2021 Quail Season Update

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Over thirty years ago the ODWC began conducting roadside surveys to monitor quail numbers throughout the state. There are 83 twenty-mile routes surveyed in August and October in all counties except Oklahoma and Tulsa counties. August surveys give biologists an idea of breeding success, while October surveys reveal a glimpse of recruitment for the fall hunting season. Typically, August survey numbers are a less reliable hunting season predictor than October's due to the fact that some chicks will not survive through the summer. Long term and year to year trends are important for sportsmen and biologists alike. The last decade has seen survey numbers cycle starting lower in 2010 and slowly rising to a peak in 2016 that quickly fell back to previous lows. The data are analyzed in two ways: by Region (Figure 1/Table 1) and by Ecoregion (Figure 2/Table 2). Looking at the data by both groupings can help to understand the causes of change in quail numbers. This year we are seeing the statewide average up by 23% over 2020.

Regionally, the northwest, southwest, and northcentral regions showed an increase over the 2020 counts (Table 1). In August only two regions of the state were up over 2020's survey numbers. However, in October three of the six regions are up going into the season. Figures 4-10 below show the average survey results for 1990-2021.

When we break the statewide numbers down by ecoregion, we are able to see what areas are producing better or worse year-to-year (Table 2 & Figure 3). On an ecoregion basis, the Rolling Red Plain had the largest increase. By analyzing the data this way, we can also see that there are primarily three ecoregions driving the statewide average: Southern High Plain, Rolling Red Plain, and the Rolling Red Prairie.

2020 brought several challenges beyond the COVID-19 Pandemic, while the eastern half of the state had seen normal rainfall, the western half was battling drought. In February of 2021 Oklahoma received a harsh winter storm with ice, snow, and severe cold temperatures, due to the storm we expect that our population going into the spring was lower than normal. However, timely rains allowed for an outstanding crop of insects and forbs, and this allowed for a great nesting season. Even with those timely spring and summer rains much of the state is currently battling some level of drought (Figure 13). The late winter storm also seems to have delayed spring wildlife activity, this was observed in pheasant and quail. According to data from the 'Game Brood Survey App' created by Oklahoma State University and ODWC, it appears quail nesting season started in early June and carried on throughout the nesting season.

This year ODWC is once again collecting wings from public lands to better evaluate our quail population. If you harvest a bird from a Wildlife Management Area with a wing box, please take the time to place one wing from each harvested quail (whichever is least damaged as long as only one wing per bird), fill out the envelope, and then place it in the box. The management areas that will have boxes are Beaver River, Canton, Cooper, Cross Timbers, Kaw, Packsaddle, Pushmataha, and Sandy Sanders. Your participation in this data collection effort provides vital information about nesting success and timing and helps improve the management of these game birds.

In summary, hunters taking to the field will likely find patches of fair quail numbers where reproduction was not as severely impacted by weather and habitat remains in favorable condition. Hunting will not be what it was at the last observed peak in production in 2016, but we expect hunters to find birds throughout the state. Quail season opens November 13th and runs until February 15th, 2022. Hunters are allowed 10 quail daily. For more regulations and other information consult the Oklahoma Hunting and Fishing Guide online at http://www.wildlifedepartment.com/hunting/ or in print wherever hunting and fishing licenses are sold.

Ultimately, remember the outdoors are #AlwaysOpen! Work some ground, trust your dog, and make a memory!

Figure 1. Regional Map of Oklahoma.

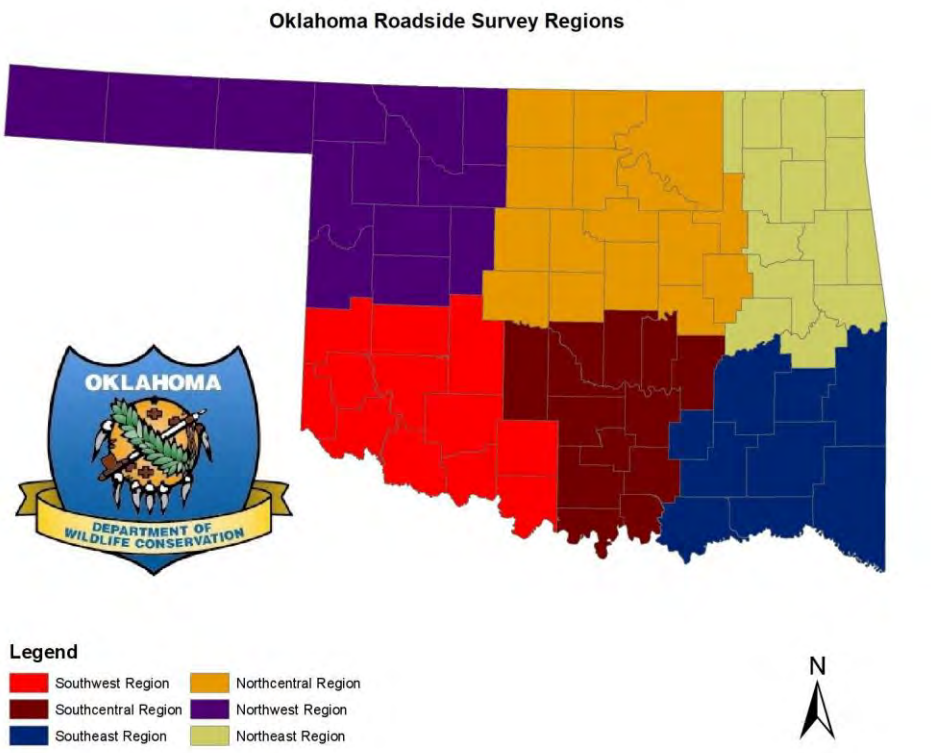

Table 1. Regional Breakdown of Surveys

	August				October		
Region	2020	2021			2020	2021	
Northwest	1.81	2.88	↑		2.875	3.875	↑
Northeast	0.64	0.43	↓		2.75	0.36	↓
Southwest	1	2.66	↑		0	1.25	↑
Southeast	4	1*	↓		0.091	0	↓
Northcentral	3.29	2.06	↓		0.87	1.2	↑
Southcentral	0	0.08	↑		0.62	0	↓
Statewide	**1.68**	**1.58**	↓		**1**	**1.23**	↑

*at least one route not completed due to COVID-19

Figure 2. Ecoregion Map of Oklahoma.

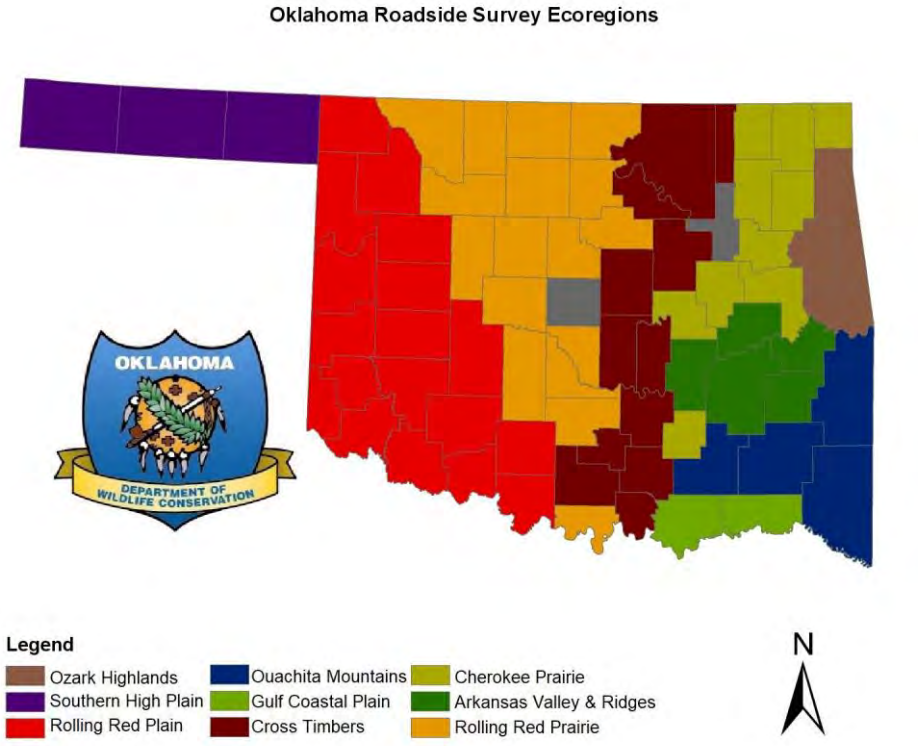

Table 2: Ecoregional Breakdown of Surveys

	August				October		
Ecoregion	2020	2021			2020	2021	
Arkansas Valley & Ridges	2.2	1.17	↓		1.33	0.00	↓
Cherokee Prairie	1.22	0.3	↓		0.90	0.50	↓
Cross Timbers	0.75	0.15	↓		0.00	0.00	-
Ozark Highlands	1.25	1.25	-		3.25	0.00	↓
Gulf Coastal Plain	0	0	-		0.00	0.00	-
Ouachita Mountains	5.25	0	↓		0.20	0.00	↓
Rolling Red Prairie	2.813	3.05	↑		1.13	1.94	↑
Rolling Red Plain	0.7	1.71	↑		0.50	1.10	↑
Southern High Plain	3	3.75	↑		5.50	10.00	↑
Statewide	**1.68**	**1.58**	↓		**1.00**	**1.23**	↑

Figure 3: Quail/Route by Ecoregion from 2016-2021

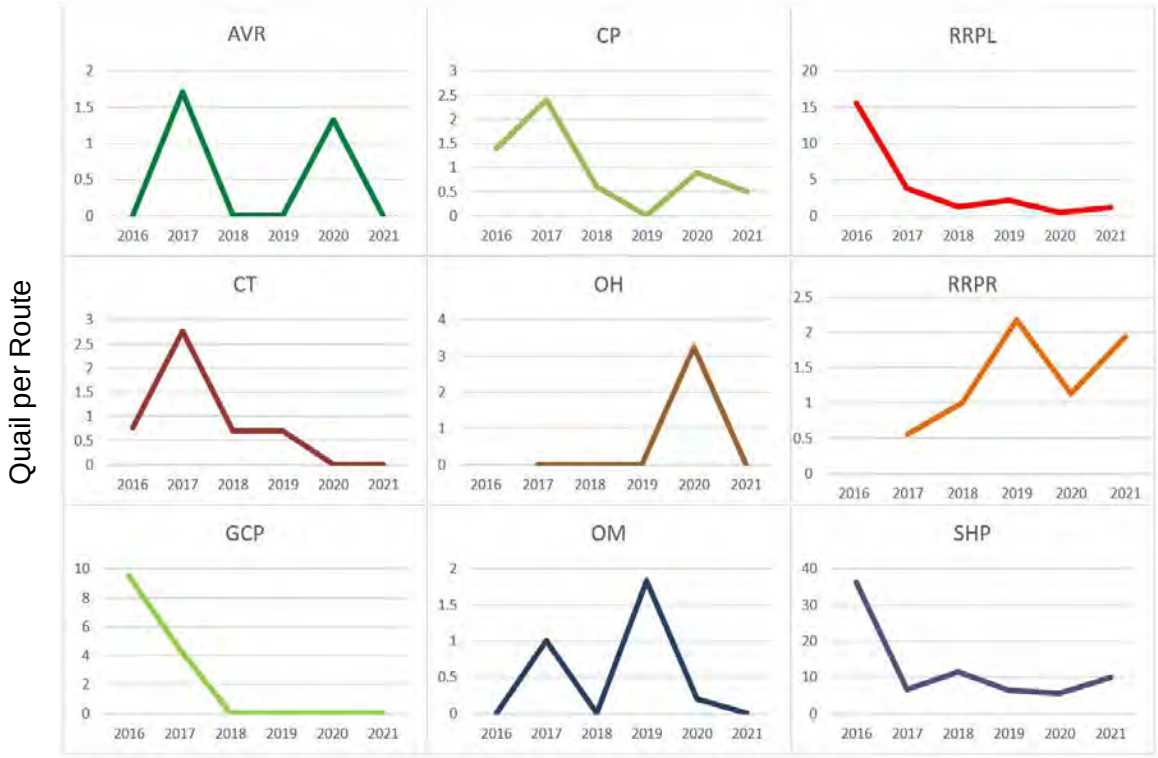

Figure 4: Statewide Long Term Averages

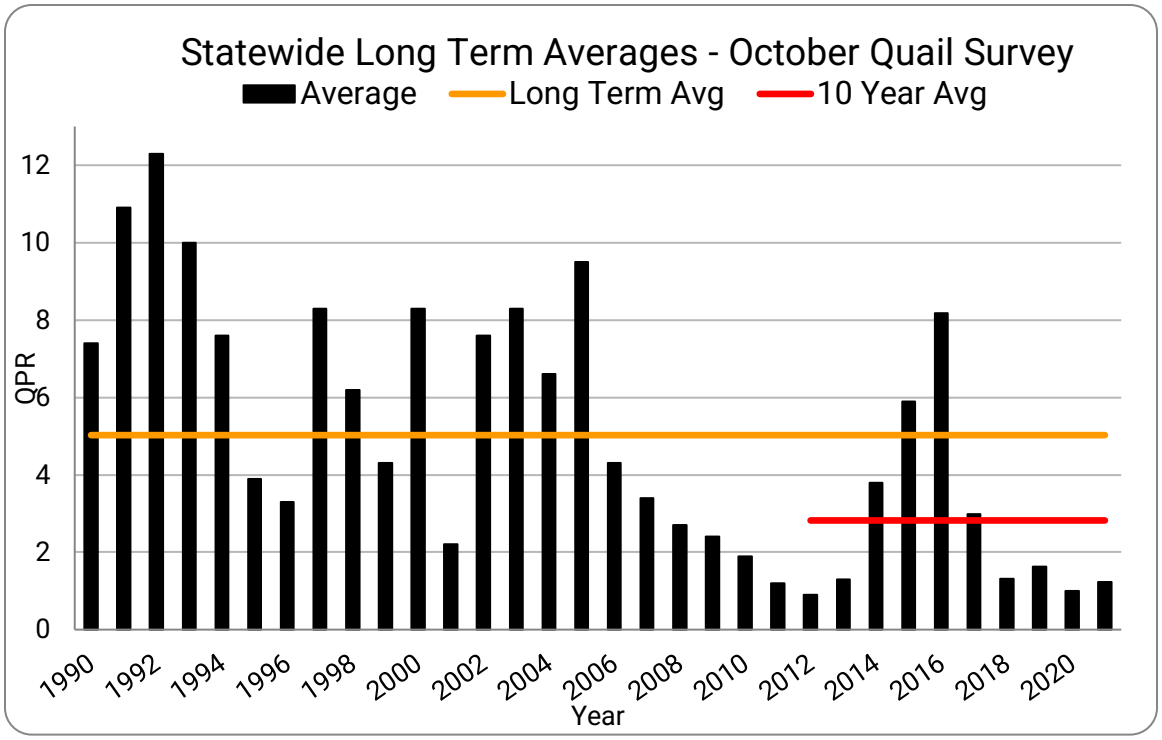

Figure 5: Northwest Long Term Averages

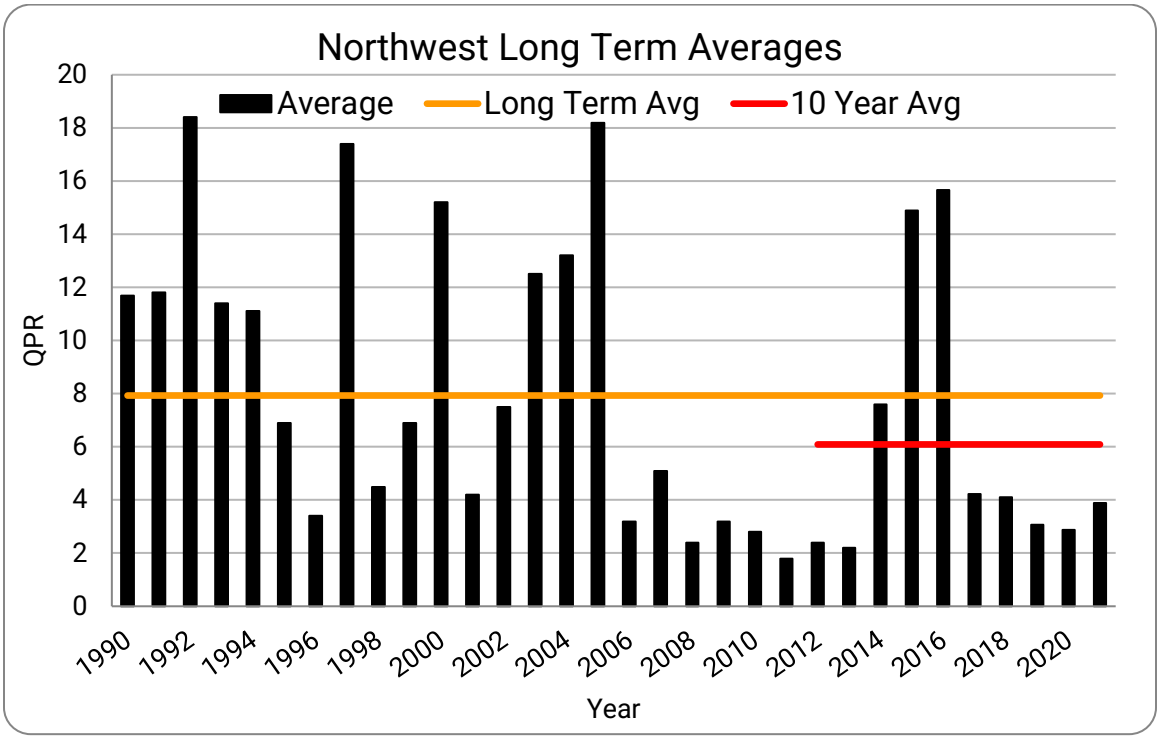

Figure 6: Southwest Long Term Average

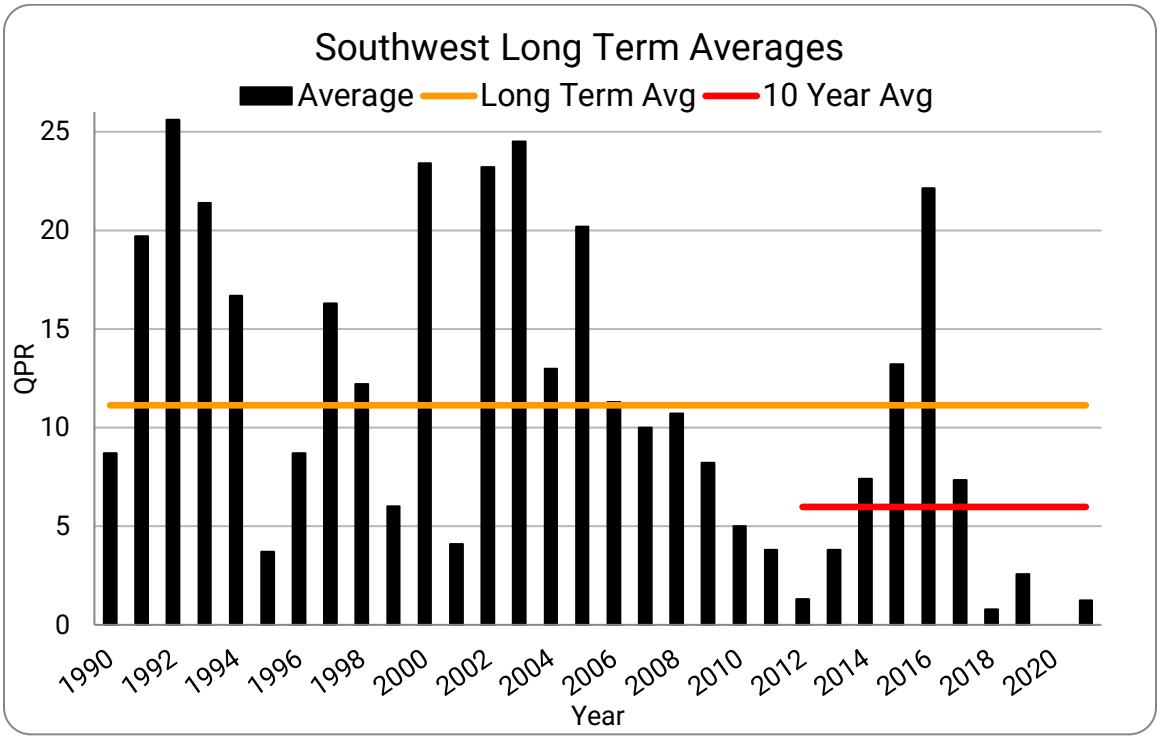

Figure 7: Northcentral Long Term Average

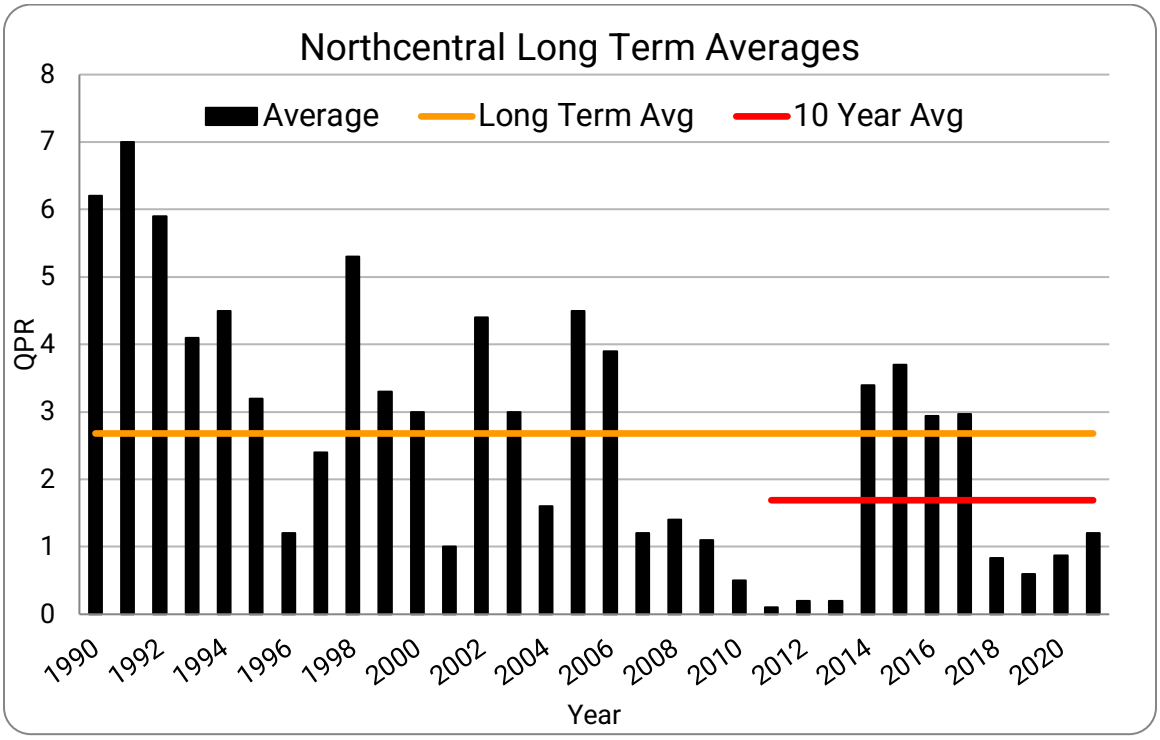

Figure 8: Southcentral Long Term Average

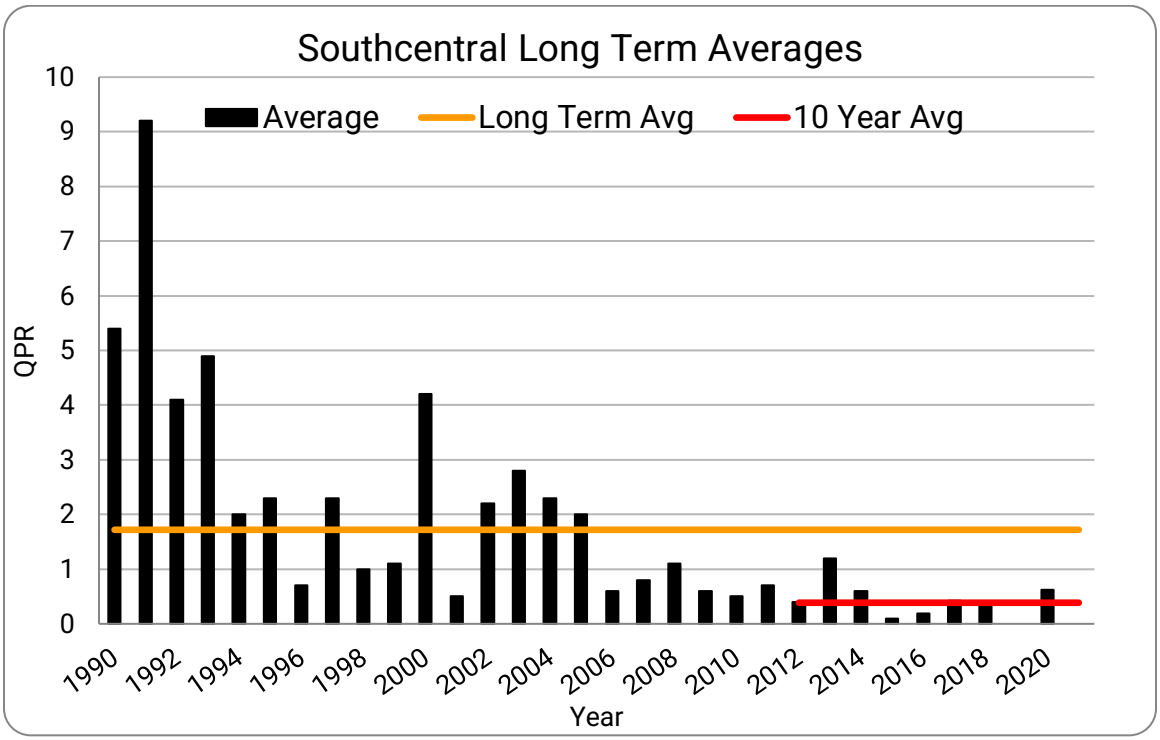

Figure 9: Northeast Long Term Average

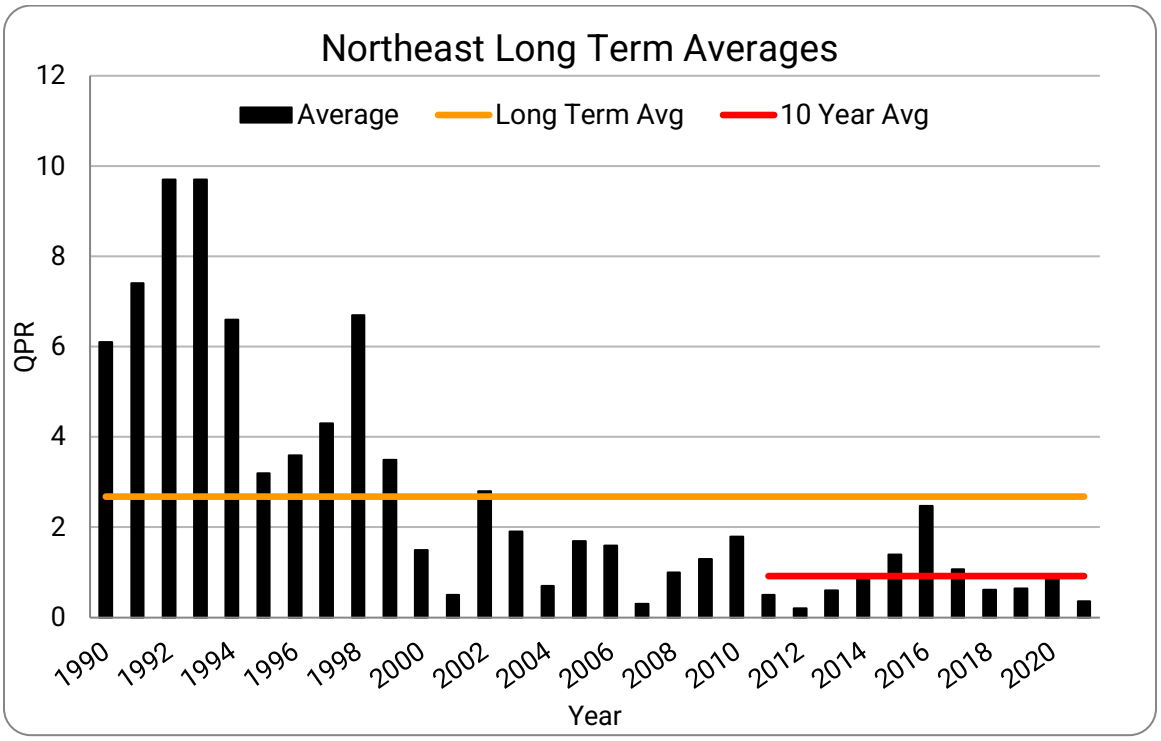

Figure 10: Southeast Long Term Average

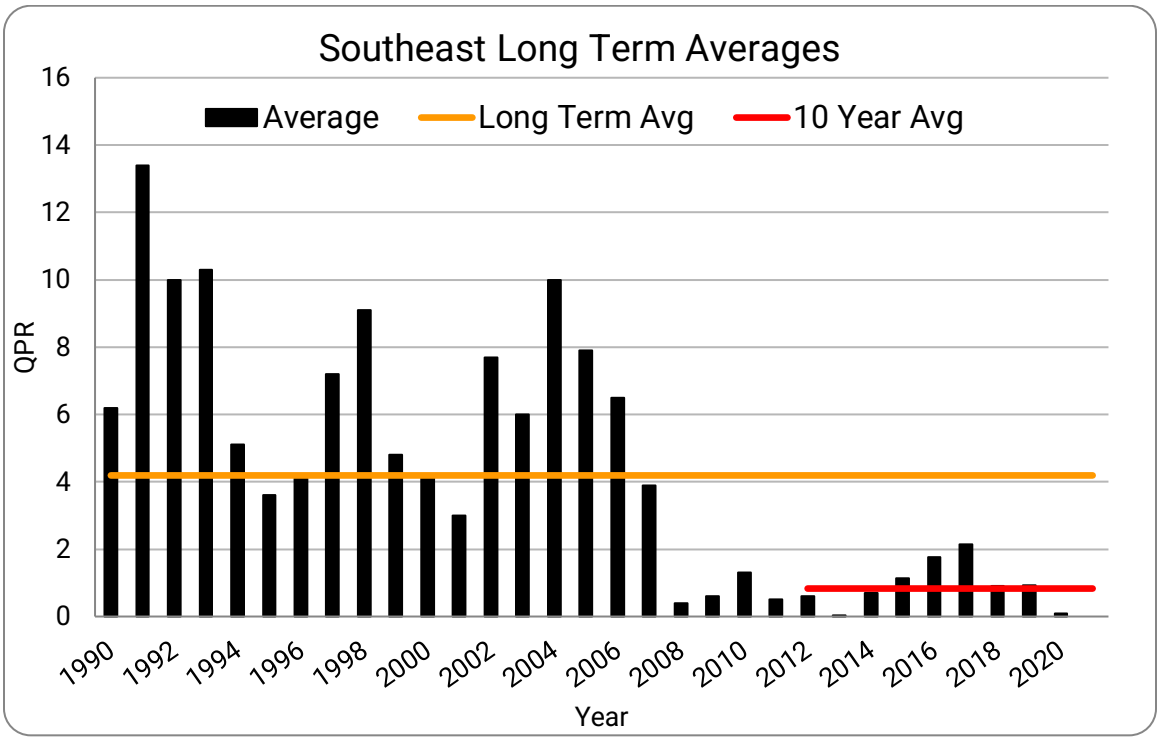

Figure 11: Rainfall totals for the last 365 days in Oklahoma (Source: Mesonet.org)

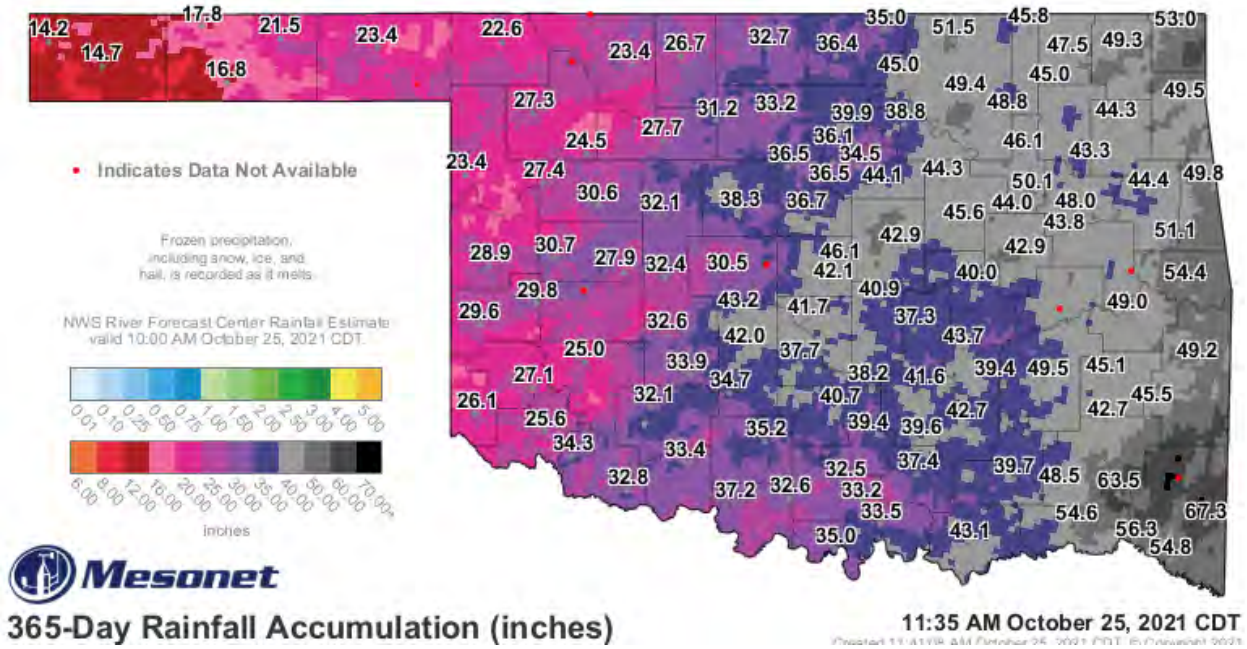

Figure 12: Average Annual Rainfall (Source: climate.ok.gov)

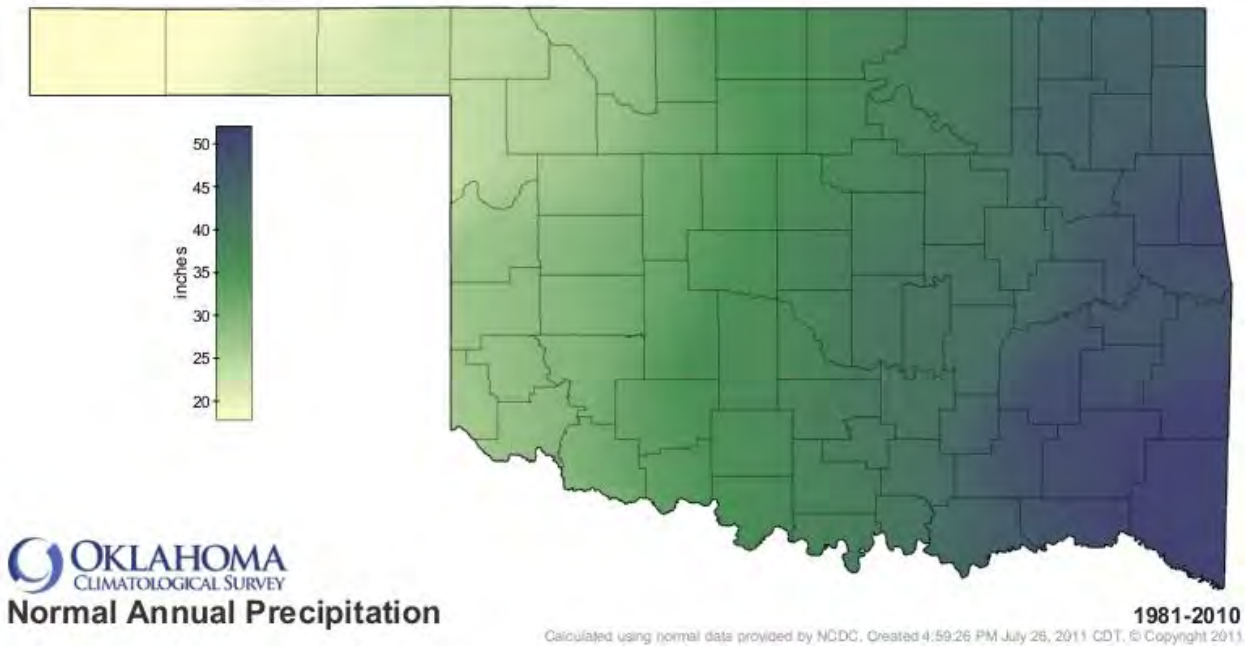

Figure 13: Comparison of Drought Conditions for 2021 (Source: Droughtmonitor.unl.edu)