



Cotton Comments

OSU Southwest Oklahoma Research and Extension Center
Altus, OK



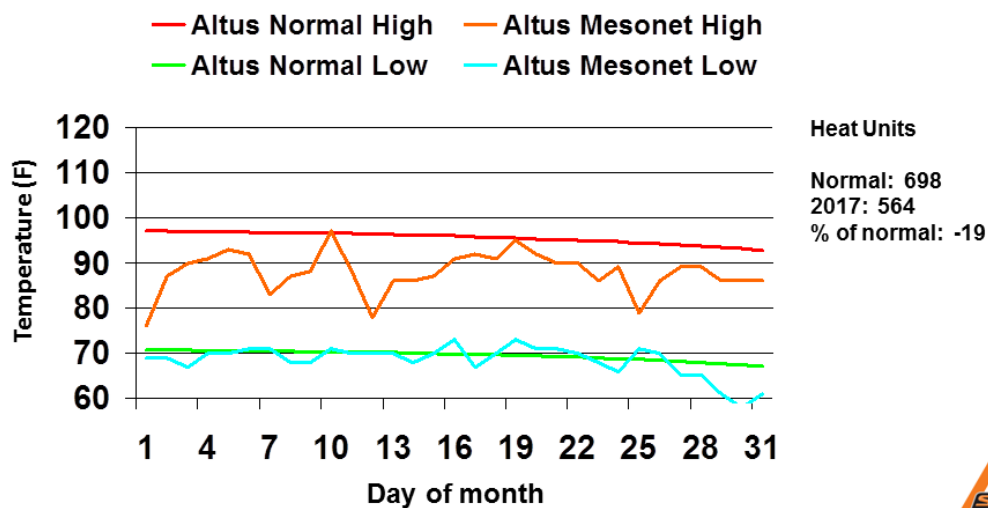
August 31, 2017

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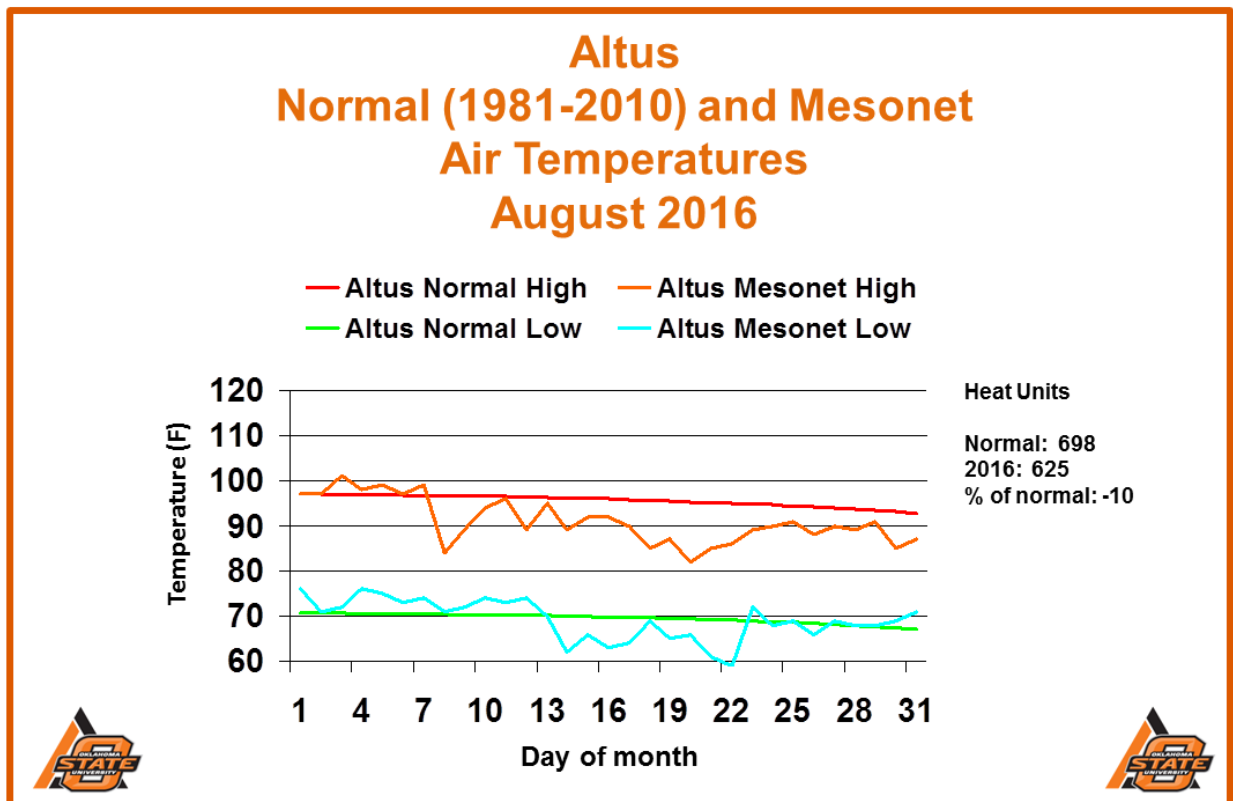
Crop and Heat Unit Update

The 2017 cotton crop maturity rate has taken a bit of a hit with the cooler August temperatures (see August 2017 Altus Mesonet temperature vs. normal temperature graph below). We closed out the month of August at about 19 percent below normal for cotton heat unit accumulation. Nearly all of the daily high temperatures were below normal. Daily low temperatures were normal for most of the month, until the last few days.

Altus Normal (1981-2010) and Mesonet Air Temperatures August 2017



What happened in the 2016 crop year is within memory, and just to refresh mine, I peeked back and looked at the same temperature data for August, 2016. It is shown below. The bottom line for August, 2016, is that it finished about 10 percent below normal for cotton heat unit accumulation. However, the months of September and October of 2016 provided us 444 and 242 cotton heat units, respectively. Our long term averages for those months are 427 and 87, respectively. So, in spite of the 10 percent below normal August in 2016, we still managed to finish up that crop very well. The big question on everyone's minds is – what will happen this year?



The table below shows Mesonet heat unit accumulations for planting dates of May 10 and 20, and June 1, 10 and 20 through August 30 for various locations in the southwestern corner of the state. The total for the various planting dates at Altus range from 2138 for the May10 date to 1500 for the June 20 date. The “normal” or what I call the “long-term average” (from 1981 through 2010) from August 31st until October 22 (the time cotton heat units approach zero) totals 514. So theoretically at least we have quite a bit of cotton maturing temperatures still to come. Generally speaking we can still have fairly good maturity in cotton crops with the lower yields typically encountered in dryland production when the heat units total out to 2000 or so. If really high yields, or late set bolls are a large fraction of the total production, this may be inadequate for good boll maturity. A lot of things can impact cotton maturity besides just heat units (solar radiation, late season rainfall, etc). However, based on the table below it appears that

dryland cotton planted as late as June 20th around Altus that has up to 2 bale/acre potential may still be okay, assuming we have a “normal” September and October. If we shift this to areas farther north and September and October fail to deliver outstanding maturity temperatures, some high yielding dryland fields may have a challenge to mature. It appears that our irrigated fields which were planted before the end of May are probably going to finish okay. These are only my thoughts and as usual, only time will tell. We need to recognize that we didn’t have any “maturity busting” temperatures until after October in 2016, perhaps we can dodge that bullet again in 2017.

2017 Mesonet Cotton Heat Units for Various Planting Dates								
	Altus	Tipton	Grandfield	Hollis	Erick	Hobart	Weatherford	Fort Cobb
May 10 - Aug 30	2138	2165	2182	2099	1900	2019	1969	1947
May 20 - Aug 30	2018	2046	2058	1995	1825	1915	1888	1847
June 1 - Aug 30	1878	1910	1918	1892	1730	1812	1796	1741
June 10 - Aug 30	1736	1768	1783	1733	1623	1688	1673	1617
June 20 - Aug 30	1500	1537	1582	1498	1410	1473	1463	1405
Altus LTA from Aug 31 thru Oct 22	514							
Total for various planting dates at Altus using LTA data from August 31 to end of season								
May 10	2652							
May 20	2532							
June 1	2392							
June 10	2250							
June 20	2014							

We are getting more reports of Verticillium wilt symptoms in fields. For a good discussion of this see last week’s newsletter. Please click here for: [Cotton Comments August 24, 2017 Volume 7 edition 11.](#)

RB

Insect Update

Of the cotton fields in the counties I either monitor or drive through I estimate that 70-80 % of this year’s fields are at cutout and approaching termination of blooming. It is critical that fields that haven’t reached this stage be monitored until they are insect proof. With fewer and fewer fields to pick from, pests will concentrate in fields that are still appealing to them (still blooming). Stinkbugs and aphids are still main concerns at this time. Please refer to last week newsletter if you have any questions about these pests. Please click here for: [Cotton Comments August 24, 2017 Volume 7 edition 11.](#) This will be the last Insect Update of the year, unless something unanticipated occurs. If anyone has any questions please contact me.

Field Surveys – Week Ending September 1, 2017

Location	Date of planting	Plant Stage	Insects	Comments
Blaine Irrigated Cotton Inc Enhanced Variety - Schantz	May 26	0.25 NAWF	NONE	GOOD
Blaine Irrigated Dow Innovation - Schantz	May 26	3.00 NAWF	Stinkbugs	GOOD
Caddo Irrigated OVT – OSU Caddo Research Station	May 30	TERMINATED		
Jackson Irrigated DT RACE – Darby	May 15	2.25 NAWF	NONE	GOOD
Jackson Irrigated Bayer CropScience APT	May 24	3.75 NAWF	1 Bollworm ¹ 5 Damaged squares	GOOD
Jackson Irrigated OVT – OSU SWREC	May 24	6.50 NAWF	NONE	GOOD
Jackson Dryland DT RACE - Abernathy	June 7	4.75 NAWF	NONE	FAIR
Jackson Irrigated Cotton Inc Enhanced Variety - Abernathy	May 9	TERMINATED		
Jackson Irrigated Innovation- Abernathy	May 10	TERMINATED		
Jackson Irrigated PhytoGen Innovation Trial – OSU SWREC	May 24	3.00 NAWF	NONE	GOOD
Jackson Irrigated Entomology Trials – OSU SWREC	May 8	3.25 NAWF	NONE	GOOD
Tillman Irrigated DT RACE – Nichols	May 12	5.25 NAWF	NONE	GOOD
Tillman Dryland OVT – OSU Tipton Valley Research Center	June 13	6.00 NAWF	NONE	GOOD
Tillman Dryland DT RACE - White	June 12	2.25 NAWF	1 Leaf footed bug	GOOD

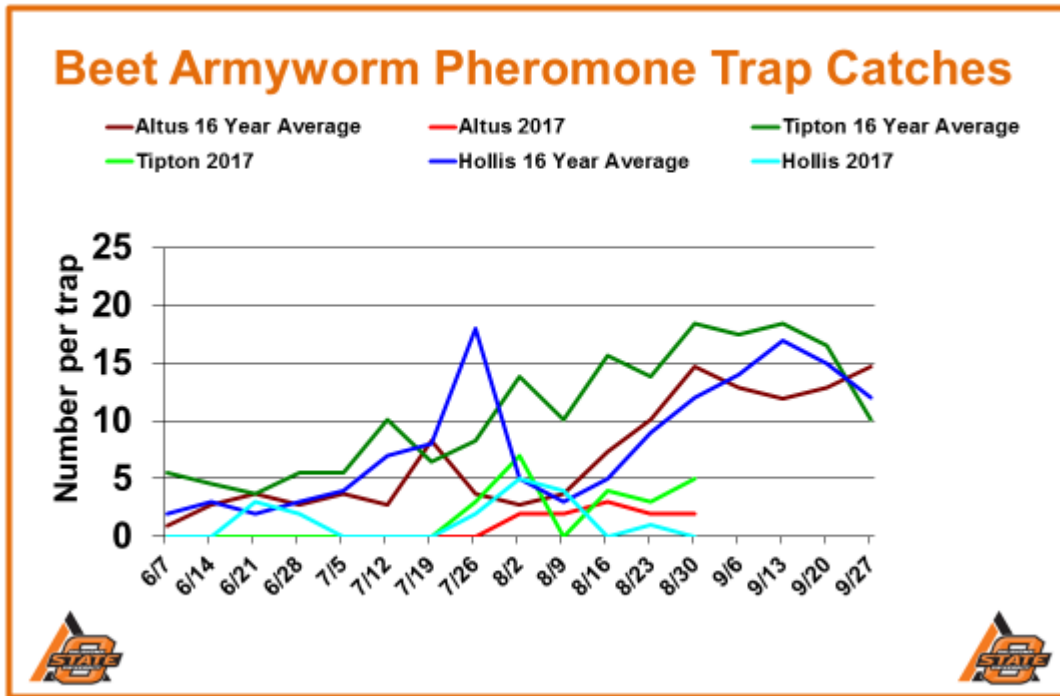
DT RACE – Dicamba Tolerant - Replicated Agronomic Cotton Evaluation Trial (Oklahoma Cooperative Extension)

OVT – Official Variety Trial (Oklahoma Agricultural Experiment Station, Altus, Tipton, Fort Cobb)

APT – Agronomic Performance Trial

¹ Bollworm population and Bollworm damaged squares are based on observations of 100 squares.

Moth pheromone trap data graphs are presented below.

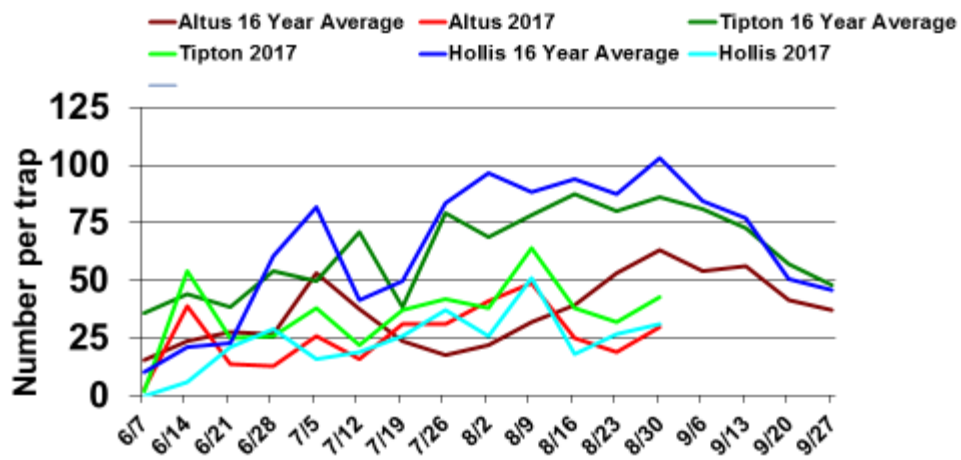


Beet armyworm moth
Photo courtesy of University of Georgia



Beet armyworm larva
Photo courtesy of USDA

Cotton Bollworm Pheromone Trap Catches



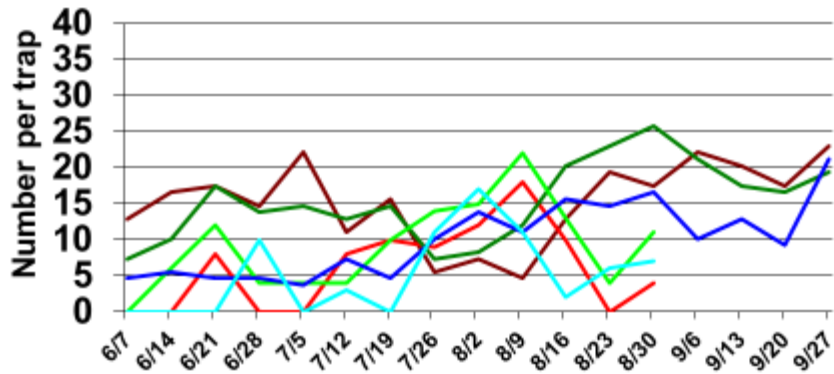
Cotton bollworm moth

Cotton bollworm larva

Photos courtesy of University of Georgia

Tobacco Budworm Pheromone Trap Catches

— Altus 16 Year Average — Altus 2017 — Tipton 16 Year Average
— Tipton 2017 — Hollis 16 Year Average — Hollis 2017



Tobacco budworm moth

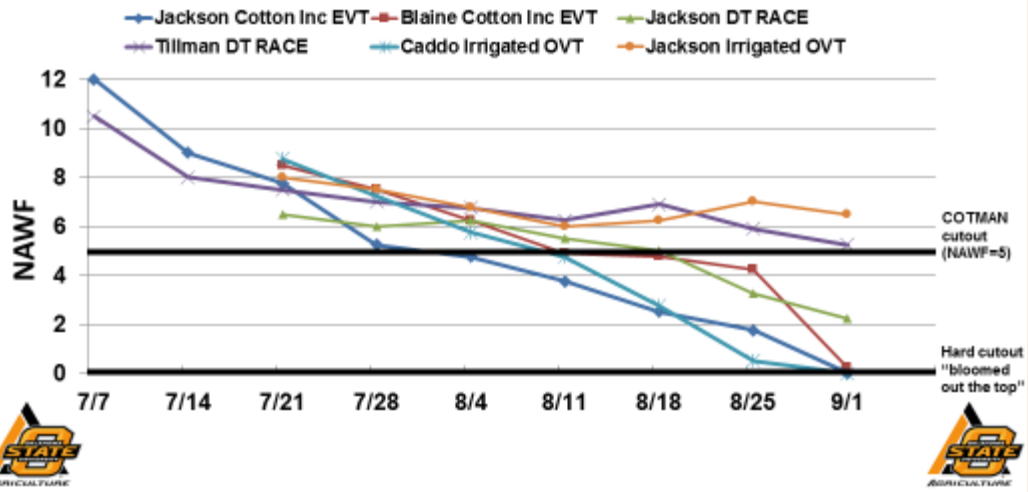


Tobacco budworm larva

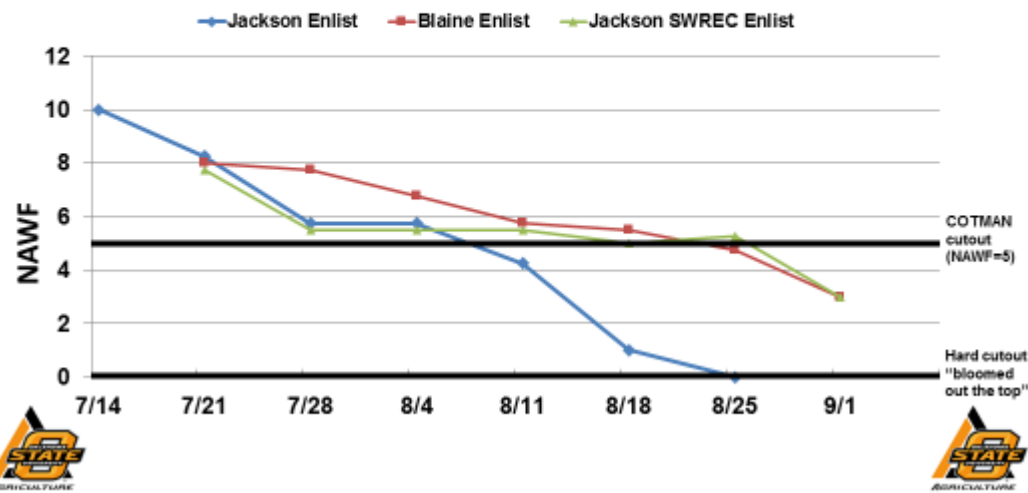
Photos courtesy of University of Georgia

JG

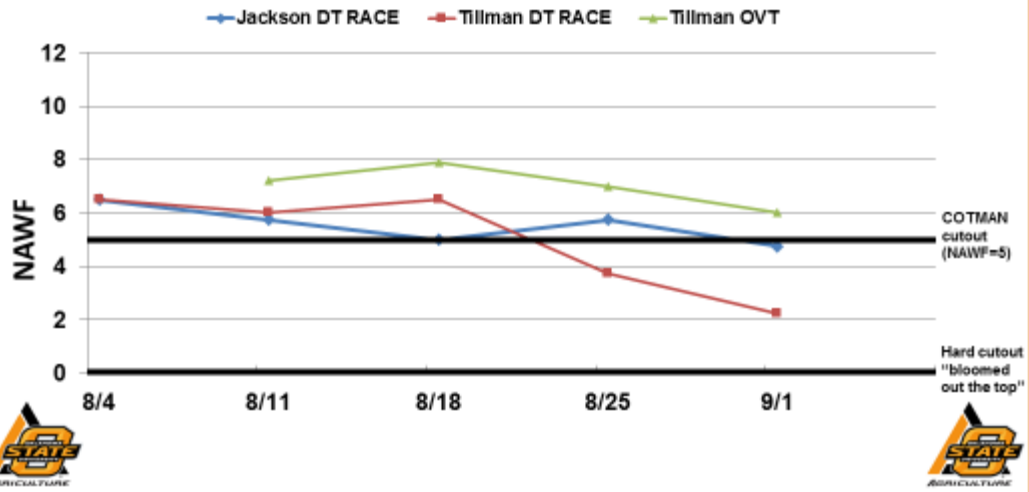
2017 NAWF - Irrigated Field Surveys



2017 NAWF – Irrigated PhytoGen Enlist Innovation Field Surveys



2017 NAWF - Dryland Field Surveys

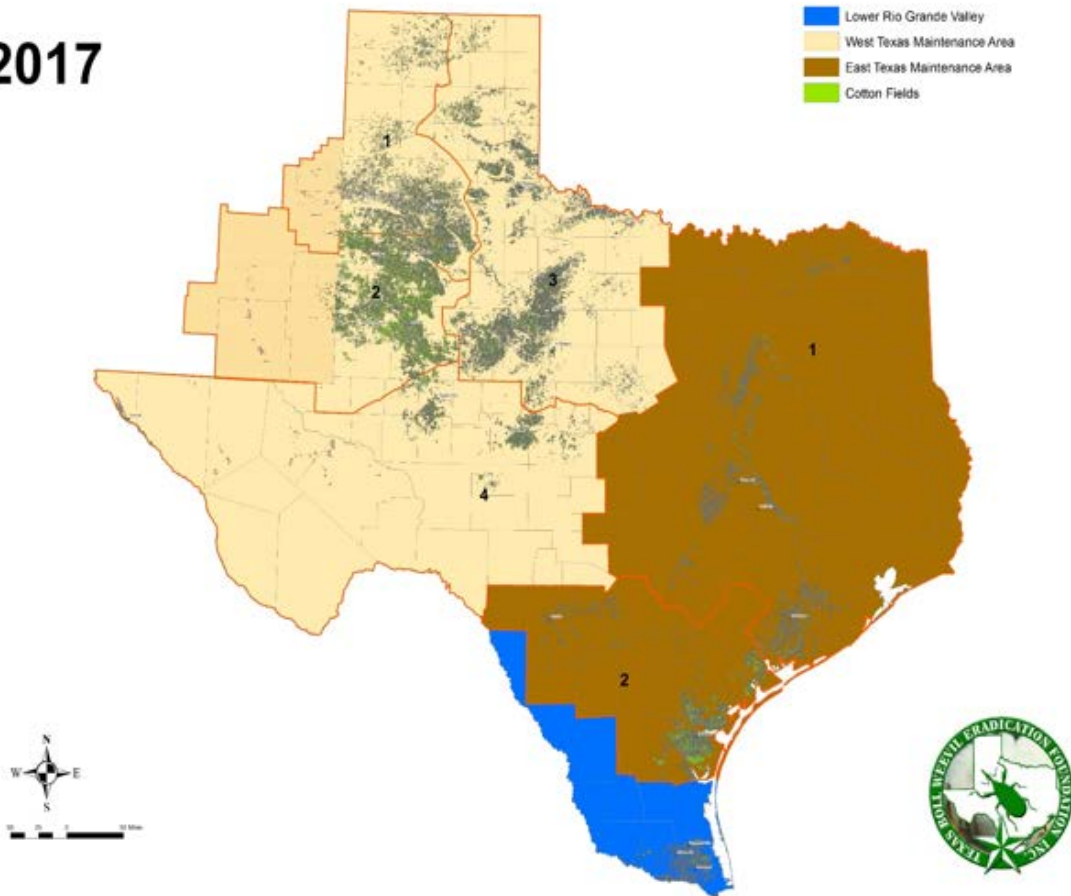


Oklahoma Boll Weevil Eradication Organization Update: Quarantine of Cotton Harvesting Equipment Coming From Certain Areas of Texas

John Henderson, 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. 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 the Texas Boll Weevil Eradication Foundation (TBWEF) at least 48 hours in advance of 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.

2017



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

Oklahoma Boll Weevil Eradication Organization:
580-477-4280 Office
580-471-7962 John Henderson Cell

Upcoming Meetings

September 6th – Northwest Cotton Growers, Moscow, KS, Field Day. For more information contact Jerry Stuckey at 620-598-2008.

Sept 14th at 10:30 a.m. Burns Flat Community Center. For more information contact Brad Babek at 580-832-3356.

September 19th at noon – Great Plains Gin, Minco, OK. For more information contact Kyle Worthington at 405-262-0155.

September 21st – Carnegie Co-op Gin Fall Tour. For more information contact Jeannie Hileman at 580-654-1142 or David Nowlin at 405-247-3376.

September 21st – Caddo Research Station Field Day, Fort Cobb.

October 4th – Jackson County Crop Tour. For more information contact Gary Strickland at 580-482-0823.

Please give credit to this newsletter if any information is reproduced or incorporated in any other communications. Thank you.

Editor

Randy Boman

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