



Current Crop and Insect Situation:

Summer has finally arrived across the state as we've seen temperatures near 100. Crop growth in irrigated fields is still doing exceptionally well. However some dryland fields are starting to show water stress. Now is the time to monitor NAWF (Nodes Above White Flower) very closely. This management tool will allow you to determine when this year's crop is insect proof.

4 NAWF + 400 heat units = Insect Proof

There have been some reports of seeing populations of cotton square borers. These can be confused with the cotton bollworm. The cotton borer however never reaches the population to do economical damage to a crop.

Cotton Square Borer



Cotton square borer adult



Cotton square borer larva

Photos courtesy of Texas A&M

Cotton Bollworm



The cotton square borer larvae is a velvety, light green, slug-shaped worm. The body is covered by a succession of

oblique lines running the width of the body segments. Where cotton bollworm larvae varies from a uniform light green to shades of green or brown, usually with stripes running the length of the body.

State of Oklahoma Cotton.



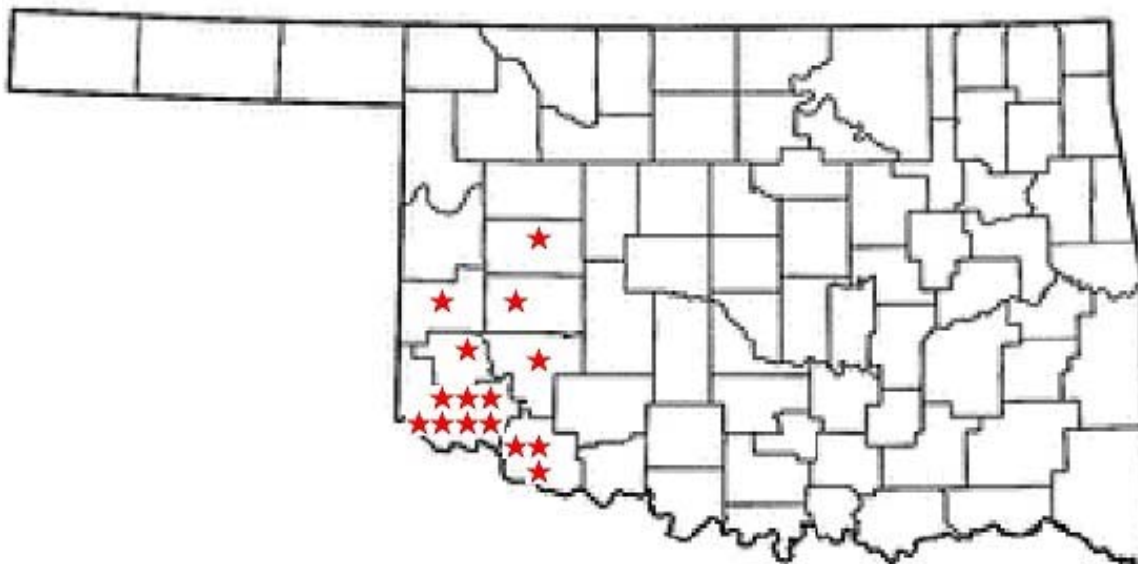
Blooming cotton.

This week's "Talking Cotton" is written by J.C. Banks. A weekly update of the Oklahoma cotton season can be found at <http://ntokcotton.org/>.

In most areas, Oklahoma cotton has recovered from the wet soils and is going into fruiting in good shape. The dryland crop is the best I have seen in several years. We had a problem with aphids in some fields, but beneficial insects and the aphid fungus have been effective in reducing the problem with only a few fields needing to be sprayed. Irrigated cotton has had two to three

irrigations and is at peak bloom and holding fruit well. The only problem we have seen this week is in some dryland fields on sandy soils that have not recovered fully from the wet soils earlier in the season. Because of the waterlogged soils, these fields developed a shallow root system with very limited taproot development. When the soils started drying out, the only roots the plant had were in the quickly drying upper soil layer. At this time the upper lateral roots are attempting to grow deeper, but growth will not be as deep as a root system with an active taproot. These plants will be at a disadvantage the rest of the season, especially if we have drying conditions. Fortunately these spots are normally in only a small part of the total acreage of the field. Since dryland cotton is growing so well, we've had questions on use of growth regulators on the crop. If the crop is well fruited and is not on extremely fertile soils, it will likely not need a growth regulator. The best growth regulator is a good fruit load. Carbohydrate demand by the developing bolls should keep vegetative growth under control.

Extension Cotton Variety Trial Locations



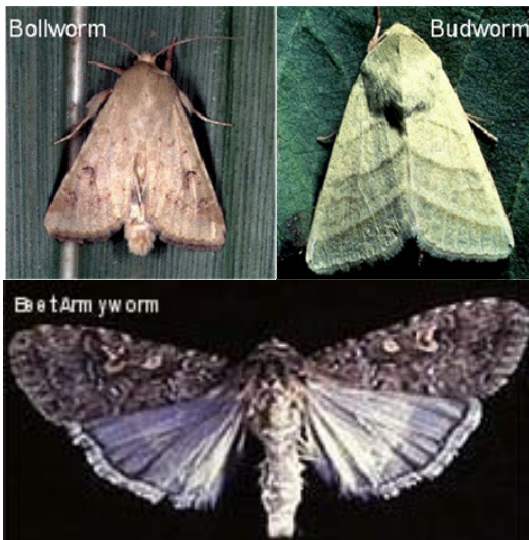
The week ending August 3

Location	Growth stage	Insects
Beckham	6 NAWF	4% Bollworm damage Few Aphids
Custer	6 NAWF	6% Bollworm damage Few Aphids
Greer	4 NAWF	1% Bollworm damage Moderate Aphids
Jackson	5 NAWF	4% Bollworm damage
Jackson	6 NAWF	2% Bollworm damage Few Aphids
Jackson	6 NAWF	4% Bollworm damage Spotty Aphids
Jackson	6 NAWF	3% Bollworm damage Spotty Aphids
Jackson	5 NAWF	2% Bollworm damage Medium Aphids 2% stink bugs
Jackson	4 NAWF	1% Bollworm damage Medium Aphids
Harmon	5 NAWF	3% Bollworm damage
Kiowa	Terminated	
Tillman	5 NAWF	3% Bollworm damage Few Aphids
Tillman	6 NAWF	4% Bollworm damage Few Aphids
Tillman	6 NAWF	4% Bollworm damage Few Aphids 1% Beet Armyworm egg mass 2 % Stink bugs
Washita	5 NAWF	2% Bollworm damage Few Aphids

MOTH TRAPS:

Week of	Bollworm			
	Altus	Hollis	Manchester ¹	Tipton
June 9	34	23	12	115
June 16	22	18	0	89
June 23	54	12	30	68
June 30	84	16	2	117
July 7	119	64	8	124
July 14	49	21	2	91
July 21	31	33	0	59
July 28	65	81	0	137
Aug 4	41	24	0	89
	Budworm			
	Altus	Hollis	Manchester	Tipton
June 9	3	0	0	16
June 16	6	4	0	14
June 23	8	0	0	8
June 30	0	1	0	6
July 7	11	2	0	9
July 14	6	4	0	11
July 21	8	4	0	12
July 28	4	2	0	18
Aug 4	0	0	0	16
	Beet Armyworm			
	Altus	Hollis	Manchester	Tipton
June 9	7	9	1	11
June 16	10	10	2	17
June 23	8	6	2	7
June 30	0	2	1	4
July 7	18	9	2	5
July 14	0	0	0	4
July 21	0	0	0	14
July 28	11	4	0	21
Aug 4	1	3	0	5

¹Traps established and maintained by Scott Price.



Photos courtesy of Texas A&M

GROWING DEGREE DAY:

A Growing Degree Day (GDD) is defined as 24 hours of time in which the temperature is one degree above the lower temperature threshold (60°F - 100°F). By using this range and the high and low temperatures for each day of the growing season, the amount of heat available to the cotton, measured in day degrees, can be calculated. The heat unit data is collected from *Mesonet weather network* weekly.

Cotton Growth Timetable

<u>Stage of Growth</u>	<u>GDD</u>	<u>Days</u>
Emergence	50 - 60	3 - 4
Pinhead Square	425 - 500	25 - 45
First Bloom	725 - 825	41 - 67
Open Boll	1575 - 1925	102 - 127
Defoliation	2150 - 2300	120 - 140

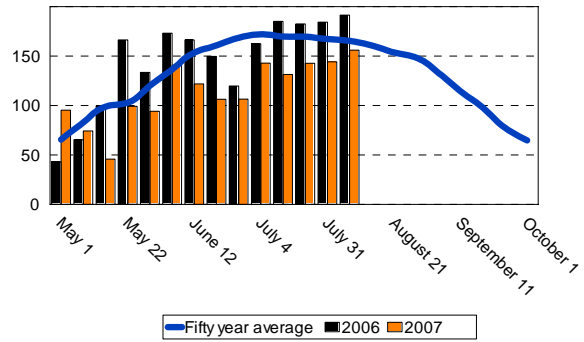
FOR FURTHER INFORMATION CONTACT:

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Altus

Growing Degree Days (GDD)

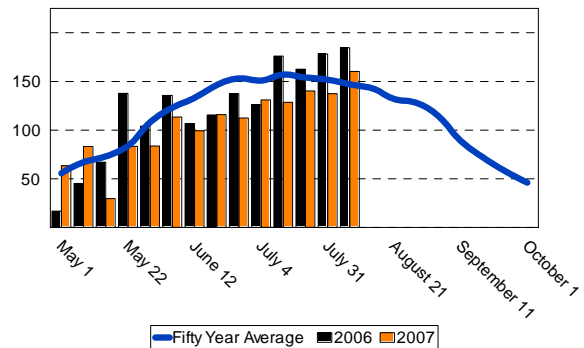
<u>Week of</u>	<u>50 year</u>	<u>2006</u>	<u>2007</u>
May 1	65.5	43.1	95.3
May 8	82.9	65.3	74.2
May 15	98.6	99.7	45.8
May 22	102.9	166.3	99.2
May 29	120.0	133.4	94.2
June 5	134.4	173.1	140.7
June 12	153.4	166.4	121.9
June 19	160.7	149.7	106.3
June 26	168.4	119.7	117.4
July 4	171.9	162.4	142.8
July 11	169.7	185.1	131.3
July 18	169.5	182.5	142.6
July 25	167.2	184.2	144.1
Aug 1	165.3	191.4	155.9
Total	1,930.4	2,022.3	1,611.7



Blackwell

Growing Degree Days (GDD)

<u>Week of</u>	<u>50 year</u>	<u>2006</u>	<u>2007</u>
May 1	55.6	16.8	63.4
May 8	67.5	45.2	83.1
May 15	73.2	67.1	29.6
May 22	84.6	137.8	83.3
May 29	108.8	104.1	83.6
June 5	123.4	135.7	113.4
June 12	133.6	106.7	99.3
June 19	146.4	115.6	115.9
June 26	153.4	137.4	112.4
July 4	151.2	126.1	131.1
July 11	157.1	176.1	128.6
July 18	154.4	162.7	140.2
July 25	152.5	178.3	137.5
Aug 1	147.3	184.6	160.3
Total	1,709.0	1,694.2	1,481.7



Hobart

Growing Degree Days (GDD)

<u>Week of</u>	<u>50 year</u>	<u>2006</u>	<u>2007</u>
May 1	62.3	31.4	76.2
May 8	76.2	22.4	65.4
May 15	84.9	86.2	32.3
May 22	94.7	164.2	86.4
May 29	119.8	115.3	76.7
June 5	136.9	171.7	122.3
June 12	145.9	142.9	112.7
June 19	153.6	131.6	110.4
June 26	162.4	153.7	117.2
July 4	163.5	148.1	133.4
July 11	162.9	184.9	128.4
July 18	164.1	180.8	142.1
July 25	164.2	185.4	140.4
Aug 1	160.2	198.3	160.1
Total	1,851.6	1,916.9	1,504.0

