

# SCWMA DEER SPOTLIGHT SURVEY

YEAR: \_\_\_\_\_

Ranch: \_\_\_\_\_  
 County: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Temp: \_\_\_\_\_  
 Wind: \_\_\_\_\_  
 Time: \_\_\_\_\_

No. Miles: \_\_\_\_\_  
 Name of Line/#: \_\_\_\_\_  
 Observers: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

BUCKS	DOES	FAWNS	UNIDENTIFIED	TOTAL

IDENTIFIED DEER		
	No.	%
BUCKS		
DOES		
FAWNS		
<b>TOTAL</b>		<b>100.00</b>

Total Deer Observed: \_\_\_\_\_  
 Acres Visibility: \_\_\_\_\_  
 Acres Per Deer: \_\_\_\_\_  
 Deer Per 1,000 Acres: \_\_\_\_\_  
 Does Per Buck: \_\_\_\_\_  
 Fawns Per Doe: \_\_\_\_\_

**TEXAS PARKS AND WILDLIFE DEPARTMENT**

**VISIBILITY CALCULATIONS FOR THE SPOTLIGHT DEER SURVEY**

County: \_\_\_\_\_ Name of Line: \_\_\_\_\_  
Calculated by: \_\_\_\_\_ Date: \_\_\_\_\_  
Name of person(s) Month/Day/Year

1. Length of line in miles \_\_\_\_\_
2. Length of line in yards (miles x 1,760 yards) \_\_\_\_\_
3. Number of stations \_\_\_\_\_
4. Grand total of all visibilities in yards \_\_\_\_\_
5. Average visibility per station (avg. width yds.) \_\_\_\_\_
6. Square yards in line (length of line x average width in yards) \_\_\_\_\_
7. Acres of visibility (square yards in line/4,840 square yards in an acre) \_\_\_\_\_

**INSTRUCTIONS FOR CONDUCTING DEER SPOTLIGHT SURVEYS**

The spotlight survey is the most common census technique used throughout most of Texas to estimate deer population density, or the estimated total number of deer in an area. It is a “sample census” technique, not a “total count”. “Acres of visibility” are calculated along a census route that runs through the different habitat types in an area. The acres of visibility are divided by the number of deer counted along the route to calculate an “acres per deer” estimate that is applied to the total area to estimate the total size of the deer population.

- Use the same survey line(s) as previously established (the acres of visibility estimate and census data will be un-useable if the route is not replicated **EXACTLY** as originally established).
- Surveys should be made during **August and September**. Counts should be concluded before factors such as acorn-drop, green-up of winter food plots, and breeding season alter deer habits and movements.
- Attempt to make a **minimum of three surveys annually** at more or less weekly intervals.
- If possible, avoid conducting surveys during periods of weather changes (rain, high winds, cool fronts, etc.) or if disruptive activities occurred during the day prior to the survey (cattle work, etc.)
- Begin the survey no earlier, or no later, than 1 HOUR AFTER SUNSET.**
- Drive the survey route at approximately 5 miles per hour.
- Do not stop to search for deer. However, the vehicle should be stopped whenever a deer is observed so that identification can be attempted.
- Record ALL deer observed. Use binoculars to try to identify. Deer should be classified in one of four categories – “antlered buck”, “adult doe”, or current-year “fawn” if POSITIVE identification can be made (fawns are a separate category and should not be lumped with does) – or as “Unidentified” if not positive. DO NOT GUESS the identity of a deer if not positive to avoid biasing herd composition**
- Record only those deer within 250 yards of the vehicle (250 yards on each side of the route, or 500 yards total width, is the maximum distance used to estimate visible acres).**
- It is not necessary, but try to record the deer data by mile if possible.
- Observations should be made by utilizing hand-held spotlights. No more, or no less, than two spotlights (one on each side of the vehicle) should be used.
- PLEASE NOTIFY THE LOCAL GAME WARDEN BEFORE CONDUCTING SPOTLIGHT SURVEYS.**

Return the completed survey forms (in an e-mail if possible) by **September 18th** at:

Olivia Kost  
 District Wildlife Biologist  
 Texas Parks and Wildlife Department  
 1516 Vincent St  
 Brownwood, TX 76801  
 254-433-0613  
[olivia.kost@tpwd.texas.gov](mailto:olivia.kost@tpwd.texas.gov)