

1078 RM

Annual Deer Season Report

1980-81

Big Cypress Wildlife Management Area

Introduction

The following is a synopsis of the 1980-81 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.

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Methods

Modes of Information Collection

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

Check Stations

During the archery and muzzleloader seasons, two check stations were in operation (on weekends only). These were located at Bear Island and Forty Mile Bend. Two additional stations were set up for the General Gun Season; the south end of Turner River Road and the Monroe Station/Monument Lake area. 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 two stations were open on a "need be" basis.

Check station operators came from four sources: 1) Assigned Commission Personnel; 2) OES; 3) Commission Reservists; and 4) National Park Service Rangers.

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 and guts 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 check station operators personally saw and collected information from. Reports by wildlife officers and hunters were used in making estimates.

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 Rylant for consistency of aging.

Analysis of Biological Data

Separation into Two Distinct Herds

Deer data collected came predominantly 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.

Age Classification

After much thought and discussion, deer were put into the following age classes: Less than 12 months, 12-24 months, $2\frac{1}{2}$, $3\frac{1}{2}$, $4\frac{1}{2}$, etc. There may be some problems with this classification, especially the less than 12 and 12-24, but I believe this is as good as any. Age pyramids were constructed for each herd.

Weights and Measurements

The mean, mode, and median 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 980 man-days were spent pursuing this sport. This total is broken down into Units as follows: Bear Island-160, Deep Lake-120, Monument-305, Stairsteps-275, Loop Road-120.

Muzzleloader Season

A total of 1385 man-days were spent by blackpowder hunters during the muzzleloader season. On a Unit basis this breaks down into; Bear Island-385, Deep Lake-180, Monument-350, Stairsteps-320, and Loop Road-150.

General Gun Season

A total of 11,875 man-days were spent by hunters in the field during the general gun season. The Monument Unit was the heaviest hunted with 4130 man-days, followed by the Stairsteps Unit (3750), Bear Island (2055), Loop Road (1205), and Deep Lake (735).

Areas of Concentration

On the Bear Island Unit most of the hunting was done on the north-eastern portion of the unit. There was an apparant increase in the number of walk hunters and ATC users than in past seasons.

The hunters were evenly distributed over the Deep Lake Unit, with no great areas of concentration.

The predominant hunter concentration in the Monument Unit was the Monument Road area. Camping areas and access points are the logical reasons for this distribution.

The main hunter concentration in the Stairsteps Unit was in the area "South of Loop Road" in "airboat country." Good numbers of buggy hunters hunted the dry prairies, open pinelands, and the edges of strands south of US 41 and west of Loop Road.

The Loop Road Unit was closed to vehicular travel, thus most of the hunting was done around the perimeter of the area.

Periods of Activity

Figure 1 shows the number of man days, by the week during the General Season.

Hunter Kill and Success

Archery Season

During the archery season a total of 15 deer were harvested (minimum). The hunter success rate was one deer per 65 man days of hunting.

Muzzleloader Season

During the muzzleloader season a minimum of 29 deer were harvested. The hunter success rate was one deer per 48 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.

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 3 and 4 show the age structure of the deer harvested on the Bear Island and Stairsteps Units respectively.

Physical Characteristics

Table 3 shows the mean antler measurements, live weights, and body measurements of adult ($2\frac{1}{2}+$) deer harvested during the 1980-81 season.

Figure 34. Age pyramid of male deer harvested during the 1981-80 hunting season, on the Bear Island Unit, Big Cypress Wildlife Management Area.

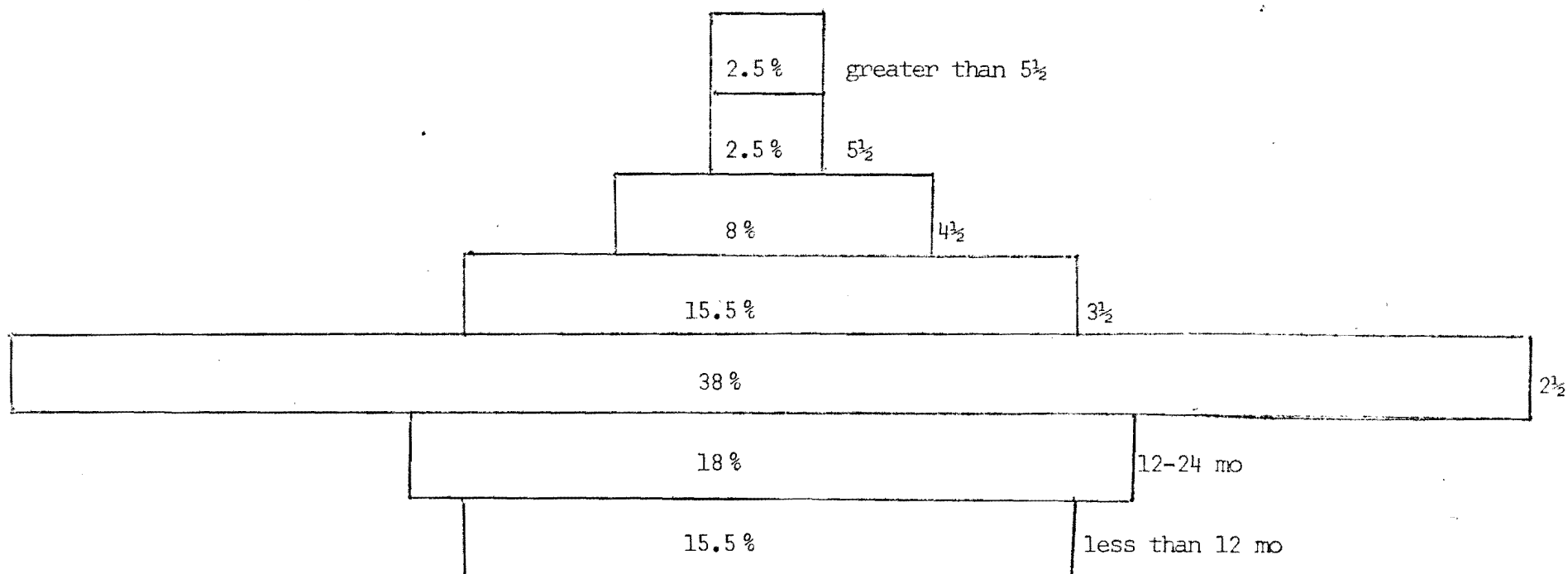


Figure 15. Age pyramid of male deer harvested during the 1980-81 hunting season, on the Stairsteps Unit, Big Cypress Wildlife Management Area.

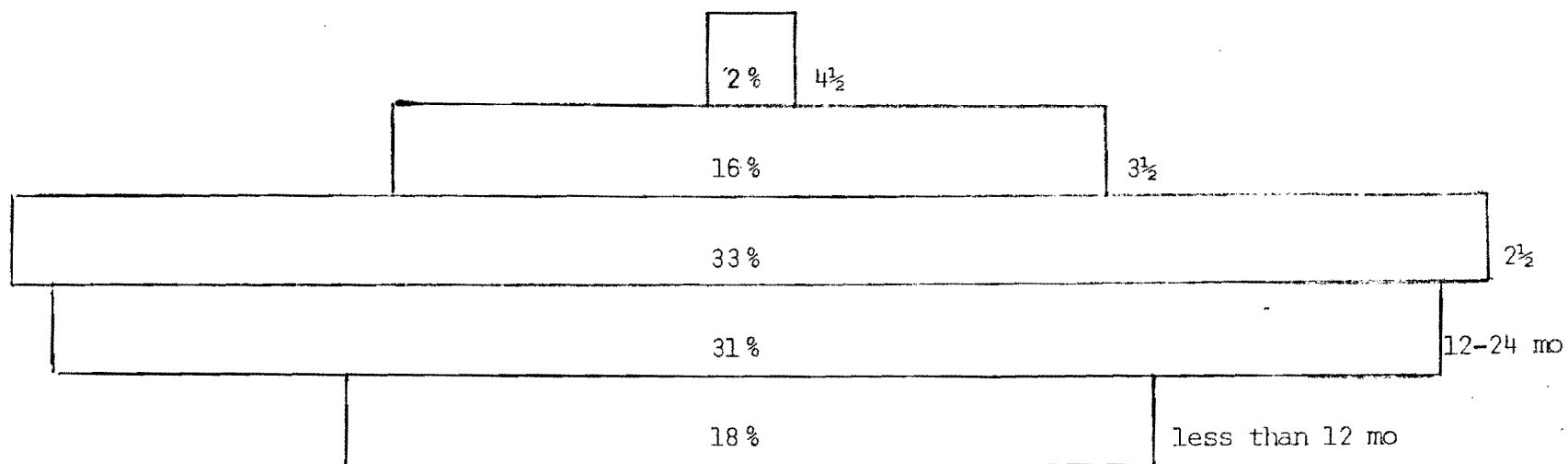


Table 1. Hunter days, deer checked, deer estimated and hunter success on the Big Cypress Wildlife Management Area during the 1980-81 General Gun Season.

Unit	Hunter Days	Deer Killed	Man Days per Deer
Bear Island	2055	51	40
Deep Lake	735	11	67
Monument	4130	37	112
Stairsteps	3750	84	45
Loop Road	<u>1205</u>	<u>18</u>	<u>67</u>
Combined	11,875	201	59

Table 2. Acres per deer killed on the Big Cypress Wildlife Management Area during the 1980-81 General Gun Season.

Unit	Unit Size (acres)	Deer Killed	Acres per Deer
Bear Island	38,000	51	745
Deep Lake	45,000	11	4091
Monument	300,000	37	8108
Stairsteps	120,000	84	1429
Loop Road	<u>55,000</u>	<u>18</u>	<u>3056</u>
Combined	558,000	201	2776

Table 3. Mean antler measurements, live weights, and body measurements of adult ($2\frac{1}{2}+$) whitetail deer males, harvested on the Big Cypress Wildlife Management Area during the 1980-81 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.)	Shld. Height (cm)	Total Length	Girth (cm)	Hind Foot (cm)
Bear Island	6.5	7.0	25	26	25	6	120	92	157	83	45
Stair- steps	6.5	6.0	22	22	23	6	100	89	151	77	45
Combined	6.5	6.5	23	24	24	6	110	90	154	80	45