

Annual Deer Season Report

1981-82

Big Cypress Wildlife Management Area

Introduction

The following is a synopsis of the 1981-82 deer season on the Big Cypress Wildlife Management Area. Included is hunter pressure and success figures, harvest totals, analysis of various biological data taken from harvested animals, and miscellaneous other points of interest.

Methods

Modes of Information Collection

Three modes of information collection were used: 1) Check Stations; 2) Area Surveillance; and 3) Cooperation from Wildlife Officers and National Park Service personnel.

Check Stations

During the archery and muzzleloader season, two check stations were in operation (on weekends only.) These were located at Bear Island and Forty Mile Ben. Three additional stations were set up for the General Gun Season; the south end of Turner River Road; the Monroe Station/Monument Lake area; and the Wildlife Management house at Ochopee. The Bear Island and Forty Mile Bend check stations were open the entire first nine days of the general gun season and on subsequent weekends throughout the season. The other three stations were open on a "need be" basis.

Check station operators came from three sources: 1) Assigned Commission Personnel; 2) OPS; and 3) Commission Reservists.

Area Surveillance

Surveillance by ground vehicle was made to check camps and camping areas, conduct car surveys, etc. Helicopter flights were made by the National Park

Service and the information relayed to us.

Cooperation from Wildlife Officers

Invaluable cooperation was given by Wildlife Officers from Collier, Hendry, and Dade Counties. They assisted greatly by reporting numbers of hunters, directing hunters to check stations, reporting deer killed and not brought through check stations, and by bringing deer skulls to the check stations. Without this cooperation much valuable data would have been lost.

Determination of Hunter Usage and Kill

Hunter usage and distribution, and number of deer harvested was determined as stated in the foregoing paragraphs. The term checked deer refers only to those that were properly documented by check station operators or wildlife officers using the approved data card provided them. In past years an "estimated" kill figure was reported on the weekly Management Area Harvest Report. This figure represented those deer checked plus those reported but not properly documented. This year only those checked were submitted. For comparison purposes, however, we analyzed past years data and determined that the number of checked deer was approximately 40 percent of the total checked and reported. By applying this figure to our number checked we have a figure much closer to the number actually harvested.

Biological Data Collection

Biological data was taken in accordance with instructions from the Regional Biologist and recorded on the Deer Biological Data Sheet furnished by the Regional Office. When possible, abomasal and rumen samples were taken. Abomasal samples were collected and preserved in the prescribed manner. Rumen contents were placed on a drying screen washed thoroughly, dried, packaged, and frozen (if necessary.) If possible, all deer jaws were pulled and examined by Biologist Pylant for consistency of aging.

Analysis of Biological Data

Separation into Two Distinct Herds

Deer data collected came predominantly from two areas; the Bear Island Unit; and the Stairsteps Unit. Because of the linear distance between the two areas (30 miles), and the difference in habitats, a distinction was made between these herds and the data analyzed accordingly when deemed appropriate.

Age Classification

After much thought and discussion, deer were put into the following age classes: Less than .5, 1.5, 2.5, 3.5, 4.5, etc. Age pyramids were constructed for each herd and overall.

Weights and Measurements

The mean of the various measurements and weights were calculated. Distinctions were made of fawn, yearling, and adult.

Results and Discussion

Hunter Usage

Archery Season

During the archery season a total of 911 man-days were spent pursuing this sport. This total is broken down into Units as follows: Bear Island - 220, Deep Lake - 70, Monument - 180, Stairsteps - 385, and Loop Road - 56.

Muzzleloader Season

A total of 1565 man-days were spent by blackpowder hunters during the muzzleloader season. On a Unit basis this breaks down into; Bear Island - 580, Deep Lake - 85, Monument - 310, Stairsteps - 455, and Loop Road - 135.

General Gun Season

A total of 14,113 man-days were spent by hunters in the field during the general gun season. The Monument Unit was the heaviest hunted with 5340 man-days, followed by the Stairsteps Unit (3835), Bear Island (2550), Deep Lake - (1243) and Loop Road - (1145).

Hunter Kill and Success

Archery Season

During the archery season a total of 13 deer were harvested (minimum). The hunter success rate was one deer per 70 man days of hunting.

Muzzleloader Season

During the muzzleloader season a minimum of 28 deer were harvested. The hunter success rate was one deer per 56 days of hunting.

General Gun Season

Table 1 compares deer harvested and hunter days, while Table 2 compares harvest against acreage. The raw data in Table 2 is somewhat misleading in that hunters are not evenly distributed over the area. Table 3 shows a comparison of past years data.

Figure 1 shows a graphic correlation between harvest and man days, by weekly interval, throughout the general gun season.

Analysis of Biological Data

Age Structure

Figure 2 and 3 show the age structure of the deer harvested on the Bear Island and Stairsteps Units respectively. Figure 4 shows the age structure of all Units combined.

Age structure of the deer harvested on the Bear Island Unit appears to fit the classic shape of a normal, good reproducing deer herd, with an expected number of animals from each age class. Thirty six percent were in the 1.5 age class and 28 percent were in the 2.5 age class. In 1980, on the same area, 18 percent were in the 1.5 age class and 38 percent in the 2.5. The difference could be either; the slight modification in the age classification (most likely), poor reproduction in the 1980 1.5 age class, or excellent reproduction in the 1981 1.5 class. During 1981 24 percent of the animals

harvested were 3.5 or older, in 1980, 30.5 percent.

On the Stairsteps Unit, 30 percent of the deer harvested were in the 1.5 age class and 45 percent in the 2.5 class. During 1980, 31 percent were in the 1.5 class and 33 percent in the 2.5 class. In 1981, 12.5 percent were 3.5 and older, in 1980, 18 percent. This is one factor we should watch in the upcoming season. If the percentage of 3.5 age classes drops, we should consider some alternatives for reversing this trend.

Over the entire management area, 30 percent were in the 1.5 class and 41 percent in the 2.5. Eighteen percent were in the 3.5 and older, with .5 class making up 10 percent. Again, we should watch this percentage of 3.5 + this coming season. I don't think we want to get to a point where we're harvesting all 1.5's and 2.5's. The increasing number of young animals harvested, however, could and probably does, to an extent, indicate good reproduction.

Physical characteristics

In comparing the various antler measurements and body weights with 1980 on the Bear Island Unit, mean antler circumference increased from 6.5 cm (right) and 7.0 cm (left) to 8.0 and 8.0. Main beam length increased from 25 cm (right) and 26 cm (left) to 29.5 and 27.5. Spread increased from 25 to 27.5 cm. Number of points increased from 6 to 7. Mean body weight (live), however, dropped from 120 to 112 lbs.

Measurements and body weights from the Stairsteps Unit and overall were almost identical. Table 4 shows the measurements and weights from 1981.

Figure 1. Man Days of Hunting and Deer Harvested, by Week, on the Big Cypress Wildlife Management Area, during the 1981-82 General Gun Season.

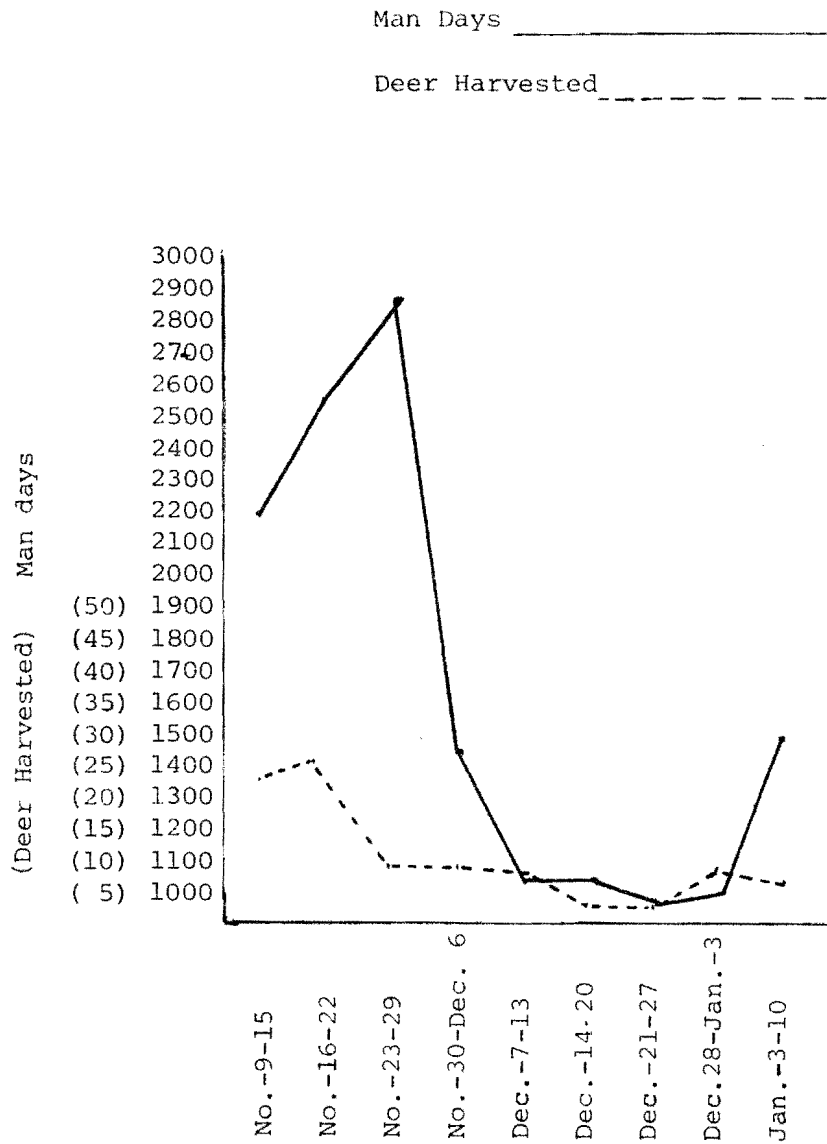


Table 1. Hunter days, deer checked, deer estimated and hunter success on the Big Cypress Wildlife Management Area during the 1981-82 General Gun Season.

Unit	Hunter Days	Deer Killed	Man Days per Deer
Bear Island	2550	60	42.5
Deep Lake	1243	5	248
Monument	5340	50	107
Stairsteps	3835	110	35
Loop Road	<u>1145</u>	<u>12</u>	<u>95</u>
Combined	14,113	237	60

Table 2. Acres per deer killed on the Big Cypress Wildlife Management Area during the 1981-82 General Gun Season.

Unit	Unit Size (acres)	Deer Killed	Acres per Deer
Bear Island	38,000	60	633
Deep Lake	45,000	5	9000
Monument	300,000	50	6000
Stairsteps	120,000	110	1090
Loop Road	<u>55,000</u>	<u>12</u>	<u>4583</u>
Combined	558,000	237	2354

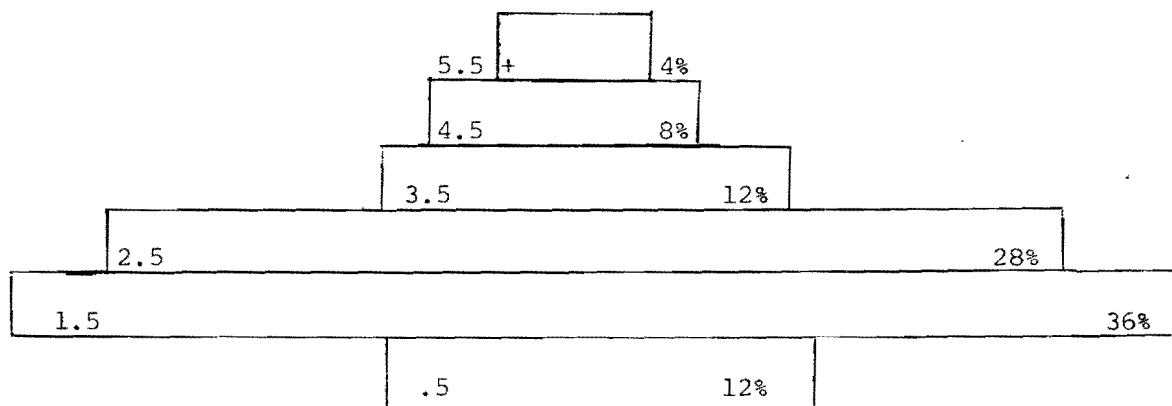


Figure 2. Age Sturcture of White-tailed deer harvested on the Bear Island Unit of the Big Cypress Wildlife Management Area during the 1981-82 Season.

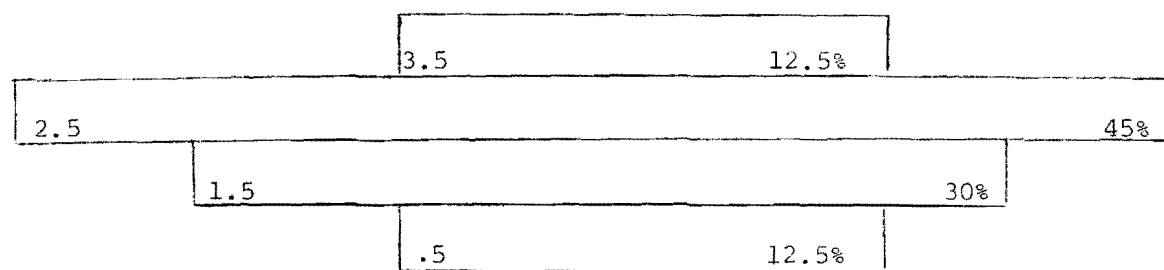


Figure 3. Age Structure of White-tailed deer harvested on the Stairsteps Unit of the Big Cypress Wildlife Management Area during the 1981-82 Season.

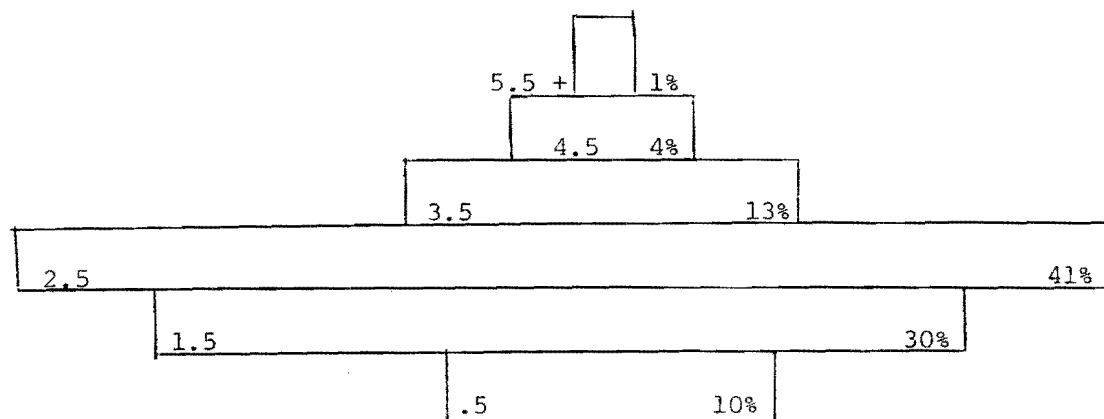


Figure 4. Age structure of White-tailed deer harvested on the Big Cypress Wildlife Management Area during the 1981-82 Season.

Table 3. Man Days of Hunting, Deer Harvested, and Man Days Per Deer, by Unit, on the Big Cypress Wildlife Management Area during the 1978, 1979, 1980, and 1981 General Gun Seasons.

Unit	Man Days				Deer Harvested 1				Man Days per Deer			
	1978	1979	1980	1981	1978	1979	1980	1981	1978	1979	1980	1981
Bear Island	1100	2405	2055	2550	27	30	51	60	41	80	40	43
Deep Lake	750	1380	735	1243	10	15	11	5	75	92	67	248
Monument			4130	5340			37	50			112	107
Stairsteps	4384	4627	3750	3835	74	70	84	110	59	66	45	35
Loop Road	1015	888	1205	1145	10	5	18	12	102	178	67	95
Total	6234	8412	11875	14113	121	120	201	237	51	70	59	60

1. Includes deer checked and estimated.

Table 4. Mean antler measurements, and live weights of adult (2½ +) whitetail deer males, harvested on the Big Cypress Wildlife Management Area during the 1981-82 hunting season.

Herd Name	Antler Circum. Rt. (cm)	Antler Circum. Lt. (cm)	Main Beam Length Rt. (cm)	Main Beam Length Lt. (cm)	Spread (cm)	Number of Points	Weight (lb.)
Bear Island	8.0	8.0	29.5	27.5	27.5	7	112
Stair- steps	6.5	6.5	22.5	21.5	24	5	100
Combined	6.5	6.5	24.5	24.5	24.5	6	106

CONDITION INDEX FOR UNGUTTED DEER
DURING THE 1981 SEASON
BIG CYPRESS W.M.A.

<u>Archery</u>	<u>Sex</u>	<u>Live wt.</u>	<u>20%</u>	<u>30%</u>	<u>Age</u>	<u>Condition</u>
	M	-	-	65	1.5	2
<u>Muzzleloader</u>						
	M	-	-	85	3.5	3
	M	-	-	60	1.5	2
	M	-	75	-	1.5	3
<u>General Gun</u>						
	M	-	-	50	1.5	3
	M	-	-	-	2.5	3
	M	-	-	65	2.5	2
	M	135	-	-	4.5	3
	M	-	-	95	2.5	3
	M	-	-	75	4.5	2
	M	-	-	85	3.5	3

Big Cypress Wildlife Management Area
White-tailed deer abomasal parasite counts
and population estimates 1981-82

ABOMASAL PARASITE DATA

No Samples

POPULATION ESTIMATES

1981 post hunt = unknown

1981 pre hunt = 4026 (4000)

1982 post hunt = 3753 (3800)

Preliminary analysis of 1982-83 Bear Island Hunter Questionnaire

Sample size: 70

Deborah Jansen
3 January 1983

participating in archery season: 27
" muzzleloader season: 38
" general gun season: 70
" turkey season: 23

Question #2: How long hunted in Bear Island: 2.8 years is average not counting these: 12, 15, 15, 20, 20, 21, 25 years. (these would make it 4.4 years)

Question #4: Type of vehicle

none 19%
ATC only 12%
Buggy 30%
CR truck 20%
ATC/OR truck 3%
ATC/buggy 6%
buggy/OR truck 6%
ATC/buggy/OR truck 4%

Question #13: Bear Island quota permits
be decreased 9%
remain the same 87%
be increased 4%

Question #5: Preferred method of hunting

ATC 7%
buggy 30%
still 50%
ATC/buggy 3%
buggy/still 10%

Question #6: Game population status on Bear Island

increasing 21%
decreasing 36%
unchanged 30%
no opinion 13%

Question #7: Illegal deer kill on Bear Island is _____ the legal deer kill.
greater than 9%
equal to 17%
less than 47%
no opinion 27%

Question #8: make a portion of Bear Island a walk hunt area

yes 23% 39% of these chose the NW quarter
no 58%
no opinion 7%

Question #10: ban on ATC use on Bear Island during

<u>archery</u>	<u>muzzleloading</u>	<u>general gun</u>
yes 36%	yes 37%	yes 33%
no 51%	no 50%	no 54%
no opinion 13%	no opinion 13%	no opinion 13%

Question #11: designated ONLY trails on Bear Island

yes 36%
no 59%
no opinion 6%

Question #12: either-sex hunt on Bear Island during archery season

yes 36%
no 40%
no opinion 4%

