

Commercial Stock Use in SEKI

Excerpts from backcountry ranger reports, 1983–2004,
a record of failed policies and environmental degradation.
(we hope to have more recent ranger reports available soon)

1983 Kern - Levin

The Kern area was not open to stock until August 1 due to wet meadows and trail conditions. Upper Funston was the first meadow open to stock with Upper Rattlesnake and Junction Meadow too wet until late August. Lower Funston was under water most of the season. Although I posted Lower Funston closed for grazing until September 1 with alternative grazing and camping 1/4 mile north at "Point Camp," I had problems with stock groups trampling through the wet meadow to get to the stock camp on the far side. Stock groups do not seem to bother stopping at the station to read the grazing regulations, and the USFS is not providing adequate or correct information. One solution would be a small temporary sign on a grape stick planted at each problem meadow closed for grazing.

Tying to trees is still a habit of many stock users. The idea of putting in hitching rails in certain key areas is good except many stock users have more stock than can be tied to one hitching rail. Ideally, they should learn to tie to a rope between two trees.

1984 Bench - Kenan

On two occasions I got into Woods Lake this season. It was obvious that this basin had been recently worked. I did a cleanup of a campsite used by a stock party at the upper lake. I destroyed a rock wall used for containing stock, removed a large fire ring and scattered horse manure that was near the inlet to the lake. There was much evidence of trampling by this party tying their stock up on the meadow grass. What is the regulation that states how far stock must be tied up away from water? This site was heavily impacted by this stock party.

1984 Rae Lakes - Cameron

There was not a lot of stock use in the area this season, but what use did occur was problematic in general. One stock group was allowed to camp 2 nights in the 60-lakes basin. The evidence of their having been there remained all summer long. Deep tracks were left in moist meadows. Also, although I can't verify it, I believe this party made a campfire while they were there. A fire was reported to me later in the area in which they camped, and I was able to find fire remains in the center of all the horse manure & tracks. Given their example I would object to further concessions being given to stock users in the 60 lakes basin. The one-night rule, as it stands, is a good one.

Dealings with Rainbow Packers, out of Onion Valley (who create most of the stock use in this area) have also been problematic. One packer claimed he was unaware that camping with stock was not allowed in the immediate Rae Lakes area. A second, rather large party (15 animals) either stayed 2 nights in one spot (above or below Dollar Lake) or else camped along the Rae Lakes and below them the next night, judging from reports I received. Either way, it was against the rules.

1985 Charlotte - Morgenson

I think it would be nice if we had a regulation requiring stock users to make every effort to keep

stock more than 100 feet from water—something in the Superintendent’s Compendium—since we are trying to keep camps that far away. I see too much manure right on stream banks, and beside campsites where the cowboy must have been watching and could have exercised some control

In the next version of the stock plan I hope we prohibit stock from going to Vidette Lakes. The trail is not suitable for stock (it’s scarcely there) and there are wet flowery meadowy areas which do not show much evidence of stock having used them. That is good. The principle of excluding certain kinds of use (automobiles, snowmobiles, mountain bikes) from certain areas is well established in the national parks. So with stock. We need stock-free areas which are easily accessible from main routes for those who desire that kind of country. Easily. Without having to climb into the ruggedest parts of the Sierra. Vidette Lakes fits this need.

All the above also applies to Gardiner Basin except that only the most determined cowboy would try to take stock, and a party, over Gardiner Pass. Nevertheless, it should be officially prohibited, just to keep that popular unmaintained route stock-free for the many who seek it as such. Hikers in Gardiner Basin have commented to me that it is nice to walk for a few days where there haven’t been any horses and mules.

The point should be made to the stock users that the country is altered in their wake and not all visitors appreciate that and we as managers also have to answer their demands. It is right and proper in a national park to have accessible stock-free areas for the hikers (95+% of the back country visitors) who want them.

Junction Meadow (Kings) received more than 100 stock nights this summer, apparently. A 343 was written on what was seen and photos were taken. I don’t know who was responsible for this but as Sierra District Range Management Specialist 118 put it: “It’s no longer a meadow. It’s a pasture.” Pastureized. Is this a concept management can recognize and deal with?

My impression is that the packers from Cedar Grove could have done better at handling their stock in this area. A woman packing for Tracy Terzian (I was told this by a Rainbow packer who said he saw her and her party) camped in Center Basin below Golden Bear Lake prior to August 22 and left trenches around small trees where the stock had been tied for evidently quite a while, and failed to scatter the many piles of manure.

1985 Crabtree - Malengo

STOCK USERS:

Many of the stock users don’t do what the park and the High Sierra Stock Users Assn. ask. Many users do not rake up and bury their manure near camp and tie animals too near camp; many do not graze their animals in the best places but will use camps to satisfy other needs. A lot of effort went into working with Charlie Morgan and Dennis Winchester this season. It seems that Charlie is willing to cooperate more and Winchester not so much, maybe the 100 dollar citation Winchester got will help him remember that we are serious about the few livestock rules that we do have.

1985 Kern - Levin

A large number of [stock] parties did the big loop up the Kern, around Wallace Creek or Tyndall Creek, thru Crabtree, Rock Creek and Golden Trout. But even more amazing was the number of parties headed for Milestone Canyon. That place got thrashed and trashed this year. A resupply party left a large box of food, stove, and gas in there which I packed out. Fragile areas were

trampled to dust and campsites enlarged. Groups I spoke to stayed anywhere from 1–3 nights in that canyon. . . . One party killed a horse climbing the trail up the rock wall to the Upper Kern, and my stock slipped and fell there too. The amount of stock use Milestone got in the years past seemed acceptable, but if use continues like this season, I would recommend Milestone be designated day use only. . . .

After five seasons of diligently warning Stock Users about not tying to trees and other stock regs and posting regs at Lewis Camp, I find no problem with coming down hard now on stock parties breaking rules. The one citation I issued this season for tying to trees had a positive effect—word spread like wildfire and I had more cooperation and support from other packers. . . .

I've had problems this year with people going over the 20 head stock limit, picketing in meadows, and overstaying the 48 hour limit in Upper and Lower Funston.

1986 Le Conte - Morgenson

There wasn't a great deal of stock use in Le Conte Canyon this past summer, but by the end Little Pete Meadow looked used. Recognizing the validity of stock use in the mountains, and aside from the question of long-term ecologic damage, it is always sad to see a mountain meadow trampled, the grass grazed to the nub, and piles of manure about. These meadows are places of exceptional beauty (and biological interest) and to look at them as feed for stock users is no more proper than to look at dead and weathered snags as fire-wood for hikers. The arguments will rage through the years and I hope this element can enter into the next round. The stock users have won this round on two arguments which are a little weak: tradition, and the question of long-term damage. Traditions sometimes have to change. Slavery was once a tradition, as was a male-dominated work force. The question of long-term damage, important as it is, is insufficient by itself. There are other values also at stake.

In my view neither Pete meadow should receive much grazing in any year. Little Pete will continue to be used, and it probably can withstand it better than either Big Pete or Grouse. Both these latter stay wet longer. This year even Little Pete was wet late in the season. Some sections dried but it is difficult to confine stock to these. Imprinting in wet areas, far in excess of the one inch standard, and sometimes resembling trails, resulted. A further problem with Little Pete is that there is no particularly satisfactory campsite for a stock party, it is right beside the Muir Trail, and is a popular destination for hikers. I think most stock groups would rather be more by themselves than is possible at Little Pete Meadow.

Big Pete Meadow was wet all year and I was glad it received no grazing. There still was surface water throughout when the fall storms started. I would think that in all but the driest years it should not be grazed. A fence just below it would attract use and for that reason the fence should not be replaced. Perhaps grazing would work in the dispersed meadows up canyon, and a fence above Big Pete might support this.

Actually, these principal meadows needn't be grazed as often as they are. There is enough grass scattered on drier benches throughout the canyon to support quite a lot of stock use. The challenge is to get stock users to turn their stock there instead of into large, lush meadows, and to exert a little effort to keep them on those benches.

In early September two people with five llamas passed through Le Conte Canyon. They camped on Dusy Bench and at Grouse Meadow. Their practice was to tie each animal on a long rope, and move them frequently. After their departure the grazed areas simply looked like the grass had been nibbled. There was none of the trampling and sod disturbance so often left by horses and

mules. It is my recommendation that the Park Service lead by example and convert to llamas! Finally, after so much arduous work on a stock use plan, we need to address the question of NPS and commercial stock grazing in meadows before their opening dates. The question arose this year and probably will in the future. Are these opening dates serious?

1986 Rock Creek - Kenan

The stock use in the Rock Creek drainage brings a lot of impact to the meadows of the area. I feel that commercial pack stations should be required to attain [*sic*] wilderness permits just as any other visitor is required. I realize that implementing that regulation would not be easy, otherwise it would already have been done.

Requiring permits would provide the backcountry ranger with several advantages for managing stock parties. The ranger could be informed over the radio as to when the stock party would be coming into his/her area. This would provide the opportunity for the ranger to contact every stock group that comes into their area. Also, with this official record (the permit), the stock group would be more inclined to be on their best behavior. Cottonwood Pack Station did appear to be on their best behavior this summer, but I am convinced that this was because they knew the odds were that they would be contacted by the ranger while in the area.

1987 Crabtree - Malengo

Some of the stock users in the area did some resource damage with their stock. Mostly it was from commercial users with large numbers of stock. Twenty animals loose in a meadow turn it from a beautiful park meadow to something far less natural. I think the park needs to put more restrictions on the size of groups and to make stock groups pay per nights grazing.

After all, everyone owns the grass resource and only a select group are using it. Heavy stock use changes the visual beauty of an area, something we are supposed to protect.

There is no comparison to the impact left by the average backpacker as compared to the average stock group. The stock groups trample the area, leave manure and generally leave many different signs of their presence.

Small groups leave a lot less signs. The reasons are mostly because of number but having time to be attentive to the animals is what also makes a big difference. Generally the abusers are not taking time.

1987 Little Five - Hayden

BIG FIVE LAKES: Big Five Lake #3 and the two upper meadows between Big Five Lakes #4 and #5, simply stated, get too much use. This judgment is based on the overall condition of the area by the camp at Big Five #3, used almost exclusively by Mineral King Pack Station; and the condition of the upper meadows, which have hundreds of two inch plus deep hoof prints. (See photographs). What can we do? See stock use suggestions.

LITTLE FIVE LAKES: Used almost exclusively by Mineral King Pack Station and use is definitely on the rise since 1984. The changes are evident in the condition of meadows and campsites. In addition, it seems that those who stay overnight at Little Five Lakes have a difficult time with keeping the stock out of the very wet closed stringer. The two hundred, two inch plus deep hoof prints there on September 28 speak for themselves (see photographs). What can we do?

STOCK SUGGESTIONS

BIG FIVE LAKES #3 camp - At the very least, get the Mineral King Pack Station more involved in maintaining this campsite themselves, since they seem to account for 95% of the use. The location is good because it is off the "beaten path" and few other visitors come across it. The present fire-ring needs to be reconstructed away from the rock face and the two filled in mammoth fire-rings need to be obliterated altogether. **The location where Mineral King Pack Station ties up their stock needs to be rotated periodically, otherwise you wind up with what is there now: a forty foot by fifty foot zone of mule poop, two-three inches deep. The following items were found in this camp on September 29th: remnants of horseshoes; scraps of assorted tack; broken liquor bottles; beer cans; tin foil; cigarette butts; cigar wrappers; chewing tobacco cans; wire; twine; ropes; grills; assorted cans; sausage and bacon packages; an egg carton; orange peels; men's underwear; used toilet paper (less than eight feet from water) and melted plastic.**

1987 Rock Creek - Lyness

Meadows/Stock Use

This was a very season for the Cottonwood Pack Station. When I arrived on June 25 I was told that the pack station had had stock in the Rock Creek area every day for 20 days already. Only a few trips were overnight trips, but the stringer meadow had already been grazed. All meadows mentioned showed some signs of the previous year's use, (mainly deep hoofprints) but only the stringer meadow had been grazed. It had signs of mechanical impact (all those listed on the inventory) scattered throughout over 10% - 15% of the meadow. By the end of the season this meadow had been heavily used, with much mechanical impact. It is arguable whether or not it was "overgrazed"—certainly it is not aesthetically appealing, and Cottonwood quit using that camp in mid-August. The stringer camp received almost continuous use from late June through July.

In August Nathan's Meadow and the lower crossing meadows began to receive more use, with Nathan's being used almost constantly for three weeks. It has a mowed appearance as of mid-September. Penned-Up Meadow was used for only about 4 nights that I know of; the lower meadows (below the crossing) for 7-10 nights. All meadows except Penned-Up have been at least moderately used, with the heaviest use in Nathan's, the stringer meadows, and Lower Rock Creek Lake meadow. 2 parties used "Meadow #2," unaware that it was closed. Both stopped using it as soon as they were informed of the closure, but that meadow was grazed a few times. There were signs from early in the season that stock from the stringer meadows above periodically use the closed meadow. . . . Rainbow came through once, that I know of; the Londons reportedly came through three times, evidently in violation of their H.S.S.U.A. agreement; and Charlie Morgan camped at Nathan's Meadow for 10 days with 16 head of stock.

1988 Le Conte - Morgenson

With so many fences in the canyon, we should attach a small sign to each gate explaining that these are for meadow closure to protect the meadows. Hikers don't know what these fences are for and stock users will think they are to keep the stock in the meadows, as in pastures.

Our grazing regulations for Evolution Lake need to state that all of Evolution Basin (Lake - Muir Pass) is closed to overnight stock grazing. In July Galen Rowell's stock party wanted to stay overnight and graze at Sapphire Lake. Misunderstandings and hard feelings were generated when The Green and The Gray intervened.

I, and all hikers, think there should be studies on what stock leave in the water, water quality

being the concern it is. And there should be guidelines, either in the Superintendent's Compendium (list?) or in minimum impact guidelines, about stock users trying to keep stock away from water as much as practical and possible and trying to keep them from urinating in streams at crossings. Just an occasional effort would be a nice gesture.

1988 Rock Creek - Lyness

Stock Use: Cottonwood Pack Station was even busier this year than last. On a few weekends they had all their stock, almost 70 head, out on the trail. They had 5 “all-expense trips” to hide-out camp at Lower Rock Creek Lake. For the 6 weeks from mid-July through Labor Day there was almost always at least 1 spot trip in on Rock Creek, often 2. This wouldn't be a problem except that they use Upper Rock Creek Lake almost exclusively. As noted last year and by previous rangers, this lake suffers the worst impact in the drainage and is more vulnerable than many other areas. The spot trips almost double the impact this lake gets.

Meadows: (See also meadow report) The meadows were unbelievably dry this year. (Damp instead of oozing.) The heavily used stringers behind the Lower Lake were as wet as ever, though, and already showed severe to moderate mechanical impact when I arrived—deep hoofprints, broken streambanks, broken sod. The Pack Station is using this area well before a ranger arrives. I don't think the stringer meadows should be grazed before the end of June on a low snow year, later on a wet year. Penned-Up Meadow also stays very wet. When I arrived I found severe damage to the meadow especially where the trail passes through. CPS takes groups up to Sky Blue Lake; early season trips make a huge mess in Penned-Up) - the damage was far worse this year than last because they used the trail so early.

Nathan's Meadow received very heavy use, at least: 30 nights, and is about 75% grazed now. Because it was so dry, mechanical is only moderate. The campsite looks awful, even after I shoveled manure and tried to fill in holes and troughs.

Overall, I remain unimpressed by the ethics of stock users. They burn enormous logs, hack at anything and everything, leave manure everywhere, leave stock tied up such that they paw big ruts, and build new firepits. (Art McCall's party built one 5' from the established one right against a rock.) And they frequently show animosity towards the ranger's suggestions.

I get many complaints from backpackers during August. . . .

The Upper Lake is still a disaster. The spot-trip groups are the worst offenders, leaving junk in the pits, enlarging them, and trampling large areas. One group this year pounded nails in trees, burned a rainfly which melted over a 10' diameter area, and left a log the size of a sequoia in their huge pit. There is just no wood at this lake — this summer some standing dead snags were cut down. (Again, it had to be a group that was packed in that did this.)

1988 Tyndall - Atkinson

Under current regulations, grazing is not permitted above 11,200 feet in both the Wright Lakes Basin and Milestone Basin. The regulation looks good on paper, but in reality it just doesn't work. It is impossible to turn stock loose to graze and expect them to observe some invisible, man-drawn line that has nothing to do with natural barriers. The 11,200' line in both basins is easily crossed by stock. In Milestone, Rainbow Packers' stock have wandered above the 11,200' mark for two years in a row. To erect a drift fence clear across the basin would be aesthetically unacceptable. If we don't want stock grazing in the upper portions of either of these basins, we will have to close the entire basins to grazing. We have no choice.

Closing these basins will not cause anybody great hardship. To my knowledge, Milestone was grazed only once this summer (by Rainbow). I discussed the problem with Pete Rigali, packer for Rainbow. Rigali said it would make no difference to him if we closed Milestone — that he could just as easily graze in the upper Kern.

Wright Lakes Basin was not grazed at all this summer. I did a fairly thorough survey of the meadows in the basin at the very end of August to look for signs of stock use. I saw only two piles of horse manure, both of which were several years old. A closure here obviously wouldn't have much impact on stock users.

Group Size

Iridescent Lake, Wright Lakes Basin, Upper Kern Lakes are all remote and pristine places far off the beaten path — places where people should be able to feel some solitude. This summer, however, I wandered into each of these spots only to be confronted by bustling cities (twice in Wright Lakes!). Brightly-hued tents were scattered about everywhere, and with all the people milling around I might as well have been on an L.A. street corner.

All of these groups were Sierra Club sponsored. In each case, the people were highly conscious of their impact on the land; indeed, their wilderness manners were impeccable. There was little if any physical impact. It was not unreasonably noisy. But the visual impact was huge. If for no other reason, we need to restrict cross-country travel to small groups — I'd say no more than eight at the very maximum.

1989 Bench - Kenan

There was a noticeable increase in stock trips this season. Last season there was only one stock trip over Taboose Pass. This season there were ten to my knowledge. There is an obvious trend for stockusers to want to get into the more remote areas of the park. Taboose & Sawmill Passes are getting more use. There is an overall trend of increasing use in the backcountry by all of the commercial pack stations. Rainbow Pack Station had one of its biggest years.

How well are we managing stock in the park? How well are we managing backpackers in the high elevations? Twenty backpackers are a heck of a lot easier to manage at 10,200 ft. than twenty head of stock. What is the status of our water quality in the high elevation lakes & drainages. May I suggest that it could be better.

So, how are we doing managing the stock use in the backcountry. May I suggest that we are doing a poor job. How well prepared we for managing a big increase in stock use in the future. . .

In taking a close look at the impact by stock in the high elevations we do have a problem. In the fragile lake basins above 10,000 ft., stock grazing can be very noticeable and damaging.

An example of stock damage was seen this season at Woods Lake. I contacted John Berry of Rainbow Pack Station on August 5 at Woods Lake. John was camping at Woods Lake at point C. He had pinned his 10 head of stock in overnight in the area shown on the south side of the lake. The natural cliff barrier had prevented his stock leaving to the west.

I inspected the area where the stock had been kept oversight. There were deep hoof marks in the soft lakeshore grasses. Also, there was manure in the inlet streams to the lake. This is not a rare case, but it is more of a common practice. . . .

Stock Management

There is a significant increase in stock use in the park. Private & commercial use is increasing while administrative use is remaining about the same.

How can we continue to let pack stations write their own permits? In order for backcountry rangers to “work with” stock parties to make sure that they are abiding by the regulations, we need to know when & where they are going to be.

Commercial Pack stations need to be required to contact either Sierra Crest or Sierra District operations prior to bringing a trip into the park. That way I could be notified by radio as to the stock parties itinerary. This would allow me to be able to check up on the group. If these groups aren't “checked up” on, then they are much more inclined to not worry about abiding by the regs. We need for them to be concerned that at any given moment a ranger could be walking into camp.

1989 Crabtree - Durkee

I received about 60 complaints from visitors about various aspects of stock use. This was about normal, though several visitors were more upset than usual. Apparently about half a dozen people wrote letters to the Park specifying their concerns. Although the number of complaints to me seems about the same as in previous years, I believe backpackers are showing an increased level of concern and frustration with what seems to be an increase in stock impact at specific sites brought on by an apparent increase in stock use. Craig London (Mt. Whitney Pack Trains) has shown on his stock trips that impact can be minimized by following a few basic rules. The permittee for the Kern area (Dennis Winchester) has consistently failed to take these rules seriously. A consequence is increased backpacker/stock user conflict.

Backcountry rangers have also been the subject of increasing complaints by stock users. This has been the result of stricter enforcement of existing regulations. Because we try to maintain a working relationship with our permittee users, many of us have allowed a “learning” period for new packers. Unfortunately, packers have a high turnover so we are constantly explaining park regs. to new packers from the same permittee. This becomes extremely frustrating for the ranger and often results in what appears to be more abrupt treatment for a new packer.

This has resulted in increasing disrespect for a ranger's authority on the part of packers. There were several instances where information was asked of a packer (I.D. in two cases) or information required and the packer refused to comply. There were instances where several of us in the field felt that inadequate support was given to the ranger in enforcing long standing regulations in deference to a packer or pack station. We need to clearly spell out our authority to the packers and establish law enforcement protocols for next season.

Recommendations:

1) I completely agree with the Chief Ranger's memo of 9/6/89 that aesthetic considerations have to be factored into our stock management of alpine meadows. Many of the backcountry rangers have been advocating this approach for years. There are only a couple of places on the 220 miles of the JMT where a hiker may camp that is closed to stock use (Vidette meadow & Evolution Lake). Backpackers have a right to expect a certain number of camps be free of the smell of manure and urine (a frequent complaint) and to view meadows in a pristine and ungrazed condition—not cropped down to the height of a putting green, as many meadows in the late Fall are. In the Kern, I believe this can be done with minimal impact on stock users by closing off those basins which receive little stock use (which is actually most of them) and so guarantee that hikers have places which will be unspoiled. This can be balanced by designating certain traditional stock sites as available to stock users only. Stock impact would thus be limited to only a few sites and stock users would be guaranteed that their favorite sites would always be

available. This should cut down on backpacker complaints.

Our only criteria for management of backcountry meadows has been the opening dates which we base on the relative wetness of the meadow. We have no way of controlling the number of stock nights a meadow gets. We have been “monitoring” meadows for as long as I've been in this Park (13 years). It is time to start managing at least some of the more intensively used meadows (e.g. upper Rock Creek, middle Crabtree, Harvey Meadow) to prevent the serious aesthetic damage they usually show by August. It is quite likely that the shorter Fall grasses that are a result of high stock use also cause increased Spring erosion (suggested by Mike Newman and USFS range biologist Kathy Noland). There are signs this is happening in Harvey Meadow and may also be occurring in Milestone and perhaps upper Rock Creek. A system based on a total number of use nights per month should be established immediately for the more heavily used meadows. The nights could be divided up between the permittee packer, administrative use and estimated private use. The USFS has been using such a system for years (based on forage recovery, with no aesthetic component considered.)

Specifically: Milestone, upper Tyndall, Wright and Crabtree Lake Basins can be completely closed to stock use without a serious effect on permittee packers. Wallace should be closed above the occasionally used stock camp about 2 miles above the JMT. Crabtree Meadows should be closed above the middle meadow (leaving the heavily used backpacking camp around the Station area free of stock use, but still allowing grazing in the two lower meadows). The Whitney trail should be closed once again to stock—the potential for an accident on this narrow, heavily used trail is too great. There is also no practical place to leave animals at the pass. The Crabtree lakes should return to a policy of no stock use above the pond 1/2 mile below the lower lake (the policy until 2 years ago). This will leave only a one mile hike to get to the upper lake for stock users—not a great hardship considering the damage that results from continued stock use of that unmaintained, poorly graded use trail.

Most of the pack station owners say their business is increasing. I believe this trend will continue as the more affluent Baby Boomers continue returning to the mountains as their children become older. Our meadow management plan is not prepared for an increase in stock use—it assumes stock use will stay the same or decline. Rangers in the field have no quantitative criteria for restricting grazing. This situation requires a more critical examination than it has received so far.

2) The fire limit on the eastern side of the Kern is too high. Generally, these are the high basins mentioned in Doug's memo. At 11,200' trees are extremely sparse and are mostly Foxtail.

According to a recent study, Foxtails may have a tree ring record extending back 7,000 years. A lower limit would put fires down well into the Lodgepole forest where wood is more plentiful and the aesthetic impact not as great as at present. Lowering the fire limit to 10,800' would have minimal effect on backpackers since, according to my compliance checks this summer, more than 90% of hikers carry stoves. This proposed fire limit would also allow packers to continue to have fires at almost all of their traditional sites.

3) Apparently the permittee packers are allowed to issue wilderness permits to anyone who does business with them, even when they are only spotting food & equipment in for a group. At the very least, their authority to issue permits should be allowed only for people they actually pack in. They have consistently not been telling their clients of the Park's rules and regulations (Scattaregia and I have submitted several 343's on these incidents) and not issuing the Park regulation sheet with the permit. This is unacceptable. Dennis Winchester has not lived up to the agreement made when he was given permission to issue permits. As such, he should no longer be

allowed this privilege.

1989 Hockett - Muller

Citation should have been issued to Ray, a Bedell packer for food cache. No permit to transport firearms. Tying stock to trees, improper food storage, litter, camping on meadow too close to water.

STOCK CARE - This summer I worked with eight different animals. Four horses and four mules. I believe this was totally unnecessary and a waste of my time. I feel the Hockett Ranger should be assigned his three animals and left alone. Roy Lee Davis should not be shuttling animals in and out of Hockett. It became very frustrating.

I also was given a horse, "Quinn", on September 15 to September 23, by Roy Lee, that was in need of three daily DMSO treatments. During which time I had to stay close to the station. Trail Crew also left me an injured horse "Andy." I doctored his rope burn twice a day from August 4 to August 15.

1989 Kern - Graban

Upper Funston Meadow is the biggest management headache in the Kern patrol area. You never can go there without expecting (and finding) some new man-made disaster. . . .I have spent many days in rejuvenating the Funston Camps, and it is the same nonsense over and over and over again: big developments, benches, tables, gigantic pits 20 ft. from river, stock rings around the trees, soil pulverized, horse droppings everywhere, etc.

Upper Rattlesnake area got trounced, chewed-up, pulverized. The drought is hurting it (little regrowth). **Concentrated stock use is hurting it (much of it administrative). I think June 15 is too early for these drought years (for opening date). I think NPS users should not use it so hard. The place looks like a putting green.**

1989 McClure - Morgenson

What follows are my observations and suggestions, not particularly in order of importance. Some needed changes in our written grazing regulations sheet:

- 1) Add: Stock travel not allowed more than 1/4 mile from maintained trails unless authorized.
- 2) Add: No stock travel to Darwin Bench/Canyon from the John Muir Trail.
- 3) Add: For Evolution Valley meadows there are variable opening dates; contact park HQ before trip.
- 4) Is day-travel with stock to Martha Lake okay or not? If it is not, write it on the regulations sheet.
- 5) Instead of just stating no grazing at Evolution Lake, the sheet should read no grazing (or camping with stock) from the base of the switchbacks below Evolution Lake (the practical reality), over Muir Pass, to 10,000 feet in Le Conte Canyon. In upper Le Conte Canyon there is grass on a lake shore at 10,800 feet and a small wet meadow at 10,200 feet but neither should be grazed as they are too small, too fragile, and too near water.
- 6) Our regulation states burros and walking mules are allowed one night at Evolution Lake. Add llamas to that. And decide how many. Twenty would seem too many for Evolution Lake. We should set a limit. Two walking mules for one night. Four burros or llamas for one night. The meadows at Evolution Lake are lakeshore, and the area is hemmed-in by mountains. During July and August and early September it is an unusual night when there are not at least a couple of

groups of hikers camped in the few sites. The Chief Ranger's September 6 memo to the Superintendent on the subject of managing high lake basins applies to Evolution Lake, though we can probably stick with our present policy so long as we establish limits for the animals allowed.

7) Where a regulation states no grazing (or grazing for one night) does this mean stock are not allowed to be there or just not eat grass? Is it okay for a stock party to camp there (e.g., Evolution Lake) if the animals are tied and not allowed to roam about eating grass, or is it our intention not to have stock overnight in certain areas, realizing they have their effect on the place even if they aren't eating grass. Our wording should clarify this. A Sierra Club burro party camped two nights at Evolution Lake, but didn't turn the animals loose to graze the second night. Yet the animals were there, walking about, tied somewhere, defecating.... What is our intention? And if the regulation works this way for a burro party can a horse and mule party with 12 head similarly camp at Evolution Lake? Clarify the regulation. It could say, no camping with stock.

Other things regarding meadows and grazing:

Backcountry rangers have for years been advocating protecting McClure Meadow from stock grazing. It is a very special place and numerous comments by hikers support this. I would like to see our management policies support this. With several meadows and abundant woodland forage in Evolution Valley we can surely preserve one ungrazed meadow. Over 95% of the visitors are hikers and they have little opportunity to see an ungrazed meadow. The arguments for this protection may not be based on grazing-damage data, but the argument for grazing (tradition) is certainly emotional and not based on factual data. In any case, perhaps the quest for data to support our actions gets over emphasized. After all, our emotions distinguish us. Art and poetry and music are from and to the human heart, as is, for many, our relationship with the land. There has been a good deal of philosophical and emotional response to landscapes embedded in the conservation movement from the beginning.

All the meadows in Evolution Valley were grazed this summer, and they all looked it. Yet Franklin Meadow apparently was not, and in October it was a place of knee-high grasses, ripe and open panicles drifting on the moving air, luminous-bronze in the backlight. It was a very different place and a very different emotional experience of a mountain meadow, and entirely consistent with what one might rightly expect of national park backcountry. It was a garden. I sometimes wonder whether range management concepts are any more applicable to our business than timber management concepts. The difference between a grazed meadow and a logged forest may only be one of scale.

If we fenced and closed McClure Meadow, after a couple of seasons there would be little surface evidence of grazing and it would be a very different meadow, grasses growing through their natural cycle all season. Again, instead of just doing the monitoring project and adding studies of species changes, as valuable as these may be, we could give these meadows more protection. Manage, not just monitor.

For the stock user this means asking him to change some habits, to think more of grazing woodland forage rather than prime meadows, and even think of carrying supplemental feed. But it does NOT mean a first step toward excluding stock from the backcountry.

This would be a change in management position. We need not continue the assumption that if stock are here they have to be allowed to graze some of the park's most beautiful meadows. And we need not prove long-term ecological changes before increasing our meadow protection. We can protect them on our own long-term tradition (The Yellowstone Campfire) of protecting particularly beautiful places.

Finally, this would be recognition of the difference between mountain meadows as very special places (gardens), and pastures. There was hard grazing in the NW corner of Evolution Meadow near the one good stock camp, and by summer's end the meadow looked like a close-cropped pasture. With fences above Evolution Meadow and below McClure Meadow, parties could camp at either and graze neither.

A meadow where each year the grasses go through their natural cycle undisturbed is quite different from a meadow which has been grazed. In fact, in philosophy, and in beauty. I feel that in recent years we have gotten unduly focused on the standard of long-term ecologic change, which sounds too much like sustained yield. Obviously we need keep a watchful eye on this, but we need also recognize the short-term biological change that occurs with grazing, and admit it is not consistent with our Prime Directive. I submit that eating two-foot high grasses down to within two inches of the ground is a change in plant physiology, not just scenery.

Aesthetic values are inextricably mixed with this short-term biologic change since backcountry travelers tend to enjoy the unaltered scene over the altered. Admittedly, aesthetics is a slippery concept, but maybe more in line with the NPS traditions and organic act than sustained yield. A grazed meadow is an undeniably altered meadow. Whether we see that may depend on how fine our vision. There is more to these mountains than The Grand Scene. That Grand Scene is composed of the details.

We have made a commitment to stock users to allow them to visit these mountains. But that need not mean they can graze any meadow they want, as much as they want, until we can prove with facts and data they are causing long-term ecologic change. In any case, Doug is right, these proposals need not pinch the stock users. They can change some of their grazing habits and we can provide better meadow protection, based on the policy of letting meadow grasses go through their natural cycle each year so visitors have an opportunity to see and appreciate that, and stock users can still visit these mountains.

Doug is right about something else. Stock users have been disproportionately vocal, and hence influential, in our planning process. There is no doubt in my mind that were everyone who gets a wilderness permit allowed to vote, yea or nay, on the question of stock in the mountains, stock would be gone. Stock users are a small minority. Perhaps in an alleged democracy this is the way it should be done.

I hope we have a Chief Ranger and Superintendent willing to stand for greater protection for more mountain meadows as wholly consistent with NPS mission, to resist pressures for use, and to resist the argument that we need to prove and document this long-term change thing before we can regulate use.

1989 Rae Lakes - McDonald

Tim Loverin's Cedar Grove Pack Station had numerous trips into Woods Creek and Rae Lakes this summer, and their fire rings and camp etiquette were not always acceptable. Their camps at Baxter Creek and Upper Castle Domes had horse manure throughout camp, and their fire rings were left messy or at Baxter Creek Camp the fire ring was dug out—foil, cans, glass and ash and dumped behind a tree.

1989 Rock Creek - Scattaregia

Stock Use: Cottonwood Pack Station (CPS) had eight "all-expense" trips in the Rock Creek area that I was aware of, and frequently spotted groups in to Upper RC Lake, Lower RC Lake, and

Penned-Up Meadow. On Labor Day weekend two groups were spotted to Penned-Up Meadow for a total of 17 people. **Thirty-four people were camped in Miter Basin at one time over the weekend . . . CPS clients constituting 50% of that figure. New Army Pass trailhead quotas were full. By not including CPS in trailhead quotas, Miter Basin had exceptionally heavy use over Labor Day and I received many comments from disillusioned campers who thought they would find solitude in the cross-country access areas.**

Due to heavy use by CPS, the Lower RC Lake stringer is in especially poor condition. As of September 1st it was still 20% saturated; however, the opening date was June 20. This meadow is almost 100% affected by mechanical impact: hoof imprints are up to 8-10" deep in some places, sod displacement and large trampled areas are prevalent, and streambank erosion is extensive. Multiple use trails lead to the stringer which have been well developed by stock use. By mid-August the fine herb-grass areas look more like a putting green than a mountain meadow. The scent of horse droppings and urine permeates the air, seriously detracting from a wilderness experience. This area is used almost exclusively by CPS. I feel that impact on the stringer is excessive and may possibly indicate long-term damage. . . . Some suggestions to alleviate pressure on it in the meantime are: 1) Drastically push back opening dates; 2) Enforce the 3 night limit for grazing in Upper Rock Creek for the entire area not just individual meadows (as is the policy in Evolution Valley . . . shouldn't we be consistent in our interpretation of the Stock Management Plan?). 3) Encourage CPS to move stock around instead of tying in the same area every time or to keep stock further away from the stringer, to use the main meadow more . . . 4) consider limiting the number of grazing nights permitted at this meadow per season. CPS occasionally brings in large numbers of stock for a relatively small group. Perhaps we should consider stipulating the number of head permitted per trip dependent upon length of stay and group size instead of a blanket limit of twenty head per trip. In addition, I was not notified of CPS being given special permission to have more than 20 head this season but it did occur on a few occasions. Their use of the area is already so heavy that I do not feel it is appropriate to exceed the group limit.

I received many unsolicited stock complaints this season and have submitted a 343 with specifics. Perhaps stock complaints are up because 1) this is the third dry year in a row which probably generated a longer season for pack stations and increased use and 2) there is nowhere in the Rock Creek area for backpackers to go that is stock-free, including trailless areas, except for the highest lakes in Miter Basin. As we adopt a 6-person limit to cross-country group size, I feel that this issue needs to be addressed. Miter Basin, Siberian Outpost, Soldier Lake to the Sierra Crest, and Forgotten Canyon are all open to cross-country stock travel. Certainly 20 head of stock, or even 6 head of stock, are a much greater impact than 6 people. How do we justify limiting backpacker numbers to reduce impact without also adjusting our stock policies? All of the above mentioned areas are listed as "non-maintained trails" in the Stock Management Plan but they are actually trail-less, with the exception of lower Miter Basin. The trail into lower Miter Basin is deeply rutted and reportedly much wider than it was several years ago. This trail either needs to be closed to stock (which accounts for the majority of the impact) or maintained before more damage occurs. I do support limiting cross-country group size; however, to be equitable, I feel that stock travel should be prohibited or severely reduced to only a few head on a special request basisIn stock cross-country travel zones should we be limiting backpacker group size to six? It seems to be contradictory to me.

Grazing is permitted to the outlet of Primrose Lake in Miter Basin; however, this area is

dominated by fragile alpine meadow, there are no trees to tie a hitch line to, there are no suitable campsites (i.e., bare of vegetation) for a group of any size, and there is no real trail. It has not been grazed this season – but only one group could cause extensive impact. I propose that this area is closed to grazing before a problem develops. I also feel that Miter Basin should be closed to day use by stock as the middle and upper parts of the basin are cross-country areas. **Without a trail to confine use, signs of stock are spread widely throughout the basin floor. This detracts from the “remote” experience most users expect from traveling into a cross-country area. Stock use in Miter Basin generated a lot of complaints this summer — 2 complaints were from people who were spotted into the backcountry.**

1989 Tyndall - Atkinson

Stock use in the Upper Kern drainage concerns me. At present, use is low compared with places like Rock Creek or the Lower Kern. But as we saw this summer at Milestone, all it takes is two stock trips to foul one of these high pristine meadows. We must take quick action to prevent something like this from happening again.

With the exception of the John Muir Trail, the trails in the Upper Kern are not suited to stock use. **Most of them are not maintained and, according to the Stock Use and Meadow Management Plan, should not be used by stock at all.** Some have sections that fade away and are almost impossible to find. Most are very rocky and many have extremely steep sections, with grades of up to 44% (the NPS Trails Management Handbook recommends that trail grades for stock should ideally be less than 7%, and not greater than 10%). Trails in the area that should be closed to stock travel, and my reasons why, are listed in Attachment D.

In setting grazing limits and closures in the past, it seems to me that we have asked only one question: Is grazing causing irreparable damage to the meadow? The immediate aesthetic impacts of stock use have been ignored. We must recognize that not everybody nowadays grew up with stock, that not everybody going into the backcountry enjoys the smells, the flies, the noise and the dust of the barnyard **After Milestone Basin had been grazed by the Trail Crew’s stock this year, I received a flood of complaints from visitors who were extremely unhappy to find not an untrammelled wilderness but instead a “stinking cesspool” (one gentleman’s words).**

The Upper Kern drainage is a prime spot to set aside for human use only. It is rugged and remote, with meadows that are vulnerable to stock damage. Its trails are not maintained for stock travel. I argue that we close the entire area — from the Kern-Kaweah and Wright Lakes Basin north to the Kings-Kern Divide — to all stock use.

Group Size

Maximum group size for many trailheads in the park is 25. I recommend lowering it to 15. Large groups concentrate use into small areas. Even the biggest campsites in my area cannot handle ten or twelve tents without some resource damage, particularly around the periphery of the site, and the end result is that campsites get bigger and bigger and more and more trampled.

1990 Bench - Kenan

How well are our current management policies and regulations working in “protecting and preserving” the park backcountry? The regulations are working fairly well in helping to minimize backpacker impact. When it comes to our stock management policies, we're doing a very poor job.

The focus of last seasons report was on the feasibility of requiring stock parties in Kings Canyon

backcountry to graze their stock below 10,000 ft. If the reader refers to that report, they will find that this restriction would not change current stock use patterns very much. But this restriction would help prevent a lot of stock use damage in the future. When stock graze in areas below the fragile lake basins there is much less damage.

So what is the status of the water quality in the lake basins? Over the years it has been observed that the water quality is seriously deteriorating. Stock grazing in the lake basins are contaminating the lakes and streams with manure. Also, soap and particularly biodegradable soap use is a real problem. Many park visitors think that it's okay to use directly in the water system. Soap suds is noticeable almost everywhere in the lakes and streams.

In regards to our stock management regulations, there are positive examples where these regulations are working. The lake basins that are closed to stock grazing are protected. Stock parties passing through these areas create only a limited impact. Areas such as Evolution Basin, Dusy Basin and Rae Lakes are examples. But the lake basins that are not closed to grazing are becoming severely and irreversibly damaged.

There are numerous examples from this season where the water in the lake basins was contaminated from stock grazing. An example is at Bench Lake. Mid August a stock party with four head of stock camped on the western shore of the lake for a few nights. I was out of the area at the time on patrol, but I received the report from ranger Tom Suk, who contacted the party. They tied their stock up on the shore of the lake and adjacent to an inlet stream. I observed the area after they had gone and found a lot of manure on the shore of the lake and in the inlet stream. I did my best to rake the manure away from the edge of the lake and out of the stream. Another example is at Marion Lake. Cedar Grove Pack Station did a trip into that area mid summer. They "pinned" their stock on the western edge of the lake. I came through that area after they had gone and saw a lot of manure and trampling on the shore of the lake. During the winter all of this manure will be washed directly into the lake.

Also, a large quantity of manure was observed on the shore of the lake north west of Woods Lake. The problem is enhanced because frequently in the lake basins the grassy areas are on the shores of the lakes.

There is a significant increase in stock use in the park. Private and commercial use is increasing while administrative use is remaining about the same. What degree of impact to the lake basins would a larger increase in stock use bring? I feel that the impact could be devastating. Significant changes in our stock management need to be made in order to prepare us for the future.

What kind of changes do we need to make to help protect the fragile lake basins? Stock parties should be required to graze their stock below 10,000 ft. Also, how can we continue to let commercial pack stations write their own permits? In order for backcountry rangers to "work with" stock parties, we need to know when and where they will be. Pack stations need to be required to contact Sierra Crest or Sierra District operations prior to bringing a trip into the park. That way the backcountry ranger in the area could be notified as to the stock parties itinerary. This would allow the ranger to be able to check up on the group. If these groups aren't "checked up" on, they are much more inclined to not worry about abiding by the regulations. We need for them to be concerned that at any given moment a ranger could be walking into camp.

Currently we have no way of knowing which areas are getting heavy use. We don't know where the stock parties are going and how many stock nights individual areas are receiving. In essence, we have an unlimited and uncontrolled stock use in the park.

1990 Crabtree - Durkee

Another quiet year at Fort Crabtree. Nothing changed since last year. In fact, nothing changed since '77. As such, my recommendations remain essentially the same as last year: lower the fire limit, and close Crabtree Lakes and the Whitney trail to stock use. See my reports for '88 & '89 (or for that matter '77) for details. **While I acknowledge—and can sympathize with—the political realities which make adoption of new policies or procedures difficult for either Sierra District or Staff, it is difficult to continue, year after year, to put the time and effort into reports and documentation that, for whatever reasons, are never acted on. Either Charlie Morgan runs the Park or we do.**

[T]he new plan to include other District's stations in the Sierra District rotations is fraught with problems & has a number of us mighty nervous. Sierra District is not made up (if I may modestly say this) of your average NPS seasonals. Our average age is around 40 and length of service is about 15 years. No other District in the entire Park Service has such a consistent rate of people coming back. **YOU ARE MESSING AROUND WITH ONE OF THE MOST SUCCESSFUL OPERATIONS IN THE PARK SERVICE AND YOU OUGHT TO BE DARN CAREFUL HOW YOU GO ABOUT IT.** One of the reasons for this success is that you folks have always, within reason, tried to accommodate our station preferences. I cannot overemphasize how much this “human element” has played in maintaining stability in our District because, in spite of our hammering away about salaries & etc, we are, in fact, partially compensated in sunsets. When you start fooling around with where those sunsets are (e.g. a less desirable or even unacceptable station) you are affecting the very reason we keep coming back. I don't think this is understood outside of Sierra District (and perhaps only dimly understood even there). I don't think any of us are here because we are excited about being “rangers” and therefore would be happy no matter where we are a ranger.

A case in point is Atkinson, who simply said he wasn't interested in working at Bearpaw. Considering the amount of time (about 5 years) he's worked over in that area, that's not an unreasonable attitude. So, maybe we are being whining crybabies, but always before there's been the attempt to come up with some sort of workable solution to make everybody happy. That didn't happen here. An alternative wasn't even offered or discussed in Paul's case. What happened? How could you, essentially, discard the hardest working most conscientious employee you've got (though, admittedly, a bit high strung, but that seems a small price for the amount of work you were getting...). It is my personal and humble opinion that someone ought to approach Paul Atkinson on bended knee and ask what could induce him to come back. A few discussions I've had with him since make me think that if he were offered something other than Bearpaw, he'd come back.

I realize that seasonals having a say in policy is not SOP in the Park Service. However, given our experience, level of training and knowledge of the backcountry, I suggest it would be wise to formally include input from backcountry rangers in this new plan.

1990 Kern - Gustafson

In the 1960s the Park staff identified a half dozen superlative areas in SEKI where the meadows were still untrammelled, the waters ran pure, and hillsides and meadows were not scarred by trails. We called these “Pristine Zones”, and a prominent goal of backcountry management was to protect them in their natural state. There were to be no trails or other development in these areas, and no consumptive use by humans. Access would be cross-country and on foot.

At the time of the first controversy over dedicated Wilderness within these Parks, the Director ordered these “Pristine Zones” eliminated from our formal backcountry management presentations, saying he didn't want any category of protection stronger than that afforded by the Wilderness Act. We were still highly cognizant of the value of these least disturbed areas, though, and vowed to continue protecting them informally. The area between the Coyote Pass and Rattlesnake Creek trails, including the Crytes Lake area and the entirety of the Laurel Creek drainage, was one of these “Pristine Zones”, which we felt deserved the strongest category of preservation.

Institutional memory is short. Twenty-three years later, I'm dismayed to find this area threatened in three ways:

1. Unrestricted cross-country stock travel. Somehow, in the early 1980s, a statement was inserted into the Park Grazing and Livestock Regulations that the Entire area (Chagoopa, Funston, Big Arroyo, Rattlesnake, Laurel and Coyote Creeks) open to unrestricted stock use EXCEPT for Big Five and Little Five Lakes area. This statement is the root of the current problems, and I STRONGLY RECOMMEND ELIMINATING IT FROM THE REGULATIONS.

We never envisioned that unrestricted off-trail travel would be allowed anywhere in the fragile high country, much less within the “Pristine Zones”. I've spoken about this with Charles Morgan, Craig London, and our own Jim Harvey, who has spent nineteen years in the Kern. All are strong supporters of stock use in these Parks, and members of the Back Country Horsemen of California. None had any idea of why the West Kern Plateau should be treated in this anomalous manner, when stock travel in the remainder of the high country in both Parks is restricted to within one-half mile of recognized trails. None had any objection to seeing at least some of the Sierra preserved as much as possible as it was before exploitation by our European culture.

2. Stock “trail” into Crytes Lake. In the last few years, someone has managed to get stock in to the wonderfully pristine meadow below Crytes Lake, 3.5 miles north of Coyote Creek, and, amazingly, to have this route, which has obviously only been traveled a few times, perhaps once a season at most, added to the Park Trail System! The reason give is “This trail needed to offer more golden trout fishing to stock parties.”

Only two or three stock parties camped along the Coyote Creek Trail itself during 1990, all small private parties staying one night en route to somewhere else. There is no reason in the world why this route, which is difficult to follow on the ground, even with rock “ducks” to mark the way, should be officially acknowledged as a Park Trail, other than that it may be some Park employee's favorite fishing spot. I talked to Jim Harvey about it; he says he's never been there, but that Dan Gardner, packer for the Hockett Trail Crew, has taken his family in. Whatever the history may be, this is not a traditional stock use area, and is within the former “Pristine Zone”. PLEASE DELETE IT FROM THE TRAIL SYSTEM.

3. Mineral King Pack Station has apparently been using the beautiful meadow on South Rattlesnake Bench to pasture their stock. A stock “trail” has developed from Rattlesnake Creek to the meadow; it is mud soup in places (see photos) as it follows the small stream draining the meadow up the hillside. I found four horseshoes and a torn packsaddle strap along this route. There is trampling damage in this formerly unspoiled meadow, streambank vegetation is beginning to be torn off, and there are tracks everywhere in the small woodland meadows in the vicinity. Stock has been ridden as far as the saddle overlooking the untouched Laurel Creek area; luckily for Laurel Creek they have not yet found their way across, but nothing in the current regulations is stopping them.

1990 Rock Creek - Scattaregia

Stock Use

Cottonwood Pack Station accounted for the vast majority of stock use in the Rock Creek area with seven all-expense groups that I observed and a few additional all-expense trips that were in while I was out of the area. Cottonwood Pack Station frequently spotted groups into Lower Rock Creek Lake, penned-up Meadow, and the New Army/Siberian Pass trail junction. Due to the fire closure at Lower Soldier Lake, spot trips into that area were infrequent.

Private stock use appeared to have increased from last season. I recorded 18 private trips in Rock Creek this summer, including two llama parties. Rock Creek Pack Station was also through a few times, as was a trip out of the Mineral King Pack Station, and miscellaneous National Park Service use.

One night in mid-August there were more than 66 head of stock grazing between Lower Rock Creek Lake and Lower Rock Creek crossing. It could have easily been higher. I received many backpacker comments about the discrepancy between limiting total numbers of backpackers through trailhead quotas, but not limiting numbers per day or per week of stock for a given area. I feel that this should be addressed, especially if our stock limit per group is raised.

Soil and Moisture

The Lower Rock Creek Lake stringer meadow was not as heavily used this year as Cottonwood Pack Station employees grazed animals primarily in the main meadow. The main meadow showed signs of extremely heavy use and I received numerous complaints about trampling, hoof prints, and copious droppings. Pressure has been temporarily reduced on the stringer, but the main meadow is now being over-used. Manny, a Cottonwood Pack Station employee, agreed to take some all-expense groups down to Nathan's Meadow in July, but it never happened. Only one burro party, one walking mule party, and one llama party, to my knowledge, used the meadow other than Cottonwood Pack Station. It seems inappropriate for one group, especially a commercial pack station, to be inflicting 95% + of the damage in one given area. In a normal or wet year impacts would be significantly greater. As discussed last year, and with Mike Neuman, opening dates in Rock Creek are too early, with Nathan's Meadow being the only area coming close to being ready for grazing by June 20 in a dry year. My suggestions for alleviating pressure on Upper Rock Creek area are the same as last year's: 1) drastically push back opening dates and consider splitting the dates within Rock Creek with Nathan's Meadow opening earlier, 2) enforce the two night limit for grazing in Upper Rock Creek for the entire drainage not just individual forage areas. At the very least, this regulation needs to be clarified. Last season I was under the impression that the stock could only graze two nights total within each forage area per trip. This season I was told that the limit means two consecutive nights before the stock needs to be moved; however, it can return within the same trip after being moved for at least one, and up to two nights (if in the Upper Rock Creek area). The latter interpretation of the regulation does little to limit use. When a group such as Cottonwood Pack Station uses the Upper Rock Creek area almost exclusively, I feel we should be more aggressive in limiting their use, and hence, reducing very real impacts to the meadows.

Grazing is permitted to the outlet of Primrose Lake in Miter Basin. The nearest trees are half mile to the north or southwest; this area is dominated by fragile alpine meadow. Absolutely no suitable stock camps (or backpacker sites for more than 2-4 people) exist in this area. I have taken a 360° panorama of slides to illustrate this point — please note attached slides. The only stock group to

graze Miter Basin this season was a walking burro group. One private party, camped at Penned-Up Meadow, commented that there was no suitable feed above Penned-Up. Dennis Winchester will not take loaded animals beyond Penned-Up due to dangerous trail conditions. He is the only stock user that I'm aware of (except the burro group) that has taken animals above Penned-Up Meadow on a day use basis for the last two years. I propose that we close Miter Basin above Penned-Up Meadow to both overnight and day stock use. The only people benefitting from day use are Cottonwood Pack Station clients; private stock users walk. No one uses the area for overnight use, but it will only take one group to seriously damage the area. There is no defined trail above the small meadow approximately one-quarter mile north of Penned-Up Meadow to contain stock use, so essentially Miter Basin is subject to cross-country stock travel in an extremely fragile area. I receive numerous complaints of stock sign in the basin, some of it from stock users.

1990 Tyndall -Atkinson

As predicted, the opening of Shepherd Pass to pack animals this year flooded the Upper Kern with stock. This summer saw a 157 percent increase in the number of stock in the area over last summer and a 183 percent increase over two summers ago. Of my visitor contacts this summer, 14 percent were stock users compared to six percent last year and four percent in 1988.

Stock use in Milestone Basin was restricted this year to fifteen head per party with a two day limit. This was interpreted by Sierra District, however, to mean that a party could take any number of stock into the basin as long as they grazed only fifteen animals at a time. Thus, exactly the same number of animals grazed in Milestone as would have if it weren't regulated at all; the only difference is that they grazed in shifts. As a result, Milestone suffered even more damage than last year.

To argue whether this damage is permanent or not is beside the point. The point is that these high alpine meadows are easily impacted by stock, and these impacts remain visible for the duration of the summer. Anyone visiting mid- to late-season sees an area that is definitely not "untrammelled wilderness."

The Upper Kern Canyon near the Milestone junction and at the lake just a half-mile north (Mitochondria Lake) received extremely heavy stock use as well. Although the area is somewhat less fragile than Milestone Basin, it is in a narrow canyon with very restricted camping. Stock parties ended up camping over and over at the same small campsites. By the end of the summer, the area looked completely worn out and in much worse condition than ever before.

Once again, I propose that we create stock-free zones by closing several of the high basins in the Kern to all stock use. Without question, Milestone and Wright Lakes Basins are two that should be closed. Milestone has suffered under the heavy hooves of horses and mules long enough; Wright Lakes Basin's meadows are similarly wet and fragile. Backpackers deserve places where they can escape from stock completely if they want.

I also suggest that we take a closer look at our own administrative use of stock. For example, the Kern Trail Crew's use of stock seems to me to be excessive. There is no reason why each crew-person needs a riding horse; on foot they could clean waterbars, rock the trail, and do other light trail maintenance as they travelled. With eleven head of stock, the crew is limited to only certain camps and a lot of time is wasted travelling back and forth to work sites. Without stock, the crew could be much more flexible, camping right at work sites, for example, and thus a lot more productive. This is not an unrealistic idea. Since the trail crew is supplied once a week by

helicopter, it is not tied to stock for basic provisions. The forest service employs backpacking trail crews which, according to a friend of mine who used to be on one, work well. There's no reason why they couldn't work here.

1991 Kern - Gustafson

DRIFT FENCES, GATES AND HITCHRAILS NEEDING REPAIR

The south hitchrail at Lower Funston Meadow needs replanting. Cedar posts would be best.

Posts on the hitchrails in front of Kern R.S. are rotted out at the bottom.

Gate on Rattlesnake Creek Drift Fence #1 needs a new bar.

Gate on Rattlesnake Creek Drift Fence #2 needs a new bar.

Re-tie the cable that holds the High Sierra Gate closed.

The south stock camp at Lower Funston Meadow badly needs a saddle log. We are requiring stock parties to camp in designated sites, and this camp is substandard. FI hitchrail would be helpful too.

Rattlesnake Drift Fence #4 (the upper one) needs to be removed or relocated. It crosses a wet stringer meadow which suffers severe trampling damage as stock drifting upstream pile up against the fence and mill around. It is tacked to trees, missing posts, and much of the wire is old, rusty and loop-spliced. It is not built to Park standards. Stock users complain because a huge boulder blocks most of their string from view when they dismount to open the gate on their way upstream. I recommend that we consider eliminating this fence completely. Both Jim Harvey and I have speculated on where else it might be placed, without coming up with a good answer. The stringer meadow extends for quite a distance up and down the canyon, and any other location would require a much longer fence.

Parts of the long flat meadow (Middle Rattlesnake) between this fence and Drift Fence #3 stay wet throughout the season. In the past it has been heavily used by both commercial and NPS stock. The trail crew no longer use it, staying at Cow Camp, with its abundant forage, instead. Don Bedell, owner of the Mineral King Pack Station, told me he thought the meadow condition was "pitiful" when he saw it a couple of years ago, and said he had told his packers not to use it. Eliminating this fence would end the convenience of a "fenced pasture" and discourage overuse in the future. A possible disadvantage would be to increase grazing on South Rattlesnake Meadow, where stock can be held easily, and on the meadows west of Forester Lake, which are already heavily impacted.

The East River Pasture Drift Fence, along the Park Boundary across the river from Kern R.S., needs some attention. It is about 700 yards long and mostly in good condition. About seven posts are loose or down, and less than 100 yards of wire needs to be replaced. I vowed to fix it this year, but didn't get to it. This boundary fence keeps stock turned loose at Snake Camp off the Henry Brown property.

GRAZING

GENERAL

Grazing by pack and saddle stock is by far the most ecologically damaging practice currently allowed in these Parks. Since we are committed to maintaining this form of recreational use (which I enjoy myself!) as a traditional way of accessing the back country, I propose that we do it in the least damaging way. That means requiring stock users to carry feed and tie up, as is done virtually everywhere in the National Park System where overnight stock use is allowed, with the exception of the Sierra Nevada parks.

This won't be welcomed by stock users, but is the only way I can see to reconcile stock use with our mandate to maintain this wonderful fragment of our original Earth in a condition in which most of the species of plants, mammals, birds, reptiles, amphibians and invertebrate life which live here can survive, as this "island" of natural country becomes increasingly isolated by development and consumptive land use elsewhere.

Even the National Forest Wilderness surrounding these Parks is grazed heavily, not only by recreational livestock, but also by cattle. There needs to be someplace in the Sierra where stock users, like other visitors, practice true MINIMUM IMPACT, "take only photos, leave only footprints", and not seven-inch deep footprints in meadows that many native species depend on for their livelihood.

We need to evaluate our own practices in this respect. It is less expensive to send our Park stock to the backcountry to eat "government grass" (which is really the wildlife's grass), than to feed hay in the front country when they're not needed. Thus, we had eleven head of stock supporting a Kern Trail Crew of two or three men all summer, who were being resupplied weekly by helicopter, a resupply which was intended, when it began in the early 1970s, to cut down on administrative stock use in the back country.

Another problem is that the Park Corrals operation is funded entirely by "rent", so much per month per animal, paid by the other Park Divisions, such as Rangers, Trails, and the Historic Structures Crew. Fewer animals mean less funding for the Corrals, already hard pressed to buy new equipment and maintain a quality operation. Roy Lee Davis is doing a good job under the conditions he has to face, but isn't there a way to fund an ecologically conscientious stock operation in these Parks that doesn't reward unnecessary stock use and punish thoughtful restraint? A good question for the Superintendent!

1991 Le Conte - Hayden

Meadows

I haven't read the Park Service mandate recently; however, it seems to me that it says nothing about Park Service meadows being "range land." The Park Service recognized this when the military drove out the shepherds, and Congress no longer renewed the cattlemen's leases.

Recently, and why it took so long still boggles the mind, the Park Service decided it was natural for willow, cedar, and lodgepole to grow in meadows, and stopped the practice of weeding out these species (see Challenge of the Big Trees, Dilsaver and Tweed, p. 274). This seemed to further deny range-land status to meadows.

Government horses and mules are only second to commercial stock in the arena of impacting meadows.

Meadow Monitoring

Many of us ask when will we start managing the meadows that some say we do now. Presently, we're "in a study"—we're monitoring—and nothing can be done until the project is complete. What about the studies that came before? What about the work of Sharsmith, De Benedite (sp?), McClaren? Was it not good enough — it goes on and on.

What it looks like right now (because of the present power structure) that whatever we learn, it will only affect (management-wise) the "opening dates," one week plus or minus. Reason being: how can everyone do business? Trail crews need to get in with their stock. Commercial packers need to get their clients in. Everyone asks for exceptions and they usually get 'em. As it is right now, backcountry rangers are made out to be the villains 'cause they are holding back

“progress”(?)

What about the mandate to preserve and protect for future generations. Or do we worry about making everyone happy?

Let's get real.

(1) Let's manage, not just study forever.

(2) Let's get an ecologist, not a range specialist. This is a National Park—not a BLM cattle range.

1991 Rock Creek - Malengo

The stock use at Rock Creek is mostly by commercial -packers, with a few private groups also using the area. The problem with stock here comes mainly from Cottonwood's repeated use of the same camp and same stringer meadows at Lower Rock Creek Lake. Cottonwoods trips are usually from three to four days long . With the two day grazing limit it means that I have to check on them for three consecutive days to find them in violation. This is a difficult thing when covering a large patrol area. My guess is that they do violate this often. See case incident#101459-

The solution to this grazing problem is to make Upper Rock Ck. a one night limit, or to make the wet stringer meadows off limits to stock. The people working there seem to be willing to work things out, but Dennis Winchester seems to be the stubborn one. He will get away with whatever he can as long as we let him. Changing these regulations will force him to choose new areas better suited to grazing, i.e. Lower Rock Creek.

Also, use of the Miter Basin should not be allowed for stock. The trail (hikers trail, not maintained) is dangerous for stock and riders. People have been injured there (medivac 1984). An older couple from Independence who rode up there this season says that it is not safe.

See case incident #101459-

1992 Charlotte - Durkee

The small meadows 1/4 mile above the East Vidette drift fence were badly over-grazed by the fall. The grass was cropped down to less than 1/2 inch. I believe this was done mostly by Cedar Grove Pack Station (Onion Valley only had spot trips there, as far as I know). At this camp, stock had been tied less than 50 feet from the creek. In addition there were a number of small downed trees that were sawn up for firewood rounds--rather than just cutting one all the way back, the tops of 5 were used, leaving more stump ends.

I was not there to see or talk to whoever did it. It demonstrates the difficulties involved in enforcing “voluntary” use limits of an area.

The stock users have proposed 11,000 ft. as an acceptable compromise to the fire limit in the Kern. This is ridiculous—it is not a matter of some “offer/counter-offer” quibbling but being changed for a reason: protecting the ancient Foxtail forest and the aesthetic damage done by campfires in that area. The pure Foxtail/Whitebark zone begins at 10,600 ft. That's where the upper fire limit in the Kern should be. The Forest Service has banned campfires entirely in the Foxtail zone.

A handful of exceptions can be made for specific traditional stock sites that have sufficient lodgepole present to burn. I've taken pictures at various elevations in the Kern which show the complete absence of down wood at these elevations and will submit them when they're processed.

1992 Kern - Wood

Total Visitor Contacts: 880

Day hikers: 80
Backpackers: 442
Stock Users: 284
Day riders: 74
Stock Observed: 611

ASSISTANCE TO OTHER AGENCIES

6-14 Backcountry Horsemen on a Forest Service work project could not get two of their stock to go across the bridge. Put them in the pasture overnight.

6-16 Loaned the shoeing tools to Backcountry Horsemen on a Forest Service work project.

ASSISTANCE TO CONCESSIONERS AND COMMERCIAL PACKERS

6-15 Golden Trout Pack Station, helped Kevin McNeil get his pack string across the bridge.

6-16 Same as above.

7-19 Mineral King Pack Station, loaned shoeing tools to Chad Hayward and held horse for him to shoe. Radioed for Tyndall area grazing information. Allowed his stock in the pasture that night since it was dark and he had 4 shoes to redo.

7-17 Golden Trout Pack Station, Let them store grain in two barrels at the station for future trips in the area. (two week period)

8-4 Golden Trout Pack Station, Arranged phone call about barley.

9-2 Mineral King Pack Station, gave Mark Randall tubes and other supplies for a horse with an object stuck in its throat. (The horse was in F. S.) The horse was brought back to the station in the morning by Bob Hayward. It was unable to make it to the Kennedy Pack Station. I kept the horse "Slim" for a few days and then took it out to Mineral King.

9-6 to 9-7 Mineral King Pack Station, I took the sick horse, Slim, out to Mineral King. On the way out over Franklin Pass, I found a stack of gear in middle Rattlesnake that belonged to the Mineral King Pack Station. I had Sierra Dist. call the MK Pack Station to see if they had plans to get the gear out or if I should bring it out. I packed it out on their horse to Mineral King. (2 pack saddles, 2 matties, 3 lash ropes, 4 canvas slings and 4 saddle pads)

9-28 Golden Trout Pack Station, I helped Kevin McNeil get his pack string across the suspension bridge.

1992 Little Five - Suk

Grazing

Little Five Lakes. The sensitive stringer meadow SE of the ranger station has been closed to grazing since 1978. The problem continues to be: horses and mules can't read, and stock released to graze anywhere in the Little Five area rapidly drift into the supposedly "closed" area, causing hoofprint impacts (see case/incident no.s 200835, 200836, 201491).

Big Five Lakes. The sensitive meadow and streambank areas at the inlet of Big Five #4 are experiencing accelerated erosion due to continued hoofprint impacts. The opening dates listed in the draft wilderness plan will be insufficient to allow this area to heal. (See my memo to Sierra District Ranger dated Aug. '92, case/incident no. 200842, and my 1991 annual report, for photos and detailed discussion.)

Recommendation: prohibit grazing at Big Five Lakes.

1992 Rock Creek - Malengo

No major problems occurred this summer; except the **regular extensive meadow damage** at Lower

Rock Creek Lake and surrounding stringer meadows due to the presence of Cottonwood pack stations repeated use of these meadows. Dennis Winchester is not interested in taking trips to the lower meadows where grazing is better, where less meadow damage would occur. He will not change this practice unless the park makes some new restrictions in this area.

I recommend making the Lower Rock Creek area a one night twelve head limit, This will make Cottonwood go elsewhere or bring feed. These high elevation meadows are too fragile for the heavy use they have been getting the past several years. Mike Neuman thinks that a maximum number of stock nights per season will work but I disagree because I do not feel that Cottonwood would be truthful in reporting use, thus making this an inaccurate system.

One citation was issued to Cottonwood this season for grazing before opening date. Last year we had the same problem with Cottonwood. Another problem in this area is stock use in the Miter Basin. The trail is very unsafe for stock users. There is one spot in particular where animals have to "lunge"(packers words) over rocks and it is very unsafe. The packers now detour around another spot farther up, using the other side of the creek, thus making a second trail and causing a lot more resource damage.

Stock should not be allowed above Pinned Up meadow and should only be allowed up this far if the trail is maintained. More trails is not the parks present philosophy so really stock should not be allowed above Lower Rock Creek Lake. All portions of this trail are badly eroded due to heavy stock use and also unsafe!

I do not understand how the park is so strict on general regulations but allows this unchecked commercial use. This double standard is not in the best interest of our park. It does not take a scientist to see that this is mis-use of our resources, it is visible to almost any layman. Jody Winchester says that "we get our water above where the stream comes into the meadow because of the manure in the water", well how about the rest of us down stream who drink the water. The area I speak of is so trampled and abused that it is embarrassing to whoever is the ranger here.

1993 Charlotte - Durkee

The Homelite XL Chainsaw from Rock Creek is at Tyndall. It needs a new chain for a 2 ft. bar. Saw gas and a little bar oil is also there. Make sure someone is in charge of cutting winter fire wood when trail crew comes through. Better yet, it's probably time to start using presto logs there or flying wood in. There's too many stumps in the area and the trail crew has a habit of cutting down standing Foxtail snags for wood.

I don't know if dispersing stock use is still being considered as a solution to perceived overgrazing but, after thinking about it over the summer, I strongly oppose this. It is much better to "sacrifice" a given area (short of critical resource damage) than to spread this damage to pristine or unused areas. Dispersing stock use means more areas aesthetically damaged from grazing and new stock camps. There's a major difference between what might be acceptable when considering only remaining biomass and what is just plain outrageously ugly after even just a few head of stock have savaged an area.

The biomass monitoring as presently designed does not seriously address the problem of esthetics: loss of flowering heads in fall grasses (certainly a desired goal that has NEVER been addressed under any stock plan or monitoring program in the last 17 years); mechanical damage from hoofs breaking sod, scuffing and rolling in camp and on meadows etc.; and the stink of horse piss and manure in camps and meadows. Even one stock party in a new camp effectively destroys that site and, likely, the nearby meadow for the season. As long as we take into account only meadow

species grazed by stock and use only range management principles in meadow management, we are still looking at National Park meadows as pastures rather than the complex ecological and aesthetically critical areas that they are.

1993 Kern - Wood

ASSISTANCE TO CONCESSIONERS AND COMMERCIAL PACKERS

6-24 Golden Trout Pack Station-helped Packers Sonny Ward and Kenny James get their pack strings across the bridge and to locate the camp on private land.

7-1 Golden Trout Pack Station. Loaned shoeing tools.

7-10 Golden Trout Pack Station- Loaned shoeing tools and held horse for shoeing.

7-11 Same as above and loaned a shoe. It was replaced later

7-12 Golden Trout Pack Station . Returned 17 head of stock to F-S- camp which were "lost" and standing in the Station Yard.

9-12 Golden Trout Pack Station. Loaned halter. It was returned,

9-16 Golden Trout Pack Station. stored Barley at R-S. for Sorarsis trip. helped pack stock.

9-30 Golden Trout Pack Station. Helped reload mule

10-5 Mineral King Pack Station . Don Bedell and Packer Dave arrived after dark off Coyote trail. They stayed at the R-S. and allowed 1 night in pasture.

1993 Rock Creek - Malengo

Stock Use

The biggest stock users in this area is Cottonwood pack outfit.

The biggest area of use is the stringer meadows behind Rock Creek Lake. This area has been a problem for a decade now. Cottonwood refers to it as "Our all expense camp" and that about says it.

The problems with this camp are several:

1/ Too many years of trampling and manure (4" deep over big area) in the tie-up area.

2/ Camp is too close to water.

3/ Meadows are too fragile and wet and easily imprinted.

4/ Repeated use with no break all summer and no creativity on the packer's part about camp selection. Camp is overused.

5/ Winchester give-a-damn attitude about the park (which he openly expressed at our beginning of the season meeting.).

After rechecking the camp and cleaning up there yesterday I decided that it cannot take any more abuse, Meadow adjacent to camp is heavily imprinted (see photos), and water is only 50 feet from where their kitchen is, with all its soaps, chlorine, etc. Also I discovered many feces within 50 feet of water.

My solution or recommendation will be to close this camp for the future and tell Winchester that he will have to use his alternate camp, only about 200 feet away or go to another area. Enough is enough!

1994 Crabtree - Malengo

The trail crew had by far the most stock nights of anyone.

Upper Crabtree and Lower Crabtree did not get over-grazed but Lower Whitney Creek, Nathan's, and Tyndall certainly did. One of the problems with the trail crew stock is that they just stand

around and graze all week. I feel that (and so does Ray, the packer) they should be packing out to resupply the crew in between moves and this would save the meadows and lessen their helicopter expense.

1994 McClure - Durkee

RECOMMENDATIONS

This year I've pulled about 10 previous year end reports for the McClure area and did a literature review. Hard as it is to believe, each year shows some of the SAME recommendations for the area. It should be noted that 2 of us (Morgenson and myself) have each spent over a cumulative year (Randy 2 years!) in that area. There is one recommendation that stands out year after year (since Graban in 1977):

1) CLOSE MCCLURE MEADOW TO STOCK USE! (Graban, Gustafson, Durkee, Brennan, Scatteregia, Morgenson). "McClure Meadow is one of the most unique examples of an alpine meadow in the Sierra. Even after twenty years of fairly strict grazing regulations, it still shows much evidence of poor recovery... in the summer heat--even a week after a stock party leaves--the entire meadow smells like a corral. [this] is a major source of complaints by hikers." Durkee, 1981

The National Park Service seems embarrassed to make management recommendations based on esthetic grounds. Park visitors have an absolute right to view meadows in all stages of maturation: from the first green shoots to the "knee-high grasses, ripe and open panicles drifting on the moving air, luminous-bronze in the backlight." (Morgenson, 1989). They do not get this moving experience if the meadow has been browsed to putting green length and smells like a corral.

At the same time, it would probably be acceptable to increase the allowable grazing above Colby Meadow (in consultation with the meadow specialist) to 2-3 days.

2) Get rid of the old Soil and Moisture check dams (circa 1960) from McClure & Colby Meadows (Durkee & Morgenson).

3) Limit cross country travel to group size maximum of 6-8 (Durkee, Scattaregia, Morgenson).

The Ionian Basin has become a major destination by Sierra Club groups (4 trips), Scouts and private hiking clubs. There are not more than 3 camping spots in the entire basin and none can sleep more than 4 people without damage to vegetation.

1995 Hockett - Stowell

HOCKETT TRAIL CREW: Projects and Assists

The trail crew came into the Hockett on August 11th and left on September 12, They rebuilt many hitch rails that were broken by snow. Thanks to trail crew Lorenzo for fixing the visitors hitchrail by the station and cutting me firewood rounds, As a stock crew, they need a full time packer or someone in charge of caring for the stock. The administrative pasture can not handle that many head for an extended period, At the end of August, although the crews daily animals(6) were in the pasture all week, when the packer came in overnight all his and their stock was put out in Hockett Meadow to graze, Even with this plan the grass was very low in the fall and I often put my ranger stock out to graze in the open pasture. If a packer were on site then their animals should always graze the meadow and only stay in the night before a pack trip. The packer should also be willing to repair the fences that his stock tears down and care and doctor his stock and not rely on the ranger to do his work for him. A big Thanks to Kern Packer Ray for riding into the Hockett and helping with the injured trail crew horse and three days of fence building and repairs. We

were able to replace 36 fence posts. Thanks to Leroy for flying in 45 fence posts, rolls of wire and for the new Echo chainsaw and fuel.

1995 Le Conte - Morgenson

The meadows were extraordinarily beautiful because they weren't grazed. The grasses grew up waist high in places; tall, dense, and gorgeous. Trail crew people also commented on how unusually beautiful the meadows were. Its too bad we can't recognize and encourage this in our management policies. Surely we can find ways to let these meadows grow and flower in their natural ways, without precluding stock users rights to be here. Working with the stock users to achieve a little better protection the mtn meadows would improve our stewardship.

1996 Charlotte - Lyness

The real problem when it's busy is not the NUMBER of parties, but the SIZE of parties. All it takes is one large group to make the lake seem very busy. If a large party spends an extra night at the lake and then two more big groups come in, it's a nightmare. A large and extremely vocal group (okay, they shrieked nonstop the entire time they were here) was packed in to Charlotte (complete with full bar) for a 3-night stay. It was crazy busy that whole time. Although this may have been an isolated incident, it would be disastrous if Charlotte became a destination spot for large stock-supported groups.

1996 Crabtree - Malengo

Heavy stock damage occurred in Upper Crabtree meadow due to the large number of late groups coming through. Rock Creek Pack Station had several, Cottonwood a few and the NPS added to this from use incurred by the maintenance staff trip, 19 head X 2 nights.

1996 Le Conte - Durkee

RECOMMENDATIONS

The recommendations included in all of our year-end reports could get a bit overwhelming--as well as repetitive. I'd suggest that you choose, say, 3 important issues/recommendations from all our reports and put energy into accomplishing them. **I can't think of a single specific recommendation we've made in the last 15 years that's been acted on.** This leads to a certain cynicism.

Close McClure to grazing as a memorial to Randy. I'm quite serious about this. Randy Coffman and Rob already talked this over and RC wasn't too keen on it. Debbie Bird won't even discuss it. I firmly believe it's the only meaningful act we can do to honor someone who worked here 30 years without the least bit of official recognition from the park. Randy worked at McClure for 8 seasons. In EVERY ONE of his year end reports, he recommended closing it to stock use (see my separate, attached report on grazing recommendations as requested by RC last year).

1996 Pear Lake - Weisenberger

Stock Use

Refer to the Stock regs sheet and 36 CFR. There was approximately five times the usage this year as last. With only 20 or so stock visits, there has been a significant amount of damage to the trail. Among the worst of the problems were: 1. Waterbars being ripped out 2. Cutting the trails
Emerald Lake basin saw the most damage with the trail on either side of it having many rock

waterbars completely ripped out leaving loose rock strewn along the trail. Just north of Panther Gap, there is an area that I have rehabbed over and over and it continually was cut by stock. They would just go around the rehabbed area. The first half mile of the Lakes trail was also impossible to maintain. Stock cut the area up so much it was difficult to tell where the real trail was.

1996 Rae Lakes - Sanger

Stock Issues

Impact per visitor

Horse and Mules provide an alternate means for people to access and enjoy the wilderness.

However, it is typical that the impact on the wilderness will be far more, for a given party size, when that party uses a stock string. In addition, the use of stock can diminish the enjoyment of the wilderness for many other people.

Llama parties also pass through the area, and their impact seems far less. In addition, the experience of other visitors does not seem significantly diminished. I witnessed a backpacker's tent go up on the same spot that four llamas spent the previous night. The packer had shoveled away the manure, and the backpacker didn't seem any the wiser.

Any visitor is going to make an impact. But what happens when a party has more of an impact using stock than one ten times its size that doesn't use stock? I was very pleased to see a grandfather and his grandson able to enjoy 60 Lakes basin together. They had been dropped by a stock string which then stayed in the basin for four days. However, the damage that that visit caused far exceeded the damage done by an entire season's worth of backpackers (new dust baths, deep imprints in sphagnum moss, manure in the lakes, trampling of frog habitat, etc).

The stock capacity of Cotter meadow is stated to be 53 stock nights. That in Fjord meadow is 3 stock nights. The two meadows are within 100 yards of each other. How can I close one and not the other? How do I recommend to stock users how to keep their stock in one area and not the other?

As a side note, Fjord meadow was used more than 3 stock nights. I specifically looked in the information I had as to what the limit was, but my information was dated. Charlie Schelz provided up to date info during training, but I must have failed to collect all the data he provided during training.

I would like to call into question the 892 stock night capacity of Twin Lakes meadow. I believe this kind of use would decimate the area.

Randy Morgenson had some very good points about grazing that I wish to repeat here, as a matter of record. He expressed concern about our conducting residual biomass measurements, pointing out that these are essentially range management techniques. He noted that we are not in the feed business, that a meadow's aesthetic appeal is, in fact, our heritage. He referenced quotes by Lewis and Clark, who were overwhelmed by the beauty of the new lands. We must keep site [*sic*] of the fact that it isn't only the ecology of meadows that NPS should be striving to protect. It has long been noted that that beauty is in the eye of the beholder. In this, a democracy, perhaps a vote by the users, settled by majority, could be used to determine a limit to what is considered acceptable stock diminishment of a given meadow.

@Map = 1997 Rock Creek Malengo

[T]he Rock Creek Lake stringer meadow, from only two or three large groups using this meadow (Cottonwood's traveling trip and NPS military/staff) showed heavy impacts. This should be looked at by our meadow research person. As in years past, because of the wetness of these

stringer meadows, severe mechanical impacts are more than what should be allowed. I suggest closing these meadows to grazing (stringers). The broken sod, holes and uneven ground, which are obviously caused from grazing, should not be allowed.

1997 Bench - Edens

On Friday August 22, 1997 the Rock Creek Pack Station brought in two groups of stock located at Bench Lake Ranger Station and the first lake southwest of Bench Station. A total of 28 stock at an elevation of 10,800 feet and higher. All stock congregated at station first night. The second day 16 stock were taken over Taboose Pass for re-supply while the other 12 head of stock was taken to Bench Lake. Stock removed to Bench Lake returned to ranger station. The third night the 16 head of stock returned to station and the other 12 head of stock joined them.

Damage sustained to lake and meadow was substantial. I first tried to measure damage, but realized that damage was too widespread. Lake in front of station sustained damage full length of west shore and half length of north shore.

Second stock camp above ranger station sustained damage on the northwest and west lake shore. Lake shores in these areas are undercut and caved in by weight of stock.

Packers have stated that the Bench Lake Ranger Station and areas above offer poor grazing and realize that this area is fragile. When privileges are taken away from them, a natural reaction is to fight back. I feel a compromise is in order even though the damage that occurred is un-repairable. I propose that the Bench Station and areas above be limited to spot trips or limit stock groups to 5 or less. Larger stock groups can use the meadows above Bench Lake, and the South Fork of the Kings River where grazing is best. [See 1998 Bench.]

1997 Crabtree - Pilewski

Stock use was up this season at Crabtree. The weekend of August 15 saw several large stock groups as well as small private groups camped at Crabtree. There were over 60 pack animals each night for the entire weekend. Events like this are a good argument against the self-issuing of permits by commercial packers. Stock users (commercial and private) should be included in all trailhead quotas.

1997 Kern - Wood

No work was done in the "Bog" area, 1-1/2 mile North of Upper Funston Meadow, to improve the muddy bypass or to divert or drain water from the area. A few stock parties made it through the area in June, but it was closed after the trail crew took their stock through it on their way to Rattlesnake Canyon.

I figured the area would need 3 days to a week to dry out and be passable to stock. Unfortunately the trail crew took all their stock through the area 2 days later. They got their stock through, but they destroyed the area and it had to be closed until August 1st. They camped at the Hot Spring overnight, but did no work at the Bog and headed to Tyndall leaving behind a problem and closed trail.

1997 Le Conte - Durkee

Something has to be done about grazing use in the LeConte Canyon, especially at Big Pete Meadow. Big Pete was absolutely trashed this year. By October, the grasses in the southeast corner of the meadow (approx. 1 acre) were cropped to ground level; the sedge/grass in the

southwest corner were cropped to about 3 inches. This is an outrage and can't be allowed to continue. The area looked like a pasture. The 2 associated camps were thick with dust and bits of manure. Rob Hayden had also looked at the area and said it's the worse he's ever seen it as well. The really bad news is: it was completely legal—no regulations were broken by the packers. There is STILL no limit on use nights. This meadow is, essentially, a wetland; it is NEVER dry enough to graze, yet we continue to allow grazing. It is likely that the estimate for stock use nights allowed (which is not enforceable anyway) is based on the acreage of the entire meadow. Because of trees downed by avalanche, only about 3 (?) acres (perhaps 1% of the whole meadow) are actually accessible by stock. A coordinated grazing plan for the entire drainage has to be worked out with Sylvia. If we start limiting Big Pete, the stock will just move to Little Pete, Ladder and Grouse.

Grouse meadow was also heavily grazed—unacceptably so, especially at the southern end. Most of this was by trail crew stock. Mark Berry, the packer, suggested that if he made 2 resupply trips per week (instead of the one he did this year) he'd spend fewer nights there. This would also mean fewer helicopter trips. To ease grazing pressure on Grouse, this would be worth looking into with Jerry.

Recommendations:

1. Better training for permit issuers and USFS personnel on the east side. Incorrect information was given out this year on dogs permitted in Park; geography & food storage. A spring training session with NPS personnel can be done in combination with:
2. A training session for permittee packers & stations. More violations were seen this year than in any previous year: Morgan's station—packer left garbage; Draves was going to camp with stock at Dusy and go in to Rainbow Lakes until I told him it was illegal (clearly spelled out regulations, which he apparently didn't read...). Rainbow also packed a party with a dog into Dusy (2nd hand information...); Three Corner Round (burros) did not check opening dates & where they could camp (even though this stuff is sent to them every year). Rob Hayden met them and turned them around. Alden talked to the owner late this year and said it was clear he was absolutely clueless on the reason the group was turned around; Craig London's group camped at upper Palisade Lake and built a fire and dug a latrine on meadow sod (but I can't prove it...) Also, because there was no practical choice, all 28 head on those two trips had to camp there. As such, I also recommend that "combined" trips not be allowed. Limited stock camps make it extremely difficult to have 2 trips from one pack station running parallel without camping together.

It also seemed this year that a number of packers were actually hostile to rangers (though not owners—Draves & Morgan were friendly). Over the years, I'm getting pretty tired of this sort of thing. We go out of our way to help these people; we cite far more backpackers than stock users (partially that's because it's easier to try to work with them, but I'll also cheerfully admit that I feel no confidence whatsoever the Administration is going to support me if I do cite one...) yet we're still seen as the enemy. Don't know what we can do about this one, but it gets tiresome. Three Corner Round is back in action and assumes we've forgotten about them. REQUIRE them to submit summer's trip itinerary to Ralph to be reviewed by area b/c rangers well before trip. They travel with up to a dozen burros and have a long history (since the 40s) of violating regulations: fires above limits; building & leveling camps; building trails; especially cross-country travel. I issued 7 citations in 1984, Alden 2 and Ralph Kumano 2. They are steeped in their own traditions and have made no effort to change to minimum impact practices. The last few years, they've required 3 medivacs—2 very serious. Warn them that if they have one more violation,

we'll revoke their commercial use permit.

NOTE: Should add at this point<197>or reference<197>an additional pdf file: 1997LeConteDrift FenceDurkee.

1997 Little Five - Jostad

Stock—55 animals including pack and saddle and llamas. Stock users were primarily commercial (Mineral King Pack Station). Commercial 60%, Administrative 30%, Private 10%. Additionally, I received reports and saw evidence of roughly 50 more animals using the patrol area.

TRANSPORTS—Nick, the Kern Trail Crew horse packer, was transported to Ash Mountain for broken ribs. [COMMENT: One would like to know what happened. Fell off horse? Kicked by horse or mule?]

STOCK USE—Stock use continues to be concentrated at Forester Lake and Long Lake. There is a new concessionaire, Jerry and Dana Page, running the Mineral King and Wolverton Pack Stations. . . . Relations with the new packers are good, however they have ideas about running their operation which are in conflict with our mission of managing wilderness. (A permanent camp with showers, tents, cook ... set up between the two pack stations, burying barrels for food storage at favorite camps.)

1997 McClure - Hayden

Meadow Monitoring

This seems like a good time (since we have a new meadow monitor) to paraphrase some of Randy Morgenson's observations from his McClure End of Season Reports. He felt the program did not address the following resource issues:

—deep hoof prints—urine kill of grass—urine and manure in water—manure piles in the meadows—trails in the meadows—scuffed/torn up sod—roll pits—severely impacted areas where the animals were tied up

* An enormous sum of money has been spent, since the '60s, rerouting the trails out of the Evolution Basin and Valley meadows, however they are not recovering, in part because hundreds of stock run up and down those old trails all summer and fall. They may never have a chance to come back / grow back / rehabilitate if this continues.

Three Corner Round Burro Group

Three Corner Round needs tutoring again. They need to “go through” this park, rather than Inyo, for their permit and stock regulations info, including opening dates. They need to go over their trip plans with a subdistrict or district ranger, as they routinely disregard many NPS regulations. Here's an example for this year (from the station log-book):

July 9

Three Corner Round shows up in late afternoon, with 15 burros and 13 folks, “unaware” of the stock regulations and conditions, namely (approximately) eight miles of snow from Evolution Lake to LeConte Canyon. They are headed for Darwin Lakes/Canyon — which is closed to stock. The night of July 8 they had camped in Upper Goddard Canyon (>1 mile above the Hell For Sure Pass jct.) In the area closed to stock and had an illegal fire. Many (in fact, most) of their planned future camps are further than 1/2 mile off a maintained trail (which would make them illegal in this part of Kings, as well as LeConte, Bench, and Upper Woods Cr. Areas) — also, they have failed to check the meadow opening dates for these areas, 7/15 and 8/1 for Palisade Lakes and Upper Basin. They have the paperwork and permits. They have been an organized group since

1919. They have been dealing with NPS regulations since 1940—why can they not get it right? They also wanted to camp at McGee Lakes, which is also closed to stock.

1998 Bench - Edens

The damage caused by last years stock group that camped in the Bench station area is still highly visible. Grazing is poor in the Bench Station area and the lakes above the station have a delicate eco-system. I propose that the Bench Station area and the lakes above it be limited to stock trips, or stock groups less than five with a one night limit.

1998 Kern - Wood

[NOTE: the following is a list of the materials on hand to service stock animals.]

Kern Ranger Station: Tack Room Inventory:

- 3 Bags of Rolled Oats
- 1/2 Bag of Alfalfa Pellets
- 1/2 Block of Mineral Salt (50 lb.)
- 2 Blocks of White Salt (50 lb.)
- 1 Mineral Camp Salt (10 lb.)
- 1 Shoeing Kit with new tools - 1998
- 2 Shoeing Chaps
- 1 Anvil
- 1 New, Extra Hoof Rasp
- 5 00 Shoes
- 3 0 Shoes
- 2 1 Shoes
- 5 2 Shoes
- 2 Old Cinches
- 3 Old Halters
- 1 Bridle with Nylon Reins
- 1 Set of Bridge Boxes
- 4 Sets of Dirt Boxes (some have bad ears)
- Rivets & Burrs, snaps, buckles, rings & conways
- 2 Strips of Repair Leather
- 2 Old Saddle Pads
- 1 Easy Boot (size I)
- 1 Gall Salve
- 1 Nitrofurazone Dressing
- 1 Clear Eyes
- 1 Corona
- 1 Wonder Dust
- 1 Caustic Powder
- 1 Pint of Surgical Scrub
- 8 Butte Tablets
- 1 Veterinary Liniment (old)
- 2 Blue Lotion Spray
- 3 Pints of Hydrogen Peroxide

2 Roll-on Fly Repellent

1 Fly Repellent Base

4x4 Pads, Needles - size 28, 4 Large Syringes, 10 Small Syringes, 1 Vet Wrap, 1 Stretch Gauze wrap.

2 Tubes of Banamine, 1 Tube of Phenylzone and 2 Bactoscrub-surgical scrub sponge-brush.

2 Bottles of Penicillin are in the Ranger Station First Aid Cabinet

Horse First Aid Kit Includes:

1 Bactoscrub-Surgical Scrub Sponge-Brush, 1 Vet Wrap, 1 Blue Lotion Spray, 1 Wonder Dust, 1 Clear Eyes, 4x4 Pads and 1 Roll-On Fly Wipe.

1999 Charlotte - Durkee

Meadows & Stock Use

Stock use was about average this year though, as always, localized concentration of that use caused serious damage at two meadows: East Lake and Upper Vidette. Vidette was probably pushed over its carrying capacity during a 2 week period when about 40 to 60 head used it for 2 to 3 nights. When Bob Meadows and I went there to do the Biomass transect, we found it in unacceptable condition and requested it be closed to stock use for the remainder of the season, which was done. I have never seen a meadow in worse shape. The problem is that the packers who used it did nothing prohibited by regulations. I failed to keep a close enough eye on it because I thought the two large stock groups were camping elsewhere.

1999 McClure - Gordon

BRIDGES

A log rail and support post on the Goddard Junction bridge were broken by a mule in late August. The logs were replaced by a trail crew in early September.

As many former McClure Meadow Rangers have suggested, if McClure Meadow were closed to grazing, visitors would be able to enjoy a totally natural stock-free, grazing-free, manure-free sub-alpine meadow in the Park. (I feel that big Wet Meadow in the Roaring River patrol area should also be closed to grazing for the same reason.

1999 Roaring River

VISITOR USE

Compliance was fairly good this season. When I was aware of violations, I felt I could gain compliance by educating the people in violation more effectively than I could by citing them.

There were two cases when I found out about fairly blatant violations after the violators had left the backcountry. Both occurred in Lower Ranger Meadow and the violators were stock users. One was a food storage violation. I received a note on August 21st that said a bear had gotten Teresa Bressoud's food, and she was out to Horse Corral. Later I talked with visitors who reported that they had talked with Mrs. Bressoud and she said her food was on the ground covered by a tarp, and she had left it there for the day while she went day hiking. The bears got three to four days worth of food including a cool bag containing meat. The second violation was a messy camp where it was apparent horses had been left tied to trees, a lot of small trash was scattered around, the metal was not removed from the ashes in the firepit, and a tarp had probably been pitched over the meadow. I believe that Jacob Hamstra's party were the violators in this case, but cannot prove it.

1999 Rock Creek - Verkouille

Stock: If Rock Creek Lake stringer and lake meadows are closed I predict Pinned Up meadow will get hammered hard and flat by CPS. The old concerns about the safety and resource damage of stock use in the Miter Basin remain valid. My recommendation is that CPS be barred from the Miter but private stock use be allowed, as the area can withstand occasional use, but not the careless and constant use CPS favors. Alternatively a small number of stock nights could be granted, but continued spot packing must be closely monitored as the trail up the basin continues to deteriorate.

Administrative stock use was limited to the park and military trip, and the trail crew. The administrative trip raised the question of impact by staying at meadows that had other large stock parties present. This occurred on their way in at Nathan's meadow where the combined presence of a Rock Creek Pack station party and the NPS party resulted in 35 horses and mules at Nathan's simultaneously. It occurred on the way out at Rock Creek Lake where CPS had a large stock party at Hidden Camp (the Rock Creek Lake Stringer meadow) when the park group stayed at the west end of the lake. Additionally the NPS horses wandered down to the closed drift fence meadow. The **trail crew stock** wandered into the closed meadow behind the Rock Creek patrol cabin repeatedly. Also considerable time was necessary to clean and rehabilitate the trail crew camp by the Lower Crossing.

Vegetation concerns centered around Rock Creek Lake Stringer meadow where repeated use by CPS has resulted in a golf green look intersected with hoof damage, stream bank cutting, erosion and general mayhem. It is to be hoped that this meadow will be given a rest from CPS. The trail crew camp resulted in a definite trail continuing west past the Lower Crossing, which confused at least one group of hikers. If trail crew camps can be rotated year to year within their base-camp range it would allow these areas to rest and recuperate somewhat.

The principal camp areas and needs reflect the use patterns of two major groups: Mt. Whitney bound hikers and stock users. Many of the larger groups bound for Whitney seem to have little experience in backcountry travel, and need friendly advice on simple camp matters. The resource impacts center on trash, both in fire pits and toilet paper not quite hidden behind convenient trees and rocks. Fire pits also crop up willy-nilly and must be eradicated early and often. Stock groups have greater impacts because of the nature of horses and mules, but the only area I find hammered beyond common sense is the Rock Creek Lake Stringer Hidden Camp of CPS. Spot trip groups are the most troublesome and seem to combine the worse aspects of both hikers and equestrians. Since most of these groups are brought in by CPS for fishing they settle around Rock Creek Lake and occasionally Pinned Up meadow or Lower Soldier Lake. The resource issues here are greater quantities of trash and fires that leave logs half charred lying about. Nothing drastic, but constantly a hassle. Although I cannot call them belligerent these groups do seem to be the thickest skulled individuals the ranger has encountered. Patience and a large trash bag seem to be the best solution.

1999 Tyndall - Malengo

Stock use was quite heavy at Tyndall Creek meadow due to Shepherds Pass opening early. The NPS trail crew had 96 stock nights, Rock Creek Pack Station had 240 stock nights and Sequoia-Kings Pack Station visited three times. The meadows down near the shepherds cabin were hit quite hard. Near the ranger station, trail crew stock showed noticeable impact, near their camp and

in the meadow near the upper crossing.

2000 Charlotte - Durkee

The upper Vidette meadow (approx. ½ mile above the lower Vidette drift fence), is receiving more stock use than that small meadow is capable of sustaining. This is resulting in serious propagation of stock trails near the river, stream bank erosion, “roll” pits, trail erosion and mechanical (hoofprint) damage to a nearby Sphagnum meadow. Photos and documentation are on file with Sylvia Haultain.

We should work out a plan in consultation with Sylvia to temporarily close this meadow to allow for recovery. I suspect, at the very least, this meadow needs a 3 to 5 year rest period to recover from damage as a result of this overuse. Following recovery, we would then set a carrying capacity appropriate to the area. In the meantime, stock can use the meadows beginning ½ mile above it without any inconvenience.

We need to look seriously at our drift fence policy. With the increasing and successful use of electric fences, I believe it’s possible to remove a number of fences that exist only to prevent stock from drifting too far from packer’s camps—which is possibly with as many as 80% of all fences in Kings Canyon. Current Wilderness Management plan says that fences will not be maintained only for the convenience of packers, but to protect areas from resource damage. Few of these fences protect park resources.

Someone put the Charlotte Meadow fence back up last fall after I’d taken it down for the season and did not drop it when they left. As a result, it had extensive damage after being up all winter. It will require probably 2 to 3 days of work by the trail crew next season—cutting new posts (approx. 20); fixing the gate (now rotted & collapsed); removing fence attachments from living trees (approx 15); and stringing new sections of wire. It also appears that a stock group camped at Kearsarge Lake last Fall after I left, though damage was minimal.

2000 McClure - Gordon

Based on the significant impact damage sustained, in spite of a one month delay in opening and only about 50 stock-nights use, it is my recommendation that Darwin Meadow be closed to grazing and the hitchrail removed. Parties needing to travel over Muir Pass the next day or either camp at Colby Meadow (2 miles further) or one of the pocket meadows between.

2000 Pear Lake -Waldschmidt

LARGE GROUPS:

Once again I would like to express my concerns regarding large groups. I think it is very important to reduce the maximum group size from 15 people to somewhere around 6-8 people. This is especially a concern when it comes to cross-country travel. When groups become larger than about 6 people they tend to make more noise, which can be bothersome to other users. The amount of resource damage, especially in low visitation areas is increased. I hope this problem is not overlooked in the new Wilderness Plan.

Some type of violation occurred with almost every large group I came across again this year. They often chose poor campsite locations in order to all stay together, and frequently litter was left behind. This especially holds true for youth groups that usually do not have enough leaders to keep the group under control.

2000 Sierra Crest - Brenchley

MCCLURE AREA:

McClure, Colby and Darwin meadows were too wet to open on the "normal" year schedule. This has consistently been the case for the past few years. Opening dates should be adjusted accordingly. Darwin meadow was opened a month later than its "normal" July 15 opening. Even in mid-August the east end of the meadow was fairly wet. Use was discouraged which reduced use to less than 50 stock nights. Still the meadow received damage. Further action is needed to protect this resource.

CHARLOTTE LAKE AREA:

Upper Vidette meadow looks like a playground for stock instead of a natural meadow. There are numerous stock trails, vegetation damage, roll pits, stream bank erosion, and mechanical (hoof print) damage to a Sphagnum meadow. Action needs to be taken to prevent fix the damage. Possibilities include closing the meadow for a few years to allow it to recover or to strictly limit stock use.

The East Lake stock camp has damage to trees, a surprising lack of ground vegetation, and piles of manure near any tree small enough to get a rope around. The grazing meadow (a quarter mile upstream from the lake) has erosion and vegetation damage. The area also needs action to limit future damage.

Junction Meadow is another heavily used stock site. The experience of traveling through this area is much like crossing a well used pasture complete with gate and fence. This was the first Sierra meadow I visited. My visions of knee deep flowers, grasses and sedges were disappointedly replaced by the reality of inch tall grass with manure piles.

2001 Bench - Kenan

When I was not in the area, a stock party camped at Bench Lake and kept their stock on the west shore of the lake. (see photo) There was significant impact from the stock being basically "pinned" in this area for one or two nights. The stock waded into the lake, as I could see the stock tracks out in the lake and the stock left deep hoof prints in the soft meadow grasses along the shore of the lake.

Also, manure was found in the inlet stream that feeds Bench Lake, which resulted in contaminating the water source.

Recommendation: Bench Lake is one of the premier lakes in Kings Canyon backcountry. It is totally inappropriate to allow stock to graze along the shore of this lake as evidenced this summer. Some packers respect this area and camp elsewhere while others don't. Bench Lake should be immediately closed to stock grazing to prevent this type of damaging impact from occurring again. There are plenty of other places for stock to be kept in this area other than the shore of Bench Lake.

Stock Management

It is time that we take a close look at stock use in Kings Canyon backcountry, as significant changes are needed to protect the most fragile areas... the high elevation lake basins. Currently, along the Muir Trail some of the lake basins are closed to grazing. This was done for the obvious reason that the impact got so heavy and devastating that the closure was made. What is the cause of the incredible amount of algae slime that is growing in Rae Lakes. These lakes are literally infested with an algae growing in the lakes. It is not an algae that is growing on the rocks on the bottom of the lakes, but a unique form of slimy algae that grows thick in the water. Has the cause

of this ever been studied? No other high country lake that I've ever seen has algae slime like Rae Lakes. Certainly, a common sense observation would be that it is a result of fecal bacteria contaminating the water source - human and stock. Unfortunately, the closure of Rae Lakes to stock grazing was made too late. The algae slime in this lake is irreversible and may continue to get worse.

Accordingly, at the confluence of the Middle Fork and the South Fork of the Kings a good example of algae in the water and the water quality can be made. The South Fork is really slimy with lot's of algae on the rocks. The Middle Fork, a relatively pure water source, does not have this type of slimy growth on the rocks. Obviously, the South Fork at this point has a much higher level of water contamination than the Middle Fork.

It's time that Kings Canyon learned a lesson from Sequoia about protecting the lake basins. In the Kern region, most all of the lakes are closed to grazing. We have a situation in Kings Canyon that many lakes are unprotected and subject to a similar type of irreversible impact as Rae Lakes. What lakes in Kings Canyon backcountry are still susceptible to this type of impact. Along the Muir Trail, in order to simplify this analysis, there are three main areas. 1) Upper LeConte LeConte Canyon 2) Palisades Lakes 3) Twin Lakes. On the Monarch Divide Horseshoe Lakes, State Lakes and Volcanic Lakes are unprotected. As an immediate priority the three basins along the Muir Trail need to be closed to grazing. I have discussed this over the years and at length with the other backcountry rangers in the Kings and they all agree with this assessment. A more simple way to protect most all of the lake basins would be to have an elevation restriction. For example, not allowing grazing above 10,000 A. in Kings Canyon would protect all of the lake basins. What will be the future of stock use in the backcountry. With the world wide popularity of this spectacular area, the level of stock use will inevitably continue to increase.

Trail Crew

The trail crew in the area was the CCC's. This massive twenty people crew began their backcountry season camping in Paradise Valley. They camped at the Woods Creek Crossing for 8 weeks -+ and then moved their camp to the Twin Lakes area for approximately 6 weeks. The focus of their high country work was below Twin Lakes down to the Woods Creek crossing. They did some work on the Woods Lake Basin trail from the cutoff of the Muir Trail up to the basin. They had a spot crew that spent a week on the north side of Pinchot Pass working the trails in this area. Unfortunately the camp at Twin Lakes should never have been allowed by management. This camp resulted in the worst impact in this area that I have seen in the past 27 years and is probably the worst impact here in the past 50 years. (see photos) The problem with this camp is that it was at 10,500 ft. in an extremely fragile area. This camp was visible from the trail and 90 feet from a stream and a fragile meadow area. Once a week the crew was resupplied by stock, as normally the stock would be in the area for two nights. An estimated 10 head per week were used on these resupplies.

Problems created by this camp include the following:

- >A fire was burning trash throughout the day. This smoke could be smelled and was sometimes visible from the trail.
- >The camp site area was totally littered by the stock manure. The vegetation in the area was literally churned up and killed by the stock. Water contamination from the manure resulted as manure was seen in the water sources in the area.
- >The camp made a statement to the other stock users in the area that it is okay to create this incredible amount of impact in the area since we do it.

>The camp sends the wrong message to backpackers that we are not serious about no fires above 10,000 ft., since the trail crew had a fire here.

The fragile nature of the high country, particularly above 10,000 ft, can't handle the impact created by a large trail crew of this type. The area needs to be rehabilitated as a trail crew should never be allowed to camp here again.

Recommendation: The two large metal boxes need to be removed from this area next season. Also, the large pile of cut rounds of wood need to be dispersed/hidden.

Trail Crew Permanent Camps

Over the past two years Kings Trails has put over twenty large metal boxes (5 ft long 3 ft tall and 2 ft wide) all over Kings Canyon backcountry. This was done inadvertently and with no approval from management. The location of some of these boxes is shown on the map included. The problems created by these are explained below.

Simpson Meadow

Last season there were two metal boxes located at the main meadow camp. This is one of only three established camps in the Simpson area. This summer one more metal box was brought in and at the end of the season was left right in the middle of the camp. The other two boxes were dragged a short distance away from the camp in the woods. Simpson Meadow is a primitive area. Now there is a permanent trail crew camp here for a trail crew that was in the area this last season for a couple of weeks. These boxes need to be removed at the beginning of next season.

Upper Cloud Canyon

In upper cloud at the base of the Colby Pass trail there is one camp. A few years ago, even though it had been used by the trail crew for years, it was still a primitive looking camp. Recently two large metal boxes were flown in and left there. More trail crew development has been done here with chain sawed wooden chairs, wooden tables, etc. The trail crew uses this camp for a couple of weeks per year. Backpackers hiking through this wild canyon now see the blight of a permanent trail crew encampment. These boxes must go and this camp needs to be renaturalized by destroying all of the "improvements" at this location. These are just two of the examples of how these metal boxes impact the backcountry.

Recommendation: Management needs to establish guidelines for Trail Crew camps. In the past it was my understanding that "no permanent improvements" were allowed. First of all I do recommend that all of these metal boxes be flown out of the backcountry. Over the winter trails should be required to come to Kings District and Subdistrict rangers to submit their plan for the next season. This would prevent the huge problem created by the Twin Lakes camp this season. Also, when the plan is approved, the metal boxes should be flown in at the beginning of the season and flown out at the end of the season. Also, alternatives to large metal boxes should be explored such as bear proof metal pack boxes.

The biggest challenge we face in the future in managing this backcountry is protecting the water quality. It continues to get worse and worse every year as a result of stock and human waste contaminating the water sources. Backcountry management in a sense [sense] is a relatively new science. We have made major strides over the last 30 years in protecting the backcountry and the wildlife with trail quotas, fire restrictions, minimum impact regulations, bear boxes, stock closures etc., but there is much more to be done. The first step in managing this extremely vast backcountry is to understand where the current problems exist. As a result of spending the last 27 seasons in Sequoia and Kings Canyon backcountry, I see lots of problems that need to be addressed. Hopefully, in working as a team with the backcountry rangers, district & subdistrict

rangers, resource management and the superintendent, we can face up to these current problems and make the needed changes to protect this most sacred environment.

2001 Charlotte - Durkee

Stock Use

Stock use seemed slightly down this year in the Bubbs Creek drainage. This year, the meadow immediately above the lower Vidette drift fence was temporarily closed to stock to allow time to recover from heavy grazing and potentially irreparable damage to an associated fragile sphagnum meadow. As the regulation is written, though, camping is still allowed at the nearby stock camp. Stock users must then take their animals about 2 miles up the trail to the upper drift fence, releasing them above this fence. This is a serious burden on the stock users, likely reduces compliance and, essentially, is unenforceable by the area ranger. As a result, the closed meadow was grazed by several parties – whether accidentally or on purpose is unknown. Stock just tend to drift back down to this camp when released. The problem is similar to the fragile sphagnum meadow at Big Pete meadow. No substantive action has ever been taken to protect it, yet meadow ecologists have been concerned about it for over 50 years (Sumner (1940), Thede (1961) Neuman and McClaren (1987)). At Vidette we have a chance to protect the meadow immediately now that the problem is recognized.

2001 Crabtree - Jostad

Stock—258 animals contacted though more used the area. This number included pack and saddle horses, mules and burros. No llamas were contacted. Commercial 58% (Rock Creek Pack Station, Cottonwood Pack Station, High Sierra Pack Trains, Bishop Pack Outfitters, Cedar Grove Pack Station, Mineral King Pack Station), Administrative 29% (Kern Trail Crew, Hockett Trail Crew, Kern Ranger, Military Overflight Trip), Private 13%. These numbers are comparable to past few years.

Temperatures in the Owens and San Joaquin Valley topped 100 degrees in early May. Passes were reported snow free and creek crossings low by this time. These conditions allowed for early access into the backcountry by hikers and stock parties. There was significant evidence of hiker and stock use in the park prior to arrival of Rangers, which included garbage in area food storage boxes, newly built illegal fire rings. And stock use of meadows prior to opening dates. **Reports were taken by hikers who met a stock party with 26 animals and also a stock delivered food cache left unattended prior to arrival of Rangers.**

In early July, 10 llamas grazed for 3 nights at the east end of Evolution Meadow near a camp next to the JMT. About ten 100 to 200 sq. ft. patches were closely cropped, smashed, and partially dug up by the animals leaving a very noticeable aesthetic impact — this is due to the nature of how llamas graze: sitting down and not moving.

2002 Roaring River - Van Dusen

Stock Use

I do think it is important for there to be a ranger presence utilizing stock in this area. Other stock users in the area seem to relate and appreciate the visibility and one learns to appreciate what is involved being a stock user. **It requires a lot of time and work to care for 2 horses and to rotate them between the different meadows. There are some days where it requires 3 to 4 hours to walk to a meadow, find the horses, return to the ranger station and then saddle them up.** For me,

realizing that the care of the horses and the rotation of meadows is apart of the job, was reassuring. I suggest next year to have a 3 week or so break from the horses. Possibly late July or early August when I bring them out for new shoes, leave them at the NPS pack station. This would require checking with the packer, probably Rex, if he would feed and water the horses with his stock.

2002 Rock Creek - Jostad

Commercial Users The primary commercial users of the Rock Creek area are the pack stations which operate under incidental business permits (IBP). [Now called CUA—Commercial Use Authorization.] The Cottonwood Pack Station which is in the area several times each week has shifted its use to primarily spot trips and pass through to Crabtree on overnight trips. The pack station issues wilderness permits directly to clients and does not always provide accurate information, particularly concerning appropriate food storage. This problem has been ongoing over many years. It was again addressed this year in the field and also in dialogue between the pack station and the Kern sub district ranger. Additionally, specific incidents were documented for the NPS concession office. The Cottonwood Pack Station has been largely responsive to concerns raised in the field regarding camp conditions. However, the food storage issue persists. I recommend meeting with area rangers and sub district rangers at the beginning of the 2003 season to discuss expectations. Also, the Cottonwood Pack Station should no longer be given the privilege of issuing permits for the USFS because they have shown they are unwilling to provide accurate food storage information to clients which jeopardizes visitors and wildlife. **Several IBP pack stations which use the northern parts of Sequoia-Kings Canyon and the Inyo National Forest were under court order this season limiting their amount of stock use night in the area. When this limit was met by the Rock Creek Pack Station in early autumn they began bringing stock south and beginning trips into Rock Creek and Crabtree via Cottonwood Pass in the Golden Trout Wilderness and not covered by the court order. This meant heavier than previous late season use in the Rock Creek drainage and will need to be monitored.**

2002 Tyndall - Larson

Tyndall meadow received significant use this year compared to last. Stock camps and high line areas were hit the hardest. Erosion and shearing were also witnessed. Wright Lake Basin and Sheep Camp also were used heavily mostly by commercial outfits for spot fishing trips. Lake South America, the upper Kern, and Wallace Lake, continue to be a popular area for day rides and overnight trips for small stock parties. Milestone basin had a single stock party for two nights. These stock parties hit Tyndall with significant resource impacts. Not only limited to the camps and meadows themselves but also to trails making them up to 6 feet wide in areas. Sequoia/Kings pack station was seen cutting trails with a stock train. This practice practically creates a new trail itself. If we are to keep this area in a pristine state, action must be taken to prevent any additional damage to the parks resource.

2003 Bearpaw - Weisman

There was a lot of stock traffic on the High Sierra Trail this summer to resupply the High Sierra Camp. In past years they have made day trips but this year the stock overnights at Lower Bearpaw Meadow for about half of their trips. This was necessitated by the fact that the packers were coming from the Cedar Grove Pack Station and with travel and packing time, they weren't

arriving at Bearpaw until early evening. For most of their overnights, they brought their own feed, although the stock was allowed to roam freely for part of the time. About 12 to 14 head of stock came into Bearpaw weekly from mid-June to mid-September, with some weeks seeing more traffic.

2003 LeConte - Kenan

Stock Use

There was a significant amount of stock use in the area this season. Rainbow Pack station started coming regularly into LeConte the first part of August and they continued to have trips into the area through the end of Sept. The word from their packers is that they had their best year ever. Other pack stations that came through the area included: Red's Meadow, Sequoia/Kings Canyon, Mike Morgan, and Mammoth Pack Station. There were also two private stock parties in the area this summer.

Rainbow had a very busy summer for trips. They had 10 individual trips into the area. Most of the time they would camp at Big Pete Meadow, as they preferred this camp for a variety of reasons which include: 1) the drift fence keeps their stock in the area, 2) they prefer this stock camp because it is near the meadow and hidden from the trail.

In meeting with Sylvia Haultain this summer we took a close look at the Big Pete Stock Camp. The meadow had received what appeared to be the maximum amount of grazing for the summer. In Big Pete there is a very fragile and rare plant group that needs to be protected. As a result, Sylvia has closed a section of the meadow to grazing. Instead of closing the whole meadow to grazing or putting up a fence, we once again are looking for the lowest impact type of method to protect the plants. Sylvia had the idea to put up a map in the stock camp of the meadow that shows the closed section. This sign could be tied to a tree that would make it easy to put up at the beginning of the season and taken down at the end of the season. The packers would then be aware of the closed area and responsible for keeping their stock out of this area.

Also, there were numerous trees at the Big Pete camp that were deeply rutted around the tree as a result of stock being tied to the tree.(see photo) This amount of impact in time will kill these fragile lodgepole pines. This illustrates that an alternative method for packers to tie up their stock is needed here. We've tried making hitch rails in the past and this amount of development proved to be excessive. A better alternative that Sylvia and I discussed was to designate two trees that a hitch line would be tied to. This would prove to be a lower impact way to designate where the stock would be tied and would protect the trees.

Conclusion

One of the biggest challenges that we face in the future in managing this magnificent wilderness is to protect the water quality. It continues to get worse every year due to the stock and human waste contaminating the water sources. The most fragile areas are the high elevation lake basins. **It is time that we take a close look at stock use in Sequoia and Kings Canyon backcountry.**

Currently, along the Muir Trail, some of the lake basins are closed to grazing. This was done for the obvious reason that the impact got so heavy and devastating that the closure was made. What is the cause of the incredible amount of algae slime that is growing in Rae Lakes. These lakes are literally infested with an algae growing in the lakes. It is not an algae that is growing on the rocks on the bottom of the lakes, but a unique form of slimy algae that grows thick like "algae clouds" in the water. Has the cause of this ever been studied by the park? No other high country lake that I've ever seen has an algae slim like Rae Lakes. Certainly, a common sense observation would be

that it is a result of fecal bacteria contaminating the water source- human and stock. Unfortunately, the closure of Rae Lakes to stock grazing was made too late. The algae slime in this lake is irreversible and may continue to get worse.

2003 McClure - Malengo

RECOMMENDATIONS

A problem exists at the stock camp at Evolution Meadow. Too many animals have been tied to hitch lines between the camp and the trail. Pawing and scuffling have made deep depressions in the ground and added much manure to the area. We need to make sure all users get the word to make their hitch lines farther from camp. . . .

Another stock-related problem area is in McClure Meadows: the good stock camps are on the south side of the meadow which causes a large amount of hoof-print damage traveling to and from camp.

2003 Rock Creek - Jostad

[NOTE: The following describes in detail what we believe has since been done, including new construction in Wilderness, which is illegal.]

Appendix A

Demonstration Stock Camp Proposal

Background

Numbers of stock parties visiting the Rock Creek area were slightly higher in 2002 than in the previous few years. Important differences this season include the concentration of grazing in Lower Rock Creek and the number of private parties using the area for the first time. %s trend was observed again in 2003. Private parties utilized seven separate camps this season due to lack of familiarity of the area. Two of the camps are routinely used by stock parties, three are routinely used by backpackers in the vicinity of the food storage locker, two were previously unused. Rarely were there more than two stock parties in the area at once necessitating the existence of seven stock camps. This transpired primarily because stock camps in the area are not designated and first time users were unaware of traditionally used camps. Impacts were significant in some sites with tent pads used as hitch line areas, trees girdled by rope when stock were tied directly to trees for extended periods, seven seeps were trampled to mud 8' across by stock accessing camps via wet areas.

Proposal

In discussion with Sylvia Haultain and Catie Karplus during a field visit the idea of establishing a model camp for stock users was proposed. We would set up a demonstration stock camp at Lower Rock Creek Crossing that would be signed and provided with features that would serve as a model for minimum impact stock camping. The camp would be useful for stock users and facilitate wilderness management by demonstrating that features constitute minimum impact camping with stock. A site has been located on the north side of Rock Creek immediately below the Pacific Crest Trail crossing of the creek. It is an established though lightly used site. It is located on the north side of the creek rather than the south where traditional stock camps are located. This places it on the opposite side of the creek from the backpacker camps and food storage locker that is occasionally dominated by stock parties camped in the area. The north side of this meadow complex is thought to be better able to withstand stock use impact. The site is set more than 100' away from the Creek unlike the traditional sites that are 30-50' from water. The site is upstream

from a potential overflow site for use when more than one stock party is in the area. This secondary camp is established and can be accessed over durable surface rather than through seeps unlike the traditional sites. The site has a durable flat surface away from camp and water on which to set up a hitch line on, in contrast to all other camps used by stock in lower Rock Creek.

Site features would include:

- A hitch line area that is separated from camp established on durable, unvegetated surface. A cable with fixed tie in points and tree saver straps would be set up so that users would tie between them to hold their animals.
- An established, small size fire pit in the kitchen area.
- A “Knack” type food storage locker that would facilitate proper food storage and information about bear proof panniers.
- Signing in the camp on the top of the food storage locker outlining minimum impact practices while camping with stock
- Signing to lead visitors to the camp in lower Rock Creek and also at the south Park boundary.
- Signing about the camp at the public stock camp at Horseshoe Meadow Trailhead.
- A large rake provided in camp for removing horse droppings and restoring pawed areas.

Equipment

- An informational letter about the camp should be sent to pack stations that use the area, the Backcountry Horsemen Association, and the USFS Mt. Whitney Ranger District.
- Anodized aluminum signs reading “Stock Camp” with an arrow. Two signs required one with an arrow pointing right, one with an arrow pointing left.
- One sign to be placed in the camp with information about the camp's features and minimum impact practices.
- Installation of a “Knack” type food storage locker. This type of food storage container is preferable because of its large size which can accommodate the larger food loads carried by most stock parties. Also it is easily removable in the event that this site needs to be removed in the future.
- One fifty foot length of retired 2" fire hose for tree saver straps and a one hundred foot length of cable for hitch line with hardware for fixed anchor points along its length. One small winch for annual set up.
- One large rake.

Work Required

- A causeway to bridge a seep which runs between the camp and hitch line area, approximately 30' total length including approach with 8" clearance over deepest section of seep to be constructed from on site material (rock, wood, sand). The site was evaluated by the Trail Construction Crew in 2003 and the structure deemed appropriate and feasible. The meadows of lower Rock Creek have dozens of small seeps running through them. Many have been damaged by stock accessing camps from the main trail. The camp proposed has only one seep to be crossed rather than seven to access the current primary stock camp. A small amount of mitigation here would prevent resource impact and allow for rehabilitation of previously damaged areas.
- Formalize existing use bail into camp from the Pacific Crest Trail, approximately 100 meters.
- Reconstruct existing fire pit.
- Install signs, Knack box and hitch line.

Meadows., Although lower Rock Creek and “penned-up” meadows show signs of use, Nathan’s by far is worse for the wear (see photos). Since most other areas were used for spot trips or had limited grazing from mostly burros and llamas, they showed significantly less impact. Nathan’s, however, has large dust baths and areas of closely cropped and trampled vegetation. It appears that soils and plants were more easily disturbed or uprooted because of such dry conditions. Furthermore, not much moisture came in the form of summer rain to replenish the vegetation. This also concentrated grazing in sensitive riparian areas such as the boggy spring-fed area east of the trail in Nathan’s meadow. Similar to a wet year, it was interesting to note how sensitive these high meadows are at both extremes in precipitation.