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United States General Accounting Office 131106

Fact Sheet for the Chairman,  
Subcommittee on Public Lands,  
Committee on Interior and Insular  
Affairs, House of Representatives

August 1986

# RANGELAND MANAGEMENT

## Profiles of Federal Grazing Program Permittees



131106

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Resources, Community, and  
Economic Development Division

B-206066

August 12, 1986

The Honorable John F. Seiberling  
Chairman, Subcommittee on Public Lands  
Committee on Interior and Insular Affairs  
House of Representatives

Dear Mr. Seiberling:

On February 25, 1986, your office requested that we review the Bureau of Land Management's (BLM) grazing program to obtain profile information on permittees with grazing privileges on the public lands. Your office expressed particular interest in where the permittees reside in relation to the public land on which their livestock graze and whether the permittees are individuals, partnerships or corporations.

On June 23, 1986, we briefed your office on the results of our work and agreed to provide you with a written summary of the profile information projected over the total BLM permittee universe.

The Taylor Grazing Act of 1934, as amended (43 U.S.C. 315), authorized the Secretary of the Interior to assign grazing privileges for vacant public lands. The privilege to graze on a parcel of public rangeland is associated with a specific privately owned land base or water base property (base property). Grazing privileges have been assigned to approximately 20,000 permittees who annually graze about 4.6 million cattle, sheep, and horses on the public lands managed by BLM. These permittees include individual ranchers as well as corporations, large operators as well as small operators, and local operators as well as out-of-state operators.

We met with representatives of your office on March 13, 1986, and discussed the availability of profile information on BLM grazing program permittees and the statistical sampling approach to be used in the review. To develop the requested permittee profile information included in this fact sheet, we obtained from BLM's Denver Service Center a listing of the 140 BLM field offices and 19,870 grazing permits as of April 3, 1986. From this listing, a random sample of 765 grazing permits administered by 52 BLM field offices in 10 states was selected, using stratified and cluster sampling based on a confidence level of 95 percent. We contacted each of the 52 field offices by telephone to arrange to have their most knowledgeable grazing program


manager available to provide the needed permittee profile information. As agreed, this information was not independently verified.

We had each BLM field office complete a questionnaire on each grazing permit in our sample to provide the profile information. Using formulas for stratified and cluster sampling, we took the permittee profile information received from the BLM field offices on our 765 sample grazing permits and developed projections at the 95 percent confidence level corresponding to BLM's total universe of 19,870 permits.

In section I of this fact sheet, we show the BLM grazing program permittee profile projections. Our projections show that about 76 percent of the permittees with grazing privileges on public lands are individuals, 11 percent are corporations, and 8 percent are partnerships. About 91 percent of the permittees own base property, while 8 percent lease it. We also determined that, by using an arbitrarily established 100 miles as the limit of local residence, over 80 percent of both permittees and owners of base property are local residents. Also, about 95 percent of the permits are held by permittees that reside either within 100 miles of the base property or within the same state. Section II of the fact sheet contains the statistical information associated with our projections.

As directed by your office, we did not obtain comments from BLM on this fact sheet. At your request, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will provide copies to BLM and make copies available to others upon request. If you have any further questions on these matters, please contact me at 275-7756.

Sincerely yours,

  
Michael Gryszkowiec  
Associate Director

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## ABBREVIATIONS

AUM Animal Unit Month  
BLM Bureau of Land Management  
GAO General Accounting Office



## SECTION I

### BLM GRAZING PROGRAM PERMITTEE PROFILE PROJECTIONS

The profile projections on permittees grazing livestock on BLM-managed public lands presented in this fact sheet are based on information that BLM field office grazing program managers provided regarding 765 randomly selected grazing permits. Some of the information, such as herd size and permittee residence, is based on the grazing program managers' personal knowledge of permittees and is not recorded in any official BLM record.

BLM defines a grazing permit as a document authorizing the grazing of livestock on BLM-administered lands within grazing districts established under section 3 of the 1934 Taylor Grazing Act. A grazing lease is a similar document, only it authorizes grazing of livestock on lands administered by BLM outside of the grazing districts, on what the Taylor Grazing Act refers to as section 15 lands. When we use the term "grazing permit" in this fact sheet, we are referring to both BLM grazing permits and grazing leases.

Each BLM grazing permit allows the grazing of a specific number of livestock, measured in animal unit months (AUMs). An AUM represents the forage needed to sustain one cow or its equivalent for 1 month. For example, five sheep consume as much forage as one cow and thus represent 1 animal unit month. There are about 14.7 million AUMs authorized by BLM grazing permits.

All percentages in the figures in section I are rounded to the nearest whole percent.

FIGURE 1:  
Distribution of Permits  
Among BLM State Offices

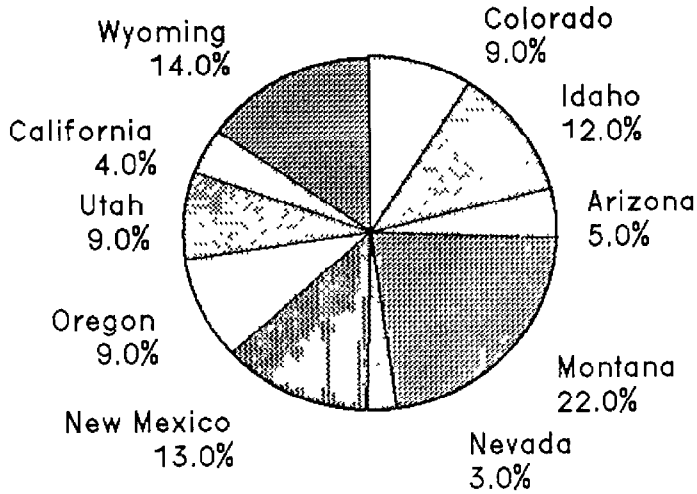
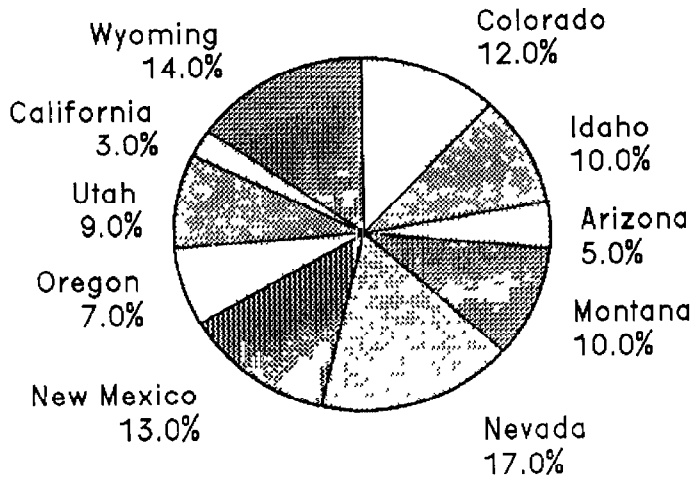


FIGURE 2:  
Distribution of AUMs  
Among BLM State Offices





DISTRIBUTION OF PERMITS AND AUMs AMONG  
BLM STATE OFFICES

Distribution of Grazing Permits Among BLM State Offices

The 19,970 grazing permits reported by BLM as of April 3, 1986, are managed by 140 BLM field offices assigned to 10 BLM state offices. Figure 1 shows the percentage of grazing permits administered by each BLM state office. Several state offices cover more than one state: the Colorado state office also covers Kansas; the Montana state office covers North and South Dakota; the New Mexico state office covers Oklahoma and Texas; the Oregon state office also covers Washington; and the Wyoming state office covers Nebraska.

Distribution of Grazing AUMs Among BLM State Offices

Figure 2 shows the distribution of the 14.7 million AUMs authorized by the BLM grazing permits among the state offices. A comparison of the two charts shows that the rate of AUMs per permit is about the same in each office, except for Montana and Nevada. The Nevada state office has more grazing AUMs than any other state office, having 17 percent of the AUMs, compared with 3 percent of the grazing permits. The Montana state office has 10 percent of the AUMs, compared with a 22 percent portion of the grazing permits. In other words, the Nevada office tends to have larger permits with larger than average assigned AUMs, while the Montana office tends to have smaller permits with smaller than average assigned AUMs.

FIGURE 3:  
Types of Permittees

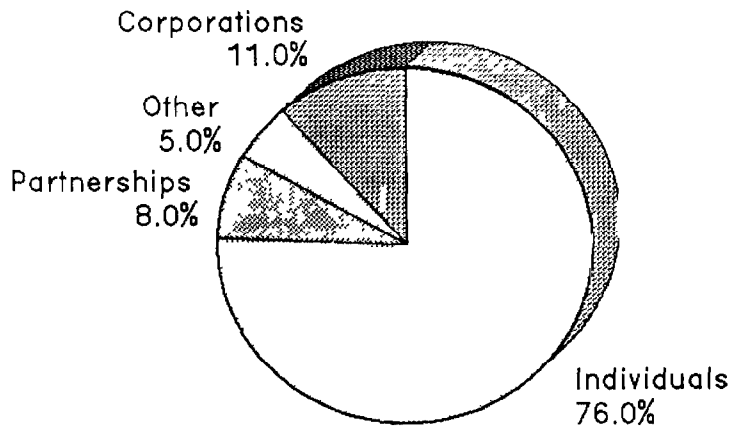
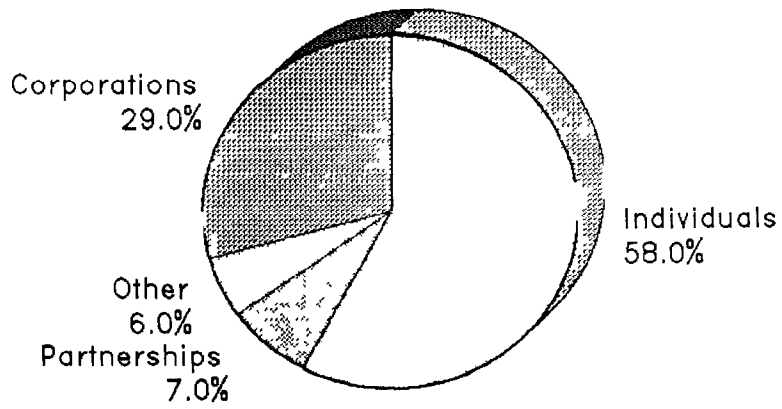


FIGURE 4:  
Distribution of AUMs  
Among Permittee Types



TYPES OF PERMITTEES AND DISTRIBUTION OF  
AUMS AMONG PERMITTEE TYPES

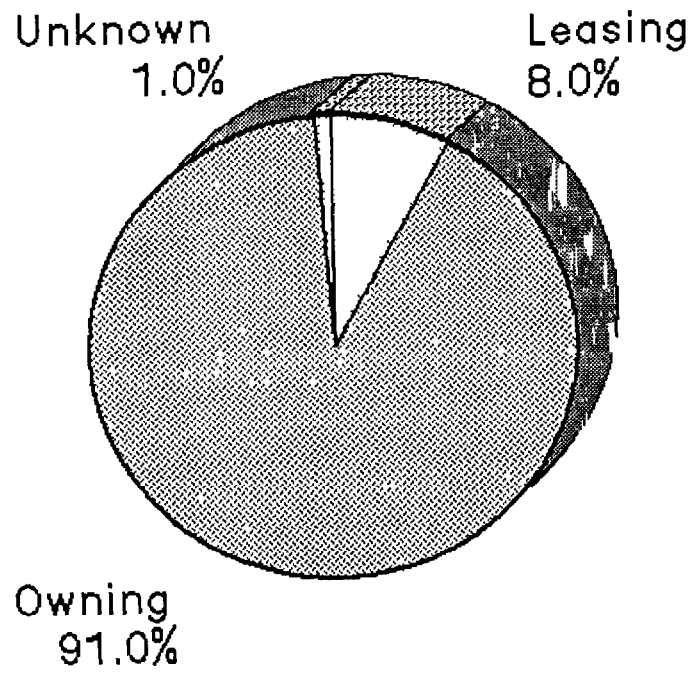
Type of Permittees

For the 765 grazing permits in our sample, we asked the BLM field offices to identify whether the permittee is an individual, a corporation, or a partnership. Our projection of the percentage of all BLM grazing permittees represented by each group is shown in figure 3. Individual operators represent the largest permittee category. The corporation category includes large as well as small family-held operations. Some permit holders did not fall in any of our three groups and are shown in the pie chart under the "other" category. Included in this group are estate trustees, grazing associations, and Indian community operations.

Distribution of AUMs Among Permittee Types

Our projection of the percentage of AUMs assigned to each of the three permittee groups is presented in figure 4. A comparison of the two charts shows that corporations tend to hold larger permits, giving them a 29 percent share of the AUMs assigned.

FIGURE 5:  
Permittees Owning or Leasing  
Base Property



## PERMITTEES OWNING OR LEASING BASE PROPERTY

The privilege to graze livestock on a specific parcel of public rangeland administered by BLM is assigned to a specific private base property. Typically, the livestock graze part of the year on the base property and part of the year on the public land. A grazing permittee can either own or lease the private base property to which BLM grazing privileges are assigned. We asked the BLM field offices to identify which of the 765 grazing permits in our sample were held by permittees owning base property and which were held by permittees with leases. Figure 5 shows our projections that about 91 percent of the permittees own rather than lease base property.

FIGURE 6:  
Distance of Residences  
of Permittees From Base Property

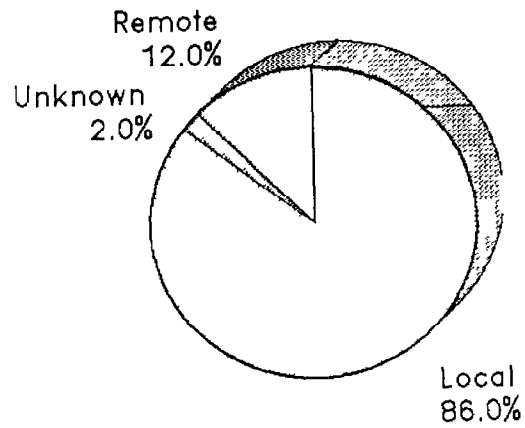
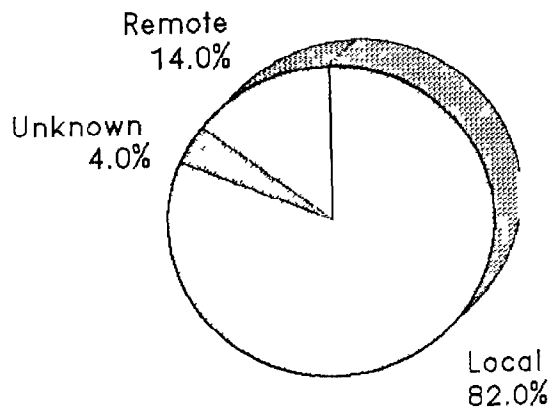


FIGURE 7:  
Distance of Residences  
of Owners From Base Property



DISTANCE OF PERMITTEE AND OWNER  
RESIDENCES FROM BASE PROPERTY

We asked the BLM field offices to identify whether the permittees holding the 765 grazing permits in our sample had local or remote residences in relation to the base property associated with their grazing permits. Where a permittee leased rather than owned the base property, we also asked the BLM field offices the distance to the base property owner's residence. We arbitrarily established 100 miles as the limit of local residence. As shown in figures 6 and 7, both permittees and owners of base property are usually local residents.

FIGURE 8:  
Distribution of AUMs  
Among Local and Remote Permittees

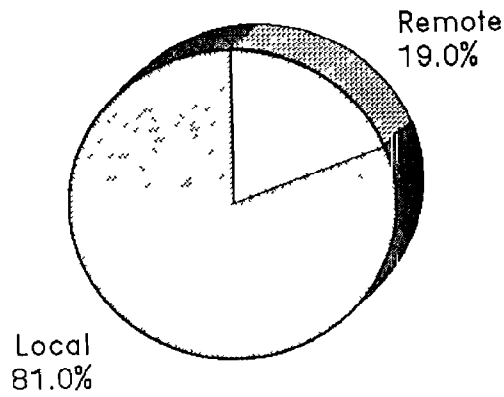
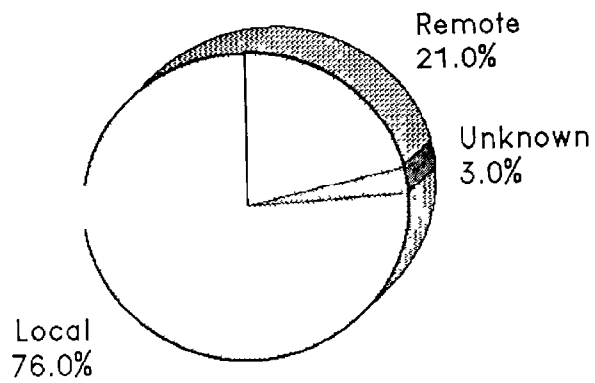


FIGURE 9:  
Distribution of AUMs  
Among Local and Remote Owners

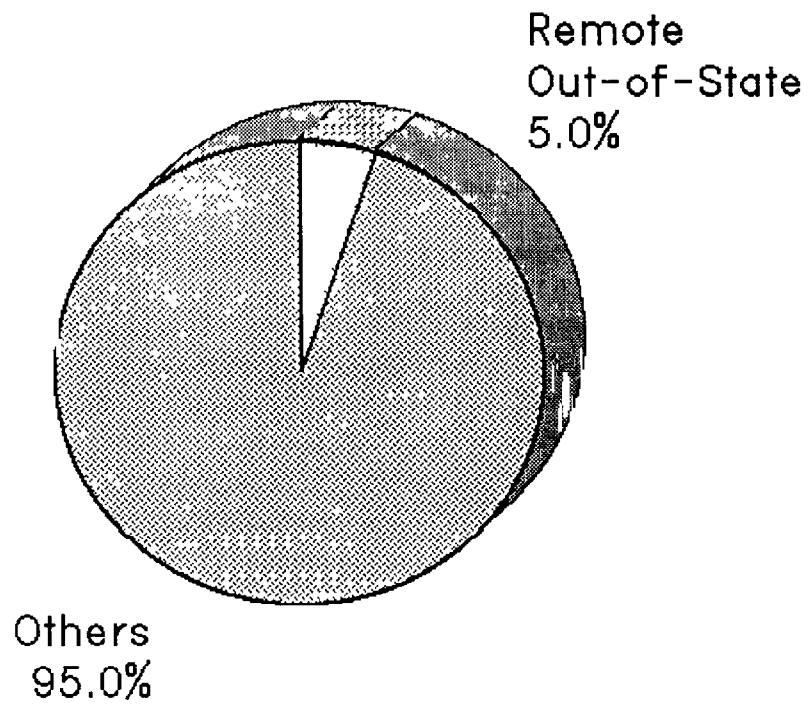




DISTRIBUTION OF AUMs AMONG LOCAL AND  
REMOTE PERMITTEES AND BASE PROPERTY OWNERS

Our projection of the percentage of AUMs assigned to local and remote permittees and owners of base property is shown in figures 8 and 9. Comparing these charts to figures 6 and 7 shows that remote permittees and owners hold 12 and 14 percent of the permits and 19 and 21 percent of the AUMs, respectively.

FIGURE 10:  
Remote Out-of-State  
Permittees



## REMOTE OUT-OF-STATE PERMITTEES

Figure 10 shows our projection of the percent of BLM grazing permits held by permittees who reside outside the state of the base property, as well as more than 100 miles away from the grazing site. We estimate that 95 percent of the permits are held by permittees who reside either within 100 miles of the base property or within the same state.

FIGURE 11:  
Permittee Herd Size  
Permits

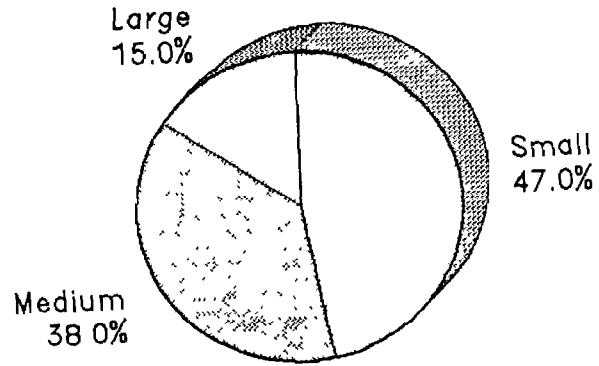
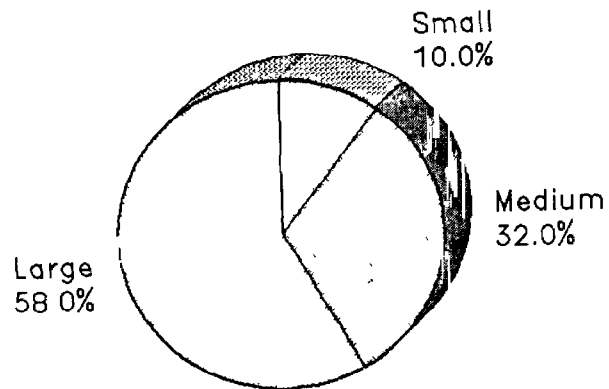


FIGURE 12:  
Permittee Herd Size  
AUMs



## PERMITTEE HERD SIZE

We asked the BLM field offices to estimate the size of the livestock herds of permittees in our sample. They provided their best estimates of the number and kinds of livestock owned by each permittee. Their estimates included the animals each permittee grazes on both public and private lands. We summarized the size of each herd by using BLM's animal unit conversion factor; i.e., one cow equals five sheep. Then we applied animal ranges used by the U.S. Department of Agriculture's Economic Research Service to designate small, medium, and large herds: under 100 animals, 100 to 499 animals, or 500 or more animals, respectively.

Figures 11 and 12 show the projections we drew from these calculations. Figure 11 shows that permittees with small herds are the largest group, holding nearly half the permits. Conversely, figure 12 shows that permittees with large herds are assigned over half the AUMs.

## SECTION II

### STATISTICAL PROJECTIONS AND CONFIDENCE INTERVALS

Tables 1 through 10 contain our projections at the 95-percent confidence level and the associated confidence ranges corresponding to the BLM grazing permittee profile information presented in section I. The statistical information presented is based on a combined stratified and two-strata clustered random sample of the grazing permits reported by BLM as of April 3, 1986. BLM's grazing program managers estimate that about 5 percent of the permittees hold more than one grazing permit. This rate of multiple permits should have minimal impact on our projections.

BLM's April 3, 1986, grazing program report shows 19,870 grazing permits totaling 14,675,859 AUMs. Before selecting our sample, we excluded 24 BLM field offices that together represented less than 1 percent of the total AUMs. These offices administered 1,381 permits, leaving a universe of 18,489 from which we drew our sample.

The statistically projected AUM totals in the following tables are slightly higher than BLM's reported 14.7 million total but well within the expected range of sampling variability. Additionally, several of the tables contain a category labeled as unknown because BLM field office grazing program managers were unable to provide the permittee profile information for all the grazing permits drawn in our sample. For example, they did not always know where the permittee or owner of base property resided.

Table 1: Types of Permittees (See figure 3)

<u>Category</u>	<u>Number</u>	<u>95-percent confidence range</u>	<u>Percent of total</u>
Individuals	14,091	13,494 to 14,687	76.2
Corporations	2,003	1,448 to 2,557	10.8
Partnerships	1,562	1,258 to 1,867	8.5
Others	779	412 to 1,145	4.2
Unknown	<u>54</u>		<u>0.3</u>
Total	<u>18,489</u>		<u>100.0</u>

Table 2: Permittee Types on an AUM Basis (See figure 4)

<u>Category</u>	<u>Number</u>	<u>95-percent confidence range</u>	<u>Percent of total</u>
Individuals	8,766,331	7,238,510 to 10,294,151	57.9
Corporations	4,424,330	2,931,070 to 5,917,589	29.2
Partnerships	979,608	575,160 to 1,384,056	6.5
Others	961,716	284,588 to 1,638,884	6.4
Total	<u>15,131,985</u>		<u>100.0</u>

Table 3: Permittees Leasing or Owning Base Property (See figure 5)

<u>Category</u>	<u>Number</u>	<u>95-percent confidence range</u>	<u>Percent of total</u>
Owning	16,727	16,288 to 17,165	90.5
Leasing	1,563	1,167 to 1,960	8.4
Unknown	199		1.1
Total	<u>18,489</u>		<u>100.0</u>

Table 4: Distance From Base Property of Permittees' Residences (See figure 6)

<u>Category</u>	<u>Number</u>	<u>95-percent confidence range</u>	<u>Percent of total</u>
Within 100 miles	15,829	15,201 to 16,457	85.6
100 miles or more	2,289	1,721 to 2,856	12.4
Unknown	371		2.0
Total	<u>18,489</u>		<u>100.0</u>

Table 5: Distance of Owners' Residence From Base Property  
(See figure 7)

<u>Category</u>	<u>Number</u>	<u>95-percent confidence range</u>	<u>Percent of total</u>
Within 100 miles	15,216	14,534 to 15,898	82.3
100 miles or more	2,522	1,941 to 3,103	13.6
Unknown	<u>751</u>		4.1
Total	<u>18,489</u>		<u>100.0</u>

Table 6: Distribution of AUMs Among Local and Remote Permittees  
(See figure 8)

<u>Category</u>	<u>Number</u>	<u>95-percent confidence range</u>	<u>Percent of total</u>
Within 100 miles	12,167,821	10,335,224 to 14,000,418	80.9
100 miles or more	<u>2,871,153</u>	1,788,944 to 3,953,362	<u>19.1</u>
Total	<u>15,038,974</u>		<u>100.0</u>

Table 7: Distribution of AUMs Among Local and Remote Owners (See  
figure 9)

<u>Category</u>	<u>Number</u>	<u>95-percent confidence range</u>	<u>Percent of total</u>
Within 100 miles	11,495,265	9,720,162 to 13,270,368	76.0
100 miles or more	3,122,893	2,037,367 to 4,208,419	20.6
Unknown	<u>513,537</u>		<u>3.4</u>
Total	<u>15,131,695</u>		<u>100.0</u>



Table 8: Remote and Out-of-State Permittees (See figure 10)

<u>Category</u>	<u>Number</u>	<u>95-percent confidence range</u>	<u>Percent of total</u>
100 miles or more and out of state	881	563 to 1,200	4.8
Others	<u>17,608</u>		<u>95.2</u>
Total	<u>18,489</u>		<u>100.0</u>

Table 9: Permittee Herd Size (See figure 11)

<u>Category</u>	<u>Number</u>	<u>95-percent confidence range</u>	<u>Percent of total</u>
Small	8,713	7,627 to 9,798	47.1
Medium	7,005	6,012 to 7,999	37.9
Large	<u>2,771</u>	2,187 to 3,356	<u>15.0</u>
Total	<u>18,489</u>		<u>100.0</u>

Table 10: Distribution of AUMs Among Herds of Different Sizes  
(See figure 12)

<u>Category</u>	<u>Number</u>	<u>95-percent confidence range</u>	<u>Percent of total</u>
Large	8,754,818	6,816,641 to 10,692,995	57.9
Medium	4,880,293	4,082,511 to 5,678,075	32.2
Small	<u>1,496,542</u>	1,184,984 to 1,808,099	<u>9.9</u>
Total	<u>15,131,653</u>		100.0

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