

White-tailed Deer Population Census of the Freeman Ranch
John T. Baccus and Thomas R. Simpson

A helicopter survey of Freeman Ranch was done on 13 February 1998. The procedure was a total count with separate tallies kept for inside and outside the high fenced area.

Results:

	Game fenced area (1200 acres)	Outside the game fence (2300 acres)	Totals
Bucks	14	9	23
Does	24	37	61
Fawns	13	15	28
Buck: Doe	1:1.7	1:4	
Fawn survival	54%	41%	
Deer / acre	1 / 23 acres	1 / 38 acres	

Of the 23 bucks observed, 9 were considered mature, with 1 outstanding individual. Six of the 9 mature bucks were found within the original game proof pasture.

The deer were centered in 4 areas: the front pasture near the old ranch house, north of the headquarters, north of the central waterlot, and near the waterlot of the Posey tract. Those areas which have traditionally been censused by spotlight were devoid of deer.

We are confident that the numbers give a valuable index to the deer population on the ranch. Helicopter censuses have been shown to underestimate the deer densities (in some instances, by as much as 60%). However, ratios of bucks to does and fawns to does are considered reliable and remain stable across the variation of estimates. The centers of activity, also, are accurate for the winter time period. These undoubtedly will change seasonally.

Although recommendations based on a single helicopter census are premature, those data which are regarded as reliable (ratios) coupled with information gathered from other ranches under similar management programs can be used to generate some useful management guidelines.

- 1) Fawn survival is good.
- 2) Buck to doe ratios show a large difference between areas within and without the high-fence. Continued harvest of bucks only, as has been traditionally practiced on the ranch, should cease. All quality management programs of which we are aware espouse a balanced harvest of bucks and does. Failure to do so has resulted in white-tailed deer populations characterized by low buck numbers and immature individuals.
- 3) Helicopter censuses, coupled with traditional spotlight censuses should become an integral part of the management plan at the Freeman Ranch. A helicopter census every second or third year would allow an assessment of the population to supplement data gathered with other methods.