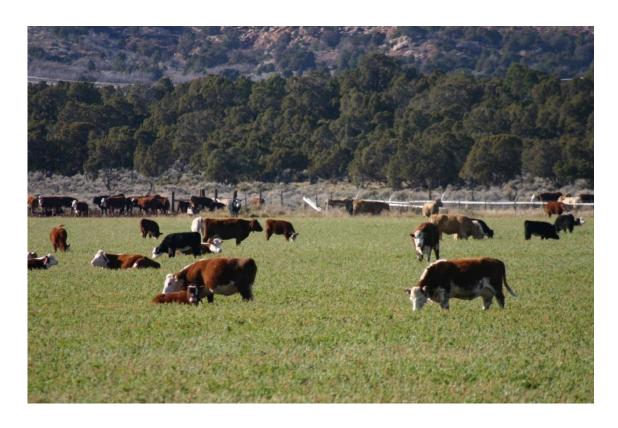
# Livestock Grazing in Utah: History and Status



A Report for the Utah Governor's Public Lands Policy Coordination Office

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#### **EXECUTIVE SUMMARY**

Livestock production has always been an important part of rural communities in Utah. However, little has been known about the characteristics of those livestock operators that do have (permittees) and do not have (non-permittees) one or more permits to graze lands that are administered by one of the state or federal agencies. This study was initiated in 2006 to provide some of the information desired by personnel associated with state/federal agencies and state/local government, as well as private citizens.

Data from published sources, as well as unpublished data obtained from federal and state agencies, were collected and summarized. These data indicate that livestock production is a very important part of economic activity in most rural communities in Utah, but the structure of the livestock industry has changed over time. Sheep production was the dominate livestock sector in Utah at the start of the 1900s, but sheep numbers rapidly declined in the 1930s and 1940s. This period of decline in the sheep industry was followed by growth in the beef industry as producers switched from sheep to cattle. These changes were not uniform throughout the state. For example, sheep numbers declined in every county between 1950 and 2002 except Box Elder County. The largest decline in sheep numbers occurred in Sanpete and Utah County, which were at one time the heart of the sheep industry in Utah. At the same time, the number of beef cows increased in every county but Washington, Kane, and Garfield. The net effect of these changes resulted in growth in rural counties in northern and central Utah. The areas that did not grow were in southern Utah and counties where urban growth has been rapid (Washington County and the Wasatch Front counties). The published data also suggest that while there are numerous livestock producers in Utah, production is dominated by a relatively few large producers.

Rangelands in Utah are primarily administered by the Bureau of Land Management (BLM) and Forest Service (FS). Data from the BLM indicate that use by domestic livestock has declined more than two-thirds over time. Most of this decline has been associated with the reduction of the sheep industry. Similar data for the FS indicate that declines in the use of FS lands have not been as dramatic as on BLM lands, but usage of FS lands today is about half what it was 60 years ago.

Every Utah livestock producer identified by the Utah office of the National Agricultural Statistics Service (NASS), as well as out-of-state operators with permits to graze public lands in Utah, were sent a survey that was designed to obtain information not available elsewhere. Analyses of these data indicate the following:

- 1. The number of animals owned by permittees is much larger than those owned by non-permittees.
- 2. Permittee operations are generally more dependent on livestock production than are non-permittees.
- 3. Permittee operations commonly involve more than one family, while non-permittee operations are single-family operations
- 4. Most livestock operations have been owned by the same family for many years (commonly more than 50), and a large portion plan to have a family member operate the ranch in the future. This was especially true of permittee ranches.

- 5. A large portion of livestock producer sales are made to local firms, but an even larger percentage of their purchases are from local firms. As a result, firms in communities where livestock production is a large portion of the area's economic activity are intimately concerned with the health of the livestock industry.
- 6. Pasture is the primary source of feed for non-permittee livestock operators when they are not being fed hay (winter), while forage from public lands is the most important source of feed for permittee operators. Pasturelands are an important source of feed for all operators, but use of federal lands allows permittees to reduce their dependency on hay as a source of feed.
- 7. The market for grazing permits is poorly understood and not well defined. As a result, little is known about the economic demand for grazing permits.
- 8. The threat of lawsuits is viewed as the most important factor that may affect the use of public lands by domestic livestock in the future. Low returns from ranching and fire/drought were also viewed as important factors that may affect the livestock grazing on public lands.
- 9. Most livestock producers believe that livestock grazing has a very positive influence on fire suppression. The impact of grazing on other uses (e.g., wildlife, water quality) was generally perceived to be neutral, with the possible exception of the spread of invasive species and weeds.
- 10. Actual use of permits was generally less than permitted use in 2006, but this is not unusual. Many permittees have and continue to take voluntary non-use of federal lands as a result of reduced forage availability (primarily associated with drought).
- 11. Lands administered by the BLM provide the largest percentage of grazed forage by those having permits to graze federal or state administered lands. However, the percentage varies in the regions outlined in the study.
- 12. The most critical period of use of public lands for most permittees was during the summer.
- 13. The most likely changes that would occur if usage of public lands was reduced were to reduce herd size, seek other sources of feed and/or supplement ranch income with off-ranch income.
- 14. Permittee ranchers viewed the sale or leasing of private lands as the least desirable alternative to reductions in the use of public lands.

#### **INDUSTRY PERSPECTIVE**

Livestock have been commercially grazed on lands in Utah for more than 150 years. The earliest record of grazing was by a herd of cattle owned by Miles Goodyear in the early 1840s. Native Americans probably grazed sheep and horses before that time. Grazing of lands by cattle and sheep in Utah increased rapidly after 1847, following the arrival of the pioneers in the Salt Lake Valley. While reliable data are not available concerning livestock numbers in Utah until after the turn of the century, it is generally conceded that sheep numbers (on an animal unit basis) exceeded cattle in importance. For example, USDA data indicate that there were about 170,000 beef cows in Utah in 1924 and 1.8 million ewes or about two times as many animal units (5 ewes are assumed to be equal to 1 cow¹) of ewes as there were beef cows. This changed shortly after the Taylor Grazing Act was passed in 1934 and with the advent of WWII. Many ranches were converted from sheep to cattle operations during this period. In fact, many of the large cattle ranches in Utah that exist today were originally sheep operations. The trend in the number of sheep and beef cattle are shown in Figures 1 and 2. These data indicate that livestock production in Utah has shifted from sheep to cattle.

The cattle industry has become the dominant sector in Utah agriculture; see Figures 3 and 4. The data in these figures indicate that the sale of cattle and calves represents about one-third of all cash receipts in the agricultural sector in Utah. This percentage has remained essentially stable for about 20 years, while sales from some sectors have changed over time. For example, hog sales increased rapidly over the last decade (primarily as a result of the growth of Circle 4 farms<sup>2</sup>), while sales from other sectors (including sheep and wool) have declined relative to other segments of agricultural production in Utah. It should be noted that much of the hay and some of the other crops are not sold for cash but are fed to livestock that are produced in the state. As a result, cash sales underrepresent the importance of crop production that is livestock feed.

The sale of livestock is particularly important in some counties (Figure 5). In most of these counties cattle and calves are the dominant livestock sector. The primary exceptions are Beaver and Sanpete County, where other livestock sales (hogs in Beaver and turkeys in Sanpete) are large. Dairy production is also important in Cache, Box Elder, Utah, Millard, and Sanpete counties -- dairy production is essentially non-existent in most counties of the state. But even in counties where dairy, hog, and turkey sales are large, the sale of cattle and calves is relatively important.

<sup>1</sup> This is the usual conversion ratio used in range management (Stoddard, Smith, & Box; Glossary of Terms used in Range Management)

<sup>&</sup>lt;sup>2</sup> Circle 4 farms is a large integrated hog operation located primarily in Beaver and Millard counties that started production in Utah in the mid 1990s. Utah ranked in the top 15 states nationally and the largest hog-producing state in the 11 western states in 2005. Most of the pigs in Utah are owned by Circle 4 farms.

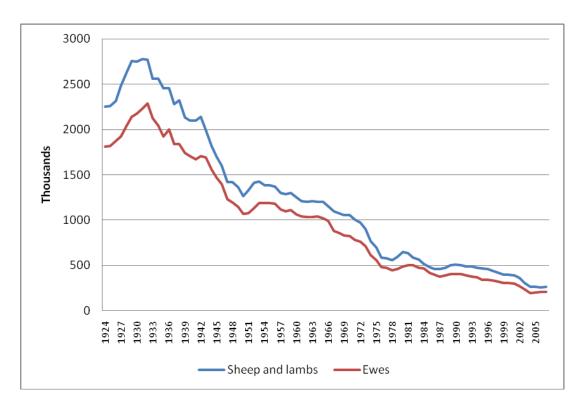


Figure 1. Number of sheep, lambs, and ewes in Utah, 1924-2007.



Figure 2. Number of cattle and calves in Utah, 1924-2007.

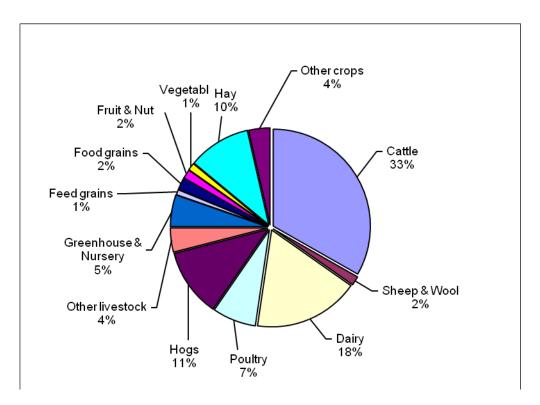


Figure 3. Percentage of cash receipts by agricultural sector in Utah, 2006.

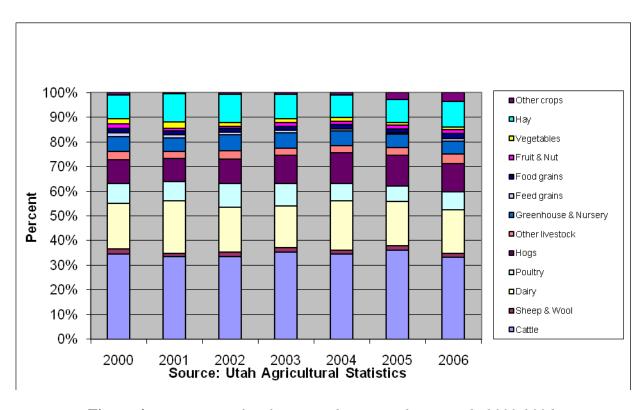
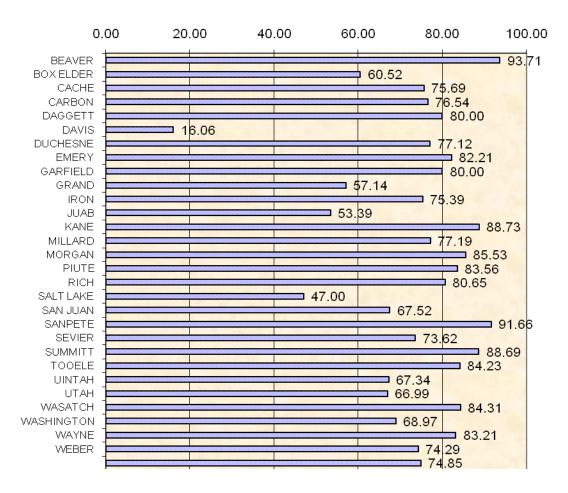


Figure 4. Percentage of cash receipts by commodity in Utah, 2000-2006.

The relative importance of livestock production in Utah is shown in Figure 6. The data in figures 4 and 6 suggest that livestock production is essentially synonymous with agricultural production in Utah: Utah agriculture is dominated by livestock production.

It should also be noted that the production of cattle and calves, as well as sheep/lambs, has generally grown in Utah relative to other states, as illustrated in Figures 7 and 8. However, the production of cattle, calves, and sheep in Utah is a relatively small percentage of United States production. This raises several questions concerning why livestock production in Utah has grown relative to other states. Other questions also arise within the state because growth has not been uniform throughout the state.

#### Percent



**Figure 5.** *Livestock and livestock products as percentage of total agricultural cash receipts by county in Utah, 2006.* 

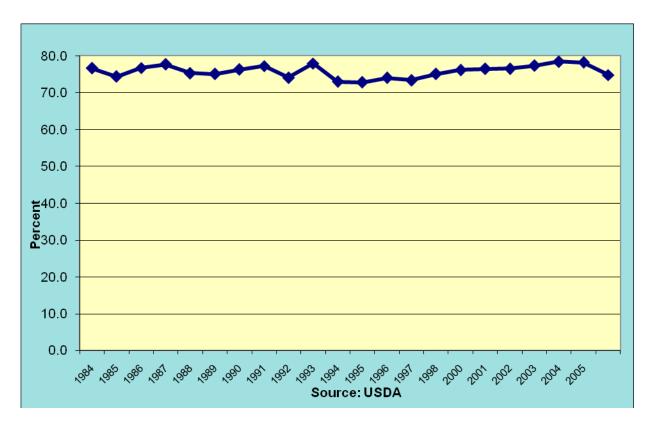
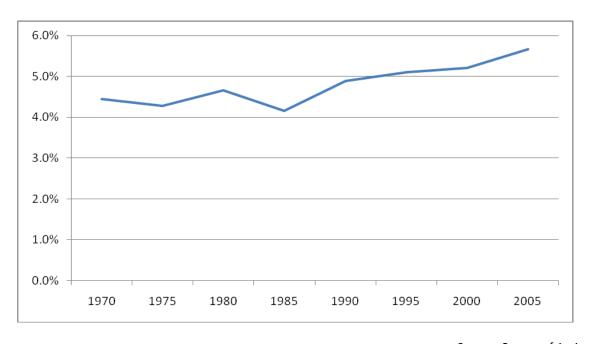
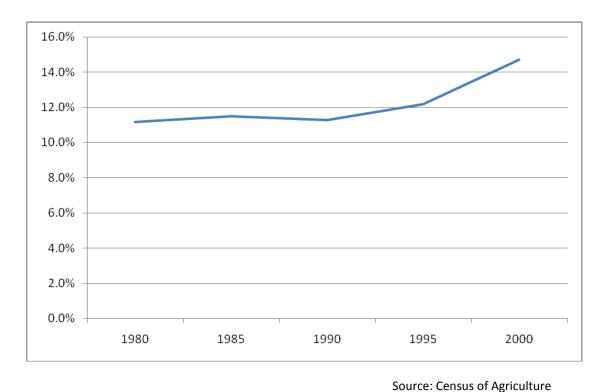


Figure 6. Livestock sales as a percent of total agricultural cash receipts in Utah, 1984-2006.



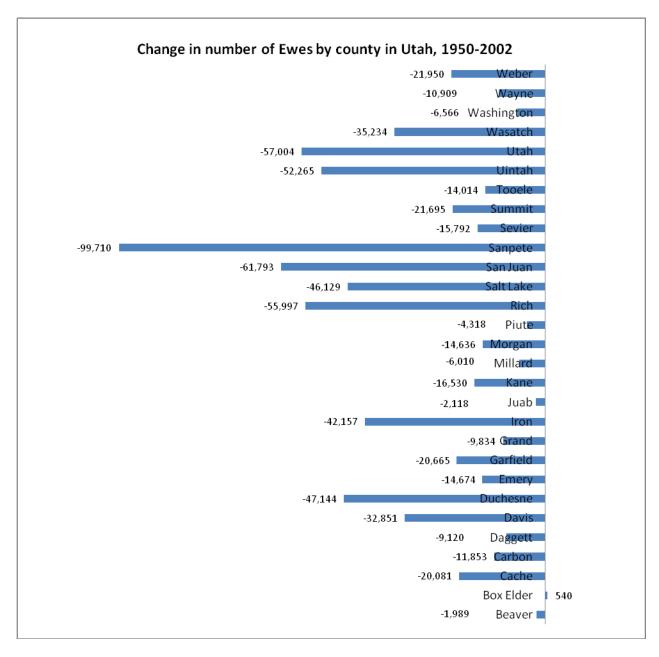
Source: Census of Agriculture

**Figure 7.** Beef cow numbers in Utah as a percent of those in the 11 western states, 1970-2005.



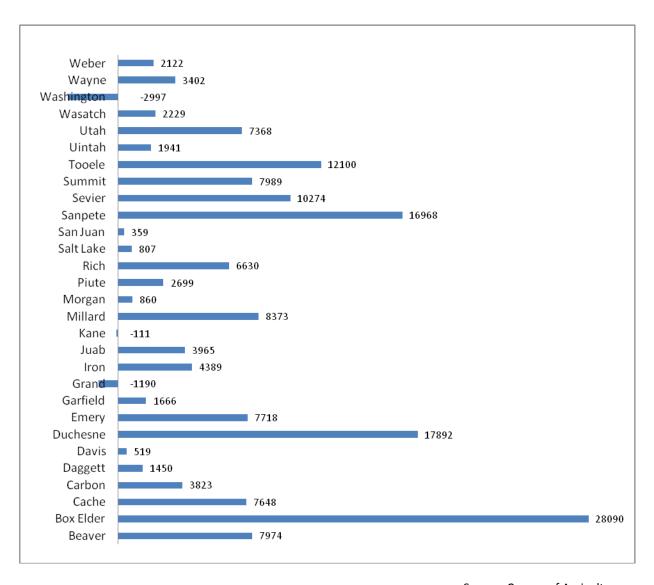
**Figure 8.** Sheep numbers in Utah as a percent of the 11 western states, 1980-2000.

For example, Census of Agriculture data indicate that ewe numbers declined in every county except Box Elder between 1950 and 2002, with the largest decline in Sanpete County (Figure 9). At the same time, beef cow numbers increased in every county except Grand, Kane, and Washington counties (Figure 10). These data show that beef cow numbers have generally increased in counties in the northern part of Utah, while counties in the southern part of the state have either declined or remained essentially unchanged during the last 50 years. For example, the three counties that border Arizona (San Juan, Kane, and Washington) either declined or had minimal growth, while the biggest increases occurred in Box Elder, Duchesne, Sanpete, and Tooele counties. The growth in cattle numbers in Sanpete County was probably the result of the large reduction in sheep numbers as producers shifted from sheep to cattle production.



**Figure 9.** Change in number of ewes in Utah by county, 1950-2002.

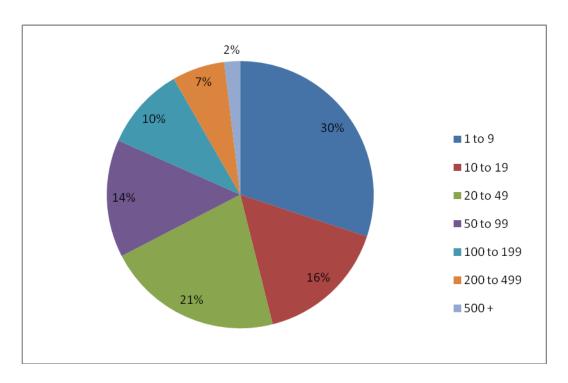
Source: Census of Agriculture



Source: Census of Agriculture

**Figure 10.** Change in the number of beef cows by county in Utah, 1950-2002.

The data in Figures 11 and 12 indicate that large producers dominate cattle production in Utah. For example, about two-thirds of the beef operations in Utah have fewer than 50 cows, and this group of firms only owns about 15% of the beef cows in the state. This compares to the two largest size classes (operations that have over 200 head), which represent about 9% of the operations and own more than 50% of the beef cows in the state, according to the 2002 Census of Agriculture. Similar data are not available for sheep operations in Utah, but personal knowledge of sheep operations in Utah suggests that large sheep operations are probably a more dominant portion of the sheep production in Utah than are the large beef operations.



**Figure 11.** Percentage of beef operations in Utah by size of herd, 2002.

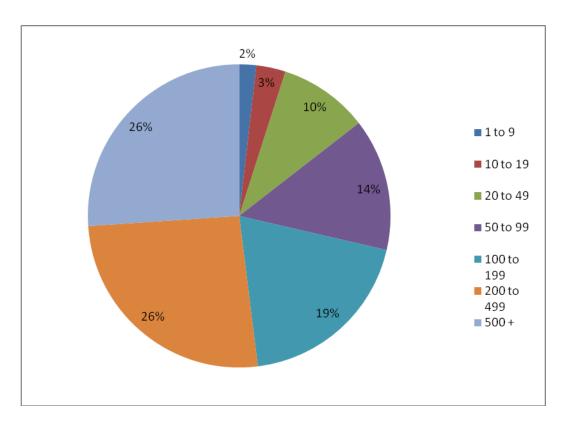


Figure 12. Percentage of cows owned by size of operation in Utah, 2002.

#### LIVESTOCK GRAZING AND PUBLIC LANDS

This publication will only provide data on the use of public and private lands in Utah by domestic livestock (sheep and beef cattle are emphasized because they are the primary domestic animals that graze rangelands in Utah) and outline some of the issues that are associated with this use.

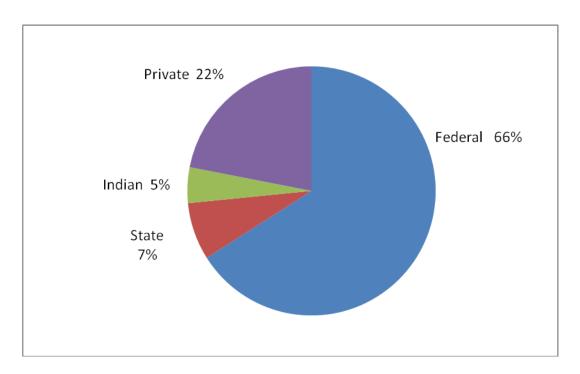
Nearly three-fourths of the land area of Utah is administered by agencies of the federal or state governments (Figure 13). The two primary agencies that administer federal lands in Utah are the Bureau of Land Management (BLM) and the Forest Service (FS), while the State and Institutional Trust Lands Administration (SITLA) manages most of the land owned by the state of Utah. The percentage of land that is administered by a government agency or by private landowners varies widely by county (Figure 14 and Table 1). For example, nearly 90% of the land in Garfield County is administered by agencies of the federal government and 5% is privately owned, while 93% of the land in Morgan County is privately owned and 4% is administered by an agency of the federal government.

The use of lands administered by the BLM and FS by livestock has varied over time. For example, data for the Forest Service indicates that permitted use by cattle, sheep, horses, and goats declined from a high of just over a million AUMs<sup>3</sup> in the 1940s to about half that amount in the 2000s (Figure 15). This decline pales in comparison to the decline in the use of BLM lands by sheep and goats (Figure 16). This decline was more than a ten-fold reduction from over 1.8 million AUMs in 1940 to about 130,000 AUMs in 2006. The overall decline (cattle and sheep) in the use of BLM lands by livestock has been over two million AUMs since 1940. The decline in the use of FS lands has not been as large—about 400,000 AUMS between 1940 and 2005. Furthermore, data since 2000 indicate that the trend in the use of FS lands is downward. Similar data for the BLM suggests that there was a reduction in authorized use in 2003, with increases in 2004-2006. However, the general trend is still downward.

The decline in the use of lands administered by the BLM and FS occurred at the same time that total livestock numbers have generally been stable (Figure 17). The increase in cattle numbers has commonly offset the decline in sheep on an animal unit basis (five sheep were assumed to equal one cow). This suggests that an increasing portion of the forage used by livestock in Utah is coming from private lands (Figure 19). It should also be noted that the changes have not been uniform throughout the state (Figure 18). For example, relatively large declines occurred in urban (e.g., Salt Lake and Davis) and "red rock" counties, such as San Juan. The biggest increases occurred in Box Elder, Beaver, Millard, Duchesne, Sevier, and Tooele counties. All of this suggests that adjustments have been made by producers in the counties based on factors such as urban growth, sometimes controversial grazing policies on federal lands, development and use of private lands, economic variables, and personal conditions. The desire to better understand these factors and the livestock industry in Utah have resulted in this study.

<sup>3</sup> An Animal Unit Month (AUM) is defined to be the amount of forage needed to feed a 1000-pound cow (or its equivalent) for one month. AUMs are the most commonly used measure of forage consumption and production but have many weaknesses (Gray) as a measurement of forage production or consumption.

13



**Figure 13.** Percentage of land area in Utah managed by federal agencies, state agencies, Indian lands and private land owners.

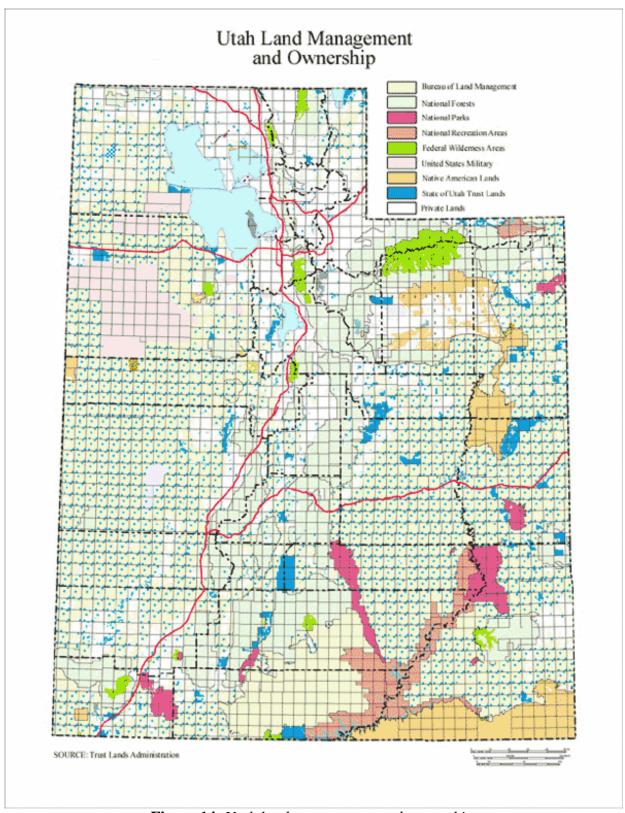
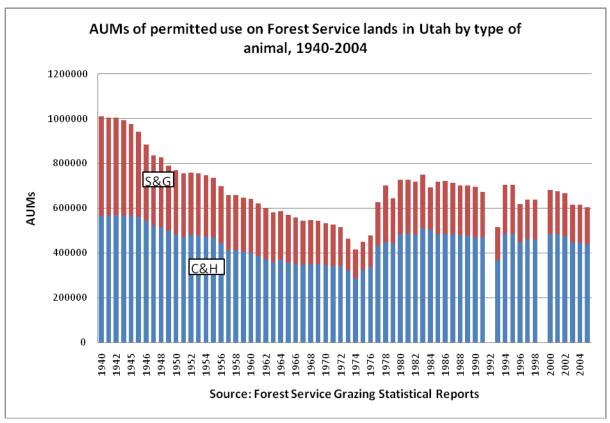


Figure 14. Utah land management and ownership.

**Table 1.** Percentage of land area in each county in Utah that is administered by specified agencies or is privately owned.

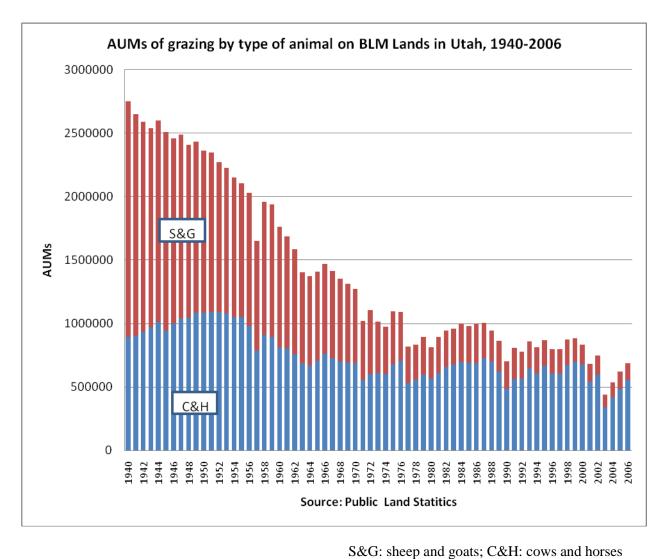
| County     | BLM | Forest<br>Service | Other<br>Federal | State | Indian | Private |
|------------|-----|-------------------|------------------|-------|--------|---------|
| Beaver     | 69% | 8%                | 0%               | 10%   | 0%     | 13%     |
| Box Elder  | 30% | 2%                | 7%               | 6%    | 0%     | 54%     |
| Cache      | 0%  | 30%               | 7%               | 5%    | 0%     | 58%     |
| Carbon     | 44% | 3%                | 0%               | 13%   | 0%     | 39%     |
| Daggett    | 25% | 37%               | 18%              | 9%    | 0%     | 11%     |
| Davis      | 0%  | 21%               | 4%               | 16%   | 0%     | 58%     |
| Duchesne   | 10% | 22%               | 13%              | 7%    | 19%    | 29%     |
| Emery      | 72% | 7%                | 0%               | 12%   | 0%     | 8%      |
| Garfield   | 45% | 31%               | 15%              | 5%    | 0%     | 5%      |
| Grand      | 66% | 2%                | 3%               | 15%   | 8%     | 4%      |
| Iron       | 45% | 11%               | 1%               | 7%    | 0%     | 36%     |
| Juab       | 65% | 5%                | 2%               | 8%    | 2%     | 17%     |
| Kane       | 64% | 5%                | 17%              | 4%    | 0%     | 11%     |
| Millard    | 68% | 9%                | 0%               | 10%   | 0%     | 14%     |
| Morgan     | 0%  | 4%                | 0%               | 2%    | 0%     | 93%     |
| Piute      | 34% | 41%               | 0%               | 13%   | 0%     | 13%     |
| Rich       | 26% | 8%                | 0%               | 8%    | 0%     | 58%     |
| Salt Lake  | 0%  | 11%               | 11%              | 0%    | 0%     | 78%     |
| San Juan   | 41% | 8%                | 11%              | 5%    | 26%    | 8%      |
| Sanpete    | 13% | 38%               | 0%               | 6%    | 0%     | 42%     |
| Sevier     | 17% | 60%               | 0%               | 4%    | 0%     | 19%     |
| Summit     | 0%  | 30%               | 13%              | 2%    | 0%     | 55%     |
| Tooele     | 43% | 3%                | 36%              | 6%    | 0%     | 12%     |
| Uintah     | 48% | 9%                | 2%               | 9%    | 16%    | 15%     |
| Utah       | 8%  | 35%               | 4%               | 7%    | 0%     | 47%     |
| Wasatch    | 0%  | 55%               | 0%               | 9%    | 0%     | 34%     |
| Washington | 41% | 22%               | 12%              | 6%    | 2%     | 18%     |
| Wayne      | 57% | 10%               | 19%              | 11%   | 0%     | 4%      |
| Weber      | 0%  | 17%               | 1%               | 5%    | 0%     | 77%     |



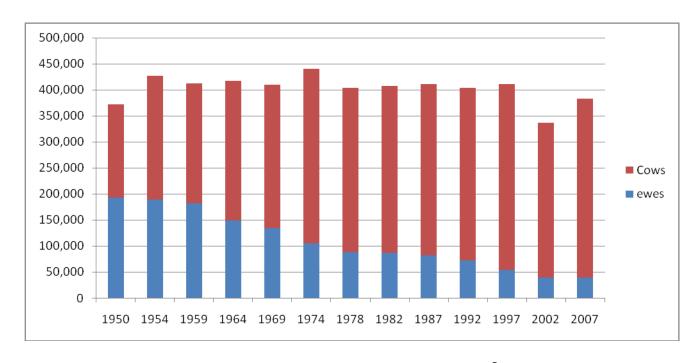
S&G: sheep and goats; C&H: cows and horses

**Figure 15.** Permitted use of Forest Service lands in Utah, 1940-2005<sup>4</sup>.

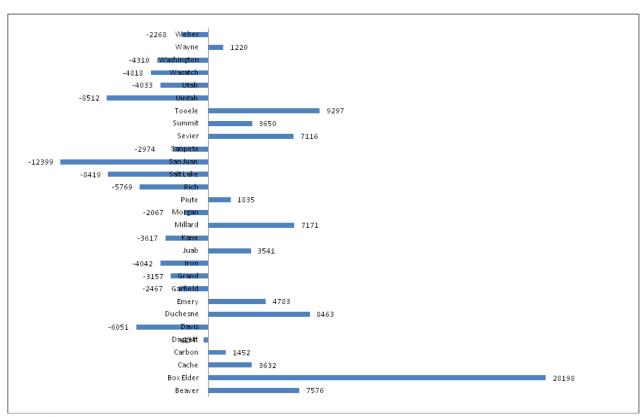
<sup>4</sup> The changes in the reported AUMS in 1977 and 1993 occurred at a time when the Forest Service changed how the data were reported. First, the data were for a Calendar Year (CY) prior to 1977. In 1978, the data are for a Fiscal Year (FY). This continued until 1988, when the data are reported for a CY. In 1993 and thereafter, the data are for the "grazing season". Data for 1992 and 1999 were not available as a result of these changes. The second factor that affects this data is associated with how animal units are determined. The original data from 1940 to 1977 are reported in "head months." A conversion was made to AUMs by assuming that each head month for cattle and horses (C&H) is equal to one AUM. The head months for Sheep and Goats (S&G) were divided by five (five sheep are assumed to be equal to one cow). This probably underestimates the amount of permitted use to some degree, because horses and cows with calves are more than one animal unit. Higher amounts for a cow with a calf (1.3 animal units) and horses (1.2 animal units) were used by the Forest Service starting in 1977. Had these higher values been used from 1940 to 1977, the permitted use would have been higher than the values shown in Figure 15. Data to make these comparable are not available.



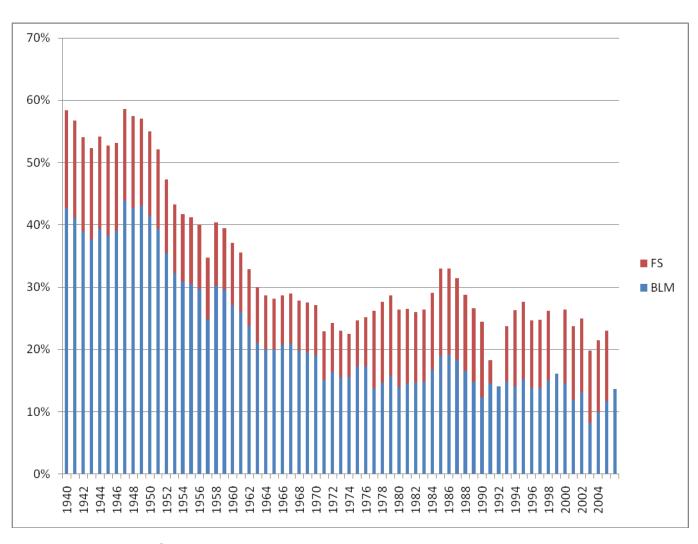
**Figure 16.** Permitted animal unit months (AUMs) of grazing by type of animal on BLM land in Utah, 1940-2006.



**Figure 17.** *Animal units of beef cows and ewes in Utah, 1950-2007.* 



**Figure 18.** Change in animal units of beef cows and ewes by county in Utah, 1950-2007.



**Figure 19.** Percentage<sup>5</sup> of feed needed by Utah's beef and sheep operations coming from lands administered by the BLM and Forest Service, 1940-2006

<sup>&</sup>lt;sup>5</sup> This percentage was computed in the following manner. The number of AUMS needed by the beef herd was derived using the following formula {Beef AUMs= [cows + (cows\*0.125\*0.7) + (cows/25)\*1.25)]\*12} where cows is the number of beef cows in the state in each year as reported by USDA. Feed for replacement heifers (cows\*.125\*0.7) and bulls ((cows/25)\*1.25) are included in this computation. A similar procedure was used for sheep {Sheep AUMS = [ewes + (ewes\*.2\*.7) + (ewes/25)\*1.25)]/5]\*12}. The total AUMs for each year was then divided into the permitted or authorized AUMS from the BLM and FS as shown in Figures 15 and 16. The percentage computed is probably a high estimate (larger percentage) for several reasons. First, actual use of BLM and FS lands historically has been less than actual use. Second, feed needed by calves and lambs are not included. Third, each cow is assumed to weigh 1,000 pounds. This may have been true in the past but, but most cows are heavier today. Fourth, bulls/rams are assumed to be 1.25 times as large as are cows/ewes. FS data are not available for 1992, 1999, or 2006.

#### LIVESTOCK GRAZING IN UTAH

Published data provides very little detail concerning the characteristics of livestock operators in the state, including questions such as:

- 1. What proportion of livestock operators in the state have permits to graze public lands?
- 2. Are livestock operators that have permits to graze publicly administered lands (permittees) different from livestock operators that do not have permits to graze public lands (non-permittees)?
- 3. How dependent are livestock operators on the use of public lands, and does this dependency vary from area to area in the state?

This study provides insight into these as well as other questions. However, it raises almost as many questions as it answers.

The first question that had to be addressed concerned the number of producers in the state. Personnel in the Utah office of the National Agricultural Statistics Service (NASS) were asked to provide the names and addresses of all livestock producers in Utah. It is generally conceded that NASS has the most complete list of producers because it is responsible for conducting the Census of Agriculture and periodical studies of other agriculture issues in Utah. The list of livestock operators obtained from NASS was complemented with brand records obtained from the Utah Department of Agriculture and Food (UDAF), as well as permit data obtained from BLM, SITLA, and FS. NASS listed 9,502 livestock operations in Utah. The data from BLM, FS, and SITLA listed 234 operations in other states that had permits to graze livestock in Utah. Every livestock operation included in the NASS data set, as well as the out-of-state operations, was sent two questionnaires. One questionnaire was designed for permittees and another for non-permittees (both questionnaires are found in Appendix A). Three mailings were sent to every livestock producer. Approximately one-third of those that received the mailings completed a useable questionnaire <sup>6</sup>. The following sections summarize some of the results.

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<sup>&</sup>lt;sup>6</sup> A discussion and analysis if the of the representativeness of the responses received is found in Appendix B.

# **General Characteristics of Respondents**

Our suvey data indicate that permittee operations are quite different from non-permittee operations. This includes size of operation, tenure, sources of feed, and outlook for the future. Permittee tend to have full-time operations, while non-permittees tend to have part-time operations.

Permittees own an average of 162 cows and 766 ewes, while non-permittees own only 28 cows and six ewes. There are two families per operation for permittees versus one family for non-permittees. Permittees have owned their operations for more than 50 years, on average, and 75% plan to have the next generation take over, while non-permittees have owned an average of 30 years and 52% plan for a family member to take over.

Permittees report that they make 57% of their sales to local firms, versus 62% of non-permittees; both groups report making 84% of their purchases from local firms; 53% of permittees have wage and salary income vs. 58% of non-permittees; 55% of permittees have business incomes vs. 44% of non-permittees; and permittees have lived 50 years in the county vs. 43 years for non-permittees. Ninety-three and 90% of respondents, respectively, were male.

There were, however, many areas (Figure 20) of the state that differ from the general characteristics noted in Table 2. These differences are outlined in greater detail in the following sections.

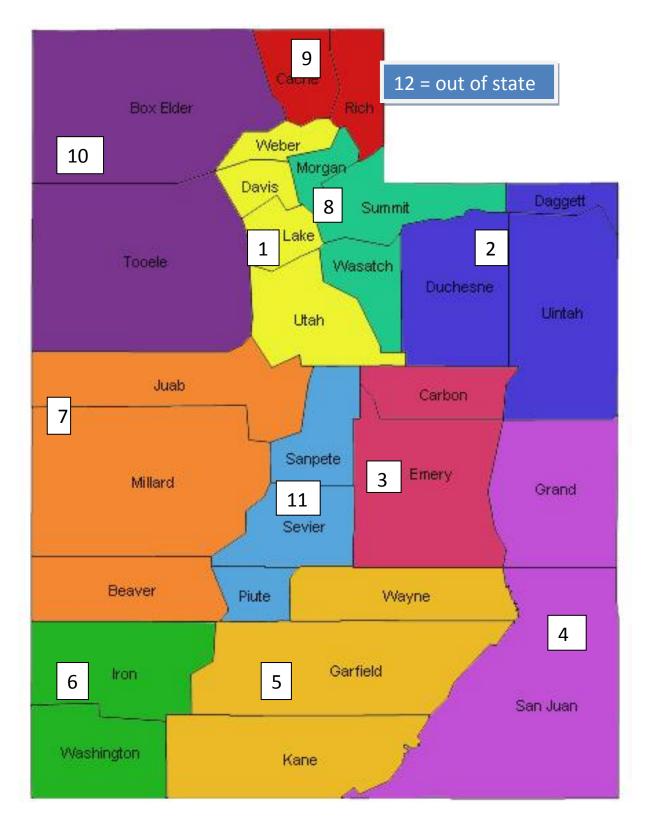


Figure 20. Regions used in the study.

#### SIZE OF OPERATION

One of the more interesting findings of the study is summarized in Tables 2 and 3. These data clearly show that cattle operations that have permits to graze public land have larger herds than do those who do not have permits to graze public lands. The 556 permit holders that provided information owned a total of more than 80,000 cows while the 2,273 non-permit holders owned a total of just over 60,000 cows. This suggests that permit holders are the dominant beef producers in Utah from a production point of view, while non-permit holders are the most common type of operator. The difference in size (as reflected by the number of cows or ewes owned) between permit and non-permit holders is especially pronounced in Cache and Rich counties, as well as in Grand and San Juan counties, where more than a 10-fold difference in the size of operation exists. One of the contributing factors for the difference in size between permit and non-permit holders in Cache and Rich counties is that permit holders are more common in Rich County, while non-permit holders are more common in Cache County; operations in Rich County include some of the largest operations in the state.

**Table 2.** Average number cows owned by permit and non-permittee beef operators by region in *Utah.* 2007.

| Region | Counties/Area           | Permittees | Non-Permittee |
|--------|-------------------------|------------|---------------|
|        | State                   | 162        | 28            |
| 1      | Davis/SL/Utah/Weber     | 122        | 15            |
| 2      | Daggett/Duchesne/Uintah | 148        | 33            |
| 3      | Carbon & Emery          | 102        | 17            |
| 4      | Grand & San Juan        | 220        | 17            |
| 5      | Garfield/Kane/Wayne     | 114        | 69            |
| 6      | Iron & Washington       | 108        | 16            |
| 7      | Beaver/Juab/Millard     | 160        | 30            |
| 8      | Morgan/Summit/Wasatch   | 171        | 28            |
| 9      | Cache & Rich            | 369        | 34            |
| 10     | Box Elder & Tooele      | 205        | 34            |
| 11     | Piute/Sanpete/Sevier    | 145        | 33            |
| 12     | Out of state            | 253        | No data       |

The number of animals owned by operators with grazing permits compared to operators without permits is much greater for sheep operations than it is for beef operations. The 62 permit holders that provided information and raised sheep owned more than three times as many ewes as the 379 non-permit holders that owned sheep. The difference is especially pronounced in regions 8, 10, and 11, where most of the sheep in the state are located.

Three other types of livestock are also important in Utah: goats, stockers (young cattle purchased and usually grazed -- not placed in a feed yard for finishing), and horses. Permit holders reported owning 661 goats, 5,570 stockers, and 2,465 horses while non-permit holders reported owning 3,566 goats, nearly 13,000 stockers, and 7,351 horses. But, because there are many more non-permittee ranches, the permittees own a disproportional share of all types of livestock in Utah—non-permittee vs. permittee for goats 6 vs. 24, stockers 3 vs. 309, and horses 3 vs. 10.

**Table 3.** Average number of ewes owned by permit and non-permit sheep operators in Utah and the percentage of the all breeding sheep and lambs by region, 2007.

| Region                    |        | Number of Ewes Owned |            |  |
|---------------------------|--------|----------------------|------------|--|
|                           | Region | Permit               | Non-permit |  |
| State                     |        | 777                  | 35         |  |
| 1 Davis/SL/Utah/Weber     | 1      | 1004                 | 4          |  |
| 2 Daggett/Duchesne/Uintah | 2      | 17                   | 5          |  |
| 3 Carbon & Emery          | 3      | 71                   | 10         |  |
| 4 Grand & San Juan        | 4      | No data              | 2          |  |
| 5 Garfield/Kane/Wayne     | 5      | 215                  | 13         |  |
| 6 Iron & Washington       | 6      | 568                  | 13         |  |
| 7 Beaver/Juab/Millard     | 7      | 30                   | 6          |  |
| 8 Morgan/Summit/Wasatch   | 8      | 1800                 | 15         |  |
| 9 Cache & Rich            | 9      | 50                   | 2          |  |
| 10 Box Elder & Tooele     | 10     | 1810                 | 11         |  |
| 11 Piute/Sanpete/Sevier   | 11     | 1354                 | 11         |  |
| 12 Out of state           | 12     | 4727                 | No data    |  |

# **Family Dependency**

Every livestock operator was asked how many owner and hired families depended on the ranch operation for all or part of their income. Approximately 7% of the non-permittee livestock operations that participated in the study indicated that hired families depended on the ranch for part of their income. Furthermore, almost all of the non-permittee operations that had hired labor derived most of their income from the sale of crops. This result was expected, given the number of animals owned by non-permittee operations, which differs significantly from permittee operations. Nearly one-fourth of the permittee operators indicated that at least one hired family depended on the ranch for some of their income; the average was 1.2 hired families per operation. In addition, an average of 1.5 owner families depended on the ranch for some of their income. The number of families that depended on the ranch was essentially uniform for each of the regions.

## **Sources of Income**

About 12% of the non-permittee respondents did not indicate what percentage of their income came from any of the sources listed (livestock, crops, other agricultural products, oil/gas, timber, or recreation). However, livestock sales were the dominant source of income for most of the operations that indicated their percentage of income by source. Crop sales were an important source of income for 850 operations, while only 5 operations listed timber as source of income. Recreation was a source of income for 84 operations, but this was generally a small portion of each firm's income. Oil and gas revenues were listed as a source of income for 30 operations and these revenues were commonly a large portion of the firm's income in some regions of the state (oil and gas data by region are not included in this report to maintain confidentiality of the information

 $^{7}$  Only 324 hired families were reported as being hired by non-permittee operations, while permittee operations reported hiring 522 families.

<sup>&</sup>lt;sup>8</sup> There were a number of notable individual exceptions to these generalizations. These differences are not included because it would not maintain the confidentiality of data provided by these firms.

provided by individual firms). The sale of other agricultural products was listed as a source of income for 124 firms, but the percentage of firms' incomes that came from this source was small.

Almost every permit holder indicated what percentage of the firm's income came from the various sources. These are outlined in Table 4. While there is some variation between the regions, livestock sales are the most important source of ranch income in all regions. Recreation is an important source of income in Region 4 (Grand and San Juan) and Region 8 (Morgan, Summit, and Wasatch). The relatively high percentage of recreation-related income in Region 8 should be especially noted because a higher portion of the land in these counties is privately owned than in other regions of the state, which helps facilitate activities such as posted hunting units. As expected, oil and gas revenues were relatively important in Region 4 (Grand and San Juan) and Region 9 (Cache and Rich). It is a bit surprising that oil and gas revenues were not indicated as a major source of income in Region 2 (Uintah Basin) by either permittee or non-permittees. Only two permit holders in the Uintah Basin listed oil and gas as a source of income and only twelve non-permit holders in the Uintah Basin listed oil and gas as a source of income. In all cases, the percentage of permittee and non-permittee income noted was generally small in this region of the state.

**Table 4.** Percentage of ranch gross income by source for permittee operations by regions in Utah, 2007.

| Region             | Livestock | Crops | Other Ag | Oil/Gas | Timber | Recreation | Other |
|--------------------|-----------|-------|----------|---------|--------|------------|-------|
| State              | 77        | 7     | 1        | <1      | <1     | <1         | 14    |
| 1 Da/SLC/Ut/Web    | 95        | 5     | <1       | <1      | <1     | <1         | <1    |
| 2 Dag/Duch/Uin     | 87        | 3     | <1       | <1      | <1     | 1          | 8     |
| 3 Carbon/Emery     | 98        | <1    | <1       | <1      | <1     | <1         | <1    |
| 4 Grand/San Juan   | 73        | 12    | <1       | 1       | 1      | 4          | 9     |
| 5 Gar/Kane/Wayne   | 76        | 5     | 2        | <1      | <1     | <1         | 18    |
| 6 Iron/Washington  | 74        | 11    | <1       | <1      | <1     | <1         | 15    |
| 7 Bvr/Juab/Millard | 72        | 17    | 3        | <1      | <1     | <1         | 8     |
| 8 Morg/Summit/Was  | 73        | 3     | 5        | <1      | <1     | 5          | 15    |
| 9 Cache/Rich       | 79        | 5     | 2        | 1       | <1     | <1         | 13    |
| 10 BE/Tooele       | 82        | 4     | 1        | <1      | <1     | 1          | 14    |
| 11 Piu/Sanp/Sev    | 82        | 5     | <1       | <1      | <1     | <1         | 12    |
| 12 Out of State    | 92        | 3     | <1       | 2       | <1     | 1          | 3     |

Note: row totals may not add to 100 due to rounding.

## **Sales and Purchases**

About two-thirds of the gross sales of non-permittee livestock operators are to firms located in the local areas, and nearly three-fourths of the sales are to firms in Utah. A higher percentage of purchases are from local firms (nearly 80%), and nearly all purchases are from firms located in Utah.

Livestock operators with grazing permits generally sell a lower percentage of their products to local firms than do non-permittees. This is especially true in areas that do not have a local livestock auction. For example, permittees in Carbon and Emery County (Region 3) reported selling less than one-third of their production to a local firm, while non-permittees sold a slightly larger percentage.

However, both groups sold a lower percentage locally than did producers in other regions (Table 5). Other counties with relatively low local sales include Wayne, Garfield, Kane, Morgan, Summit, Wasatch, Box Elder, and Tooele. Low local sales are probably a function of larger operations in some areas of the state because large operations commonly contract sales to firms outside of Utah and/or sell cattle via the satellite. While local sales may be lower for permit holders than non-permit holders, local purchases are at least as high in most areas of the state. The major exceptions are counties that have easy access to firms along the Wasatch front—Utah, Salt Lake, Weber, and Davis counties. Another area that had relatively low local purchases included Grand and San Juan counties (Region 4). Producers in this area probably obtain a large portion of their goods and services from firms in Colorado. Firms in Carbon and Emery County have relatively easy access to firms along the Wasatch front. As a result, few agricultural supply firms exist in these counties. While the information provided did not indicate where non-local purchases occur, the pattern suggests that firms along the Wasatch front depend on livestock operations in outlying areas for a significant portion of their sales.

**Table 5** . Reported percentage of local sales and purchases by permittee and non-permittee livestock operators by region.

|                         | Sales     |               | Pu        | rchases       |
|-------------------------|-----------|---------------|-----------|---------------|
| Region                  | Permittee | Non-Permittee | Permittee | Non-Permittee |
| 1 Davis/SL/Ut/Weber     | 73 %      | 70 %          | 92 %      | 86 %          |
| 2 Dag/Duch/Uintah       | 65 %      | 66 %          | 89%       | 87 %          |
| 3 Carbon/Emery          | 63 %      | 41 %          | 76 %      | 84 %          |
| 4 Grand/San Juan        | 67 %      | 54 %          | 73 %      | 62 %          |
| 5 Garfield/Kane/Wayne   | 52 %      | 62 %          | 87 %      | 89 %          |
| 6 Iron/Washington       | 76 %      | 62 %          | 95 %      | 89 %          |
| 7 Beaver/Juab/Millard   | 65 %      | 56 %          | 85 %      | 84 %          |
| 8 Morgan/Summit/Was     | 45 %      | 48 %          | 61 %      | 72 %          |
| 9 Cache/Rich            | 51 %      | 68 %          | 75 %      | 86 %          |
| 10 Box Elder/Tooele     | 41 %      | 67 %          | 81 %      | 86 %          |
| 11 Piute/Sanpete/Sevier | 64 %      | 56 %          | 92 %      | 85 %          |

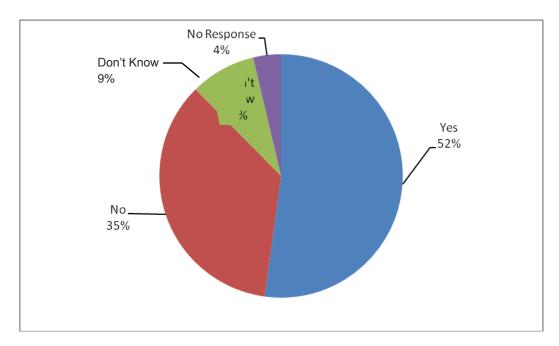
## **FAMILY TENURE**

Most livestock operations that have permits to graze on public lands have been owned by the same family for over 50 years -- the average, mode, and median values for most ranches are commonly more than 50 years. Permittee ranches in the Uintah Basin (Region 2) are exceptions to this length of tenure. Their length of tenure is closer to 40 years. The longest-tenured ranches are in Regions 1 and 9, where some families have owned their ranches for more than 70 years (Table 6). Non-permittee livestock operations have been owned by the family for fewer years than ranches having a grazing permit—an average of 35 years. Region 2 (Uintah Basin) and Region 8 (Morgan, Summit, and Wasatch counties) are the only regions where the length of tenure was similar for permittee and non-permittee livestock operations. The tenure for permittee operations was essentially double that of non-permittees in some regions of the state. This length of tenure is also related to the intended likelihood that the livestock operation would be retained by the family.

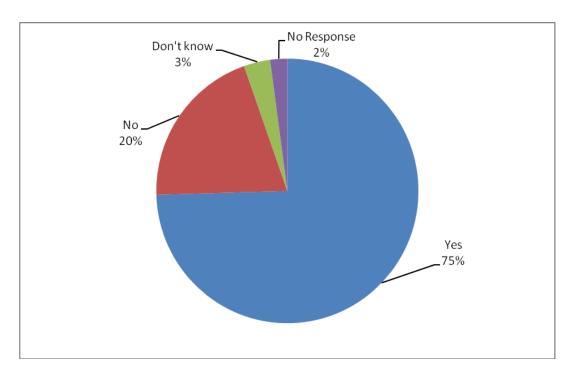
**Table 6.** Average number of years permittee and non-permittee families have owned the livestock operation by region.

| Region               | Permittee | Non-permittee |
|----------------------|-----------|---------------|
| 1 Davis/SLC/Ut/Weber | 70        | 38            |
| 2 Dag/Duch/Uin       | 39        | 34            |
| 3 Cargon/Emery       | 50        | 32            |
| 4 Grand/San Juan     | 56        | 35            |
| 5 Gar/Kane/Wayne     | 52        | 38            |
| 6 Iron/Washington    | 61        | 38            |
| 7 Bvr/Juab/Mill      | 64        | 38            |
| 8 Morg/Summit/Was    | 53        | 47            |
| 9 Cache/Rich         | 74        | 42            |
| 10 Box Elder/Tooele  | 49        | 37            |
| 11 Piute/Sanp/Sev    | 54        | 37            |

Livestock operators were asked if a family member was planning to operate this ranch in the future. The results are shown in Figures 21 and 22. These data clearly show that a higher percentage of the permittee ranches plan to have a member of the family operate their ranch in the future than do non-permittee ranches. This pattern was true for every region in the state except Region 3 (Carbon and Emery County), where less than 20% of the non-permittees plan to have a member of the family operate the ranch in the future (Table 7). The highest percentage of permittees that plan to have a family member operate the ranch in the future was in Region 6 (83%). Permittee (80%) and non-permittee (57%) ranch operations in the Uintah Basin (Region 2) and Southwest Utah (Region 6) also have a relatively high percentage that plan to have a family member operate the ranch in the future when compared to other regions of the state.



**Figure 21.** Percentage of non-permit ranches that plan to be operated by a member of the family in the future.



**Figure 22.** Percentage of permit ranches that plan to be operated by a member of the family in the future.

**Table 7.** Percentage of permittee and non-permittee livestock operations by region that intend to be operated by a family member in the future.

| Region              | Permittee | Non-Permittee |
|---------------------|-----------|---------------|
| 1 Da/SL/Ut/Web      | 68 %      | 47 %          |
| 2 Dag/Duch/Uin      | 80 %      | 57 %          |
| 3 Carbon/Emery      | 67 %      | 18 %          |
| 4 Grand/San Juan    | 75 %      | 50 %          |
| 5 Gar/Kane/Wayne    | 76 %      | 51 %          |
| 6 Iron/Washington   | 83 %      | 53 %          |
| 7 Bvr/Juab/Mill     | 74 %      | 52 %          |
| 8 Morg/Summ/Was     | 71 %      | 58 %          |
| 9 Cache/Rich        | 77 %      | 49 %          |
| 10 Box Elder/Tooele | 75 %      | 55 %          |
| 11 Piu/Sanp/Sev     | 73 %      | 51 %          |

## **SOURCES OF FEED**

Hay must be fed to livestock during the winter in most areas of the state. The only exceptions are areas where rangelands can be used for winter grazing. The period of time that animals need to be fed hay varies from Rich and Daggett counties, which commonly requires the feeding of hay for at least five months, to portions of southern Utah where winter grazing is commonly available. Sheep operations also commonly graze lands for a longer period of time than do cattle operations. They therefore are less dependent on hay as a source of feed.

Sources of feed during the grazing period (when hay is not being fed) vary throughout the state. There is also considerable variation by type of animal. For example, some horses are fed hay throughout the year while many sheep are able to graze lands essentially year round. However, about one-third of the feed needed by animals in most areas of the state is obtained from hay because hay is commonly fed more than four months of the year (4+ months divided by 12).

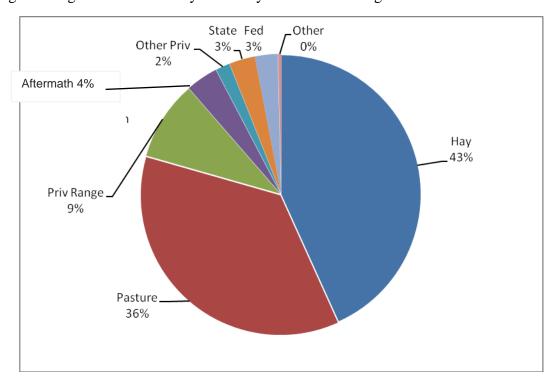
A common but imperfect measure of forage use is an Animal Unit Month (AUM), which is assumed to be the amount of forage needed by a 1000-pound cow for a month. Other animals are converted to an animal unit equivalent. Table 8 shows the conversions used in this study.

**Table 8.** AUM conversion model.

| Class of Animal  | Animal Unit Equivalent |
|------------------|------------------------|
| Cow              | 1.0                    |
| Replacement      | 0.7                    |
| Bulls            | 1.5                    |
| Yearlings        | 0.65                   |
| Stockers         | 0.7                    |
| Ewes             | 0.2                    |
| Replacement ewes | 0.15                   |
| Bucks            | 0.3                    |
| Goats            | 0.2                    |
| Horses           | 1.5                    |

The number of animals of each of the types of animals reported by each livestock operation was multiplied by the animal unit equivalent. This value was then multiplied by 12 to derive the amount of forage (AUMs) needed by that operation. The ranchers also indicated what percentage of their feed was obtained from the various sources (e.g., state, federal, private range, etc.). The amount of feed needed was multiplied by the percentage of feed by source. The resultant totals were then computed. Figures 23 and 24 indicate the average source of feed obtained by non-permittee (Figure 23) and permittee (Figure 24) ranchers.

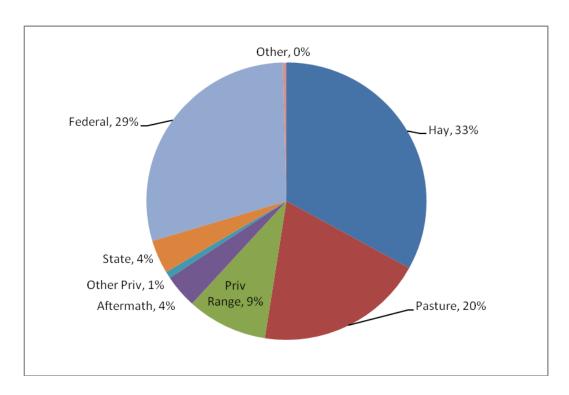
These data indicate that permittee and non-permittee livestock operators obtain about the same portion of the forage needed by livestock from private range, state lands, aftermath, and other private lands. However, permittees (as expected) obtain a much larger portion of their feed from federally administered lands. This suggests that permittees use forage from federal lands to replace the feeding of hay and the use of private pasture. There is, however, considerable variation in the percentage of forage obtained by region in the state (Tables 9 and 10). In most regions of the state, non-permittees obtain most of their grazed forage from pasture lands. This is especially true in Region 1 (Davis, Salt lake, Weber, Davis) and Region 2 (Daggett, Duchesne, and Uintah). Livestock owned by non-permittees in Region 8 (Morgan, Summit, and Wasatch) obtain a larger percentage of their forage from private rangeland than any other region in the state. This is due, at least in part, to the fact that most of the rangeland in that region is privately owned, while in the other regions rangeland is commonly owned by state or federal agencies.



**Figure 23.** *Percentage of feed by source by non-permittees in Utah.* 

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<sup>&</sup>lt;sup>9</sup> These values are probably an underestimate of the amount of forage used in Utah because most beef cows in the state weigh more than 1000 pounds and no credit is given to the forage consumed by calves or lambs. However, stockers may not be fed throughout the year. These conversions would affect the estimated total amount of forage needed but would have little, if any, effect on the percentage of feed obtained by source.



**Figure 24.** Percentage of feed by source by permittees in Utah.

**Table 9.** Percentage of feed obtained by source and region by non-permittees during the grazing season in Utah, 2007.

| Region              | Pasture | Private<br>Range | Aftermath | Other<br>Private | State | Federal | Other |
|---------------------|---------|------------------|-----------|------------------|-------|---------|-------|
| 1 Da/SL/Ut/Web      | 78      | 14               | 6         | 1                | <1    | 1       | <1    |
| 2 Dag/Duch/Uin      | 75      | 9                | 12        | 1                | 1     | 1       | 2     |
| 3 Carbon/Emery      | 16      | 17               | 2         | 1                | 14    | 1       | 48    |
| 4 Grand/San Juan    | 62      | 5                | 13        | 3                | 1     | 15      | 1     |
| 5 Gar/Kane/Wayne    | 51      | 2                | 1         | <1               | 39    | 6       | <1    |
| 6 Iron/Washington   | 59      | 17               | 6         | 3                | 3     | 13      | <1    |
| 7 Bvr/Juab/Millard  | 56      | 19               | 9         | 1                | 2     | 13      | <1    |
| 8 Morg/Summ/Was     | 44      | 45               | 6         | <1               | 2     | 1       | 1     |
| 9 Cache/Rich        | 62      | 27               | 2         | 1                | 5     | 3       | <1    |
| 10 Box Elder/Tooele | 57      | 28               | 4         | 1                | 2     | 7       | <1    |
| 11 Piu/Sanp/Sevier  | 67      | 8                | 9         | 13               | 1     | 2       | 1     |

**Table 10.** Percentage of feed obtained by source and region during the grazing season by livestock operators that have permits to graze on public lands in Utah, 2007.

| Region              | Pasture | Private<br>Range | Aftermath | Other<br>Private | State | Federal | Other |
|---------------------|---------|------------------|-----------|------------------|-------|---------|-------|
| 1 Da/SL/Ut/Web      | 30      | 11               | 17        | < 1              | 1     | 41      | <1    |
| 2 Dag/Duch/Uin      | 34      | 14               | 5         | 2                | 8     | 31      | 6     |
| 3 Carbon/Emery      | 24      | 15               | 5         | 4                | 9     | 41      | 3     |
| 4 Grand/San Juan    | 29      | 8                | 14        | 1                | 6     | 41      | <1    |
| 5 Gar/Kane/Wayne    | 20      | 7                | 4         | 1                | 13    | 55      | 1     |
| 6 Iron/Washington   | 21      | 28               | 2         | 1                | 4     | 44      | <1    |
| 7 Bvr/Juab/Millard  | 24      | 8                | 5         | 1                | 10    | 52      | <1    |
| 8 Morg/Summ/Was     | 48      | 27               | 1         | <1               | 3     | 21      | <1    |
| 9 Cache/Rich        | 38      | 10               | 3         | 1                | 1     | 46      | 1     |
| 10 Box Elder/Tooele | 23      | 20               | 8         | 1                | 8     | 40      | <1    |
| 11 Piu/Sanp/Sevier  | 31      | 14               | 3         | <1               | 4     | 47      | <1    |

#### **Grazing Permit Values**

More than 80% of the state's non-permittees have never had a permit to graze lands administered by one of the major federal agencies or SITLA. However, more than 50% of the non-permittees in Region 5 previously had a permit to graze lands administered by BLM, FS, or SITLA (Table 11). This high percentage was not expected. It should also be noted that essentially none of these operators expressed any interest in having a permit in the future. Very few non-permittees in any region ever had a permit to graze lands administered by the Park Service or Fish and Wildlife Service. As a result, this percentage is not shown in Table 11. The reasons why non-permit holders no longer hold grazing permits are noted in Appendix C. Most of these operators sold their permits and did not indicate a primary reason for the sale, but those that gave a reason commonly cited the non-fee cost of grazing these lands, including the problems of dealing with agency administrators (see the comments in Appendix C).

**Table 11.** Percentage of non-permit holders that previously had a permit to graze lands administered by the BLM, Forest Service, or SITLA by region in Utah, 2007.

| Region              | BLM | Forest Service | SITLA |
|---------------------|-----|----------------|-------|
| 1 Da/SI/Ut/Web      | 7   | 9              | 2     |
| 2 Dag/Duch/Uin      | 10  | 13             | 4     |
| 3 Carbon/Emery      | 8   | 5              | 2     |
| 4 Grand/San Juan    | 24  | 16             | 13    |
| 5 Gar/Kane/Wayne    | 52  | 38             | 25    |
| 6 Iron/Washington   | 24  | 18             | 10    |
| 7 Bvr/Juab/Mill     | 30  | 20             | 5     |
| 8 Morg/Summ/Was     | 5   | 9              | 2     |
| 9 Cache/Rich        | 6   | 11             | 2     |
| 10 Box Elder/Tooele | 13  | 8              | 3     |
| 11 Piute/Sanp/Sev   | 14  | 28             | 4     |

More work is needed to evaluate the market for grazing permits in Utah, but the responses received from non-permit holders indicated that the price they would be willing to spend for a permit, if any, was low. Some indicated a high willingness to pay, but these were not common. The most common responses received were either no response or zero. Willingness to pay values by non-permittees was generally highest for summer permits, especially those administered by the Forest Service. But the data suggest that permit values are not high and that there is very little difference by agency or season of use.

One possible reason why values provided by non-permittees were so low may be related to how non-permittees interpreted the question posed in the questionnaire. Non-permittees may have interpreted the question as asking what they would be willing to pay for an AUM (several non-permittees explicitly stated their willingness to pay in this manner) of grazing from lands administered by an agency and season of the year and not what they would be willing to pay for the permit. If this interpretation is correct, the values provided by non-permittees were commonly lower than the fees paid to graze private lands (average values were commonly less than \$12 per AUM). The exception to this generalization was for BLM and SITLA lands in Region 10 that could be grazed during the winter (these were \$26 per AUM). If the values provided by non-permittees do reflect their willingness to pay for a grazing permit, they suggest that non-permittees do not place high value in the ownership of a permit to graze lands administered by one of the agencies (BLM, FS, SITLA). Relatively high values were indicated by a few non-permittees. For example, the maximum values were more than \$1,000 per AUM but these were single observations. Given the small number of non-permittees that indicated any amount for their willingness to pay for a grazing permit, no values are provided in this study.

Permittees were also asked to indicate what they would be willing to pay for additional permits in their area. But, like the responses received from non-permittees, no value was given by most permittees. It is not known if the lack of response was a function of a lack of willingness to purchase a permit, if the value of the permits were (are) unknown, or if the value of a permit varies so much that the amount that would be offered could only be determined by evaluating the benefits and costs of a particular allotment (productivity and non-fee costs vary widely by allotment). The responses received from permittees were commonly above the average values indicated by nonpermit holders, but the highest values indicated by permittees were lower than the highest values indicated by non-permittees. In addition, the variation in the amount permittees were willing to pay was much smaller than the variation in values expressed by non-permittees. This suggests that permit holders probably have a better understanding of the market for grazing permits. There was considerable variation by region, agency and season of use (Table 12). The values in Table 12 are the highest average value indicated by season of use for an agency. The variation in the values reported suggests that further analysis is needed. This is particularly true for regions and agencies when the average is quite different from the median (Region 4 is the only region where average and median values were nearly the same).

However, the following generalizations are probably valid. First, permits to graze lands administered by the FS commonly have the highest value in each region. Permits that can be grazed during the summer and winter appear to be the most valuable. These values are probably related to the feeding of hay. Winter grazing permits would normally allow a producer to substitute grazing for feeding hay, while a summer permit would allow a livestock producer to remove livestock from private lands during the growing season when hay is being produced for the winter feeding period

(this is probably the primary reason why FS permits have high relative value). However, in some regions there does not appear to be any significant difference in the value by season of use.

Second, there is considerable variation in the reported values. This suggests that each allotment probably has its own value to a producer. Third, the median (mid-value of the data set) is generally smaller than the mean/average for most areas and agencies. This suggests <sup>10</sup> that a few high values exist, compared to the most common values indicated. The most important inference that the provided data suggest is that there are a number of factors (size and type of operator, non-fee costs, ownership of other permits, etc.) that affect the value of a grazing permit. An analysis of these factors requires additional study.

Permittees were also asked to indicate what price they would be willing to accept for permits that they currently own. Most indicated that they were not willing to sell their permits and, therefore, did not provide a value for their current permit. As a result, there were very few responses to this question and no results are reported in this study.

**Table 12.** Average and median amount permittees would be willing to pay (\$ per AUM) for a grazing permit in their area by agency and season of use.

|                     | BLM        |         | Forest Se  | ervice | SITL       | A       |
|---------------------|------------|---------|------------|--------|------------|---------|
| Region              | Avg/Median | Season  | Avg/Median | Season | Avg/Median | Season  |
| 1 Da/SL/Ut/Web      | 79/50      | Summer  | 121/50     | Summer | 111/100    | Sp/Su/F |
| 2 Dag/Duch/Uin      | 86/80      | Winter  | 251/102    | Summer | 94/80      | Winter  |
| 3 Carbon/Emery      | 81/55      | Winter  | 183/123    | Summer | 43/30      | Summer  |
| 4 Grand/San Juan    | 76/75      | Winter  | 86/78      | Summer | 78/78      | Spring  |
| 5 Gar/Kane/Wayne    | 174/65     | Su/W    | 255/120    | Summer | 114/80     | Su/F    |
| 6 Iron/Washington   | 162/100    | Winter  | 206/100    | Spring | 119/100    | Su/W    |
| 7 Bvr/Juab/Mill     | 166/100    | Su/F    | 164/100    | Summer | 133/90     | Sp/F    |
| 8 Morg/Summ/Was     | 195/66     | Sp/Su   | 325/325    | Spring | 75/75      | Winter  |
| 9 Cache/Rich        | 73/40      | Sp/Su/W | 113/50     | Summer | 55/12      | Summer  |
| 10 Box Elder/Tooele | 88/75      | Sp/Su/W | 91/50      | Sp/Su  | 90/60      | Sp/Su   |
| 11 Piu/Sanp/Sev     | 199/90     | Summer  | 242/150    | Winter | 138/90     | Summer  |

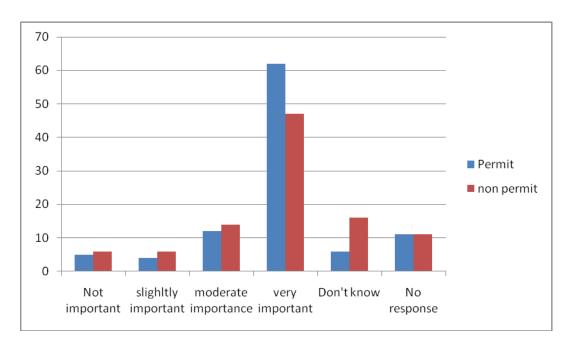
Values for other seasons are lower than the values shown. Values that were similar (within \$10 per AUM) for more than one season are indicated.

#### Factors Affecting Grazing

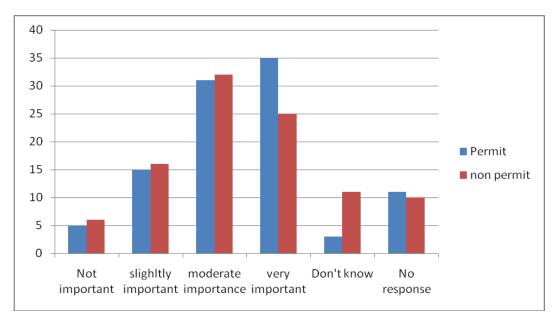
Livestock producers were asked to indicate what particular factors or influences they thought would "affect the use of publicly administered lands by domestic livestock." Responses are outlined in Figures 25-34. Non-permittees and permittees both view legal suits, low returns, and drought/fire as the primary factors that may affect the use of publicly administered lands by livestock. However, a higher percentage of the permittees view most of these factors as impediments to the use of public lands by domestic livestock. It should also be noted that a higher percentage of the non-permittees expressed a "don't know" opinion than did permittees. As a result, non-permittees have fewer responses in other columns. Still, the relative prioritization of the influences/threats was generally the same for permittees and non-permittees.

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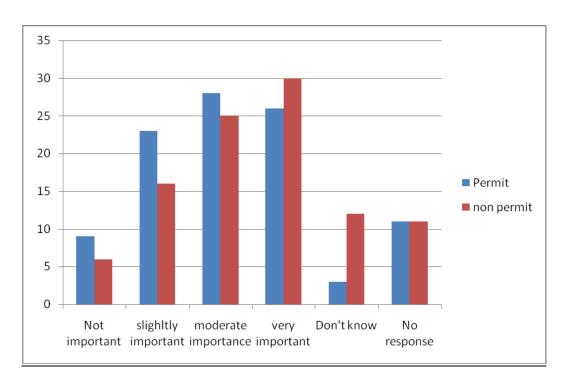
 $<sup>^{10}</sup>$  Values for agencies not listed (e.g. Park Service) were lower than those indicated.



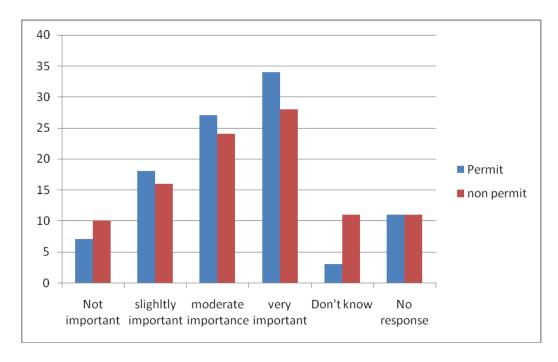
**Figure 25.** Percentage of permittee and non-permittee responses to the question: "How important do you think legal suits will be in affecting the use of public lands by livestock?"



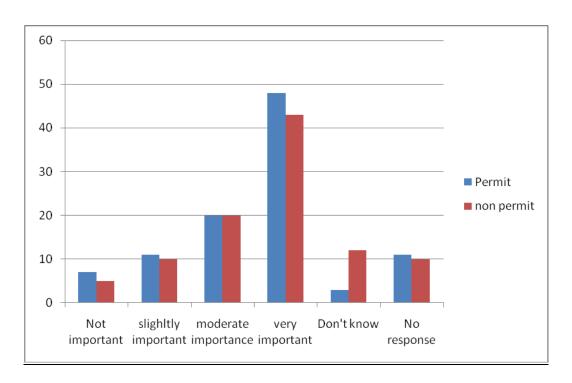
**Figure 26.** Percentage of permittee and non-permittee responses to the question: "How important do you think increased emphasis on use by wildlife will affect the use of public lands by livestock?"



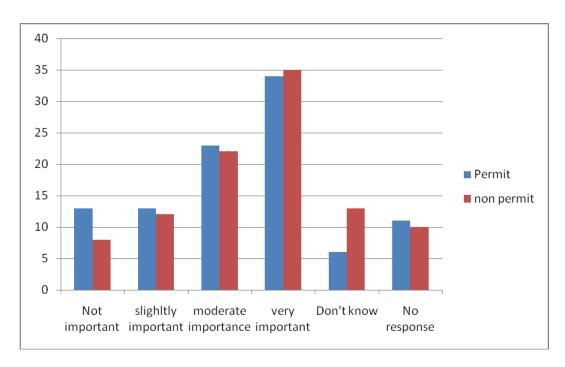
**Figure 27.** Percentage of permittee and non-permittee responses to the question: "How important do you think invasive species or weeds will be in affecting the use of public lands by livestock?"



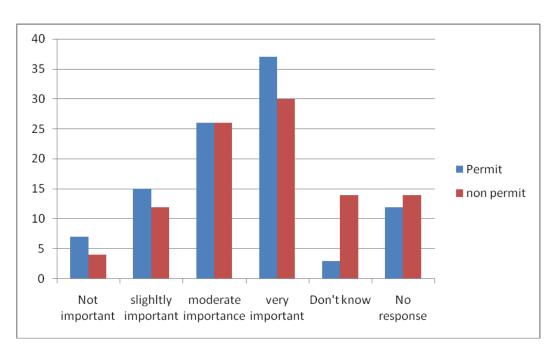
**Figure 28.** Percentage of permittee and non-permittee responses to the question: "How important do you think recreational activities (OHV's, hikers, etc.) will affect the use of public lands by livestock?"



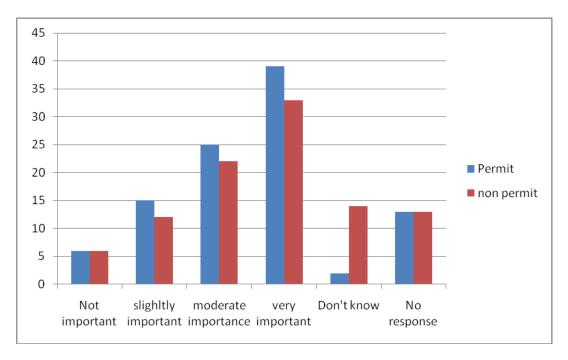
**Figure 29.** Percentage of permittee and non-permittee responses to the question: "How important do you think low returns from ranching will affect the use of public lands by livestock?"



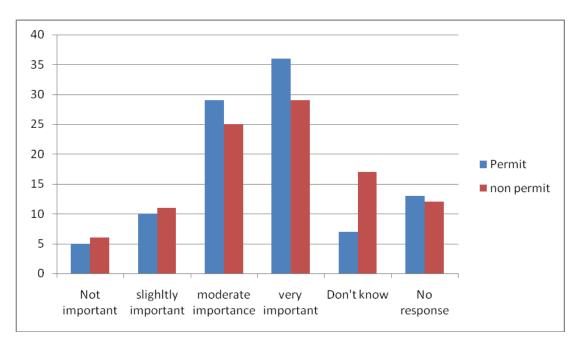
**Figure 30.** Percentage of permittee and non-permittee responses to the question: "How important do you think the purchase of ranches for recreational/second homes will affect the use of public lands by livestock?"



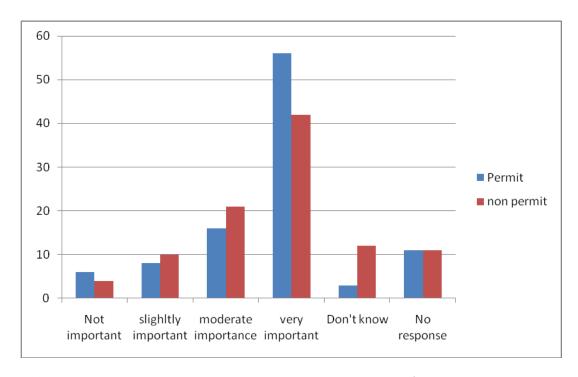
**Figure 31.** Percentage of permittee and non-permittee responses to the question: "How important do you think reduced development or maintenance of range improvements will affect the use of public lands by livestock?"



**Figure 32.** Percentage of permittee and non-permittee responses to the question: "How important do you think increases in grazing fees will affect the use of public lands by livestock?"



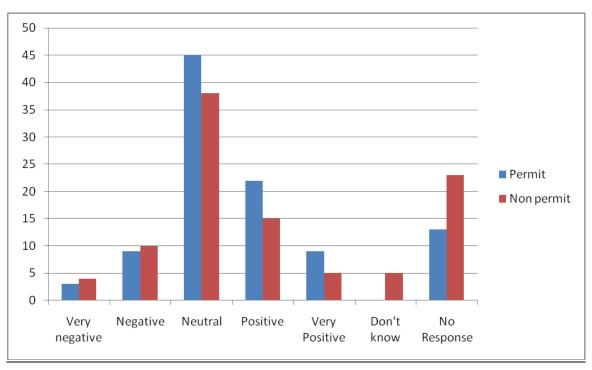
**Figure 33.** Percentage of permittee and non-permittee responses to the question: "How important do you think increases in non fee costs of grazing will affect the use of public lands by livestock?"



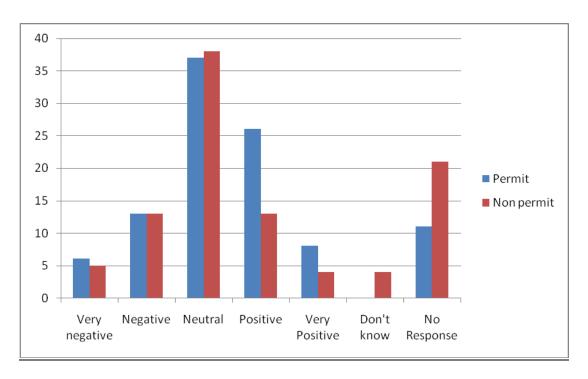
**Figure 34.** Percentage of permittee and non-permittee responses to the question: "How important do you think drought and fire will be in affecting the use of public lands by livestock?"

#### IMPACT OF GRAZING ON OTHER USES

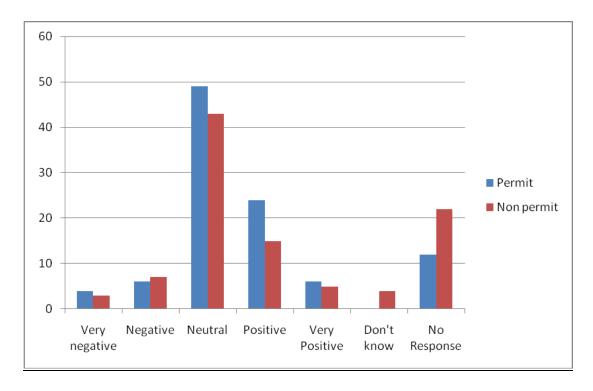
Permittees and non-permittees were asked to indicate what influence livestock grazing had on other uses (e.g., wildlife, birds, water quality). Responses are noted in Figures 35-41. These responses clearly show that fire suppression is viewed as the most positive influence of grazing. The spread of invasive plants or weeds was viewed as the most negative influence, but most respondents viewed this as being basically neutral. Non-permit users were more uncertain about these influences than were permit holders. The most common response received concerning these influences by both permit and non-permit holders was basically neutral with the exception of fire suppression. It should be noted that no permittee indicated that they did not know what influence livestock grazing had on the activities/uses outlined below, while many non-permittees did not know. The percentage of the non-permittees that indicated that they did not know was quite consistent. In fact, the same respondents commonly said "did not know" for all of the uses outlined below.



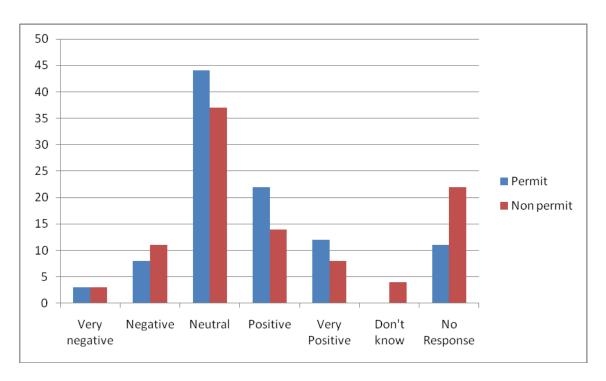
**Figure 35.** Permittee and non-permittee perception of the importance livestock grazing has on vegetation in riparian areas.



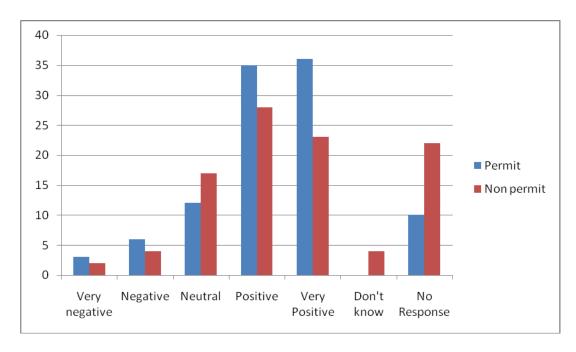
**Figure 36.** *Permittee and non-permittee perception of the importance livestock grazing has on numbers of big game animals.* 



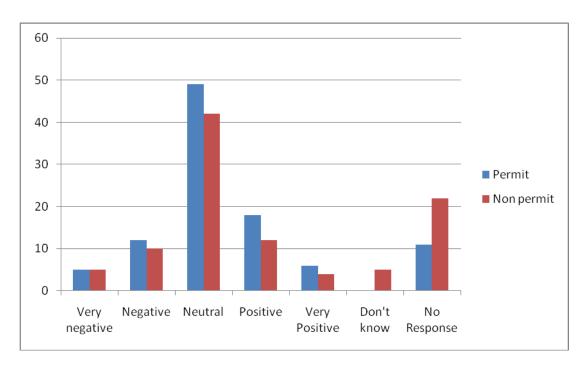
**Figure 37.** Permittee and non-permittee perception of the importance livestock grazing has on the number and variety of birds.



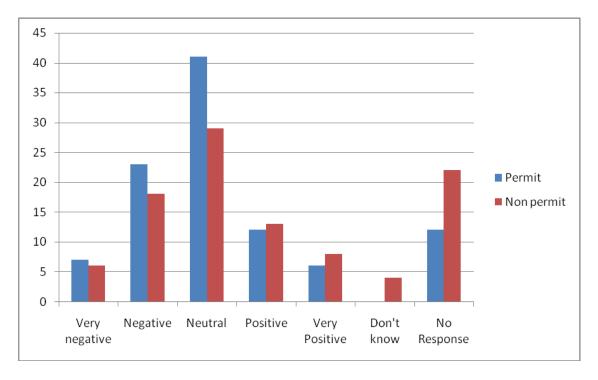
**Figure 38.** Permittee and non-permittee perception of the importance livestock grazing has on water quality/quantity.



**Figure 39.** Permittee and non-permittee perception of the importance livestock grazing has on fire suppression.



**Figure 40.** *Permittee and non-permittee perception of the importance livestock grazing has on recreational opportunities.* 



**Figure 41.** Permittee and non-permittee perception of the importance livestock grazing has on the spread of invasive plant species or weeds.

#### **PERMITTEE ISSUES**

The preceding sections were common to the permittee and non-permittee questionnaires. This section deals with issues of importance just to permittees.

Each permittee was asked to list each of the permits they owned, what agency administered that permit, the period of use, the permitted number of AUMs, the AUMs used in 2006, when each permit was acquired, and how the permit was acquired.

#### **Permit Holders**

One of the original objectives that was not fulfilled was to determine what percentage of the livestock operators have permits to graze publicly administered lands. A definitive answer would require an estimate of the total number of livestock producers in the state and the number of those that have permits. It was not possible to obtain either of these values for several reasons. First, no data exists that indicates the number of livestock producers in the state. The 2002 Census of Agriculture indicates that there were 6,688 farms that owned cattle and calves and 5,055 had beef cows. There were also 1,422 farms with sheep and lambs, 680 that had milk cows, and 752 that had goats. However, many operations had more than one type of animal (e.g., beef and sheep, or milk and beef cows).

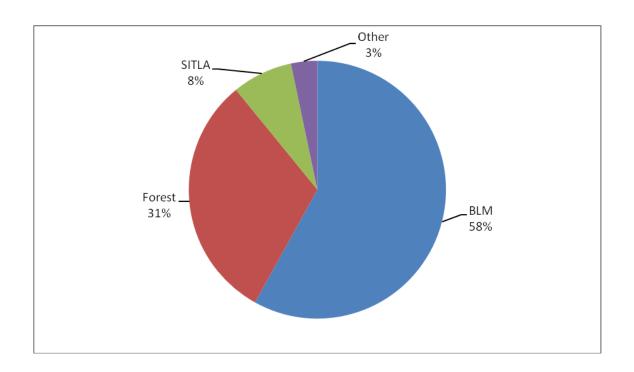
The 9,502 names of livestock operators obtained from NASS included a number that no longer owned any livestock (about 1.5% of those surveyed that also returned a questionnaire indicated that they no longer had livestock). The brand data from UDAF also did not provide a clear indication of the number of livestock producers there are in Utah because some individuals or firms may own a brand but no livestock, and some firms own multiple brands. As a result, there is no data that clearly indicate how many livestock operators there are in Utah. Permit data obtained from the BLM, FS, and SITLA also proved to be difficult to evaluate. The same operation may have a permit that is owned by more than one member of the family, or one may be owned by the firm and another by an owner of the firm (e.g., a BLM permit for the same operation may be owned by one member of the family and an FS permit by another<sup>11</sup>). Given all of these difficulties, a rough estimate of the percentage of livestock operators in the state that have a permit to graze publicly administered lands can be provided. If the response rate for permittee and non-permittee operators was representative of the state's operators, the percentage of permit holders to total operators would be about 18% (number of permittee respondents divided by the total number of respondents). This is probably a low estimate, for some of the reasons noted in Appendix B. The number of permit holders in the BLM, FS, and SITLA databases suggests that this percentage (18%) is probably conservative. As a result, it is likely that about 20% of the livestock operators in the state have permits to graze publicly administered lands in the state.

#### **Number of Permits**

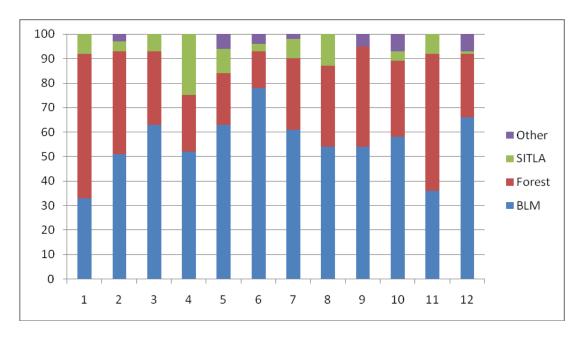
One common question deals with the number of permits owned by permittees. As expected, BLM and FS permits are the most common grazing permits owned by those who provided information (Figures 42 and 43), but the percentage varied by administration in each of the regions (Figure 43). For example, BLM allotments were most common in Region 6, while FS allotments were most common in Regions 1 and 11.

Most permittees owned two permits, with the exception of permittees in Regions 1, 2, 8, and 9, which commonly had only one permit. Permittees that had two permits commonly had a FS and a BLM permit, but other combinations (two BLM, one BLM and one SITLA, etc.) also occurred. This, however, was the average number of permits owned by respondents. Some large operators had several permits and many operators only have one permit.

<sup>&</sup>lt;sup>11</sup> This is common when a firm is a family operation (e.g., father and son).



**Figure 42.** *Percentage of grazing permits owned by permittees by agency.* 



**Figure 43.** Percentage of grazing permits owned by permittees in each region by agency.

**Table 13.** Agency and season of use that were judged to be most critical by permittees by region.

| Region               | Primary Agency | Season(s) of Use     |
|----------------------|----------------|----------------------|
| 1 Da/SI/Ut/Web       | Forest Service | Summer               |
| 2 Dag/Duch/Uin       | Forest & BLM   | Summer               |
| 3 Carbon/Emery       | Forest & BLM   | Summer               |
| 4 Grand/SJ           | BLM            | Spring/Summer/Winter |
| 5 Gar/Kane/Way       | BLM            | Summer               |
| 6 Iron/Washington    | BLM            | Summer               |
| 7 Bvr/Juab/Mill      | BLM            | Summer               |
| 8 Morg/Summ/Was      | BLM            |                      |
| 9 Cache/Rich         | FS & BLM       | Summer               |
| 10 Box Elder/Tooele  | BLM            | Summer               |
| 11 Piute/Sanp/Sevier | Forest         | Summer               |
| 12 Out of State      | BLM            |                      |
| State                | Forest & BLM   | Summer               |

Permittees were asked to indicate which of their permits were most critical to their ranch operation. The most common responses received were nothing (no response) or "all of them." But, there were some interesting responses from those that did indicate which allotments they viewed as most critical. A summary of these responses is shown in Table 13. The reasons why these allotments were considered critical are listed in Appendix C. There was no clear indication of the season of use that was viewed as most critical for permittees in Regions 8 and 12, but summer use is viewed as most critical in most regions of the state. This is somewhat surprising, given the seasons of use summarized in the following section. For example, winter use is high in Region 4, but summer use is viewed as being most critical by those that responded to the question. One possible reason why summer use of public lands is viewed as being most critical is that private lands are being used to produce other crops during this season and having livestock off the ranch is desirable (see also the reasons listed in Appendix C).

#### Season of Use

Permittees were asked to indicate when each of their allotments was grazed. The AUMs of use for each of these seasons was then summarized. This summarization is subject to some error, because some allotments are used during more than one season. The total AUMs were summarized by the primary season of use indicated by the permittee. As a result, the seasons indicated in Figure 44 are general. Nevertheless, there is considerable variation in season of use by region. For example, summer use dominates in Regions 1, 2, and 9, while use during the winter is high in Regions 4 and 8. The high winter use in Region 8 (Morgan, Summit, and Wasatch Counties) is surprising because very little of the public land in these counties can be grazed during the winter and none of the land in these counties is administered by the BLM (see Table 1). Furthermore, it is unlikely that any of the FS lands could be grazed during the winter. As a result, most of the operators in this region probably graze lands located in other regions of the state (e.g., west desert).

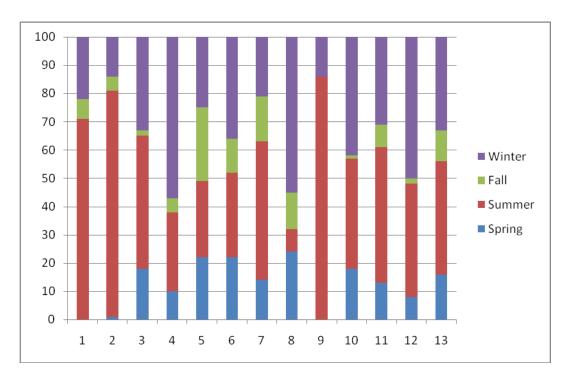


Figure 44. Percentage of actual use in 2006 by permittees in each region.

#### **Amount of Use**

Some grazing permits involve a small number of AUMs or land area, while others are large. The use of an allotment is affected by administrative, economic, and physical variables. For example, drought may limit the use of an area because the amount of forage available is less than the permit would allow. As a result of this, as well as other variables, permittees commonly graze fewer animals and/or reduce the period of use so that actual use is less than what is permitted. The difference between permitted and actual use for 2006 for each of the regions is shown in Figure 45. These data indicate that actual use was less than permitted use in every region, but the percentage was particularly large for permittees in Regions 3 and 8. There are a number of reasons why actual use may be less than permitted use of an allotment. In an effort to assess some of these reasons, permittees were asked if they had taken voluntary or involuntarily non-use of any of the allotments they were permitted to use. Nearly 25% of the permittees had taken non-use, and most of this had been voluntary. The primary reason given was drought (see comments in Appendix C). Most of the non-use was for one year and only 14% of the permittees indicated that the losses had been permanent (most permittees did not provide any response to this question, so 14% is probably a low estimate). The primary adjustment made to the reduction in use was to reduce herd size (see comments in Appendix C).

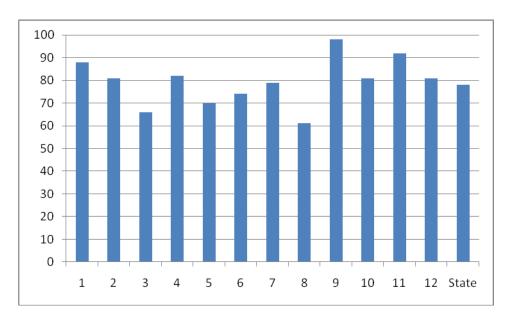
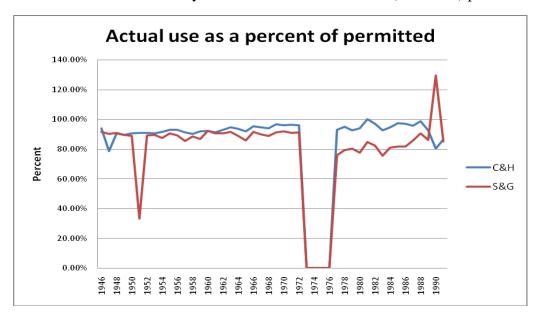


Figure 45. Actual use as a percent of permitted use in each of the regions in 2006.

The difference in permitted use compared to actual use may appear odd to some readers because it is not obvious why a producer would not use his/her full permit. There are numerous reasons (e.g., reduced herd size as a result of drought in the past, voluntary non-use). Some indication of how commonly a producer may not use his/her full permit is indicated in Figure 46. These data clearly indicate that actual use was commonly less than permitted use during the period when the FS provided data on permitted and actual use. They also indicate that sheep (and goat) operators stocked somewhat more conservatively than did those that had cattle (and horse) permits.



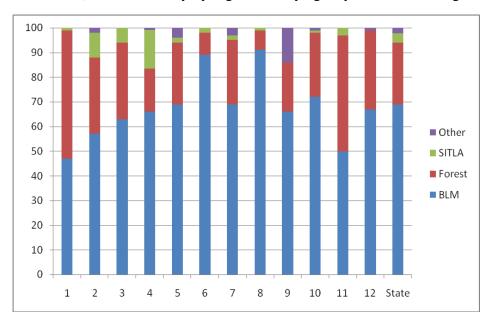
**Figure 46.** Actual use <sup>12</sup> of Forest Service lands as a percent of permitted use in Utah by class of animal, 1946-1991.

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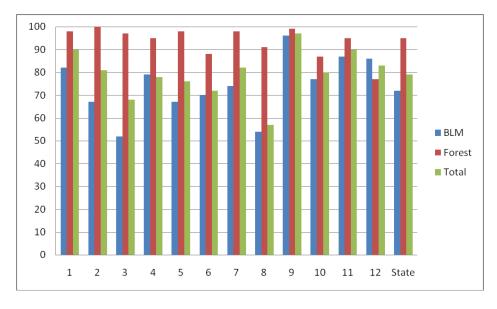
 $<sup>^{\</sup>rm 12}$  Actual use data were not reported for all of the years shown.

#### **Forage from Agency**

The land ownership pattern shown in Figure 14 and Table 1 suggest that forage obtained from the various agencies will not be uniform throughout the state because BLM, FS, and SITLA land ownership varies by county and region. For example, the data in Figure 47 indicates that nearly 90% of the permitted forage provided by the various agencies comes from BLM lands in Region 6, while less than 50% of the forage in Region 1 comes from BLM lands. Lands administered by the BLM do, however, provide about 70% of the forage that producers obtain from all public lands in the state. A similar pattern also exists for actual use (permittees were asked to provide permitted and actual use data). However, the ratio of actual to permitted use (actual use divided by permitted use) varied not only by region, but by agency, as shown in Figure 48.



**Figure 47.** Percentage of permitted livestock use by agency in regions of Utah in 2006.



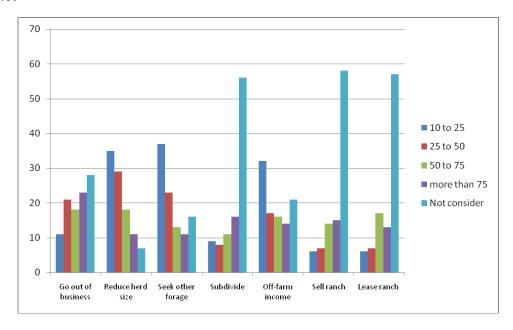
**Figure 48.** *Percentage of actual to permitted use by agency and region, 2006.* 

These data, like the historic FS data above (Figure 46), indicate that actual use is commonly less than permitted use, particularly for lands administered by the BLM that experienced prolonged drought before 2006. This would have affected BLM lands to a greater degree than FS lands, because they are commonly in low-rainfall areas. This is probably the reason why lands in Region 9 were stocked closer to permitted use.

#### **Grazing Adjustments**

A number of adjustments can be made if the use of public lands is reduced. Permittees were asked to indicate what percent reduction it would take to have them make various alternative adjustments (go out of business, reduce herd size, seek other sources of forage, subdivide private land, supplement ranch income with off-ranch income, sell the ranch, or lease the ranch to another producer). The responses to these alternatives are summarized in Figure 49.<sup>13</sup>.

Fewer than 10% of respondents were willing to sell the ranch, lease it to another rancher, or subdivide private lands, while 72% would consider going out of business. This suggests most permittees would likely stay in business and get by with private resources if use of public lands was reduced. However, about 10% of the permittees would consider going out of business if grazing permits were reduced by as little as 25%. If the reduction was as much as 50%, more than half of the permittees would consider going out of business. It would take less than a 25% reduction in the use of the permits owned to have more than 30% of the permittees reduce herd size, to seek other sources of forage or supplement ranch income with off-ranch sources of income. Nearly two-thirds of the permittees would reduce herd size and/or seek other forage if permits were reduced between 25 and 50%.



**Figure 49.** Percentage of responding permittees that would consider alternative actions, given alternative reductions (percent) in the use of owned grazing permits.

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<sup>&</sup>lt;sup>13</sup> It should be emphasized these data are only for those permittees that indicated what percent adjustment would be needed to make the adjustments considered. More than one-third of the permittees did not respond to this general question and nearly half of the permittees did not respond to the last three alternatives (supplement, sell, and lease). However, the responses received are probably indicative of the non-responding permittees.

#### **CONCLUSIONS**

Several related conclusions can be drawn from the data and analysis above concerning the livestock industry in Utah. Some of these are briefly outlined below.

- 1. The livestock industry in Utah has changed over time from sheep to cattle production, but the change has not been at the 5:1 ratio that has commonly been assumed. This is especially true in some areas of the state (e.g., southern Utah). As a result, livestock production has shifted from southern to northern Utah.
- 2. Relatively large reductions in the use of lands administered by the FS and BLM by cattle, sheep, horses, and goats have occurred over time. As a result, an increasing portion of the feed needed by the livestock industry in Utah is produced on private land. Livestock production has commonly declined in areas where the amount or development of private land is limited (e.g., areas where the amount of public land is high or where urban development has occurred).
- 3. Livestock producers with permits to graze public lands have larger operations than livestock producers without permits. Large portions of these operators also have other sources of income that supplement their ranch operation, but ranching is their primary occupation. Livestock operators without permits can generally be viewed as part-time producers whose primary occupation is not the production of livestock.
- 4. Livestock operators with grazing permits generally have been owned by the same family for more than one generation, and they intend to keep this a family operation in the future. These operators view the sale of the ranch, leasing, and the creation of subdivisions actions of last resort if their use of public lands were reduced.
- 5. Livestock producers view legal proceedings as the biggest threat to the use of public lands by livestock. These legal actions are generally beyond their control.
- 6. Most livestock producers believe that livestock grazing has a positive impact on the reduction of fires. Livestock grazing is generally viewed as having a basically neutral impact on other uses (birds, big game, water quality/quantity, riparian areas, recreation, etc.).
- 7. The value of grazing permits varies widely within the state. The limited data that are available suggest that the value must be evaluated for each parcel and that few, if any, generalizations can be made.
- 8. Livestock production is a relatively important segment of the economy in some counties and regions of the state. This is especially true in some of the most rural counties. As a result, other segments (especially firms that supply inputs used by livestock operations) of the economy in these counties are closely related to and dependent on a healthy livestock production sector.

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# Appendix A

# Cover Letter and Questionnaires Sent to Livestock Producers

The following letter and the survey were sent to all addresses initially and then sent again later to the addresses that did not respond. The memo dated December 1 was a third mailing. Copies of these materials may be downloaded from the public lands section of the Agribusiness web page at Utah State University

http://extension.usu.edu/agribusiness/







#### Dear Utah Livestock Producer

Approximately two-thirds of the land in Utah is managed by some governmental agency (BLM, Forest Service, State of Utah [SITLA], Park Service, etc). The Utah legislature gave researchers at Utah State University a grant to provide socio-economic information that these agencies and local units of government can use in resolving land management issues. This survey is one part of this grant.

One of the important uses of publically managed lands as well as private lands in Utah involves grazing by domestic livestock. Members of the State Grazing Advisory Board strongly encourage you to participate in this study by completing one of the enclosed questionnaires. One questionnaire is designed for those who currently have one or more permits to graze livestock on lands that are administered by a land management agency (for example, BLM, Forest Service, SITLA). The second is designed for livestock operators who do not have a permit to graze on lands administered by a government land management agency. This survey is also supported by the Utah Cattlemen, Wool growers, Farm Bureau, and Department of Agriculture and Food. The information you provide is needed to help us assess the role and importance of livestock grazing in Utah.

Your name was selected from a list of farms and ranches maintained by the Utah office of USDA's Agricultural Statistics Service. They are cooperating in this project but will not see the responses received and we will not see the names and addresses of those being mailed a questionnaire. All information received will remain confidential. Information provided by any individual will not be revealed. Questionnaires will be separated from return envelopes so there is no way to determine who provided what response. Your participation is voluntary and greatly appreciated!

Please return your response in the enclosed business reply envelope.

Should you have any questions concerning the study, please contact Bruce Godfrey (<a href="mailto:bruceg@ext.usu.edu">bruceg@ext.usu.edu</a> or 435-797-2294) at Utah State University who is directing the work dealing with livestock grazing on public lands. Copies of the questionnaires used are also posted on public lands section of the agribusiness web site at USU (<a href="http://extension.usu.edu/agribusiness/">http://extension.usu.edu/agribusiness/</a>).

Thank you for your participation.

Sincerely yours

Jay Tanner

Chair, Utah Grazing Advisory Board

#### **State Grazing Advisory Board NorthEast Regional Grazing Advisory Board**

| Paul McCoy       | Vernal         | Paul W. McCoy       | Vernal   |
|------------------|----------------|---------------------|----------|
| Jay Tanner       | Grouse Creek   | Doak H. Chew        | Jensen   |
| Butch Jensen     | Price          | Mitchell R. Hacking | Vernal   |
| Tom Hatch        | Panguitch      | Todd Moon           | Myton    |
| Andrew Taft      | Bicknell       | Burt DeLambert      | Vernal   |
| Darrell Johnson  | Rush Valley    | Bill Robinson       | Jensen   |
| Steve Osguthorpe | Park City      | Gawain Snow         | Jensen   |
| Mike Styler      | Salt Lake City | Gordon Moon         | Duchesne |
| Ruland Gill      | Salt Lake City | Peggy Briggs        | Manila   |
| Rex Sacco        | Helper         |                     |          |
| Stanley Wood     | Lyman          |                     |          |

#### **South East Regional Grazing**

#### **South West Regional Grazing Advisory Board**

#### **Advisory Board**

| David Robinson         | Monticello     | <b>Tom and Corrine Williams</b> | Cedar City  |
|------------------------|----------------|---------------------------------|-------------|
| Sandy Johnson          | Lake Powell    | Arlin Hughes                    | Veyo        |
| Charles Redd           | La Sal         | Raymond and Allida Heaton       | Alton       |
| Charley Tracy          | Monticello     | Tom Hatch                       | Panguitch   |
| Dee and Tammy Taylor   | Moab           | Dennis and Jeri Iverson         | Washington  |
| Butch and Jeanie Jense | n Price        | Wayne Smith                     | Cedar City  |
| Wade and Cassie Jense  | n Cleveland    | Dell LeFevre                    | Boulder     |
| Vic and Frankie Sacco  | Price          | Dean Eyre                       | Minersville |
| Don and Kathie Holyoa  | k Green River  | Calvin and Phyllis Yardley      | Beaver      |
| Ross and Jeannie Hinki | ns Orangeville | William Dalton                  | Minersville |
| John Hanna             | Price          |                                 |             |
| Earl Gordon            | Huntington     |                                 |             |

#### **North West Region Grazing**

#### **Central Regional Grazing Advisory Board**

#### **Advisory Board**

| Jr. Goring         | Deweyville   | Stephen Osguthorpe | Park City  |
|--------------------|--------------|--------------------|------------|
| Calvin V. Crandall | Springville  | Bill Jasperson     | Goshen     |
| Jason Morgan       | Morgan       | Jack C. Madsen     | Gunnison   |
| Mike Spencer       | Malta        | Paul Frischknecht  | Manti      |
| Bill Kennedy       | Randolph     | Stanley Wood       | Lyman      |
| Gail Parker        | Ibapah       | E. Earle Hobby     | Fairview   |
| Ken Jordan         | Kamas        | Mark R. Monroe     | Scipio     |
| Jay Tanner         | Grouse Creek | Bliss Brinkerhoff  | Bicknell   |
| Brent Rose         | Park Valley  | Andrew G. Taft     | Bicknell   |
| Kelly Kunzler      | Park Valley  | John S. Nielson    | Leamington |
|                    |              | Verl Bagley        | Loa        |

#### меmorandum

Date: 1 December 2007

To: Beef and sheep producers in Utah

From: E. Bruce Godfrey

Subject: Grazing questionnaires

**It is not too late to respond.** This is the third mailing of a questionnaire that is designed to help us assess the role and importance of the livestock industry in Utah and in regions of the state. The information you provide, along with other information that is being developed, will be used by the governor=s office and local units of government in preparing responses to planning documents and EIS statements developed by federal agencies.

We realize that the earlier mailings arrived at a busy time of the year. As a result, many of you did not respond----to date less than 20% of those that were mailed a questionnaire in August and September have responded.

The following provides you with some guidelines concerning which questionnaire you should complete and return in the enclosed business reply envelope.

- 1. Did you respond earlier by returning a questionnaire or indicating that you were no longer a livestock producer?
  - A. If yes. **Thank you**. Your cooperation is appreciated! Dispose of the material in this mailing. You received this mailing because we have no way of knowing, unless you provided us with this information, who has and has not responded. This was done to keep all responses anonymous.
  - B. If no. Go to #2
- 2. Do you have a permit to graze livestock on public (e.g., BLM, Forest Service) lands?
  - A. If yes. complete and return the buff (yellow) colored questionnaire.
  - B. If no. complete and return the green questionnaire.

If you have any questions, please contact:

E. Bruce Godfrey
Department of Economics
3530 Old Main Hill, USU
Logan, Utah 84322-3530

Phone: (435) 797-2294 Fax: (435) 797-2701

e-mail: bruceg@ext.usu.edu

Your cooperation is appreciated! We wish you a happy holiday season.

Public lands grazing survey Summer 2007

# Grazing Non-permittee Questionnaire



Do you currently hold or lease one or more permits to graze livestock on lands administered by a land management agency (e.g., BLM, Forest Service, SITLA, Park Service)? If yes, please complete the Grazing Permittee Questionnaire. If no, please complete the following.

1. In what county and state is your ranch headquarters located?

| ef animals   | Sheep   |                   |
|--|---|-------------------|
| Brood cows   | Ewes  |                   |
| Replacement heifers  | Replacements  |                   |
| Bulls  | Bucks   |                   |
| Retained yearlings   | Goats   |                   |
| Purchased stockers   | Horses  |                   |
| come (enter appropriate number)?  Owner families:  |   | -                 |
| come (enter appropriate number)?   | Hired labor families:   |                   |
| Come (enter appropriate number)?  Owner families:  What percent of your ranches gross i  Source Sale of livestock  | Hired labor families:ncome is from the sale of:                             | ent of gross inco |
| Come (enter appropriate number)?  Owner families:  What percent of your ranches gross i  Source Sale of livestock Sale of crops  | Hired labor families:  ncome is from the sale of:  Approximate perc         | ent of gross inco |
| Owner families:  What percent of your ranches gross i  Source Sale of livestock Sale of crops Sale of other ag products  | Hired labor families:<br>ncome is from the sale of:<br>Approximate perc<br> | ent of gross inco |
| Come (enter appropriate number)?  Owner families:  What percent of your ranches gross i  Source Sale of livestock Sale of crops  | Hired labor families:<br>ncome is from the sale of:<br>Approximate perc<br> | ent of gross inco |
| Come (enter appropriate number)?  Owner families:  What percent of your ranches gross i  Source Sale of livestock Sale of crops Sale of other ag products Oil/gas                      | Hired labor families:<br>ncome is from the sale of:<br>Approximate perc<br> | ent of gross inco |
| Owner families:  What percent of your ranches gross i  Source Sale of livestock Sale of crops Sale of other ag products Oil/gas Timber   | Hired labor families:  ncome is from the sale of:  Approximate perc         | ent of gross inco |
| Owner families:  What percent of your ranches gross i  Source Sale of livestock Sale of crops Sale of other ag products Oil/gas Timber Recreational enterprises                        | Hired labor families:  ncome is from the sale of:  Approximate perc         | ent of gross inco |
| Owner families:  What percent of your ranches gross i  Source Sale of livestock Sale of crops Sale of other ag products Oil/gas Timber Recreational enterprises Other (please specify) | Hired labor families:  ncome is from the sale of:  Approximate perc         | ent of gross inco |

| A. Local area:  | %                      | B. Utah:          | % |
|---|------------------------|-------------------|---|
| 7. How long have you or your f<br>8. Does a member of the family    | =                      | -                 | • |
| yes or no.  |                        |                   |   |
| 9. During which period of time<br>feed (For example, 15 Novemb      |                        | • •               | - |
| What percent of the ha  | y fed is raised on you | ır farm or ranch? | % |
| 10. When your livestock are no obtained from the following so Utah? |                        | • •               |   |

| Source of feed  | Percent | Percent from Utah |
|-----------------|---------|-------------------|
| Private pasture |         |                   |
| Private range   |         |                   |
| Crop aftermath  |         |                   |
| Other private   |         |                   |
| State lands     |         |                   |
| Federal permits |         |                   |
| Other (specify) |         |                   |
| Total           | 100 %   |                   |

11. Have you (family/firm/ranch) ever owned a permit that allowed you to graze livestock on lands administered by any of the following land management agencies (circle all of the appropriate agencies)

Bureau of Land Management (BLM) State of Utah (SITLA) Fish & Wildlife Service Forest Service Park Service

|   |                     | d one or more permits to own these permits? | graze (        | on public | lands i | n the p   | ast but no |
|---|---------------------|---|----------------|-----------|---------|-----------|------------|
|   |                     |   |                |           |         |           |            |
| 0 0.  |                     | lable for sale in your area                 | -              | •         |         | illing to | pay for a  |
| Agency                                      | Spring              | Summer                                      | Fall           |           | V       | Winter    |            |
| BLM   |                     |   |                |           |         |           |            |
| Forest Service                              |                     |   |                |           |         |           |            |
| SITLA (state)                               |                     |   |                |           |         |           |            |
| 2= slightly importa ).  Factor or influence | ant, 3 = moderate   | ly important, 4 = very in                   | <b>iportar</b> | it; DK= c |         | 10w or 1  | no opinion |
| Legal suits filed to r                      | educe or eliminate  | e grazing                                   | 1              | 2         | 3       | 4         | DK         |
| Increased emphasis                          | on use by wildlife  | e   | 1              | 2         | 3       | 4         | DK         |
| Invasive species or                         | weeds               |   | 1              | 2         | 3       | 4         | DK         |
| Recreational activiti                       | ies (OHV's, hikers  | s, etc)                                     | 1              | 2         | 3       | 4         | DK         |
| Low returns from ra                         | nching              |   | 1              | 2         | 3       | 4         | DK         |
| Purchase of ranches                         | for recreation/sec  | ond homes                                   | 1              | 2         | 3       | 4         | DK         |
| •   |                     | ange improvements<br>etation treatments)    | 1              | 2         | 3       | 4         | DK         |
| Increases in grazing                        | fees                |   | 1              | 2         | 3       | 4         | DK         |
| Increases in the non                        | -fee costs of grazi | ng public lands                             | 1              | 2         | 3       | 4         | DK         |
| Drought/Fire                                |                     |   | 1              | 2         | 3       | 4         | DK         |

Other (please specify) \_\_\_\_\_1

DK

| <b>15.</b> | Grazing by domestic livestock can have a positive as well as a negative impact on other uses. Indicate |
|------------|--|
|            | what impact, if any, grazing by domestic livestock has on the following in areas where your livestock  |
|            | graze (check the appropriate box)  |

### Background information

The following information will allow us to determine how representative the responses received are of the general population. All responses will remain strictly confidential.

| 16. | What is your | gende | r (circle | e approp | riate resp | onse): | Male | Female |
|-----|--------------|-------|-----------|----------|------------|--------|------|--------|
|     |              |       |           |          | _          |        |      |        |

17. What is your level of education (circle appropriate response):

less than a high school degree High school degree or GED Some College 2 year/associate degree

4 year degree (BA/BS) Advanced degree (MS, JD, PhD, etc)

| 18. In what county and state is your <b>p</b>                              | primary residence?                  |                  |
|--|-------------------------------------|------------------|
| How long have you lived in the   | •                                   |                  |
| 19. How many people currently live i                                       | n your household                    |                  |
| Total number   | Number under the                    | e age of 18:     |
| 20. What is your religious affiliation i                                   | if any (circle appropriate response | e)?              |
| Latter-Day Saint Protestant (e.g., Baptist, Episco Other (please specify): |                                     | Catholic<br>None |
|  |                                     | - ,              |

# 21. Which of the following best describes your racial/ethnic background? (Feel free circle more than on category if appropriate):

| White/Caucasion/Anglo   | African American/Black          |
|-------------------------|---------------------------------|
| Hispanic/Latino/Latina  | Native American/American Indian |
| Asian                   | Pacific Islander                |
| Other (please specify): |                                 |

#### 22. Which of the following are current sources of income to your household? Circle all that apply.

Wages and salary
Income from business
Interest and/or investment income
Income from rental property
Supplemental security income
Other disability benefits

Social Security payments
Retirement pension payments
Unemployment compensation
Food stamps
Public assistance/welfare
Other

# 23. Which of the following categories best describes you pre-tax annual household income for 2006? Circle the appropriate amount

| Less than \$15,0000    | \$ 75,000 to \$99,9999   |
|------------------------|--------------------------|
| \$ 15,000 to \$ 24,999 | \$ 100,000 to \$ 149,999 |
| \$ 25,000 to \$ 34,999 | \$ 150,000 to \$200,000  |
| \$ 35,000 to \$ 49,999 | \$ 200,000 or more       |
| \$ 50,000 to \$ 74,999 |                          |

24. Please add any comments you believe would be helpful or informative.

#### Public lands grazing survey Summer 2007

## **Grazing Permittee Questionnaire**











Do you currently hold or lease one or more permits to graze livestock on lands administered by a land management agency (e.g., BLM, Forest Service, SITLA, Park Service)? If no, please complete the enclosed non-permittee questionnaire. If yes, please complete the following questionnaire.

| State:   | County:  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| Iow many of the following types of animals do you (family/firm/ranch) currently own?   |  |  |  |  |  |  |
| Beef animals   | Sheep  |  |  |  |  |  |
| Brood cows   | Ewes   |  |  |  |  |  |
| Replacement heifers Replacements   |  |  |  |  |  |  |
| Bulls  | Bucks  |  |  |  |  |  |
| Retained yearlings   | Goats  |  |  |  |  |  |
| Purchased stockers   | Horses   |  |  |  |  |  |
| ne (enter appropriate number)?   | nd on this ranch operation for all or part of th   |  |  |  |  |  |
| ne (enter appropriate number)?  Owner families   | Hired labor families:  |  |  |  |  |  |
| ne (enter appropriate number)?  Owner families   | Hired labor families:  |  |  |  |  |  |
| ne (enter appropriate number)?  Owner families Hat percent of your ranches gross income in   | Hired labor families:s from the sale of:   |  |  |  |  |  |
| ne (enter appropriate number)?  Owner families Hat percent of your ranches gross income in Source  | Hired labor families:s from the sale of:  Approximate percent of gross income  |  |  |  |  |  |
| ne (enter appropriate number)?  Owner families Hat percent of your ranches gross income in Source Sale of livestock  | Approximate percent of gross income  |  |  |  |  |  |
| ne (enter appropriate number)?  Owner families Hat percent of your ranches gross income in Source Sale of livestock Sale of crops  | Approximate percent of gross income %  |  |  |  |  |  |
| ne (enter appropriate number)?  Owner families Final percent of your ranches gross income in the source and source are source. Sale of livestock are sold of crops are sold of their ag products.              | Approximate percent of gross income  |  |  |  |  |  |
| ne (enter appropriate number)?  Owner families He hat percent of your ranches gross income in Source Sale of livestock Sale of crops Sale of other ag products Oil/gas   | Hired labor families:s from the sale of:  Approximate percent of gross income%%%%  |  |  |  |  |  |
| ne (enter appropriate number)?  Owner families Final content of your ranches gross income in the source and source are source. Sale of livestock are sold of crops are sold of other agroducts. Oil/gas Timber | ### Hired labor families:  ### s from the sale of:    Approximate percent of gross income  |  |  |  |  |  |
| ne (enter appropriate number)?  Owner families He hat percent of your ranches gross income in Source Sale of livestock Sale of crops Sale of other ag products Oil/gas Timber Recreational enterprises         | Approximate percent of gross income  Mapproximate percent of gross inc |  |  |  |  |  |
| ne (enter appropriate number)?  Owner families He hat percent of your ranches gross income in Source Sale of livestock Sale of crops Sale of other ag products Oil/gas Timber Recreational enterprises         | ### Hired labor families:  ### s from the sale of:    Approximate percent of gross income  |  |  |  |  |  |

| 6. What percentage of your p individuals in:        | ourchases (su   | pplies, fuel, medicine | e, etc) are from fi | rms or              |
|---|-----------------|------------------------|---------------------|---------------------|
| A. Local area:                                      | %               | B. Utah                | %                   |                     |
| 7. How long have you or your                        | r family owne   | ed this livestock oper | ration?             | years               |
| 8. Does a member of the fami<br>generation)? yes or | • -             | erate this ranch/firm  | n in the future (ne | ext                 |
| 9. During what period do you                        | ır livestock ty | pically depend on h    | ay as their prima   | ry source of feed   |
| (for example, 15 November to                        | o 31 March) '   | ?                      |                     |                     |
| What percent of the h                               | nay you feed i  | is raised on your far  | m/ranch?            | %                   |
| 10. When your livestock are i                       | not primarily   | being feed hay, wha    | at percentage of tl | heir feed (AUMs) is |
| obtained from the following s                       | sources? Wha    | at percentage of each  | n source of feed is | obtained from lands |
| in Utah?  |                 |                        |                     |                     |

| Source of feed  | Percent | Percent from Utah |
|-----------------|---------|-------------------|
| Private pasture |         |                   |
| Private range   |         |                   |
| Crop aftermath  |         |                   |
| Other private   |         |                   |
| State lands     |         |                   |
| Federal lands   |         |                   |
| Other (specify) |         |                   |
| Total           | 100%    |                   |

11. If a permit became available for sale in your area, what would you be willing to pay for a grazing permit administered by the following agencies by season of use (\$ per AUM)?

| Agency         | Spring | Summer | Fall | Winter |
|----------------|--------|--------|------|--------|
| BLM            |        |        |      |        |
| Forest Service |        |        |      |        |
| SITLA (state)  |        |        |      |        |

12 . Please complete the following for each permit you have to graze on publicly administered lands: A) allotment name or number, B) agency (e.g., BLM, Forest Service, SITLA, National Park Service) that administers this allotment, C) in what state is this permit is located, D) the number of AUMs permitted and used in 2006, E) the season of permitted use and F) when and how this permit was acquired by your family/firm. See the examples noted below

| Allotment name or number | Agency | State | Permitted<br>AUMs | AUMs used in 2006 | Season of use | When acquired | How acquired            |
|--------------------------|--------|-------|-------------------|-------------------|---------------|---------------|-------------------------|
| Big Creek                | FS     | UT    | 450               | 300               | 6/1 to 9/15   | 1975          | purchased base property |
| 99 mile                  | BLM    | ID    | 300               | 300               | 11/15 to 3/25 | 2004          | sub-lease from neighbor |
|                          |        |       |                   |                   |               |               |                         |
|                          |        |       |                   |                   |               |               |                         |
|                          |        |       |                   |                   |               |               |                         |
|                          |        |       |                   |                   |               |               |                         |
|                          |        |       |                   |                   |               |               |                         |
|                          |        |       |                   |                   |               |               |                         |
|                          |        |       |                   |                   |               |               |                         |
|                          |        |       |                   |                   |               |               |                         |
|                          |        |       |                   |                   |               |               |                         |
|                          |        |       |                   |                   |               |               |                         |
|                          |        |       |                   |                   |               |               |                         |
|                          |        |       |                   |                   |               |               |                         |
|                          |        |       |                   |                   |               |               |                         |
|                          |        |       |                   |                   |               |               |                         |
|                          |        |       |                   |                   |               |               |                         |

| operation? Please o               |                             | 1 question 12 de               | you view as t   | eing the mo  | ost crucial to your ran | icn<br>  |
|-----------------------------------|-----------------------------|--------------------------------|-----------------|--------------|-------------------------|----------|
|                                   |                             |                                |                 |              |                         |          |
| 4. Has voluntary uestion 12?      | or involuntar               | y non-use been                 | taken since 19  | 90 on any o  | f the allotments noted  | l in     |
| Allotment                         | Year(s)<br>non-use<br>taken | Voluntary<br>or<br>Involuntary | Reduced<br>AUMs | Reason       | n(s)                    |          |
|                                   |                             |                                |                 |              |                         |          |
|                                   |                             |                                |                 |              |                         |          |
|                                   |                             | ber of AUMs poce 1990? Yes on  |                 | ny of the pe | rmits noted in questio  | on #12 b |
| •                                 |                             | •                              | 0 01            |              | 90? Yes or No?          | ıs notec |
|                                   |                             |                                |                 |              |                         |          |
|                                   |                             |                                |                 |              |                         |          |
| 8. What amount vurrently own/hold |                             |                                | er AUM) to in   | duce you to  | sell any or all the per | mits yo  |
| llotment or perm                  | it Accept                   | able price                     | Allotment o     | r permit     | Acceptable price        |          |
|                                   |                             |                                |                 |              |                         |          |
|                                   |                             |                                |                 |              |                         |          |
|                                   |                             |                                |                 |              |                         |          |

19. If you involuntarily lost (not sold) the use (AUMs) of the permits noted in question #12, indicate how much of a loss would be needed to have you make each of the following adjustments by you/your ranch (check the most appropriate column in each row).

Percent reduction

|   | refeelt reduction |       |       |      |          |
|---|-------------------|-------|-------|------|----------|
| Action:                                   | 10 to             | 25 to | 50 to | more | would    |
|   | 25%               | 50%   | 75 %  | than | not      |
|   |                   |       |       | 75%  | consider |
| Go out of business                        |                   |       |       |      |          |
| Reduce herd size                          |                   |       |       |      |          |
| Seek other sources of forage              |                   |       |       |      |          |
| Sub-divide private land (ranchettes, etc) |                   |       |       |      |          |
| Supplement ranch with off-ranch income    |                   |       |       |      |          |
| Sell ranch to another firm                |                   |       |       |      |          |
| Lease ranch to another firm               |                   |       |       |      |          |
| Other (please specify):                   |                   |       |       |      |          |
| Other (please specify):                   |                   |       |       |      |          |

20. Several factors or influences have or may affect the use of publicly administered lands by domestic livestock. Please indicate how important you believe each of the following may be in affecting the use of your grazing permit(s). Please circle the appropriate response (1= not important, 2= slightly important, 3 = moderately important, 4 = Very important, DK= Don't know or no opinion).

| Factor or influence                                    | <u>Imp</u> | ortance | <u>2</u> |    |
|--|------------|---------|----------|----|
| Legal suits filed to reduce or eliminate grazing       | 2          | 3       | 4        | DK |
| Increased emphasis on use by wildlife                  | 2          | 3       | 4        | DK |
| Invasive species or weeds                              | 2          | 3       | 4        | DK |
| Recreational activities (OHV's, hikers, etc)           | 2          | 3       | 4        | DK |
| Low returns from ranching                              | 2          | 3       | 4        | DK |
| Purchase of ranches for recreation/second homes        | 2          | 3       | 4        | DK |
| Reduced development/maintenance of range improvements  | 2          | 3       | 4        | DK |
| Increases in grazing fees                              | 2          | 3       | 4        | DK |
| Increases in the non-fee costs of grazing public lands | 2          | 3       | 4        | DK |
| Drought/Fire   | 2          | 3       | 4        | DK |
| Other (please specify)1                                | 2          | 3       | 4        | DK |

21. Grazing by domestic livestock can have positive as well as negative impacts on other uses. Indicate what impact, if any, grazing by livestock has on the following in the areas where your livestock graze (Check the appropriate box).

| Impact of livestock grazing on:           | Very<br>Negative | Negative | Neutral | Positive | Very<br>Positive |
|---|------------------|----------|---------|----------|------------------|
| Vegetation in riparian areas              |                  |          |         |          |                  |
| Numbers of big game animals               |                  |          |         |          |                  |
| Number and variety of birds               |                  |          |         |          |                  |
| Water Quantity/Quality                    |                  |          |         |          |                  |
| Fire suppression                          |                  |          |         |          |                  |
| Recreational opportunities                |                  |          |         |          |                  |
| Spread of invasive plant species or weeds |                  |          |         |          |                  |
| Others (please specify)                   |                  |          |         |          |                  |
|   |                  |          |         |          |                  |
|   |                  |          |         |          |                  |

22. Please add any comments that you believe would be useful or informative concerning livestock grazing on public lands.

### **Background** information

The following information will allow us to determine how representative the responses received are of the general population. All responses will remain strictly confidential.

23. What is your gender (circle appropriate response): Male Female 24. What is your level of education (circle appropriate response): less than a high school degree High school degree or GED Some College 2 year/associate degree 4 year degree (BA/BS) Advanced degree (MS, JD, PhD, etc) 25. In what county and state is your primary residence? How long have you lived in this county? \_\_\_\_ 26. How many people currently live in your household Total number:\_\_\_\_\_ Number under the age of 18: 27. What is your religious affiliation if any (circle appropriate response)? Latter-Day Saint **Buddhist** Catholic Protestant (e.g., Baptist, Episcopalian, Lutheran, Methodist) Other (please specify): None 28. Which of the following best describes your racial/ethnic background? (Feel free circle more than one category of appropriate): White/Caucasion/Anglo African American/Black Hispanic/Latino/Latina Native American/American Indian Pacific Islander Asian Other (please specify): \_\_\_\_\_ **29.** Which of the following are current sources of income to your household? Circle all that apply. Wages and salary Social Security payments Income from business Retirement pension payments Interest and/or investment income Unemployment compensation Food stamps Income from rental property Supplemental security income Public assistance/welfare Other disability benefits Other 30. Which of the following categories best describes you pre-tax annual household income for 2006? Circle the appropriate amount Less than \$15,0000 \$ 75,000 to \$99,9999

\$ 100,000 to \$ 149,999

\$ 150,000 to \$200,000

\$ 200,000 or more

\$ 15,000 to \$ 24,999

\$ 25,000 to \$ 34,999

\$ 35,000 to \$ 49,999

\$ 50,000 to \$ 74,999

## Appendix B

Representativeness of Survey Data

Every five years producers are required to provide information for the Census of Agriculture, conducted by the Census Bureau through 2001. The 2002 Census was conducted by USDA's National Agricultural Statistics Service (NASS). The Utah office of NASS also conducts various surveys of agricultural producers throughout the year. As a result, NASS data is probably the most complete source of information concerning agriculture. Most of the questions raised in this study are not areas of emphasis for studies conducted by NASS. As a result, there is no benchmark data that can be used for comparison for many of the questions raised in this study (e.g., number of animals owned by permit and non-permit holders). However, NASS data probably provides the best data set for comparison purposes. The Utah office of NASS did provide the list of livestock operators that received the questionnaires that were used in this study. However, the names and addresses of these individuals and firms were kept confidential and not revealed to the author of this study. As a result, the names and addresses could not be compared to grazing records maintained by BLM, FS and SITLA. BLM, FS, and SITLA records provided the only data available concerning out-of-state firms or individuals that have permits to graze lands in Utah. Data for every registered brand were obtained from the Utah Department of Agriculture and Food (UDAF). Every county agent in the state was also asked to provide data on the number of livestock operators that were on their mailing list.

All of the above sources, along with the NASS data noted above, were used to evaluate how representative the responses received were of all producers in Utah. It should be emphasized however, that the responses received are not a sub-sample of the population. The questionnaires were sent to EVERY livestock producer identified by NASS, BLM, FS, and SITLA. The number of responses received by county is noted in Table B1. These data indicate a high response rate for some counties (e.g., Beaver and Wayne) and low for others (e.g., Salt Lake). The low response rates for the urban counties were expected because it is likely that most of these producers are small, part-time operators. The low response rate that was not expected is that for Sanpete County.

The Utah office of NASS was asked to indicate how many producers on the mailing list (9,502) had either more than 25 beef cows or 50 ewes. The result was 4,577 producers. The remainder (9502 - 4577 = 4925) had fewer than this number of animals. The permit and non-permit questionnaires were summarized to reflect those producers that had more than 25 cows or 50 ewes. The number of these producers, by county, was then divided by the number of large (more than 25 cows or 50 ewes) producers identified by NASS. The response rate for the larger producers was smaller in all but Piute, Rich, and Sanpete counties than it was when the smaller producers were included in the comparison. This suggests that larger producers are probably under-represented in the study when compared to NASS data.

**Table B1**. Number of permit and non-permit holder responses by county and percentage of NASS number.

|                     |       | Number of Res | sponses Rec | eived | Percent | of NASS |
|---------------------|-------|---------------|-------------|-------|---------|---------|
| County/Area         | NASS  | Non-Permit    | Permit      | Total | All     | Large   |
| Beaver              | 132   | 43            | 20          | 63    | 48%     | 29%     |
| Box Elder           | 572   | 154           | 32          | 186   | 33%     | 27%     |
| Cache               | 700   | 202           | 16          | 218   | 31%     | 17%     |
| Carbon              | 167   | 37            | 1           | 38    | 23%     | 11%     |
| Daggett             | 30    | 8             | 5           | 13    | 43%     | 33%     |
| Davis               | 252   | 69            | 1           | 70    | 28%     | 18%     |
| Duchesne            | 676   | 167           | 20          | 187   | 28%     | 26%     |
| Emery               | 360   | 70            | 47          | 117   | 33%     | 30%     |
| Garfield            | 178   | 32            | 24          | 56    | 31%     | 27%     |
| Grand               | 40    | 11            | 3           | 14    | 35%     | 20%     |
| Iron                | 311   | 70            | 30          | 100   | 32%     | 30%     |
| Juab                | 136   | 33            | 12          | 45    | 33%     | 27%     |
| Kane                | 86    | 20            | 18          | 38    | 44%     | 27%     |
| Millard             | 365   | 81            | 42          | 123   | 34%     | 33%     |
| Morgan              | 154   | 52            | 6           | 58    | 38%     | 33%     |
| Piute               | 69    | 14            | 7           | 21    | 30%     | 39%     |
| Rich                | 122   | 14            | 27          | 41    | 34%     | 38%     |
| Salt Lake           | 478   | 65            | 2           | 67    | 14%     | 5%      |
| San Juan            | 138   | 27            | 21          | 48    | 35%     | 29%     |
| Sanpete             | 480   | 50            | 17          | 67    | 14%     | 26%     |
| Sevier              | 372   | 91            | 18          | 109   | 29%     | 22%     |
| Summit              | 379   | 109           | 10          | 119   | 31%     | 26%     |
| Tooele              | 262   | 55            | 22          | 77    | 29%     | 25%     |
| Unitah              | 581   | 158           | 20          | 178   | 30%     | 22%     |
| Utah                | 1,120 | 266           | 28          | 294   | 26%     | 22%     |
| Wasatch             | 213   | 41            | 5           | 46    | 22%     | 19%     |
| Washington          | 427   | 69            | 39          | 108   | 25%     | 20%     |
| Wayne               | 127   | 29            | 29          | 58    | 46%     | 40%     |
| Weber               | 575   | 124           | 0           | 124   | 22%     | 10%     |
| No county indicated |       | 11            | 2           | 13    |         |         |
| Other               |       |               |             | 376   | 4%      |         |
| Out of state        |       | 12            | 32          | 44    |         |         |
| Total               | 9,502 | 2,184         | 556         | 3,116 | 33%     | 24%     |

It should be noted that more than 375 questionnaires<sup>14</sup> were returned because producers were either no longer in business, contacted at an incorrect address, or a phone call was received that indicated that the caller was out of business, did not want to participate in the study, or was not

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 $<sup>^{14}</sup>$  Records were not kept of all phone calls and returned questionnaires. The 376 noted in Table B1 are only the number for which a response was recorded.

viewed as a livestock producer (e.g., several individuals indicated that they only raised an animal or two for family consumption).

**Table B2.** Beef cows, breeding sheep, and lambs included in the survey as a percentage of those reported by NASS by region in Utah.

|                     | Beef Cows |         |         | Breeding Sheep & Lambs |        |         |  |
|---------------------|-----------|---------|---------|------------------------|--------|---------|--|
| Region              | NASS      | Sample  | Percent | NASS                   | Sample | Percent |  |
| 1 Da/SL/Ut/Web      | 32,000    | 11,477  | 36%     | 24,700                 | 6,022  | 24%     |  |
| 2 Dag/Duch/Uin      | 44,000    | 17,299  | 39%     | 15,600                 | 1,773  | 11%     |  |
| 3 Carbon/Emery      | 23,000    | 6,682   | 29%     | 15,400                 | 1,358  | 9%      |  |
| 4 Grand/SJ          | 12,000    | 5,947   | 50%     | 2,000                  | 85     | 4%      |  |
| 5 Gar/Kane/Way      | 23,500    | 13,061  | 56%     | 7,000                  | 2,024  | 29%     |  |
| 6 Iron/Washington   | 17,000    | 8,986   | 53%     | 36,700                 | 9,715  | 26%     |  |
| 7 Bvr/Juab/Mill     | 46,500    | 16,467  | 35%     | 8,000                  | 969    | 12%     |  |
| 8 Morg/Summ/Was     | 16,000    | 8,583   | 54%     | 45,000                 | 13,432 | 30%     |  |
| 9 Cache/Rich        | 27,500    | 22,368  | 81%     | 11,400                 | 1,490  | 13%     |  |
| 10 Box Elder/Tooele | 57,000    | 17,317  | 30%     | 42,400                 | 9,793  | 23%     |  |
| 11 Piu/Sanp/Sev     | 45,500    | 10,962  | 24%     | 60,700                 | 13,716 | 23%     |  |
| State               | 344,000   | 139,149 | 40%     | 270,000                | 60,377 | 22%     |  |

Another way of evaluating the representativeness of the responses received is to compare the number of animals included in the sample compared the total reported by NASS. This comparison is shown in Table B2. The NASS data are the reported number of beef cows and breeding sheep and lambs found in the 2007 issue of Utah Agricultural Statistics for 1 January 2007. The number in the sample is the number of beef cows and ewes reported by those who responded to the survey. This comparison suggests that a larger portion of the state's beef cows is included in the survey than is suggested by the number of operators that responded. For example, in Region 9 (Cache and Rich County) some 80% of the estimated number of beef cows reported by NASS were included in the survey responses, which is much higher than the percentage of the respondents for either county (Table B1). In general, the percentage of beef cows included in the survey is a larger share of the estimated number of beef cows reported by NASS in every region of the state. However, the percentage response is lower for sheep. This suggests that sheep operators are probably under-represented in the study. A review of the data and personal knowledge of the industry suggests that large permit-holding sheep operators are probably the one group that is most under-represented in this study. However, no data exist to confirm or refute this supposition. It should be emphasized that the number of animals reported by NASS is also an estimate. The standard used (NASS data) for comparison is also subject to sampling error, but it is the only data available that can be used for comparison.

The data in Table B3 summarize the general characteristics of permittee and non-permittee respondents. These data indicate that the general population characteristics of respondents are similar for permittees and non-permittees. The one response that was somewhat surprising was the high percentage of the questionnaires that were completed by males. It is not known if these characteristics differ in the regions of the state because these summaries have not been completed at the time this publication was written.

Table B3. Background information of permittee and non-permittee respondents.

| Characteristic                                       | Permittees | Non-<br>permittees |
|--|------------|--------------------|
| Percent of respondents that were male                | 93%        | 89%                |
| Percent by level of education                        |            |                    |
| Less than high school                                | 2%         | 2%                 |
| High school degree or GED                            | 28%        | 26%                |
| Some College   | 25%        | 24%                |
| 2yr/associate degree                                 | 12%        | 12%                |
| 4 year degree (BA/BS)                                | 19%        | 21%                |
| Advanced degree (MS/JD/PhD, etc)                     | 12%        | 13%                |
| Average number of people in household                | 3          | 2.9                |
| Religious affiliation                                |            |                    |
| Latter-day Saint                                     | 87%        | 84%                |
| Protestant and Catholic                              | 2%         | 5%                 |
| None or no response given                            | 11%        | 10%                |
| Racial/Ethnic Background                             |            |                    |
| White/Caucasian/Anglo                                | 95%        | 94%                |
| Hispanic/Latio/Latina                                | <1%        | < 1%               |
| Native American/American Indian                      | <1%        | 1%                 |
| Percent reporting income by source                   |            |                    |
| Wages and Salary                                     | 54%        | 58%                |
| Social Security payments                             | 32%        | 36%                |
| Income from business                                 | 55%        | 44%                |
| Retirement pension payments                          | 25%        | 31%                |
| Interest or Investment income                        | 23%        | 27%                |
| Unemployment compensation                            | 0%         | <1%                |
| Income from rental property                          | 10%        | 15%                |
| Food stamps or public assistance welfare             | None       | None               |
| Supplemental Security payments                       | 2%         | 2 %                |
| Other  | 4%         | 4%                 |
| Percent having annual gross income (pre-tax) in 2006 |            |                    |
| Less than \$15,000                                   | 3%         | 2.6%               |
| \$15,000 to \$24,999                                 | 7%         | 6.8%               |
| \$ 25,000 to \$34.999                                | 11%        | 10.2%              |
| \$ 35,000 to \$49,999                                | 15%        | 17.3%              |
| \$ 50,000 to 74,999                                  | 21%        | 24.1%              |
| \$ 75,000 to \$99,999                                | 11%        | 16.6%              |
| \$ 100,000 to \$149,999                              | 7%         | 9.7%               |
| \$ 150,000 to \$ 200,000                             | 2%         | 2.4%               |
| \$ 200,000 or more                                   | 4%         | 4.0%               |
| No response given                                    | 21%        | 6.3%               |

## **Appendix C**

**Responses to Survey Questions** 

The following responses were received are generally verbatim comments. The only changes that were made were corrections for spelling and deletion of names or allotments. Deletion of the names of individuals or specific allotments was made to maintain the confidentiality of the responses received.

# Reasons given by non-permit holders concerning why they no longer own a permit to graze on BLM, Forest Service, SITLA, FWS, or Park Service Lands

sold livestock and permits to neighbor

We had to sell our land back to Forest Service to get Federal aid to restore water shed in the 1930s We owned 1 section of mountain land until 1930

never owned a permit

Millcreek canyon 80 years ago or more for sheep

Federal Bureaucracy discoufed use threatened curtailment and was difficult to work with. Therefore sold off majority of operation. Tired of listening to "pristine deer and elk only" rhetoric.

sold permits in Nevada 500 head

his mother lost them

The price was lower

the demand of rec - costs more than it was worth. (more)

Downsize to livestock #

didn't use them or need them

downsize and cost

environmentalists screwed us out of our grazing permits

sold most of ranch & moved cows to NV; sold most of cows

father grazed cattle on Strawberry, but farm broke up

sold cows

not sure

sold due to cuts, restrictions & labor shortages – 1965

too much recreation on land, cost too high for small operator

too expensive

reduction of number of animals

dad has pass but only uses 70% other left open

uncertainty due to previous cuts

cut back, sold

sold permits with former ranch in Northern Utah

don't know

sold permits because private ground was condemned too many times

politics - with gov. and others who hold permits

family strawberry permits. They might someday. But the range is turning to sagebrush. It

was the cows and water users that made strawberry what it was

Sold before I purchased the land

too close to city, too much traffic, too much liability

too short of grazing season

loss of farm ground

we let a friend use them

turned over to neighbor

failed to renew permits

Expense

Strawberry Water Users - done away with

cut back - so we sold out

sold - government too hard to work with

Strawberry water and grazing

couldn't afford to

no cattle sold permit

discontinued permits in Strawberry

the government and environmentalists forced us out of these permits with no personal compensation being paid for them. We owned a much larger herd before our permits were taken from us.

just renting out my land

strawberry water users

Forest Service has them now

no longer have the need

sold out

sold to the reduction of permits

Sold

too much harassment from forest service

project was closed and permit sold

problems with gov. and other cattlemen

sold because of gov. harassment

sold them

permits were pulled

father sold permits

had permits in strawberry valley, gov. condemned them

to expensive

sold them with farm

sold it

too expensive

Short season. Express in maintaining

sold permit

It was my Father And sold long ago

not available

never had the opportunity to get ine

SILA sold it in an auction

don't wish to put up with BLM, state of Utah

opp. Too small- probably wouldn't buy any

sold sheep herds

Sold

sold it

Bureau of Reclamation took back, river contamination

sold out

cut back # of animals and days allowed make it hard

too expensive to ship cows to range, reduction in herd due to drought

sold my cows and got too old to ride that much

cost hard to get along with government

not feasible

sold our cattle and permits

cost and not available

we used to run sheep but sold them

sold out, too old to keep up

lease cancelled. Don't think anyone runs on it anymore. Don't know for sure. Also Difficult

to work with DWR

partly retired and slowed down my operation

Grandpa sold them

insecurity of continued use

I sold it

cost of permit

it became too costly

sold because season to use it was shorter

more economical to use private & Indian leases

sold permit in Wyoming (too far to travel)

up/downs of farming/ranching

Sold

didn't need one

sold permit

too much red tape and tracking expense

sold the ground

sold property

sold to neighbor

sold it

Too much government control

leasing members deceased

no longer in livestock business full time

sold them out, tired of the red tape and harassment

too old

very small operation

predation and theft of calves.

sold and bought private ground

It was too time consuming for small # of the permit (43 cow/calf units)

sold them

sold summer permit to \_\_\_\_\_, had a full time job too hard to handle at the time

bought the public lands so as not to deal with others and to keep public out of trespassing on

the operation

had to cut back on operation numbers and no longer need them

the family sold it

too far away

given to someone else

sold them with pasture

purchase the land

an uncle in another area now owns the permit

they've become too expensive

sold place and permits

purchased the land

it was a poor permit and gov. red tape

always had enough private grazing for needs

sold ground and permit

no need, no feed

no longer have cows

never owned

no livestock owned now

When dad & uncle retired then passed away our private deeded land mostly is leased to other operators, no need to renew permit - Also dad and uncle were out bid in 1990 on some state permits

sold permit

father sold largest part

parents sold them

**Economics** 

too much hassle

too many rules and reg and other permittees

sold base property

permits were sold when I was young and dad was killed in accident

Sold

Sold

grandfather sold permits with part of the farm

we sold the permits and cows

sold base property

Sold

cattle are fed at home

sold them

family farm sold by parents

run on private farm

transferred to next generation

sold with 95% of farm

dad owned the permits- brother inherited them

Sold

sold 2007

property leased

drought and sold out

reduced the help size to a more manageable level

sold due to inability of father while I was out of US

the farm has 1 small permit 6 amu's that we kept just to keep from having to build a fence.

There is no pasture on the permit just canyon and cedar trees

We have 3 grazing permits, but none in my name

I sublease from a current lease

sold them with cattle sale

too much hassle with the above agencies

Navajo Reservation grazing permit

Injury

Tired of hassle with Gov. Reg & envir "exclusionists"

sold cows due to AUM cut drought

sold them

not enough time

old age

cut the permits

BLM closing, park run on

land trade made it unnecessary to lease from the forest service

down size

sold, too much trespass

we went out of the livestock business and sold our permits to others

the government kept cutting permits

it was retired- no family member could run it

I had some SITLA ground but they took it away

sold most of the farm

Sold herd

sold it

no access to permit

because of monument status - tired of dealing with BLM idiots. Drought

sold sheep permits did not trade to beef

father sold

the distaste I developed for working with federal agencies

Not economical to maintain

Other interest

sold- too much trouble

bought private past -not agree w/ grazing plans -reasonable sell

wasn't enough feed for the animals

sold to nephew and niece

Drought and could not compete with buffalo

could not longer take care of it

permit was sold when dad retired

owned in the past not any more

sold them

ask my brother \_\_\_

sold to niece and husband

sold livestock and permit

Sold

father required to sell the permits

sold- can find many to purchase

personal choice

sold the cows

gave up permit when operation downsized Sold cost prohibitive due to distance sold them

too many laws and too many people poking their noses around our business

reduced number of livestock

sold sheep and permit

sold permit out of range sheep

I have no livestock. I have sold the permits

we have owned permits that we sold because of the way we operate the business

they were taken without compensation

mother sold to pay Dr. bills

went out of the livestock business

sold permit out of fear of losing everything

not feasible numbers cut

we got a bad check for our lambs- had to sell

state sold land

Sold

The hassle of working with gov.

too many persistent bureaucrats

forest service took father grazing permits

couldn't put up w/ BLM's regulations & policies

would be interested but don't know cost

Owner died, Changed operation

Not economically feasible

Agencies are too hard to work with

Retired

we haven't needed them

sold permit not practical for our location

so much regulation and mismanagement that I sold permits

sold rights

SITLA has become a real estate development arm of Utah

Father sold it before he died

had to sell permit when moved to Nevada/ California in 1956. was carrying as non use for several years prior to moving away

I no longer own any cattle I have a very small BLM permit for sale

we use the range only as a hobby

moved away, sold cows, no longer used permit

permits decreased

Conflict of interest- worked for BLM

Na

Sold

brother now owns it

Sold

expensive and too much time to take care of cattle

to much control and decisions by the government

1960's bought private ground for the cows

Sold

they were sold

sold BLM too unpredictable

father owned and sold when retired

it got to be too big of a hassle to deal with a federal agency

wife's grandfather had permit we believe and when he died his wife got rid of it sold them

Sold

requires too much time cannot work and keep permits

BLM kept reducing the number of permits. Orig. 50 then 25 then 12 then sold permits sold and went to private pasture

ground has been burned or droughts cut permits

traded permits to another rancher

made ranch smaller- sold them

father retired and sold permits

got to be a pain

do not plan to carry enough stock to need one

time conflicts

permits were sold - too much hassle with gov agency

was leased (fire, fencing, would transfer sheep permit to cow

forest service banned permit on Nebo

not worth cost and effort

permit #'s were reduced until it cost more to ride and manage the unit than we could possibly gain from it

the government stopped the grazing

sold to other producers

we got pushed out of them by the agencies noted

The government stop us from grazing

no longer allowed grazing there

sold because of costs - sold down cows - raise calves for beef

dad sold the cows and the permits

Adjudication

the permits were cut from 75 head down to 15 head

very poor range, did not work well with management decisions

AUM were cut down so low it wasn't worth renewing

Sold

they took them away

went broke

sold the permit to buy private pasture

moved out of the area

sold them because of conflict of interest

too much hassle dealing with BLM, other cattlemen, public etc.

A number of reasons, including changing operations (we're in a down-sized transition mode right now). But largely because the public land entities are such a pain to deal with and

#### becoming increasingly unfriendly to grazing

50 years ago

Sold permits

they cut your permit and won't let you increase

Sold the permit to buy a ranch

sold forest permit for small number of horses

sold due to time to took to maintain fences

sold them

troubles/uncertainty of gov. agencies

Parents sold it-I would evaluate then be very interested

convenience and problems with FS

didn't use

sold ranch and moved to current location

state sold the land

state sold parcel of land

USU sold property

Sold when ranch split Economy of scale forced sale

other family members have the permits

sold sheep operation to family member who bought these permits

it was too time consuming to work with the forest service. Because of all the regulations I spent too much time

the hassle of dealing with forest service personnel - fencing problem and public complaints

leased 1920 - 1941 gov sheep permits sheep have mot run on this land in years

went out of sheep business

change from cattle & sheep to dairy at the time

sold ranch next to permit

don't need

I don't qualify for BLM permits

sold sheep herd

they are in my father's name

uncertain future with forest permit

the state park purchased the private range making the forest unavailable

forest and state canceled the grazing

sold the cow operation and the permits went with the herd

Forest Service too hard to deal with

The state took it away from us and turned it over to sheep permit

sold permit with the cow in the 80s

father sold permit

sold some private land to state park

association sold out to sheep men

don't know where to get one

sold permit

forest service pushed us out - b/c rec camping

less and less grazing time

inconvenience and losses

not worth work to maintain with lwss time and less livestock

sold the ranch

I quit raising cow & calf operation

increased grazing price

sold them too much hassle with the

we get tired of the uncertainty of amount of time we would be on the range. Also we're tired of non farmers trying to manage our use of permits

various reasons including the hassle of dealing with Forest Service and local

environmentalist

not worth the trouble too much red tape

Rail Road - sold former ranch

sold them

only good for Sept and Aug not worth the bother, no actual value - more of a nuisance

Rail Road - sold former ranch

no longer have cows

conflict with ranger and state livestock leaders

failure to receive paperwork

never owned one

still own them

I didn't have enough help and it was expensive

lack of positive management control

never had a chance-always taken by the big guys

grandparents sold

sold sheep and cattle

sold them, ranger tough to work with

Too much of a hassle

forced out by high expense and western watershed

I have retired, but left my nephew use the range

sold them to my brother

too costly to remove cattle

still have them

but sure grandpa ran cattle before I was born

one family member bought from us

sold when husband died

too much hassle, hard to check cattle, hard to coordinate rides, drought

cost of membership and value of grazing was not worth it.

Economics, bank pressure

sold them

the BLM became difficult to work with, was having to haul cattle 75 to 100 ,iles to utilize permits. Had problems with disease from other peoples cattle and bulls. 90% was problems with BLM

brother now operates grazing permits

state sold permit lands

cut herd number down

the state of Utah sold it

sold that ranch

stopped raising beef

they sold to Utah school trust lands. They sold out to private individuals

sold all cows

too many problems with the BLM management

too much trouble, improvements, short season

they were exchanged for remote grazing

sold to other family members

moved from Idaho

traded it

Utah ran it by the book didn't care about specific conditions

husband died

long story

cattle was sold and permits were cancelled or taken from my family by the BLM and Forest

Service

health, old age, pressure from administrator

sold cows

sold permit when husband died

still have permits but because of costs don't use

Forest Service to hard to get along with. Pasture is much easier to run, less time involved

tired of fighting the feds

cuts in numbers and time

cost of operation

forest service canceled all cattle permits

It just wasn't worth the hassle for 25 permits

death loss, difficulty in managing herd calving

ATVs, dev., regulations, not cost effective

sold our sheep herd tot other livestock owner

Sold permits

Expired

Use private land now

sold sheep and permits

cost too much

too short grazing time. Too many problems with FS

We sold them we lose to many to wild animals

father-in-law did many years ago when has larger herd

transferred to another family

loss due to predators and other costs

father sold sheep herd

economics dictated a change in occupation

cut back and sold the sheep

costs too high so changed operation\

was not proving profitable

not worth cost and effort

price of lamb was so low in 2000 that I sold 1200 ewe and forest permit

# of head and pasture dates not consistent

Sold

Sold

too difficult to operate under USFS rules and regs, shortened grazing periods death and loss sold permit

we do own them

sold and got out of sheep

permit numbers were cut, it was no longer economical

sold sheep and permit

we leased our cows to a permittee who was unable to keep up his cattle numbers for several years

down sized operation

could not depend upon; cost

Retired

Private pasture became available. Easier to manage

bureaucratic rigenmorole done away with permits

too much hassle and gov reg

ranch was closed

sold my cattle and forest permit for more than I was carring in 2007 January

too much hassle - too expensive to maintain.

sold for health problems

Sold

proper opportunity to sell

Too far from home ranch. Possibility that government could or would cancel lease.

Difficulty dealing with some government administration.

dad had to sell out because of drought

the returns were not worth the effort

sold cattle to father

too costly to operate

no longer exist

disease destroyed herd, could not rebuild

retirement because of age and gov. restrictions

grandparents sold

sold ranch

too much hassle

too much gov. hassle

not cost effective

sold out

Environmental pressures and grazing cutbacks

Too hard to work under govt supervision

sold to brother

sold permit

dad sold out

forest service canceled our permits

sold on non use

I owned a permit prior to working for BLM as a \_\_\_\_\_. When I went to work they (BLM)

deemed it as a conflict of interest and made me give up the permit

to many predators and no herders

#### Miscellaneous voluntary comments received in non-permittee questionnaires

Some years grazing should be earlier because of good spring feed. Don't let the June grass grow so tall

Due to the drought in our area no cattle was kept in 2007, I am hoping to be more productive in future

It's just a hobby

I think that I already filled out this questionnaire

Battle with growth and state water engineer priority is anti agriculture

Don't feel like I know enough yet to participate intelligently in a survey like this

Buys light steers, put on hay and pasture and sell as bigwste2rstdersnthay Fiskisevforrbeefandrmonfantillye a cow operator

BLM does not know how to manage the land, should be turned over to the private sector. Keep and make control local

My children are the 5<sup>th</sup> generation on our farm

Our cow numbers are down right now because we sold them in the high market. Plan on rebuilding to 100 brood cows

I would not buy a permit. I would buy property and manage it myself for a better return

For Income: Personal – 3 Business – 9

what is the purpose of this survey? Will is help small producers or just the big operators

200 dairy cows 100 dairy heifers

I believe that land uses can be multiple

our business will probably all be for sale in the next 10-15 yrs because none of our children want to continue

I think it reduces the danger of all kinds of fires to graze all of these areas.

Our operation is primarily for our own use. We produce 4 beef cows yearly- we use our hay for sale also

Early spring grazing on big game winter range is a benefit, where later on it seems to push the animals to other areas

wouldn't want a permit if it were free

cattle operation does not contribute significantly to my net income

and harvest crops off of about 8 acre

why am I getting this form we dairy 100% contained lots

small farms = broke

Beef cows are not our main source of income. Me and my wife both work outside of agriculture

put more information out on the positive side of grazing

went out of the dairy business in 1985

just sold beef animals permits should be able to be bid on by everyone for 5 year contracts

Get a good public relations firm. Public grazing needs to ed spread by enviro groups

we have reduced our herd

# 23 is not your business

hobby farmer, livestock raised for weed control and own use

get the state of Utah. Governor and Legislature to stop buying private lands. Discourage conservation easements

Thanks for asking

Very negative impacts to camping, hiking, hunting. Not worth it.

Livestock people who have grazing permits take very good care of the lands – grazing reduces fire danger and promotes grass growth

we train horses and use public lands a lot for recreation.

I would love to have winter grazing permit opportunities in any part of northern Utah

I'm not running any cattle yet but I am planning to buy some in 2008. I would appreciate any help with literature about the business that you would recommend.

Due to a senior partner having ill health our operation has cut down drastically

without **low cost** public grazing many farmers and ranchers would be forced out of business

Public land grazing is very important to the future of farming & ranching we must do everything we can to keep Public land grazing

kick environmentalists out of our state BLM & forest service lands have too many people who think they own the ground & like to throw their weight around

many ranchers and farmers in this area would go out of business without the permits

no longer own livestock

we no longer ranch

fluctuation of prices

we pasture neighbor's cows

grazing practices by "old theory" ranchers should be more closely monitored. The way grandpa used to farm is not always the best method. More education needs to be given to younger ranchers

we raise these animals for recreational and for the kids to learn responsibility not for profit

retired – we own 446 acres and lease to others for \$500 per year

plans for the state should be provided for all development is begun

we feel grazing helps with fire suppression by decreasing undergrowth

religion, ethnicity and income should not apply

Sagebrush has taken over leading to fire hazards and recreational danger

US gov. needs to look to the future- we will always need food grown in America, farming has got to be profitable

This is a very very little hobby

There's always a problem with wild life on this ranch, ruin fences, garden, yard, wrecked vehicles

our marketing changes every year- we answered #5 with an estimated average

The seasons are too short, too expensive. DWR has too many Elk

Just started – haven't seen a profit yet

Buy and sell 40 head of calves per year

at present we only feed what we want for our family's use. We graze after our crow season. We rent the field to others to feed off.

Grazing is very important

don't claim our place in taxes for farm or make any deductions off farm, just raise a few head for personal use

ranch and farms leased out

I would like to know how to access information on obtaining permits

The range was owned by the family trust since 1976 and sold in 2007. I no longer have access to summer or winter range and have sold my cattle as of Dec. 2007

We only have 2 cows on private land 5.06 acres

would like available leases of public lands mailed to livestock producers, before environmental concerns purchase items

I don't have grazing animals that would be using BLM lands

hobby farm, my expenses always exceed any income this place generates

good livestock management equals good land management; please send info on how to obtain permits

I only raise a couple of cows at a time for beef and I do not currently have any

I have a small 4.7 acre farm. It may one day buy my place of residence. It is a hobby farm at best.

Have less government involved

generally speaking livestock men have been the best stewards of the range and it's too bad negative attitudes and false information have such a big impact on ranching\farming

We raise livestock to harvest their fleece. Why are we not considered and acknowledged for our contributions?

Due to the salt creek fire we were forced to sell all reduce environmentalists hold on public lands - wildofirear diversion deut graith stress weinthe acquire in the as per cond. Before

> haven't farmed for over 13 years, all we have are 4 horses that are in a corral

give ALL public lands in the state to local managed by the people of the state. Get the federal gov. out of our public lands.

I feel there are a few areas that grazing would help control grass and vegetation from being fuel for fire

I sold my ranch 7 yrs ago and just kept a few head of cows that I can feed and take care of in my old age

special interest groups have too much influence with no practical knowledge

I would like more info on the chances we have to graze on private or public lands

pasture land is leased

I raise beef for food, goats for milk, chickens for eggs, fish for food, and I sell a little of each for income

Permits far below private pasture prices – permits should be recalled every 10 years and re-auctioned

I don't know what the cost would be for permits but infelteisteich possible to start a new operation

my ranching is more a hobby than for economic gain

have no idea what the going rate is for permits or if by month or cost of permit

lack of income from farming has been a negative to future of farming by our family

the lack of grazing has been responsible for the increase in fires

#1 problem is ag land turning into residential and land process escalating along with property taxes

I no longer own livestock

One thing that would really help is if I had inherited a farm like most everybody else

we are only minutely involved but acutely aware of challenges of those living off of ranching

use corn to feed people and livestock not gas tanks. Build schools not bombs. Buy American

This is a hobby and we have calves for freezer meat and to keep the pasture feed off

have 2/3 acre & combine with neighbor 1-1/4 acre to graze 3 or 4 beef cows in summer to butcher for own use & to sell

Our ranch is a hobby farm we love to be around animals. It is a way to relax

grazing fees should be based on market forces and not political muscle of the livestock operators or greenies.

I feel strongly that public lands should be used by a wide range of multiple uses- mining, oil, gas, grazing I would be interested in a grazing permit for horses.

It is harder each year to find livestock feeder steers to purchase

selling out in Sept 2007- too expensive

grazing on public lands is very important to the success of our Ut. Economy and livestock business

My little operation is too minor to be of use in your program

will be buying cattle in the near future

small beginner farms need help

fuel prices are hurting us

The small family farm has about had it- you need to get big to survive or have other income

The small stock producer can't compete because of the present policies

use grazing as a means of fire suppression, over grazing is no longer the issue.

Unused land deteriorates

I don't approve of support grazing by private owners on public lands

farm land is being sold to build houses and ranchers can't afford to compete

I rent out my farm pasture to a neighbor for cow/calf operation

I put \$5.00 per AUM But don't know or have any idea how much ranchers are paying for permits. Would be interested on knowing more about grazing permits and their availability

I rent 60 acres of pasture for 4 months out of the

year. I'm not paid much for cow calf unit. Unless you a big – there is no way to make a living off the land

livestock belongs on private lands, mountains are destroyed by livestock

my cattle are a hobby or food source. The sale of calves feed the herd and produce beef (unadulterated) for family consumption

I feed four calves each year for sale to pay the taxes on home and property

I own 5 Acers to pasture my horses on. They are for pleasure. I raise one beef per year for family use.

These are dairy cows – help dairy prices

Just a hobby

allow cattle on the mt. early enough to "eat" up the fire dangers, monitor and remain flexible

feed costs due to ethanol and bio diesel are killing us – fuel costs – trucking – shipping costs are cutting margins

This range land is private and is leased to a cattle operation

I am actively involved some sales to help support my farming habit

This family has owned the place since 1863 to now 2008 that's 145 years still in the same name & I'll be the 4<sup>th</sup> generation to run it. I will pass it on down to my oldest son, who will go on with it as we all have done, most places around me have been sold and turned into houses and concrete which grows no food, It's about time that people realized where we are headed. The farms and ranches are being pushed out by moneyed people. We are headed down a trail of doom very fast.

Lease pasture and water

Just do this to keep my ground in the green belt

There needs to be more use for livestock on public lands, not to stop grazing, grazing is a positive affect on land

I wish to thank those that have worked so hard to help rural America survive in hard times

Some birds are helpful some are bad – it is more profitable to sell land to developers

sold cow/calf operation because of lack of access to grazing. Went to an all hay production.

Survey does not apply. Own 35 acres used for recreation and leased to neighbor that runs the herd from 6/15 to 11/15

these are dairy cows

I do not have a clue of how much the grazing permits are worth

you better take care of the farmers. The wealth of this nation rests on his back.

I see a lot of elderly farmers selling out to developers at a high \$. Younger would-be farmers cannot compete at the high \$ amount. Sub-divisions should be built in non-productive land

If you want public land to be healthy you need to graze it.

Watering troughs for livestock also give water to wildlife. Upsetting to see ranchers names carved into trees on Mosbey Mt.

stop laws that currently allow the rich to steal feed from poor small land owners

some states won't accept cattle

I only have 1 goat. My dad grazes his cattle on my pasture in trade for hay for my goat

The last 4 or 5 questions indicate the validity of your questionnaire.

More public grazing= fire suppression; more public grazing= wildlife I see more deer (wildlife) on the farms than on public lands

Fuel is one of my biggest expenses. I feel the oil companies are greedy

have had more cattle in the past but had to reduce the number when the family sold the private grazing land on blue mountain to another cattle raising operation

BLM needs to help with private property fence lines that join them and spray noxious weeds

sold farm, bought larger farm in Wyoming

have had more cattle in the past but had to replace the total numbers when fam. Sold private range

The livestock industry means a lot to our family and we can't let it go. Its who we are, what makes us. We love it!!!

It would be nice to have grazing permit at a reasonable cost

We should have our Strawberry grazing rights returned to us. This would also help with the fires in this area.

Our ranching operation is primarily a program of real estate maintenance

stop overgrazing, because it affects the image of all ranchers also it take years to recover if it ever does don't send me any more questionnaires

livestock grazing on public lands must pay fair market value comparable to private land in order to compete with recreational use

we raise lambs starting spring and sell in the fall every year. My father runs a separate sheep/cattle operation and has permits on BLM and Forest Service

had to sell cows because of condemnations and left us with no access to water for livestock and calving areas etc.

I only have 2 acres of pasture. I feed 4 animals for beef every year for family and friends. Generally from May to October. They then are slaughtered and processed

Thanks for your efforts in helping agriculture

would like very much to acquire grazing permit

I don't remember if I have already responded to this questionnaire

due to drought, we sold 60% of our cow herd in Aug and Sept

no comment because it wouldn't make any difference

I want more public advertising of range permits for sale or lease- it seems to be done behind close doors

small family historic farm- appox. 20 acres.

I could not get a permit if I tried

Taxes this year are outrageous! 600% increase is not right!

Just a hobby

I have rodeo bulls. They are too expensive to graze on public ground

sold dairy farm in 1965 have only 8 acres left where in pasture and grass hay

Land owners want to help but feel state and county agencies ties hands or try's to dictate policy; I speed two weeks a year trying to stop invasive weeds; I am cutting in road to property – no access right now

Property owned by a family partnership presided over by a 94 year old female. Grazing is leased to local friends; 40 head of cattle but do not know the division

established about 1910, and wasn't worked much from 1970-1994 been trying to get back into production the past 10 yrs

farm is mostly in young trees and fruit that are sold on road side stand

Raise beef for family use – do not sell for income

I believe that grazing helps public lands and game animals because ranchers control predators, keep water holes open, keep trails open and benefit the ground.

I lease my farms and buy hay from leases

Warner Valley used to be a very good winter permit but not now

Grazing permits that are in non-use should be made available to others who would use themnot environmentals

Farming and Ranching only help the environment and wildlife, no farmer/rancher wants to ruin the earth/animals

if permits were stable and I knew I wouldn't lose my investment I would love to buy some. (more)

We currently have the 4.3 acres for sale. We are not pasturing or feeding or owning livestock

I am struggling to keep going and I pray I can make it one more year!

Retirement and part time Jobs for both of us

I would welcome being part of a discussion group on this topic (info on sheet)

losing water shares to get simple water connects for water troughs for cattle om the Weber-Taylor area

I'm too old to know

our farm is up for sale Weber county taxes put me out of business

we no longer have cattle on our farm

tell the tree huggers to drop dead

Do not appreciate the questions #20 & 21

\_\_\_\_\_is forcing us to give up Irrigation shares for a connect water trough- who can afford to do that?

ground is worth more than farming, could easily retire if sold ground for horses or condos, what a waste

sells horse, wants to retire next year owns 30 acres

my wife & I both work other jobs cattle have many positive results on the environment contrary to popular belief

a larger (wider return envelope would be helpful

we no longer own cattle, all cattle from this operation were sold in 2006

retired

about 40% of my income comes from feeding cattle

for other people.

Our activities have been limited by mountain lions- otherwise keep to 200 head of sheep

#### Critical allotments (Q 13)

#### Why are the allotments identified important to your operation

Note: reference to particular allotments or operations have been deleted to maintain confidentiality

no other winter range

able to hay pasture only one A11 only one

all we would be done only one I have amount of aums Only one I have base property Only one I have base property Only one I have **Bought** Only one I have bought from family Only one I have bought when BLM came in to offer Only one I have bought from son only one we have can't sell the permits or else we sell the ranch only one we have couldn't feed livestock without them

only one with any feed decided to sell these and buy some closer to new operationly permit still own doesn't need hav in winter only winter feed I have Don't have to feed winter hay Only winter grazing Family permit in name of father father and purchased neighbor Provides enough feed from father purchased with range

from individual purchase base

grandfather obtained/organization of BLM grazing purchase base property

purchase from neighbor

had original since early 1800, purchased other permits as they came up purchase ground

purchase of ranch
If could buy more it would help the operation, more water available with those permits
if had winter grazing we could sell our hay instead of feeding it
for used, would have purchased private Purchased Inheritance

Purchased inherited from parents Purchased inherited/purchased purchased inherited/purchased permit purchased lease came available

purchased base property leased from oil company purchased base property leased private and obtained BLM permit purchased base property More time away from home and more AUM's purchased base property most cattle on it purchased base property Need both

purchased base property

purchased lease from father purchased base property purchased base property purchased permit/base property purchased base property purchased private land and BLM purchased base property purchased shares/base property purchased base property purchased shares/sub lease purchased base property purchased water base

purchased base property purchased with base property

purchased with ranch purchased base property

purchased base property Purchased purchased base property Purchased

purchased base property sale from neighbor purchased base property save feeding hay

sub from non-use neighbor purchased base property purchased base property, from previous owner sub lease from family, purchased base property/aum's from neighbor sub lease from neighbor purchased base property/from neighbor sub lease from neighbor

sub leases, purchased BLM permit purchased base property/sublease purchased base property/sub-lease from cousin summer and winter grazing

purchased base property/sub-lease from neighbor summer feed purchased base property/sub-lease from neighbor summer pasture purchased base property/sub-lease from neighbor/inheritedmer pasture purchased based property

summer pasture

purchased cattle and base Taylor grazing act, purchased based property,

purchased cows with permit leased base property

purchased cows with permit Taylor grazing act/lease from neighbor

purchased from another permittee totally dependents on grazing through the winter months

trade through BLM, purchased base property, purchased from another permittee

purchased from bond rep cost, purchased from prior randledease from neighbor purchased from father trade/purchased/lease

used with private concurrently purchased from father used with private concurrently purchased from friend

purchased from neighbor we use all of them purchased from other permit holders winter grazing

with purchase, plus extra and state lease purchased from previous owner

without would be out of business purchased from shareholder

### Non-use (Q 14)

## Reasons why voluntary or non-voluntary use was taken

| antelope, grazing, drought         | drought |
|------------------------------------|---------|
| better use it                      | drought |
| BLM changed off/on dates, no water | Drought |
| BLM mandated                       | Drought |
| BLM/FS                             | Drought |
| change in base generation          | Drought |
| changed to winter use              | Drought |
| conservation                       | Drought |
| conservation                       | Drought |
| desert tortoise                    | Drought |
| Didn't need that many              | drought |
| Drought                            | drought |
|                                    |         |

Drought & reseeding drought drought drought & water development problems drought drought and bison use drought Drought and Decreased numbers drought drought and fire drought drought and fire Drought drought and fire Drought drought and fire drought drought, fire drought, fire drought Drought, Lack of Money to buy cattle drought drought drought, not enough feed drought drought, permanent cut drought drought/forest ranger no common sense drought drought drought Dry drought Dry Drought Dry drought Dry drought Dry drought dry conditions drought Dry Range drought dry season Drought dry, no feed Drought dry, no feed there

fallow, planted, no-use false conditions

Father died, drought Father unable to

Feed

feed reduction/droughts

Fire Fire

Fire Fire

Fire Fire Fire

Fire fire and drought fire destruction

Fire, Drought

fire, winter grazing, overgrazed

Fires

for range improvement forest service decision FS cut them/BLM cut them government took them Help improve range herd reduction

lack of feed and drought lack of feed, lack of fencing

lack of fencing lack of moisture lack of water

lack of feed

Loco

Management

move cows off early

need BLM AUMs to use the State land

need to repair the fences no cows- economics No exchange for cattle

no feed no feed no feed no grass no rain no rain no water

not enough cattle not enough cattle number of livestock overgrazed, drought

over-grazing

partial non-use, drought

personal choice & fire damage

poor feed range condition range condition range improvement range improvement recovery from fire reduced feed Reevaluated Rehabilitation

residential development, too many conflicts

severe drought sold cattle sold cows

re-seeding project

stupid government suspended AUM's to bothersome to far to transfer to improve the range to many buffalo unknown, suspended unsure of numbers very severe drought

Water water-fire

we voluntarily reduce when feed is scarce when dry summers short feeder feed

#### O 17

#### What adjustments, if any, were made as a result of reductions in the use of grazing allotments

50% cut Down sized. 75% reduction in cattle numbers Drought Exchanged to cattle due to fire adjusted grazing plan As a cow-calf yearling operation, we reduced yearling than bath windlow adequate forage for the base momma cow herd fed hay, reduced herd size AUMs cut fed more hay because I have extra AUM's I was able to feed some permits heavy while not feeding \_ allotment more than one month in the fall 2006 feed cattle for 2 years bought another permit feed hay bought bad and used CRP ground feed more hay bought hay feed more hay-purchased bought hay fewer cattle bought hay fewer cattle in operation due to BLM taking approx Bought hay, reduced herd 35% of our range and placing it in desert tortoise bought hay--sold down numbers--went with dept to settle all habitat and not allowing any grazing. bought high priced feed Found more pasture bought more farm and pasture had to buy hay bought more pasture land had to buy hay for livestock for three years bought more property to raise more feed had to buy more hay and rent more pasture buy hay had to feed, find other pasture buy more hay had to find summer pasture elsewhere, private buy more hay and pasture to compensate property leases went up in price. had to purchase hay and lease private pasture buy private range had to reduce number of mother cows cattle herd was reduced have someone else take some of my herd Converting to feeder operation cut back cows between drought and floods and fires Hay heavy culling and kept a few heifers home cut back numbers lease fall feed Cut down-when the director shut me off of the 1/2 mbear acidican address west of the Had to shear and leave for Colorado sooner. I made my own adjustment in 2002 by selling 1/3 of my cattle because of drought on private as well Cut herd size as public land. Cut herd size I sold off 1 band due to drought Cut herd size in half cut numbers of cattle because BLM will not help improve range

cut numbers of ewes, fewer, lambs to sell, deep some sheep on the farm more often, hauled water and fixed a spring for same reason.

cut numbers, and maintenance cut the size of the cow herd down

cut numbers of ewes, fewer, lambs to sell, deep some sheep on the farm more often, hauled water and fixed a spring for same reason.

Installed fences for rest/rotation pastures assisting with drought situation. In addition, installed 7 miles

Decrease numbers of new water line and troughs in each pasture to

assist with rest/rotation method. Entire No major changes waterline is approx 32 miles in length. none at this time I've had to find pasture out of the state None keep cattle on private pasture None kept extra hay None Labor None lack of winter feed for sheep None Layoff hired hands None lease other grazing None lease other pasture None lease property None leased CRP Ground None Leased land elsewhere None Leased land in Colorado None leased other BLM allotments None leased other pasture None leased other pasture None leased other property None leased private lands None leased property not much, just got by less cattle Numbers less number of cattle **Pastured** litigating for over 10 yrs private range and forage, did not expand livestock grazing eliminated on one winter put more sheep in other areas for winter permit 135 head \_\_ allotment and season of purchased feed use reduced on \_\_allotment 50 head, AZ purchased hay because of desert tortoise-sold forest permit purchased hay 250 head-same time and used private fields for purchased hay summer and \_\_\_\_ allotment for winter purchased hay lowered total number Purchased hay and leased extra pasture more hav purchased more permits more private pasture purchased more permits more private pasture purchased more private land more ranch work put cows on feed on crop/hay ground Moved entire herd to BLM ranch for 18 months raise more pasture and hay then moved all back to our allotment when time raised more crops was over. reduce herd must grow more hay reduce herd n/a reduce herd Na reduce herd Na Reduce herd size New lambing facilities, not as large as would have been reduce herd size no change reduced aums

reduced cattle numbers reduced cattle numbers Reduced numbers reduced cattle numbers 2/5 because of drought reduced herd reduced numbers Reduced numbers

reduced herd reduced numbers and kind of livestock reduced herd number Reduced numbers due to drought reduced herd number reduced numbers of cattle owned reduced herd size reduced numbers of livestock reduced herd size reduced overall numbers

reduced herd size rented pasture reduced herd size rented private pasture

reduced herd size Renting more fields-changing lambing dates-more

reduced herd size trucking

reduced herd size rotate pastures during growing season every other

reduced herd size year and pulled off during summer months

reduced herd size run on private

reduced herd size run only the number of cows we are allocated

reduced herd size run our cattle on private pastures

reduced herd size sell cattle reduced herd size sell down cows

reduced herd size sent cattle to private pasture elsewhere

reduced herd size slowed herd growth

reduced herd size Sold 1/2 permits in 1993 and also 1/2 private land,

reduced herd size have been 1/2 of remainder during drought

reduced herd size sold 10 permits in Providence allotment to use only

reduced herd size

South Cache allotment

reduced herd size
reduced herd size
sold 20 head
sold 50%
reduced herd size
sold a permit
reduced herd size

sold a permit because of fire problems

reduced herd size
reduced herd size
sold another permit
sold breeding stock
sold brood cows
reduced herd size

reduced herd size
reduced herd size
reduced herd size
reduced herd size
reduced herd size
reduced herd size
reduced herd size
reduced herd size
reduced herd size
reduced herd size/fed more hay
sold cattle

reduced need size/red more may sold cattle reduced number sold cattle

reduced number of cattle
reduced number of cows
reduced number of head of cattle
sold cattle
sold cattle

reduced numbers

sold cattle

sold cattle way down because of drought.

Don't know if drought is over yet. Also being effected by population growth in our area.

sold cattle, rented other pasture

sold cattle, rented pasture

sold cow

sold cows

sold cows

sold cows during drought

sold cows, fed on private lands

sold cows, purchased hay

sold down herd

sold down my number of cattle

sold herd. Purchased hay

Sold Livestock

sold livestock

sold livestock

sold livestock to adjust for feed

sold most of cows and reduced horses

sold number down and bought hay

sold of livestock

sold off older cows to get down to permitted

numbers

Sold other FS permit

sold out

sold permits

sold permits to the number

Sold some of the cows

sold some sheep

Sometimes too much snow, so I keep them on

the ranch

supplemental feed and reduced number of

cattle

Took cattle to a leased ranch in Nevada and fed

a lot of hay

took job

Turned out late

unable to increase herd size

use private lands

used hay

used more private grazing

used other places, no reduction of herd

used private property more heavily. Used a

BLM permit in Utah that was temporarily available used to have sheep switched to cows

very little

We buy more hay

we down-sized

we had to sell

We have been unable to find a permanent grazing area since losing one forest permit and each year we are looking for a new area.

We purchased pasture out of the state and cut our herd numbers.

We sold 60 head of our permit to fit the number of cows we could feed from the hay which we raise on our own land.

we sold the sheep and changed to cattle we were forced to sell because of turtle habitat we were under the permitted numbers until 2007! will have to sell some cows, if no help comes from government