

**BEARPAW MEADOW
END OF SEASON REPORT
2009
Nina Weisman**

A. General Summary

This year the Bearpaw Ranger Station was staffed from June 15 to September 15th. Usually the station is staffed until the end of September but due to funding issues, the season was cut two weeks short. Additionally, there was only enough funding for six-day workweeks every other week. That worked out to 68 duty days in the patrol area this season versus 79 days in 2008. There weren't any big incidents in the patrol area this year although it was quite busy overall. As usual I thoroughly enjoyed the patrol area's diversity and hope to return next season.

B. Visitor Services

a. Contacts

i. **Backpacker** This season visitation on the High Sierra Trail was still quite high compared to previous years. In 2007 I contacted about 1300 visitors, 2008 saw 1900 visitors, and this year, even with the shortened season, I contacted over 1500 hikers, and the trailhead quotas filled up much more often than in past years. There seemed to be more Boy Scout Troops this year, and overall larger groups. I wonder if the pricing of the wilderness permit, which favors large groups, affected this at all.

ii. **Day hiker** Most of my dayhiker contacts were made in the few miles closest to the trailhead. I contacted over 160 of them this season. About 10 of the sturdiest made it out to Bearpaw and back.

iii. **Stock** Usually the majority of stock use in the area is the twice-weekly resupply of the High Sierra Camp but this year there was a lot of other stock use also. For the first time, a private stock group with two horses stayed at the High Sierra Camp and kept their horses in Bearpaw Meadow. Horse Corral Pack Station had many hired trips, which went through the patrol area. The groups stayed at Bearpaw, Lower Bearpaw, Redwood Meadow, and Pinto Lake. Also the Kaweah and Construction Trail Crews had weekly resupply trips that used the area. The Hockett crew used Redwood Meadow early in the season as they always do and turned in their stock night use info. The ranger station was mobilized and demobilized by stock this season also.

b. **Law Enforcement** This season I issued warnings to 4 groups camped too close to water, 3 warnings for food storage, 1 warning for camping on vegetation, and 2 warnings for no permit when required (had reservations, didn't stop for permit, etc.) During my week of frontcountry patrol, I issued many warnings for various infractions in the Lodgepole area.

c. **Citations**. This year I was lucky enough to not have to issue any citations. All the infractions I encountered were solvable by warnings as none of them were very serious.

d. Search, Rescue, Medical Incidents In the Bearpaw area, there were no notable incidents other than preparation and planning for a separated hiker who was located the next morning. While on frontcountry duty, I was assigned IC duties for a fatality that occurred on the Tokopah Falls trail. This incident only lasted half a day but it took half the week to complete the paperwork involved. We had 32 employees and the helicopter involved for this incident.

e. Fatalities - The only fatality was the above mentioned.

f. Weather It was another interesting weather year at Bearpaw. In June it rained and was quite cold for the first two weeks. The vegetation was quite happy about this but all the burnables were used up at the ranger station due to the tree crew trying to keep warm in early June. (I restocked them in case it happens next year.) The rest of the summer was mostly unremarkable other than some very hot periods where it didn't even cool down at night. (climate change?)

g. Fires There were two fires in the patrol area this season. One that I reported was caused by a lightning strike in the Granite Creek drainage. The strike was seen by High Sierra Camp employees and visitors. It was determined after a flyover that it wasn't a candidate to leave burning and it was put out in a couple of days. Another lightning strike landed in the Mehrten Creek drainage and that fire was managed for a couple of weeks before going out. It was staffed by various fire monitors and fire crew. Apparently it straddled the trail at one point and caused a minor stock wreck when the mules realized they were hiking with flames and smoke on both sides. After a few radio calls describing the problem, they backed the fire away from the trail. They did post numerous signs warning people about smoke and fire operation. When I hiked out the signs were still in place but FMO informed me the fire was officially out and they would get someone out there to remove the signs.

C. Use Patterns

a. Backpackers It seemed to me that visitation was up considerably this year and my contact numbers support that. Also, the trailhead quotas for the High Sierra Trail filled up more often than in the past. Most users were traveling the High Sierra Trail to Mt. Whitney. Some were doing loops through Kaweah Gap and Blackrock Pass or into/out of Kings Cyn. via Elizabeth Pass. Some had the Bearpaw area as their destination. Every year more people hike over one of the cross-country passes into Kaweah Basin or the Kern-Kaweah.

b. Stock As mentioned above, there was a lot more stock use in the patrol area this year although only one of the groups was private. See details in the following sections.

c. Administrative The Hockett trail crew has a few head of stock that they keep in Redwood Meadow early in the season. They frequently bring in supplemental feed in case the meadow isn't ready for serious grazing. The Kaweah Trail crew was mostly resupplied by stock this summer. Often, the packer did the roundtrip in one day. When the crew was at Lone Pine, the packer stayed down below the main meadow and the camp a couple of times. The crew put up an electric fence to contain the animals for the evening and it was located where the helicopter usually lands. When the crew moved to Pinto Lake, the packer stayed over a couple of times but usually did the trip in one day. The Construction Crew camped at Hamilton Lake this summer and a majority of their resupplies were by stock. As there is no grazing allowed at Hamilton, and it is a fragile area, we agreed that the packer try to return to Bearpaw for most of the evenings and only stay at Hamilton in case of emergency or really late trip. This seemed to work. I think they only stayed at the lake 2 or 3 times and had feed with them. Also, the stock were highlined so that they would do minimal damage. I inspected the area the stock were held and it looked as if stock had been there but I think all evidence will be wiped out by the winter. Most trips the packer went

into Hamilton, returned to Bearpaw for the evening, then went back out to Wolverton the next day. I think it would be better if the stock never stayed overnight there, as the area is very fragile, but this compromise worked with the minimal number of nights used. Some Ash Mountain maintenance employees went on a stock trip in the area with other AM park employees. They came over Elizabeth Pass, stayed at Lone Pine Creek for the night, and then exited out the High Sierra Trail. The trail crews constitute most of the administrative use in the patrol area but this year we had a few different research crews doing studies. One of the studies had an installation at Hamilton Lake. Other researchers traveled through the area frequently.

d. Commercial The Horse Corral Pack Station makes numerous day trips into Bearpaw to resupply the High Sierra Camp (twice weekly) and also the Outward Bound groups (few times a summer). Additionally many smaller groups arrange for spot trips into Bearpaw to get a head start on their trip. They also had many longer trips this year, resulting in grazing at Bearpaw Meadow, Lower Bearpaw Mdw., Redwood Mdw., and Pinto Lake. I saw a few educational groups this season, whose permits I checked. Outward Bound is a regular user of the area. We get very few other commercial users of the area.

e. Private I encountered two private stock parties this season. One was a couple who brought their riding horses to Bearpaw and stayed at the High Sierra Camp. I have never seen that before. They were very well informed and highlined their stock in Bearpaw Meadow. They stayed two nights. Jonah Gilbert, a park employee, took his personal stock on a trip and stayed 6 nights at the Pinto Lake camping area when some of his animals were sick. He was able to get some antibiotics and other meds and nurse them enough to get them out over Timber Gap.

D. Natural Resources

a. Bear Activity There were numerous bear sightings all over the backcountry this summer. I did not receive any reports of incidents, however. Many visitors reported bear sightings but it seems that the bear boxes, canisters, and education are working. There were a couple of bears that frequented the Bearpaw area but they were strongly leashed every time they appeared and soon learned to skirt the perimeter of the camp area.

b. Wildlife I observed many different species of wildlife in the area including Golden Eagles, pikas, grouse, quail, snakes (rubber boa, Mtn. king, garter), goldfinches, tanagers, and heard pileated woodpeckers and spotted owls at Redwood Meadow. In June and July, a mountain lion was heard around the Bearpaw area and was seen by a few employees. They witnessed a mountain lion walking right through the camp area between the ranger station and the storage shed. Soon after that, it wasn't heard or seen in the area the rest of the summer.

c. Vegetation Probably due to the extended rains in June, the vegetation was very happy this season. The flowers lasted well into September. I noticed that the acorn, seed, and berry crops were not very good this year, maybe due to a very hot and dry summer and not very much precipitation after June. I am noticing healthier populations of plants that didn't used to be prevalent in the patrol area. When I arrived in 1996, there were hardly any whitestem raspberry bushes and now they're all over the place. Also, I noticed that a patch of Equisetum "horsetail" between Bearpaw and Hamilton Lakes has grown quite a bit larger. Both of these species are abundant at lower elevations but were rarely seen on the High Sierra Trail until recently. ?

The Outward Bound groups again asked for service projects and I enlisted them to help with some cheat grass eradication. The High Sierra Trail has significant amounts of cheat grass all along its length. They did a very good job, as usual.

E. Cultural Resources

a. **Prehistoric Sites** There was no change in any of the existing sites and no new sites discovered this season. I checked on the large site at Redwood Meadow and it was undisturbed.

b. **Historic Sites** The historic buildings at Redwood Meadow wintered well and were in good shape this summer. The work that the crew did last summer looks really good, the roof that looked quite red has now faded and looks like the old roof.

F. Backcountry Facilities

a. Ranger Station

i. **Conditions; solar, structural, maintenance completed or needed** The Bearpaw Ranger station is in very good condition and withstands the seasons well. This season, the mouse problem was worse than usual. The station used to have all the holes sealed up but I think it has shifted over the years. I caught at least 20 mice over the summer and was constantly battling the nests. The resident carpenter ants were very busy as well, depositing more than the usual amount of sawdust. The solar system is still working fine, although I expect the batteries to fail soon. They've already outlived their projected life span. I painted some of the beams in front of the station and am ordering more paint for next season in order to finish the job. Overall, the building is in very good shape and doesn't need any major work.

b. Signs

ii. **Conditions, requests** The existing signs in the patrol area are fine at this time. I'm still waiting for the no fire signs for Pinto Lake. I found a metal post for that sign so I only need the sign itself. I would like to add a sign in the Hamilton Lake area to clarify the fire regulations. Since there are effectively no fires allowed between Hamilton and the Big Arroyo Crossing, and there is a "No fires above this point" sign in the Big Arroyo, I would like to have a similar sign at Hamilton Lakes at the lower end of the lake. I think that would reduce the number of illegal and disfiguring fires in both the Hamilton drainage and in 9 Lakes Basin. Right now the fire regulations are complex and most visitors don't read them carefully enough.

G. Trails

a. **Trail Activities (work accomplished)** The trails in the Bearpaw patrol area are extremely well maintained. Occasionally I would remove a small tree here and there that had fallen across a trail. On one occasion I removed some rocks from the Buck Creek switches after a rainstorm with the help of 6-1-11. The Kaweah Crew, as always, did an excellent job and was always around to help when needed. Josh Gabik was trail crew leader this year and did an excellent job. He has been on the crew for many years and knows the area intimately. There were many urgent jobs this season that he accomplished quickly and efficiently. Also, he and his crew were available any time I needed help with anything. I hope that Josh returns as crew leader for a long time as I really enjoy working with him and his crew and I know who to call when I need assistance. This year the Construction Crew was stationed at Hamilton Lake for most of the summer while they worked on the High Sierra Trail up to Kaweah Gap. Lorenzo Moreno was crew leader and Tony Fiorino was the maintenance worker. Having both been past Kaweah Crew leaders, they were an excellent team to supervise this crew. They accomplished a lot of work and were very helpful to visitors in the area. When a stock party unexpectedly went through a problem spot, Lorenzo hiked down on his lieu day to escort them through so they wouldn't have any problems. The Hockett crew also works in the area at Redwood Meadow and the Middle Fork early in the season. As

usual they did an excellent job maintaining the trail network in that area. It was great to have these crews around because they are so helpful and do such a good job. They are also quite helpful to the visitors and frequently call me to relay questions or messages. I look forward to working with them in the future.



Buck Ck. switch before

Buck Ck. switch after

b. Problem Areas There aren't that many problematic areas in the patrol district, but as always, the Elizabeth Pass trail remains difficult to follow and is extremely steep.

H. Camp Areas

a. Conditions All of the camping areas stayed in fairly good condition this season with frequent patrols and cleanings. The Bearpaw campground and Hamilton Lakes received significant use this season, especially by large groups. Tamarack Lake received quite a bit of use but still looked good at the end of the season. Precipice Lake had a lot of campers who need some review on waste disposal, but overall summered well. Redwood Mdw. had lots of visits but its season was cut short due to the water running out in early September. I assisted Alison Steiner, the Little Five Lakes Ranger, with a campsite rehabilitation project in the Big Arroyo. We removed a fire ring, loosened the soil, dispersed local seeds, moved boulders into the site, and transplanted a few plants to discourage campers. I look forward to seeing how the site looks next year.

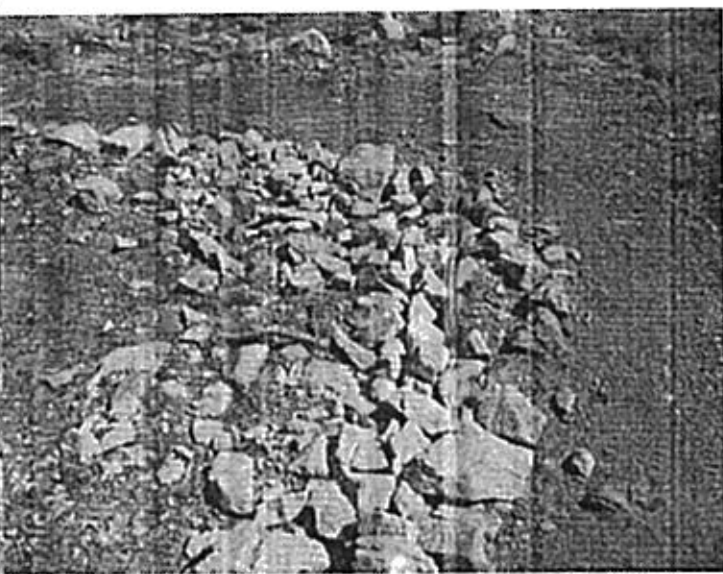


Rehabilitated campsite at Big Arroyo

b. Sanitation This year the big sanitation subject is the pit toilet at Hamilton Lakes. It is a huge problem. The trail crew has been maintaining it for years but they have a hard time digging very deep holes due to the large boulders and shallow bedrock in the area. Also, the past pit toilet sites aren't decomposing very fast (or, it seems, at all in some cases). The snowmelt sits in the holes, doesn't percolate, (probably due to the bedrock), and it takes a while for them to dry out. The lake gets a lot of use and is one of the most popular spots on the High Sierra Trail. The current visitation numbers have filled up the toilet holes in one season. This year, it filled up before the end of the season. The trail crew has been discussing this issue with me for a few years now. There are no new places to put holes and the area now has many discernible old sites. Having mulled over the various options, the consensus seems to be to install a vault toilet. The current situation should not continue, the area is too busy and impacted to go back to cat-holing, it's too high and cold for a composting toilet, and it's too far from a trailhead for wag bags. (Most visitors are continuing on to Whitney, we can't ask them to carry a wag bag for a week!) After having a discussion with Dan Blackwell and Paul Schwarz at Bearpaw, they seemed in favor of a vault toilet solution as the most beneficial with the least impact. I hope that this can be implemented soon because it has been getting worse for years and it was pretty bad this season. We "knocked down the cone" early in the summer but it still almost overflowed by mid-September. Now it needs to be moved again! The suggestion was made that a Romtec 'trailside' composting toilet would be a good solution.



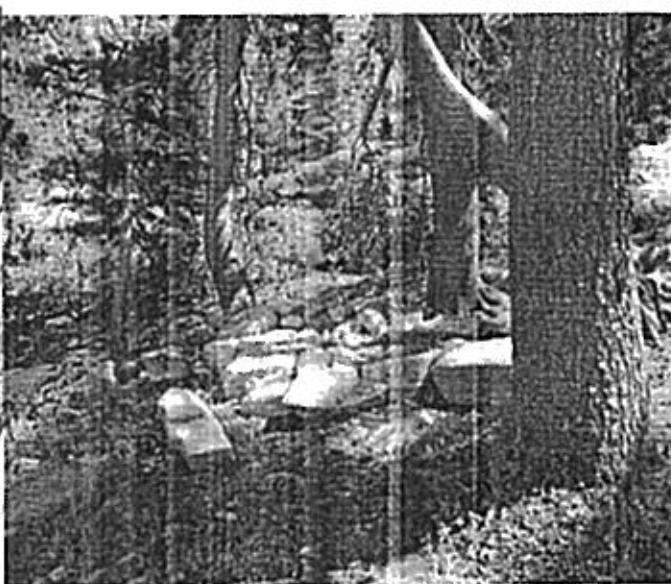
current pit site 2009



old pit toilet site



old pit toilet site



old pit toilet site

c. **Fire Rings** This was an average year for illegal fire ring construction. There were about 15 fire pits removed and all existing pits were regularly reduced and cleaned.

d. **Firewood Availability** At the Bearpaw campground, there is still plenty of firewood available from the fuel reduction project. In the other areas where fires are allowed in the patrol area, the wood availability is good. The Pinto Lake area still has limited wood resources and I think the fire ban there should continue. The trail crew split a large stack of firewood for the Ranger Station so there is plenty for a couple of seasons.

e. **Food Storage** Food storage methods were discussed endlessly this season as the specter of possible removal of bear boxes loomed. **The removal of bear boxes is one of the worst ideas I've heard in my many years working at these parks.** When I started here, food storage was a huge problem and bears learned many bad habits and kept people awake all night in the backcountry regularly,

got large amounts of food, and frequently had to be destroyed. I think our bear management program has done an excellent job of minimizing this problem and I have watched the transformation since bear boxes were first installed. Now that we have canisters available and many people use them, the reliance on bear boxes has lessened but they are still crucial elements in the varied arsenal of food storage tools. Most people cannot fit all of the food for a week long trip in a canister. What they do is use the food storage lockers for the first night or two of their trip in order to get a little further into the backcountry. Then, they are able to fit the remaining food into their canisters for the rest of their trip. This is an extremely common way people use the lockers. It is ridiculously burdensome, if not hazardous, for people to attempt to carry 2 canisters per person. I have witnessed this and these people are overloaded and it is definitely a safety hazard. Most of these travelers could have used the lockers for the first day or two and managed their trips well. The reason they didn't, in most cases, was because they didn't realize there were lockers in the area they were visiting. Also, many novice backpackers use the lockers for their 1 or 2 night trip as their only food storage. These people often are not experienced in packing and are extremely grateful for the lockers because they couldn't have carried a canister. Even if all hikers are required to carry a canister starting next year, we still need to have these food lockers in place so that overflow food will fit and so that most people will not have to carry two canisters. I would even suggest that the wording of the requirement allow the use of food lockers instead of canisters if available so that people with a single destination with lockers wouldn't be required to carry a canister as long as they used a locker. Basically this would just disallow counterbalancing as a legal food storage technique.

I. Permit System

a. Trailheads The many trailheads that supply my patrol area didn't seem to differ much from last year in amount of use. Crescent Mdw. and Wolverton are the winners, far outnumbering the other trailheads. The third most popular was Timber Gap, out of Mineral King, for those hikers looping around Little Five Lakes and Kaweah Gap. I saw hikers from all over, though. There were a few from east side trailheads and some JMT people either ending their trip or resupplying.

b. Issuing Office We were very lucky to have 3 trailhead rangers this summer. The only drawback was that they were all new to the job but they learned quickly. All three are very strong hikers and covered many miles while trying to familiarize themselves with the area. If some or all of them return, we should have a very good operation next year. Mineral King had more permit issuers this year and I was hopeful that they would occasionally come into Cliff Creek. Unfortunately again this year, one of the permit issuers never hiked the trails, one left early, and the others never seemed to hike north over Timber Gap. The Cliff Creek drainage used to get frequent patrols by the MK staff but hasn't had much attention from them in the last few years. They did seem to be doing a better job overall this year writing permits, maybe due to their attendance at the wilderness training. I had very few issues with hikers from that trailhead. I hope that next year, they will occasionally be able to patrol Timber Gap, Cliff Creek, Spring Lake, etc., as they write almost all of the permits for that area.

J. Communications We continue to struggle with the results of the digital conversion requirement. The (b) (7)(F) repeater was much better this year than the previous few. I can still hear (b) (7)(F) from Bearpaw and many other areas but cannot hit it anymore. Backcountry direct has been a pleasant surprise. It works really well all over the patrol area. I can communicate with the trail crews and other employees across almost the whole drainage. It works along the High Sierra Trail all the way to Kaweah Gap and even a little ways into Nine Lakes Basin. I'm also able to reach Pinto Lake much better than on any of the repeaters. For some reason, it doesn't work very well in the Lone Pine drainage but almost everywhere else in the patrol area it outdoes the repeater. Many of the problems now seem to stem from the frontcountry base stations. Also, **THE ALERT TONES ARE HORRIBLE!!** Is there any way

to change them so they don't squeal and sound like nails on a blackboard? Overall, though, I had many fewer problems this year and it seems like the radio system is improving.

K. Needs for next year

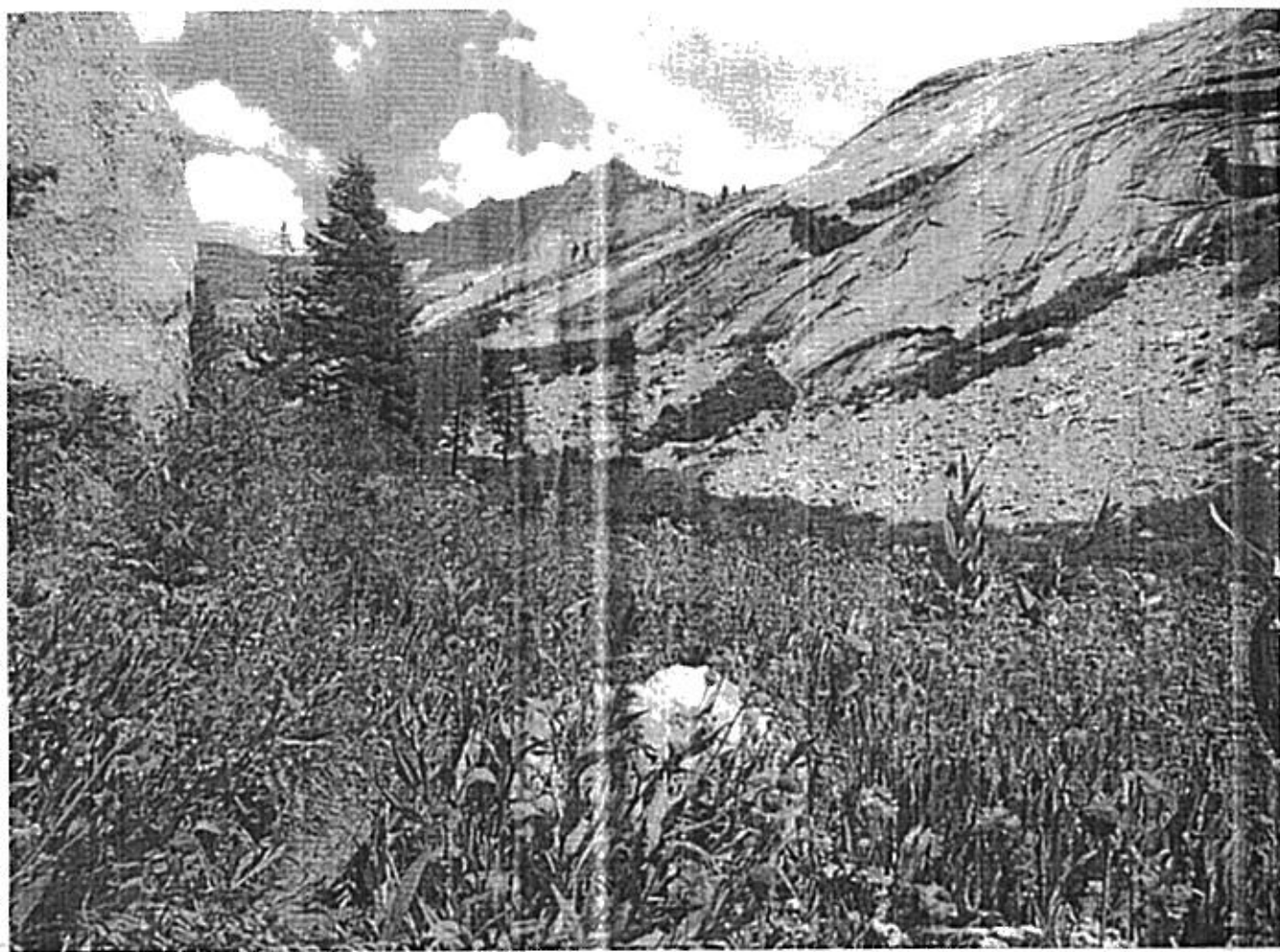
Heavy duty wire cutters
Can opener
"Forest Green" paint, 1 gallon
Toilet seat for pit toilet riser (other seats aren't working)
New propane regulator with flex hose with 1/2" fittings
Blackboard paint (for old peeling blackboard)
New climbing rope for SAR pack
Small summit registers (threaded PVC with caps)
3 bottles of down soap for sleeping bag
toilet paper
paper towels
large heavy duty trash bags
small trash bags
sign "No Fires Beyond This Point"
sign "Hamilton Lakes, No Fires"
sign, "Pinto Lake Campground, No Fires"
1 gallon Simple Green
flashlight bulbs, 2.5 V 5
AAA batteries
Scouring powder, like Comet or Ajax

L. Recommendations

1. LEAVE ALL FOOD STORAGE LOCKERS IN THE WILDERNESS
2. REPLACE HAMILTON PIT TOILET WITH VAULT/COMPOSTER TOILET
3. Hire 3 trailhead rangers for Mineral King and continue to hire 3 for all other trailhead areas.
4. Wilderness permits should be a per person charge. The per permit charge favors large groups and is unfair to smaller groups. As I showed last season, we would have made more money charging \$5 per person than \$15 per permit and it would have been much more equitable.
5. The park shuttle bus system is a great addition to the park but it doesn't serve backpackers very well. The permit desk is open at 7 am but the first shuttle bus doesn't arrive until 9 am so people get a very late start on the trail if they use the buses. Also, the buses don't stop at the Wolverton trailhead at all. It would be very easy to do so, maybe just on the hour instead of every few minutes. At the Crescent Meadow trailhead, the last bus leaves the parking lot at 5:30 pm. In the middle of summer, it is light until almost 9 pm and many hikers don't make it out by 5:30 so it doesn't serve them at all. How about one early bus that picks up backpackers at the VC in Lodgepole and stops at both Wolverton and Crescent Meadow; then hourly or so stops at Wolverton trailhead; and one bus that has a late run out to Crescent Mdw. just before dark?

M Pertinent Inventory

There are 3 full propane tanks at the Bearpaw Ranger Station. There is some firewood on the uphill side of the cabin in case anyone uses the station during the off season. The solar panels are wedged into the beams over the front porch so that the batteries keep charging all winter. The DC base station/radio charger has been sent to the radio shop to be repaired and needs to be taken back out there in 2010. All the other items from previous inventories including full EMS pack, SAR gear, 4 bottles O2, 6 fire extinguishers, 4 new wooden chairs, sleeping bags and pads, pocket rocket and fuel, window cleaner, dish soap, ½ gal floor polish, other misc. cleaning supplies.



Sierra Crest – Bench Lake Ranger Station
End of Season Report 2009
Christopher J Miles

This was my first season as a backcountry ranger and it was a great pleasure to have spent it at the Bench Lake Ranger Station on the Sierra Crest. I stayed relatively healthy, explored new territory, rehabbed many campsites and fire rings, discovered archeological sites and generally had a great time. I completed projects in the area, met a lot of nice people, gave out all kinds of information and assisted with med-evacs and one SAR.

I arrived June 17th at the station in very wet weather and was able to locate and set up the station with the help of Charlie Stearns and a Kings Canyon trail crew that was in the area. My season was June 17th- September 27th, 2009.

VISITOR SERVICES

Month	Visitor Contacts	Miles	Comments
June	138	79	1 med-evac
July	273	179	1 med-evac
August	447	210	3 med-evacs
September	237	143	
Totals	1095	611	

Visitor Contacts for August reflect 70 contacts while 4-1-15 watched the station for the first week of August.

95% of these Visitor Contacts were backpackers walking either the JMT or the PCT. There were six stock groups in my area this year. I contacted 23 day hikers on my first day hiking out of Paradise Valley.

Law Enforcement

I gave numerous warnings for people camped on vegetation this year. The majority of these warnings were in the Station area at the small lake just south of the station and in the Lake Marjorie area. Everyone moved without incident after I talked with them about their choice of campsites.

Two citations were issued out of the Bench Patrol area this year. One was for having dogs in the park and the other was for collection of obsidian from an archeological site.

SAR

There were two SAR's in the Bench Patrol area this year. The first one occurred in the Triple Falls area of Cartridge Creek. The individual was found uninjured and flown to Cedar Grove for evaluation.

The second SAR occurred on Split Mountain after an individual failed to return to his camp after climbing the mountain. The individual walked out under his own power after descending the wrong drainage.

Medical

There were five med-evacs from the Bench Area this year.

6/20/2009	Abdominal Pain	Bench Ranger Station
7/30/2009	Knee	Bench Ranger Station
8/04/2009	Abdominal Pain	JMT North of Station
8/27/2009	Ankle injury	Bench Ranger Station
8/27/2009	HAPE	Upper Basin

There were no fatalities in the Bench Area this year.

Weather

The weather this year was pretty mild through out the year. The beginning of June was very wet. We had two days of rainy weather in July and snow was predicted the first week of August. Sadly, it never transpired but the temperatures did plummet for a few days into the 20's at night. September was fantastic. Unseasonably warm temperatures and very clear days prevailed for the month.

Fires

There were no human caused fires in the Bench Area this year. The two most notable fire events in the area were a lightening caused fire high on the east side of the Crest about two or three miles south of Taboose Pass and the controlled burn at Grant Grove which caused a massive amount of smoke to travel into the White Fork canyon, the South Fork canyon and many other areas of Kings Canyon.

USE PATTERNS

Generally in the Bench area, 95% of the people I contacted were walking the PCT or the JMT. Of the other 5%, most folks were either coming in over Taboose Pass or doing various loops out of Cedar Grove, Bishop Pass or Kearsarge Pass. I met 5-6 parties attempting Ropers High Route. One party descended the Muro Blanco in mid August.

Early season, June 17th- July 20th, is the time for PCT hikers heading north to Canada. About mid July the traffic patterns switch and there are many more south bound

JMT hikers from this time till the end of the season. Mid July was also the time that I started seeing parties coming to the area specifically to climb peaks.

I saw four Boy Scout troops this year and they were all doing a great job keeping their camp clean and choosing appropriate campsites.

I saw 6 stock parties this year in the Bench Area. 5 out of the 6 stayed and grazed at the South Fork Crossing area. One party was a spot trip by Rock Creek Pack Station to Bench Lake and this stock group grazed both the Bench area for one night and Taboose Pass area for one night. The Park Service packers who demobed the Bench Station also stayed at the South Fork, however they camped about a mile below the crossing.

In my opinion the South Fork Crossing area should be monitored closely for over-grazing, as it is a small meadow with not much forage. The amount of use it saw this year is probably all that it can stand and one packer even refused to graze the area because he thought it didn't look well. He took his stock down river about a half a mile to graze them.

There were three guided groups in the area this year all doing the JMT. 2 were stock supported and one was not.

A Kings Canyon trail crew was in the area in the middle of June for about two weeks using a camp just to the south of the Station. Danny Boiano and the aquatic crew were also using the area while they restored a lake in Pinchot Basin and one in Upper Basin. These camps were used very lightly as the crew was also working in LeConte canyon and this was their priority area.

NATURAL RESOURCES

Bear Activity

There was very little bear activity in the Bench Area this year. Early in the season there was a mother bear and three cubs on the east side of Taboose Pass. They finally made it over to the west side near the third week of August. Mom was teaching the cubs how to swim in the lakes and generally how to be good bears.

Wildlife

There is certainly a lot going on up in the high country. There are huge numbers of Hermit Thrushes, Juncos', Mountain Chickadees' and Grey Crowned Rosy Finches'. There were many Mountain Bluebirds on the south side of Pinchot Pass as well. In addition to these fine-feathered friends numerous birds of prey were sighted including Northern Harriers and one or two Red Tailed Hawks. One instance well worth mentioning is the morning that a pair of Golden Eagles conducted aerial raids in the forest adjacent to the station. I actually had many sightings of Golden Eagles near Taboose Pass, Pinchot Pass and Crater Mountain as well. There were also small falcons about that I was too slow to identify before they plunged into the brush. I did also have an owl of some type buzz the station early in August.

I enjoyed many sightings of Pikas in the high country (including one who thought that Debs' shoe was a hurdle) as well as marmots and lots of Douglas Squirrels. I did not

have any problems with rodents invading my camp except for a pair of mice in the early season that were quickly dispatched.

There were two sightings of Big Horn Sheep in the Bench area this year by people other than those who used telemetry to locate them. One pair was spotted up near Striped Mountain Lakes and three others were spotted on the north side of the west ridge of Pinchot Pass.

I saw three Jackrabbits in Upper Basin as well as ten Ptarmigan. The Bench area is a fantastic place to view wildlife and I even had an unconfirmed sighting of a badger. (I like to think of it as a Wolverine if only to keep the dream alive!!) Coyotes were also a welcome addition to the myriad wildlife in the area.

Vegetation

Sky Pilots and Jeffery's' Shooting Stars were the most abundant flowers I observed this year. Sky Pilots thrived on the north side of Pinchot Pass to the extent that if you were not careful the smell would knock you over. The meadows seemed to be in good shape this year with water hanging in the meadows a bit later than usual (probably due to the cool weather in June).

The alpine forest of Lodgepole and Western White Pine was spectacular. There was abundant cone production this fall as the Douglas squirrels and Clarks Nutcrackers delightfully discovered.

CULTURAL RESOURCES

I visited many prehistoric sites this summer and also a few historic sites. I spent a week with (b) (7) doing Archeological site inventory of specific sites in my patrol area and we ended up finding a few new ones as well. There are a few hunting blinds in the Bench area as well as a few gravesites. While participating in this inventory we came upon an individual collecting obsidian. It is my opinion that these sites need to be visited more often. The ranger in the area should be given a list of all the archeological sites so that it is possible to assess their condition on a more regular basis. I encountered only one individual collecting and who knows how many more visitors have collected in the past and how many more could in the future. It would be a shame if these sites were to be picked over and destroyed by a few individuals.

I was unable to locate a Shortys' cabin that is in Lakes Basin this year. I hope to find it in future forays into the area. It is possible that the entire structure has sunk into the ground.

BACKCOUNTRY FACILITIES

Ranger Station

The Bench Lake Ranger Station was much improved this year by the purchase of a new Montana Canvas Wall Tent. Thanks Deb! The platform seems to be in good repair although it could use a coat of sealer to prevent the boards from rotting out. I do not know if they have been sealed before but it would be a good thing to do either at the

beginning or the end of next season. The solar system works very well and charges all batteries and the satellite phone very well. The batteries are holding up well.

Currently there is a pit toilet with a seat. While it is able to withstand use from one ranger during the summer months the Bench station is very high and cold. I dug a new pit this season and believe that by filling it in at the end of the season it will help with the breakdown of material. Ideally, I think that if the incinerating toilet at LeConte works well they should be considered for the high elevation stations.

The Bench Station is a very workable set up. With a few Fire Logs the wood stove can keep the station warm and comfortable during cold weather and with the various tarps that are at the station I was able to have shaded area for the kitchen. It is a compact station and the storage facilities are adequate for food during the season and for the camp at the end of the season. The whole camp fits in three Knaack boxes, one regular bear box and two 50-gallon drums. Even the wheelbarrow fits!!! (I had to jump up and down on it but it fits!)

Signs

Signs in the area are in good shape. The only sign in poor repair is the old wooden sign atop Taboose Pass. There is lots of carved graffiti on it and the white painted letters have faded. It really is too bad because I think that the sign is a neat sight when you get to the top of the pass. It's classy, despite the graffiti. A pint or two of white paint would easily refresh the lettering on the sign and would be worth consideration.

While mileage on all signs in the area continues to be a topic of some humor to back packers I found that all signs were within a half mile of the actual mileage according to a GPS unit.

All fire closure signs are in good repair.

TRAILS

Trail Activities

I began more rehab efforts on the old Taboose Pass trail this year. I obscured some spurs of the old trail near the outlet to Striped Mountain lakes and also tried to restore the grade to hillsides going down to the South Fork of the Kings Rivers. I built a small wall at the junction of the old trail and the JMT so it doesn't look like a trail junction any more. I raked out the area and put many rocks and a large portion of a dead tree in the middle of the trail. My thought is that people who know of the old trail or have a copy of an old map are going to use the old trail despite rehab efforts. I continually kicked over cairns at the junction. It became a game I would play with people. How many days until a new set of cairns would be put up? My suggestion is to continue with rehab efforts and to take the old trail off of new maps. The old trail is still visible from high on the pass and efforts to obscure portions of trail seem to work until people walk on the trail. If we really want to discourage use, either a trail-closed sign is necessary or a week or two of rehab efforts with a trail crew to try and transplant vegetation back to the trail bed and restoration of grade is necessary.

Problem Areas

The area in the most definite need of work is the south side of Mather Pass. All of the stock groups that have come over that pass, including park packers, have said how bad the top switches are. Two outside walls have blown out and are in immediate need of repair. At these two points the trail is only a foot and a half wide on extremely loose soil. If we have a big winter snow pack this year it could make the pass impassable to stock. In addition to these switches there are many large rocks on the approach that need to be moved out of the trail bed. This is the case on both Mather and Pinchot Passes.

There are many other areas along this section of the JMT that are in need of attention as well. Having a trail crew in the area later in the season after the snow has melted off the passes would be of great benefit. There are sections where the trail bed is shin deep and visitors have started to walk to either side causing new paths to appear. Most of these areas are occurring in wetter areas going north towards Upper Basin.

The new Taboose Pass trail could also use a little work. There are places where the trail is hard to follow, especially if there is any snow on the ground. The trail needs to be more defined in a few areas. This, however, is lower priority than Mather Pass.

CAMP AREAS

Conditions

Campsites are generally in good shape with the most impacted areas being Lake Marjorie, South Fork Crossing, Bench Lake and Upper Basin. Most issues in the area are illegal fire rings and people camping on vegetation. I rehabbed many campsites this summer, which a lot of times meant removing old fire rings and scattering the ashes. There were a few that I closed using rock bombs and generally they stayed closed although in one instance I closed a site 3 times before people stopped camping there.

Both Bench Lake and Striped Mountain Lakes saw moderate use this year with Striped Mountain Lakes being used the least. I saw many parties camped at Bench either to fish in the lake or to climb Arrow Peak. Most visitors used one of two campsites at both the west and east end of the lake. I removed two large fire rings from the west side campsite.

Sanitation

I saw very little in the way of errant toilet paper this year. It seemed to get worse near the end of the season. I began to talk to visitors more about their toilet paper after a few times of finding errant pieces here and there. Most visitors were very receptive to what I had to say. There are no pit toilets in the Bench area.

Fire Rings

Total obliterated: 35

The Bench area is unique in that there are only a very limited number of areas where fires are permitted. I allowed fires west of the trail at the South Fork Crossing on the south side of the river. Most people I talked to didn't even like to have fires so this was not a problem. There was a massive fire ring at the south fork crossing about a quarter mile down stream that I reduced that was used by quite a number of groups including stock parties.

In the beginning of the season I destroyed many fire rings at Ansel Adams tarn near Twin Lakes. To my delight the rings that I destroyed never came back. Thank you visitors!!

When the weather got cold in August I did find a few new fire rings in Upper Basin that were removed.

Firewood Availability

Firewood availability is ok down at the South Fork Crossing and generally pretty scant in the higher elevations.

Food Storage

There are no food storage lockers in the Bench Patrol Area. While there were no problem bears in the area I did see a mother and three cubs that I was worried about. Canisters are not required in this area and I talked to quite a few people who did not have canisters. One party was shoving food into a crack in rocks nearby their campsite. They were advised that it was unacceptable to do so and after a long conversation agreed to hang their food.

PERMIT SYSTEM

Trailheads

The two closest trailheads to the Bench area are the Taboose Pass trailhead (10 miles) and Roads End out of Cedar Grove (25 miles). Most users were either passing through on the JMT/PCT. Taboose Pass saw an increase in use this year. At times I would get reports of twenty cars in the parking lot! People who have used Taboose in the past said that they noticed a definite increase in use over this pass this year compared to years past. Word is getting out that it is a quick way into the high country.

Issuing Offices

I saw many different types of permits this year. The most common permits were those issued for the PCT/JMT. The next most common were those issued out of the east side offices. Some visitors relayed conflicting information to me regarding fires in the parks. A few visitors told me that they were told that there were no fires above 6000'!!! While this is OK in my book the regulation is 10,000' and the correct information should be relayed.

I would suggest that trailhead rangers spend more time with visitors discussing campsite selection. I issued 19 case cards this year and 11 of those were for people camped on vegetation. This is an area that needs to be discussed more with visitors when they pick up their permit.

COMMUNICATIONS

Ah yes, the Bermuda Triangle. I mean the Bench Triangle. This has been a notoriously difficult area for communication and continues to be challenging. From the immediate station area there are specific points where (b) (7) works best for communicating with Dispatch. (b) (7) was working pretty well from the base station at the beginning of the season until work was done on the (b) (7) tower at the beginning of August. I noticed a serious decline in reliability with (b) (7) throughout the entire patrol area soon after this work was completed. Areas that once had fair reception suddenly became poor. I believe that the tower must have been leaning towards (b) (7) and once straightened no longer pointed in the (b) (7)(F).

The most difficult area to get reliable radio transmission is the JMT from the (b) (7)(F). This is a complete dead zone. No contact is possible on any repeater. It seems that the whole (b) (7)(F) is in a dead zone until about a mile (b) (7)(F) and then it possible to get out on (b) (7).

The next most difficult area for communications in the area is (b) (7)(F) and the surrounding area. While seemingly in line of sight with (b) (7), it is nearly impossible to get reliable communication from the (b) (7)(F) area.

Another very difficult area is the (b) (7)(F) area. Reception again on (b) (7) changed significantly in the area once work was done on the tower in the beginning of August. Once I left the station to go (b) (7)(F) communication dropped until I reached the (b) (7)(F) where reception was very good. Most repeaters functioned from this spot and I could even get Forgotten repeater from there.

The Bench Lake trail and the lake area itself has fair to poor reception on (b) (7). Again, after work was done on the (b) (7) tower this diminished. The best area for communications in the whole patrol area seemed to be in (b) (7)(F). As you get higher in the (b) (7) the reception (b) (7)(F). Again (b) (7) deteriorated after work was completed in August.

Generally, the (b) (7)(F) radio area. The satellite phone was a huge benefit in this regard. In one instance in particular it provided me with communication from the South Fork trail area while assisting a lady who was in great pain. I was able to relay important information and coordinate a helicopter for evacuation.

In my opinion, the only (b) (7)(F) in the immediate vicinity. There are a few peaks in the area where a (b) (7)(F).

RECOMMENDATIONS

The Bench Ranger Station is an extremely important station. It fills a large gap in coverage between the LeConte station and Rae Lakes, a distance of 36 miles. The patrol area is large, exposed, and busy not to mention remote. I contacted over one thousand visitors this year. I issued many warnings and recommended two important citations from the area. There were 5 medical incidents and 2 SARs' in the area this year. The traffic coming over Taboose Pass is increasing and visitors are going into remote spots such as Lake Basin more frequently. There is a large concentration of archeological sites in the patrol area, which need looking after as is evident by at least one collection incident this year. A ranger presence in the area is definitely warranted. This Ranger station should be staffed full time every summer.

There is a lot of PCT traffic that the park misses in the early season. I believe that at least a few stations if not all, be mobilized at the beginning of June to catch some of this traffic. Currently we do a pretty good job of seeing much PCT traffic, however, it would be worth thinking about getting out there earlier.

I am recommending that a trail crew be staged in the area for a longer tour near the middle of the summer when the snow pack has melted off of the high passes. There is much work needed on both Pinchot and Mather Passes and this work can't be completed in the early season.

I recommend replacing the pit toilet with an incinerating toilet to minimize our impact in this particular area.

I would like to see a set of stairs added to the front of the platform. This is a huge step down onto rocky terrain and stairs would make it safer for the ranger to get in and out of the tent as well as make the platform look more approachable to visitors. I would also like to see a small "counter top" area constructed in the station area so that a ranger does not have to do dishes while squatting over the sump. It is very hard on the back. The bed frame should also be rebuilt or a cot frame purchased.

I am recommending that trailheads discuss choosing a campsite more thoroughly with visitors as well as food storage options. Maybe requiring canisters in all areas of the park is a good idea?

I am also recommending that Meadow Monitoring personnel take a closer look at the South Fork Crossing Area meadow. It is a small meadow that sees a fair bit of use and it would be worth paying more attention to.

I am also recommending that instead of the Dura Logs I used this season we find a more friendly type of compressed wood logs for use in the wood stove. There are a lot of chemicals in the Dura Logs and something a bit more environmentally friendly would be nice.

NEEDS FOR NEXT YEAR

Small Stainless steel Kettle

Fire extinguisher

2 metal washbasins for dishes

3 boxes Dura Logs or other compressed wood fire logs

Fire Starter

Log Book

Materials for new bed frame, stairs, counter top and book shelves

Small cast iron skillet

Toolbox

Sibleys' Western bird ID book

New edition of RJ Secors' climbing guide

Washboard

Stand for solar panel

New Flower and Plant ID book (Falcon guides Western Wildflowers)

Shoe Goo

Indoor/outdoor digital thermometer

INVENTORY

4 hand sanitizer
3 dish soap
1 laundry detergent (half to three quarters full)
8 small sun block
6 boxes matches
Various lighters
1 gallon bleach
11 rolls toilet paper
1 gallon white gas
2 full propane tanks- 1 large and 1 small
2 shovels
1 small shovels
1 Restoration site sign
1 Ranger station sign
1 hack saw
1 rip saw
1 regular hand saw
2 Pulaski
1 come along
1 flat blade shovel
1 rock bar
1 broom
2 solar showers
1 sledgehammer
1 Coleman Cook stove (2 burner)
1 Coleman Oven
1 propane cook stove
2 water jugs (2 and 5 gallon)
2 Coleman Lanterns (1 white gas 1 propane)
Various kitchen supplies
1 working pressure cooker
1 Medium cast iron skillet
2 MSR Simmerlite stoves
3 Green Coleman Propane canisters
1 Slumber Jack Sleeping bag
1 large Eureka Tent
1 Sierra Designs Clip Flashlite tent
2 large Brown Tarps
1 wall tent and frame (new 2009)
1 box each large and small trash bags
1 washbasin
1 mountain maytag
3 steel 5 gallon buckets
1 wood stove

- 1 roll away table
- Solar panel
- 1 base station and antenna
- 2 solar batteries (new 2008)
- 1 inverter (new 2009)
- 2 O2 cylinders (Size Jumbo D)
- 1 cot mattress
- 1 foam bedroll
- Various office supplies
- 4 boxes AA batteries
- 1 roll flagging
- 2 backpack Medical kits
- 1 large medical kit
- 2 C- collars
- Non-rebreather masks
- Nasal Cannulas
- 1 O2 regulator
- 1 Katahdyn Base Camp water filter.

CAMPSITE REHAB

Bench Lake/ Lake Marjorie Area

Site #	UTM	Action
46-6-4	369248 x 4090035	Rehabbed fire pits to remove scarring on blackened rock
R-0995	370221 x 4090303	Took down rock stove
R-1007	371860 x 4091660	Obliterated fire ring
R-1002	372252 x 4090719	Obliterated fire ring
46-7-21	372436 x 4090523	Obliterated fire ring
46-7-18	372370 x 4090393	Obliterated fire ring
46-7-17	372420 x 4090342	Placed rocks in site, moved log. Vegetation coming back

South Fork Kings/ Taboose Pass

46-4-3	373120 x 4092143	Obliterated fire ring
46-2-33	371435 x 4092607	Obliterated fire ring
46-2-1	371414 x 4092574	Obliterated fire ring
46-2-44	371288 x 4092405	Reduced fire pit, took nails and wire out of trees
46-2-49	371192 x 409222	Obliterated fire ring and removed old trashes
46-2-50	371164 x 4092219	Obliterated fire ring
46-2-14	371027 x 4095325	Obliterated fire ring
46-2-15	371024 x 4095305	Obliterated fire ring
46-2-9	371088 x 4095205	Obliterated fire ring
R-0976	371053 x 4094917	Obliterated fire ring

Sierra Crest: Charlotte Lake
End of Season Report: 2009
Durkee/Meier

The voice of the inanimate object, therefore, should not be stilled. That does not mean that the judiciary takes over the managerial functions from the federal agency. It merely means that before these priceless bits of Americana (such as a valley, an alpine meadow, a river, or a lake) are forever lost or are so transformed as to be reduced to the eventual rubble of our urban environment, the voice of the existing beneficiaries of these environmental wonders should be heard.

Perhaps they will not win. Perhaps the bulldozers of "progress" will plow under all the aesthetic wonders of this beautiful land. That is not the present question. The sole question is, who has standing to be heard?

*That is why these environmental issues should be tendered by the inanimate object itself. Then there will be assurances that all of the forms of life which it represents will stand before the court - the pileated woodpecker as well as the coyote and bear, the lemmings as well as the trout in the streams. **Those inarticulate members of the ecological group cannot speak. But those people who have so frequented the place as to know its values and wonders will be able to speak for the entire ecological community.....** [emphasis added].*

William O. Douglas, dissenting in *Sierra Club v. Morton*, 405 U.S. 727 (1972)

	Visitor Contacts	Miles Patrolled
June	270 (from 6/19)	67
July	820	220
August	980	270
September	850	190
October	90 (to 10/5)	35
Total	3010	782

Law Enforcement Incidents

Citations: 6 (1 party > 15; 2 no bear canister; 1 no permit; 1 soap in water; 1 abandoned food – via Pilewski).

Warnings: 126 (42 camping on meadow; 38 washing in stream/lake; 27 camped too close to water; 17 food storage; 2 no permit (but not yet camped)).

SAR: Medivacs: 4 (1 advanced HAPE; 3 AMS)
Searches/Assist: 7 (5 separated party; 1 “help” response at night)

Weather: Other than unusually cold weather for a week in mid-August (low of 18), weather was within range of normal. No serious thunderstorms, not much ppt. Not much snow on arrival on June 19th. 0° F 10/5.

Fires: None

ATL: 7, 2 successful

Use Patterns

- Backpackers: 2800
 - A definite increase in backpacker use this year – a majority from through hikers (especially JMT and PCT in the very early season). A possible explanation is that a poor economy may have contributed to this increase. Backpacking affords an inexpensive

vacation for both the employed and unemployed. I also believe that the number of Scouts has increased as have the number of hikers in their late teens through late 20s.

- Day Hikers: 250
- Stock Users:
 - Commercial: 60 (mostly Berner's pack station on food cache drops)
 - Commercial overnight @ Charlotte: 14
 - # of visitors carried by Commercial Stock: approx 18
 - Administrative at Charlotte overnight: 55
 - Private at Charlotte Overnight: 0
 - At Vidette: 4

At the beginning of the season, there was a brief hassle when Sequoia Kings Pack Trains (Brian & Dee Berner) didn't get their commercial use permit in time to pack in a resupply for a client. After being told they couldn't come into the park, they left the food buckets at Kearsarge Pass. After that, though, Berner and his packers all did a fine job: their camps at Upper Vidette were clean and all other drops were made in a timely manner. He also made sure all his packers came by the station to check if there was any garbage to be carried out. His main packers (Larry & Derryl) were friendly to both me and hikers.

There are signs that Boy Scout groups are again becoming an increasing problem – they had improved dramatically in the mid-80s, but the last couple of years seem to be showing worse camping practices again.

In mid-August, a huge number of troops were travelling to Whitney. Many had their act together, but a higher number than in previous years were blatantly ignoring regulations. The Kern rangers and I gave at least 5 citations to troops – several for exceeding the 15 person limit. During this short period, I contacted 5 Whitney bound scout troops, all of whom were in some level of violation of regulations. More amazingly, the troop leaders would just lie (in front of scouts) about their group size or what they were told at the permit station. Possible solutions might include:

1. a letter to their Philmont training camp in New Mexico outlining our concerns and asking them to specifically train for and address these problems;
2. having the permit offices increase their vigilance looking for groups using 2 permits to evade the group size limit, and
3. have the permit office (Lone Pine & all NPS stations) call the area ranger to alert us to any Scout group over 10 people.

Natural Resources

- **Bears:** Two bears entered the cabin sometime in the Spring. Damage to the cabin showed they tried to get in by ripping the siding off but failed, for some reason, to get past the tar paper on the interior. One or both of them were then able to climb onto a Knaack box at the back of the station, climb onto the snow survey temperature gauge and then onto the roof, rip up a section of shingles and 1" X 12" roofing to gain access to the inside of the cabin. There were food caches stored on rafters which they pulled out and then at least one climbed into the cabin and ate much of the left over snow survey food. They did not seem, though, to be human habituated bears because many food items were left untouched inside the cabin (syrup, most cans). They seemed to eat only easily opened packaged goods (candy bars, some pastas, cocoa etc). They also attempted to enter the Snow Survey instrument station, ripping up a large section of shingles.

The bears were seen and photographed by a hiker in early June. Scat and beds around the area showed they were probably accessing the cabin for weeks. When packers John Berry & John Henry arrived with my gear and food on June 10th or so, they found the cabin a mess. They performed a heroic feat by: cleaning up, bagging and packing out 4 mule loads of bear created garbage; stashing almost all of our food in the Knaack & bear box; and securing the roof as best they could with tools and materials on hand. Maintenance employee Phil Gross arrived a few days later to do a better patch job on the roof. We later moved the Knaack box and took down the SS instrument box.

When Dario Malengo (Rae Lakes ranger) arrived on 6/18, he found that the cabin had again been entered through the roof by bears and some of our food – which John had been unable to fit in the outside boxes – had been eaten. We arrived on 6/19 and saw the bears still in the area. It appeared to me to be a female and very large (2nd year) cub. Unusual for that time of year, but I think they stayed together because the cub was able to fit through the hole in the roof and bring food up (evidenced by wrappers and garbage strewn all around the cabin). When sighted, the larger bear kept making grunting sounds as the smaller bear traveled ahead. In my experience, this was consistent with female/cub behavior.

Upon our arrival, I attempted hazing the bears with pepper spray and, two days later when a shotgun was delivered, with rubber rounds. Nothing worked and the bears kept coming back, though later at night. They were, though, easy to scare off both by me and campers in the area. Rangers Dalrymple and Ernesto arrived a few days later after authorization was made to kill the bears. After several nights of watching, we were able to see and identify the two bears. They shot at, but missed, both bears. We checked the area thoroughly and for several days after looking for any sign of blood, but found none. The bears were never seen again, though. Within that week, Dalrymple returned with the bear biologist who set 3 snares in the surrounding area. These were also unsuccessful.

Otherwise, there were no significant bear incidents the entire season. A female and first year cub were seen often around Junction Meadow and came up the Charlotte Creek drainage every week or so. They were also seen swimming in Charlotte Lake in September. They showed no interest in hiker's food, though. A large bear was seen twice by the trail crew at the Center Basin camp. It may well have been the larger of the bears involved in the cabin break in, but there was no way to positively identify it. It scared away fairly easily, though did walk very boldly into camp and headed straight for the cook tent. There were two reports of campers (one a scout troop) losing food on the USFS side at Flower Lake because of illegal food storage. There were no reports of food loss in the Park.

There has been a marked decrease in bear/human incidents in the last 5 years. This is continued evidence of the incredible success of bear canisters, food storage lockers and continued emphasis by Trailhead and Wilderness rangers on education and enforcement.

- **Wildlife:** I recorded about 110 wildlife observation. One significant observation was a previously unknown breeding population of Mountain Yellow-legged frogs above the high trail from (b) (3) (A), (b) (3) (B). This is miles from any other known breeding population and should be checked often by the area ranger and the Aquatic Biologist. In addition, I checked on my previously reported breeding populations at two ponds just (b) (3) (A), (b) (3) (B). Both continue to do well with no sign of Chytrid or other disturbance. Through foreman Brian Pope, I specifically

requested the CCC crew not swim or bathe in the ponds so as not to endanger this isolated population. They were happy to cooperate. Both froggie sites were later checked and recorded by the fish/frog rehab crew.

Wildlife species composition and distribution seemed consistent with past years I've been here and with my Sierra experience in general. Pikas don't seem to show any shifts in elevation and appear in the same areas I usually find them (going back to the mid-70s). A couple of biologists from UCB were at Bullfrog Lake, repeating part of the 1915 Grinnell transect. The biologist did mention that the original data from ca 1915 may not have been complete for pikas in the lower end of their habitat (8,000 – 9,500 ft.). As such, the thinking that climate change is forcing them to move up in range (about 1,000 feet vertical) may not be quite accurate because of missing data.

Although not in my area of responsibility this year, I again want to draw attention to the fact that Belding's Ground Squirrel is apparently extirpated from the main Evolution Valley as well as LeConte Canyon. McClure Ranger Dave Gordon did not see any in McClure, Evolution or Colby meadows in 2008 or 2009. I had seen at least 6 in McClure Meadow in 2006. This is a huge tragedy and loss to the character and biota of the area. As I've noted before, this may well be a result of climate change and unavoidable, but I strongly urge a closer look at the meadow ecology of these areas to determine if some other agent is responsible (e.g. lodgepole encroachment, stock or human impacts). To paraphrase Darwin: "If the plight of the Beldings is due, not to their own abilities, but to our institutions, great is our sin."

- **Vegetation:** Populations of the Alpine Jewel Flower (*Streptanthus gracilis*), noted as Uncommon for the area, still exist in their previously known areas (Bullfrog/Vidette switchbacks; Kearsarge high trail; starting up from Vidette Meadow on the JMT). A small group of raspberries was found at Vidette Meadow – never seen them that high before. The blueberry crop (*Vaccinium sp*) was almost non-existent. Probably too dry in the Fall. No exotics were found in the patrol area.
 - **Meadows & Grazing:** Residual Biomass was carried out around September 9th at Junction/East Lake and a week later at Upper Vidette. There was moderate trespass grazing found at the lower end of Junction Meadow and almost no evidence of grazing above the new fence. Since Orland, of Cedar Grove pack station, admitted to at least once putting back up the lower drift fence (it was done twice), it seems likely the meadow was grazed on purpose. Except for one NPS group, no other stock group was known to have grazed the Junction area.

When I visited East Lake on those dates, talks with backpackers and Cedar Grove rangers indicated that Cedar Grove Pack Station stayed at the lake for at least 3 nights. They were gone when I arrived so no direct action could be taken. The reference meadow was ungrazed. The core meadow showed less impact than I've observed in previous years, but was still beyond what I would consider both its ecological and aesthetic carrying capacity. Several roll pits were noted, grasses and sedges were unevenly grazed giving a choppy and unnatural character to the meadow. In addition, the entire area smelled overwhelmingly of horse urine and manure.

The core meadow at Upper Vidette showed no sign of grazing and has probably plateaued in recovery from extensive overuse about 8+ years ago. Vegetation is lush, stream banks and roll pits are growing over but there are still significant bare areas and

woody vegetation, which I believe to be the result of previous overuse by stock. Future recovery will likely slow since the bare areas will require much more time for recolonization by perennials. As such, closure should continue.

Prohibiting grazing below the 10,000' fence has allowed significant recovery in that area (Upper Vidette), however it has necessarily caused increased impact in the previously and mostly unused meadows above that fence up to Center Creek. See Meadows & Grazing: Recommendations for possible solutions.

Cultural Resources

- **Prehistoric Sites:** After consulting with Archeologist Tom Burge, I used the database of both known (b) (3) area archeological sites as well as the Sitelead database to begin a resurvey to determine if any of the sites were subject to disturbance by either humans (e.g. campsites or vandalism) or natural processes (erosion, wildlife burrows). I also wanted to demonstrate a Proof of Concept that rangers with GPS units loaded with the area's site databases could find and survey even very small areas of artifacts. I consider the effort very successful. Navigating with a GPS unit, I was able to locate about 20 sites – some as small as 5' X 5' with only a half dozen (b) (3) (A), (b) artifacts – and reevaluate the site for disturbance or other potential loss. Although Tom and I did not have time to design a form with the information he might need, I designed one using the existing fields of both databases then adding when the site we resurveyed; whether it showed signs of disturbance; what the potential of disturbance might be; and comments describing the site. I failed to include photographs or a field to ID photos taken, which would obviously be very useful.
 - See Prehistoric Sites: As noted in the previous Prehistoric Sites section, wilderness rangers can and should be involved in periodically checking the integrity of Native American and early Euro-American sites. At the direction of Tom Burge, rangers can navigate to sites loaded into their GPS devices and fill out a short form observing actual or potential disturbances. Recommendation.
- **Historic Sites:** At Tom Burge's request, I resurveyed the Historic Register Vidette Shorty's cabin. It showed no signs of vandalism or serious disturbance. The cabin was partially restored at the direction of Bill Tweed in the early 80s (?). It is starting to lean to the west slightly, but seems otherwise stable and intact. There are no active campsites in the immediate area. However, a sign asking visitors not to camp inside is no longer there. I GPS'd the site and took about a dozen photographs of the exterior and interior. I also geolocated the individual photos and supplied a description for the Header information. (See Wilderness Furniture: ESRI, makers of ArcMap software, use the term "furniture" to refer to assorted objects that occupy a mapped area, usually city streets, such as fire hydrants, signs, street lights etc. As I noted in the **Facilities Inventory**: In addition, and at the suggestion of Wilderness Coordinator Fauth, I started an inventory and survey of all buildings and man-made items in the (b) (3) Patrol area. I GPS'd each item, photographed most, geolocated each photograph and combined the data into an ArcMap Geodatabase. I have also begun to think of a structured way to organize the data to make it useful and easily accessible from the SEKI Network to all interested NPS employees (see section, we need to figure out what furniture we have and who's responsible for each, as well as ensure that these objects are periodically reviewed to determine and justify their continued existence in a Wilderness setting. This would be useful to the Wilderness Office for planning purposes and to other divisions, such as Backcountry Facilities, to have a quickly accessible

location, maintenance history & data for all objects they're responsible for maintaining. recommendation for thoughts on storing and linking photos and documents).

Backcountry Facilities

1. **Ranger Station:** This was, of course, a major concern this year. After the bear(s) came in through the roof, a plan had to be quickly prepared on how to repair it. Fortunately, both the California Snow Survey and the Superintendent favored a secure roof and a metal roof was put on. It's never a good idea to underestimate the abilities of bears, but the new roof – metal sheets bolted onto both $\frac{3}{4}$ " plywood and the roof joists, further reinforced by strips of metal stock – is about as bear-proof as we could have made it.

In addition, the two former professional contractors who were assigned the project did an outstanding job of repairing the exterior walls ripped out by bears; putting in a double walled (code) chimney; hard lining the propane (again, code); installing storage cabinets; putting the solar panels on a pole (major safety improvement over previous location of trying to install on roof every year); rewiring the existing solar and electrical to make it safer and less of a spaghetti mess; and cutting up and piling as much as 1,500 lbs of construction debris.

There was a slight glitch when suggestions were made that the construction debris be burned on site. I objected on several grounds, which I repeat for future Wilderness demolition projects:

- California air quality boards uniformly prohibit this practice;
- there is nowhere to burn such a pile without seriously scorching trees or destroying alpine meadow;
- I would not do it because of safety concerns which would require me to breathe toxics;
- we are, after all, the National Park Service and should do things in an environmentally conscientious manner.
- Finally, Management Directive 24, written in 1996, was found which specifies that "burning treated construction wood" is prohibited in the Parks.

Although it was a definite pain for everyone, all debris was packed out in about 4 trips of 14 head each by NPS packers, who deserve a major 'attaboy' for their efforts.

The building survey and photos, as requested by Backcountry Facilities Manager Karplus, was completed by NPS Maintenance worker Marty Maine (who, along with Eric Sieh, did the repairs on the cabin in July and August – 'attaboys' to both for excellent work and close cooperation and consultation with the residents).

In addition to the bear break-in, it appears someone used the cabin for at least a week – probably after the last snow survey. All the presto logs were gone as well as almost all of the small propane cylinders. Several branches had been sawed off in the immediate area of the station. Whoever was here had access to a key. Because of the bear mess, there was no way to tell if they used food or left a clean cabin.

2. **Signs:** I placed about 10 computer printed, laminated "Site Closed to Camping" signs in the area to begin rehabilitating area campsites. Most of the initial set are too close to water and are indented by the Campsite Inventory data. This was a good way to be able to start rehabbing sites in an organized way and do it by area. We also placed signs in each bear box warning that any food caches left would be confiscated. This was totally ineffective. Food continued to be left

and we hauled about 300 lbs of abandoned (never picked up) food back to the station. As such, it's critical that a sign be made for next year and placed at the NPS sign at Onion Valley trailhead saying:

**Food Caches May Not Be Left in any National Park Bear Box
They Will Be Confiscated**

The sign should have "U" bolts to easily attach it to the existing sign post without the need for a drill.

We should also consider including this on the Wilderness Permit.

3. **Facilities Inventory:** In addition, and at the suggestion of Wilderness Coordinator Fauth, I started an inventory and survey of all buildings and man-made items in the Charlotte Patrol area. I GPS'd each item, photographed most, geolocated each photograph and combined the data into an ArcMap Geodatabase. I have also begun to think of a structured way to organize the data to make it useful and easily accessible from the SEKI Network to all interested NPS employees (see **Wilderness Furniture:** ESRI, makers of ArcMap software, use the term "furniture" to refer to assorted objects that occupy a mapped area, usually city streets, such as fire hydrants, signs, street lights etc. As I noted in the **Facilities Inventory:** In addition, and at the suggestion of Wilderness Coordinator Fauth, I started an inventory and survey of all buildings and man-made items in the Charlotte Patrol area. I GPS'd each item, photographed most, geolocated each photograph and combined the data into an ArcMap Geodatabase. I have also begun to think of a structured way to organize the data to make it useful and easily accessible from the SEKI Network to all interested NPS employees (see section, we need to figure out what furniture we have and who's responsible for each, as well as ensure that these objects are periodically reviewed to determine and justify their continued existence in a Wilderness setting. This would be useful to the Wilderness Office for planning purposes and to other divisions, such as Backcountry Facilities, to have a quickly accessible location, maintenance history & data for all objects they're responsible for maintaining.

There are about 50 individual items (aka "Furniture" in ArcMap parlance) in the Charlotte Area. They include buildings (ranger station, outhouse, Snow Survey instrument shed, Shorty's cabin); signs (both directional and advisory); research transect points in meadows; snow survey transect markers; and assorted storage boxes (Knaack boxes and food storage lockers). The huge problem is there's no oversight of the collective impact nor is there any formalized review of whether something is still necessary after it's been put in. As a result, artificial structures keep getting added to Wilderness but are rarely formally removed (backcountry rangers have been known to make things disappear when it's apparent it's no longer needed...). Nor do Wilderness aesthetic values seem to be considered when putting objects in. An example are the two meadow transects put in this year above Charlotte Lake. They were established without guidance from the area ranger or, apparently, much consideration for Wilderness aesthetics. At the urging of the Sierra Crest ranger, at least one was immediately removed and the site will be reevaluated next year. I have a number of thoughts on this issue. (See **Wilderness Furniture:** ESRI, makers of ArcMap software, use the term "furniture" to refer to assorted objects that occupy a mapped area, usually city streets, such as fire hydrants, signs, street lights etc. As I noted in the **Facilities Inventory:** In addition, and at the suggestion of Wilderness Coordinator Fauth, I started an inventory and survey of all buildings and man-made items in the Charlotte Patrol area. I GPS'd each item,

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- **Trails**

A CCC crew of about 22 was camped all summer below Center Basin and worked on the Forester Pass trail above Wheelbarrow Camp (11,200'). It's a 2 year project and excellent work was done in pulling the trail out of meadows and beginning a much needed rehab of the switchbacks. See on Recommendation 5, **Trails:** The trail section from the JMT/Bullfrog junction is badly in need of several weeks of work to repair steps and accelerating erosion and collapse of retaining walls. Several of the steps might well give way under the weight of stock and are a definite hazard to stock users.

- **Camp Areas & Permits**

About 30 sites were rehabbed with signs placed in many closing the site, usually as "too close to water". This will be part of a continuing effort based on the map and data set generated by the Campsite Inventory. Ideally, we could get Scout or other groups to volunteer in this effort.

Higher visitation did generate an increase in warnings and citations for minimum impact camping practices. Washing clothes in water (though usually without soap) and camping on vegetation were the leading reasons for educational & enforcement contacts. The permit stations did a fairly good job of outlining practices to hikers. There were occasional glitches or misinformation from Lone Pine and Bishop but, overall, USFS did better than previous years. Cedar Grove permit issuers did an outstanding job of patrolling and keeping Junction Meadow and East Lake clean. Coverage there was significantly better than any previous year.

As noted, food storage compliance this year was excellent. The continuing and serious problem is people leaving both "extra" food in boxes – despite strongly worded notes prohibiting it – and leaving food caches to be picked up later. Again, I strongly recommend a sign at Onion Valley as well as removing the two lowest Kearsarge bear boxes and, perhaps, the middle Vidette one.

Carefully Considered Opinions and Recommendations
(based on Keen Observations, Careful Assimilation & Analysis of Existing Data
and a brilliant Synthesis & Exposition of Facts)

1. **Wilderness Furniture:** ESRI, makers of ArcMap software, use the term “furniture” to refer to assorted objects that occupy a mapped area, usually city streets, such as fire hydrants, signs, street lights etc. As I noted in the **Facilities Inventory:** In addition, and at the suggestion of Wilderness Coordinator Fauth, I started an inventory and survey of all buildings and man-made items in the Charlotte Patrol area. I GPS'd each item, photographed most, geolocated each photograph and combined the data into an ArcMap Geodatabase. I have also begun to think of a structured way to organize the data to make it useful and easily accessible from the SEKI Network to all interested NPS employees (see section, we need to figure out what furniture we have and who's responsible for each, as well as ensure that these objects are periodically reviewed to determine and justify their continued existence in a Wilderness setting. This would be useful to the Wilderness Office for planning purposes and to other divisions, such as Backcountry Facilities, to have a quickly accessible location, maintenance history & data for all objects they're responsible for maintaining.

There is as yet no effective search function on the SEKI network: too often we depend on being able to contact specific individuals responsible for various documents and photos to find out where on the network needed data is. Everyone who uses a computer knows how useful Google is, yet the parks' network is, essentially, little more than a bunch of semi-organized file drawers that have to be looked through individually to find what's needed. An ideal system would allow intuitive access and linking of objects to the various documents and photos associated with that object. This is even more critical for the hundreds – now perhaps thousands – of photos we take.

Although this is a park-wide problem requiring a solution beyond the scope of an End of Season report, I suggest a resolution that will, at least, allow the Wilderness Office to better organize it's information. Arc has a tool which allows a drag and drop of the photo to the point where it was taken. It then encodes the XY coordinates in the photo. Combined with embedded Description, Title and Author information, photos would become retrievable by a simple search and the exact location findable again.

This season, I began a possible beta format to be considered to achieve some of these goals:

- First, in consultation with interested parties (e.g. Wilderness Office, Backcountry Facilities, both b/c districts, GIS & data management) design a format for compiling and storing this information. The primary locator or index would be the object's individual point marked by an appropriate symbol geolocated on an ArcMap map of the park. The object itself would have relevant information that would show as a database record when clicked on. Possible information fields could include:
 - **Name** (e.g. Charlotte Ranger Station).
 - **Structure Type** (building, sign, transect point etc).
 - **Established** (1954).
 - **Location** (Charlotte Lake, Kings Canyon).
 - **Responsible Agency** (National Park Service).
 - **Contact Office** (Wilderness Office; Sierra Crest &/or Backcountry Facilities...).

- **Short Summary/Comments** (One room wood frame cabin built 1954 as snow survey shelter by California Department of Water Resources; Used as ranger station ca 1965 to present).
- **Photo Links** (Instant links to geolocated photos of object).
- **Review Period** (Period, in years, for automatic review of relevance/need of object).
- **Next Review** (can trigger automatic pop-up or message at review time).
- **Sunset Date** (proposed date object can be removed).

The object would also be linked to most all relevant photos and documents on the parks' Network relating to it. For instance, Charlotte RS would be hyperlinked (with a hover & mouse click) to a maintenance history document of the cabin which in turn can link to photos, ranger & district end of season reports; photos – both scenic and maintenance; costs of construction; station inventory & etc.

No documents on the network needs to be moved but a number likely have to be exhumed from file drawers and desks, scanned and put on the network. Also, all of these documents are still accessible individually. The method suggested just creates a central point that links all relevant documents and photos and provides a structure for organizing them.

- After the field form is designed, backcountry trail crews and rangers can be assigned to GPS each object; fill out the relevant fields on a form; and take photos.
- Finally, the entire data set is compiled, linked and made available on the Network. This can be also be accessible through ArcExplorer – the free and fairly easy to use program from ESRI (like Google Earth). This lowers the bar on technical expertise needed to reference data. Editing and data manipulation are still done with ArcMap.

Again, this approach provides a much needed way to inventory, visualize, access and evaluate all the stuff we've got accumulating in the Sequoia Kings Wilderness. I've put together a demo for the Charlotte area using the above format and can show it around.

2. **Prehistoric Sites:** As noted in the previous Prehistoric Sites section, wilderness rangers can and should be involved in periodically checking the integrity of Native American and early Euro-American sites. At the direction of Tom Burge, rangers can navigate to sites loaded into their GPS devices and fill out a short form observing actual or potential disturbances. Such a resurvey project being carried out by Wilderness rangers has several advantages:
 - The parks' archeology staff is not sufficient to effectively carry out needed and mandated resurveys of archeological resources. Wilderness rangers are already there, are very familiar with the terrain and have a trained eye to distinguish artifacts.
 - There have been several instances of illegal artifact collecting in the past few years – one this year in the (b) (3) (A), area. Having Wilderness rangers carry out site surveys both heightens our awareness of archeological resources as well as familiarizes us with where, specifically, to look for potential illegal activity. I strongly suspect there's much more collecting going on than we're aware of. It's critical that we familiarize ourselves with existing sites and keep an eye on them. To do so, we have to know where they are.

- Finally, this allows rangers to become more proficient with GPS devices and improves our ability to navigate to other locations such as SPOT activations; SARs and helispots where location is given as coordinates. To effectively carry out the latter emergency responses requires practice and a familiarity with the GPS device under less critical circumstances.

One objection raised was what if the GPS were lost and the data then available to whoever finds it. This might be mitigated by loading, say, 30 sites in the ranger's patrol area onto the device. The project would be carried out over two or three years with a new data set loaded each year. The main point, though, is that if backcountry rangers don't do this, it won't get done for the majority of sites in the park.

3. **Meadows & Grazing:** As noted in the *Meadows and Grazing* summary, the grazing closure below the 10,000 foot Upper Vidette drift fence has moved impact into the alpine meadows and stringers between the fence and Center Creek – areas that previously received little grazing. Although such grazing has probably been mostly below the biological carrying capacity of those meadows, it has significantly increased aesthetic and mechanical impacts to that area: roll pits have increased (Center Creek area, above the fence, a few scattered near the JMT); stock “social trails” as they follow each other to new feeding areas; increased hoof impacts in wet and riparian areas; and the smells of manure and urine in formerly pristine meadows. All of these impacts significantly lessen the scenic appeal of alpine meadows for park visitors as well as increase ecological impacts.

A possible compromise solution is to consider two fences to restrict stock to a smaller area. I would suggest taking the existing fence out and moving it down to maybe ¼ mile above the Core Meadow; and putting another one about ½ mile or so at a suitable spot above the current one. Until 3 years ago, there were 2 fences in this area. This would restrict stock to a wooded area with fairly good grazing and up through some suitable wooded/stringer meadow areas that don't receive much camping use. It would protect the scenic qualities of the more fragile and aesthetically representative alpine meadows above the second fence. Stock users would favor it because it allows a good camp in an area where fires are allowed and limits the area where the animals can roam away from camp. They would also have a food storage locker nearby for overflow food.

The Vidette restrictions are a good example that all efforts to reduce stock impact in one area only move that impact to other areas. It is my experience and opinion that these tradeoffs in impact are not the lesser of two evils. Over the years, we have accepted that certain areas – used most often by backpackers – receive disproportionate impacts beyond what we would probably agree is the area's carrying capacity: Kearsarge Lakes, Crabtree Meadows, Charlotte Lake etc. I think we need to look more closely at reducing the total impact area for stock by not moving their impact around so much but attempting to mitigate it for areas that, historically, have already seen a lot of impact both in campsites and grazing. We need to favor sub-alpine/forested grazing over alpine & open; established stock camps over moving use to long abandoned stock camps or creating new ones; drier meadows and stringers over endangering wetland habitat – especially where there's evidence of vulnerable birds breeding. We should also consider allowing storage of feed pellets for packers.

We have to consider consequences beyond mere biomass use when deciding to shuffle grazing patterns – such decisions have to be made by examining the total ecological footprint that stock necessarily brings to an area (e.g. campsite impacts; nitrates from urine and manure close to streams; pathogens from horse manure; roll pits, smell, and the overall aesthetic impacts not catalogued by existing monitoring practices). I continue to argue that aesthetics needs to be made an integral part of such decision making: the “conserve the scenery” part of the Organic Act that is an integral part of our mandate.

4. **Communication:** There were some problems with both trail crew and backcountry rangers this season on who – amongst dispatch, Wilderness Office and individual supervisors – was responsible for delivering and taking personal messages as well as relaying necessary information between rangers. It happened where both dispatch and the Wilderness Office did not take or relay messages, advising callers to call the direct supervisor instead. The problem with leaving a message with a supervisor is that they’re often gone for several days (all summer in the case of the Kern supervisor) and messages are not received in a timely manner. This needs to be addressed this winter and responsibility assigned that best meets the needs of all parties, but with an emphasis on the timely delivery of information for backcountry workers.
5. **Trails:** The trail section from the JMT/Bullfrog junction is badly in need of several weeks of work to repair steps and accelerating erosion and collapse of retaining walls. Several of the steps might well give way under the weight of stock and are a definite hazard to stock users.



2009 END OF SEASON REPORT HOCKETT RANGER STATION

A. GENERAL SUMMARY

VIP Don McDonald and I arrived at Atwell on June 15th and overnighted there. In the morning we packed up four mules and rode in on a cold cloudy day without any rain. Trail had been logged a few days before so the ride was uneventful. All the creeks were deep with Corner Creek and its large boulders in the center being the only difficult crossing. No wildlife seen. We contacted several groups of backpackers on the way in and when we arrived at the station.

Found the cabin to be in good condition, and it was clean. When we left at the end of last season Thor and his crew was still replacing the roof. Afterwards Beth Lasswell the packer hauled their stuff out, but she did not have enough room for the old roofing paper that was stuffed in about 14 gunny sacks and it was left in the tack shed along with 2 and a half bales of hay. Both the hay and sacks had mice running around in them. Fortunately the south end of meadow and pasture were a little wet so we tied up the stock and fed off the hay for a few days and finally put the stock out for a few nights in the north fenced pasture area.

Like last season my work schedule this year was 10 days on and four off. It makes for a less stressful absence from home. The big change this year is that Don is slowly transitioning his business to a longtime employee and this along with an understanding wife allowed him to spend a total of over 30 days on the Hockett with me. Like at home Don needs to be doing something, always has to have a project and his dance card was full here this summer. From repairing toilets, replacing rotted fence posts on the pasture fence, rehabbing fire pits, packing in new mattresses, to installing new hasps on the shutters, he was always kept busy.

Things of note this year were varied. On July 17th lightning struck about 3/4 mile east of the station causing a fire that eventually covered almost 500 acres. At the time of my closing the station it was creeping west less than half a mile from the station but was primarily burning south and east. More about that later. Balch Park Pack Station felt the sting of the recession this year. Tim Shew on his first trip to Hockett on September 9th thought his season was off over 40 per cent this year.

On August 29th a visitor was leading her packed horse south of the bluffs when it stepped off the edge and rolled down hill about 400 feet killing it. She reported it the next day to MK rangers. She returned two days later and confirmed that it was dead and that bears had found it. More about this visitor and her group later in my report.

I had the opportunity to provide 5 hours of stock training to the MK Rangers when their stock arrived up there at the beginning of the season. I also went to Little 5 from Mineral King on an extended patrol having never been over Timber Gap or Black Rock Pass.

By seasons end I patrolled on horseback (Military Trip, Little 5 etc.) for a total of 630 miles. My right hip gets a little irritated in the saddle after about 3 hours, so I would walk and lead on some patrols so my hiking miles in the wilderness totaled 80 miles.

B. Visitor Services

a. Contacts

- i. Backpacker 147
- ii. Day Hiker 53 Between Deer Creek and Atwell. 1 day hiker to Sand Meadow and one to Hockett.

iii. Stock Users 6 private trips 37 head 22 people

1 commercial trip 16 head 8 people

4 commercial spot trips 3 by Balch Park and 1 by Horse Corral pack stations totaling 23 people

There was evidence of at least 3 other overnight stock groups, 2 at SF Pasture and one at Hidden that occurred on my days off or while out of the park.

iv. Administrative

The trail crew utilized up to 14 head during their stay at Hockett and Slims. I did not observe the group, but the folks who service the weather station here and at Wet Meadow come in each season. This season they used 12 head for 5 people and held and fed at Hockett trail crew camp one night. They use Matt Hooper of Cedar Grove Pack station.

b. Law Enforcement

- i. There were no law enforcement contacts or events. On my way out once ran into a man and woman with a dog hiking from Atwell towards the East Fork. They were escorted back to the campground.

c. Citations

- i. No citations were issued but may I suggest a candidate. I don't have the woman's particulars but her name is (b) (6) of Exeter. She is the lady who owned the rider less horse that fell off the trail and was killed. Karl Pearson should have the phone and address, as (b) (6) contacted Karl to report the death of the horse. This occurred when I was on the military trip. On the Sunday of my return home August 30th, Karl called me and reported the death of the horse and that the owner was a neighbor of mine (b) (6). She wanted to speak with me and Karl asked if I would call her. I did and learned the following. She and her 3 friends obtained their permit from MK and rode or led their stock into Hockett on Aug 26th. Their horses were tired and probably overloaded, they made it as far as Corner Creek where they camped on the trail, and tied to the trees. The next day they arrived at Hockett and I asked her where they camped. She said by the station near the creek. I asked her if she saw the sign that directed them to a stock camp, and she said she saw bulletin board but does not recall seeing the stock camp directions. I asked how they restrained their stock and she said they tied to the trees, because they were afraid the horses would leave them. She admitted that her horse does paw the ground. She confirmed that they did not have a shovel or rake.

I returned to station on Sept. 5th and easily found where the group had camped above Corner Creek. One tree on the trails edge was dished out and roots exposed, two other trees received similar damage. They did camp on bare ground.

At Hockett I found their camp approximately 100 feet north of the backpacker camp and bear box. They had camped between the trail and the creek, which is prohibited by signs. They tied to at least 7 trees during their two-night stay. They built a fire in the middle of the grassy area near the creek and left a burnt beer can and other trash in the ring. Two trees that they tied to received major impact from the horse pawing the ground. These two trees were less than 10 feet from the Wittman Creek. We rehabbed the fire ring and area the best we could and took photos of both before and after.

d. Search, Rescue, Medical Incidents

- i. July 4th 2009 Hockett RS Laceration Treat and Release
- ii. July 5th 2009 Wet Meadow Overdue Hiker SAR #17
After spending two nights at Wet Meadow the hiker found his way up the Farewell Gap where trail crewmembers located him.

e. Fatalities

- i. Just the horse

f. Weather

- i. Unseasonably warm the entire summer. A few overcast days and in mid September the plateau was blanketed in a thick fog. One lightning storm that triggered the Horse Fire on July 17th. And that brings us to item g.

g. Fires

- i. The Horse Fire is burning less than half a mile from the east edge of the meadow. Monitors who have been on site since the fire started report that the fire is creeping a few yards a day to the west and towards the Hockett Trail near Horse Creek. It is actively burning southeast and some parts of the fire are at 10,000 foot and burning some foxtail pine. Expectations are that it will run out of fuel if winds push it due east towards the granite dome, but could continue to burn if it travels south east and stays in the forested area.

The station does not appear to be at risk at this moment. Pumps are placed in Wittman Creek and hoses laid out to protect the station, tack shed and privy and the fence posts that make up the pasture

fence. As the fire creeps west, trees can be heard falling making us aware of just how close the fire is. The plan is to allow the fire to burn and wait for precipitation to extinguish it. The monitors working a 7 day rotation are camped at the Trail Crew camp in the pasture, and will remain on site well into October.

C. USE PATTERNS

a. Backpackers

- i. About half the visitors who entered via Atwell or Cold Springs stayed at Hockett or the Lakes then exited the way they came in. The other half continued on usually going thru Wet Meadow and out Farewell. A handful of hikers came up South Fork and complained about the poison oak. I did not contact any hiker who had entered through Summit Lake or Touhy Gap, both south boundary entrances.

b. Stock Users

- i. Two stock groups entered via Cold Springs and camped at the Hockett Horse camp. Another group came in from South Fork and stayed at SF Pasture. At least two other stock groups used the Touhy Gap entrance, one staying at Hidden and the other at Upper SF Pasture. In spite of SF Meadow being closed, the impact to the other open camps and associated meadows was moderate. There was no use at SF Meadow with the exception of hikers or a spot trip. The one group camped at Hidden was not observed but must have had a large number of stock. When I left the meadow was nearly untouched, the only previous stock group having only hand grazed and fed. When I returned from the military trip the grass was visibly trampled and short. The camp itself looked like some effort was made to clean up after themselves. There were only 3 stock groups camped here during the season.
- ii. The trail crew camped at Slims Meadow for nearly 3 weeks. They raked the hitch rail area and it has remained that way all summer, so I don't believe any one else camped there. While at Hockett they almost always turned their stock out in the meadow. On one or two occasions when the packer was out and the crew only had 4 or 5 head and needed to be out early in the morning I let them turn out in the back pasture. There was no grazing at Quinn this summer.
- iii. Commercial stock use was limited to one full service trip to SF Pasture. The commercial packers from Balch Park and Horse Corral had numerous spot trips to the stock camps and one to

Hockett Lakes. Ash Mountain Fire has utilized Horse Corral to resupply the Fire Monitor camp every Monday.

D. Natural Resources

a. Bear Activity

- i. I observed 7 bears and two cubs on the Atwell Trail between Deer Creek and the Switchback. I saw no bears anywhere else while on Station. A bear did knock over bear boxes in the Monitor camp in late July. A bear was seen in the South Fork area and its tracks seen in the camps, so visitors were warned. Bear tracks were plentiful on the trail between Hockett and South Fork.

b. Wildlife

- i. Deer were plentiful in the meadow in the early summer. By mid July at least 10 obviously pregnant deer were in the meadow twice a day. In no time we had 15 fawns scampering through the meadow.

(b) (6) of 3 Rivers reported he observed a Bald Eagle lifting off the log in the middle of the creek in SF Meadow. He said this took place on August 11 in the afternoon. He and his family were camping at SF Pasture. He states he is an avid hunter and outdoors person and knows an eagle when he sees one, and is certain the bird he saw was an eagle.

In mid September a group of 9 hikers left Hockett and on the trail they thought near Deer Creek observed a 5foot rattlesnake. This year on one of my trips out I saw a small one in one of the shaded corners of the trail south of the bluffs.

c. Vegetation

- i. On September 6th Sylvia Haultain while visiting the Hockett pointed out to me a very small flowering plant about 200 feet from the leaning corner post. She had an idea of what type of plant it was but was astonished to have found it here. She will do some research and report back.

E. Cultural Resources

a. Prehistoric Sites

- i. (b) (3) (A), (b) still inspires awe and wonder to first time observers. The grinding holes at the (b) (3) (A), (b) (3) (B) and (b) (3) (B), (b) (3) (A) are intact. Someone always puts stones in the holes at Hockett as if they are in fact ancient pestles.

b. Historic Sites

- i. The old Ranger Cabin site in the Hockett Pasture continues to reveal its presence and inspire thoughts of what it was like when it

was a functional station and of the people who staffed it. Quinn Cabin is still solid and always a pleasure to view thru the trees as one approaches from the south. It does need to have its sill logs replaced soon, refer to the structure assessment photos and report.

F. Backcountry Facilities

a. Hockett Ranger Station

- i. All is well at the Hockett Station. VIP Don McDonald found a half gallon of stain and touched up the front porch and surrounding areas until the can was empty. Tried to get some more but the warehouse was all out of the paint. We brought in some brushes in anticipation of getting the paint/stain so they are hanging in the east bedroom closet ready for next year. The cabin roof is new and looks great, and matches the 6 year old roof of the tack shed.

A structure condition assessment was conducted at the cabin this season with the information going to Dave Karplus. It details the immediate needs of the station, which is the backsplash behind the sink and countertop. I noted a cracked window on the east bedroom window, with glass size. The interior walls have settled to the point that the two bedroom doors do not close.

We found that sometime during the winter someone had attempted to work on the pump, perhaps thinking that if they bolted it down and primed it they would have water. We had a difficult time trying to seal the connection between pump and countertop flange. What is critical is the leather gasket flapper. It had been removed and became dried out, making a water tight seal difficult. It took several days of operation to finally fine tune the gasket setting to stop the leak.

I normally take the foot valve and pipe out of the well as it is PVC to prevent it freezing and cracking. I put it in the tack shed. I disconnect (loosen) the flange bolts on the pump and the remaining water flows back out into the well, draining the hand pump. I then leave it in place, which ensures the gasket remains in place and protected from the elements. I suppose that one could remove the pump making certain that the gasket stays on the pump and not the countertop flange. Once the pump and gasket are off, place the bottom in a plastic bag and tape it, and lay the whole thing on the countertop.

This year the water system will remain in place so that fire monitors have access to drinking water until they demob which is expected to be mid October. At that time Fire will fly me or someone from maintenance hopefully Dave Yemm to take the

water system down. I will leave detailed instructions with Erika at the end of the season in the event I am not available to come in.

The foam material used as chinking and the rope caulking is still falling out between the logs. It pops out (both types) and looks really tacky.

We installed hinged hasps on the primary shutters. The slide bolts installed on flimsy plywood were not secure enough and trying to put the slide bolt into the drilled hole in the window frame was difficult for two people to accomplish, let alone one. The hasps slip over the d ring and a snap is used to secure the two.

In early July the trail crew and I dug a new hole for the outhouse, the old one lasting nearly 6 years. On July 17th the fire monitors arrived and by the time this report is completed the hole is nearly full. The hole fills up with water during the winter and perhaps that helps break the cone down and the facility will be usable in the spring. Will have to keep an eye on that next year.

The solar system worked flawlessly from the start of the season. The panel is stored in the east bedroom closet. Batteries were new in 2008.

Also in the east bedroom closet is a blue 18 gallon Rubbermaid bin. Inside is stored a backup inverter for the solar system, a new toolbox with a variety of new hand tools, and the cordless drill with a drill bit set. In the event paint or stain becomes available there is a package of brushes in the bin. There is also a backup propane pigtail or stinger, used to connect the propane tank to the pressure regulator. It too is stored in the bin, along with a nipple adapter needed to complete the connection. The old stinger is hanging on a nail in the back of the closet and works well without the adapter, and should be used until it is unserviceable.

The hairpin antenna on the south peak of the cabin roof is connected to the base station and works very well. The sputnik looking antenna is stored in the above closet.



b. Signs

- i. At the beginning of the season Don and I traveled to park entrances at So. Fork Xing, Touhy Gap, Summit Lake, Windy Gap, and Wet Meadow, to post new signs that announced the closure of SF Meadow. The signs direct visitors to alternate camps and meadows. We also placed these signs along different portions of trails nearing the closed meadow. If the meadow is opened next year these signs should be removed. Thanks to Steve and his staff in the sign shop for making these signs for us. They look great. The only negative comment I heard about the signs is that they imply a continued closure of South Fork Meadow.
- ii. Still need the directional sign below Summit Lake. I described its wording in last years report. It directs folks to Windy Gap, and to South Fork Meadow, as well as Summit Lake. I have looked in the file box at the station and I can't find the sign description for the junction of the Hockett Lake trail and the SF Meadow/SF Xing trail. The sign post is there but the sign is missing. It is .4 miles east of the Hockett Lake entrance. A sign that says Quinn Meadow 5.5 mile arrow left or it can read South Fork Meadow 1.2 mile, arrow left would work. Right now I have a piece of tape wrapped around the post, and in sharpie I have written the above (less mileage) on the tape.



G. Trails

a. Trail Activities

- i. I performed routine trail clearing, hand sawing small diameter down trees, dragging larger ones off the trail etc. I also placed barrier timber on annoying parallel trails. I focused on the trails from the station leading to Evelyn Lake, Hockett lakes, and SF Meadow.
- ii. I also observed a hole on the bridge I believe is known as Slims Crossing. It is a quarter mile west of SF Meadow on the Touhy Cut-Off trail. It may or may not have caused a horse to trip on the bridge and fall without injury. I spoke to Billy Hancock and he nailed a piece of plywood over the area. A close inspection indicates that the wood planking is shrinking and the edges of the planks are becoming worn and the gaps between them are now larger. More plywood would be a quick fix, but ultimately the planks need to be pulled and reset.
- iii. The trail crew cleared and blasted granite footing and widened the area around the bluffs. Great work, mules will no longer bang their boxes on the upslope side, the impact pushing the animal toward the trail edge.

b. Problem Areas

- i. Item ii above. Also the slick rock on both the south sides of East Fork and Deer Creek crossings. At Deer Creek the shoes of the stock are wet and then they have to climb a slick large rocky area. A slip and the animal could go down and end up in the river. Same applies when leaving the East Fork bridge going to Hockett, with same results if the animal slips.

H. Camp Areas

a. Conditions

- i. At the beginning of the season the majority of the camps on the plateau were in good condition, mostly needing only a minor rehab and removal of litter. The South Fork Crossing stock camp was a mess, with a large volcano fire pit and full of trash. Summit lake was the same at the beginning of the season and on the next to last day of the season while doing a boundary patrol, Don and I removed a huge encampment from the north shore of the lake near the hitch rails and the "No Fires" sign.

The backpacker camp at Hockett got a lot of use this summer, and the fire pit area was black with ash. We put several wheelbarrow loads of sand and gravel around the pit to tidy things up, and it looked well at the end of the season.

Rock camp fared well this summer, a spot trip by Balch Park, and then a late arriving stock group spent a night there, holding their

animals, and then they moved to Hidden Camp in the morning when it was vacated.

The Trail Crew camp in the pasture at Hockett was in use nearly all summer. The trail crew was only gone a few days having moved to Slims when the Horse fire began and fire monitors arrived on the 18th of July and will be there until mid-October. Their camp looks neat and tidy. They are using a lot of the lumber and stumps that the trail crew uses for their kitchen set up, and they have been asked to break down those items and store them behind the large down tree behind the camp when they demob.

There has been a large amount of foot traffic in and out of the camp as the monitors go to their respective daily work locations, Teams transitioning in and out, the packer arriving every Monday to resupply them, and other visitors and resource staff visiting the camp. What has been great is that they have all walked and remained on the trails around the cabin and meadow, creating no new paths or cutting corners.

b. Sanitation

- i. We picked up a new toilet seat at the Trails office along with a unique hardware piece (Tyler said it was an extinct hardware piece) as the seats designed for the stainless steel cone or tower are no longer available, and the common household plastic toilet seat is the only thing available. He says the problem is that the old metal and the new plastic ones do not mount the same. Thanks to the piece Tyler gave me the one disabled pit toilet at Hockett can now be used.
- ii. I mentioned earlier the privy at the station merrits watching next season. With all the increased use (On the first of October there will be an additional 5 people camped with the usual three fire monitors) the new privy is filling rapidly.
- iii. Sanitation issues on the trail were negligible this season and the same can be said for most of the camps in the area.

c. Fire Rings

- i. A real beauty of a volcano was found at SF Xing early in the summer, and then a large one at the end of the season at Summit Lake.
- ii. Most rings were easily maintained throughout the summer with the usual foil and occasional litter in the immediate area.
- iii. I finally managed to locate the three rings listed on the campsite inventory sheet describing them as to be removed. I have no idea how Sandy found these three at Horse Creek, Only through GPS use was I able to. I removed one ring, thinking to myself why

would someone camp here only to return 2 weeks later and find that someone had built a ring not 5 feet from the one I had removed. Someone just likes that spot I guess.



Ring removal at Horse Creek and part of campsite removal prgm.

- iv. This season I collected 4 grills from assorted camp sites. People bring them in use them and then don't want to haul the nasty things out, so they leave them for the next person to use. That person comes along with his own grill or steel plate and doesn't want to use the old one, uses his and leaves all of them there. On a fire flight I flew out 5 grills and 2 large steel plates, one 2 foot by almost 3 foot and a 1/4 inch thick.



- d. Firewood availability
 - i. As mentioned in camping areas, lodgepole firewood is readily available at all campsites. With the exception of the fire ban at Blossom and Summit Lakes, fires are permitted on the plateau including Evelyn Lake
- e. Food Storage
 - i. There are 6 bear boxes on the plateau, and one food storage cable at Horse Creek, and all are functional and well used. There were no bear related issues with food storage this season. Fire monitors

returned to their camp at the onset of their tour here and found that a bear had been in camp and knocked things around a bit but scored no food.

Two private stock users had their own bear proof boxes. One used Bear Away boxes and the other used Kawasaki aluminum boxes.

Horse Corral Pack Station did a spot trip to Hockett Lakes and left the hikers with 3 sets of bear boxes. I noticed that at least two of the boxes had a locking device missing, technically not meeting the criteria of bear proof. When I saw this the packer Brian Dotters had already left, and the next time I saw him I forgot to mention it to him.

f. Permit System

- i. No issues with permits this year. Again this season I often heard Lodgepole trail head contacting either the Pear Lake or Bearpaw ranger to advise them of special or problematic visitors or numbers of groups etc. It would have been nice to be alerted that a stock group was traveling to the Hockett from MK as happened twice this season, or that a large group of hikers was planning a 3 or 4 day visit. Not always necessary to do but it would help the ranger prepare information for the visitor and suggest campsites or locations that would make their visit more enjoyable.

I. Communications

a. Reliability

- i. Communications was a big improvement this year. Occasionally someone sounded like R2D2 for a moment while on digital, and once I switched to group 2 and all worked well, I didn't change a thing.
- ii. The base station worked well using the older hairpin antenna.
- iii. The batteries this year worked well, often lasting up to 5 or may days with moderate use.

b. Problem areas

- i. The (b) (7)(F) repeater covers nearly all of Hockett. I also have access to all of the command channels. Coverage is not available on the trail from (b) (7)(F). At the cabin I tested both digital and analog from inside and outside of the cabin and dispatch reported I was loud and clear.
- ii. The (b) (7)(F) area has some problem areas, but improve when transmitting from the south or north end of the meadow.
- iii. Below Summit Lake on the park side near the Windy Gap and South Fork Meadow junction I can sometimes get out on (b) (7)(F) and talk with the rest of the world.

c. Satellite Phone

- i. Great tool, worked well, few dropped calls, and the text messaging aspect was great. Still had nearly 400 minutes at the end of the season.

J. NEEDS FOR NEXT YEAR

a. Station

- i. It would be nice to have an extra BP cuff and stethoscope at the station. I mentioned this last year and I still forgot to ask about one this year. Just good to have one on hand I think.
- ii. The cabin still needs caulking and paint. Thor was trying to get the foam tubing to work while on site last year with the roof repair. I don't know about the foam tubing stuff, it just looks terrible, even when painted.
- iii. I mentioned earlier that we found a bit of brown stain and hit the front of the station until it ran out. The part we got looks great, but a couple of gallons and a few days the remaining portion of the front wall and sides could be done. The new roof is great but the old gal could use a touch of makeup.
- iv. The pasture fence is need of major repairs. New wire is needed and either wood fence posts or t-posts would help in the putting up of the fence in the spring.
- v. Don and friend Tony Craighead spent an afternoon this season replacing nine old rotted fence posts on the pasture fence. They removed 5 unsightly t-posts from that run. Fortunately Thor had left 5 or 6 logs he had prepared for rafters in last years roof replacement and didn't use them. We cut them to 5' lengths and they worked great for fence posts. The corner posts need replacing and they need to be at least 8" in diameter and at least 3 or 4 feet deep, to bear the strain of the fence wire and the wet conditions of that corner.
- vi. 4 or 5 rolls of fence wire could be used to replace the old rusted wire that breaks in a hard wind.
- vii. The administrative outhouse should be evaluated in the spring for relocation.

K. Recommendations

a. Meadows

- i. I know staff will evaluate South Fork Meadow during the winter and make a decision as to opening or keeping it closed. Admittedly my observation is that the core area of the meadow has come back quite a bit, but one can easily see even from the trail that the reference area is bit taller and fuller. May I suggest something for thought, and that is to consider a night limit, say 3 nights maximum. Other camps can be used for longer stays.

- ii. I don't know what we should do with Slims Meadow. The only thing I can think of is for unused stock to be taken out between resupply days, leaving the trail crew with only essential or required stock necessary for them to do their jobs. Riding stock for the crew and 2 or 3 equipment mules. Just some random thoughts, but the meadow looked pretty sad and the Trail Crew was the only user this season. Don and I rode it before the crew moved there and we both felt it was ready for use, and they arrived about the 19th or 20th of July. But when I checked it after they left the Hockett, there was moderate deep hoof prints and some shearing of stream beds. It was my call to declare it open but maybe the wrong one.

L. Pertinent inventory

a. Station

- i. The cabin is stocked with good deal of cleaning supplies, a gallon of bleach along with other household cleaners. There are possibly 4 packages of sponges and scouring pads. There is no steel wool or wire scrubs.
- ii. I brought in some coffee cups so there are about 10 total. One or two cereal/salad bowls would help compliment what is now there. Plenty of plates, mixing bowls etc. A few steak knives would help, maybe next year.

There are plenty of ladles, tongs, and other kitchen utensils in the drawers and a good selection of pots and pans. There are cookie sheets and cast iron skillet in the oven. I left a white plastic breadbox in the closet. Use it to store tortillas, bread and other things you need frequently but want to keep the critters away from. On that subject, mice were a big problem this season, caught about 14 in the wheel of fortune (it is in the tack shed) and towards the end of the summer the only thing working was traps. Got 6 in the last week there this summer.

The tablecloth is in the pine box along with 7 paper towels, and 8 toilet paper rolls. There are burlap bags in the pine box, and plastic bags of several sizes in the metal box marked newspapers on the floor of the west wall. The other half of the pine box contains 5 sleeping bags, blankets, pillows and some pillow cases.

The drawer to the right of the sink has a myriad of hand tools, tape measure etc. In the bookcase are two plastic cases, one contains a nice screwdriver set, and the other a large socket set. The above-mentioned drawer has two large and two small crescent wrenches along with a pipe wrench. There are other pipe wrenches in the tack shed. You will do yourself and others a favor if you use only the crescent wrench to put the brass and copper propane pigtail

back on the regulator come spring time. The pipe wrench tends to round the corners and makes future removals and installations more difficult.

This year Thor provided me with a tool box that contained pliers, open end wrenches, vice grips, chisels, putty knives etc. I placed it in the storage bin in the east bedroom closet.

In a drawer below the hand pump is a small cardboard box that contains replacement leather flappers for the water pump. The pump is set to go simply by reseating the pump to the base and tightening the bolts. The flapper is lubricated and ready to go. The pump is loosened at the end of the season to drain the water from it, and to keep folks from attempting to work the handle just to see if there is water available. On that subject the foot valve for the well, is located in the tack shed, on the south wall above the saddle racks. It is a 4-foot long of white plastic tube, with a spring on one end and a coupler on the other. When you install it don't cross thread the threads and when you think it is snug, give it another half turn. Doing so helps to maintain the pump prime.

b. Tack Shed

- i. There are 2 full large propane tanks in the tack shed, and two staged at the helipad to come in when the fire monitors are demobed. There is an empty large tank and a set of white skis someone left at the station to come out as backhaul. Larissa Perez was shown the items and thought they could be taken out without a problem.
- ii. There are 3 wheel barrows in the shed, only one having a solid rubber tire. The other two have tubes, but there is no pump in the shed. The tires are not flat but it wouldn't hurt to have a pump and some green slime on hand for when one does go flat.

In Closing

There has been no U.S Flag in the cabin since I have been the ranger there. I always brought in a new one each season and marked it with the year it flew at the Hockett and took them home. The flagpole is laid along the foundation of the west cabin wall and the rope and pulley are in a plastic

bag in the bookshelf. If you are so inclined and have a flag, just uncover the hole at the southwest corner of the cabin, and put the pole in it, attaching it to the rafters with a few nails and the attached plumbers tape. The cabin just looked more handsome with the flag flying, and when coming back to the station after a long day, you can peek through the trees and see the meadow, the station, and the flag, just awesome!

I would like to thank everyone for the opportunity to serve as the Hockett Ranger this summer, it was a terrific season, and made even more special with the work schedule I was given. Every season I feel as if I learned something new. Erika is great to work for, trusting me to manage my assigned area on my own and always being available when I have a question, or a problem. The Military trip is always a highlight of my season and I appreciate the invitation to help in any way I can. It was great meeting and working with Kevin on this trip. He was a trooper, and a good hand, willing to do anything to help.

Again thanks to all of you who take the time to read this, for your continued dedication and contribution to the success of these parks, and permitting me to be a small part of that effort

Joe Ventura
Hockett Ranger
2009

ADIOS!!



Kern Sub-District: Kern Canyon Ranger Station
End of Season Report-Jessica Chacon-Miles
2009



- A. **Kern Canyon 2009:** # of rattlesnakes > # of visitors, but = to # of trees in canyon; packrats large and in charge; temperatures: stifling; and Velvet grass still present.

B. Visitor Services

a. Contacts

<i>Type</i>	<i>June</i>	<i>July</i>	<i>August</i>	<i>September</i>	<i>Totals</i>
<i>Backpackers</i>	20	63	181	33	297
<i>Day Hikers/Riders</i>	3	4	9	4	20
<i>Stock-commercial</i>	0	9	14	10	33
<i>Stock-private</i>	0	4	0	0	4
<i>Totals</i>	23	80	204	47	354

b. Law Enforcement

N/A

c. Citations

d. Search, Rescue, Medical Incidents

<i>Date</i>	<i>Location</i>	<i>Type</i>	<i>Evacuation</i>
6/20-21	Kern R.S.	Cardio	Helicopter
8/5	Kern R.S.	Gastro	Treat/Release

e. Weather

Lots of words could be used to describe the weather in the lower reaches of the Kern Canyon this season, but in a nutshell: HOT. This marks the third year of ~50% snow-pack for the Kern drainage and the effects are beginning to become apparent in area meadows and surrounding vegetation (particularly trees).

Throughout most of June the Sierra Nevada experienced cool temperatures and abundant moisture. This cooling effect really affected the river and stream flows for the duration of the summer. As of late August the Kern River was still relatively high and only crossable in a few spots. After looking at a picture of a log jam (Upper Funston area) from late June 2007, the water levels are very similar to late August 2009. Remarkable! Once July got on its way, summer temperatures climbed to what I would think of as above normal. It was not uncommon to have temperatures in the high 90's and a few days above 100°F. The low temperatures rarely dipped below 55° F. It seemed as though the thermometer on the porch never reached above 85°F, funny how the porch was always an amicable temperature.

f. Fires (natural, human caused- not camp-fires)

Surprisingly quiet with respect to the amount of lightning activity this season. July seemed to be the big fire month this season with a grand total of three active fires. Of those three, the one that seemed to impact the Kern Canyon the most was the Shotgun fire. As usual, nature had her way with them and were extinguished in due time. Her methods usually involved deluges of rain.

C. Use Patterns

a. Backpackers

As usual the highest use was seen along the High Sierra Trail, although it seemed lower than in years past. Every month would result in several groups completing a nice loop originating in Mineral Kings. However, the majority of folks passing by the station usually came from Horseshoe Meadow and planned to exit the same way or through some other trail via Forest Service. Primary use south of the Hot Springs was fly-fishing with an occasional whitewater kayaker (3 folks over 4th of July weekend).



Kayak at Kern Hot Spring.



Deconstructing camper structure at Funston Meadow.

b. Stock

Private stock use in the lower Kern Canyon was remarkably low this year. To the best of my knowledge the few groups that did pass through were doing merely that. Almost all traveled from Golden Trout Wilderness (Little Whitney area) and were headed out to Quaking Aspen area; with the exception of one group passing by the station on their way to Coyote Lakes. There was but one group, (b) (6) (owner of GTPS on days off with family) up for a day ride from Little Kern Lake area. I attribute this decline in stock use to the presence of Velvet Grass in the

Canyon and an overall shift in use patterns. It seems that most users do not wish to further contribute to the problem or hassle with the increased grazing restrictions. There are ample amounts of Forest Service Land south and south east of here that seem to be visited as well as other areas within Sequoia and Kings Canyon Parks (primarily along the crest).

c. Administrative

A fair amount of administrative use occurred in the lower portions of the Kern Canyon. The Kern Trail crew paid their usual mid-June time here at the station and a wetlands monitoring crew visited the Coyote Pass area during late July. The trail crews in the area have been more than helpful with the various tasks throughout my area. Last, but certainly not least, the ever-present invasive weed management crews (ACE Crew) were persistent throughout the entire season (late-June – mid-August) working diligently on eradicating, or merely reducing numbers, of Velvet Grass (*Holcus Lanatus*). Come September, the weed survey crew [Erin D., Jen J., Patrick R.] was busy combing the canyon in search of documented, un-documented infestations and as well as areas of suitable habitat.

d. Commercial

Commercial use in the lower Kern was fairly low this year. The usual suspects (Cottonwood P.S., Rock Creek P.S., Horse Corral P.S. and Golden Trout P.S.) visited the canyon throughout the season. Their use within the park, as far as meadow grazing was concerned, had been concentrated in Upper Funston meadow. Sierra Mountain Guides passed through my patrol area late season on their way to completing the High Sierra Trail (stock assisted).

D. Natural Resources

a. Bear Activity

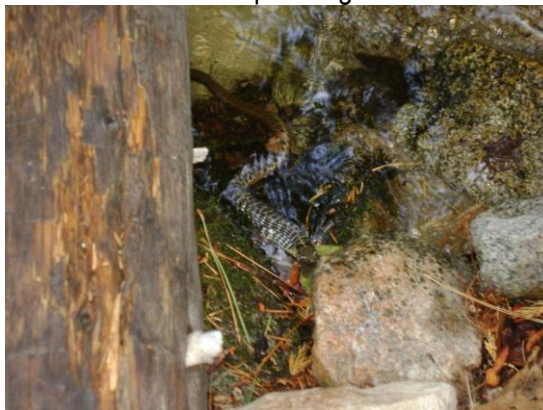
These four legged, furry creatures are quite abundant within the canyon walls as well as the surrounding areas. It was not uncommon to see new tracks (various sizes) on the trail daily, throughout the season. The Kern Station received some damage; thankfully it was limited to scratch marks on some of the shutters and a chunk taken out of one of the porch posts. The nature of the marks leads me to believe that the bear was merely marking his territory. Unfortunately the tack shed suffered some damage as well. Nothing too terribly bad, he just attempted to rip the door off again. Apparently it's no secret to the wildlife that that building is not bear proof! Fortunately, all incidents that occurred at or near the station left the bears being un-rewarded for their bad behavior. The ACE Crew camp also suffered several incidents throughout the summer, again nothing too terribly bad, just making quite a mess of things.



Bear activity at the ACE crew camp and Kern Ranger Station.

b. Wildlife

The reptilian population in the Canyon was in biblical proportions this year. I'm sure that this is always the case down here; after all it is prime habitat. Needless to say I have improved my reptilian identification skills. One incident that stands out in my mind was a common garter snake that I happened to come across while he was enjoying his morning breakfast of a 6-inch trout. Quite a sight to see! It was noted by several folks (myself, trail crew, and long time visitors of the canyon) that the rattlesnake population was quite healthy this year. It should also be noted that despite this healthy population, that the rodent population is even healthier. I unfortunately did not get an opportunity to see the notorious Bald eagles that have nested in Lower Funston in years past, but did get ample opportunities to view a pair of Golden eagles with young. During late July a noisy flock of Clark's Nutcrackers inundated the lower reaches of the canyon stashing seeds hither and yond. Perhaps this is an omen of the upcoming winter.



Snake eating a fish.

c. Vegetation

The early and subsequent rain events have really boosted productivity of the herbaceous vegetation within the canyon. The height of the grasses in the meadows is remarkable despite the fact that this is the third consecutive “dry” year. Both Upper and Lower Funston meadows have an average grass height of 3-4 feet. Rattlesnake Canyon received a break from grazing this year. This was attributed to low visitation by stock groups and mostly because trail crew did not have their stock while working within the canyon. As for *Holcus lanatus* (velvet grass), yes it is still present. Resource management crews (Erin D. and ACE) stormed up and down the canyon this summer working hard at eradicating this pesky plant. A tremendous effort has been put forth in eradication and I would encourage similar efforts over the next couple of years to see if we can make a dent in it. I would however recommend that the primary effort be placed on up canyon (Upper Funston/ Maze area). It seems that efforts would be best suited if crews visited these priority sites monthly in an attempt to stifle spread up canyon. As I write this report the “weed” peeps are surveying the canyon to identify the full extent of the infestation. As many others, I too am anxious to hear the results. In addition to the known weeds in the Kern I came across a small population of *Avena barbata* (slender wild oat) or *Avena sativa* (cultivated oat) in the Lewis Pasture (pressed sample for positive identification and eradicated all found). A species of concern that should be given at least some thought is *Laminaceae Mentha pulegium* L. (pennyroyal); it is has become quite abundant throughout the canyon floor. From my understanding it is an undesirable non-native that is very hard to remove once established in an area.

I noticed that the southern most edge of Sky parlor meadow has seen a fair amount of grazing. The location of this meadow is an interesting spot to monitor as for it is on the periphery of two patrol areas. In future seasons it would be beneficial to watch this area a bit more closely as for it seems as though there were areas where the vegetation was closely cropped.

The woody vegetation (i.e., trees) is showing signs of stress from lack of adequate moisture. All up and down the canyon there is considerably more die-off than in previous years. Whether it insect, lack of water or both there is an obvious impact. The majority of trees affected are *Calocedrus decurrens* (cedar) and *Pinus jeffreyi* (jeffrey pine). Age, location and competition within the trees show no significant pattern; the die-off is random. It has been interesting and satisfying to observe this occurrence over time. I believe that it is mother earth’s way of taking care of herself, though we may not completely understand her reasoning.



Exotic grasses in the Kern Big Pasture.

E. Cultural Resources

a. Prehistoric & Historic Sites

All sites were visited and was unable to detect any changes in condition.

F. Backcountry Facilities

a. Ranger Station

- i. Overall the condition of the Kern Ranger Station is a 7 on a scale of 1-10 (10 being top-notch and 1 being dire need of repair). This number could go either up or down drastically depending upon action taken over the next few years. Structurally the building is sound, however there are a few things that need attention to prevent rodentia from compeltely taking over the building. Listed below is the maintance needed:
 - 1) The entire building needs to be re-chinked, including the area above the door/line (this has never been chinked and provides easy access and habitat for the little fuzzy guys).
 - 2) The stone fireplace needs to be sealed off to the interior to prevent access (presently there is screen and wood serving as a temporary barrier).
 - 3) The wood cook stove chimney is askew and needs to be straightened and caulked.
 - 4) Floor in station needs to be painted (battleship grey color)
 - 5) Tack/ Tool shed needs to be re-roofed.
- ii. The solar system is in good condition; the charge on the batteries has been consistent at 13.9 v all summer. There is no functioning base station and in future years it would be nice if the station had one.
- iii. Maintance completed at the station included:
 - 1) Painted the tack/tool shed and outhouse
 - 2) With 315 repaired a break in the water line (this will need attention in upcoming years)
 - 3) 3-2-10 (Erin D.) dug out the bottom of the cesspool, [sump] early season, still does not drain well and smells great. Addition of enzymes may help with the smell and breakdown of stuff.
 - 4) Front door knob adjustments (prevented purchase of a new one)

b. Signs

i. Conditions, requests

Overall, most of the signs within the Kern Canyon are in good condition. The sign immediately south of the Ranger Station (on Coyote Creek Trail) was erroneous in direction with respect to Junction Meadow. The position of the actual sign was showing it as being west instead of north. Rather than plastering the sign with duct tape and illustrating it with a maze of arrows, I repositioned the sign on the post so that it points the way intended. As for the sign at the junction of the High Sierra Trail [in the Kern], I feel that it could be replaced. As things mysteriously happen out here, the sign is now quite bent and scratched all to heck. It is not one of immediate repair, but if we are going to have signs in the wilderness it is our responsibility to have them looking their best (included is a sign request form with pertinent information).

G. Trails

a. Trail Activities (work accomplished)

As usual the Kern Trail crew has done an outstanding job. Aside from the usual maintenance on the trails (which includes the dig-out area on the Coyote pass trail) accomplishments were: a re-route on the switches leading up to the east side of Franklin Pass, placement of a few checks and steps in Lower Rattlesnake and replaced both middle and upper drift gate posts [both had suffered extensive damage over the course of the winter], and the ever present "dirting" project on the talus field just below the Hot Springs has received ample amounts of attention this season. As the season progressed many trees fell and numerous rocks have rolled all finding their way to the trail bed. If I was unable to remove, either by myself or with assistance from the ACE crew I assessed the passability for stock and worked with the area Kern trail crew (who were more than obliging). When possible I would remove them, at times with the assistance of the ACE crew. Who removed two punky, rotten logs from the trail just north of Lower Funston Meadow.



b. Problem areas

Most of the trails in the Kern Canyon are in good shape and the area trail crew is aware of major problem areas. Unfortunately, due to the amount of area that they need to cover, their time is limited so they too need to prioritize their projects. Listed below are areas that I feel need to be addressed in up coming seasons. The first three of which address safety and sanitation (respectively) and the latter are more or less maintenance (preservation of existing trail) and clean up.

- 1) Rattlesnake Creek/Kern crossing needs to be addressed. The 'high water' log crossing is falling into the creek, thus making it more dangerous than the actual crossing. Historically this crossing seems to have been an issue.
- 2) Continue with the removal of the toilet at Forester Lake and place at Hot Springs (this also needs to be re-dug).
- 3) A new latrine needs to be dug at Upper Funston Stock camp.
- 4) HST from Kern to JCT below Moraine Lake needs brushing (small sections where the trail bed is completely obscured by brush causing users to pioneer new routes adjacent to original trail bed) and some checks to assist with runoff. Sections of the trail look pretty beat up.
- 5) Place steps/checks on section just north of the station (just after sandy hill, where you 1st walk alongside the river).
- 6) Remove broken bomb box south of Kern Hot Springs Trail Crew camp.

H. Camp Areas

a. Conditions

All designated camp areas are in good shape, despite the intense use they receive at times throughout the season. The Hot Springs and the junction Rattlesnake Creek/Trail with the Kern River/Trail receive the most use and required regular attention. There are a few hazard trees present in the Hot Springs camping area; I recommend that they be removed if possible. Unfortunately, the Hot Springs received some abuse this season by some industrious campers. Idle hands led to the construction (of a new tub/hole) or should I say the destruction of the ever-so fragile meadow. If I had only arrived a day earlier I would have nabbed the culprits. The Lower Funston camp area is a safety hazard and a maintance nightmare. This season (and many previous) it is not uncommon to find 20+ trees completely occluding the camping area (including many that block or rest on the bear boxes). Many more trees fall here throughout the season, with this in mind I would not recommend that stock parties stay here (even if the meadow were open for grazing).



Pit dug by campers at Kern Hot Spring. Restored by rangers.

b. Sanitation

Sanitation in backcountry camps is always of an issue. The latrine at the Hot Springs needs to desperately be re-dug and ideally replaced with something that does not look so precarious (I believe that the Trail Crew re-dug this near the end of the season). Visitors are beginning to utilize the bushes in the surrounding area. Additionally the latrine in Upper Funston Meadow needs to be re-dug; it's getting dangerously full.

c. Fire rings

The number of used and unused fire rings present in the Kern Canyon is a great indicator of the amount of visitation in years past. In its time, the Kern Canyon was a happening place. Today the use is nothing near what it once was particularly in the lower reaches of the canyon. One of my main objectives this season was to work on the 'campsite inventory restoration' project. Roughly 70% of the project for the Lower Kern was completed this season. The majority of the known sites listed on the inventory list [as contain/rehab] have been converted to three sided rings. Some of the remaining sites are questionable as to their existence, due to previous years rangers removing them. Most of these can be found near the Hot Spring. Outside the inventoried fire rings approximately 10-15 fire rings have been obliterated with assistance of 114; a good portion of these rings were located between the Kern River and the Big Pasture. I'm certain there will be many more found in subsequent years.

d. Firewood availability

As trees notoriously fall down here in the Kern Canyon, there is never really an under-abundance of firewood availability. With respect to the new 'no fires below 10,400' feet'; there are very few areas within my patrol area where this is of concern (i.e., meets the criteria of elevation and visitation). Upper Rattlesnake canyon at Forrester Lake is the only site that comes close to this restriction. However it is important to note that *Pinus balfouriana* (foxtail) does exist at elevations down to approximately 9000 ft., that of which opens up quite a bit more of my patrol area. Fortunately they are not the primary species at these lower elevations. Thus I feel that the move to the new fire restriction elevation is a good move in the preservation of a grand tree.

e. Food Storage

Despite the increased use in food canisters among backpackers the bear boxes are getting utilized just as much. Within my patrol area I was unaware of any bears obtaining food (or harassing visitors), but they were definitely on the prowl and seemed to know where to look for food.

I. Permit System

a. Trail Heads & Issuing Offices

Trailhead rangers out of the Lone Pine office did an exceptional job of providing information as well as patrolling the area (they even made it to the Kern!). In future years it would be appropriate for Mineral King trailheads to make extended patrols in Kern (Rattlesnake canyon/Farewell loop). As for the majority of folks coming to the Lower Kern [from Mineral King] are traveling this loop. With respect to information getting out to the public with regards to the Velvet Grass (presence and grazing regulations) was great. Many visitors were asking me about the Velvet Grass.

J. Communications

At this point in the game I'm sure that everyone is very aware that radio communication in the backcountry is severely compromised. My ability to "hit" the repeater here at the station took some trial and error. Spots that have worked in the past no longer work and after somewhat "reliable" spots were identified I kept my fingers crossed and got used to repeating myself. If the radio shop is not going to change the system for a few years, perhaps it would be possible to get a similar "fix" (the mega-booster antenna treatment) as to what the (b) (7)(F) received this summer. It is a little frustrating knowing that I did miss a fair amount of radio traffic due to my location within the canyon and would have to scramble around trying to find a spot that would work. What worked in one area one week did not work the next.

K. Recommendations

- Continue to staff all ranger stations
- Temporary Kern station (platform with tent/yurt structure and knock boxes) near the old Chagoopa Patrol Cabin Site (area ranger would be much more effective based in an area where visitation is highest, still able to conduct patrols down canyon as necessary)
- Remove toilet at Forester Lake and re-locate at the Hot Springs
- Station maintenance
- Spring deadline for backcountry commercial permits

L. Project Accomplishments

- Completed roughly 70% of campsite inventory/rehab
- Facilities maintenance: paint out-buildings
- Signs: repair/ switch around/ and remove duct tape
- Rebuild gate on Kern Bridge near station



Repaired drift gate on Kern Bridge at south park boundary.

- Work with Ace crew HOLA eradication/survey and conduct rehab of social trails in the lower Kern
- Met with the (b) and (b) (6) families on several occasions
- Removed/rehabbed several fire rings outside of campsite inventory
- Removed lots random trash and old fencing wire

M. Pertinent Inventory and Needs

- | | | | |
|------------------------------|------|-------------------------------|--------|
| • Maps (7.5" quads only) | | • Strapping/glass tape 1" | 3 |
| ○ Kern Peak | 2 | • Strapping/glass tape ½ " | 1 |
| ○ Kern Lake | 3 | • Masking tape | 2 |
| ○ Quinn Peak | 2 | • Duct tape | 1 |
| ○ Chagoopa Falls | 4 | • Scotch tape | 2 |
| ○ Mt. Brewer | 1 | • Flagging | 5 |
| ○ Triple Divide | 1 | • Sunscreen | 4 |
| ○ Mt. Kaweah | 3 | • Gloves (leather) asst sizes | few |
| ○ Mt. Whitney | 1 | • Paper towels | 6 |
| ○ Johnson Peak | 1 | • Toilet paper | 27 |
| ○ Mineral King | 3 | • Trash bags large | ~15 |
| • Ideas pads (yellow) | 9 | • Trash bags small | ¾ |
| • Post-it notes | lots | full roll | |
| • Pens | lots | • Burlap sacs | >10 |
| • Pencils | few | • Cloth mattress cover | 1 |
| • Sharpies | 2 | • Latex exam gloves | ¼ |
| • Batteries AAA ('09) | 16 | full box | |
| • Batteries AA ('09) | 22 | • Bleach | lots |
| • Batteries AA box + '08 | 4 | • Foil | lots |
| • Batteries AA Lithium ('09) | 2 | • Sponges (green/yellow) | 3 |
| • Batteries C box | 1 ½ | • Spray bottles | (4) |
| • Plain envelopes box | 1 | • Propane | |
| • Holey envelopes | ~10 | | |
| asst sizes | | ○ Tall | 1 full |
| • Steno pads | 4 | & 1 ¼ full | |
| • Pad o paper (8 ½ x 11) | 1 | ○ Short | 2 full |
| • Black log book | 1 | • Fuel canisters (isopropro) | |
| • Green record log book | 1 | | |
| • Gov envelopes asst sz | lots | ○ 8 oz full | 6 |
| • Paper lunch sacks | lots | ○ 8 oz < ½ | 2 |
| • SAR brochure | 4 | ○ 16 oz full | 1 |
| (few more in medical box) | | ○ 16 oz > ½ | 1 |

Kern Canyon R.S.

2009

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• Kitchen matches	2 ½		
boxes			
• Bug dope (cutter roll sticks)	1 full		
• Mouse traps	2		
(need many more!)			
• Inverter (new '09)	1		
• Inverter (old – still works)	1		
• Base charger	1		
• Roll away table	1		
• Deep cell batt (13V charge)	3		
• Solar panel	1		
(fixed unit)			
• Dewalt cordless drill	1		
• O2 Tanks D cylinder & reg	3		
(1600psi, 1500psi, 1600psi)			
• Vacu splint	1		
• Litter	1		
• SAM spints	7		
• C-collars			
○ Regular	1		
○ No-neck	2		
• NRB			
○ Old	2		
○ New	3		
• Nasal cannula	5		
• BVM	0		
• BP cuff	1		
• Stethoscope	1		
• Pocket mask	3		
• Scotch splint			
○ 4 x 30	1		
		○ 4 x 15	1
		• Ace bandages	5
		• Eye dressing	5
		• 4" bandage compress	5
		• ice packs	2
		• OPA	
		○ #11	1
		○ #7	1
		• Lotion	1
		• Conditioner	1
		• Dish Rack	1
		• Pot pad holder	2
		• Dish Soap	1 (¾ full)
		• Ziploc Baggies	
		○ Quart	~4
		○ Gallon	1
		• Tuppies	lots
		• '09 Species list	1
		• Jepson's	1
		• Various field guides	
		• Dictionary	
		• Medicine 4 mountaineering	
		• Where there is no doctor	
		• Various other assorted reading material	
		• Candles	
		○ Tea lights	3
		○ Votives	2
		○ Pillar	½
		(short fatty)	

Needs

- Giant spatula
- Sibleys Western Field guide (birds)
- Comfy chair for porch
- Stainless steel kettle
- Steel wool
- Past and present conditions (SEKI)
- Electric rat trap buzzt!
- Enzymes for sump
- Butter knives (4)
- Ladder
- Tool boxes (project tool shed organization)

Facility Maint. Needs

- 3/4" plywood sheet (for bed frame/mattress)
- 1 x 12" pine (tack shed) X 5 pieces
- hose bib/faucet gaskets
- galvanized compression fittings
- high temp caulk (for stove pipe)
- 1/2" & 3/4" hose bibs each

LeConte Area End of Season Report 2009 Rick Sanger

A. General Summary

This year was the 50th year LeConte Canyon was staffed with a ranger. The cabin was built at the end of 1970.

This year, the station was staffed from June 17 to Sept 26. This was a dry end of a "Normal" moisture year, with snow level in upper Dusy on June 17. It was my first year patrolling this area. The weather was mild and seemed to have more cloud cover than in most of my backcountry years.

I was surprised by the number of visitor contacts, especially in June & July. This station has more activity compared to my experience of 6 years at Pear lake. VIP Suzanne Weber was with me the entire season, and at times we did "visitor triage" to more quickly address visitor needs. I suspect, from talking with 112 & 313 that visitor numbers were up this year.

Rob Daniel, ranger from 1969 decided to re-visit his old station in August. It was fascinating to hear his stories, especially of being in his tent listening to Neil Armstrong land on the moon.

Attention was given to organizing paperwork & files at the station. About 40 lbs of outdated paperwork with no apparent historical value was removed.

An incinerating toilet was installed at the end of the season & was used some with success.

B. Visitor Services

Contacts:

Month	Miles	Vtr. Contacts	Citations	EMS	SAR	CaseCards
June	74	154	0	0	1	5
July	158	570	0	4	1	8
Aug	135	669	3	2	0	5
Sept (thru 9/13)	109	228	1	0	0	0
Tot	476	1621	4	6	2	18

Law Enforcement

4 citations (Dog in Wilderness; Fire (terms of permit), Improper food storage (2)

18 case cards only modestly represents the numerous warnings for camping on vegetation, fixing equipment, giving out minor medical supplies, teaching proper food storage technique, etc.

Search, Rescue, Medical incidents

6/26: Pearson, Numbness in face and hands (AMS), Self-Evac

7/10: Winger, Snowblindness, Self-Evac

7/11: Mack, dizziness, Self-Evac

7/14: Noble (“Fritz search”), denied needing help
7/20: Hoog, finger cramping, Self-Evac
8/20: Moorjani, something in eye, Self-Evac
8/21: Larson, exhaustion, Self-Evac

VIP Weber

Having Suzanne with me all summer was fantastic. But more than just having a wonderful companion, her presence made everything I did much safer – a second person to call for help if needed. She took her stewardship of the area seriously and often worked independently, cleaning fire rings and answering visitor questions. Further, I was able to discuss projects and concerns with her - arriving at better solutions than if I was on my own. The park greatly benefitted from her presence.



C. Use Patterns

Backpacking:

Use was what I would have expected, with PCT hikers dominating contacts at the beginning of the season followed by a steady stream of John Muir Trail Hikers. The percentages are close to what Dave G noted in 2007 (*50% entire JMT (mostly north to south); 20% N. Lake to/from S.Lake; 15% in/out over Bishop; 10% all or part of PCT; 5% miscellaneous*) with possible exception of a notable number of High Route users. I heard there was a recent article in OUTSIDE magazine that might account for this.

It seems visitation was increased this year, from talking with (b) & (b).

Stock Use:

Stock use was dominated by trail crew resupplies (Big Pete Meadow). Rainbow Pack Station used the area consistently throughout the season (Ladder Camp) with two High Sierra Pack Station trips, one Rock Creek trip, one Bishop Pack station trip, two private parties and one llama group.

Kayakers:

I contacted about 5 kayak groups this year and tried to learn about the users and their activity (summarized below). This is a small, close-knit user group that prides itself on wilderness awareness. I believe any issues we have will be communicated quickly throughout the users.

Two immediate concerns need to be addressed. The first is somewhat minor and has to do with a greater awareness of fire-ring impacts. Fires should be built with minimum impact in mind – there was a report of a ring visible from the Middle Fork trail on the north side of the river, a place only accessible to kayakers

(new fire rings are technically illegal, an issue addressed in the “Regulations” section below).

The second concern is of abandoned kayaks. I have heard of about four kayaks found in the river or on shore. This is a significant problem. I discussed the concern with forest service employees at the White Mountain Desk, and they said it would be possible to take pictures of kayakers with their kayaks when they get their permits. I also spoke with Keith Waterfall who thinks this could be done, as well. He said he tracks the middle fork flows and sends patrol officers to the trail when the kayakers are expected through. These officers, as well as trail crew expected to be working on the trail in 2010 could also be asked to take photos. This could allow for citations to be issued, if this strategy is chosen. For now, I think we need to see if the kayak community has any ideas as to how to prevent or correct this problem.

I was given the name & contact information for one respected member of the community, and wish to write him a letter regarding these concerns and ask him for suggestions.

What I’ve learned about kayaking the middle fork:

Equipment typically weighs about 100 lbs per person (!). The community of kayakers is small & close-knit. Everyone now understands they need a permit! Although kayaking the middle fork has been done in one day, it is more typically a 6 day trip. Camp1: LeConte RS. Camp2: at confluence with Palisade creek, Camp3: Near cartridge/simpson Camp4: lower tehipite valley. Minimum portage is 11 (was 12 a few years back). Good group size is 4: Two will provide safety down stream while other two run the given rapid. A larger group gets too spread out, less and there isn’t adequate safety.

Users might use stock more to stage their equipment, but timing is such that pass usually isn’t open when the river is at the required flow rate. Thus users mostly carry their 100 lb loads from south lake to LeConte RS !

Bear canisters do not fit in the kayaks with paddler in place. They will fit in the cockpit when the kayak is being carried. Thus users wishing to camp in Dusy have to bring friends in to pack the canisters back to South Lake.

The river was first done by Royal Robbins & Yvon Chinard in early 80’s with fiberglass boats, had to portage the whole thing. In 1997 it was run by Scott Lindgren & Mark Hayden who produced the video “Liquid Lifestyles”. (I have this video). This led to greater awareness of this world-class run.

Done in one day by (b) (6) & (b) (6), started hiking at 2 am, pulled out at Yucca Point at 10 pm.

Usually can only be done during 4-5 day window. This year was unusual in that it was about a 14 day window. Some users did it two times!

D. Natural Resources

Wildlife:

Individual sightings are detailed in an auxiliary file. Of interest were 1 bear roaming for about 4 days in upper to middle LeConte, 2 cooper’s Hawk sightings, 1 Pine Marten (at station), & several long & short-tailed weasels. Visitor pictures were seen of a montane shrew & rubber boa.

Vegetation/Meadows

Sylvia Haultain visited LeConte with Corrie to orient me to LeConte meadows, assist in residual biomass clipping, & set up a core site in Big Pete meadow. Martin Oliver & Liz were present from Yosemite to learn more about our monitoring program in hopes of implementing a program there. Chris Miles (b) was present as well, making it nearly an entire meadow monitoring conference.

For future reference I include these notes about Big Pete Meadow: Ecologically, the meadow could be called a “forested fen” which is unusual & interesting ecologically. A “fen” is fed by ground water with more than 30 cm of peat. This meadow is important due to prominence of Sphagnum moss & presence of sundew (an insectivorous plant) predominantly in the northeastern corner of the meadow.

The location of the meadow makes it an important first grazing opportunity for parties coming from the north and last opportunity for parties moving from the south.

To balance uniqueness of meadow with it’s grazing importance, the grazing guide declares half the meadow closed – the closed section being the forested half to the north & west that is difficult for animals to access anyway.

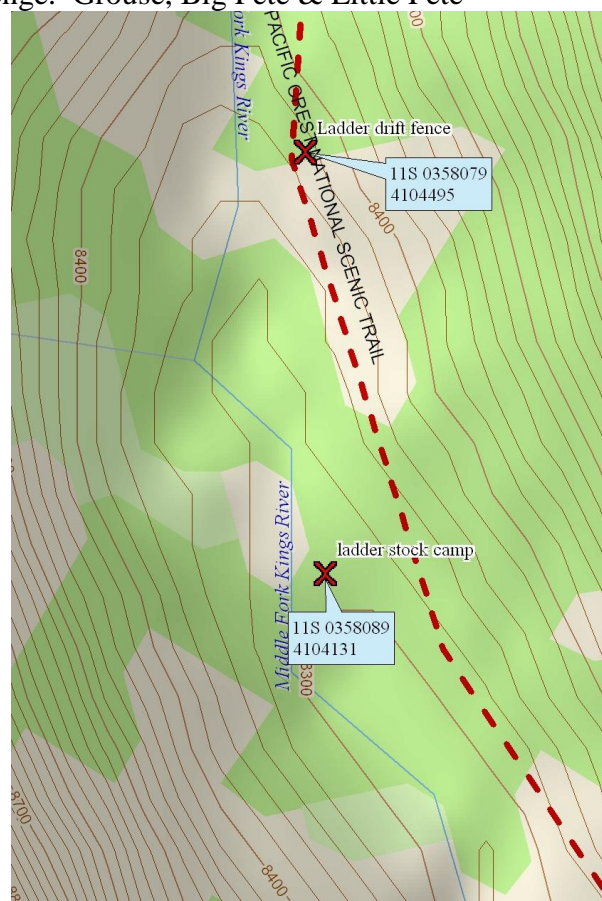
Our meadow survey found Big Pete to be significantly impacted with some grazing penetrating into the closed area. We do not expect the trail crew to be using this meadow next year, and hope this gives it a chance to recover.

The opening date of Grouse was delayed this year from July 15 to Aug 1. (it saw no use). I would have delayed the opening of Big Pete at least 2 weeks, (to Aug 1) now that I understand the meadow better (it saw it’s first grazing on 7/21).

Setting opening dates remains a challenge. Grouse, Big Pete & Little Pete have some areas that never fully dry out enough to withstand hoof prints. Sylvia’s 2007 memo on opening dates shifts emphasis from soil moisture to plant development. For next year I will use plant development in the core (previously grazed) areas as a “weighted” factor in determining opening dates.

Suggestion edits for Forage Guide:

- 42-1 Dusy Creek: “A drift fence is above the meadow at the base of the switchbacks to Dusy Basin.” (this drift fence has been removed)
- 39-3 Little Pete Meadow “A drift fence is above the meadow.” My suggestion is to reword this similar to what you have



done in 39-5, saying “A drift fence is above the meadow at 39-2, Big Pete Meadow.

45-1 Palisade Lakes “A stock camp lies along the trail halfway up the northeast side of the upper lake.” I didn’t see this stock camp, and Dave Gordon doesn’t remember one either. I’ll look again next year.

Ladder Meadow: The drift fence is located **uphill** from the stock camps! See map. Guide says downhill.

Dusy Basin:

It should be noted that Dusy Basin is an area of heavy use and significant impact from hikers. Two park employees mentioned to me how impressed they were with the extent of the impact, with one asking if areas are ever closed to backpackers (like meadows are to stock). Tents can be found on the vegetation on about any given night. Use trails criss-cross the basin, & Kathleen Mathew’s researcher’s orange tent was visible from the trail all summer long.

I have not formulated any plan to begin addressing this impact, and am open to suggestions & guidance.

E. Cultural Resources

Photos were taken of a number of (b) (3) (A), found in the area. One was made (b) (3) (A), (b) (3). These have been emailed to Tom Burge along with photos of a spearhead that was found near LeConte RS by previous ranger.

A shelter near the Palisade Creek confluence was re-located based on a description found at the LeConte station. It was likely built by trail crew many years ago.

The stone stove built at the ranger station site in 1959 turned 50 this year. A decision should be made as to whether it should remain or be dismantled.

I found some interesting information in the Sierra Crest Cache in regards to Hester Lake history. These were memorial items left by the nephew of the flight engineer aboard the B-24. (b) (6), Fairfield, Conn 06825) Evidently left in 2003 & since collected up by a ranger. These items were photographed (emailed to Ward Eldridge) and brought back to the station library. They include a laminated copy(?) of Robert Bursey’s Citation of Honor.

Cabin remains were located near palisade creek confluence (using handwritten notes at cabin) and photographed. Photos & info send to Ward Eldridge.



F. Backcountry Facilities

Cabin:

The solar system at the cabin worked exceedingly well. The cabin is rodent proof (but the storage shed is not). The cabin is in good repair. This year the aluminum security door and window shutters were outfitted with heavy duty hinges for increased security and convenience.

The cabin was broken into in November, 2008. A report on the incident was written up with enough information to generate leads as to the suspects.

Equipment:

The 700 watt “xpower” inverter worked extremely well. It is quiet and, as I left mine on all summer, seemed durable as well.

Incinerating Toilet:

An incinerating toilet was installed in the final weeks of my duty. It hasn’t been used much, but so far seems to be performing well. There are several questions/notes I have about the toilet

- The toilet is wired to receive it’s power from the “load” terminals of the solar regulator. This wiring configuration blows the fuses



of the regulator. The hookup diagram shows the toilet receiving it's power directly from the batteries. Has someone made sure the toilet power requirements are within the load of the regulators? Were the regulators supplied by the manufacturer?

- Connecting the auxiliary 12V power socket to the "load" terminals of the regulator also blew a fuse (when the vacuum was plugged in & turned on) For this reason, the socket was re-wired directly to the batteries.
- the current angle of the solar panels might be too steep. The battery charge will need to be monitored next summer. To reduce the angle, we'll need additional "L" stock to brace from snow load and feet for the base of the "L" stock braces. (or maybe it will work layed down flat...)
- we need to research what fuses the manufacturer requires in the toilet and the solar regulators & get extras on hand
- There is no way to read out battery charge or propane level. This will have to be measured with a voltmeter & "swishing" the propane tank. (a "ignition failure" light will go on when the propane runs out)
- How often does the toilet need to be cleaned out? A more detailed manual for the station would be helpful.
- The toilet requires dual 12 volt power requirement, which seems costly and unnecessary. It requires two regulators, two solar panels & two batteries!! I can only guess that some mechanism within the unit requires 24 volts. Why didn't the manufacturer allow for a single 24 volt supply? Or design in a converter to boost 12 to 24 volts?
- The "lid up" switch is slightly mis-adjusted and doesn't always register that someone is sitting on the unit!

G. Trails

Trail Work

It was great to have the Adam's crew in the area. They accomplished a great deal. I accompanied a logging crew for two days in Palisade Creek and was especially impressed with the safety and awareness used in chainsaw operations. All members are obviously skilled, hardworking and very safety conscious.

I discussed possible future trail work with Adam, including a re-route of the trail as it passes Lake 10,800 to bring it out of the meadow & make it easier to follow for hikers. Also, the trail from this point to beyond Helen Lake is very wet in early season as the snows melt. (pictures on file) It is like walking in a stream the whole way! I'm not sure what could be done, or if non-eroding trail flooding is a priority (the tread is mostly cobbled.)

Finally, a significant "use trail" formed on the south side of the Helen Lake outlet. It appears that as the water level lowered, people failed to cross the outlet & pick up the actual trail. I moved some boulders from the stream bed in an attempt to make the crossing more obvious & put one duck as a marker to direct people to cross the stream. I'll try rehabbing the use trail next year, but might require more work than I can do.

The crew made a great effort at restoring their camp when they left.

H. Camp Areas

A number of camp sites were noted as candidates for restoration. Pictures were taken, GPS coordinates noted & in some cases work was begun. This information is presented in a separate file and can be used to monitor success of restoration in the future, or decide what work can be done in upcoming years.

I. Permit System

I was told by one visitor that the White Mtn Ranger Station would not leave his permit for him outside after closing hours. This seemed unusual to me, and caused him some inconvenience.

In some cases permits issued for Bishop Pass were stamped “canisters recommended” and in other cases “canisters required.”

It would be nice to have the known CUA itineraries at the beginning of the season. (I wasn’t able to download easily due to limited time & access to network)

J. Radio Communications

The (b) (7) Repeater tower was replaced in mid-summer. This correlated with diminished reception. Specifically, reception in (b) (7)(E) went from “Good” to “Fair.” Reception at (b) (7)(E) used to be OK until it went poor at the lake at 10,800 ft. Now it is fair all the way to (b) (7)(E) (where the frog crew stays – this was confirmed by the frog crew). Reception used to be good in the (b) (7)(E) area, and is now at the low end of fair.

Sometimes I can tilt my antenna and have better luck hitting a problematic repeater. It seems that in the same way, making the (b) (7) tower vertical has actually *reduced* radio coverage!

The 12 v base stations are very finicky about the way they recharge LI-ion batteries. It may take several days for the light to turn "green" and seems to depend on the charge state of the solar batteries. I've dropped my LI-ion into the charger after a 4 day patrol and had it immediately turn green!! However, in measuring the voltage of this battery, it was clearly dead. Similarly, measuring the voltage of a battery showing a red light may show it fully charged.

These things don't instill confidence in the system. Nina has struggled with this as well, and the system at PEAR acted the same way.

One solution is to measure the voltage of all batteries and ignore the red/green lights. Another might be to use 120 volt chargers (reliable) in conjunction with an inverter.

My radio lacked correct Forest Service frequencies. This can be corrected for next year. Keith waterfall suggests “(b) (7) Repeater,” “(b) (7) r Repeater” & “(b) (7)(E)” repeater.

I have updated the radio coverage map.

K. Operations

Regulations: Content & Education

The meadow binder given to us by Sylvia Haultain includes the current minimum impact regulation sheet & stock use & grazing regulations. Kudos to her, since I found myself in the backcountry with these as my only copies. Was

this by accident or design? Has the meadow ecologist been given responsibility for updating rangers on latest regulations?

The binder did *not* have a copy “Wilderness Regulations Specific to the John Muir Trail.” A copy of this was obtained from hikers (!). The document states that “through-hikers are required to either use bear-proof containers or food storage lockers located along the trail.” This implies JMT hikers *are not* required to have a canister between Pinchot & Forester – is this true? Do we need to educate rangers or re-write the document?

It should be noted that Yosemite regulations prohibit hanging food. Yet JMT hikers (carrying a Yosemite permit & regulations) entering from the north have often resupplied at VVR or Muir Trail ranch and their food does not fit into their canister. I think it important that the northern rangers remind visitors that excess food can and should be hung in Kings Canyon NP.

It would be interesting to trace the history of how it came to be that adding rocks to fire rings is a citable offense. Was this an intentional track? And do we really want the building of new rings to be illegal? The minimum impact regulation sheet constitutes “terms of permit,” and “terms of permit” has a \$150 bail amount.

Since we are here, I’ll again mention that eating the leaves of wild onion remains illegal. I hope someday compendium revisions will change this.

Photo Cataloging

The Problem: The effort to catalog & track photos needs to become serious. Digital technology has drastically reduced the cost of photography and therefore the quality and quantity of photos has increased. These valuable “records” are dumped into a largely unorganized bin called the “I” drive. I carry a personal camera and I’ve been taking hundreds of photos each summer. It is likely the other rangers are doing the same, not to mention our thousands of park visitors. If properly stored & catalogued, these photos will be invaluable in the future for SARs, virtual tours, and in ways not yet imagined...

The Future Solution: The park must work toward a cataloging process that will allow for searches by location, subject & other key characteristics. Location searches must be both by name (“Rae lakes Loop”) and GIS-specified region. For the following discussion, I’ll refer to the final cataloging system as “the Full-Blown System.”

Considerations: The key to starting this process is successfully linking textual information to each photograph. There are several ways this can be done:
Storing photos in named folders: example:

“Rangers/wilderness/LeConte/wildflowers/DSC0031.jpg” This allows for users to find specific photos without specialized applications and without the Full-Blown System implementation. However, photos must be duplicated to be stored in multiple categories. Also the amount of information retained is very limited and applies to all photos in the folder

Changing the name of the photo: example: “white columbine.jpg”

This approach has the exact pros & cons as storing photos in named folders, discussed in previous paragraph. Additionally, possible filename duplication becomes a problem – you might have 20 pictures of white

columbines. Choosing to label the picture “white columbine (1).jpg” makes it awkward to refer to the specific photo, and to remember what number to use for the next picture you take of a white columbine.

Storing “metadata” in the photo: example: in Adobe’s “Bridge” program, one can store a large amount of categorized information about each photo, including place, photographer, original filename, exposure settings, etc. This is a step in the right direction, however, it appears that metadata is application specific – the user would have to use the same application program to retrieve the metadata as was used to create it. (would have to use adobe bridge) (technical note: it might be that metadata is non-proprietary, allowing another program to read the information if properly programmed) So, the biggest drawback to this approach is that the information is not available to the general user of today’s network.

Trying to store metadata at this point in time (before the Full-Blown System is specified) implies that much work will need to be done to retrieve the data and move it into the Full-Blown System, once it is decided what that might be.

Storing the photograph’s filename in a separate informational database:

Example: A database contains a record with “DSC031.jpg” as the picture name, Rick Sanger as the photographer, 7/3/2009 as the date taken, etc etc. This is the best design for the Full Blown System, since databases are optimized for searches and can link to other programs, like the GIS database. However, this kind of system cannot be implemented by individuals in the field.

It should be noted that the “photo log” that the BC rangers are given by Sylvia IS a way to implement this system now. It allows for extensive details to be noted about each photo, but these details must be entered into the computer at a later date. There is some possibility of the details being mis-matched with the photos in this system.

What I suggest we do now: This season I have sorted my photos into folders with fairly understandable names. In a few instances, I duplicated photos I felt were important to be in two categories. Additionally, I’ve added more detailed information to the filename, *but retained the original name as well*. This allows for easy reference, and a unique filename. I did not add metadata as I am unsure of what system the park will use in the future, and didn’t want to waste my time.

Example: “Rangers/wilderness/LeConte/wildflowers/white columbine DSC0031.jpg”

Sorting photos into folders and renaming with more detailed information is something all backcountry rangers can do each season without specialized equipment (other than a laptop!). However, it is important to somewhat standardize the folder names and have clear definitions as to what goes in them. This will help with the implementation of the Full-Blown System. For example, if all rangers sort photos into a “wildflowers” folder, then that folder name can be converted into a “tag” for that photo in the future. But if some rangers use “meadows & wildflowers” as a folder name, then changing the folder names into

tags will require either the creation of two separate tags or a decision by the part of the programmer as to whether each photo can be placed into some other pre-existing tag - it gets messy.

Note that the folder name will lead to the creation of multiple tags in the Full-Blown System: for example: LeConte 09/wildflowers/ yields the tags “Sanger” “2009” “LeConte Patrol” “wildflowers.”

Here are suggested standardized folder names: Archeology, flowers, scenery, gallery (what I consider my “best photos), routes & landscape (photos useful for route planning or known routes), wildlife, rehab (for restoration projects), meadows, facilities (cabin, toilets, etc). I also have other folders that are specific to my area or my projects, and I believe each ranger should generate more specific folder names and subfolders as they feel is best to categorize their photos.

Campsite inventory corrections:

I’m not sure if the campsite inventory is being kept current, or if it is a done deal. In any case, here are some corrections

35593, 41086	should be on other side of river,
11S 0355970 4108580	“boulder site” across trail from site above
39-1-28	Has 3 sites
39-1-18	Has 4 sites
New0359285, 4102398	trail crew knock box & camp
New	UTM(nad83) 356022, 4108566 north of trail “danny’s site”

Track Logs

Circular path in Big Pete	For my use, demarcates meadow
Linear track, lower big pete	Walked from one end of drift fence to the other, then back to trail
Linear track, deer meadow	Drift fence
Linear track, ladder meadow	Drift fence
Linear track, Dusy trail junc	Drift fence

Location of old precipitation guage

0359202, 4106425 (nad83)

(picture shows pieces,
cutup & ready for flight)

L. Personal Equipment

Let's just get one thing clear, those convertible pants really ... don't work. The elastic is way too tight on the waist and the legs, you can't slip the cuffs off over your boots, the cuffs are designed different year-to-year so I've been on more than one patrol with only one useable cuff... *and* the color is horrible.

Which leads me to say that whoever came up with the idea of buying the rangers light-weight *functional* parkas should be made queen. I even love the patch. Thank you thank you thank you!!!!

Any chance we can get convertible pants next year?

Yosemite Mountain Guides

received clothing discounts with Columbia Sportswear to use their new line of light-weight gear – and the guides use the stuff cause it's good!

Other gear feedback:

Mountain Hardware Phantom 15, 800 loft: A godsend. Buy more!

Osprey Aether 85: Awesome: thanks Deb!

Heat Sheet bivvy (adventure medical Kits): worked great until it gets too wet inside.



M. Needs for next year

First Priority

Current compendium
First aid tape, ½" 5 rolls
Sheet rock screws (about 1.25" long), handful
Ace bandages (5 each)
aspirin for EMS kit
paper tags with strings
Foam mattress (2 each) (note that blue, "sleep quality" foam will last much longer than the foam currently purchased.) **Large pad found in cache & put on pallet**
Clear safety goggles for chopping wood, etc
Spare Fuses for toilet & solar regulator (value needs to be researched)
"L" stock made by trail crew to reduce angle of solar panel & provide bracing from snow load.
Stainless steel dish scrubbie
Toilet brush & holder
Spray bottle
Katydyn Hiker: replacement filter (**found one in cache & put on pallet**)
(NOTE: 12V sat phone charger is broken. Will charge on 120 volt charger)
Dish towels
Pot holders (2 each)
Mattress covers
Brown report cover (bendable metal holds report thru 2 holes)
Staples, just a few reloads
dish gloves, large size , 2 pair
burlap bags (gunny sacks) for hauling trash, 10 ea

Second Priority

Fire starter (gel or sticks)
Interior paint, 1 gal white (for walls), 1 gal grey (for floor)
Hack-saw blades (for metal) 2 ea
Metal spatula
Large serving/cooking spoons, 1 slotted, 1 solid
Spring hinges for screen door (NOT to mount flat, but rather at right angle when closed)
Nomex shirt
Crampons
Mt. Thompson 7' quad
Troubleshoot cast iron propane burner. made by Hurricane products 800, 624 4711 Suspect current regulator is either not correct or broken because low flames die out. Perhaps need new regulator needs to be 11" W.C. McClure's works fine & uses Cavagna Group model 718B. LeConte has same regulator, broken?

Third Priority

Old station logs (have, 74, 76, 89, 92, 97)

Overpressure plug, 800 877 0441 or www.gopresto.com, model 0136001

NOTE: NOT at station:

Climbing rope & rack

Equipment Request:

1 Lit Platypus with valve on end	
Heat Sheet bivvy (adventure medical Kits):	
“Neolite” sleeping pad	

N. Recommendations

- write letter to kayak user representative asking how we can address the issue of abandoned kayaks and to pass the word about minimum impact fire rings (I have a phone number, see discussion above)
- small edits to forage guide (see discussion above)
- program radio with new east side forest service frequencies (Keith waterfall suggests “(b) Repeater,” “(b) (7) Repeater” & “(b) (7)(F)” repeater).
- troubleshoot windy repeater... experiment with purposefully leaning the tower? (see discussion above)
- make sure rangers given all relevant regulation hand-outs before entering the backcountry (see K. above)
- consider suggestions regarding photo cataloging, specifically having rangers sort photos into specific folders and add descriptions to existing file names in preparation for a future full-featured photo database
- buy rangers decent convertible pants
- have Wilderness office to provide known CUA itineraries at season start (wasn't able to download easily due to limited time & access to network)

O. Projects for Next Year

Find stock camp in palisades

Rehab use trail on south side of Helen lake outlet

Continue to restore candidate sites

Set up trail register

Change angle of solar panels on toilet

Find soda springs at confluence

Clean up ancient fire rings around confluence

Kayak patrol (follow group down middle fork)

Look for cabin shingles at palisades junction, ejectn seat up nowhere drainage

Prime aluminum security door & paint, put 6” hasps on window shutters, paint shutters.

P. Pertinent Inventory:

Beginnings of digital inventory in “Inventory.doc”



Rick & Suzanne's Wedding in Little Pete, Aug 13, 2009.



Little Five Lakes from Blackrock Pass Trail

End of Season Report

Little Five Lakes Ranger Station
June 2-September 30, 2009
Alison Steiner



Moraine Lake

A. Visitor Services

a. Contacts:

- i. Backpacker/Dayhiker: 835
- ii. Stock (please refer to stock use observation forms for more accurate information):
 1. Total Animals/Total Use Nights: 24/53
 2. Commercial: 14
 3. Private: 4
 4. Administrative: please refer to maintenance records

b. Law Enforcement/Citations:

Two citations were issued for violations in the Little Five Area this summer—the first to a group improperly storing food in Nine Lakes Basin, the second to a hiker without a permit. As always, education proved the most effective means by which to handle law enforcement situations.

c. SARs and Medicals:

Date:	Location:	Type:	Evacuation/Resolution:
7/8	Little Five R.S.	Visitor Assist (EMS): 16 yr. old female w/lacerated finger	Response by (b) ; resolved without significant NPS intervention
7/29 We	Forester Lake	Medical: 52 yr. old male complaining of chest pain	Response by (b) (7) ; helicopter evacuation (ALS)
7/30 a t h e	Little Five R.S.	SAR: man separated from party while hiking from Franklin Pass to Little Five	Response by (b) ; party found at Big Five Lakes on 8/2



Leader of Black Mountain Expeditions
bandaging lacerated finger (7/8)

d. Fatalities:

There were no fatalities in the Little Five Area this summer.

e. Weather:

The season started with unusually cold, wet weather. In early June, six to twelve inches of snow fell in the high country. This meant that area passes held snow into mid-July, despite a below average winter snowpack. Aside from significant thunderstorm activity in late July, the rest of the summer was generally clear.

In early August, a system more typical of late September moved through the area. From August 5 to August 8, daytime temperatures at Little Five were as low as 40 degrees. Fearing sub-freezing temps and snow flurries, many visitors fled the backcountry prior to this storm.



Fog on the Great Western Divide (8/7)

f. Fires:

A series of thunderstorms in mid-July started several fires in Sequoia's backcountry, the most significant of which was the Horse Fire on the Hockett Plateau. The fire was monitored throughout the season and had grown to approximately 400+ acres by September 30.



View of Horse Fire from Hockett Plateau (7/19)

McClure Ranger Station

2009 End of Season Report

Ranger Dave Gordon

General Summary

This was another much-less-than-normal snowpack season (about 60% of the normal spring snowpack in the northern portion of the Park) – this made for easier than usual crossings of passes and creeks. Visitation in the backcountry was very high with an especially high proportion of hikers doing the JMT. There were also a near record amount of “PCTers” early season – estimates indicate about 400 having started, about half of which make it to McClure (the 1/3 way-point of the 2,650 miles). Bugs at McClure (mosquitoes and flies) were milder than most seasons, and were mostly gone by early August.

Visitor Contacts / Patrols

	Visitor Contacts	Miles Patrolled
June (16 days)	111	84
July	401	179
August	837	167
September	287	163
October (5 days)	24	29
Totals	1,660	622

Contacts were mostly with backpackers, except for about a dozen day hikers contacted near Piute Creek and 5 “ultra-runners” doing the N. Lake-to-S. Lake, 56 mile loop in one day. 17 stock groups were contacted (11 commercial, 4 private and 2 administrative) consisting of 74 stock users (including clients) with 94 horses/mules, 2 burros, and 2 llamas. Most commercial groups were from High Sierra Pack Station, and there was one group each from Bishop Pack Outfitters, Rainbow Pack Station, Rock Creek Pack Station and Muir Trail Ranch.

Law Enforcement

Almost every group contacted was checked for possession of a Wilderness Permit and asked how their food was stored at night. As with recent seasons, very few groups did not have bear-proof canisters and would hang their food – those groups were given instructions for proper hanging. 37 LE case cards were issued, which included 15 verbal warnings (7- tents on vegetation; 1- permit left in vehicle; 3- camp too close to water; 1- camp too close to trail; 1- stock manure not completely removed from camp; 1- search dog, in training, in Wilderness; 1- inadequate food hanging). “Unknown suspect” infractions included: 21 illegal campfires and one improper disposal of human waste. Two citations were written: one for no Wilderness Permit, and one for improper food storage (food left on the ground, unattended, at campsite).

Search, Rescue, and Medical Incidents

Date	Location	Type	Disposition
7/30	Darwin Canyon	Ankle Injury	Helicopter Evac
8/22 & 23	McClure Meadow	AMS/HAPE	“
9/16	Colby Meadow	Knee Injury	“

There were also case cards issued for ten “Visitor Assist – EMS”: 3- advice for mild AMS; 5- advice for sore ankles, knees, and leg muscle; 2- analgesics and/or bandages given to visitors.

Weather

This summer was a stormy one with many cloudy afternoons, but surprisingly little lightning or precipitation from monsoonal flows. Also several very cold fronts moved quickly through the Sierra (one in August, two in September) resulting in cold, windy, cloudy days, but again without measurable precipitation. On 10/4, it snowed 3” at McClure, the day I left for the season.

Use Patterns

Visitation was very high this summer with a higher proportion of JMT hikers comprising about 60% of contacts (mostly from Yosemite to Mt. Whitney). Other routes noted include about 20% N. Lake to/from S. Lake; 5% “PCTers”, early season; 10% to/from Florence Lake; 5% miscellaneous, including cross-country routes: Lamarck Col/ Darwin Bench, Davis Lake, upper Goddard canyon, Ionian Basin, McGee Lakes and Lake 11,106’. Wanda Lake to Goddard Canyon via Davis Lake and North Goddard Creek has been especially popular due to information found on the internet (without specifics on problem sections or degree of difficulty for inexperienced or under-conditioned hikers).

Organized groups encountered consisted of 8 Boy Scout troops, 3 high school groups, one Sierra Club (non-commercial), one college, and 2 Mt. Travel Sobek walking groups with stock support.

Stock usage was similar to last season, with exception of only two administrative groups seen – Ranger mobilization and demob, at the beginning and end of the season. 4 private stock groups were contacted: one with 2 llamas, one with 2 burros, and two with horses/mules. Several stock groups traveled over Muir Pass from the north and through the entire length of the Park (out over Cottonwood Pass).

Natural Resources

No bears or bear scat were seen by me throughout the patrol area, as was the case last year – nor were there any reports of any bears seen in the patrol area. Three Long-tailed Weasels were observed early season, and many coyotes were seen or heard late season.

Meadows that were open to grazing in Evolution Valley, McClure and Evolution, experienced relatively light grazing. There was no evidence of grazing in Colby or Darwin Meadows, which were closed to grazing this season. The only delay to grazing opening was for 10 days at Evolution Meadow (7/1 to 7/10), due to wet condition and immature growth (few seed-heads). RB monitoring expanded this year with the addition of “Core” and “Reference” plots at McClure, along with the previously monitored plots at Colby and Evolution Meadows.

Cultural Resources

Two archaeologists from Yosemite (working for Tom Burge) were assisted for several days in mid-August documenting (b) (3) (A), (b) (3) (B) sites in (b) (3) (A), (b) (3) (B). When (b) (3) were found, the site was GPS’d, mapped, and described as to what was found, terrain description, and location relative to landmarks.

Ranger Station

A “Building Inspection” / survey was completed for the cabin and outhouse – 43 photos were taken, measurements recorded, and floor plan and site map drawn. Work done on the cabin included: east window caulked; guy wires secured to the stove pipe above the roof; and solar controller load wires connected to a 24-terminal bus-strip (eliminating all wire-nut junctions). Also, construction remnants (metal scraps, hardware, etc.) and miscellaneous useless gear was consolidated for future helicopter back-haul (including “the kitchen sink”).

Trails/Signs

Routine trail work was done by a trail crew for about two weeks early season on the JMT and Goddard Canyon trail: less than ½ dozen trees needed clearing; water-bars were shoveled.

Four new signs were erected: a “Stock Camp” sign was placed to identify the new Evolution Meadow stock camp; a “Park Entrance” information sign was placed near the east end of Florence Lake, by trail crew; two high-water, alternate route caution signs were placed at each end of the route: one at the Evolution Creek crossing, and one at Evolution Meadow. An unfortunate, unintended consequence of these signs was that many more hikers went through the fragile meadow route, in spite of relatively low water level at the trail ford – next year the signs will be left up only until the water level is no longer a problem.

Drift Fences

All three drift fences are in fair to good condition and are fully functional with ongoing, routine repairs of gates, wires, and fence posts. They were assessed for condition, GPS locations, measured lengths/directions, and photographed every 15-20 ft. – summary is on “2009 McClure Area Drift Fences Photo Log”. A potential site for a new Colby Meadow drift fence was located about half way between Colby and McClure Meadows (346071 x 4116823).

Camp Areas (see “2009 Campsite Rehab Photo Log and Summary”)

21 campsites were obliterated with rocks, tree debris, and occasionally half-buried, large boulders as part of the campsite rehab program. Most of these sites had been previously slated for obliteration during the campsite survey phase of the project in 2006 and 2007. Sites were either too close to water, too close to trail, or otherwise in a sensitive location. A couple of sites were not originally earmarked for rehab/obliteration, but were in my opinion, just as necessary to eliminate. Some of the sites on the survey list had already been rehabbed in 2008 or experienced natural rehab, requiring little or no action. Included in the summary log are two large fire pits that were photographed before and after destruction, as examples of typical, routine fire pit removals.

171 fire pits were cleaned and/or reduced in size this season, and 41 fire pits were destroyed. Most of the 41 were illegal (above 10,000 ft.) fire pits at McGee Lakes, Darwin Bench, Evolution Lake, and upper Goddard Canyon. About a dozen destroyed fire pits were built in sensitive sites (granite slabs or meadows) or near an existing fire pit. 11 pits were destroyed in conjunction with the campsite rehab program.

Permit System

Most Wilderness Permits that were issued to hikers came with regulations attached, and provided thorough minimum impact camping information – of course, not everyone reads “the fine print”. Many hikers do not know to pack out used toilet paper, to not burn foil/plastic containing food

packaging, or to not build or modify fire pits. Some don't know not to erect a tent on vegetation, or how to hang food properly.

Communications

Radio communications worked well this season with the (b) (7)(F) repeater – rarely did I need to use a telescopic antenna. There are only a few known dead spots (such as the (b) (7)(F) Lake) in the patrol area.

Additionally, the availability of a satellite phone was of tremendous benefit for both myself and visitors. I used the phone to contact Dispatch for case card numbers, Debbie Brenchley with weekly reports, and occasionally other rangers to exchange wilderness information, that otherwise would have tied-up backcountry radio traffic. About 30 brief calls were made by visitors to family/friends regarding trip delays or changed routes, due to injury, weather, or slower than anticipated hiking.

Recommendations

1. A task for this season was to identify a possible location for a new drift fence below Colby Meadow. The best location is about half way between Colby and McClure Meadows (346071 x 4116823); however, I believe we should wait until more information is obtained regarding the usefulness of the fence. Next season, McClure is scheduled to be closed to grazing, and it can be monitored for stock that migrate into it from up canyon. George Durkee has stated that when the meadow was closed in 2006 & 2007, only a couple of groups of stock came down into McClure each season, and only for part of the night. In my opinion, preventing this level of grazing at McClure may not justify a new fence, especially considering McClure's reduced level of overall grazing during the last 10 years, and its high grazing capacity.
2. The drift fence near the second (steel) bridge on the South Fork of the San Joaquin River could be eliminated with the use of a simple gate attached to the south end of the bridge. At Roaring River during the 1994-1996 seasons, just a single steel pipe at the end of the similar bridge kept stock from crossing the bridge. This idea was discussed with D.J. (5-5-7), and he could not think of any problems, from a packer's perspective.
3. As mentioned before, many hikers do not know that used T-P should be packed out. I suggest that large ziplock baggies be given out (one per person) with permits. Labels on the bags could have sanitation information (bury waste 6-8 inches at least 100 feet from water, etc.). After a couple of years, most hikers would at least know of this regulation.
4. Although I did not cite for any dogs in the Wilderness, it seems that many hikers are attempting to sneak their dog(s) by the rangers (even at night). When caught, the dog owner should not only be cited, but also put on the "local file" with Dispatch and given a warning that the next infraction will result in a mandatory court appearance.
5. A "cross-country hiking checklist" could be given out with a permit for those who plan to hike off-trail. Many hikers traveling over Lamarck Col or the Davis Lake/ N. Goddard Creek traverse, do not have the experience or the conditioning for the degree of difficulty of these routes. These and other issues could be addressed on the checklist. "A group is only as strong/capable as its weakest link".

6. Not all campsites that have been slated for obliteration during the campsite survey of 2006 & 2007 should be eliminated – many are good sites, but perhaps 50-100 feet from water, and are needed because of high demand, especially in August.

McClure Ranger Station
Needs for 2010

30 small, clear plastic bags
12 large, brown plastic bags
1 box "extra large" latex medical gloves
6 mouse traps
1 book of citations
1 7 ½ gallon propane tank
3 rolls medical tape
1 fireplace lighter
1 hand sanitizer
1 box assorted "band-aids"
4 kitchen sponges
10 CUA Monitoring forms
10 AUO time logs
1 black logbook (7530-00-274-5494)
24 AA batteries
8-12 AAA batteries
2 packages paper towels
1 box fence nails (U-shaped)
20 SAR brochures
20 PCFs
1 aluminum snow shovel (wood handle)
4 stamped NPS envelopes
12 4 oz. MSR propane/butane fuel canisters

McClure Ranger Station
Consumables Inventory (on hand October 2009)

8 gallons propane
4 propane canisters
10 rolls toilet paper
2 packages paper towels
3 quarts window cleaner
1 gallon simple green cleaner
2 gallons white gas (Coleman stove)
8 AAA alkaline batteries
7 AA alkaline batteries
4 AA lithium batteries
1 gallon bleach
1 quart laundry detergent
1 pint dish soap

2009 Campsite Rehab Photo Log and Summary

Photo #	Date	Campsite #,GPS, or Location	Action Summary	Fire pit Destroyed	Direction of Photo	Before or After	Notes
9 10	7/3 "	33-1-7	Filled with rocks		E "	B A	Lake 11,106'
11	"	33-1-6	No action – Natural rehab		E "	A	"
12 13	" "	33-1-5	Moved logs & rocks	yes	S "	B A	"
14 15	7/4 "	¼ mile below Sapphire Lake	Filled with rocks		NW "	B A	"
16 17 18	7/8 " "	33-4-3	Filled with rocks and ½ buried boulders		W " NE	B A A	McClure
19 20	" "	33-4-24	"		W "	B A	Below McClure – see also #95
21 22	" "	33-3-29	"	yes	W "	B A	Below McClure – see also #96
24 25	7/15 "	33-3-18	Filled with rocks	yes	NW "	B A	
26 27	7/16 "	28-2-6	"	yes	W "	B A	
28 29	" "	28-2-7	"	yes	S "	B A	
30 31	" "	28-1-1	"	yes	SW "	B A	
34 35	7/20 "	34-1-20	"		SE "	B A	
36 37	" "	34-1-22	"		E "	B A	
78 79 80	8/7 " "	346685 x 4116471	"	yes	E " "	B A A	Above Colby
81	8/9	349134 x 4115230	"		S	A (only)	Evolution Lake *
82	"	34-1-19	"		S	A (only)	" *
83 84	" "	34-1-12	"		S "	B A	"
85	"	34-1-11	No action – Natural rehab		S	A	"
86 89	" 8/14	34-1-40	Filled with rocks		NE "	B A	" Out of sequence *
87 88	8/9 "	Darwin Creek Near JMT	Example of fire pit destruction	yes	SW "	B A	
95	8/16	33-4-24	Add more rocks		W	A	*
96	"	33-3-29	"		W	A	*
97	8/26	343873 x 4117570	Filled with rocks	yes	W	A (only)	
98 99	8/27 "	28-1-11	Destroyed fire pit On granite slab	yes	S "	B A	Piute Creek
100 101	" "	28-1-19	Filled with rocks Destroyed 2 fire pits	yes (2)	W "	B A	"
102 103	" "	Piute Creek Bridge Near JMT	Example of fire pit destruction	yes	NW "	B A	"
104 105	" "	28-1-6	Filled with rocks		N "	B A	"

* 2 Boy Scout troops assisted with adding rocks to these sites

**PEAR LAKE
END OF SEASON REPORT
2009
Christina Gooch**

A. General Summary

The Pear Lake Ranger Station was staffed from June 21 through September 30. This was somewhat of a transitional time, being my first season at Pear Lake with much to catch up on and learn quickly. However, I think things went smoothly and that it was a successful and productive season. It was also a very busy season, but there were no large incidents in the area.

Statistics:

	Visitor Contacts	Miles	EMS	SAR	Fire Pits	OB Campers
June/July	533	176	1	0	5	5
August	532	139	2	0	2	6
September	451	161	0	0	3	3
TOTAL	1156	476	3	0	10	14

B. Visitor Services

a. Contacts

i. Day-Hikers and Backpackers

The majority of my contacts this year were backpackers (about 60%), but the area was very popular with day-hikers as well. I contacted over 200 backpacking parties, ranging in size from 1 to 15 members per party. The Lakes Trail and Alta Trails continue to be extremely popular destinations, as do cross-country routes to the Tablelands and Moose Lake.

ii. Stock

All the stock I encountered in the area this season were NPS stock from the Wolverton Pack Station. Two maintenance projects (the emptying of the Pear and Emerald Phoenix toilets and the station reroofing) were supplied by stock, and the ranger station mobilization and demobilization were carried out by stock as well. The pack station also had 2 hired trips to Pear Lake. One of these groups stayed at Pear Lake for several days; the other was getting a head start on a cross-country route ending at Cedar Grove.

iii. Groups

I encountered quite a few organized groups staying in and passing through the area this season, including:

- Outward Bound (2) – passing through the patrol area as part of a 22 day trip.
- Sierra Club (1 national, 2 local chapters) – passing through Pear and Emerald as part of longer cross-country trips.
- UC Santa Cruz (3) – first-year orientation groups, backpacking through Pear and Emerald Lakes, Moose Lake, and the Tablelands.
- Boy Scouts of America (1) – staying at Pear Lake.

b. Law Enforcement

This was the first season in quite some time that the Pear Lake station was staffed by a non-commissioned ranger, and I think the arrangement worked out well. I encountered very few situations that I felt required a law enforcement officer on scene; I was also able to work with frontcountry law enforcement in Lodgepole, who were very helpful in contacting parties and issuing citations when necessary.

Out-of-bounds camping was the most common regulation infraction I encountered this season. 6 of these incidents occurred at Pear Lake, 7 at Emerald Lake, and 1 at Heather Lake. This was followed by food storage violations at Pear and Emerald. Out of the 200+ backpacking parties I contacted over the season, 4 parties were backpacking without a wilderness permit. I worked with frontcountry law enforcement to issue a citation to 1 of these parties. Lastly, I saw evidence of numerous fires at Pear and Emerald Lakes, but was unable to contact any of the responsible parties in action.

c. Search, Rescue, Medical Incidents

<u>Date</u>	<u>Location</u>	<u>Type</u>	<u>Evacuation</u>
07/25	Pear Lake	Back Pain	Helivac
08/01	Pear Lake	AMS	Escort to Wolverton
08/10	Tokopah Falls	Fatality	Short-haul body recovery

There were 2 medical incidents in the Pear Lake area this season. The first involved an 18 year old female complaining of back pain, who was helivacked from Pear Lake. The second involved a 10 year old male suffering from symptoms of AMS, and with a history of experiencing AMS on his two previous trips to Pear Lake. I accompanied him and his father to Wolverton, and his condition improved immensely with the drop in elevation. Lastly, while on a lieu day in Lodgepole, I was involved in a fatality near Tokopah Falls. I remained in Lodgepole for 2 more days to attend the incident's After Action Review and CISD.

The only notable searches in the Pear Lake area involved preparation and planning and/or hasty searches for separated hikers who were found shortly after being reported. This occurred on 3 occasions.

C. Use Patterns

As mentioned above, the Pear Lake area is a very popular destination for both day-hikers and backpackers. Many of the day-hikers I contacted stopped at the Watchtower or Heather Lake, while many continued all the way to Pear Lake.

The majority of the backpackers on the Lakes Trail this season were coming from Wolverton and staying at Pear or Emerald Lakes. A significant number (around 20-30%) continued on to Moose Lake or the Tablelands, and a small percentage of those pursued longer cross-country routes, ending at Cedar Grove (via Cloud or Deadman Canyon) or Crescent Meadow (via Bearpaw).

The current quota numbers seem to be appropriate as the campgrounds rarely overfilled. At times, however, one campground was completely filled while the other was nearly empty. It seems that a better balance could be achieved if the trailhead desk kept track of how many parties were destined for each campground; however, this may be impractical as significant numbers of parties alter their intended itinerary once on the trail (due to fatigue, impulsiveness, etc).

D. Natural Resources

a. Research Equipment

There are several active research projects in the Pear Lake area. Steve Sedrow's research continues in Emerald Lake. Kevin Skeen also has instrumentation in Emerald Lake and the lower Marble Fork. The buoy in the middle of the lake continues to attract attention and concern (as it is often mistaken for a small child), but Kevin informed me that it is scheduled to be removed in the near future. This season Kevin was also supposed to reconfigure mounts on his instrumentation that were throttling trees in the lower Marble Fork; I am unaware of whether this reconfiguration ended up occurring or not. Something to check on next season.

I also had researchers (Lena Coleman and Paul Wilson) at Pear Lake from Cal State Northridge, studying the occurrence of bryophyte populations in high elevation lakes and streams.

b. Bear Activity

I heard no reports of bear activity in the Pear Lake area this season. I heard 2 reports of a bear swimming in Heather Lake on different occasions, and several reports of bear activity near the Hump and the Watchtower. Many visitors encountered bears lower on the Lakes Trail near Wolverton. I only encountered one bear (in The Fold drainage) on cross-country patrol.

c. Wildlife

Coyote activity was extremely high in the Pear and Emerald Lakes area this season. The coyotes in the campgrounds were quite bold, coming right up to campers and not being hazed away easily. Their calls were frequently heard in the morning and evening throughout the Lakes area and Marble Fork drainage.

Pikas were seen regularly along the Lakes Trail above the Watchtower, and were particularly abundant in the Pear Lake and ranger station areas.

Mice were abundant in the cabin all season, tapering off somewhat in August and showing up in large numbers again in mid-September. I estimate that I caught over 50 mice throughout the season. I also (surprisingly and sadly) caught 3 shrews in the mousetraps. In addition to shrews and mice, there is at least one resident wood rat living in the cabin's upstairs, and numerous marmots living in the basement.

E. Cultural Resources

F. Backcountry Facilities

a. Pear Lake Hut

The cabin seems to be in good shape. Thor and 4 other members of the Historic Crew are in the process of giving the building a bit of a face-lift at the time of writing, with a new roof, front door lock, and the filling of critter holes in the window and vent chinking. They are also fixing a cracked bench and a broken window handle.

The clivus was also emptied in early August. However, the 7 bags of waste sat in the station basement and were not packed out until my demobilization on September 30. As described below in reference to the Phoenix composting toilets, such a delay in removal is unacceptable. In the future, waste must be packed out immediately after emptying in order to prevent rodents from chewing through the bags and spreading waste on the basement floor. The bags also cause the station to smell quite nasty.

b. Propane System

Last season plans were made to improve the cabin's propane system. These plans were partially implemented (hard line feeds with easily accessible shut-off valves were installed from the tanks into the station); however, there is still a significant amount of work to be done to complete them:

- Replacement of flexible copper lines with standard black iron pipe
- Building of a protective box to house the 4 propane tanks
- Installation of a propane alarm in the basement

The propane alarm and wiring is currently at the station, but will require metal casing to protect the wires in the basement before it can be installed. This is due to the high marmot activity in the basement and their tendency to chew on everything possible.

c. Pear Lake Hut Roof

The station is getting a (much-needed) new roof this season! In addition to replacing all of the shingles, the Historic Crew is treating the rafter tail ends with preservatives, re-chinking missing mortar (critter holes) in the windows and vents, and fitting the front door with a new lock.

d. Solar Power

The solar equipment at the cabin seems to be working well. The batteries rarely dropped below "green", and provided plenty of power for summer needs. The solar-powered 8v ice chest was also very useful, chilling the food by day and insulating it by night. This allowed fresh food to be stored significantly longer.

e. Phoenix Composting Toilets

The composting toilets at Pear and Emerald were a source of mixed blessings this season. We were lucky enough to get both facilities emptied (which had not occurred in several years, causing the toilets to become alarmingly full). Mike Lovett and a crew of 4 spent several days in early August emptying the tanks, filling up 55 bags of poop from the Pear

toilets and 38 bags from the Emerald toilets. These bags were supposed to have been packed out by stock immediately after they were filled. Instead, due to miscommunications among maintenance, packer, and backcountry staff, the bags were allowed to sit in the lower half of the bathrooms for the rest of the season, being chewed through by rodents, leaking onto the floor, and creating a terrible stench. This is where the bags remain at the time of this writing.

Mike would like to make the emptyings an annual event, so that no one is stuck with having to shovel out such a high volume of waste again. I think this is a great idea; however, **it is imperative that the waste be packed out immediately after removal from the tanks.** I would suggest the waste be packed out no later than 3-4 days after removal.

Visitor responses to the toilets changed significantly during the season due to this problem. At the beginning of the season, I received numerous rave reviews of the toilets. People were thrilled to find them there, impressed with the condition of the facilities, and amazed at the minimal odor. By the end of the season, however, I heard nothing but complaints, as the porous bags of waste caused the bathrooms and surrounding areas to smell terribly.

It should also be noted that Emerald still needs a new solar mount, and both Emerald and Pear need new 12v batteries for the fans.

f. Heather Lake Toilet

The Heather Lake pit toilet is, in my opinion, a mess. First of all, the structure itself is rickety and falling apart. Secondly, the pit looks more like a trash dump than a toilet. It has been reported in previous years that winter melt creates a stream flowing into and out of the pit, carrying all the sewage with it and leaving only trash. Apparently no better site for the toilet has been found.

Due to the high use of Heather Lake, getting rid of a toilet completely is not an ideal solution. However, I do recommend putting effort into finding a better spot to rebuild a pit toilet or finding an alternative type of toilet (vault?) for the area.

G. Trails

a. Trail Work

There were no trail crews in the area this season. Windstorms caused 2 small trees (8-10 inches in diameter) to fall across the trail in August, one ¼ of a mile above the western Hump-Watchtower intersection (pictured below) and one just above the Watchtower. I used a handsaw to remove the trees, and destroyed social trails that had started to develop as people skirted around the trees.



Recommendations for future trail work include the following, and were sent to Sequoia Trails in previous seasons by Rick Sanger:

- Build stream crossing on Panther Gap trail to avoid continued meadow damage.
- Rebuild large, muddy area on Alta Trail (1/2 mile east of Panther Gap).
- Install water bars near top of the Hump Trail.
- Rebuild trail at Mehrten Meadow where camp use-trail has eroded the integrity of the main trail.

b. Trailhead Signs

Wolverton Trailhead – The signs at the trailhead could use renovation, and in my opinion should emphasize:

- Permits are required for overnight use, and are available at Lodgepole.
- No fires anywhere along the Lakes Trail (mention fine?)
- Active Bear Area. Bear canisters and bear lockers are the only effective food storage methods. Bear canisters are available for rent at Lodgepole.
- No pets allowed on trail.
- Watchtower vs. The Hump – a note recommending the Watchtower to all users except those concerned about heights and those riding stock. (Also good to include at the Hump-Watchtower intersection.)

c. Trail Signs

Heather Lake – The sign stating “Day Use Only – No Camping or Fires” seems to be a little too far from the actual lake for people to make a connection. The sign is currently

posted just east of the Hump-Watchtower intersection, at which point the lake is not yet in view. I think the sign would be more noticeable and more effective if it were moved 200 feet down the trail (in view of the lake, close to the “Toilet” sign and an obvious OB campsite).

Pear and Emerald Lakes – The bulletin boards at the Pear and Emerald Lake campgrounds are worn and in poor shape. New signs should be created and posted, including:

- Maps of the designated campsites
- No Fires (mention fine?)
- Permit required for overnight use

H. Camp Areas

a. Area Overview

One of the biggest things I noticed about the Pear Lake area is that Pear and Emerald seem to be stuck in a grey area between frontcountry and backcountry camping sites. While they are 6 miles from the trailhead and technically “backcountry areas,” the presence of designated camping sites and toilet facilities gives them a kind of frontcountry feel. Due to these “frontcountry comforts” and the relatively short hike from Lodgepole, Pear and Emerald seem to attract a larger number of inexperienced, uneducated wilderness travelers than some of the park’s other backcountry destinations. The area’s visitor population therefore seems to include large numbers of both backpacking-savvy wilderness seekers that are disappointed with the area’s established features (toilets, sites, etc), and novices that are not as familiar with minimum impact and Leave-No-Trace ethics. This dynamic results in a dichotomy of problems, with the former group being, for example, more likely to camp OB (in defiance of the wilderness-experience-crushing “designated sites”), and the latter being more likely to store food improperly and leave behind trash.

While this is not necessarily a problem that can be or needs to be remedied, I think it is a tricky situation unique to the Pear and Emerald area and something for the Pear Lake ranger to be aware of. It’s also something to keep in mind when reforming and improving signs, campsites, etc., and for the trailhead desk to keep in mind when issuing permits and providing information about the qualities and features of each trail.

b. Conditions

Both the Pear and Emerald Lakes campgrounds stayed in relatively good condition this season considering the extremely high use they receive. I do believe the numbered carsonite campsite posts need to be replaced, as they can be difficult to see, making several of the designated sites hard to find. New posts are at the station and have been painted and numbered, and just need to be installed in the campgrounds. I think that making these markings clearer would cut down significantly on the number of out-of-bounds campers, many of who attempted to but simply could not find the sites.

c. Fire Evidence

I found a significant amount of fire evidence at both Pear and Emerald this season, and destroyed 10 different fire pits. While there are signs at both lakes stating “No Fires,” I think the number of fires could be effectively reduced if the fine (dollar amount) for having a fire was mentioned as well. While I doubt that anyone on their wilderness trip would enjoy seeing unpleasant, threatening information about fines, I think protecting this fragile and highly impacted area should take precedence over catering to the types of signs hikers would like to see. Such information could be posted directly with the “No Fires” sign in the campgrounds. It could also be posted on sheets on the inside of the bathroom doors (one surefire way to get people to read something), along with information on *why* fires are prohibited in this area. I think that educating people on the reasons behind this regulation (**lack of wood**, scarring of rock and ground) is very important, and it is not currently done by signs or information sheets in the campgrounds or, to my knowledge, by the trailhead rangers issuing wilderness permits.

d. Food Storage

Most of the visitors to Pear and Emerald used the bear boxes in the campgrounds. Several carried canisters. Almost all parties I contacted that were traveling cross-country (away from the bear boxes) were carrying canisters; the only parties that were not were 3 large groups from UC Santa Cruz, who were hanging and counterbalancing.

I think the bear boxes at Pear and Emerald are essential for maintaining a high level of proper food storage. The boxes are in poor shape, however – they are difficult to open and close and they are not mouse proof. I would recommend replacing them (particularly the lower box at Pear Lake).

I. Permit System

Nearly all of the backpackers I contacted this season left from the Wolverton trailhead, obtaining their permit at Lodgepole. I think the Lodgepole trailhead staff did a very good job informing and educating visitors about area rules and regulations. I do think it could be effective (as I have mentioned before) to mention the reasons behind some of the regulations (such as camping in designated sites and the ban on fires), and to perhaps mention the fine for fires.

Communication with the trailhead rangers was adequate. They did inform me of specific parties to be aware of (large groups, noncompliant or troublesome groups, etc), which I appreciated. They occasionally, but not always, informed me when they planned to patrol in the Pear area (which they all did at least once). I would have liked to know of their plans to be in the area each time, as it would have provided an opportunity to discuss patrol issues, etc.

One suggestion that I have for the trailhead desk is to address large groups as a whole. There are many large groups (15+ members) that use the Lakes Trail, and as it stands, usually only one person in that group gets the permit and hears the spiel about minimum impact regulations, etc. My guess is that this information rarely disseminates through to

the rest of the group. I would suggest that for parties of 6 or more, the trailhead ranger speak to the entire group (even if this means stepping outside the visitor center to where they are waiting) before issuing a permit.

J. Radio Communications

Radio communications on the (b) (7)(F) repeater were remarkably poor in the Pear Lake and station area this season. This surprises me, as Rick was apparently able to hear (b) (7)(F) traffic consistently at the cabin last year. There is only a small spot outside of the cabin that I was able to semi-reliably hit (b) (7)(F) in the mornings; however, in the evenings I could almost never successfully hear or communicate on (b) (7)(F). A base-station booster was connected to an antenna on the roof, but this seemed to make no difference in my reception. Coverage was slightly better at (b) (7)(F), but still very patchy and unreliable. It was significantly better at (b) (7)(F) and elsewhere in my patrol area.

(b) (7)(F)) was far more reliable than (b) (7)(F) at the station and (b) (7)(F), and was a viable backup almost everywhere else I traveled within the patrol area. As (b) (7)(F) was useless in the evenings in the station area, I used (b) (7)(F) to call out of service each evening.

General Use and LE Tac also worked remarkably well from the station area and along the Lakes Trail.

K. Needs for Next Year

- Burlap bags (for trash)
- Paintbrushes and stencils (for campsite posts)
- Metal wire casing (to protect propane alarm wires in basement)
- 10 bags wood chips (5 for Pear, 5 for Emerald)
- Distilled water for batteries at Pear and Emerald toilets
- Mount for solar panel at Emerald toilet

L. Recommendations

Recommendations have been made throughout this document. Main points include:

- Packing out clivus and Phoenix toilet waste **immediately** after emptying.
- Renumbering and better delineating designated sites at Pear and Emerald.
- Moving the Heather Lake “Day Use Only” closer to the lake.
- Replacing (**not remove**) lower bear box at Pear Lake.
- Inform visitors of the fine for fires (trailhead staff, sign in campground, sign in bathrooms).
- Having trailhead staff speak to *entire* group before issuing a wilderness permit if large parties are seeking a permit.

M. Pertinent Inventory

There are 6 full propane tanks at the Pear Lake Station. All fire extinguishers and O2 cylinders were pressure tested at the end of last season (2008). All other items from previous inventories remain, including EMS supplies, SAR gear (cache inventory was updated early in the season), winter SAR gear, sleeping bags and pads, and cabin living supplies.

**Rae Lakes
End of Season Report, 2009
Ranger Dario Malengo**

General Summary

I started hiking into the mountains from Onion Valley on June 17, 2009 after two weeks of training.

The first incident I came across was the second break in of the Charlotte Ranger Station by bears. I informed (b) (7) of this and was requested to evaluate damage and keep a lookout for the bears until the Charlotte Ranger arrived. The (b) (7) repeater was not working, so staying at Charlotte was the only option with radio comms.

On June 20, I hiked over Glen Pass to Rae Lakes to set up the station. The snow on the north side of Glen Pass was continuous for one and a half miles. I broke trail to connect with the upper switchbacks to make travel easier for the many early Pacific Crest Trail (PCT) hikers.

Station set up was easy, having done it so many times before. I also had assistance from (b) (7) (Anna Echter) from Cedar Grove, who was especially helpful the next day carrying supplies to the station from the helispot.

When (b) (7) arrived two days later we put up the new tent top which was a big improvement over the old one.

My season at Rae Lakes consisted of frequent patrols to the many popular hiking and camping areas; Sixty Lakes basin, the peninsula and isthmus areas of Rae Lakes, Arrowhead Lake, Woods Creek Crossing, Glen Pass and infrequent patrols to the many other areas.

I initiated 3 medical evacuations by helicopter, escorted one individual with AMS to a lower elevation (Woods Creek Crossing), assisted (b) (7) with a medical evacuation at Charlotte Lake and assisted many individuals with minor medical and other problems. I also participated in 2 SARs in the area.

Overall use may have been down a little compared to previous seasons, but Rae Lakes is still a very busy area. Having many campsites available helps disperse campers.

Visitor Services

Visitor Contacts and Hiking Statistics

	VISITOR CONTACTS	MILES HIKED
June	156	88
July	569	257
August	785	250
September	428	245
TOTAL	1938	840

Contacts

Most visitors are backpackers and end up staying overnight in the area (between 60 Lakes Jct and Dollar Lake).

Occasionally day hikers come into the area. One group day hiked the whole Rae Lakes Loop. Some day hikers go to Glen Pass from Onion Valley and one man hiked to 60 Lakes from Onion Valley.

Stock use was minimal. I contacted two private groups (Rae Lakes and Castle Dome meadows). Had two contacts with Rob from High Sierra Pack Station and met Brian from Sequoia Kings Pack station twice as well. Cedar Grove Pack Station had some trips into the Woods Creek area.

Law Enforcement

On September 18, I met a stock group near Castle Domes Meadow who had left cigarette butts on the ground and aluminum foil in the firepit. Contact (b) at Cedar Grove and gave him the information to contact the group at the trailhead.

No dogs were seen but one came through, avoiding rangers. I contacted (b) (Miles at Bench) notifying him about the dog. (b) was able to find the person with the dog and escorted him out Taboose Pass, meeting (b) who issued a citation.

I gave visitors warnings six times for camping on vegetation and made them move their camp.

Search, Rescue, Medical Incidents

CI#	Date	SAR#	Area	Chief Complaint	Type
487	6/21/2009	7	rae lakes	abdominal pain	medevac
570	7/2/2009	12	rae lakes	knee	medevac
841	7/28/2009	29	rae lakes	separated party	search
936	8/6/2009	40	woods ck	hand	medevac
1123	8/20/2009		rae lakes	laceration to face	BLS-TAR
1124	8/21/2009		rae lakes	laceration to knee	BLS-TAR
1187	9/3/2009		rae lakes	altitude illness	BLS-TAR
1237	9/11/2009	59	rae lakes	broken toe	medevac

I initiated 3 helicopter evacuations; June 21, for abdominal problems, July 2 for a knee injury that happened coming down the snow on Glen Pass, and September 12 for a woman with a broken toe who was unable to hike.

I assisted (b) with a medical on July 28, by delivering a sick patient to him at Charlotte while I was in route to assist with a search/separated party. On August 21, I assisted a woman with a deep cut on her knee by irrigating and bandaging the wound. She was able to hike out to medical care. On August 20 I assisted a woman with a cut on her face by bandaging the wound. On September 3, I evaluated a woman with altitude illness (slight heart palpitations and difficulty breathing). With base hospital contact it was decided to have her hike to a lower elevation where she improved.

Fatalities – none

Weather

As usual the weather was mostly fair and sunny with a few thunder storms, but nothing significant to cause hikers distress. September seemed to be unusually warm, with low morning temperatures above freezing.

Fires

No natural or human caused fires occurred in the area.

Use Patterns

Most backpackers coming into the Rae Lakes Basin are coming from Cedar Grove, the John Muir Trail, or from Onion Valley over Kearsarge and Glen Passes.

The PCT is gaining in popularity every year. The majority of them are from out of state as are many of the visitors to Rae Lakes.

Baxter Pass had several hikers coming into the area later in the season. One day I met eleven hikers that came in from Baxter. The other entry points are Sawmill Pass, Dragon Pass (north and south) and Sixty Lakes Col from Gardiner Basin.

Natural Resources

Bear activity

There were no bear incidents reported to me on the north side of Glen Pass nor in the Woods Creek drainage. A visitor saw a bear on Woods Creek. Lake in the season, a bear came to Rae Lakes and is eating Whitebark Pine cones. The bear was not bothering visitors or the Ranger Station.

Wildlife

I saw many large bucks in late season in the Rae Lakes area and also down in Paradise Valley. On one trip to Baxter Pass, I saw seventeen Big Horn ewes. A visitor saw a lone ram just below Window Peak Lake.

This season I have seen more pikas than ever, including one in the rock pile in front of the station running upside down up a rock (wish my feet stuck to rock like that!).

Vegetation

This season was another dry one with the grasses turning brown early.

Meadow openings set at a normal year was just right because of the early season cold and wet spell in early June kept moisture on the ground longer.

Cultural Resources

Prehistoric

I did not visit any prehistoric sites in the area that I know of.

Historic sites

Shorty's Cabin near Woods Creek crossing is totally collapsed and nearly unrecognizable.

Photos were taken in September for the archaeologist.

A sheepherders stove is located uphill from the ranger station.

Facilities

The ranger station is still sound enough to last another season if need be. Hopefully, the new ranger station will be approved for next year.

The solar system is working good.

The 2 knaack boxes are in good condition.

Signs

A new sign is needed at Sixty Lakes and PCT junction. This is a replacement sign for one that was stolen two years ago. People continue to go the wrong way here even though there is a temporary sign and numerous cairns.

A sign is also needed for the toilet at Woods Creek crossing.

All other signs are in good condition.

Trails

The Sixty Lakes trail need repairs and new construction, especially since we allow stock on this trail.

A section of trail above Arrowhead Lake needs repairs due to fill being washed away.

Just below the ranger station the trail needs work to drain water off the trail. A wheelbarrow and large hammer are needed to make fill.

Camp areas

The peninsula area gets the most use at Rae Lakes. The main reason seems to be that most campers want to get as close as they can to Glen Pass. This is a good area for a lot of people because of the large number of hardened sites. This area takes pressure off other areas.

Frequent patrols are done in the busy areas to contact visitors, pick up litter and bury and toilet paper.

The other heavily used area is Woods Creek crossing, since it is the only big area to camp in many miles in any direction. Activating the toilet on the north side of the river has helped a lot with sanitation at Woods Creek crossing. A new hole needs to be dug for the toilet.

Fire Rings

All fire rings in this area are maintained regularly, they are at Woods Creek and Baxter camp.

Wood Availability

Wood availability is good in all areas except Woods Creek crossing.

Food Storage

The food storage lockers are all in working order. The combination of storage lockers and canisters has eliminated the bear problem in the area, but people need to be diligent because bears still roam the Rae Lakes area.

Permit System

The permit system seems to be working well. All visitors checked for permits had permits along with minimum impact information. Lone Pine, Bishop and Roads End have done an excellent job. Permits attached to the pack are convenient for both the visitor and the ranger and should be encouraged by all issuing stations.

Communications

Communications in the Rae Lakes area are good except for a few locations; (b) (7)(F) Radio transmissions in these areas is still available by changing locations short distances or using the extra long antenna (skyprobe).

Adding the simulcast to all base stations has made for a lot of interference. Hearing constant broadcasts about trail crew and fire logistics on opposite ends of the park are annoying and interfere when talking with visitors.

Needs for Next Year

- 2 boxes fire logs
- 2 propane tanks
- 2 new chairs (directors or chair with good back)

Recommendations

- Signs for Woods Creek toilet and 60 Lakes Junction
- Maintenance and construction needed on 60 Lakes trail
- New ranger station with wood stove with oven for baking (important!)
- New hole for toilet at Woods Creek

Inventory (See Inventory)

Inventory, Rae Lakes

- 1 Wood stove
- 1 Propane stove
- 3 Fry pans
- Miscellaneous utensils: forks, spoons, knives
- 3 cups
- 3 Oxygen cylinders (2 D's, 1 M.9)
- 2 large knaack boxes
- 2 Military storage boxes
- 2 Military flight boxes
- 2 Galvanized buckets
- 2 Solar showers
- 1 Down sleeping bag
- 1 Clip flashlight tent
- 1 Thermo Rest pad
- 1 Fire extinguisher (2003)
- 1 Pressure cooker (stainless)
- 2 Pots
- 1 Solar system
- 1 Neon light
- 1 3-burner Coleman stove
- 1 2-burner Coleman stove (cylinders)
- 1 Limbing saw
- 1 Cross cut saw
- 1 Polaski
- Several large and small plastic bags
- Several burlap bags
- 1 Coleman oven
- Miscellaneous first aid equipment
- 2 Gallons Coleman fuel
- 1 Propane tank (7.5 gallon, ½ full)
- 1 Rapid wash
- 1 folding chair (metal)
- 2 Kill your back canvas folding chairs
- 1 Foam sleeping mattress
- 3 wash tubs
- 1 shovel
- Miscellaneous tools: hammer, pliers, screwdrivers
- 1 Coleman oven
- 1 Bear canister
- 2 Crescent wrenches
- 1 Roll up table

Photos

1. Steep steps, Sixty Lakes Trail
2. Erosion, Sixty Lakes Trail
3. Deep Erosion
4. More Erosion
5. Dangerous Stock Trail
6. Shortcutting Dangerous Trail
7. Cross Country Short Cut
8. Cross Country Short Cut
9. Cross Country Short Cut
10. Cross Country Short Cut
11. More Sixty Lakes Trail
12. More Sixty Lakes Trail
13. More Sixty Lakes Trail
14. ?
15. ?
16. ?
17. Woods Creek escaped camp fire
18. Woods Creek escaped camp fire
19. Woods Creek escaped camp fire
20. Woods Creek escaped camp fire
21. Toilet Woods Creek
22. Toilet Woods Creek
23. Broken rung on bridge
24. Shorty's Cabin
25. Fire ring before rehabbing
26. After rehabbing
27. Core Plot Castle Dome Meadow
28. Core Plot, Castle Dome Meadow

**Rock Creek Ranger Station
End of Season Report
2009**



A. Visitor Services

a. Contacts

- i. Backpacker & Day hiker—2090
- ii. Stock (commercial, administrative, private)—326

b. Law Enforcement

Law enforcement contacts were made and violation notices issued throughout the season for illegal fires, littering, abandoned property, washing with soap in creeks, camping on vegetation, commercial use, dogs in wilderness.



Abandoned property and camping on vegetation

c. Search, Rescue, Medical incidents

<u>Date</u>	<u>Location</u>	<u>Type</u>	<u>Evacuation</u>
08/03	Siberian O	Hip Dislo	Helicopter
08/24	Rock Creek	Chest Pain	Helicopter

In late July we spent part of several days attempting to locate a party who had been travelling with a SPOT device. The device was on constant tracking mode and sent out locations from Lower Rock Creek appearing to move slowly around the drainage. No party in need of assistance or SPOT device was located. The reporting party contacted the Park one week later and stated the hikers had never been in Rock Creek and had exited the wilderness.

d. Fatalities

There was one fatality on Army Pass. A 65 year old woman died from injuries sustained in a fall while travelling on an icy section of the abandoned north facing trail on the east side of the pass. Rangers assisted Inyo County Sheriff to recover the hiker's remains. There were two additional fatalities, one from a heart attack and the other from unknown causes, in the Cottonwood Lakes Basin.

e. Weather

Weather was mild over the course of the summer following a wet spring and occasional thunderstorms during July.

f. Fires (natural, human caused not campfires)

A lightning caused fire burned on the Inyo National Forest burned from early July through the summer. It was occasionally active with a distinct smoke plume visible in the Rock Creek area.

B. Use Patterns

a. Backpackers

Backpacker use remains consistent with previous summers with significant visitation in the Miter Basin, on Mt. Langley and along the Pacific Crest Trail. There were at least twice the usual number of PCT through hikers in the area in June, with hikers reporting record numbers starting the trail this year. There were many hikers on multi week trips who reported spending more time in the wilderness because of free time due to job loss.

b. Stock

Stock use was high and dispersed throughout the drainage. There were several private parties grazing in Rock Creek. The primary commercial users were Rock Creek PS and Cottonwood PS as well as trips from Frontier PS, High Sierra PS and Sequoia Kings Canyon PS. One private stock party lost three mules in Rock Creek for seven days.



c. Administrative

The Kern trail crew spent two weeks working in Rock Creek and were able to begin work on the heavily eroded section of trail between Rock Creek Lake and Solider Lake. The Chief Ranger/Department of Defense trip visited Rock Creek in August to discuss military over flights of the Park. Field crews were in the area assessing potential for a GLORIA alpine monitoring site, night sky monitoring, and wetland monitoring. NPS stock partially demobed the Rock Creek Ranger Station by stock. They were unable to take out all gear due to inadequate stock (2 ½ mule loads).

d. Commercial

There continues to be significant commercial use in the Rock Creek area, most groups being guided are enroute to Mt. Whitney. In addition to commercial stock use there are many guided hiking groups and dozens of university affiliated groups whose status is unclear regarding the need for a CUA or SUA. Sierra Mountaineering Center led a hiking party supported by stock through Rock Creek every two weeks during the summer.

C. Natural Resources

a. Bear Activity

There was a sow with three cubs and a yearling sighted on several occasions in the meadows of Lower Rock Creek. There were no incidents of food being obtained by bears.

b. Wildlife

A badger was reported by a visitor at Lower Crabtree Meadow. There were regular sightings of the bighorn sheep herd in the Mt. Langley/Miter Basin area.

c. Vegetation

Meadow vegetation continued to grow significantly through August. Impacts from stock use were dispersed throughout the drainage. Despite a relatively light snowpack, rains into July kept plants vibrant. There continue to be new pockets of bark beetle mortality throughout the drainage.

D. Cultural Resources

a. Prehistoric Sites

Several prehistoric sites were visited and no new impacts were observed this season.

b. Historic Sites

The Ranger Station is the primary historic site in the area.

E. Backcountry Facilities

a. Ranger Station

The solar electric system was inventoried. Maintenance was conducted on the cabin including repair of two holes in the shingle roof, screen door repair, closing rodent entry holes, and installation of a floor in the attic. This final item was a significant safety improvement so that items stored and rangers walking in the attic no longer sit directly on the cabin ceiling or balance on beams. Fifty year old mattresses were replaced, old mattresses flown out on mobilization.

The maintenance division took an active role in conducting maintenance of the cabin and the improvements were of lasting quality and much appreciated.

b. Signs

Fire elevation signs were moved from Penned Up Meadow and Solider Lake to Guyot Creek and below Rock Creek Lake to reflect new campfire limits.



F. Trails

a. Trail Activities

The Kern trail crew conducted routine maintenance, repaired the crossing of Rock Creek at Nathans Meadow where an alternate trail had developed in the meadow, and began work on the highly eroded section between Rock Creek and Solider Lakes. They packed supplies for cabin maintenance that were flown into their camp to the Ranger Station.



The trails in Rock Creek were cleared with axe, cross-cut and bow saw

b. Problem Areas

- i. Rock Creek Lake to Solider Lake—high use and heavily eroded
- ii. “Unmaintained” trail into the Miter Basin—high use, including by stock, steep, eroded
- iii. PCT @ south boundary—high use, steep, eroded
- iv. Drift fence—continue replacement of T-posts with wooden posts

G. Camp Areas

a. Conditions

Work was begun throughout the drainage to remove or restore dozens of camps too close to water or trail or infrequently used based on recent campsite survey.

b. Sanitation

A noticeable subset of hikers continue to use poor sanitation practices such as defecating adjacent to campsites, on meadow vegetation, failing to bury their feces or pack out their toilet paper. See recommendations.



c. Fire rings



One of many fire pits removed with new fire limit @ 10,400' in Kern

The fire elevation limit was lowered from 11,200' to 10,400' in the Kern drainage to more appropriately match fuel wood availability, protect foxtail pine habitat and include the areas below 11,200' already closed to fires. Dozens of fire pits were removed from the area. Visitors were largely unmoved by the new regulation as they rarely expect open fires to be part of their backpacking experience in the high country. A few pits were rebuilt but illegal fires are more frequently built at places like Solider Lake that has been closed to fires for two decades.

d. Food Storage

Compliance with the food storage canister requirement in Rock Creek is good. However, many visitors en route to Mt. Whitney use the food storage lockers to cache food. This should be addressed in the compendium rather than trying to use the CFR regarding abandoned property. Most visitors caching food leave notes stating their food is not abandoned and give their name and expected return date. This fills the lockers with food of hikers who are not actually in the area.

H. Permit System

a. Trailheads

The trailhead office in Lone Pine largely provided useful, accurate information to visitors entering the Park. A notable exception is the quality of information given to private stock users. These permits are issued infrequently and few practical details are provided. See recommendations.



Lone Pine trailhead ranger Christy Moerbe helping with project work in Rock Creek

I. Communications

Radio communications in Rock Creek are good due to proximity to the repeater site. Use of satellite phones in the sub district enhanced communications in emergency operations and routine business.

J. Recommendations

- a. Provide Meadow notebook from plant ecologist and training to the Interagency Visitor Center supervisor on issuing stock use permits.
- b. Prohibit caching food and gear in food storage lockers for visitors not camped in the immediate area via the Superintendents Compendium and post restriction on lockers.
- c. Distribute a zip lock bag with wilderness permit as vehicle to discuss proper sanitation and packing out toilet paper. Conduct this as a trial at a single trailhead office such as Mineral King or Cedar Grove and assess improvement.
- d. Clarify requirement for obtaining a CUA or SUA for organized groups or guided parties. Set date for permits to be obtained for the summer season. This will enable field staff to better enforce commercial use regulations.
- e. Institute group size limit for off trail travel at eight people per group.
- f. Construct cairns to mark route on Mt. Langley.
- g. Implement secondary quota for visitors entering Park via Cottonwood Lakes Basin (sub quotas for New Army and Army Passes).

K. Pertinent Inventory

- Propane 2 small full, 1 small mostly full
- Pocket Rocket fuel, 15 full of assorted sizes
- White Gas, ample for several years of snow survey use

A. General Summary

It was wonderful to spend a whole paid season as the Tyndall Ranger and be able to spend the majority of my time in my patrol area. I felt like I was able to get to know the area better and accomplish my job with much more ease. Furthermore, with the large numbers of visitors and commercial stock use, I feel like I was able to keep the area cleaner and was able to help assist those in need (versus the years this station has been unstaffed). There were four medicals in my patrol area this season and four commercial pack trips that needed assistance (three groups lost their stock for several days each and one group had two animals die in a wreck in the Upper Kern Canyon). I was also able to help support the numerous groups who passed through the area doing various scientific studies or projects both here at Tyndall and at Crabtree. Lots of fire pits (approx. 40) were removed this year from a combination of the new lower 10,400' fire regulation, campsite rehabilitation project and numerous illegal ones (not just because of the new regulation were those illegal!). Overall, it was quite a productive and fun season trying to protect and preserve the Tyndall Plateau and surrounding areas for future generations (that means you (b) (6) :). I will walk away this season proudly carrying my engraved wooden ice axe and lots of fond memories of my fourteenth season (including the touching words that were given along with the axe).

B. Visitor Services

a. Contacts

i. Backpackers (approx. 2000 contacts)

This year there were several individuals that became ill due to pushing themselves too hard. It was unusual considering they were all young and athletic, an otherwise healthy user group that normally doesn't need much help. Otherwise, most visitors were respectful and followed the rules and regulations. There seemed to be less trash left behind than in previous years and most adhered to the new fire restrictions.

ii. Day hikers...saw lots on Mt. Whitney patrols and one lady who had a Whitney day permit and was hiking the High Sierra Trail and looked fully capable.

iii. Stock

There was very little private use. Commercial groups brought approximately 80 head to the area. The Kern Trail Crew had 13 head but only camped at Cold Springs in the upper Kern. Except for Cold Springs, use was well distributed in my patrol area.

b. Law Enforcement/ c. Citations

All was performed by (b) or (b). All three citations issued were for illegal fires (two at Crabtree, one at Tyndall). The fire regulations at the Crabtree ranger station were not new and the visitors knew they were in violation. The commercial packer who had a fire at Tyndall had been told by (b) that they were not allowed and ample information regarding this new regulation was given to the pack station throughout the season in the front country and in the field. One warning regarding caching food in bear boxes was given. To their credit, there is no information given with the permit stating that this is not allowed nor is that written in/on any of the area bear boxes. An interesting assortment of abandoned gear was found, but as usual the perpetrators were long gone.



REI in the backcountry!

d. SAR & Medicals

<u>Date</u>	<u>Location</u>	<u>Type</u>	<u>Evacuation</u>
6/25-26	Bighorn Plateau	exhaustion/AMS	TAR
6/30	Shepherd's Pass	unknown	self?
7/14-15	Tyndall RS	exhaustion/AMS	TAR
8/1	Crabtree RS	pneumonia	Helicopter
8/7-8	Colby Ps.	unknown	chase!/SAR
8/11-12	Jct. Mdw., Kern	exhaustion/AMS	TAR

SPOT devices: All Kern rangers were issued them. Mine came in handy prior to mobilization when my radio died. I also carried it early season when I was uncertain of repeater coverage. Once a new antenna was installed on (b) (7)(F), I became more confident of coverage and mostly left my heavy spot device at the station.

Visitors carrying SPOT devices have certainly changed the wilderness experience. This year people outright lost them on their travels; one erroneously reported a party as being in one place for several days in a row; a few misreported locations when 911 or Help buttons were pressed. The park would receive reports of concerned friends or family when someone didn't check in with the okay button. And,

the biggest concern with these devices was how the NPS should respond to vague requests from the Help button and who is funding these SAR efforts requested from the Help or 911 calls initiated by these devices? SPOT? We'll see how this technology evolves and how the NPS will create protocols surrounding their use. Stay tuned...

e. Fatalities

A combination of six horses and mules died in the backcountry of Sequoia/Kings Canyon this year. In the Tyndall area, while on a commercial trip, a horse and a mule fell off a thirty foot bluff in the Upper Kern/Milestone Creek vicinity after making a wrong turn on a switchback. They died upon impact. Due to the terrain and distance from the trail and water, they were left as is (See report).

f. Weather

Spring was rather cool and unsettled. We even saw a few inches of snow during training and up to six in the high country late June.



Trail Crest en route Tyndall, June 17, 2009

As a result, despite a low snowpack, passes remained snow covered through mid July. But then things dried out quickly. Creek crossings were low. Meadows turned dusty and brown. We had one hazardous snowstorm warning mid season that ended up ushering in a few days of cold (down to 25 F at Tyndall), but no precip. The weather patterns this summer were benign with very little lightning or thunderstorm activity. Those storms that did role through were exceptionally isolated and not widespread.

g. Fires

Smoke from the Horse Creek fire at Hockett Meadow and the Lion (?) fire to the south of the park would spread up canyon a few times during the red flag warnings. Smoke from the Yosemite fire and a few large fires burning to the west would also obscure the skies a couple of days as well. Otherwise, clear blue skies prevailed.

C. Use Patterns

a. Backpackers

The JMT/PCT is still very popular. I heard with the economy there was a record number (500?) PCT hikers this year. Saw lots of them who were delayed by early season snowstorm(s). Lots of peak baggers this year in the upper Kern. Even more obscure peaks such as Deerhorn are getting climbed and skied/snowboarded with some frequency given the info in the registers (that aren't being stolen!). I encountered several peak climbing chapters this summer including some which were stock supported. Snow melted off all Kings-Kern divide passes including Thunder which made for easy(-ier) travel in this area.

b. Stock

Virtually all stock use in the Tyndall area was commercial. And, almost all of these groups lost their animals during their travels. Thankfully, myself and (b) were able to help reunite all of these animals with their respective owners. As mentioned previously, one group had the misfortune of losing two of their animals permanently in the upper Kern due to a bad wreck. Use patterns were well distributed throughout the whole patrol area except for Cold Springs where both administrative and commercial use caused heavier impacts to those meadows.

c. Administrative

There was a lot of various administrative use in the Tyndall vicinity this season. Danny Boiano's (b) crew would frequently pay visits to the ranger station between trips to Center Basin and Kern Point. Mason, Andy and Sam were very pleasant to meet with and seemed quite dedicated to their very physically demanding jobs out here.

I spent one morning working with Yosemite's archaeologist along upper Tyndall Creek.



YOSE archaeologist with tiny obsidian point.

We were inventorying known sites within the area. Occasional (b) (3) (A), (b) (3) (B) were found, but not much else remained. We discussed how it was important for the

backcountry rangers in particular to know where these sites are so we can best protect them. I believe that the Bench Lake ranger even caught someone illegally collecting in his area while he was doing this very same survey!

The I & M Lakes crew came through on their way to Kaweah Basin. I helped line them out on some short cuts and cross country routes. I also saw the Army Corp of Engineers on Deerhorn Saddle while they were surveying the fault line that runs from Lake Isabella to that vicinity of which they were trying to determine more precisely.

While in the Crabtree area, I met (b) and the Duriscoes to help with the Mt Whitney night sky project. (b) and I acted as the support team/sherpas for this worthwhile endeavor. I had always wanted to spend the night on the summit and was glad to be among friends for this work. We managed to pull it off during a week of very unsettled weather. In fact, residual clouds from a thunderstorm and smoke from nearby fires did obscure some of the horizon, but Dan still was able to pull it off. I look forward to seeing his night sky centennial hut photo that was unveiled at Whitney Portal for the occasion. Also while covering the Crabtree Station, I participated the Soundscape Study that Annie Esperanza coordinated. Both Annie and Sylvia Haultain, by the way, selflessly supplemented our diets this year with tasty treats and vegetables. Thank you!! Our favorite type of selfless, administrative cooperation:)

d. Commercial

All commercial use in the Tyndall area involved stock to my knowledge. See stock & permit section and CUA's. Hours of contacts were recorded on CUA's this year to show how much time we spend with groups in the field. Also, it would be good to have a definition for when to turn down a commercial use permit, i.e. how many strikes before a group is considered out? Has anyone ever been turned down?

D. Natural Resources

a. Bear Activity

Bear sightings were scattered mid season with approximately one sighting at each bear box campground in the Kern/Kern Plateau area with the exception of Crabtree. No incidents were reported in these areas. However, multiple reports, virtually all second hand, trickled down the JMT of people losing food in the Kearsarge Pass area, mostly to the east on INFS land. It sounds like most of those hit ended up just hiking back out. It also sounds like all of them had bear cans, but just had hung or stashed their surplus food under rocks, etc. It would be good to have both our east side trailhead rangers as well as INFS rangers maintain a strong presence here as this is an annual problem that shows no signs of disappearing despite the use of canisters. More literature or warnings at the trailhead would be appropriate as well.

b. Wildlife

Early season, perhaps due to late snowmelt or our earlier arrival out here, I saw lots of American Pipits and White-crowned sparrows nesting along the Tyndall Plateau.



White-crowned sparrow nest.

So many, in fact, I'd have to watch where I'd step for fear of crushing their poor eggs. But, the rodents stole the show this summer. Even backpackers reported the abundance of mice scurrying around camps which, since I've worked here, was never noteworthy enough of a visitor report. And, my observations confirm this as all summer long they would be scurrying around the Tyndall and Crabtree cabins and once even chewed up my shoelaces at a camp I have never seen but a few people use. Chipmunks and chickarees also were plentiful. I saw a handful (almost a dozen) of white-tailed jackrabbit on the Tyndall plateau and Crabtree area. And, pika were everywhere. Yippee! So many that my observations will not reflect the true abundance. It seems there was at least one every half mile in the usual alpine habitat (talus, meadow, alpine lake). Last but not least, I finally saw one representative of the Williamson bighorn sheep herd as it scrambled up a snowfield on the east side of Shepherds Pass late September.

c. Vegetation

I collected a few specimens for the herbarium: *Hackiela floribunda*, *Navaretia breweri* and *Phacelia austromonta*

Meadows look awfully dry due to the third consecutive year of drought. Amazingly, most hung in there though as the stock naturally dispersed their use in the Upper Kern and Tyndall area...some more than the packers would have liked! One exception to this resilience was Cold Springs. All of those meadows were grazed down to a nub and there was lots of mechanical damage along the river banks. I would recommend giving this area a rest administratively for at least one season and have the trail crew utilize Tyndall and or the Kern Kaweah (two areas they didn't spend much time in this year anyway). And, another random note, all meadows that were grazed moderately to heavily this season showed numerous urine stains. Perhaps, these grasses are more susceptible to burns when already dried out from three years of

drought? Another factor at work in these meadows, especially in lower Wright Creek was damage from thousands of crickets. I noticed one area in particular that was infested with virtually no grasses left behind!

Grazing Capacity Limits: I think coming up with numbers as a rough estimate or guide is helpful especially for those new to a patrol area, but on the same token, it is hard to come up with them in the field unless one has observed the trends for at least several years in row. I gave it my best shot.

Velvet Grass Notes: Please keep the tarping in the Kern in place for a minimum of five years to kill off the velvet grass seed bank. Any shorter span of time would be a complete waste of effort, time and money. There is no harm in leaving it so long as its integrity is checked once a season. All tarping is in a very discreet place in an area that is infrequently visited. It would be more damaging to the meadow ecosystem as a whole to remove it prematurely, defeating its purpose. Also, I did find the time to do a cursory survey of Junction Meadow in the Kern and meadows north through Cold Springs and found no velvet grass. Granted, Cold Springs was heavily grazed when I surveyed this area mid September.

E. Cultural Resources

a. Prehistoric (see administrative section)

b. Historic

I GPS'ed and took photos of the two historic cabins in the Tyndall area aside from the ranger station. Dave Yemm documented details of it on his survey of the stations.

F. Backcountry Facilities

a. Ranger Station

The station is in great shape now that it has a new waterproof roof. The mice are still sneaking in somehow, possibly through the eaves and deteriorating chinking as I've seen them climb these rock walls with ease. Speaking of rocks, Yemm and Pope added another step below the front door entrance. It's much nicer on the neck and back to exit the cabin now. Yemm has plans and supplies to finish the attic floor next season as do the snow surveyors. A larger, more powerful antenna was installed midseason by Cody from the radio shop. I painted a new coat of varnish on the floor at the end of the season. It was in pretty poor shape from previous water damage and some day may need replaced due to warping.

b. Signs

All are in place and functional. I would like to have two signs removed next year along the lower Milestone Basin trail (1 old restoration site sign UTM , and the "Contact nearest ranger sign for grazing Milestone Basin." Has that EVER happened?!! Also, after cleaning up illegal fire rings at the JMT/Wallace ck. Jct. EVERY patrol, (b) and I will move the "No fires above this elevation" sign from Wallace Waterfall Meadow to 10,400' along the HST next year. The recreation maps show this elevation ambiguously close to the bear box camp and this keeps the signage consistent with that to the west along the HST.

G. Trails

a. Trail Activities/ Work accomplished

The King's CCC's crew quickly remedied a pile of stock-stopping boulders that fell near the chute on the south side of Forester Pass.



They removed it prior to all the snow melting so the pass remained open to stock all season. I was thankful for their work as the Kern Crew was busy working on a project a good distance away in Rattlesnake Creek. The CCC's also worked tirelessly under Brian Pope's friendly supervision on multiple projects including a reroute north of Forester Pass on the JMT. This was much needed and has come along quite nicely. Pope was a great relay of information along the trail. It's great having extra eyes and ears out here.

The Kern Crew prioritized their busy schedule and, reasonably so, skipped their stay at Tyndall. Most trails still looked in good shape due to mild weather and the Construction crew spending all of last season here. Nick, Beth, Adam and Rebecca were very helpful though in shuttling supplies for the cabin from Cold Springs. Beth in particular did a great job packing the awkward loads of glass and plywood. They also helped haul out lots of trash that accumulated out here both from administrative use and from messy visitors. It was an asset to have Adam (and Major) around to aid us in the various medicals that occurred in our absence or as a first responder.

b. Problem areas

All truly bad areas are along somewhat less popular trails. No surprise, here they are:

- 1) Brushing/ defining trail in Upper Kern Basin.
- 2) Re-routing trail adjacent to lake due south of pass south of Lake South America. Always a flooded meadow/trail early-mid season.
- 3) Super steep switchbacks just below tree-line Sequoia side of Colby Pass need steps and/or re-route with less grade.
- 4) Rehabbing old trails especially towards Shepherds Pass.

H. Camp Areas

All are looking pretty good, but need constant attention or rehab work in bear box campgrounds. I would recommend removal of the bear box below the Tyndall ranger station. Although I'm a strong advocate of them elsewhere, this one receives virtually no use and even less now that fires are not allowed below the ranger station. That is why it was occasionally used before (fires were not allowed upstream of here by the other bear box on the JMT). This camp area in general is rather poor due to widow makers and lack of flat ground without vegetation. I have already started rehab of this area. Wallace Creek along the JMT needs constant vigilance and is highly impacted.

I. Permit System

There needs to be a spring deadline for **commercial permittees**. It creates a very awkward and sometimes embarrassing situation for field personnel who don't know whether an outfit is operating legally or not. Even with radio communications, we often get conflicting, not up-to-date information. This year many clients were uncertain whether or not the services they paid for (ex. food drops) would be available once they reached their rendezvous points. Not having a deadline just makes it an unprofessional way to operate out here. And, it makes for uncomfortable relations with packers and guides from the start (see Kern 2008 report).

Trailheads overall did a good job. It would be nice to have a copy of or knowledge of the eastside trailhead ranger's patrol schedules that way we can coordinate projects or patrols better. A couple of rangers out of Lone Pine would issue wag bags to those hiking north on the JMT or elsewhere where they were not required. Once full, these hikers were very reluctant to carry them for 50 odd miles! Lastly, private stock users were not given forage guides or opening dates for meadows and therefore, it was impossible to enforce these regulations.

J. Communications

Communications started off real rough both because of poor radio reception/transmission in the Tyndall area and because my base station fried the programming in my handheld radio. Thankfully, the latter was easily resolved upon mobilization with a new radio. The former has gradually improved but still has issues. Initially, the new station antenna helped, but once the new larger antenna was installed on (b) (7)(F) it became pretty moot. In fact, when the radio is plugged in it primarily picks up (b) (7) often (b) (7)(F) and sometimes base stations such as Dispatch or (b) Sierra. It is very inconsistent. If I want to hear (b) (7)(F) and usually the base stations, I have to move my radio to the bunk bed (unplugged) or outside along the station wall or some nearby rock. At least I have a way to be contacted at the station because I will usually keep my satellite phone on. So, in an emergency, multiple venues or repeaters can be tried. I cannot transmit on (b) (7) in the vicinity of the ranger station which is to be expected. Also, both radio and phone communications vary with the cloud cover and weather and cycle of the moon probably! It is very dynamic. With persistence and creativity it can usually be relied upon although the weather didn't really test the radio system this summer as it was mostly sunny with no long stretches of monsoonal clouds or moisture. Bottom line, never assume the Tyndall ranger heard anything without confirmation.



Campsite Inventory

Campsite Inventory: 28 sites obliterated or rehabbed; 9 sites left in Tyndall patrol area. Helped (b) with Wallace Creek drainage as there were numerous old large stock camps. Excellent efficient way to clean up the backcountry as the trends of old seem to have permanently changed. Not many private stock groups, way more leave no trace ethics, and more peak bagger camps vs. stock camps in these off trail areas.

K. Needs for next year

The Laws field guide to the Sierra Nevada by JM Laws (for all stations)

Basic Cookbook (all stations? minus Kern)

SAR headlamp

backpacking headlamp (mine cracked)

Strapping tape (1-2 rolls)

RUN sheets

Lists of bear box locations (to hand out)

L. Recommendations/Projects for next year

- Remove two signs, Milestone Basin.
- Remove bear box below Tyndall Ranger Station.
- Move Knack box to Cons Crew Camp, SW corner, Tyndall Meadow.
- Complete Campsite Inventory Rehab. work.
- Replace nasty toilet at Kern Hot Springs along popular High Sierra trail with nice one at Forester Lake.
- Remove old bomb box with broken lid by Kern Hot Springs Trail Crew Camp
- Keep the tarping in the Kern in place for a minimum of five years to kill off the velvet grass seed bank. Any shorter span of time would be a complete waste of effort, time and money.
- Have East side NPS pack station & office for demobe, etc.
- Use bear box surveys from 2008 before considering the removal of any boxes. Too much time, money, effort and impact was involved in placing these to have them removed in haste without any research.

A. General Summary

This was my 18th summer working as a commissioned wilderness ranger at SEKI. It was a busy summer for visitation (numbers up slightly from last season), though no major incidents occurred in the area. The focal point for most visitors to the area is Mt. Whitney.

I arrived at Crabtree on June 17th following a month of training and front country patrols. The hike over Trail Crest to start this season was in a snowstorm and there was still a fair amount of winter snow on the ground due to a cool and wet spring. Overall there were dry conditions compared to normal, though more snow and water than last season. I contacted many PCT thru hikers and observed signs of much use prior to my arrival. It would be useful to arrive at our backcountry outposts closer to the beginning of June rather than the end. The Crabtree patrol cabin was in good condition upon my arrival and the snow surveyors continue to take good care of the cabin in the winter. I had expected a break-in this spring due to the inclement weather, but was pleasantly surprised to find the cabin secure. The front door would be easy enough to breach and we are only asking for trouble by leaving it as such. I recommend reinforcing the cabin door to make it more secure.



B. Visitor Services

Visitor services are a primary duty of the Crabtree ranger. The high volume of visitors to the area each summer insures that much time will be spent answering questions, giving directions, and "educating" visitors on taking care of this National Park Wilderness. The public service that the Crabtree Ranger provides to park visitors can be rewarding and meaningful to folks in helping them enjoy our public lands. Wilderness rangers are in the unique position of contacting park visitors in a place where much effort was made to get to and being able to share the amazing surroundings of the high sierra and our own personal experiences with them. Also, being the person wearing the badge, and the grey and green puts us in pretty high regard with most visitors even before introductions are made and gives us the opportunity to enrich the experience that visitors have at SEKI. The fact that wilderness rangers at SEKI live in the wilderness all summer long makes this all possible.

a. Contacts

- i. Backpacker- 2,367**
- ii. Dayhiker- 1,550**
- iii. Stock- 215**



b. Law Enforcement

A seasonal LE commission is a vital tool for the Crabtree ranger to possess. It is used daily on patrols and I strongly encourage that a commissioned ranger continue to be staffed at Crabtree. Education of park visitors continues to be my focus to gain compliance with NPS regulations. Abandoned property continues to be a problem at Crabtree. Items are continually left in the bear-boxes, and the "bounty" collected at Guitar Lake each summer is ridiculous. Particularly at times of inclement weather people will abandon their belongings in an effort to "get out alive". This summer I packed out items including bear canisters, tents, and articles of clothing. I attribute this mostly to novice backpackers who do not put the proper thought into packing for their trip in the first place. I do not know what the solution to this ongoing problem is but an educational push at the permit stations to "pack it out" could not hurt.

The new fire regulations in the Kern (10,400' from 11,200') also increased the number of LE contacts pertaining to campfires. Several citations were issued for illegal campfires, but mostly we were left to clean up after the fact and the perpetrator had left the area before being contacted. I expect that as the years go on the fire regulations will take better hold and the incidents of illegal campfires in the Kern will be reduced.



c. Citations

I issued 7 citations this summer that included; pet (dog) in the NPS wilderness (2), group size violation, illegal campfires (2), abandoned property, permit violations (2). There were several incidents of commercial operations that did not have the proper permits that I reported to the Kern Area Supervisor. Erika was going to follow up with the concessions office and issue citations if appropriate.

d. SAR & Medicals

Incidents were down again in the Crabtree Patrol area this summer. There was one search that (b) and I responded to in the Colby Pass area when a woman activated the "help" signal on her SPOT device. She was mobile by the time we got on scene and apparently self-evacuated to Cedar Grove the following day.

There were 3 medi-vacs from Crabtree this summer.

*A 52 year old man was evacuated from Timberline Lake with "cardiac symptoms". The report came in via satellite phone to park dispatch. Due to pending nightfall the helicopter was dispatched immediately while I responded from the Crabtree Ranger station. I arrived just prior to the helicopter and the patient was evacuated to Ash Mt. and ground transported to Kaweah-Delta. Medical follow up indicated the patient was not having a cardiac event.

*A 48 year old man was evacuated by (b) from Crabtree with possible HAPE. Follow up indicated that the patient was suffering from pneumonia and that 100% of his left lung field was filled with fluid.

*A 44 year old man was evacuated from Crabtree with possible HAPE. The patient was on day 4 of a trip from Cedar Grove and had "charged" over Glenn and Forester passes before becoming ill at Guitar Lake. Chief complaints were fatigue, SOB, and persistent and productive cough. The patient had sputum that was streaked with blood. As of this writing I am awaiting follow up.

e. Fatalities

There were 2 fatalities on the Mountaineers Route on Mt. Whitney just outside the park boundary in the spring when visitors fell and slid on lingering snow. The Inyo NF responded to these incidents. There were no fatalities in the Crabtree area this summer.

f. Weather

It was another dry summer in the southern sierra. There was a period of thunderstorm activity in late July that brought isolated showers to the area. I doubt that much more than an inch of precipitation fell at Crabtree this summer. Yikes!! The area was dusty and dry by seasons end. Temperatures were near normal for most of the summer.

g. Fires

There were no wildfires in the Crabtree area this summer. Smoke from numerous fires in California, notably the fires near Los Angeles and Santa Cruz, put some smoke in the skies over the southern sierra, but considering the active fire season in the Golden State, skies were mostly smoke free this summer.

C. Use Patterns

a. Backpackers

Backpackers constitute the majority of use in the Crabtree patrol area. This year the trend was towards the long distance hikes of the PCT and JMT. I take this as a sign of the economic hard times and I had numerous hikers on these trails tell me as much. Folks who were out of work and trying not to spend what money they had took to the long distance trails for recreation and whatever solace they could find in wilderness travel. Judging from the broad smiles on most folks faces contacted either finishing the JMT or hitting the high sierra on their way to Canada it seems to have worked. I had many inquiries as to how to become the Crabtree Ranger.....(I try not to smile too much).

The loop trips from Horseshoe Meadow and Onion Valley to Whitney Portal continue to bring many backpackers to the area from mid July thru August. Most Boy Scout troops do their trips at this time and many parties of 15 are contacted heading for Whitney one way or another. The exit quota on Trail Crest is full during the busiest of the summer months resulting in more overnight use in the Crabtree area.



b. Stock

Stock use was down a little in the area this summer. Stock parties continue to visit Crabtree for its fishing opportunities and to pack their clients in to climb Mt. Whitney. I contacted a few more private stock parties this summer than previous years, several who were traveling with llamas. Private stock parties who go to permit issuing stations in Lone Pine, Bishop, and Mammoth are not given adequate information on park grazing regulations. We need to make preseason visits to each of these locations to insure that permit issuers not only have SEKI stock regulations, but also that they give this information to private stock parties. We cannot enforce regulations in the field if we are not giving backcountry users the opportunity to know what those regulations are.

Commercial Pack Stations stated that business was significantly off this season due to a poor economy. Year end numbers should give the best indication but I observed that commercial stock use was only down a little bit. Cottonwood and Rock Creek pack stations are the most frequent users of the Crabtree area, though Frontier Pack Station logged 48 grazing night at upper Crabtree just after it opened. Please refer to the stock use observations form for details on area stock use for 2008.



c. Administrative

There was a good amount of administrative use in the area this summer. The Kern Trail Crew was camped at Sandy meadow for 10 days while they worked on area trails. Nick Serrano led the crew this summer and they did a fine job doing maintenance on area trails. They completed a project for me on Mt. Whitney on their annual run up there, and reburied the cables of the lightning diffusion system of the Whitney Hut.

Soundscape researchers from the NPS Air Quality HQ in Fort Collins were at Crabtree for 2 weeks doing visitor surveys on sound expectations of the SEKI wilderness. Their survey included a 3 minute listening exercise for visitors to focus on the sounds and document their impressions and appropriateness of the various sounds heard in the 3 minutes. They had logged approximately 270 surveys by the end of their time here and the results should be interesting.

NPS Night Sky guru Dan Duriscoe and his faithful assistant Cindy were at Crabtree in mid July to take photographs on the summit of Mt. Whitney. The Tyndall ranger and I helped them to carry their equipment and spent the night with them assisting on Mt. Whitney. They used the photographs at the Whitney Hut centennial celebration on August 27th and to assess "light pollution" in California as viewed from the lofty heights of the highest peak. Their findings will also be interesting to view.

The Chief Ranger-Department of Defense trip to discuss military overflights of the SEKI wilderness was held the last week of August. This occurred in the middle of perhaps the loudest and most sustained period of noise created by military overflights that I have heard in my years at SEKI. This was an interesting development as, typically, the military has kept it somewhat quiet during this trip. Not sure what to make of this development, but there was a representative from Lemoore NAS who are responsible for most of the overflights on board this year, and they really got to experience the intrusive sounds of their military overflights first hand. We can only hope that the situation is improved in the future. I accompanied the Chief Ranger and military representatives on a hike up Mt. Whitney and appreciated the opportunity to show the Chief Ranger around the area and address pertinent issues.



d. Commercial

Commercial use in the area focuses around Mt. Whitney. Be it backpackers, stock users, or climbers, most commercial use occurs on or around Mt. Whitney. I will not list all commercial users contacted this year in my report, but rather address the problem of Commercial Use Authorizations and enforcement of permit requirements in the field. I was given erroneous information on several occasions this year as to the validity of CUA holders "status" and this led to confusion and a less than professional contact on my part. The first involved Sequoia-Kings Pack Trains and a visitor at Crabtree who had hired them to resupply him at Charlotte Lake. I was told by the concessions office that the pack station would not be issued a CUA this season due to insurance requirements that they were unable to fulfill. The visitor, standing at my side, heard this conversation and was informed that he would have to either somehow meet the packer at the park boundary or hike to the pack station at Onion Valley to pick up his resupply. Several days after the hiker had departed Crabtree we were informed that Sequoia-Kings had been issued a CUA and were "cleared" to operate in the park. This incident caused undue stress to the the park visitor who had hired Sequoia-Kings and logistical problems in obtaining his resupply. It also made the park look bad by not running a tight ship.

Another incident occurred when I contacted a climbing party from Sierra Mountaineering International on Mt. Whitney for the second time this season and they did not have the proper papers in hand (for the second time). When I inquired with the wilderness office, per (b) 's request, I was informed that they were still delinquent on payment and did not have a valid CUA. While in the process of issuing a citation to this party per my job responsibility, in front of their clients as they prepared to descend Mt. Whitney, I was informed by (b) to hold off until further research could be done. I had already informed them that they did not have a valid CUA and that I would be issuing a citation. This incident made our organization look anything but organized and made me look unprofessional. There has got to be a better way of doing business. The best solution would be to put a date certain by which groups wanting to obtain a CUA at SEKI would have to fulfill the requirements and be issued a CUA. NO CUA's would be

issued after this date and rangers heading into the field would be given a final list of all valid CUA holders for that year. We must do better with our commercial operating permits.

e. Military overflights

The noise from military overflights makes it impossible to have a wilderness experience south of the Kings-Kern divide. This year the constant roar of the jets was out of control during a 3 week period starting in mid August. A woman who I contacted at Wallace Creek during this period summed it up quite well. She was finishing the JMT with her hiking partner and approached me wide eyed and looking fearful. "What's going on?" she asked me. I asked her what she meant and she said "with all of these military jets, are we at war in the homeland?". "Has there been another terrorist attack like on 9/11?". I informed her that the military complex of R2508 was overhead and that the jets frequently fly over the park. She was quite relieved to know that the sounds of war did not actually mean we were at war in California. Her partner suggested that we put signs up to inform people that the noise is normal and not to be alarmed or afraid. We need to be better stewards of the wilderness soundscapes.

D. Natural Resources

a. Bear Activity

I had reports of bear sightings at Junction Meadow and Wallace Creek this summer, but there were no incidents that I know of involving problem bears (or problem visitors). The only bear activity that I heard of was in the Kearsarge Pass-Onion Valley area.

b. Wildlife

The smaller variety of wildlife had a banner year in the Crabtree area. Small mammals including mice, all varieties of squirrel and chipmunk, and our friend the pika were in abundance this summer. Since we have been asked to be particularly attentive to pika sightings, I observed more pika than any previous summer that I have worked at SEKI. Mule deer are also abundant in the area and many raptor species were observed in the fall. I observed several populations of (b) (3) (A), (b) (3) (B) where I had not previously seen them.

c. Vegetation

Monitoring area meadows is a big part of the Crabtree rangers job responsibilities. Lower Crabtree meadow was closed to grazing again this summer which put more pressure on Upper Crabtree meadow. By the end of August upper Crabtree had received 147 grazing nights and was showing signs of needing a rest. Sylvia had instructed me to keep a close eye on upper CT and to consider closing it at 145 nights. We initiated a closure on 8/29 and referred use to other meadows in the area. Please see my report and associated photographs on the closure of upper Crabtree meadow. The persistent dry conditions of the past few (approx. 3) years are taking a toll on area vegetation. Residual Biomass monitoring was conducted in early

September at area meadows. Please see my stock observations form for use trends at area meadows.

E. Cultural Resources

a. Prehistoric

No prehistoric sites were observed this summer at Crabtree. I did not have the opportunity to visit any of the inventoried sites in the area.

b. Historic

The Mt. Whitney Hut turned 100 years old this summer and by all accounts there was a gala celebration at the Whitney Portal to commemorate the occasion. The hut is still in pretty good shape, though it will probably need a new door on the visitor side in the next few years. I do an inspection once a month on the lightning diffusion system on the hut and it continues to be in good shape.

F. Backcountry Facilities

a. Ranger Station



The Crabtree ranger station continues to be a well functioning ranger station and will be for years to come. I know that it is slated for replacement but I feel like, having been the ranger here for 10 seasons, I should weigh in on this proposal. The current ranger station is a well built structure that will last for years in its present state with very little maintenance required. We painted the interior this summer and this was a nice improvement and made the station much cleaner. The added length of stovepipe that the snow surveyors installed last fall makes the woodstove draft much better and burn smoke-free. There is no comparison between the Rae Lakes ranger station (which badly needs to be replaced) and Crabtree (which in my opinion does not).

b. Signs

I moved our fire signs down to the lower elevation of 10,400' this summer to reflect the change in the regulations in the Kern. I also moved the "toilet" sign at the area campground to a more useful location. The "pit" at the toilet still has much capacity left, and the new location will better serve the visitor and save many trips to the ranger station to ask where the toilet is. Most visitors to the area know about the pit toilet already and the new sign location will now help them to locate it on their own.

G. Trails

a. Trail Activities/ Work accomplished

The Kern trail crew performed routine maintenance on area trails in August. They also cut firewood for the snow survey and helped with the aforementioned project on Mt. Whitney. Area trails are still showing the efforts of the Cons crew who were in the Crabtree area for a full summer in 2007.

b. Problem areas

There were some big rocks that rolled onto the Whitney trail this winter, but are still easily passable to hikers. The dilemma of trying to move these rocks is the constant traffic on the trail and the threat of blitzing the trail below with any runaway rocks that might start rolling. The trail is totally serviceable and will be for years to come with routine maintenance.

H. Camp Areas

Conditions continue to improve at Guitar Lake due to the wag-bag, pack out your poop, program. I dispensed approximately 2,000 bags from Crabtree this summer and compliance, remarkably, has been very good. We should try and dispense more bags at permit stations and trailheads for visitors coming to the Whitney area. All other camp areas at Crabtree are looking good. Many fire pits were removed above 10,400' to reflect the new fire regulations (see photos). By seasons end all fire pits above 10,400 had been removed. Much work was accomplished on the campsites inventory project in the area. Many old campsites were obliterated, and ones that still get used were contained. Please refer to data sheets for specifics. This project will continue in the 2010 season.

The camps around the bear boxes continue to be the most popular campsites. They are still used by many visitors and we should keep the ones in place that are already in use area. It is no small task to get wag-bags to Crabtree. Bear Boxes serve the park resources as well as the park visitors and much effort has already been made to place them in their current locations.

I. Permit System

The permit system for hikers continues to function well. There were some issues with east side permit issuers telling hikers to pick up their wag-bags at Crabtree (rather than at the permit station). Since there is a limited supply of wag-bags at Crabtree and much effort to get them here it is better that folks pick up their wag-bags in Lone Pine. I think we should consider giving the permit station in Yosemite a nominal supply of wag-bags to dispense to southbound JMT hikers. They constitute a large volume of people who pick up bags at Crabtree.

We need to do better with issuing permits to private stock parties. The information has got to be made available to these park users to protect park resources.

The wilderness office did a great job this summer issuing permits and keeping visitors informed of conditions. A big thanks to Irene, Cherie, and Leslie for all of their hard work and support this summer!!

J. Communications

Communications in the Kern, on the (b) (7)(F) repeater, continue to be problematic. There were 3 flights to the (b) (7)(F) repeater this summer and very little changed from the beginning of the season. Please refer to the radio coverage map given to Pat Linebeck at seasons end for specific areas of radio coverage. Two years ago before the conversion to "digital" we were fortunate to have the best radio coverage on (b) (7)(F) ever. We had a local repeater which allowed us to talk among ourselves without tying up other frequencies, and adequate coverage in most areas of the Kern. We have gone from that to the most inconsistent and poor coverage that I have seen in my 18 summers working in the Kern and using the (b) (7)(F) repeater. I offer the following 2 examples of how inadequate communications compromise the safety of field rangers and of park visitors.

*I responded to a possible cardiac patient at Timberline Lake in July and when I arrived on scene was unable to communicate with dispatch, helicopter (b) (7)(F), or the Kern area supervisor.

*In August while on a law-enforcement contact on Mt. Whitney (an agitated party of 3 with a dog) I had very spotty communications with park dispatch which further escalated the agitation of the party.

K. Needs for next year

**Place Names of the Sierra Nevada* by Browning

*Dictionary

*see below for inventory and station needs

Crabtree Trail Counter Numbers 2009

7/17-182

7/24-229

7/31-282

8/7-411

8/14-562

8/21-543

8/28-461

9/4-323

9/11-243

9/18-160

9/25-115

Total for 2009 from July 17 to September 25= 3,511

Wag-Bag count for summer 2009

2,250 distributed

225 left at Crabtree for 2010 season

L. Recommendations

*Staff all Kern stations in 2009. The longer seasons in 2009 were a step in the right direction. It would be nice to have some staffing in the field during the 2010 hunting season, as we have been remiss in this important department for last several years.

*Continue to work towards improving communications in 2010. Could we return to the effective communications we had in 2007??

*Work with concessions office to ensure more accurate information given to field rangers regarding CUA's.

*Work harder to ensure that hikers in the Crabtree area who are travelling in the "wag-bag zone" have been given wag-bags already and do not need to pick them up at Crabtree. This is not an attempt to stop our dispensing of bags at Crabtree, but rather minimize the number of bags we send to Crabtree each season to be dispensed.

M. Inventory

Propane (sm.)-1 (2 small used in 2009)
Propane (lg.)-2
Propane (Coleman)-depends on snow survey use
Pocket Rocket (sm.)-6 partial, 3 full
Pocket Rocket (lg.)-6 partial, 7 full
White gas (gal.)-ample
Bear canisters-1 bear vault

TP-4
PT-2
Steno Pads-1
Log Books-0
8 1/2 x 11 Pads-2
Pocket Pads-2
Laminating Paper-ample
Pens-2 boxes skilcraft (ample)
Pencils-ample

7.5" Maps
 Cirque Pk
 Chagoopa Falls
 Johnson Pk
 Kearsarge Pk.
 Mt Brewer
 Mt Clarence King
 Mt Kaweah
 Mt Whitney-ample
 Mt Williamson
 Triple Divide
 Sphinx Lakes
 Recreation Map

Duct tape-1.5
Strapping tape-0
Electrical tape-0

NRB-5
Nasal Cannula-3
D cylinder O₂--3
 cylinder O₂
Medical tape-2 rolls needed for 2010
Laytex gloves-1 box
Ibuprophen-ample
Aspirin-ample

Acetaminophen-ample

Lithium AA

AA batteries

AAA batteries-10

C batteries-1 set for trail counter ok for 2010

D batteries

Lg. Trash bags-ample

Sm. Trash bags-10

Burlap sacks-2

Grain sacks (for firepits)-1

Shovel blade (for firepits)-1

Work gloves (sz/type)-leather large (2)

Work gloves (sz/type)

Work gloves (sz/type)

Work gloves (sz/type)

Sponges-2

Matches (boxes)-4

Snow seal-1 partial

Sunscreen-2

Bug repellent-2

Aluminum foil- 1 partial. (more needed for 2010)

Coffee filters-ample large

Coffee cone-2

Laundry Soap-ample

Dish Soap-ample

Shampoo-needed for 2010

Conditioner-ample

Soap-needed for 2010

Lotion-needed for 2010

Aloe-needed for 2010

Spices listed

RUN sheets-ample

AUO logs-ample

Wildlife Obs.-ample

Exotic Plant Obs.-ample

BIMS-ample

CUA/IBP-ample

Bear Box Loc.-ample

Lodgepole Trailhead Report 2009

May 29 -September 26, 2009

Trailhead Rangers:

Jordan Neumann

Jason Kudulis

Will Molland-Simms

General Observations

This season we started a bit late. The crew didn't arrive until June and we went through two weeks of wilderness and search and rescue training. Our regular staffing of the permit desk didn't begin until mid June. When we first began to patrol the trails, there was a lot of work to be done. The bear box at Mehrton Creek had about 30 lbs. of trash left over from the winter. Nearly every fire ring had to be rebuilt and many illegal rings had to be destroyed, especially in the Twin Lakes area. All 3 rangers were new to working the Lodgepole Wilderness Desk. I (Jordan) had been an interpretative ranger here last summer and had worked in this area of the park as a guide for a couple years and was familiar with the operations and all of the trails. Will had completed a summer internship as a trailhead in Grant and knew a lot about the parks. The first few weeks after training were spent training on desk operations, learning the trails, and becoming familiar with the Giant Forest area. The crew picked up everything quickly and we were able to get the trails cleaned and ready to go. As usual, the Watchtower route to Pear Lake did not open until late June because of snow and ice making the trail dangerous. We had about 3 weeks of cool and rainy weather in June. This was very unusual but did not seem to deter many hikers. The extra moisture brought out great wildflowers in July along with a plague of mosquitoes. The mosquito population lasted for about the last three weeks of July and finally abated by August.

The summer was fairly quiet as far as Search and Rescues. All SAR's were solved quickly. SPOT devices and satellite phones seem to be a contributing factor to this.

We had really strong hikers this year and were able to put over 1,100 miles on the trails!

Permit Statistics/ Use patterns (During Wilderness Desk Summer Season)

Number of Permits Issued

	May 29-31	June	July	August	September	Total
High Sierra	9	99	191	157	84	540
Bearpaw			5	51	20	76
Alta	2	25	48	48	25	148
Pear Lake	3	50	125	123	89	390
Twin Lakes	1	42	79	81	57	260
Total	15	216	448	460	275	1414

Number of Visitors

	May 29-31	June	July	August	September	Total
High Sierra	16	259	551	462	207	1495
Bearpaw			16	145	51	212
Alta	9	87	188	169	97	550
Pear Lake	7	128	332	336	185	988
Twin Lakes	2	96	235	285	160	778
Total	34	570	1322	1397	700	4023

Number of Visitor Nights

	May 29-31	June	July	August	September	Total
High Sierra	50	1039	2408	2731	922	7150
Bearpaw			36	321	118	475
Alta	23	254	703	694	360	2034
Pear Lake	10	262	726	822	567	2387
Twin Lakes	2	247	721	924	555	2449
Total	85	1802	4594	5492	2522	14495

We issued about the same number of permits this year as last. Trail use was heaviest on the High Sierra Trail. Many people were making the trip through to Whitney. We occasionally had problems with people and groups thinking that their reservation slip was a wilderness permit. A few of these were found on the trail and we made them hike out to get their actual permit. They were not happy, but a permit is required and the wording is quite clear on the reservation slip.

As usual, Boy Scout groups caused a few problems. They tend to be large groups that are poorly organized and the kids like to throw trash in the fires and leave lots of trash behind. We also were getting many alterations to camp sites after groups passed through. It is very important to be strict when going over the regulations with these groups and let them know the consequences for violations.

On the trails we contacted 970 day hikers and 909 backpackers.

Projects

September brought the busiest day of the year with Labor Day. After that everything was quiet and we were able to get some projects done. We fixed and painted the winter trail boards that seem to get destroyed by snow each year. We resigned the Sunset, Wolverton, Lodgepole, Alta and Bear Hill trails as well. The plan is to get a little done on the Panther Gap trail towards Long Meadow and the Crescent Meadow trail, both of which need a lot of work.

Camp Areas

We made a point to hit the trails hard this year. We wanted to keep the sites as clean as possible and try to enforce minimum impact regulations. We removed 42 illegal fire rings, cleaned up

sites 83 times, and rehabbed camp sites 41 times. We removed 284 lbs of trash. A majority of this trash came from food storage lockers at the trailheads. We cleaned these every 3-4 weeks. We only maintained 1 fire pit at Panther Gap this year. This area does not often get more than one group of backpackers and we felt there was no need for multiple fire rings that would encourage more damage to the resource. Twin Lakes was the major problem with illegal fire rings. There are multiple signs and the rules are on the permit and the regulations. It is important to patrol this area heavily and try to stay on top of this issue. Camp sites at Clover Creek and JO Pass intersection were frequently rebuilt by groups and these areas face heavy impact and often need a lot of attention. Mehrton Meadow on the Alta Trail sees a lot of use and the rings need to be dug out every couple weeks. Mehrton Creek on the High Sierra Trail is another heavy impact area that requires frequent patrols.

Permit System

The computer permit system is easy to use and works very well. The server is pretty slow, but supposedly that will be fixed soon. It is important to make the visitor get their vehicle information and license plate. This is essential information used on SAR's. We found that it was easier to place emergency contact info and tent color under the remarks tab on the main permit page and not under the visitor info. This was because it was much faster to bring up the remarks tab on the main page if you were looking for quick contact info on the individual. This will not be an issue if the server becomes faster. Long itineraries are able to get printed on the permit now.

Recommendations

We had a great summer and were able to do a lot of hiking. It was nice to have most of our patrol days near our days off. This enabled us to do extended wilderness trips if we chose. The focus of this job is on the Lodgepole area. It is important to learn all of the trails around here as soon as possible. At the beginning of the season, hike a different trail each day. Learn Twin Lakes, Pear Lake, Alta, and the High Sierra Trail. Don't forget about the many other trails in our area. Take time to learn the main trails in the Giant Forest as well as using patrol days to hike Little Baldy and Muir Grove. As you learn the trails, check the conditions and report any down trees and trail maintenance to the person in charge of trail work in this area. Remove all the fire rings that appear during the winter months and clean out everything found in the bear lockers. Note high water crossings and other trail hazards and post them on the dry erase board. Report all major trail conditions to the wilderness desk so they can update the website.

After the immediate trails are learned, take some longer overnight trips and learn our heavy use areas. If you have the chance, do some of the popular longer loop trails such as the Deadman Loop and the Blackrock Pass Loop. The more you know about this area, the better you can assist the visitor with trip planning.

Stay in contact with the backcountry rangers in this patrol area. Let them know when you are passing by their station. Bring out their mail and ask them if they need anything else hiked out. Radio the backcountry rangers with info on large groups that will be passing through their area as well as any permit concerns you may have.

Road's End Wilderness Permit Station Year-end Report 2009

Rangers

Anna Echter
Ron Rowan
Courtney Fischer

Introduction

The Road's End Permit Station was staffed from May 22nd to September 26th this year. We were able to perform extensive trail patrols this year as the Station was fully staffed. We hiked 710 miles this summer and were able to contact many hikers as well as accomplish a lot of backcountry tasks. However, all staff members were new to King's Canyon and it took time to familiarize ourselves with the area before we were able to provide quality information to visitors.

Permit Statistics / Use Patterns

We issued 185 permits in June, 370 permits in July, 381 permits in August, and 239 permits in September. We contacted 784 backpackers and 672 day hikers while on trail patrol and performed 224 compliance checks. We encountered 71 stock and 35 stock users on the trail. The vast majority of permits were for the Rae Lakes loop or some connecting hike such as East Lake. The Copper Creek trail received occasional use. Many of these hikers requested permits for Steve Roper's "High Route" – a 200-mile cross country route from Road's End to Twin Lakes near Bridgeport. The Lewis Creek trail was rarely used for overnight trips.

Resource Work / Camping Areas

The main camping areas we cover are Paradise Valley and the Bubbs Creek corridor. We spent a lot of time in these areas and were able to make many improvements. Overall, we cleaned 119 campfire rings and 137 campsites. We removed 16 illegal fire rings. Nearly all of the fire pits in these areas were rebuilt. They were reduced in size (generally less than 3 feet across), dug into the ground, and encircled by 3 – 6 large rocks instead of dozens. Campsites were cleaned and most of the logs and rocks used as furniture were removed. We removed 110 lbs. of trash from the backcountry including everything that was stored in the 55-gallon drum at the Paradise Valley ranger cache.

Paradise Valley has 2 toilets that definitely needed attention and will need more in the future. We placed large rocks around their platforms to prevent animals from getting into them and to plug the unsightly holes. The pedestal on the Lower Paradise toilet is bent and needs to be replaced. The toilet also needs to be moved as it is filled to capacity. The Middle Paradise toilet is still doing okay probably due to the fact that fewer people camp here than at the Lower or Upper campsites. Both of these toilets could use new seats. Upper Paradise could use a toilet as this is a busy area.

All of the wooden signs in Paradise Valley should be replaced. There are 3 new signs in the Road's End Station that could be brought up by the next NPS stock party. A drill would be needed since the holes drilled in the current signs are not uniform. There are newly laminated Lower and Middle Paradise maps in the file cabinet at Road's End. Upper Paradise will need to have a new map made as the trail crew will soon be rerouting the trail and moving the campsites due to recurrent flooding in the area.

The administrative site at Upper Paradise should be inventoried and downsized. There are 4 metal boxes filled with extra gear that could be replaced by one large Knaack box. This box could also hold the tools that are currently out in the open so that they could be protected from the elements. There is a pile of old tent poles and sign posts that need to be removed. The old wooden platform could also be disassembled and taken out or burned. The 55-gallon drum should be crushed and removed as it just seems to accumulate trash.

The Bubbs Creek trail has campsites at Sphinx Creek, Charlotte Creek, and Junction Meadow. The Sphinx Creek camping area now has a rocked trail up to the toilet as well as a temporary "Toilet" sign on the main trail (a permanent sign has been ordered from the sign shop). The toilet is in good condition, but it could use a new seat. This toilet will probably never have to be moved as the pit under it is very deep. A large tarp that was tied to a snag and used as a screen was dismantled and carried out. There were also a dozen large planks stacked up near the toilet that were stashed behind a tree 40 feet north of the toilet. Several more of these large planks with nails were removed from the campsites in the area and stashed. The trail crew camp across the river was left as is – it has some camp furniture and a large fire pit. The old wooden sign at the junction was removed – there are newer metal signs there that provide directions.

We also removed the broken wooden sign at Charlotte Creek. There is a rocked trail that leads to the campsites and should be visible from the main trail. A new metal sign for this area has been ordered from the sign shop.

Junction Meadow also had a broken wooden sign at its west end that was removed. The food storage locker and campsites are right next to the trail and should be fairly obvious for those traveling the Rae Lakes loop counterclockwise. A sign should be installed at the east end of the meadow to let people know they need to pass through the two drift fences before they find the camping area as this is not obvious.

On the Copper Creek trail, the old wooden sign at Lower Tent Meadow was removed and a trail rocked up to the main campsite.

On the Lewis Creek trail, the broken wooden sign at Frypan Meadow was removed. The two metal signs at the Wildman Meadow junction were straightened.

Trails

The trail to Paradise Valley suffered some damage after a strong rainstorm in September. Small sections up to Mist Falls are washed out and the trail has gotten rockier. The trail in Upper Paradise was flooded in the spring and early summer due to the logjam in the river. The trail was temporarily rerouted for the summer and a permanent reroute needs to be built as this area will continue to flood every year.

Otherwise, I heard many compliments on the well-maintained trails in Kings Canyon. People were always impressed by the rock work and the general great condition of the trails.

Meadow / Stock Issues

Lower Junction Meadow was closed to grazing this year due to flooding and heavy use last year. We monitored and took photos of the meadow on several occasions and noticed evidence of stock use on these trips. We then dismantled the drift fence gate at the lower meadow. This gate was then rebuilt and closed on two separate occasions by an unknown party. The Cedar Grove commercial pack station was contacted and they stated that they were unaware of the meadow closure. In the future, we should schedule trail patrols to coincide with commercial pack trips so that the issue could be more closely monitored.

Otherwise, commercial stock use was down this year due to the economic downturn. The trail crews did not spend much time in this area and so there was little NPS grazing in the nearby meadows.

Recommendations

Several items could improve operations at Road's End. Firstly, we have discarded a lot of outdated supplies, information, etc. We need some new maps for Road's End staff to use on trail patrol – 3 Tom Harrison Rae Lakes maps and 3 Tom Harrison or National Geographic Sequoia/Kings Canyon maps. We need the 3rd edition of "The High Sierra" by R.J. Secor (we have the 1st edition). We could also use a copy of Steve Roper's "Sierra High Route".

We opened on the Friday of Memorial Day weekend this year. There were issues with the solar power system and we ran out of power after being open for 15 minutes. We were unable to open the cash register and had to scramble to accommodate the groups of people that had arrived. We were all new to Road's End and had to figure out how to run the station through trial and error. It would have been better to open a few days earlier so as to work out the kinks before one of the busiest weekends of the summer.

The Road's End permit station operates on limited solar power that provides just enough energy to run the cash register and one light for a short amount of time. We are only able to be in contact with the Wilderness Office by radio. We have no internet service and so are not able to look up weather reports, information on other trailheads or hiking areas, etc. We write all of our permits by hand and then the Wilderness Office enters the data into the computerized Yosemite permit system. If we had satellite

internet, a laptop, a printer, along with a power upgrade, we could issue printed permits and save the Wilderness Office many hours of data entry work. We would also be able to look up any information we needed to provide better customer service to backpackers and other visitors. We would have better communication with the Wilderness Office via email and be able to respond to any questions that they wanted to pass on to us from visitors. This would be a great improvement to the station and to the Park's wilderness operations as a whole.

Road's End sells Golden Age passes and we did not sell a single pass this season. People are unaware that we sell these passes and probably would not expect us to. These should be sold at the Visitor Center, as they sell other park passes.

When writing permits, we also distribute a copy of the Minimum Impact Regulations. This form has been much improved over the past few years. However, it has a signature line on it that is unnecessary. When people sign their permits, they are agreeing to abide by the rules of that permit, which includes these regulations. If a party gets a permit, rents a bear canister, and pays by credit card, they have to sign their name 5 times. They sign the permit, the minimum impact regulations, the bear canister rental form, the credit card receipt for the NPS permit, and the credit card receipt for the SNHA canister. Obviously, this makes for unhappy backpackers who are here to take a break from those sorts of things.

There are many busy camp areas in the backcountry that have pit toilets. Many of these are old, unattractive, even dangerous, and need to be replaced. However, the Park has no replacements and it has been difficult to locate a place to buy these toilets. The warehouse should determine where to acquire these toilets and stock them for future use.

Road's End is a busy place and receives many different kinds of visitors – Muir Rock swimmers, day hikers, visitors with limited English skills, long-distance thru-hikers, etc. There is very little signed information to assist these groups. A large map at our end of the parking lot would help orient people. A “Day Use Only Parking” sign would be helpful in the main lot. A sign pointing to the “Overnight Parking” lots is also needed. We need several signs to direct people to the bathroom which is somewhat hidden. People are also unable to find the one potable water source which is in the rock in front of the station. People are unable to find Muir Rock and should have some more printed information on the rules pertaining to that area as it gets very busy. Visitors get frustrated at the lack of obvious information.

Lastly, a few improvements could be made to help future employees be more successful. A list of collateral duties would help new staffers know what is expected of them while at the station and keep them busy during slow times. We can pick up trash in the parking lots and at Muir Rock, check the food storage lockers for abandoned items, make sure people haven't left food in their cars, clean the station, etc.

Employees should also familiarize themselves with all the information on the NPS/seki website before they are stationed at Road's End and no longer have a chance to have time in the office.

The wilderness permit stations in the Park can be staffed by Visitor Use Assistants or General Park Rangers. However, this is a specific job that needs a specific and clear job description. Before we collected fees, we were Trailhead Rangers, which is a better job title. This job requires a person to be able to carry a heavy backpack over rough terrain for up to 5 days at a time in all kinds of weather while navigating with a

map and compass. A Trailhead Ranger should have interest in doing resource work which can include cleaning out and rebuilding fire pits, picking up and carrying out possibly many pounds of trash (including used toilet paper), doing some minor trail/campsite maintenance, and being friendly to visitors while performing these tasks. A person from a VUA list may be expecting a sedentary job at an entrance station or campground office. When we are staffing the permit station, we are constantly answering questions about different hikes, issues in the backcountry, etc. This requires us to have spent some amount of time in the backcountry gaining knowledge and experience. We expect a lot from visitors, and they should expect a lot from us. We expect them to pay the entrance fee, pay the campground fee, pay the wilderness permit fee, rent a canister, make a reservation possibly months in advance, etc. Many of these people drive many hours or fly here from all parts of the country specifically to hike and backpack in this beautiful area. The Rae Lakes loop is world famous. The majority of our permits and questions pertain to this particular hike and every employee should hike this trail as soon as possible in the season. We should know more about this hike or any other hike here than most visitors. The least we can do is be able to provide thorough and up-to-date information on local conditions, so that visitors can have the best experience possible.