

## **Summary report of stock use and grazing in wilderness meadows Sequoia and Kings Canyon National Parks, 2008**

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### ***Summary***

- With the May 1 snowpack containing 48-63% of the average annual water content, 2008 was characterized as a dry to normal year (depending on watershed) in Sequoia and Kings Canyon National Parks.
- Reported recreational and administrative stock use during the summer of 2008 totaled **6,992 stock nights**, or 8,479 animal unit nights. This represents an increase of 8.4% compared to 2007, which had a total of 6,449 stock nights reported.
- Commercial and administrative packers continue to account for the majority of pack stock use in the two parks, accounting for 45% and 46%, respectively, of reported use. Private users accounted for the remaining 9%.
- Relative to 2007, reported commercial use decreased by 1%, while reported private use increased by 32% (likely reflecting better reporting rather than an actual increase in use). Administrative use increased by 15% over the previous year.
- Reported use of supplemental feed in lieu of grazing increased slightly among all users relative to the previous year (which had experienced a sharp decrease). Overall reported use of supplemental feed increased by 24%, from 479 nights in 2007 to 593 nights in 2008. Commercial use of supplemental feed increased by 18%, private use by 31%, and administrative use by 31%.
- Horses and mules remained the primary type of stock used, accounting for 95% of total use. Llama use increased relative to previous years, yet still accounted for just under 2% of total use. Reported burro use decreased, accounting for just over 3% of total stock use.

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## Introduction

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This document provides the 2008 annual summary of reported administrative and recreational saddle and pack stock use of the wilderness and backcountry meadows of Sequoia and Kings Canyon National Parks (SEKI). This information is collected via reporting forms that are distributed to commercial, private, and administrative stock users, and from the wilderness permit database. After each trip all stock users at SEKI are required to provide the information requested on these forms.

Data on stock use of the wilderness meadows of SEKI has been collected in one form or another for over fifty years. In 1986, a standardized approach with accompanying computer database was initiated, and this method, although modified, is still in use today. From this database, yearly summary statistics are prepared and presented in tabular and graph form, and comparison with past years use is presented.

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## Methods

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At the beginning of each field season (May) all commercial and administrative stock users of the wilderness at SEKI are provided forms to document their trips. Private stock users are given a "Stock-Use Card" along with the issuance of their wilderness permit. All stock users are required to respond to the information requested on these forms, which includes:

- 1) Name of packer
- 2) Date of trip
- 3) Packer classification (commercial, administrative, or private)
- 4) Type of stock used
- 5) Number of stock
- 6) Number of people
- 7) Name and location of forage areas where stock grazed
- 8) Number of nights spent in each forage area
- 9) Name of party on wilderness permit

After each trip these forms are completed and returned to the meadow monitoring specialist at SEKI and the information is then entered into a database. In 2007, all commercial users were required to submit monthly reports, instead of a final summary report at the end of October; these included not only overnight use, but day use as well. The 2008 database file is named "*SEKI\_StockUse\_2008.mdb*", and contains approximately 434 records of various private, commercial, and administrative overnight stock trips.

Prior to 1998 there was some confusion over the terminology used to calculate use levels presented in the annual stock use report. It appears the term stock night was used interchangeably with animal unit night, and it was not always clear which unit was being referred to. The following definitions are intended to help clarify these terms and to set the stage for the data that follow in the rest of the report.

Conventionally, an overnight stay by a pack animal is defined in terms of a common currency, the *animal unit night*. An *animal unit* is equal to approximately 1,000 pounds of grazing animal; an animal unit night refers to an overnight stay by that animal. In range management

almost everything is compared to cows, which at approximately 1,000 pounds are rated at 1.00 animal unit night. According to this system, an overnight stay by a horse or mule is defined as 1.25 animal unit nights. An overnight stay by a burro is 0.50 of an animal unit night, and a llama is 0.35 of an animal unit night. The use of animal unit nights reflects the variation in forage consumed by these different sized animals, and allows for comparison with other grazing systems. An adult horse consumes approximately 25% more forage than an adult cow in a 24 hour period, a llama consumes 35% of that of a cow, and a burro about 50%. Thirty animal unit nights are equal to one *animal unit month* (AUM) which is the amount of dry forage required by one animal unit for one month based on a standardized forage allowance of 26 pounds per day. The use of these standardized units allows range managers to compare use across systems and to establish grazing capacities based on the varying consumption of forage by different types of animal.

For the purposes of this report, and to make the data accessible to all users, a *stock night* represents an overnight stay by any pack animal, whether or not the animal grazed or was fed supplemental feed, and without reference to the more conventional animal unit night. A grazing night is an overnight stay that includes grazing. In order to facilitate comparison between years, the statistics that follow are reported in stock nights and/or grazing nights. Where the data allow, summary figures are reported in both animal unit and stock nights. When referring to earlier reports, note that there may be discrepancies in the numbers reported due to use of different terminology. Discussions of grazing capacity, as in the annual Residual Biomass Monitoring Report, always rely on the more conventional animal unit night.

The following figures represent overnight visits by stock only, they do not include stock use from day trips, or drop trips which were completed in one day.

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## Results

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**User compliance.** Despite requiring monthly grazing reports in 2008, response from commercial packers was significantly delayed and many reports did not come in until late in the year. Of the 16 commercial pack stations operating in Sequoia and Kings Canyon during 2008 (one concessioner and 15 Commercial Use Authorization holders), seven consistently submitted their monthly stock use reports by the due date specified in their contract or permit. The concessions office, wilderness office, and meadow monitoring staff each played a significant role in reminding delinquent CUA holders to submit their monthly reports. Several commercial packers failed to submit their reports until well into the winter, leading to delays in summarizing and interpreting the 2008 use data.

Of the 27 trips made by private parties during 2008, 6 users returned their cards at the end of the season. The remaining trips were documented using the wilderness permit database and the staff observation logs, with follow up calls made to each party to document specific grazing locations.

The ranger observation logs continue to play a key role in documenting stock use throughout the parks. In the Roaring River area the local ranger observed nearly twice as many nights as were reported by the primary packer (in late December, well past the last monthly deadline), demonstrating the importance of both monthly reports, to increase accuracy, and in ranger observations for quality assurance/control. Having a ranger on the Hockett Plateau after several lapse years led to a noticeable increase in reports from private users.

**Reported use.** Reported recreational and administrative stock use during the summer of 2008 totaled **6,992 stock nights**, or 8,479 animal unit nights. This represents an increase of 8.4% compared to 2007, which had a total of 6,449 stock nights reported. Relative to 2007, reported commercial use decreased by 1.4%, while reported private use increased by 32%. Administrative use increased by 15%.

The following statistics describe 2008 stock use by stock type, user type, month, and forage area; and compares that use with past years for which data are available. The letter next to the year indicates the type of snow pack winter (d=dry, n=normal, w=wet) that preceded the field season. According to the amount of moisture in the snowpack, we categorize a year as one of the following:

- 1) **Dry** (less than 50% of average precipitation)
- 2) **Normal** (50% to 150% of average precipitation)
- 3) **Wet** (more than 150% of average precipitation)

The snowpack is the best indicator we have of the amount of moisture the meadows received. Meadow opening dates for a particular season are adjusted based on snowpack during the preceding winter.

Based on snow survey data, 2008 was characterized as a ‘normal’ year in the Kings and Kaweah River Drainages, and a “dry” year in the Kern, with a May 1 snowpack ranging from 48-63% of normal in park drainages. Although early access to the high country and normal to dry season opening dates for grazing allowed for a longer season for pack stock users in the two parks, use appeared lighter than usual until picking up in August.

Meadow opening dates continued to be posted to the backcountry conditions website, with changes posted by the wilderness office as information was received from the field. In SEQU, being on the wet end of a dry year (48% of normal, with 50% being the cutoff between dry and normal year opening dates) meant delayed opening dates in a number of locations. Grazing on the Hockett Plateau was delayed by a week; Penned-up Meadow and Rock Creek Lake were delayed by three weeks and two weeks, respectively. Two meadows on the Chagoopa Plateau were delayed by four weeks, while grazing in meadows at Little Five Lakes and Big Five Lakes were delayed by two weeks and three weeks. Lone Pine Meadow was delayed by one week, and Coyote Meadow by two weeks. In KICA, grazing was delayed at John Muir Trail Junction (Upper Basin), south of Pinchot Pass, and Twin Lakes by 10 days, and at Junction Meadow (Bubb’s Creek) by two weeks.

**Types of use.** Use is divided into three categories: *Commercial* users are people or companies that pack in stock as a paid service. Companies or individuals of this type are required to hold a commercial operators license with the park. *Private* use is packing done by an individual or with his or her friends or family. Only a standard Wilderness permit is required for this type of use. *Administrative* users are those that are employed by the National Park Service and who use pack stock in order to carry out their official duties.

Table 1 and Figure 1. Proportional types of stock use in 2008.

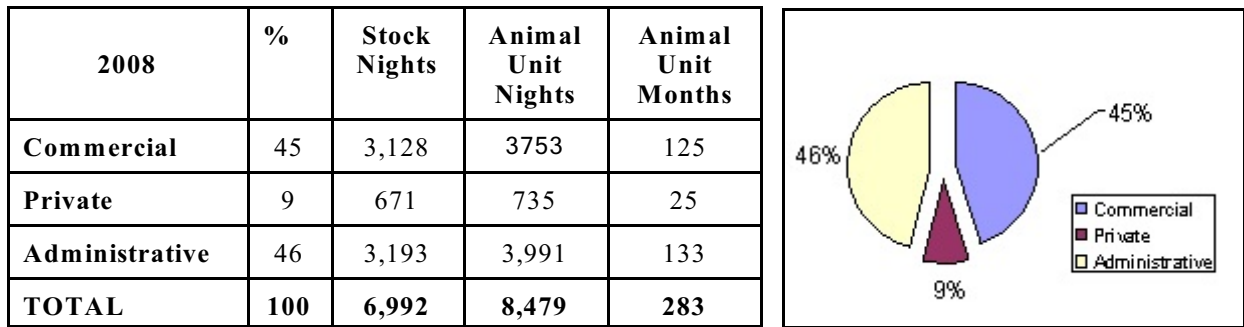
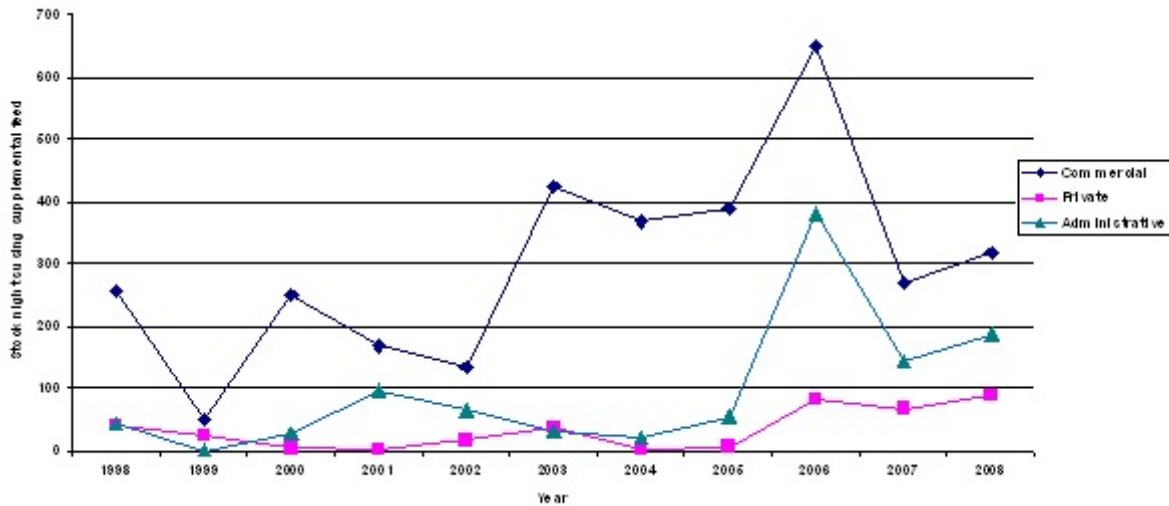
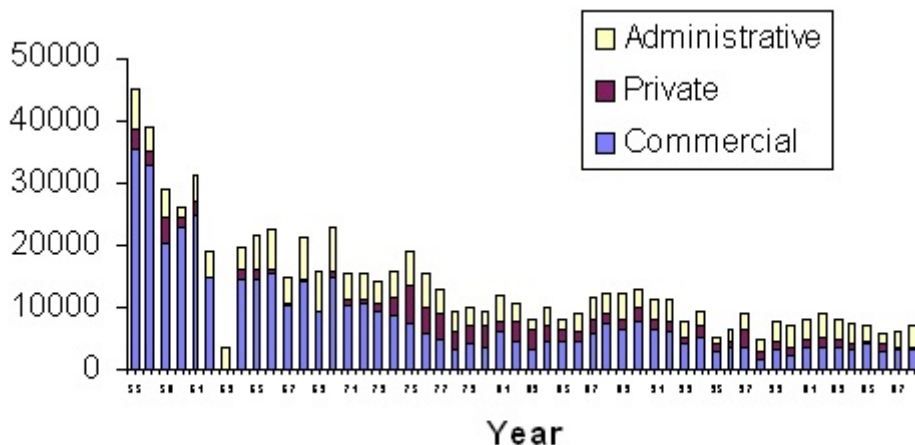


Figure 2. Reported use (stock nights) of supplemental feed by user group 1998- 2008.



**Supplemental feed.** Use of supplemental feed increased over that reported for 2007 by 24%, but remained significantly lower than reported in 2006. A total of 593 nights of supplemental feed were reported in 2008, compared with 1,112 in 2006 and 479 in 2007. The biggest commercial users of supplemental feed were the Cedar Grove and Cottonwood Pack Stations.

**Figure 3:** Reported Stock Nights in Wilderness Meadows of Sequoia and Kings Canyon National Parks, 1986-2008.



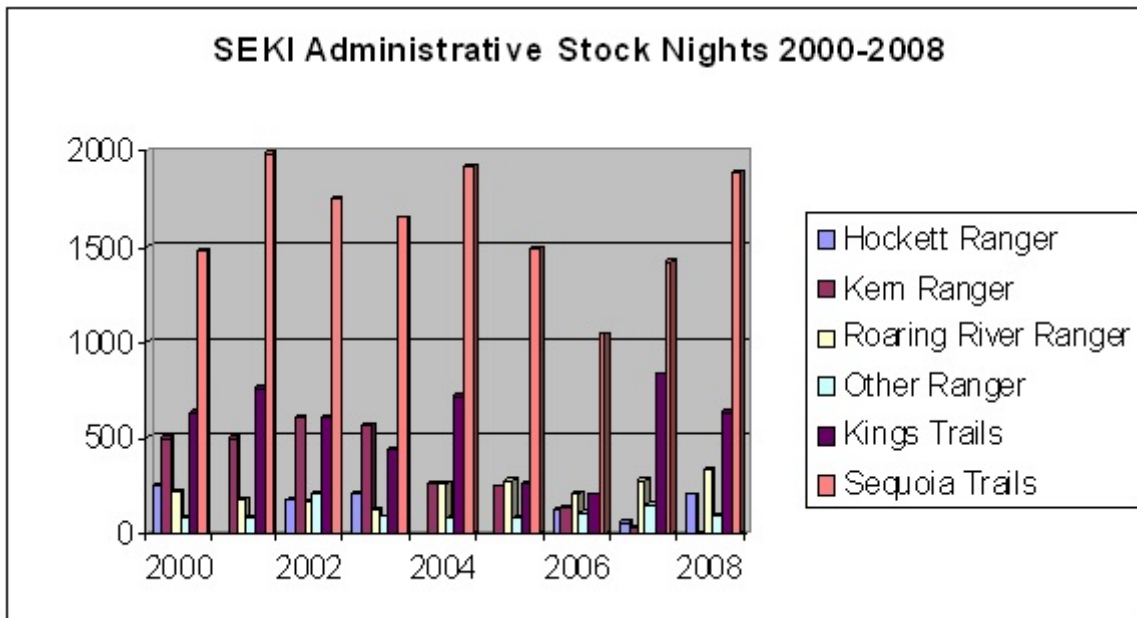
**Historical Use** (1984 to present). Reported use of stock at Sequoia & Kings Canyon National Parks from 1984 to the present is listed below. Information from years 1955-1983 is available upon request; data for years prior to 1955 likely exists but has yet to be located and summarized. As new information arises it will be incorporated into subsequent reports. Refer to **Figure 3**. It is important to note that these reflect *reported* use; due to inconsistencies in reporting, these may be quite different from actual use, especially during earlier years. Data from the period 1985 to the present are the most accurate.

Administrative grazing in the Ash Mountain pasture, which is non-wilderness, is not included in these figures. Up to 90 horses and mules may be grazing at Ash Mountain at any one time. Over the years, grazing in these pastures has ranged from approximately 300 to 700 AUMs or 8,000 to 21,000 animal unit nights per year. In most years, almost all of the park stock spend the winter (November to late April) at the Pixley Wildlife Refuge in the San Joaquin Valley, returning to the Ash Mountain pasture in spring.

**Table 2.** Administrative Use (grazing nights and stock nights) 2001-2008. This includes all reported use by National Park Service personnel in wilderness meadows, shown as Grazing Nights (Additional Nights of Supplemental feed)|Total stock nights. It does not include grazing in the Ash Mountain pasture.

Packer	2008	2007	2006	2005	2004	2003	2002	2001
Cedar Grove Rangers	-	9	10 (4) 14			7		
Hockett Ranger	199	57	131			215	178	
Kern Ranger	-	24	121 (15) 136	242	254 (1) 255	538 (31) 569	602 (2) 604	478 (11) 489
Kings Trail Crew	536 (106) 642	766 (75) 841	200	261	712	442	547 (52) 599	707 (49) 756
Military Overflight Trip	68	64 (8) 72	4 (76) 80	70 (10) 80	67 (9) 77	76	80	56 (18) 74
Miscellaneous	-	55 (11) 66	18				77	
Roaring River Ranger	308 (30) 338	254 (20) 274	180 (28) 208	277	254 (12) 266	122	166	177
Sequoia Trail Crews	1834 (51) 1,886	1397 (29) 1426	891 (153) 1044	1448 (45) 1493	1927	1648	1754	1969 (19) 1988

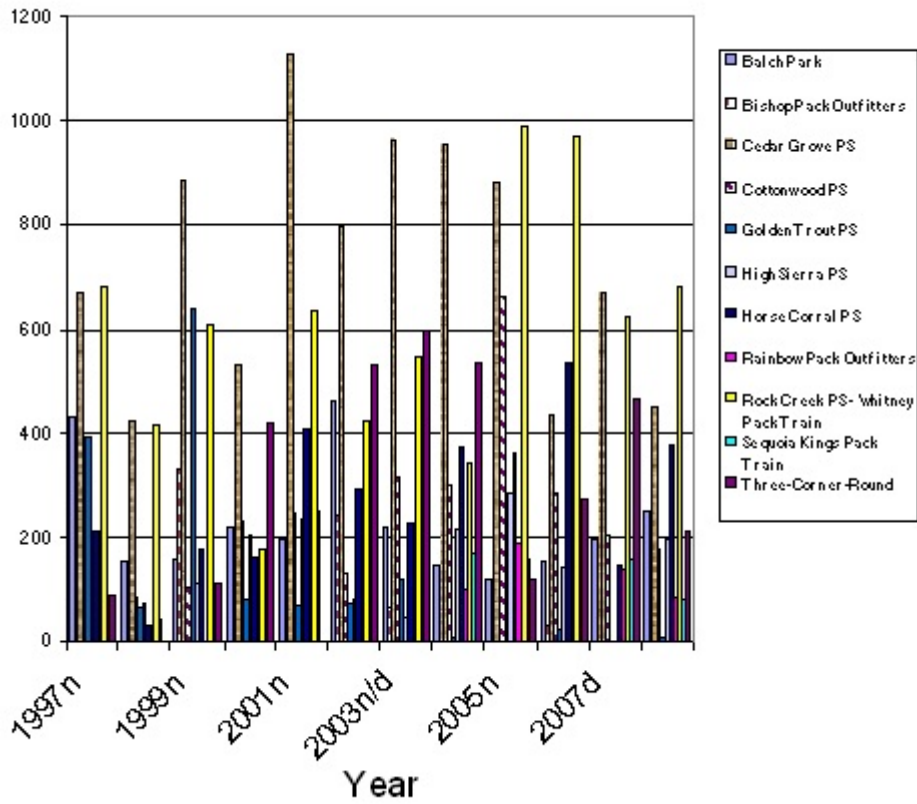
**Figure 4.** Administrative stock use by user, 1994-2008 (total stock nights per year by user class).



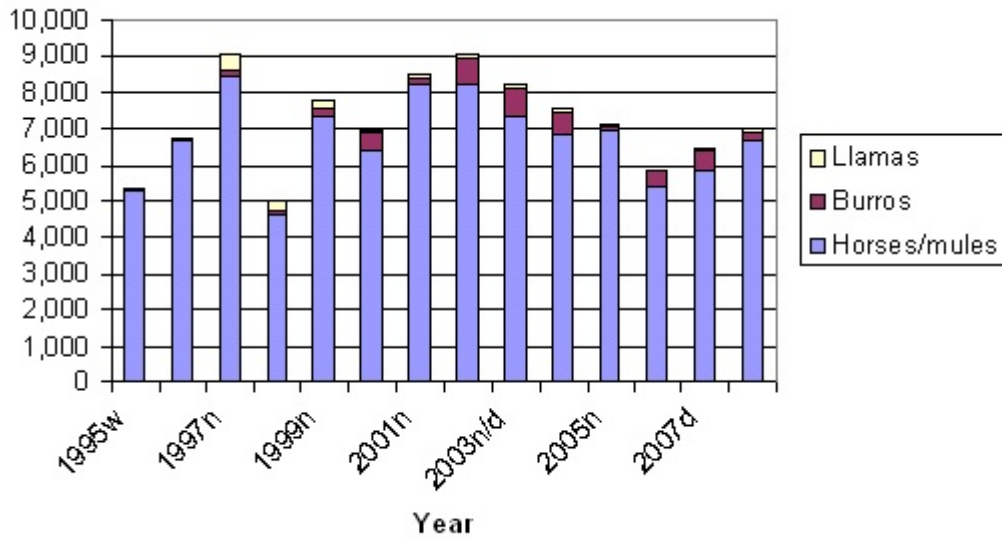
**Table 3.** Commercial Use (grazing nights and stock nights), shown as grazing nights (additional nights of supplemental feed)|Total stock nights. Packers reporting no use for three consecutive years are removed from the table.

PACKER	2008n/d	2007d	2006w	2005n	2004d	2003n/d	2002n/d	2001n
Balch Park Pack Station	250	135 (60) 195	120 (33) 153	119	146	219	462	193
Bishop Pack Outfitters	200	194	32	0	80	50 (15) 65	240	134
Cedar Grove Pack Station	281 (170) 451	658 (12) 670	405 (30) 435	834 (46) 880	933 (22) 955	880 (85) 965	770 (27) 797	1107 (20) 1127
Clyde Pack Outfitters	12	12	0	0	8	10	14	0
Cottonwood Pack Station	72 (108) 180	123 (79) 202	71 (213) 284	453 (207) 660	48 (250) 298	56 (256) 312	63 (70) 133	116 (131) 247
Frontier Pack Train	360	52 (13) 65	0	0	0	0	0	0
Golden Trout Wilderness Packtrains	(5) 5	0	0 (21) 21	185	5	117 (4) 121	71	68
High Sierra Pack Station	184 (11) 195	299	51 (88) 139	202 (79) 281	215	49	77	235
Horse Corral Pack Station	378	145 (2) 147	376 (156) 532	359 (5) 364	374	224	296	408
Pine Creek Pack Station	10	0	0	0	0	0	0	0
Rainbow Pack Outfitters	85	134 (4) 138	181 (2) 183	186	80 (20) 100	133 (14) 147	62	103
Reds Meadow Pack Station	42 (14) 42	0	0	56	0	0	75	82
Rock Creek Pack Station	683	577 (48) 625	903 (67) 970	951 (39) 990	308 (32) 340	461 (12) 473	408 (5) 413	624 (12) 636
Sequoia-Kings Pack Trains	67 (10) 67	135 (21) 156	60	159	164 (6) 170	221 221	145	253
Three-Corner-Round Pack Outfit (burros)	210	438 (30) 468	230 (40) 270	112 (8) 120	520 (15) 535	561 (39) 600	528	0

**Figure 5.** Commercial Use by Commercial Packer (Stock Nights).



**Figure 6.** Types of Stock (stock nights). Horses and mules remained the primary type of stock used in 2008, with burros and



**Table 4.** Monthly Use and Percentage of Entire Season, May-October 1998-2008

	May		June		July		August		Sept.		Oct.	
	Nights	%	Nights	%	Nights	%	Nights	%	Nights	%	Nights	%
2008n/d	0	0	865	12.4	2073	29.7	2677	38.3	1279	18.3	98	1.4
2007d	0	0	605	9.4	2130	33.11	2483	38.51	1175	18.23	54	.84
2006w	0	0	331	5.6	1223	20.8	3025	51.6	1260	21.5	26	.4
2005n	0	0	252	3.51	1604	22.36	3528	49.17	1717	23.93	74	1.1
2004d	0	0	594	7.8	2559	33.69	3057	40.24	1330	17.51	40	.5
2003n/d	0	0	424	5.4	2603	31.7	3348	40.7	1634	19.8	209	2.5
2002n/d	0	0	880	9.7	3058	33.7	3118	34.4	1879	20.7	141	1.6
2001n	6	0.1	536	6.6	2190	26.8	3730	45.7	1418	17.4	289	3.5
2000n	0	0	1134	16.3	2005	28.8	2492	35.7	1240	17.8	100	1.4
1999n	0	0	663	8.5	2133	27.4	3243	41.7	1537	19.8	204	2.6
1998w	0	0	67	1.3	508	10.2	2762	55.5	1439	28.9	64	1.3

**Number of Areas Receiving Use.** The number of areas used may be used as an indication of the dispersion of stock use. Variation in the number of areas used, however, may also reflect differences in reporting. Use was reported for a total of 110 forage areas in 2008, compared to 95 in 2007 (a list showing the number of commercial, private, and administrative stock nights for each forage area is presented in Appendix 2). **Commercial** users reported use in a total of 70 areas, **private** parties in 37 areas, and **administrative** users in 46 areas.

**Table 5.** Number of forage areas used, by user group.

	Commercial	Private	Administrative	Overall
2008n/d	70	37	46	110
2007d	60	40	43	95
2006w	60	38	36	90
2005n	75	25	38	99
2004d	73	50	50	110
2003n/d	65	61	47	113
2002n/d	69	58	46	109
2001n	78	49	46	115
2000n	72	53	52	113
1999n	63	31	46	92
1998w	52	43	35	93

**Areas of High Use.** Based on reported stock nights, the following forage areas received heavy use in 2008. Prior to 1998, heavy use was defined as use exceeding 75% of the estimated carrying capacity of a meadow. Until the system of estimating carrying capacity of these meadows is further developed

and refined, heavy use will be defined solely on the absolute amount of use an area receives. Note that forage areas differ in their ability to withstand use and thus may be heavily used but not overgrazed. These meadows should, however, be watched closely for signs of deterioration.

The twenty five forage areas that received the heaviest use overall (by all user groups combined) are shown in Table 6. The **ten** areas most heavily used (total number of stock nights) in 2008 by each user group (commercial, private, and administrative) are presented in the three tables following. Note that these numbers include grazing nights, nights where supplemental feed was provided, and total stock nights.

**Table 6.** Grazing and total stock nights in the 25 most heavily used areas in 2008 for commercial, private and administrative use combined, with previous years use numbers included for reference. Shown as Grazing Nights (Additional Nights of Supplemental feed)|Total stock nights.

	Meadow	2008	2007	2006	2005	2004	2003	2002
83-8	Sandy Meadow	410	51	199	160	134	100	195
90-5.1	Hockett Meadow	355	122	121	132	354	323	365
69-5.1	Scaffold Mdw Tourist Past.	280 (10) 290	272 (5) 277	240 (4) 244	309	269 (3) 272	86	118
86-1	Kern Bridge Camp	272 (3) 275	183	0	124 (8) 132	264	300	318 (2) 320
90-4	Cow Camp	273	4	0	0	0	0	0
84-2	Lower Rock Ck Xing Mdw	203 (42) 245	92 (59) 151	251 (107) 358	291 (54) 345	108 (25) 133	215 (52) 267	196 (7) 203
83-4	Upper Crabtree Meadow	190 (19) 209	271 (19) 290	0 (154) 154	40 (18) 58	206 (36) 242	166 (101) 267	234
90-11	South Fork Pasture	200	24	21	0	28	122	180
58-1	Castle Domes Meadow	94 (105) 199	73	66	78	116	21	62
70-5	Big Wet Meadow	196	24	180	5 (3) 8	52	109	354
39-2	Big Pete Meadow	187	103	45	74	140	81 (15) 96	137
77-5	Redwood Meadow	112 (51) 163	93 (28) 121	60 (153) 213	34 (55) 89	130	81	315
79-1	Cold Springs Camp Area	156	178	243	120	92	110	91
33-3	Colby Meadow	136 (10) 146	62	7 (60) 67	148 (25) 173	143 (10) 153	6	44
85-10	Nathan's Meadow	143	46	68	117	60 (6) 66	51 (14) 65	49 (2) 51
51-1	Simpson Meadow	141	210	77	148	219	106	381
28-4	Franklin-Montgomery Mdw	124 (16) 140	150	10	19 (2) 21	24	0	12
81-1	Wright Creek Drainage	135	46	147	66	143 (2) 145	158	103
89-3	Lower Lost Canyon Mdws	135	153	0	72	0	83	0
71-3.2	Middle Ranger Meadow	124	16	196	100	85	289	0
90-9	Lower South Fork Meadow	45 (78) 123	12	52 (73) 125	0	30	83	60
86-7	Lewis Camp Large Pasture	115	199	112	218	371	530	517
90-13	Slim's Meadow	113	0	88	0	67	180	89
66-3	Junction Meadow	51 (44) 95	63 (11) 74	153 (30) 183	147 (20) 167	145 (18) 163	219	125 (7) 132

**Table 7.** Commercial grazing and stock nights in the ten areas receiving the heaviest commercial use in 2008, with previous years use numbers provided for reference. Shown as Grazing Nights (Additional Nights of Supplemental feed)|Total commercial stock nights. For total stock nights in these meadows, refer to Appendix 2.

	Meadow	2008	2007	2006	2005	2004	2003	2002
84-2	Lower Rock Ck Xing Mdw	195 (42) 237	47 (47) 94	136 (88) 224	258 (54) 312	70 (25) 95	100 (52) 152	93 (7) 100
83-4	Upper Crabtree Meadow	188 (19) 207	253 (11) 264	0 (116) 116	40 (18) 58	122 (36) 158	114 (101) 215	168
90-11	South Fork Pasture	200	0	5	0	0	30	152
58-1	Castle Domes Meadow	81 (105) 186	61	56	64	40	21	56
83-8	Sandy Meadow	180	11	76	48	6	0	0
33-3	Colby Meadow	136 (10) 146	62	7 (60) 67	78 (25) 103	143 (10) 153	6	44
70-5	Big Wet Meadow	136	24	164	5 (3) 8	28	92	163
81-1	Wright Creek Drainage	120	46	112	39	137 (2) 139	149	99
85-10	Nathan's Meadow	111	46	58	117	41 (6) 47	32 (14) 46	22 (2) 24
71-3.2	Middle Ranger Meadow	104	0	0	57	0	0	0
66-3	Junction Meadow	51 (44) 95	63	113 (30) 143	126 (20) 146	129 (18) 147	122	119

**Table 8.** Private grazing and stock nights in the ten areas receiving the heaviest private use in 2008, with previous years use numbers included for reference. Shown as Grazing Nights (Additional Nights of Supplemental feed)|Total private stock nights. For total stock nights in these meadows, refer to Appendix 2.

	Meadow	2008	2007	2006	2005	2004	2003	2002
90-9	Lower South Fork Meadow	45 (78) 123	0	3 (40) 43	0	0	53	48
70-5	Big Wet Meadow	60	0	0	0	24	15	171
72-8	Sugarloaf Meadow	46	91	34	10	15	48	91
69-5.1	Scaffold Mdw Tourist Past	32 (10) 42	12	152	18	63 (3) 66	63	62
86-2	Upper Funston Meadow	36	53	44	16	96	28	86
69-2	West Side Roaring River	30	0	2	0	0	0	0
90-5.1	Hockett Meadow	30	0	4	0	61	97	8
71-1	Austin Camp Meadows	21	0	33	17	114	5	51
71-3.2	Middle Ranger Meadow	20	16	196	43	81	281	0
90-13	Slim's Meadow	20	0	0	0	0	0	0
67-1	East Lake Meadow	18	0	0	0	12	18	16
89-9	Middle Rattlesnake Canyon	18	0	8	0	0	0	12
81-1	Wright Creek Drainage	15	0	35	27	0	9	4
71-2	Grave Meadow	14	0	0	0	24	42	0

**Table 9.** Administrative grazing and stock nights in the ten areas receiving the heaviest administrative use in 2008, with previous years use numbers included for reference. Shown as Grazing Nights (Additional Nights of Supplemental feed)|Total administrative stock nights. For total stock nights in these meadows, refer to Appendix 2.

	Meadow	2008	2007	2006	2005	2004	2003	2002
90-5.1	Hockett Meadow	325	122	117	132	273	226	336
90-4	Cow Camp	273	0	0	0	0	0	0
86-1	Kern Bridge Camp	272	183	0	124	262	286	298 (2) 300
83-8	Sandy Meadow	230	40	123	112	128	100	195
69-5.1	Scaffold Mdw Tourist Past	195	224 (5) 229	88	185	186	20	26
77-5	Redwood Meadow	112 (51) 163	93 (28) 121	20 (153) 173	34 (55) 89	94	55	303
79-1	Cold Springs Camp Area	156	178	243	120	92	96	91
51-1	Simpson Meadow	141	91	21	75	92	60	152
89-3	Lower Lost Canyon Mdws	135	153	0	72	0	69	0
28-4	Franklin-Montgomery Mdw	117 (16) 133	143	0	0	12	0	0

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## Discussion

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Based on snow survey data, 2008 was characterized as a ‘normal’ year in the Kings and Kaweah River Drainages, and a “dry” year in the Kern, with a May 1 snowpack ranging from 48-63% of normal in park drainages. Although early access to the high country and normal to dry season opening dates for grazing allowed for a longer season for pack stock users in the two parks, use appeared lighter than usual until picking up in August (although the total number of reported early season nights does not support this perception). No midseason grazing restrictions were implemented.

Reported recreational and administrative stock use during the summer of 2008 totaled **6,992 stock nights**, or 8,479 animal unit nights. This represents an increase of 8.4% compared to 2007 (an extremely dry year), which had a total of 6,449 stock nights reported. Relative to 2007, reported commercial use decreased by 1%, while reported private use increased by 32%. The increase in reported private use may represent an increase in reporting and ranger observations rather than an actual change in use. As in 2006, the increase in reported private use corresponds with increased staffing of the Hockett Ranger Station, whose patrol area is frequented by private stock users.

Administrative use increased by 15% in 2008 over the previous year. Although overall use by administrative trail crews continued to increase in 2008, use patterns varied significantly by district. Use by Sequoia district trail crews increased by 32%, from 1,426 nights in 2007 to 1,834 nights in 2008. In contrast, use by Kings Canyon trail crews decreased from 841 reported stock nights in 2007 to 642 nights in 2008, a decrease of 24%. Note that these numbers also include 24 stock nights used while mobilizing/demobilizing wilderness ranger stations in lieu of using helicopter flights (noting also that this is believed to under represent the actual nights used for this purpose, as packers have not consistently noted when a trip is dedicated to station mobilization). Reported stock use by ranger staff increased by 46%, from a total of 436 nights in 2007 to 637 nights in 2008. This increase is largely accounted for by the increase in stock mounted staffing at the Hockett and Roaring River Ranger Stations. Note that 56 of the commercial stock nights reported in 2008 were attributed to NPS administrative use, such as supplying trail crews or resource projects.

Relative to 2007, reported commercial use decreased by 1% in 2008. Six commercial outfitters (Cedar Grove, Cottonwood, High Sierra, Rainbow, Sequoia-Kings, and Three Corner Round) reported moderate to significant decreases in overnight use in 2008. Notably, Cedar Grove Pack Station reported 451 nights in 2008, compared with 670 in 2007, and High Sierra reported 195 total nights compared with 299 in 2007.

Three commercial outfitters (Frontier, Horse Corral, and Rock Creek) reported moderate to significant increases in overnight use in 2008. Frontier reported the greatest increase, with 360 nights in 2008 vs. 65 nights in 2007. A single trip into the Kern largely accounted for their numbers. Horse Corral increased from 147 reported/observed nights in 2007 to 378 nights in 2008; note that a significant percentage of the reported use in 2008 was attributed to ranger observations. Rock Creek Pack Station reported a moderate increase of 63 nights over the 625 nights reported in 2007, for a total of 688 nights in 2008.

Use of supplemental feed increased over that reported for 2007 by 24%, but remained significantly lower than reported in 2006. A total of 593 nights of supplemental feed were reported in 2008, compared with 1,112 in 2006 and 479 in 2007. Horses and mules remained the primary type of stock used, accounting for 95% of total use. Llama use increased relative to previous years, but continued to account for just over 2% of total use. Reported burro use declined slightly, accounting for approximately 3% of total stock use; as in previous years, burro use is largely attributable to a single user, Three Corner Round.

Administrative use continued to be focused on meadows adjacent to stock supported ranger stations and those areas serving as foci for trail crews. The Roaring River and Hockett stations received most of the ranger use; as due in part to the velvet grass control efforts in the Kern Canyon, the Kern Ranger Station was staffed by a foot ranger in 2008. Trail crew use was concentrated on Franklin-Montgomery Meadow and Simpson Meadow in Kings Canyon; Cold Springs, Kern Bridge Camp, Sandy Meadow and Cow Camp in Sequoia.

Significant increases in use relative to 2007 were seen in a number of areas, including the following:

*Kings Canyon*

McClure Meadow  
Colby Meadow  
Big Pete Meadow  
Little Pete Meadow  
Glacier Valley Meadows  
Castle Domes Meadow  
Big Wet Meadow  
Middle Ranger Meadow

*Sequoia*

Redwood Meadow  
Wright Creek Drainage  
Sandy Meadows  
Lower Rock Creek Crossing Meadow  
Lower Rock Creek Meadows  
Nathan's Meadow  
Kern Bridge Camp  
South Fork Pasture  
Cow Camp  
Hockett Meadow  
Lower South Fork Meadow

**Data management.** As in previous years, lack of response and/or a mechanism that elicits a response from private stock users remains a concern. Trailhead personnel are now consistently indicating on each permit whether it was being issued to a commercial or private stock group; this improves our ability to identify private users and thus limit the number of redundant information requests sent out to clients of commercial packers. Commercial packers are required to include the name of the client who received the permit so that we can better correlate field observations with reported use. Both of these practices will be continued in 2009, as well as full implementation and strict enforcement of the monthly reporting requirement of both day and overnight use. Despite imperfect compliance in 2008, monthly reports allowed us to better track stock use patterns overall, and streamlined the process of winnowing through the permit database at the end of the

season. Having monthly reports in hand for key areas enables us to make informed decisions regarding the need for grazing restrictions mid-season. In addition to having the trails supervisors enter much of the administrative use during the season, 2.5 pay periods of support during the fall months allowed us to enter and process the stock use and residual biomass monitoring data in a timely manner. Note, however, that although day use by commercial packers has been reported since 2005, staffing shortfalls have resulted in an inability to digitize or summarize those data.

Wilderness and trailhead rangers are asked to continue to maintain their stock use observation forms, which are critical for verifying use reports and gaining a more realistic estimate of actual use for specific forage areas.

Note that this report supercedes all previous stock use reports from Sequoia and Kings Canyon National Parks, as additional data are acquired and errors are corrected.

As this report relies on diverse sources of data, and as the author is certainly not immune to the making of errors, please submit corrections or comments regarding any questionable portions of this report. If you are aware of use that has not been captured, or if it appears that use has been either under- or over-reported, please do not hesitate to bring it to my attention. Even if it is not possible to determine the correct number, it is helpful to annotate areas of uncertainty wherever they occur. We will endeavor to update the stock use database as corrections are submitted; note that this practice results in variations in the totals from one year to the next as additional data become available.

**Acknowledgements.** We wish to thank all of the stock users who took the time to send in their reporting forms this year, and also the wilderness and trailhead rangers who kept track of stock use nights in their areas. These observations are essential to monitoring use patterns. Funding for the seasonal meadow monitoring position was again provided in part by the concessions office. Additional funds for this position were also provided by the maintenance division, allowing us to provide additional effort in the field. Paul Pfenninger in the concessions office, and Nicole Ver in the Wilderness office, tenaciously pursued truant reports, a task that is deeply appreciated. Jammie Meyer entered the use data and also helped track down missing reports. I also wish to recognize the additional effort made by trailhead rangers to annotate permits for us, and by the wilderness office staff who set aside packstock related permits and shared the output of the wilderness permit database. Finally, my hat is off to Tyler Johnson and David Karplus, Trails Supervisors for Sequoia and Kings Canyon respectively, for continuing to use the customized data entry program developed by Erik Frenzel in 2007. As with the commercial reports, having up to date administrative reports available is key to making informed management decisions.

**Appendix 1. Samples of stock use reporting forms used during 2008; the small card is distributed to private parties with their wilderness permit, and is stamped and addressed for ease of return.**

**STOCK USE REPORTING CARD** *Sequoia and Kings Canyon National Parks*  
 Please circle one: Horses/mules      Burros      Llamas  
 Please circle one: Commercial Packer      Private Party      NPS Stock

Date	Forage Area Used That Night (name of meadow, camp, etc.)	Forage Area #	# of stock	# of nights	# of people

Form completed by (please print): \_\_\_\_\_ Date: \_\_\_\_\_  
 Address: \_\_\_\_\_ Phone: \_\_\_\_\_  
 One location per line. Please be specific in naming forage areas. Please return by Oct. 31.

Front:

UNITED STATES  
 DEPARTMENT OF THE INTERIOR      AN EQUAL OPPORTUNITY EMPLOYER  
 NATIONAL PARK SERVICE  
SEQUOIA AND KINGS CANYON NATIONAL PARKS  
 47050 GENERALS HIGHWAY  
 THREE RIVERS, CALIFORNIA 93271

Official Business  
 Penalty For Private Use \$300

Wilderness Office  
 Sequoia and Kings Cyn National Parks  
 47050 Generals Highway  
 Three Rivers, CA 93271



Appendix 2: Reported Grazing Nights and Supplemental Feed Nights by Meadow Forage Area in 2008.

		Commercial Grazing-Private Grazing-Administrative Grazing Total Nights Grazing (Additional Nights with Feed Provided)						
		2008	2007	2006	2005	2004	2003	2002
28-1	Piute Creek	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
28-2	Aspen Meadow	3-0-0 3	0-0-0 0	0-0-0 0 (14)	5-0-0 5	0-0-0 0 (10)	0-0-0 0	0-16-0 16
28-3	Cony Camp	17-0-0 17 (37)	36-0-0 36 (44)	4-0-0 4	0-0-28 28 (2)	16-2-57 75	4-0-0 4	31-0-0 31
28-4	Franklin-Montgomery Mdw	7-0-117 124 (16)	7-0-143 150	10-0-0 10	19-0-0 19 (2)	12-0-12 24	0-0-0 0	12-0-0 12
28-6	Hell-For-Sure Jct Mdws	8-0-0 8	8-0-0 8	0-0-0 0	3-0-0 3	16-0-0 16	0-0-0 0	10-15-0 25
28-7	Upper Goddard Cyn	0-0-0 0	0-11-0 11 (11)	18-0-0 18	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
33-1	Evolution Meadow	32-0-0 32	102-0-0 102	44-0-0 44	0-0-0 0	0-0-0 0	117-0-0 117	177-17-32 226
33-2	McClure Meadow	58-0-16 74 (1)	0-5-18 23	0-0-0 0	59-0-0 59 (54)	26-4-11 41	58-0-16 74	27-0-11 38
33-3	Colby Meadow	136-0-0 136 (10)	62-0-0 62	7-0-0 7 (60)	78-50-20 148 (25)	143-0-0 143 (10)	6-0-0 6	44-0-0 44
33-4	Darwin Meadow	67-0-0 67	95-0-0 95	0-0-0 0 (14)	0-0-0 0	12-0-0 12	0-0-0 0	0-0-0 0
33-5	Lake 11,106	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
33-6	Darwin Bench	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
33-8	McGee Canyon	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
33-9	Emerald Lakes	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
34-1	Evolution Lake	0-0-0 0	0-0-0 0 (12)	0-0-0 0	0-0-0 0	0-0-0 0 (5)	0-0-0 0 (14)	0-3-0 3
34-2	Sapphire Lake	8-0-0 8	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
34-3	Huxley Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
38-1	Upper Blue Canyon	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
38-2	Blue Canyon Meadow	0-0-0 0	12-0-18 30	0-0-0 0	0-0-0 0	0-0-0 0	0-0-8 8	6-0-15 21
38-3	Lower Blue Canyon	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
39-1	Upper LeConte Canyon	0-0-0 0	0-0-0 0	0-0-0 0	9-0-0 9	0-0-0 0	0-0-0 0	0-0-0 0
39-2	Big Pete Meadow	81-0-106 187	103-0-0 103	45-0-0 45	74-0-0 74	89-0-51 140	81-0-0 81 (15)	137-0-0 137
39-3	Little Pete Meadow	70-0-14 84	40-13-0 53	0-4-12 16	6-0-20 26	45-11-0 56	0-0-14 14	15-0-45 60
39-4	Ladder Camp	16-0-0 16	49-0-0 49	136-0-0 136	26-0-0 26	21-0-0 21	16-0-0 16	27-0-0 27
39-5	Grouse Meadow	38-0-0 38	29-3-90 122	14-0-0 14	0-0-0 0	6-0-0 6	19-0-0 19	8-0-20 28
39-6	Palisade Creek Junction	0-0-0 0	9-0-0 9	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
39-7	Stillwater Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
39-8	Deer Meadow	22-0-4 26	6-0-0 6	7-0-0 7	44-0-14 58	0-0-60 60	19-0-0 19	5-0-10 15
42-1	Dusy Creek	12-0-0 12	0-0-0 0	7-0-0 7	0-0-0 0	5-0-0 5	17-0-0 17	11-0-0 11
42-2	Lower Dusy Basin	0-4-0 4	0-0-0 0 (22)	0-0-0 0 (14)	0-0-0 0 (20)	0-0-0 0 (10)	0-0-0 0	0-0-0 0
42-3	Upper Dusy Basin	0-0-0 0	0-0-0 0 (14)	0-0-0 0	0-0-0 0 (22)	0-0-0 0 (14)	0-0-0 0	0-0-0 0
42-4	Rainbow Lakes	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0

Appendix 2: Reported Grazing Nights and Supplemental Feed Nights by Meadow Forage Area in 2008.

		Commercial Grazing-Private Grazing-Administrative Grazing Total Nights Grazing (Additional Nights with Feed Provided)						
		2008	2007	2006	2005	2004	2003	2002
45-1	Palisade Lakes	5-0-0 5	62-7-0 69 (6)	0-0-0 0	66-0-0 66	12-2-0 14	0-0-0 0	0-0-0 0
46-1	Upper Basin Meadows	41-0-0 41	92-0-0 92	0-5-0 5	72-0-0 72 (8)	0-0-0 0	21-0-0 21	0-0-0 0
46-2	South Fork Kings River	13-0-8 21	22-8-32 62	7-0-0 7 (18)	73-0-0 73	12-0-0 12	28-0-0 28 (12)	21-0-0 21
46-3	Bench Lake/JMT Jct.	0-0-0 0	63-6-18 87	0-0-0 0	4-0-0 4	19-4-0 23	31-0-0 31	8-10-6 24
46-4	Bench Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	5-0-0 5	0-0-0 0
46-5	Taboose Pass Area	31-0-0 31	60-0-0 60	0-0-0 0	0-0-0 0	5-0-0 5	17-0-0 17	0-0-0 0
46-6	Lake Marjorie	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
47-1	Cartridge Creek	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
47-2	Lake Basin	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
47-3	Marion Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
47-4	Cataract Creek	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
47-5	Mdws SW of Bench Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
47-8	Muro Blanco	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
51-1	Simpson Meadow	0-0-141 141	119-0-91 210	56-0-21 77	73-0-75 148	127-0-92 219	46-0-60 106	229-0-152 381
51-2	Tehipite Valley	4-0-0 4	0-0-0 0	28-0-0 28	0-0-0 0	0-0-0 0	0-0-0 0	8-0-0 8
51-3	Gnat Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	10-0-0 10	0-0-0 0
51-4	Hay Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	8-0-0 8	0-0-0 0	0-0-0 0
52-1	Volcanic Lakes Basin	12-0-0 12	0-0-0 0	0-0-0 0	0-0-0 0	5-0-0 5	16-0-0 16	0-0-0 0
52-2	Kennedy Canyon Meadows	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
52-3	Upper Kennedy Canyon Mdws	0-0-0 0	0-0-0 0	0-0-0 0	0-0-24 24	0-0-0 0	0-0-0 0	0-0-0 0
52-4	Kennedy Pass Meadows	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-93 93	0-0-0 0	0-0-0 0
52-5	West Kennedy Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
52-6	Frypan Meadow	0-0-0 0	0-0-0 0	0-0-2 2	0-0-0 0	0-0-0 0	14-0-0 14	0-0-0 0
52-13	Jerkey Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
52-14	Upper end of Hotel Creek	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
52-15	Hotel Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
53-1	Horseshoe Meadows	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
53-2	Horseshoe Lakes Turnoff	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
53-3	State Lakes Area	0-0-0 0 (5)	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	34-0-0 34	0-0-0 0
53-4.1	Dougherty Meadows	0-0-0 0	0-0-0 0 (26)	0-0-0 0	0-0-6 6	0-0-0 0	0-0-0 0	0-0-0 0
53-4.2	Glacier Valley Meadows	0-0-45 45	0-0-0 0	56-0-0 56	8-0-20 28	13-0-0 13	116-40-0 156	0-24-20 44 (24)

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		Commercial Grazing-Private Grazing-Administrative Grazing Total Nights Grazing (Additional Nights with Feed Provided)						
		2008	2007	2006	2005	2004	2003	2002
53-5	Fallen Moon Meadow	0-0-0 0	0-0-0 0	28-0-0 28	36-0-0 36	62-0-0 62	64.5-12-0 76.5	61-35-0 96 (7)
53-6	Volcanic Trail Junction	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
53-7	Shorty's Meadow	16-0-0 16	65-0-0 65	0-0-0 0	92-0-6 98	65-0-0 65	52.5-0-0 52.5	70-0-0 70
53-8	Granite Pass Meadows	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
54-1	Granite Lake	0-0-0 0 (10)	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
54-2	Granite Basin Meadows	40-0-3 43	27-10-9 46	0-0-4 4 (4)	70-0-0 70	43-0-0 43	50-0-13 63	28-0-0 28 (18)
54-3	Grouse Lake	4-0-0 4	0-6-0 6	0-0-0 0	30-0-0 30	0-0-0 0	0-0-0 0	0-36-0 44
54-4	Halfmoon Meadow	0-0-6 6	0-0-0 0	14-0-0 14	0-0-0 0	0-0-0 0	48-0-0 48	0-0-0 0
54-5.1	Lower Tent Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-6-0 6	0-0-0 0
54-5.2	Upper Tent Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
55-1	Woods Creek Jct Mdw	6-0-16 22	0-0-7 7	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
55-2	U. Paradise Valley Mdw	0-0-0 0	0-0-0 0 (1)	0-8-0 8	0-0-0 0	0-0-0 0	0-0-0 0 (5)	0-0-0 0
55-3	L. Paradise Valley Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
56-1	Mdws S. of Pinchot Pass	54-0-0 54	90-0-0 90	0-0-0 0	0-0-0 0	135-0-0 135	0-0-0 0	80-0-0 80
56-2	Twin Lakes Area	39-0-0 39	41-0-0 41	90-0-8 98	8-0-0 8	12-0-6 18	17-0-0 17	5-0-0 5
56-3	White Fork Camp	0-0-0 0	11-0-5 16 (3)	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
57-1	Woods Lake Meadows	14-0-0 14	96-0-0 96	0-0-0 0	20-0-0 20	75-0-0 75	109-0-0 109	74-0-0 74
58-1	Castle Domes Meadow	81-0-13 94 (105)	61-0-12 73	56-0-10 66	64-0-14 78	40-0-76 116	21-0-0 21	56-0-6 62
58-2	Woods Creek Crossing	66-0-0 66 (19)	42-2-63 107 (18)	108-8-40 156	247-0-37 284	75-0-126 201 (4)	159-5-69 233	90-0-58 148 (5)
58-3	Baxter Creek Drift Fence	53-0-0 53	50-6-0 56	27-0-0 27	53-7-0 60	51-4-0 55	28-0-0 28 (5)	121-0-0 121
59-1	Baxter Creek	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
59-2	Baxter Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
60-1	Gardiner Basin	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
61-1	Cotter Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
61-2	Fjord Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
61-3	Lower 60 Lakes Basin Mdws	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
62-1	Rae Lakes Basin Meadows	0-0-0 0 (19)	0-5-0 5 (13)	0-8-0 8	0-0-0 0	0-0-0 0 (6)	0-4-0 4	0-0-0 0
62-2	Dragon Lake Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
63-1	Charlotte Creek Meadows	25-0-18 43 (21)	43-1-143 187	0-0-0 0	0-14-0 14	53-12-0 65	91-24-3 118	48-10-0 58
63-2	Charlotte Lake Lower Mdw	0-0-0 0	0-0-0 0	7-0-0 7	37-0-0 37	0-0-0 0	0-0-0 0	0-0-0 0
63-3	Charlotte Lake Upper Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0

Appendix 2: Reported Grazing Nights and Supplemental Feed Nights by Meadow Forage Area in 2008.

Commercial Grazing-Private Grazing-Administrative Grazing Total Nights Grazing (Additional Nights with Feed Provided)								
		2008	2007	2006	2005	2004	2003	2002
64-1	Kearsarge Basin Meadows	0-0-0 0	0-0-0 0 (51)	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
64-2	Bullfrog Lake Meadows	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-10-0 10	0-0-0 0	0-0-0 0
65-1	Vidette Meadow	0-2-0 2	0-0-0 0	0-0-0 0 (9)	20-0-0 20 (26)	0-8-0 8	0-0-0 0	0-0-0 0
65-2	East Vidette Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
65-3	Upper Vidette Meadows	0-0-0 0 (15)	0-0-0 0	0-0-0 0	64-0-0 64	12-0-0 12	45-4-0 49	0-0-0 0
65-4	Upper Bubbs Creek	57-2-0 59	227-6-0 233	59-0-0 59	12-12-0 24	239-4-0 243	218-5-23 246	88-0-0 88 (8)
65-5	Center Basin	13-0-0 13	0-0-0 0	0-0-0 0	0-0-0 0	0-1-0 1	0-0-0 0	0-0-0 0
66-1.1	Sphinx Creek Junction	0-0-0 0	0-0-0 0	0-0-0 0 (20)	0-0-0 0	0-0-0 0	0-5-0 5	0-0-0 0
66-1.2	Angleworm Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-3-0 3	0-0-0 0	0-0-0 0	0-0-0 0
66-2	Charlotte Creek Confluence	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-5-0 5 (2)	0-0-0 0
66-3	Junction Meadow	51-0-0 51 (44)	63-0-0 63 (11)	113-0-40 153 (30)	126-3-18 147 (20)	129-4-12 145 (18)	122-3-94 219	119-0-6 125 (7)
67-1	East Lake Meadow	14-18-0 32	168-0-0 168	95-0-0 95	4-0-0 4	210-12-0 222	98-18-0 116 (33)	133-16-0 149
67-2	Ouzel Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
67-3	Reflection Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
68-1	Sphinx Creek Crossing	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-4-0 4	0-0-0 0	0-0-0 0
69-2	West Side Roaring River	0-30-58 88	0-0-54 54	0-2-55 57 (16)	0-0-95 95	0-0-12 12 (4)	0-0-97 97	0-0-67 67 (8)
69-3	JR Pasture	3-2-85 90	0-0-24 24 (10)	0-0-58 58	6-0-57 63	10-0-48 58 (4)	0-0-19 19	0-0-25 25
69-4	Lackey Pasture	6-2-18 26	0-0-60 60	0-8-16 24	0-0-25 25	0-19-36 55	3-2-16 21	0-0-10 10
69-5.1	Scaffold Mdw Tourist Past.	53-32-195 280 (10)	36-12-224 272 (5)	0-152-88 240 (4)	106-18-185 309	20-63-186 269 (3)	3-63-20 86	30-62-26 118
69-5.2	Grasshopper Meadow	0-0-0 0	0-0-0 0	0-24-0 24	76-32-0 108	63-0-28 91	0-0-6 6	0-0-20 20
69-6.1	Moraine Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-5-0 5	0-0-0 0
69-6.2	Moraine Stringers	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
69-6.3	Metroyhoy Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
70-1.1	Grasshopper Camp	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-6 6	0-0-0 0
70-1.2	Brewer Stringers	0-0-0 0	0-0-0 0	40-0-0 40	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
70-2	Barton Meadow and Stringer	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
70-3	False Cement Table Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-14 14	0-0-20 20
70-4	Cement Table Meadow	0-0-0 0	0-12-0 12	40-5-0 45	48-0-0 48	0-22-0 22	0-4-0 4	0-12-0 12
70-5	Big Wet Meadow	136-60-0 196	24-0-0 24	164-0-16 180	5-0-0 5 (3)	28-24-0 52	92-15-2 109	163-171-20 354
70-6	Grand Palace Hotel	2-0-5 7	0-0-9 9	2-4-38 44	0-20-0 20	7-12-53 72	0-14-63 77	0-15-43 58
70-7	Colby Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0

Appendix 2: Reported Grazing Nights and Supplemental Feed Nights by Meadow Forage Area in 2008.

		Commercial Grazing-Private Grazing-Administrative Grazing Total Nights Grazing (Additional Nights with Feed Provided)						
		2008	2007	2006	2005	2004	2003	2002
71-1	Austin Camp Meadows	0-21-0 21	0-0-0 0	16-33-0 49	0-17-0 17	68-114-0 182	3-5-12 20	0-51-25 76
71-2	Grave Meadow	0-14-0 14	20-0-0 20	0-0-0 0	0-0-0 0	0-24-0 24	32-42-0 74	0-0-0 0
71-3.1	Lower Ranger Meadow	26-0-0 26	0-0-9 9	0-0-0 0	0-0-0 0	0-0-0 0	0-4-0 4 (5)	0-0-0 0
71-3.2	Middle Ranger Meadow	104-20-0 124	0-16-0 16	0-196-0 196	57-43-0 100	0-81-4 85	0-281-8 289	0-0-0 0
71-4	Upper Ranger Meadow	0-0-0 0 (5)	70-0-0 70	40-0-0 40	42-0-0 42	0-0-0 0	0-0-8 8	0-20-6 26
71-5	Upper Deadman Canyon	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
72-1	Pond Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
72-2	Catch'em Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
72-3	Willow Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
72-4	Mitchell Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
72-5	Quartz Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
72-6	Williams Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-8-0 8
72-7	Comanche Meadow	0-0-0 0 (4)	0-0-0 0	0-6-0 6	0-6-0 6	11-7-0 18	0-0-0 0	0-0-0 0
72-8	Sugarloaf Meadow	17-46-5 68 (5)	14-91-0 105	50-34-0 84 (140)	26-10-0 36	36-15-0 51	75-48-0 123	99-91-5 195
72-9	Little Sugarloaf Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-6-0 6	0-0-0 0	0-0-0 0
72-10	Sugarloaf Creek Camp	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
72-11	Honeymoon Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
72-12	Boggy Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
72-13	Crowley Canyon	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
72-14	Box Canyon	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
72-15	Ellis Meadow Area	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
72-16	Paradise Meadow Area	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
72-17	West Fork Ferguson Ck	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-29-0 29
72-18	Ferguson Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
72-19	Long Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
72-20	Lewistall Meadows	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
72-21	Little Jack Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
72-22	Scenic Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
73-1	Sheep Camp Meadow	37-0-0 37	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
73-2	Seville Lake	0-0-0 0 (10)	0-0-0 0	0-3-0 3 (4)	0-14-0 14	0-0-0 0	0-0-0 0	0-0-0 0 (6)
73-3	Lovelace Cabin Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0

Appendix 2: Reported Grazing Nights and Supplemental Feed Nights by Meadow Forage Area in 2008.

		Commercial Grazing-Private Grazing-Administrative Grazing Total Nights Grazing (Additional Nights with Feed Provided)						
		2008	2007	2006	2005	2004	2003	2002
73-4	Lost Lake	0-0-0 0 (10)	0-0-0 0	0-3-0 3 (4)	0-0-0 0	0-0-0 0 (4)	0-39-0 39	0-12-0 12
73-5	Ranger & Beville Lakes	0-0-0 0	0-0-0 0 (5)	0-0-0 0 (16)	0-8-10 18	0-20-0 20	22-0-0 22	0-24-0 24
74-1	Twin Lakes	5-0-0 5	0-0-0 0	0-0-0 0	0-0-0 0	0-0-2 2	0-0-0 0	0-6-0 6
74-2	Pattee Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
74-3	Clover Creek	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
74-4	Cahoon Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
74-5	Silliman Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
74-6	Willow Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
75-1	Lone Pine Meadows	0-0-0 0	0-0-0 0	0-0-0 0	40-0-0 40	0-6-0 6	0-5-0 5	21-12-0 33 (33)
75-2	Tamarack Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
75-3	Table Meadows	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
76-1	Emerald Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
76-2	Pear Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
77-1	Bearpaw Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0 (2)	11-14-0 25	0-0-0 0	0-27-0 27
77-2	Little Bearpaw Meadow	0-0-0 0	0-0-0 0	0-0-0 0	22-0-0 22	0-0-0 0	0-9-0 9 (74)	0-0-0 0
77-3	River Valley	0-0-0 0	0-0-0 0	41-0-0 41	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
77-4	Granite Ck, Strawberry Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
77-5	Redwood Meadow	0-0-112 112 (51)	0-0-93 93 (28)	38-2-20 60 (153)	0-0-34 34 (55)	36-0-94 130	15-11-55 81	6-6-303 315
77-6	Cliff Creek	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-3-0 3
77-7	Pinto Lake Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-19-18 37	31-0-0 31
78-1	Hamilton Lakes	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
79-1	Cold Springs Camp Area	0-0-156 156	0-0-178 178	0-0-243 243	0-0-120 120	0-0-92 92	0-14-96 110	0-0-91 91
79-2	Milestone Basin	0-0-0 0	0-0-0 0	0-14-0 14	0-18-0 18	0-0-3 3	0-7-0 7	0-34-0 34
79-3	Rockslide Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
79-4	Lower Kern-Kaweah River	0-0-0 0	0-0-12 12	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
79-5	Gallats Lake Meadows	13-0-0 13	0-0-108 108	18-0-0 18	0-0-0 0	31-0-145 176	0-0-0 0	0-0-0 0
79-6	Upper Kern-Kaweah River	0-0-0 0	0-0-36 36	0-0-0 0	0-0-0 0	0-0-0 0	0-0-84 84	0-0-0 0
80-1	Bighorn Plateau Lake Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	30-0-0 30	0-0-0 0
80-2	Tyndall Ck/JMT Frog Ponds	0-8-0 8	0-0-0 0	0-0-0 0	0-6-72 78	0-0-0 0	0-0-0 0	0-0-0 0
80-3	Tyndall Creek Meadows	62-0-26 88	65-6-96 167	39-24-0 63	61-18-12 91	62-16-72 150	145-23-72 240	121-9-65 195
80-4	Sheep Camp Meadows	4-0-0 4	0-0-0 0	0-0-0 0	11-0-0 11	72-0-0 72	140-0-0 140 (5)	14-0-0 14

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		Commercial Grazing-Private Grazing-Administrative Grazing Total Nights Grazing (Additional Nights with Feed Provided)						
		2008	2007	2006	2005	2004	2003	2002
80-5.1	Lake South America	4-12-0 16	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	11-0-0 11	48-0-0 48
80-5.2	Lake S. Americal Col Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
80-6	Kern Headwaters	0-0-0 0	0-0-0 0	0-0-0 0	69-0-0 69	0-0-0 0	57-0-0 57	11-0-0 11
81-1	Wright Creek Drainage	120-15-0 135	46-0-0 46	112-35-0 147	39-27-0 66	137-0-6 143 (2)	149-9-0 158	99-4-0 103
81-2.1	Wallace Ck/JMT Jct Mdw	0-2-0 2	0-3-0 3	0-0-0 0	12-0-0 12	12-0-0 12	0-0-0 0	0-0-0 0
81-2.2	Wallace Creek Meadows	22-0-0 22	14-0-0 14	58-0-0 58	110-0-0 110	0-0-0 0	0-0-0 0	20-0-0 20
81-2.3	Wallace Ck Waterfall Mdw	0-6-0 6	0-6-0 6	0-0-0 0	0-0-0 0	5-5-0 10	0-0-0 0	0-0-0 0
81-2.4	Marshy Meadows	0-12-0 12	0-0-0 0	0-0-0 0	33-0-0 33	0-0-0 0	0-0-0 0	0-0-0 0
81-2.5	Wallace Ck Closed Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
82-1	Junction Meadow on the Kern	0-0-0 0	0-20-0 20 (18)	6-0-0 6	26-0-0 26	0-38-0 38	0-16-0 16	3-4-0 7
82-2	One mi. < Junction Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
82-3	Three mi. < Junction Mdw	0-0-0 0	0-0-0 0	0-0-0 0	12-0-0 12	0-0-0 0	0-0-0 0	0-0-0 0
83-1	Guitar Lake	0-3-0 3	0-3-0 3	0-0-0 0	0-0-0 0	0-4-0 4	0-0-0 0	0-0-0 0
83-2	Timberline Lake Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
83-3	Crabtree R.S. Meadows	0-0-0 0	0-0-0 0 (3)	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0 (37)	0-0-0 0
83-4	Upper Crabtree Meadow	188-2-0 190 (19)	253-6-12 271 (19)	0-0-0 0 (154)	40-0-0 40 (18)	122-44-40 206 (36)	114-14-38 166 (101)	168-26-40 234
83-5	Lower Crabtree Meadow	0-0-0 0 (5)	69-15-0 84 (9)	119-12-1 132 (23)	316-27-0 343 (50)	0-15-0 15 (31)	11-0-0 11 (22)	84-12-40 136 (40)
83-6	Crabtree Lakes Meadows	0-0-0 0 (22)	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0 (35)	0-0-0 0	0-0-0 0
83-7	Lower Whitney Creek	0-12-0 12	0-0-0 0	40-42-0 82	65-0-0 65	0-0-0 0	0-0-0 0	0-12-0 12
83-8	Sandy Meadow	180-0-230 410	11-0-40 51	76-0-123 199	48-0-112 160	6-0-128 134	0-0-100 100	0-0-195 195
84-1	Rock Creek R.S. Meadow	0-0-0 0	0-3-0 3	0-0-0 0	0-0-0 0	0-2-0 2	0-9-0 9	0-49-0 49
84-2	Lower Rock Ck Xing Mdw	195-8-17 220 (42)	47-3-42 92 (59)	136-31-84 251 (107)	258-13-20 291 (54)	70-38-0 108 (25)	100-19-96 215 (52)	93-25-78 196 (7)
84-3	Lower Rock Creek Meadows	40-0-52 92	0-0-0 0	0-0-0 0	23-0-0 23	0-0-0 0	0-0-0 0	0-0-0 0
84-4	Forgotten Canyon Meadows	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
84-5	Guyot Creek Meadows	0-0-0 0	0-0-0 0	0-1-0 1	0-0-0 0	0-0-0 0	0-0-0 0	0-1-0 1
84-6	Siberian Outpost	0-0-0 0	0-0-0 0	0-32-0 32	22-9-0 31	0-0-0 0 (15)	0-14-0 14	12-7-0 19
85-1	Sky Blue Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
85-2	Miter Basin Meadows	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
85-3	Lower Miter Basin Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
85-4	Penned-up Meadow	7-0-40 47	58-0-18 76 (1)	23-0-0 23 (19)	44-0-20 64 (18)	12-0-10 22 (10)	0-0-19 19 (19)	58-0-0 58 (63)
85-5	Upper Soldier Lake Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0

Appendix 2: Reported Grazing Nights and Supplemental Feed Nights by Meadow Forage Area in 2008.

		Commercial Grazing-Private Grazing-Administrative Grazing Total Nights Grazing (Additional Nights with Feed Provided)						
		2008	2007	2006	2005	2004	2003	2002
85-6	Lower Soldier Lake Mdws	11-12-0 23	0-0-0 0 (4)	0-1-0 1	0-0-0 0	0-0-0 0	0-0-0 0	0-8-0 8
85-7	New Army Pass Jct Mdws	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-8-0 8	51-0-0 51	0-0-0 0
85-8	Lower Rock Creek Lk Mdw	0-0-0 0	0-9-0 9 (14)	0-1-0 1 (12)	0-0-0 0 (59)	0-10-20 30 (129)	0-6-0 6 (41)	0-0-0 0
85-9	Rock Creek Meadow #2	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
85-10	Nathan's Meadow	111-12-20 143	46-0-0 46	58-0-10 68	117-0-0 117	41-0-19 60 (6)	32-0-19 51 (14)	22-7-20 49 (2)
86-1	Kern Bridge Camp	0-0-272 272 (3)	0-0-183 183	0-0-0 0	0-0-124 124 (8)	0-2-262 264	0-14-286 300	0-20-298 318 (2)
86-2	Upper Funston Meadow	0-36-30 66	6-53-28 87 (6)	20-44-48 112 (9)	127-16-21 164	32-96-49 177	0-28-23 51	39-86-38 163
86-3	Big Arroyo Confluence	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-7-0 7	0-0-0 0	0-0-0 0
86-4	21" Camp, Rattlesnake Ck	0-12-0 12 (5)	0-0-0 0	0-0-0 0	7-0-0 7	0-14-0 14	40-7-0 47	68-0-0 68
86-5	Lower Funston Meadow	0-0-0 0 (11)	0-20-0 20	80-22-0 102	131-0-19 150	35-16-4 55 (4)	40-38-0 78	85-80-0 165
86-6	Snake Camp, River Pasture	0-0-0 0	0-0-0 0	0-0-0 0 (7)	0-0-0 0	0-12-0 12	0-0-0 0	0-0-0 0
86-7	Lewis Camp Large Pasture	0-0-115 115	0-0-199 199	0-24-88 112	8-0-210 218	8-0-363 371	2-6-522 530	4-14-499 517
86-8	Kern Station Small Pastur	0-0-0 0 (6)	0-3-0 3	0-0-33 33 (15)	0-0-26 26	0-0-11 11	35-0-69 104 (35)	22-0-70 92
87-1	Upper Big Arroyo	0-0-75 75	0-0-0 0	0-0-144 144	0-0-77 77	8-6-0 14	0-9-0 9	0-8-0 8
87-2	Little Upper Big Arroyo	0-0-75 75	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-110 110	0-0-0 0
87-3	Big Arroyo Patrol Cabin	0-0-75 75	10-0-13 23	41-0-0 41	0-0-0 0	14-0-0 14	0-5-44 49	0-0-170 170
87-4	Lower Big Arroyo	0-0-0 0	0-0-0 0	0-0-0 0	12-0-0 12	0-0-216 216	0-14-0 14	0-0-5 5
87-5	Chagoopa Plateau Mdw #1	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
87-6	Chagoopa Plateau Mdw #2	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
87-7	Chagoopa Plateau Mdw #3	0-0-0 0	0-0-0 0	0-0-0 0	12-0-0 12	0-0-0 0	0-0-0 0	0-0-0 0
87-8	Chagoopa Plateau Mdw #4	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
87-9	Chagoopa Plateau Treehouse	0-0-0 0	0-0-0 0	0-0-0 0	4-0-0 4	0-0-0 0	0-0-0 0	0-0-0 0
87-10	Sky Parlor Meadow	0-0-0 0	0-0-0 0	0-0-0 0	22-0-36 58	0-22-3 25	0-0-0 0 (5)	8-2-36 46
88-1	L. Little 5 Lks (Long Lake)	0-0-0 0	0-0-11 11	0-0-0 0	0-0-0 0	0-0-0 0	0-14-18 32	58-0-0 58
88-2	U. Little 5 Lks (R.S. Mdw)	0-0-10 10	0-0-0 0	0-0-0 0	0-0-0 0	0-0-3 3	0-0-0 0	8-3-0 11
88-3	Big 5 Lakes Lower Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	6-6-0 12
88-4	Big 5 Lakes Upper Mdw	0-0-0 0	0-0-0 0	0-0-0 0	24-0-0 24	0-0-0 0	0-3-0 3	16-0-0 16
88-5	Big 5 Lakes Upper Stringe	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
89-1	Spring Lk/Glacier Pass Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
89-2	Upper Lost Canyon Meadows	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-76 76	0-0-0 0	5-0-0 5
89-3	Lower Lost Canyon Mdws	0-0-135 135	0-0-153 153	0-0-0 0	0-0-72 72	0-0-0 0	0-14-69 83	0-0-0 0

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		Commercial Grazing-Private Grazing-Administrative Grazing Total Nights Grazing (Additional Nights with Feed Provided)						
		2008	2007	2006	2005	2004	2003	2002
89-4	Soda Creek Canyon	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	8-0-0 8
89-5.1	Forester Lake Bench Mdws	0-5-0 5	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-9-0 9
89-5.2	Forester Lake Meadows	0-5-0 5	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-9-0 9
89-5.3	Forester Lake Pocket Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
89-6	Upper Rattlesnake Canyon	0-6-0 6	0-0-0 0	0-0-12 12	0-0-26 26	0-0-8 8	0-6-36 42	29-0-6 35
89-7	Shotgun Pass Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-4.5 4.5	21-0-0 21
89-8	South Rattlesnake Canyon	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	3-0-0 3
89-9	Middle Rattlesnake Canyon	0-18-0 18	18-0-162 180	0-8-0 8 (12)	0-0-162 162	0-0-136 136	0-0-128 128	0-12-133.5 145.5
89-10	Cow Camp	0-0-0 0	0-0-0 0	0-0-0 0	0-0-6 6	0-0-0 0	0-0-3 3	0-0-0 0
89-11	Laurel Creek Basin	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
89-12	Crytes Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
89-13	Coyote Creek Meadows	0-12-0 12	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
90-1	Horse Creek Meadows	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
90-2	Ansel Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
90-3	Evelyn Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
90-4	Cow Camp	0-0-273 273	0-4-0 4	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
90-5.1	Hockett Meadow	0-30-325 355	0-0-122 122	0-4-117 121	0-0-132 132	20-61-273 354	0-97-226 323	0-8-336 365
90-5.2	Hockett Pasture	0-0-16 16	0-0-85 85	0-0-78 78	0-4-55 59	0-0-164 164	0-0-66 66	0-0-104 104
90-6	Sand Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
90-7	Mitchell Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
90-8	Tuohy Ck/S. Fk Kaweah	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-4-0 4	48-5-0 53
90-9	Lower South Fork Meadow	0-45-0 45 (78)	12-0-0 12	49-3-0 52 (73)	0-0-0 0	30-0-0 30	30-53-0 83	12-48-0 60
90-10	South Fork Meadow	0-10-0 10	75-17-0 92 (60)	66-15-3 84 (32)	119-0-0 119	102-0-0 102	159-130-0 289	246-77-0 323
90-11	South Fork Pasture	200-0-0 200	0-24-0 24	5-16-0 21	0-0-0 0	0-28-0 28	30-92-0 122	152-28-0 180
90-12	Blossom Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
90-13	Slim's Meadow	0-20-93 113	0-0-0 0	0-0-88 88	0-0-0 0	0-0-67 67	0-0-180 180	0-0-89 89
90-14	Green Meadow	50-6-0 56	0-0-0 0	0-0-60 60	0-0-0 0	0-1-0 1	0-0-0 0	0-0-0 0

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		Commercial Grazing-Private Grazing-Administrative Grazing Total Nights Grazing (Additional Nights with Feed Provided)						
		2008	2007	2006	2005	2004	2003	2002
90-15	Tuohy Meadows	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-10-0 10	0-0-0 0
90-16	Summit Meadow	0-0-0 0	0-0-0 0	0-14-0 14	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
90-17	Cyclone Meadow	0-0-0 0	48-0-0 48	0-0-0 0	0-0-0 0	14-0-0 14	0-0-0 0	4-0-0 4
90-18	Summit Lake Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
90-19	Quinn Meadow	0-0-3 3	0-0-6 6	0-0-3 3	0-0-8 8	0-0-5 5	0-20-11 31	0-7-33 40
91-1	Ladybug Camp	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
91-2	Whiskey Log Camp	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
91-3	Cahoon Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
92-1	Monarch Lakes	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
92-2	Crystal Lakes, Cobalt Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
92-3	Franklin Lakes	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-5-0 5
93-1	White Chief Meadow	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
93-2	Eagle Lake	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
93-3	Mosquito Lakes	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
94-1	Mineral Lakes	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
95-1	Redwood Canyon	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
96-1	North Fork Kaweah River	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0