DATE: January 24, 1985

REPLY TO ATTNOF: Wildlife Management Biologist, Memphis, TN

SUBJECT: 1984 Deer Harvest Data Summary

TO: Refuge Manager, Holla Bend NWR

I have summarized the 1984 deer harvest data you provided into the three attached tables. This year's data looks good, with a normal composition of age and sex. Weights appear to be normal and the average number of points (5.5) in the yearling bucks is very good.

I have included in the tables blank spaces for comparable 1983 data if it is available. If you have it, please enter in appropriate space and return a copy to me. Blank spaces are also provided for Hunter Days, Hunter Hours, etc. for both 1984 and 1983. If you have this information, please also enter it on the form. Yearly comparisons of all this data will permit us to watch for changes that could occur over time.

Only data that were verified by a biologist were utilized in Tables 2 and 3. I did tabulate all the data to make comparisons to the verified sample. The only significant changes were decreases in the 6 month age class and increases in the 1½ and 2½ age classes when all data were used. The following tables compare the two sets of data:

Date		<u>A</u>	ge (Pero	cent Co	<u>mpositi</u>	<u>on)</u>	
source	13	1년	21/2	3½	4½	5½	Total
Verified	56.1	14.0	14.0	8.8	3.5	3.5	99.9
Not Verified	5.0	40.0	40.0	7.5	7.5	0	100.0
Combined	35.1	24.7	24.7	8.2	5.2	2.1	100.0

Average Weights

		Not		Not	Point	ts
<u>Age</u>	Verified Bucks	Verified Bucks	Verified Does	Verified Does	Verified	Not Verified
1/2	72	NS	58	NS	-	-
$1^{\frac{1}{2}}$	123	128	89*	105	5.5	5.4
2½	158	149	110	104	8.0	7.3
3½	191*	145*	102	NS	13.0*	5.5
41/2	180	178*	NS	119	10.5	8.0*
5½	NS	NS	109	NS	NS	NS

NS - No sample

The only conclusion I can make of the differences in the verified and not verified ages  $\frac{1}{2}$ ,  $\frac{1}{2}$ , and  $\frac{2}{2}$  is that by chance biologist verified most of the  $\frac{1}{2}$  age class (32 out of 34) and missed many (16 out of 24) of each of the  $\frac{1}{2}$  and  $\frac{2}{2}$  age class.

There is no evidence (based upon the  $1\frac{1}{2}$  age group weights) that hunters mis-aged the  $\frac{1}{2}$  age group as  $1\frac{1}{2}$ . I concluded; therefore, that these differences also occured by chance.

Several of the weight entries on the forms did not indicate whether it was a live or dressed weight. This occurred for those weights verified by biologist as well as hunter entries. You might consider developing a method to improve this entry.

It appears to me that hunters do a pretty good job of entering the data requested and there's no evidence of gross mis-aging. I do suggest; however, that you continue to have a biologist or trained volunteer verify all data entries for 50 to 75 percent of the annual harvest.

If you have any questions or I can be of any further assistance please call.

<sup>\* -</sup> Single sample

Table 1. Holla Bend NWR 1984 Deer Hunt Results

Bow Either Sex	Type Hunt
76	No. Days
45	Bucks
55	Does
100	Total
	Hunter Days
	Hunter Hours
	HD per Deer
	HH per Deer
	HH per

1983 Totals

Table 2. Holla Bend NWR 1984 Age and Sex Composition\*

Sex	2/2	11,	21/2	Age 3½	4½	51/2	Total
Bucks	12	6	ω	1	2	0	24
Does	20	2	J.	4	0	2	33
Totals	32	8	∞	G	2	2	57
1984 Percents	56.1	14.0	14.0	8.8	3.5	ა ა	99.9

st Based on a sample of 57 Deer where data were verified by biologist.

1983 Percents

Table 3. Holla Bend NWR 1984 Average Live Weight and Antler Measurements By Age Class\*

	Bucks	3	Does		Point	
Age	1983	1984	1983	1984	1983	1984
1/2		72		58		-
$1^{1}_{2}$		123		89**		5.5
2 <sup>1</sup> ⁄ <sub>2</sub>		158		110		8
3½		191**		102		13**
41/2		180		NS		10.5
5½+		NS		109		NS

<sup>\*</sup> Based on sample of 57 deer where data were verified by biologist

<sup>\*\*</sup> Single sample

NS No sample