



Spring-planted Oat for Grazing or Hay Production

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Seasonal droughts are normal in the southern Great Plains. Droughts occurring during the fall and winter can be especially disruptive of a usually predictable supply of wheat pasture. The two most common effects of drought are minimal available forage for spring grazing and limited hay supplies. When wheat pasture fails due to drought, there are limited opportunities to recover lost forage production. The best option to offset forage losses from wheat pasture is spring-planted oat.

Oat can be planted in late winter through early spring for use as pasture or hay and may offer some help for increasing a short forage supply. However, this option can be somewhat expensive with substantial risk involved due to weather, insects, and diseases. The most successful spring plantings occur when oat is drill-planted on a prepared seedbed and managed accordingly.

Currently, there is not a wide selection of oat varieties available. Those varieties adapted for use in the southern U.S. are preferable to northern U.S. varieties. However, nearly all of the available oat seed is produced in the northern U.S. Feed oat has been successfully used and can provide excellent nutrition for many classes of livestock. However, many of these have not been tested as seed oat and may contain weed seeds (noxious weed seeds in particular), have unknown seed germination, and foreign material. Feed oat sources are usually relatively cheap, but they are rarely a wise purchase. In Oklahoma, state seed law requires that seed being sold for planting purposes have a tag with a recent test result for germination, weed seed and foreign material.

Keys for successful spring oat production

- Seed quality is crucial. A minimum germination of no less than 85 percent will ensure an adequate stand under reasonable growing conditions.
- Do not cut back on seeding rate. Because spring-planted oat forms a single stem with minimal tillering, it is necessary to have a high plant population.
- When grazed, do not begin grazing until the plants are 6 inches tall. This will increase forage production over plants that are grazed earlier.
- When harvested for hay, cut at early heading to optimize yield and quality.

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Planting date and rate

The window for spring-planted oat is between February 15 and March 10 with an optimum planting time during the last full week of February. If dry weather and above freezing temperatures occur in late January and early February, the planting date can be shifted closer to February 15. However, if conditions are wet, damp, and cold during late January and early February, then planting may be delayed until early March. For best results, oat should be drill-planted on a conventionally prepared seedbed at a seeding rate of 80 to 100 pounds of seed per acre.

Seeding depth can be as deep as 1½ inches, but a depth of only ½ to ¾ inch will increase the rate of emergence, establishment and forage production potential. If oat is being considered for failed wheat pasture, no-till planting should be successful as long as there is a minimal amount of residue. Again, seeding depth should be only ½ to ¾ inch. Forage production potential from a spring-planted oat crop will average 1,500 to 2,000 pounds of forage per acre. Based on the forage production of spring-planted oat, N fertilizer at a rate of 60 to 75 pounds actual N per acre should be applied after establishment.

Forage Management Unique to Spring-planted Oat

The growth habit of spring-plant winter annual forage crops are unique and require a slightly different management than if planted in the fall. Most seed will only produce a single stem following germination and emergence. This is important because little regrowth will occur following defoliation either by grazing or haying.

Grazing

Prior to grazing, oat plants should have a minimum of six inches growth. It is important to not begin grazing until the stems begun to elongate (similar to 1st hollow stem in wheat). If grazing occurs prior to stem elongation, it is important to consider strip-grazing or limit grazing to more efficiently utilize the forage.

Spring-planted oat matures quite rapidly once the spring temperatures began warming. Each acre of spring-planted oat should to provide between 35 and 60 days of grazing for a mature beef animal. Growing animals (750 pounds) can be stocked at approximately 1.5 animals per acre for 60 days.

Hay Production

Spring-planted oat harvested for hay, should be cut at early heading. Once the seedheads begin to emerge, there will be no appreciable increase in forage yield. Likewise, once the seedheads begin to emerge, a substantial decrease occurs in nutritive value due to the accumulation of stem tissue and also leaf loss. If harvested for hay, delaying harvest until early heading will maximize yield for that production method.

Do not consider spring-planted oat to be the fool-proof solution to remedy a short forage supply. There are potential risks involved due to weather, insects and diseases. With planning and a little luck, a spring-planted oat crop may add some additional forage to an already short or non-existent forage supply.

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