

# Ochiltree County Ag Newsletter March 2017

TEXAS A&M  
**AGRI**LIFE  
EXTENSION

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## Northeast Panhandle GRAIN SORGHUM CONFERENCE

Monday March 6, 2017  
OCHILTREE EXPO CENTER-PERRYTON  
8:00 AM

*Lunch-- Sponsored by Equity Exchange*

**3 CEUs (2 IPM & 1 General) will be offered!**

All producers are invited to attend. Topics will include: Sugarcane Aphid Management, Weed Management Strategies, Sorghum Profitability, and Market Outlook. Representatives with Texas Grain Sorghum Producers will also give an update. Seed company reps will be on hand to give talks on their products afterwards.

***For more information contact AgriLife Extension agents in the following counties.***

Ochiltree County- Scott Strawn  
806-435-4501

Hansford County- Andrew Sprague  
806-659-4130

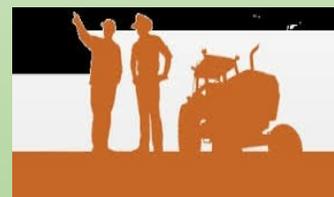
Roberts County- Michael Wilkes  
806-868-3191

Lipscomb County- JR Sprague  
806-862-4601

Hemphill County- Andy Holloway  
806-323-9114

Educational programs of the Texas AgriLife Extension Service are open to all people without regard to race, color, sex, disability, religion, age, or national origin.

The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating



### OCHILTREE AG GROUP-OAG

A new group is being formed called "Ochiltree Ag Group". It will function similar to a marketing club but will have expanded topics related to crop and livestock production, as well as markets and marketing and anything related to agriculture. This will be for all Ochiltree and surrounding area producers. **The first meeting will be Tuesday, March 7, 2017 at 7:00 pm at Margarita's Steakhouse, in Perryton, in the side meeting room.**





### **Master Irrigator:**

Room is still available for participants in the North Plains Groundwater Conservation District "Master Irrigator" Program. This is a highly recommended in depth program for irrigated crop producers. At the completion of the program, participants will have the option for additional grant funding for irrigation equipment that can be utilized in their farm operation. The dates and topics are

March 22-Agronomics

March 29-Irrigation scheduling

April 5-Systems

April 12-Special Topics

To Apply for the program or to gain more information on the program go to [northplainsgcd.org/masterirrigator](http://northplainsgcd.org/masterirrigator)



## *Evaluating Late Emerging Wheat*

### **Dr. Brent Bean**

Former Texas A&M Extension Agronomy, Amarillo  
*(This article came out in 2004 but is still relevant today)*

Recent rains have been just what the Doctor ordered for our drought stressed wheat crop. If good moisture conditions continue, the wheat crop may certainly make a comeback. One question I am getting is 'what kind of yield can I now expect'? The answer to this question is largely dependent on the condition of the wheat prior to receiving the recent moisture and what the rest of March and April has in store for us. There are three components that contribute to yield. Those are: number of heads, number of seed per head, and weight of each seed.

- *Fields that emerged well, and got off to a reasonably good start.* Hopefully these fields still have excellent potential, although their leaves may have been burned back due to cold weather in early January. It is possible some of the primary tillers that developed in the fall may have been aborted due to our fall and winter drought. This likely occurred in some fields. Late winter and spring tillers can make up for some of this loss. Conditions that will favor the development of these spring tillers are a cool, wet March. Our current wet conditions should promote the potential for a high number of seed per head. Overall, these fields should have a reasonable chance to make a good yield.

- Number of heads are determined by seeding rate and tillering. A healthy wheat plant will usually have 3 to 5 tillers that contribute greatly to yield (or more under good irrigated conditions). The two or three most productive tillers usually develop in the fall. Secondary tillers that develop in late winter and early spring can and do contribute to yield. How much they contribute to yield will be very much tied to March and April weather.

Number of seed per head is largely affected by conditions that are present the two weeks prior to jointing, and the conditions that are present during and immediately after flowering. The potential number of seed is determined when the plant switches from a vegetative to a reproductive stage of development. This will likely occur over the next two to three weeks (March 4 - 24). The rains we have recently received should give us conditions for a high number of seed per head. How many of those potential seed actually develop will be determined later.

Seed weight will be based on conditions present during grain fill, with wet, moderate temperatures promoting high seed weight.

So let's discuss different scenarios and how these three components may interact to effect final yield:

• *Fields that emerged well, and got off to a reasonably good start.* Hopefully these fields still have excellent potential, although their leaves may have been burned back due to cold weather in early January. It is possible some of the primary tillers that developed in the fall may have been aborted due to our fall and winter drought. This likely occurred in some fields. Late winter and spring tillers can make up for some of this loss. Conditions that will favor the development of these spring tillers are a cool, wet March. Our current wet conditions should promote the potential for a high number of seed per head. Overall, these fields should have a reasonable chance to make a good yield.

• *Fields with wheat that emerged in the fall but are thin and/or spotty.* These are the fields that looked like they were just about dead four weeks ago. In these fields a wet, cool March, will be essential for promoting tillering. If adequate tillering does not occur, seed number per head and seed weight can potentially at least, partially offset this lack of productive tillers. However, they are unlikely to fully compensate for the lack of tillering. Expect some decline in yield.

Fields with wheat that have just recently emerged. Even under the best of situations, these fields are unlikely to produce a 'normal' yield. However, these fields can still produce significant yield. One concern is that wheat that has just now emerged may not have 'vernalized'. Vernalization is essentially a chilling affect that must take place in winter wheat before it will switch from the vegetative to reproductive stage and produce a head. This is a protective mechanism in winter wheat that keeps the growing point below the ground, thus insulating it from potentially being frozen during the winter. Once the plant has been sufficiently 'chilled' and temperatures begin to warm up (day length may also play a role), the plant will start its reproductive stage and jointing will soon occur. This vernalization process starts as soon as the seed imbibes water. Wheat does not need to be emerged for vernalization to begin. The effective vernalizing temperature range appears to be from 33 and 50 F. The amount of chilling necessary is variety dependent. Some varieties may require as little as a few days to vernalize, while others may require as much as six weeks. Varieties known to have a short vernalization requirement are TAM 101 and TAM 202. Jagger is also suspected of having a short vernalization requirement.

My best guess, is that any variety planted before January 1 has had plenty of opportunity to vernalize, even if it has just recently emerged. Clearly the yield potential of recently emerged wheat has been significantly reduced, as even under the best of spring conditions seed number per head and seed weight cannot make up for the lack of sufficient tillering.

### ***Estimating Wheat Yield Potential***

Two publications have been written on how to estimate wheat yield. Both publications require you to make certain assumptions (guesses) on seed number and seed weight. Basically, to get an estimate of yield potential, number of plants are counted, or better yet tillers, per square foot. By estimating seed number and seed weight a potential yield can be derived. Clearly the closer to actual harvest the more accurate the yield estimate will be. These two publications, one from Texas and one from Oklahoma, can be printed from the internet at:

- <http://soilcrop.tamu.edu/publications/pubs/scs1999-21.pdf>
- <http://www.agr.okstate.edu/plantsoilsci/extension/publications/wheat/pt-01-10/pt2001-10.htm>

Research out of Kansas and elsewhere suggests that wheat yield can be reduced as much as 20% for every month planting is delayed past it's optimum planting date. On average, wheat yield was reduced 50% when it emerged in March compared to in the fall. However, as indicated in the previous discussion, actual yield loss will largely be dependent on weather conditions from now through grain fill. At least the recent moisture has given the crop a fighting chance. If fields have a decent yield potential at this time, keep in mind that weed control and possibly nitrogen topdressing may be required. If wheat is to be topdressed with nitrogen this needs to occur before jointing to do much good.



***Capital Farm Credit- Farm & Ranch Risk Management Workshop: "Risk Management, Finance & Strategies in a Down Economy"***

***Thursday, March 9, 2017.***

***Ochiltree County Expo Center***

***8:00 am- 12:00pm***

***Lunch Provided***

***Topics include Managing Risk in Today's Markets***

***Utilizing risk management software***

***Livestock, Forage & Crop insurance programs***

***Ranch accounting 101: Budget & Balance Sheets***

***RSVP by March 6th to Capital Farm Credit at 806-435-6526***

## Considering Spring Planted Oats

Dr. Calvin Trostle, Extension Agronomy, Lubbock

The wheat crop in the Texas Panhandle and South Plains has gotten off to a poor start. Wheat that was planted early following late summer rains emerged and produced some early season growth for grazing. Later planted wheat under dryland conditions either did not germinate due to lack of adequate soil moisture or if the wheat emerged simply hasn't grown well. In some fields lack of precipitation through the fall and early winter coupled

with a few days of single digit temperatures have resulted 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.

As a result of the poor wheat prospects some growers are considering 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 planted later. Oats will germinate at soil temperatures as low as 40 degrees 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://lubbock.tamu.edu/irrigate/weatherdata.php> or <http://amarillo2.tamu.edu/nppet/petnet1.htm>

Oats should be planted in a similar manner as 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. Studies conducted by Texas A&M crop specialists Calvin Trostle have suggested 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 lower with the reduced seeding rate at Bushland in 2003.

If winter weeds are present these should be controlled either by tillage or herbicide prior to planting. Glyphosate (ie 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.

Choice of variety will be dependent on if the oats are to be grazed, grown for hay, or to be used for grain production. Based on the results of variety trials the recommendations are Walken, Troy, and Monida oats for grazing, Charisma, Magnum, Monida, Troy and Walken oats for hay production, 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

Lubbock, Texas, 2001-2002

Calvin Trostle, Extension Agronomy, Texas A&M--Lubbock

Oat Variety ( Except TAM 200)	Relative Maturity	2001-2002 Multiple Clipping (lbs./A)	2001-2002 One time Hay (lbs./A)
Bob	Short	4451	2989
Charisma	Long	4932	5673
Chilocco	Short	4775	3512
Dallas	Short	4537	3242
Hyttest	Medium-short	4268	3628
Jerry	Shot	5045	3287
Magnum	Long	4208	5754
Monida	Medium-long	4862	5976
Nora	Short	4702	3513
TAMO 397	Short	4393	2735
Troy	Medium-long	5856	5537
Walken	Very long	5342	5343
TAM 200 wheat	XXX	3426	3054

Average	4677	4165
Short-maturity oat	4596	3258
Long-maturity oat	5040	5656

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

TAM 200 seeded in 2003 on Feb. 15 gave about ~20% of the yield of most oat varieties.

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