

# Deer Study Report

Prepared for Red Cedar Ranch, LLC

The following finding and recommendations by Hodges Natural Resources, LLC are based on the yearly data collected from sightings, camera surveys and harvest reports from Red Cedar Ranch, LLC in Adams County, Mississippi for the 2012-13 Season.



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## Summary

In the last 8 years the 148 acres of cutover has lifted causing a decrease in browse. The limited deer harvest has caused the body weights of bucks to decrease and the competition for food sources to be too great. From camera surveys the age structure of the does are too high. While many 1 -2 year old bucks are seen many are harvest by nearby landowners and the property is only sustaining a small number of mature bucks that are mostly nocturnal. Based on historical harvest reports, buck weights and antler sizes are decreasing. Food plot quality is medium to low. Browse supply is decreasing. The new cutover area is helping overall cover and browse.

## Recommendations

- Selective Timber Harvest to improve habitat
- Increased Doe Harvest to balance herd
- Food Plot enhancement to improve hunting and habitat
- Stand placement to remove pressure on mature bucks
- Selective Cull Harvest
- Proper record keeping to improve ongoing data
- Supplemental Feeding program
- Secure Borders to help with pressure

## Key Indicators

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*Does sightings per hunt have increased steadily since 2008*

*Mature Buck Sightings have shown no increase over 8 years*

*Weights of Harvested animals are decreasing*

*Antler averages are showing signs of decrease*

*Doe to Buck Ratio at 4:1*

*Harvested areas have lifted showing decrease in Habitat*

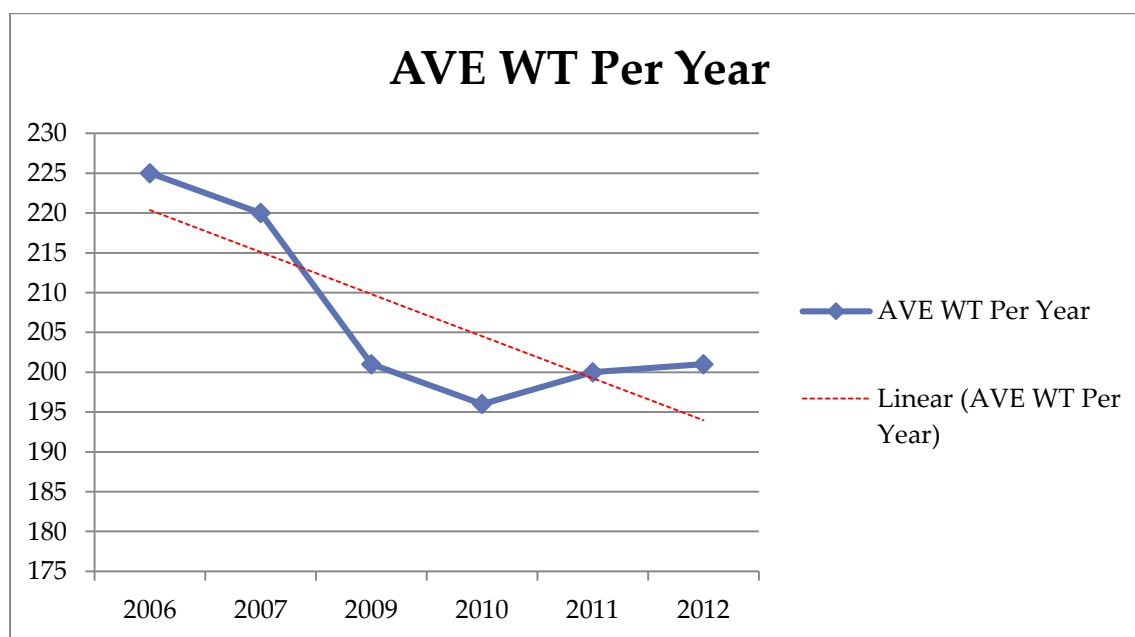
*Fields are not at their optimum and are in need of Lime and sub soiling*

*Camera Surveys show mature bucks are highly nocturnal*

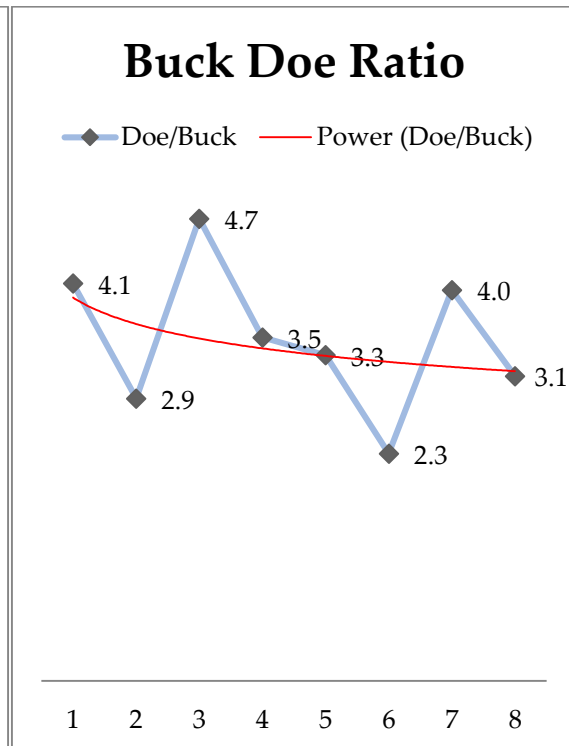
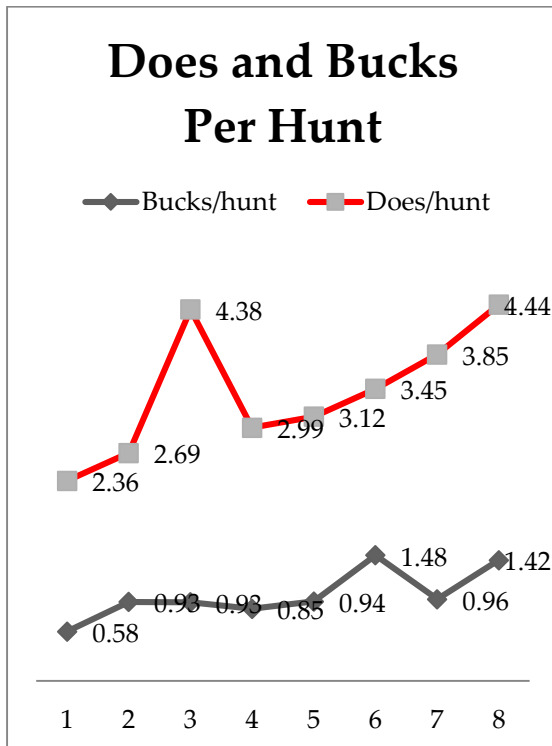
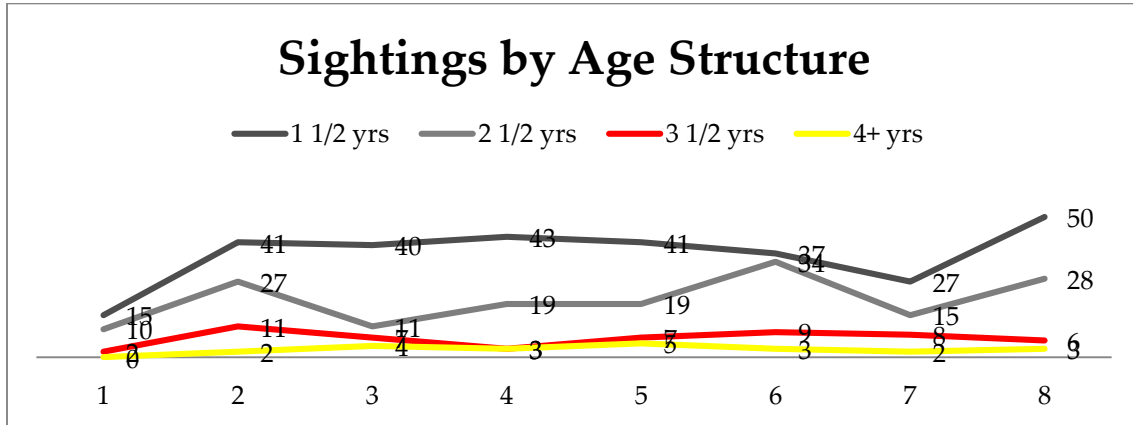
## Historical Harvest Data

### Statistics for 4 1/2 year old or greater bucks (Non Culls)

Hunter	Deer Name	Weight	Ave Beam	Mass	Spread	Points	SCORE	Age	Date
Jason jones	Creek Monster	230	25	37	17	10	142	6	12/16/2006
Josh Jones	Cherry Laurel 8	220	21.75	28.5	16	8	118	4	1/5/2006
Josh Jones	Broken Tine 9	220	19.75	28	16.75	9	133	4	12/29/2007
Josh Jones	Rock Plot 8	200	19.75	32	14.25	8	120	4	11/22/2009
Jake DePrato	The Wide 8	202	21.5	27.875	17.5	8	120	5	12/18/2009
Jason jones	Rock Plot 9	196	17 3/4	26	14 1/4	8	101	4	12/15/2010
Jason Jones	Spot	190	17	28.4	13	8	109	4	10/1/2011
Josh Jones	Barnacles	210	20	30.25	16	8	123	4	12/27/2011
Jake DePrato	The Tipton 9	200	17	22	14	9	102	4	11/23/2012
Josh Jones	Blades	202	19	40	15.25	9	123	5	12/28/2012
<b>Averages</b>		<b>207.00</b>	<b>19.85</b>	<b>30.00</b>	<b>15.40</b>	<b>8.50</b>	<b>119.10</b>		



## Historical Observation Data



## Season Observation Data

### TABLE OF DEER SIGHTINGS

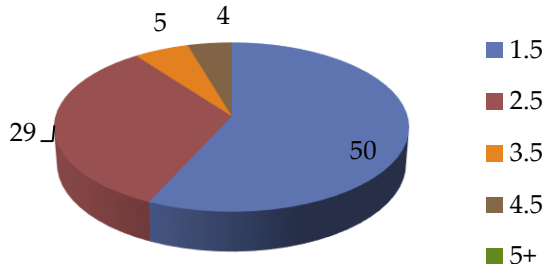
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***Buck Sightings***

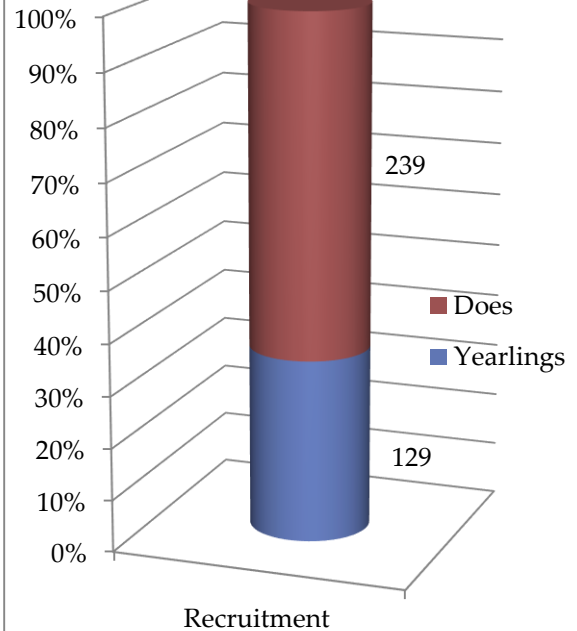
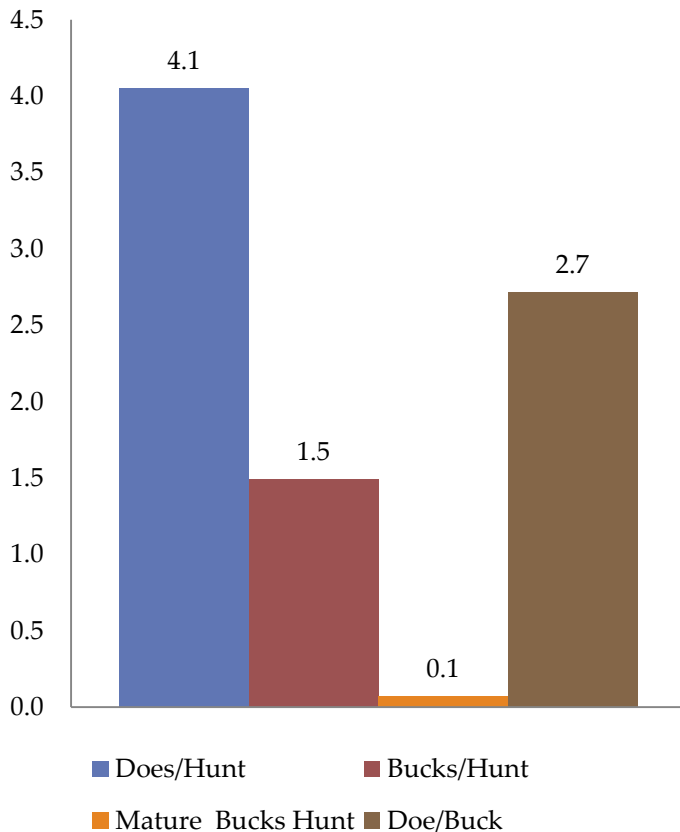
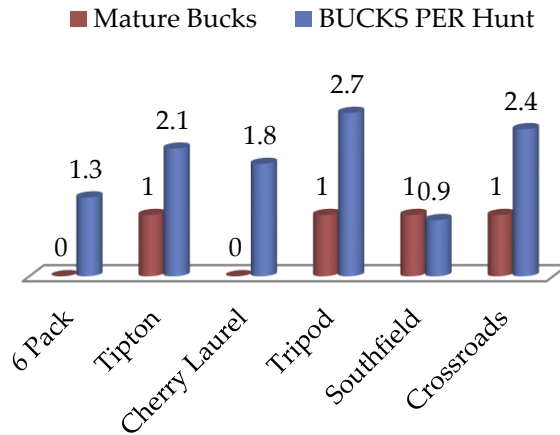
<i>1.5 Year Olds</i>	.....	50
<i>2.5 Year Olds</i>	.....	29
<i>3.5 Year Olds</i>	.....	5
<i>4.5 Year Olds</i>	.....	4
<i>5+ Year Olds</i>	.....	0
<i>Mature Bucks</i>	.....	4
<i>Total Bucks</i>	.....	88
<i>Yearlings</i>	.....	129
<i>Does</i>	.....	239
<i>Total Deer</i>	.....	456
<i>Does Per Hunt</i>	.....	4.1
<i>Bucks Per Hunt</i>	.....	1.5
<i>Recruitment</i>	.....	0.5
<i>Doe Ratio</i>	.....	2.7
<i>Number of Hunts</i>	.....	59

# Season Observation Data

## Buck Sightings Breakdown



## Bucks By Stand



## Camera Observation Data



*4 Year Old 10 pt on camera after the season ended – Never Seen*

### Summary

The camera observation show similar ratio results as the live sightings, however it revealed that the large majority of mature bucks are extremely nocturnal. There were also many cull bucks identified that were never seen during the season. The study also revealed the presence of Feral Hogs that have not been seen during daylight hours, as well as, a large population of coyotes, fox and bobcat. Peak mature buck activity is 1 – 3 am with a low percentage of mature animals moving right after shooting hours. This indicates pressure is affecting mature buck sightings in the evenings.



*Sow Pig never seen - will have 3 litters of an average of 8 piglets this year*

## 2013-14 Action Plan

### **1. Increase Carrying Capacity and Habitat**

- a. Gravity feeder(s) placed in key protected areas.
- b. Bulldozer “dead zone” areas and widen roads – keep clipped
- c. Timber Harvest – refer to timber plan
- d. Subsoil Plots and lime – keep mowed and sprayed for desirables
- e. Silviculture in several areas during the timber thinning
- f. Plant Fruit Trees, honey suckle, etc to keep deer on property seasonally
- g. Fertilization of native browse along roads and other key areas
- h. Plant supplemental feeding areas with high percentage of clovers
- i. Manage supplemental feeding areas by controlling competition
- j. Fertilization of thinned areas

### **2. Pressure**

- a. Designate restricted areas. No hunting in the Hardwoods
- b. No Hunting Rest Period in Primitive Weapon season (DEC 1 – Dec 15)
- c. Improve Stand placement in Plots not to spook mature bucks
- d. Establish protected areas to harvest does and limit stress on plots
- e. Limit Hunters and travel areas
- f. Avoid hunting in improper winds
- g. Post Lines and make a presence – Protect Borders and talk with neighbors
- h. Plant pines on creek for border from neighbor
- i. Purchase Boyd Woods for buffer

### **3. MANAGEMENT**

- a. Take 20 Does in 2013 in mornings and midday
- b. Focus on 5 year old Deer and Only Designated Culls
- c. Complete management Plan and distribute to members
- d. Camera Surveillance will be continued as a tool to monitor
- e. More detailed log data will be kept with updated log sheets
- f. 5+ year old bucks will be targeted going forward

### **4. Predation**

- a. Hogs should be eliminated and trapped when possible
- b. Control Coyotes, Bobcats, etc in the off season before fawns are dropped



## Conclusion

Red Cedar Ranch is in a good position to increase the age structure and improve the habitat to result in more mature class deer being seen and harvested. The harvest cut will improve the habitat by providing cover and browse. However, this will increase the deer numbers and the doe harvest must be increased.

The recruitment rate (yearlings per doe) is adequate, but needs to be maintained. This rate can be increased by controlling the predation from the increasing coyote population. Some other factors that can help increase recruitment rates are balancing the buck to doe ratio and the increasing the amount of available browse. Increasing the available browse will help with the over health of the herd and therefore increase recruitment.

Buck weights are down due to the loss of habitat occurring and the doe numbers increasing. An increase in buck weights and antler average can be realized in a few years if the appropriate action plan is carried out. Moving to a 5+ year old management plan will ensure your 3-4 year old survive and remain on the property.

Because of the layout of the tract the borders are causing lots of pressure on the population. Communication with your neighbors and a good posting and patrolling practice will help improve this. Habitat improvements and supplemental feeding will add to the carrying capacity but must be balanced with proper harvest rates.

The key indicators mentioned in the beginning are measurements that we want to watch closely and place an attainable goal to achieve. They are;

- Doe to Buck Ratio to be cut to 2:1 in 3 year, 1:1 in 5 years
- Increase Mature Buck sightings and level out doe sighting per hunt
- Increase average weights of bucks and does by 10% in 1 year, 20% in 3 years
- Show average increase in antler measurements of 10-20% in 3 years
- Increase Recruitment to a ratio of .8 to 1 in 2 years
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Lastly, detailed log data is crucial to help manage your wildlife asset. Tracking the information is tedious at times, but a very valuable tool. Please fill out your logsheets completely and timely.

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# Notes

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