



# Cotton Comments

OSU Southwest Oklahoma Research and Extension Center Altus, OK



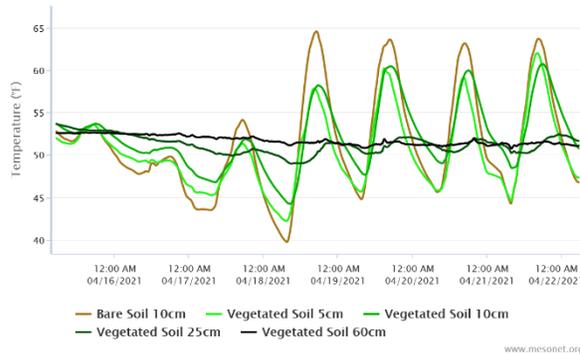
April 22, 2021

Volume 11 No. 2

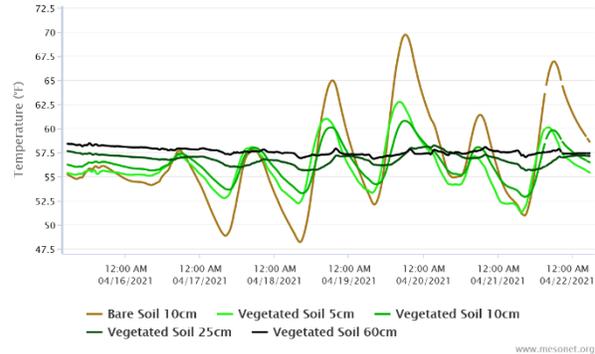
## When to Plant

Drought and cold temperatures still persistent across Oklahoma. The cold temperature will rectify itself as the spring progress, the main concern is moisture. Soil temperature will be a major concern for the next two to three weeks. I suggest using this Mesonet tool and pay attention to the low soil bare soil temperature. Click on [Soil temperature graph](#) (just select the station near you)

Soil Temperature for Goodwell



Soil Temperature for Grandfield



Please refer To Cotton Comment Volume 11 edition 1 April 8, 2021 ([Click Here](#)) for a more in depth discussion of early season planting and chilling effect.

Also Ken Lege of PhytoGen® cottonseed has compiled an excellent guide for planting decisions.

## Keys To Successful Cotton Stand Establishment

Establishing a uniform, vigorous stand of seedlings is the first step of producing a successful cotton crop. Here are some important factors to consider to start the season with the highest chance for success:

Know the quality of the lot(s) of seed you purchase. This information will not be printed on the bag of cottonseed. You must request the specific quality data for the specific lot you are purchasing from your seed retailer or from your seed company representative.

### Warm germination - *Minimum* of 80% warm germination

- Conducted at 68 degrees Fahrenheit for 16 hours and 86 degrees Fahrenheit for 8 hours for 4 days
- Measure of seed viability **Required** by state and federal seed laws

## Cool germination

- 'Texas Cool Test', conducted at a constant 64.5 degrees Fahrenheit for 7 days
- Provides better assessment of seed vigor **Not** required by state or federal seed laws

## Cool-Warm Vigor Index (CWVI)

Combines the warm germ plus the cool germ test results

160 or greater = Excellent  
140 – 159 – Good  
120 – 139 = Fair  
Less than 120 = Poor

Plant lots with higher cool germs and higher CWVI values earlier in the season when conditions may not be as optimum. Plant lots with lower cool germs and lower CWVI values later in the season when conditions are more conducive to better germination and emergence.

## Soil conditions at planting

Soil-to-seed contact is important for proper germination. Good contact between soil particles and seed is necessary for the imbibition to take place to initiate the germination process. Proper adjustment of planters to ensure optimum, but not excessive, pressure is important. A well-prepared seed bed, void of large clods and with good moisture, plays an important role in achieving good soil-to-seed contact as well.

Seeding depth greatly affects how quickly the seedling will emerge. Particularly in dryland scenarios, it is important to determine at what depth adequate moisture is present to support seed germination. Uniformity of seeding depth down the row is important for achieving a uniform stand of cotton; an optimum stand of cotton is one where seedlings across the field emerge within a few hours of one another. Typically, planter speed and proper adjustment of seeding depth among row units are the factors most often affecting the uniformity of emergence across the field.

## Soil and air temperature

- Cotton is very sensitive to cool temperatures and can experience cold or chilling injury if planted under sub-optimal conditions.
- The most critical period is when seed are imbibing moisture, which is typically within the first 24 - 48 hours of planting.
- If germinating seedlings experience 41 degrees Fahrenheit or lower during imbibition (i.e., soil temperature at seed depth), seedling death is highly probable.
- If germinating seedlings experience 50 degrees Fahrenheit or lower during imbibition, chilling injury is very likely.
- Optimal planting target is to have a 10-day average soil temperature of 65 degrees Fahrenheit or higher at the 8-inch depth.
- Use soil thermometers to determine the temperatures of your fields, since bed depths, tillage, amount of cover crops, etc. can greatly affect soil temperatures.
- Use your local mesonet as a guide.
- West Texas Mesonet: [Click here](#)
- Oklahoma Mesonet: [Click here](#)
- Kansas Mesonet: [Click here](#)

- At a minimum, soil temperatures in the seed and root zone should exceed 60 degrees Fahrenheit, and the five-day forecast for daytime maximum temperatures should exceed 80 degrees Fahrenheit. Additionally, the nighttime minimum temperatures should be forecast to be above 50 degrees Fahrenheit for the following five days.
- Tracking heat unit accumulation predictions for the next five days can also be of benefit. Cotton heat units, or degree-day 60s (DD60s) can be calculated as:  

$$\{( \text{maximum temperature for a 24-hour period} + (\text{minimum temperature for a 24-hour period}) / 2 \} - 60$$

Use the following table to guide your planting decision

Predictive DD60 Accumulation for Five Days Following Planting	Outlook For Planting
<10	Very Poor
11 – 15	Poor
16 – 25	Marginal
26 – 50	Good
>50	Very Good

Source: *Cotton Physiology Today*, Vol 13, No 1.

### Planting date

- While planting date is key to successfully establishing a stand of cotton, it varies greatly by small changes in geography. Consult local seed company representatives, seed retailers, and Extension personnel for local recommendations.
- Rather than relying on calendar dates to determine when to start planting cotton in your area, follow the recommendations discussed above regarding soil and air temperature to guide your planting timing.

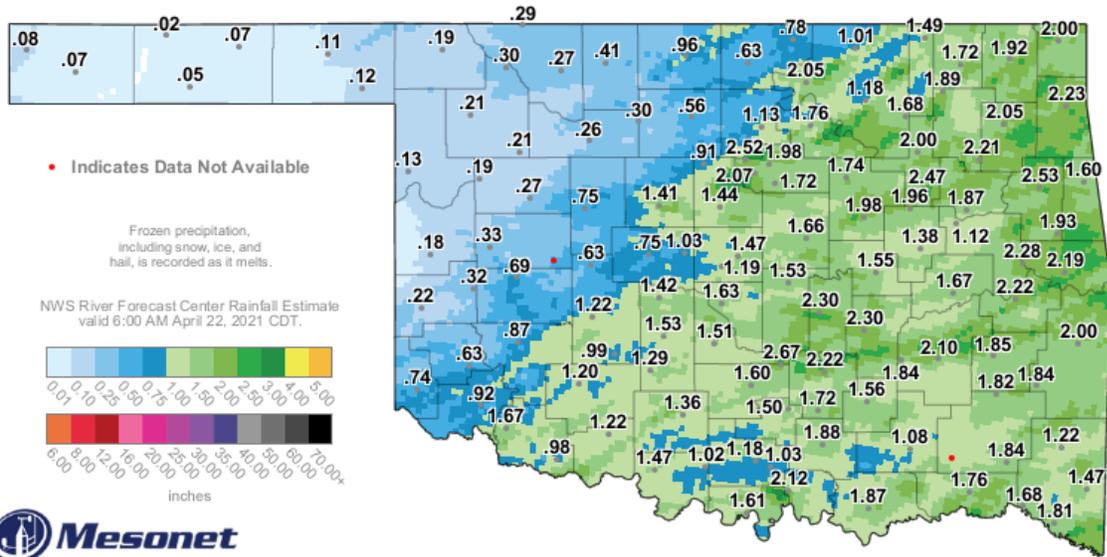
Weather patterns change from year to year, but following the agronomic fundamentals listed above, and closely tracking soil and air temperatures will help you achieve a more uniform and successful stand of cotton.

### Sources:

Cotton Seed Quality – Where It All Begins. Todd Baughman, Randy Boman, and Robert Lemon. Texas AgriLife Extension SCS-2004-01. Soil Temperatures for Cotton Planting. Randy Boman and Robert Lemon. Texas AgriLife Extension SCS-2005-17. Planting and Replanting Decisions. *Cotton Physiology Today*, Vol 13, no 1. April, 2007.

## Current Situation

The drought persist across most of Oklahoma.



14-Day Rainfall Accumulation (inches)

6:55 AM April 22, 2021 CDT

Created 7:00:53 AM April 22, 2021 CDT. © Copyright 2021

## U.S. Drought Monitor Oklahoma

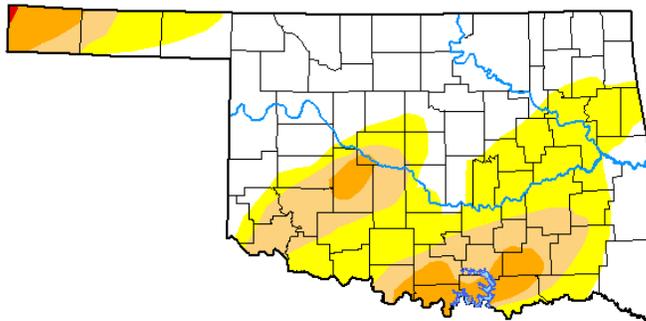
April 20, 2021

(Released Thursday, Apr. 22, 2021)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	49.11	50.89	21.76	6.96	0.08	0.00
<b>Last Week</b> <i>04-13-2021</i>	47.00	53.00	22.86	8.52	0.08	0.00
<b>3 Months Ago</b> <i>01-19-2021</i>	67.61	32.39	11.96	5.52	0.83	0.00
<b>Start of Calendar Year</b> <i>12-29-2020</i>	56.83	43.17	25.21	7.75	1.45	0.00
<b>Start of Water Year</b> <i>09-29-2020</i>	66.79	33.21	17.71	11.97	1.55	0.00
<b>One Year Ago</b> <i>04-21-2020</i>	89.09	10.91	3.94	2.27	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



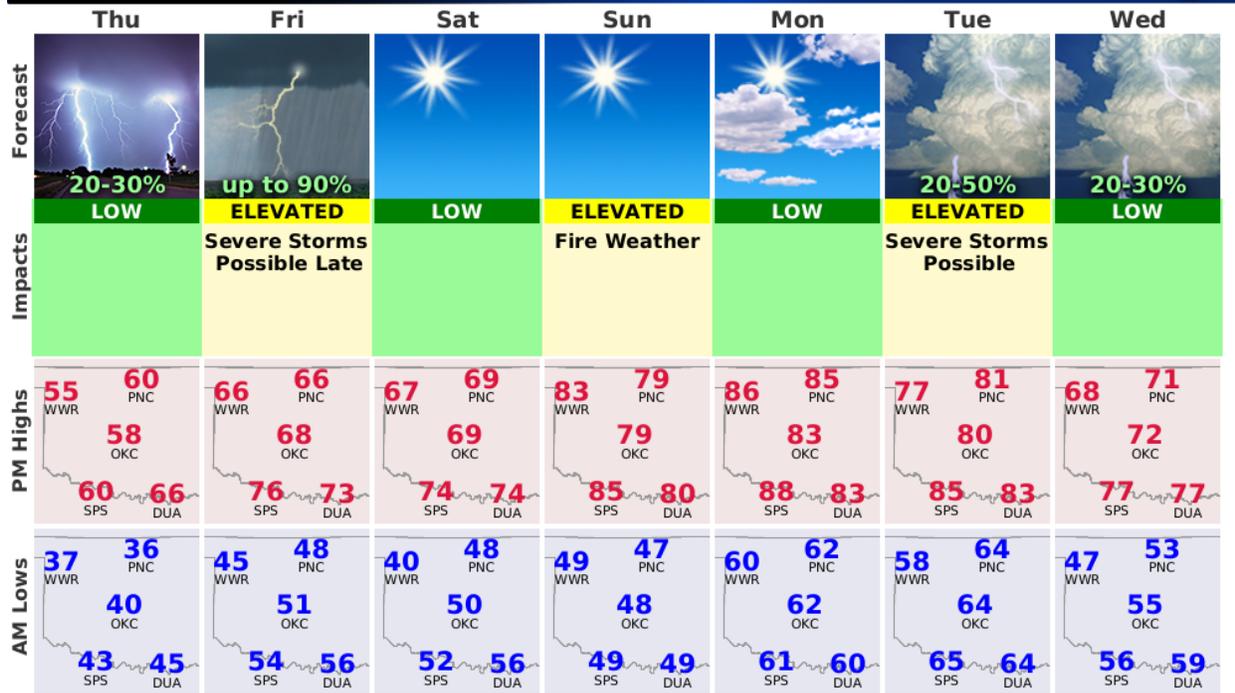
[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

# Next Seven Days

Weather Forecast Office

Norman, OK

Issued Apr 22, 2021 4:29 AM CDT



## Oklahoma Boll Weevil Eradication Organization

Web page address click here: [OBWEO](https://www.obweo.org/)

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 six years

Year	Acres <sup>1</sup>
2015	216,678
2016	299,302
2017	568,434
2018	756,397
2019	603,014
2020	564,063

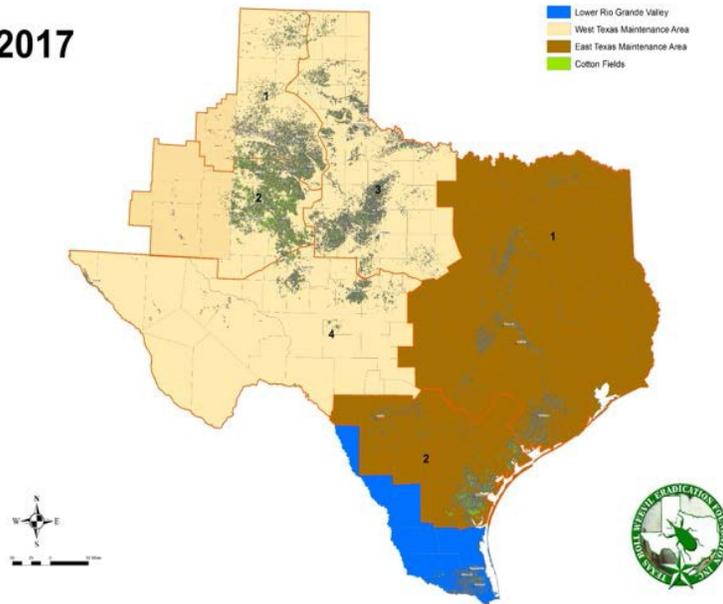
<sup>1</sup> Oklahoma Boll Weevil Eradication Organization

OBWEO is preparing for the upcoming 2021 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.

2017



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.

## Current Market Headlines

I will try to provide a market report this year. I am no economist so will not try to provide any input but just the bare bones headlines.

ICE cotton futures rose on Thursday as hopes that a swift economic rebound would spur demand for the natural fiber and concerns over dry weather in West Texas offset lower weekly exports.

\* Cotton contracts for July CTN1CTc2 rose 0.28 cent, or 0.3% to 84.48 cents per lb by 1:19 p.m. EDT (1719 GMT). They traded within a range of 83.49 and 85.23 cents a lb.

\* "Export sales were terrible across the board... (but) they're not going to be excellent every week and you're still in line to have a pretty good year," said Jon Marcus, president of Lakefront Futures and Options brokerage in Chicago.

\* The cotton market is likely at a point where it holds firm even in the wake of "sluggish" export sales though it is stalling awaiting fresh news to push it higher, Marcus said, adding prices could face resistance around 89 cents.

\* The U.S Department of Agriculture's weekly export sales report showed net sales of 122,300 Running Bales for 2020/2021, down 55% from the previous week and 54% below the prior 4-week average. EXP/COT

\* "We do not have a lot of cotton in the U.S... you're going to see a much better export sales report next week," said Louis Barbera, partner and analyst at VLM Commodities Ltd.

\* Barbera said that a lack of rain in West Texas, high crop abandonment in South Texas and a rally in soybeans and corn futures could result in lower U.S supplies and buoy July cotton futures to \$1 before its expiry.

\* Hopes for a fast economic recovery from the pandemic were bolstered by data that showed U.S retail sales rose by the most in 10 months in March and weekly initial jobless claims fell to its lowest level since mid-March 2020.

## Trainings and CEU's

### Required Training for Dicamba Applicators

If you still not have received your mandatory training for Dicamba use, contact your local county extension office.

### Required Training for Paraquat Applicators

Thanks to Josh Bushong OSU Area Extension Agronomist for a more simplified link to paraquat training link [Click here](#).



## Private Applicators License Updates

A private pesticide applicator is someone who uses or supervises the use of restricted-use pesticide to produce an agricultural commodity on: personally owned property; rented property; property owned by his or her employer; property under his or her general control; or the property of another person if applied without compensation, other than the trading of personal services between producers of agricultural commodities.

An ag commodity is a plant or animal grown for sale, lease, barter, feed or human consumption and animals raised for farm or ranch work. No license is required to apply general-use pesticides to produce ag commodities.

### Open-Book Exam Changes

- EPA's 2017 revision to CFR part 171 requires all testing to be closed-book and proctored
- Deadline to submit paper exams: **June 1, 2021**
- Study packets will continue to be available at county extension offices (no exam included) for proctored exams

### NEW Testing Procedure

- Exam must be taken at a PSI Services testing location
  - 7 locations in Oklahoma
  - Exam is administered on a computer
- Register & Schedule exam online or by phone:
  - [www.psiexams.com](http://www.psiexams.com)
    - Create an account (email address required)
  - Phone: (855) 579-4643

### Continuing Education Units (CEUs) for Private Applicators

- **Certification Cycle: 2019-2023**
  - Private Applicators can get credit for courses approved for Ag Plant (1A)
  - ODAFF tracks CEUs that are provided to the Agency
  - CEUs prorated depending on date certified
- Deadline for recertification with CEUs: **December 31, 2023**
- May not receive CEUs in the year first certified
- May receive no more than 10 CEUs in one year

What year did you get certified?	What year can you start earning CEUs?	How many CEUs do you need to recertify?
2019	2020	16
2020	2021	12
2021	2022	8
2022	2023	4
2023*	Expiration date moves to the next cycle (2024-2028)*	20*

\*Private applicators certifying in 2023 must receive 1-10 CEUs in at least 3 out of 5 years (years do not have to be sequential).

For additional questions, contact Megan Parker at 405.522.5972.

On-line CEU trainings:

This is the only **free** online CEU training that is available that I can find if you are aware of any sites PLEASE contact me and I will list them.

Make certain that is approved for Oklahoma Department of Agriculture and Forestry and is designated IA.

That will be the only training that will be credited for Oklahoma private applicator license.

[AG CEU Online](#)

**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](mailto: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](http://www.cotton.okstate.edu)

[www.ntokcotton.org](http://www.ntokcotton.org)

Oklahoma State University in compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246 as amended, Title IX of the Education Amendments of 1972, Americans with Disabilities Act of 1990, and other federal laws and regulations does not discriminate on the basis of race, color, national origin, sex, age, religion, disability, or status as a veteran in any of its policies, practices, or procedures. This includes but is not limited to admissions, employment, financial aid, and educational services.