WINDSTAR GINS

Edcot Gin – Edmonson, TX
Phillip Kidd, Manager
(806) 864-3335

Tule Creek Gin – Tulia, TX
Jaime Subealdea, Manager
(806) 627-4287

Lakeview Gin – Tulia, TX
Joe Borchardt, Manager
(806) 627-4227

Johnson Gin – Silverton, TX
Daniel Jenkins, Manager
(806) 823-2224

Top of Texas Gin – Hereford, TX
Billy Sam Borchardt, Co-Manager
Steven Birkenfeld, Co-Manager
(806) 258-7466

Adobe Walls Gin – Spearman, TX
Jerrell Key, Manager
(806) 659-2574

Lonestar Gin – Pampa, TX
Carey McKinney, Manager
(806) 665-0677

Cotton Insights Newsletter

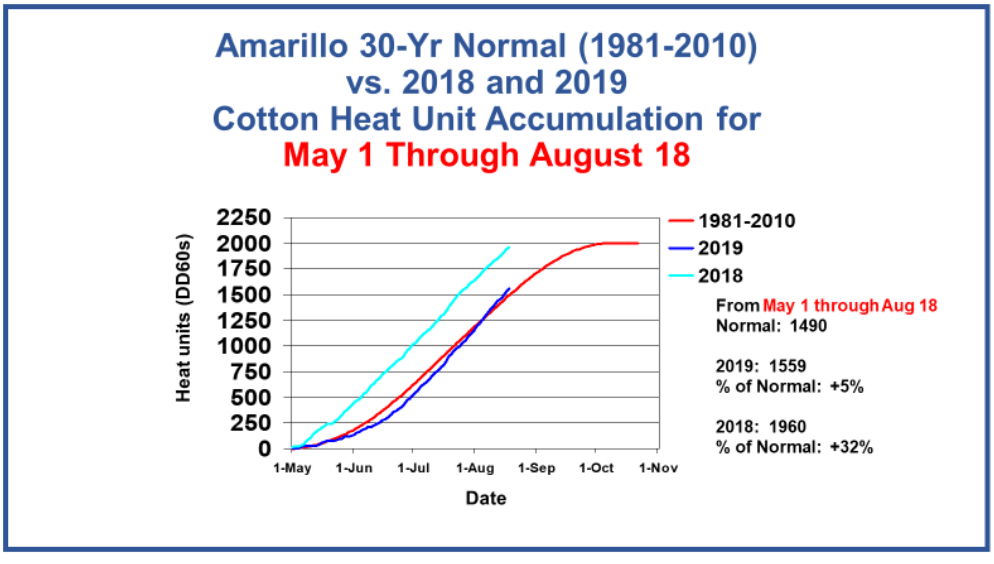
A service provided by Windstar, Inc. affiliated gins.

August 19, 2019

Randy Boman, Ph.D.
Windstar Cotton Agronomics Manager
(580) 481-4050
rboman@windstarinc.com
www.windstarinc.com

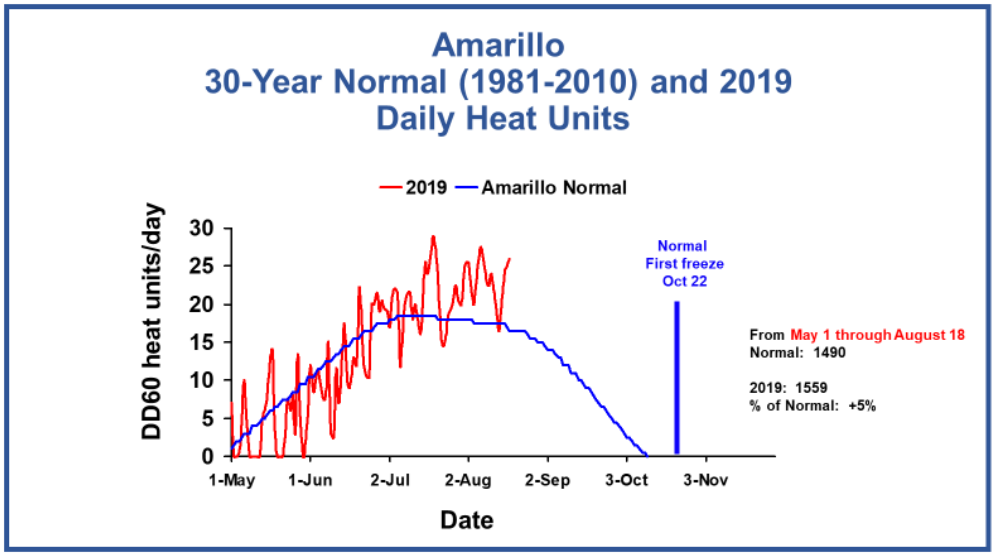
Crop Update

The past month has provided considerable heat with scanty rainfall. Unless fields have been lucky enough to be under various spotty thunderstorm events or have good irrigation capacity, there has been a struggle. 2019 has seen 14 days of 100 degrees or greater at Amarillo. The wet situation with the corresponding cotton heat unit deficit (that was so notable in May and the first half of June) has shifted gears and morphed into hot and dry conditions. We are now about 5% above normal from May 1st through August 18th (see graph below). The month of July ended with 632 heat units vs. 566 for the normal, or about 12% above normal. Thus far for August (through the 18th), it is above normal with respect to DD60 heat units (415 vs. 315 for the normal, or 32% above normal). This can be seen below with the 2019 seasonal accumulation overtaking the "normal" line within the past few days.

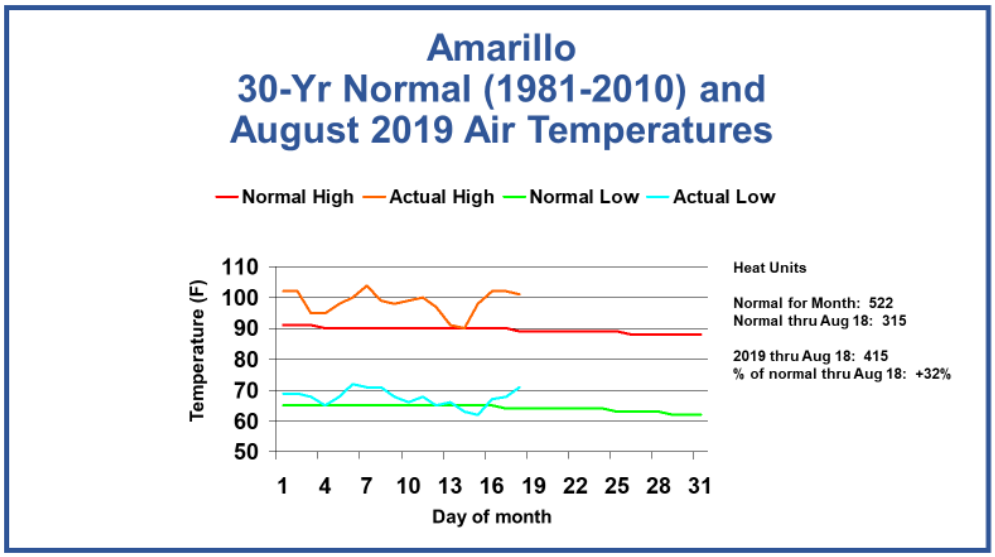


The heat has been good for irrigated cotton assuming the irrigation capacity is adequate to meet crop demand. Many irrigated fields are exhibiting nodes above white flower of less than 5 at this time, and fruit retention is being adjusted by the plants. We are beginning to see aborted squares and small bolls. A lot of dryland cotton is in trouble with respect to soil moisture due to the "flash drought" that is currently underway, and many fields have "bloomed out the top" and are exhibiting extreme stress.

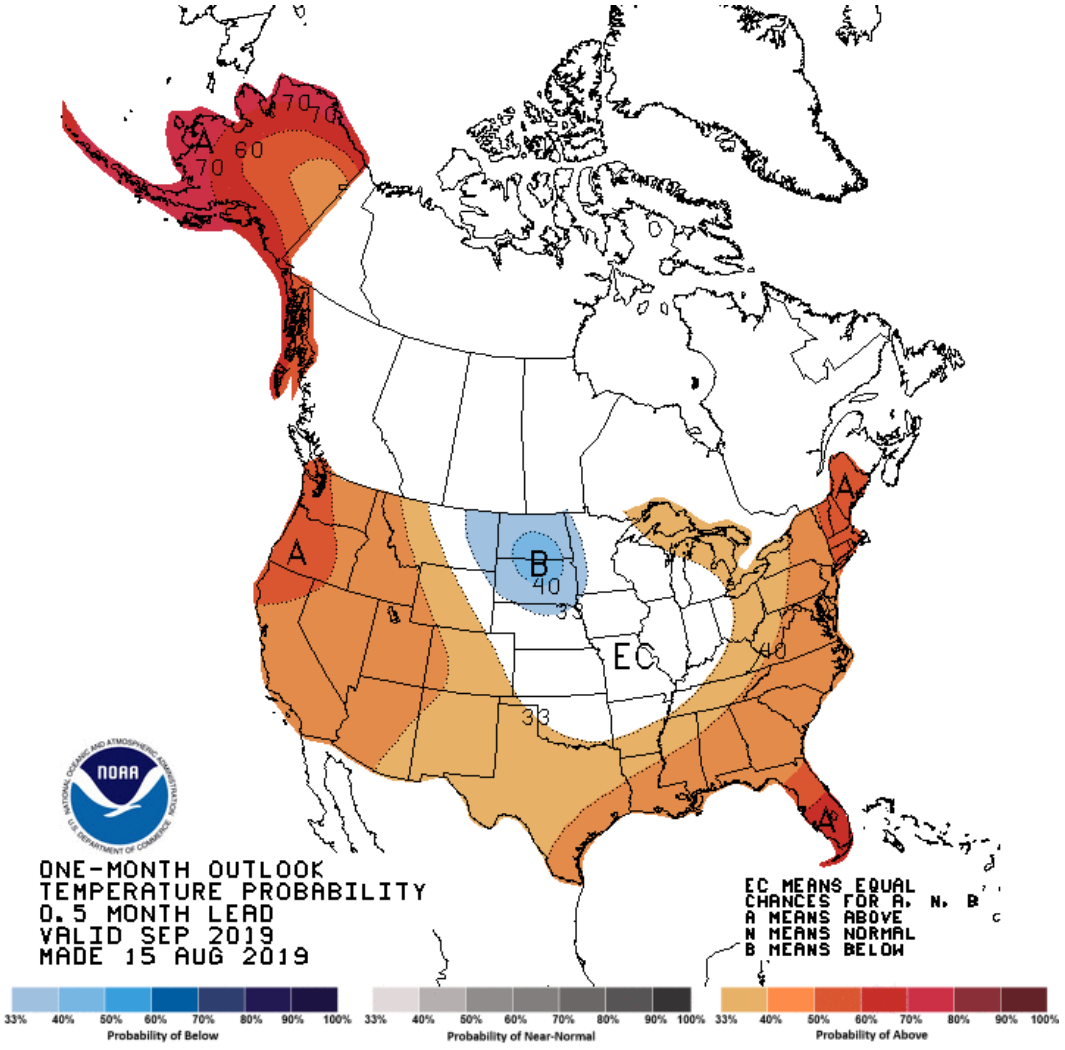
When looking at the daily heat unit accumulation for the season (see graph below), it is easy to see the impact of the above normal temperatures in July and thus far into August. It is also noteworthy to mention that the 30-year normal daily heat units have peaked. We are now on cusp of hitting the "down hill slide" of fewer "normal" daily heat units until the zero point is reached on October 11.



The temperatures for the month of August have been mostly well above normal for both the highs and lows and this can be seen in the graph below. Irrigation demand continues to be high and cotton evapotranspiration (ET) is about 0.3 to 0.4 inches per day.



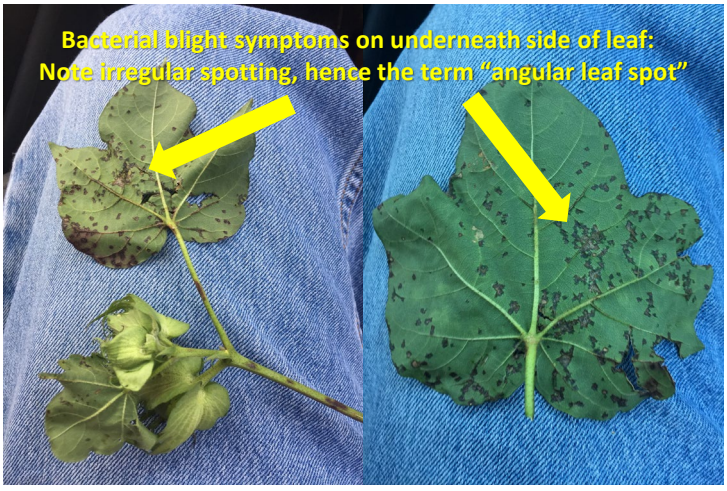
The NOAA/National Weather Service Climate Prediction Center's One-Month Outlook for temperatures is indicating that we have a 33% probability of above normal temperatures for the period of August 15th through September 15th. This is good news for irrigated cotton, and might translate into better crop maturity at harvest. Precipitation Outlook for this same period is indicating Equal Chances of above, normal, or below normal rainfall. The link for this website is here: https://www.cpc.ncep.noaa.gov/



Bacterial Blight Disease Noted

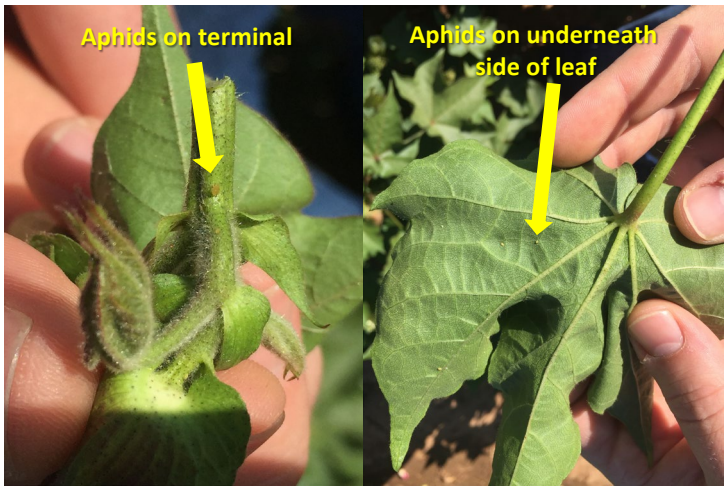
This bacterial disease can be found in at least some fields nearly every year, and this year is no different. Normally hot, dry conditions will check the progression, and this is likely to occur this year.

- There are no commercially viable options to control this disease except for genetics (host plant resistance). This means planting varieties that have a good level of resistance or immunity is important.
- Seldom does this cotton disease cause major yield loss in our region due to low humidity in open canopies (e.g. dryland and low capacity pivots).
- Where susceptible varieties are planted under high capacity pivots and where high humidity in the canopy can be sustained, there can be exceptions.
- Yield loss can occur when the disease is aggressive enough to infect a substantial number of leaves which then results in premature defoliation. The disease can later infect bolls.
- Leaves first show symptoms in small areas, then these areas coalesce into larger areas that eventually become necrotic (die). The leaf then defoliates prematurely.
- Bolls can be impacted if the disease has a strong presence. After the carpel wall is breached by bacterial digestion of the tissue, boll rot occurs.
- Dr. Terry Wheeler at the Texas A&M AgriLife Research and Extension Center at Lubbock conducts trials every year in the South Plains to evaluate variety reaction to Bacterial blight RACE 18.
- For a list of varieties and their reaction to this plant disease, go to: https://lubbock.tamu.edu/files/2019/03/Bacterial-blight-3419.pdf



Insect Pests Noted

- Green Stinkbug: Although not found in large numbers, there are some fields with green stink bug populations. These insects may be increasing in corn and sorghum fields and may ultimately migrate to cotton fields as those crops dry down. Keep a good watch.
- Cotton Aphid: Normally, this pest can be found in some numbers in many cotton fields. Beneficial arthropods are important for keeping this insect pest in check. It is important to conserve these beneficial arthropods if at all possible. Significant aphid populations have recently been noted in other areas, so be aware of this pest as the crop progresses.
- For more information, refer to the Texas A&M AgriLife Extension Service publication entitled "2019 Cotton Insect Control Suggestions." For a copy of this publication, click on the link below:
- https://lubbock.tamu.edu/files/2019/08/2019-Cotton-Insect-Control-Suggestions_ENTO090.pdf



Upcoming Texas A&M AgriLife Extension Service Meetings: Hutchinson/Hansford Counties Production Meeting, Adobe Walls Gin, Spearman, August 22, 9:30 am; Gray/Carson Counties Production Meeting, Gray County Annex, Pampa, August 22, 3:00 pm