Cotton Comments

OSU Southwest Oklahoma Research and Extension Center Altus, OK

July 23, 2020 Volume 10 No. 9

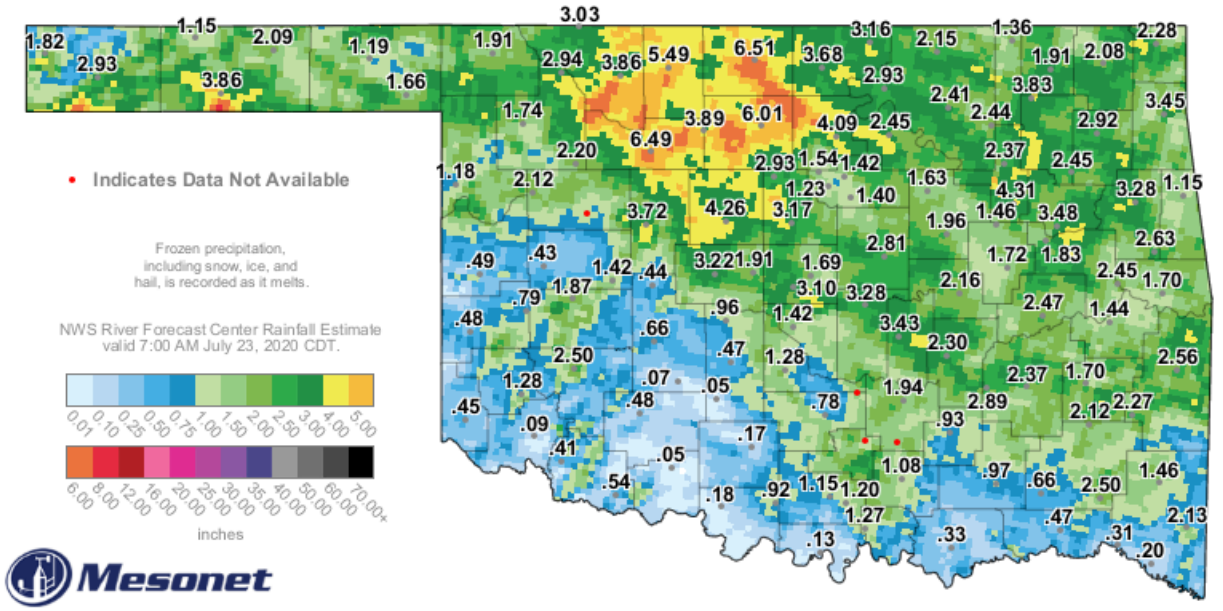
Current Situation

"Cotton showers" continue across the region. A term I learned from N.B Thomas Oklahoma State university first cotton specialist. The term means a rain can occur on one field and a mile away sun is shining. A very frustrating situation for the ones not receiving rainfall. The fields that received rain are doing excellent with exceptional growth and fruit retention. Plant growth regulator (PGRS) applications are continuing across the state. Each field and variety needs to be evaluated separately. One again I urge to consult your seed representative for his/her advice on this matter.

Little to no insect pressure has occurred so far this season. Please keep scouting fields however. Two different situation has occurred where a sporadic pest has appeared. Yellow stripe armyworms were discovered in one and a hatch of Beet armyworms was observed in another.

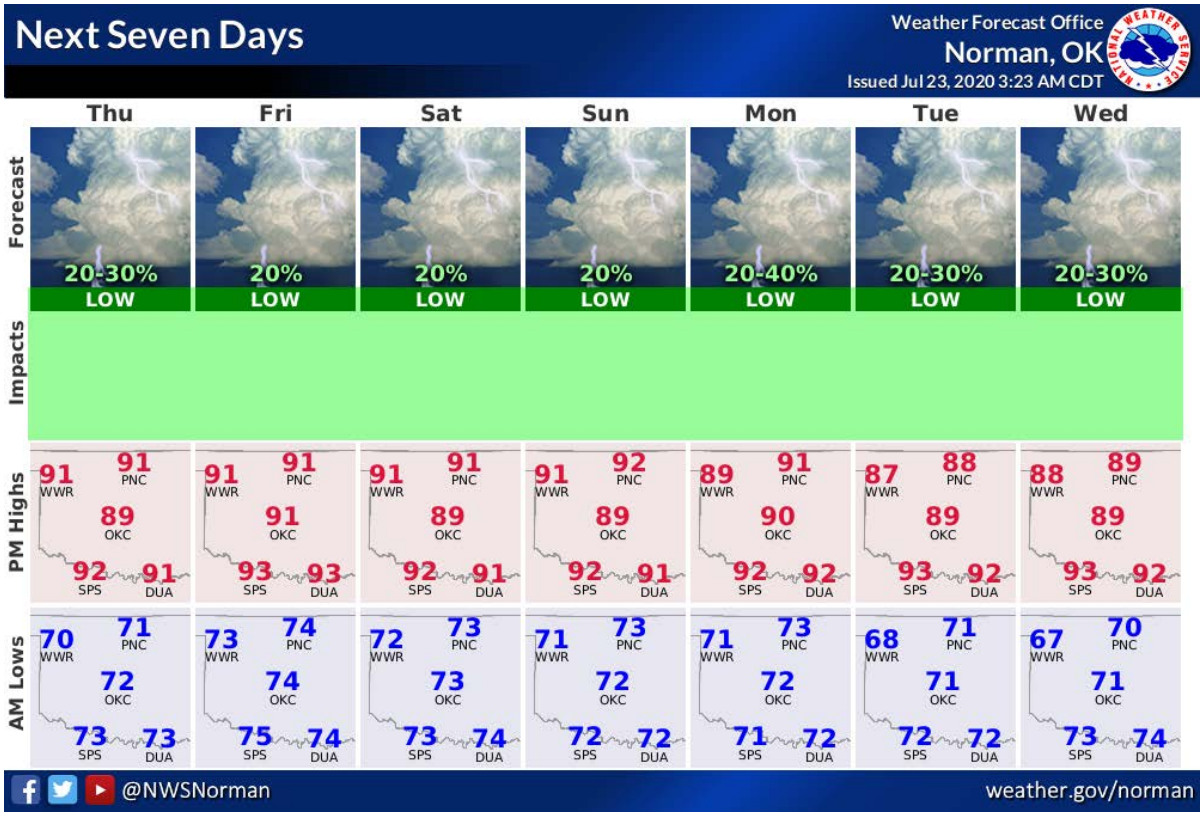
After emergence scouting of the field must start and continue on a weekly basis until termination of the crop.

Moisture sensors in an irrigation trail at the Southwest Research and Extension Center, Altus Oklahoma.



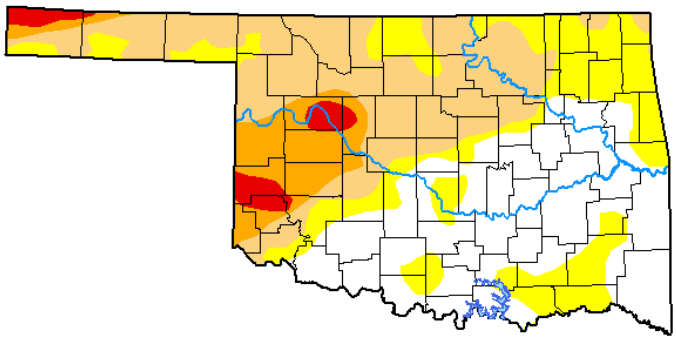
14-Day Rainfall Accumulation (inches)

8:00 AM July 23, 2020 CDT



U.S. Drought Monitor

Oklahoma



July 21, 2020

(Released Thursday, Jul. 23, 2020)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	35.40	64.60	41.40	11.42	2.98	0.00
Last Week *07-14-2020*	39.08	60.92	43.16	18.15	2.99	0.00
3 Months Ago *04-21-2020*	89.09	10.91	3.94	2.27	0.00	0.00
Start of Calendar Year *12-31-2019*	76.45	23.55	10.47	3.64	0.00	0.00
Start of Water Year *10-01-2019*	71.94	28.06	11.08	1.01	0.00	0.00
One Year Ago *07-23-2019*	94.33	5.67	0.00	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author:
Richard Heim
NCEI/NOAA

droughtmonitor.unl.edu

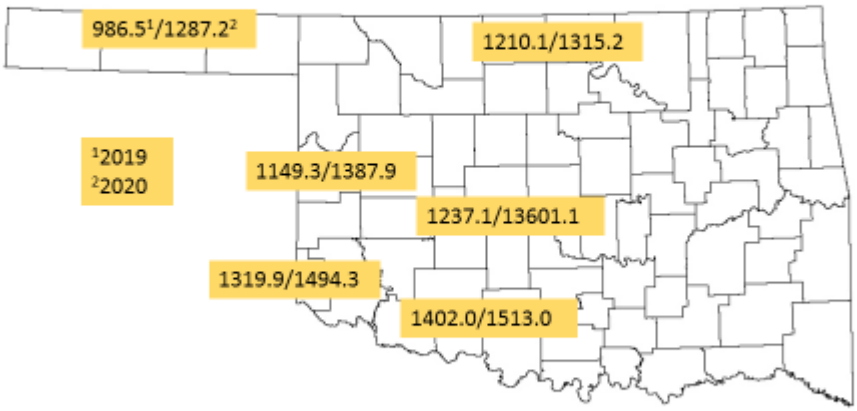
Growing degree days

Cotton Growth Timetable

Stage of Growth	GDD	Days
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

2020 Growing Degree days for select locations May 1 to July 22

State wide average 175.4 more degrees units 2020 compared to 2019



To calculate growing degree days for specific fields and planting dates please click here: [Oklahoma Mesonet Degree Heat Unit Calculator-Cotton]

The standard calculation for cotton DD60 heat units is:

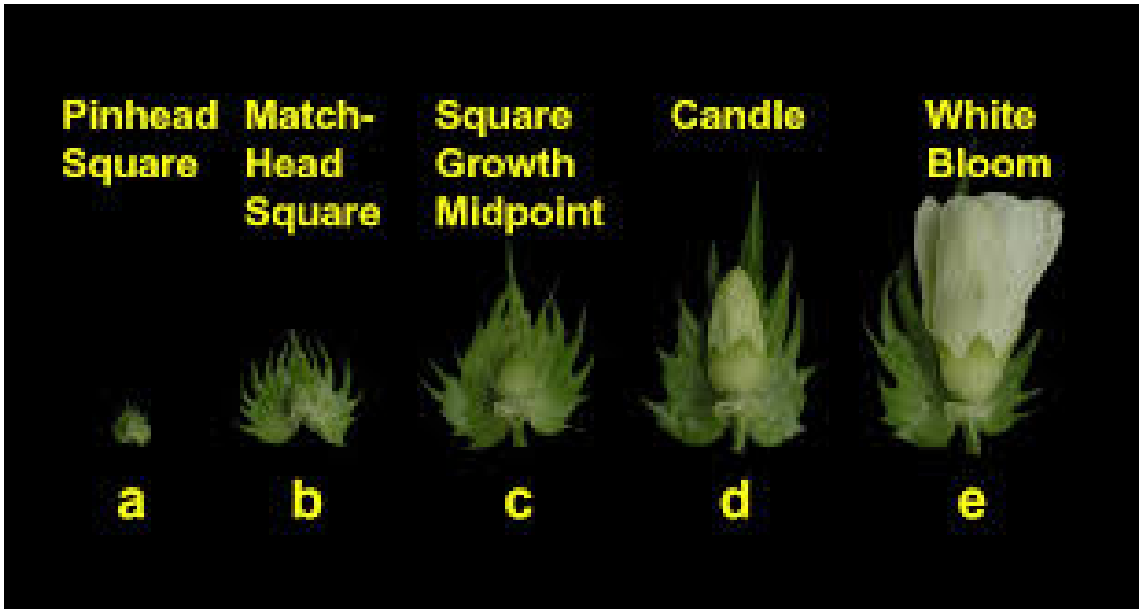
((maximum air temperature, F° + minimum air temperature, F°) / 2) - 60 = DD60 heat units

Essentially, the average air temperature for the day is determined and the 60 degree F° developmental threshold for cotton is subtracted. The DD60s for each day are then totaled.

Oklahoma State University Field Surveys

This office conducts field surveys is six counties (Jackson, Caddo, Greer, Harmon, Tillman and Washita) on a weekly bases these include producer fields, Extension trials, official variety test sites in southwestern Oklahoma. These fields have different planting dates and varieties with various traits. The plant stage varies as July 23, 2020 from 6th truleaf to Blooming.

The most dominate plant stage as of July 9 for these trials: **First Bloom**



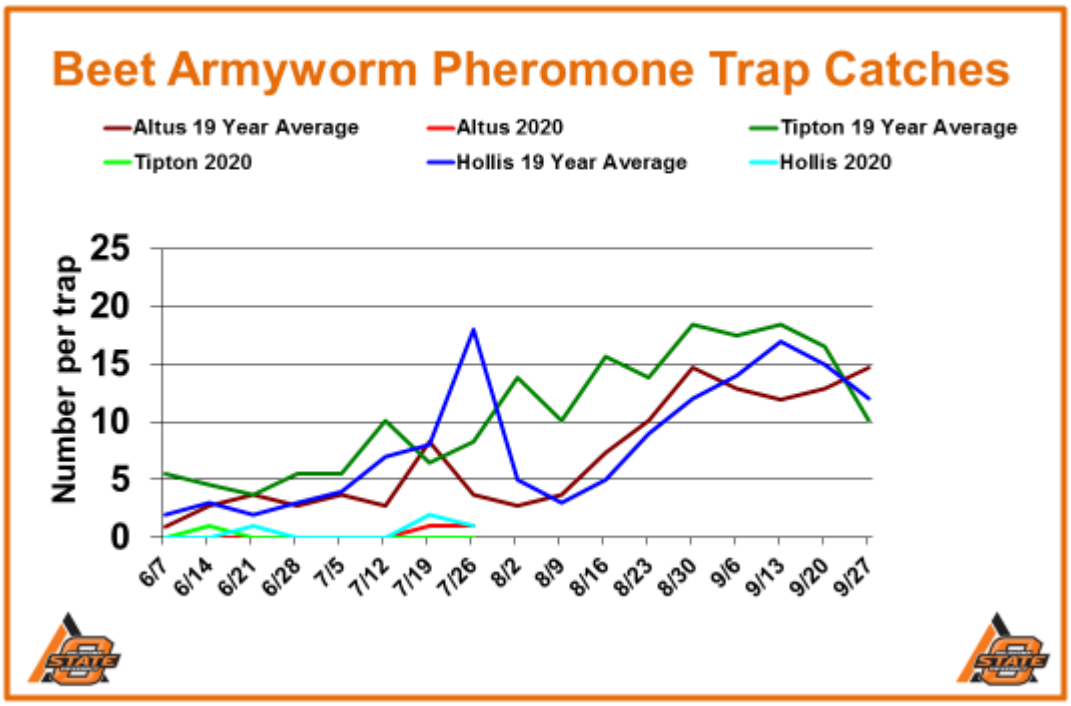
Courtesy of Texas A&M AgriLife

The cotton pest of most concern as of July 23 for these trials: **Bollworm complex and Cotton Aphids**

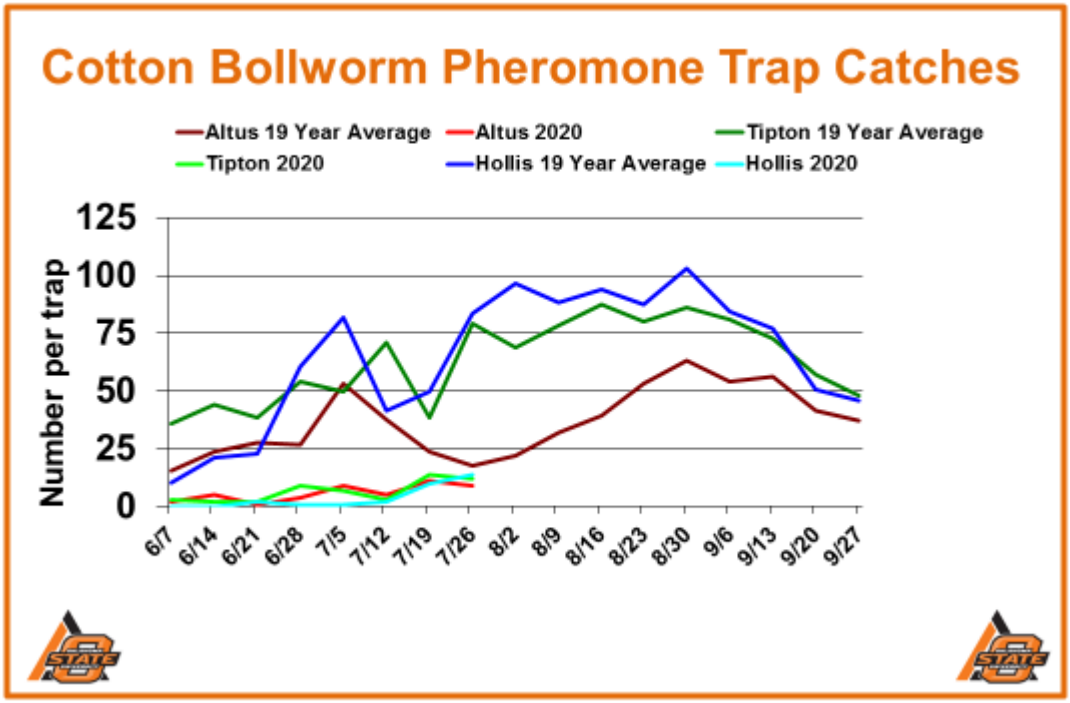
Courtesy of UT Crop News

Moth Trap Counts 2020

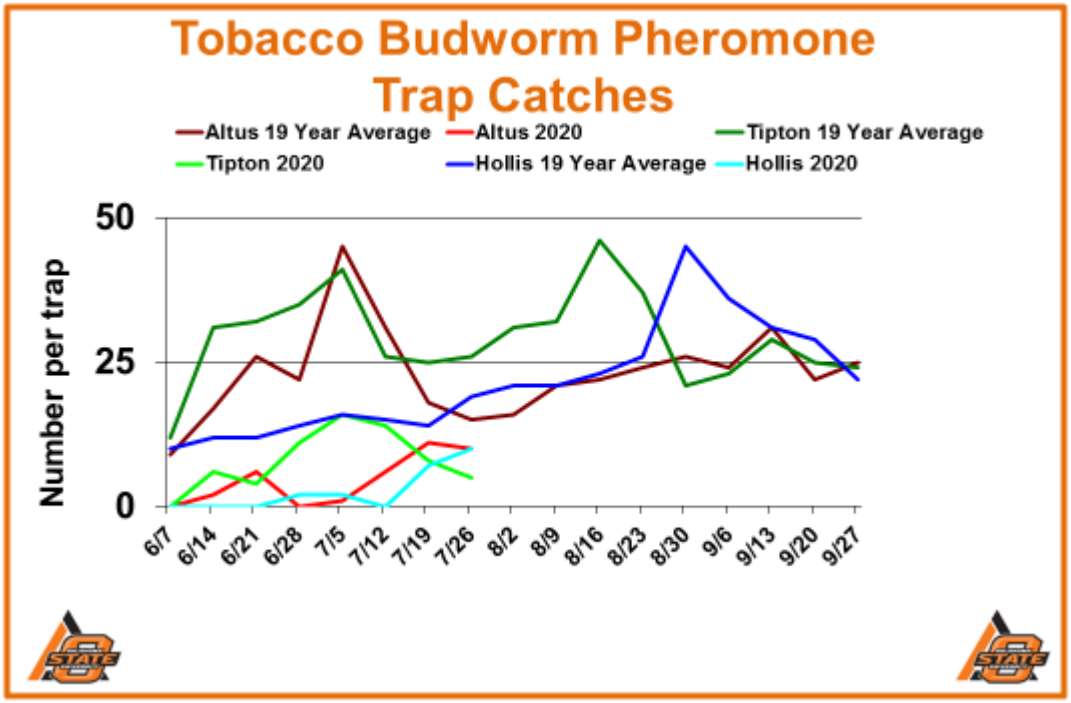
Moth numbers remain low this year. All field reports have stated that very few months has been observed.



Beet armyworm moth
Photo courtesy of University of Georgia



Cotton bollworm moth
Photo courtesy of University of Georgia



Tobacco budworm moth
Photo courtesy of University of Georgia

Fall Armyworm Trap Results 2020

Date Week ending	Jackson	Tillman	Harmon	Caddo
6/7	0	2	0	1
6/14	0	5	0	2
6/21	3	0	0	2
6/28	1	2	0	4
7/4	2	3	2	2
7/11	0	0	0	8
7/18	1	0	2	0
7/26	1	0	1	0

Jackson OSU Southwest Research and Extension Center
Tillman OSU Southwest Agronomy Research Station
Harmon Harmon Near Gould
Caddo Caddo Research Station

Photos courtesy Oklahoma State University

Oklahoma Boll Weevil Eradication Organization

New web page address click here: OBWEO

Brenda Osborne, Director of the Oklahoma Boll Weevil Organization, based at Altus, provided the information below. Eradication of the boll weevil across most of the U.S. Cotton Belt, and in the state has been very successful and is a major contributing factor to the continued profitability of cotton production. It has been a long, difficult, and expensive task to rid our state and most of the Cotton Belt of this invasive species that for such a long time negatively impacted our production. Since 1998 the producers of Oklahoma has spent over **thirty seven million** dollars to eradicate and provide a maintenance program.

Cotton acres for the past five years

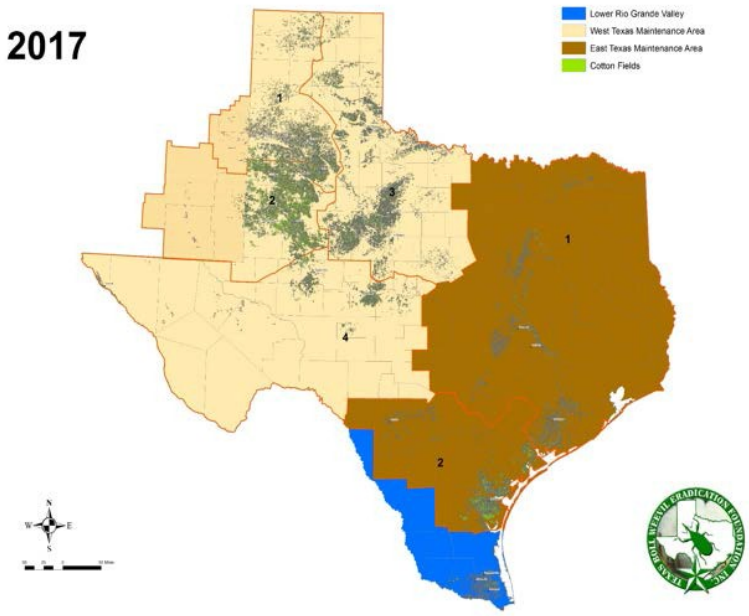
Year	Acres[1]
2015	216,678
2016	299,302
2017	568,434
2018	756,397
2019	603,014

[1] Oklahoma Boll Weevil Eradication Organization

OBWEO is preparing for the upcoming 2020 cotton season. It is our responsibility to ensure the continued success of this program. If you have been growing cotton for the past 3-5 years, we know where those fields are located. ***However, if you are a new producer or have not grown cotton in several years, we need you to provide the legal descriptions of these new cotton fields***.

There is a Boll Weevil Assessment for harvested cotton acres. The current assessment is $2.50 per harvested acre. This assessment is reviewed annually. The trapping density this year is one trap per 640 acres. In areas where planted cotton acreage density is high, not all fields will actually have a trap near it. In other areas that are more isolated, each field will need a trap.

There is still a difficult fight with this insect pest in south Texas, and we all need to do our part in keeping this pest from resurfacing in our state. Cotton harvesting equipment entering Oklahoma from two eradication areas in Texas has to be certified as boll weevil free prior to movement into our state. Please contact TBWEF before departure from these two areas. This will allow TBWEF to inspect the equipment. A USDA-APHIS phytosanitary certificate is issued and is required before equipment can be transported from these areas. These ONLY include the Lower Rio Grande Valley Eradication Zone (blue area on the map below) or the East Texas Maintenance Area (brown area on the map below). This is critical to meet USDA- APHIS requirements and prevent the re-infestation of boll weevils into eradicated areas. It is illegal to move non-certified cotton harvesting equipment from these areas into the state of Oklahoma.



Texas Boll Weevil Eradication Foundation: 325-672-2800
After Hours and Weekends: 325-668-7361

Contact John Lamb at the Frederick office at 580-335-7760 or cell 580-305-1930 for the following counties: Tillman, Cotton, Comanche, Atoka, Bryan, and Stephens.

Contact Brenda Osborne at the Altus office at 580-477-4287 or cell 580-471-79632 for all other counties.

The Cotton Comments Newsletter is maintained by Jerry Goodson, Extension Assistant. If you would like to receive this newsletter via email, send a request to:

jerry.goodson@okstate.edu

Jerry Goodson
Extension Assistant
16721 US Hwy. 283
Altus, Oklahoma
(580) 482-8880 office
(580) 482-0208 fax

www.cotton.okstate.edu

www.ntokcotton.org