

Summary report of stock use and grazing in wilderness meadows Sequoia and Kings Canyon National Parks, 2007

Summary

- With the May 1 snowpack containing 5-34% of the average annual water content, 2007 was characterized as an extremely dry year in Sequoia and Kings Canyon National Parks. Early access to the high country and dry season opening dates for grazing resulted in a longer season for pack stock users in the two parks, and reported commercial and administrative stock use increased accordingly.
- Dry conditions led to a shortened grazing season in some areas, with formal restrictions put in place in four meadows (Castle Domes, Junction/Bubb's, Lower Crabtree, South Fork Meadow) and advisories in an additional three (Evolution, Colby, Middle Rattlesnake) before the end of the season.
- Reported recreational and administrative stock use during the summer of 2007 totaled **6,449 stock nights**, or 7,640 animal unit nights. This represents an increase of 9.9% compared to 2006, which had a total of 5,867 stock nights reported.
- Commercial and administrative packers continue to account for the majority of pack stock use in the two parks, accounting for 49% and 43%, respectively, of reported use. Private users accounted for the remaining 8%.
- Relative to 2006, reported commercial use increased by 3%, while reported private use decreased by 47%. Administrative use increased by 51% over the previous year.
- Reported use of supplemental feed in lieu of grazing decreased among all users relative to the previous year. Overall reported use of supplemental feed decreased by 57%, from 1,112 nights in 2006 to 479 nights in 2007. Commercial use of supplemental feed decreased by 59%, private use by 18%, and administrative use by 62%.
- Horses and mules remained the primary type of stock used, accounting for 92% of total use. Llama use increased relative to previous years, yet still accounted for just over 1% of total use. Reported burro use remained stable, accounting for just over 7% of total stock use.

February 28, 2008

Prepared by S. Haultain/Plant Ecologist and
Erik Frenzel, Biological Technician
Division of Resources Management and Science
Sequoia and Kings Canyon National Parks
Three Rivers, California 93271

SEKI_07Stockusereport_Haultain_20080228.wpd/pdf

TABLE OF CONTENTS

INTRODUCTION	1
METHODS	1
RESULTS	2
User Compliance.....	2
Reported Use.....	2
Types of Use.....	3
Supplemental Feed.....	3
Historical Use.....	4
Administrative Use.....	5
Commercial Use.....	6
Types of Stock.....	7
Monthly Use.....	8
Number of Areas Receiving Use.....	8
Areas of High Use.....	8
DISCUSSION	11
Data Management.....	12
Acknowledgements.....	13
APPENDIX 1: Stock use reporting forms.....	14
APPENDIX 2: Reported stock use by meadow forage area.....	16
Table 1: Proportional types of stock use.....	3
Table 2: Administrative use	5
Table 3: Commercial use.....	6
Table 4: Monthly use and percentage of entire season.....	8
Table 5: Number of forage areas used by each user group.....	8
Table 6: Stock nights in the 25 most heavily used areas	9
Table 7: Number of commercial stock nights in the ten areas receiving the heaviest commercial use.....	10
Table 8: Number of private stock nights in the ten areas receiving the heaviest private use	10
Table 9: Number of administrative stock nights in the ten areas receiving the heaviest administrative use.....	11
Figure 1: Proportional types of stock use	3
Figure 2: Reported use (stock nights) of supplemental feed by user group	3
Figure 3: Historical reported stock use.....	4
Figure 4: Administrative stock use by user.....	5
Figure 5: Commercial stock use by user.....	7
Figure 6: Types of stock.....	7

Introduction

This document provides the 2007 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.

Methods

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. This years database file is named "*SEKI_StockUse_2007.mdb*", and contains approximately 466 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.

Results

User compliance. Of the 17 commercial pack stations operating in Sequoia and Kings Canyon during 2007 (one concessioner and 16 Commercial Use Authorization holders), only four consistently submitted their monthly stock use reports by the due date specified in their contract or permit. The others were reported to the concessions office for follow up, which eventually resulted in delivery of all of the reports by the end of November.

Of the 26 trips made by private parties during 2007, 5 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.

Reported use. Reported recreational and administrative stock use during the summer of 2007 totaled **6,449 stock nights**, or 7,640 animal unit nights. This represents an increase of 9.9% compared to 2006, which had a total of 5,867 stock nights reported. Relative to 2006, reported commercial use increased by 3%, while reported private use decreased by 47%. Administrative use increased by 51%.

The following statistics describe 2007 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)

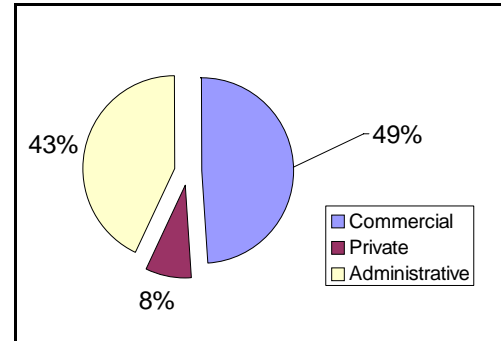
The snowpack is the best indicator we have of the amount of moisture the meadows received. Meadow opening dates for a particular season are adjusted based on snowpack during the preceding winter.

Based on snow survey data, 2007 was characterized as an extremely dry year in the southern Sierra Nevada, with a May 1 snowpack ranging from 5% to 34% of normal in Sequoia and Kings Canyon drainages. Looking at the records for the Crabtree Meadows snow course, one must go back to 1977 to find lower total snow water content for the water year. In Kings Canyon National Park dry conditions led to early opening (by approximately one week) of three meadows. Dry conditions also meant that more emphasis was placed on plant developmental stage than on soil moisture conditions when determining range readiness.

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.

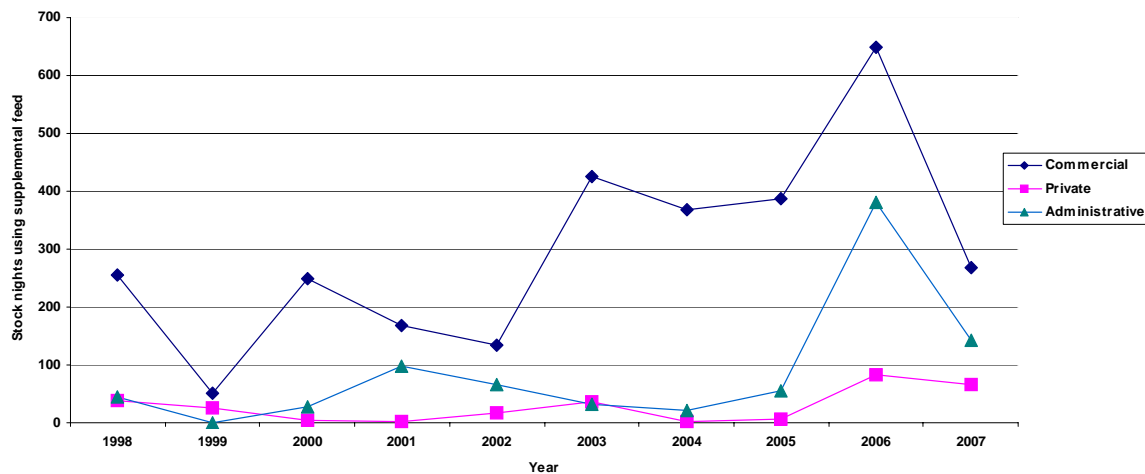
Table 1 and Figure 1. Proportional types of stock use in 2007.

2007	%	Stock Nights	Animal Unit Nights	Animal Unit Months
Commercial	49	3,171	3,613	120
Private	8	507	566	19
Administrative	43	2,769	3,461	115
TOTAL	100	6,447	7,640	255



Supplemental feed. Reported use of supplemental feed (hay, pellets or grain packed in lieu of grazing) decreased 57% from 1,112 stock nights in 2006 to 479 stock nights in 2007.

Figure 2. Reported use (stock nights) of supplemental feed by user group 1998- 2007.



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 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. Drought conditions in 2007 meant that the park animals were brought back to Ash Mountain significantly earlier than in normal or wet years.

Figure 3: Reported Stock Use in Wilderness Meadows of Sequoia and Kings Canyon National Parks, 1986-2007.

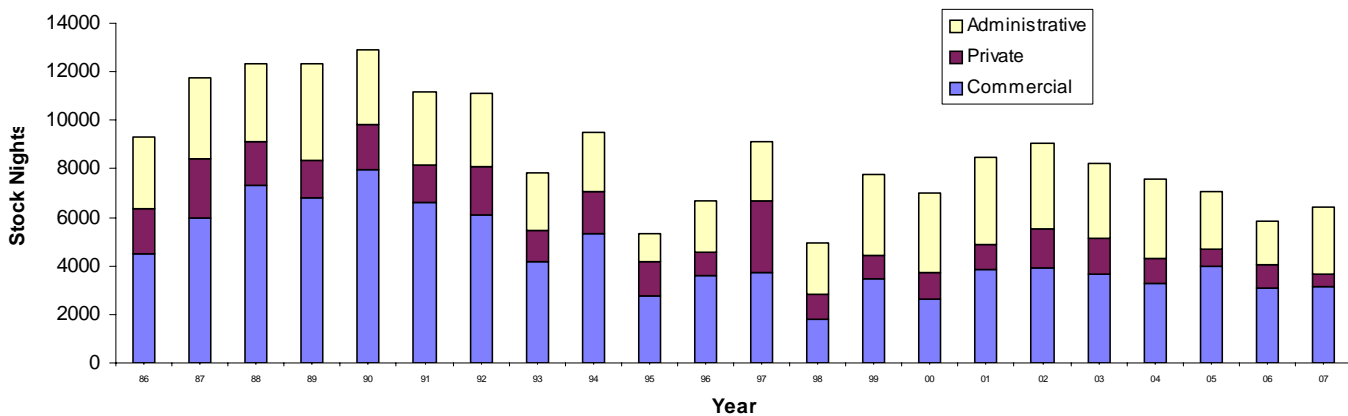


Table 2. Administrative Use (grazing nights and stock nights) 2000-2007. This includes all reported use by National Park Service personnel in wilderness meadows, shown as Grazing Nights (Additional Nights of Supplemental feed)|Total stock nights. It does not include grazing in the Ash Mountain pasture.

Packer	2007	2006	2005	2004	2003	2002	2001	2000
Cedar Grove Rangers	9	10 (4) 14				7		2
Hockett Ranger	57	131			215	178		246 (7) 253
Kern Ranger	24	121 (15) 136	242	254 (1) 255	538 (31) 569	602 (2) 604	478 (11) 489	479 (13) 492
Kings Trail Crew	766 (75) 841	200	261	712	442	547 (52) 599	707 (49) 756	627 (7) 634
Military Overflight Trip	64 (8) 72	4 (76) 80	48(9) 57	67 (9) 76	76	80	56 (18) 74	72
Miscellaneous	55 (11) 66	18				77		
Roaring River Ranger	254 (20) 274	180 (28) 208	277	254 (12) 266	122	166	177	218
Sequoia Trail Crews	1397 (29) 1426	891 (153) 1044	1448 (45) 1493	1927	1648	1754	1969 (19) 1988	1483

Figure 4. Administrative stock use by user, 1994-2007 (total stock nights per year by user class).

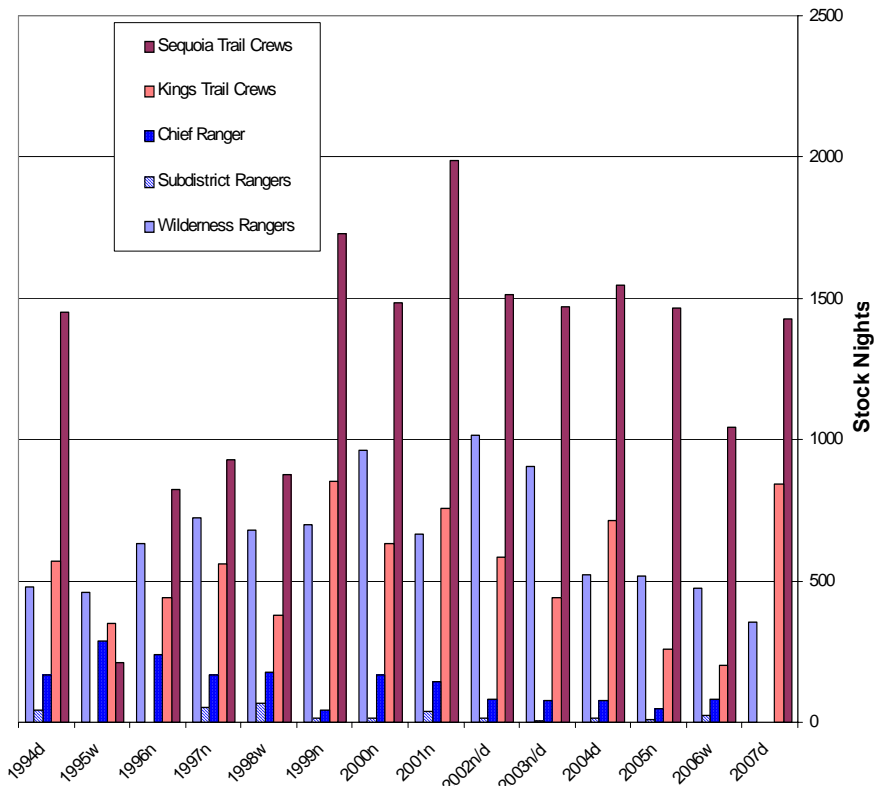


Table 3. Commercial Use (grazing nights and stock nights), shown as grazing nights (additional nights of supplemental feed)|Total stock nights. Packers reporting no use for three consecutive years are removed from the table.

PACKER	2007d	2006w	2005n	2004d	2003n/d	2002n/d	2001n	2000n
Balch Park Pack Station	135 (60) 195	120 (33) 153	119	146	219	462	193	222
Bishop Pack Outfitters	194	32	0	80	50 (15) 65	240	134	35
Cedar Grove Pack Station	658 (12) 670	405 (30) 435	834 (46) 880	933 (22) 955	880 (85) 965	770 (27) 797	1107 (20) 1127	466 (62) 528
Clyde Pack Outfitters	12	0	0	8	10	14	0	8
Cottonwood Pack Station	123 (79) 202	71 (213) 284	453 (207) 660	48 (250) 298	56 (256) 312	63 (70) 133	116 (131) 247	59 (174) 233
Frontier Pack Train	52 (13) 65	0	0	0	0	0	0	0
Glacier Pack Trains	0	0	88	0	0	0	0	0
Golden Trout Wilderness Packtrains	0	0 (21) 21	185	5	117 (4) 121	71	68	79
High Sierra Pack Station	299	51 (88) 139	202 (79) 281	215	49	77	235	192 (10) 202
Horse Corral Pack Station	145 (2) 147	376 (156) 532	359 (5) 364	374	224	296	408	161
Lost Valley Camp Pack Station	0	0	6 (4) 10	0	0	48	65	54
Rainbow Pack Outfitters	134 (4) 138	181 (2) 183	186	80 (20) 100	133 (14) 147	62	103	62
Reds Meadow Pack Station	0	0	56	0	0	75	82	174
Rock Creek Pack Station	577 (48) 625	903 (67) 970	951 (39) 990	308 (32) 340	461 (12) 473	408 (5) 413	624 (12) 636	176
Sequoia-Kings Pack Trains	135 (21) 156	60	159	164 (6) 170	221 221	145	253	4
Three-Corner-Round Pack Outfit (burros)	438 (30) 468	230 (40) 270	112 (8) 120	520 (15) 535	561 (39) 600	528	0	420

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

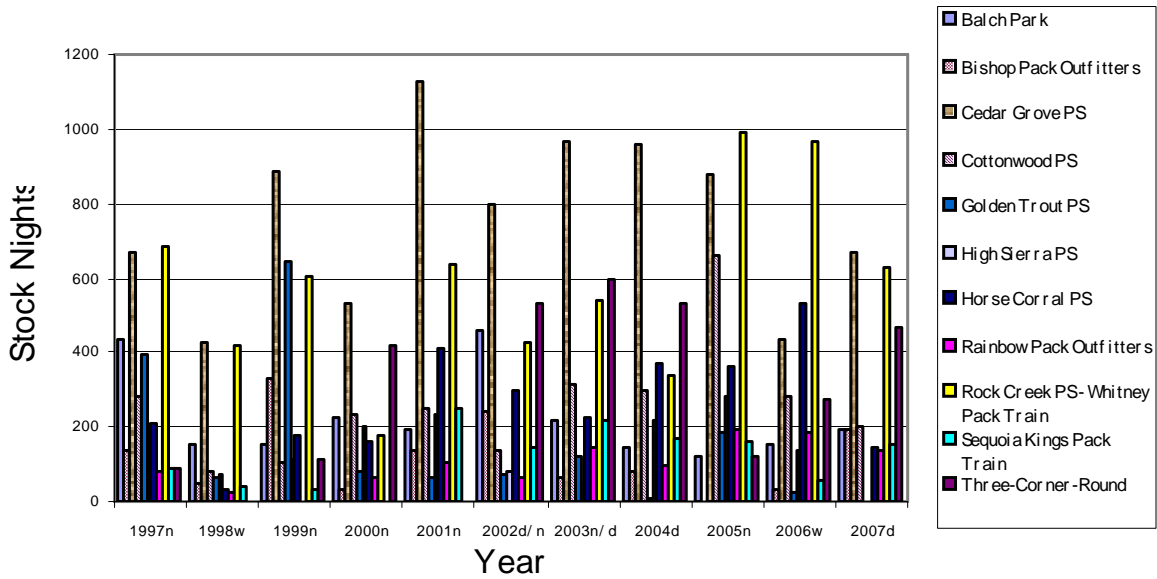


Figure 6. Types of Stock. Horses and mules remained the primary type of stock used in 2007, with burros and llamas making up a relatively small percentage of total use.

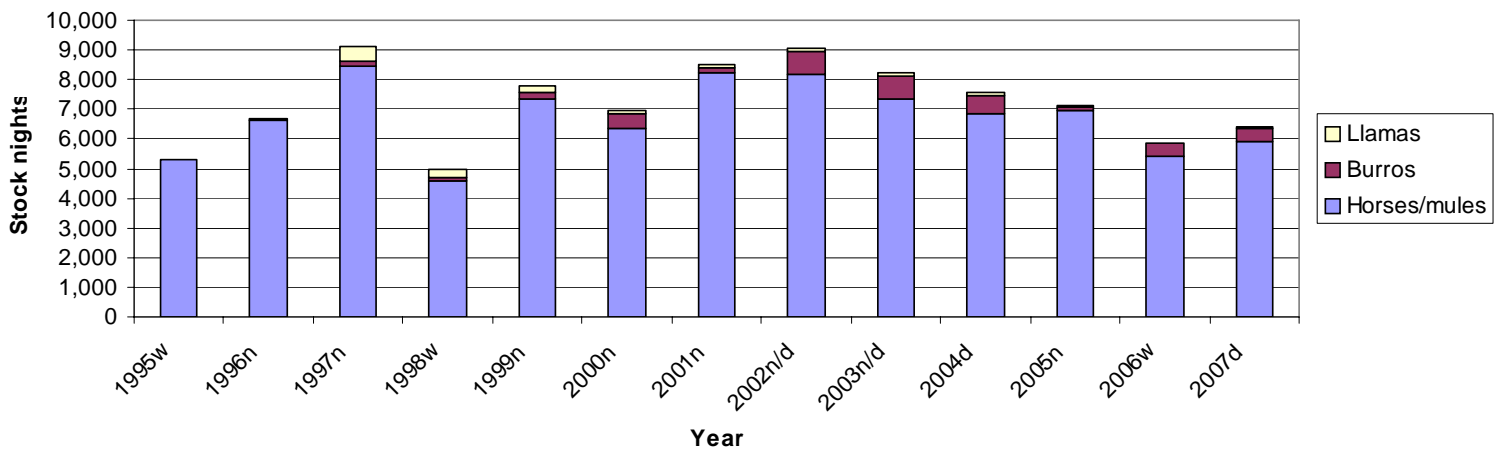


Table 4. Monthly Use and Percentage of Entire Season, May-October 1998-2007

	May		June		July		August		Sept.		Oct.	
	Nights	%	Nights	%	Nights	%	Nights	%	Nights	%	Nights	%
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 95 forage areas in 2007, compared to 90 in 2006 (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 60 areas, **private** parties in 40 areas, and **administrative** users in 43 areas.

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

	Commercial	Private	Administrative	Overall
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 2007. 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 2007 by each user group (commercial, private, and administrative) are presented in the three tables following. Note that these numbers include both grazing nights and total stock nights.

Table 6. Grazing and total stock nights in the 25 most heavily used areas in 2007 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	2007	2006	2005	2004	2003	2002	2001	2000
83-4	Upper Crabtree Meadow	271 (19) 290	0 (154) 154	40 (18) 58	206 (36) 242	166 (101) 267	234	284 (25) 309	119 (10) 129
69-5.1	Scaffold Mdw Tourist Past.	272 (5) 277	240 (4) 244	309	269 (3) 272	86	118	324	348
65-4	Upper Bubbs Creek	233	59	24	243	246	88 (8) 96	11	50
51-1	Simpson Meadow	210	77	148	219	106	381	183	265
86-7	Lewis Camp Large Pasture	199	112	218	371	530	517	674	584
63-1	Charlotte Creek Meadows	187	0	14	65	118	58	29	66
86-1	Kern Bridge Camp	183	0	124 (8) 132	264	300	318 (2) 320	252 (5) 257	35 (10) 45
89-9	Middle Rattlesnake Canyon	180	8 (12) 20	162	136	128	145.5	152	60
79-1	Cold Springs Camp Area	178	243	120	92	110	91	151	72
67-1	East Lake Meadow	168	95	4	222	116 (33) 149	149	110	44 (62) 106
80-3	Tyndall Creek Meadows	167	63	91	150	240	195	371	149
89-3	Lower Lost Canyon Mdws	153	0	72	0	83	0	181	100
90-10	South Fork Meadow	92 (60) 152	84 (32) 116	119	102	289	323	138	140
84-2	Lower Rock Ck Xing Mdw	92 (59) 151	251 (107) 358	291 (54) 345	108 (25) 133	215 (52) 267	196 (7) 203	8 (3) 11	21 (7) 28
28-4	Franklin-Montgomery Mdw	150	10	19 (2) 21	24	0	12	42	9
58-2	Woods Creek Crossing	107 (18) 125	156	284	201 (4) 205	233	148 (5) 153	158 (44) 202	0
39-5	Grouse Meadow	122	14	0	6	19	28	31	24
90-5.1	Hockett Meadow	122	121	132	354	323	365	342	81
77-5	Redwood Meadow	93 (28) 121	60 (153) 213	34 (55) 89	130	81	315	64	100
79-5	Gallats Lake Meadows	108	18	0	176	0	0	0	9
72-8	Sugarloaf Meadow	105	84 (140) 224	36	51	123	195	128	200
39-2	Big Pete Meadow	103	45	74	140	81 (15) 96	137	84	20
33-1	Evolution Meadow	102	44	0	0	117	226	198	163 (4) 167
57-1	Woods Lake Meadows	96	0	20	75	109	74	18	0
33-4	Darwin Meadow	95	0 (14) 14	0	12	0	0	30 (2) 32	28

Table 7. Commercial grazing and stock nights in the ten areas receiving the heaviest commercial use in 2007, with previous years use numbers provided for reference. Shown as Grazing Nights (Additional Nights of Supplemental feed)|Total stock nights.

	Meadow	2007	2006	2005	2004	2003	2002	2001	2000
83-4	Upper Crabtree Meadow	253 (11) 264	0 (116) 116	40 (18) 58	122 (36) 158	114 (101) 215	168	282 (25) 307	101 (10) 111
65-4	Upper Bubbs Creek	227	59	12	239	218	88 (8) 96	6	50
67-1	East Lake Meadow	168	95	4	210	98 (33) 131	133	105	44 (62) 106
90-10	South Fork Meadow	75 (60) 135	66	119	102	159	246	118	122
51-1	Simpson Meadow	119	56	73	127	46	229	34	66
39-2	Big Pete Meadow	103	45	74	89	81 (15) 96	137	74	13
33-1	Evolution Meadow	102	44	0	0	117	177	150	157 (4) 161
57-1	Woods Lake Meadows	96	0	20	75	109	74	18	0
33-4	Darwin Meadow	95	0 (14) 14	0	12	0	0	30	14
84-2	Lower Rock Ck Xing Mdw	47 (47) 94	136 (88) 224	258 (54) 312	70 (25) 95	100 (52) 152	93 (7) 100	8 (3) 11	0 (7) 7

Table 8. Private grazing and stock nights in the ten areas receiving the heaviest private use in 2007, with previous years use numbers included for reference. Shown as Grazing Nights (Additional Nights of Supplemental feed)|Total stock nights.

	Meadow	2007	2006	2005	2004	2003	2002	2001	2000
72-8	Sugarloaf Meadow	91	34	10	15	48	91	128	122
86-2	Upper Funston Meadow	53	44	16	96	28	86	37	48
82-1	Junction Meadow/Kern	20(6) 26	0	0	38	16	4	0	0
90-11	South Fork Pasture	24	16	0	28	92	28	38	0
28-7	Upper Goddard Cyn	11(11) 22	0	0	0	0	0	0	0
86-5	Lower Funston Meadow	20	22	0	16	38	80	26	2
62-1	Rae Lakes Basin Meadows	5 (13) 18	8	0	0	4	0	0	0
90-10	South Fork Meadow	17	15 (32) 47	0	0	130	77	20	18
71-3.2	Middle Ranger Meadow	16	196	43	81	281	0	0	0
83-5	Lower Crabtree Meadow	15	12	27	15	0	12	26	56

Table 9. Administrative grazing and stock nights in the ten areas receiving the heaviest administrative use in 2007, with previous years use numbers included for reference. Shown as Grazing Nights (Additional Nights of Supplemental feed)|Total stock nights.

	Meadow	2007	2006	2005	2004	2003	2002	2001	2000
69-5.1	Scaffold Mdw Tourist Past	224 (5) 229	88	185	186	20	26	205	189
86-7	Lewis Camp Large Pasture	199	88	210	363	522	499	630	551
86-1	Kern Bridge Camp	183	0	124	262	286	298 (2) 300	252 (5) 257	27 (10) 37
79-1	Cold Springs Camp Area	178	243	120	92	96	91	151	72
89-9	Middle Rattlesnake Canyon	162	0	162	136	128	133.5	152	48
89-3	Lower Lost Canyon Mdws	153	0	72	0	69	0	168	100
28-4	Franklin-Montgomery Mdw	143	0	0	12	0	0	12	0
63-1	Charlotte Creek Meadows	143	0	0	0	3	0	0	0
90-5.1	Hockett Meadow	122	117	132	273	226	336	342	79
77-5	Redwood Meadow	93 (28) 121	20 (153) 173	34 (55) 89	94	55	303	64	100

Discussion

Reported recreational and administrative stock use during the extremely dry summer of 2007 totaled **6,449 stock nights**, or 7,640 animal unit nights. This represents an increase of 9.9% compared to 2006 (an extremely wet year), which had a total of 5,867 stock nights reported. Relative to 2006, reported commercial use increased by 3%, while reported private use decreased by 47%. Administrative use increased by 51%. Dry conditions, which led to early opening dates for grazing in park meadows, and less restricted access over passes due to early snow melt likely account for the increase in commercial and administrative use. The decrease in reported private use may represent a lack of reporting rather than an actual change in use, although this is difficult to confirm. Decreased staffing at the Hockett and Kern Ranger Stations may have led to decreased reporting; observed conditions on the Hockett Plateau suggest additional grazing nights than those reported. In 2006, when the Hockett Ranger Station saw an increase in staffing, a concurrent increase in reported private use was also noted.

Use by administrative trail crews increased sharply in 2007. Use by Kings Canyon trail crews increased from 200 reported stock nights in 2006 to 841 nights in 2007, an increase of 321%. Use by Sequoia trail crews increased by 36%, from 1,044 nights in 2006 to 1,426 nights in 2007. Reported stock use by ranger staff decreased 27%, from 577 nights in 2006 to 422 nights in 2007. This decrease is largely accounted for by the reduction in stock mounted staffing at the Hockett and Kern Ranger Stations.

Relative to 2006, seven commercial outfitters (Balch Park, Bishop, Cedar Grove, Clyde, Glacier, and High Sierra, Sequoia-Kings and Three Corner Round) each reported significant increases in use. Despite an overall increase in commercial use of 3% in 2007, four outfitters (Cottonwood, Horse Corral, Rainbow, and Rock Creek) each reported moderate to significant decreases. Notably, Rock Creek Pack Station reported 625 nights in 2007, compared with 970 in 2006, and Horse Corral reported 147 total nights compared with 532 in 2006. Golden Trout Wilderness Pack trains reported no use in the parks in 2007.

Reported use of supplemental feed in lieu of grazing decreased markedly among all users relative to 2006. Overall, reported use of supplemental feed decreased by 57%. Horses and mules remained the primary type of stock used, accounting for 92% of total use. Llama use increased relative to previous years, but continued to account for just over 1% of total use. Reported burro use remained stable, accounting for just over 7% 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 (especially Roaring River, as the Hockett and Kern stations were staffed only part time by a mounted ranger) and those areas serving as foci for trail crews (Franklin-Montgomery Meadow in Kings Canyon; Lewis Camp Large Pasture, Kern Bridge Camp, Cold Springs Camp, Hockett Meadow, Middle Rattlesnake, Lower Lost Canyon, and Redwood Meadow in Sequoia).

Significant increases in use relative to 2006 were seen in a number of areas, including the following:

Kings Canyon

- Franklin-Montgomery Meadow
- Evolution Meadow
- Darwin Meadow
- Big Pete Meadow
- Little Pete Meadow
- Grouse Meadow
- Bench Lake/Upper Basin
- Simpson Meadow
- Twin Lakes/Woods Lake
- Charlotte Creek
- Upper Bubbs Creek

Sequoia

- Redwood Meadow
- Cold Springs Camp Area
- Gallats Lake
- Tyndall Creek
- Upper Crabtree
- Kern Bridge Camp
- Lewis Camp Big Pasture
- Lower Lost Canyon
- Middle Rattlesnake Canyon
- Hockett Meadow
- S. 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 2008, as well as full implementation and enforcement of the monthly reporting requirement of both day and overnight use. In 2007 this allowed us to better track stock use patterns overall, and streamlined the process of winnowing through the permit database. With monthly reports in hand for key areas, we were able 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, and this support is greatly appreciated. Paul Pfenninger in the concessions office tenaciously pursued truant reports, a task that is deeply appreciated. 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 requesting and then using the customized data entry program developed by Erik Frenzel. 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 2007; 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 2007
 Commercial Grazing-Private Grazing-Administrative Grazing | Total Nights Grazing (Additional Nights with Feed Provided)

Meadow	2007	2006	2005	2004	2003	2002	2001
28-1 Piute Cr	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	30-0-0 30
28-2 Aspen Mdw	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	6-0-0 6
28-3 Cony Camp	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	8-0-22 30
28-4 Franklin-Montgomery	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	30-0-12 42
28-6 Hell-For-Sure Jct	8-0-0 8	0-0-0 0	3-0-0 3	16-0-0 16	0-0-0 0	10-15-0 25	46-0-0 46
28-7 Upr Goddard Cyn	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	0-0-0 0
33-1 Evolution Mdw	102-0-0 102	44-0-0 44	0-0-0 0	0-0-0 0	117-0-0 117	177-17-32 226	150-42-6 198
33-2 McClure Mdw	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	43-3-32 78
33-3 Colby Mdw	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	30-7-0 37
33-4 Darwin Mdw	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	30-0-0 30 (2)
33-5 Lk 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 Cyn	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-4-0 4
33-9 Emerald Lks	0-0-0 0	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 Lk	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	0-0-0 0
34-2 Sapphire Lk	0-0-0 0	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 Lk	0-0-0 0	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 Upr Blue Cyn	0-0-0 0	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 Cyn Mdw	12-0-18 30	0-0-0 0	0-0-0 0	0-0-0 0	0-0-8 8	6-0-15 21	0-0-0 0
38-3 Lwr Blue Cyn	0-0-0 0	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 Upr LeConte Cyn	0-0-0 0	0-0-0 0	9-0-0 9	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
39-2 Big Pete Mdw	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	74-0-10 84
39-3 Little Pete Mdw	40-13-0 53	0-4-12 16	6-0-20 26	45-11-0 56	0-0-14 14	15-0-45 60	48-0-0 48
39-4 Ladder Camp	49-0-0 49	136-0-0 136	26-0-0 26	21-0-0 21	16-0-0 16	27-0-0 27	4-0-0 4
39-5 Grouse Mdw	29-3-90 122	14-0-0 14	0-0-0 0	6-0-0 6	19-0-0 19	8-0-20 28	13-0-18 31
39-6 Palisade Cr Jxn	9-0-0 9	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
39-7 Stillwater 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
39-8 Deer Mdw	6-0-0 6	7-0-0 7	44-0-14 58	0-0-60 60	19-0-0 19	5-0-10 15	32-0-0 32
42-1 Dusy Cr	0-0-0 0	7-0-0 7	0-0-0 0	5-0-0 5	17-0-0 17	11-0-0 11	0-0-0 0
42-2 Lwr Dusy Bsn	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	0-0-0 0
42-3 Upr Dusy Bsn	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	0-0-0 0
42-4 Rainbow Lks	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
45-1 Palisade Lks	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	0-0-0 0
46-1 Upr Bsn Mdws	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	133-0-0 133
46-2 South Fork Kings Rvr	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	43-0-0 43
46-3 Bench Lk/JMT Jct.	63-6-18 87	0-0-0 0	4-0-0 4	19-4-0 23	31-0-0 31	8-10-6 24	37-0-0 37
46-4 Bench Lk	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	5-0-0 5	0-0-0 0	7-0-0 7
46-5 Taboose Pass Area	60-0-0 60	0-0-0 0	0-0-0 0	5-0-0 5	17-0-0 17	0-0-0 0	6-0-0 6

Appendix 2: Reported Grazing Nights and Supplemental Feed Nights by Meadow Forage Area in 2007
 Commercial Grazing-Private Grazing-Administrative Grazing | Total Nights Grazing (Additional Nights with Feed Provided)

Meadow	2007	2006	2005	2004	2003	2002	2001
46-6 Lk 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 Cr	0-0-0 0	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 Lk Bsn	0-0-0 0	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 Lk	0-0-0 0	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 Cr	0-0-0 0	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 Bench Lk	0-0-0 0	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 Mdw	119-0-91 210	56-0-21 77	73-0-75 148	127-0-92 219	46-0-60 106	229-0-152 381	34-0-149 183
51-2 Tehipite Valley	0-0-0 0	28-0-0 28	0-0-0 0	0-0-0 0	0-0-0 0	8-0-0 8	0-0-0 0
51-3 Gnat Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	10-0-0 10	0-0-0 0	0-0-0 0
51-4 Hay Mdw	0-0-0 0	0-0-0 0	0-0-0 0	8-0-0 8	0-0-0 0	0-0-0 0	0-0-0 0
52-1 Volcanic Lks Bsn	0-0-0 0	0-0-0 0	0-0-0 0	5-0-0 5	16-0-0 16	0-0-0 0	0-0-0 0
52-2 Kennedy Cyn 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
52-3 Upr Kennedy Cn Mdw	0-0-0 0	0-0-0 0	0-0-24 24	0-0-0 0	0-0-0 0	0-0-0 0	0-18-0 18
52-4 Kennedy Pass Mdws	0-0-0 0	0-0-0 0	0-0-0 0	0-0-93 93	0-0-0 0	0-0-0 0	0-0-0 0
52-5 West Kennedy Lk	0-0-0 0	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 Mdw	0-0-0 0	0-0-2 2	0-0-0 0	0-0-0 0	14-0-0 14	0-0-0 0	0-0-0 0
52-13 Jerkey 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
52-14 Upr end of Hotel Cr	0-0-0 0	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 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
53-1 Horseshoe 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
53-2 Horseshoe Lks 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 Lks Area	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	34-0-0 34	0-0-0 0	0-0-0 0
53-4.1 Dougherty Mdws	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	0-0-0 0
53-4.2 Glacier Valley Mdws	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)	74-32-0 106
53-5 Fallen Moon Mdw	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)	80-27-0 107 (7)
53-6 Volcanic Trail Jxn	0-0-0 0	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 Mdw	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	97-0-0 97
53-8 Granite Pass 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
54-1 Granite Lk	0-0-0 0	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 Bsn Mdws	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)	21-0-0 21
54-3 Grouse Lk	0-6-0 6	0-0-0 0	30-0-0 30	0-0-0 0	0-0-0 0	0-36-0 44	11-0-0 11
54-4 Halfmoon Mdw	0-0-0 0	14-0-0 14	0-0-0 0	0-0-0 0	48-0-0 48	0-0-0 0	0-18-0 18
54-5.1 Lwr Tent Mdw	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
54-5.2 Upr Tent 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
55-1 Woods Cr Jct Mdw	0-0-7 7	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	175-0-15 190
55-2 U. Paradise Valley Mdw	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	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

Appendix 2: Reported Grazing Nights and Supplemental Feed Nights by Meadow Forage Area in 2007
 Commercial Grazing-Private Grazing-Administrative Grazing | Total Nights Grazing (Additional Nights with Feed Provided)

Meadow	2007	2006	2005	2004	2003	2002	2001
56-1 Mdws S. of Pinchot Pass	90-0-0 90	0-0-0 0	0-0-0 0	135-0-0 135	0-0-0 0	80-0-0 80	13-0-0 13
56-2 Twin Lks Area	41-0-0 41	90-0-8 98	8-0-0 8	12-0-6 18	17-0-0 17	5-0-0 5	0-1-98 99
56-3 White Fork Camp	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	13-0-0 13
57-1 Woods Lk Mdws	96-0-0 96	0-0-0 0	20-0-0 20	75-0-0 75	109-0-0 109	74-0-0 74	18-0-0 18
58-1 Castle Domes Mdw	61-0-12 73	56-0-10 66	64-0-14 78	40-0-76 116	21-0-0 21	56-0-6 62	122-0-0 122 (5)
58-2 Woods Cr Xing	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)	13-63-82 158 (44)
58-3 Baxter Cr Drift Fnc	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	48-0-0 48
59-1 Baxter Cr	0-0-0 0	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 Lk	0-0-0 0	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 Bsn	0-0-0 0	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 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
61-2 Fjord 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
61-3 Lwr 60 Lks Bsn 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 Lks Bsn Mdws	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	0-0-0 0
62-2 Dragon Lk 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
63-1 Cr Mdws	43-1-143 187	0-0-0 0	0-14-0 14	53-12-0 65	91-24-3 118	48-10-0 58	29-0-0 29
63-2 Charlotte Lk Lwr Mdw	0-0-0 0	7-0-0 7	37-0-0 37	0-0-0 0	0-0-0 0	0-0-0 0	34-0-0 34
63-3 Charlotte Lk Upr 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
64-1 Kearsarge Bsn Mdws	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	0-0-0 0
64-2 Bullfrog Lk Mdws	0-0-0 0	0-0-0 0	0-0-0 0	0-10-0 10	0-0-0 0	0-0-0 0	0-5-0 5
65-1 Vidette Mdw	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	0-1-0 1
65-2 East Vidette 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	13-0-0 13
65-3 Upr Vidette Mdws	0-0-0 0	0-0-0 0	64-0-0 64	12-0-0 12	45-4-0 49	0-0-0 0	20-0-0 20 (13)
65-4 Upr Bubbs Cr	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)	6-5-0 11
65-5 Center Bsn	0-0-0 0	0-0-0 0	0-0-0 0	0-1-0 1	0-0-0 0	0-0-0 0	12-0-0 12
66-1.1 Sphinx Cr Jxn	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	0-0-0 0
66-1.2 Angleworm Mdw	0-0-0 0	0-0-0 0	0-3-0 3	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
66-2 Charlotte Cr Confl.	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	0-0-0 0
66-3 Jxn Mdw/Bubbs	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)	161-12-17 190
67-1 East Lk Mdw	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	105-5-0 110
67-2 Ouzel 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
67-3 Reflection Lk	0-0-0 0	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 Cr Xing	0-0-0 0	0-0-0 0	0-0-0 0	0-4-0 4	0-0-0 0	0-0-0 0	0-0-0 0
69-2 W. Side Roaring Rvr	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)	0-0-22 22
69-3 JR Pasture	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	0-2-27 29
69-4 Lackey Pasture	0-0-60 60	0-8-16 24	0-0-25 25	0-19-36 55	3-2-16 21	0-0-10 10	0-8-12 20
69-5.1 Scaffold Mdw	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	17-102-205 324

Appendix 2: Reported Grazing Nights and Supplemental Feed Nights by Meadow Forage Area in 2007
 Commercial Grazing-Private Grazing-Administrative Grazing | Total Nights Grazing (Additional Nights with Feed Provided)

Meadow	2007	2006	2005	2004	2003	2002	2001
69-5.2 Grasshopper Mdw	0-0-0 0	0-24-0 24	76-32-0 108	63-0-28 91	0-0-6 6	0-0-20 20	48-0-8 56
69-6.1 Moraine Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-5-0 5	0-0-0 0	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 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
70-1.1 Grasshopper Camp	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-6 6	0-0-0 0	0-0-22 22
70-1.2 Brewer Stringers	0-0-0 0	40-0-0 40	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
70-2 Barton Mdw/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 Tbl Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-14 14	0-0-20 20	0-0-0 0
70-4 Cement Table Mdw	0-12-0 12	40-5-0 45	48-0-0 48	0-22-0 22	0-4-0 4	0-12-0 12	10-55-0 65
70-5 Big Wet Mdw	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	212-27-36 275
70-6 Grand Palace Hotel	0-0-9 9	2-4-38 44	0-20-0 20	7-12-53 72	0-14-63 77	0-15-43 58	0-0-20 20
70-7 Colby Lk	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
71-1 Austin Camp Mdws	0-0-0 0	16-33-0 49	0-17-0 17	68-114-0 182	3-5-12 20	0-51-25 76	0-50-22 72
71-2 Grave Mdw	20-0-0 20	0-0-0 0	0-0-0 0	0-24-0 24	32-42-0 74	0-0-0 0	20-0-0 20
71-3.1 Lwr Ranger Mdw	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	0-0-4 4
71-3.2 Middle Ranger Mdw	0-16-0 16	0-196-0 196	57-43-0 100	0-81-4 85	0-281-8 289	0-0-0 0	0-0-0 0
71-4 Upr Ranger Mdw	70-0-0 70	40-0-0 40	42-0-0 42	0-0-0 0	0-0-8 8	0-20-6 26	0-0-6 6
71-5 Upr Deadman Cyn	0-0-0 0	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 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
72-2 Catch'em 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
72-3 Willow 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
72-4 Mitchell 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
72-5 Quartz 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
72-6 Williams Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-8-0 8	0-0-0 0
72-7 Comanche Mdw	0-0-0 0	0-6-0 6	0-6-0 6	11-7-0 18	0-0-0 0	0-0-0 0	0-0-0 0
72-8 Sugarloaf Mdw	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	0-128-0 128
72-9 Little Sugarloaf Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-6-0 6	0-0-0 0	0-0-0 0	0-0-0 0
72-10 Sugarloaf Cr 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	0-25-18 43
72-11 Honeymoon 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
72-12 Boggy 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
72-13 Crowley Cyn	0-0-0 0	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 Cyn	0-0-0 0	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 Mdw 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 Mdw 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	0-29-0 29	0-0-0 0
72-18 Ferguson 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
72-19 Long 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
72-20 Lewistall 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

Appendix 2: Reported Grazing Nights and Supplemental Feed Nights by Meadow Forage Area in 2007
 Commercial Grazing-Private Grazing-Administrative Grazing | Total Nights Grazing (Additional Nights with Feed Provided)

Meadow	2007	2006	2005	2004	2003	2002	2001
72-21 Little Jack 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
72-22 Scenic 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
73-1 Sheep Camp 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
73-2 Seville Lk	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)	0-0-0 0
73-3 Lovelace Cabin 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
73-4 Lost Lk	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	0-0-0 0
73-5 Ranger & Beville Lks	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	42-82-91 215
74-1 Twin Lks	0-0-0 0	0-0-0 0	0-0-0 0	0-0-2 2	0-0-0 0	0-6-0 6	0-0-0 0
74-2 Pattee 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
74-3 Clover Cr	0-0-0 0	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 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
74-5 Silliman 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
74-6 Willow 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
75-1 Lone Pine Mdws	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)	0-0-0 0 (5)
75-2 Tamarack Lk	0-0-0 0	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 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
76-1 Emerald Lk	0-0-0 0	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 Lk	0-0-0 0	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 Mdw	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	0-0-0 0
77-2 Little Bearpaw Mdw	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	0-0-0 0
77-3 Rvr Valley	0-0-0 0	41-0-0 41	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
77-4 Granite Ck/Strawberry	0-0-0 0	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 Mdw	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	0-0-64 64
77-6 Cliff Cr	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-3-0 3	0-3-0 3
77-7 Pinto Lk Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-19-18 37	31-0-0 31	16-0-0 16
78-1 Hamilton Lks	0-0-0 0	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	0-0-178 178	0-0-243 243	0-0-120 120	0-0-92 92	0-14-96 110	0-0-91 91	0-0-151 151
79-2 Milestone Bsn	0-0-0 0	0-14-0 14	0-18-0 18	0-0-3 3	0-7-0 7	0-34-0 34	0-0-0 0
79-3 Rockslide Lk	0-0-0 0	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 Lwr Kern-Kaweah Rvr	0-0-12 12	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	16-0-0 16
79-5 Gallats Lk Mdws	0-0-108 108	18-0-0 18	0-0-0 0	31-0-145 176	0-0-0 0	0-0-0 0	0-0-0 0
79-6 Upr Kern-Kaweah Rvr	0-0-36 36	0-0-0 0	0-0-0 0	0-0-0 0	0-0-84 84	0-0-0 0	0-0-52 52
80-1 Bighorn Plateau Lk Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	30-0-0 30	0-0-0 0	0-0-0 0
80-2 Tyndall Ck/JMT Pond	0-0-0 0	0-0-0 0	0-6-72 78	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
80-3 Tyndall Cr Mdws	65-6-96 167	39-24-0 63	61-18-12 91	62-16-72 150	145-23-72 240	121-9-65 195	243-37-91 371
80-4 Sheep Camp Mdws	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	16-0-0 16
80-5.1 Lk South America	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	11-0-0 11	48-0-0 48	0-0-0 0
80-5.2 Lk S. Americal Col	0-0-0 0	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 2007
 Commercial Grazing-Private Grazing-Administrative Grazing | Total Nights Grazing (Additional Nights with Feed Provided)

Meadow	2007	2006	2005	2004	2003	2002	2001
80-6 Kern Headwaters	0-0-0 0	0-0-0 0	69-0-0 69	0-0-0 0	57-0-0 57	11-0-0 11	12-0-0 12
81-1 Wright Cr Drainage	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	104-0-0 104
81-2.1 Wallace Ck/JMT Jct	0-3-0 3	0-0-0 0	12-0-0 12	12-0-0 12	0-0-0 0	0-0-0 0	0-1-0 1 (5)
81-2.2 Wallace Cr Mdws	14-0-0 14	58-0-0 58	110-0-0 110	0-0-0 0	0-0-0 0	20-0-0 20	14-0-0 14
81-2.3 Wallace Ck Waterfall	0-6-0 6	0-0-0 0	0-0-0 0	5-5-0 10	0-0-0 0	0-0-0 0	0-0-0 0
81-2.4 Marshy Mdws	0-0-0 0	0-0-0 0	33-0-0 33	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
81-2.5 Wallace Ck Closed	0-0-0 0	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 Jxn Mdw/Kern	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	0-0-0 0
82-2 One mi. < Jxn 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 (2)
82-3 Three mi. < Jxn Mdw	0-0-0 0	0-0-0 0	12-0-0 12	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
83-1 Guitar Lk	0-3-0 3	0-0-0 0	0-0-0 0	0-4-0 4	0-0-0 0	0-0-0 0	0-0-0 0
83-2 Timberline Lk 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
83-3 Crabtree R.S. Mdws	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	0-1-0 1 (6)
83-4 Upr Crabtree Mdw	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 (40)	282-0-2 284 (25)
83-5 Lwr Crabtree Mdw	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)	10-26-76 112
83-6 Crabtree Lks Mdws	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	0-0-0 0
83-7 Lwr Whitney Cr	0-0-0 0	40-42-0 82	65-0-0 65	0-0-0 0	0-0-0 0	0-12-0 12	0-0-0 0
83-8 Sandy Mdw	11-0-40 51	76-0-123 199	48-0-112 160	6-0-128 134	0-0-100 100	0-0-195 195	0-1-130 131
84-1 Rock Cr R.S. Mdw	0-3-0 3	0-0-0 0	0-0-0 0	0-2-0 2	0-9-0 9	0-49-0 49	0-5-0 5
84-2 Lwr Rock Ck Xing Mdw	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)	8-0-0 8 (3)
84-3 Lwr Rock Cr Mdws	0-0-0 0	0-0-0 0	23-0-0 23	0-0-0 0	0-0-0 0	0-0-0 0	36-3-0 39
84-4 Forgotten Cyn 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
84-5 Guyot Cr Mdws	0-0-0 0	0-1-0 1	0-0-0 0	0-0-0 0	0-0-0 0	0-1-0 1	0-0-0 0 (4)
84-6 Siberian Outpost	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	0-0-0 0
85-1 Sky Blue Lk	0-0-0 0	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 Bsn 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
85-3 Lwr Miter Bsn 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
85-4 Penned-up Mdw	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)	12-0-0 12 (59)
85-5 Upr Soldier Lk 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	0-2-0 2
85-6 Lwr Soldier Lk Mdws	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	0-0-0 0
85-7 N. Army Pass Jct Mdws	0-0-0 0	0-0-0 0	0-0-0 0	0-8-0 8	51-0-0 51	0-0-0 0	12-0-0 12 (7)
85-8 Lwr Rock Cr Lk Mdw	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	0-0-0 0 (63)
85-9 Rock Cr 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
85-10 Nathan's Mdw	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)	103-6-90 199
86-1 Kern Bridge Camp	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)	0-0-252 252 (5)
86-2 Upr Funston Mdw	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	50-37-27 114
86-3 Big Arroyo Confl.	0-0-0 0	0-0-0 0	0-0-0 0	0-7-0 7	0-0-0 0	0-0-0 0	0-0-168 168

Appendix 2: Reported Grazing Nights and Supplemental Feed Nights by Meadow Forage Area in 2007
 Commercial Grazing-Private Grazing-Administrative Grazing | Total Nights Grazing (Additional Nights with Feed Provided)

Meadow	2007	2006	2005	2004	2003	2002	2001
86-4 21"Camp/RattlesnakeCk	0-0-0 0	0-0-0 0	7-0-0 7	0-14-0 14	40-7-0 47	68-0-0 68	9-0-0 9
86-5 Lwr Funston Mdw	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	65-26-0 91
86-6 Snake Camp/Rvr Past.	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	0-0-0 0
86-7 Lewis Camp Lg Past.	0-0-199 199	0-24-88 112	8-0-210 218	8-0-363 371	2-6-522 530	4-14-499 517	19-25-630 674
86-8 Kern Station Sm Past.	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	0-12-122 134
87-1 Upr Big Arroyo	0-0-0 0	0-0-144 144	0-0-77 77	8-6-0 14	0-9-0 9	0-8-0 8	0-0-0 0
87-2 Little Upr Big Arroyo	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-110 110	0-0-0 0	0-0-0 0
87-3 Big Arroyo Patrol Cabn	10-0-13 23	41-0-0 41	0-0-0 0	14-0-0 14	0-5-44 49	0-0-170 170	0-0-0 0
87-4 Lwr Big Arroyo	0-0-0 0	0-0-0 0	12-0-0 12	0-0-216 216	0-14-0 14	0-0-5 5	0-0-0 0
87-5 Chagoopa Pl. #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 Pl. #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 Pl. #3	0-0-0 0	0-0-0 0	12-0-0 12	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
87-8 Chagoopa Pl. #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 Treehouse Mdw	0-0-0 0	0-0-0 0	4-0-0 4	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
87-10 Sky Parlor Mdw	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	0-0-0 0
88-1 L. Little 5 Lks/Long Lk	0-0-11 11	0-0-0 0	0-0-0 0	0-0-0 0	0-14-18 32	58-0-0 58	10-0-0 10
88-2 U. Little 5 Lks/R.S.	0-0-0 0	0-0-0 0	0-0-0 0	0-0-3 3	0-0-0 0	8-3-0 11	8-3-0 11
88-3 Big 5 Lks Lwr Mdw	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	6-6-0 12	0-3-0 3
88-4 Big 5 Lks Upr Mdw	0-0-0 0	0-0-0 0	24-0-0 24	0-0-0 0	0-3-0 3	16-0-0 16	16-0-0 16
88-5 Big 5 Lks Upr 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/Glac. Pass	0-0-0 0	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 Upr Lost Cyn Mdws	0-0-0 0	0-0-0 0	0-0-0 0	0-0-76 76	0-0-0 0	5-0-0 5	0-0-0 0
89-3 Lwr Lost Cyn Mdws	0-0-153 153	0-0-0 0	0-0-72 72	0-0-0 0	0-14-69 83	0-0-0 0	13-0-168 181
89-4 Soda Cr Cyn	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	8-0-0 8	0-0-0 0
89-5.1 Forester Lk Bench	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-9-0 9	0-3-0 3
89-5.2 Forester Lk Mdws	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-9-0 9	0-0-0 0
89-5.3 Forester Lk Pocket	0-0-0 0	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 Upr Rattlesnake Cyn	0-0-0 0	0-0-12 12	0-0-26 26	0-0-8 8	0-6-36 42	29-0-6 35	0-0-0 0
89-7 Shotgun Pass Mdw	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	13-5-0 18
89-8 S. Rattlesnake Cyn	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	3-0-0 3	28-0-0 28
89-9 Mid. Rattlesnake Cyn	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	0-0-152 152
89-10 Cow Camp	0-0-0 0	0-0-0 0	0-0-6 6	0-0-0 0	0-0-3 3	0-0-0 0	0-0-0 0
89-11 Laurel Cr Bsn	0-0-0 0	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 Lk	0-0-0 0	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 Cr 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
90-1 Horse Cr 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
90-2 Ansel Lk	0-0-0 0	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 Lk	0-0-0 0	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 2007
Commercial Grazing-Private Grazing-Administrative Grazing | Total Nights Grazing (Additional Nights with Feed Provided)

Meadow	2007	2006	2005	2004	2003	2002	2001
90-4 Cow Camp	0-4-0 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
90-5.1 Hockett Mdw	0-0-122 122	0-4-117 121	0-0-132 132	20-61-273 354	0-97-226 323	0-8-336 365	0-0-342 342
90-5.2 Hockett Pasture	0-0-85 85	0-0-78 78	0-4-55 59	0-0-164 164	0-0-66 66	0-0-104 104	0-0-24 24
90-6 Sand 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
90-7 Mitchell 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
90-8 Tuohy Ck/S. Fk Kwh.	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-4-0 4	48-5-0 53	30-0-0 30
90-9 Lwr S. Fork Mdw	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	0-3-0 3
90-10 S. Fork Mdw	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	118-20-0 138
90-11 S. Fork Pasture	0-24-0 24	5-16-0 21	0-0-0 0	0-28-0 28	30-92-0 122	152-28-0 180	69-38-0 107
90-12 Blossom Lk	0-0-0 0	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 Mdw	0-0-0 0	0-0-88 88	0-0-0 0	0-0-67 67	0-0-180 180	0-0-89 89	0-0-0 0
90-14 Green Mdw	0-0-0 0	0-0-60 60	0-0-0 0	0-1-0 1	0-0-0 0	0-0-0 0	0-0-0 0
90-15 Tuohy Mdws	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-10-0 10	0-0-0 0	0-33-0 33
90-16 Summit Mdw	0-0-0 0	0-14-0 14	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0
90-17 Cyclone Mdw	48-0-0 48	0-0-0 0	0-0-0 0	14-0-0 14	0-0-0 0	4-0-0 4	0-0-0 0
90-18 Summit Lk 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	0-10-0 10
90-19 Quinn Mdw	0-0-6 6	0-0-3 3	0-0-8 8	0-0-5 5	0-20-11 31	0-7-33 40	0-0-2 2
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 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
92-1 Monarch Lks	0-0-0 0	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/Cobalt Lks	0-0-0 0	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 Lks	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-5-0 5	0-13-0 13
93-1 White Chief 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
93-2 Eagle Lk	0-0-0 0	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 Lks	0-0-0 0	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 Lks	0-0-0 0	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 Cyn	0-0-0 0	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	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0	0-0-0 0

