

Utah's Cooperative Wildlife Management Unit Program: A Survey of Landowners, Operators and Landowner/Operators



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Utah's CWMU Program: A Survey of Landowners and Operators

FINAL REPORT

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Table of Contents

Introduction.....	1
Methods.....	1
Results.....	1
CWMU Characteristics.....	1
Respondent Demographics	2
CWMU Management and Services.....	3
CWMU Revenues and Costs.....	6
CWMU Motivations and Satisfaction.....	8
Discussion.....	11
Conclusion.....	15
References.....	16
Appendices (survey).....	17

List of Tables

Table 1. Income-generating Enterprises.....	3
Table 2. Total and Median Number of Big Game Permits in 2001.....	4
Table 3. Permit Distribution.....	4
Table 4. Goods and Services Provided.....	6
Table 5. Average Permit Prices.....	7
Table 6. Other Recreation on CWMUs.....	7
Table 7. CWMU Costs.....	8
Table 8. Landowner Satisfaction.....	9
Table 9. Satisfaction with CWMU Experiences.....	10
Table 10. Permit Prices for 1986.....	11
Table 11. Permit Allocations.....	14

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Introduction

Utah's Cooperative Wildlife Management Unit (CWMU) Program began as a pilot program in 1990 and was codified by the Utah Legislature in 1994. The CWMU program was established with the intent of satisfying several objectives: (1) provide income for landowners, (2) create satisfying hunting opportunities, (3) increase wildlife habitat, (4) provide adequate trespass protection for landowners who open their lands for hunting, and (5) increase access to private lands for hunting big game (Messmer et al. 1998). Now that the program has been in existence for over a decade, Utah's CWMU Association and the Jack H. Berryman Institute sought to assess the status of the program in terms of the five objectives from the CWMU participant's perspective. The goal of this research was to provide insight into the CWMU program from the landowner and operator perspective including CWMU characteristics and organization, participant demographics, management and services, revenues and costs, and participant motivations and satisfaction.

Methods

We conducted a census of all landowners, operators, and landowner/operators who participated in the Utah CWMU program during the 2001-2002 hunting season. CWMU names and associated landowners and operators were obtained from the CWMU Association and Utah Division of Wildlife Resources (UDWR). In the summer of 2001, four landowners and operators were confidentially contacted and interviewed regarding their participation in the CWMU program. The information gathered from these interviews was used to construct the survey. The CWMU Association February 2001 newsletter informed readers they would be receiving a mail survey from Utah State University the following March. Each CWMU usually has only one operator but can have multiple landowners, resulting in 296 participants in 83 CWMUs. The confidential pre-survey interviews with landowners revealed that landowners and operators may act autonomously (e.g., providing range improvements and other expenditures) on their portions of a CWMU. Therefore, surveys were mailed to all participants. Two weeks after the surveys were mailed, a reminder postcard was mailed to all non-respondents. Follow-up telephone calls were made through May 2002. A total of 75 surveys were received, representing 48 (64%) of Utah CWMUs.

Results

CWMU Characteristics

As of Fall 2001, respondents had been participating in the CWMU program an average of 6.38 years. Nearly 60% of respondents have been in the program for 5 years or fewer. Nearly all CWMUs (86.7%) have more than one landowner or operator with a census average of 3.96 participants per CWMU. Of the survey respondents, the average number of operators is 1.19

while the number of landowners is considerably higher, at 5.15 per CWMU. The average number of acres per CWMU is 22,855. However, there are a few CWMUs with greater than 40,000 acres, one as large as 220,000 acres, and the median size was 15,000 acres. Respondents themselves reported owning and leasing a median of 3,000 and 4,600 acres, respectively, within their CWMU. Most CWMU operators or landowner/operators (76.5%) lease land from at least one other landowner. One-third (32.4%) lease from one other landowner, and 11.8% of respondents lease from seven or more landowners.

Sole proprietorships comprise 39.4% of CWMU management structures and 19.7% are operated as non-family corporations. Eleven respondents (15.5%) stated that they are a coalition of landowners. Business management is largely an in-house affair; 82.7% reported that one of the landowners or operators serves as a business manager for the CWMU. The survey asked respondents how costs and revenues are managed within the CWMU. The largest percentage (30.7%) stated these dollars are allocated according to a predetermined arrangement such as a partnership agreement. The remainder of responses varied considerably; 13.3% stated that a business entity pays all expenses and issues payments to partners, and 5.3% reported that all participants get together to record expenses and revenues. A significant proportion, 14.7%, said "other."

The average number of permits issued to a CWMU by UDWR was 34.29. However, the median was considerably lower, at 26.5. Two CWMUs are issued over 100 permits, one of whom receives over 200. Fifty percent of landowners are issued 23 or fewer permits. Deer permits were issued most often, with the average number of buck permits being 25.68 (18 median) and 45 antlerless permits (median = 20). Eighteen or fewer permits were issued to 60.7% of respondents. Elk permits issued were second to deer, with a mean of 12.67 (median = 7) bull and 16.32 (median = 10) antlerless (sp) permits. Fifty percent of respondents received fewer than 7 bull elk permits. Other permits issued included an average of 1.92 bull and 2.00 antlerless moose permits (n=13), and 9 buck pronghorn and 23 doe pronghorn permits (n = 2). Other game species respondents said are found on their CWMUs in populations large enough to hunt include mountain lions (56.9%, n = 58), furbearers (42.4%, n = 33), coyotes (59.7%, n = 72), waterfowl (24%, n = 25), sharptail grouse (50%, n = 14), blue/ruffed grouse (52.6%, n = 38), turkeys (50%, n = 36), sage grouse (47.2%, n = 36), and black bears (43.8%, n = 32).

Respondent Demographics

Respondents were nearly all male (94.6%), and were on average 56 years old. The age of the youngest respondent was 30 and the oldest was 87. Respondents are a fairly well-educated group; 30.1% hold a bachelors degree and 32.9% have earned a graduate or professional degree. Nearly a quarter (23.5%) reported their household earns between \$40,001 and \$60,000 annually (including income from non-ranch sources). Over a third of respondents (33.8%) reported an annual household income between \$60,001 and \$100,000. Eighteen respondents (26.4%) reported annual household incomes greater than \$100,001. Table 1 illustrates the sources of income-generating enterprises that comprise this annual household income. A majority (59.1%) of landowners listed a total ranch income (excluding non-ranch sources, but including ranch-

related enterprises) of \$50,000 or less. Sixteen percent listed a total ranch income between \$100,001 and \$200,000; 13.6% reported a ranch income between \$200,001 and \$500,000.

Table 1. Income-generating enterprises.

Sources	Percent Respondents Who Gain Income From This Source	Average Percent of Income From This Source
Livestock	37.3%	30.7%
Crops	16.0%	15.3%
CWMU hunting	68.0%	26.5%
Other recreation ¹	8.0%	27.7%
Off-ranch job(s)	40.0%	58.7%
Investments	38.7%	24.9%
Other	37.3%	44.4%

¹ Other recreation includes hunting, fishing, sight-seeing, etc.

CWMU Management and Services

Participants in the CWMU program may make changes to their ranching operations to accommodate the hunting enterprise. Sixty percent of respondents reported they managed forage with wildlife in mind. Almost half (46.7%) provide additional water developments, and 44% harvest fewer animals than permits allotted. Thirty-six percent reported implementing a more aggressive predator control plan. One-third of respondents seed with plants preferred by game (34.7%), provide additional mineral supplements (33.3%), or furnish supplemental wildlife feed (30.7%). Respondents reportedly made few significant changes to their livestock operations, 26.7% reported decreasing livestock numbers, and 26.7% reduce total grazing days. However, 32% adjust grazing dates and 36% alter livestock grazing locations.

Table 2 shows the total number of big game permits allotted to all 83 CWMUs by the UDWR. Sixty-eight percent of our respondents receive at least two antlered elk permits (no one reported receiving only one permit). The median number of bull elk permits reported was seven with 69.2% reporting receiving 10 or fewer. The highest number of bull elk permits reported for a CWMU was 56. Seventy-one percent of operators or landowner/operators reported receiving buck deer permits. Median allocations were 18 and 20 for buck and antlerless, respectively. The largest number of buck deer permits was 126; the second largest was 63. However, 59.3% of respondents were allotted 18 or fewer. Thirteen respondents reported receiving bull moose permits and two reported receiving buck pronghorn permits.

Table 2. Total and median number of big game permits 2001.

Species		Private	Public	Sub total	Total	Median ¹ (Mean)
Deer	Buck	1,597	224	1,821	2,116	26.0 (33.4)
	Antlerless	30	265 ²	295		
Elk	Bull	615	107	722	2,092	35.0 (41.0)
	Antlerless	381	989	1,370		
Moose	Bull	26	18	44	104	3.0 (3.5)
	Antlerless	20	40	60		
Pronghorn	Buck	49	32	81	84	3.0 (14.9)
	Doe	1	2	3		

¹ Number of CWMUs: Deer = 66, Elk = 51, Moose = 24, and Pronghorn = 7.

² Of the 265 public antlerless deer permits, 150 were for 2 deer each.

Table 3 shows how respondent operators and landowner/operators distributed their allotted permits. Most allotted permits were sold to either customers or guides; however, a significant portion were given as gifts. Very few permits were used as a payment in lieu of goods or services. Forty-four percent of respondents reported that they did not use all of their permits in 2001. Thirty percent did not use all of their antlered permits and 7.6% did not use all of their doe/cow permits. Twelve respondents provided a reason for not using all of their permits; seven cited concern over the health or quality of the game herds and three reported a lack of demand for the price.

Table 3. Permit distribution.

Animal		Customer	Guide/ Outfitter	Gift(s)	In Lieu Payment	Total Number
Deer	Buck	319 (57.4%)	151 (27.2%)	81 (14.6%)	5 (9.0%)	556
	Antlerless	0 (-)	0 (-)	0 (-)	0 (-)	0
Elk	Bull	197 (69.6)	50 (17.7%)	33 (11.7%)	3 (1.1%)	283
	Antlerless	105 (62.1%)	42 (24.9%)	13 (7.7%)	9 (5.3%)	169
Moose	Bull	20 (74.1%)	7 (25.9%)	0 (0.0%)	0 (0.0%)	27
	Antlerless	0 (-)	0 (-)	0 (-)	0 (-)	0
Pronghorn	Buck	0 (0.0%)	3 (60.0%)	2 (40.0%)	0 (0.0%)	5
	Doe	0 (0.0%)	0 (0.0%)	21 (100.0%)	0 (0.0%)	21

The CWMU program attracts a high proportion of out-of-state hunters. Respondents reported that in 2001, 70.2% of private hunters were from outside Utah. Return clients are a large portion of CWMU business, comprising 72.7 % of total hunters. The median number of guided and unguided private hunters per hunt was 5.08 and 4.5, respectively. For public hunters, the median dropped to 3.38 guided and 3.0 unguided. On average, the number of days sportsmen were allowed to hunt on a CWMU did not differ between public draw and private hunter permits. For both antlered deer and elk permits, the median number of days ranged from 8.4 to 8.96. One exception was antlered moose, with an average of 17.08 days allowed to public hunters and 12.2 days to private hunters. When asked how the CWMU schedules public draw and private permit hunters, 35.9 percent reported they pre-set separate dates for public and private hunters. Only 15.4% reported that they try to schedule most private clients before scheduling public hunters. Another 30.8% reported that they use scheduling methods not provided in the survey. Several comments emphasized that at times public hunters hunt first and that CWMUs try to accommodate all hunters' schedules.

CWMUs offer a variety of lodging and other services for their clients; every respondent reported providing some additional good or service. A total of 48.7% of respondents reported they provide some type of lodging facilities for hunters. Nearly half, 42.1%, stated they provide cabins, 30.8% listed campsites, 25.6% offer wall tents, and 10.3% provide camper trailers. The total adds to greater than 100% as some CWMUs furnish more than one type of lodging. Table 4 illustrates the services CWMUs may supply. While there does not appear to be a difference between the services CWMUs offer unguided public and private hunters, there were significant differences in the services provided as part of the hunt to guided public and private hunters. Nearly half (47.4%) provide meals to their guided private hunters, but only 15.8% supply meals to their guided public hunters. The same proportion (47.4%) furnish lodging to guided private hunters, but 15.4% provide lodging to guided public hunters. Animal retrieval also differed, with 50% and 26.3% offering animal retrieval to guided private and public hunters, respectively. Interestingly, while two-thirds reported providing maps to hunters, all CWMUs are required by the UDWR to provide maps.

Table 4. Goods and services provided.

Goods and Services	Percent of CWMUs
Maps	63.8%
Campsite	44.7%
Meals	40.4%
Lodging	40.4%
Transportation	34.0%
Animal retrieval	42.6%
Taxidermy	8.5%
Meat processing	10.6%
Meat shipping	10.6%
Horses	12.8%
Tours/sightseeing	6.4%
Scouting	34.0%

CWMU Revenues and Costs

The median total revenue reported from the sale of permits and hunts was \$25,500, with a range between \$1,400 and \$730,000. Over two-thirds (71.4%) reported a total revenue of \$51,000 or less. Table 5 shows the average price of permits sold for guided and unguided permits. Prices charged for all permits ranged from \$100 for guided antlered deer to \$12,000, also guided antlered deer. A large price range was prevalent for both deer and elk. Prices charged for all bull moose permits ranged from \$4,000 to \$10,000. Unsurprisingly, CWMUs tend to charge higher prices for guided hunts. The median price charged for a guided bull elk permit was \$5,000 and \$3,000 for a guided buck deer permit.

Table 5. Average permit price.

Permit Type		Guided	Unguided
Deer	Antlered	\$4,427	\$2,122
	Antlerless	\$150	- ¹
Elk	Antlered	\$6,071	\$4,100
	Antlerless	\$470	\$633
Moose	Antlered	\$5,571	\$5,500
	Antlerless	-	-
Pronghorn	Buck	\$3,000	\$1,200
	Doe	-	-

¹No data available

Recreational activities other than hunting may offer an additional revenue source to CWMUs. Table 6 illustrates recreational uses that occur on CWMU lands. While a significant portion of CWMUs allow activities such as hiking, camping and photography, very few CWMUs charge for these activities on their lands. The exception was fishing, where 58.3% of respondents reported that they charge a daily fee that ranged from \$8 to \$200.

Table 6. Other recreation on CWMUs.

Recreation Activities	CWMUs that Allow	CWMUs that Charge
Hiking	34.0%	2.1%
Camping	34.0%	4.3%
Scenic driving	23.4%	2.1%
Picnicking	25.5%	2.1%
Photography	25.5%	4.3%
Bird/wildlife watching	27.7%	6.4%
ATV riding	23.4%	2.1%
Horseback riding	38.3%	2.1%
Mountain biking	19.1%	2.1%
Wood cutting	14.9%	2.1%
Fishing	21.3%	12.8%

Business-related costs encumber a significant portion of CWMU revenue. Results show that on average, participants estimated that 23.35% of their total revenue is allocated to paying for labor (e.g., guides, cooks), 9% goes to equipment (e.g., vehicles and their maintenance), 7.54% is allocated to lodging, 6% pays for food purchases, and 18.8% is allocated to other costs (e.g., range leases, transportation). Table 7 shows the range and median costs for 10 cost categories.

Table 7. CWMU costs.

Cost Type	Median	Low	High
Range leases	\$13,200	\$1,000	\$120,000
Promotions ¹	\$1,500	\$150	\$20,000
Payroll	\$4,550	\$100	\$160,000
Maintenance ²	\$1,200	\$100	\$50,000
Miscellaneous items ³	\$1,250	\$100	\$9,000
Office supplies ⁴	\$200	\$25	\$2,000
Fuel	\$1,000	\$50	\$7,000
Food	\$2,000	\$230	\$8,000
Insurance	\$800	\$195	\$5,000
Other	\$750	\$350	\$5,100

¹Promotions include hunting show, outdoor trade show, and other associated costs.

²Maintenance includes fencing and facility costs.

³Miscellaneous items include money spent on sporting goods, equipment, and other associated costs.

⁴Office supplies include postage, phone, fax, and other associated costs.

CWMU Motivations and Satisfaction

Participants have many reasons for joining the CWMU program. Nearly all respondents (90.7%) stated that increased revenue was a motivation, 64% said that they participated to alleviate trespassing pressure, 58.7% enjoy providing wildlife habitat, 42.7% said participation helps compensate for wildlife depredation, and 24% stated one reason was to be able to hunt on their own land. When participants were asked their main goal from participating in the CWMU program, 40% stated their goal was profit and lifestyle, 34.7% stated their main objective is profit. Five respondents (6.75%) said their primary aim is habitat/wildlife management, and four stated their goal is to manage trespassing.

The CWMU program is opening up private land to public hunting. Prior to enrolling in

the CWMU program, 33.3% of respondents allowed no public hunting and 35.4% allowed public hunters only with the purchase of trespass rights. Only 29.2% allowed public hunting at no charge if hunters asked permission. Since participating in the CWMU program, respondents reported that, on average, trespassing problems have decreased.

A large percentage of respondents (78.6%) indicated that big game species caused agricultural damage to the CWMU in 2001. Respondents indicated the greatest losses were incurred by deer (mean = \$10,357, median = \$5,000); however, the range was considerable (\$500 to \$25,000). For elk, the average damage estimate was \$4,619, the median was considerably lower at \$2,000, and the range was sizeable (\$150 to \$25,000). No respondents indicated that other species caused agricultural damage to their properties.

Overall, respondents seem fairly satisfied with most aspects of the CWMU program. Table 8 illustrates the mean satisfaction for several categories, with 5 representing highly satisfied and 1 representing highly dissatisfied. Over two-thirds were either moderately or highly satisfied with the CWMU minimum size requirement. Seventy-three percent are moderately or highly satisfied with the support the program receives from the UDWR and 69.7% are satisfied with their relationship with the UDWR. Respondents are satisfied with the number of permits they receive (77.6%), and 82.8% are moderately to highly satisfied with the 90/10 split between public and private permits. Opinions of the CWMU Association were favorable; 89.9% of respondents report they are moderately to highly satisfied with the Association.

Table 8. Landowner Satisfaction.

Satisfaction With	Mean Satisfaction ¹
CWMU minimum size requirement	3.8
Working relationship with partner(s) in my CWMU operation	4.3
Effort of other partner(s) compared to my own	4.0
CWMU association	4.3
Quality of <u>private</u> hunters	4.3
Quality of <u>public</u> hunters	3.3
Support of CWMU program by the UDWR	4.0
Relationship with and trust of UDWR	3.8
Total number of permits allotted	4.2
90/10 split between private and public permits	4.3

¹Mean score calculated on a 1 to 5 scale where 5= highly satisfied, 4= moderately satisfied, 3= neutral, 2= moderately dissatisfied, and 1= highly dissatisfied. Reverse coded from survey.

The largest source of dissatisfaction existed with respondents' opinions about public hunters, with 21.2% stating they were moderately or highly dissatisfied with the quality of public hunters. Conversely, only 1.5% of respondents were moderately dissatisfied with the quality of private hunters. Respondents were asked to state why they are dissatisfied; many reported that "public hunters expect too much." Respondents were asked to rate, on a scale of 1 to 5 (with 1 being never and 5 representing eight or more incidents per year), the frequency of certain problems they may have with their public and private hunters, respectively. Overall, respondents reported few problems with vandalism, carelessness with firearms, game law violations, trespass onto neighboring lands, unwillingness to accept hunt dates, and complaints to the CWMU or UDWR. There was not a significant difference between problems CWMUs had with private and public hunters; mean responses for all categories ranged from 1.09 to 1.83. However, there was a noticeable difference between the private and public hunters when operators were asked about hunters who drive off designated roads. The mean score for private hunters was 1.59 and public hunters received 2.31.

Respondents were asked their opinion on the overall satisfaction of their public and private hunter experiences, with 5 representing highly satisfied and 1 representing highly dissatisfied. Respondents felt that both public and private hunters held similar satisfaction, between highly and moderately satisfied for nearly every category. Respondents did believe that their private hunters were slightly less satisfied regarding the number of legal animals seen (4.53) than their public hunters (4.62), the number of trophy animals seen (3.97 private and 4.03 public), information about where to hunt (4.61 private and 4.67 public) and with the value for the price, (4.42 private and 4.68 public). A study of Utah CWMU hunter experiences completed at the same time as this study indicated a slight, but not unexpected, disparity between CWMU operator and hunter perceptions (McCoy et al. 2003). This disparity is shown in Table 9.

Table 9: Satisfaction with CWMU experiences.

	CWMU Perception		Hunter Perception	
	private	public	private	public
Overall hunt quality	4.61	4.56	4.4	4.1
Number of legal animals seen	4.53	4.62	4.1	3.8
Number of trophy animals seen	3.97	4.03	3.5	3.3
Effort to harvest	4.19	4.17	4.2	3.9
Number of days allowed to hunt	4.53	4.65	4.3	3.8
Time of year for hunt	4.48	4.52	4.9	4.0
Information about CWMU	4.65	4.53	4.1	3.8
Information about where to hunt on CWMU	4.61	4.67	4.3	4.1
Hospitality by CWMU	4.78	4.76	4.6	4.1
Value for the price	4.42	4.68	4.1	4.1

Respondents are relatively confident that the CWMU program will continue through the next decade, with 70.4% reporting they are somewhat or very confident the program will exist 10 years from now. Just over 11% were somewhat to very unconfident about the program's future. Respondents were also asked whether they would invest more time or money into their CWMU operation if the program were guaranteed to exist for the next 10 years (35.7% said yes), 11-20 years (22.9% said yes) or more than 20 years (17.1% said yes). Of the 35.7% who reported "yes" to the next 10 years, 22 (88%) stated they would make additional habitat improvements; seven listed water developments. Of the 22.9% who reported they would make additional investments if the program were guaranteed to exist for the next 11-20 years, 13 (81.3%) stated they would invest in habitat improvements, and four reported they would make additional water developments. For the 17.1% who said they would make additional investments if the program were guaranteed to exist for longer than 20 years, habitat and water remained primary investments (75% and 33%, respectively). However, facility development (e.g., lodging) was a commonly listed investment (33%). Nearly a quarter, 24.3%, reported they would not make any additional investment over and above what they are currently making.

Discussion

This study was conducted to assess landowner and operator's perspectives on Utah's CWMU program. Overall, landowners and operators who responded to the survey seemed satisfied with the program. Most are profiting from their participation and are relatively satisfied with hunter quality. Many are making efforts to improve the quality of game on their CWMUs, strategies that primarily involve managing forage for wildlife, providing additional water developments, and decreasing harvest rates.

In 1986, four years prior to the inception of the CWMU program, Lucy Ann Jordan and John Workman at Utah State University conducted a study of fee hunting enterprises in Utah (Jordan and Workman, 1989). Several aspects of this 2001 study were designed to evaluate the changes that have taken place in the fee hunting landscape in the 15 years since the Jordan-Workman research. The average age of participants (56) hasn't significantly changed since 1986, when 40% of respondents were 55 years old. This indicates that, in contrast to traditional agricultural enterprises in the state, the CWMU program may be attracting younger participants. As the Jordan-Workman study participants were solely landowners, we questioned if there could be age differences between the classes of our respondents. While operators were slightly younger on average (50.4), the average age of landowner/operators and landowners was 55.1 and 58.3, respectively. A major difference that has arisen since the 1986 study is participant education. In 1986, 81% had completed high school, 47% attended college, and 8% held a graduate or professional degree. However, in 2001, 63% of respondents had completed a bachelor's degree, and 30.9% held a graduate or professional degree.

In 1986, the average fees charged for guided elk or deer hunts were \$2,133 (equivalent to

\$3,443 in 2001 dollars¹) and \$1,106 (\$1,786 in 2001 dollars), respectively. Unguided fees were significantly lower, \$71 (\$115 in 2001 dollars) for unguided elk and \$169 (\$273.04 in 2001 dollars). The study did not differentiate between antlered and antlerless species. When we combined our antlered and antlerless results, the average price for a CWMU guided elk permit in 2001 was \$4,597 and a guided deer permit was \$4,159. Unguided hunts averaged \$3,154 for elk and \$2,122 for deer. The average annual cash fee hunting income in 1986 was \$6,587 (\$10,642 in 2001 dollars), compared to \$95,909 in 2001. This is a significant change, however, recall that the mean was greatly affected by a few large operators and the 2001 median annual revenue was \$27,750. These comparisons reveal an interesting result. While the real price of all hunts has increased since 1986, the largest price increases occurred in the unguided hunt category.

The price of the permit itself may account for some of this difference; hunters in 1986 generally purchased their permits separately from purchasing access rights. However, adding the permit prices from 1986 (Table 10) to the cost of unguided and unguided hunts did not account for a significant portion of this difference. Additionally, the average annual cash fee hunting income also increased significantly, indicating that there is a strong market for private hunting opportunities.

Table 10: Permit prices for 1986².

Permit Type	Resident	Non-Resident
Big Game License (deer tag attached)	\$15	\$120
Muzzle-loader buck deer	\$10	\$10
Archery buck deer	\$10	\$10
High Country buck deer	\$22	\$22
Limited Entry buck deer	\$22	\$22
Archery bull elk	\$30	\$100
General Season bull elk	\$30	\$100
Limited Entry bull elk	\$52	\$202
Muzzle-loader bull elk	\$52	\$202

²1986 dollars

The CWMU program may be encouraging landowners to make additional investments in the wildlife enterprise. In 1986, 19% of fee-hunting landowners had made habitat improvements (forage or wetland/pond development). In 2001, 60% reported managing their forage with wildlife

¹In 1986 \$2,133 had the same purchasing power as \$3,443 in 2001 (Consumer Price Index).

in mind, 46.7% provide additional water developments, and 34.7% seed with plants favorable for game.

The Jordan-Workman (1989) study also found that landowner participation in fee hunting is somewhat irregular from year to year, stating that "Apparently there is a group of landowners that move into and out of fee hunting as circumstances dictate." The CWMU program may be encouraging regular participation, as there was not an indication that landowners and operators move into or out of the program. In 1986, the primary reason landowners initiated fee hunting was to control trespass, the second was profit. In 2001, profit was the primary motivation and alleviating trespassing pressure was second. Landowners in 1986 reported that road and facility maintenance were their most troublesome costs, and 33% indicated they have had problems with paying hunters damaging property. In 2001, respondents reported almost no vandalism from private and public hunters. Driving off road was a bit more of a problem; however, the average response indicated that there is fewer than one incident per year for private hunters and fewer than four incidents per year for public hunters.

Services provided to hunters may also be increasing. In 1986, 11% of landowners provided no additional services to their fee-paying hunters. When respondents did offer services, they provided primarily water and campsites. In 2001, all respondents reported offering additional goods and services. Maps, animal retrieval, meals, and lodging were the goods and services most frequently offered. Although our data indicates that fewer services, namely meals, lodging, and animal retrieval are offered to guided public hunters than to guided private hunters, this may not indicate that CWMUs are favoring their private hunters. As public hunters are Utah residents, it is possible that CWMUs do not offer meals and lodging because they are not needed by those Utah residents who live near CWMUs.

While some CWMUs appear to be offering additional recreational opportunities on their lands, hunting seems to be the sole recreational income-generating enterprise for most. That many landowners do allow hiking, camping, scenic driving, photography, and bird/wildlife watching reveals that the opportunity does exist for cultivating additional recreational income. A few participants stated they do charge for these activities, but while fees tended not to vary between activity, they did range from \$8 to \$200 per day, depending on the CWMU. As the population of Utah, particularly the concentration along the Wasatch front, increases the pressure for public land recreation, the demand for a less-crowded recreational experience on private lands may rise, offering CWMUs the opportunity to capitalize on their relatively large, contiguous acreage.

A small number of respondents (7) reported they obtain permits from other CWMUs; however, the mean number of permits obtained was 22.29, with a median of 12. This may indicate that CWMU operators serve as guides on other CWMUs. Many CWMU participants are involved with multiple CWMUs. Twenty-one landowners, operators, or landowner operators participate in more than one CWMU. Of these are 13 who serve as operators for multiple CWMUs, indicating that CWMU management is a full-time business for some individuals.

One significant change over the past 15 years is the residency of fee-paying hunters. In 1986, 44% of landowners believed that between 90 and 100% of their hunters were Utah residents. Only 15% of landowners stated that less than half of their hunters are Utah residents. In 2001, 70.2% of private clients were non-residents, leaving 29.8% of resident private clients. Note that these percentages do not include the public permits that are reserved for Utah residents. The 2001 survey asked respondents if their CWMU receives the current 90/10 permit allocation (90% of permits allocated are for private use, while 10% are reserved for the public draw). The ratio of yes to no responses was 2:1, indicating that around a third of respondents do not receive this split. Respondents were asked what allocation they do receive and answers ranged from 50/50 to 80/20. None indicated the percentage of private permits is greater than 90%. This is consistent with UDWR's philosophy that each permitted species on a CWMU should receive at least one public permit. Therefore, if a CWMU is allowed only two permits for a given species, the allocation is 50/50. Table 11 illustrates the 2001 percentage of permits allocated to the public for antlered species. For all species and permits, the average percentage of permits allocated to the public was 38%.

Table 11: Permit Allocations.

Permit Type	Percent to Public
Antlered Deer	12.3%
Antlered Elk	15%
Antlered Moose	41%
Pronghorn Buck	40%

Although out-of-state hunters may bring a significant amount of revenue to the state's economy, concern remains that the CWMU program is restricting opportunities for resident hunters who are unable to pay a higher price for private permits. Survey respondents were asked to describe their investment in the program if the current standard 90/10 split was changed. Respondents were informed that investment could include spending more time or money on additional services or range improvements, etc. If 100% of the permits were allocated to the CWMU (no public permits), over two-thirds (70.3%) reported they would somewhat or greatly increase their investment in the program. Over a quarter (25.9%) stated they would not change their investment. If the allocation dropped to 70/30, almost half stated they would slightly or greatly decrease their investment in the program and 36.7% reported they would stop participating in the program. When the allocated percentages were lowered to 50/50, 72.4% stated they would no longer participate in the CWMU program and 20.7% would greatly decrease their investment. These results indicate that policy makers should tread carefully in their attempts to obtain additional resident hunting opportunities in the CWMU program as the state may lose both total hunting opportunities and wildlife benefits on private land if the current 90/10 allocation is reduced.

Utah's CWMU program is opening up additional land for public hunting. Prior to participation in the program, only 30% of respondents allowed public hunting on their lands free of charge. Survey responses indicate that the CWMU program has opened 343,847 acres to public hunting (240,000 of owned acres and 103,131 leased). As our respondents represent only two-thirds of Utah's CWMUs, the total acreage now available to public hunting likely exceeds this amount.

While the surveys we received represent 64% of Utah's CWMUs, our total response rate was very low, 25.3%. As of 2002, there were 83 CWMUs in Utah. The average number of participants in a Utah CWMU is 3.52. Informal interviews with several landowners and operators during survey design revealed that when several landowners comprise one CWMU, many landowner activities (e.g. habitat improvements, operational costs, or even permit sales) occur autonomously. Contacting only one landowner or operator per CWMU could have neglected important information and therefore surveys were mailed to all 296 participants. After the second survey mailing, we attempted to contact 214 non-respondents and were able to speak with 41 participants. Ten respondents did not have a telephone number, and we were unable to contact 173. Of those contacted, three agreed to (and did) complete the survey. Of the remainder, 12 reported that even though they remain official landowners in a CWMU, someone else handles all of their CWMU business (often this was a relative). Eleven stated they did not possess the information needed to complete the survey, five indicated they were too busy, three believed the survey required too much personal information, three weren't interested, two were no longer participants in the CWMU program, and two were deceased. Non-respondent comments indicate there may be a significant number of unofficial participants in the program and that many landowners may be participating in name only. This is a curious result, as any landowner who contributes land to a CWMU program bears real costs and would also earn revenues from participation. The condition of private lands can greatly affect wildlife; UDWR may be well served to add these "unofficial" participants to their CWMU database, as these people seem to be taking an active role in management activities.

Conclusion

Whether the CWMU program is satisfying its five objectives is dependant upon both hunter and landowner/operator experiences. As this research was limited to landowner and operator perceptions, the answer to this question remains somewhat one-sided. The program is providing income for both landowners and operators, most of whom are making a profit. Landowner investment in the CWMU enterprise may be increasing wildlife habitat as shown by a change in some grazing practices, more water developments, and forage management for wildlife. While landowners and operators continue to report some trespassing problems, alleviating trespass pressure is no longer the primary motivation for respondents enrolling in the CWMU program, with over half of the respondents stating that this was not a reason they joined the program. Prior to enrolling in the program, many landowners (33%) did not allow any public hunting access to their lands. Another 35% allowed public hunting only if they purchased trespass rights. With over 1,600,367 acres of private land enrolled in the CWMU program in 2001, these

results indicate that the program is providing access to both public and private hunters. Although operators believe the CWMU program is creating satisfying hunting opportunities, this objective depends upon the hunter perspective. A separate 2002 survey of CWMU hunters indicates that the program is satisfying this objective (McCoy et al. 2003).

The creation of CWMUs may offer landowners and operators opportunities for additional enterprise development on these lands. Contiguous blocks of 5,000 or more acres may be ideal for satisfying a future demand for private recreational experiences. Nevertheless, the primary enterprise for most landowners remains agriculture, with livestock and crops comprising an average of 45.25% of total household income.

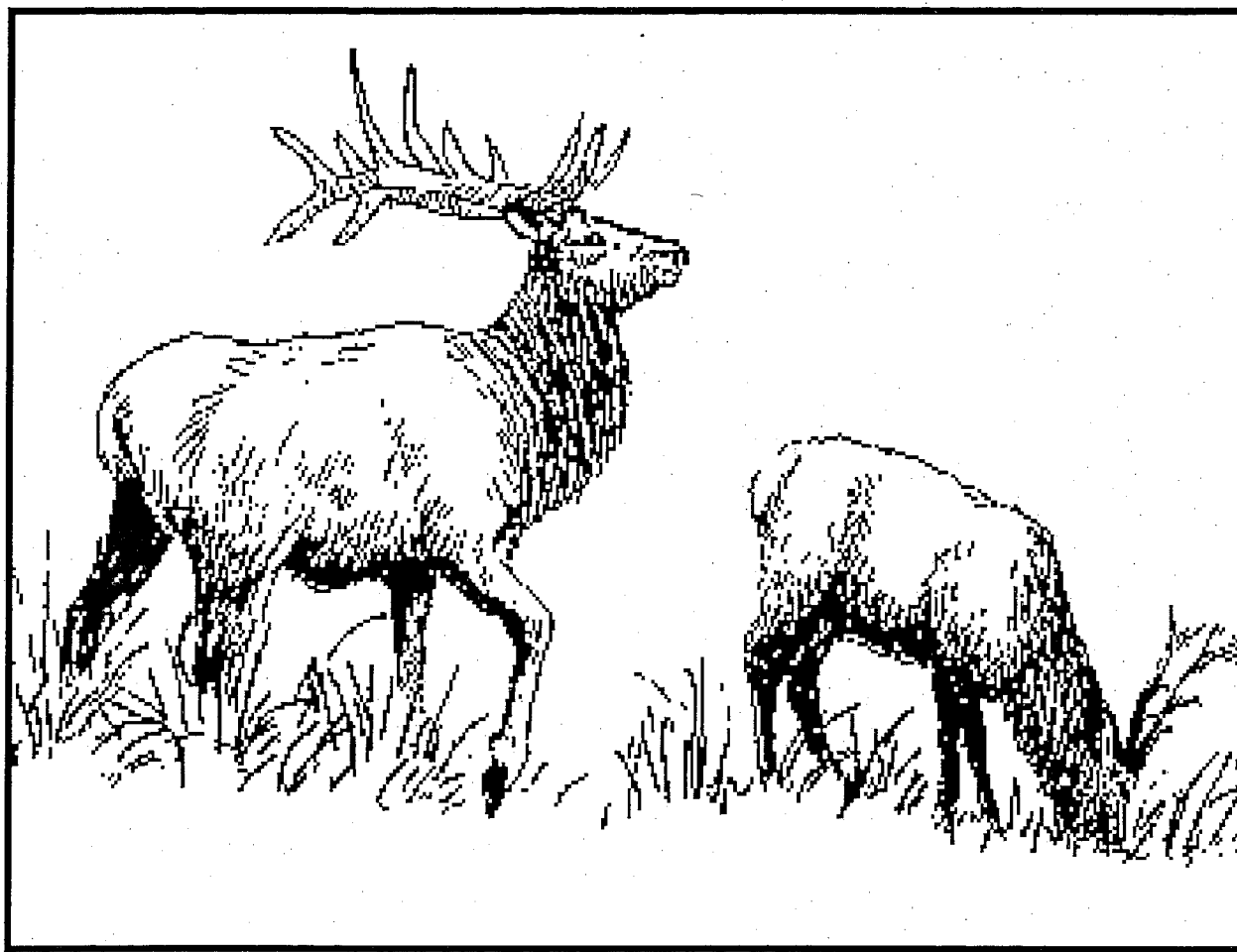
The CWMU program appears to have offered a stability in the private hunting market that the earlier informal fee hunting program was unable to provide. The legislative authority establishing the program offers landowners and operators confidence about the future existence of the program, providing landowners and operators with incentives to improve wildlife habitat, construct infrastructure, and improve guest services. Any proposed future changes to the program should be evaluated on the impacts they may have on these incentives, as it is these motivations that determine how and whether the program's objectives are satisfied.

References

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Appendices

Survey of Utah CWMU Landowners, Operators, and Landowner/Operators



**CWMU Association and Jack H. Berryman Institute
Rangeland Resources Department
Utah State University**

Survey of CWMU Landowners, Operators, and Landowner/Operators

Thank you for taking the time to complete this survey. The questions asked all pertain to the 2001 hunting season (through January 2002). The survey is divided into five sections. Please carefully follow the brief instructions preceding each section, as some sections may not apply to all respondents. We leave it up to the respondent to determine their status as landowners or operators or landowner/operators. Participants completing more than one survey (for multiple CWMUs) need only fill-out Section IV once. If we do not receive this survey within two weeks of this mailing, we will call you to see if there is further clarification we can provide on any of the questions.

SECTION I: TO BE COMPLETED BY ALL CWMU LANDOWNERS, OPERATORS, AND LANDOWNER/OPERATORS

1. For this CWMU are you a(n):
 Operator
 Landowner/Operator
 Landowner

2. As of Fall 2001, how long have you participated as either a landowner or operator in Utah's CWMU (or BGPDU) program? _____ years

3. What was your reason(s) for enrolling in the CWMU program? (Check all that apply)
 Provides an additional source of revenue
 Compensates for wildlife depredation
 Alleviates trespassing pressure
 Being able to hunt your own land without having to draw a permit
 Enjoy providing habitat for wildlife
 Other _____

4. Including yourself, how many landowners or operators are part of your CWMU?
 Operators Landowners

5. How large is this CWMU? _____ Acres

6. How many acres within this CWMU do you personally own _____ and/or lease _____?

7. Which of the following best describes this CWMU operation? (Check one)
 Sole proprietorship or partnership operated by family
 Family-owned corporation and family-operated
 Family-owned corporation but NOT family-operated
 Non-family corporation
 Other (Please explain) _____

8. Which ONE of the following statements best describes the MAIN GOAL from your participation in this CWMU? (Check one)
 Profit from CWMU
 Profit and lifestyle
 Lifestyle or hobby
 The CWMU operation is used to reduce tax liability
 Other (Please explain) _____

9. In 2001, how many permits: _____ was this CWMU issued by UDWR
_____ did you obtain from other CWMUs

10. Is one of the landowners or operators designated as a business manager who accounts for all costs incurred and revenues earned by the CWMU partners?

Yes No
Yes No

[IF YES], Are you this person?

11. If there is a partnership or there are multiple operators or landowner/operators in your CWMU, please indicate how the CWMU manages its costs and revenues. (Check the most appropriate)

- Partnership or other business entity pays all expenses plus issues payments to partners
- Allocated according to a predetermined agreement (i.e. partnership agreement, etc.)
- Each member submits a record of costs/sales to a business manager
- All permit sales are handled by one person and individual members submit a record of costs to be reimbursed
- There is no business manager, but all participants get together to record expenses/revenues
- Other (Please explain) _____

12. Which actions have you taken as a result of your participation in the CWMU program?
(Check all that apply)

- Reduce total livestock numbers
- Change dates that livestock graze
- Change locations in which livestock graze
- Reduce total days that livestock are allowed to graze
- Change fencing type
- Change fencing location
- Seed with plants preferred by game
- Manage forage with wildlife in mind
- Provide supplemental feed for wildlife
- Provide more mineral supplements
- Provide additional water developments
- Decrease harvest of bucks/does (Not use all of your tags)
- Implement a more aggressive predator control plan
- Other _____

13. In 2001 did any of the following game species cause noticeable damage to the CWMU?

			<u>Average dollar damage in 2001</u>
Elk	Yes	No	\$ _____
Deer	Yes	No	\$ _____
Moose	Yes	No	\$ _____
Pronghorn	Yes	No	\$ _____
Other _____	Yes	No	\$ _____

14. There may be a number of wildlife species that are found on this CWMU. Please check the species you know to exist on the CWMU, what time of year they are present, and where they are located.

					Present on CWMU	Present on my portion of CWMU	Population large enough to hunt on CWMU
<u>Circle all that apply</u>							
<input type="checkbox"/> Elk	fall	winter	spring	summer	___	___	___
<input type="checkbox"/> Deer	fall	winter	spring	summer	___	___	___
<input type="checkbox"/> Pronghorn	fall	winter	spring	summer	___	___	___
<input type="checkbox"/> Moose	fall	winter	spring	summer	___	___	___
<input type="checkbox"/> Mountain lion	fall	winter	spring	summer	___	___	___
<input type="checkbox"/> Furbearers	fall	winter	spring	summer	___	___	___
<input type="checkbox"/> Coyotes	fall	winter	spring	summer	___	___	___
<input type="checkbox"/> Waterfowl	fall	winter	spring	summer	___	___	___
<input type="checkbox"/> Sharptail grouse	fall	winter	spring	summer	___	___	___
<input type="checkbox"/> Blue/roughed grouse	fall	winter	spring	summer	___	___	___
<input type="checkbox"/> Turkeys	fall	winter	spring	summer	___	___	___
<input type="checkbox"/> Sage grouse	fall	winter	spring	summer	___	___	___
<input type="checkbox"/> Black bears	fall	winter	spring	summer	___	___	___
<input type="checkbox"/> Other _____	fall	winter	spring	summer	___	___	___

15. Which of the following activities below do you allow the general public to do on your CWMU? (Check all that apply)

	<u>Charge</u>	<u>Per (Circle one)</u>		
<input type="checkbox"/> Hiking	\$ _____	day	week	no charge
<input type="checkbox"/> Camping	\$ _____	day	week	no charge
<input type="checkbox"/> Scenic driving	\$ _____	day	week	no charge
<input type="checkbox"/> Picnicking	\$ _____	day	week	no charge
<input type="checkbox"/> Photography	\$ _____	day	week	no charge
<input type="checkbox"/> Bird/wildlife watching	\$ _____	day	week	no charge
<input type="checkbox"/> ATV riding	\$ _____	day	week	no charge
<input type="checkbox"/> Horseback riding	\$ _____	day	week	no charge
<input type="checkbox"/> Mountain Biking	\$ _____	day	week	no charge
<input type="checkbox"/> Wood Cutting	\$ _____	day	week	no charge
<input type="checkbox"/> Fishing	\$ _____	day	week	no charge
<input type="checkbox"/> Other _____	\$ _____	day	week	no charge

16. Would you invest more time and/or dollars into your CWMU operation if the CWMU program were guaranteed to exist for the: (Check only one)

- Next 10 years
- Next 11 to 20 years
- More than 20 years
- I would not make any additional investment

What changes would you make if the program were guaranteed to exist for the number of years you marked above:

- 1- _____
- 2- _____
- 3- _____
- 4- _____

17. How confident are you that Utah's CWMU program will be existence 10 years from now?
(Check one)

- Very confident
- Somewhat confident
- Neutral
- Somewhat *un*confident
- Very *un*confident

18. Now we want to gather information on how satisfied you are with the following:

- 1= **Highly Satisfied** 3= **Neutral** 5= **Highly Dissatisfied**
 2= **Moderately Satisfied** 4= **Moderately Dissatisfied** NA= **Not applicable**

CWMU minimum size requirement	1	2	3	4	5	NA
Working relationship with partner(s) in my CWMU operation	1	2	3	4	5	NA
Effort of other partner(s) compared to my own	1	2	3	4	5	NA
CWMU Association	1	2	3	4	5	NA
Quality of <u>private</u> hunters	1	2	3	4	5	NA
Quality of <u>public</u> hunters	1	2	3	4	5	NA
Support of CWMU program by the UDWR	1	2	3	4	5	NA
Relationship with and trust of UDWR	1	2	3	4	5	NA
Total number of permits allotted	1	2	3	4	5	NA
90/10 split between private and public permits	1	2	3	4	5	NA

19. If you are moderately (4) or highly dissatisfied (5) please state why.

IF YOU ARE A LANDOWNER BUT ARE NOT AN OPERATOR OR LANDOWNER/OPERATOR FOR THIS CWMU, PLEASE SKIP TO QUESTION 39.

Section II: TO BE COMPLETED BY CWMU OPERATORS AND LANDOWNER/OPERATORS

20. As an operator or landowner/operator, from how many other landowners do you lease?
(Do not include yourself; circle only one.)

- 0 1 2 3 4 5 6 7 or more

21. In 2001, how many private permits was your CWMU allotted by the UDWR?

Total Private Permits Allotted

Elk	-Antlered	_____
	-Antlerless	_____
Pronghorn	-Buck	_____
	-Doe	_____
Moose	-Antlered	_____
	-Antlerless	_____
Deer	-Antlered	_____
	-Antlerless	_____
Other	_____	_____

22. Of the permits listed in Question 21 please tell us how many were allocated in the following categories.

		<u>Sold to Customer</u>	<u>Sold to guide/outfitter</u>	<u>Gifts to friends and family</u>	<u>Payment in lieu of goods or services</u>
Elk	-Antlered	___	___	___	___
	-Antlerless	___	___	___	___
Pronghorn	-Buck	___	___	___	___
	-Doe	___	___	___	___
Moose	-Antlered	___	___	___	___
	-Antlerless	___	___	___	___
Deer	-Antlered	___	___	___	___
	-Antlerless	___	___	___	___
Other	_____	___	___	___	___

23. In 2001 were all of your permits used? (either sold or given away; an unsuccessful hunt counts as a use)

Yes No

[IF NO], How many were not used? ___ Doe
 ___ Buck/Bull

What was your reason for not using all of your 2001 permits? _____

24. In 2001, How many of your:

- ___ Private hunters were from out-of-state?
- ___ Private hunters were from in-state?
- ___ Total hunters were return clients from previous years?

25. What type of lodging do you provide for your clients? (Check all that apply)

- | | | | |
|--|--|-----|----|
| ___ Wall Tents | Built specifically for CWMU operation? | Yes | No |
| ___ Cabins | Built specifically for CWMU operation? | Yes | No |
| ___ Camper Trailers | Purchased specifically for CWMU operation? | Yes | No |
| ___ Campsite | Built specifically for CWMU operation? | Yes | No |
| ___ Other _____ | Built specifically for CWMU operation? | Yes | No |
| ___ We do not provide overnight lodging. | | | |

26. In 2001, which of the following goods and services did this CWMU provide?
(Check all that apply)

	<u>Provided as part of the hunt</u>				<u>Provided for an additional fee</u> (e.g. \$5.00 / Map)	
	<u>Guided</u>		<u>Unguided</u>		<u>Private</u>	<u>Public</u>
	<u>Private</u>	<u>Public</u>	<u>Private</u>	<u>Public</u>		
Maps	___	___	___	___	\$ ___ / ___	\$ ___ / ___
Camping site	___	___	___	___	\$ ___ / ___	\$ ___ / ___
Meals	___	___	___	___	\$ ___ / ___	\$ ___ / ___
Lodging	___	___	___	___	\$ ___ / ___	\$ ___ / ___
Transportation	___	___	___	___	\$ ___ / ___	\$ ___ / ___
Animal retrieval	___	___	___	___	\$ ___ / ___	\$ ___ / ___
Taxidermy	___	___	___	___	\$ ___ / ___	\$ ___ / ___
Meat processing	___	___	___	___	\$ ___ / ___	\$ ___ / ___
Meat shipping	___	___	___	___	\$ ___ / ___	\$ ___ / ___
Horses	___	___	___	___	\$ ___ / ___	\$ ___ / ___
Tours/sightseeing	___	___	___	___	\$ ___ / ___	\$ ___ / ___
Scouting	___	___	___	___	\$ ___ / ___	\$ ___ / ___
Other _____	___	___	___	___	\$ ___ / ___	\$ ___ / ___

27. What is the average number of permitted hunters that you allow per hunt?

<u>Guided</u>	<u>Unguided</u>
___ Private Hunters	___ Private Hunters
___ Public Hunters	___ Public Hunters

28. In the 2001 hunting season, please indicate on average how many days per hunt public and private hunters were allowed to hunt on this CWMU.

<u>Hunt</u>	<u>Public Hunters</u>	<u>Private Hunters</u>
Elk -Antlered	___ Days	___ Days
Pronghorn-Buck	___ Days	___ Days
Moose-Antlered	___ Days	___ Days
Deer -Antlered	___ Days	___ Days

29. Which statement best describes how your CWMU schedules public draw and private hunters during the season.

- ___ We set hunt dates on a strictly first-come first-served basis (public or private).
- ___ We pre-set separate dates for both public and private hunters.
- ___ We pre-set dates and hold a lottery for all hunters to fill the dates
- ___ We try to schedule most private clients before we schedule public hunters.
- ___ Other (Please explain) _____

30. In 2001, what was the total revenue earned by your CWMU from the sale of permits and hunts? \$ _____

What percentage of this total (not including costs) do you expect to receive? _____%

31. What percentage of this CWMU's total revenue would you allocate to the following costs that may be part of the program. (Total may add up to less than 100%)

- _____ % Permit
- _____ % Food
- _____ % Equipment (Vehicles, ATV's)
- _____ % Lodging (Tents, Cabins)
- _____ % Labor (Guide, Cook, Operator effort)
- _____ % Other services (Transportation, Meat processing, etc...)

32. In 2001, what would you estimate were the total costs you spent as a participant in this CWMU in the following categories: (Do not include costs for the entire CWMU unless you are the sole landowner/operator.)

- \$ _____ Range leases
- \$ _____ Promotions (hunting shows, outdoor trade shows, etc.)
- \$ _____ Payroll (wages)
- \$ _____ Maintenance (fencing and facilities)
- \$ _____ Miscellaneous items (sporting goods, equipment, etc.)
- \$ _____ Office Supplies (postage, phone, fax)
- \$ _____ Fuel
- \$ _____ Food (grocery or restaurant)
- \$ _____ Insurance
- \$ _____ Other

33. Please tell us the average price for which your CWMU sold the following permits in 2001. If a category does not apply, write N/A in the corresponding blank.

		Guided	Unguided
		Average price of permit sold	Average price of permit sold
Elk	-Antlered	\$ _____	\$ _____
	-Antlerless	\$ _____	\$ _____
Pronghorn	-Buck	\$ _____	\$ _____
	-Doe	\$ _____	\$ _____
Moose	-Antlered	\$ _____	\$ _____
	-Antlerless	\$ _____	\$ _____
Deer	-Antlered	\$ _____	\$ _____
	-Antlerless	\$ _____	\$ _____
Other	_____	\$ _____	\$ _____

34. The percentage of permits allocated between public and private hunters is currently approximately 90% private and 10% public for bull elk and buck deer. Do you currently receive this split?

Yes No

[IF NO], What split do you receive? _____

35. Recently there have been proposals in the Utah legislature to change the percentage of CWMU permits allocated between private and public hunters. Please indicate your response to the following scenarios that represent a change from the current 90/10 split. (Investment might include spending more time or money on services, range improvements, etc.)

1= Greatly increase investment in CWMU 3= No change 5= Greatly decrease
 2= Somewhat increase 4= Slightly decrease 6= Stop participating

100% of tags allocated to owner/operator	1	2	3	4	5	6
70 % of tags to owner/operator and 30% to public	1	2	3	4	5	6
50 % of tags to owner/operator and 50% to public	1	2	3	4	5	6

36. Please indicate your response to the following scenarios regarding increasing or decreasing the total number of tags your CWMU is issued per year. For example if you currently receive 10 permits, a 50% increase would give you 15. Assume that both the ratio of antlered to antlerless and the 90/10 split between private and public remains the same.

1= Greatly increase investment in CWMU 3= No change 5= Greatly decrease
 2= Somewhat increase 4= Slightly decrease 6= Stop participating

Total number of tags increase by 50%	1	2	3	4	5	6
Total number of tags increase by 10%	1	2	3	4	5	6
Total number of tags decrease by 10%	1	2	3	4	5	6
Total number of tags decrease by 50%	1	2	3	4	5	6

37. Now we want to gather information on the overall satisfaction of your CWMU **hunter** experiences. On a scale of **1** to **5**, please rate how satisfied on average you believe you private and public hunters were with their CWMU experience.

1= Highly Satisfied 4= Moderately Dissatisfied 5= Highly Dissatisfied
 2= Moderately Satisfied 3= Neutral DK= Don't Know

	<u>Private Hunters</u>						<u>Public Hunters</u>					
Overall quality of hunt	1	2	3	4	5	DK	1	2	3	4	5	DK
Number of legal animals seen	1	2	3	4	5	DK	1	2	3	4	5	DK
Number of trophy animals seen	1	2	3	4	5	DK	1	2	3	4	5	DK
Effort required to harvest an animal	1	2	3	4	5	DK	1	2	3	4	5	DK
Number of days allowed to hunt	1	2	3	4	5	DK	1	2	3	4	5	DK
Time of year hunt was conducted	1	2	3	4	5	DK	1	2	3	4	5	DK
Information about the hunt	1	2	3	4	5	DK	1	2	3	4	5	DK
Information about where to hunt	1	2	3	4	5	DK	1	2	3	4	5	DK
Hospitality shown by staff and/or operator	1	2	3	4	5	DK	1	2	3	4	5	DK
Value for the price	1	2	3	4	5	DK	1	2	3	4	5	DK

38. On a scale of 1 to 5, please rate the problems, if any, you have with your private and public hunters since your participation in the CWMU program.

- 1= Never (No incidents)
- 2= Very infrequent (1 incident per year or fewer)
- 3= Somewhat frequent (2-4 incidents per year)
- 4= Frequent (5-7 incidents per year)
- 5= Very frequent (8 or more incidents per year)
- NA= Not Applicable

	Private Hunters						Public Hunters					
	1	2	3	4	5	NA	1	2	3	4	5	NA
Vandalism												
Driving off road												
Carelessness with firearms												
Violation of game laws												
Neighboring CWMU hunter trespass												
Unwillingness to wear hunter orange												
Unwillingness to accept hunt dates												
Complaints to your CWMU or UDWR												
Hunters fail to show for scheduled hunt												

IF YOU ARE AN OPERATOR BUT ARE NOT A LANDOWNER OR LANDOWNER/OPERATOR FOR THIS CWMU, PLEASE SKIP TO QUESTION 43.

Section III: TO BE COMPLETED BY CWMU LANDOWNERS & LANDOWNER/OPERATORS

39. Please complete the following information with respect to the land that you own or lease.

- Total acres of private grazing land that you own _____ acres
- Total acres of grazing land that you lease _____ acres
- Total number of acres you own in the CWMU program _____ acres

If not all of your private grazing land is in the CWMU program, why not?

40. Before applying to the CWMU program did you: (Check those that apply)

- Allow friends and family to hunt on your land
- Allow general public to hunt on your land at no charge if they ask permission
- Allow general public to hunt on your land at no charge without permission
- Not allow general public to hunt on your land unless they purchase trespass rights
- Not allow any public hunters on your land
- Not allow any hunting on your land

41. Since your participation in the CWMU program, trespassing problems on your CWMU lands

- 1= Greatly Increased 3= No change 5= Greatly Decreased
 - 2= Somewhat Increased 4= Somewhat Decreased
- 1 2 3 4 5

42. What was your opinion of having elk, deer, moose, or pronghorn on your land before joining the CWMU program?

- 1= Very unfavorable 3= No opinion 5= Very favorable
 - 2= Unfavorable 4= Favorable
- 1 2 3 4 5

SECTION V: TO BE COMPLETED BY ALL PARTICIPANTS

The purpose of this part of the survey is to learn what costs go into starting a CWMU operation and maintaining the operation for one year. Please provide only information that is relevant to the CWMU (not the ranch as a whole). For example, you would only include dollars spent on range leases if the range you lease is part of the CWMU. Please fill in the following table as best as you can. There are three sections, 1-Fixed annual costs (costs you have to pay regardless of permit numbers), 2- Variable annual costs or (costs that can vary in any given year), and 3- Long term costs (costs paid for something you need for a while). Some items in the table below may not apply to you or your operation; just put a 0 where this is the case. Some items may be used for other purposes not directly related to the CWMU. For example, if you have horses and feed them year round, but also use them for the CWMU season, we only need to know how much it costs to maintain them (food, vet, shoes) for your CWMU hunting season.

Please complete this section in reference to only one CWMU. If you participate in multiple CWMUs and are unsure how to divide any costs between CWMUs, just make your best estimate of how they might be divided.

Item	Was this item a one-time only cost?		Total CWMU cost (If you know)	Your share of CWMU costs (for partners)	County where the majority of these costs are paid	Purchased specifically for CWMU operation?		% time during year devoted to non-CWMU purposes
	<u>Y</u>	<u>N</u>				<u>Y</u>	<u>N</u>	
COSTS YOU HAVE TO PAY REGARDLESS OF PERMIT NUMBERS								
All Licenses and Membership fees/dues (Business, CWMU, Corporation, etc.)			\$ _____	\$ _____	_____			____%
Range Lease			\$ _____	\$ _____	_____			____%
Insurance (Liability, Property, Other)			\$ _____	\$ _____	_____			____%
Interest on Loans			\$ _____	\$ _____	_____			____%
Property Taxes			\$ _____	\$ _____	_____			____%
Horse Feed			\$ _____	\$ _____	_____			____%

Item	Was this item a one-time only cost?		Total CWMU cost (If you know)	Your share of CWMU costs (for partners)	County where the majority of these costs are paid	Purchased specifically for CWMU operation?		% time during year devoted to non-CWMU purposes
	<u>Y</u>	<u>N</u>				<u>Y</u>	<u>N</u>	

COSTS THAT CAN VARY IN ANY GIVEN YEAR

Office Costs (Phone, Fax, Mail, etc.)			\$ _____	\$ _____	_____			____%
Refunds to Hunters			\$ _____	\$ _____	_____			____%
Advertising (Promotions, outdoor shows, etc.)			\$ _____	\$ _____	_____			____%
Taxes (Corporation, Income, and Other Taxes)			\$ _____	\$ _____	_____			____%
Gasoline			\$ _____	\$ _____	_____			____%
Tires			\$ _____	\$ _____	_____			____%
Regular Vehicle Servicing Costs and Mechanical Repairs			\$ _____	\$ _____	_____			____%
CWMU Related Costs (Fencing, Seeding, Roads)			\$ _____	\$ _____	_____			____%
Payroll Costs (Guides, Ranch Hands, Security, Employee Insurance, FICA, Benefits, Medicaid, etc.)			\$ _____	\$ _____	_____			____%
Hotels			\$ _____	\$ _____	_____			____%
Groceries			\$ _____	\$ _____	_____			____%
Restaurant			\$ _____	\$ _____	_____			____%

Item	Was this item a one-time only cost?		Total CWMU cost (If you know)	Your share of CWMU costs (for partners)	County where the majority of these costs are paid	Purchased specifically for CWMU operation?		% time during year devoted to non-CWMU purposes
	<u>Y</u>	<u>N</u>				<u>Y</u>	<u>N</u>	
Animal Costs (Veterinary Care Livestock Losses due to CWMU)			\$ _____	\$ _____	_____			____%
Taxidermy			\$ _____	\$ _____	_____			____%
Meat processing			\$ _____	\$ _____	_____			____%
COSTS PAID FOR LONG TERM INVESTMENTS								
Land Purchase			\$ _____	\$ _____	_____			____%
Vehicles for CWMU use: (Tractors, Trucks Bulldozers, ATV's, Vans Other Vehicles)			\$ _____	\$ _____	_____			____%
Bunkhouses and Tent furnishings and Bathroom Facilities			\$ _____	\$ _____	_____			____%
Misc. Equipment (camp equip, cooking equip, generators, etc.)			\$ _____	\$ _____	_____			____%
Purchase of horses and horse supplies (Saddles, Bits, etc.)			\$ _____	\$ _____	_____			____%

We would like to express our sincere appreciation to you for taking the time to complete this questionnaire. PLEASE RETURN YOUR COMPLETED QUESTIONNAIRE IN THE ENCLOSED, POSTAGE-PAID ENVELOPE. If you would like a summary of this study's results, just write **"copy of results requested"** and your address on the back of the return envelope. If there are any pressing concerns that need the attention of scientists, extension, and policy-makers, please **tell us about them** in the space below.