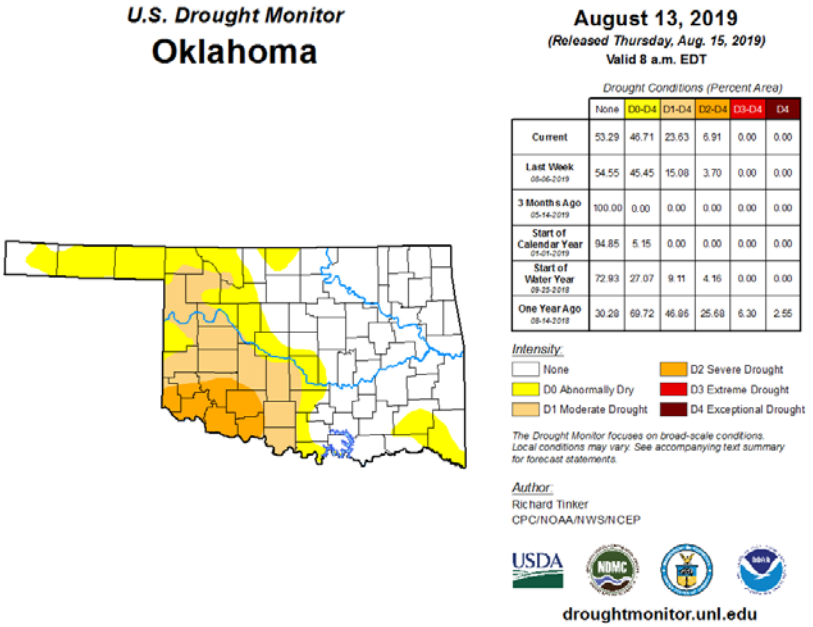
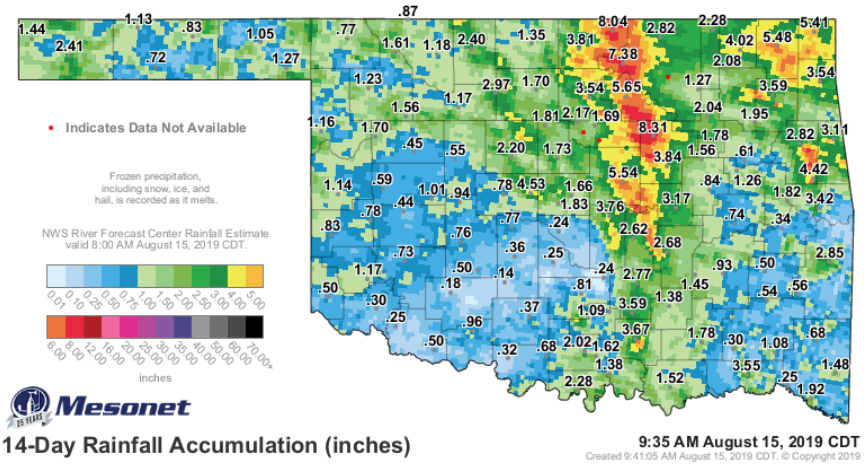
Cotton Comments

OSU Southwest Oklahoma Research and Extension Center
Altus, OK

August 15, 2019 Volume 9 No. 9

2019 Current Situation





Crop Conditions

This year's crop has developed at a rapid place. More and more fields are becoming flower gardens (this includes irrigated as well as dryland fields) and physical cut out will soon occur if not already in some fields. The previous intense heat as severely limited some potential of this year's crop yield. This week rain has help tremendous as well a return to more seasonal temperatures. Aphids and Spider mites population that were almost at control levels in several fields has been almost eliminated by beneficial insect population especially Lady bugs. The best advice for this year is a wait and see attitude. Bollworm larvae sightings are at an all-time low. No other pest have been reported.

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

SERPENTINE LEAF MINER:

Serpentine leaf miners are sporadic pests of cotton. These pest occur every year but despite disfiguring cotton leaves, it has little if any effect on cotton yields. These mines are made by fly larvae feeding on the soft interior tissues so that only the papery, thin covering of the exterior leaf surfaces remain.

MINUTE PIRATE BUG / INSIDOUS FLOWER BUG:

Orius tristicolor *adult*.
D. Letourneau

Minute pirate bugs as the name suggests, are tiny bugs (1/8" long), oval-shaped, black with white wing patches. Nymphs are small, wingless, teardrop-shaped, ranging in color from yellow orange to brown in color. Nymphs and adults have piercing-sucking mouthparts within a long beak. Both adults and nymphs feed on a variety of insects including thrips, spider mites, aphids, insect eggs and small caterpillars. They are effective searchers, with voracious appetites. A pirate bug can eat 30 or more spider mites a day.

The pirate bug holds the prey in its front legs while inserting its beak into the host body, often several times until the prey is empty. Minute pirate bugs overwinter as adults in leaf litter. They emerge about mid-April and begin feeding and remain active into October. Two or three days after mating, the females lay eggs within plant tissue and hatch within 5 days. The nymphs take about 20 days to become adults. Adults live about 35 days, during which the females lay an average of 129 eggs. Several generations occur during the growing season. The last generation of adults winters over.

GROWING DEGREE DAY:

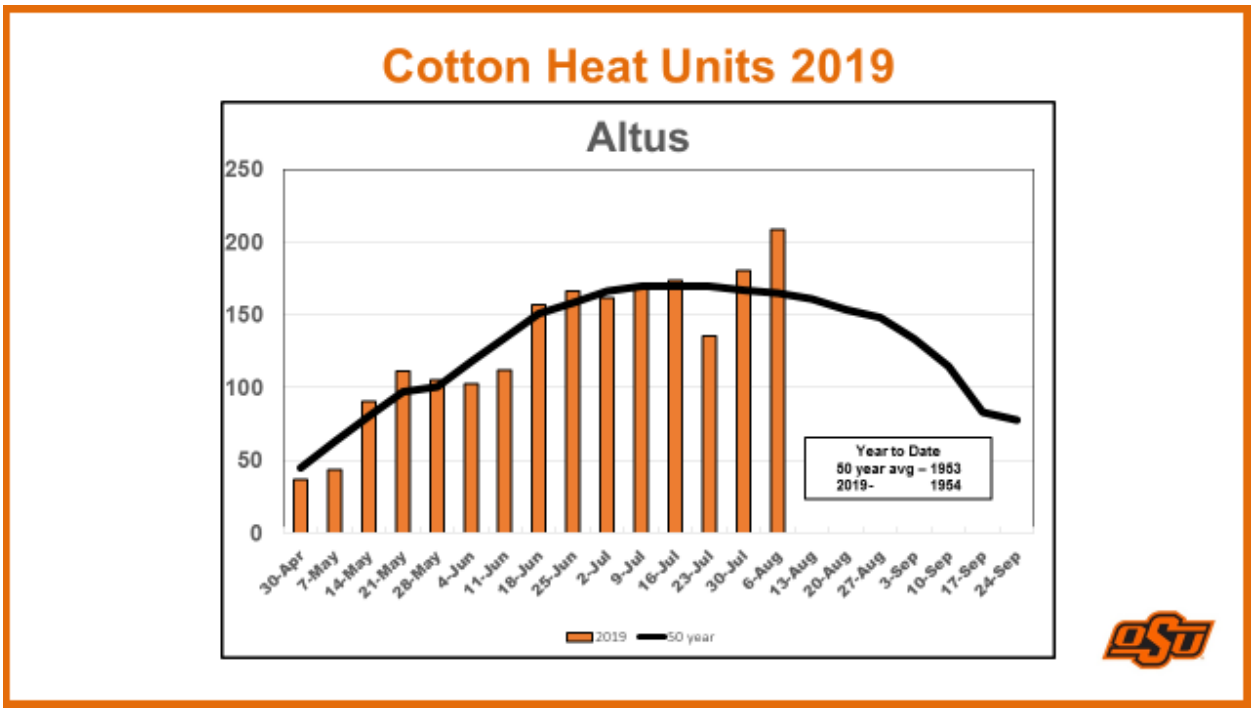
Growing degree days monitoring can be used to predict where the crop stands in comparison against historical data. This information then can be utilized in helping making management decisions to what actions are needed.

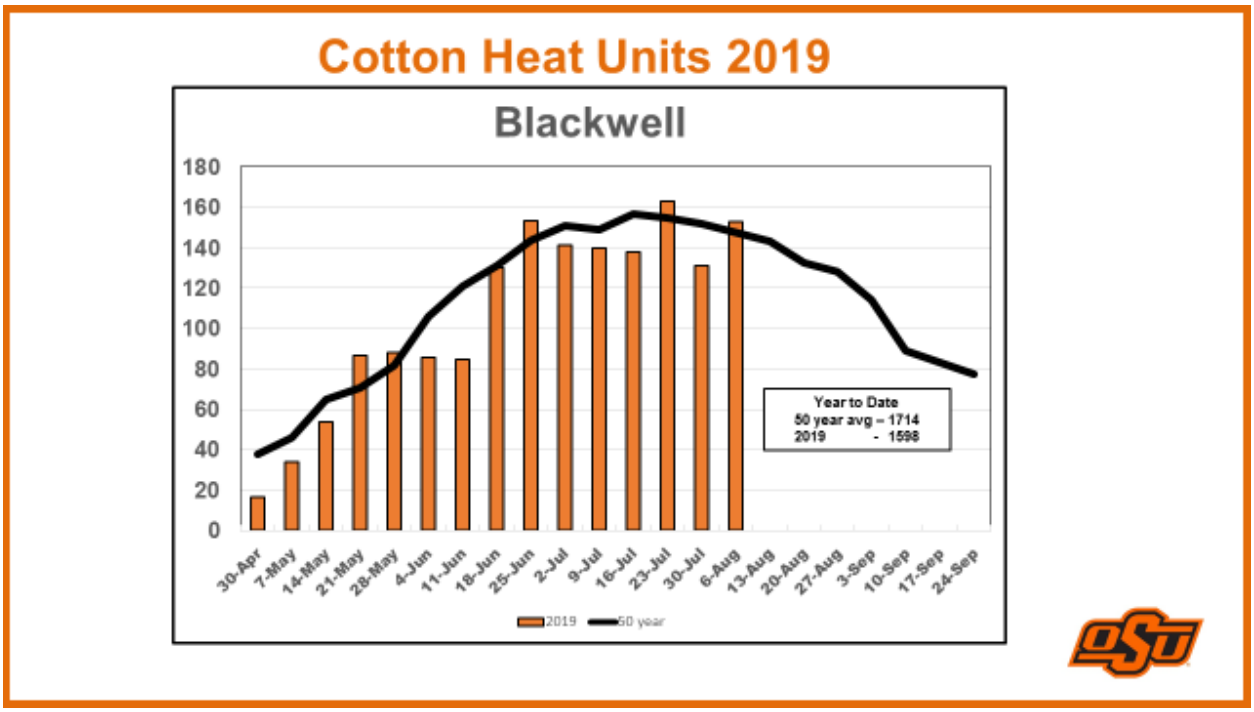
Growing Degree Day (GDD) is defined as 24 hours of time in which the temperature is one degree above the lower temperature threshold (60°F - 100°F). By using this range and the high and low temperatures for each day of the growing season, the amount of heat available to the cotton, measured in day degrees,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

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

2019 Cotton Heat Units

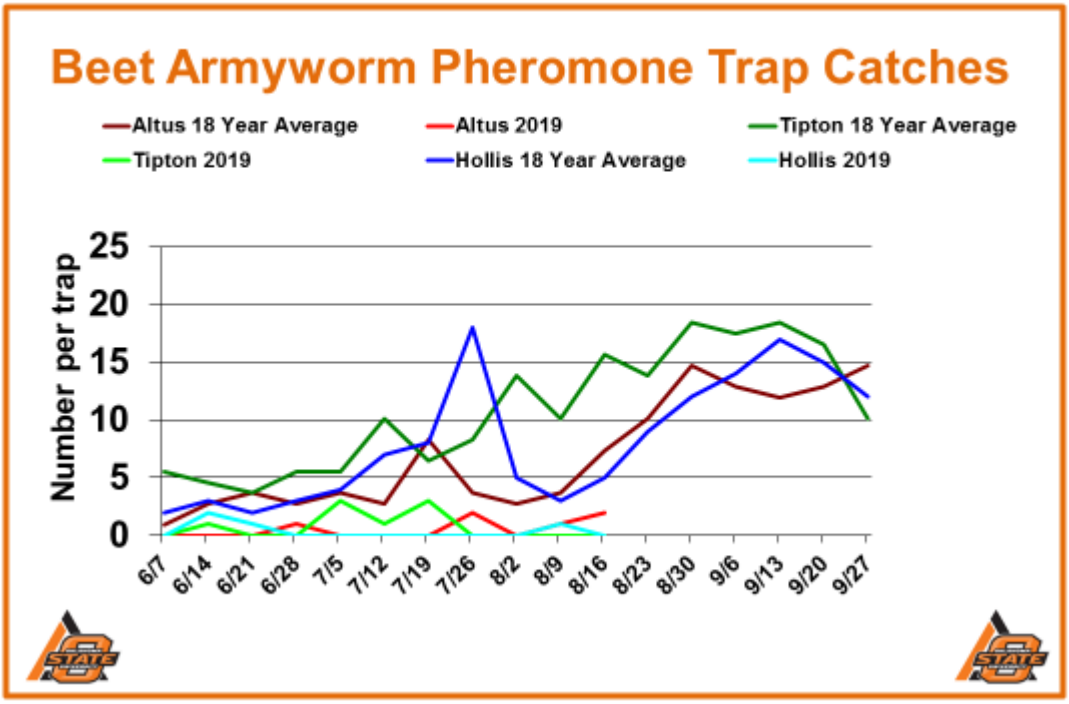




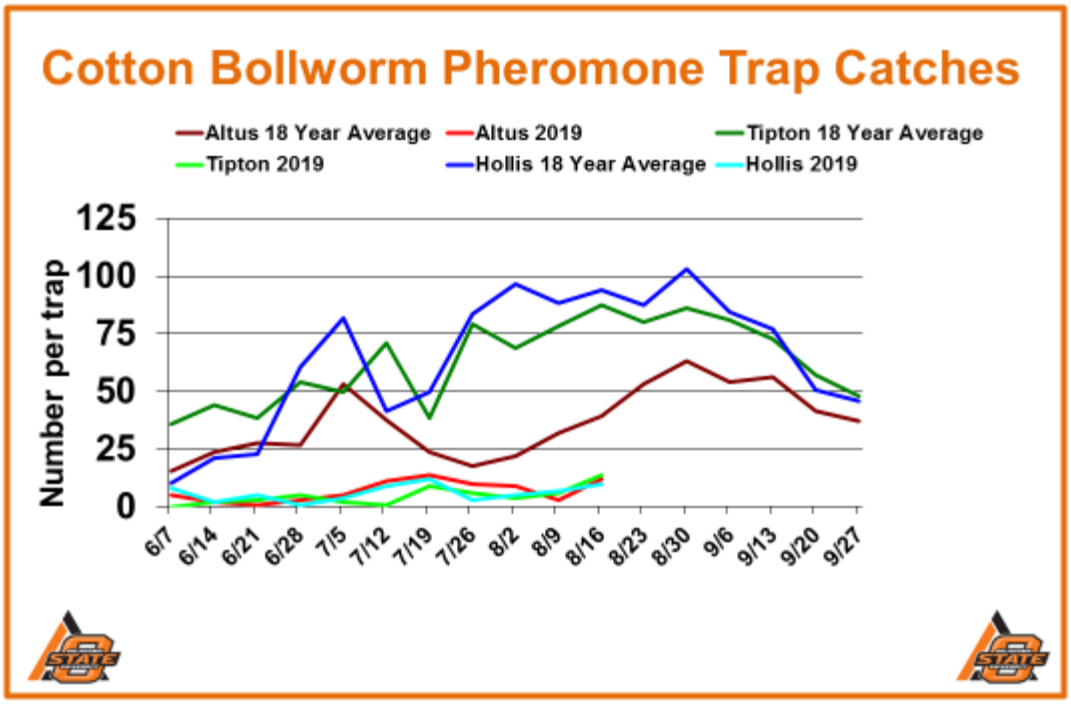
This represent two areas across the state. For a comparison of the fifty year average for a specific area please compensate for distance to the closest area.

Moth Trap Counts 2019

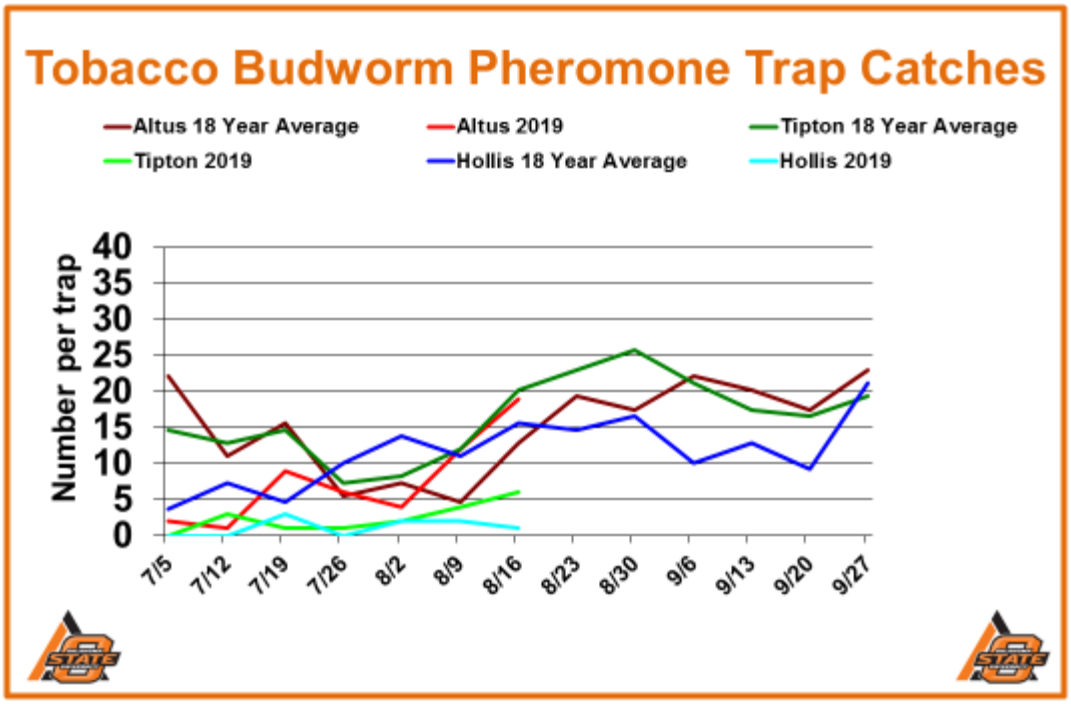
The August moth flight failed to materialize. Field still reports that little moth activity has been observed.



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 2019

Date Week ending	Jackson	Tillman	Harmon	Caddo
6/28	1	3	0	5
7/5	7	8	4	4
7/12	6	5	5	8
7/19	3	11	10	7
7/26	6	2	1	4
8/2	0	5	3	0
8/9	1	0	5	2
8/10	1	1	0	0

Jackson OSU Southwest Research and Extension Center
Tillman OSU Southwest Agronomy Research Station
Harmon Harmon County Fair Complex
Caddo Caddo Research Station

Photos courtesy Oklahoma State University

Oklahoma Boll Weevil Eradication Organization

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 **$37,218,599** to eradicate and provide a maintenance program.

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.

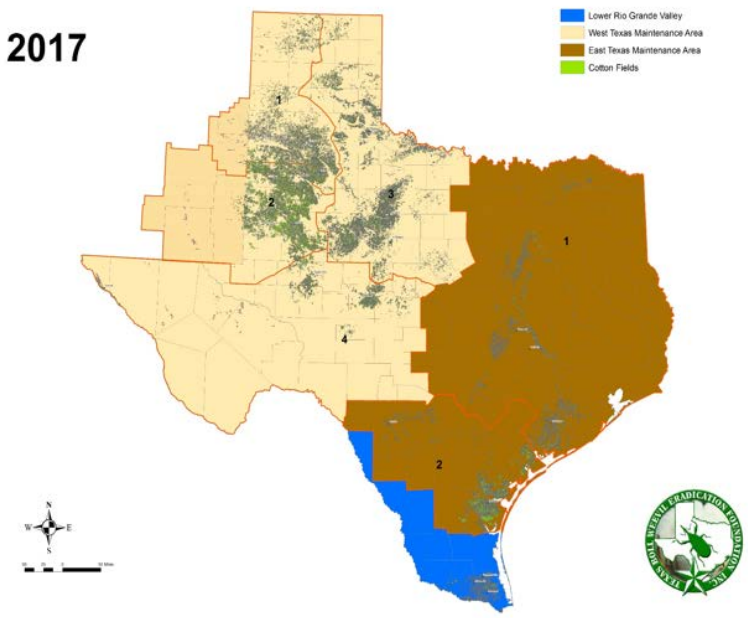
Cotton acres for past five years

Year	Acres[1]
2014	237,523
2015	216,678
2016	299,302
2017	568,434
2018	756,397

[1] Oklahoma Boll Weevil Eradication Organization

OBWEO is preparing for the upcoming 2019 cotton season. It is our responsibility to ensure the continued success of this program. With all the talk of a significant increase in cotton acres, there are some important issues with respect to OBWEO that you need to be aware of. 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.

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 t equipment 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.

Harvey Schroeder Executive Director Oklahoma Cotton Council has relaunched his Oklahoma Cotton web site.

Please click on emblem to visit it.

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