



August 2024 Quail Roadside Survey

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September - 2024

Habitat and Weather

El Niño helps drive boom; Bobwhite numbers best since 2016

The Oklahoma Department of Wildlife Conservation (ODWC) has conducted annual roadside surveys in August and October since 1990 to provide an index of annual population fluctuations. The number of quail observed are reported to provide an index of quail abundance and indicates reproductive success. Currently, ODWC employees survey 81 routes in 75 of Oklahoma's 77 counties. Oklahoma and Tulsa counties, both comprised of almost exclusively urban landscapes, are excluded from the survey.

The state is divided into either geographic regions (Figure 1) or ecoregions (Figure 11) to compare the index year-to-year. By looking at both divisions we can get a more precise view of on-the-ground conditions in each county and can get a better glimpse into the area you may intend to hunt.

The 2024 August roadside quail survey shows the statewide quail index up substantially over 2023 climbing from 2.23 to 6.52 quail per route (q/r) which is 28.8% above the 35-year average of 5.06q/r (Table 1 & Figure 2), and 92.3% above the 10-year average of 3.39q/r. Age structure of observed quail shows 54.2% full grown, 38.3% $\frac{3}{4}$ grown, 6.8% $\frac{1}{2}$ grown, and 0.8% $\frac{1}{4}$ grown birds. This age structure indicates successful early broods with additional nesting throughout the summer. Last fall the latest known hatch was documented from the wing-box program with a harvested quail hatching out mid-September in the Northcentral Region. Two other individuals appeared to be from later hatches in far-western parts of the state, but the wings were badly damaged. ODWC biologists are currently monitoring our fall weather patterns and are excited to see the numbers on the October Survey. Additionally, ODWC biologists have received several reports of broods of varying ages throughout the summer. All regions of the state except the Southeast region improved from the 2023 survey. All regions, other than the Southeast region, are currently above their historic 35-year average and 10-year average. (Figures 3-8). The past winter was fairly mild for Oklahoma, with only a few major systems that brought bitter cold. After three consecutive years of La Niña (warmer/drier) weather patterns last spring saw a transition to El Niño (cooler/wetter) which generally ties to better

quail numbers. Fortunately, that El Niño pattern maintained until April of this year. By May we had transitioned into an “ENSO-Neutral” or within half of a degree of average Pacific Ocean index temperatures. We are currently seeing drought effect about 75% of the state with less than 20% in those D2-D3 (Severe/Extreme) categories. Rainfall throughout the growing season has been somewhat regular across much of the state, coming at times in monsoon-like systems dumping several inches locally at a time. Precipitation in the spring had on-the-ground conditions looking pretty good; by mid-March 55% of the state was drought-free. Summer heat and a lack of rain over the last ~60 days have allowed drought to steadily take hold once again, especially in the southwest region. Below, figures 9 & 10 show the drought and rainfall conditions across the state.

Over the last 180 days most of Oklahoma has seen below normal rainfall. Some areas in the southwest seeing <20% of their normal rainfall across the last 60 days. Even with higher sightings, dense vegetation along roadsides in some areas could contribute to fewer observations. Given the current conditions around the state we can also look at roadside survey numbers on an ecoregion basis. Figure 11 shows the 9 major ecoregions of Oklahoma while Table 2 gives a comparison of 2023 and 2024 survey results by ecoregion.

One pair of scaled quail was observed during the 2024 August survey. There are only a few routes in Oklahoma with the opportunity to observe scaled quail. Therefore, this is not a prediction of scaled quail abundance, strictly an observation. ODWC has received several reports of scaled quail broods in the Oklahoma panhandle this year.

Anecdotally, I have received numerous brood reports throughout August. Over the past 35 years the August Roadside Surveys have shown us that they are not always the most reliable when it comes to forecasting the upcoming season. Stay tuned for the October roadside surveys and 2024 Season Outlook, which will provide a better indication of what the upcoming quail season could have in store.

Oklahoma’s quail season is right around the corner opening on November 9th and closing on February 15th, 2025. The bag-limit remains 10 quail daily. For regulations and more 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.

Figure 1. Oklahoma Roadside Survey Regions

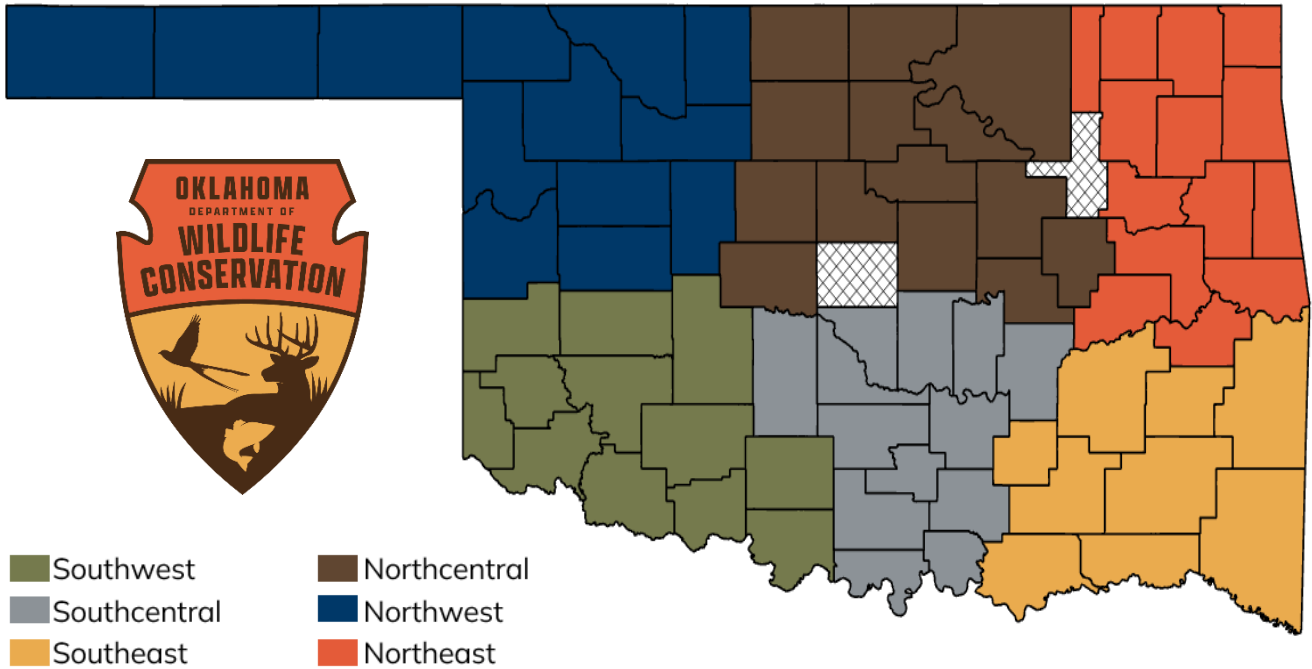


Table 1. Bobwhite quail observations/20-mile route by geographic region in Oklahoma.

Region	35-year Average	10-year Average	2022 Average	2023 Average	2024 Average
Statewide	5.06	3.39	1.53	2.23	6.52
Northwest	7.29	5.99	2.31	4.88	13.31
Northeast	2.83	1.67	0.79	3.5	4.71
Northcentral	3.16	3.05	3.6	1.07	4.13
Southwest	11.94	7.16	1.58	2.67	13.42
Southeast	3.53	1.41	0.27	0.45	0.18
Southcentral	1.81	0.25	0	0.08	1.85

Figure 2. Long-term average of bobwhite observations in Oklahoma

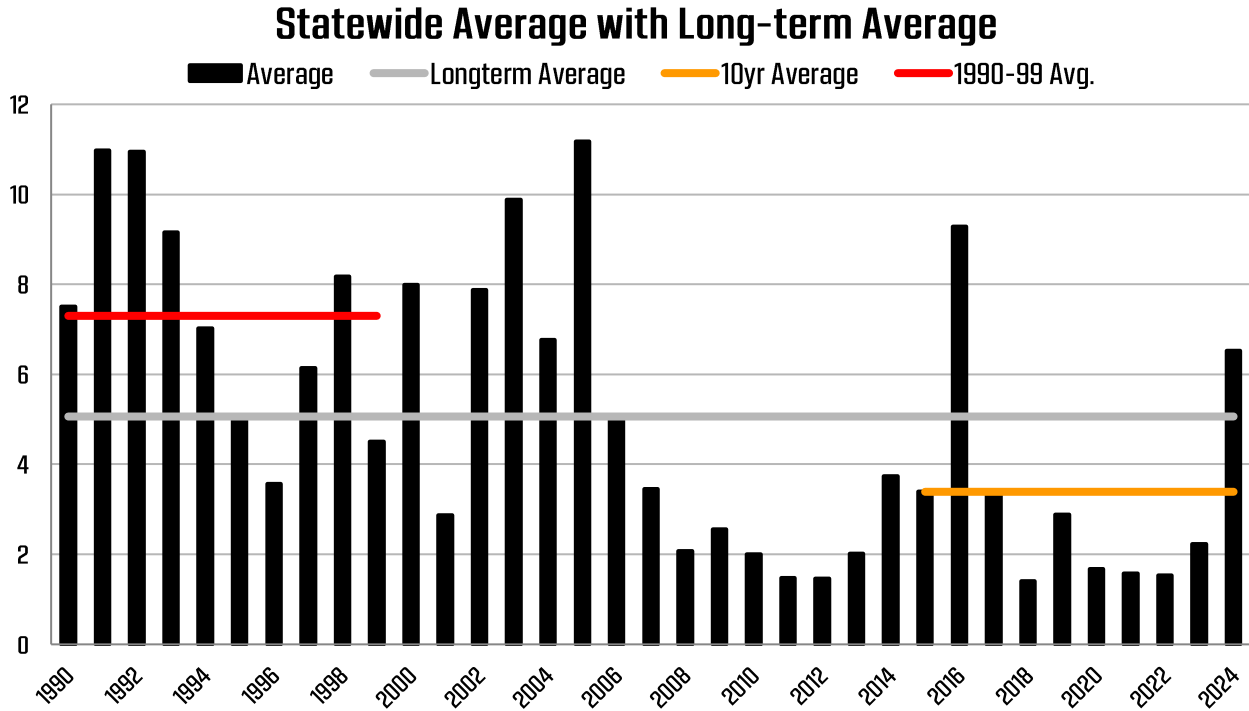


Figure 3. Long-term average of bobwhite observations in northwest Oklahoma.

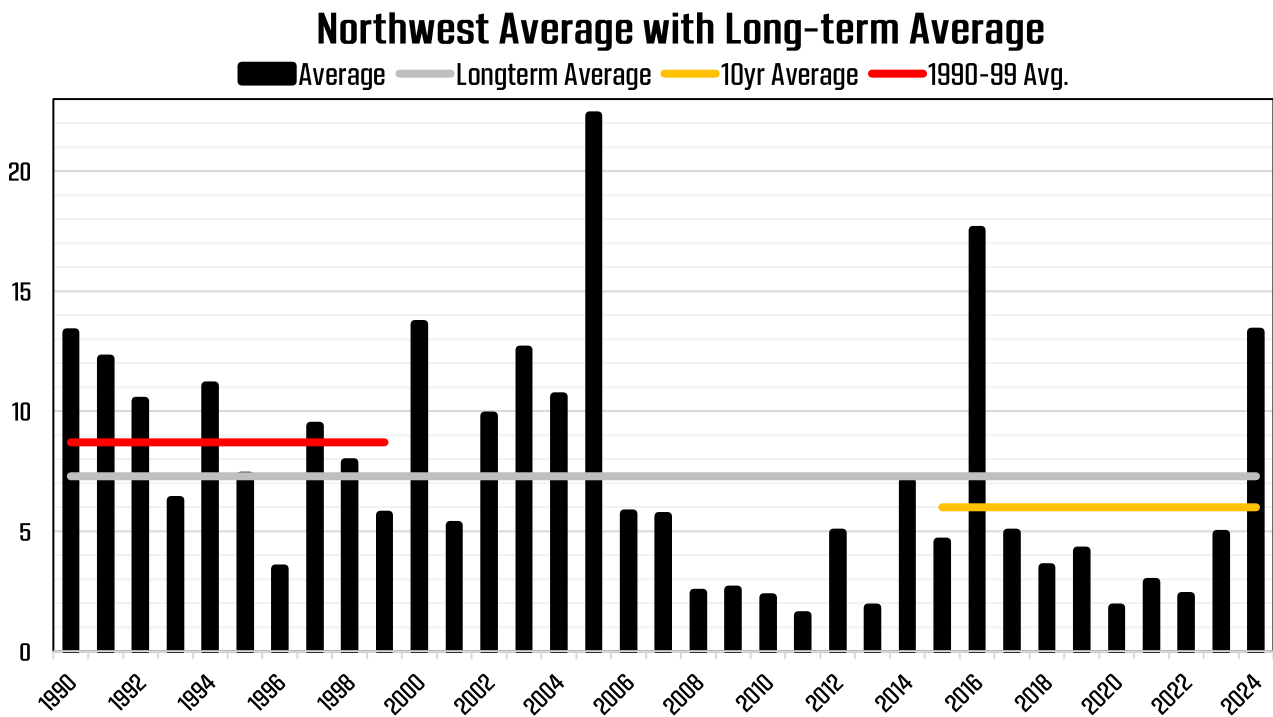


Figure 4. Long-term average of bobwhite observations in northeast Oklahoma.

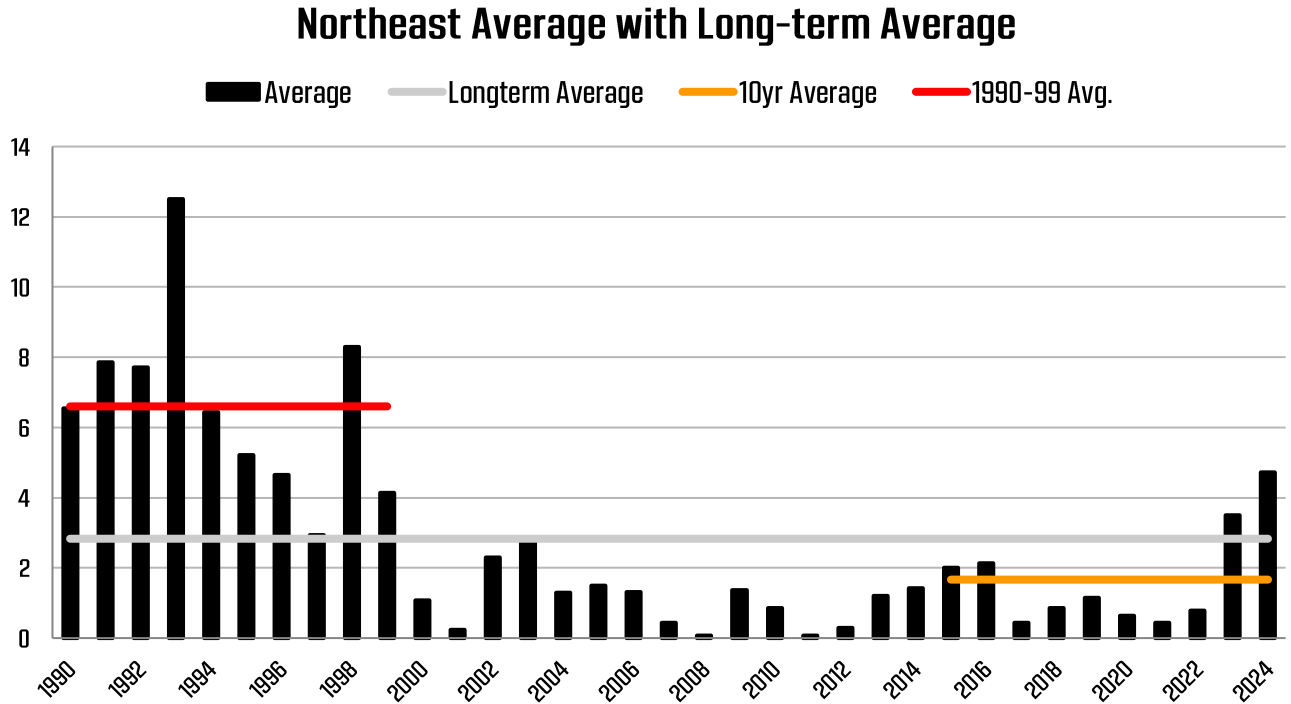


Figure 5. Long-term average of bobwhite observations in northcentral Oklahoma.

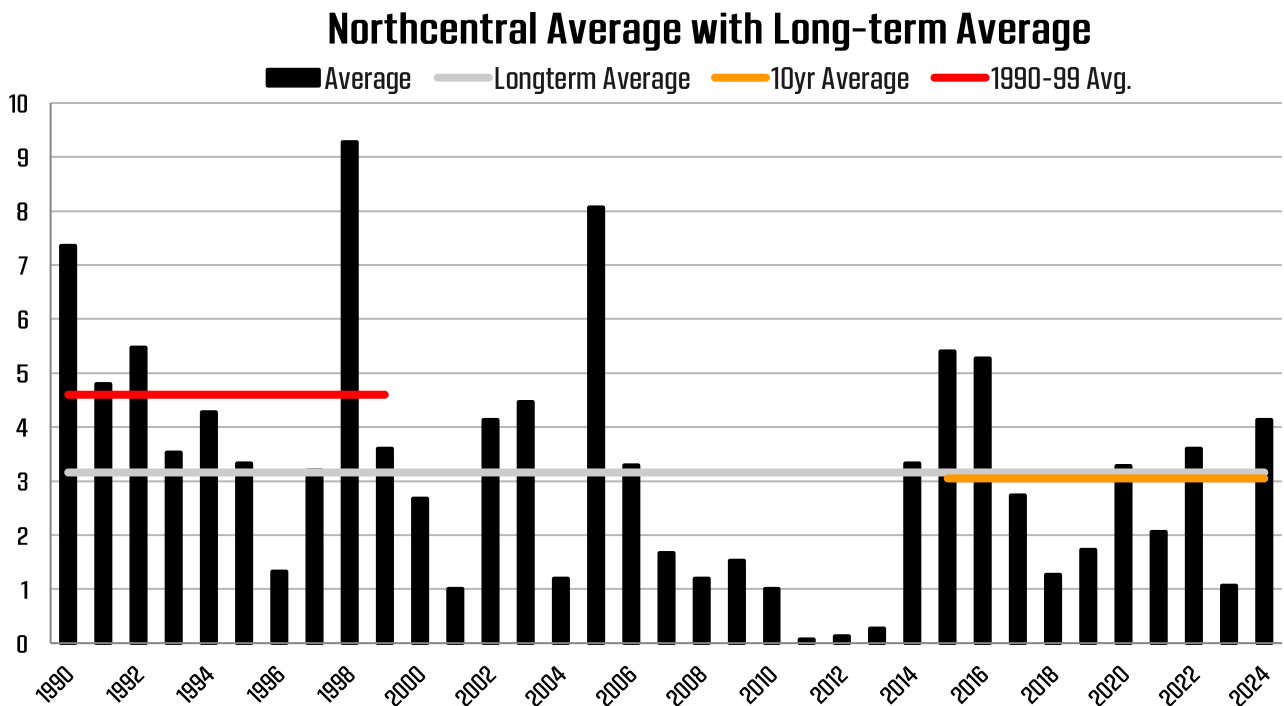


Figure 6. Long-term average of bobwhite observations in southwest Oklahoma.

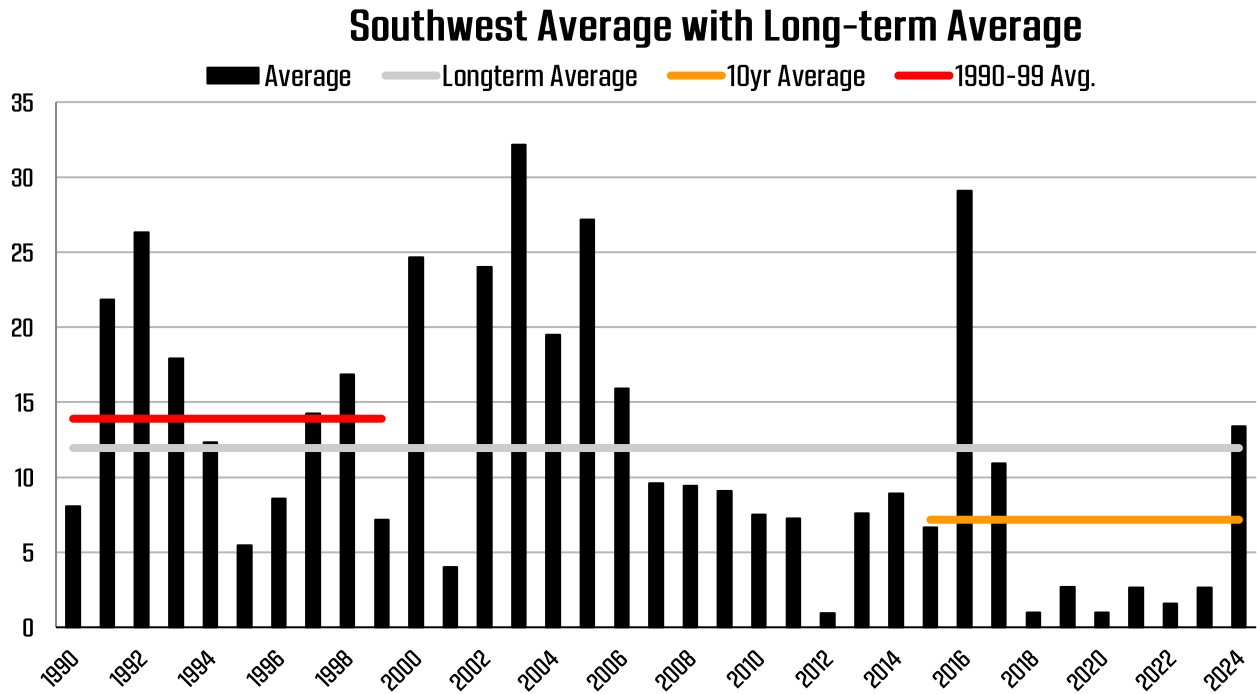


Figure 7. Long-term average of bobwhite observations in southeast Oklahoma.

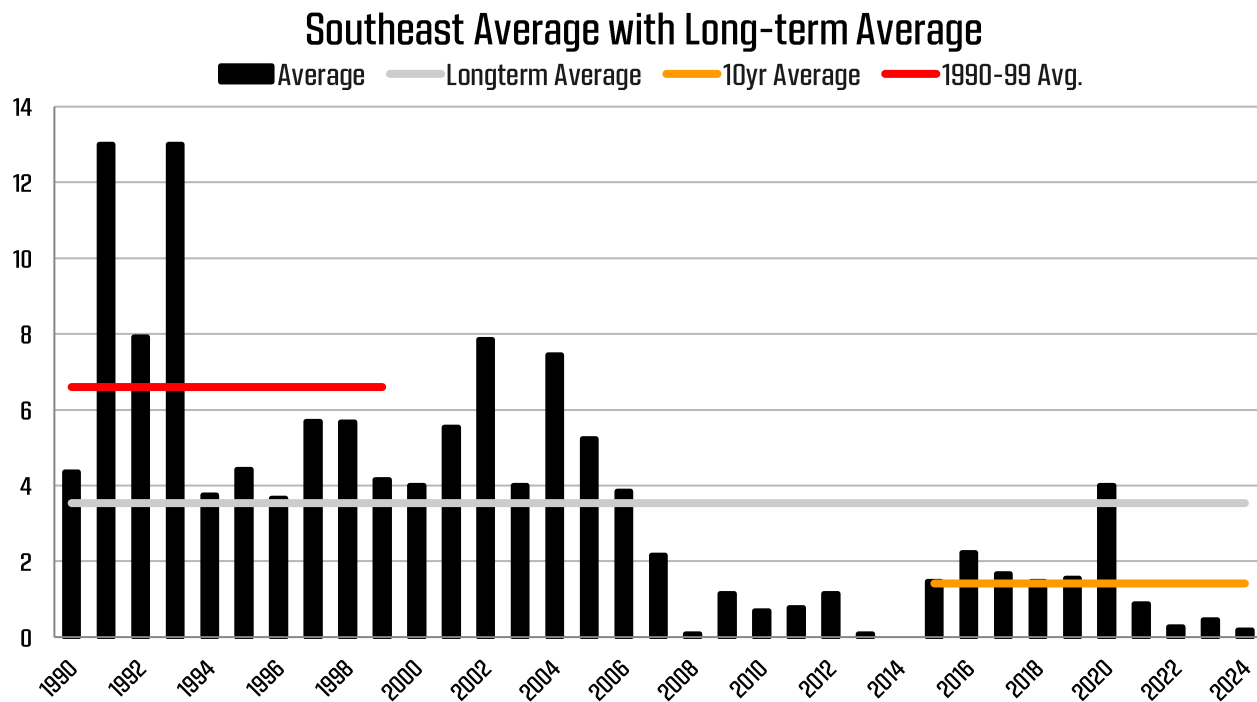


Figure 8. Long-term average of bobwhite observations in southcentral Oklahoma.

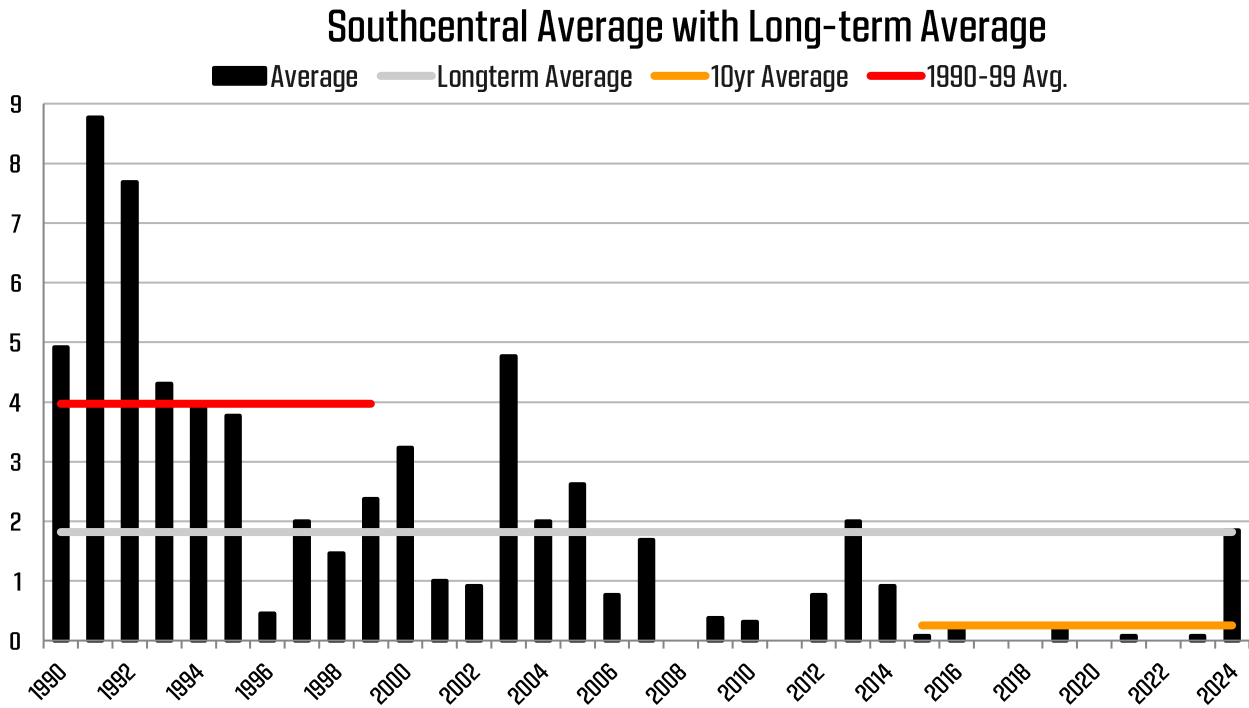


Figure 9. Drought Comparison from March 12th, 2024, to August 29th, 2024 (Source: droughtmonitor.unl.edu/)

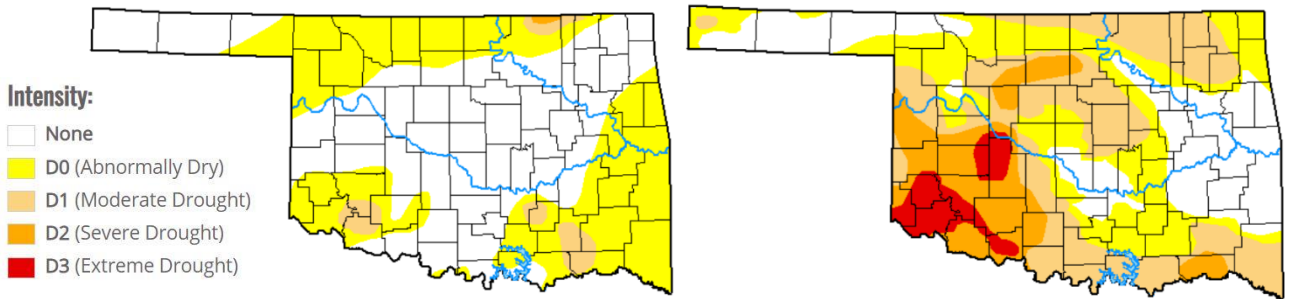


Figure 10. Departure from normal rainfall in inches: March 8 – Sept. 3, 2024 (Source: mesonet.org)

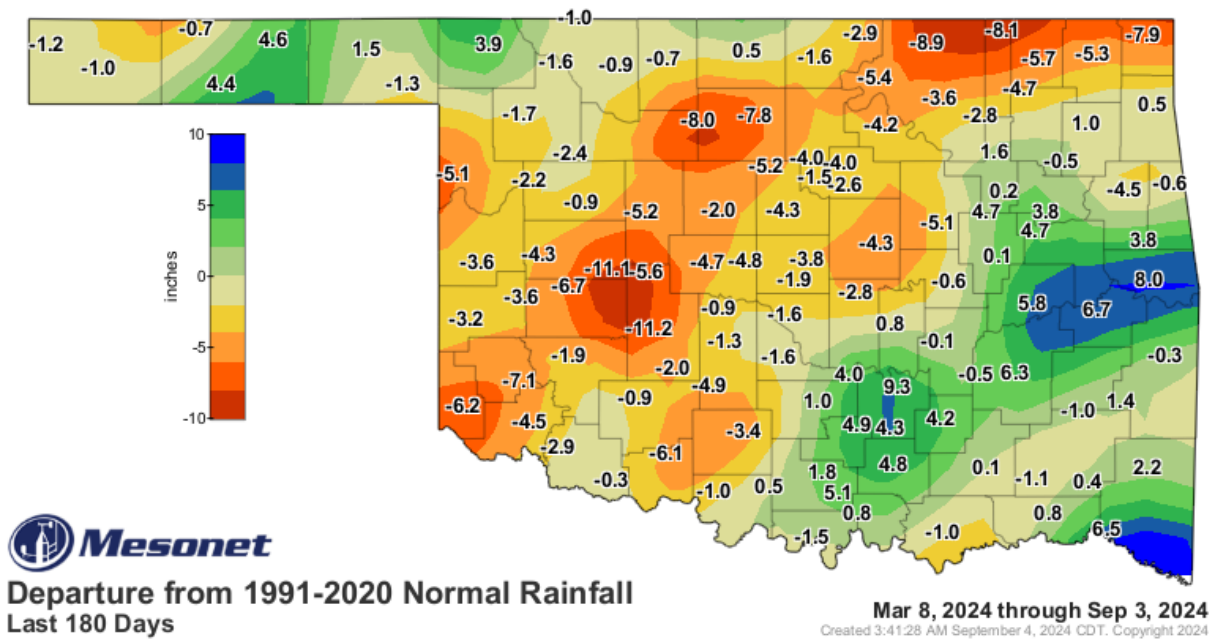


Figure 11. Ecoregions of Oklahoma

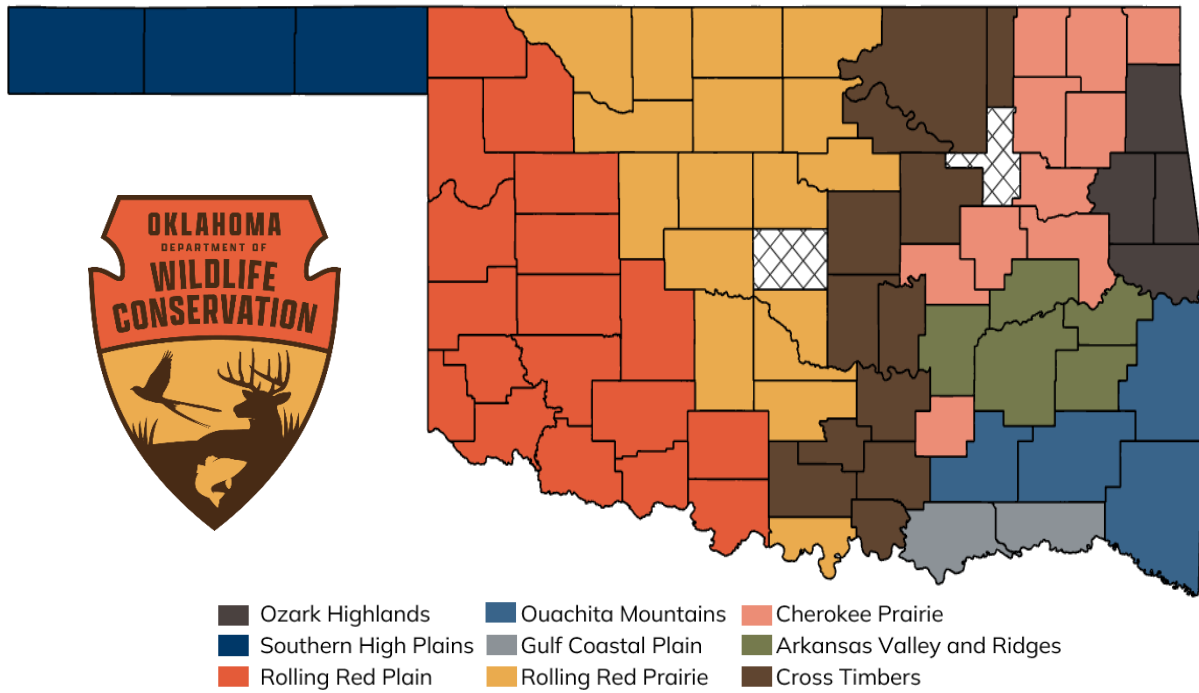


Table 2. Bobwhite quail numbers/20-mile route in the 9 geographic ecoregions of Oklahoma

Ecoregion	August		
	2023	2024	
Arkansas Valley & Ridges	0	3.83	↑
Cherokee Prairie	3.7	4.4	↑
Cross Timbers	1.15	0.85	↓
Ozark Highlands	0	0	-
Gulf Coastal Plain	0	0	-
Ouachita Mountains	1	0.4	↓
Rolling Red Prairie	1.71	6.06	↑
Rolling Red Plain	4	14.8	↑
Southern High Plain	3.75	12.25	↑
Statewide	2.23	6.52	↑