RANGE PLANTING

Oklahoma Conservation Practice Job Sheet 550 05

Landowner_____

WHAT IS RANGE PLANTING

Range planting is establishing adapted native plants by seeding.

HOW IT HELPS THE LAND

Plantings of native plants offer erosion control, water retention and a variety of other benefits. Native mixtures contain four or five grasses and may include a mixture of perennial forbs and legumes. The plantings provide a diversity of food plants for wildlife and other habitat components as well. This includes nesting cover, escape cover, protective cover, edge effects, bugging areas and loafing areas.

Livestock also benefit from native mixtures. A diversity of plants offers a broad spectrum of forage quality, especially when forbs and legumes are part of the planting. Many of the native species, such as little bluestem, stand up during the wintertime, when low growing forages are covered with snow.

WHERE THE PRACTICE APPLIES

This practice can be used anywhere the intended use is rangeland, native pasture, grazeable forest, and grazed wildlife land.

WHERE TO GET HELP

Your local Natural Resources Conservation Service or Conservation District office can assist you in developing a native mix that is adaptable and that will meet your objectives.

APPLYING THE PRACTICE

A clean, firm, weed-free seedbed should be prepared. Eliminate plow pans before planting for moisture storage and root penetration.

Plow pans can severely restrict root growth.

On sandy textured soils in western Oklahoma, blowing sand can kill seedlings and soil can be lost from the field. In these cases a cover crop of wheat or sorghum will be needed. Manage the cover crop to leave at least a 10 - 12 inch stubble height. Do not allow the cover crop to volunteer.

Whenever possible native grasses should be seeded with a grass drill equipped with double disk openers having depth bands followed by cultipacker, press wheels or drag chains. Plant the seed ¼ to ¾ inches deep. The distance between rows should not exceed 12 inches.

Optimum seeding dates are from March 15 to May 1 but successful plantings can be done between December 1 and May 31. Soils should be tested for fertility prior to planting.

Seeded grasses should not be grazed the first year following seeding. A deferment is usually needed the following growing season to insure establishment.

SEED QUALITY

Range plants are calculated on a Pure Live Seed (PLS) basis. Compute by adding percentage of germination and firm seed. Multiply this sum by purity. Divide the product by 100 for percent PLS.

$$\frac{(\%\ \text{Germ.} + \%\ \text{Firm Seed}) \times \text{Purity}}{100} = \%\ \text{PLS}$$

(Firm, hard or dormant are congruent terms).

The origin of the seed should be within 200 miles south, 300 miles west, 100 miles north, and 150 miles east of the planting location. Also, the seed source should not be from elevations more than 2,000 feet higher nor 1,000 feet lower than the elevation of the planting site. Exceptions would be named varieties with proven ranges of adaptability.

Once the seed mixture is prepared, then actual planting is based on the bulk pounds per acre.

PEST CONTROL

Unwanted annual weedy plants should be controlled when they exceed 3 per square foot or are anticipated to exceed a 50 percent canopy. Mowing should be done when the weeds reach a height of 6 to 8 inches. Mow above the height of seeded plants. Mowing when air temperature exceeds 95 and the humidity falls below 30% may dehydrate the seedlings. Generally, mowing should not be done after July 15, and is preferred over chemical applications to maintain forb and legume populations. Always follow label directions when applying chemical weed control. Weeds may also be controlled by flash grazing.

NUTRIENTS

A soil test for establishment is required to determine nutrient needs.

OTHER CONSIDERATIONS

Your objectives should be taken into consideration when developing a native mix. The mix should contribute to wildlife and aesthetics when the opportunity exists.

MAINTAINING THE PRACTICE

Once the native grass is established, a management program consisting of proper stocking rates will be needed to insure plant health and vigor. Brush management and prescribed burning may also be used to maintain the desired plant community.

Site Specific Planting Recommendations

_____ **Client** _____ **Date**_____ **Acres**

_____ **Planting dates** _____ **Fertilizer**

Field No.	Seedbed Preparation and dates	Species (including cover crop)	% of Mix	PLS/ac	PLS Total

Additional specifications or notes

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_____ **Conservationist** _____ **Date**