Mineral Licks

Habitat HOW-TO'S

Mineral licks may be found naturally throughout Kentucky. Although found naturally, landowners often express interest in developing mineral licks in specific sites. Just like any management decision, you have to weigh the pros and cons to determine if this is a wildlife habitat improvement needed for your specific area.

Landowners develop supplemental mineral licks mainly for deer in hopes of attracting more animals to an area and enhancing antler growth. It is important to remember some basic facts of deer biology. Mineral supplementation alone will not increase antler growth or the capability of the land to support deer. Several factors play a vital role in wildlife management and mineral licks may actually be at the bottom of the list of things to improve upon. The size of deer antlers depends not only on mineral nutrition, but also age, forage quantity and quality, and genetics. Improving one factor while ignoring others will not yield productive results. Herd density and buck-to-doe ratios, together with genetics, are the major factors determining deer health and antler development. No studies have ever confirmed that mineral licks alone increase antler size or weight. However, common sense tells us that a properly managed mineral lick may in fact be beneficial to wildlife.

Calcium and phosphorus are the most abundant minerals found in antlers, followed by magnesium and sodium.

Figure 1. Many natural mineral licks, such as this one at Land Between the Lakes, are found throughout Kentucky.

Figure 2. Select upland dry sites for mineral lick establishment.

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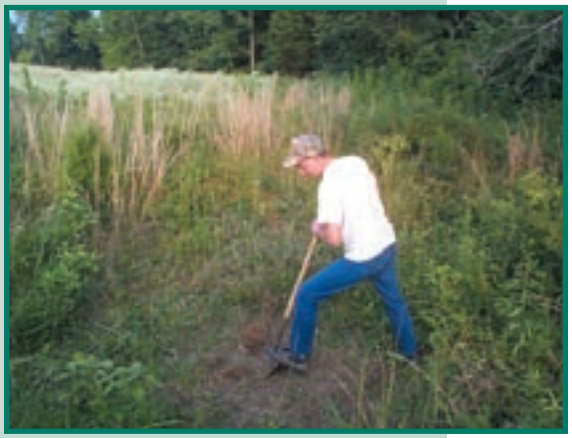

Figure 3. Field edges attract wildlife and should be considered for site selection.

This gives us the ingredients to concentrate on for our mineral lick. You may have noticed that most mineral licks are readily used in spring and summer. This may reflect the increased nutritional demands of gestation for does and antler development for bucks. Bucks generally start antler development in late March and finish growth by mid September. Most does give birth in May or early June. If you choose to develop mineral licks, make sure they are available during these important months.

One major problem with mineral licks that should be considered is the concentration of wildlife. Many wildlife diseases can be spread by "nose to nose" contact or saliva from large concentrations of animals. If an infected animal visits a mineral lick followed by several unaffected animals, you could increase the spread of the disease. Check with your local Fish and Wildlife agency on any restrictions concerning baiting or the use of mineral licks. **The Kentucky Department of Fish and Wildlife Resources (KDFWR) does not allow baiting or mineral licks on any Wildlife Management Areas.** You should contact the KDFWR at 1-800-858-1549 or your local Wildlife and Boating Officer for more information regarding baiting laws.

Establishment of Mineral Licks

Select an area that provides wildlife with protection or that will keep them moving in a desired direction. Look at the soil type in the area. Choose a site with fine-textured soils or a silt-loam soil. Your local Natural Resources Conservation Service (NRCS) office will have soil maps for your property. If the area has clay subsoil, it will help keep leaching, the filtration of minerals from the soil, to a minimum. Clay subsoils will not allow the minerals to filter out beyond the availability to wildlife. Choose a dry upland site; do not select an area in a major flood plain. Consider placing licks in areas frequented by wildlife such as on the edge of a food plot, along an established trail, or near a bedding area.

Remove the leaf litter or vegetation from a 4 to 6 foot diameter circle and loosen the soil with a shovel. Spread a mixture of dicalcium phosphate with red trace mineral rock salt or regular sodium chloride (table salt) at a rate of 5 pounds of dicalcium phosphate to 20 pounds salt. Initially use a minimum of 50 pounds of salt

with 12 pounds of dicalcium phosphate. These minerals can be found at your local farm supply store. Wildlife will not use mineral licks without an attractant such as salt. For this reason you may want to increase the rate of salt at first to attract wildlife to the site and reduce the rate upon recharging the lick. Mix the salt and minerals into the soil, using a shovel or hoe. Minerals are more readily used by wildlife after becoming incorporated into the soil. You should start to see wildlife use after the first couple of rains. Caution: the addition of salt will affect the soil pH of the immediate surrounding area and may kill existing vegetation around the lick.

Figure 4. Loosen the soil with a shovel or hoe.

Commercial mixtures and blocks are available, but many contain sugar and are excessively expensive. Do not use mixtures containing sugars. Although sugars will increase the consumption rate, it may cause tooth decay. Tooth decay will diminish food consumption along with the health of the animal. Some farm supply stores carry Livestock Mineral 2:1, which includes the correct mixture of calcium, phosphate and salt for animal consumption. Consider adding extra salt at first to attract wildlife.

Figure 5. Incorporate the minerals into the soil until evenly mixed.

Management of Mineral Licks

Mineral licks may need to be recharged from year to year depending upon soil types and animal usage. Most licks require 20 to 50 pounds of salt yearly accompanied by the correct amount of dicalcium phosphate. Some areas may be prone to soil erosion or loss and may need soil added with the minerals. If the lick starts to hold water, add soil or cut a small channel to allow the water to drain. A properly managed mineral lick will provide essential minerals to a variety of wildlife for years to come. Some of the more frequent users of mineral licks include deer, squirrels, woodchucks, opossums, and raccoons, along with a variety of birds.

Mineral licks may play a role in your overall management objectives, but they should not be counted on to provide all the essential elements to increase antler growth or animal density. A properly managed property includes a diversity of food, water, and cover. To maximize your property's potential for wildlife contact your local KDFWR biologist for management recommendations.

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SUMMARY OF OPTIONS:

Location of Mineral Lick:
- Near cover with good soils

Type of Mineral Lick:
- Standard mix, commercial blocks (Beware of sugar!)

Size of Mineral Lick
- 4-6 foot diameter circle

Management of Mineral Licks:
- Reapplication of minerals and soil

***Related *Habitat How-To* references:**

Forest Openings
Food Plots
Legumes
Annual Grains

Planning for My Property

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