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RESPONSES OF UTAH DEER HUNTERS TO A CHECKING STATION QUESTIONNAIRE

Dennis D. Austin¹ and Luey Jordan¹

ABSTRACT—During the 1987 deer hunt 4,250 card questionnaires were distributed to Utah hunters at nine checking stations. Return rates varied from a mean 23% when cards were simply handed to hunters, to 50% when hunters' names and telephone numbers were taken. Results concerning methodology suggest that questionnaire surveys conducted from checking stations are efficient and accurate in obtaining hunter opinions. Questionnaire results indicated that most hunters rated the Utah deer hunt as moderately satisfactory, but may prefer alternative options that would result in a higher quality hunt. The majority of hunters indicated that hunter numbers should be limited to current levels or decreased. Unretrieved kill was reported as 21 deer per 100 hunters.

The need to obtain representative opinions concerning mule deer management from Utah hunters is becoming increasingly important to game managers. Recreational impacts upon wildlife populations are expanding, causing a greater need for communication between managers and users. Various vehicles for obtaining hunter input are available, including public meetings, informal meetings with hunting and fishing clubs, direct letters and telephone calls, and public surveys. Since each method has limitations, each should be evaluated and used as appropriate. In this study, hunters were surveyed at established checking stations during the general deer hunt, when opinions about deer hunting were current.

Although most management decisions are based primarily upon biological data, considerable variation in management strategies is available within the boundaries of sound biological practices. Hunter numbers and their effectiveness in harvesting deer in Utah have far exceeded what is necessary to keep deer populations from expanding above range-carrying capacities. Consequently, managers face the question of how best to provide quality hunting to a large hunting public, remove the harvestable surplus, and still obtain adequate license revenues for management needs. The type of hunt (i.e., buck-only vs. either-sex), season length, sex and age structure of harvested deer, and number of hunters participating are areas of management manipulation that can be applied to

obtain various levels of hunting quality. These areas of trade-off opportunities need hunter input. This survey addressed some of these issues.

The objectives in this study were to determine (1) feasibility of collecting information from questionnaires handed out at checking stations during the deer hunt, (2) demographics of hunters using checking stations, and (3) hunter information and opinions on several questions related to hunting.

METHODS

QUESTIONNAIRE DISTRIBUTION.—Questionnaires (Appendix A) were printed on 4 × 6 yellow- and red-colored, postage-paid cards. Equal numbers of yellow cards and red cards were distributed, one card to each alternate hunter. On both cards questions 1–10 were identical. The remaining questions differed between cards, with only the responses of the red cards reported in this study. The number of cards given to each of the nine checking stations was proportional to the number of hunters expected at each station. Cards were coded to determine their point of origin. Beginning at 1600 hrs on Sunday, the second day of the deer hunt, every licensed hunter checked at each station was handed a questionnaire and asked to return it as soon as possible. Questionnaires were distributed until the supply was depleted.

At four stations between 1500 and 1600 hrs on Sunday, hunter names and telephone

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TABLE 1. Questionnaire return rates.

Station name	Number of questionnaires distributed	Number returned			% returned
		Red	Yellow	Total	
Snowville	300	44	38	82	27.3
Blacksmith	300	37	30	67	22.3
Ogden	500	47	52	99	19.8
Daniels	719	73	71	144	20.0
Thistle	600	62	63	125	20.8
Sheepcreek	215	30	32	62	28.8
Tucker	200	14	20	34	17.0
Subtotal ¹	2,834	307	306	613	21.6
Bloomington ²	800	94	91	185	23.1
Vernon ³	200	42	36	78	39.0
Blacksmith	14	5	4	9	64.3
Ogden	9	2	1	3	33.3
Daniels	50	12	6	18	36.0
Subtotal ⁴	73	19	11	30	41.1
Vernon ⁵	50	19	13	32	64.0
Daniels ⁶ (Monday)	100	100	—	100	100.0
Daniels ⁷ (Monday)	93	21	19	40	43.0
Daniels ¹ (Monday)	100	7	12	19	19.0
TOTAL	4,250	609	488	1,097	25.8

¹Hunters mostly residents from buck-only hunting areas, questionnaires simply handed out.

²Hunters mostly nonresidents from buck-only hunting areas, questionnaires simply handed out.

³Hunters mostly residents from limited-entry hunting areas, questionnaires simply handed out.

⁴Hunters mostly residents from buck-hunting areas, hunters' names and telephone numbers recorded.

⁵Hunters mostly residents from limited-entry hunting areas, hunters' names and telephone numbers recorded.

⁶Hunters mostly residents from buck-only hunting areas, hunters interviewed at checking station.

⁷Hunters mostly residents from buck-only hunting areas, hunters' names and telephone numbers recorded.

numbers were recorded before each licensed hunter was handed a questionnaire. This study aspect was designed to determine if return rates could be increased by recording personal information.

Between 1430 and 1600 hrs on Monday, the third day of the deer hunt, personnel at one station randomly selected hunters and interviewed them using the red questionnaire. Between 1600 and 1700 hrs hunter names and telephone numbers were recorded before the hunters received questionnaires. Between 1700 and 1730 hrs additional questionnaires were simply handed to hunters. These variations were designed to compare the consistency in results among three methods of distribution.

Data were analyzed using the chi-square statistic. The cross-tabulation method from the SPSS-X program on the VAX computer was employed. Significance level was set at $p = .05$ and reported for important interactions.

RESULTS AND DISCUSSION

QUESTIONNAIRE RETURN RATES.—Checking

stations used for distribution, the number of questionnaires distributed, and return rates are indicated in Table 1. The Vernon station received mostly hunters from a limited-entry unit, and the Bloomington station checked only nonresident hunters. These two stations may be expected to represent atypical subpopulations of Utah hunters. At the other seven stations a random sample of hunters mostly from buck-only units were given questionnaires.

Rates of return for the seven buck-only stations varied from 17.0 to 28.8%, with a mean of 22.3%. Nonresident hunters (Bloomington station) had a similar return rate (23.1%), while the predominantly resident hunters from the limited-entry area (Vernon station) had a much higher return rate (39.0%). These rates of return are comparable to return rates for big game harvest questionnaires in Utah, which usually range between 25 and 40%, using two mailings. The return rates for this questionnaire are especially encouraging considering its complexity compared with the few, simple questions on harvest questionnaires.

TABLE 2. Summarized hunter demographics and question responses.

1. Hunter age	16-17	18-24	25-34	35-44	45-54	55-64	65+	Total			
Number (%)	37 (3)	141 (13)	341 (31)	263 (24)	169 (16)	95 (9)	43 (4)	1,089			
2. Hunter sex	Male	Female	Total								
Number (%)	980 (92)	92 (8)	1,070								
3. Hunter residency	Utah	Other	Total								
Number (%)	573 (52)	194 (18)	1,067								
4. Years of Utah deer-hunting experience	1-2	3-5	6-10	11-20	21+	Total					
Number (%)	129 (12)	139 (13)	225 (21)	274 (25)	321 (30)	1,088					
5. Have you tagged a deer on this hunt?	Yes	No	Total								
Number (%)	492 (45)	595 (55)	1,087								
6. Has a member of your party tagged a deer on this hunt?	Yes	No	Total								
Number (%)	672 (62)	405 (38)	1,077								
7. Will you hunt the same unit next year?	Yes	No	Total								
Number (%)	833 (79)	221 (21)	1,054								
8. Did you hunt the same unit last year?	Yes	No	Total								
Number (%)	607 (56)	469 (44)	1,076								
9. 1987 deer-hunting experience compared with past years											
	-----Worst					Best-----					
Scale	1	2	3	4	5	6	7	8	9	10	Total
Number (%)	71 (6)	48 (4)	94 (9)	78 (7)	203 (19)	131 (12)	122 (11)	159 (15)	71 (6)	116 (10)	1,093
10. Have you ever hunted a limited-entry unit?	Yes	No	Total								
Number (%)	109 (18)	484 (52)	593								
11. Have you ever hunted a 3-point-and-better unit?	Yes	No	Total								
Number (%)	125 (21)	475 (79)	600								
12. Hunter preference for number of buck-only units	0	1-55	56	57-73	74	Total					
Number (%)	89 (17)	184 (36)	163 (32)	28 (5)	49 (10)	513					
13. Hunter preference for number of limited-entry units	0	1-7	8	9-73	74	Total					
Number (%)	145 (28)	17 (3)	184 (36)	161 (31)	7 (1)	514					
14. Hunter preference for number of 3-point-and-better units	0	1-9	10	11-73	74	Total					
Number (%)	71 (14)	28 (5)	180 (35)	174 (34)	63 (12)	516					
15. Should hunting pressure and hunting opportunity be reduced?	Yes	No	Total								
Number (%)	364 (62)	222 (38)	586								
16. Should number of hunters be limited to current levels?	Yes	No	Total								
Number (%)	357 (62)	220 (38)	577								
17. Hunter preference for combinations of hunting success and opportunity											
% success	35	45	55	65	75						
Number of hunters	200,000	175,000	156,000	140,000	127,000						
Combination	1	2	3	4	5						
Number (%)	249 (44)	85 (15)	82 (15)	74 (13)	73 (13)						
18. Did you observe any deer killed and left in the field?	Yes	No	Total								
Number (%)	98 (17)	484 (83)	582								
	(1 deer 84, 2 deer 9, 3+ deer 5)										

hunting success vs. opportunity combinations (question 17, Table 2) were significantly different between stations.

EFFECTS OF HUNTING UNIT ON HUNTER RESPONSES.—Hunting unit effects were highly variable, largely a result of small numbers of hunters (less than 10) surveyed from most of Utah's 74 units. Consequently, the potential effects of hunting unit were not evaluated in this study.

HUNTER DEMOGRAPHICS.—Hunters in this study were mostly 18–55 years of age (84%) with all age groups well represented, male (92%), Utah residents (82%), and highly variable in years of deer hunting experience (Table 2). Krannick and Cundy (1987) and Wasatch Opinion Corporation (1984) reported similar age bracket distribution and sex ratios using completely random designs, suggesting that the sample in this study was representative of the hunting population. Years of deer hunting experience could be divided into four groups of about equal size, those groups being 1–5, 6–10, 11–20, and 21+ years of experience. These data indicate that many hunters quit deer hunting after only a few years of experience. Nonresidents were older ($p < .01$) than residents, had fewer years of experience ($p < .001$), and included a lower proportion of females ($p < .001$). These data suggest that nonresident hunters attracted to Utah are older when they first hunt in Utah and have less hunting experience than Utah residents.

HUNTER SUCCESS RATES.—Forty-five percent of hunters reported tagging a deer in this study, and 62% of the hunting parties were successful in tagging at least one deer. Since hunter response to the questionnaire did not vary between individual vs. party success, this question could be combined on future studies. Surprisingly, neither individual nor party success was related to hunter age, years of hunting experience, or last year's experience on the same unit. This suggests that luck in harvesting a deer, given Utah's high hunter densities, is probably at least as important as age and experience. Because hunting success was not a significant factor in comparing hunter responses for either the number of hunting units preferred by hunters or questions involving hunt quality (questions 12–17, Table 2), but was significant in determining overall hunt satisfaction (question 9), non-

response bias, as affected by differences in hunter success, was apparently low. It is also interesting to note that success rate for females (57%) was much higher than male success rate (44%) and approached significance ($p = .06$). Illegal use of female licenses by male hunters is one possible explanation.

EXPERIENCE ON HUNTING UNIT.—Hunters planning to return to the same hunting unit the next year had significantly ($p < .001$) higher success rates than hunters not planning to return. Overall, 79% of hunters planned to return to the same unit next year, but only 56% indicated that they hunted the same unit the previous year. These data indicate that almost half of Utah hunters pursue deer in a different area each year. Some interactions were significantly different with respect to unit experience. Nonresidents were less likely than residents to return to the same area ($p < .01$), while older hunters ($p < .05$), and particularly hunters with more deer hunting experience ($p < .001$), were more likely to return to the same areas.

HUNTER SATISFACTION WITH THE UTAH DEER HUNT.—The overall mean satisfaction score was 5.9 on a 10-point scale. This result compares closely to that (5.6) obtained for the 1986 hunt (Krannick and Cundy 1987) and suggests that nonresponse bias in this study was low. As may be expected, successful hunters were more satisfied than unsuccessful hunters ($p < .001$). However, hunter age ($p < .02$) and years of deer hunting experience ($p < .01$) were also significant interactions. Older hunters and those with more experience were less satisfied than younger hunters. One explanation is that success rate and size of bucks harvested have decreased during the last 15 years (Austin et al. 1989) and may have diminished the perceived quality of the experience.

EFFECT OF HUNTING EXPERIENCE ON LIMITED-ENTRY AND 3-POINT-AND-BETTER UNITS ON HUNTER RESPONSES.—Overall, 18 and 21% of hunters indicated previous experience on limited-entry and 3-point-and-better units, respectively. Hunters with experience in one of these types of hunts also tended to have experience in the other ($p > .001$). Also, hunters with 6–10 years of experience and mostly in the 25–34-year-old age bracket had a much higher rate of participation in 3-point-and-better units ($p < .001$), but not on limited-entry hunts.

Return rates where hunter names and telephone numbers were recorded were much higher. Mean return rate from the three combined buck-only stations was 41.1% and from the limited-entry station 64.0%. Return rates were approximately doubled by recording names and telephone numbers.

Return rates for questionnaires distributed during the third day of the deer hunt were similar, with 19.0% for surveys simply handed out and 43.0% for surveys on which names and telephone numbers were recorded.

EFFECT OF CARD COLOR ON HUNTER RESPONSES.—The effect of card color was not significant in any of the questions common to both cards. Comparisons made between colors included: (1) combination of all data, (2) type of hunting area, and (3) mode of questionnaire distribution. From the combined seven regular checking stations, return rates of 21.6 and 21.7% for red and yellow cards, respectively, were obtained. Consequently, questions 1–10 from the two card colors were combined.

EFFECT OF DISTRIBUTION MODE ON HUNTER RESPONSES.—The effect of questionnaire distribution mode on hunter responses was not significant on most questions within checking stations. Only 5 of 70 comparisons were significantly different, and little consistency was found, as only 2 of the 5 significant comparisons represented the same question, suggesting simple random significant differences. We compared data obtained from the relatively small number of hunter interviews (100) and the even smaller number of questionnaires that recorded hunter names and telephone numbers (61). From this comparison we concluded that hunter response to the questionnaire appeared to be unaffected by distribution mode. This result was expected because the same method of random distribution of questionnaires to hunters was used with each mode. Because rates of return were different and hunter responses to the questions were generally not different, nonresponse bias was probably low in this survey. However, two of the significant comparisons concerned the question, "Has a member of your party tagged a deer on this hunt?" Thus, the mode of distribution may have biased hunter response on this question. Nonetheless, data from the different modes were generally insignificant, and data were combined.

EFFECT OF TYPE OF HUNT ON HUNTER RESPONSES.—The effect of type of unit hunted (i.e., buck-only, limited-entry, or 3-point-and-better) had only three significant effects on hunter responses: (1) Hunter participation by sex was affected ($p < .001$); female participation was relatively higher on limited-entry and lower on 3-point-and-better units. (2) Hunter residence was affected ($p < .001$); nonresident participation was proportionately higher on 3-point-and-better areas and lower on limited-entry units. (3) The satisfaction from the 1987 deer hunting experience (question 9, Table 2) was also affected ($p < .05$) in terms of distribution of scores. However, mean scores were not different, with 5.8, 5.8, and 5.9 for limited-entry, 3-point-and-better, and buck-only hunts, respectively. Nonetheless, the limited-entry score may not be representative, as the mean score from the Vernon checking station was 6.9, and included not only the 48 hunters who specified the limited-entry area, but an additional 30 hunters who did not specify the area. More data are needed from limited-entry areas to assess hunter satisfaction. However, the data indicated that restricting hunters to shooting only large deer, 3-point-and-better hunts, had no value in increasing hunter satisfaction.

EFFECTS OF CHECKING STATION ON HUNTER RESPONSES.—The effect of checking stations where hunters were mostly residents from buck-only areas produced only five significant differences: (1) Hunter success was significantly different, varying from 29% at the Blacksmith Fork station to 48% at Sheepcreek. (2) Similarly, party success was significantly different, varying from 33% at Blacksmith Fork to 80% at Sheepcreek. (3) Satisfaction with the 1987 deer hunting experience for resident hunters (question 9, Table 2) was also affected, as mean scores ranged from 4.6 at Blacksmith Fork to 6.0 at Daniels Canyon. As may be predicted, higher hunter success was significantly correlated with higher satisfaction scores. It is also important to note that hunter satisfaction for nonresidents (Bloomington station) was higher than for resident hunters, with a value of 6.6. (4) Percentage of hunters with hunting experience on 3-point-and-better units was also significantly different between checking stations, ranging from 43% at Blacksmith Fork to 10% at Thistle. (5) Hunter preferences for the

HUNTER PREFERENCE FOR NUMBER OF BUCK-ONLY, LIMITED-ENTRY, AND 3-POINT-AND-BETTER UNITS.—This open-ended question yielded medians for number of preferred units of 50, 8, and 10 for buck-only, limited-entry, and 3-point-and-better units, respectively, which corresponded closely to the current number of designated units, 56, 8, and 10, respectively. Hunters with experience on 3-point-and-better units preferred fewer buck-only units ($p < .03$) and more 3-point-and-better units ($p < .001$) than did hunters without experience. Hunters with experience on limited-entry units preferred more limited-entry units ($p < .03$) than did hunters without experience, but about the same number of buck-only hunts.

HUNTER PREFERENCES FOR QUALITY HUNTING.—The majority of hunters indicated they would prefer (1) reducing hunting pressure and opportunity, and thus harvesting a higher proportion of mature deer ($p < .001$), and (2) limiting hunter numbers to current levels ($p < .001$) (questions 15, 16, Table 2). A minority of hunters (41%) indicated they would prefer that hunter numbers be substantially reduced below current levels, while the majority (59%) preferred little or no change in hunter numbers (question 17, Table 2). Combined, these three questions indicated that most hunters are satisfied with the current level of hunter participation but strongly prefer that the number of hunters be restricted to current levels (license sales about 200,000). Furthermore, the size of harvested bucks was important to hunters, as they indicated a willingness to decrease hunting opportunity in order to have a higher proportion of mature bucks in the harvest. Similar results were found by Wasatch Opinion Corporation (1984).

Importantly, hunter success was unrelated to responses regarding hunting quality: unsuccessful as well as successful hunters were in agreement on preference for improved quality. Also, the question (#16) dealing with limiting hunter numbers to current levels was unrelated to hunting satisfaction scores, again indicating that hunters are united in this area. Similar conclusions were reported by Kranick and Cundy (1987).

Generally, hunters with experience on limited-entry and 3-point-and-better units were in stronger support for higher quality

($p < .05$) than were hunters without experience. Interactions among the three quality questions indicated hunters were consistent in quality preferences ($p < .001$).

UNRETRIEVED DEER.—The number of deer reported killed and left in the field, which included both illegal kill and crippling loss, was very high, with 20.6 deer reported/100 hunters (5.1 bucks, 11.2 does, 4.3 fawns, and 1.0 unclassified). The number of unretrieved deer reported/100 legal bucks checked was 47.2 (11.7 bucks, 23.4 does, 9.8 fawns, and 2.3 unclassified).

Robinette et al. (1977) stated that hunters reported 2.4–16.3 (mean = 7.6) unretrieved deer/100 hunters on the Oak Creek deer unit between 1948 and 1959 under either-sex hunts. Unpublished data (1980–82) from the Vernon deer unit under heavy, buck-only hunting pressure indicated 1.3–2.5 (mean = 2.0) discrete unretrieved deer/100 hunters or a mean of 17.5 unretrieved deer/100 legal bucks checked. Stapley (1970) reported 26.3 unretrieved deer/100 legally harvested bucks on buck-only units and 8.5 under either-sex hunting. Using his figures, we calculated that unretrieved deer increased 311% when hunts were shifted from either-sex to buck-only. Losch and Samuel (1976) summarized existing data and obtained a mean percent increase of 270%.

In Utah during 13 years (1961–73) of regular season, either-sex hunting, a total mean from all hunts of 37,796 antlerless deer and 64,719 bucks were harvested annually. During 13 years of regular season, buck-only hunts (1974–86), 63,339 bucks were harvested annually, but only 6,088 antlerless deer. Because differences in buck harvest (-2.1%), number of hunters ($+6.8\%$), and full recruitment rate ($+3.4\%$) showed only minor changes between periods, we would expect differences in the total deer population to be small. Although other factors, such as weather, may have differed between the two periods, the increase in unretrieved deer during the regular hunt may account for at least part of the difference in the antlerless harvest. The ratio of the difference in antlerless harvest between the two periods (31,709) to the annual legal buck harvest (1974–86) is calculated at .501. Thus, an estimate of 50.1 unretrieved deer/100 legal deer harvested can be projected. This figure is close to the 47.2 unretrieved

deer/100 legal harvested as determined in this study, and it is considerably higher than figures reported for either-sex hunts (Losch and Samuel 1976, Robinette et al. 1977, Stapley 1970).

No significant relationships were found with hunter demographics, success, or experience on types of hunting units. Apparently, all hunters were equally likely to find unretrieved deer. However, it was surprising that the number of unretrieved deer was not significantly different among the three types of hunting units. Hunters reported 36, 25, and 20 unretrieved deer/100 hunters from limited-entry, 3-point-and-better, and buck-only units, respectively, with 8, 10, and 5 unretrieved bucks, respectively. Data suggest that increased sample sizes would increase levels of significance. Additional information should be collected concerning types of hunting units, potential differences between vegetative types, and length (1–11 days) of the hunt.

CONCLUSIONS

Distribution of hunter questionnaires at established checking stations in Utah appears to be a time-saving and economic approach for obtaining hunter opinions. Return rates in the 20–30% range would be expected and would yield demographic and hunter opinion information representative of the hunting population.

Hunter response from this study indicated the following conclusions:

1. Mean age of Utah hunters was 35–44 years, and mean number of years of deer hunting experience was 11–20 years.

2. No difference was found between the three types of hunts, buck-only, limited-

entry, 3-point-and-better, during the regular season with respect to hunter satisfaction.

3. Hunters were generally in agreement with the number of each type of hunt as currently managed.

4. Hunter age, years of experience, and hunting area familiarity were not related to success, and almost half of Utah deer hunters selected a different unit to hunt between years.

5. Hunters indicated a strong and consistent desire to improve the quality of the deer hunt in terms of possibly reducing number of hunters, increasing the quality of harvested bucks, and, particularly, limiting number of hunters to the current level.

6. The numbers of deer that were killed and not retrieved were substantial, equal to about 47% of the number of legally harvested bucks, and were consistently high regardless of hunt type or area.

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APPENDIX A.

Dear Hunters: In order to manage deer better for Utah hunters, we are asking for your opinions about deer hunting in Utah. Please answer the following questions and mail the questionnaire on your trip home. (No postage required.)

1. Age: 16-17 18-24 25-34 35-44 45-54 55-64 65+
2. Sex: MALE FEMALE
3. Residence: UTAH OTHER
4. Years of deer-hunting experience in Utah:
1-2 3-5 6-10 11-20 21+
5. Have you tagged a deer on this hunt? YES NO
6. Has a member of your party tagged a deer on this hunt? YES NO
7. Which Utah deer unit did you hunt? _____
8. Do you anticipate hunting this unit next year? YES NO
9. Did you hunt this unit last year? YES NO
10. Using a scale of 1 to 10, where 1 means that your deer-hunting experience was the worst ever, and 10 means that your experience was the best ever, circle the number which best describes your deer-hunting experience this year.
1 2 3 4 5 6 7 8 9 10
11. Have you ever hunted on a limited-entry unit? YES NO
12. Have you ever hunted on a 3-point-and-better unit? YES NO
13. Utah has 74 deer management units. They are managed as regular buck hunts, limited-entry hunts, or 3-point-and-better hunts. Please write in how many of each type of hunt you would prefer.

Type of Unit	Current Number of Units	Your Preference
Regular buck hunts	56	_____
Limited-entry hunts	8	_____
3-point-and-better hunts	10	_____
Total	74	74

14. On regular buck hunts, hunter pressure is high and about 25% of the bucks harvested are mature (3-point and better). By reducing hunter pressure, which means hunting opportunity would also be reduced, the percent of mature bucks in the harvest would increase. Circle your choice of the alternatives below.
 - A. DO NOT REDUCE HUNTING PRESSURE
 - B. REDUCE HUNTING PRESSURE AND INCREASE HARVEST PERCENT OF MATURE BUCKS
15. Right now, Utah has about 200,000 deer hunters. In the next few years the number of people wishing to hunt could increase. If hunter numbers increase, circle your choice of the alternatives below.
 - A. DO NOT LIMIT HUNTER NUMBERS
 - B. LIMIT NUMBER OF HUNTERS TO CURRENT LEVEL BY RESTRICTING PERMITS
16. Utah hunters harvest about 70,000 bucks each year with a 35% success rate. One way to increase success rate is to reduce the number of hunters. Below are some combinations of success rate, how often the average hunter could expect to draw a permit if number of hunters were restricted, and number of Utah hunters. Circle the combination below you would prefer.

Combination	Success Rate	% Chance Average Hunter Draws Permit	Number of Utah Hunters
1	35	100	200,000
2	40	88	175,000
3	45	78	156,000
4	50	70	140,000
5	55	64	127,000

17. Did you observe any deer killed and left in the field?
YES NO Sex: M or F Age: FAWN or ADULT