



## South Texas Quail Nesting Season- Status Report July 2016

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The 2015–2016 quail season was one for the record books. Helicopter surveys flown across South Texas during December yielded density estimates ranging from a bird/3 acres to just better than a bird/acre. Densities simply do not get much better than that. Bobwhites and scaled quail were also noticeably more abundant in areas where their densities had been low for some time (e.g. the Edwards Plateau). Two-hour hunts over dogs in the Sand Sheet consistently yielded >15 covey rises/hunt and hunts with >20 covey rises/hunt were reported often. Furthermore, helicopter counts conducted across several ranches, over the duration of the season showed that many of these birds made it through the hunting season. So now that we are 4 months removed from such a memorable season, the question now becomes: what should we expect next season?

I run the CKWRI Quail Outreach Program, which is a free science-based landowner consultation service, provided by CKWRI, Quail Coalition, Quail Forever and private donors. Through communication with our graduate students and travel to various ranches, we are collectively able to develop a good pulse of breeding conditions and quail production across South Texas. Below, I'll report a few general observations about the nesting season thus far, substantiated with data collected by our graduate students working quail projects across South Texas.

### *Conditions before the 2016 Nesting Season*

Read almost any press headline regarding El Nino driven weather patterns and you will most likely find something about how this pattern negatively impacts rainfall, temperatures, and agriculture in other parts of the world. However, as an agriculturalist or quail hunter in Texas, it's a blessing. During El Nino events, moisture is driven from the Pacific Ocean across northern Mexico and into Texas and the Southwest, resulting in wetter-than-normal weather patterns from fall through spring in these areas. No doubt, we have received generous amounts of rainfall over the past 2 fall through winter periods. When we receive rainfall during this time, South Texas remains cooler for longer periods and is blessed with copious amounts of forbs (weeds and wildflowers) that seem to cover nearly every patch of bare-ground. Forbs are absolutely critical in providing essential nutrients to hens both before and during the nesting season. If you shot quail during late morning or evening the past 2 seasons, did you notice any greens in crops from your harvested quail? I bet the majority of crops looked like green marble! These forbs consumed during winter, are the same plants that provide abundant seed later during spring and summer. However, perhaps the most important benefit these forbs provide is through insects and cover during spring and summer. Quail chicks depend on insects produced from these forbs and insect abundance is correlated to forb abundance and species richness. It's well known, when we receive rainfall, overall temperatures are kept at or below their seasonal averages and food and cover abounds, resulting in increased bobwhite production and survival.

This past winter, South Texas generally received good rainfall. Forbs were abundant. As the season progressed however, some areas of South Texas experienced a brief drying period which probably did little to impact quail. However, from April through early June, most areas across South Texas received those critical rains for quail production. Today, almost every portion of South Texas is green, and quail are going to work producing chicks.

### *2016 Nesting Season Report*

As is usual during good spring conditions in South Texas, bobwhites and scaled quail coveys began to break during late February and early March, while some small coveys (4–8 birds) remain together until mid-April. Male bobwhites began calling during March and the first bobwhite chicks of the year were reported in Victoria County on April 8<sup>th</sup>. The first scaled quail chicks were reported in Starr County on April 27<sup>th</sup>. More commonly however, bobwhites begin nesting in South Texas about the 1<sup>st</sup> of May followed about a week later by scaled quail. We currently have 5 students working on radio-telemetry projects across South Texas. Below is a summary of their findings.

At the time of our data summary (June 15<sup>th</sup>, Table 1), our students had found 87 nests. The first bobwhite nest found by our students was on April 8<sup>th</sup> as a hen was laying in Live Oak County. All students had bobwhites sitting on nests by May 1<sup>st</sup>. Our first scaled quail nest was discovered on May 9<sup>th</sup>. Clutch sizes for bobwhites have ranged from 3 to 20 eggs and have averaged about 12 eggs/nest. The average and upper range of bobwhite clutch sizes is just a shade lower this year than last year at this time (12.5 and 22 eggs, respectively), but still remains respectable nonetheless. Bobwhites usually average 11–12 eggs/clutch. Clutch sizes for scaled quail have ranged from 8 to 13 eggs and averaged about 11 eggs/nest. Thus far, nest success for bobwhites has ranged from 20 to 66% and averaged 41%. This percentage is similar to last year and above the average success rate of 30% for bobwhites.

Table 1. Northern bobwhite and scaled quail nesting data for 5 study sites across South Texas during the 2016 nesting season. Because of this early summary, data may be skewed due to low sample sizes.

<b>Study Site</b>	<b>Date of First Nest</b>	<b>Percentage of Hens Nesting</b>	<b>Average Clutch Size</b>	<b>Range in Clutch Sizes</b>	<b>Nest Success (% Nests Hatched)</b>	<b>Nesting Outlook as of 15-June</b>
<b>Three Rivers/Pawnee</b>	24-April-2016	N/A	12	11-16	31%	Good
<b>Hebbronville 1017</b>	30-April-2016	13%	12	9-17	20%	Average
<b>Hebbronville 16</b>	16-April-2016	3%	10.7	3-20	38%	Good
<b>Cotulla</b>	01-May-2016	50%	12	8-14	66%	Good
<b>Carrizo Springs (Bobs)</b>	28-April-2016	22%	12.2	10-15	50%	Good
<b>Carrizo Springs (Blues)</b>	16-May-2016	17%	11.3	8-13	N/A	Good

### *In Closing*

Overall, most hens have nested or are reneating and clutch sizes and nest success has been slightly above average. Chicks from a day to a month old are routinely being seen and conditions are still mostly green across South Texas. Because the range has remained mostly green, chick survival will most likely be satisfactory and hens will continue to reneat. Overall, on a scale ranging from very poor to excellent, conditions across South Texas are generally good for quail production this year. Good production on top of a strong breeding population almost ensures a respectable 2016–2017 season. However, there is still much time left before the next season, and bobwhites can nest into October with the right conditions (green rangeland). On a more somber note, at the time of this writing, the National Oceanic and Atmospheric Administration declares that the Pacific oscillation (the driver for El Nino and La Nina weather

patterns) is currently in a neutral phase and they have predicted a 70% chance of entering a La Nina pattern by this fall. This is not the best news for the quail hunter. However, we can certainly be happy that we received the rainfall this year when it was most needed for production. There's a lot of time left between now and next season. Let's keep our fingers crossed that conditions stay green and relatively cool for the remainder of the year.

*Acknowledgements.* We would like to thank our hard-working grad students (Carter Crouch, Ross Couvillon, Rachel Smith, Ben Olsen, and Kelsey Davis) for their quail nesting information. Funding for the various projects was provided by the San Cristoval Ranch, the Energy 21 Lease on the Eshelmann Vogt Ranch, Tim Hixon, and the San Pedro Joint Venture. The quail outreach program is funded by the San Antonio Chapter of Quail Forever, South Texas Quail Coalition, San Antonio Quail Coalition, Hill Country Quail Coalition, South Texas Charity Weekend, and other generous private donors.