

Spring oats for forage production

Submitted by: David Kehler, County Extension Director/Agriculture Agent

Producers have found spring oats to provide excellent spring pasture and hay. With reasonable fertilizer inputs, spring oats can provide an excellent bridge for producers short on available pasture in April and May until perennial pasture or summer annual forage production becomes available.

Oat pasture should be treated the same as winter wheat pasture in terms of stocking rates and time to initiate grazing. Since grain production is not practical or recommended under grazing, producers should treat oat pasture as a graze-out program or remove it when ready for the next crop. Oats are easily controlled by a variety of herbicides, such as glyphosate and atrazine. The length of effective grazing is a function of stocking rate and weather. Rotational grazing may extend the window for effective pasture production.

Properly stored, oat hay also provides a high-quality feed source. Studies at the South Central Experiment Field near Hutchinson indicate hay yields on a dry weight basis of three to five tons per acre are typical under average weather conditions.

These hay yields were obtained with 75 lbs/acre of nitrogen (N) applied preplant and an additional 50 lbs/acre N broadcast approximately six weeks after emergence. Lower total N rates will result in adequate forage production, especially hay. However, to maximize grazing opportunities, it is important to supply adequate N.

For hay, late boot to early heading is the optimal timing to balance quantity with quality considerations. Harvested at the dough stage, hay should have an approximate TDN of 56% with 10% protein, both on a dry basis. A nitrate test is recommended. Prussic acid levels should not be a concern.

Cultural practices

Before planting oats, check the herbicide history of the desired field. Oats are especially sensitive to triazine herbicides. Also, if producers are planting oats for pasture and are considering applying a herbicide for weed control, carefully check the pesticide label for grazing restrictions.

The optimal planting date depends on location. For most of the state, planting is recommended from late February through the mid-March. After the optimal planting range, grain production will be limited most years. However, adequate pasture is practical after the optimum planting date. To maximize pasture production potential, it is necessary to plant as early as possible.

A seeding rate of two bushels per acre is recommended. Under good soil moisture or irrigation, three bushels per acre may be preferable for grazing. When grown for hay or silage, fertility recommendations are similar to those for grain production: 75 to 125 lbs N per acre. When planted for grazing, an additional 30 lbs N per acre is recommended. As always, a soil test is recommended.

Oats may be successfully planted no-till, however, growth and vigor are typically greater when pre-plant tillage is used. In either case, a fine, firm seedbed is necessary for optimal production. Under adequate soil moisture conditions, a seeding depth of ½ to 1 inch is preferable. Oats may be planted at depths greater than one inch under dry conditions; however, oat seedlings are less vigorous than wheat and can experience difficulties emerging at deeper planting depths, especially after crusting rains.

To facilitate planting and maximize forage production, winter annual weeds should be controlled either mechanically or with a burndown herbicide prior to planting. Weed control is best achieved through a good stand with rapid growth. Before using any herbicides consult the label.

For more information, see K-State publication MF-1072 “Small Grain Cereals for Forage” at: <http://www.bookstore.ksre.ksu.edu/pubs/mf1072.pdf>