

Improving Kentucky Horse Pastures



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Well managed pastures can provide a nutritious and inexpensive feed source.

Pasture Management

For many horses, quality pasture can provide almost all nutrients needed for maintenance or light work for much of the year. Pasture reduces the cost of keeping horses while providing safe footing and minimizing impacts on the environment. Below are some guidelines for improving pastures.

Plan to utilize spring and fall pasture growth. Kentucky pastures are dominated by cool season species such as tall fescue, Kentucky bluegrass, orchardgrass and white clover. These species grow rapidly in the spring and fall. Design grazing plans to utilize this natural flush of growth.

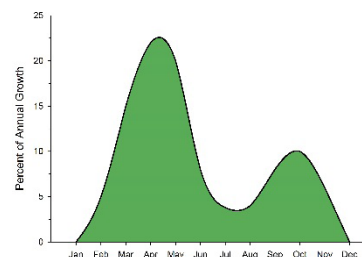
Soil sample every 2-3 years. Soil nutrients play a key role in pasture productivity and persistence. Soil tests recommend needed additions of phosphorus (P), potassium (K) and lime (adjusts pH) based on what is needed.

Apply nitrogen in the fall. Unlike hay fields that should be fertilized in the spring to boost yield, most horse pastures should be fertilized in the fall. One to two applications of nitrogen (40-60 lbs/acre) in the fall will boost fall production, root development and winter survival.

Control weeds that limit pasture productivity. Successful weed control includes identifying major weeds, selecting herbicides that are proven to control those weeds and applying at the correct time of year for the targeted species. A thick stand of desirable forages improves long term weed control. Always follow herbicide label.

Overseed thin stands to increase available forage. Fall overseeding of pastures can fill in bare areas left by heavy grazing or aggressive weed control programs. Mow pastures close before drilling seed into the sod. Seed should be placed 1/4-1/2 inch deep and should be well established (usually 4-6 inch in height) before grazing. Certified seed of an improved variety adapted for the area is well worth the investment.

Re-establish poor pastures. When desirable forages make up less than half a pasture, complete re-establishment may be needed. Two killing sprays with a non-selective herbicide 4-6 weeks apart will be required to remove all undesirable species followed by fall seeding. Pastures can be grazed late the following spring once grasses are well established.



Cool season grasses grow best in the spring and fall, summer growth is limited by high temperatures.



Pastures should be soil sampled to a depth of 3-4 inches using a soil probe.



Inexpensive sprayers can be attached to ATVs or golf carts to apply herbicides on small pastures.



Fall nitrogen extends fall grazing, boosts winter survival and encourages early spring green up.

RECOMMENDED PASTURE SEEDING MIXTURE:

30% Novel Tall Fescue

30% Orchardgrass

25% KY Bluegrass

10% Perennial Ryegrass

5% White Clover

Drill a total of 30-40 lbs. of seed in two directions late August to early September.



Buttercup: prolific reseeding annual or perennial. Control in late winter, before flowers are visible.



Horsenettle: warm season perennial. Controlled in late summer.



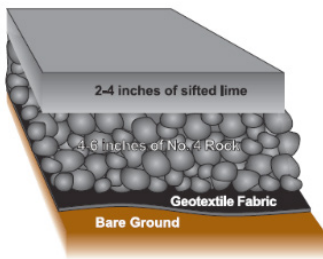
Common Ragweed: warm season annual. Controlled in summer with herbicides or aggressive mowing.



Plantain: cool season perennial. Edible, but limited yield, best controlled in fall or spring.



Healthy pasture sods provide a safe exercise surface for both growing and mature pleasure horses.



Rock pads are constructed by placing geotextile fabric under crushed stone and dense grade aggregate.



Heavy Use Pads provide a safe, dry place for hay feeding or loafing during wet weather or when pasture productivity is limited.

Grazing Management

While improving pastures can significantly improve forage production, changes in grazing management are often needed to maintain improvements long term.

Consider the stocking rate. On average, one mature horse will require 2-3 acres of managed pasture. Less may result in overgrazing of desirable grasses, high weed populations and bare areas. If adequate land per horse cannot be provided, consider limiting grazing by confining horses to stalls or sacrifice areas.

Implement rotational grazing. Rotating horses from one pasture to another gives pastures time to rest. Rotations can be as simple as two pastures rested 2-4 weeks or as complicated as weekly rotations as dictated by plant growth.

Designate sacrifice areas. Even well managed pastures do not grow during the winter months. During such times, keeping horses in designated sacrifice areas will protect pastures from overgrazing and traffic damage. In some cases, these areas can be improved by installing heavy use pads.

Install heavy use pads. Cover is hard to maintain in high traffic areas such as around water, shade, and feeding areas. Installation of geotextile fabric with crushed stone and dense grade aggregate provides a permeable, dry footing for horses and caregivers year around with minimal upkeep.

Manage toxic tall fescue. Naturally occurring tall fescue is often infected with a toxic endophyte that can be dangerous to late term pregnant mares. Remove tall fescue from mare pastures, maintain other desirable forages or provide high quality hay. Consider testing and move mares to less toxic pastures. No negative effects have been documented in non-pregnant horses.

Monitor easy keepers. Improved pastures can provide too much nutrition for horses who suffer from metabolic disorders or those who simply maintain weight easily. Limit grazing by using sacrifice areas or grazing muzzles.

Scout for nimblewill. Nimblewill is a native, warm season, perennial grass not grazed by any livestock or controlled by pasture herbicides. Pastures containing nimblewill should be carefully managed to prevent the spread of nimblewill including limited broadleaf weed control and no summer nitrogen applications. As nimblewill continues to spread across a pasture, complete re-establishment may be necessary.

Additional Resources

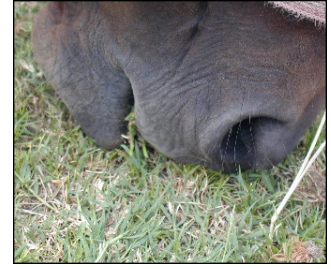
UK Cooperative Extension Service. Extension offices can be found in every county of the Commonwealth. Visit <http://extension.ca.uky.edu/county> to find your county office or call (859) 257-4302.

UK Forage Extension. Information and educational events on pastures and forage production can be found at <https://forages.ca.uky.edu/>

UK Weed Science. Publication and resources on weed control can be found at <http://weedscience.ca.uky.edu/forages>

UK Equine Programs. Equine management information and educational events can be found at <https://equine.ca.uky.edu/outreach>.

Bluegrass Equine Digest. The Bluegrass Equine Digest is a free, award-winning, monthly electronic newsletter dedicated to providing up-to-date information on equine research from the University of Kentucky's College of Agriculture, Food and the Environment. Sign up by visiting TheHorse.com and click "newsletters".



Close and frequent grazing weakens sods, resulting in a pasture that is less productive and more susceptible to erosion and weed encroachment.



Electric fence is an effective and inexpensive way to begin rotational grazing.



Endophyte infected tall fescue can cause prolonged gestation, dystocia and agalactia when grazed by late term mares.

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