

# 2011 August Roadside Quail Survey Summary

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The Oklahoma Department of Wildlife Conservation has conducted annual roadside surveys in August and October since 1990 to index quail populations across Oklahoma. The survey provides an index of annual population fluctuations. Observers report the number of quail seen to provide an index of quail abundance (number seen/20 mile route) and reproductive success. Currently, Department employees run 83 20-mile routes in all counties except Oklahoma and Tulsa. Larger counties like Beaver, Ellis, Le Flore, McCurtain, Osage, Pittsburg, Pushmataha, and Roger Mills, have two routes.

The 2011 August roadside quail survey has been concluded, and the statewide quail index is down 77 percent from the previous 21-year average, which is an all time low (Table 1). The statewide index is down 25% from the 2010 August survey, and the number of quail observed in all regions was down from the 2010 survey except for the southeast region which remained the same. Quail numbers in the northwest and southwest regions showed the least decline compared to 2010 numbers, with the north central, northeast and south central regions showing the greatest decline (Figure 1). The number of broods observed during the August survey decreased from 15 in 2010 to 14 in 2011. Of the broods observed during the August survey, 64% were either full or  $\frac{3}{4}$  grown compared to 92% during last year's survey.

Weather is a critical factor in determining the productivity of quail and other ground nesting birds. The severe drought conditions over the past year have undoubtedly had a negative effect on quail production. Record drought conditions set the stage early on for a negative impact on quail production by limiting nesting habitat quantity and quality and the availability of seeds and insects essential for both adult and chick survival. The extremely hot and dry conditions the state has experienced over the course of the quail nesting season are also known to negatively affect quail production by shortening the reproductive period, inhibiting nest initiation and egg laying, causing embryo mortality and reducing survival of chicks and adults. Scattered showers in portions of the state improved some localized nesting conditions. However, the record number of days over 100 degrees, record high temperatures, and extreme drought conditions over most of the state, has undoubtedly had a serious negative impact on overall quail nesting success and production. The results of the August survey generally don't reflect the majority of quail produced from late nesting attempts and the success of late nesting attempts can be important in determining the size of the fall quail population. The October roadside quail survey should provide additional information and some clarity about the quail population and season outlook for this Fall.

The Quail Season Outlook is posted on [www.wildlifedepartment.com](http://www.wildlifedepartment.com) during the last week of October.

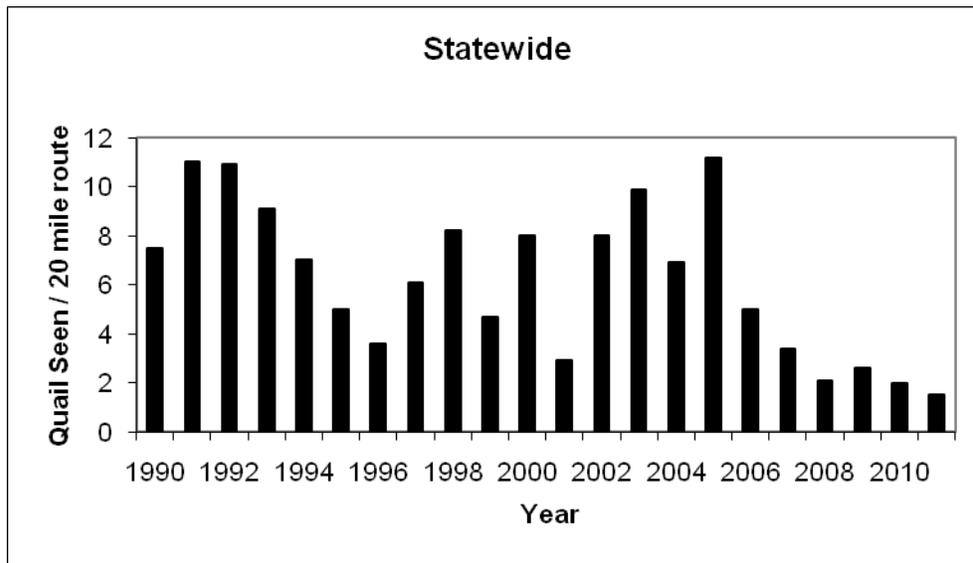
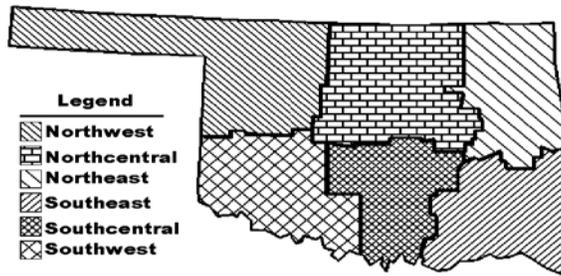


**Table 1. Quail seen/20 mile route during the August 2011 roadside surveys.**

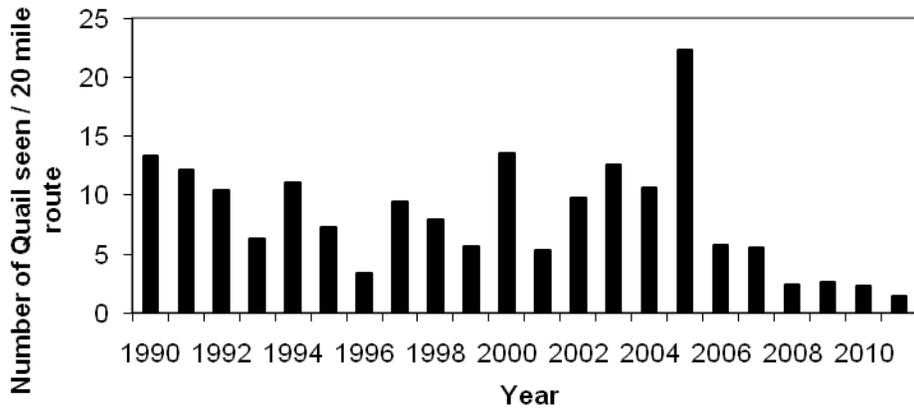
Region	Previous 21-yr. Average	2010	2011
Statewide	6.6	2.0	1.5
Northwest	8.8	2.3	1.5
North Central	3.9	1.0	0.1
Northeast	4.0	0.9	0.1
Southwest	15.3	7.5	7.3
South Central	2.8	0.3	0
Southeast	5.7	0.8	0.8

Figure 1

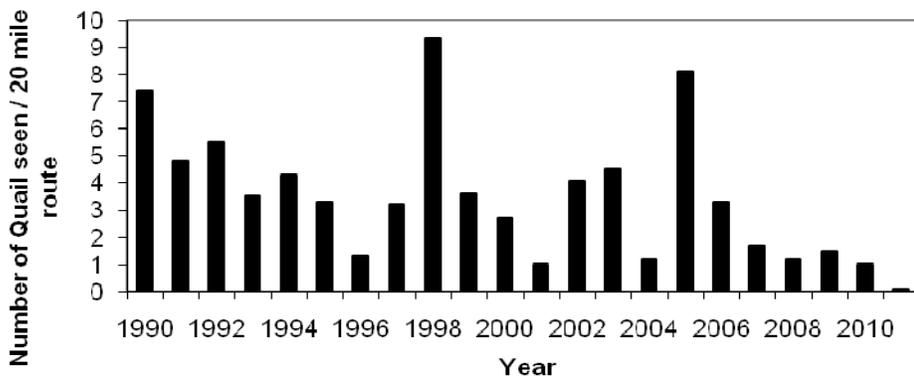
**Regional boundaries for Oklahoma used for quail roadside surveys.**



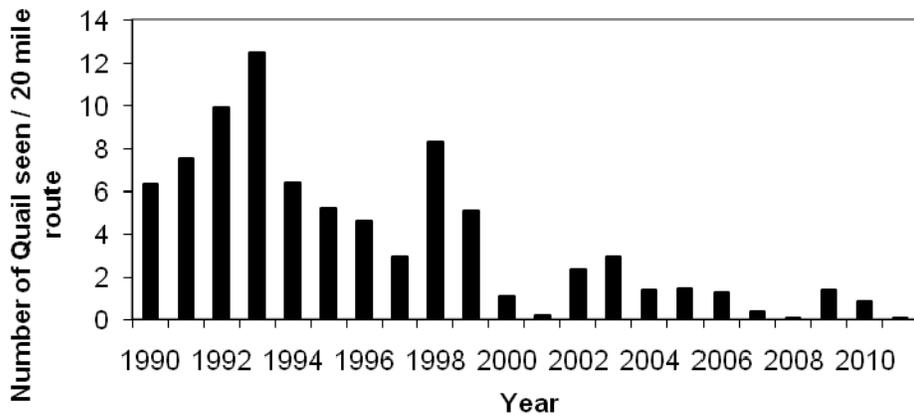
### Northwest



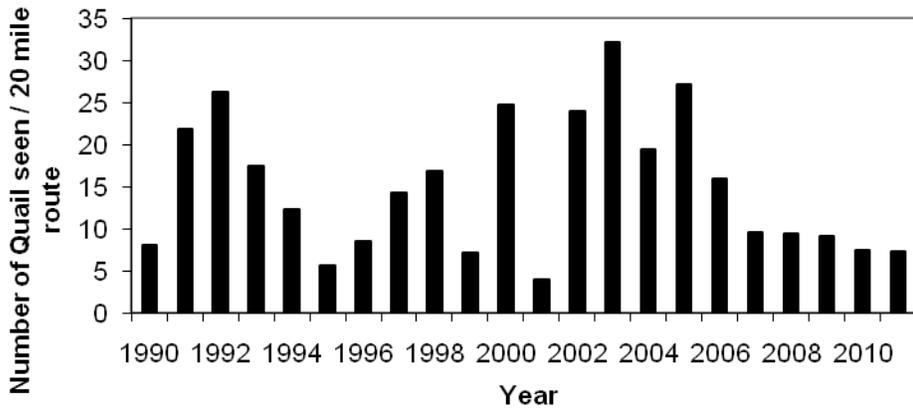
### North Central



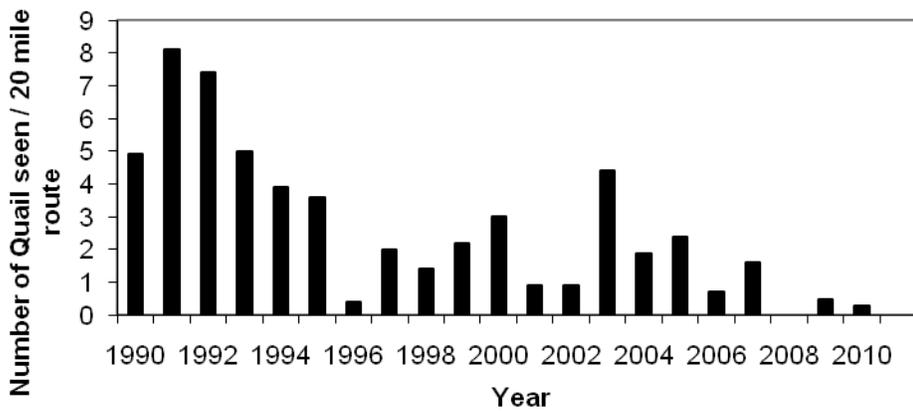
### Northeast



### Southwest



### South Central



### Southeast

