



Helicopter Survey Report

Clay Lorenz

Wilson County, Texas

February 22, 2020



Flight Data:

Pilot: Jon Fuller

Survey Time: 8:30 am – 9:03 AM

Conditions: Mostly Sunny (15% Cloud Cover); 43°F; Winds ESE 4 MPH

Population Size and Density

The observers counted a total of **70 white-tailed deer** across the entirety of the ranch during the 2020 helicopter survey. This is consistent with the 64 deer observed in the 2019 survey. Of these deer, the surveyors observed:

Bucks	12
Does	42
Fawns	13
Unknown	3

A **deer density of 20 acres/deer** was observed across the ^{1,000}~~1,430~~ acres of usable white-tailed deer habitat on the ranch. The population remains stable and within the carrying capacity for post Oak Savannah habitat.

Sex Ratio

The adult sex ratio or buck/doe ratio observed on the ranch is **2:7**. Continue to work to improve the buck to doe ratio to improve herd health. Having a 1:3 ratio promotes one rut and reduces the stress period on bucks. In addition, this increases the chances of all fawns being born within the same 10 day period.

Fawn Survival

The surveyors noted **31% white-tailed deer fawn survival** during the survey. This is slightly higher than the average survival for years with below average rainfall.

Buck Age Structure

Class	Age/Antler	Percentage
Young	1.5–2.5	50%
Middle	3.5–4.5	50%
Mature	5.5+	0%

Our survey showed that buck numbers are evenly distributed among the young and middle age class. Continue to work to improve the age distribution by protecting some middle age bucks to ensure you have a mature age class.

Other Animals

Coyote	1
Feral Hog	33
Javelina	0
Quail (Coveys)	0

Recommendations

I recommend you continue to diligently harvest does to ensure a healthy buck to doe ratio. You can keep the deer density within carrying capacity via doe harvest. I recommend a more conservative buck harvest to allow more bucks to reach maturity and even out the age classes. Since you are trying to reduce the population density and improve the sex ratio I would conservatively harvest young and middle age cull bucks. As long as habitat conditions are good or average I would choose spike bucks or bucks with at least one unbranched antler. In addition, a healthy buck to doe ratio results in one strong rut as opposed to several rut cycles. Multiple rut cycles further stresses bucks and can result in unintentional losses. The habitat conditions reflect above average rainfall. I recommend reducing grazing pressure or deferring grazing to allow grass and brush establishment. Improved cover will benefit fawning cover, ground nesting bird success and browse for deer. Selective thinning of the forest to reduce the canopy cover to 60% will encourage forb and brush establishment. Focus on removing the most common species, the least beneficial to wildlife, or stressed trees. Stressed trees have curved or split trunks and lots of branches on the trunk. Continue with removal of feral hogs by any legal means.

HELICOPTER SURVEY

9:03 a

Raw Data Sheet

2/22/20

Ranch:

WH King / Jim King
Estate

County:

Wilson

Mostly Sunny (15% Cloud Cover); 43°F; Wind ESE 4 MPH

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