

Old World Bluestem



Plow pan or hard pans, can severely limit production. Remove plow pans with chiseling during seedbed preparation.

What is Old World Bluestem?

Old World Bluestem is a warm season perennial bunch grass with good forage quality, responds well to fertilization, is drought tolerant, withstands close grazing and is palatable to livestock. It has been introduced in the United States over the last 40 years. Old World Bluestem is not closely related to the native big and little bluestem grasses found throughout Oklahoma.

How it helps the land

Well managed Old World Bluestem will maintain or improve soil condition, provide erosion protection, improve water quality, and increase water retention on the farm. Old World Bluestem is a plant that producers can select to enhance their current forage program and lengthen their grazing season. One of the major advantages of Old World Bluestem

is its relatively high quality forage during July, August and September. Typically, this is the time of year when other warm seasons grasses such as bermudagrass are lower in quality.

Where the practice applies

Old World Bluestem can improve forage quality, and reclaim marginal cropland. Old World Bluestem can also complement other forages in a grazing program such as native grass, weeping lovegrass, forage sorghums, alfalfa, bermudagrass, tall wheatgrass, small grains, tall fescue and clovers.

Where to get help

Your local Natural Resources Conservation Service, Conservation District and OSU Extension offices can assist in selection of adaptable grass varieties suited to the soils on your farm.

Requirements of Old World Bluestem

Old World Bluestem will produce on a wide range of soils. They are best adapted to finer textured soils such as loams, clay loams, sandy loams, etc.. Planting is not recommended on coarse sandy soils or wet soils.

Although Old World Bluestem will grow on acid soils, a pH of 6.0 to 7.5 should be maintained.

The five most common varieties used in Oklahoma include: Caucasian, Ganada, Plains, WW-Spar and WW-Iron Master. Most varieties can be planted statewide. Ganada and WW-Iron Master are better adapted in the western third of the state in the high plains area. WW-Iron Master is also adapted to the high pH iron chlorosis inducing soils of western Oklahoma.

Applying the practice

Soil testing is the first step toward establishment. This will insure proper fertility levels needed for production and establishment. Adequate phosphorous and potassium levels must be maintained to obtain optimum response to nitrogen and to promote root development. A "dead litter" cover crop may be needed when planting Old World Bluestem into soil susceptible to wind erosion.

A clean, firm, weed-free seedbed should be prepared. Eliminate plow pans before planting. Apply needed nutrients, lime, etc., at this time according to soil test results. To reduce weed competition for the nutrients, N fertilizer should not be applied too early.

When re-seeding former cropland, residual nitrogen may be sufficient to establish the stand. However, phosphorus should be soil tested to determine if adequate levels exist.

Plant by any method that insures good soil-seed contact. Plant shallow so the soil coverage of the seed will be less than 1/2 inch after the first rain. The best results have been obtained when seeding was done with a drill specifically designed to handle the "fluffy" grass seeds. If broadcasted, a

cultipacker should follow to press the seed into the ground. Care must be taken to avoid planting the seed too deep.

Seed Old World Bluestem at a rate of 1 to 3 Pure Live Seed (PLS) pounds per acre. Optimum seeding dates are from March 1 to May 31.

Top dress with nitrogen after seedling emergence. Control weeds when needed by flash grazing, chemical application or mowing. Allow grass to establish before harvesting. Old World Bluestem seeded into wheat, that will be "grazed out" has a high success rate. Remove cattle prior to emergence of grass seedlings.

Other considerations

Additional income can be realized from seed and hay production. Old World Bluestem can provide good quality hay yields. Hay with a 10 to 16 percent crude protein can be obtained with the application of a good fertility program and proper timing of harvest.

Old World Bluestem is not a "fix all" grass, but can be used in a planned grazing management system. It can also complement existing grass varieties.

Old World Bluestem has little value as food for most species of wildlife. However, Old World Bluestem can provide escape cover for small game animals and birds such as cottontails, rabbits and bobwhite quail. It is generally too thick for young ground dwelling birds.

Old World Bluestem does well on other critical areas such as oil field slush pit sites, road sides, power line right of ways, pond dam, etc.

One downside of Old World Bluestem is that, under some circumstances, it can spread into other grasslands or areas where it may not be wanted. Old World Bluestem does not seem to invade adjacent cropland.

Maintaining the practice

Once the Old World Bluestem is established, a management program consisting of fertility, weed control and proper grazing will need to be developed to insure plant health and vigor. Drought conditions, wildfire, freeze damage and other natural occurrences may require a change in management. Contact your NRCS office for help in making these changes.

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