, and the only evidence that moles exist may be mounds of soil (molehills) pushed up to the surface. They are used as highways leading from cavities to feeding areas and are used most during hot, dry, or very cold weather when earthworms and insects move deeper into the soil.

Controlling Mole Damage

The first step in controlling moles is to actually determine if a mole is the culprit. Because moles are insectivores, they do not routinely eat garden seeds and bulbs, although they are often blamed. The real culprits are probably voles, white-footed mice, or house mice. If your garden has runways in it, the moles are looking for insects and earthworms.

Moles play a beneficial role in the management of soil and in the control of undesirable grubs and insects. By tunneling and shifting soil particles, moles permit better aeration of soil, aid in drying out sod, and allow humus (organic matter) to travel deeper into the soil. This tunneling also allows subsoil material to be moved closer to the surface where nutrients may be more available to plant roots.

Perhaps the mole's greatest crime is the nuisance it creates in lawns and gardens. If you have this problem, take control measures.

Trapping

Because of the mole's unique biological attributes, the most effective way to control moles is trapping. As mentioned previously, moles are solitary and have a high energy requirement that dictates a large feeding territory. Thus, mole densities are not as great as you might imagine. A single lawn may have only one or two moles, which means the offending animals can be removed and the problem solved. In addition, mole reproduction is so low that areas are not repopulated quickly.

The habit of moles to quickly open and repair damaged runways provides another advantage in trapping. A mole becomes suspicious when it encounters anything unusual in its burrow such as a steel leg-hold trap, but it is not suspicious of soil blocking the runway. When it encounters a blockage, the mole immediately pushes its way into the blocked area, reopens it, and continues on its way. Specially designed mole traps take advantage of this habit. When preparing to trap moles, be aware that moles are sensitive to anything unnatural in their environment. Be careful not to tear up large amounts of soil or many sections of burrows when setting a trap. Also be aware that a poorly set or incorrectly placed trap is an immediate danger signal to the mole and will cause the mole to detour. Trapping moles takes patience and persistence. If you have an ongoing problem with moles, you may need to set traps during most of the summer.

Types of Mole Traps

Three types of mole traps are currently available and all work equally well if used properly. The names of these traps are harpoon trap, scissor-jaw trap, and choker-loop trap. The harpoon trap has sharp spikes that spear the mole as it passes. The scissor-jaw trap kills by grabbing the animal. These traps are shown in Figure 1. Finally, the choker-loop trap has a loop that tightens around the mole's body. You can buy traps at local hardware, agriculture supply, feed and seed stores, or from these manufacturers:

Harpoon and Scissor-Jaw Trap
Woodstream Corporation
69 N. Locust St.
Lititz, PA 17543
(717) 626-2125

Choker Loop Type Trap
Nash Mole Trap Company
5716 East "S" Avenue
Vicksburg, MS 39097-0990
(616) 322-2980

When and Where to Trap

Trap site selection and timing are critically important if trapping is to be successful. Because of the difficulty in placing a trap in a deep burrow, most trapping is done on surface burrows. Remember surface burrows are used most actively during the spring and fall and immediately after a warm rain. Trapping during these periods increases the likelihood of catching the animal. To be successful, you must find an active burrow. Active burrows are relatively straight runways that may connect two systems of foraging activity. A burrow system that ends abruptly has probably been abandoned, and a burrow system that is highly branched and turning back on itself, is probably a foraging burrow and may also be abandoned. In addition, burrows that have numerous mouse holes or breaks are probably not being used.

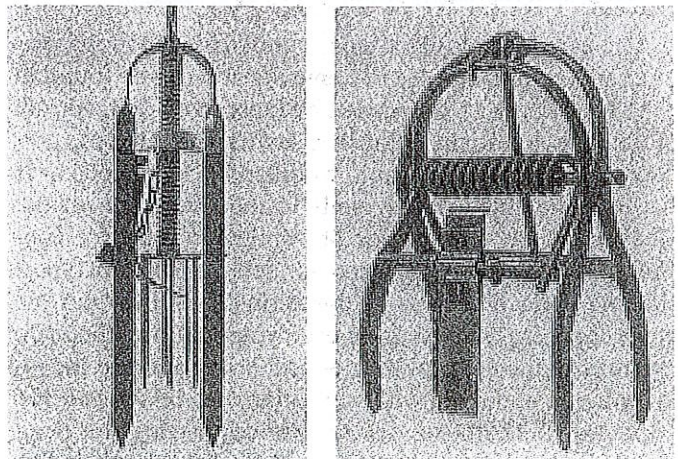


Figure 1. Harpoon trap, left, and scissor-jaw trap.

To find a frequently used burrow, tramp down with your foot on each runway (see Figure 2). Within 12 to 24 hours active runways will be repaired. Then, you can put a trap in this location. If the trap has not captured a mole in three days: (1) the trap was placed in the wrong location, (2) the runway was disturbed too much, (3) the trap was improperly set, and the mole detected it, (4) the mole changed its habits and was not actively using the burrow, or (5) you captured all the moles in the general area.



Figure 2. To determine which runways are active, flatten a small section of the runway with your foot and check the next morning.

Traps are generally more effective if set in the late afternoon or early evening (4 to 6 p.m.) coinciding with the activity period of the mole. Be sure to check the spring mechanism several times to ensure the trap is working adequately before placing it in the burrow system. If traps need to be relocated, wait until after the morning activity period. Be sure to handle the traps safely, keep them away from children, and follow the manufacturer's directions. Put a small bucket over them if children or pets are present. Instructions below show the proper use of each type of trap.

Setting a Harpoon Trap

1. Level and lightly pack down the runway ridge with your foot.
2. Set the trap (with the safety catch in place) so that it straddles the active runway and is inserted deeply enough to prevent recoil when the trap is sprung. The trigger pan should touch the flattened ridge (see Figure 3).
3. Release the safety catch allowing the spikes to be forced into the runway (or raise and release the spikes several times to make holes in the soil for the spikes to enter).
4. Set the trap and leave it alone. Do not disturb any other part of the mole's runway system.

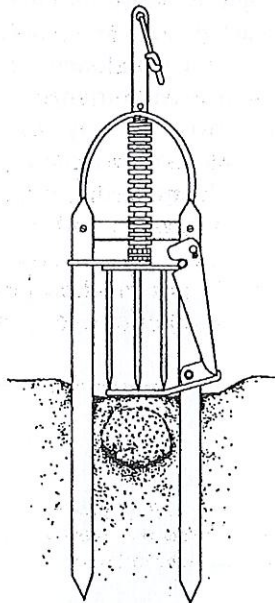


Figure 3. The harpoon trap is set directly over the runway so that its supporting stakes straddle the runway and its spikes go into the runway when it is tripped.

Setting a Scissor-Jaw Trap

1. Dig out a section of a straight runway with a garden trowel across the runway a little deeper than the burrow and as wide as the trap. Note the exact direction of the tunnel indicated by the open ends.
2. Replace and repack the loose soil.
3. Set the trap (be sure to secure the safety catch). Place the trap in the runway so that it straddles the open runway. Be sure the trigger mechanism touches the packed soil between the jaws (see Figure 4).
4. Place the trap so that the ends of the jaws are set about 1 inch below the runway opening. Make sure the trap is in line with the runway so the mole has to pass between the jaws.
5. Set the trigger mechanism so that it will spring easily. Release the safety catch. **Caution: Be extremely careful when handling these traps.**

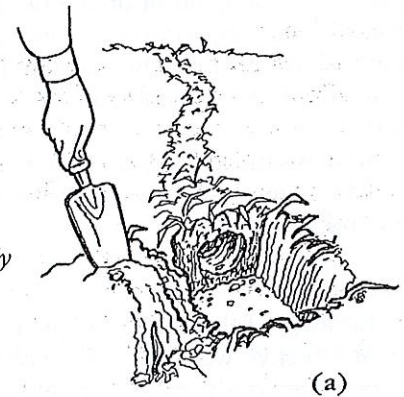
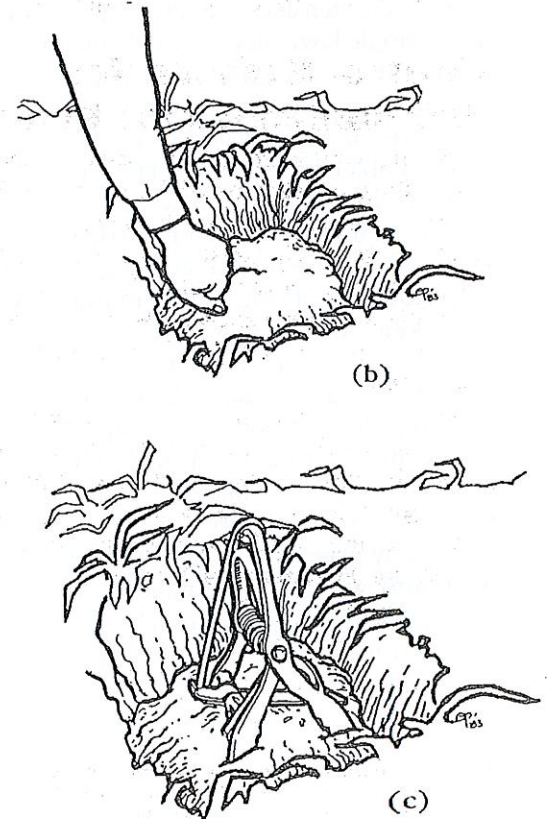


Figure 4.
a. Before setting a mole trap, first excavate a tunnel.
b. Replace the soil loosely in the excavation.
c. Set the scissor-jaw trap so that the jaws straddle the runway.



Fumigation

The extent to which gas cartridges or aluminum phosphide are effective depends on a variety of factors. This method is recommended only if the entire burrow system can be located and fumigated. This usually requires a neighbor's cooperation since a burrow system is found over three to four lawns. Fumigation is rarely effective if the soil is porous or dry, the fumigant is not correctly placed, the complete burrow system is not treated, or there are numerous shallow feeding tunnels. **Warning: Never use a fumigant in a manner inconsistent with its labeling.**

Fumigants appear to be most successful in controlling star-nosed moles, which are uncommon in Kentucky. Their usefulness in controlling eastern moles is questionable and requires extensive work in locating the burrow system, determining active burrows, and digging out an area to place the cartridges.

Repellents

If moles eat bulbs, an aversive taste repellent, Thiram, is available from a variety of sources including agriculture supply stores, feed and seed stores, and garden shops. Thiram is available as a liquid so you can dip bulbs in it before planting. Be sure to follow the instructions on the package.

There is some new evidence that mole repellents containing the active ingredient castor oil are effective in repelling moles from lawns. These repellents are available under a wide variety of trade names. You should understand that these repellents do not actually kill the offending animal and, if suitable habitat remains, the moles will return. Be sure to follow the manufacturer's label closely.

Control Methods Not Recommended for Kentucky

No known short cuts or magic potions are useful in controlling moles. One of the most common of these so-called "sure-fire remedies" is to place chewing gum in the burrow. Research has shown that doing so has no effect on moles even if they eat it. Do not place broken glass, razor blades, rose branches, bleaches, diesel fuel, lye, sheep dip, or human hair down the burrow system to drive the mole away.

Do not use poison peanuts. Remember moles eat insects and earthworms, not nuts. Poisons are also a danger to family pets or other wildlife. Zinc phosphide is federally registered for mole control; however, it is a Restricted Use Pesticide, which requires that the applicator be certified by the Environmental Protection Agency (EPA) or work

under a certified applicator's direct supervision. **Warning: Never use a pesticide in a manner inconsistent with its labeling.** Failure to comply with all the provided directions may subject you to federal and/or state penalties.

The use of pesticides or insecticides to destroy the mole's food source is also not recommended. If you have a grub problem, contact your county Extension agent for information on treating the problem. Therefore, treat your lawn for a grub problem, not a mole problem.

Some people think that mole plants, *Euphorbia lathyris*, and castor bean plants repel moles. However, these plants' repellent properties are doubtful. In addition, they are poisonous to humans. Also, because they easily escape cultivation, they may become a problem weed.

For More Information

The Mammals of Kentucky. R. W. Barbour and W. H. Davis. 1974. The University Press of Kentucky, Lexington.

Home Range, Movements, and Diet Activity of the Eastern Mole, *Scalopus aquaticus*. M. J. Harvey. 1967. Ph.D. Thesis, University of Kentucky, Lexington.

"Moles." F. R. Henderson. 1984. *Prevention and Control of Wildlife Damage*. R. M. Timm, ed. Great Plains Agricultural Council and Nebraska Cooperative Extension Service, University of Nebraska, Lincoln.

Important Mole Facts to Remember

- Trapping is the only effective control method.
- Locate active travel tunnels.
- There are fewer moles in your yard than you think—two or three moles per acre, at most.
- Moles have a low reproductive rate; removing a few moles has a great impact on the population.
- Be patient and persistent; keep moving the trap until you are successful.
- Do not put chewing gum, chemicals, broken glass, or other objects in the burrows.

Mention or display of a trademark, proprietary product, or firm in text or figures does not constitute an endorsement and does not imply approval to the exclusion of other suitable products or firms.



LIVINGSTON COUNTY
COOPERATIVE EXTENSION OFFICE PRESENTS:

HAY QUALITY CONTEST

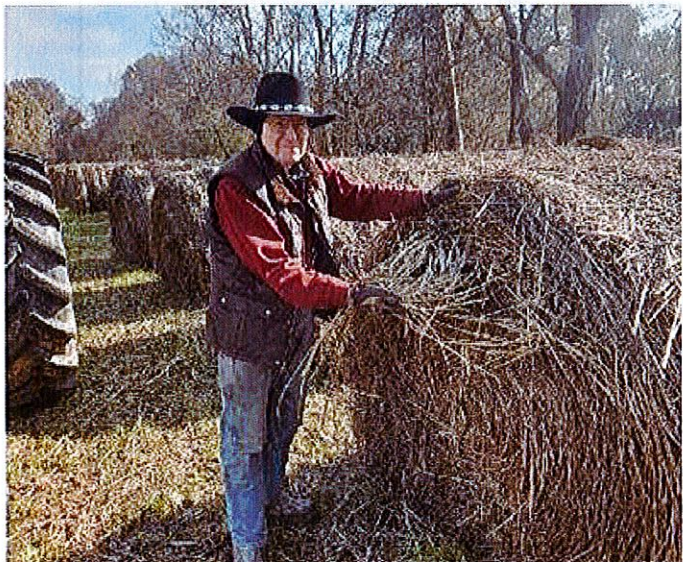
Livingston County Extension is hosting its annual hay sampling contest! This contest will consist of two hay categories: **Mixed Grass Hay & Legume Hay**

Bring in your FREE hay Samples starting

July 1st 2022-August 19th 2022

Monday - Friday 8:00am - 4:30pm

Please bring in all hay samples in gallon zip lock bags



1st Place in both categories will win a county ham cured by a local Livingston County 4-H club member!

For questions please contact
the Livingston County Extension
Office at 270-928-2168
Mon-Fri 8:00am-4:30pm

Adam Barnes

CEA for ANR



Farmers June 2022 Recipe



Stuffed Zucchini Boats

4 medium zucchini
1 pound chicken breast
½ cup chopped onion
1 egg, beaten

¾ cup marinara sauce
¼ cup bread crumbs
1 teaspoon garlic powder
½ teaspoon black pepper

1½ cups shredded cheddar cheese
Olive oil, optional

Cut zucchini in half lengthwise. Cut a thin slice from the bottom of each with a sharp knife to allow the zucchini to sit flat. Scoop out the pulp, leaving ¼-inch shells. (Optional, lightly brush the shells with olive oil.) Preheat the oven to 350° F. Cut chicken breast into 1 inch cubes. In a large skillet, cook chicken and onion over medium heat until meat is no longer pink; drain. Remove from the heat; stir in the egg, marinara sauce, bread crumbs, garlic powder, black pepper and 1 cup cheese. Spoon about ¼ cup into each

zucchini shell. Place each filled shell onto a non-greased cooking sheet and place into the oven and bake for 15 minutes. Remove boats from oven and sprinkle on the remaining cheese. Bake boats for an additional 5 minutes or until the cheese melts.

Yield: 4 servings

Nutritional Analysis: 420 calories, 20 g fat, 9 g saturated fat, 170 mg cholesterol, 700 mg sodium, 19 g carbohydrate, 4 g fiber, 9 g sugar, 40 g protein.



Buying Kentucky Proud is easy. Look for the label at your grocery store, farmers' market, or roadside stand.

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