

## Considering Spring Planted Oats

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Often the wheat crop in the Texas Panhandle and South Plains has a poor start. The stand and crop potential will depend each year on the timing of planting and rains (if not irrigated). Wheat planted early following late summer rains will emerge and produce early season growth for grazing. Later planted wheat after rainfall tapers off under dryland conditions may not germinate due to lack of adequate soil moisture or if the wheat emerged simply doesn't grow well. In some fields lack of precipitation through the fall and early winter coupled with a few days of single digit temperatures may result in thinning and loss of wheat stands. Hoped-for precipitation in late December through January may help considerably in some parts of the region, but in many cases it will be too little too late.

When wheat prospects are poor some growers may consider spring-planted oats. Spring-planted oats can be utilized for production of forage, hay, or grain, and based on Texas A&M testing should provide much better forage production than late-planted winter wheat. Oats should be planted in the spring between February 10 and March 15. Those producers on the South Plains should try to plant early during this window while those in the northern Panhandle will have more success planting later. Oats will germinate at soil temperatures as low as 40°F but emergence will be quicker with warmer temperatures.

Soil moisture and temperature will largely determine how fast the oat plant will develop. Therefore, days from planting to grain harvest can vary greatly from year to year. A 10-day delay in planting will not necessarily mean a 10-day delay in maturity. Research in Nebraska suggests that for every 3 or 4 days planting is delayed maturity will be delayed approximately one day. For up-to-date soil temperatures in your area consult the soil temperature information available at <http://www.mesonet.ttu.edu/latestobs/soil.html> (daily 2", 4", & 8") or <http://meso-file1.tosm.ttu.edu/tech/1-output/soil.html> (where you can select the 10-day average minimum for bare soil at 8"). Also, National Weather Service, [www.weather.gov](http://www.weather.gov), has limited information available (haven't learned how to extract it).

Oats should be planted in a similar manner to wheat. General seeding rate recommendations are 50 lbs./A for dryland and 90 to 100 lbs./A for irrigation. Keep in mind when comparing oat prices that there are only 32 lbs of oats per bushel. Oat seed with test weight above 32 lbs. per bushel may establish quicker (which may compensate for fewer seed per bushel). Studies conducted by Texas A&M AgriLife crop specialists Drs. Brent Bean (formerly) and Calvin Trostle suggest that lower seeding rates may be used without significantly affecting yield. When Walken and Troy oat varieties were tested at seeding rates of 50 and 100 lbs per acre little difference was observed in forage and hay yield at Bushland and Lubbock, Texas, in 2002 and 2003. Grain yield was significantly lower with the reduced seeding rate at Bushland in 2003.

Nitrogen requirements for oats are usually comparable for topdressing of wheat in the spring. Forty to 60 lbs./A of applied nitrogen will usually be sufficient for most yield goals.

If winter weeds are present these should be controlled either by tillage or herbicide prior to planting. Glyphosate (i.e., Roundup) should be effective on most weeds and grasses that may be present and would not force a delay in planting like 2,4-D. If 2,4-D is used oats should not be planted for a minimum of 10 days. Once oats are established labeled herbicides include 2,4-D, Aim, Glean, Buctril, MCPA, Stinger, Harmony Extra, Starane, and Peak. Ally is not labeled for use in oats. (For a recent list of labeled herbicides consult 'Weed Control Recommendations in Wheat,' Texas A&M AgriLife Extension, <http://agrilifebookstore.org>)

Choice of variety will be dependent on if the oats are to be grazed, grown for hay, or to be used for grain production. Drs. Bean and Trostle conducted variety trials 201-2003, and many of these varieties are still available. Based on those results we suggest Walken, Troy, and Monida oats for grazing, Charisma, Magnum, Monida, Troy and Walken oats for hay production (e.g. medium-long and long maturity), and Dallas, Jerry, Nora, and Monida for grain. Varieties with consistently high test weight were Chilocco, Jerry, and Monida. South Plains data suggests that Troy and Hytest also have good grain yield.

### Spring-planted Oat Variety Trial

Lubbock, Texas, 2001 & 2002

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Oat Variety (except TAM 200)	Relative Maturity	2001 & 2002 Multiple Clipping (lbs./A)	2001 & 2002 One-time Hay (lbs./A)
Bob	Short	4,451	2,989
Charisma	Long	4,932	5,673
Chilocco	Short	4,775	3,512
Dallas	Short	4,537	3,242
Hytest	Medium-short	4,268	3,528
Jerry	Short	5,045	3,287
Magnum	Long	4,208	5,754
Monida	Medium-long	4,862	5,976
Nora	Short	4,702	3,513
TAMO 397	Short	4,393	2,735
Troy	Medium-long	5,856	5,537
Walken	Very long	5,342	5,343
TAM 200 wheat	XXX	3,426	3,054

Average	4,677	4,165
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Short-maturity oat	4,596	3,258
Long-maturity oat	5,040	5,656

Wheat has increased risk of not vernalizing (chilling) properly with delayed seeding;

TAM 200 seeded in 2/15/2003 on Feb. 15 was ~20% of the yield of most oat varieties.

Tests were flood irrigated and replicated 3 times per variety in each year.

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