



TEXAS COUNTY AG NEWSLETTER

March 2007

Move those cattle!

By Jeff Edwards, Brad Tipton,
Curtis Bensch, and Rick
Kochenower

First hollow stem (FHS) continues to progress in our plots throughout the state. The majority of our most popular varieties are past first hollow stem (Table 1). So *there is a good chance if you are grazing Jagger, Jagalene, Overley, or OK Bullet you are causing significant damage to your wheat yield potential.*

The one exception is the Panhandle, which is just starting to show some hollow stem. It is likely, however that the majority of fields in this area will be at first hollow stem by the end of next week.

Table 1. Hollow stem measurements at Stillwater, El Reno, and Goodwell, OK. Shaded cells indicate a variety has reached first hollow stem at a location. A blank, white cell indicates that hollow stem was not measured for a variety at that location

VARIETY	Stillwater	El Reno Conv. Till	El Reno No-Till	Goodwell
	March 12	-----March 13-----		March 12
OKFIELD	2.2	1.4	1.7	
CENTERFIELD	1.1	1.8	0.9	
PROTECTION CL	-	-	-	
OVERLEY	-	-	-	
FULLER	-	-	-	1.1
JAGALENE	-	-	2.7	0.7
JAGGER	-	-	-	0.7
OK BULLET	-	3.1	2.6	
SANTA FE	-	-	-	
SHOCKER	-	-	-	
2174	1.2	1.0	1.3	0.2
ENDURANCE	1.3	1.1	1.0	
TAM 111	1.6	1.6	0.9	0.3
DOANS	2.6	-	1.5	
CUTTER	-	-	-	0.8
FANNIN	-	-	-	1.4
DUSTER	-	-	2.3	
DELIVER	1.8	-	2.2	
JEI 110	1.5	2.4	1.8	
DANBY	0.7	1.2	0.8	
GUYMON	-	-	-	
INTRADA	-	-	-	
IKE	0.6	-	-	
LAKIN	0.9	-	-	
TREGO	0.6	-	-	
STANTON	2.3	-	-	
TAM 110	-	-	-	
AVALANCHE	1.3	-	-	
2145	-	-	-	
NEOSHO	-	-	-	
TAM 112	-	-	-	
Ok101	1.4	-	-	
Ok102	0.6	-	-	
CUSTER	-	-	-	0.5

Wheat Disease Update

OKLAHOMA-by Dr. Bob Hunger, March 15, 2007:

Wheat Soilborne Mosaic Virus (WSBMV) & Wheat Spindle Streak Mosaic Virus (WSSMV):

WSBMV and WSSMV symptoms are continuing to be clearly expressed in the WSBM/WSSM nursery I have here at Stillwater. However, most of the wheat varieties planted in Oklahoma are resistant to one or both of these viruses, and we only rarely ever hear of any problems with these diseases.

Wheat foliar diseases: Powdery mildew continues to be the most prevalent foliar disease observed on wheat around Stillwater and across the state. Yesterday (March 14th) Brian Olson and I traveled from Stillwater to Altus and stopped to exam wheat variety-demonstrations at or near El Reno, Minco, Apache, and Altus. At these locations, moderate to heavy powdery mildew was observed on the lower leaves of susceptible varieties at all locations.

Remember, this is not unexpected in Oklahoma for this time of year. As jointing occurs and the wheat grows, the canopy will "open up" and the better air circulation combined with warmer and drier weather usually slows or stops the spread of powdery mildew. With some of the extremely susceptible varieties (see: <http://wheat.okstate.edu/vtr/index.htm> for ratings of varieties to powdery mildew), spread of powdery mildew to the upper leaves can continue to occur but only rarely are the flag and flag-1 leaves infected and yield losses from powdery mildew usually are not significant.

Brian and I also saw some leaf rust pustules on lower leaves, which should continue to increase during the coming weeks. How severe leaf rust becomes will depend on several things including the inoculum present in fields in Oklahoma (which currently is low), inoculum that blows in from Texas that currently also sounds to be low but may soon increase (see report below), and the weather during the coming weeks. **To date, no stripe rust has been observed in Oklahoma.**

TEXAS - by Rex Herrington of Texas A&M, College Station, March 12, 2007:

After six weeks of very dry conditions in the southern half of Texas, which has slowed all rust development, an upper level low has brought widespread rains to a good portion of the state. The area from College Station to Uvalde saw less than 0.25" of rain from late January to March 10.

Rain is forecast to continue through Wednesday. March 11 & 12 rainfall amounts so far include - - Uvalde-1.5", San Antonion-1.5", Brady-0.02", College Station-1.2", Hearne (30 miles north of College Station-7.2", Waco-2.5", and Hillsboro-1.3". Other areas in the Central Texas Blacklands reported up to 3.5".

KANSAS - by Dr. Erick De Wolf, Extension Wheat Pathologist, KSU , March 13, 2007:

The wheat is greening up in Kansas and I was visiting some research plots on the K-State Plant Pathology Farm with Bill Bockus this afternoon. While we were crawling around looking for various diseases, we discovered trace amounts of leaf rust. The leaf rust appears to have overwintered near Manhattan KS, but is still limited to the lower leaves. I mentioned the find to Bob Bowden, and we concluded that the next few weeks will be critical for further disease development. If the leaves where the rust overwintered die before the rust spreads it will be hard to find the disease in a few weeks. Time will tell if this find is important or not. We will let you know if we see any more rust activity.



BEEF CATTLE RESEARCH UPDATE

Britt Hicks, Ph.D.

Area Extension Livestock Specialist

Oklahoma Panhandle Research & Extension Center

March 2007

Factors Contributing to Value and Returns in Steer Feedouts

Recently Arkansas researchers summarized data from nine years (1996 thru 2004; 1,917 calves) of the Arkansas Steer Feedout program. Their analysis showed that quality grade, medical expenses, and average daily gain significantly contributed to returns above feedlot expenses in each of the nine years. Hot carcass weight and yield grade were significant sources of variation 8 of 9 years. Hot carcass weight appeared to be the major factor affecting returns accounting for 40.5 to 67.8% of the variation in returns in 8 of the 9 years. Similarly, Colorado researchers identified hot carcass weight as the single most important component of carcass value in both a quality-based grid and yield-based grid.²

In a second analysis, these researchers categorized the calves into two groups to evaluate characteristics of calves that did (FIT) or did not (NOFIT) fall within a price grid structure based on hot carcass weight (must weigh 550 to 950 lb), choice grade (minimum of choice), and yield grade (maximum of 3.5). NOFIT calves exhibited more Brahman (11.4 vs 7.8%) and continental breeding (41.7 vs 28.1%), but less English breeding (44.9 vs 60.8%) than FIT calves. More NOFIT calves were classified as USDA large frame calves, whereas, more FIT calves were classified as moderated framed. FIT calves gained 7.4% faster and had 35 lb heavier final weights and 24 lb heavier carcass weights than NOFIT calves. Medical expenses were 34% greater for NOFIT than FIT calves (\$2.67/head). As a result of these differences, FIT calves returned \$75 more than NOFIT calves.

In a third analysis, the calves were categorized into two groups (healthy vs treated) to evaluate the impact of morbidity on performance and carcass merit. Overall, 15.7% of the calves were treated for sickness. Healthy calves gained 4.4% faster and had 15 lb heavier final weights and 20 lb heavier carcass weights than treated calves. Healthy calves also graded better than treated calves (46 vs 25% choice). Health calves returned nearly \$66 more per head than treated calves with \$42 of the difference in returns being due to medicine cost. Similar results were reported from the Texas A&M Ranch to Rail databases for 1991-1995³ in which healthy cattle averaged \$92 more profit per head than sick cattle with \$31 of the difference being due to medicine cost.

In a final analysis, the initial (initial weight X initial price/lb) and final values (carcass weight X price/lb) of the steers were used to divide the cattle into four groups. The four groups were: steers with above average initial and final value (AA), steers with above average initial value but less than average final value (AB), steers with less than average initial value but above average final value (BA) and steers with less than average initial and final value (BB). The AA cattle showed less Brahman influence and more continental influence than the other groups. Returns from feeding differed among the four groups averaging \$183, \$123, \$79, and \$28 per head for the BA, AA, BB, and AB groups, respectively. Not surprisingly, these returns suggested that the most profitable cattle were those that were bought cheaper, performed well and had good carcasses.

Continued on next page

Effect of BRD on Feedlot Performance and Impact of Genetics on BRD Susceptibility
Recent Iowa research analyzed performance and health treatment records on 1,714 Angus-sired calves fed at various feedlots over a three year period (2003-2005).⁴ In this summary, treatment for bovine respiratory disease (BRD) ranged from a high incidence of 18.6% in 2003 to a low incidence of 5.8% in 2004. Overall, 89.5% of the cattle were never treated, whereas 4.6% of the cattle were treated once or twice and 1.5% were treated three to six times. Treatment for BRD significantly reduced daily gain, carcass weight, ribeye area, and marbling score. Sire also significantly effected the number of times an animal was treated for BRD suggesting that genetics plays an important role in the resistance to BRD in Angus cattle.

Effect of Method and Timing of Castration on Newly Arrived Stocker Cattle
Recent Arkansas research evaluated the overall impact of castration and the effects of timing and method of castration on growth performance and health of newly arrived stocker cattle.⁵ This research project used 272 crossbred male calves (185 bulls and 87 steers) weighing 462 lb that were purchased from sale barns and shipped to the University of Arkansas Stocker Unit in Savoy, AR (three trials). Bull calves were castrated by banding or surgical methods on day 0 or 14 of the receiving period. Over the 43 to 52 day trials, bulls castrated surgically on day 0 gained significantly faster (1.45 lb/day) than bulls castrated surgically on day 14 (1.12 lb/day) or banded on day 0 (1.21 lb/day) with bulls banded on day 14 having intermediate gains (1.36 lb/day). No differences in morbidity were observed among the castration treatments. Steers gained faster than bulls (1.78 vs vs 1.28 lb/day) and had a lower incidence of morbidity than bulls (50 vs 79%).

These data suggest that if bulls are castrated surgically, castration at arrival does not add enough stress to reduce growth performance as compared to delaying castration to day 14. Postponing surgical castration reduced performance. Whereas, banding castration could be delayed until two weeks following arrival without effecting growth performance.

Check the Thaw Thermos Carefully Before Artificial Insemination Season Begins

by Glenn Selk

Producers that utilize artificial insemination in their breeding program must pay close attention to detail to achieve high reproductive rates. One of the details that is often overlooked is the proper thaw temperature of the water in the thaw thermos that is available to bring semen straws up to the correct temperature. Most AI companies still recommend that the water in the thaw thermos be 95 to 98 degrees Fahrenheit. When the temperature in the thaw thermos goes significantly above that range, fertility of the semen being thawed may decrease.

As we conducted AI Refresher Clinics around the state of Oklahoma in past years, we have checked the thermometers in the thaw thermos of many producers. About one of every 10 of these thermos thermometers was incorrect by 10 or more degrees F. In nearly every case, the problem thermometer was a "dial" thermometer, and could have been the culprit in lower conception rates at the owner's farm or ranch. Therefore producers need to check these thermometers before each breeding season against a reliable mercury type thermometer. The dial thermometer can be adjusted by using a box end wrench on the collar below the dial and then with vice-grips or pliers turning the rim of the dial to return the thermometer to the correct setting. Over heating the semen during the thaw process, can reduce pregnancy rates.

HOOKER HARD WINTER WHEAT VARIETY TRIAL 2006-2007

COOPERATOR: ERNEST HERALD

20	13	40	34	6	12	7	36	17	31	8	37
401	402	403	404	405	406	407	408	409	410	411	412

37	8	20	13	31	36	17	40	12	7	34	6
301	302	303	304	305	306	307	308	309	310	311	312

31	12	37	7	34	20	8	6	40	17	13	36
201	202	203	204	205	206	207	208	209	210	211	212

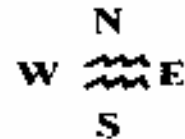
6	7	8	12	13	17	20	31	34	36	37	40
101	102	103	104	105	106	107	108	109	110	111	112

PLANTED: 10-02-06

FERTILIZATION: 30#, 11-52-0/Ac.

Soil test information: pH = 0.0, Total N = 000, P = 00, K = 000.

60# seeding rate.



6 = JAGALENE

7 = JAGGER

8 = OK BULLET

12 = ENDURANCE

13 = TAM 111

17 = DUSTER

20 = DANBY

31 = INTRADA

34 = TREGO

36 = TAM 110

37 = AVALANCHE

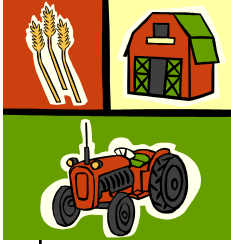
40 = TAM 112

Care of Newly Purchased Young Bulls by Glenn Selk

Young bulls that are purchased at production sales are often in "good" body condition. Let's face it, well conditioned bulls look better on sale day and sell better. Gain tested bulls have been fed for maximum gain while on test. Both of these scenarios, make commercial cow calf producers wonder about fertility and libido of these young sires when they are turned out in a pasture with a group of cycling females and very little, if any, grain in sight.

Research at Kansas State University has illustrated that young "gain-tested" bulls have normal fertility and libido when allowed to return gradually to moderate fleshiness and hearty physical condition before the breeding season. In fact, many performance-tested bulls from central test stations are returned to the owner's ranch after the gain test in order that they be allowed to be properly conditioned before the sale date. Test station sales usually offer bulls that completed their gain test about 6 months previously.

Any rancher that purchases a young, highly fitted or conditioned bull should plan to gradually reduce the fleshiness of the bull before the breeding season. To let these bulls down, it is a good practice to start them on a ration that is not too dissimilar to the one they have been accustomed to but that is 60% to 70% of their previous intake. The amount of grain can be reduced at the rate of about 10% per week until the desired level is achieved. At the same time, substitutions should be made in the form of light, bulky feeds--such as oats or alfalfa hay. Ideally, this letdown should be completed prior to the time bulls are turned out. Dramatic nutritional changes can have an adverse effect on semen production, so it is important that these ration modifications be done gradually. Producers need to try to keep the total diet of these young bulls at, or near, 12% crude protein. Allow the change of diets to take place gradually, instead of allowing a rapid condition and weight loss during the first of the breeding season, which could be reflected in a reduced calf crop next year.



OSU Extension Wheat Variety Plots

Signs have been placed on the replicated wheat plots, 3 miles NE of Hooker, then about $\frac{1}{4}$ mile East off of Highway 54.

**The plots are located on Ernest Herald's farm.
(See plot plan located inside of newsletter).**

Steve Kraich, Ag/4-H Educator
Texas County OSU Extension Service

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