

SUMMARY REPORT

2010 Deer Management Program

Iowa City, Iowa

by

White Buffalo, Inc.

Site Description

Iowa City contains a matrix of suburban/commercial development, agricultural fields, parks and open grasslands. As a result of no legal hunting opportunities and fertile soils, the deer population had increased to a level incompatible with some land uses and human activities. Although deer physical condition is not an issue, there is concern regarding deer/vehicle collisions and damage to garden and landscape plantings. As part of the 2010 comprehensive deer management program under the authorization of the Iowa Department of Natural Resources this is the 10th year, taking the 2002-2003 winter off, in which a population reduction program was implemented.

Deer Management Program Overview

Prebaiting was conducted from 18 December 2009 – 10 January 2010. Deer removal activities conducted from 11 - 21 January 2010. Eleven days of fieldwork were required to achieve the harvest of 57 deer.

Field Methods

We followed the operations protocol outlined in the contract. Seventeen bait sites were selected throughout the area of operation. Bait sites were shut down during the program as productivity declined, initial prebaiting activity demonstrated little deer activity, or weather conditions deemed the sites inaccessible.

Deer were shot on a first opportunity basis. This means that deer were shot only when, 1) a safe opportunity presented itself, and 2) maximal harvest efficiency would be achieved. Carcasses were then tagged and delivered to Ruzicka's Meats for processing.

Harvest Demographics

The entire data set generated from harvested deer is represented in the spreadsheet entitled "City of Iowa City – Deer Harvest by Date: 11 - 21 January 2010" (Appendix A). We harvested 39 females (68%) and 18 males (32%). The overall harvest demographics are summarized in Table 1. Eighteen (32%) fawns and 39 (68%) adults were harvested.

Table 1. Age class and sex distribution of deer harvested in Iowa City, Iowa from 11–21 January 2010.

AGE	# MALE (%)	# FEMALE (%)	# COMBINED
Fawn	11 (19.3)	7 (12.3)	18
Adult	7 (12.3)	32 (56.1)	39

Harvest by Deer Management Zone

To allow for a more comprehensive population management program, we summarized all the harvest data by management zone (Table 2) relative to deer concentration identified by the City’s 2008 aerial snow count, no count was conducted in 2009. The most productive sites were within Zone D and the combination of Zone H&I, where 22, 7, and 15 deer were removed respectively (77% of the total harvest).

Table 2. Ten year comparison of harvest data by deer management zone.

ZONE	1999-2000	2001	2002	2004	2005	2006	2007	2008	2009*	2010
A	15	2	27	-	-	-	-	-	-	-
B	186	74	48	31	13	19	8	3	6	3
C	57	123	51	49	44	17	13	7	18	6
D	102	122	93	117	48	66	29	33	23	22
F	-	19	10	3	8	7	20	2	4	4
H & I	-	-	21	-	41	41	129	44	18	22
Total	360	340	250	200	154	150	199	89	69	57

Discussion

Three sites initially prepared for culling operations were shut down before removal efforts began based on our inability to access the sites due to the persistent deep and drifting snow. All three sites were located on University of Iowa property. Two additional sites were shut down due to lack of deer activity. Of the remaining 12 sites, all but two received two sharpshooting attempts (removal effort). In every case the second seated attempt resulted in a significant decline in productivity (deer harvested/man hour).

Harvest demographics this year indicate fawn recruitment to be 0.56 fawns per adult doe. This ratio is further confirmed by the limited number of fawns seen in the field (i.e., those not harvested). Many times, adult does harvested in groups would have no fawns present. Historical fawn recruitment based on past cull data was ~1.1 fawns per adult doe. This is the second year in a row where fawn recruitment is significantly below the historical average.

Adult male (males that had shed their antlers) harvest is similar to past years (~12.5%), with the exception of 2009 where 15% more adult males were harvested due to a later start date of operations (i.e. more males had shed their antlers). As stated in previous years, we would likely remove $\leq 1\%$ adult males if the entire permit were valid starting 1 December.

Thirty six antlered males were observed while field operations were being conducted, additional antlered males were observed though infrared camera data. Individual animals were identified based on antler characteristics, no male was counted twice and if any doubt existed they were not added to the total. If snow counts are conducted, they should be interpreted with caution as, generally, there are a significant number of adult males (relative to adult females) present at most harvest sites. The ratio of observed yearling/adult males to yearling/adult females was ~1:1. Therefore, the population growth

potential relative to observed density will be greatly diminished. Again, next year's harvest projections should reflect this change in demographics.

Recreational feeding of deer on Saint Joseph's Cemetery continues to hamper our ability to manage deer in the Northwest corner of Hickory Hill Park and the surrounding area. Deer densities in this area appear (based on track sign and visual observations) to be significantly higher than the rest of town. The wood lot on the Southeast corner of Interstate Highway 6 and Hawkins Road also has substantial feeding activity from the residents of the Hope House (University of Iowa). Nine percent of the deer/vehicle strikes in town occur proximate to this location.

Deer vehicle strikes are down significantly from 1999 when 103 collisions were recorded. Thirty three collisions were recorded in 2009 (a 68% reduction), with 15 (45%) of those occurring on Highway 218 or Interstate 80, where town boundaries prevent adequate management activities to occur.

Total harvest has dropped significantly from 2007 to 2010. There are a number of reasons for this decline; however it should be noted that our effort per site has increased (at most sites) as deer densities continue to fall. Trend data suggest an overall herd reduction in all zones where culling activity occurs. A good example of this is Zone B, 186 deer were removed in 1999-2000 cull operations, only 3 animals were removed this year with two seated attempts. Harvest in this zone has stabilized in the single digits. Similar results occur in all zones.

Future Program Suggestions

Based on low recruitment over the last two years, dramatically reduced deer vehicle strikes (and corresponding deer densities), and a generally insignificant amount landscape damage we suggest that Iowa City consider delaying any additional deer management activities until winter of 2011-2012. At this time the State permit will again need to be made valid early to maintain the reduced densities on the University property (i.e., during the Christmas break). Also, if the State sees value in protecting males, I recommend that the general City-wide permit be made active by 1 December so males can be avoided (nearly all yearling and adult males will have visible antlers).

Acknowledgments

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Iowa City Aerial Deer Counts

Zone	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
A	37	*	60	74	64	29	76	*	71	*	170	80	*	71
B	69	*	154	81	33	30	30	*	19	*	5	2	*	7
C	78	*	90	99	39	36	60	*	43	*	46	33	*	21
D	65	*	127	140	38	25	100	*	88	*	65	36	*	25
E	0	*	0	7	12	0	12	*	9	*	41	19	*	0
F	11	*	15	48	42	15	74	*	65	*	80	32	*	31
G	3	*	0	4	0	0	0	*	5	*	43	35	*	29
H	6	*	31	48	24	23	42	*	6	*	53	26	*	11
I	49	*	79	197	99	43	169	*	109	*	101	39	*	27
Total	318	0	556	698	351	201	563	0	415	0	604	302	0	222

* Not Flown

Aerial count conducted on February 11, 2010 by Greg Harris, Wildlife Depredation Biologist, Iowa DNR

