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## **Soil Moisture and No Competition Is Key to Ryegrass**

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With good moisture, no weed or grass competition, and good soil fertility, ryegrass can establish within 60 days to provide highly nutritious grazing for early-weaned calves, replacement heifers, or a supplement for lactating cows. The problem is getting enough rainfall to get a stand, the rest is fairly easy. In north and central Florida, rainfall from November to March is relatively dependable compared with the lower half of the state. November, the month when ryegrass is planted in central and south Florida, is historically the month with the least rainfall. The 61-year average rainfall for November at the Range Cattle REC is 1.94 inches, and December is similar with 1.98 inches. This is not sufficient rainfall to establish ryegrass quickly in a prepared seedbed without irrigation. Suppose we could get a good stand of ryegrass with 4 inches of monthly rainfall, what are the chances of that? The answer is, there is a one year in ten chance of a 4 inch total monthly rainfall for November or December.

In good seedbed preparation, too much moisture is lost to allow for rapid, uniform ryegrass germination. In a dry seed bed, ryegrass seed will not germinate and grow without 3 to 4 inches of rain in the month after sowing, and this delays stand development. It could be February before ryegrass is ready for grazing. Ranchers in the lower half of the state are pinched on both ends of the ryegrass season. Limited rainfall means slow fall establishment, and warm spring temperatures in April means the end of the ryegrass growing season. Cattlemen could end up paying a lot of money for a little bit of grass. Over-seeding ryegrass in bahiagrass is even less desirable because seed and fertilizer costs are about the same as that for prepared seed bed, but ryegrass production is about a third. Bahiagrass is too competitive in the lower part of the state for over-seeding ryegrass to be practical. Bahiagrass just does not go into the level of dormancy in central and south Florida that it does in the north where cold temperature forces dormancy.

Ryegrass can be established very well in central and south Florida flatwoods by drilling into an undisturbed, competition-free seed bed and utilizing the residual moisture from summer rains. The area can be dedicated to ryegrass year-after-year, preferably a low area with good soil moisture and relatively high organic matter content, or it may be a pasture you wish to renovate the following summer. If the pasture is a deep, well-drained sand, this practice will not work as well. Prevent a large build-up of grass and weeds during the summer by grazing. Mow in mid-September, let it regrow for a few weeks, and in early October apply Round-up herbicide at 2 quarts/acre. Follow the label and use ammonium sulfate in the spray solution. Allow the pasture to desiccate, and burn it in early November. Burning is important because it removes all the cover, and a mat of dead vegetation prevents seedlings from receiving full sunlight at emergence. It also harbors insect pests. Drill ryegrass into the burned stubble at 12 to 15 lb seed/acre during the first 2 weeks of November. Set the drill to place the seed  $\frac{1}{2}$  to  $\frac{3}{4}$  inch below the soil surface to put the seed in the moisture. If you can see seed on the surface, that seed is not going to germinate quickly. If the weatherman is calling for sunny hot weather, delay seeding for a while. Don't be in a hurry. When ryegrass seedlings appear in the row, fertilize with a complete fertilizer and include a micro-nutrient package too. This method of sowing ryegrass works, and it is dependable. The key is to get the seed into the soil moisture and to have the seedling emerge into a competition-free seed bed. Although this direct seeding method will help get a quick, uniform stand, rainfall from January to April is often limiting in central and south Florida with an average of about 2.5 to 3 inches each month. Keep in mind that there will be years when limited rainfall will keep ryegrass from meeting its full potential in our region no matter how good the stand.