BEARPAW MEADOW RANGER STATION 2006 END OF SEASON REPORT NINA WEISMAN

This year the Bearpaw Ranger Station was staffed from June 26 to September 28.

General Observations:

This year I contacted about 1300 hikers on the trails, off trails, and at various campsites in the backcountry. Most of these visitors were backpackers; about 100 of them were day hikers, seen close to the trailheads. I contacted approximately 35 stock users, all clients of commercial packers.

The High Sierra Trail gets most of its stock traffic from the biweekly High Sierra Camp resupplies. Twice a week between 8 and 12 head of stock came to Bearpaw and returned to the trailhead the same day. The Horse Corral Pack Station holds this contract. Also, the Hockett Trail Crew stayed at Redwood Meadow at the beginning of the summer and kept their stock in the admin section of the meadow.

This season I issued one citation in the backcountry for lack of wilderness permit and one additional citation was mailed to the other half of the party. Also, we are investigating a littering offense, which may result in a citation. I made a few warnings for food storage this season. While working in the frontcountry for a week, I issued about 12 citations, included among these were food storage and various traffic and weapons violations.

This year I had some minor medicals and assisted with a medivac from Bearpaw. I also performed 3 minor medicals while in the frontcountry.

I did not participate in any major SAR's this season but assisted with 2 minor SAR's in the frontcountry, and had a short SAR at Bearpaw with an overdue hiker we found within an hour. Also, **Second** flew into the Cliff Creek camping area and walked out a hiker with possible food poisoning.

This season was truly a wet year. The streams were high, the snow took a long time to melt off, and the meadows were swamps all summer. The High Sierra Trail had some access issues with the "tunnel" being hazardous well into the season, and snow covering much of the trail from Precipice Lake to Kaweah Gap. We also had a week of very high humidity and thunderstorms every afternoon; this coincided with the record high temperatures in the rest of the state.

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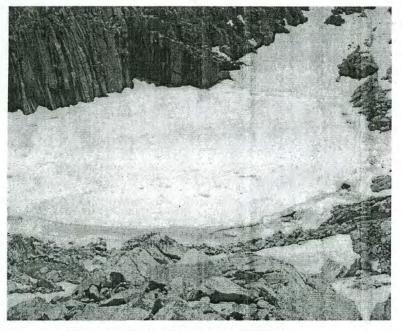


Figure 1 Precipice Lake, 7/7/06

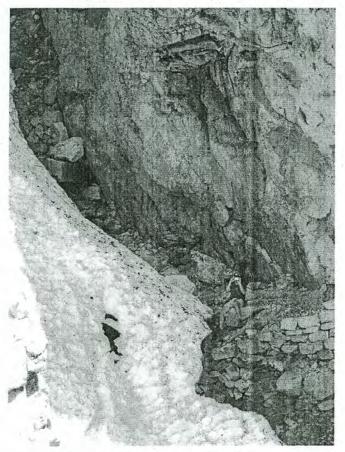


Figure 2 "The Tunnel 7/7/06" Use Patterns:

The High Sierra Trail continues to get significant hiker use. There were many large groups, some Sierra Club, Boy Scout, School Groups, and also many smaller groups.

There was a lot of day stock use in the patrol area this season. The Horse Corral Pack Station made biweekly resupply trips for the High Sierra Camp. Additionally, they brought in about 5 spot trips and resupplied the Outward Bound groups in the Bearpaw Area. They spent the night a few times at Lower Bearpaw Meadow and spent 2 nights at Redwood Meadow. The lower public section of that meadow was too dry so we allowed them to graze the upper admin section, which was much drier. The Park Packers made a few trips into the patrol area to resupply the trail crews. Usually they brought their own feed and did not graze the areas they stayed in. In June, the Hockett crew stayed at Redwood Meadow for a couple of weeks but they brought their own feed because the meadow wasn't open for grazing yet. Some bat researchers worked in the area and the HCPS packer that brought them in stayed in Lower Bearpaw Meadow in late September.

There was very little aircraft activity in my patrol area. The military ships passed through at a very high elevation. There were a few small private airplanes but none of them flew very low.

Natural Resources:

Wildlife: Bearpaw continues to be an area full of interesting wildlife. Bears were frequently seen but were not a big problem this year. On the High Sierra Trail about 1.5 miles west of Hamilton Lake, there was a dead bear in a tree this year. The first people in the area this season noticed it so we assume it died over the winter or spring sometime. It was in a curious position, below the trail, in the base of a shrubby oak. After much investigation and contemplation, I decided it probably fell down the cliffs nearby (nails were shredded), received serious head and possibly other injuries, and crawled into the nearest and easiest tree before it passed out. (Trees are places of safety for bears) It could be smelled for miles around on a breezy day and was a site of interest for the hikers. I talked to the Kaweah Crew about pushing it off the cliff and they took care of that. I was

concerned about people removing parts, as it was accessible from the trail.



Figure 3 Dead Bear on HST

Many other wildlife sightings occurred this year. Mountain lions were sighted on or near the HST at least 3 times this summer. Pikas were abundant in the high country, I saw more grouse this year than last, Golden Eagles were a common sight, I saw an osprey at Hamilton Lakes, and many different species of birds were seen. The bat



Figure 4 Lion track near Bearpaw

Vegetation Mgmt: Redwood Meadow was extremely lush and wet: this year. There was no evidence of its history of being dry and sandy at times. If

possible, I think the coneflowers were even more abundant this season. This is how it looked this year:



Figure 5 Redwood Meadow 7/06

As it was an extremely wet year, all the meadows were delayed in opening. I extended both Redwood Meadow and Lone Pine Meadow twice before they were dry enough for grazing pressure. The final opening date for both was August 20th.

On the exotic plant front, I was able to coordinate another cheat grass removal service project this season. Usually it has all gone to seed by the time I arrive each year but because of the late spring, most of the plants were still green in July. I had an Outward Bound group pull cheat grass as their service project. They had fun and learned about exotic species invasion.

Cultural Resources:

The status of the historical buildings in the Bearpaw patrol area hasn't changed since last season. They are all still holding up in relatively good shape. The Hockett Crew takes very good care of the buildings in Redwood Meadow.

There are some archaeological resources in the patrol area but they aren't commonly known about and their status has not changed.

Backcountry Facilities:

Both the Bearpaw and Redwood Meadow cabins are in good condition. There is a propane issue in the Bearpaw Cabin. I tried repeatedly to repair the various leaks and even used a "Leakator" to identify them. I again replaced the line behind the refrigerator and checked all other lines. It seems that the culprit is the water heater, circa 1981. The "Leakator" went crazy when it neared the controller box of the water heater. It doesn't seem to be repairable. The odor of propane in the cabin is unmistakable and quite bad. I duct taped, Teflon taped, and coated with aluminum foil every spot possible and the smell has lessened but not disappeared. This issued should definitely be addressed next season. The solar system is working well.

This year I redid the Hamilton Lake map and made a few other bulletin board signs. The map is much improved over the last one and seems to be easier to read than the last one. The basic laminated some of the signs but we ran out of thick laminate plastic. The thick plastic lasts much longer than the thin so, if possible, we should get some more for next season.

Trails:

There are two trail crews that work in the Bearpaw Patrol area. The Hockett crew starts the season at Redwood Meadow working on the trails in Cliff Creek and the Middle Fork. They did a good job clearing the trails in the area and left the Redwood Meadow cabin very neat and clean. The Kaweah crew worked in the Bearpaw area all summer. This year, they had a new leader, Tony Fiorino. He did an excellent job as leader and they did a beautiful job shoring up a difficult piece of the HST below Bearpaw. They did many other useful projects and went out of their way to help anytime it was needed. Tony was concerned about the Hamilton Lake pit toilet situation and we brainstormed together to try to come up with a workable solution. As usual, I was very impressed by the Kaweah Crew and am very happy to have them in the area. As always, the Elizabeth Pass trail could use a large-scale project, as it is loose and hard to follow on the Sequoia side.

Camp Areas:

The Bearpaw campground was heavily used this season, as usual. The firewood left after the fuels reduction project is still being used up and the campers are very happy to have so much available wood. The camping area looks good; most of the visitors left their sites in good condition. The two pit toilets are still viable and don't need to be moved anytime soon. The Kaweah Crew moved the upper pit toilet to a much more visible spot near the CG/HST trail intersection. They did a very nice paint job on it and the hikers can now see and find the pit toilet without wandering through the woods looking for it. The four bear boxes are all functional.

The High Sierra Camp had five employees again this season. It continues to be a pleasure working with them, especially the manager, Carolyn Pistilli. They are always very helpful to all the visitors, and are willing to assist me whenever necessary. The camp guests are required to get a wilderness permit before hiking out. I think this is working very well and should continue. Besides making sure the guests know about minimum impact, it is often helpful to be able to call and see if they've actually started the hike. Many times, a guest will not arrive by evening and instead of immediately looking for them, I can call first to see if they are even on the trail. The concession packer supplying the camp changed to the Horse Corral Pack Station this year. This is working well. The packers are efficient and helpful and very cooperative whenever I talk to them or as for their help.

Hamilton Lake is one of the most popular camping spots in the area. There are campers there most nights of the season. For the most part, visitors camp where they are supposed to. Since it gets so much use, it does sometimes show some wear but with regular maintenance, it seems to recover quickly. The Kaweah Crew and I discussed the problem of the pit toilet this summer. The toilet needs to be moved every few years and there aren't many new spots to move it to. Apparently the waste material doesn't degrade very fast in the rocky and cold environment there and when the crew starts digging a new hole, they often dig up old waste material. We brainstormed many different plans and even drew up a plan for a new, low impact toilet that would have to be emptied every season. The kinks are still not worked out and I think we need to talk with the wilderness managers and find out if there are any existing designs appropriate for this site.

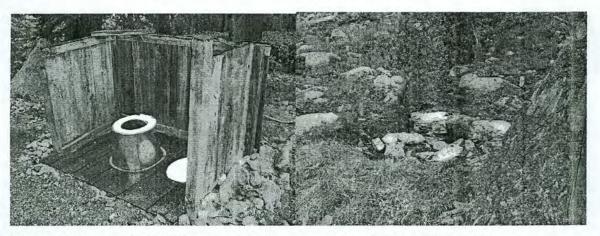


Figure 6 Current Toilet Hamilton Lake

Figure 7 Old Toilet site



Figure 8 Old Toilet Site

Figure 9 Old Toillet Site

Tamarack Lake is a beautiful spot at the end of a spur trail. It mostly gets day use from people staying at Bearpaw. Occasionally there will be overnight campers there. Most have bear canisters and obey the no fire regulation, although there were a couple of illegal fire pits this season. The lake area looked good all summer.

The High Sierra Trail west of Bearpaw has 3 major camping areas that get considerable use. Mehrten Ck., at 6 miles from the trailhead, probably gets the most. It was patrolled often by myself and the trailhead staff to keep it clean. 9 Mile Ck. has about 4 campsites, 2 with fire rings. I contacted many groups there this year. The bear box is functioning well. Buck Ck. camping area is very small but gets regular use.

Redwood Meadow is a frequent stop for campers doing the Blackrock Pass-Kaweah Gap loop. There are a couple of campsites at the lower end of the meadow where most people camp. There were no major issues there although a large tree fell on the most popular campsite right next to the water faucet. It's too early yet to tell where most of the campers will move to but there are nearby tent pads so it may not make much of an impact.

Cliff Creek has a few significant camping areas. The Cliff Ck.-Timber Gap junction has a few sites where many people camp. The Mineral King trailhead rangers usually share patrolling duties with me in this area. I don't know how often they made it there as the fire pits there grew considerably and had lots of trash in them.

The Pinto Lake camping area gets many visitors. Fires have been prohibited there for a while but people still create new fire rings there. I believe that this is caused by limited information at the Mineral King trailhead. On one visit, I broke up more than 10 fire pits there! I put an extra NO FIRES sign on the bearbox but I really think we need better information at the Mineral King permit desk.

Permit System:

The Lodgepole trailhead operation this year had 3 employees which is the minimum needed for this area. Diana Liles returned to the trailhead position. She was very helpful and did a great job supervising. Lisann Zeller returned and Chad Namolik joined the staff. Chad has been an avid backpacker in this area for the last few years and he patrolled many miles this season and cleaned many fire pits. He also helped with the Residual Biomass Survey at the end of the season. The trailhead operation as a whole did a very good job and communicated fairly well with those of us in the backcountry.

The Mineral King trailhead staff again had only one hiking ranger. I think this is a serious problem as the rangers issuing permits really need to know the backcountry intimately so that they can inform the visitors accurately. Also, much of the trail patrol near the trailheads is the responsibility of the trailhead rangers. Mineral King has many miles of trail near the trailheads and they need more than one ranger to adequately patrol and maintain them.

Next season, if possible, I would like to have a meeting with both the Lodgepole and Mineral King trailhead staff. I would like to discuss delivery of the minimum impact talk. If it is read, or delivered in a monotone, no one is going to listen or retain the information. Also, I would like to discuss problem areas and what the backcountry rangers expect from the trailhead staff.

Another trailhead issue which I think is a problem is the location of the Lodgepole permit desk. It is EXTREMELY difficult to carry on a conversation in the middle of the Visitor Center with all the noise and distractions, much less have the visitor concentrate on learning the minimum impact principles and learn about their trip. I have questioned many backpackers on what they heard at the permit desk and many of them can't quite remember what was said. This didn't used to occur when the permits were obtained in a separate room.

Since we're discussing permits, I feel I must again comment on the permit fee. IT IS UNFAIR AND EXORBITANT!! The fee structure, as it is now set, encourages large groups in the wilderness. If you're a solo hiker, you pay \$15, whether for one night or many. If you're a group of 15, you pay \$1 a piece. I strongly feel that \$15 a person is much too expensive and if you're going to have a fee, \$1 is too cheap. Do we want to encourage large groups, with the exponentially larger resource damage they make? How about \$ 5 a person, without consideration for group size or number of permits? This is a much fairer allocation of the burden and doesn't influence group size at all.

Inventory:

There are 3 large and 1 small full propane tanks at the station. Also, there are 4 large empty tanks at the helispot in the campground. I talked to the helibase and they will pick up the empties when they take maintenance in there in October. Also, Dan Blackwell asked me to leave the water system on so it will be available for them in October when they go in to finish emptying the septic tanks. The new pocket rocket stove and titanium pots are at the station, as are 5 sleeping bags. The rest of the items are the same as the inventory on file at the ranger station at Lodgpole.

Supplies needed for 2006:

Station Needs: New water heater without propane leak! Granular hand soap Hammer Small opaque trash bags Large strong trash bags Chemical toilet cleaner Linoleum floor cleaner/polish 2 Toilet seats for pit toilets 3 Triple Divide Maps, 1 Johnson Pealk map, 1 Crabtree map 1 full 0₂ bottle Eyewash Soap for down sleeping bags Paper towels X 4 Scale to weigh gear (bathroom scale?) emergency space blanket Large clear trash bags More P-cord 3 rolls duct tape Teflon tape designed for propane fittings

Equipment:

I

Prioritized wish list for gear

- 1. Day patrol pack, under 2 lbs, small w/side mesh pockets and good hipbelt (i.e. Osprey Atmos 35,25, or similar, size small)
- 2. Tarp tent
- 3. Lightweight tarp, such as Integral Designs pitchable tarp
- 4. Ridgerest or Z-rest
- 5. Katadyn Exstream

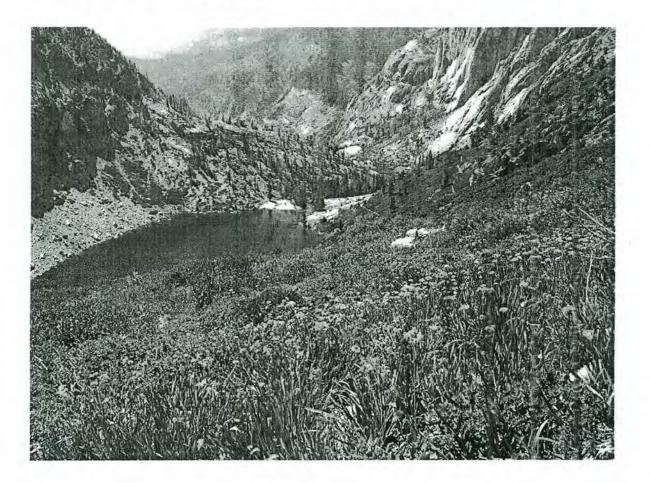
Recommendations:

1. The last few years, the MK trailhead rangers didn't hike, therefore they weren't able to help in the backcountry and didn't know the area very well. This year, one of the trailhead rangers hiked and it helped the area but there still needs to be more than one field trailhead ranger. There are a lot of camping areas close to Mineral King that need frequent patrolling. Also, many hikers that I talked to that originated in Mineral King didn't have very good information. The trailhead position serves a crucial function in maintaining the backcountry and should be fully staffed with employees that are able to patrol the trails and learn the area they write permits for. Mineral King trailhead rangers should all hike and they should attend some or all of the wilderness training. Also, I would like to meet with them at the beginning of the season

2. We need a refrigerator at Wuksachi Fire Station. The small one in the training room freezes everything, no matter where you put it. Also, even if itt worked, that unit is too small. Early season, many people use the station during training and there isn't enough room to store all the food. Much of it goes bad. Most importantly, the Pear Lake and Bearpaw rangers need a place to store their perishables before they go into the backcountry and after they come out. I have had many food items be ruined and lost many dollars' worth of food because of this chilling deficiency. There are a few older refrigerators in various locations around the park and it would be very helpful if we could get one of the working ones at the fire station.

3. We should look at some options for improving the pit toilet situation at Hamilton Lake.

4. Again, we need to do something about the cost for wilderness permits. It unfairly punishes small hiking groups and rewards big ones. Is this how we want to manage the backcountry? Also, after paying \$20 to get into the park, \$20 to camp in the park per night, we're charging \$15?! for a wilderness permit. This is starting to resemble Disneyland. A much more equitable solution would be to charge per person, such as \$5 per person. For example, at the Lodgepole Permit Desk this summer, 1093 permits were written. At \$15 each, that comes to \$16,395. 3553 people were included in those permits. At \$5 per person, that comes to \$17,765. If we were to change the fee structure to \$5 per person, the system would be much more equitable AND we would collect more money! 5. Move the Lodgepole permit desk to a quieter location.



BENCH LAKE END OF SEASON REPORT

A. General Summary

I started my backcountry patrols in Kearsarge Basin prior to heading up Taboose Pass to set up the Bench Lake Ranger Station.

Perseverance leads to accomplishment: I made it up Taboose Pass (approx. one mile of snow), found the station (snow free), and got things set up. It took two attempts to get the tent poles right; the extra poles led to our first failure. Interestingly, in the Bench Lake logbook of 1994, the same fiasco happened to the district ranger and others. I have separated the poles (the extras need to go out).

Set-up came just in time. Early season PCT hikers met many obstacles, high water, snow and heavy thunderstorms. The first night, after setting up the tent, an ailing and exhausted hiker named "Little Sister", a nineteen year old male, who had done consecutive marathon days, needed help. It was easy to see that he was in need of food and rest so I took him in and put him up for the night. The next morning he was ready to hit the trail. This same sort of scenario happened many times in the next couple of weeks as the Bench Lake station became a stopping port for weary PCT hikers.

Besides thunderstorms and snow, high water crossings were a hazard for the first five weeks (until the end of July). The South Fork of the Kings River was impassable until about the twenty-first of July.

I directed hikers to go on the north side of the river for two-and-a-half miles where it crosses back to the north side. Many people did this without problems and without any resource damage. An Outward Bound group was determined to go down the Murro Blanco. Their planned route was to cross the King's River, which they could not do. So the leader made the decision to go down the near side, which was against my advice. Fortunately, they made it and let me know through the office. I was much relieved.

Leaving Bench Lake to work at Rae Lakes, I went down the Murro Blanco route just described. It was a gorgeous flower walk for the first half; the second half was hell, aspens sideways and straight up, ten-foot high chinquapin, swamps, boulder-fields and every obstacle you can imagine. I barely made it through to Arrow Creek that night. I noticed broken sticks and other signs of the Outward Bound group who went before and imagined that they too will never forget that trip.

There was one medical evacuation by helicopter from the Bench Lake station for a man with a knee injury. I was evaluating him hobbling down the trail from above when helicopter(b) (7) came into the area for the trail crew. Deciding to take advantage of this opportunity and getting the OK from (b), we had him flown out. Later I received word that he had a torn meniscus and needed surgery.

who came upon a man with a broken prosthetic leg initiated a stock evacuation. He contacted dispatch and had a stock evacuation arranged with Cedar Grove Pack Station. They sent out an extra-ordinarily qualified person, Beth Laswell of Three Rivers, whose father has a prosthetic leg.

Other than the incidents described, my early season at Bench Lake was quite routine. I gave out a lot of trail and weather information, talked to visitors, warmed them at the station, and did daily patrols in my area. No law-enforcement situations arose.

A small group of ultra-distance runners were using Taboose Pass Trail. They went up Taboose Pass to Pinchot Pass, climbed Mount Wynn and Mount Pinchot, and returned to the trailhead. One of them threw in Stripped Mountain on top of this.

On August first, I headed into Rae Lakes, stopping at Kearsarge Lakes to get trained by (b) to do campsite inventory. I arrived at Rae Lakes the next day to take over for Bob Kenan, who went to patrol the Monarch Divide.

There were many visitors at Rae Lakes during the month of August. I initiated two medi-vacs on my first day at Rae Lakes. One was a fourteen year old with serious AMS and the other a fifty-year-old male also with altitude problems and a history of seizures. Two other AMS situations occurred: one that required me to spend the night near the patient, with oxygen available if needed; and another in which I helped a man hike to a lower elevation. Both of these people were able to hike out of the mountains.

In August, Rae Lakes had a continuous flow of campers. The peninsula had many campers every night, the other areas receiving the overflow.

Many campers at Rae Lakes day hiked into Sixty-Lakes Basin.

Frog recovery in Sixty Lakes Basin seemed to be going good for the past few years, but now Chytrid fungus has spread through-out the basin threatening all populations. (b) (6) is desperately trying to combat this disease but his attempts seem to be futile. One possible source of the contamination is the researchers themselves and (b) (6) admitted this. The frogs in Sixty Lakes all looked very skinny. (b) (6) says that Chytrid does this; the frogs are not getting the needed nutrition.

On a bright note for amphibians, I found a male Yosemite Toad one night at the Rae Lakes Station on my ground cloth - fifty miles south of its known range limit near

Muir Pass. Not wanting to interfere with it, I moved my pad a little and went to sleep next to it. (b) (6) was pleased to hear about this and thought it likely that the species would range this far south. This toad matched the picture in (b) (6) Reptile and Amphibian book, page fifteen

At Rae Lakes, I made patrols to Baxter Lakes, South Dragon and Gould Passes, down Charlotte Creek to Bubbs Creek, and to East Lake and Lake Reflection. While in the Bubbs Creek area, I was informed that (b) (6) was overdue. When I was at East Lake, (b) had already fallen to his death before the search had started. Mount Brewer attracts a lot of climbers from all sides. I met six Mount Brewer climbers on my one day patrol in that area. I made it back to Rae Lakes the day the search started and did not participate.

The Rae Lakes station is an important one. It is the only station between Le Conte Canyon and Crabtree on the John Muir Trail that is manned every year. The location is perfect: close to the trail but hidden, with beautiful views and a perfect spring nearby. The location in the upper basin is good for patrols to the peninsula, the most heavily used area at Rae Lakes.

The area of Woods Creek crossing gets very heavy use. This is where the Rae Lakes Loop Trail and the John Muir Trail meet. In mid August, on a camp-fire ring rehabilitation patrol I met at least fifty campers here. This is a common occurrence during the month of August. A few days after this clean-up trip, a woman complained to (b) and I about excess toilet paper in the area. She said she thought we needed a pit toilet in this area. There is one across the Creek and (b) and I discussed the possibility

of moving it closer to the camps next year. Most people do a good job with their sanitation but it only takes one or a few to ruin things for everyone.

On September fifth, I headed up Taboose Pass to finish my season. Between the fifth and the fifteenth of September I saw approximately twenty people a day. After that, visitation dropped to a few or none per day.

The Bench Lake tent station is in good repair and at a convenient location for both the visitor and the ranger. With the increase in use on the John Muir trail this station is an important one to keep manned in the future.

B. Visitor Services

1. Statistics

	June	July	August	September	Totals
Visitor	24	302	812	295	1409
Contacts					
Miles	37	209	276	172	657
Patrolled					
Day Hikers		6			6
*Stock					
Users					

*3 commercial, 1 private (5 head)

Visitor use in the Bench Lake area was mostly by John Muir Trail hikers. A few people entered from Taboose Pass to access the area for climbing or fishing. Prescott College, with a group of fifteen, entered Taboose to go north on the John Muir Trail to

Florence Lake. I met one group of three coming from Cedar Grove to go fishing in Lake Basin.

Use at Rae Lakes was steady from early season and reached its peak in August, when I contacted nearly one hundred hikers a day. Now, there are almost as many John Muir Trail hikers as there are Rae Lakes loop hikers.

The first week after Labor Day, I saw about twenty John Muir Trail hikers a day in the Bench Lake area. After that, I only saw a few. Now, on September twenty-fifth, I see only one or none each day.

2. Law Enforcement Incidents:

The only violations I encountered this season were campers setting up camp on grass or vegetation, but all of these people were eager to comply when asked to move. All people contacted had a wilderness permit. I did not see any dogs in the park this summer.

I did not encounter any one with an illegal fire. I came across an illegal fire-pit below Lake Marjorie and found two old illegal fire-pits on a patrol to Baxter Lakes. On a clean-up patrol to Bench Lake in late season, I did not find any signs of illegal campfires.

Date	Location	Туре	Evacuation
July 26	Bench Lake Station	Knee injury	Helicopter
August 3	Rae Lakes (0900)	AMS	Helicopter
August 3	Rae Lakes (1730)	AMS	Helicopter
August 10	Rae Lakes	AMS, nutrition?	Treat & release

3. Search and Rescue and Medical Incide	3.	Search and	Rescue	and Medica	l Inciden
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Many common ailments in the high country are altitude related. Most people adjust after a few days, but the ones we need to watch for are extremely fatigued after two or more days at altitude. It is common for one person in a party to have signs of

AMS. Two such cases needed a helicopter evacuation this summer and two others needed to be monitored closely. One exited without assistance, and the other was able to continue on his trip.

Another concern is differences in hiking abilities. Such was the case with the man with the knee injury at Bench Lake. Trying to keep up with his hiking partner, from Cedar Grove on the John Muir Trail, he was not able to finish their trip and needed to be evacuated. He needed knee surgery after this.

4. Service Incidents

We provide services to visitors nearly every day, usually in the form of information, but also for physical needs: warming hypothermic hikers; assisting with food needs; and providing band-aids, elastic wrap, or anything that an ailing hiker or camper might need.

I did not have much contact with the Forest Service this season except for meeting with Brian (Whitney Ranger) in Lone Pine, and giving by information on how to hit the Forgotten repeater from Lone Pine.

5. Ranger Station

- Installed new wood burning stove
- New antenna system (possible loose connection on my radio} was no improvement
- Solar worked good (battery still good)
- No rodent problems (need screen on lock openings on Knaack Box)
- Propane stove needs new regulator
- Pit Toilet was okay

C. Wilderness Protection

The wilderness in these parks is doing well. The users respond to the NPS's

efforts to protect this wilderness. Camp areas are impacted minimally and receive regular

maintenance by wilderness rangers. Trash is rare and nearly all campers appreciate the fact that the NPS is trying to keep these parks as pristine as possible. Bear problems are almost non-existent in the backcountry due to NPS requirements and visitor compliance.

This year's campsite inventory will show that these parks have never been better cared for. Occasionally, we come across resource violations like the abandoned trash and food I found at the Woods Creek bear box this summer, but in my many years of experience, this is rare. Considering the large number of visitors these parks receive, things are looking good, better than ever.

1. Meadow Management

Opening dates were late this year and I did not meet a stock group until August seventeenth, a Cedar Grove trip going over Glenn Pass. Rock Creek Pack Station grazed at Baxter Creek and above Twin Lakes. John Berry, packing for Cunningham Pack Station, came through the Bench Lake area in September. Only one private group with five head came through. With so few groups spread over this large area, no significant grazing or stock problems were present.

No residual biomass was study was assigned this area.

2. IBP Forms

IBP forms were filled out for Cedar Grove Pack Station when they visited Rae Lakes and for the "Outward Bound" group that went down the "Murro Blanco".

3. Signs

Signs are all adequate in this patrol area. I installed a new sign at the Baxter-JMT intersection. It informs people that the Baxter Trail is un-maintained.

4. Bear Incidents

No bear incidents occurred in this area this summer. There is a resident bear in the Bench Lake area that was seen at Lake Marjorie, Stripped Mountain Lakes (just below) and at the South Fork Kings River crossing. There were no problems with this bear.

5. Wildlife

Included in text above with the exception of a mountain lion seen taking a fawn at Lake Marjorie.

6. Resource Impacts and Issues

High use areas need more attention from the ranger. Examples in this area are: Paradise Valley, Woods Creek crossing, peninsula at Rae Lakes, Kearsarge, Lakes Vidette Meadows, and Center Creek junction.

7. Resource Projects

No significant resource projects are needed in the area other than repair of large areas of trail erosion on the Taboose Pass Trail, Bench Lake Trail and the John Muir Trail. These problems are being attended to by Kings Canyon Trails. On-going projects are fire ring rehabilitation and litter patrols.

I eliminated illegal fire-rings at Baxter Lakes and on the JMT at the South Fork crossing in early season. The South Fork crossing ring never came back. I also eliminated two illegal fire-rings in the Lake Marjorie area and one north of the South Fork crossing. Fortunately, most people are not having illegal fires. Finding only a few for the entire season is not bad. Patrolling Bench Lake at the end of my season, I did not find one illegal fire-ring. Thinking back to the early days after the 10,000 foot closure, a

volunteer and I eliminated 45 large fire-rings in one day and now, twenty-five years later, there is no sign that they ever existed.

8. Campsites

Certain areas have more concentrated camping. I don't necessarily think that this is bad. The peninsula area at Rae Lakes is an example. This area has a lot of good hardened sites away from water that support a lot of campers. Most people want to camp in close proximity to others. Even if they have canisters, they still camp near the bear box. This keeps most other areas un-crowded.

The Woods Creek junction area needs regular patrols to keep the fire-rings maintained and to pick up trash or abandoned food in the bear box. The woman's suggestion (See General Summary above) about a pit toilet is a possible solution to keep toilet paper at bay, although it would need to be monitored closely.

9. Trails

Kings Canyon trails does a lot of excellent work. Still there are many sections of trail throughout the park that are behind in maintenance. The trail above Lake Marjorie needs work as does the trail to Bench Lake and the Taboose Pass Trail.

The CCC crew did a lot of excellent work this season filling in ruts in the meadows below Taboose Pass. A trail reroute around these meadows has been approved, but it is uncertain when work will begin. In the meantime, the old trail through the meadows is still being used. The Taboose cut off, heading north to the JMT, is very badly eroded and should be abandoned and rehabilitated. The main trail going to the JMT south of the Kings River is the only trail needed, and if the re-route was completed away from the meadows, it would be an excellent route.

The C's are scheduled to work this area again next year, using the same camp

below the Taboose JMT intersection.

The Taboose trail east of the park is very steep and rocky. Stock used it in late

season, but it was difficult for them.

The CCC crew finished their season in good spirits. There were difficulties

getting sufficient supplies to them on time, but because of good leadership, they made out

okay.

D. Recommendations

- Eliminate and rehabilitate the section of the Taboose Pass Trail going north to the JMT.
- Move the pit toilet to the south side of Woods Creek crossing.
- Build new Rae Lakes cabin, old one is unhealthy and an embarrassment to the National Park Service.
- For additional recommendations see body of report.

E. Equipment Needs for Bench Lake Station

- Plastic dish washing pan
- 3 ceramic cups
- gas regulator
- mosquito netting
- stainless steel pot with handle

Sierra Crest: Charlotte Lake Kurt Gross End of Season Report 2006

A. General Summary

I opened the Charlotte Lake Ranger Station on June 26 after hiking from the Roads End trail head. The trail was already in excellent condition with no snow along the route. With a seven-week long stretch of perfect weather and very few medical or law enforcement incidents, this was a great season in the Charlotte Lake patrol area. I hiked every trail and most of the cross-country routes in the Charlotte Lake patrol area. To cross-train with front country law enforcement rangers and to increase my skill set, I spent one week in Cedar Grove doing road patrol. I spent another week away for the SAR on aerial and ground searches and as a member of the technical recovery team. Additionally, I was out of the backcountry for three days for a wedding. This accounts for the low number of miles hiked. A highlight of the season was a letter from NPS director Fran Mainella congratulating me on the successful field reduction of a dislocated shoulder. However, the best event of the summer was an evening program about wilderness rangers that I led for the visitors in Cedar Grove.

1. Statistics					
	June	July	August	September	TOTAL
Hikers	38	261	537	143	979
Miles	25	170	161	141	497
Day Hikers	3	25	0	2	30
Stock Users	5	5	18	4	32
Stock	8	18	26	9	61

B. Visitor Services

1 Chatiation

Visitors arrived in the backcountry later in the season than usual, probably due to the heavy snow pack (165% of average) and late spring thaw. Kearsarge Pass was free of snow when I arrived on June 26, Glen Pass was stock passable by August 14, and Forester Pass was stock passable by August 28.

Seven parties inquired about the conditions of Harrison Pass. This seems to me a large number considering the difficulty and cross-country nature of the pass. At least five of these parties turned back or changed their itinerary after speaking with me or attempting to climb Harrison Pass.

As trail conditions changed, I passed information along to the Wilderness Office and occasionally the Roads End Permit Station. Unfortunately, the Wilderness Office did not always accurately record or distribute the information to the trailheads or backcountry visitors. Furthermore, the Roads End Permit Station did not adequately stress the seriousness of the warnings from wilderness rangers regarding hazardous crossings and snow-covered passes. Several parties shared with me that they felt unsafe and scared and wished they had been given better information – information that I and other wilderness rangers had already asked the trailhead rangers to disseminate.

Between NPS trail crews and the Cedar Grove Pack Station trips, the bulk of stock use in the Charlotte Lake patrol area concentrated at Junction Meadow. I contacted three stock groups between Middle Vidette Meadow and Center Basin Junction, Sequoia Kings Pack Station delivered resupply caches to Charlotte Lake at least five times, and one string of donkeys was led from Onion Valley to Avalanche Pass. Surely there was more stock use in the patrol area, but I did not encounter the parties.

2. Law Enforcement Incidents:

There were few LE incidents in the Charlotte Lake patrol area this season; most of which involved wilderness permits, food storage containers, and campfires. I issued one citation for "no permit when required" and covered 111 when she issued citations for "no permit when required" and "interfering with agency functions". Warnings were given for poor campsite selection, improper food storage, and illegal fires.

Last year's end of season report for the Charlotte Lake patrol area included remarks about two backcountry visitors claiming to be day-hikers even though they were well into the wilderness with large packs and overnight gear. This year, I met a similar individual near Charlotte Lake. While I was unconvinced by his story that he was only day-hiking, I did not pursue the issue because several other parties required my assistance at the same time.

Inyo National Forest rangers gave bad information about food storage, campsite limits, and campfires to several parties. At least two permits were issued by the wrong trailhead and therefore the parties were not given the proper information corresponding to their itinerary and area of travel.

5. Search, Rescue, and Medical Incluents.					
Date	Location	Туре	Evacuation		
7/19	Cedar Grove	Laceration	POV		
7/24 413 responded	Junction Meadow	Sprained Ankle	Stock		
7/25	Sphinx Creek Jct.	Sprained Ankle	Treat and Release		
8/8	Forester Pass	Dislocated Shoulder	POV		
8/14	Charlotte Lake	AMS/Stomach Pain	Treat and Release		
8/14	Charlotte Lake	AMS/Vomiting	Treat and Release		
8/21	Charlotte Lake	Fishhook in Cheek	POV		
8/29-9/2	Mt. Brewer	SAR/Recovery	Helicopter		

3. Search, Rescue, and Medical Incidents:

Several more AMS cases were reported to me after the symptoms resolved. Most of these incidents involved hikers entering at Onion Valley and hiking to Mount Whitney. At least two parties changed their itinerary and returned to the trailhead because of a sick hiker. By the time I contacted these parties the hikers were all well.

4. Service Incidents:

In addition to numerous visitor information contacts, there were a few noticeable service incidents. I assisted two visitors and 413 assisted two more visitors who were poorly dressed and poorly prepared for the July thunderstorms. All stayed in the Charlotte Lake

Ranger station until their gear was dry and the weather was safe for them to continue hiking.

Twice, I visited and worked with 9237's crews in Center Basin and Sixty Lake Basin. I spent six full days (two with 915 and 918) working on the campsite inventory project and two (one and a half with 9232) full days working on the residual biomass/meadow monitoring project.

5. Ranger Station:

443 visited the Charlotte Lake Ranger Station to assess its condition and prepare for improvements in 2007. His report to 441 has a detailed description of structural and systemic conditions as well as recommendations for improvement and repair. Key issues are drafty and poorly functioning windows, a leaking roof, and clumsy storm shutters. Other areas for improvement include old beds, marginal propane plumbing for the stove, poorly insulated roof and walls, and a minimum of shelves and work surfaces.

I added shakes to the roof to cover holes in the tarpaper and prevent leaks but many of the shakes are rotten and may need to be replaced soon.

The solar system functioned flawlessly as did the new radio base station and roof antenna which increased radio reception so well that I could even monitor Command and General Use from Cedar Grove. The propane stove and oven worked very well, with the exception of the back left burner which left soot on the bottoms of pots. The pit toilet is in fine condition. There were no rodent problems all season.

By the end of the season, the water from the Katadyn purifer tasted very silty and biologic, much like lake water. Scrubbing the filters did not change this and perhaps the filters should be replaced.

C. Wilderness Protection

1. General Resource Conditions

Hopefully the 2006 campsite inventory project provides a good measure of the number and quality of campsites in the Charlotte Lake patrol area. In my opinion, the sites were generally in good condition with few severely impacted areas. Illegal fires continue to be an issue, however, since this is my first season as the Charlotte Lake ranger, I do not know how this year's use compares to previous years.

Trails in the Charlotte Lake patrol area benefited from the NPS and CCC trail crews doing much work in the Junction Meadow and Kearsarge Lakes areas. Their work was noticed and appreciated by many wilderness visitors all summer long.

The Junction Meadow, Vidette Meadow, and part of the East Lake drift fences were already up when I arrived. A large tree had fallen across an upper portion of the East Lake fence and knocked down several fence posts. The trail crew built a new drift fence at Junction Meadow to protect the recently flooded lower meadow. The old fence posts are still in place and should be removed unless there is justification for leaving them in place.

2. Meadow Management:

Bubbs Creek is still diverted at Junction Meadow and a new drift was built this year to keep grazing above the fragile lower meadow. 9232 inspected the meadow early in the season and recommended that the upper meadow open for grazing on the standard opening date for wet seasons. Twice more during the season, 9232 visited Junction Meadow. I met with 9232 at Junction Meadow both times and discussed the impact the meadow received this year.

Junction Meadow received a significant amount of stock use this season. With the CCC trail crew spending the first part of the season at the Junction Meadow stock camp and the NPS trail crew based at Bullfrog Lake, weekly resupply pack trips severely impacted the Junction Meadow area.

Perhaps a permanent high line can be established on a hardened surface and packed feed be a mandatory requirement of stock users in Junction Meadow.

3. IBP/Concession contacts and comments:

With the exception of Sequoia-Kings Pack Station, all Incidental Business Permit holders and concessionaires had the required paperwork and permits. I did not contact any of the SKPS packers after their permit was revoked mid-season but did feel uncomfortable since the decision was made so late into the season. By that time, SKPS had already made commitments to clients and were, therefore, in a position to let these customers down by cancelling their trips, break the law by sneaking into the park, or keep asking for exceptions to the park's decision.

A large full-service pack trip from Cottonwood Pack Station travelled from Onion Valley to Cottonwood Pack Station. While the packers and all the members of the party were gregarious and seemingly conscientious, a through-hiker complained that there was no room in the food storage locker because the stock feed was stored in the locker. I asked the packers to store the feed in their panniers and keep the lockers available for through-hikers.

Two participants on a Walden West Backpacking trip became sick at Charlotte Lake and I was not able to fully determine whether they were suffering from AMS or a gastrointestinal ailment. The whole party admitted to sharing food and water throughout the trip and perhaps poor hygiene got the best of these two patients. Although both leaders were trained in Wilderness First Aid, neither seemed to know how to treat the participants. SEKI may want to consider Yosemite's recent requirement that at least one leader of organized trips be Wilderness First Responder certified.

4. Signs:

Per 111's request, I removed two old aluminium "no fires" signs from the Kearsarge Lakes area and two anodized aluminium "restoration area" signs from Bullfrog Lake. The wooden sign on Junction Pass was broken and poorly repaired. It should be replaced or simply removed. Finally, the "no camping below Sphinx Creek" sign at the Sphinx Creek junction with Bubbs Creek is facing downstream. It should be turned around 180 degrees so its message is conveyed to the correct audience – hikers travelling from above the Sphinx Creek junction to below it.

5. Bear Incidents:

There were no bear incidents all season. Bears were sighted at Junction Meadow and Charlotte Lake. The newer, two-door food storage locker at Charlotte Lake is slightly damaged. The structure is warped and the doors do not fully close. This issue was passed through the Wilderness office to 9210. Without heavy equipment, I do not know how the box can be returned to square.

6. *Wildlife observations:* See wildlife observation card.

7. Resource impacts/issues:

Helicopter use in the wilderness was frequent this season and many visitors and park employees complained that it was excessive. While I don't know what brightline the park uses to justify flights into the wilderness, perhaps this standard can be revisited to reduce noise pollution and the unwelcome distraction of machinery in the wilderness.

Many parties asked about the camping restriction at Bullfrog Lake. The area is still recovery from the huge impact several decades ago, but exactly how far from the lake the no camping zone extends is not clear. Perhaps a metric can be stated in the compendium, ie: a half mile radius from the lake. The NPS trail crew based their work out Bullfrog Lake and did an excellent job rehabilitating their site.

On my last patrol of the season I saw a fallen log across the trail at upper Vidette Meadow and another on the Bubbs Creek trail below Charlotte Creek. There will surely be more blow down and avalanche debris by next summer.

8. Minor resource projects completed:

9. Fire Ring Data:

10. Campsite conditions:

See Campsite Inventory data for campsites in the Charlotte Lake patrol area.

D. Recommendations

1. Communications:



The Fire Weather report is an extremely important piece of information for wilderness rangers. Unfortunately, the reports were not always read. When they were read, the time at which the report was read varied by over an hour. It would be ideal if a specific time was chosen and the reports read consistently at that time, like the 11:00 AM roundup. Furthermore, the "discussion" portion of the report rarely transmitted when one of the female readers broadcast the weather. In spite of repeated requests from multiple wilderness rangers, this never improved.

As discussed earlier, the dissemination of information to and from the trailhead rangers can be improved. Better transcription and distribution of trail condition reports by the Wilderness Office will help as well as trailhead rangers fully understanding the significance of these reports and why hazards should be fully stressed to hikers.

2. Resource impacts/issues:

Perhaps a permanent high line can be established on a hardened surface and packed feed be a mandatory requirement of stock users in Junction Meadow.

The old drift fence posts are still in place at Junction Meadow and should be removed unless there is justification for leaving them in place.

3. Signs:

The "no camping below Sphinx Creek" sign should be turned around 180 degrees so its message is conveyed to the correct audience – hikers travelling from above the Sphinx Creek junction to below it.

4. Work to do for 2007 season:

Several items need to be backhauled at the beginning of the season: trash in 50-gallon drum behind station, small propane canisters, fire extinguishers, barbecue grill in snow survey shed, and hiker box of food in the station.

By the end of the season, the water from the Katadyn purifer tasted very silty and biologic, much like lake water. Scrubbing the filters did not change this and perhaps the filters should be replaced.

E. Equipment Needs

Inventory of supplies and gear left at Charlotte Lake Ranger Station:

- 3+ gallons white gas
- 4+ canisters of propane
- 1+ tank of propane
- 1 Sierra Designs Clip Flashlight tent
- 1 Outdoor Research Advanced Bivy Sack
- 1 Coleman liquid gas lantern
- 1 Coleman propane lantern
- 1 Garcia food storage container
- 1 Bendix King radio AA-battery clamshell
- 1 Katadyn 10-liter ceramic water purifier

Supplies needed for 2007 season:

- 1 box of binder clips
- 1 pair of needle-nosed pliers
- 3 Katadyn water filters

2006 END OF SEASON SUMMARY **HOCKETT RANGER STATION JOE VENTURA**

A. **GENAERAL OBSERVATIONS**

a. Contacts

1. Backpackers	59	
2. Day hiker	3	

- 2. Day hiker
- 3. Stock Users 23 Private Stock Users with 38 head of stock
 - 8 Commercial Trips with 33 guests, and 61 head of stock
 - 8 Day riders with 9 head of stock
- b. Start of Season

I began my season at Kern Ranger Station in June, and on July 20 I moved to Hockett for about 6 weeks. I left Atwell Mill with 4 head of stock on a cloudy day. Gregg Feltis was going in to resupply the Trail crew so we rode together. Great trip until about 1 pm when it began to rain, then hail. Arrived at the station about 3, he went to the camp and I unpacked and opened the cabin, all in a driving hail and rain storm. It rained for several hours, the meadow was a lake, and the creek behind the station was a major stream.

Tyler Johnson was visiting the trail crew camp for a few days. He and his wife and another couple had hiked in and arrived shortly before Gregg and I. Their gear and clothing were wet as well as they. They stayed in the cabin for 2 nights, to dry out, and Tyler helped me with the pump, kitchen drain, and other chores. It was much appreciated and an excellent opportunity to visit with him.

Gregg left 2 days later and took my one mule out and transported it down the hill for my wife to pick up and take home. She would bring it back in August when I would need it to close the station and ride back to the Kern for the remainder of the season.

c. Law Enforcement

There were three events that constituted a law enforcement contact. The first was a stock group at Rock Camp on the South Fork that had a dog with them. The owner claimed he did not know dogs were not permitted and said he did not see signs at the park entrance at Summit Lake. I wrote a report and Erika would follow up on the matter. He did pack up that day and left the park via

Touhy Gap. I confirmed that signs did exist at Summit and Touhy Gap.

The second event was a contact with two backpackers at Summit Lake. This involved a fire pit in a no fire area, nails in trees, improper food storage, a pellet gun, and camping on vegetation. The kids were cooperative. They cleaned up the area, removed the fire pit, removed the nails, and left the park. Erika would follow up on this as well.

The third event was a group of bow hunters passing through the Hockett on their way from Atwell to Wet Meadow. Their trip started late, but they should have been able to make the boundary by sunset, but it turns out they didn't. They camped in the park that night and the next day lost their stock, and spent another night in the park. I did not see them camping, but it was witnessed by a visitor. I found their camp the next day but they had located their stock and moved on out of the Park. That was given to Bud Walsh for follow up.

d. Citations

Refer to Law Enforcement

e. Medical Emergencies

There was one rescue and transport event. On July 23 two pack mules and a 80 year old male on horseback went off the trail at Cabin Creek, about 1 mile from Atwell Mill. Tyler Johnson and his group were hiking out from Hockett and alerted me to the accident, and said I should respond as they would need as much help as could be had to rescue the rider and deal with the stock. When I arrived there were approximately 15 people on hand including Bud Walsh and Chris Waldschmidt. The injured party was carried out by litter to Atwell Mill, transported by ambulance to the Helipad and flown by Life Flight to UMC. By 1030 pm I had the equipment, mules, and fellow companion of the injured party out to Atwell.

f. Fatalities

There were none

g. Transports

See medical emergencies

h. Searches

There were none

i. Weather

Several thunderstorms, one during my arrival on station and one During the medical emergency on July 23. The rest of the season Was mild, and towards the end of August a fire in the morning was nice.

j. Fires

A fire burning in the forest area near Tamarack Creek, caused some smoke problems for a short time, and also closed trails into the forest area from Farewell Gap. This changed the itinerary of several groups of backpackers.

B. USE PATTERNS

a.

There was evidence of stock use on the South Fork well before the July 21st meadow opening date. The meadows at Hidden, Rock, and Upper camps looked very well, so perhaps early arriving stock users brought feed in. I did find several stock users feeding pellets and simply hand grazing for an hour or so even after the meadows opened.

Backpackers were plentiful during my stay at the Hockett. I only observed two groups at Summit Lake this summer, and only a few at Blossom Lakes, and no one at Cyclone.

It was apparent that Balch Park Pack Station had a busy season, and many of their trips were into the park. Tim Shew the owner, conducted many of the trips, but he did use his daughter Chelsea, and Mike Brown as packers. I am acquainted with all of them from previous seasons, and all are easy to deal with, and willing to do what is requested to better manage stock impact.

C. NATURAL RESOURCES

- a. I saw plenty of bears this season, but there were no contact with visitors. Bears were seen in the meadow, in the trail crew camp, and sign of them around the privy at the station. I saw bears at the trail crossing near Rock Camp and in the area of Corner Creek. The bear box at Hidden Camp has been broken for 4 years, and is used primarily for a table now.
- b. Wildlife

There were about 25 deer in the meadow during the early part of the season, but mountain lion tracks and one group spotted one on the trail, may be why there were so few seen towards the end of the season.

c. Vegetation
All the meadows were green, tall, healthy and wet when I arrived.
It seemed that within in 2 or 3 weeks, the grass was drying and meadows turning brown.

D. BACK COUNTRY FACILITIES

a. The Ranger Station appears to be in good condition. The caulking, or hemp, and the foam stuff in between the logs used a few years ago, needs replacing, and a bit of paint wouldn't hurt either.

Thor visited this summer, doing his building inventory and made notes of the things that need to be done. He can give a better report on the actual physical condition of the place.

The Quinn cabin for its age is in good shape. Bud Walsh went in around late September and gave the place a good cleaning, and took out some old sleeping bags, trash and garbage. A bear had dug a hole on the roof near the north eave of the building during the winter. I took a bunch of shingles from Hockett to Quinn and performed a repair job of sorts. It didn't appear as though the bear or water created any problems with the attic. Thor said it was well done and I could go to work for him if I wanted.

b. The toilet on the trail to Evelyn Lake may need attention in the spring. A bear has broken and knocked over the cone and seat of one. It was apparently getting into some garbage that had been dumped into the pit.

The hitch rail at Evelyn Lake is broken and needs to be replaced.

c. I replaced the wooden food storage cable at Horse Creek with a metal one. The metal boundary sign at Touhy Gap should be replaced. It was crushed by a tree some time ago, and is pretty misshapen. I replanted it and it is legible but looks kind of tacky. A new sign and post would be easier to replace, as a new hole has to be dug anyway.

Billy Hancock and I talked about the sign needed at the junction below Summit lake at the Windy Gap junction. There is not one there but a trail does go in that direction, and when someone needs to be going that way he or she would not know to turn there. A sign a few hundred feet further down the trail towards Cyclone meadow exists, and it should be moved to where there is no sign. Erika also observed this when she patrolled the area. My description of the problem does sound confusing, but I believe Erika has a diagram of the area and where the sign should be, and what has to happen.

E. TRAILS

Trails associated within the patrol area are in good condition. Lots of down trees, but the trail crew got on that early. The trail area

near Hidden Camp where a causeway was built several years ago is holding up just fine. The steps on the granite portion of the trail between Upper Camp and the Blossom Lakes junction are getting a little tall. Stock and humans do ok going up, but down hill stock have to jump down to the next tread, and when hiking I have to turn sideways to step off one step down to the next. I think that is self explanatory.

F. CAMP AREAS

a.

Early on the three primary stock camps looked pretty good, but by the end of the season they were worn out. The meadows were short, not when I left in August but when I returned in October for the snow survey resupply, and maybe that is what I should restrict this report to, what the Hockett looked like when I left. If I or another wilderness ranger had been on station for the rest of the season things may have not been different, but who knows. I think we could have managed the use a little bit, by directing folks to other possible camp sites.

Sanitation did not appear to be an obvious problem. As much as the Pack Station used the camps and the number of guests, one would think that you would see signs. That was not the case. The packers dug cat holes or pits for people to use. I don't know what the private users did, so if I didn't see any evidence of what they did or its resulting impact, they too must have practiced proper sanitation.

Fire Rings require a good deal of attention wherever the stock camps are. I had to work on the South Fork fire ring for several hours, reducing it from a 6 foot circle 18 inches tall to a 5 rock fire ring. Lots of ash removal in all the camps was necessary. I removed 3 grilles and a 25 lb steel plate from four camps.

Firewood was available at all the camps. The backpacker camp near the Ranger Station will have wood for several seasons as a lodgepole went down adjacent to the camp. There was evidence of a chain saw used at Rock Camp. A tree that had come down, had been limbed of all branches and the tree then used as a place for pack and saddle stock. It was apparent that a chain saw was used for this project. Erika, David Yemm and I all saw evidence of this. This happened before the season began. I discussed this with Tim Shew who reported that a large stock group camped at Rock Camp for a week during the July 4th holiday. This was 3 weeks before the meadows opened. He assumed they packed feed in. It did not appear as though a large stock group had grazed South Fork meadow when I arrived. The grass was tall and very few hoof prints in the meadow or creek banks were present, so maybe they did pack feed, and maybe they did bring a chain saw with them.

Food Storage was not a problem this season, except for those who camped at Hidden Camp. The box there is broken, the door completely off. I wouldn't be surprised if that door does not become a campfire griddle at some point. I have posted signs notifying folks of the broken box, and that they must use other certified bear containers or guard their food.



a.



H. RECOMMENDATIONS

a.

This summer the Chief Ranger stayed a few nights at the Station while I was on patrol. When I returned he had left a note describing his visit, and asked that if I recorded the measurements of the window shades in the cabin he would see that new replacement shades would be ordered. I did that. He also said if there was anything else the station needed to add that to the list. I did that too. The cabin needs new mattresses and when Erika came in for a visit, we took those measurements as well. She will discuss this with the Chief and see if the budget will withstand the expense. I would also ask that we contact Tyler Johnson as he mentioned to me that he had a new refrigerator and no where for it to go at the present time. That may have changed since his stay at the Hockett, but it bears follow-up in the event he still has it available.

I. INVENTORY

a.

The Station has just about everything one would need in the way of equipment. Both stations received two new full size sleeping bags this fall, courtesy of the snow survey budget. The stove and fridge are in good working order, but a new fridge would be a bonus. Someone broke the propane tube outside of the cabin and replaced it with very short one. That same person placed a new one in my box at the Wilderness Office and I packed it in and Dave Yemm helped me make it work. Thanks to the person for sending in a replacement. There are only one and half tanks of propane in the tack shed, and two empty ones that need to come out.

The solar system is working fine, and the batteries during the day reflect a state of charge at about 13.7 volts. The biggest draw in terms of load is the 12 volt fluorescent lights. (b) (7)(F)

Joe Ventura

Kern/Hockett Ranger

Date

Kern Station

2006 End of Season Report

A. General Observations

a. Contacts:

Backpackers-80 Day Hikers- 9 Day Riders- 1 Stock Users- 1 private group, 6 people, and 11 head 2 commercial spot trips, 3 packers, 9 guests, 11 head 1 commercial trip, 1 packer, 2 guests, 6 head

b. Start of Season

I left Jerkey Meadow Trail Head on Weds. June 21at 1pm, with Erik Frenzel, and a friend of mine (b) (6) , on a hot sunny day. Arrived at Trout Ranger Station for the night. We arrived at the Kern Station on Thursday about 2 P.M. and were greeted by Eric Davenport, trail crew leader. The weather was still warm, about 95 degrees. Eric said the cabin interior was a mess, thanks to rats and mice. It was. Erik and (b) (6) pitched in and with masks, bleach and gloves we got to work. We pulled all the furniture out and threw a bunch of stuff out. We put much of the historic and cultural items in boxes and they were later flown out. Rats were making a mess of the items, and knocking them down off the mantle.

The trail crew had already opened the ditches and had water running to the cabin, and the shower. There were indications of bears molesting the buildings, but no damage was observed.

The season was determined to be a "wet" season, meaning my pastures and the meadows would not be ready for grazing until July 1st. Gregg and Nick had packed in the trail crew the week before. The packers and the stock spent the night and fed hay, then left the next morning. I too was relegated to feeding pellets and grain until July 1st.

The next day June 23rd, Erik and I hiked to Lower Funston. On the way we checked the large pasture, and determined it would be all right to graze on the first of July. The meadow at Lower Funston was green and tall and surprisingly fairly dry. It too would be ready to open on July 1st.

On the 24th we got as far as Rattlesnake Creek in our effort to check Upper Funston. The water was high and fast, not suitable for stock. A large tree was down about 100 yards upstream, so hikers could get across.

Erik departed on the 25^{th} , back to Jerkey, and (b) (6) left on the 26^{th} .

This year was unique in that my assignment would include a 6-week tour of duty at the Hockett Ranger Station, beginning July 16th. Other rangers and park staff would visit or patrol the Kern during my absence. Also unique and very frustrating was my inability to get across Rattlesnake and Coyote creeks with stock before leaving the Kern on July 16th. Last year was a normal year and it was difficult then. It was necessary to have someone on the other side to throw a rope to and lead the horse across through the high water, and let the mules follow across on their own. If an animal went down, at least a human would not go down with them and end up in Lake Isabella.

I was able to hike to the Hot Springs, but not until July 1st when I could put my stock in the pasture, because until then they had to be fed twice a day.

During my hike to the Hot Springs I discovered that the trail between Rattlesnake and Big Arroyo creeks was largely under water. Logjams on the river had moved water to the west side and trails were now about 2 feet of water in places. Where the bottom or tread of the trail could be seen, it was very boggy and I would sink to my calves or knee in places. Hikers were bypassing the areas in very rocky and steep areas. Stock were not going to be able to bypass or travel on the main trail. Another area that was aggressively worked last year by the trail crew including new boardwalks above the High Sierra Trail junction was undone by the high water. After some discussion about this with Erika Jostad, I posted these two sections of trail closed to stock, until the water receded, and the trail crew could make repairs. I posted the trail with signs and informed the Wilderness Office.

On July 12th Erika Jostad, Allison Steiner, Laura Pilewski, and Will Jaynes arrived at the Kern Station for a day and a half of stock training. Afterwards, Erika, Laura, and I pulled velvet grass out of the admin pasture. Erik Frenzel had identified it on his visit here. Later, Laura hiked about the area and identified other plots in the larger pasture, on the trail below and in the meadow at Lower Funston.

On July 16th I left the Kern Station via Lewis Camp trailhead for my tour at the Hockett. On September 5, participated in the Military Trip with J.D. Swed and Gregg Fauth. On September 13th I returned to the Kern via M.K., Franklin Pass, Rattlesnake, and met with Erik Frenzel at Upper Funston for the night. We did meadow monitoring the next day, and I returned to the Station that night.

I closed the station on September 28th, having patrolled approximately 556 miles on horseback, and 112 miles on foot, both accumulations from my tours at Hockett and Kern stations as well as the military trip.

c. Law Enforcement

While assigned to the Kern there were no law enforcement contacts. Some issues with IB Permits occurred with Golden Trout Wilderness Pack Trains. On July 8th, I contacted Mark Brown a packer for GTWPT. He was taking two hikers to Middle Rattlesnake for a spot trip. First I told him he would probably not be able to cross Rattlesnake creek, and if he could, then he would have to feed hay, grain, or pellets if he overnighted anywhere above Cow Camp on the trail. In addition he did not have a copy of the IB permit, nor any identification. I know Mark, so that was not an issue, but he also did not have a wilderness permit for his guests. The two guests admitted that they filled one out at the pack station, but it must have been left on the dock with some other items they left behind. Mark said he would be back next week for another trip and he would bring copies of all the documents. I gave the visitors a note regarding their circumstances in the event they were contacted during their visit by another ranger. I also informed the wilderness office of the contact. I later learned that the pack station had not filed for the IB permit. It had been mailed to them, but had not been returned. Several days later, that was resolved.

On September 16th, another packer for GTWPT on another spot trip, came through and again did not have a copy of the IB permit, or a Wilderness Permit for the guests. He said he would be back to pick up the group on the 20th and would have that information. He did. This was his second trip for the pack station and apologized. On September 22, I contacted personally both owners of the pack station, and emphasized the importance of providing their employees with the required documents. I don't believe e this will continue to be a problem in the future. They are new to the pack station business, and appear to be wanting to comply with park rules and regulations.

d. Citations

There were none

e. Medical Emergencies

On September 24th I rode from Lewis Camp trailhead with my neighbor Just before Little Kern River, his mule was bit by bees or wasps, and bucked (b) (6) off. He had the wind knocked out of him, was sore just below his left armpit, but said he was fine. He remounted, and we rode to the station. He was mobile and ambulatory that day and the next, however on Tuesday, September 26th as he rose out of his bed he felt a popping, on the left side of his rib cage, and was nearly blinded by the pain he said. He did not feel like he would be able to walk or ride out with me on the 28th. I completed an exam, and found his chest sounds were normal, and that he was relatively pain free sitting still. If he coughed, laughed, or moved his upper torso, he went to a 9 or 10 on the pain scale. I contacted Erika Jostad, and she determined that a medical evacuation was his only option. She and Helicopter 552 arrived about 1200 hours. Slowly and with discomfort, he was able to sit in the ship and he was taken to Ash Mountain, the transported by ambulance to KDDH. I took his mule out with me when I closed the station.

f. Transports

See above

g. Fatalities

There were none

h. Searches

There were none

i. Weather

Mostly hot. One day on the porch at 5pm, in the shade, it was 96 degrees. It rained on June 27^{th} and on the 28^{th} . When I returned to the Kern in September, fall was evident, but no rain since July 23^{rd} .

j. Fires

A lightning caused fire burned in the Little Kern River drainage about July 8^{th} . It was close to the Coyote Pass area and produced a lot of smoke that rested in the Kern Canyon.

On September 18th nearly unbearable amounts of smoke were in the canyon determined to be the result of a fire in the Los Padres National Forest.

B. USE PATTERNS

a. Hikers

I observed about 30 hikers traveling by the station during the season at the Kern. Most use is observed up canyon, where hikers travel to the Kern via east west routes from Mineral King, Crescent Meadow, and Mt. Whitney. Their travels result in heavy use at the Hot Springs.

b. Stock Users

Stock use was moderate this season, or at least the impact of stock use was moderate, considering that the Funstons opened long before the other meadows in the park opened. Grazing was evident at both Funstons and some grazing occurred on Rattlesnake camps.

c. Commercial Stock Use

It was reported in the Stock Use Observation report by one of the visiting rangers that Rock Creek Pack Station conducted trips into the Kern. On one trip they passed through the station spent two nights at Lower Funston, two nights at Upper Funston then two back at Lower, and then out. Even Horse Corral Pack Station did a resupply of a hiking group at the Hot Springs. I did not see or hear of any trips into the park by GTWPT.

d. Administrative Use

Use was limited this year due to the "wet" determination. The packers brought the trail crew in, and left the next day. After that the crew was resupplied by helicopter until mid August when Greg came in to move the crew from the Hot Springs to Cold Springs. Even then Gregg had to camp at Upper Funston, as grazing is closed below the Kern Bridge.

C. NATURAL RESOURCES

a. Bear activity was low this season. As reported earlier a bear did attempt to get at the grain in the tack shed this year as in the last 2 years without success. Visitors reported bears at the Hot Springs and upper Funston. There were no reports of bears annoying visitors or obtaining their food. Warnings of proper food storage were posted on the trail at drift fences and in campsites.

b. Wildlife

Another high season for rattlesnakes. On my first journey up canyon with Erik Frenzel I watched him rock hop on to a log at Laurel Creek and nearly step on the snake resting on the log. It was downhill for the rest of the season. When I returned to the Kern via Mineral King in September and arrived at the Rattlesnake and Kern Junction, saw a huge rattler. When I arrived at the Upper Funston to meet with Erik, he had chased a rattler out of the campsite.

Visitors reported an eagle at the Hot Springs and near Lower Funston.

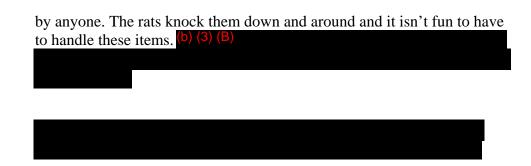
c. Meadows

This year the meadows were dark green, tall, and wet. Erik identified an invasive plant, velvet grass, in the administrative pasture at the station. Laura Pilewski discovered other plots of velvet grass in the big pasture, on the trail below and at Lower Funston. She plotted their locations and I was given a GPS with instructions from Erik on its operation and I recorded the locations for Athena. Hope the thing was working right and I get her close to the exact spot.

D. CULTURAL RESOURCES

a. Cabin

This year when we arrived the interior was a mess. Many of the artifacts kept inside and on the fireplace mantle were covered in grime and rat droppings. They just do not get the opportunity to be viewed or enjoyed



E. BACKCOUNTRY FACILITIES

a. The cabin appears structurally sound. The back door frame is settling and causes the back door to stick.

The wood stove chimney was bent over again this past season. Rainwater drips down the chimney and is rusting the pipe and stove. Thor visited to do his building inventory, and is aware of the problem. I did get up there and put about a shovel full of Henry Roof Patch on the flashing and pipe, reset the guide wires that keep the thing relatively upright. Let me know how it holds up this winter.

The sump is still not percolating very well. When I arrived this summer, it was about 18 inches from the top, During my absence from the station and infrequent use by visiting staff, the grey water level did not appear close to spilling over, like it did last year.

A window on the east wall north of the front door, remains broken. It is intact, held together with tape and cardboard. Thor examined it and I believe he has the measurements. They are included in last years end of season report.

The stove and fridge are in excellent operating condition. The kitchen cabinets, and storage cabinets remain rodent proof. While Thor was here he acted as my spotter, while I climbed up on the roof and reset the wire screen over the fireplace chimney. It is there to prevent entry into the cabin by rats. In talking to Steve Moffit this summer, he says the rats enter the fireplace from the attic, where the rock walls go through the ceiling, attic, and roof. There is every indication that he is correct, as the rats focus on building their nests in the fireplace box and floor area. Some kind of steel plate or heavy screen placed where a damper should be, or covering the entire box opening would help.

F. TRAILS

a. When I returned to the Kern from Hockett, I patrolled up to the Hot Springs, and found that the trail crew had worked the trail from Rattlesnake north. The boardwalk was repaired, and there appeared to be no big concerns. The log jams still are in place on the river, so another high water year could result in problems again next year. b. The Rattlesnake trail could use some attention next season. From the switchbacks down to near the junction the rocky trail is getting very rough, with steps that are hard on both man and beast.

Another tough spot is just above the switchbacks, where a spring comes out of the north side of the trail, and causes a very wet and slippery granite area. It is also very close to the steep edge of the trail. Hikers have to rock hop the spot, and a misstep could result in an injury. I always walk that spot. It could benefit from some blasting or some type of causeway. I don't recall this being as big a problem during a dry year, just in normal and wet years.

c. I still receive a good deal of complaints from both hikers and stock users regarding the Coyote Pass trail on the forest side. There are several trees down on the trail just west of the Park Boundary at the pass, that are difficult for hikers to negotiate, and extremely dangerous for stock users. The bypass for these trees are suitable for hikers but not for stock users. The Tamarack fire this summer did not burn the trees down on the trail from the Pass to Rifle Creek. It is believed that the forest folks will log the trail, as part of their cleanup efforts post-fire.

G. CAMP AREAS

a. The trail crew repaired the hitch rail at Lower Funston, and cleared the down trees obstructing access to the campsites.

In September the old style bear box was removed and replaced with two new ones at Lower Funston. The down side is that they are both at the north camp. One needs to be moved a few hundred feet to the south camp, but it will take three or four people to accomplish that.

- b. I knew the campsite inventory folks were going to be in the area this summer so I rehabbed the Lower Funston camp in early July. All that was left was one down log near the fire pit. When I returned in September, it looked as though preparations were made to build a log cabin! 20' logs were stacked 3 high on 3 sides of the campsite. A bear box had been moved to the fire pit area to serve as a table. It is all gone now.
- c. In order to reach the meadow from the trail, stock and people have to cross a small stream or kind of lagoon. The banks of the stream are experiencing severe damage and erosion. Stock are now crossing in other portions of the stream to avoid the boggy eroded banks that are on the main traveled entrance to the meadow. It is getting very ugly. A wooden bridge or causeway, like some of those on the Hockett Plateau would eliminate that.
- d. And while on that subject, how about a bridge at the Rattlesnake Creek crossing? In a dry year the crossing is stock doable early in the season. In a normal year it is mid July before stock can cross, and in a wet year it will be late July, and only then with the ranger having some help on the other

side of the creek. Have someone stand on the other side of the creek, throw him or her a rope and they lead the horse across the creek. Turn the mules loose and they will eventually enter the water on their own and cross, they think the horse is leaving them. I observed in September that the banks are experiencing major erosion on the north side.

A wooden bridge, no rails, just a wood plank floor, would be an answer. It would make the crossing safer for all, and just as importantly facilitate the early season patrols of the upper portion of the canyon on stock. (b) (7)(F)

e. Sanitation

The toilets at the Hot Springs and Upper Funston need the floorings replaced. The timber for the Hot Springs is at the T/C camp, they just need the time to do it along with their other projects and emergencies.

The Upper Funston toilet needs a toilet seat and lid. The current one falls off the tower when used. The floor is ok, just needs to be leveled and reset.

f. Fire rings

The fire rings in designated camps were in good condition and of minimal size. Lower Funston and the west Hot Springs fire ring require more attention than all others.

g. Firewood Availability

Firewood was plentiful in most of the camp areas

h. Food Storage

There were no food storage incidents this summer. Contacts with visitors found that many were carrying bear canisters, and stock users seem to understand that bear boxes would be inevitable.

H. PERMIT SYSTEM

a. Two incidents this summer with both wilderness permits and IB permits were encountered, and both with GTWPT. Guests of the pack station left their wilderness permits at the pack station, and the packer did not have a copy of the IB permit or I.D. on their person. The first time this happened in early July, it was discovered that the pack station had not returned their IB permit application. That was resolved. In both cases the packer promised to bring the documents when he returned to pick up the guests, and they did.

The new owners of the station are new to the pack station business, but seem to be open to suggestions and want to do the right thing. I have had some discussions with them on several occasions, and each time they learn something new about doing business, especially in the park.



I. COMMUNICATIONS

J. NEEDS FOR NEXT YEAR

- a. A large metal bear proof box to store grain and pellets outside of the tack shed would be just great. It may reduce the attempts to get into the poor old shed. It has been repaired with a hodgepodge of materials, and it cannot withstand many more entry attempts.
- b. The station still needs a roll of electric fence tape, the current one having been shortened and spliced to the point of being inadequate.

K. RECOMMENDATIONS

- a. It would be great if the Trail Crew could schedule some additional time next year to work on the Rattlesnake Trail from Cow camp to the Kern.
- b. As said earlier, a bridge over the Rattlesnake would be nice. And not just for safety, which is extremely important, but to facilitate patrols of the upper canyon during high water years with stock. I can only imagine a horse and rider, going down in the Rattlesnake at the confluence of the Kern.

L. PERTINENT INVENTORY

- a. There are one and a half bags of pellets, and nearly one full bag of grain in the tack shed.
- b. Vet supplies are abundant and stored in one of the garbage cans in the shed. There are plenty of farrier supplies in the shed and a shoeing kit in the gray box in the cabin. Also in the box is your electric fence kit, with a

short roll of tape. I have been using my own kit, which uses electric fence poly wire, much better than the tape.

- c. You will also need to bring in some powdered penicillin. Each time you think you need to use it, say for an infection of some sort, treatment will involve one dose a day, for a minimum of 5 days. Each dose is contained in a packet, which you administer with some grain. So bring in enough for say two events.
- d. There are three full bottles of propane and two empty tanks.
- e. The cabin is equipped with all the cooking and serving utensils you could think of, including a pasta spoon. There are 6 burlap bags, about 30 large brown trash bags, and just a few of the small wastebasket size plastic bags.
- f. There are sandwich size and gallon size zip lock bags, 3 rolls of aluminum foil, and paper sacks. Bleach and other cleaning supplies are under the sink. Bring some rubber gloves, protective eyewear, and masks for the start of the season cleaning of the cabin.

There are 8 rolls of TP and only one and a half PT. There are also 2 sleeping bags, and two nice daypacks in the cabin.

g. The office cabinet is equipped with steno books, but a few writing pads would be convenient. There are a variety of pens and pencils, sharpie's and such. The cabinet also contains small hand tools for fixing stuff in the cabin, so you don't have to stumble around in the messy tool shed looking for things.

Also in the cabinet are some clean linen, 2 bath towels, and some kitchen towels. There are some vinyl tablecloths in there too and they are marked as to where they go if you choose to use them. There is also a U.S. flag. I used my personal one and the eyelets were different, so the snaps on the flagpole line may need adjustment.

h. The inverter still works loudly but well. The solar batteries seem to be holding up well. By the end of each day and if there has been little demand placed on them the voltage should read about 13.7. I have found that the biggest drain is the overhead lights, and the XM radio. There is very little if any load current registered when using the inverter or the base station battery charger. A voltmeter is in the office cabinet. The cable and antenna that was sent in for us to install, are on the wall above the radio equipment.

In closing I would like to thank everyone who is responsible for me being here, and providing me with an opportunity to actually enjoy my work. I cannot tell you how many times just this season someone said "wow, how does a person get a job like this?" I realize I am very fortunate, and I am sure my fellow rangers feel the same.

Joe Ventura Kern Ranger

September 30, 2006

2006 Little Five Lakes End of Season Report

2006

End of Season Report

Little Five Lakes Ranger Station

By Will Jaynes

June 27, 2006 through September 29, 2006

General Observations

Contacts

533 visitor contacts 664 miles hiked

Early season snow kept hikers from the area for the early part of the summer. I did see over 100 more visitors than last season's Little Five ranger.

Start of Season

Because of heavy snow in the Little Five area, I started my season on the East side of the park with Erika Jostad (). I consider myself extremely fortunate that I was able to start my first season as a wilderness ranger in this way. Last season, the Little Five ranger saw very few visitors the first few weeks because of all the snow. I feel that I received on the job training with () (7) as well as Rob and Laura Pilewski and Alison Steiner. I was able to see their stations and get to know them all better as well as getting to see them work. This made things much easier when I got back to Little Five and was on my own.

After spending June 27 through July 2 on the ease side, I spent July 4-7 on the Hockett Plateau. During this time, I spent two nights at the Hockett Ranger Station and one at the Quinn Ranger Station. It was beneficial to see so much of the Kern-Sub district in my first few weeks. I feel I can answer questions about much of the area now.

I got into Little Five on July 8 and spent just a few days there before heading to the Kern Ranger Station for stock training. I got back to Little Five on July 15 and things were slow as far as hikers were concerned for about the next week or so. I attribute this to snow on the passes and high stream crossings. Snow remained on Black Rock Pass until about the first week in August.

I started to see a rise in visitors the last week in July (which, coincidentally, was the worst week weather wise all summer).

Law Enforcement and Citations

No citations were issued in the Little Five area. I had to speak with a few campers about campsite selection and reminded more than a few people about Leave No Trace ethics. Most visitors seemed genuinely interested in learning and complied without complaint or incident.

Medicals

There were no medicals in the Little Five area.

Transports

There were no transports in the Little Five area.

Fatalities

There were no fatalities in the Little Five area.

Searches

There were a number of searches in the Mineral King area, but none actually spilled over into my patrol area. On September 13 while hiking towards Mineral King for a lieu day, I heard radio traffic about a search in Mineral King. I offered my services. While waiting at the Mineral King Ranger Station for a hiking partner, the individual was found.

My services as a Family Liaison were requested on August 1 for a search in Kings Canyon near Aspen Meadow. I was picked up that evening by helicopter and flown to the site to meet with the family. I spent the evening of August 1 with the husband of the missing woman and another couple who were friends. I spent all day August 2nd with them and hiked them out to Florence Lake on August 3. I spent August 4th at Headquarters writing my report and debriefing with Sue Schwarz. I hiked back into Little Five on August 5.

Weather

Weather was generally beautiful most of the summer, especially August and September. July saw rain and thunderstorms for a good part of the month. The stormiest and wettest part of the month began on July 17th and continued through the 29th. An afternoon thundershower usually rolled in between 1400-1600 and sometimes continued through the evening, though only occasionally lasting through the night. Beginning July 30th I saw only sunshine the rest of the season with just a handful of cloudy days. Temperatures starting dropping around mid-September, getting below freezing the last 7-10 days before heading out. The wind was almost a constant the last 2-3 weeks with strong gusts late at night.

Fires

There were two fires just south of the park that brought smoke into the area in early August. This was especially apparent while I was in the Kern Canyon. There was also a late season fire in the Los Padres National Forest that made the Little Five area smoky for a few days.

Use Patterns

Backpackers

There are a number of different loops that backpackers coming to the Little Five area use. The three most popular seem to be:

1. Black Rock Pass to Sawtooth Pass—This seemed to be the most popular loop with the majority of people going out of Sawtooth. Most hikers do this loop in four days.

2. Kaweah Gap to Black Rock Pass—This hike seemed more popular earlier in the season.

3. Franklin Pass to Black Rock Pass—This hike was probably the third most popular loop (although very close to being second) with most hikers starting exclusively in the Franklin Pass direction.

Most backpackers that stayed at Little Five arrived between 1600-1800 and only stayed one night. Only a handful stayed a second night and none stayed more than two.

Stock

There was very little stock use in the Little Five area this year. I saw no commercial stock in my patrol area. I saw evidence of llama near Lost Canyon, but never saw the animals.

Administrative

There was a trail crew in the area in late August/early September. They camped at Lost Canyon and the Big Arroyo Crossing. The trail crew did use stock. A squad trip had been planned for late September but was cancelled.

Commercial

I only contacted two commercial groups in my area this summer. One from the Sierra Club and one from Outward Bound. Both were carrying their Commercial Use Authorization permits.

Over flights

There were many military flights throughout the Little Five area. I believe them all to be at least 3000 feet above ground level.

I reported one lower flyer while I was covering the Kern Station on August 28. The jet (I believe an F16) flew approximately 1000 feet above the East Canyon wall. When I reported the incident to fire dispatch I mistakenly used Tower Rock (which is not in the park) as the location. Fire dispatch replied that Tower Rock wasn't in the park and couldn't report it. I gave another location that was in the park, but later found out it still wasn't reported. After talking with 3-1-3 (Rob Pilewski) we both believe that this flight was reported to him by visitors as flying down the canyon.

Natural Resources

Bear Activity

There was very little bear activity in the Little Five patrol area, and none reported by visitors. I spotted two bears over the course of the season. One on the Big Arroyo Trail, two miles south of the old Patrol cabin and another about halfway between Cliff Creek and Timber Gap. On my last day in the Little Five area I saw wonderful bear tracks near Long Lake.

Wildlife

Yellow-bellied marmots and Golden Mantled ground squirrels were a constant presence around the station and campground areas. There was a family of marmots (two adults and three young) near the campground that remained curious about my activities throughout the season.

Mule deer were also quite visible throughout the season in the Little Five area including a good number of fawns. I also saw a number of bucks including a group of four to five that I saw a number of times on the west side of Glacier Pass.

Pacific Tree frogs were very vocal early in the season. Thousands of tadpoles were visible throughout the summer in the nearly ponds.

I saw pikas in the rocks above Columbine Lake and just off the trail below Monarch Lakes. I also heard them in various places throughout the summer, including the little hill east of the station.

I didn't see any coyotes this summer, but they were very vocal late in the season, especially my last week. I heard them mostly after dark but also early one morning.

I also saw a Heather vole one morning as I was hiking to Spring Lake from Black Rock Pass.

Vegetation

After a second wet winter in a row, vegetation was very lush in the Little Five area. After the rains in July, however, things dried out extremely quick and I didn't have to delay any meadow openings. There was little to no damage to vegetation in the Little Five area due to the wet winter and no grazing.

Meadow monitoring was not done this season because of the lack of stock in the area.

As noted in last season's report by Roxanne Everett, the area around the Big Arroyo Patrol Cabin lacks vegetation and is very trampled where vegetation exists.

Resource Projects

I completed two resource projects this year. The first was a trail relocation around the pond between Lower Big Five Lakes and Lost Canyon. The trail was underwater for much of the early season and many use trails were beginning to show as hikers tried to find a way to stay dry. The new trail goes wider around the lake and should prove useful next season.

The second project was to naturalize old sections of trail that have been relocated or started to split into a "double track" trail. Many of these types of trails exist in the area. One, mentioned in last years report, is a section just north of the Long Lake outlet. An old section of trail was very apparent and because of the number of rocks, looked a bit like steps. I removed some of the rocks and reduced the rut with duff and sticks.

The relocation done by last years Little Five ranger was also starting to show some wear and hikers were beginning to "cut" this section of trail. I made more obvious barriers and covered the old trail which was beginning to show.

Another bad section of trail was below the no fire sign towards Big Five Lakes. The trail was beginning to split into two, resembling a jeep trail. This was a project I had a Boy Scout Troop help with. I was able to talk about trail maintenance and the importance on staying on the trail with them.

There were a few other old sections of trail that only required minor work such as removing limbs from trail that had grown in well.

Cultural Resources

Historic Sites

The Big Arroyo Patrol Cabin did not suffer any major damage over the summer. Visitors seem very interested in the structure and I allowed some to look inside. There is quite a bit of broken glass in the area.

Backcountry Facilities

Yurt

The yurt held up brilliantly throughout the season and I see no reason why it shouldn't last for many summers to come. It withstands rain, wind, and the cold as well as any permanent structure. The new door and dome were both perfect fits and with good winter storage should last the life of the yurt. Unfortunately, the dome had to be flown out as there is no good storage spot for it.

The tongue and groove platforms are a bit warped and as a result do not all fit together. This leaves a small space in the floor. I solved this by putting down broken down cardboard boxes over the hole and my bed over the top. It was not a major problem.

The drip edge is a bit chewed up from the marmots, but served its purposes well. It may need to be replaced in the future if it continues to be a snack for marmots. They also chewed on the plywood that covers the storage boxes. I also heard marmots trying to get into the storage boxes early in the season. This may have to be addressed.

The porch platform held up fine and I don't anticipate any problems with it in the near future.

I had no problems with fleas this season, which I attribute to getting rid of the carpet that again was left out all winter. I did, however, have mice in the yurt. I never kept food in the station but I did have my kitchen set up inside. Thankfully, there were mouse traps that I did use successfully.

I would like to see another piece of carpet come out. Because of the spaces between the floorboards its very hard to sweep. Most of the dirt goes right into the cracks and as a result, the floor never felt clean. Even a cheap carpet remnant would help. It would be much easier to sweep and could also be brought outside and shaken out.

I was fortunate to have Erika and Dave to help put up and take down the yurt. It had been mentioned in previous years' reports that this was a difficult task for only two people. With three, it was a snap. If possible, I recommend that there are always three people for putting up and taking down the yurt.

Two of the three metal boxes at the station are in OK shape and should be utilized for a few more years. The third (the one located on the Southwest corner) leaks and doesn't lock. I would like to see this replaced.

I had no problems with the electrical system whatsoever. We had the batteries checked before the season and they worked fine all summer. The inverter also did its job throughout the season.

I also dug a new pit for the toilet at Little Five. Although the ground is rocky and tough to dig very deep, the pit should last the next couple of seasons.

Signs

The sign on the West side of Sawtooth Pass needs to come down. It is not consisted with other backcountry signs and has not weathered well.

I also agree with last years report about the signs at Little Claire Lake. The signs on both sides of the lake need to be consistent with information.

I would like to see an interpretive sign on the Big Arroyo Patrol Cabin. The sign could give info such as when it was built, staffed, etc. Visitors are very interested in the structure and it would be nice for them to have this information when I am not around to offer it.

Trails

Trail Activities (work accomplished)

Visitor contacts were my primary activity along the trail. I contacted 533 visitors on the trail throughout the season.

I also accomplished a lot of trail maintenance especially during the early season when no trail crew was in the area. There were a lot of trees down in the area and I did a lot of early season hiking with a bow saw in hand.

There were two large trees down just east of the station that covered two sections of trail. I relocated the trail temporarily while I worked on them with a cross cut saw. The work was completed when I met a Boy Scout Troop looking for a service project.

I also dug out many drainage channels during the early season. As per last years recommendations, I removed the pole at Sawtooth Pass which seemingly served no purpose. The one at Kaweah Pass remains as it is cemented in.

Problem Areas

Most of the trails in the Little Five area are in very good condition. There are a few sections which could use a little work in the coming years.

1. Sawtooth Pass Trail—Although its unfair to classify the west side of the pass as a trail (it listed as an unmaintained trail on most maps), I get more visitor complaints about this route than anything else in my area. A good number of people going up from Mineral King end up at Glacier Pass and people going down to Monarch Lakes just seem to head towards the Lakes regardless of the route. It would be nice if there was a way to mark the route.

2. Lower Big Arroyo Trail—This trail is very hard to follow, especially at river crossings and through meadows. Although rarely used, the visitors who did hike it had trouble staying on the trail. Having hiked this trail a number of times this summer, I can see where some people may have trouble.

3. Upper Big Five Lakes Trail—This trail becomes indistinct after the junction to Lower Big Five and where the trail splits left and right. The trail becomes difficult to follow and completely disappears in some spots. Although not used a great deal, this may have lead to the large amounts of trash, broken glass, and illegal fire pits in the area.

Camp Areas

Conditions

The majority of camping area in the Little Five areas is clean and crowding on most nights is not an issue. Some of the more popular areas, such as the Big Arroyo crossing, definitely need more attention in regard to trash and fire pit issues. Camping in the area seems to center around bear box locations.

Camping at Little Five Lakes is almost exclusively near the bear box. Repeat visitors seem to be the only ones who venture away from the box to spots like the ones across the lake from the ranger station.

Columbine Lake has some very inappropriate sites along the trail and close to the lake. I talked with many visitors about campsite selection here.

The partially buried barrel remains at Pinto Lake. This needs to be removes as it is a potential hazard.

Sanitation

As the season grew, visitors seemed to get more careless in their choices of bathroom spots and burying toilet paper. I know this is an uncomfortable topic for many people, but I feel we need to do a better job of education. If we don't, I think the days of park wide wag bag requirements are closer than we think.

The privacy screens at Forester Lake, Monarch Lakes, and Upper Funston Meadow need to be replaced or fixed. None are offering much privacy. The toilet seats at Forester Lake and Monarch Lakes are both broken.

Fire Rings

16 Removed

The biggest fire rings and the ones that required the most attention were at the Big Arroyo crossing. This might be area where we consider putting a minimum impact sheet in the bear box. I removed two fire rings from this area.

I also removed fire rings form Upper Big Five (3), Lower Big Five (2), Spring Lake (3), Lost Canyon (1), Upper Big Arroyo (1), Pinto Lake (2), and Moraine Lake (2). 6-1-12 also removed a number of rings at Pinto Lake. I believe this area needs a "Fires Prohibited" sign.

Although I'm in the minority, I believe that fires should be banned in the backcountry. I spent countless hours this summer cleaning, reducing and removing fire pits. I believe

this time could be used for much more productive things such as trial work, resource projects, and visitor contacts/information. Fire rings cause irreparable damage to rocks, the ground, and vegetation when used illegally. They are also the major source of trash in the backcountry.

Firewood Availability

Availability doesn't seem to be a major problem in areas where we allow campfires. Long Lake, however, may be the exception and even though seldom used, this could be remedied by lowering the restriction from its current 10,400 feet—or banning fires altogether.

Food Storage

Early in the season there seemed to be a large number of hikers not using bear canisters and instead hanging their food in areas like Nine Lake Basin and Columbine Lake. None of these people had any idea how to counter balance or even what the term meant. They would often offer in the way of explanation that "Bears aren't out this early" or "Bears don't come this high in elevation." When I would refute these statements, they would shrug their shoulders as if to say they didn't care. In light of this, I would like to see us require use of canisters or bear boxes and ban food hanging.

New food storage boxes like the ones at Little Five and Pinto Lake went into the Big Arroyo and Moraine Lake. The placement at Moraine Lake was bad, but can be moved with two people. The new boxes are good, but for some reason most visitors use only one latch. Perhaps bear management could design a small sign reminding people to use both. Also, Roxanne Everett's wonderful signs went out with the old boxes, even though I specifically asked that they be switched to the new boxes. I then asked for them to be put in my box in the wilderness office to come out by the end of the season and this didn't happen. These signs MUST come out for next season.

Trailheads

I spent very little time at the Mineral King trailheads, but I have a few observations: The signs in the parking lot are horribly out dated. So much more information could be conveyed as it seems most people stop for one last distraction before hitting the trail.

The parking lots and first few miles of trail from the trailhead were littered with trash. I realize these areas get a tremendous amount of use, but the volume of litter I saw is unacceptable.

Issuing Office

The Mineral King trailhead does a very good job. It was recommended in last year's report that they list on each permit where fires are not allowed. The only time I noticed

that this wasn't done, the person issuing the permit was a name I didn't recognize. I figured this was maybe a volunteer or someone who doesn't work the desk often.

Another thing that I think could be improved is that I often hear the Lodgepole Trailhead letting rangers know of large groups heading their direction. I feel that this would be helpful. I had virtually no contact with the trailhead.

I also think we need to be more selective who gets recommended to hike cross country. I had a number of parties who were told about Glacier Pass unsolicited. I feel that this is a bad idea and could lead to potential problems. I also feel the map hanging in the office showing cross country routes needs to come down.

Communications



Case Numbers (Case card only)

06/29 # 060544 Visitor Assist – Phone call to east side for shuttle

07/21 # 060818 Visitor Assist – Check with Wilderness Office on Permit Information (separated from party)

08/08 # 060951 Visitor Assist - Phone call to family to relay end date of hike

08/16 # 061068 Visitor Assist - Message to member of party left behind

08/22 # 061105 Put out unattended campfire

08/28 # 061152 Call to Wilderness Office to report lost stock

08/29 # 061153 Put out unattended campfire

09/04 # 061231 Gave food to hikers

09/06 # 061232 Gave food to hikers

Needs for 2007

Backpacking tent
Therma-Rest or Z-Rest sleeping pad
Lighter bear canister (currently only Garcia at station)
Digital camera
Carpet section for yurt
Three large tarps (all tarps used to cover platform for winter are in poor shape)
Outside thermometer
Mattress covers
Electric fence signs
Black magic markers
Black Sharpies
Duct tape
Strapping tape
Protective eye goggles
WD-40
Strike anywhere matches
Fire resistant base for woodstove
Step ladder or step stool
Colander
Cheese grater

Large wash basin (for laundry and bathing – the current buckets are a bit small for these chores)

Recommendations

- 1. Improve the Sawtooth trail on the western side of the pass.
- 2. Replace (or remove) sign on Sawtooth Pass.
- 3. "Fires Prohibited" sign at Pinto Lake

4. Repair (or replace) privacy screens at Forester Lake, Monarch Lakes, and Upper Funston Meadow

- 5. Repair toilet seats at Forester Lake and Monarch lakes
- 6. Remove partially buried barrel at Pinto Lake
- 7. Take down rock cairns on east side of Sawtooth Pass
- 8. No food hanging policy
- 9. Interpretive sign on Big Arroyo Patrol Cabin
- 10. New metal box for Little Five station
- 11. Reminder at next year's training on proper radio usage
- 12. Remove metal pole at Kaweah Gap

13. Hiking poles for all Wilderness Rangers that request them (I feel that hiking poles keep me safer than any other piece of equipment I use)

14. No more fires in the Wilderness

Pertinent Inventory

1+ roll small clear trash bags22 Large black trash bags6 burlap sacks

405 2" Galvanized screws
63 ³/₄ " screws
4 1 ¹/₄ " screws
18 ¹/₂ " large head screws
7 ¹/₂ " large head screws
2 1" screws
6 1" large head screws
4 ³/₄ " large head screws
4 ³/₄ " large head screws
2 1 1/16" thick screws with attached washer
2 9/16" tick screws with attached washer

2 full sets area maps1 National Geographic Park mapBushnell Binoculars100' nylon cord, plus lots of pea cord

Garcia bear canister
 small propane tank, full
 large propane tank, over half full
 gallons white gas
 Liters denatured alcohol
 box strike anywhere matches, nearly full

4 Sunscreen tubes
1 hand soap
1 ¹/₂ bottles dish soap
22 rolls, toilet paper
4 packages, paper towels
1 sponge
1/3 bottle Tide laundry soap

3 oxygen tanks, full
Lots of Ibuprofen, Aspirin, Ointment
7 pairs latex gloves
2 pair disposable sun goggles
12 insect sting relief swabs
9 junior band aids
6 butterfly closures
1 box band aids, nearly full

2 tweezers 1 glucose 2 sam splints 2 wire splints 3 2" ace bandages 1 4" ace bandages 1 large piece moleskin 2 triangular bandages 3 rolls stretch gauze 2 3M 9211 respirators (N95) 1 syringe 1 micro shield 2 instant ice packs 4 dozen alcohol pads 18 4 x 4 gauze pads 5 4 x 4 dressing sponges 1 8" x 7 $\frac{1}{2}$ " combine dressing 3 3" x 4" sterile pads 1 roll 2" surgical adhesive tape 1 roll 3" adhesive tape 1 roll ¹/₂" antisieze tape 2 2" bandage compresses 1 package 5 1/8" x 3" suture strips 4 packages 6 ¹/₂" x 4 suture strips 1 stethoscope 1 yellow helmet

4 pairs leather gloves
6 pair ear plugs
2 pencils
3 dozen pens
2 sharpies (almost dry)
2 magic markers (almost dry)

2 pair scissors
2 pair scissors
15 8 ¹/₂" x 11" clear plastic holders
6 pocket pads (yellow fire notepads)
1 steno pad

Preliminary Recommendations for Restoration

Signs

The sign at Sawtooth Pass needs to come down. It is simply a laminated piece of paper on a stake. It looks bad and is not consistent with other backcountry signs.

Trails

A few of the areas I worked on this summer should be checked on next season:

My Relocation between Lower Big Five and Lost Canyon (next to pond) and Roxanne Everett's relocation from 2005 just north of the station towards the Big Arroyo. Also tow areas where parallel trails are showing; Upper Big Arroyo and below no tire sign towards Big Five.

Campsites

It would be nice if there was a way to re-grow some vegetation around the Big Arroyo Cabin. It looks very trampled and bare.

The partially buried drum/barrel at Pinto Lake needs to come out. It could be hazardous and it is unsanitary as it has been used as a toilet.

McClure Ranger Station End of Season Report: 2006

George Durkee & Paige Meier

Summary

Wet conditions followed by very warm weather made 2006 an excellent season for wild Strawberries. A 150% of normal snow pack created spring snow, high water and difficult spring hiking conditions. Nonetheless, about 75 PCT hikers had come through by the first week of July. All hikers were strongly cautioned about the dangerous high water crossing of the Muir Trail at Evolution Creek. Signs were posted strongly recommending that the creek be forded at the old trail crossing in Evolution Meadow. The trail crossing remained high and dangerous into early August because of the snow pack and continued and significant rain in July. This crossing has been the subject of many discussions over the years about whether a bridge or log crossing should be built. At the very least, we should make 2 metal signs that can be posted at both ends directing people to the safer crossing during high water periods.

Visitation seemed about normal when compared to previous years. Use patterns may be changing somewhat, though. Fewer people seem to be coming to Evolution Valley (Colby, McClure, Evolution Meadows) as a destination to stay. Hikers doing the entire JMT seem to be increasing as well as PCT hikers. They don't stop for nothin'. People doing the North & South Lake loop may have decreased somewhat compared to previous years and Lamark Col seems about the same. As such, I'd guess that over 90% of travelers stay only one night at any of the campsites in the area.

In early August, there was a drowning about 1 mile inside the park boundary on the John Muir Trail. Initial reports indicated it was outside the park. I began to hike to the scene at about 10:30 PM but IC asked that I return to station. I was flown to the scene the next morning along with Debbie Brenchley and met with Fresno Sheriff's who had arrived about 10 minutes earlier. In addition, there was an early season fatality on Mt. Mendel.

Grazing was light throughout the area this year. There were fewer than 25 AUMs for each of the Evolution Valley Meadows: McClure (0); Colby (20); Evolution (20); Darwin (0) (all are approximate from observations or packer reports).

Visitor Protection

Statistics:	
Miles Hiked	450
Visitors Contacted	1,700
Grazing nights	Colby: 20 AUM, McClure: 0; Evolution: 20; Darwin Meadows: 0.
Citations	2 (camp too close to water; camp on vegetation)
Warnings	29 (15 camp on vegetation; 12 too close to water; 2 dog in park;
SARs	2 (responded to drowning, then to body recovery several weeks
	later).

Medical 3 (2 prolonged vomiting: Tx with fluids, no medivac); 1 medivac w/ severe abdominal pain).

Ranger Station

Thor was hammering away when we arrived in June. He installed beautiful pine cabinets and a solid butcher block counter. Initially he wanted to install a sink on the counter, however we decided that was too useful a space to mar it with a sink and we've asked that he consider putting a sink as an end table under the west window. Although a lot of work was done sealing the logs, we still trapped over 40 mice this year, though there were periods of up to 10 days when none were caught. This continues to be a potentially serious health problem and a concerted effort with foam and caulk sealant (likely around the end logs) has to be made.

The attached list for 2007 shows some items that are needed, among them: more sealant, a picnic table, new windows and a small folding indoor table. Thanks to Thor, the station now has a very complete tool set. The Solar System is in fairly good shape, but it's likely that 3 new 12V batteries will be needed by 2008. Thor also began work on a metal box for the propane tanks, but was unable to finish it.

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Communication

Wilderness

Resources

Each time I return to McClure, I'm reminded how remote and pristine large sections of this area are. Not only has visitation remained rare in large areas of the patrol zone – the Ionian Basin, Enchanted Gorge, Goddard Creek, the meadows directly south of the Glacier Divide – but visitation is also apparently dropping for areas that formerly received moderate traffic: Lake 11,106, McGee Canyon and even Martha Lake and upper Goddard Canyon. Fewer people seem to be doing side trips or making those areas their destination. Everyone is head down, poles clicking furiously and Whitney Bound. *Bon Voyage, cher campeurs*! In addition, those other areas seem to be going out of the memories of packers so they no longer guide or suggest trips to, say, Lake 11,106, which still has excellent fishing and a semi-good trail up there.

This year there was almost no grazing of the Evolution Valley meadows. Pack Stations may have diverted their trips because of the late opening dates, but Florence Lake Pack

Station still ran 4 trips in early season and packed feed for the one night they spent at Colby and Evolution Meadow.

I was last stationed here in 1995 and note several critical changes since that time. The encroachment of lodgepole pine is well established and will reduce the meadowed area of Colby and McClure by at least 20% each (see map of McClure encroachement areas). In the 60s, Soil and Moisture put in check dams on the side streams, presumably to help restore the bank vegetation and raise the meadow water table (?). They also cut out the lodgepole saplings and trees up to about 8" diameter. Trees that, 10 years ago were small and scrawny and, I thought, might not survive because of the higher water table or other environmental conditions are now 6 feet + tall and obviously well established. In 20 more years these areas will be well established forest.

Also of significance is the seriously reduced population and range of the Belding ground squirrel. There appear to be only 4 in the McClure Meadow and none at Colby or Evolution, where they were previously seen in the 80s. They have also disappeared from Little Pete Meadow near LeConte, where they also were as late as the 80s. The good news is there's a healthy population below the Pavilion Dome/Glacier Divide which I don't remember from previous times here. Colonies also exist at the mouth of Darwin Canyon and an apparently expanding population at Evolution Lake. Are they moving up as a result of climate change? Changes in meadow vegetation in Evolution Valley as a result of grazing?? We don't know.

Although there is a huge and robust research effort going on in Sequoia Kings, I wonder if we're missing a lot with our individual studies (meadow monitoring, frogs carnivore survey, tree & climate work in the Kern & etc.). For instance, as good and nationally recognized as our wildlife database is, it is not good enough to warn us in a timely fashion of species in decline or shifting habitat to new areas as a result of climate change or, perhaps, anthropogenic causes. We missed the rapid disappearance of the Foothill yellow-legged frog. We were behind the curve on the Mountain Yellow-legged frog. We are making an effort to track pika populations (likely being extirpated from their habitat in Nevada as a result of climate change), but I don't believe the effort to track their populations is adequate nor concentrated enough.

We really need a better system to quickly note changing patterns in wildlife and vegetation. We need a more organized approach and some new tools to help. Two approaches can be combined to tell us what's happening to our alpine ecosystems, what's driving those changes (e.g. lodgepole invasion, possible change in elevation & habitat of small furry critters, changes in species composition of plant communities independent of grazing, changes in bird migration patterns and habitat...) and, perhaps, plan management actions to mitigate those changes that may be a result of human actions (e.g. historical sheep, cattle or horse grazing). (See Recommendations at the end of this report).

Campsite Inventory

This year we began the Campsite Inventory project. I spent about 12 days mapping campsites, initially with Sandy, Amanda and Gregg, then finishing up the areas we didn't get to in that first week. From my standpoint, data collection and mapping was made hugely easier with my PDA, ArcPad and a GPS configuration. It's clear that, while there may not be significantly fewer campsites (though that may be a result of being much more familiar with the area and having more time than the original researchers), the campsites are a lot smaller and less impacted than the campsites surveyed in the 70s. Years of rangers talking to people about minimum impact, taking apart developed sites, and removing sites too close to water have been effective. In addition, a lot of the previously mapped sites are receiving almost no use and many are now counted as **-re**habbed" though not yet taken apart by rangers. Having a map showing the locations of these sites as well as those less than 50 feet from water will be extremely helpful to continue improving and rehabilitating wilderness campsites.

Water Quality

Dr. Rober Derlet of UC Davis came through this season continuing his extensive water quality sampling (mostly for *e-coli*). He noted that the outflow of Darwin Lakes had algae growing in the water while the outflow of Goethe Lakes did not. Darwin receives a fair number of hikers while Goethe does not. He has previously noted this phenomenon in the Rae Lakes area and is beginning to speculate that it is a result of soap or other phosphorous (the rate determinant nutrient for algal growth) containing contaminant entering the water from hikers or stock users. Generally, though, he considers Sierra water to be free of most pathogens.

Wildlife

Beldings, Pikas and frogs

As noted above, it's quite possible that Belding ground squirrels are disappearing from areas where they were formerly quite common (McClure and Colby Meadows, Little Pete Meadow). They may, though, have established healthy populations higher (Dusy Basin, Darwin Bench). The point is, though, we don't really know and there seems to be no formal effort to track small mammals to see if they're being affected by either climate change or other influences (e.g. grazing). Both the Mountain and Foothill yellow-legged frogs disappeared before we were really aware they were in danger. The same may be happening to pikas. What else are we missing as we spend a huge amount of our time and energy on bears and grazing of meadows?

Bighorn Sheep

While reading through old station logs, I came across several references to Bighorn Sheep: a live sheep was seen on Mt. Darwin in the early 60s; a skull was found in the rocks below Evolution Meadow in the 60s; another skull was found around Mt. Rhinestine in the 80s; and a partial skull was found near the McClure Station about 6 years ago. This skull was still at the station. In addition, John Muir saw a large band in 1873 when he was first visiting Evolution Valley. He probably saw them in the cascades as he started up from Goddard Canyon. There's another observation by Fred Ross, a long-time packer in the area, that he used to commonly see a band of sheep in the Mt. Goddard area in the late 30s. Fred also knew of a skull found along the Glacier Divide, though the date is unknown. Finally, someone apparently saw a small band near Wanda Lake this year (Erika Jostad was trying to get more information on this). I think it's quite possible that a band of bighorn sheep existed between Pavilion Dome south to Blue Canyon perhaps as late as the 50s or 60s. This area might be worth considering as a place to reintroduce sheep, since it has easy access to a remote and fairly well protected winter range down into the Middle Fork area. I've written John Wehausen to see if he wants to try to recover DNA from the McClure skull.

Froggies

I found a fairly healthy population of Mountain Yellow-legged near the outlet of Wanda Lake. About 75 adults and over 200 tadpoles, some with legs. I had never noticed such a large breeding population there before. The wildlife database shows only two other observations from the 80s. It must mean that Wanda is now clear of fish. Although I had never seen fish rise at Wanda Lake, I'd heard of occasional reports of fish there. There was a map of frog sightings at the station, probably from the early 90s. I checked most of the sites and found no other yellow-legged populations, though quite a few tree frog ponds were noted.

Bears

As I noted in 1995, there was some bear scat on the Darwin Bench towards Lake 11,106 and Pavilion Dome. There was also some from last year at the head of Evolution Valley towards the hanging cirque at the south end. No sign of this bear being near people or obtaining human food. A bear was apparently shot as a nuisance bear near the Muir Trail Ranch in early August, though there were no reports of it coming into the park.

Fisher

Paige may have seen a Fisher traveling on the river bank across from the station. Not good enough to record as a sighting, but a fair chance that's what it was.

Grazing & Meadows

There was very little grazing this year. Evolution received maybe 3 parties for a total of 20 animal use nights. Colby received about 10 nights. John Berry was packing for Cunningham and had several early season trips but brought feed each time. No packers used Darwin (aka Upper Colby) meadows this year. The trail crew camp at the 3rd Goddard bridge received an unknown amount of grazing (at least two groups to pack them in and out, but likely a couple of other commercial trips). The area showed some serious pawing where stock was tied to trees and several roll pits.

The Residual Biomass transect for Colby was done about September 9^{th} . Evolution was done by the 20^{th} .

Trails

The trails are in fairly good shape. Because of late grazing opening dates, the trail crew did not come through until about September 20th and stayed in Goddard only 2 days. In this time frame, they were unable to get any effective work done: a number of trails need

brushing (just above Evolution Meadow and parts of Goddard Canyon). Also, although a crew was able to log in mid-July, it was a rushed job and only the downed logs were removed. A number of hanging trees still present a danger to horse riders as well as several that should be cut since they'll come down soon. The crew was able to consolidate some of the scattered bridge decking used as benches in campsites, however they missed several of the camps that also had planks in the camp. All three drift fences require work. The one rebuilt on the trail crew's last day had already broken apart when I was there a week later. Ideally, a crew can be packed in next year early and work for a couple of weeks from the Goddard Bridge. If Cunningham packs them, feed can be brought in if those meadows are not yet open to grazing.

In late August Paige and I waded around in the pool formed above the crossing log at Darwin Creek and the JMT, pulling a huge amount of debris out. This allowed the water to move easily under the crossing logs and, I believe, will make spring crossing easier there. We last did this in 1995. It's something that probably ought to be done ever 3-5 years as debris builds up from spring runoff and floods.

Recommendations

- 1. As part of the Inventory and Monitoring program, coordinate an interdisciplinary, multi-discipline study of one large ecosystem, specifically the Evolution Valley area. Yep, a long shot, but really worth starting to think about. This area is very representative of much of the Sierra alpine ecosystem and would serve as a good study area to answer critical questions about:
 - a. Effect of climate change on vegetation (meadows and lodgepole encroachment) and small critters (are they moving to higher elevations as suggested by the Grinell resurvey in Yosemite?).
 - b. Historical and current influences of grazing (sheep, cows & horses) on current vegetation (both meadows and lodgepole encroachment) and effects on animal (mammals, birds and insect) populations.
 - c. Management decisions to mitigate possible anthropogenic effects on ecosystems – cut lodgepoles out of meadows? what effects are stock grazing having on wildlife dependent on meadows (deer and beldings)?; adjust allowable stock grazing where meadows are reduced by over 20% due to forest encroachment; reestablish mountain yellow-legged frog populations etc.
- 2. Although wilderness rangers have made the majority of contributions to the Wildlife Observation Database, we can make even greater and more precise contributions with a relatively small expenditure for equipment. Using a GPS receiver and ArcPad, rangers would be able to carry out a variety of data gathering projects: map campsites, enter wildlife observations, create SAR tracklogs, map helispots, map hazardous environmental conditions, and create tracklogs of safe winter routes useable during conditions of limited visibility.

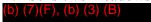
To get a more accurate picture of wildlife, we each really need to spend, say, a week per month recording ALL (or almost all) wildlife we see. Generally we only record one instance of a critter. That is if, say, Beldings are common in an area we only record it once or twice. Just looking at the records, though, there's no way of telling if there was only one animal in a given area or many. The Mountain yellow-legged frog is another example. I looked them up in the database to see if there'd been previous sightings at Wanda Lake. There were two in the 80s, but no indication of how many were seen, only that at least one was observed there. For wildlife observations we should, ideally, record an exact location by UTM of everything we run into and the number of individuals seen. This would allow a closer tracking (real time) of animal's responses to changes in climate or other environmental conditions and allow more timely management response, if appropriate.

a. Specifically, the park could purchase 4 units (2 for each backcountry subdistrict) consisting of a Windows Mobile-based PDA (e.g. Dell Axim x51 -- \$250); a Bluetooth GPS (\$50); an Otterbox (a waterproof & shockproof case for the PDA, \$50); ArcPad software (free, I think—NPS has a number of licenses for it). For both wildlife recordings and campsite inventories, for instance, the ArcPad software can be set up with dropdown lists. A ranger only has to turn on the GPS, use the appropriate database and then choose the critter or correct choices from an existing menu. At the end of the season, the data is uploaded to the mother database without requiring a person to enter it all. Not to get too dweebie, but ArcPad also has to capability to associate the GPS location on photos taken with a PDA. This would be a huge help in cataloguing the 100s of photographs taken each year by wilderness rangers.

- b. This configuration would also be extremely useful on SARs. A search team would record their exact route for a day's search; map clues along the way; then all the data would be uploaded to Plans at the end of the day and a master map of all search teams created from that. I tested this out on the Goddard drowning SAR and found it worked very well. It would also be quite easy to download SAR teams' tracklogs at the SAR and create the maps onsite.
- c. I have attached a map of all the data I collected this summer as an example of what's possible using this set-up.
- *3.* Paint the radio repeater instrument shed. It's shiny aluminum is visible from much of the Evolution area.
- 4. Both last year and this year I received complaints from hikers who would have to wait around until morning to pick up their permits so they could get a pep talk from the permit person. I think we should look more closely at a better way of doing this. I'm sympathetic to hikers who drive up from LA and want to get an early trail start, picking up their permit on the way. They can't because the station is closed which delays them from starting until noon or so. We have a responsibility to make the process as easy on them as possible. At the same time, experience has shown that people who get an in-person summary of rules do better with compliance. We might look at testing a program of allowing people to read the regulations online and answer a short series of questions to show they read the regulations. It would have to be taken within, say, a week of their trip. It would be fairly easy to set up on the SEKI site.
- 5. A more efficient way of preserving knowledge especially about safety issues is needed. We should seriously consider a plan for developing a *Wilderness User and Staff Safety and Resources Handbook*. This would be intended as a reference for each station allowing wilderness rangers to have access to critical knowledge that, currently, is learned only by experience or discussions with other rangers. Among some of the subjects that could be mapped and described for rangers new to an area are:

- 1. Helispots
- 2. Hazardous water crossings & safer alternatives.
- 3. GPS xc ski routes for limited visibility conditions. For instance, both Kearsarge and Bishop Passes have critical turns that have to be made to descend by the safest route. GPS is the most efficient way of accomplishing this.

4. Sensitive meadows that require closer monitoring.



Outline

Introduction Arriving at Rae Lakes in June Rae Lakes Area Management Visitor Contacts Visitor Assistance **Ranger Switch** Rae Lakes Peninsula Campsite **Rae Lakes Isthmus Rae Lakes Station Cleanup** 60 Lakes Frog Memo Law Enforcement Preseason Training Windy Repeater Problem Managing Park Crew Camps Trail Crew Camp at Bullfrog Lake **Trail Crew Boxes** Woods Creek Crossing Baxter Creek Stock Camp **Drift Fences Drift Fence Vandalism Requirement for Rangers** New Radios New Rae Station Location **Campsite Inventory** SARS Bears Morgenson Accident Site Closing Upper LeConte to Stock Stock Use in Little Pete and Big Pete Water Quality Study Junction Meadow Problems Ash Mountain Fire Weather **Monarch Station Trail Conditions** Volcanic Lake Impact Blue Canyon Cleanup Signs **Simpson Station** Area Coverage **Monarch Station History** The Need for Monarch Station **Projects Complete**

Introduction

The season began on June 12 with the EMT refresher and then a week of law enforcement training. This was the second big winter in a row. Has this happened in the last thirty years? There was much snow in the high country. Hazardous conditions from icy passes to many dangerous river and stream crossings were all over the backcountry.

My season was split between Rae Lakes and the Monarch Divide. Through July I was at Rae Lakes and the month of August I moved over to the Monarch Divide and then back at Rae lakes for September. In August, Dario came down from Bench Lake and filled for me at Rae. It made for a great season; covering lots of high country, getting involved with several SARS and accomplishing a lot of project work.

My supplies arrived via and it was relatively easy to set up the station. The PCTrs were coming through when I arrived at Rae Lakes. Snow was patchy from Dollar Lake on up to the station. Snow was solid from the base of the pass on up. The mosquitoes were out in full force by the first of July and remained very thick through July.

Overall the shanty style of Rae Lakes Station worked great. I reorganized the interior and made a bed along the east wall. All of my food was easily contained in the nice new Knaack box. The woodburner was used throughout the season and was easy to start with a chunk of Turbo log.

The north side of Glen Pass is a precarious place with snow and ice. It drops steeple down and if you get off track....it gets cliffy. The South Fork of the Kings in Upper Basin is one of the most dangerous river crossings. Hikers southbound get there with two options; hike back up river to find a safer place or cross at the trail crossing where it remained dangerous until the middle of July. Hikers northbound can stay on the east side of the river and catch the trail up above with no problem.

How do we deal with this and the many other crossings in the future? It's easy to put a sign up on the south side of the river to advise hikers to stay on the east side of the river. But the southbound hikers are the concerning ones. In the past, I put a memo a couple of miles up river to advise hikers to stay on the east side of the river from that point down to the crossing.

Arriving at Rae Lakes in June

When I arrived at Rae Lakes station in June the station area was a mess. There were bits of cardboard and litter all around the station grounds. Equipment was

disorganized and there was no food left at the station. Fortunately, the helicopter arrived with my supplies the day after I arrived at the station.

The tent for the Rae Station is dissolving. It basically fell apart when I took it down in the fall. A new one is needed to get through next season. If the station is being built next season, a 16 X 16 ft. green tarp would be sufficient for a couple of months until the ranger moves out and the station is torn down. The outer fly for the station is in good shape.

Rae Lakes Area Management

The mandatory use of bear canisters has transformed camping patterns at Rae Lakes over the past few years. Before canisters, hikers would camp almost always at the bear boxes. Now people are spreading out around the lakes. The peninsula site is the most heavily impacted camping area and an effort was made this summer to try and reduce the camping in this area.

I modified a map that showed the camping areas in Rae Lakes. (see photo) These were placed at Dollar Lake and on the west side of the isthmus in upper Rae Lakes. The hope was to show people that there are a variety of camping places in the basin to help hikers to spread out. The tendency is that hikers will congregate in this fragile peninsula area. Many people want to know about alternative camping so they are not camping with so many other people.

Either way a regular cleaning up of the peninsula site is necessary. On two occasions I cleaned up fire rings that were built in the peninsula area this summer. (see photos)

The most common minimum impact violations are hikers camping too close to water and setting up tents on vegetated soils. I gave numerous verbal warnings for both of these violations throughout the summer. In all cases hikers were extremely cooperative and would be sure to avoid that in the future.

Visitor Contacts

This season I contacted approx. 1,100 park visitors and covered around 700 miles of backcountry patrol. The busiest time was in August and I was moved over to the Monarch Divide during that month.

I was surprised with the percentage of hikers coming into Rae from Kearsarge. From my surveys throughout the season, there seemed to be as many hikers coming into Rae Lakes from Kearsarge as there were hikers doing the Rae Lakes Loop starting at Cedar Grove.

Sixty Lakes Basin is a popular destination for hikers. Hikers will frequently day hike into the area with a lay over day in the Rae Lakes area.

Visitor contacts: June - 60, July - 421, August - 286, September - 381 **Miles hiked**: June - 45, July - 150, August - 250, September - 200 No concession contacts, no bear incidents, no change in meadow opening dates, no citations were issued, no medivacs or medical incidents.

Visitor Assistance

I did assist hikers in many ways this season. At the beginning of the season to the north of Rae Lakes there were numerous hazardous stream crossings that hikers would be encountering....White Fork, South Fork of the Kings, Evolution Creek. It is important to advise hikers of the hazards that they will encounter in order to help to prevent problems.

The north side of Glen Pass was hazardous until the end of July with an icy snow field. South bound hikers were advised of this hazard and Roads End Station was kept up to speed of these conditions.

There was a day in July while hiking north that I contacted 6 groups that were not advised of the hazards on Glen Pass by the Roads End Ranger. Conditions were still dangerous on the north side of Glenn. I contacted $\begin{bmatrix} b \\ 7 \end{bmatrix}$ to make sure that the Roads End Rangers would be advising everyone of this hazard until I gave notice that the pass was no longer hazardous.

Other types of assistance given to hikers this summer included the following: Relay emergency messages through dispatch

Give emergency food

Boot and campstove repair

Give extra white gas for campstoves

Relay messages from the wilderness office to hikers on the trail

Ranger Switch

The idea with the switch was to be able to get some coverage on the Monarch Divide for the season. Historically, there has been a ranger on the Monarch most seasons, but the last few years funding for this operation has not been available.

Logistically it worked very smoothly. I had prepared a box of food and a small bag of clothes to be packed into the Monarch before I arrived. This was accomplished the end of July by Cedar Grove rangers $\begin{bmatrix} b & (7) \\ (F) & (D) \end{bmatrix}$ (Dave) riding up to Monarch Station and packing with two mules. The rangers used there own stock for this operation. I had nothing that needed to be moved over to the Monarch from Rae Lakes.

Dario had prepared a box of food and some clothes in a similar fashion and left it in the Cedar Grove cache. This was packed in the first part of August to Rae Lakes. He also had a few items from Bench that were packed over to Rae.

Fortunately, I was able to provide Dario with food to eat for the first eight or nine days, since his supplies did not arrive until the after the first week in August.

In the future, not having the packers to move anything from Bench to Rae would simplify this move. It also needs to be timed better to have the supplies at Rae when the Ranger arrives. Overall this switch worked great. Dario and I worked together to make it all happen smoothly. Dario did an excellent job taking over as the Rae Lakes ranger.

Rae Lakes Peninsula Campsite

This area is by far the most impacted spot in the Rae Lakes Basin. People like to camp here because it is near the lake and has spectacular views. There two bear boxes here and one is broken and needs to be replaced. I am recommending that we keep two functional bear boxes at this location.

In the early 80's there were six outhouses from the Woods Creek crossing into Rae Lakes. We took them all out because of the upkeep nightmare except for the one at the Woods Creek crossing.

The main problem here is that all of the camping here creates a lot of fecal bacteria being deposited in the soil. Marmots eat it and some small percentage will get into the water system.

Recommendation:

At this point, I do not recommend and outhouse at the peninsula site. With my memos and contacts, I work to spread out the camping in the basin to reduce the impact in this area.

Rae Lakes Isthmus

The isthmus should be officially closed to camping. This narrow strip of land between the two upper lakes has only a few camping spots and nothing that is 100 feet from water. This season I posted memos on the south side of the isthmus and Dollar Lake with a map that showed no camping on the isthmus.

We need to close it to camping and in the meantime develop a standard memo/map that will advise hikers entering the area. This season, with my memos, I had no problem with people camping on the isthmus. I think they also helped to distribute camping throughout the basin.

Rae Lakes Station Cleanup

If the Rae Station is built next summer it will be important to make sure that the area is cleaned up after the project.

When I was at McClure this summer I observed a ton of construction debris around the station left from the restoration project. The debris is mostly old logs and lumber that was replaced during this project. I was the McClure ranger during the restoration in 05 and did all that I could after the restoration to clean up the yard. But the project was completed in Sept. right before my season ended so that there was limited time.

Certainly, the project is not complete until the cleanup is done. It may require assistance from the trail crew next summer in order to buck up rounds from the old sill logs and cleanup the area around the station.

At Rae Lakes during the construction it will be important for the ranger to make sure that the area is left clean after the project. Also, with all of the stock and helicopter flights there are old equipment items at Rae that need to be flown out. There are a few equipment items needed for Rae Lakes next season. (refer to needs list)

60 Lakes Frog Memo

I think it would be valuable to have a memo prepared that would be put at the first lake. The idea with the memo would be to inform hikers that frog research is going on in the area.

Frog nets were vandalized this summer in Center Basin by hikers. Hikers currently hiking through 60 Lakes can see a net in the lake and not know what is going on. If they are informed, they would be less likely to vandalize in the future. It would read something like this:

60 Lakes Basin is a special "yellow legged frog" research area. Research personnel have a camp in the area and utilize equipment such as nets that can be seen in locations in the basin.

Law Enforcement

This season I did not write a citation. Part of the reason for this is that I was away from Rae Lakes during the busy month of August.

On Sept. 5 , I heard a report from $\begin{bmatrix} b \\ 7 \end{bmatrix}$ that a man with two boys had not shown her there wilderness permit at Tyndall Creek. And the word from $\begin{bmatrix} b \\ 7 \end{bmatrix}$ was that he made her feel "uncomfortable" with remarks like, "I am an American citizen, why do you want to see a wilderness permit", etc. Since they were on their way to Kearsarge Pass I contacted $\begin{bmatrix} b \\ 7 \end{bmatrix}$. I did not want $\begin{bmatrix} b \\ 7 \end{bmatrix}$ to contact this individual by himself, so I hiked over to meet up with Kurt so that we could contact this party together.

I got an early start from Rae on the day we expected that they would be hiking over Kearsarge. By 0900 hrs. Kurt and I were on Kearsarge Pass making contacts with hikers. We decided to drop down from the pass and at the first cutoff to Kearsarge Lakes we made contact with the two boys. They said that their father had already hiked out the day before over Kearsarge and that they were hiking out to meet him. We asked them for their permit and they had one and showed it to us. We had a long talk with the boys, gathered permit information and let them proceed out of the park.

We do not know why the father did not show the permit to **box**, but I felt that it was worthwhile to team up with Kurt on this contact, because of the nature of his remarks with **box**.

I saw no dogs in the backcountry this summer and I think that our tough stance on citing anyone with a dog is helping to get the word out.

Preseason Training

The EMT training we have at the beginning of the season is excellent. It's a great way to get ready for whatever may happen throughout the course of the season. The two days of backcountry ranger training gives us a chance to get together and prepare for the season. Law enforcement training this year was more enjoyable than many of the years in the past and was managed well with the absence of Bob Wilson.

When we have rangers that are changing stations for the season, it would be helpful for the ranger that was stationed there the previous year to meet with the new ranger. This would give them a chance to address issues and go over the needs list for the season. Also, the stations needs list should be made available so we are clear on what we need for the season. Also, having the previous year end reports to pass around would be helpful.





Managing Park Crew Camps

The camp that is used for the frog researchers at Upper LeConte Lake is adjacent to the trail. The camp also occupies the only convenient camping sites for some distance above and below the location.

This spring Danny mentioned that for two to three weeks at a time they would be working in the area and he was wondering if it would be okay to leave their personal tents up. I mentioned this to Dave Gordon and recommended that they take their tents down while they were gone so that hikers could use this area for camping. Dave Gordon agreed with me on this issue.

The camp is not in the best of locations, but the crews here are always extremely helpful and friendly to the hikers. The camp is just not in the best of locations.

To get to another camp spot below the camp requires that hikers heading south must drop down a few hundred feet in elevation and about a mile in distance. A better camp location would be one that is hidden from the trail and one that does not occupy all of the camping spots in an area.

As we have a significant number of park crews and trail crews establishing camps in the back country, as we have seen with the Bullfrog camp, many of these camps are being put in less than desirable locations. Establishing an approval process for these camps is becoming increasing necessary.

The management idea would be that in the spring locations for camps would be submitted to $\begin{bmatrix} b \\ 7 \end{bmatrix}$ and $\begin{bmatrix} b \\ 7 \end{bmatrix}$ for approval. That way Debbie and Erica could evaluate these proposed locations and make changes if need be.

The criteria that we are looking for would be for example:

*hidden from the trail when possible

*not occupying established sites that campers use on a regular basis *along with the other min impact requirements for camping

Camps that have been "less than desirable over the past few years include: Upper LeConte Lake (frog crew), Twin Lakes (trail crew), Bullfrog Lake (trail crew), upper Dusy Basin (frog research UC Davis), Dollar Lake (archeology crew)

Trail Crew Camp at Bullfrog Lake

Hikers coming in the high trail from Kearsarge for a wilderness adventure look down on the closed lake of Bullfrog and see the following: a raft in the middle of the lake, a large yellow tarp and an obvious large camp set up below. This was the scenario for most of the season that was the result of the trail crew camping at the closed lake of Bullfrog.

(Gross) worked with them to try and camouflage the tarp with a different a more earthy color. We do need to prevent this problem of inappropriate camps from happening in the future.

This was a great crew led by $\text{Evan}_{(F)}^{(b)(7)}$). They got a lot of work done and I heard nothing but good reports from the hikers they contacted. But the camp was inappropriate and sent the wrong message to hikers.

Trail crew boxes

What is being done to inventory and pinpoint the location of trail crew camps and boxes. Over the past decade, 40 + large Knaack metal boxes were flown into the backcountry to establish trail crew camps. Some of these camps are in good locations and others need to be assessed for possibly a better location. We need to identify these camp locations and inventory the boxes.

Woods Creek Crossing Photo Log

Photos were taken of all the improvements at the Woods Creek crossing. The photos include: lower and upper Castle Domes drift fences, trail crew camp with metal boxes, outhouse, signs, bridge, two bear boxes, and a memo board. It is amazing the number of "improvements" that are in this area.

Is it necessary to have the outhouse here? There is a sign that says "toilet" stashed behind a tree at that location. So basically hikers are not even aware that it exists. The primary use of this outhouse is for trail crews when they are in the area.

Baxter Creek Stock Camp

The Baxter camp was used by at least three stock trips this season. Dario told me that in August the Cedar Grove pack station stayed there for a night. I saw evidence that the camp was used a couple of more times.

The camp is a good one and has plenty of room and bare ground for handling the impact. It is hidden from the trail and provides visible access to the meadows. The drift fence keeps stock from venturing into the basin for grazing. This is the ideal scenario for our stock management. Every lake basin should be closed to grazing in

order to protect our pristine fragile lake shores and water quality. This could so easily be done by having 10,000 ft. as the cutoff for grazing.

Drift Fences

Drift fences are a high maintenance "improvement" in the backcountry. The drift fences in the area that need work are the following:

<u>Dougherty fence</u> -5 to 6 posts need to be replaced. Gate is wire type and in good shape - the fence is two hundred yards in length

<u>Castle Domes upper</u> – the main gate post was knocked over and needs to be reset – the gate operation, wire type, will need to be reworked

<u>Castle Domes lower</u> – the main gate post was knocked over and needs to be reset – the wire type gate will need to be reworked.

<u>Baxter Creek</u> – the wire type gate is in sad shape and needs to reworked to be easily function. Now it is a hassle for hikers.

Drift Fence Vandalism

At the end of September while hiking out down Woods Creek the gate post for both the upper and lower Castle Domes fences were knocked over. It appeared that it was an act of vandalism by hikers. Photos were taken of the fence vandalism.

Requirement for Rangers

At the end of the season rangers should leave at least four or five days worth food at the station. Understanding that the next ranger arriving in the spring may have to wait a few days before the supplies come in on the helicopter. Rangers are also responsible for closing down the station in an organized fashion. (I am seeing way too many disorganized and sloppy closings of stations.) Rangers are responsible for making sure their garbage from the season gets out of the backcountry.

This all needs to be done with respect for the next ranger that arrives at the station.



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New Rae Station Location

Hopefully the new Rae Lakes station will be put in place next season. I feel that the current location is the best for the new station for many reasons. Some of these reasons include the following:

*hiker contacts – The current location works great for contacting hikers. They can easily walk up to the station to make contact with the ranger. Also, from the station, I can monitor hiker activity on the trail and make contact with hikers that are hiking through the area.

In comparison if the station was with moved up the hill these hiker contacts would be lost. The location up the hill is too far from the trail and would practically eliminate any possibility of hiker contact and interchange from the current station location. The current location is already an impacted site as opposed to the site up the hill which is pristine. I saw ample sign this season that the bighorn were hanging around the site up the hill as they have typically done in the past.

Campsite Inventory

The inventories that were done this summer included Woods Lake and Granite Lake. Granite Lake took a full day of work. Woods Lake took a half of day of work, but counting hiking time from Rae, a day to get there and a day to get back, it was about a $2\frac{1}{2}$ days of work. See all forms and photos in back of report. All forms were sent to Sandy Graban.

<u>SARS</u>

that he was on one of two mountains, Brewer or North Guard. Before noon the recon chopper spotted the body in a gulley on the west face.

Bears

I saw one bear this summer. It was at lower Baxter Creek and the bear had a fawn in its mouth. The doe was charging the bear to no avail. The bear ran up the hill with the fawn. I had no reports of bears getting food from park visitors.

Morgenson Accident Site

On July 19th I hiked up to Window Peak Lake. My plan was to visit Randy's accident site. With the big winter of 05/06 being similar to the 95/96 winter, I expected to find the conditions similar to when Randy had his accident.

Arriving at Window Peak Lake in the late afternoon of the 19th the threatening clouds opened up to rain as I approached the lake. Setting up my tent for shelter intense thunder and lightening broke lose and this setting seemed totally appropriate.

The next morning I ventured under clear skies up to the site. What I found is what I had expected to find. The location where Randy's radio was found was packed with a huge snowfield six to eight feet deep. (see photos)

The exact area where the radio was found, which is "most likely" the accident site, was starting to "sump down". This was obviously an area, that as the snow melted, was going to collapse in. It looked like a dangerous area and I certainly would not have walked out there for concern of breaking through the snow.

So as Randy came down from the north (Explorer Pass), maybe later in the day when the snow was soft, he walked out on this snow field, saw the top of the gorge 15 feet away and was going to cross this area so he would go around the snow packed gorge and then he fell through.

I knew he was under the snow after we did the investigation in 01. My search team had walked right by that area in 96 and the only way we would have missed him is that he was under the snow. To me this site visit 10 years to the day after the accident confirmed my suspicions.

Stock Use in Little Pete and Big Pete Meadows

Little Pete Meadow is a relatively small and narrow meadow that is the most popular camping site for backpackers in the area. There are approx. 6 camping sites here with only one site that is big enough to handle a large group. Frequently this summer in August, all of these camp sites would be filled by backpackers. There was a lot of stock use in Little Pete this summer. In most cases this summer stock groups camping here would not have access to the group site, because it was occupied by backpackers. As a result, they would have to use a smaller site and their tents and gear would be spread out all over the meadow grasses. There were a few times this summer that backpackers complained to me about the stock. In an ideal park management scenario, backpacker camping would be separated from stock grazing.

Big Pete Meadow on the contrary has four really good group sites. It is much better suited for stock groups than Little Pete. I met with packer Bobby Tanner this summer as he had a stock group that was coming south from Muir Pass. He ended up camping in Little Pete, because he thought Big Pete was closed to grazing. Bobby told me that he would have preferred to camp in Big Pete over Little Pete. As it turned out, in Little Pete, the group site was occupied so they had to camp at a small camp site. The group's tents were spread out all over the meadow grasses.

Recommendation: Part of Big Pete is closed to grazing because of the "endangered" plant. As shown from this summer, this creates confusion for the packers thinking that this meadow is closed. This partial closure of Big Pete does not do anything to protect this plant, but it does create confusion for the packers. Big Pete is where we want the stock groups to camp and this partial closure should be cancelled to help prevent this confusion in the future. Also, Catie Karplus and I wandered around the area where this "endangered plant" is located and found that there are trees down all throughout this area that would prevent stock from grazing here. Also, because of the problems created from combining grazing and backpacker camping in Little Pete, it would be appropriate to close Little Pete to grazing. All of Big Pete Meadow should definitely not be closed to grazing to try and protect this "endangered" plant. As seen from this summer this is totally unnecessary. Also, it would create impact in Upper LeConte Canyon. This would make it too far for stock groups to travel in a day, in some cases, from Little Pete Meadow to McClure Meadow. As a result, some stock groups would be forced to camp in Upper LeConte, around the fragile lake areas, because of the long travel distance.

Closing Upper LeConte Lake to Grazing

Efforts have been made to close Upper LeConte Lake and meadow areas to grazing. It is legal to graze stock at this fragile little meadow at 10,300 ft. Walking through this fragile waterfall meadow area it is hard to imagine 20 head of stock grazing here, but it is legal and I have seen it in the past. The lake area is a fragile frog research area. This area is very similar for research to 60 Lakes Basin. The closing to grazing is that much more critical with the advent of the citric fungus.

Large hoofs impacting the lake shore could easily carry the fungus into the area. It is the hope that our scientist and managers can work together to close Upper LeConte and all lake basins to grazing.

In order to make this closure Big Pete Meadow needs to remain open. (Refer to the exerpt below from my LeConte 02 year end report.)

Water Quality Study

I met Dr. Derlet at Rae Lakes this summer. He has talked to us in preseason training in the past about his water quality studies. He is measuring for fecal ecolie bacteria that is easily detectable in our water systems. In comparison for trying to find and record levels of giardia, which is very difficult to detect.

Dr. Derlet's studies have been underway for a few years now. He is able to correlate heavy stock use areas to heavy fecal bacteria levels in the areas lakes and streams. He can show that fecal bacteria in lakes from stock grazing on the shores of the lakes as being very damaging for a variety of reasons. The standing lake water holds the fecal bacteria in that water system. Fecal bacteria in rivers and streams is very damaging, but the Dr. reports that it will eventually get filtered within a 5 or 6 mile period downstream.

This is more science that can help us to protect our fragile lakes and close all lakes above 10,000 feet to grazing.

Junction Meadow Problems

So what more can be said than the fact that Junction Meadow was trashed by over grazing this summer. A friend of mine walked through there in late September and he said he had never seen manure so concentrated all over the meadow.

It is the time that we implement a quota for grazing nights to protect all high use stock use areas in the backcountry. If a quota was in place, then the stock parties would need to feed there stock or travel to another area.

Ash Mountain Fire Weather

All of the backcountry rangers and crews in the backcountry rely very heavily on the 1600 hr. weather report from Ash Mtn. Fire. Over the years it has consistently been delivered at 1600 hours, but this season it was not given to us on a regular basis in the time that we monitor. Later in the season the reports were more reliable. Management needs to continue to work with Ash Mountain Fire, so that we can get these vital weather reports on a reliable basis.

A Month on the Monarch

This season I had the wonderful opportunity to work the month of August on the Monarch Divide. The focus of my work was to cover as much of the area as possible and do cleanup work where needed and assess trail conditions. It also allowed me to set up the station and analyze the station needs for next season. (see needs list) I was able to work on the Simpson Station doing general cleanup and maintenance work.

Monarch Station

The redwood decking that I put on the Monarch Station floor in 04 has held up beautifully. The edges did not warp at all as the boards lay perfectly flat. Also, in 04, I put in a French drain on the north side of the floor, added more rocks to the foundation and encompassed the perimeter of the floor with hardwear cloth to keep the marmots from getting underneath the station. The floor is in great shape and should last many years with proper maintenance.

The station has sufficient metal boxes and is well supplied with equipment. There are a few items that will be needed for the 07 Monarch operation and they are listed in the back of the report. Overall this is a very functional, well supplied station and the location is excellent.

Trail conditions

Trails in the Rae Lakes area are generally in good shape. The work on the 60 Lakes Trail from a couple years ago is holding up. There is a place at the lower end of the trail that it is hard to find. Where the trail starts to climb up from the lake, the trail is easily lost.

The Deadline Ridge trail has numerous trees down, as it looks like it hasn't been logged for a few years. There were 10 trees down from Volcanic Lakes to the northern end of Deadpine Ridge. I completely lost the trail at the northern end. This is a precarious situation, because hikers not good at navigating may lose there way and drop down into the Middle Fork cliffs as opposed to lower Kennedy Canyon.

The trail to Tehipite from Simpson was not logged this summer. The trail crew was in Simpson for a couple of weeks. They were hampered from doing this work because the river at that time was still difficult to cross.

Volcanic Lakes Impact

Evidently in fall of 05 someone tried to make a raft at Volcanic Lake 10,000. I observed this site this summer and did some rehab work. Several cut trees were scattered away from the lake into the woods. Refer to photos.

Stumps on the shore of the lake of 4 trees cut deface the shore of this lake. It is one of the worst impact violations that I have ever seen in the backcountry. I am recommending that more rehab work be done next summer. This would require assistance from the trail crew. A chain saw is needed to flush the stumps low to the ground so that they are no longer visible. I would be willing to work with the trail crew on this project next summer.

There is also a bonfire type of mess at the upper Volcanic Lakes. I cleared up much of the ash and coals, but more work will be needed next season to completely rehab this area.

Blue Canyon Cleanup

About 10 years ago a bearbox with some supplies was flown into the Big Meadow camp in Blue Canyon. The idea was to provide some supplies for rangers patrolling this isolated canyon. Unfortunately the locked box was broken into and now it is basically garbage that needs to be cleaned up.

I am recommending that this bear box be flown out of the backcountry to clean up this area next summer. Next season, I could hike into the area and do the cleanup and move the box to an appropriate LZ. Then, when it is convenient for helitack, they could fly into the area and load the box.

<u>Signs</u>

All signs were photographed on the Monarch this season, as I don't think that this has been done for a few years. (See attached CD) It is unfortunate that so many of these signs have been defaced with scratch marks and scratched on lettering. All of the vandalized signs are noted for possible replacement.

A new sign is needed in Simpson Meadow. The location is ¹/₂ mile west of Horseshoe Creek. (refer to photo) This trail no longer is the way to go to Tehipite. The sign was made when there was a bridge over the middle fork just below Dougherty Creek. So, basically this new sign would have no reference to Tehipite Valley, since the crossing for going to Tehipite is up river from here.

Simpson Station

The maintenance and repair of this 60 + year old cabin has been my passion for the past thirty years. In the mid eighties, I reroofed the cabin with cedar shingles. Later I built custom cabinets inside and continued over the years to keep it clean and well supplied. Last fall I rebuilt the footbridge out in front of the cabin that goes over Horseshoe Creek. This summer I did general maintenance and cleanup around the cabin. Also, was able to get some food into the station to get me through the summer. There is work to be done on the cabin for next season. The grounds are littered with fallen trees that have fallen over the last decade. Horseshoe Creek is badly eroding and threatens to wash out the station if it is not worked in the next few years. There is a log jam just below the station that is enhancing this problem. These logs need to be bucked up and cleared out.

Back in the 80's the carpenter ants were eating away at the cedar logs of the cabin. I put down that powered compound on the perimeter of the slab that killed them for some years. This needs to be done again as they are getting reintrenched. Also, there is a small amount of garbage that needs to be taken out that can be done by the trail crew next season when they in the area.

Monarch Station History

Over the past 30 years the Monarch station has been "manned" most of the years. Over the past several years funding for this station has not been secured. This year money was acquired to restart this critical station.

Traditionally the Monarch ranger was a roving backcountry patrol ranger covering areas that included: the Monarch Divide, Simpson and the Middle Fork, Woods Creek, Bubbs Creek, Bench Lake and remote areas.

Chuck Watson was roving patrol in the early 70's until 75. Ralph Kumano was in the area for six seasons starting in 76. He based out of the Simpson Station. He cleaned up the station and brought in equipment and supplies to make it more operational. Until Kumano's work at Simpson Station, it had been abandoned and was a venerable rats nest. Dario was stationed there for a season in 79 and he built some cabinets in the station and a loft. In the mid 80's, I reroofed the station with cedar shingles. In the 90's I built more cabinets in the station, and milled an exterior table that is attached to the back of the station and a large front step for erosion control. Overall the station is in okay shape, but more maintenance work is needed.

The station on the Monarch Divide was moved from place to place for a few years. Tom Suc had a camp near the Fallen Moon camp for a few years around 88 to 90. I moved the camp over to Volcanic Lakes for the 91 and 92 seasons. And Sandy Graban had a camp in Volcanic Lakes in 93. Then Dave Ashe and company decided to establish the station in the present location on the south side of Granite Pass. They built a floor frame and brought in more equipment and supplies for the station. This location has proven to be an excellent location for this station.

The Need for Monarch Station

There is an important need to continue funding the Monarch Divide Station. Cedar Grove sub district is a vast backcountry district that includes: Bubbs Creek, Woods Creek, Monarch Divide, Simpson Meadow, Tehipite Valley and Blue Canyon. The Monarch ranger can also patrol over to Bench Lake or do periodic cleanup work in Paradise Valley.

The Monarch Divide ranger is a roving patrol ranger that can cover a vast amount of backcountry. It was shown this season that when park visitors know that there is a ranger in the area that they will be on their best behavior. Conversely when there is not a ranger in the backcountry, then that area will suffer the consequences of stations being in a state of disrepair, fire ring work getting neglected and garbage and other backcountry problems accumulating and being unnoticed.

Area Coverage

This season I was all over Kings Canyon backcountry from Goddard Canyon to Mt. Brewer. Areas covered this season include:

Baxter Lakes Rae Lakes Kearsarge Pass and Lakes Charlotte Lake and Creek 60 Lakes (five day hikes into the area) **Dragon Lakes** Woods Lake Basin **Bench** Lake Window Peak Lake White Fork Canyon Granite Basin and Lake Glacier Lakes and Valley Volcanic Lakes Kennedy Canyon Dead Pine Ridge Horseshoe Lakes and Creek State Lakes Simpson Meadow

Projects Completed

Campsite inventory Campsite rehab Meadow monitor Castle Domes Station maintenance and repair Rae Lakes Peninsula site rehab Simpson Station Maintenance Monarch Station Maintenance Photo documentation throughout the season of 250 photos including: All signs in Monarch Divide region Campsite inventory Fire ring and campsite rehab work Volcanic Lakes rehab.

Conclusion

It was another incredible experience to work with Sequoia Kings as a backcountry ranger. A lot of work was accomplished as it was a very productive season.

As backcountry rangers we are able to report issues and make recommendations with our year end reports. A big part of our responsibility in backcountry management is to understand what problems exist. It is our job to provide this information to management. Then it is up to our managers to work within the system and to make changes and new regulations to protect the wilderness.

This is a magnificent wilderness that is very fragile. Problems and recommendations have been presented within this report. Hopefully it will help to provide information to help us more effectively manage this incredible wilderness.

Needs List for Monarch Station

*quality tarp - 15' X 15' - black (so not visible from the trail)
*2 nylon ropes - 75' long (1/2 inch in diameter)
*station wood burner and flue piping - a similar stove to Rae Lakes
*AA batteries - two boxes
*chair - metal (co could be stored outside if need be)
*TP - 10 rolls
*small plastic bags - 50
*large plastic bags - 20
*gunnysacks - 15
*epi pen
*plastic bucket - 5 gallon (for hauling water)
*heavy black plastic - 20' X 10'

Simpson Station Needs List for 07

*chain saw for Simpson Meadow cabin
*TP – 5 rolls
*gunny sacs – 15
*cedar shingles – a small bundle (approx. 30)
*scrubbers for dishes – plastic type

Needs List for Rae Lakes Station

*cervical color *epi pen *aspirin – for heart patients *medical tape *medical pack – (large enough to hold lot's of stuff for a load and go) Note: my medical bag works great for size and is very handy *park radio battery charger – (there is none at the station, it shorted out) *12 presto logs for wood burner *staples for staple gun – (box) *warning notices *citations *propane – (10 gallon tank) *propane canisters – 8 *maps – 15 min. quads (Marion, Goddard, Pinchot) 2 each *large Knaack box

Need to get out of Rae Lakes

*55 gallon drum that is bent
*two old square flight boxes – (they leak)
*one old trash can – it's bent and can't be sealed
*7 metal sign posts
*old stove pipe – (we have new pipe)
*scrapwood – (pile is next to the station)

Rock Creek End of Season Report 2006 by Laura Pilewski

A. General Observations

a. Contacts

i. Backpackers

ii. Day hikers

This season I was only able to patrol Mt. Langley on a monthly basis (vs. bimonthly) due to needs elsewhere. No progress was made cairning a route to the summit to help mitigate resource damage from multiple user trails on the fragile alpine vegetation. But, I would encourage efforts in the future as this "14er" continues to gain popularity.

iii. Stock

Once again, Cottonwood and Rock Creek Pack Stations were the primary users. CPS almost always brought feed which greatly reduced impact to the area meadows. It would be nice if RCPS did the same in the future, provided it's weed free.

Approximately 320 horses/mules, six burros, and two llamas passed through (some more quickly than others, Clark!). Of those, six were private groups, an increase over previous years. Four of six private groups had varying degrees of problems (a dog and/or placing their highline on vegetation overnight).

The most notable user was Clark the llama who spent approximately two and a half weeks in the Rock Creek area recuperating. His trip originated in the Bishop Pass area. Along the journey, his pads wore away and his feet became cut up to the point where he refused to go any further south than Guyot Flat. His owner abandoned him in the "desert" and asked 3-1-3 to shoot him. Rob refused. We nursed him back to health with the help of numerous park personnel and visitors. Eventually, he was escorted out by a "llama guru" out of Wofford Heights (see "Clark Chronicles" and photo gallery).

b. Start of Season

We attended training the week of June 11th and 18th. As always, the EMT refresher was the most worthwhile and professional. The triage portion was a nice addition as us backcountry rangers don't get much practice in this realm. But, as we are well aware, we are not immune from such situations. One random idea for future training: basic trail maintenance and tool care and use.

Annie Esperanza's air quality presentation was quite moving. It is people like her who encourage us to not give up on protecting the park (and planet) in times like these, and who make us feel like family within this park. It was also encouraging to know the new park superintendent, Craig Axtell, stands behind these ideals. Even more so, it was a pleasant change to have him communicate this to us throughout the season at training, on the radio and, best yet, in the backcountry.

Mobilization went smoothly despite it being delayed by poor weather (quite unusual to have three days of thunderstorms early season). I had plenty of supplies to tide me over and had extra time to clean up the neighborhood before the summer guests arrived. I did a quick loop through the Miter Basin/Crabtree Lakes area to assess snow conditions. I stopped at Crabtree to meet with the other Kern Plateau rangers as planned for Gamow bag training. Then, I bounced over to Mt. Langley and Army Passes to report those conditions.

Just as I got acclimated to fourteen thousand feet, down I go into the depths of the Kern trench. The camps in the Rattlesnake and near the Hot Springs needed (and still need) lots of attention. And, as it turned out, Frenzel () (7) had recently found the invasive velvet grass (*Holcus lanatus*) in Little Pasture. So, surveying the Kern and pulling several gunny sacks full of this weed kept me occupied (see detailed report).

Law Enforcement

c. Citations

The summer of 2006 ushered in a different crowd. People were lighting up illegal fires (4), walking around without permits (4 groups) and oversize groups (groups of 26, 18, 17, and 23). Boy scouts (troops of any size) or any group of eight or more should receive emphasis regarding the group size limit rule. Five of eighteen violations were committed by BSA this season. **Medicals**

d. Transports

I had seven this year:

7/02/06 Possible pneumonia/respiratory infection @ Army Ck.; self evacuation

7/28/06 With 3-1-3, lower Crabtree mdw., Acute abdominal pain which disappeare.! No evacuation.

7/29/06 Possible sprained ankle, lower Rock Ck. Refusal; continued trip successfully. 8/06/06 HAPE @ Army Ck.; hospitalized two nights; helicopter evacuation.

8/06/06 Possible AMS. Treat and release. Arranged for stock evac. but they later refused. 9/06/06 Possible AMS/ early signs HAPE. Helicopter evacuation.

9/12/06 Possible tonsillitis. Treat and release. Self evacuation.

e. Fatalities

f. Searches

Mt. Brewer SAR. I did not participate except for offer permit info. and talk to hikers headed in that direction.

g. Weather

Snow was gone from the high places approximately one week earlier than last year. However, Old Army Pass had been exceptionally wind loaded and held a very large cornice until mid August. Like last year, July brought record high temperatures along with wicked lightning storms. Some days brought three rounds of intense thunderstorms within twenty four hours. Along with these storms came lots of rain and consequently nearly impassable stream crossings. July 27th was the wettest with Rock Creek receiving almost four inches of rain with flood debris (see photos) visible through the end of the season. It even blew out the log jam above Nathan's meadow. Coincidentally, this foul weather abated a year to the day from BSA Troop #1's Sandy Meadow incident. This did not go without notice on their trip. It seems both they and the mountains were finally at peace after their memorial this year. It never rained a drop in the area until September 5th.

h. Fires

Lots of smoke was produced this year due to the Beck, Tamarack and even Los Padres' Day fires (all located on or outside the park boundary). I was able to see the Tamarack fire in its early stages when I climbed the ridge from Coyote Pass and peered down into the drainage. Isolated crowns burst into flames amidst the chaparral. Unfortunately, the winds were high so I had to retreat.

B. Use Patterns

a. Backpackers

Everyone loves Richins new *Mt. Whitney* guidebook, except us rangers. Now the Miter Basin on some nights has over forty. Surprisingly, resource damage seems to be minimal as most people follow the same pre-existing foot paths. However, the sensitive riparian corridor that the author recommends ascending (p. 133) from lower Soldier Lake to the tarn has seen lots of impact. The disturbance to the soil and vegetation caused lots of erosion during July rainstorms. This route can easily be avoided by climbing the low saddle northwest of the lake, then traversing into the Miter Basin. Guyot creek also seems to be gaining popularity.

b. Stock (approx. 360 nights)

Same as last year, use was concentrated at the lower Rock Creek crossing (260 nights), until 22 August when Nathan's opened (62 nights). Then it was used heavily late season. Once again, I tried to balance use on both sides of lower Rock Creek when possible. Although the demo camp is attractive to even commercial users, the south side was drier. Thankfully, RCPS, the biggest grazer in this area, often prefers it. Penned-up had approximately 26 nights of use.

c. Administrative

Sylvia Haultain and Erik Frenzel graced me with their presence in September. We struggled to clip the meadows before nightfall, but we always awoke the next day with a smile on our face. We discussed use patterns, explored fens, and found invasive weeds. Then, I sent Sylvia on the mission of strolling through the Guyot Creek meadows to assess if they were appropriate for future grazing as they seem to be wet year round.

During September, the military trip also came through. Greg Fauth's efforts to make these folks more sensitive to this issue should be commended as blatant, tree-top level low flyers have decreased in number. However, overall traffic and hence noise has seemed to have increased. I am anxious to see the results of the soundscape project and how noise levels compare to other parts of the country. Reporting requirements with fire dispatch need to be clarified for next year so that overflights are not missed.

The military trip this year was a unique opportunity to spend time with the USNFS packers. It was refreshing to see them bring their own feed and work so friendly and professionally. Perhaps, they could do our packing (demob rangers, resupply trail crews) out of the east side in the future. It seems it would involve much less use of resources (fuel, grazing, time) and would be more efficient.

Sandy Graban and Amanda spent a week in the area doing campsite inventory (see section "G. Camp Area").

d. Commercial

CPS and RCPS were present all summer. Otherwise, a handful of Whitney bound hiking expeditions came through. See CUA forms.

C. Natural Resources

a. Bear Activity

No reported incidents. I did practically bump into one on the lower Rock Creek trail July 4th, but we quickly went our separate ways.

b. Wildlife

Lots of rodents and pikas. Less PTF'S than last year despite the precipitation. I saw the deer with the white radio collar a couple times mid season near the ranger station. At the end of the season I got a really good look at a pine marten (not weasel) atop Mt. Guyot. It was possibly hunting/drinking near an isolated snow patch.

c. Vegetation

The meadows of Rock Creek were waist deep and wet again. Like Sylvia mentioned to me, in places such as lower Rock Creek, you can still see that this growth is wonderful, though somewhat superficial over previously damaged soil without much turf.

I found only a couple herbarium specimens this year.

I did get to travel to the Kern to survey the spread of HOLA. Unfortunately, I found HOLA from the Kern Ranger Station through upper Funston meadow, its coverage lessening as one goes north. It seems indisputable that the cause of its spread is stock, more specifically, administrative in nature (see HOLA report). I did my best eradicating what I could by pulling plants by the roots. I hope Athena will get money for this and many other projects next year as we are on the brink of letting velvet grass take over the Kern similar to Yosemite's meadows.

We also found several invasives in the hitching area of the "all expense camp" at Rock Creek Lake. In past years, we have pulled *Malva* sp., but this year *Erodium cicutarium* and *Hordeum (murinum)* was also found. We should definitely make it a habit to do annual surveys of hitching areas and helispots . Laminated specimens or photos should be given to each respective station with what has been found in previous years.

D. Cultural Resources

- a. Prehistoric Sites (no comments)
- b. Historic Sites (no comments)
- **E.** Backcountry Facilities

a. Cabin

A nice new sequoia wood door was installed mid September by Thor. Mice continue to enter the station via the attic and front door.

b. Signs

All (including Old Army Pass sign) are still in place and in good condition.

F. Trails

a. Trail Activities

Area trails did not get much attention this year due to short time the maintenance crew was in the area.

The work the construction crew did in 2004-2005 held strong despite severe flooding in late July.

b. Problem Areas

- i. Complete Rock Creek drift fence: 23 T posts north side, 5 T posts south side. Already have 1 roll of wire and approx. 5 lbs. U hooks (n. side, s. end). Need to remove 6 extra T posts stashed with above & misc. extra wire along south side.
- ii. Army Pass trail has deep 3 ¹/₂' deep gully on west side approach. Area at reroute where water pours over trail early season (mid switchbacks) needs work. Eventually, steep lower switchbacks should be re-routed.
- iii. "Chute" between Rock Creek& Lower Soldier Lakes needs work.

- iv. Re-hab Army creek area adjacent to "all expense camp," Rock Ck. Lk. (possible ranger resource project 2007).
- v. Cairn route up Mt. Langley similar to Sawtooth Pass (see 2004, 2005 season end reports).

G. Camp Areas

a. Conditions

People still prefer bear box sites although canisters have encouraged some to "branch out." The peninsula at Lower Soldier Lake needs to be monitored and maybe eventually closed. It receives more use than a fragile sub alpine area can take. People continue to have illegal fires in the foxtail forest.

The campsite inventory project with Sandy and Amanda opened my eyes to how vast the Rock Creek area actually is. I inventoried seventy sites in the Siberian Creek and Miter Basin alone in addition to the areas I surveyed <u>with</u> them. I found more sites than I knew existed (most were old & subsequently destroyed). It was a great repeat survey. These should greatly aid our understanding of trends and impacts in the backcountry of Sequoia-Kings

Sanitation

Despite the rains, thankfully the white carnations were not in abundance, although a few did start blooming late season. I had one full wag bag delivered to the ranger station. And, another one placed in the bear box downstream.

b. Fire rings

See new data from campsite inventory. There's a lot more than I thought in my patrol area.

c. Firewood Availability

See 2005 Report. Need fuel wood inventory at bear box locations.

d. Food Storage

New bear box at Rock Creek Lake. All in area are functional now.

H. Permit System

a. Trailheads

b. Issuing Office

Trailhead rangers did not explain fire regulations within the park adequately. A check or "X" (to indicate if fires are allowed) beside their itinerary along with highlighting the minimum impact sheet would be great. Placing a square to indicate bear boxes is nice too since people often have excess food early on even if they are not allowed. Trailhead personnel need to ask how many bear canisters people have, not just do they have one. They still need to have a conversation about food storage.

Communications (b) (7)(F)



I. Needs for Next Year

- Funding for all stations, then...
- Cast iron 2-burner propane stove
- Hanta-proof suit and disposal bags
- o Foam caulking for attic of cabin
- Mt. Langley registers (preferably similar to Whitney w/ numbered entries and limited space for comments).
- o Reference books (see 2004 report).
- o Grounding stake for grounding wire, solar panel
- o Digital camera
- o Hatchet
- o Wisk broom
- Hand towel
- o Good shovel
- o Rake
- o Pencil sharpener
- o Pens
- \circ 4 Mt. Whitney quads (7 $\frac{1}{2}$)
- o Forms
 - Bear box locations (6)
 - Min. Imapact (20)
 - Run Sheets (12)
 - Photo logs (4)
 - End of season outline (2)
 - Inventory Forms (6)
- o Medical
 - Peds. NRB
 - Benzoin
 - Kling (2" & 4")
 - Medical tape
 - Aspirin & Acetaminophen

J. Recommendations

- Mouse proof cabin for health and safety of ranger.
- Cairn route up Mt. Langley.
- Continue bimonthly patrols up Langley when possible. Coordinate w/ 3-1-9.
- Still consider new trailhead education methods (see 2004 appendix).
- Contact BSA organization to provide info. in their newsletters regarding rules/regs.
- Make sure Lone Pine trailhead meets w/ backcountry rangers early season and provides up to date stock info. @ trailhead, including demo camp location.
- Continue spring training and funding for all ranger stations.
- Provide invasive species info. to ranger stations & survey hitching areas /helispots annually.
- Send out chainsaw & snow survey poles.
- Have CPS & RCPS use weed free feed and graze as little as possible.
- Find batteries that last as long but warn you of when they are about to die.

K. Pertinent Inventory

2 Sm. (31/2 gal.) propane 2 Lg. (7 gal.) propane 12 Sm. Snow survey propane 2 Lighter fluid 2 Sm. Pocket rocket fuel cans 3.5 Lg. Pocket rocket fuel cans 1 Gun cleaning kit 0 Bear cans 2 Alum. Fire pit shovels ¹/₂ gal. laundry soap 1 ¹/₂ dish soap 1 Rolls of foil 1 coffee cone 0 coffee filters 1 mirror spices: cinnamon, chili, cumin, curry, soy, Tabasco Warehouse: 10+ White gas (gal.) 0 Denatured Alcohol 12 D batteries 12 AA batteries **4 AAA batteries** 8 Burlap sacks 20 Sm. Trash bags 30 Lg. Trash bags 18 TP 8 PT 2 Rolls Duct tape 3 Rolls Strapping tape 3 Writing tablets 1 Steno tablets 2 Log books 6 Laminating paper **1** Cutter Sticks lots Bug repellant 1 Sunscreen lots p-cord 0 sponges 2 Match boxes 7.5" maps: 4 Chagoopa 1 Johnson Pk.

1 Kearsarge Pk. 2 Kern Lk 1 Kern Pk 3 Mineral King 2 Mt Brewer 5+ Mt Kaweah 3 Mt Langley 1 Mt Pinchot 0 Mt Whitney 1 Mt Williamson 2 Triple Divide 2 Cirque Pk **Climb/Rescue gear:** 6 locking std. carabineers 1 non-locking carabineer 2, 4'L webbing 1, 165'L dynamic(10mm) rope 1 adjustable climb. Harness Medical (not incl. 1st Aid Kit) O2 cylinders (4 jumbo D: 2@1400, 1@1600, 1@2000; 1 reg. D@1500) 2 regulators 1 BVM 6 nasal cannulas 4 ad. NRB 1stethoscope (extra BP cuff left @Crabtree) 1 litter 1 full body vacuum splint 2 c-collars 1 inflatable leg splint 1 inflatable arm splint 2 SAM splints 2, 4"x30" Scotchcast splints 1, 4"x15" Scotchcast splints 12 emerg. Sunglasses lots $2x^2$, $4x^4$ pads 1 multi-trauma dressing lots steri strips/butterflies lots ibu., antacid, antibiotic ointment, bandaids (reg/knuckle) Open/ Close Duties addition:

Demo Camp

Attach cable at west end using "Come –along" (read directions!), wood round nearby or by separating ladder at station. Make sure spacers are far enough from trees and somewhat centered.

Replace rocks under line to minimize pawing.

Tighten cable mid season.

End-of-Season Report

Tyndall Creek Ranger Station June 23-September 28, 2006 Alison Steiner



Milestone Basin

A. General Observations:

- a. Statistics:
 - i. Contacts:

Because I spent the majority of August staffing the Kern Ranger Station and conducting a campsite inventory of the Kern-Kaweah (both relatively remote areas), these numbers do not accurately reflect visitation to the Tyndall plateau. In 2004 and 2005, up to 50 hikers a day traveled through the district on the John Muir Trail during late-July and August. Although I contacted fewer backpackers this season than last, I have no reason to believe that the area's use patterns have actually changed.

- 1. Backpackers: ~770
- 2. Day Hikers: ~ 10
- 3. Stock Users: ~80
- ii. Stock:
 - 1. Total Animals/Total Use Nights: 112/329
 - 2. Horses/Mules: 105
 - 3. Burrows: 7
 - 4. Llamas: 0
 - 5. Commercial: 88
 - 6. Private: 12
 - 7. Administrative: 12
- iii. Law Enforcement:

As in previous years, education proved the most effective means by which to handle law enforcement situations. I issued no citations this season.

iv. Medicals:

Two visitors were evacuated from Tyndall this summer due to medical emergencies. Unfortunately, I was not at the station for either of these incidents. Sequoia's trail construction crew (specifically Brian Pope and Major Bryant) handled both situations, the first of which involved chest pain and the second serious altitude sickness. The trail crew's involvement in these emergencies highlights the importance of <u>all</u> park employees (not just rangers) in maintaining visitor safety. I believe that all backcountry employees should be exposed to basic first aid and highly encouraged to participate in more advanced EMS training. v. <u>SAR</u>:

1. The park should provide SAR training to all backcountry employees, especially rangers.

2. Searchers should be briefed every morning and evening about the "big picture." How many search teams are there? Have any clues been found? Etc...

3. Searchers must be told who to contact with information...the IC, operations, etc.?

b. Weather Summary:

Like last year, the southern Sierras received a substantial amount of rain, hail, and sleet this season. Although the area experienced a heat wave in late-June (one that caused water levels to peak prior to our arrival in the backcountry), incredibly stormy weather proved the norm between July 17 and July 29. These thunderstorms caused flash flooding in both the Wright Creek and Coyote Creek drainages. The floods flattened areas more than 20 feet wide in spots and raised water levels by at least 5 feet. This weather system started numerous fires throughout the eastern Sierras, several of which periodically filled the district with smoke. Except for one small snowstorm on September 26, blue skies predominated for the rest of the season.

B. Use Patterns:

a. Hikers:

See section on contact statistics.

b. Stock:

Stock use at Tyndall proved highly unpredictable this summer. Although the Wright Creek drainage saw considerable use early season (100 use nights in late-July alone), other meadows in the area remained ungrazed until mid-August. Like last year, the snow on Forester Pass and the deteriorating condition of Shepherds Pass prevented access to the Tyndall Plateau for the majority of the season.

I noticed only two significant changes in stock use patterns. First, the Kern crew did not camp at Tyndall this year, a decision that eliminated

84 of Tyndall Meadow's use nights. Second, Rock Creek Pack Station ran more full-service trips in the district, specifically in the Wright Creek and Wallace Creek drainages. Although RCPS generally does a wonderful job of rehabbing campsites, I think that the park should discuss appropriate or preferable camps with Craig London prior to next season. Several of his packers chose inadequate sites, causing unnecessary resource damage to otherwise pristine spots.

c. Administrative:

The construction crew's three month stay at Tyndall constituted the only significant administrative use in the area this season. Although several new trails developed throughout the meadow, I think that little lasting damage occurred from the increase in foot traffic. However, several crew members chose inappropriate sites for their tents (spots that they had to drastically alter to make comfortable). To help mitigate this problem, the park should require trail crew members to attend LNT training at the beginning of each season.

d. Commercial:

See section on stock use.

e. Aircraft:

Surprisingly, military over-flights as well as low flying aircraft were common along many of Tyndall's trail corridors and crosscountry routes this summer. 3-1-2 and I reported a total of four low flyers in the area this season (as compared to only one last year). Although I believe that the park's efforts to improve relations with military representatives have significantly lessened low flying incidents, problems with noise pollution still persist. As one gentleman on the military trip observed, the issue is not how low but rather how loud. I think that the soundscape project at Crabtree will highlight this point.

C. Natural Resources:

a. Bear Activity:

Bears were present, but not problematic, in the Tyndall area. I found tracks in Tyndall Meadow on July 5th, along Wallace Creek on September 10th, and in the Kern Canyon (above the John Dean Cutoff) on September 25th. Unlike previous years, I received no reports of "problem" bears north of Forester Pass.

b. Wildlife:

Coyotes, mule deer, mountain yellow legged frogs, and pikas dominated this season's wildlife observations. On August 30th, I saw a coyote on the pass just south of Lake South America and, on September 27th, I noticed tracks along the Mitochondria Lake trail. During August and September, fawns and does swarmed the Tyndall Creek Drainage

while bucks spent the majority of their time on higher ground. I also found mountain yellow legged frogs in two tarns east of Kern Ridge.

The only noticeable change in wildlife observations this season involved pikas. Unlike last year (when the pika population seemed to be declining), I heard or saw pikas everywhere this summer. Please refer to my wildlife observation cards for specific locations.

c. Vegetation:

I noticed no non-native species within the district this summer. However, I spent approximately 10 hours pulling velvet grass in Little Pasture and Lower Funston during my two-week stint in the Kern.

D. Cultural Resources:



E. Backcountry Facilities/Signs:

Most of the facilities/signs within the Tyndall area are in good condition. 3-1-5 assembled the Tyndall Creek/Kern River drift fence on July 24th, and I disassembled the fence on September 25th. 7-5-7 Brian completed several cabin improvement projects this season, including lowering the stove, burying the solar wires, installing a radio base station, and replumbing the cabin's propane. In addition, by Nick and I patched several holes in the ranger station roof using tapped tin (a suggestion of Thor's). After assessing the cabin, Thor determined that the station should be reshingled next season.

F. Trails:

a. Trail Activities:

The construction crew spent three months this summer rerouting the lower portion of the Shepherds Pass trail. Their work is outstanding! They lifted the trail out of a wet meadow and onto a dry bench, carefully maintained a narrow trail corridor (using a wheelbarrow to carry away dirt, so as to protect the area's fragile flora), and rehabilitated the junction of the old/new trail.

Although the Kern crew skipped Tyndall this year, they spent a week working on the "chute" on the Colby Pass trail. Early season floods created eight-foot gullies on the east side of the chute and caused a small rockslide on the west side. Thanks to their hard work, the Colby Pass trail is now stock passable. However, I would <u>not</u> recommend the route to large parties or inexperience stock users.

In addition, b and I removed "liner rocks" from the Forester Pass Trail to help naturalize a reroute from the mid-1990s.





b. Problem Areas:

The Forester Pass trail remains the most problematic spot in the district. Because Tyndall receives considerable early season use by PCT hikers, the trails program should prioritize the maintenance of the JMT/PCT over that of less visited sites (such as the Kern Canyon or Colby Pass). In the last few years alone, severe erosion and braiding has

occurred throughout the area. If the Forester Pass trail does not receive substantial maintenance in the next year or two, reroutes, etc. may be necessary.

G. Camp Areas:

a. Conditions:

Junction Meadow, Wallace Creek Crossing, the Frog Ponds, and Tyndall Creek Crossing are still the primary camping areas within the district. These sites remained in good condition throughout the season due to frequent "fire ring and garbage" patrols. A drastic increase in illegal fires proved the most noticeable change in campsite impacts. I attribute this to the summer's extremely stormy weather and feel that trailhead offices should carefully discuss fire regulations with visitors prior to their trip.

b. Sanitation:

Due to the low density of travel within the district, sanitation remained an issue of relatively little concern. Toilet paper blooms and human feces were commonly found in the Wallace and Tyndall Creek campsites (sometimes only three feet away from water!!!) and occasionally discovered in more pristine areas like Upper Wright Lakes. I believe that trailhead rangers should spend more time discussing the proper disposal of human waste with visitors, even if it is an uncomfortable topic. This has proven successful in the Wag Bag campaign (almost every Mt. Whitney bound hiker who entered from an east side trailhead carried a Wag Bag this summer) and could help improve overall backcountry sanitation.

c. Fire Rings/Firewood Availability:

As in previous years, I spent the majority of my summer reducing and/or removing fire rings. I obliterated over 40 illegal fire pits this season alone! I believe that universal fire regulations (like those in Kings Canyon) would help reduce the number of illegal fires that occur throughout the park.



Wallace Creek Crossing





Kern Canyon



Wallace Creek Crossing

d. Food Storage:

Food storage compliance remained extremely high this summer (95+%). Nearly everyone that I encountered on the John Muir Trail was equipped with a bear proof canister, if not two! I even noticed that a growing number of people were using canisters in remote, off-trail locations (such as the Upper Kern, Kaweah Basin, etc...).

In early August, be encountered an Outward Bound group camped at the Tyndall Creek Crossing (where there is a bear box) because they had no bear proof canisters. Although the organization had asked the park to allow their groups to hang food in bear canister required areas, the leaders that be an expressed an interest in carrying canisters. I believe that the park should require Outward Bound (and all other commercial operators) to follow the same regulations as general visitors. If Outward Bound groups hang food in "problem" areas, they teach teenagers bad Leave No Trace techniques and perpetuate the idea that rules are meant to be broken. Perhaps a park employee could speak to Outward Bound leaders about proper food storage during their spring training next year.

e. Impacts/Restoration:

Numerous sites within the district proved heavily impacted and in need of restoration. I removed several rock walls on Shepherds Pass, around Williamson Bowl, and at Lake 11,440. I also continued the Sheep Camp cleanup that was started last year, ultimately packing out over 30 pounds of trash from the area and obliterating 5 fire pits. The most significant project that I completed involved the restoration of the camp area around the Tyndall Creek bear box. Nick and I closed several campsites in the area by burying rocks, transplanting native grasses, etc. I recommend that the Tyndall ranger closely monitor this spot next year and post a restoration site sign if people continue to camp in this location. The Frog Pond is an ideal area for future campsite definition projects.



Rockwall at Lake 11,440 (before/after)



Tyndall Creek Crossing (before/after)

f. Campsite Inventory:

H. Permit System:

a. Compliance:

Permit compliance was quite high this summer (99+%). I met only one individual without a permit all season and felt that he deserved no more than a verbal warning.

b. Issuing Offices:

The issuing offices did a great job this summer! Visitors were generally well versed in, and willing to comply with, park regulations. My only recommendation is that trailhead offices/rangers emphasize the importance of proper backcountry sanitation (proper waste disposal, etc...) and the problems with illegal fires (resource damage, fire danger, etc...).

I. Communications:

(b) (7)(F)



J. Inventory:

Fuel:

4 gallons Coleman white gas 2 small propane tanks (1 full, 1 ¹/₂ full) 1 large propane tank (¹/₂ full) 8 large Pocket Rocket canisters (2 full, 3 ¹/₂ full, 3 almost empty) 4 small Pocket Rocket canisters (all ¹/₂ full)

Maps:

 Sequoia-Kings Canyon National Geographic
 Tom Harrison Sequoia-Kings Canyon
 Tom Harrison Mt. Whitney
 John Muir Wilderness and SEKI
 Kearsarge Peak (7.5 min)
 Triple Divide (7.5 min)
 Mt. Williamson (7.5 min)
 Mt. Whitney (7.5 min)
 Mt. Kaweah (7.5 min)
 Marion Peak (15 min)
 Golden Trout Wilderness
 Olancha (15 min)
 Chagoopa Falls (7.5 min)

<u>Cabin Supplies</u>: 1 box + ~20 large, black trash bags 4 rolls small, clear trash bags 1 roll duct tape

7 rolls toilet paper 3 bottles dish soap 2 boxes aluminum foil 6 boxes matches 2 notepads 1 steno pad 3 boxes ziplocks 2 new dishtowels 2 sponges 3 bunches paper towels 2 Wagbags 5 burlap sacks 0 lightweight shovels Oxygen: 1 M-9 (1150psi) 2 D (1300psi and 1200psi) **Batteries**: 20 AA 8 AAA 2 D Other: 1 box coffee cones 1 coffee cone (small) Cumin Curry Cinnamon Salt/pepper Chili powder

K. Needs for Next Year:

<u>Maps</u> :	<u>Fuel</u> :
1 Kern Lake (7.5 min)	2 small or 1 large propane tank
1 Mt. Kaweah (7.5 min)	
2 Mt. Brewer (7.5 min)	Other:
	Stool
First Aid Supplies:	TP
Stethoscope	Wildlife Observation Forms
BP Cuff	Lamination sheets
Oxygen	Burlap sacks
	Duct tape
	Sponges

L. Recommendations:

- a. Continue to staff the Tyndall Ranger Station with a paid employee.
- b. Offer SAR training to backcountry employees, especially rangers.
- c. Improve communication during SARs.
- d. Create universal fire regulations for Sequoia National Park.
- e. Establish official protocol for the park's response to medical emergencies reported via cell or satellite phone.
- f. Remove "no fires" sign at Wallace Creek Crossing.
- g. Continue out-of-service calls.
- h. Prioritize maintenance of the JMT so that erosion and braiding do not continue.
- i. Speak to Craig London about appropriate campsites throughout the district.
- j. Define campsites at the Frog Ponds.
- k. Provide LNT training for all backcountry employees.
- 1. Fund all six stations. Although rotating rangers through the Kern proved sufficient, it compromised the condition/coverage of all stations and districts.

A. General Observations

This was my 15th summer working as a wilderness ranger at Sequoia National Park. Although visitation appeared to be down a little from last season, and there were fewer incidents, it was a memorable summer for all who visited this piece of wilderness paradise. While the world outside this wilderness retreat seems to change daily it is comforting to know that the natural world protected within Sequoia National Park remains largely the same.

It was a typically busy season in the Crabtree area. Both backpacker and stock numbers were down slightly from last season. The allure of climbing Mt. Whitney, at 14,494' the highest point in the lower 48 states, continues to be the impetus that draws most visitors to the area.

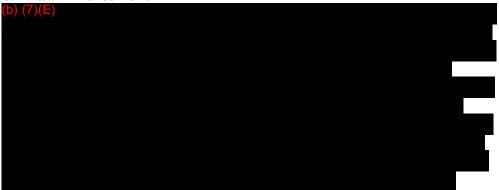
a. Contacts

- i. Backpackers-2,464
- ii. Day hikers-812
- iii. Stock-250 (appx.)

b. Start of Season

I arrived at the Crabtree ranger station on June 25th following 2 weeks of training. The EMT refresher was excellent and the backcountry training was abbreviated but worthwhile. Wilderness rangers should arrive at their ranger stations no later than the middle on June regardless of the perceived conditions. Visitors had made quite a mess in the Crabtree area prior to my arrival; illegal fires, attempted break-ins at the ranger station, trash in the bear boxes and ranger station (see photo's), were all observed upon my arrival on June 25th.

c. Law Enforcement



d. Citations

Citations were written in the area for; grazing prior to opening date, pet in a closed area, littering, and no permit where required. Often times compliance can be achieved by lower levels of enforcement; verbal or written warnings. It is a large area that wilderness rangers are charged with managing and often times we hear about and see violations after the fact when the violator(s) have already left the area.

e. Medicals

There were numerous medicals of varying degree in the area this season. There were less cases of altitude illness requiring evacuation this summer than in the past. Minor medicals requiring tape, band-aids, and advice are common.

f. Transports

- An 18 year old male was evacuated via helicopter and later diagnosed with HAPE and HACE. He was on day six of a trans-sierra on the high sierra trail and did not report any symptoms prior to reaching the 12,000' elevation on the Mt. Whitney trail where he had a rapid onset of life threatening AMS.
- A 61 year old male was evacuated via stock (CWPS) for a recurring knee injury from lower Crabtree meadow.
- A 52 year old male was evacuated via helicopter for a medical condition (cardiac) exacerbated by strenuous activity at high elevation. The individual had a pace-maker and was on many medications. Curious that he was in the backcountry in the first place....
- An individual was evacuated from the summit of Mt. Whitney for an undetermined cardiac condition. The evacuation was initiated via cell phone and turned out to be not very serious.
- A 67 year old male with and injured knee was evacuated via NPS stock from the Crabtree ranger station.

g. Fatalities

There were no fatalities in the area this summer. (As of late September)

h. Searches

There were 2 minor searches in the area this summer.

--In mid-August a group of boy scouts showed up late one night at the ranger station reporting a missing person from another hiking party. The individual was inexperienced and last seen near the summit of Mt. Whitney. He was not found when the members of his party retraced his route to the summit. I left the ranger station at 0400 and found the missing party at Guitar Lake, a bit shaken up but in good health. He claimed that he lost the trail below the summit and descended cross-country via the SW slopes of Mt. Whitney. This was a close call.

-- In late August I assisted the USFS to search for an individual who was climbing the Keeler and reportedly in some kind of trouble (out of food and water and unable to climb up or down). The individual was able to attain the summit ridge of Mt. Whitney and self evacuate, but not before the Inyo NF launched the helicopter to assist. This was another "cell-phone evac" with only vague details to go on and the 2nd one this summer where the party was able to self evacuate, but not before some kind of action by the NPS and USFS. There needs to be a protocol concerning these "calls for help" when a ranger is not on scene and a person is requesting our assistance and the details are vague at best. There are more people every year carrying cell phones and satellite phones in the backcountry and we will continue to get these calls.

i. Weather

There was a rainy season and a dry season in the Southern Sierra this summer. From late June through the month of July there were daily thunderstorms and much cloud cover. When August 1st rolled around the skies cleared and it was unusually dry in all of August thru September. The temperatures were above average during the "rainy season" and near or below average in August and September.

j. Fires

There were no fires in the immediate area this summer but smoke could be seen from other fires throughout the summer. Primarily the two fires (Beck and Tamarack) burning south of the park boundary pushed smoke into the area. There were several very smoky days in mid-September from a fire reportedly burning in the Los Padres NF.

B. Use Patterns

a. Backpackers

The Mt. Whitney corridor continues to get flooded with visitors. Trail Crest and Mt. Whitney are the focal point for many visitors trip into the Sequoia Park backcountry. Visitors start out on many trailheads throughout the Sierra and funnel out over Mt. Whitney. Horseshoe Meadow and Onion Valley are the most popular "loop" trips that end at Whitney portal. Exit quotas on Trail Crest continue to result in more visitor nights in the park. The JMT was more popular than ever this year and the majority of wag-bags distributed at Crabtree this summer were given to JMT through hikers. The majority of JMT hikers travel north to south. I was interviewed this summer by a woman updating the JMT guidebook and was happy to update her on changes in the Crabtree area (especially the use of wag-bags). This is an important way of getting pertinent information to the visitor. There were more thru hikers on the PCT this season than in the past. Late June and early July see an influx of PCT hikers in the area on their way to Canada. This season I observed the continued trend of less backpackers traveling cross-country, although the "Crabtree Pass Loop" continues to see its share of traffic.

b. Stock

A "wet" year for meadow openings coupled with a rainy July resulted in even later opening dates and a decrease overall in stock use in the Crabtree area. Upper Crabtree Meadow was closed for the 2nd year in a row due to persistent wet conditions. Lower Crabtree and Sandy meadows received the most use in the area (170 and 80 nights respectively). Strawberry meadow had 40 stock nights and this is pretty much its capacity. We added Strawberry meadow to the RB monitoring program this summer. I was able to disperse use to Sandy Meadow from Lower Crabtree when I was able to contact the stock parties prior to their setting up camp. The Crabtree area is popular with stock parties because of the proximity to Mt. Whitney. Many groups are spotting their clients up to Guitar Lake to climb Mt. Whitney then camping with their stock at Crabtree Meadows.

c. Administrative

The Kern trail crew spent 2 weeks in the area maintaining area trails. They camped with their 12 head of stock at Sandy meadow while in the area. The military trip (20 head of stock) did not graze area meadows this summer, opting instead to feed their animals pellets while in the backcountry. Plant ecologist extraordinaire Sylvia Haultain spent several days in the area assessing area meadows, assisting with the RB monitoring, and advising the Crabtree ranger in management of area meadows. Two resource projects in the area this summer were the soundscape project and the campsite inventory project (see resources for more information).

d. Commercial

There were many commercial stock outfits using the area this summer. The focal point of their trips to the area is Mt. Whitney. Pack stations in the area this summer were; Cottonwood Pack Station, Rock Creek Pack Station, Sequoia-Kings Pack Trains, and High Sierra Pack Trains. CUA monitoring forms were kept on all commercial users when contacted and compliance was good overall with park regulations. Commercial hiking outfits using the area included; Adventure Travel West, Mt. Travel Sobek, and Southern Yosemite Mt. Guides.

C. Natural Resources

a. Bear Activity

There were only 2 bear sightings in the area this summer. There were no incidents between bears and humans. It seems that 90% of visitors are carrying bear canisters and all stock parties contacted are using the bear proof panniers or barrels. The word has gotten out and the PR campaign to promote bear canisters has been a huge success.

b. Wildlife

Please refer to wildlife reporting cards for a synopsis of wildlife sightings in the area this summer. The Pika monitoring continued this season and I observed more pika in the high country this summer than the last two seasons. There is still a small population of MT. Yellow-Legged frogs in the pond above upper Crabtree Lake.

c. Vegetation

The area meadows remained soggy well into summer. Rangers were busy this summer assessing area meadows for grazing opening dates on a weekly basis. RB monitoring was conducted at Sandy meadow, Lower Whitney Creek, and Lower Crabtree. See photos and RB study data for more info.

d. Soundscape Monitoring

At the start of the 2006 season personnel from SEKI's air resources office installed equipment at Crabtree to record time-series sound data (including "ambient" noise every two minutes, plus loud noise "events"). I was provided instructions and training to maintain the installation, and checked the equipment approximately every 3 days throughout the summer. When time allowed, I also participated in hour long "attended logging" sessions where I recorded all sound events audible to me while situated near the soundscape equipment. This project will provide a wealth of data that will prove useful in

SEKI's upcoming wilderness planning process. I provided a demonstration of the soundscape monitoring program for the military trip that was in the area in early September to discuss the issue of noise created by military over flights. I received numerous, unsolicited complaints form visitors this summer regarding the noise from military jets and the effects on the Sequoia Park "wilderness". On September 23rd at 1720 hrs, a particularly loud military over flight "event" (reference soundscape data to listen to "event") caused a visitor (Moore, Incline Village, NV) to come to the ranger station to complain. He stated that "the noise from these military jets, and others, make it impossible to have a wilderness experience in this part of the Southern Sierra wilderness.

e. Campsite Inventory

I worked with Sandy and Amanda on the Campsite inventory project during the second week of August. They provided me with training and worked in the field with me for several days. It will be interesting to compare this summer's field work with the original inventory that was done 30 years ago. It would appear that, from the original maps, there are far fewer campsites than 30 years ago and the sites that are still in use are less impacted. Good work to all the rangers over the years in rehabilitating old campsites!!

D. Cultural Resources

a. Prehistoric Sites

No new sites were observed this season and I was unable to visit any inventoried sites due to a lack of time.

b. Historic Sites

The Mt. Whitney shelter, constructed by the Smithsonian Institute in 1909, received some much needed repairs by Thor in mid-September. He re-hung the doors and patched some of the holes in the structure to in an attempt to keep blowing snow out of the building. We will see come spring if this work was successful. The NPS should put the necessary resources into maintaining this historic structure to ensure that it stays in good repair for years to come. The summit of Mt. Whitney receives thousands of visitors every year and is a good opportunity for the NPS to put its best foot forward. The lightning diffusion system is intact and in good repair. The NPS had a good presence on Mt. Whitney this summer and routine maintenance was performed during each patrol.

E. Backcountry Facilities

a. Cabin

The Crabtree ranger station, constructed in 1971, continues to be a functional structure. The cabin is somewhat rundown and not very aesthetically pleasing. The station receives more visitors than any others in the park. The last I heard the station is scheduled for replacement in the next couple of years. I support this decision.

b. Signs

Between the time I left last fall and the time I arrived this summer someone had vandalized and removed 2 signs in the area. I located one of the signs and

replaced it in its rightful spot. The other sign is still missing from the area campground stating "no fires within ¹/₄ mile". I will stencil this info on the new bear box so no new sign is necessary. All other signs in the area are in good repair. There are no sign needs for next year.

F. Trails

a. Trail Activities

The Kern trail crew, led by Eric Davenport, performed maintenance on area trails in August. The trails in the area receive such a high volume of use by stock and hikers that it is important to keep up on the maintenance and building of structures when necessary.

b. Problem Areas

The Lone Pine Trailhead ranger, Mike Yoshioka, did some work with the USFS on the short stretch of trail between the sigh junction and the actual "trail crest". They were able to move some of the large boulders to the edge of the trail enabling hikers to more easily negotiate this stretch of trail. Good job Mike!!

I have heard that the construction crew will be in the area next summer working on the JMT reroute (adding structures to the existing trail) and working up higher on the MT. Whitney Trail. I support this effort if it is to be as this is such a high profile trail. Erika and Tyler will need to find an appropriate camp if there is a large crew for a long duration in the Whitney Creek area.

G. Camp Areas

a. Conditions

The conditions at area campsites remain status quo. There are so many large groups using the area in August that I try to steer them towards appropriate camps, usually around the main campgrounds near bear boxes. According to my limited knowledge of the initial campsite inventory project, area camps are in much better condition now than 30 years ago. Years of hard work restoring campsites has really paid off and despite the high volume of use in the Crabtree area all campsites look pretty darn good.

b. Sanitation

This was the first full season of the voluntary pack out human waste program. Wag-bags were distributed starting in late June and running through the end of the season. Approximately 1,000 bags were distributed from the self-serve station at the Mt. Whitney-JMT trail junction near the Crabtree ranger station (see photos). The wag-bag station had a brief informational message with instructions on where to use the bags. We are asking visitors to pack out their waste from Guitar Lake east to the summit, as well as, the USFS side of the Whitney trail. Since there are no depositories for used bags on the NPS side of the Crest we are only asking those visitors who are traveling east to Whitney Portal to carry out their waste. Based on the number of bags that were distributed and the number of errant bags that I discovered along the trail and elsewhere (9), I would say that thus far the program has been a success. Visitors who start their trip at Horseshoe Meadow, Onion Valley, or Whitney Portal are given bags when they pick up their permits in Lone Pine so the number of bags in use this summer in the area is much higher than the 1,000 that were distributed at Crabtree. The majority of visitors picking up bags at Crabtree are hiking the JMT and the High Sierra Trail. I talked with USFS rangers and administrators throughout the summer and they report that wagbag compliance is high (90%) on their side of the Crest as well. I removed the toilet on Mt. Whitney this summer and the USFS is in the process of removing the toilets at trail camp and outpost camp so it seems that wagbags are here to stay. I support this direction and we should continue the PR campaign to promote wag-bags. I observed much less toilet paper and human waste at Guitar Lake and the surrounding area this summer and we should expect conditions to continue to improve as time passes and wag-bag use continues. This is an added demand on the Crabtree ranger's time (and psyche when they have to carry someone else's bag of crap discovered along the trail) but the greater good is served and the area will continue to show improvement in sanitary conditions.

c. Fire rings

There are 10 fire rings that are maintained in the area. Except during times of inclement weather it seems that less and less people are interested in having fires in the high alpine environment around Crabtree. We should standardize the fire regulations in Sequoia Park. From a resource management perspective there really is no justification for allowing campfires in the Foxtail Pine belt. The fire elevation should be established at 10,000 like in Kings Canyon.

d. Firewood Availability

There has not been much change in regards to firewood availability. On a cold and wet summer there will be less downed wood. The fire restrictions at the ranger station campground, lower Crabtree, and Wallace creek should continue due to a lack of available firewood.

e. Food Storage

A much needed replacement for the bear box at the ranger station campground was flown in on September 1st. I am happy to report that the new box is mouse proof, ventilated, and aesthetically pleasing. Other bear boxes in the area continue to be functional. Most visitors carry their own canisters and it seems that counter balance technique is a thing of the past.

H. Permit System

a. Trailheads

Permit quotas do not protect the Crabtree area from impacts caused by excessive use. There is no quota for stock use in the area and since the commercial pack stations write their own permits there is no way to track or regulate stock use numbers. Wilderness rangers do their best to regulate use in the field, but this is a difficult mission due to our other on-going duties. Hiker and stock numbers have been down a little the past two seasons due to lingering snow and high water but we cannot count on the weather to regulate backcountry use. The exit quota on Trail Crest continues to result in more overnight use in the park. Mike Yoshioka did an excellent job again this season working the trailhead ranger position out of Lone Pine. He is a great asset to the wilderness ranger program at SEKI.

b. Issuing Office

(b) (6) did an excellent job of supporting the field staff this summer. They are very helpful in acting as liaison between wilderness rangers and the USFS office in Lone Pine. Visitors to the area were well informed and kept up to date on area conditions. Permit compliance was good this season with only 2 parties contacted lacking the necessary permits. The USFS started issuing the "hang tags" in mid season to Mt. Whitney hikers resulting in more efficient compliance checks. We need to again stress to commercial operators that they need to carry a copy of the CUA and identification on every trip into SEKI.

I want to take this opportunity to thank (b) (6) for all of his help over the years in supporting the wilderness rangers. He has been an invaluable asset to the program and he will be sorely missed. Good luck in future endeavors (b) (6)

I. Communications

Ranger round up continues to be successful and the wilderness office staff is to be commended for this. (b) (7)(F)

J. Needs for Next Year

daypack
 rolls TP
 PT
 scrubber sponge
 boxes matches
 duct tape
 K. Recommendations
 *Lower fire elevation regulation to a standard elevation (10,000') to better protect park resources.

*Allow wilderness rangers to de-mob to the east side. This would allow rangers to spend more time in the field and would save gas and money by not having rangers on travel status and paying mileage.

*The Crabtree ranger's field season has been whittled down to 3 months. Resource damage is taking place prior to my arrival and after my departure. Historically the Crabtree ranger has stayed in the field until mid-October or later. Extend the field season for wilderness rangers at the beginning and end of the season.

*Make commercial pack stations go through the same permit-quota system as other wilderness travelers. We will be better able to track and manage use if we (NPS) issue the permits.

*Use the soundscape data obtained this summer to manage the natural sounds as an integral element of wilderness at SEKI.

L. Pertinent Inventory

O2 cylinders-1 jumbo D 1100psi, 1 D 1400 psi, 1 D 1750 psi, 1 D 1500 psi Sm. (31/2 gal.) propane- 2.5 Lg. (7 gal.) propane-1 Sm. Snow survey propane-unknown White gas (gal.)-5 Lighter fluid-unknown Denatured Alcohol-.5 D batteries-22 AA batteries-28 AAA batteries-10 Sm. Pocket rocket fuel cans-2 Lg. Pocket rocket fuel cans-4 Burlap sacks-3 Sm. Trash bags-20 Lg. Trash bags-10 **TP-1.5** PT-.5 Rolls Duct tape-0 **Rolls Strapping tape-0** Writing tablets-2.5 Steno tablets-1 Log books-0 Laminating paper-0 Gun cleaning kit-1 (needs patchs) Cutter Sticks-2 Bug repellant-3 Sunscreen-0 p-cord-50' Bear cans-1 garcia, 1 carbon fiber Alum. Firepit shovels-1 laundry soap-1 dish soap-3 sponges-1 Match boxes-0 Rolls of foil-0 coffee cone-1 coffee filters-10 mirror-1

spices-lots

7.5" maps-complete set