



2022 Quail Season Update

By: Tell Judkins, Upland Game Biologist

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 at the lowest recorded on these surveys in 2012 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). This year we are seeing the statewide average up by about 6% over 2021.

Regionally, the northeast and northcentral regions were up over 2021's survey number in the August Survey. However, the southeast and southwest showed an increase over the 2021 counts in the October surveys (Table 1). Figures 4-10 below show the average survey results for 1990-2022. In these graphs I have added a rolling 10-year average this year shown as 'Prev Avg' to help visualize the changes in numbers over longer periods. 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. Looking at the data by both groupings can help to understand the fluctuations in quail numbers.

The past year has brought with it several challenges. Last years season saw mild drought conditions making hunting rough, and as winter continued the drought worsened through severe cold fronts and storms. Spring saw some reprieve for most of the state, but the far southwest and panhandle saw little rain. It wasn't until June that those areas finally found some relief, but it was short lived (Figures 11-12). Flash drought hit as the summer heat set in quickly with areas in the southwest seeing up to 66 days over 100°F, and a majority of the state seeing 90-138 days over 90°F. Intermittent rains allowed for much of the state to see decent crops of forbs and insects, but overall nesting season was very dry. Currently, we see over 99% of the state in at least Severe Drought, and over 82% in Extreme Drought (Figure 13).

According to limited observation data from the 'Game Brood Survey App' created by Oklahoma State University and ODWC, it appears quail nesting season started in early June, with a majority of observations coming in mid-July. Age structure of observed bobwhite show 63.6% full grown, 20% $\frac{3}{4}$ grown, 12.7% $\frac{1}{2}$ grown, and 3.6% $\frac{1}{4}$ grown. This structure shows a decent early hatch, but may also demonstrate how drought stress lead to repeated nest attempts.

No scaled quail were observed during the 2022 surveys. There are only a few routes in Oklahoma with the opportunity to observe scaled quail. Therefore, this is strictly an observation, not a prediction of scaled quail abundance. ODWC biologists have received several reports of scaled quail broods in the Oklahoma panhandle.

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 into a provided envelope 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 12th 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 <https://www.wildlifedepartment.com/hunting/regs> or in print wherever hunting and fishing licenses are sold.

Rule Change: Quail Season on Department Managed Land: Closed to non-resident hunting February 1-15 on western Wildlife Management Areas. Consult the Special Area Regulations on page 55 of the Hunting and Fishing Guide below.

Ultimately, remember the outdoors are always open!

Work some ground, trust your dog, and make a memory!

Figure 1. Regional Map of Oklahoma.

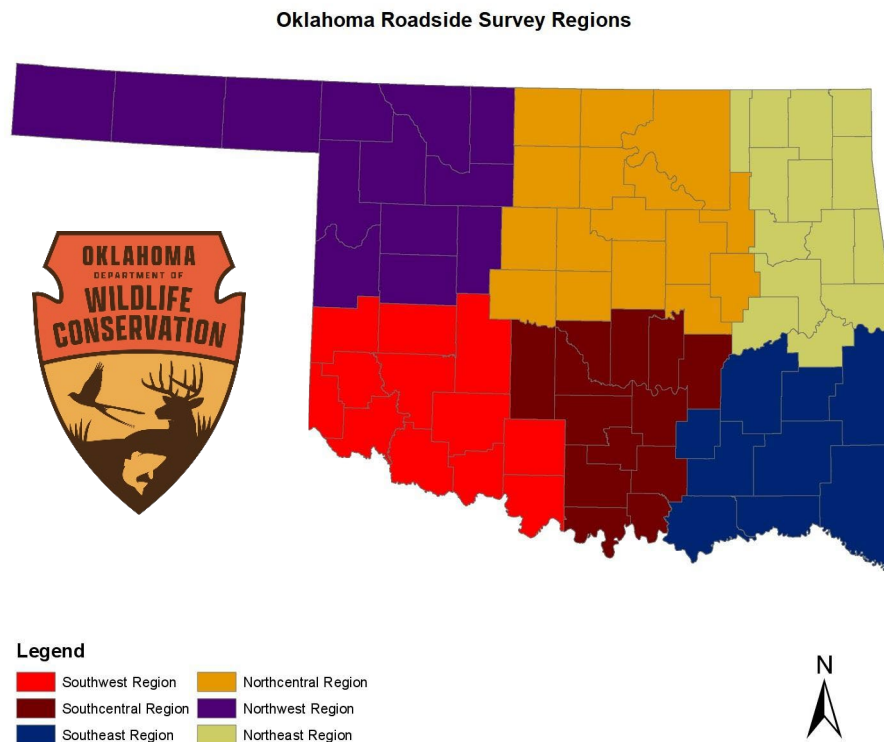


Table 1. Regional Breakdown of Surveys

	August			October		
Region	2021	2022		2021	2022	
Northwest	2.88	2.31	↓	3.875	3.5	↓
Northeast	0.43	0.79	↑	0.36	0.29	↓
Southwest	2.66	1.58	↓	1.25	1.5	↑
Southeast	0.88	0.27	↓	0	0.91	↑
Northcentral	2.06	3.6	↑	1.2	1.2	-
Southcentral	0.08	0	↓	0	0	-
Statewide	1.58	1.53	↓	1.23	1.31	↑

Figure 2. Ecoregion Map of Oklahoma.

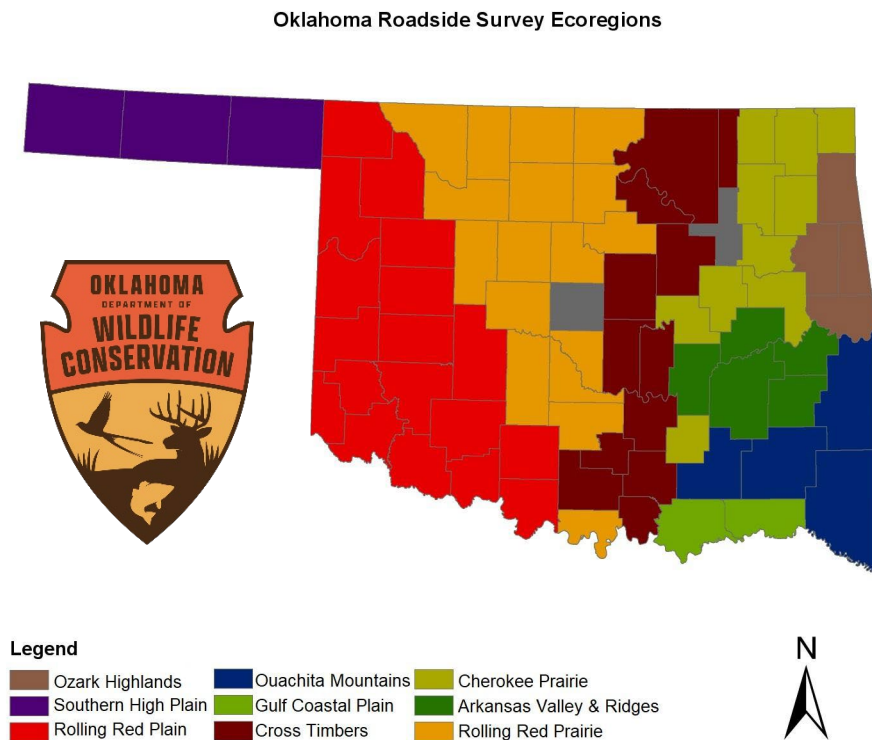


Table 2: Ecoregional Breakdown of Surveys

Ecoregion	August				October		
	2021	2022			2021	2022	
Arkansas Valley & Ridges	1.17	0.5	↓		0	1.66	↑
Cherokee Prairie	0.3	1.4	↑		0.50	0.20	↓
Cross Timbers	0.15	0.69	↑		0	0.23	↑
Ozark Highlands	1.25	0	↓		0	0.50	↑
Gulf Coastal Plain	0	0	-		0	0	-
Ouachita Mountains	0	0.2	↑		0	0	-
Rolling Red Prairie	1.71	2.56	↑		1.94	0.88	↓
Rolling Red Plain	3.05	2.66	↓		1.10	3.20	↑
Southern High Plain	3.75	0	↓		10.00	2.50	↓
Statewide	1.58	1.53	↓		1.23	1.31	↑

Figure 3: Quail/Route by Ecoregion from 2016-2022

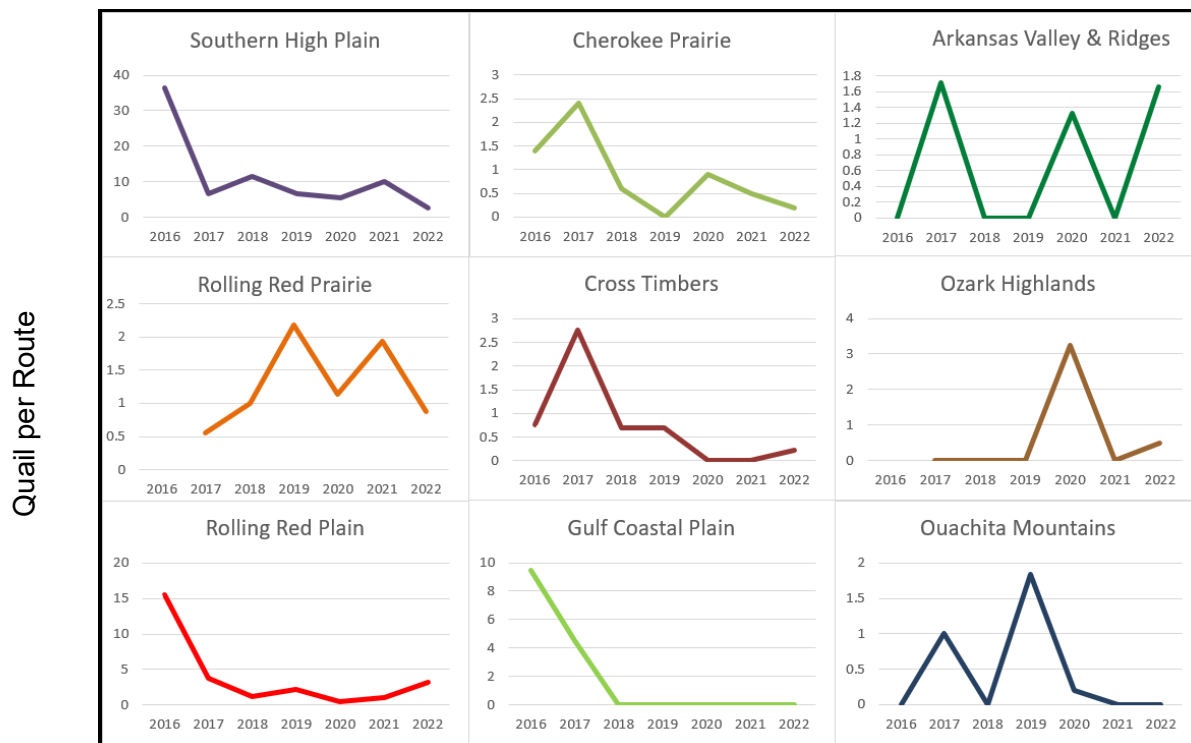


Figure 4: Statewide Long Term Averages

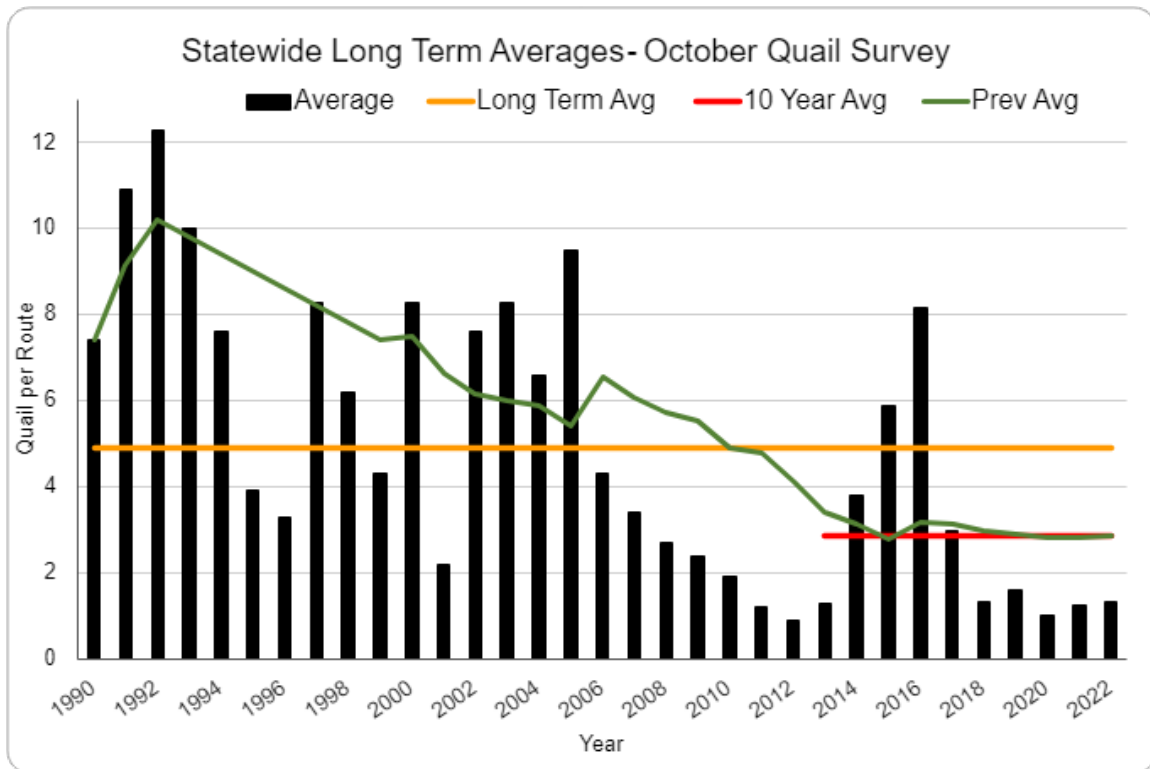


Figure 5: Northwest Long Term Averages

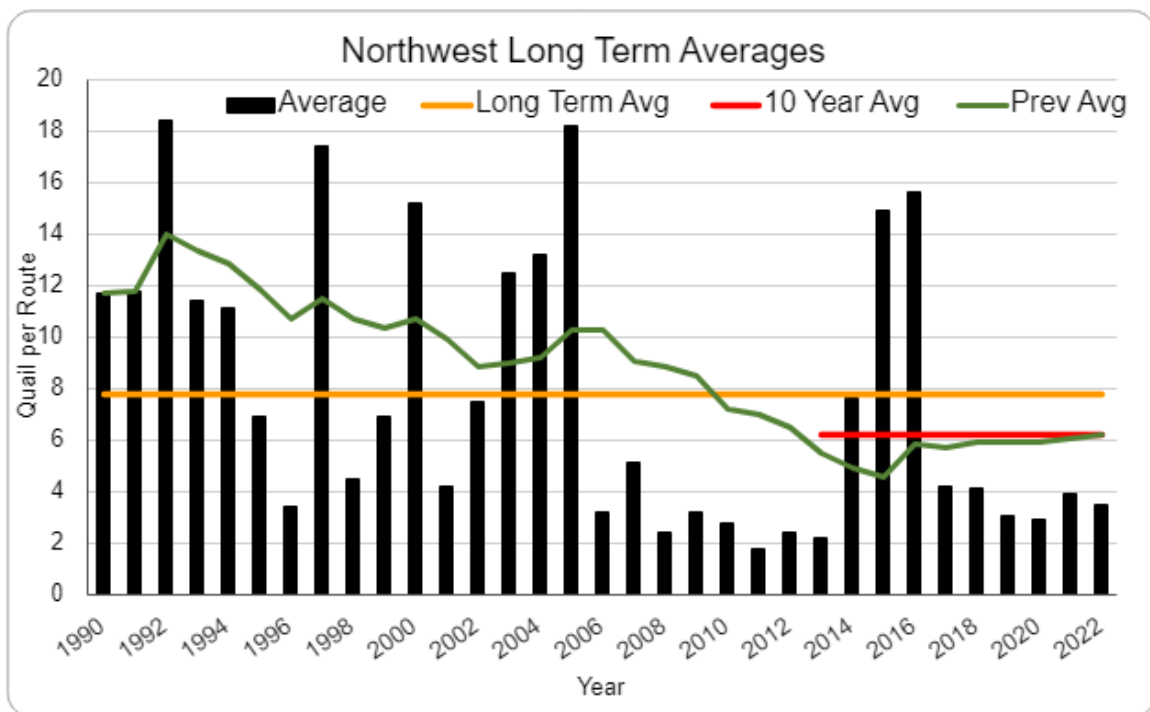


Figure 6: Southwest Long Term Average

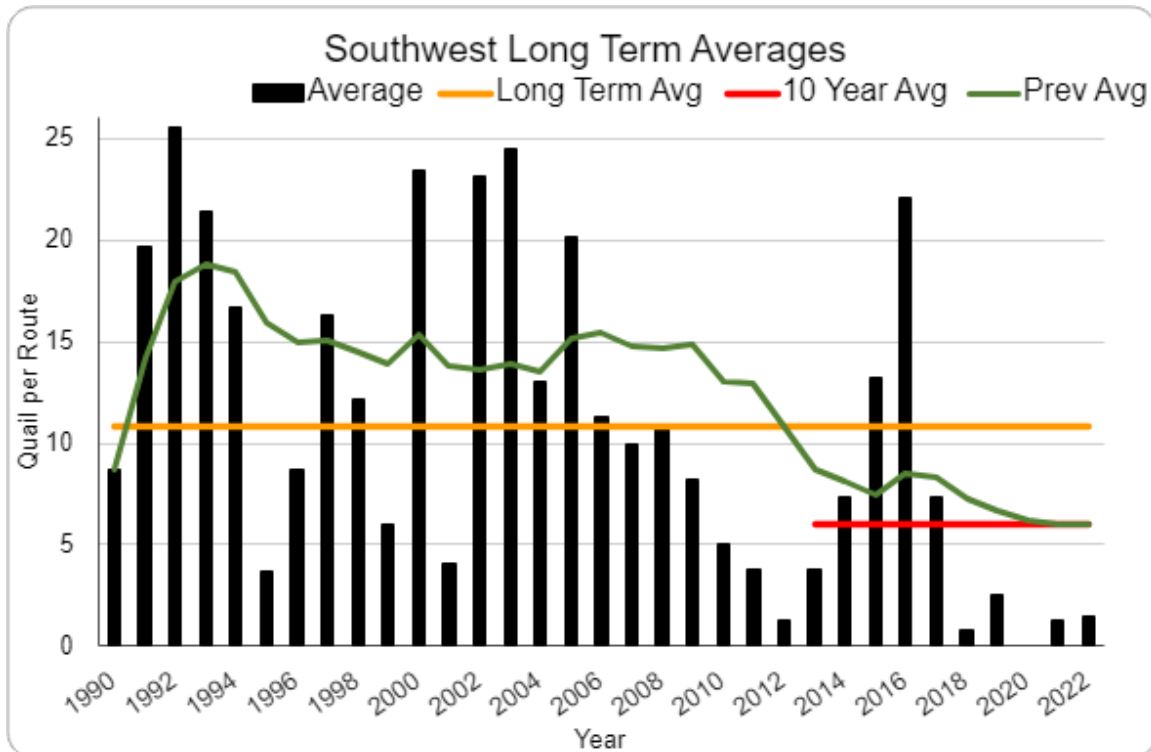


Figure 7: Northcentral Long Term Average

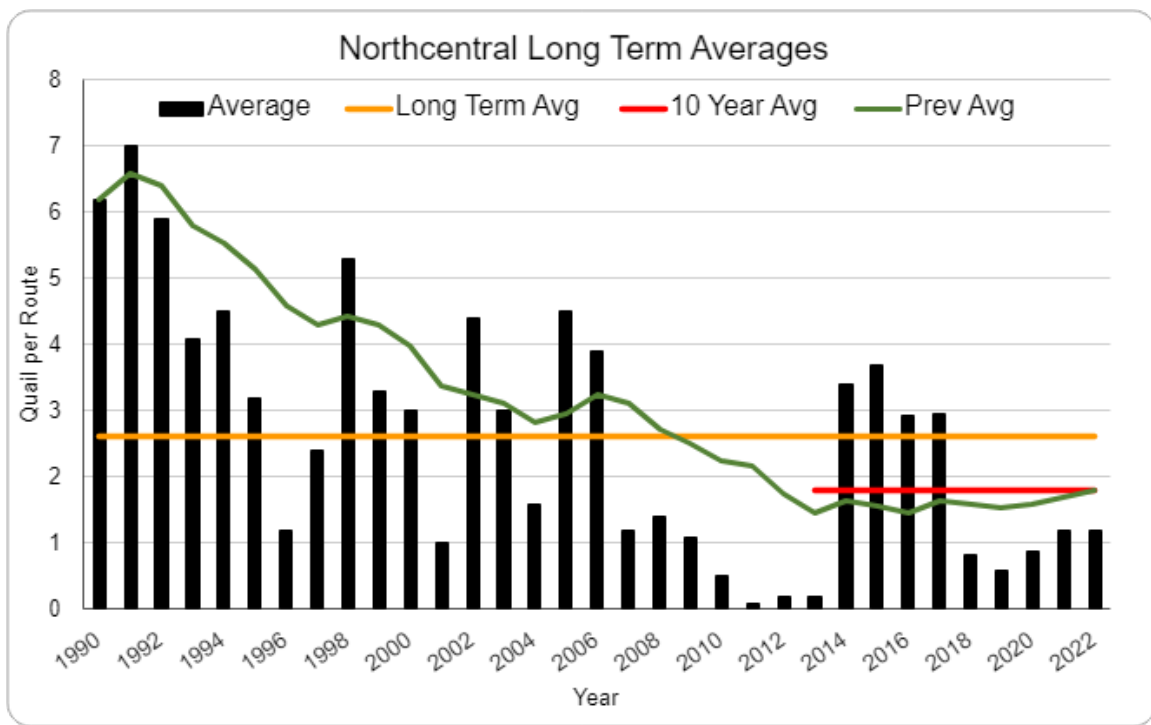


Figure 8: Southcentral Long Term Average

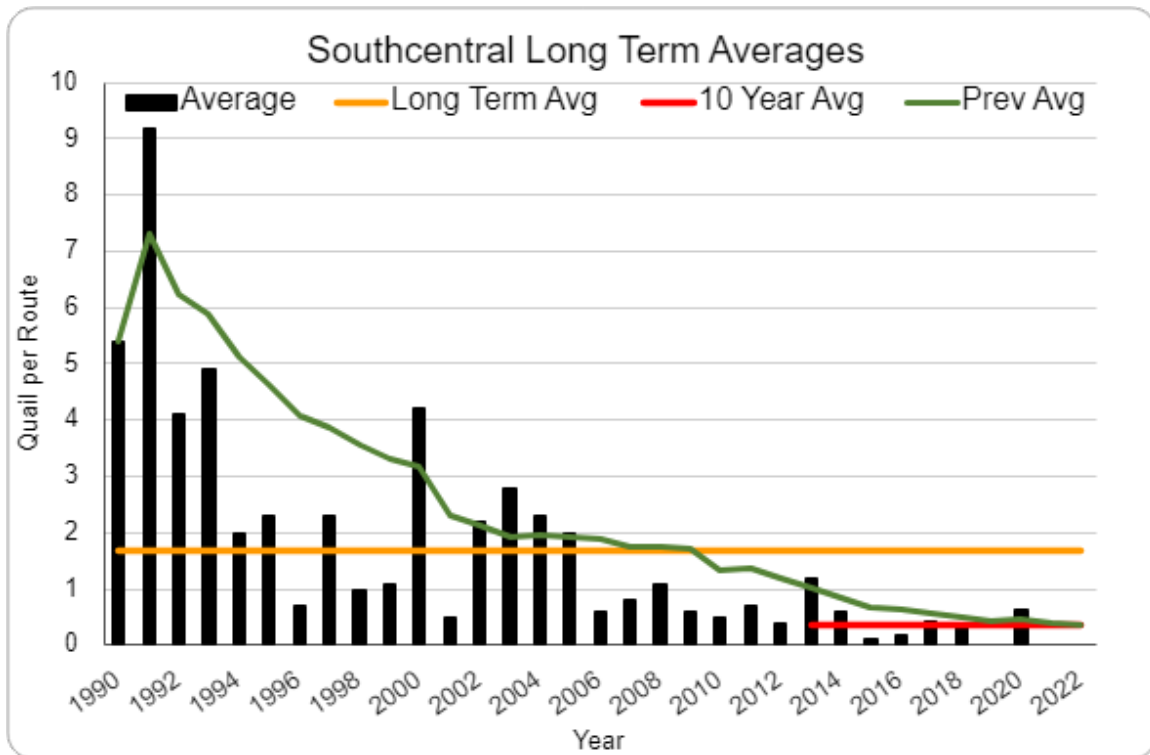


Figure 9: Northeast Long Term Average

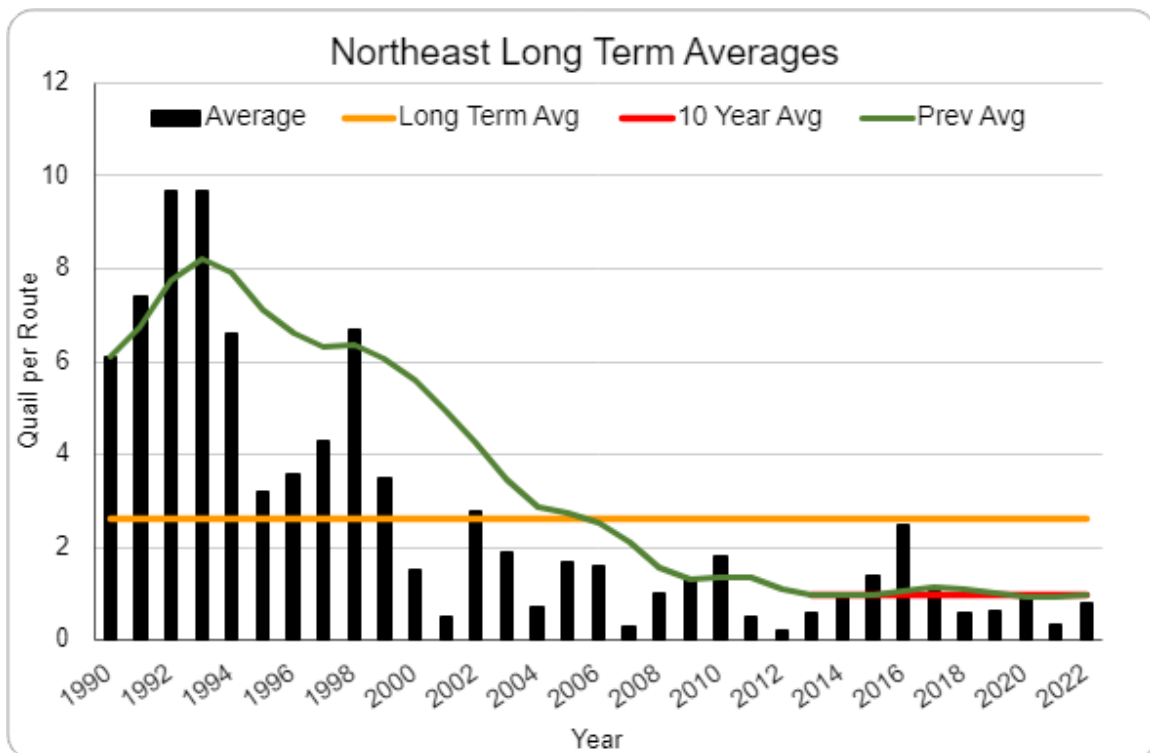


Figure 10: Southeast Long Term Average

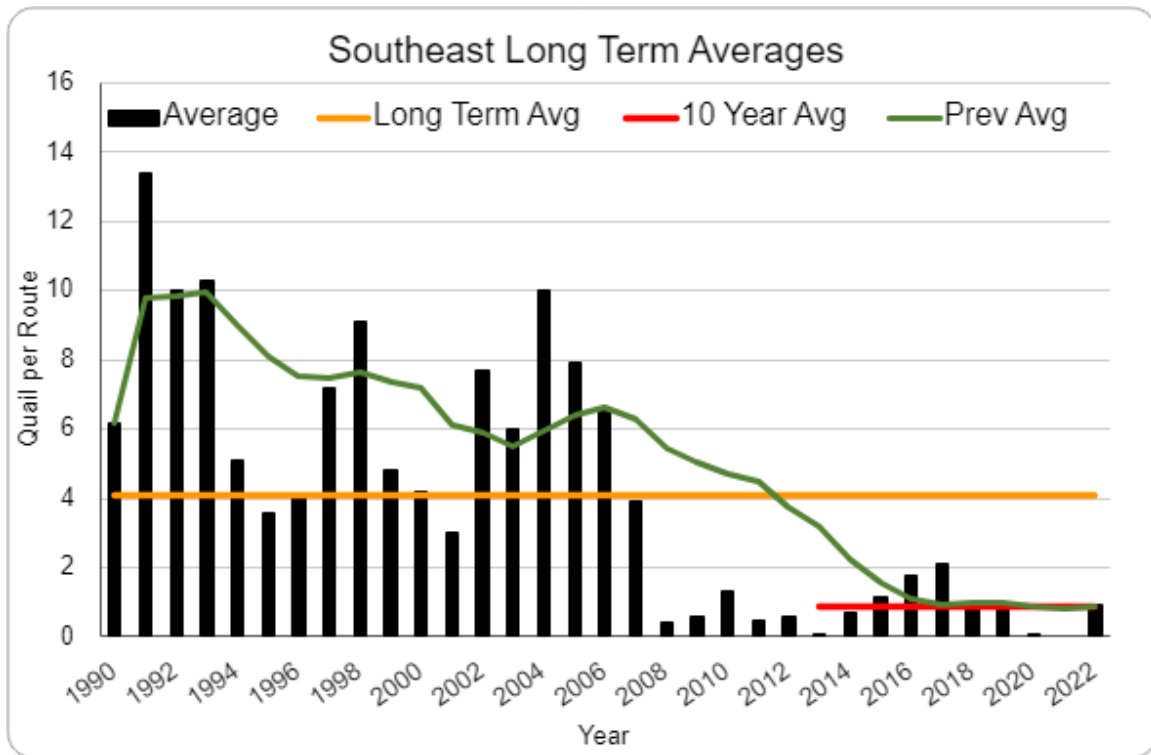


Figure 11: Rainfall totals for the last 365 days in Oklahoma (Source: Mesonet.org)

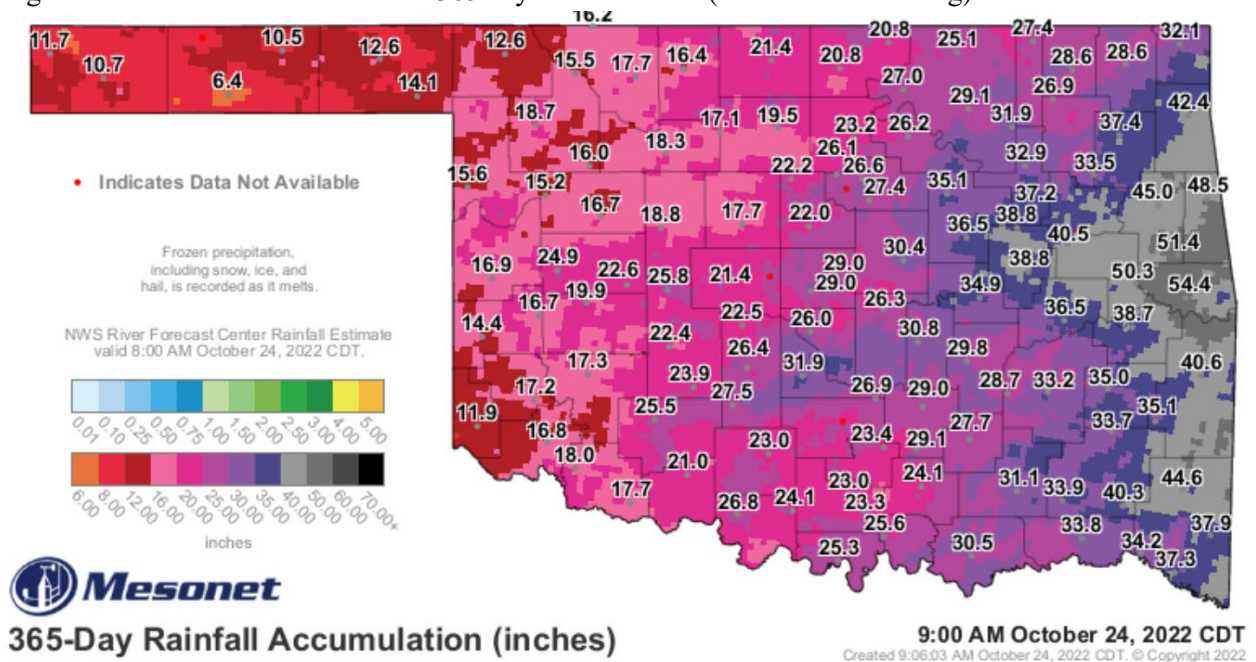


Figure 12: Average Annual Rainfall (Source: climate.ok.gov)

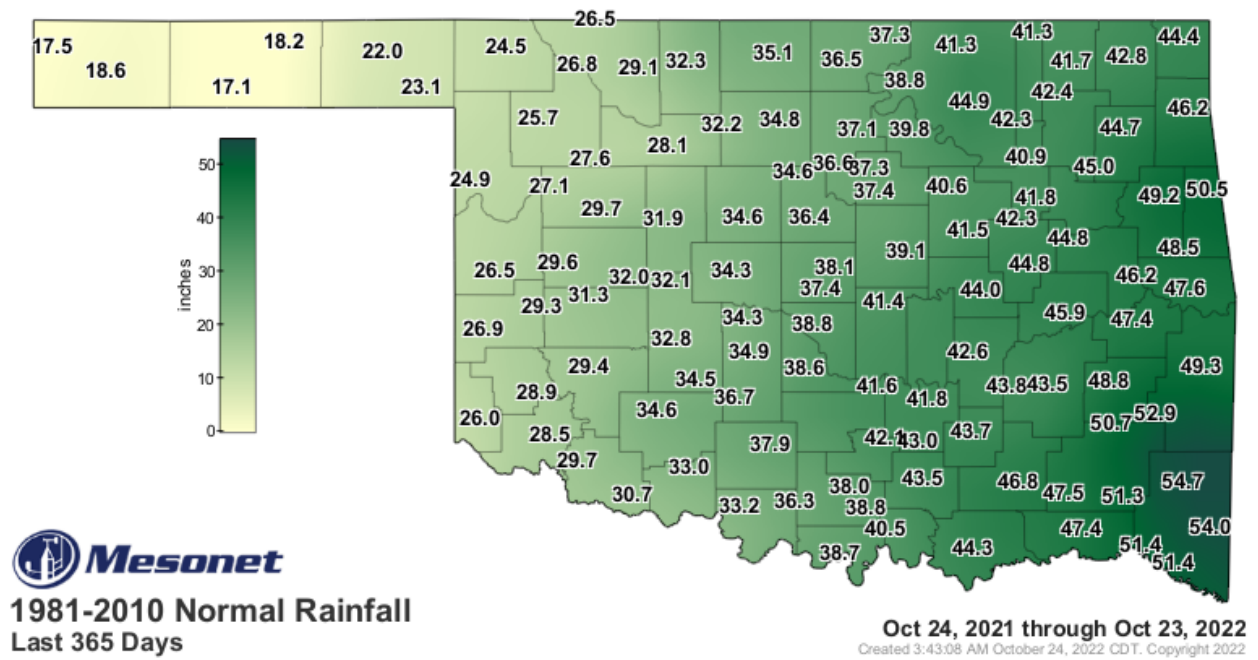


Figure 13: Comparison of Drought Conditions for 2022 (Source: Droughtmonitor.unl.edu)

