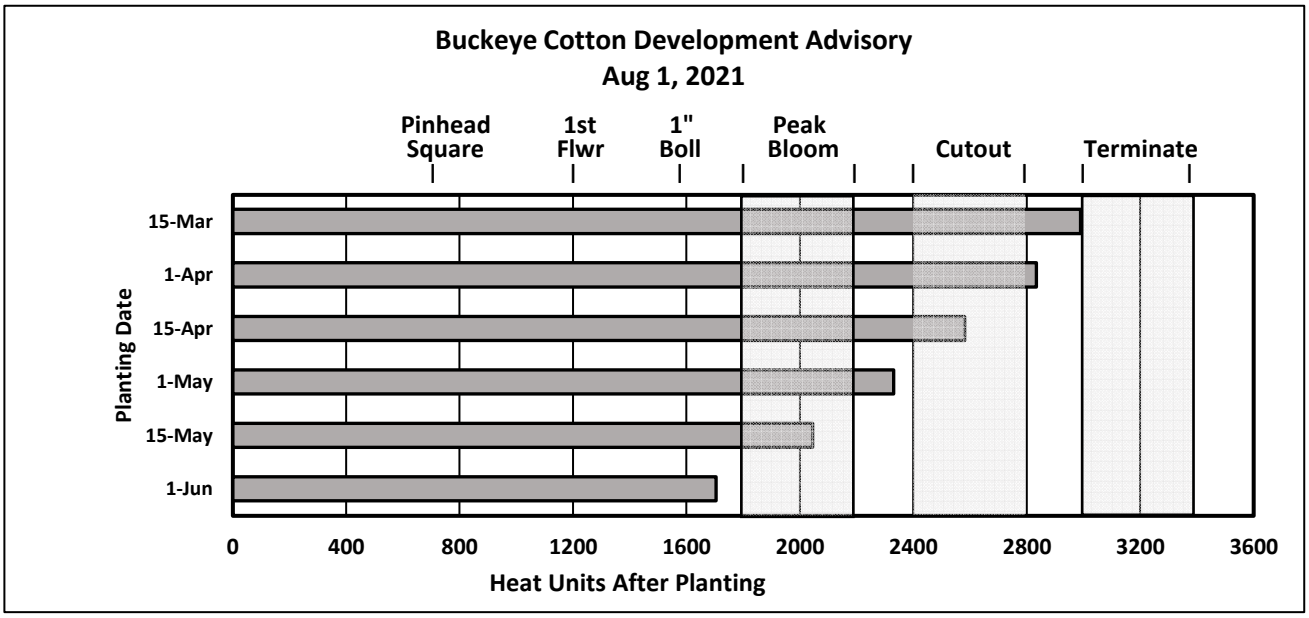
THE UNIVERSITY OF ARIZONA Cooperative Extension



Heat Units After Planting

Planted:	15-Mar	1-Apr	15-Apr	1-May	15-May	1-Jun	
2021:	2990	2834	2582	2331	2045	1704	
Normal:	2837	2666	2508	2275	2018	1647	
+/-Norm:	5	6	3	2	1	2	Days
2020:	2815	2702	2563	2290	1985	1628	
Water Use:	2.14	2.14	2.14	2.14	2.07	1.62	"/wk

Temperature & Heat Units

Last Week	Max	Min	HUs	Rain	This Week	Max	Min	HUs
Actual	104	78	202	0.20	2020	109	79	206
Normal	103	78	202		Normal	105	77	202

Cotton Heat Stress

Date						
7/26	7/27	7/28	7/29	7/30	7/31	8/1
NS	L1	L2	L2	L1	L1	L2

NS: No Stress; L1: Level 1; L2: Level 2

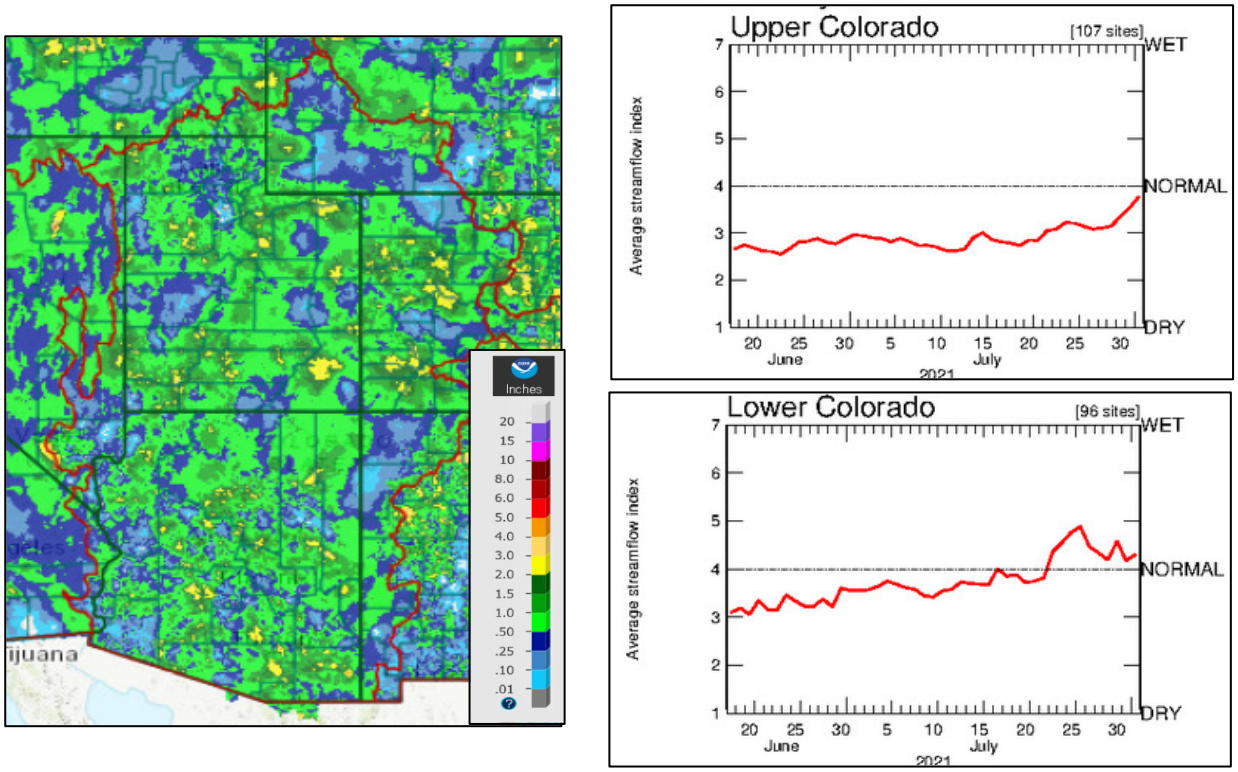
Weather Forecast

Monsoon activity is expected to greatly diminish this week as high pressure develops over NV & western AZ. Expect rising temperatures & lower humidity levels, particularly across western AZ where daytime temperatures are expected to approach 115F. Precipitation will be limited & confined to the higher elevation areas of eastern AZ. The location of the high pressure system will adjust to more favorable position for monsoon ativity late in the week, resulting in slightly cooler temperatures, increased moisture & improved chances for precipitation by the weekend.

Agronomy Update

We are experiencing a significant monsoon season & most AZ production areas are experiencing increased humidity, heat, & some rains. Like everything, the monsoon season comes as a "package deal" & it is important to watch out for several key aspects in the field. Monsoon conditions are commonly quite conducive to weed growth & the development of some plant diseases & insect populations (both harmful & beneficial). Excessive vegetative growth and/or a possible drop in fruit retention can be experienced. Rains can generate questions on irrigation management & it is good to check soil moisture directly in the field. Cotton plants will begin to experience water stress at ~ 55-60% plant-available water (PAW) in the soil, which is when most soil textures feel almost (but not quite) dry to the touch. Fields should be irrigated so that depletion does exceed 55-60% PAW. Rains can also push salts that have accumulated on the soil surface into the root zone & create an apparent "water-stress" effect on the plants. In that case, additional irrigation water can further leach the salts from the root zone.

Water Supply Update



Last week's active monsoon pattern generated significant levels of precipitation across much of the Colorado Basin (left). Streamflow in the Upper Basin (upper right) increased but remains slightly below normal. Streamflow in the Lower Basin (lower right) continues to run slightly above normal. Sources: NOAA/NWS Advanced Hydrological Prediction Service and USGS Water Watch.