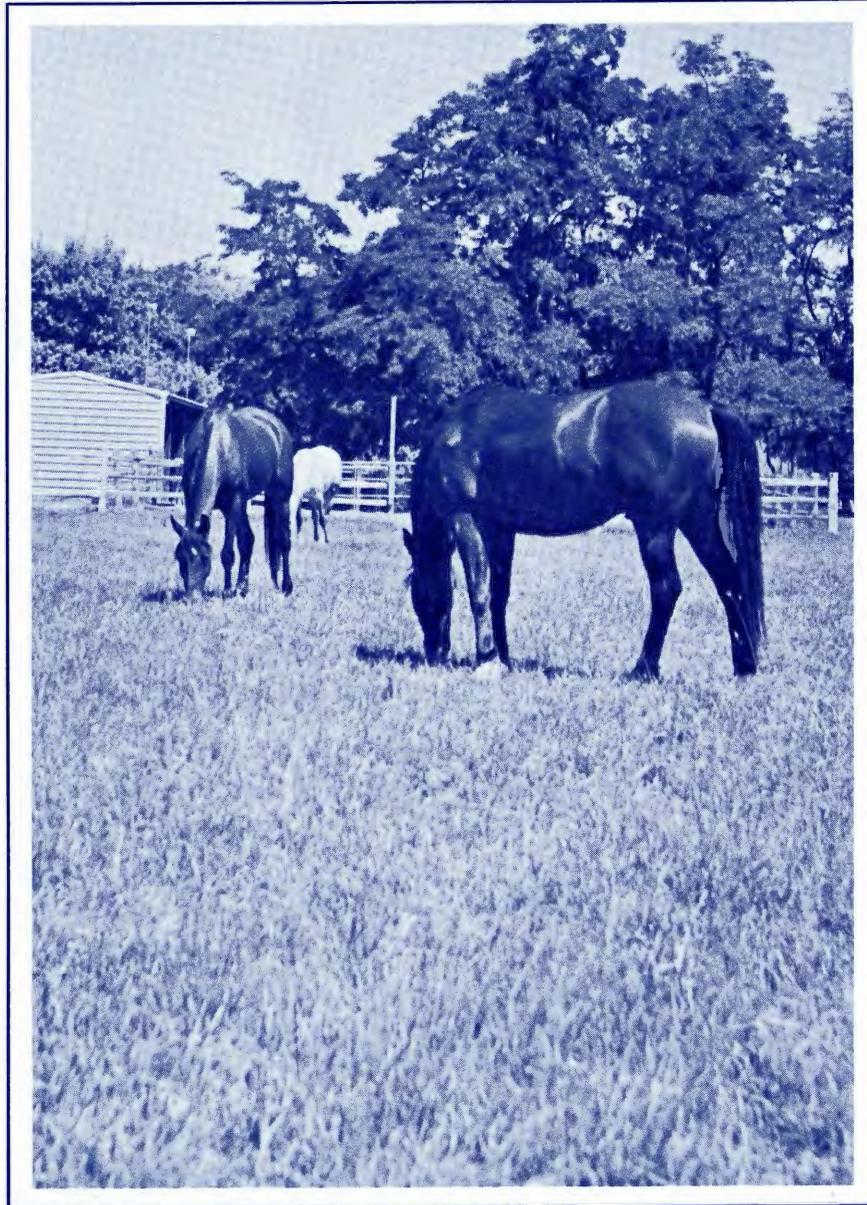


NONIRRIGATED PASTURES for Horses in Eastern Washington



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Good pastures have several advantages for horse production: (1) the forage is high in digestible nutrients, (2) the crop is harvested by animals, (3) storage is not required, and (4) pasture provides exercise for the horse.

A pasture, to produce high-quality feed at an economical cost, has three basic requirements: (1) high-producing adapted species, (2) adequate fertility, and (3) proper management.

Seedbed Preparation and Seeding

Seedbed preparation is important in establishing a good stand of grasses and legumes. Prepare a firm, fine seedbed to establish grasses and legumes.

Seed in the spring as early as it is possible to work the soil and prepare the seedbed without causing compaction problems.

A cultipacker-type seeder with a double set of rollers helps to firm the seedbed and obtain desirable stands. Grain drills equipped with depth regulators will help control the depth of seeding. Do not seed grasses and legumes more than 1/4 to 1/2 inch deep.

Fertilizing

Work 20 pounds of nitrogen and about 20 pounds of sulfur into the soil during seedbed preparation. Ammonium sulfate can be used to supply both these needs.

Base phosphorus, potash, zinc, and boron applications on soil tests; work the recommended rate into the seedbed before the final packing.

After pastures are established, they will need 20 pounds of available nitrogen annually in the low rainfall areas and up to 80 pounds in the high rainfall areas for good production.

Grasses

Crested wheatgrass. Crested wheatgrass is a bunchgrass that will grow in areas with less than 12 inches annual precipitation. It will produce more feed than other grasses in these low rainfall areas.

Pubescent wheatgrass. Pubescent wheatgrass is a sod-forming grass adapted to areas with 12 to 14 inches of annual precipitation.

Intermediate wheatgrass. Intermediate wheatgrass is a mild sod-forming, late-maturing grass with good seedling vigor. Intermediate wheatgrass is adapted to areas of 12 to 20 inches annual precipitation and well-drained soils. Intermediate wheatgrass is palatable to horses, though not as palatable as bluegrass or timothy.

Smoothbrome grass. Smoothbrome grass is a long-life, perennial, sod-forming grass. It is excellent grass for pastures in areas with more than 16 inches of rainfall, and it will grow in soils with a higher moisture content than intermediate wheatgrass.

Tall fescue. Tall fescue is adapted to widely different soil conditions in Washington. It will grow on wet, poorly drained soils, saline-alkali soils, and on droughty soils. It is not as palatable as many of the other grasses. Tall fescue will withstand considerable abuse and horses will graze it if no other grasses are available.

Timothy. Timothy will not produce as much total forage as orchardgrass, smoothbrome grass, or tall fescue, but it is more palatable for horses than orchardgrass. It will grow on wetter soils than orchardgrass but will not produce well on droughty soils or in low rainfall areas.

Orchardgrass. Orchardgrass can be grown on non-irrigated soils that have more than 18 inches annual rainfall. It is a high-producing grass but is not as palatable for horses as intermediate wheatgrass or smoothbrome grass. It will not take as much abuse as tall fescue. Orchardgrass is best suited to soils where irrigation is available or there is adequate moisture for grass growth during the summer months.

Kentucky bluegrass. Bluegrass is one of the most widely acclaimed grasses for horses and is one of the most palatable grasses for pasture. Where bluegrass can be grown, it makes an excellent pasture, but other grasses produce more feed than bluegrass. Grow bluegrass only in areas with more than 20 inches annual precipitation or where there is adequate moisture for grass growth during the summer months.

Tall wheatgrass. Tall wheatgrass is a coarse, stemmy bunchgrass that will grow in saline-alkali soil conditions where other grasses will not survive.

Meadow foxtail. Meadow foxtail is adapted to poorly drained soils. Other grasses will produce better pasture on well-drained soils. Seeding rates for grasses are listed in the table. In some pastures it is desirable to seed one or more grasses. If you mix different grasses, reduce the seeding rate of each grass used.

Legumes

Alfalfa. Alfalfa is widely used with grasses for horse pastures. Ladak is the best variety for non-irrigated pasture production. Use 1 or 2 pounds of seed per acre.

Red clover. Red clover can be used in horse pastures but it is a short-lived legume. Red clover

Seeding Rate for Grasses in Pounds per Acre.

Species	Seeding rate, Lb/A
Crested wheatgrass	8
Pubescent wheatgrass	10
Intermediate wheatgrass	10
Smoothbrome grass	8
Tall fescue	10
Timothy	4
Orchardgrass	8
Bluegrass (pasture type)	5
Tall wheatgrass	10
Meadow foxtail	6

will last only about 3 years and some varieties will last only 2 years. Use 3 to 4 pounds of seed per acre.

White clover. White clover may be used in areas where moisture is adequate for summer plant growth. One pound of seed per acre is adequate.

Birdsfoot trefoil. Birdsfoot trefoil is adapted to soils that are too wet to grow alfalfa. Trefoil will grow on soils adapted to alfalfa production but trefoil is slower-establishing and lower-producing than alfalfa. Best stands are obtained by seeding birdsfoot trefoil at 3 to 4 pounds per acre in alternate rows with a grass. Excess legumes may create founder and colic problems. Pastures for horses should have less than 40 percent legumes in the pasture mixture.

Weed Control

Herbicides are available to selectively remove broadleaf weeds from grasses. Most of these herbicides will kill legumes as well as the weeds.

Control weeds before planting grass and legumes. Check with your county Extension agent for weed control recommendations.

Grazing

Proper pasture management is important in producing good quality forage. Graze pastures to maintain a uniform height and prevent patchy

grazing where the animals leave the taller growth of forage ungrazed.

Clipping may be necessary to maintain uniform grazing. Clipping will remove ungrazed forage and help control weeds. Drag pastures to spread animal droppings and help prevent patchy grazing. Dragging often eliminates the need for clipping.

Rotation grazing where pastures are divided into smaller paddocks will help prevent patchy grazing and leave excess forage to be harvested as hay.

Overgrazing is the most common reason for loss of good pasture stands, resulting in poor quality, low-producing pastures. Many people let their horses graze pastures right into the ground. Even if horses are fed hay on pasture during periods of low production, they will continue to graze

the grass so short that recovery is very slow and eventually nonpalatable weeds replace the desirable grass and legumes.

Condition horses to grass slowly before they are turned on pasture in the spring. This can be accomplished by turning them on grass for a few hours a day and gradually increasing the time until they can be left out continually. This gives the horse's digestive system a chance to become gradually accustomed to the feed change.

Give horses a full feed of hay before turning them on grass. This will reduce consumption and help reduce problems of colic or founder.

Mature horses will get too fat on high-producing pastures—limit the feed intake by removing them from the pasture for a time during each 24-hour period.