

SOILS

Seeding guidelines increase winter pasture productivity

by James Locke / jmlocke@noble.org



Seeding small grain cool-season annuals, like wheat or cereal rye, into perennial warm-season grass pasture, like bermudagrass, has been a common

practice for many years. A few of the benefits of sod-seeding small grain winter pasture include providing high quality forage during the winter months, providing additional forage production during the warm-season grass's dormant season and potentially reducing the need for winter supplementation.

While the benefits are easy to see, producing small grain forage in a warm-season perennial grass sod presents some unique challenges. Since the warm-season grass and the small grain have different best management practices, some compromises are necessary for the production of both.

The first step is managing the warm-season grass prior to planting the small grain forage. The warm-season grass should be grazed, hayed or mowed to a 3-inch height by early September. In most situations, applying a non-selective herbicide before planting will be necessary to chemically "frost" the grass and eliminate any weeds that might be

present. Temporarily stopping the warm-season grass growth allows the small grain an opportunity to germinate and become established with less competition. Herbicide options include 0.25 to 0.5 pounds paraquat per acre or 0.5 to 1.0 pound glyphosate per acre. Note that glyphosate is a systemic herbicide that will translocate to the bermudagrass roots and potentially reduce production the following year. Failure to properly manage the warm-season grass is one of the most common causes of sod-seeding failures.

The next step is selecting the forage species, planting method and seeding rate. Wheat is most commonly used due to its widespread availability and adaptability. Cereal rye is a common choice for sandier soils, or when fall and early winter production is a priority. Rye also fits very well in sod-seeding situations because it matures earlier and is less likely to compete with the warm-season grass in the spring. Availability of cereal rye planting seed can sometimes be a problem. Other options include oats, barley, triticale or mixtures of more than one species. The planting method which results in the most consistent, reliable stands uses a grain drill calibrated to deliver the correct seeding rate and is capable

of penetrating the sod. This method ensures a consistent planting depth and good seed-to-soil contact. Seeding rates with a grain drill range from 90 to 120 pounds per acre.

Alternatively, seed can be broadcast. A light disking and running a culti-packer or drag is needed to enhance seed-to-soil contact. Advantages of broadcast planting are the ability to blend seed with fertilizer and faster spreading. Disadvantages are higher seeding rates, lack of depth control, poorer seed-to-soil contact and a higher risk of stand failure. Seeding rates when broadcast planting range from 120 to 150 pounds per acre. Regardless of forage choice or planting method, use high quality, high vigor planting seed since planting into an existing sod is a challenging seedling environment.

Finally, apply lime and fertilizers for your yield goal and as recommended from soil tests. Phosphorus and potassium rates are based on soil test results and should be applied near planting or soon after emergence. If needed, lime should be applied before planting. Nitrogen rates are based on yield goals and should be applied when the forage is needed. If fall or early winter grazing is the priority, apply most or all of the nitrogen near planting or soon after ►

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emergence. If spring grazing is the priority, apply starter nitrogen in the fall and the remainder in late winter or early spring.

Care should be taken not to sod-

seed more small grain winter pasture than can be utilized. It is important to graze out or remove the winter pasture as hay before it can compete with the warm-season peren-

nial grass during its prime growing season in the spring. If the small grain competes with the warm-season grass, it can significantly reduce its production. ■