

Small grain forages can be a profitable option for producers. They can be planted in the fall and either terminated or grazed out in the early spring, allowing time to plant a summer row crop if soil moisture is adequate.

**Spring oats.** Spring oats are usually planted in late February or March in Kansas. However, spring oats can also be planted in August or early September -- and if done so, they will produce much more fall forage compared to other small grain forages in the fall before a killing freeze. They will almost never produce grain if planted in August. Spring oats do not need to vernalize before heading. They will develop rapidly in the fall if they have enough moisture and fertility, and may even head out before termination by the first hard freeze in the mid-20 degree F range, but in most years it will not have time to produce viable grain.

Spring oats can also be planted in a mixture with a winter small grain. The spring oat will produce most of the forage in the fall and then most likely winter kill. If the winter climate is mild, the spring crop can survive the winter. The winter small grain will overwinter and produce forage in the spring. Winter small grain biomass production might be less than if planted alone, but the combination of oat and winter small grain biomass will most likely be higher than winter small grain planted alone. If a mixture is used, plant oats at a 50% seeding rate and winter small grain at 100% seeding rate.

Oat pasture can generally carry 500 pounds of beef per acre. Average daily gains range from 1.5 to 2.5 pounds per head per day. Forage quality on actively growing oats is high, with protein content in the range of 20 to 25%.

**Winter wheat.** Wheat is often used for grazing and grain in so-called "dual-purpose" systems. These systems are usually balanced between getting good forage and good grain yields without maximizing yields on either side. Dual-purpose wheat is typically planted at least two to three weeks earlier than wheat planted for grain only, which can increase the risk of a wheat streak mosaic infection. In addition, producers wanting both grazing and grain should use a higher-than-normal seeding rate and increase the N rate.

**Winter barley.** There are new, improved varieties of winter barley available with better winterhardiness, especially under grazing. Many of the newer varieties also produce more forage than older varieties. Barley produces palatable growth rapidly in the fall under favorable conditions. It is considered superior to other cereals for fall and early winter pasture, but wheat, triticale, and rye provide better late winter and spring grazing. Barley has excellent drought and heat tolerance. Winter barley forage is typically the most palatable of the small grain cereals and feed quality is the highest, although tonnage of barley is usually less than triticale or rye.

**Winter rye.** Rye establishes fall pasture quickly. It also regrows rapidly in late winter and early spring. However, rye becomes "stemmy" and unpalatable earlier in the spring than other cereals. Since rye is less palatable and higher in fiber than wheat or barley, cattle gains during grazing are normally greater on oat, wheat, triticale, and barley pasture than on rye pasture. Rye is the hardiest of the small grain cereals for overall tolerance to drought, heat, winterkill, and poor soil conditions.

**Winter triticale.** Triticale, a cross between wheat and rye, possesses the toughness of rye along with the quality of wheat. It can be grazed much harder than wheat and still recover to produce grain. Triticale

and rye can be planted about a month earlier than wheat with a decreased risk of wheat streak mosaic (while the triticale might not show symptoms of wheat streak mosaic virus infection, it may vector the mites that might affect a neighboring wheat field). However, there is still risk to grasshopper feeding in the fall, hessian fly, barley yellow dwarf, or root rot. Planting triticale or rye earlier in the fall increases the amount of fall forage available compared to winter wheat. Triticale has longer effective spring grazing than rye, but not as long as wheat. Depending on the variety, winter triticale will head later than rye so the forage can remain higher in quality later into the spring. Heading date on all winter cereals should be a consideration if spring grazing is the goal.

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