

# Charlotte Lake

## End of Season Report

### Jim Syvertsen 2014

#### A. General Summary

This year the station was staffed from June 22 to September 23. It was another drought year, the third in a row. However, the summer received frequent rain, the likes of which I had not seen in my four summers in the Sierras.

While I had wilderness experience in this area from previous years, there was still a learning curve for me with multifarious duties of a Wilderness Ranger. I preformed every duty that rangers might expect to encounter in the wilderness.

I had thought that with the growing popularity of satellite emergency devices (Spot, GeoPro, and satellite phones) classic ground-searches for missing persons would become less frequent. However, it seemed like this year we experienced a high frequency of ground searches, at times chasing a moving 911 signal. Visitors in need of help in the wilderness are from the full spectrum of experience levels. New backpackers can require rescue from a trail, and experienced mountaineers can require help on difficult terrain. As a park, it seemed like it was a busy Search and Rescue year, at least from my experience.

#### B. Visitor Services

1. Statistics	June	July	August	September	Total
Visitor Contacts	74	204	382	140	800
Miles Patrolled	70	182	234	157	649
Trash in Pounds	13	25	22	2	62

#### 2. Law Enforcement Incidents:

This season I observed very few incidents for which I thought a citation was appropriate. The most common type of violation that I observed visitors committing was camping on vegetation. The vegetation was almost always sparse brown sedges that visitors were unaware that they would negatively impact.

The most common violation for which there were no suspects was food caches and trash stashes in bear lockers. This topic is discussed further in the recommendations section in this report.



The greatest resource damage I observed was from stock animals grazing on the south shore of East Lake. The vegetation was cropped close to the ground with deep hoof prints and manure right up to the edge of the lake. Based on my investigation and reports received by a Ranger Riorden in Cedar Grove, the damage was caused by a private stock party. I took photographs of the damage and supplied Ranger Riorden with a written supplemental report.

I discovered many firerings containing partially burned trash, often the plastic/foil instant dinner wrappers. I was never able to observe the violators of this. The minimum impact sheets that the park hands out to wilderness travelers do inform visitors to not burn trash. I am not certain exactly what the Forest Service sheets say about this.

I issued a citation on August 31 for a pet (dog) in the wilderness at Kearsarge Lakes. The party had camped with the dog there the previous night and was planning on camping in the park this night as well. I contacted them in the afternoon, so I could not ask them to leave the park with their dog. To their credit, the dog was on a leash and well behaved.

I issued a citation on September 23 to an individual who did not have an overnight wilderness permit. A Cedar Grove patrol ranger had informed me that this individual refused to get a permit or a bear can at Roads End. When I contacted him, he stated, "I don't believe I need a permit." I also issued him a warning for not having a bear can and told him to store all his scented items in a bear locker at night. It was not aware of the purpose of proper food storage, so I educated him about bears.

I issued various verbal warnings for camping on vegetation, improper food storage, and grazing in a closed area.

I was not able to catch anyone building firerings or having fires at Kearsarge Lakes, however, I found new ones built almost every week. Mostly they were built at the first major campsite, near the grey bear locker. There is a wide ring of large boulders at that camp in which the firering typically appears. The boulders make a nice sitting circle, so I have left them there. A potential solution to this reoccurring firering would be to remove these boulders from the camp. To do this, a rockbar tool would be needed to leverage the rocks.

### 3. Search, Rescue, and Medical Incidents:

General summary

<u>Date</u>	<u>Location</u>	<u>Type</u>	<u>Evacuation</u>
6/25	Charlotte	Minor Laceration	Visitor Assist
7/28	Bench Lake	SAR	Helicopter
8/9	Charlotte	Llama SAR	Found, Returned to owner
8/17	Kearsarge	Abdominal Pain	Helicopter
8/18	Gardiner Basin	SAR	Helicopter

### 4. Service Incidents:

On a half dozen occasions, I gave out extra food to visitors who requested it. It was typically visitors waiting for a resupply and needed an extra day of rations.

Several minor medical inquiries not tabulated when visitors were not requesting assistance, but seeking information on their options for self-rescue.



## 5. Ranger Station:

At the beginning of the season, the trail from Charlotte Lake up to the Ranger Station had many loose, tennis ball-sized rocks and was experiencing erosion. With the help of other rangers and V.I.P. Ellison, I removed the loose rocks and installed steps and erosion breaks. The trail is now less hazardous to walk down at night, and should withstand the effects of erosion for a few seasons to come.

Before:



After:



The station's old windows were replaced with ones that are counterbalanced. This makes opening the security shutters much easier, as they are quite sticky and require two hands to unlock. The station is also much less drafty now, which will be appreciated by the snow surveyors I am sure. The trim work around the windows exhibits excellent craftsmanship.

A flagstone on the porch broke out of its cement. The worker who installed the windows was able to wedge it securely in place with other stones. I then made cement with sand, wood ash and water to fill in the cracks and make it look more "natural".

Structurally, the station, solar panel, and other appliances are in good working order. The solar panel is extremely difficult to put up and take down. It took three of us to put it up and I nearly dropped it taking it down by myself. Next year I will have to plan its removal more carefully using the ladder in the snow survey shed.

I burned through just over one tank of propane this season. This includes many loaves of bread baked and cups of tea boiled. There are presently 3 full tanks at the station which will be plenty for the 2015 season.

The station is in good working order. Everything is functioning at an arguably luxurious level. The park's forester came by the station and assessed potential hazard trees in the area. He concluded that the station was in no immediate danger, but did note a potential hazard tree threatening the snow survey shed.

The pit toilet is in good working order. While it is filling up, I expect it to be able to receive at least two more seasons of use before a new pit needs to be dug.

Charlotte Ranger Station continues to be rodent-free, largely thanks to Ranger Sanger's ingenuity and engineering of an automatically-closing screen door with gap-filling mesh.

## **C. Wilderness Protection**

In the Charlotte Lake area, I rehabilitated three tent pads that were too close to the trail. There are more than enough places to camp around the lake that are not directly adjacent to the trail. I rehabilitated select sites by burying a large rock in the center of the cleared area, and filling the rest in with loose stones. It matches the surrounding rocky landscape well.

Area trails are for the most part structurally intact. There are a few erosion chutes on the south side of Glenn Pass that at present, are still easily stock passable. The winter may exacerbate them, so the Charlotte Ranger next season would be wise to check them early. Because they are located on switchbacks, retaining walls might be needed to shore them up.

The switchbacks leading from Vidette to Bullfrog junction, and especially from Bullfrog Junction to the sand flat junction were eroded by the heavy rain events this season. Some sand has been washed away beneath the granite steps, making the steps deeper, and more difficult to climb.

For next year, the area drift fences could use a few more heavy staples, as some have been lost in the years. I estimate 30 staples should suffice. The drift fence at East Lake needs immediate attention. There is drift fence trash including two spools of wire, scrap pieces of wire, and unused piles of T-bar. There are a few trees supporting the drift fence that have to pieces of wood buffering the wrapped wire. The wire has dug into the bark, fast girdling the trees. The wire needs to be removed as soon as possible, if it is not already too late.

JMT resupplies out of Onion Valley went well this season. Pine Creek pack station would make resupplies face-to-face at either the sand flat junction, or down by Charlotte Lake. There were at least three hiker-supplied food caches left in the bear locker at Charlotte. The sign on the locker door, and a written warning left by myself did not seem to have any effect.

With another year of early melt, all but the tail-end of PCT hikers were missed by the time our seasons began. JMT through hikers remain the most dominant user group, followed by Rae Lakes Loopers, and area hikers coming from Kearsarge and other Passes.

### **2. Meadow Management:**

Overall, I learned that grazing regulations, meadow use, and stock party contacts are a weak point of mine. With the help of fellow wilderness rangers, I did, by the end of the season, start to get a grasp on how to contact a stock group. I am more prepared with information I need from them and for them.

The Charlotte area meadows this season opened on time in accordance with a dry year. I made a decision to extend the closing date of East Lake meadow by 12 stock nights based on what I saw immediately after the drift fence. I did not realize that there was a larger, more heavily grazed area farther up the trail. Upon doing the residual biomass monitoring, I saw grazing impacts to an extent that would have affected my decision to postpone the closing date.

There is a sign at the Vidette Meadow junction that reads “Vidette and Upper Vidette Meadows are closed to grazing. Grazing is allowed above the upper fence.” It is my understanding that private stock parties are now allowed to graze in Vidette Meadows, so this sign is no longer relevant and should be removed. It is bolted to the junction signpost with U-bolts and hex nuts.

I completed all the area Residual Biomass Monitoring work with the help of a meadow biologist.

I observed a bear around Charlotte Ranger Station only once. It was headed towards the buried cold – storage barrel behind the station. It turned around and walked away after a calm inquiry, “Hey bear, what’re you doing?”

The month of August saw a marked absence of songbird songs. By mid-September however, I heard the brown creeper start again.

The greatest resource impact I observed was the illegal grazing at East Lake, discussed elsewhere in this report. Otherwise, I did not observe any significant, user-generated resources damage.

Constant minor trail maintenance was performed. Rocks were constantly being dislodged, likely from hooves, and I would kick them off the trail whenever I encountered them. I also removed from the trail piles of manure and fallen branches.

Firerings Removed. Vidette Area: 6, Kearsarge Lakes: 5, Charlotte Lake: 3, Bullfrog Lake: 1.

#### D. Recommendations

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I recommend a discussion on the merits of bear lockers. It is my opinion that, while I do not enjoy carrying trash, it is better to fill an oil drum with visitors’ garbage than for one bear to get a taste of human food. This is likely already being discussed in the new park’s Wilderness Stewardship Plan.

It debatable whether or not removing the lockers is a viable solution. Is it better that we have these “trash cans” to concentrate the garbage, even if it encourages leaving unwanted trash and property? If the lockers were to be removed, would people still leave trash, but hide it somewhere scattered and unprotected from wildlife? This debate might not be answered solely from the experiment with the bear lockers at Kearsarge Lakes. Because they are not on the JMT/PCT, they see different user groups. That said, I did not find any

significant trash in the Kearsarge area due to the unavailable lockers. In fact, on a number of occasions I found property (a tarp, Tupperware, blue jeans) abandoned on top of the lockers. Visitors seem to see bear lockers as a good place to leave unwanted items.

East Lake drift fence requires immediate attention. Wire needs to be removed from around trees before they girdle (if it's not already too late), and extra fence trash needs to be packed out. The gate could also use some repairs, and the supporting posts fell down as soon as I lowered the fence.

There is a commercial stock group call "3 Corner Round" that comes into the park for a few weeks every year. From visitor reports and from my own personal experience, they are competent and polite. However, their supervisors require each of their animals to wear a Swiss cow bell, which in my opinion make an unreasonable loud noise. I could hear them coming from a half mile away. They are also annoyed by the cacophony of the bells, but obey their supervisor's direction. I recommend our administrators discuss this issue with the 3 Corner Round owners, in hopes that we can come to a compromise on balancing stock safety with wilderness experience for other users.

At the end of the season, I discovered I need to improve my recording of data. Going back over my daily logs, I realized how little I recorded regarding eventful contacts, minor medicals, and photographs and coordinates of notable issues. I will be more prepared for this in the future but bringing with me to the station a daily log template. It will be worthwhile to briefly go over the end of season report format so that expectations of data are fresh in our minds.

## **E. Equipment Needs**

For minor repairs on area drift fences, 30 heavy fencing staples are needed.

I broke two extendable antennas this season. They will have to be replaced.

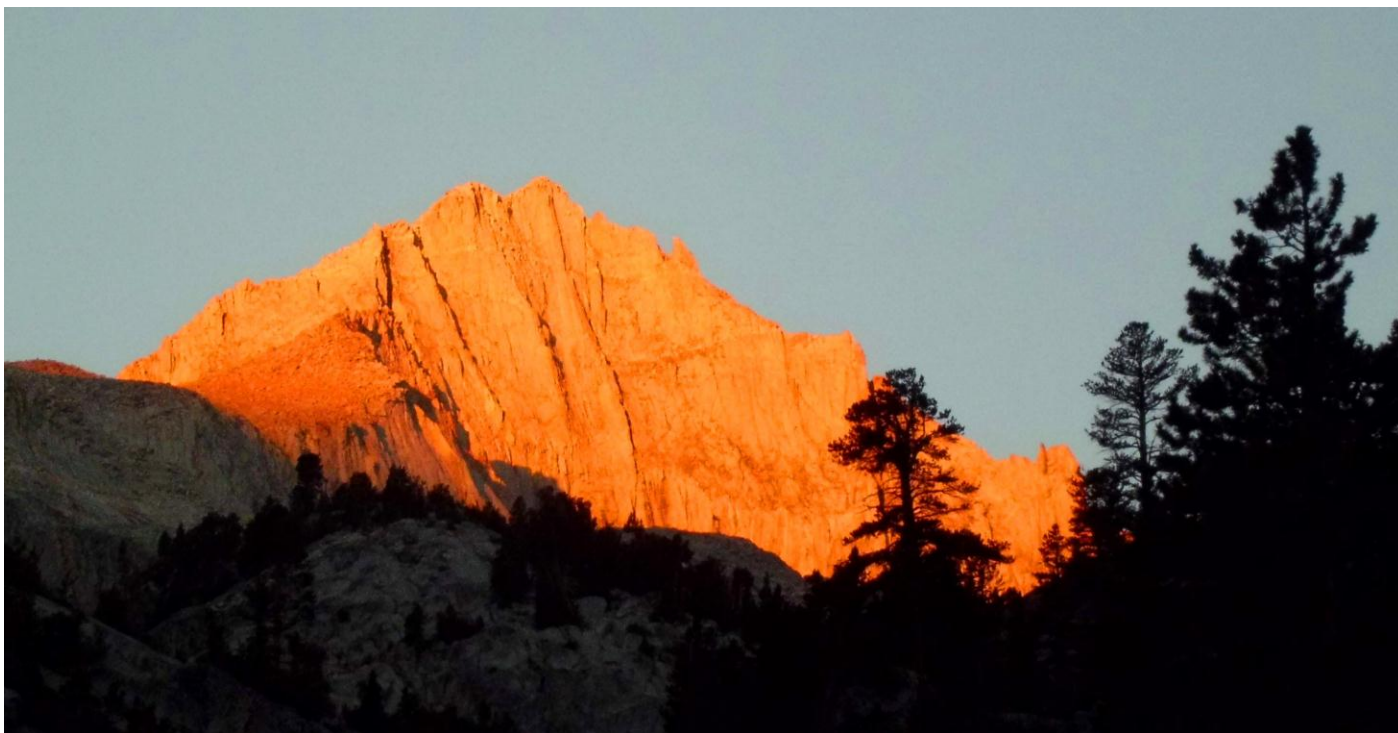
With efficient headlamps, I went through only one pack of AA batteries. There is a pack of new batteries left at the station, so depending on the 2015 Ranger's battery habits, no more should be needed.

There is plenty of propane to last the 2015 season. Isobutane/propane mix backpacking fuel canister left at station: 2 big, 4 small. Canisters used in 2014: 3 big, 2 small.

No radio batteries were left at the station.

I left a large plastic tote full of food that will winter well. Also left there was a small tote of home-dehydrated Sanger food, and a large tote of abandoned backpacking food (the "hungry hiker" box). Cleaning supplies are well stocked, but some toilet paper and paper towels are recommended.

The station could use more salt.



[END OF REPORT]



**Crabtree Ranger Station**  
**End of Season Report – 2014**  
**Submitted By: Rob Pilewski**

**A. General Summary**

This was my 23rd season working as a commissioned wilderness ranger at SEKI. There have been some subtle, and not so subtle, changes in the Sequoia and Kings Canyon Wilderness since I started working here in 1992. The most significant changes have involved user trends and subsequent impacts to this national treasure. There have been noticeable shifts in how, and where, visitors travel in the Park. My first season here there were fewer than 50 people attempting to thru hike the length of the Pacific Crest Trail. The PCT and the JMT are the same as one travels north of Crabtree to the northern



boundary of Kings Canyon National Park. This season the number of people attempting this 2,700 mile journey was somewhere between 1,500 and 2,000! The amount of commercial stock use has also seen a significant spike in user nights as CUA holders have realized there is a market for selling stock supported hiking trips to Mt. Whitney. Couple this with the increasing numbers of south bound JMT hikers (I estimate between 5,000 to 10,000 this summer!) and I can state unequivocally that visitation was higher this summer than any of the 23 previous summers that I have spent at SEKI. This is by no means a complaint. I am all for access to our public lands and I think that our culture is better when the citizenry go to the wilderness. However there are fewer resources these days to deal with these increasing numbers... fewer rangers working fewer hours have a hard time keeping up with the work load of this increased visitation.

This season came on the heels of the 3rd dry winter in a row and park resources are showing it. Park vegetation is looking stressed, lake levels are down significantly, and springs that once flowed freely are bone dry. The climate is changing folks and so are things here in the SEKI wilderness.

The other major change in the Crabtree patrol this summer was the new ranger station. It served the public and the ranger quite well in its inaugural summer!

**B. Visitor Services**

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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 treasure. Because the highest, and infinitely accessible point in the lower 48 States resides in the Crabtree Patrol area there is a large number of novice wilderness users that require more coaching than more experienced



users do. On most summer days, there are also 100+ day hikers on the two miles of the Mt. Whitney trail that runs along the park boundary.

The public service that the Crabtree Ranger provides to park visitors can be rewarding and meaningful to folks in helping them enjoy their public lands. This season, more than ever, park visitors expressed their gratitude for the service that wilderness rangers provide. Visitors were impressed by the new ranger station at Crabtree and many enjoyed the view from the porch and the shelter that the station provided on rainy days. 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 NPS uniform puts us in pretty high regard with most visitors 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. There is no substitute for having this cadre of experienced wilderness rangers who live in the SEKI wilderness summer after summer. The knowledge and information about the park is invaluable to park managers and visitors alike and can only come from years of experience and living in the wilderness all summer long. The Wilderness Ranger Program at SEKI is the best in the business when it comes to visitor services and providing 24 hours a day coverage. (b) (7)(E)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**a. Contacts**

**i. Backpacker- 2,980**

**ii. Dayhiker- 1,950**

**iii. Stock- 275**

**b. Law Enforcement**

A seasonal LE commission is a vital tool for the Crabtree ranger to have in the tool box. It is used daily on patrols and I strongly encourage that a commissioned ranger continue to be staffed at Crabtree. In an area that receives so much visitation it is important to have the ability to enforce park regulations in the field. That being said, education of park visitors about park resources and the importance of protecting these resources is an effective means of gaining compliance and protecting said resources.

**c. Citations**

As of this writing I have issued 1 citation for an illegal campfire. Many violations are observed after the fact and the subject has left the area. I broke down and rehabbed many illegal fire pits this summer. One in was at Upper Soldier Lake and the person had cut live pine boughs from several ancient Foxtail Pines to fuel their illegal campfire.(see photos) I issued countless verbal warnings for; camping on

vegetation, high line too close to camp, not removing manure from camp, group size violation, feeding wildlife (the Marmots on Mt. Whitney are given handouts all summer long!), human waste disposal, and leaving/abandoning items in the bear-box for more than 24 hours. Most of these violations were minor and the violators were able to take corrective action before any damage was done. (b) (7)(E)

These statistics are more appropriate for EOS reports and station logs. Routine ranger work should not contribute to the incessant radio traffic that makes things less safe out here for all of us.

#### **d. SAR & Medicals**

I was involved with 5 SARS this summer. The first was at Mt. Whitney in mid June and was focused on the east side (Inyo NF) of the mountain where the person was last seen descending towards Trail Camp. After 4 days of intensive searching, in a fairly limited search area, the subject was located by helicopter (b) above Mirror Lake. He had taken a fatal fall from the cliffs above Mirror Lake after apparently losing the trail. The second was at Mt. Goddard in early July and was quickly resolved when the person was located by the helicopter inserting searchers at Davis Lake. The subject had fallen while descending Mt. Goddard and had suffered a compound fracture of his lower leg three days prior to being located, but was otherwise fine.



There was another search at Mt. Whitney following a spell of bad weather on July 30th. The reporting party arrived at the Crabtree Ranger Station on the morning of July 29th to report that her husband had not returned to their designated meeting place at Guitar Lake the night prior after ascending Mt. Whitney. The Rock Creek Ranger searched area campgrounds and stayed with the RP while I went up Mt. Whitney. Poor weather prevented me from ascending the mountain until late in the day. Helicopter 552 and I arrived to the summit area at about the same time, at sunset, and (b) spotted the subject on the north side of the mountain. He had suffered a fatal fall after apparently losing the trail on the summit plateau and following a cairned route down the N side which connects with the Mountaineers Route. 8-1-2 and I did the recovery\scene investigation the following day. The summit of Mt. Whitney was enshrouded in a low cloud during this period and probably contributed to this tragic accident.

The third SAR of the season on Mt. Whitney occurred in mid-September. The Inyo County SO took a report of an individual suffering from altitude sickness and hypothermia somewhere between Trail Crest and the summit. Helicopter (b) was unavailable so a CHP helicopter flew in and spent 45 minutes orbiting around the search area but were unable to land. I hiked up with the Gamow bag in the night, and 8-1-17 and 8-3-1 who were camped above Guitar Lake also assisted. The individual apparently self-evacuated by the time we arrived as we were unable to locate the victim.

I assisted with the Gardiner Basin SAR on August 19, 20, and 21st. The search followed the stormiest period of the summer and involved many ground teams and 2 helicopters. The subject was located by a ground team on the north side of Mt. Gardiner. He had suffered a fall presumably after trying to descend to Gardiner Basin from the shoulder of Mt. Gardiner. He either died of exposure and/or of complications from his injuries days before he was found.

The common theme in all of these accidents is that the subjects were solo and bad weather was a contributing factor.

#### **MEDICALS--**

<b>Date</b>	<b>Location</b>	<b>Type</b>	<b>Evacuation</b>
8/28	Crabtree	HAPE	Helicopter (b)
9/7	Guitar Lake	HAPE	Helicopter (b) (7) (CHP)

There are numerous visitor assist EMS calls throughout the summer. Many are at the Crabtree ranger station and are for such minor maladies as AMS, muscle strains, and a wide range of ambiguous medical complaints. In this wilderness setting it is sometimes difficult to separate the people who require evacuation from those who require monitoring and encouragement.

#### **e. Fatalities**

SEE SAR.

#### **f. Weather**



The aforementioned 3 years of drought in California has really taken a toll on water sources in the area. Brief relief came in the form of monsoonal flow in late July and early August. On August 4th over a foot of snow fell on Mt. Whitney. The photo to the left was taken on August 5th. I cannot recall such a significant snowfall occurring mid-summer before. August 11th, in particular, was a day of soaking rains and lots of electrical activity. I estimate that Whitney Creek rose between 1'-2' during this day. There was so much lightning activity during this storm that there undoubtedly would have been wildfire activity if not for the soaking rains that accompanied the storm.

#### **g. Fires**

As of this writing it has been a very quiet fire season. A few smoldering, solitary trees burned at Wallace Creek and the Big Arroyo/Kern Canyon.

## **C. Use Patterns**

### **a. Backpackers**

Backpackers constitute the majority of use in the Crabtree patrol area. There were more stock supported hiking parties this summer than in previous seasons. The JMT thru hikers originating in Yosemite and hiking Southbound thru SEKI to Mt. Whitney have perhaps become the biggest user group in the area. It would be good to get the permit data from Yosemite to see just how many permits they are issuing to southbound JMT hikers. There was a dramatic spike in the number of PCT thru hikers this summer.

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 and other SEKI areas.

### **b. Stock**

Commercial stock use continues to increase at Crabtree due to the popularity of Mt. Whitney. The stock supported hiking trips to Mt. Whitney continue to be the biggest source of grazing nights in the area. These trips originate and finish at Horseshoe Meadow. There was 1 and sometimes 2 of these trips every week throughout the summer. They are organized by Sierra Mountain Center, Sierra Mountain Guides, and REI. The Cottonwood and Rock Creek Pack Stations are "subcontracted" to pack for the trips and they stay 2 nights in the Crabtree area while the clients are hiking Mt. Whitney. Rock Creek Pack Station also had many trips coming through Crabtree from Onion Valley and Horseshoe Meadow. The Kern Trail Crew stock were in the area for approximately 7 nights and a total 80 stock nights.

There were only 2 private stock parties to visit the Crabtree area this summer. Please refer to the stock use observations sheet for specific numbers and locations of stock use at Crabtree this summer.

### **c. Administrative**

The Kern Trail Crew camped above Timberline Lake and spent the better part of a week fixing 2 blow-outs of walls on switchback #6 on the Mt. Whitney trail this summer. They did a fine job.

There was lots of I&M crews through the area throughout the summer. There were many caches sent to Crabtree this summer by these crews. This works out better when the Kern stations are mobilized by helicopter and have more allowable space. The past 3 years of drought have resulted in stock mobilizations and space is more limited. We are happy to help resource crews get supplies into the field, but more stock is necessary to mobilize the rangers.

It was good to see the new Kern Sub-District Ranger, Klint Powell, in the field this summer. We spent 3 days together in the Crabtree area getting him oriented to the lay of the land and talking about local issues and concerns. We spent a day together patrolling Mt. Whitney.

SEKI forester Tom Warner spent several days in the area assessing tree hazards. He tagged 3 trees near the new ranger station as tree hazards, and one near the public toilet in the campground.

(b) (6) visited Crabtree in July. Our meeting focused on wag-bags and Mt. Whitney. There is a concern about west bound hikers entering the park from Whitney Portal and what to do with full wag-bags once they get to Crabtree. We discussed several options, but decided on keeping an eye on things and having permit issuers educate users on the issue and offering alternatives. One thing we all agree on is that we need to improve communications between SEKI and Inyo rangers. We should make sure at the beginning of the field season that we have each others frequencies programmed into our radios and which channels are monitored by each group.

(b) (6) also stated that the Inyo NF is collecting a fee from reservations made on its website from people whose sole intention is to visit SEKI.

#### **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. This season saw a spike in the number of commercial stock supported hiking trips. These trips primarily originate at Horseshoe Meadow, culminate in a hiking ascent of Mt. Whitney, and exit via the same route to Horseshoe Meadow. They are 5 night trips and utilize commercial pack stations to carry camp supplies from one location to the next. The reason that they exit back to Horseshoe Meadow rather than Whitney Portal is because the USFS does not allow commercial use on the main Mt. Whitney trail (east side). The primary pack station is Cottonwood Pack Station, with Rock Creek Pack Station also packing for some of these trips. They typically travel with 7 head of stock for groups ranging in size from 4 to 12 people. These trips are primarily sold by Sierra Mountain Center (SMC) out of Bishop, with REI subcontracting SMC and the Rock Creek Pack Station for their trips. There was at least one, but sometimes 2 of these trips every week throughout the summer. I did not have any issues with any of these trips. Their guides are professional and compliant with park regulations. They use wag-bags for their human waste while they are camped at Guitar Lake and pack it back out to Horseshoe Meadow. The stock aspect runs smoothly as well and they had it down to a routine operation by seasons end. Area trails are showing significant wear and tear due to this increase of stock use on the same trail corridor every week..

Other commercial users in the area this summer were: Southern Yosemite Mountain Guides, High Sierra Pack Trains, Sequoia-Kings Pack Trains, and Call of the Wild,. Again, almost all of the commercial use in the Crabtree area has an element of Mt. Whitney in it, if not an exclusive reason to be in this part of the Park.

### **D. Natural Resources**

#### **a. Bear Activity**

The only bear sighting that was reported to me was at Wallace Creek. There were no incidents of bears obtaining, or trying to obtain, human food reported to me. This fact includes the entire JMT corridor from Yosemite to Mt. Whitney. The bear



canisters and boxes are a huge success. Permit issuers should stop including a BIMS form with every issued permit. This is a huge waste of paper and is unnecessary.

### **b. Wildlife**

Wildlife sightings in the area were fairly routine this summer. There was a bald eagle that could be seen flying over the high lake basins that had the best fishing throughout the summer. Golden eagles have been much more prevalent in the past so the bald eagle is somewhat of a rare sighting. The local deer population continues to do well with many fawns observed this summer. The pika population is also doing quite well and many visitors approached this ranger to learn more about this cute little critter and ask if they could take one home with them. So sorry, the pikas are protected and we like them just the way they are!

### **c. Vegetation**

Monitoring area meadows is a big part of the Crabtree ranger's job responsibilities. All of the Crabtree Meadows were open for limited grazing by recreational pack stock this summer. Lower Crabtree was allotted 40 nights of grazing and it was closed in mid-August. Upper Crabtree was allotted 75 nights of grazing and as of this writing it has received 48 grazing nights, and Sandy Meadow was allotted 200 nights and it was closed in late August. While I was doing the RB work this fall at Crabtree I was struck by the poor state of the area meadows, particularly the reference plot at Sandy meadow and the core plot at Upper Crabtree. There was much more bare ground, less productivity, and the meadows just did not look very healthy. This was not apparent until late in the season when the dry conditions really took its toll. I do not attribute this only to the grazing impacts, but a combination of 3 years of drought, the various rodents in the meadow churning up the soil, and combined years of grazing impacts. I took lots of photos of these impacts and we will need to keep a close eye on things, especially if the drought persists.



Sylvia and Erik have done a great job of guiding field rangers in the management of park meadows. It is a challenge here at Crabtree to monitor grazing impacts. Once packers turn their stock out at night to graze they drift to places that they have no control over. In an area like Crabtree it would be ideal if we could require stock users to have better control of their stock once they are turned out to graze. Some stock users are happy to have the opportunity to hand graze their animals in certain areas, or to use electric fences to control where their animals go for grazing. Most users maintain that turning the stock out at night and listening for the bell in the morning and "wrangling" the stock by going to find them, wherever they have drifted overnight is the right way to graze their stock. I also think that there could be more grazing nights allotted if stock users had better control of where their stock graze,



therefore more evenly distributing use across the meadow, and in places that can sustain more grazing.

## **E. Cultural Resources**

### **a. Prehistoric**

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

### **b. Historic**

The Mt. Whitney Hut turned 105 years old this summer. It is still much revered by visitors to the summit of Mt. Whitney. Thor (historic preservation crew) repaired the door last fall and installed a new door knob and reinforced the door and jam. The work that they did 2 years ago is looking great and this historic structure is in as good of shape as I have seen it. Rebecca Webb from maintenance did a building assessment on the structure this fall. My hand written sign asking visitors not to write graffiti on the walls has worked so far, but we might want to have a permanent sign made up and installed on the inside of the visitors side of the building.

## **F. Backcountry Facilities**

### **a. Ranger Station**

This was the first summer for the new Crabtree Ranger Station. It served the public and the ranger quite well. There were many positive comments from visitors about the beautiful new cabin. There are still some gaps in the logs that will need to be addressed. As of this writing there were no mice this summer, but it is a bit drafty. The state snow surveyors, who use the cabin for their shelter while conducting the winter snow surveys, had a list of issues from their use last winter. This list was passed along to David Karplus. Their chief complaint was that the new cabin leaked heat and mice. They said that they were unable to heat the cabin, in spite of, the wood stove being blazing hot. Their proposed solution was a larger stove, but it seems it would be a tough fit in that space. There was to be a cabin assessment done this summer, but as of this writing it has not happened. We should see how the cabin performs this winter before any changes take place. By summers end the cabin had settled more and was a bit tighter. It was easier to heat, and again, no mice this summer after I trapped out the hold outs from winter.

### **b. Signs**

All signs in the area are in good shape. The only sign need is the aforementioned sign for the Whitney Hut.

## **G. Trails**

### **a. Trail Activities/ Work accomplished**

The Kern trail crew spent a week in mid-July maintaining area trails and working on the aforementioned blow outs on the Whitney trail. They also cut the

firewood for the snow survey and were a huge help on incidents in the area. Crew leader Josh Gabik was invaluable during the SAR on Mt. Whitney in late July.

### **b. Problem areas**

Crabtree area trails are in good shape. The high volume of stock traffic each summer takes a heavy toll, however, and annual maintenance is required. The dry conditions and increase in stock use the past 3 years has contributed to a significant widening of area trails.

## **H. Camp Areas**

Conditions continue to improve at Guitar Lake due to the wag-bag program. Due to the significant increase in PCT hikers, however, sanitation at Guitar Lake took a step backwards during the "PCT season" (mid May through June). Although not on the PCT, most through hikers take the side trip to Mt. Whitney and camp at Guitar Lake. Because they are not exiting to Whitney Portal we do not request that they use the wag-bags to dispense of human waste. I cleaned up the mess that was left in their wake (feces on the surface, near water, feces cairns, toilet paper everywhere, etc) to the best of my ability when I arrived in late June. One way that we could deal with this problem is through the permit process. The Inyo NF requires PCT



through hikers to pay a fee and have a special permit to use the east side trail to Whitney Portal. Perhaps SEKI could consider permitting as well.

I dispensed approximately 1,000 bags from Crabtree this summer, which is **800** less than the previous summer. Handing the bags out in Yosemite to southbound JMT hikers has made a huge difference in the number handed out at Crabtree. We should continue this trend and give JMT hikers this information in advance so that they can put them in

their cache to be picked up somewhere south of Yosemite if they so choose.

Guitar Lake remains the most popular overnight area at Crabtree, and perhaps the entire SEKI wilderness. Most commercial hiking groups that are using stock have voluntarily used wag-bags to pack out human waste from Guitar Lake. I recommend that we **require** all commercial users to pack out human waste from Guitar Lake whether they have stock or not. The Inyo NF does not allow **any** commercial use on the main Whitney trail on their side of the mountain. I am not in favor of eliminating commercial use on our side.

The camps around the bear boxes continue to be the most popular campsites. They are still used by many visitors. 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.

The pit toilet at the ranger station campground need to be moved at the start of the 2015 season. Tom Warner identified 2 hazard trees in the vicinity, and it is pretty much full. It was in the current location for 6 seasons.

## I. Permit System

The permit system continues to work well for most user groups. The one exception is the permits issued by the Pacific Crest Trail Association. (see above) There were nearly 2,000 through hikers on the PCT this summer (more and more every year) and they are not getting the information they need to travel through SEKI on their way north. We should have an outreach to the PCTA and come up with a way to ensure that this user group is well informed, especially since many of them are hiking through the SEKI wilderness prior to wilderness rangers mobilizing to the field for the season. I recommend that we limit the number of PCTA issued through hiker permits that give hikers access through SEKI. Once that number is met than people wanting to hike the PCT through SEKI will have to go through the same process to obtain a permit that every other person does-giving them the opportunity to get the appropriate information about the place and "leave no trace" practices.

## J. Communications

(b) (7)(E), (b) (5)

#### **K. Needs for next year**

- Some area rugs for new ranger station. Either that or put a new finish on the floor, as the tongue and groove flooring is difficult to keep clean.
- Sign of Whitney Hut grafitti

#### **\*see below for inventory and station needs**

- REI half dome 2 ridge pole
- Fireplace/Wood burning stove tool set (shovel, broom, poker)

#### **Wag-Bag count for summer 2014**

**1,000 distributed**

**900 left at Crabtree for 2014 (need 15 boxes for next season)**

#### **L. Recommendations**

\*Due to the high volume of commercial and private stock use at Crabtree and the high demand for grazing nights in an area with limited capacity, SEKI Administrative grazing nights should be kept to a minimum at Crabtree.

\*Staff all Kern ranger stations in 2015. The cuts in the wilderness ranger budget over the past 2 years are taking a toll on park resources and visitor services. Hopefully we can continue to be good stewards of the SEKI wilderness and staff the wilderness ranger stations.

\*Continue to work towards improving communications in 2015.

\*Bring back wilderness round-up, and put the wilderness office back in the loop when it comes to wilderness operations.

\*Require that stock users who are grazing park meadows have better control over what parts of meadows their stock graze. To just "turn them out" at night and have the whole string follow the lead animal with the bell is resulting in resource impacts. If more users were to "hand graze", graze during the day, or use any means available to control where their stock graze there could be more grazing nights available in area meadows to them. This is particularly true in the Crabtree area where stock tend to prefer certain meadows and certain parts of those meadows.

## M. Inventory

9 boxes Wagbags  
lots Whitney registers  
Propane 3 1/2 Large. (1 1/2 lg used 2014)  
Propane (Coleman)-depends on snow survey use  
Pocket Rocket (sm.)-1  
Pocket Rocket (lg.)-7  
White gas (gal.)-NONE  
Bear canisters-1 bear vault

TP-12

PT-3

Steno Pads-1

Log Books-0

8 1/2 x 11 Pads-2

Pocket Pads-4

Laminating Paper-ample

Pens-2 boxes skilcraft (ample)

Pencils-ample

### 7.5" Maps

Cirque Pk-1

Chagoopa Falls-2

Johnson Pk-2

Kearsarge Pk.-1

Marion-1

Mineral King-1

Mt Brewer-1

Mt Clarence King-1

Mt Kaweah-2

Mt Langley-2

Mt Pinchot-1

Mt Whitney-4

Mt Williamson-2

Triple Divide-3

Sphinx Lakes-1

Quinn-1

SEKI Recreation Map-2

### Books:

Secor Peaks & Passes...

JM Laws

SN before History

Medicine for Mtning

Weeden SN Flora

Jepson

Not great bird book

Deck of cards

Duct tape-1

Strapping tape-3

Electrical tape-1

Lithium AA-0

Lithium AAA-0

AA batteries-0

AAA batteries-0  
C batteries-6  
D batteries-0  
Lg. Trash bags-10  
Med Trash bags-100  
Sm. Trash bags-20  
Burlap sacks-0  
Grain sacks (for firepits)-1  
Shovel blade (for firepits)-1  
Work gloves (sz/type)-leather large (1)  
Work gloves (sz/type)-cloth/leather (3)  
Work gloves (sz/type)  
Work gloves (sz/type)

Sponges-4  
Matches (boxes)-4  
Snow seal-1 partial  
Sunscreen-2  
Bug repellent-2

Aluminum foil- 1  
Coffee filters-1/2 box  
Coffee cone-2  
Laundry Soap-1/4 bottle  
Dish Soap-3  
Shampoo-1  
Conditioner-1  
Soap-1  
Lotion-0  
Aloe-0  
Spices listed: lg Sriacha, lots salt, red pepper, rice vinegar, soy sauce

RUN sheets-ample  
AUO logs-needed  
Wildlife Obs.-ample  
Exotic Plant Obs.-ample  
BIMS-ample  
CUA/IBP-6  
Bear Box Loc.-ample  
Mailing Labels with present CVB location-ample if they are still being sent to Philadelphia



**Gear left @CTRS:**

- \*1 titanium pot
- \*1 pocket rocket
- \*1 ridge rest
- \*1 SAR headlamp
- \*1 3/4 length therma rest
- 1 camp/station therma rest
- 1 REI 1/2 dome tent
- 2 double sleep screens
- \*2 ice axes (1 heavy, 1 light)
- 2 sets instep crampons
- 1 set crampons (heavy fits all boots)
- 1 pr ankle gaiters (sz large)
- 3 mosquito head nets
- lots bug repellent (4 Cutter sticks, lots spray)
  
- 1 space blanket
- 1 radio harness
- 1 vacu splint
- 1 pair station binoculars

**Needs:**

- REI half dome 2 ridge pole
- Fireplace/Wood burning stove tool set (shovel, broom, poker)

Mobilization 2015:

- Remove full large propane tank with wrong threads
- Remove wheel barrow by Snowtel site
- Remove medicine cabinet inside Snowtel site
- Remove box of misc solar supplies. Place good ones in Kern cache
- 
- 
- Move solar batteries south to Rock Creek
- Move few pillows south to Rock Creek
- Exchange two thin mattresses for one thick wide one at Rock Creek
-

**HOCKETT MEADOW RANGER STATION  
2014 END OF SEASON REPORT  
Submitted by Joe Ventura**



**A. General Summary**

This season began a bit earlier than in years past, arriving from Atwell Mill on May 31st. Other Kern Sub District Rangers reported to their stations a week or two earlier than I but my wife and I were enjoying a European vacation at the time the call went out for rangers to report.

My ride in was uneventful, the front country trail crew having gone in a few days ahead of me to clear the trail. The trail was free of snow until Corner Creek, and was patchy in and around the trail to Horse Creek. Snow was a foot deep in the trail in areas until the descent into Hockett Meadow.

On arrival at Hockett (Saturday May 31st) I observed 5 backpackers in the campsites which confirmed that visitors were taking advantage of a very early summer. I observed 7 day hikers along the trail from Atwell to as far as Deer Creek and two backpackers on their way out to Cold Springs having camped at Hockett Meadow.

I rode in with 3 pack mules and some grain, anticipating a wet meadow and a projected meadow opening date of June 10th. The meadow was free of snow, but still very wet, the result of Whittman Creek receding and leaving ponds in low lying areas of the meadow. The below photo was taken June 1st, the low that morning was 25 degrees.



The stock was fed and tied up, while I went about unpacking supplies and equipment, and readying the station. I left the next day for Atwell, I transported my stock home, spent Monday at Ash Mountain then hiked from Atwell to Hockett on Tuesday. The trail was nearly snow free on my return, and I spent the next 8 days hiking the Hockett Plateau (47 miles). I noted that South Fork Meadow, Upper South Fork Meadow and Hidden Camp Meadow were somewhat drier than Hockett Meadow. A June 10th opening for Hockett would be ill advised so I requested and it was granted that the Hockett Plateau meadow opening date be extended to June 17th.

After my initial patrol, I hiked out for days off and returned on the 16th with Willie The Wonder Horse, and two mules. I held and fed them the night of the 16th, checked the meadow and it seemed as though the opening date of the 17th would hold. I put my stock in an electric fence on the 17th, got up the next day and rode out for training. For the remainder of June my schedule was 5 days on and two off. In July, and for the remainder of the summer I worked 10 days on and 4 off. It seemed that I spent a great deal of time on the Atwell/Hockett trail this summer, but the work schedule did allow me to travel home on days off.

On July 1st, Don McDonald (VIP Mack) joined me at the Hockett for the months of July and August. Vacations took up June and September and he assured me that was a one time only thing, as he feels that being in the backcountry in the summer is a priority.

By the end of the season I had recorded 585 miles on horseback and 56 miles on foot. This included an 83 mile patrol from Mineral King over Farewell, Coyote passes, down to the Kern Station, up to the Hot Springs, picked up trash in the bear boxes there, up

the Rattlesnake to Little Claire to pickup an abandoned backpack, and out over Franklin Pass.

## **B. Visitor Services**

### **Contacts**

- a. 128 Backpackers
- b. 43 Day Hikers (one from MK to Franklin Pass, and another from MK to Hockett)
- c. Commercial; 24 people, 37 head for a total of 95 nights.
- d. Private Users; 15 people, 24 head for a total of 51 nights.

### **Law Enforcement**

- a. There were no Law Enforcement events or need this summer.

### **Citations**

- a. There were no citations. but on 9/14/14 Sunday at approximately 1530 hours I was preparing to cross the East Fork Bridge, 30 minutes from Atwell. I observed a small black case containing a ukelele and a gallon water bottle abandoned in the center of the bridge. There were no visitors present, so I strapped the case to one of my pack mules, when I saw a WMA (later identified as (b) (6) ) walking from an upper pool. He had a dog with him, unleashed who began barking and running towards my stock. The stock began to spook almost knocking me down. I hollered for the subject to hold his dog. He caught the dog and held it while I tried to calm my animals down, but we were at the foot of the bridge and not a safe place with the dog still barking and growling. The owner did not have a leash, and gave his name and said that they were camping in Atwell at space #2. I told him to exit the wilderness as soon as possible with the dog, but to give me a 20 minute head start, so his dog would not worry or stress my stock. I told him the Ukelele would be on the other side of the bridge. The dog was a white and tan pit bull.

I called 811 on the radio who arranged for (b) (7)(F) go to the described site to confirm a name or vehicle license, for a possible citation

### **Search, Rescue, Medical Incidents**

- a. On June 25th approximately 1200 hours I was on patrol in the Wet Meadow and Park Boundary area when a female voice came on the radio asking for help. Dispatch contacted me as the woman was reporting a 16 year old female had dislocated her knee and was presently in camp at Hockett. I spoke with the woman directly and learned that the woman was a group of 8 camping at Hockett and I had contacted them the day before. The girl was hiking to Evelyn Lake when the incident occurred and other members of the group had carried her back to camp. I asked her how it was that we were communicating, and she said that they saw the trail crew camp at

Hockett found no one there but did find a park radio. She advised that the patient was stable and alert, and believed that the patient had reset her dislocated knee herself.

I recalled meeting this lady and her group of 9 hikers who had arrived in the area the day before. There were six teenagers and two adults, all from Michigan.

I arrived approximately 1430 hours. The patient was alert and responsive, stating that she had in fact reset the knee, as this is perhaps the 3rd time it has happened. She had a knee brace on but the exposed knee was swollen. She tried to bear weight on it after it happened but could not stand. To remove the neoprene knee brace would have caused her more pain, so I simply sam splinted the knee using two splints and an ace bandage. Ned Kelleher ((b) ) the incident commander asked if walking out or horse evac was an option, and the patient and I agreed they were not. He decided to send Helicopter 552 to fly the patient and an adult leader (Sherri Dewars) with a medical release. The transport occurred at approximately 1530 with park medic Stiltz 715 receiving the patient.

## **FATALITIES**

- a. None

## **WEATHER**

- a. Weather was mild, average temps about 70 to 75, but mornings in August and September recorded low temps around mid 20's.

## **C. Use Patterns**

### **Backpackers**

- a. The number of observed backpackers traveling the Plateau increased slightly this year from 118 in 2012 to 128 this year. Several groups started in MK, traveled through Hockett, and exited South Fork Campground in Three Rivers. Many traveled to Hockett only, returning to Atwell or MK. The loop that some hikers like is the MK to Hockett, to Wet Meadows (Sequoia National Forest) down to the Little Kern, over Farewell and out to MK. The forest area is not maintained and the trail is not marked. At least two backpacker groups and one group from Soil Survey successful traveled through the Wet Meadow area finding the Little Kern trail. All three groups did utilize a GPS however. One group of three were unable to locate the junction and returned to Hockett. Until the trail is better marked either with signs or rock cairn a GPS is a suggested tool to safely navigate through that area.

## **Stock**



- a. Stock use was up this season. I saw only two private groups on two different excursions during the summer. Several spot trips by Balch Park and one full service trip was the extent of that pack station's trips to Hockett. They did pack in two backpackers to Hidden Camp. This camp was used only twice this summer, once by the above mentioned backpackers and then by a private stock group.
- b. Cedar Grove Pack Station for many years has been contracted to pack in the USGS Hydrologist to repair the weather stations and equipment at Hockett and Wet Meadow. They arrived at Hockett from Atwell on Friday August 1st, their plan was to service Hockett on the way to South Fork Meadow, where they would camp two nights. It was late when they went past Hockett so they camped at South Fork Friday night, keeping two horses tied up, and turning the other eight out to graze. Saturday morning they caught up their stock, and went to Wet Meadow and completed their work. Saturday night they turned the stock out as the night before, the plan being on Sunday morning they would ride out to Hockett service the equipment there and ride out to Atwell. Sunday morning however the stock were missing except for one mule that was standing with the two tied up horses.

The packers rode out to Atwell thinking the stock returned to the trailers but no stock. One packer remained for five days, was joined by two other searchers for several days, searching every conceivable meadow or trail. They even rode out to Balch Park Pack Station with no results. Eventually Balch Park came to pack out the equipment and supplies for Cedar Grove Pack Station. (b) (6) owner of Cedar Grove Pack station was diligent in the pack station's efforts to locate the missing stock, sending employees and searchers in at least every other week.

On September 12th at about 2pm a group of backpackers traveling from MK to Hockett on the Tar Gap trail arrived at the station. One of the members complained about the trail and all the horse tracks and manure, that stock were making a mess of the trail. I checked with MK Ranger Station, and they were not aware of any stock groups traveling the Tar Gap trail, and I was reasonably positive there had not been any use of stock on that trail. As luck would have it, only an hour had elapsed from the observation of the backpackers, when (b) (6), grandsons of (b) (6) arrived at the station. They reported that they had rode up South Fork in Three Rivers, rode to Touhy Gap, over to Summit Lake, Windy Gap, and to the ranger station, and no sign of the stock. (b) (6) said he was out of places to look. I told him of the observations of the backpackers and suggested they head that way in the morning. They camped at the stock camp Hockett, and left the next morning, for MK, telling them that regardless if they did or did not find the stock to continue to MK corrals. I spoke with the Sub-District Ranger who was at the MK Ranger Station and advised him of the plan. He called me in the afternoon, and advised the stock had been located, and were being housed at the old pack station corral.

## **Administrative**

- a. Administrative stock use was limited to the trail crew, and a 4 day visit by the Leadership Team. The trail crew reports a 60 night use in the Pasture. The most impact occurs when the packer arrives for a weekly resupply and keeps some stock in the pasture. Also the crew itself keeps on average 3 horses and a mule, and they need to have them close in the morning so they can accomplish their work. With a little bit of team work we were able to utilize an electric fence out in the meadow to reduce the use in the pasture. The crew is receptive to using the electric fence, but the fence material they have is bulky and short in length. Gallagher makes a braided polywire electric fence, that is approximately 1600 feet.
- b. If they used a roll of this material, they could fence a large area of the meadow, resulting in fewer relocations of the fence and less impact to graze within the fence area. The trail crew is at Hockett for less than three weeks, and my stock is there for the summer, I would like to have some grass in the pasture for my stock. As it was, I recorded less than 30 nights on the Pasture, using it only the night before I left for my days off, or occasionally for an early patrol. After leaving Hockett the trail crew moved to Slims Meadow for two weeks.
- c. Army Corp of Engineers contracts with Cedar Grove Pack Station every year to service the weather stations at Hockett and Wet Meadow. This year they based for two nights at South Fork Meadow. The lost stock, previously mentioned, resulted in approx. 301 stock nights. Cedar Grove Pack Station stated it appeared the stock spent most of their time around Tar Gap.

## **Commercial**

- a. Commercial use was limited stock use by Balch Park Pack Station, and the initial trip by Cedar Grove to maintain the weather stations. Balch Park had only one full service trip to Upper South Fork meadow for a party of 6 and 15 head for four nights. They also had a few spot trips, one to Cyclone meadow and the others at Hidden, SF Meadow and Upper SF meadow.

## **D. Natural Resources**

### **Bear Activity**

- a. There were no incidents of bears annoying or harassing visitors, but there were plenty of sightings and tracks. While on top of the dune in Sand Meadow, I observed a very large bear, grey with what looked like a darker stripe down his back. He was loping from the east end of the meadow across to the west edge. It was easily 300 pounds.

- b. On my ride out on Sunday the 14th, I saw a similar sized black bear while leaving the Clover Creek area. It was in the lower end of a corner section of the trail, on the down slope side. It was concealed in the trees and brush and was standing perfectly still. My horse and two mules were unaware of his presence but I knew I would be the first to know when the stock noticed him. I began conversing with the stock trying to get them to focus on me. It worked for a while, but the bear did move, spooking all three.
- c. Klinton Powell reported that in July he contacted a hiker on the Tar Gap trail tha had camped near the Hockett station and a bear had tried to get into his bear cannister. Where this exactly happened we are not sure. The hiker informed Klinton that the ranger station was closed but wrote the event on the bulletin board. I am unable to locate the note. Klinton examined the cannister and it was a jar type, blue in color. The cannister had evidence of damage, but was still secure.

### Wildlife



- a. In over 10 years going in and out on the Atwell/Hockett trail, I have seen just one rattlesnake. This dry year I ran into 3, with trail crew and packers reporting sightings as well. This snake was big, mean and camouflaged in green. 12 rattles and a button. It was sitting on the edge the trail asleep I surmise, when my hiking pole poked the ground near him and he struck at it. This was near the 5 mile or halfway mark of the trail at about 7700 feet.
- b. A visitor I contacted at South Fork Meadow, reported photographing a Pika at upper Blossom Lakes on July 12th. I examined the photo on his digital camera and it certainly was a Pika. He was an intern at SCICON this year and his visa expired at the end of July, when he would be returning to England. I gave him my email address, but have yet to hear from him. If anyone reading this would like to get in touch with him his information is as follows:

(b) (6)

## **Vegetation**

- a. Under the authority of MD 9 I requested that two meadows be closed. The first was Upper South Fork pasture meadow. While it had nearly 70 nights of grazing with a limit of 100 nights more importantly was how the stock were getting to the meadow. It seems that a down tree blocked the path from the camp across the river, and into the meadow. This path utilizes a sandy beach area on both sides of the river, minimizing shore erosion. With the down tree blocking this path, users were taking their stock from camp to a pristine shoreline, and shearing and erosion was occurring. The private stock user at the camp agreed that the meadow was pretty short, and when I explained the shearing of the banks, he admitted that his horse got hung up on the bank trying to cross to the meadow..
- b. The other meadow closed thru MD 9 was South Fork Meadow. The core area nearest the camp was hard hit, and had a recorded 70 nights grazing of an allowed 75. The actual number of grazing nights will be determined when Cedar Grove Pack station submits their grazing reorts for the times they went to search for their stock. But the meadow area nearest the camp had simply reached or exceeded its capacity, and was extremely short. The other side of the river the meadow looked well, but it is not where the stock graze.

## **E. Cultural Resources**

### **Historic Sites**

(b) (3) (B)



(b) (3) (B)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

## **F. Backcountry Facilities**

### **Ranger Station**

- a. The station is in relatively good condition. The flooring is in need of a good deep cleaning and some wax. An aggressive sweep with a broom and subsequent mopping when dried reveals plenty of dirt still remains.
- b. The well dropped to a 21" depth, leaving only about 10 inches of water available for the pump to draw up. It's the lowest I have seen it in 13 years. To conserve that water I began hauling water from Wittman creek and filtering it, but the water was so silty the gravity filter plugged up after 25 gallons.
- c. The well water travels through some old, old plumbing, resulting in a rust colored finished product when it comes out the pump. It is so bad (rust) that the prime in the pump leaks back a bit, not much, but enough to leave rust colored stains on the white pvc tube where it connects to the steel plumbing. This connection is well above the water level in the well, so it is obvious the rust is back tracking. To replace the plumbing would require a lot of work however. Refer to my 2012 EOS report for other details on this subject.
- d. The solar and battery system is in excellent condition, the batteries having a charge of 12 volts when I arrived this season. The batteries were installed in 2008, and were at 13 volts when disconnected this season. The inverter is pretty loud, but still effective. A new backup inverter is in the snow survey closet, hanging on a nail.
- e. Four window screens are still unusable. Some screen material and the wood frame material I think it's called beading would be needed to repair them. The actual screen frames are ok, it's just the little 1/4 in. trim that secures the screen material that's needed in case the old ones break in the remove and replace process.
- f. The outhouse was moved in 2012, but it is fast filling. Depending on the amount of decomposition that occurs, a new location may be in store for next season.
- g. The station received a new refrigerator last summer. It works well and easy to light off in the spring. There are two valves at the rear of the unit. One is on a flex line that shuts off gas to the fridge from the tank. Another is on the fridge frame at the inlet, where the flex line connects. That valve is well labeled with a diagram of how the valve should be turned for off and on. The manual for the fridge is in the blue file box in the bookcase.
- h. The gas valve for the stove is directly behind it and is in the off position for the winter.

### **Signs**

- a. The sign for the Pit Toilets at the Hockett backpacker camps has been replaced, and the post reset.
- b. A "NO FIRE" sign is missing from the park entrance at Summit Lake. A new one was sent in but it did not have any holes drilled or bolts. The drill is at the station so all is needed are two bolts and nuts long enough to span the 2" square post still standing guard at the entrance.
- c. Two other signs are missing, one at the Wet Meadow entrance at the park boundary and one near Hockett lakes. Refer to 2012 signs report.

## **G. Trails**

### **General**

- a. Trails were in good condition at the beginning of the season. Front country trail crews logged the Atwell/Hockett trail prior to my arrival at the beginning of the season.
- b. I only had to comment about the rough rocky trail to Summit Lake just above the junction at the South Fork trail, and the Hockett Trail crew got on it and did a great reroute.
- c. For several years the Horse Creek bridge has been in need of serious repairs. The trail crew this season replaced a rail log and shored up that side, which removed the springing of the bridge when stock crossed it. They also filled in some gaps between the planks that were getting wider and wider. That repair lasted 3 or 4 weeks when the filler fell out. It was not very safe, some gaps so large that a horse or mule could easily put its foot through. The trail crew was gone, so on my days off I had some old 1X8 pine shelving at home, cut them into 34 inch lengths, collected some nails and a hammer, and another temporary fix was implemented on my way in to Hockett. I believe the trail crew has the bridge on its list of projects for next season. This was only pine shelving so I don't think it will last very long. Hopefully it will be sound for the first few trips in next season.
- d. Trail crews for the last few years have put a great deal of effort in maintaining the Franklin Pass trail. I did have an event on the trail coming down from the pass in August. About a half mile down, just after a switchback, the trail is cut out of granite. My horse managed to get his left front foot stuck in a channel that runs parallel with the trail. I was surprised that my horse stood still and did not panic, but the shoe was jammed into the channel. I bailed off, and with my back to the down slope, was able to use my boot to kick the jammed hoof forward, and out of the groove. There were no visible injury. I know Beth and Tyler traveled that trail a good deal this summer, without incident I believe, and maybe mine was just a fluke. Maybe the trail crew knows where this spot is and can knock the 1" channel down with a sledge next summer.





Thats a triple E boot.

Not a good photo, but the fix was.

## **H. Camp Areas**

### **Conditions**

- a. The camps are adequate for the type of and degree of use they receive. The camps at the station, Evelyn Lake, and Horse Creek, are used a great deal and only require fire pit rehab a few times a season. The hardest hit camp this year was Rock Camp at South Fork Meadow. There was a 7 day spot trip with 5 people, in July, and then Cedar Grove arrived on August 1st, with 4 people and 10 head for two nights. After their stock took off, the packers remained behind for a week, searching for their stock. They returned in the middle of August, while I was out, and they stayed for 4-5 nights with 5 head. No raking or shoveling took place, so manure was everywhere.

Soil Survey people camped there in early September and commented that there were many manure piles that had not been spread.

- b. As usual, Summit Lake did not disappoint this year. There were a total of 5 messy, illegal fire pits there. These two were the largest.







- b. Sanitation did not seem to be an issue again this season. The camps around the RS have two pit toilets that were in fair condition at the end of the season.
- c. I rehabbed and cleaned about 20 fire pits, at nearly all the camps. Surprised at how well the horse camp at Touhy and South Fork were. Someone did leave a grill, behind, it's at the station ready to be back hauled next season.
- d. Firewood is available at most of the camps. Evelyn Lake requires a little trekking to locate firewood.
- e. There were no food storage issues this season. MK rangers are making certain that hikers are equipped with canisters.

## I. Permit System

- a. No issues with the permit process from MK, they are thorough in their instructions to the Hikers. They counsel those who want to do the Hockett to Farewell loop via Wet Meadow, encouraging them to visit with the Hockett ranger for suggestions.
- b. On many occasions when Balch Park Pack Station came into the park, no permit was in possession by either the folks he spot tripped in. The reason was often the permit was written (forest service) and left on the dock or office at the pack station. He and I have discussed this and his point is that the park service declines to issue him permits to write for folks coming to the park. Not sure what that is all about, but if someone can advise him besides me, that his parties need to have a permit in camp or on them, would be helpful. All other conditions of his concession requirements are met.

## J. Communications

[illegible]

### K. Needs For Next Year

- a. Again, a request to get new sleeping bags for both stations. At the very least get some clean ones to bring in and take out the old one to be cleaned. the bags have been in Hockett since 2003, and the ones at Quinn since 2007.
- b. This year I had to haul water from Wittman creek as the well water dropped to a usable 8-10 inches. I checked out a gravity filter from Rene at the fire cache to filter the creek water. Klinton Powell suggested using a filter similar to one the Pear Lake station has or had. A large hard plastic tank filled from the top and filters into a reservoir. The filter on that system is cleanable, the one I had (Katadyne) the filter is not serviceable in the field.
- c. Klinton and I also talked about the floor in the ranger station. It is in dire need of a deep cleaning, and Klinton suggested a wax as well. He has some ideas as they too had to perform that task at stations in Yellowstone
- d. The flue for the wood stove needs a cleaning as well. There is a flue brush in the tack shed, but I believe that Thor simply used a chain hung from the chimney cap and banged that around, knocking the soot loose. Also some duct tape and drop cloths would help in containing the mess.
- e. Two new 51 locks should be ordered to secure the sleeping bag locker and the shutter on the north wall. Currently there is a master lock on the north shutter, and the key for that lock is at the top left corner of the front door frame inside the cabin. There is no lock on sleeping bag locker.
- f. Thor has the old blinds taken down from the cabin several years ago. I have put up 3 in the dining table and south wall just for a little privacy. If I can get just 3 of those old ones in some kind of working order every window in the place would have a blind/shade.

## **M. Pertinent Inventory**

- a. Propane: there are 2 full tall tanks, and one of the smaller tanks is about 1/3 full.
- b. A complete electric fence is located under the bed in the east bedroom. It has about 8 of the two piece fiberglass posts, but I left about 8 of the longer one piece fiberglass posts in the tack shed.
- c. There is a full bag of Senior Equine, a half of bag of dry cob and half of bag of alfalfa pellets in the grain barrel.
- d. A small jar of stove grease is in the tool drawer in the kitchen, for greasing the kitchen stove valve facings. If you find one that leaks, and it is a very little tiny leak usually, take the valve apart, and put a light film on the two brass facings and your done.
- e. There is one new cork or leather flapper for the water pump. I had to put one in this year as they get so black, crusty and brittle.

As in years past I have always been fortunate to have had great people to work with and work for. This year was no different. Thanks to all those who made it possible for me to again enjoy a great season at the ol' Hockett.



End of Report

## LeConte Ranger Station End of Season Report



This season the LeConte Ranger Station was staffed from June 20th through September 23<sup>rd</sup>. It was a dry year but water levels got a resurgence in the end of July and beginning of August with the storm systems moving through. JMT and PCT hiker numbers were at an all-time high.

### Visitor Services

	Miles	Visitor Contacts
June	36	143
July	202	596
August	202	977
September	124	392
Total	564	2108

Day Hikers: 24

Half of these day hikers encountered were taking part in the Sierra Challenge in which a group day hikes to ten peaks in ten consecutive days. The group was hiking to Langille Peak from South Lake trailhead.

Stock Users: 15

Commercial Users: Rainbow Pack Station (2), High Sierra Pack Station (1), Rock Creek Pack Station (5), Muir Trail Ranch (1)



Private: 1 woman riding the PCT on horse, 1 man with four llamas, 2 men

Administrative: NPS packers- Lyell and Robert (into Big Pete to resupply CCC crew and Upper LeConte for last half of season)

### **Law Enforcement**

No citations issued this season. Many verbal warnings were administered.

Camping on vegetation: 12

Camping too close to water: 5

Cutting switchbacks: 3

Amplified noise: 3

Improper food storage: 4

Abandoned property (IO): 21

Illegal campfires (IO): 12

### **SARS/Medical Incidents**

Medicals:

Date	Location	Problem	Evacuation
6/28	Little Pete	Seizure	Helicopter
8/3	Big Pete	Vomiting, lethargic	Helicopter
8/12	Big Pete	Injured right hip	Helicopter

Medicals in the LeConte zone that others responded to:

7/25	Deer Mdw	Nausea	Helicopter	Trail Crew-Edlyn
8/5	Palisades	Appendicitis	Helicopter	Trail Crew(corresponded with resupply)
8/9?	Bench Lake	Foot Injury	Helicopter	Trail Crew -Dan
8/14	Big Pete	Broken Ankle	Helicopter	Trail Crew-Edlyn/Ned Kelleher
8/15	Upper Basin	Knee Injury	Helicopter	Sandy Graban/Meadow Crew

The trail crews in the LeConte area proved crucial to medicals and search and rescues. Dan Devoe's crew showed excellent team work and communication. Edlyn Clevenger's NPS crew spent hours with a few injured and sick visitors and helped them exit the wilderness. Bobby Z.'s crew volunteered for multiple searches and also put out an illegal fire in Upper LeConte.

#### SAR

7/10	(b) (6)	Wanda Lake
7/28	(b) (6)	Arrow Peak
8/20	(b) (6)	Gardiner
9/6	(b) (6)	Davis/Wanda

#### Service Incidents

Visitor Assists:

Sat Phone Call/Call through Dispatch: 27

Food given: 21

Fuel given: 9

First Aid supplies given: 12

Tape/Glue/Other repair supplies given: 11



Invasive Species Orchardgrass Removal:

7/14-16 With Rich and Patrick, visited all sites

7/23 Little Pete- no orchardgrass found, scissors located.

7/25	Two sites north of Grouse Mdw- none found
7/27	Stillwater Mdw and Bridge site- 40 seedlings pulled, none flowering
8/1	Two sites north of Grouse Mdw- none found
8/5	Little Pete-none found
8/31	Two sites north of Grouse Mdw- none found
9/4	Deer Mdw-none found, Stillwater Mdw, and bridge site-70 seedlings
9/9	Two sites north of Grouse Mdw- none found
9/15	Two sites north of Grouse-none found, Stillwater and bridge site- none flowering
9/16	Little Pete- none found

### **Ranger Station**

The station is in great condition and is rodent- free. After a bumpy start with the solar system, it worked well all season. However in the couple cloudy and rainy weeks we had mid-season, my radio batteries were not able to fully charge.

Philip Gross came in and shaved down the eaves so the shutters could open all the way. He also took off the mangled lockbox as well as installed a new sink. The new sink however was missing a couple parts and is functional only temporarily.

As Miles suggested last year, the floor of the cabin needs to be sealed. There is some linseed oil out there though Phil had other suggestions he thought would be better. Also, a new lockbox needs to be installed on the cabin.

### **Wilderness Protection**

#### **General Resource Conditions**

Drift fences- There are two posts down on the east side of the Ladder Camp fence. People are creating a new path to the west of the Big Pete Meadow gate where they push all the wires together to hop over. This gate is made of wire and I believe people don't want to deal with it so they go around.

Camp Areas- All camp sites on the JMT saw a lot of use. People continued to put in new fire rings even in camps right next to one.

Trail Maintenance-There was a lot of trail work accomplished in the LeConte area this season. The Middle Fork Kings trail was restored from the landslides that occurred last summer. Upper LeConte, Palisade, Mather Pass, South Fork Kings, Big Pete Meadow and south of Dusy bridge all had considerable work done.

The section of the Bishop Pass trail east of the bridge was wet all season. Also, the log bridge over Dusy Creek just east of the Dusy Bench broke near the end of the season. This can be a tricky crossing in

spring when water levels are high. If possible it would be great to figure out a way to reinstate the log crossing or build something more stable.

Backcountry User Trends-The large majority of people were hiking the JMT. Those that were not hiking the entirety of the JMT were often doing the North Lake/South Lake loop or hiking on the JMT from Bishop Pass to Kearsarge Pass. A handful of folks were doing parts or all of Roper's High Route, which seemed to me as less than in the past. I only saw a total of three people any of the times I was on the Middle Fork Trail, other than trail crew.

#### Meadow Management

Meadow opening dates went as scheduled except for Simpson Meadow which opened early due to the Meadow Crew's (Natalie and Tom) recommendation. I collected residual biomass samples from Simpson Meadow, Big Pete and Little Pete Meadow.

Meadow concerns- Big Pete Meadow continues to hold water for the summer and is also heavily used. Little Pete Meadow developed a new roll pit this season after Big Pete was closed.

#### Concession Comments

All the interactions I had with commercial operators were positive. However, a group with 20 head came through while I was out of the area and apparently left a mess in Big Pete Meadow including a large number of horseshoes. It is reported to be a packer named (b) with Rock Creek Pack Station.

Southern Yosemite Mountain Guides, Sierra Club, Sierra Mountain Center, and Mountain Sobek had guided trips through the LeConte area in conjunction with High Sierra, Rock Creek, and Rainbow Pack Stations.

I had the most interaction with Rainbow Pack Station and they frequently went out of their way to take out my trash or other backhaul.

#### Bear incidents

There were no incidents this season though frequent enough bear sightings in Grouse Meadow and near the station.



Fire rings

2 illegal pits removed from Golden staircase

1 extraneous pit removed from Big Pete Meadow

1 pit on vegetation removed from Little Pete Meadow

3 illegal pits removed from Lower Dusy

2 illegal pits removed from Upper Dusy

3 illegal pits removed from Upper LeConte Canyon

### Recommendations

With the amount of SARs that occurred in the Bench Lake area this year, I would recommend staffing Bench Lake ranger station next year if funding allows.

(b) (5), (b) (7)(E)

[REDACTED]

Another recommendation is to get a gun safe out to the station. There is a trigger lock out there but it would be nice to be able to lock up the rest of the weapons as well.

Also, I'd like to get some helicopter training in the beginning of the season if possible.

(b) (5)

A large black rectangular redaction box covers the top portion of the page, starting below the '(b) (5)' text and extending across most of the page width.

### **Needs**

Propane (20-25 gallons)

Small hand axe

Lockbox

Extra antenna

Crystal Clear decorative B type 40 watt light bulbs

Mt Thompson and Mt Henry 7.5 min maps

4 D batteries for lantern

Thermarest patch kit

Candles

### **Backhaul**

4 dead solar batteries



## **LITTLE 5 LAKES RANGER STATION YEAR END REPORT 2014 - Kenan**

### **GENERAL SUMMARY**

With the low snow year the season began early at Little 5. The yurt was set up the end of May. I then came out for the “Operational Leadership” training and after that hiked into Hockett and Quinn for an 8 day patrol. We then had EMT refresher on June 16 through the 18<sup>th</sup>. On June 24, I left Mineral King and headed into the area over Sawtooth Pass.

There was very little snow in the area. There was some snow on the north side of Black Rock and Sawtooth Passes. Hikers were already coming into the area in early June, as due to the lack of snow the hiking season began early.

My objective for the season was to first do patrols to assess the conditions in the area. Within the first few weeks I patrolled to: Chagoopa Plateau , Sky Parlor Meadow, Big Arroyo (lower to upper), Big 5, Lost Canyon, Soda Creek, Rattlesnake Creek, Willow Meadow cutoff, Spring Lake, Pinto Lake, Cliff Creek and 9 Lakes Basin.

### **Little 5 Ranger Station Responsibilities**

The responsibilities of the Little 5 Ranger include: enforce park regulations, area patrol, cabin opening/closing and maintenance, update station inventory and needs list, summary of equipment needing repair, meadow monitoring (residual biomass), stock use report, aircraft observations, campsite cleanup and rehab, wildlife observations, drift fence status, trail conditions reports (to the Wilderness Office), interface with area trail crew, knowledge of area and area hazards, assisting park visitors in any way possible, effective radio communications, special projects and recommendations.

### **VISITOR SERVICES**

miles hiked: 375

#### **Contacts**

Backpackers – 425

Day hikers - 195

Fire rings removed – 35

Fire rings reduced – 47

Fire rings cleaned - 30

Commercial stock user - 0

#### **Law Enforcement**

There were no law enforcement events this summer other than the Minimum Impact Violations,

#### **Citations**

There were no citations issued this summer.

#### **Verbal Warnings**

There were 25 verbal warnings this summer given to Minimum Impact violations. These resulted from hikers: camping on grass, camping too close to water and improper food storage.

## **SEARCH and RESCUE**

There was one major SAR in the Little 5 area this season. On July 12, I contacted three hikers that were on their way to climb Black Kaweah. I advised this group of three, in their 60's, that this was an extremely dangerous mountain and I advised them to use extreme caution. At the end of our talk, they reported to me that they had a "spot device", as a backup in case they had a problem.

Around 11:00 the next morning, I heard of the radio that a spot device had been activated on Black Kaweah. 711 was flown in by (b) (7) to handle the emergency. The patient was removed from the mountain by short haul and then flown out to the hospital. Reportedly, her injuries were not that severe.

The next day the two other members of the group stopped by the ranger station on their way out of the backcountry. They told me that the lady that had the accident was in front leading the way. She evidently grabbed a rock that came loose and she tumbled over backwards rolling down the hill past them. She was able to stop her fall inches away from a 500 foot cliff nearly ending her life.

SARs with the park have been changed forever with the advent of the satellite devices and satellite phones. The satellite devices saved lives this season as in the Black Kaweah incident. Unfortunately people are taking advantage of this service and pushing the button when there really is not an emergency.

Also, having the emergency device has given some people the feeling of invincibility. Some people seem to feel that they can take "big risks" now because if they run into trouble, they can always call for help. Either way, these devices are here to stay. Since they have come on the market, over the past 6 years +, SARS are increasing significantly each season and this trend will continue.

## **FATALITIES**

Nine Lake Basin

## **WEATHER**

It was a fairly wet summer for the Sierra. Most of the storms were from about mid July to mid August. The Sierra Crest around Whitney got most of the rain and heavy downpours. Little 5 usually would end up with a sprinkle or light rain. There were several day long storms that did provide some good moisture for the Little 5 area.

## **USE PATTERNS**

Due to the low snow year, hikers began coming into the area in early June. The loops and routes that hikers are doing are primarily: 1) Timber Gap, Black Rock Pass and out Sawtooth 2) Franklin Pass and out either Sawtooth or Black Rock/Timber Gap 3) Crescent Meadow, Kaweah Gap, Black Rock Pass to Redwood Meadow and out. 4) High Sierra Trail.

Throughout the summer with my patrols my goal was to keep up on cleaning the major camps. These major camps include: Cliff Creek crossing, Pinto Lake, Spring Lake, 9 Lakes, Little 5, Big 5, Lost Canyon, Columbine Lake, Soda Creek, Little Claire Lake, Forester Lake, Big Arroyo and Moraine Lake.

Routinely this season I patrolled the major camps and did the cleanup work throughout the season. I found a couple of areas where I started work that will be continuing next season. The two areas are: Upper Soda Creek just below the cutoff to Little Claire Lake and Lost Canyon just below the Big 5 cutoff.

In the Soda Creek location I found numerous old fire rings. Fires are allowed in this area and these fire rings have accumulated over the years. I removed around 10 big rings in this area and plan to do more work here next year.

A similar case is in Lost Canyon below the cutoff. It is a popular camping area that needs additional work. I removed around 5 fire rings in this area. I plan to do more work needs to be done in this location next season. I think we may be at critical time in our wilderness bear management. There is some talk about taking the “food storage lockers” out of the wilderness and require everyone to carry canisters.

### **Bear Boxes**

The history of bear boxes goes back 32 years. I was part of a construction project putting in several galvanized poles in Kearsarge Basin. With (b) (6)

(b) (6), we dug the holes to set in concrete 3 inch in diameter poles with hooks on the top for hanging food. This method required an additional pole to put the food on in order to hang it on the pole.

The bear boxes have worked very well and the new box is a major improvement on the old. In the Little 5 area there are new boxes at: Pinto Lake, Little 5, Moraine Lake and Big Arroyo.

(b) (5) The current location of the Lost Canyon box is inappropriate. It's on a slope chained to a tree about 25 feet from the creek. The Big 5 box is located in a place that works to disperse the camping in this location. It is placed in between the two main camping areas to prevent too much impact at the one main camp.

The bear boxes have worked well and are a proven method to help keep food from the bears. They have transformed “camping” patterns in the backcountry, as the majority of hikers choose to camp in the bear box area....even though they may have enough storage capacity with their canisters. It seems that most hikers are carrying canisters in this area.

(b) (5) . I do encourage hikers to find some alternatives along their trip to camp in less impacted areas. It also enhances the backpackers experience to get away from the “camp ground” type of experience.

There are certain areas where taking out a bear box could be appropriate. For example at the “peninsula” camping area there was two bear boxes. This is a fragile area and the ranger in the area needs to keep a close look at this area to see if the boxes should be removed from here in the future to reduce impact.

### **Columbine Lake**

This fragile high elevation lake gets a lot of camping. It is a destination camp for many people who want to be in a position to hike out to Mineral King in a day from this location. I tried to help reduce the number of camping nights at this location throughout the season. I would encourage people heading south up Lost Canyon to consider camping at the

meadow area just north of Columbine Lake. There is really good camping here in the trees on the east side of the creek. This camp area also puts hikers in a good position for getting out to MK, as it is only about a ½ hour hike to Columbine Lake.

## **STOCK**

There were no commercial stock groups seen in the area this season. I did have a report of a commercial packer bringing in a resupply for a Boy Scout group this season at Little 5, but did not get word as to who this was.

The majority of the stock use was the Hockett Trail Crew. They moved into Lost Canyon around August 10 and stayed in that area for about two weeks. They then moved their camp into Big Arroyo where they stayed for approximately two weeks. Then they moved over to Pinto Lake and joined up with 756s crew for a three week project in that area. This trail crew did an excellent job in the area this season. They got an incredible amount of work done in a short period of time. The Hockett Crew leader (b) (Jeff) had his first season as leader of this crew and he did an excellent job. The crew was also considerate and helpful to the backpackers they encountered. Overall I was very impressed with their operation.

We need to get a base line for the number of stock nights they had while at their Lost Canyon and Big Arroyo camps. I recommend that management gets with (b) Tyler this fall to tally the stock nights for each camp. The packer Nick (b) (7) will leave stock in the wilderness and go out to get their resupply. 7

I studied the Meadow Binder as there are many different meadows in the area. It is important to have a good understanding as to where the grazing is allowed in the area. At some point in the future, there could be a resurgence of stock use in the area. The residual biomass was done at middle Rattlesnake by 9232 and 9233. I did the RB at Forester Lake. It was found that the small “core” meadow was grazed this season.

I feel that keeping rangers evolved in doing the RB is important. I learned a lot about the Forester Lake Meadow as a result of doing this analysis.

## **NATURAL RESOURCES**

### **Bear Activity**

I did have reports of one or two bears that were hanging out at the Cliff Creek camp. Evidently these bears were not afraid of humans and would sort of pace around the camp. I had no report of these bears getting food or exhibiting aggressive behavior.

### **WILDLIFE**

This season I had the following unique sightings over the summer: Bald Eagle, pine marten, short tail weasel, and white tailed jack rabbit. I think this may have been my first season to not see a bear in the wilderness. I did observe a lot of bear “scat” down in Big Arroyo, so I think that the bear population is fairly healthy in the area.

## **ADMINISTRATIVE**

### **Mineral King Trailhead**

I worked closely with the Mineral King Trailhead rangers this season. Reed ((b) (7)) helped me set up the yurt and we made contact several other times this season in the backcountry. Leslie ((b) (7)) stayed at Little 5 on one occasion when I was out on patrol. She hiked in later in the season and stayed a night with me at Little 5. The next day, I went on patrol to 9 Lakes and she stayed at Little 5 for another evening working out of the area. Jeff ((b) (7)) stopped by the station a couple of times during the season. Later in the season I let him know that I would be on patrol the first of September for about a week. Jeff planned a patrol to be at Little 5 for two nights to cover the area while I was gone.

I do see that the Little 5 Ranger needs to work closely with the MK trailhead rangers. Communications are important to report trail conditions. The MK rangers would notify me if stock were coming into my area or if there were large groups that I should be on the lookout for. As shown, there is also a great opportunity for the MK rangers to be able to work/enjoy the Little 5 Station while I am out on patrol. The contacts during the summer offer valuable time to be able to discuss the backcountry operation and work together as a team.

### **Permit System**

This season in making hiker contacts I would always check their permit and make note of the last name on their permit. I did not contact anyone this summer that did not have a permit. MK trailhead rangers did an excellent job this season with helping to prepare hikers for their trip with providing valuable trail information and minimum impact regulations.

Sometimes I would run into hikers that were running a bit behind on their planned itinerary. On a few occasions these hikers would come to me and say that they did not think they could make it out the day they had planned to exit. This put them in a situation of desperately trying to hike out, because that's what was on their permit. I think it is important that we let hikers know that if they are running behind that they do not have to exit on the day they had planned. Hikers are sometimes doing long and exhausting hikes when taking an extra day would be to their advantage. I think we need to advise hikers that it is okay to take an extra day to get out if they are needing too.

### **Kern Station**

The Kern Station traditionally has been a "vital" station for our wilderness management. It is located at a primary park entrance. The station historically has been operated by a stock patrol ranger.

I see a huge void in the backcountry by not manning this station. The Kern is a massive region.

## VEGETATION

Since there was no commercial stock use in the area this summer, it comes down to managing the trail crew grazing to protect the meadows in the area. I did the RB at Forester Lake Meadow. This is a small meadow area that is adjacent to the lake shore. The “core” plot was grazed over 75% of the meadow with “close cropped” vegetation.

## COMMUNICATIONS

(b) (7)(E), (b) (5)

I do not feel that we had adequate training with the geo pro this season. It took me a while to get the bugs out of sending emails. I was trying to reply to a message and it would send the email with no copy. Kevin Morris assisted me on the radio to correct this problem and from then on I had no problems sending emails.

(b) (7)(E), (b) (5)

## CULTURAL RESOURCES

(b) (3) (B)

The windows are locked, but the door remains open for visitors to look in. There were no problems with vandalism this season that has occurred in the past.

## BACKCOUNTRY FACILITIES

I did make a patrol into Quinn Ranger Station early in the season. There were “pack rats” or some type of similar rodent that had gotten into the cabin attack. I reported this to my



supervisor as I estimated as many as 20 of these critters in the attack eating the new plywood ceiling. They need to be eradicated or they will soon punch a hole in the ceiling and get into the cabin.

The Little 5 Station yurt performed very nicely this season. It stored well over the winter and was easy to put up with assistance. The canvas wall, plasticized roof material and insulation are holding up well. There is a 4 inch in diameter fracture in the yurt dome. This does not appear to be getting worse and it may have occurred over the winter, since it was stored on top of the station platform.

I stored the dome for the yurt this fall under the front deck of the station. Two 4 by 4s were removed in order to slide the dome under the deck. These supports for the deck were then replaced. This was relatively easy to do and it is the only sure way to protect the dome from damage. In the past, the dome had been flown out for the winter to prevent it from breaking. By storing it under the porch, there should be no problem for the dome being damaged over the winter.

### **Station Projects**

This season I had two primary projects at the Little 5 Station. I built new steps to the porch and a new out house hole was dug. The previous rock step was steep and the new redwood steps make it easier for the many times each day the ranger is up and down the steps. The old outhouse was up the hill "half the way to Big 5". The new outhouse is much closer to the station and is much more convenient to access.

### **Station Solar Unit**

The station solar worked great this season as I am always charging batteries on my electronic devices.....I was able to use my electric toothbrush too throughout the summer along with being able to charge my iPod. The system has three batteries and good solar access on the panels. I actually only had one panel hooked up this season and always had plenty of charge on my batteries.

### **SIGNS**

I photographed all of the signs in my area this season. All signs are in good shape. The use of "restoration area" signs works well in the area. There are several of them around the Little 5 Lakes Station site that work well to keep campers off of fragile areas. The "no fires" above this point is also a very good way to make sure hikers know that we are serious about our fire elevation restrictions.

### **TRAILS**

Overall the trails in the area are in good shape. The exception is the Sawtooth Pass Trail from Monarch Lake up. This trail is classified as "non maintained" for a good reason. The sandy soil has made it hard to put a trail in here that will last. Hikers need to be advised that trail is not a maintained trail and of the difficulty and hazards evolved with climbing Sawtooth Pass.

There were a number of trees down this season in the area. I notified the area trail crews as to the location and number of trees so they would know where the work needs to be done.

## **CONCLUSION**

Presented in this report is an overview of the work accomplished this season. Our park is unique with our seasonal wilderness ranger operation. There is no other National Park that has seasonal wilderness rangers that come back year after year. This was my 40<sup>th</sup> season with Sequoia/Kings and I share this honor with Dario Malengo. We have a proud tradition with our wilderness ranger program and we want to keep this operation strong in the future.

### **Little 5 Station Needs List for 2014**

- 5 gunny sacs
- 10 tp
- 30 small plastic bags
- 10 large plastic bags
- 1 station propane tank
- 1 polar guard bag
- 1 two man tent
- 1 two burner coleman propane stove
- 3 propane canisters
- 1 box of 2 inch sheet rock screws (50)
- 1. 2 rolls of filament tape (1 inch wide)

## **McClure Meadow Ranger Station**

### **End-of-Season Report 2014**

Dario Malengo

#### **General**

The McClure Meadows Ranger backcountry season started after two preliminary backcountry training sessions to Rae Lakes and Charlotte Lake with other backcountry staff. Then on June 25, I hiked over Lamarck Col into Darwin Basin to begin my season as the McClure Meadows ranger.

Due to a low snowfall the previous winter, the high passes were open early this season allowing a steady flow of Pacific Crest Trail (PCT) hikers and visitation throughout the area. By the first week of July, visitation from the PCT, John Muir Trail (JMT) and others was constant.

The cabin at McClure was in good repair and was easily made into a functioning ranger station. Except for a steady flow of mice all season long, the cabin is perfect. Visitors are constantly dropping by for trail information, weather forecasts, and for other information and/or concerns.

#### **Use Patterns**

Hikers doing the JMT are the largest user group. Every year there is a steady increase in the numbers of JMT hikers. The second largest user group is the North-Lake-to-South-Lake hikers. This is a 58-mile trip going over Piute, Muir, and Bishop passes. The third largest group is the hikers entering from Florence Lake going to McClure Meadow, Evolution Lake, Goddard Canyon, Martha Lake, Davis Lake, to Wanda Lake. Also a constant number of hikers are going over Lamarck Col into Darwin Basin and to the JMT. (More about Lamarck Col later.) Also some hikers are avoiding the JMT and doing the "Roper High Route" over Snow-Tongue Col to Humphrey's Basin. And there is extensive cross-country travel off of the JMT going to Davis Lake, Martha Lake, and the Ionian Basin. A few groups traverse Haeckel Col to Lake Sabrina.

#### **Camps & Campsites**

Along the JMT are numerous good sites for camping. Beginning at the Piute Creek entrance in Goddard Canyon, and all the way to Wanda Lake, there are many good options for camping. At McClure Meadows, good camps are found below and above the ranger station. The destination for many JMT hikers is Evolution Lake. Evolution Lake puts them in a good position to make it over Muir Pass the following day. Above Evolution Lake, good camps can be found at Sapphire Lake and Wanda Lake. Beyond Wanda Lake there are no good camps until Helen Lake.

#### **Stock Use**

There was no stock use in this area until August 10<sup>th</sup>. After 8/10 there were many stock-supported groups. The High Sierra Pack Station (HSPS) was the most frequent user along with Rock Creek Pack Station (RCPS). HSPS had several small trips and RCPS had three large trips through the area. Grazing occurred at McClure Meadows "pocket meadows" and at Evolution Meadows.

One stock group, the first group (on August 10), camped at the main backpacker camp and left manure, hoof clippings, and six horseshoes in the camp. I was not able to determine definitively who led this group, but it was probably one of the commercial outfits, as my interviews with multiple parties indicated that there were no private stock users in the area.

I recorded stock nights as follows: McClure Meadows 52 stock nights; Evolution 34 stock nights; and Goddard Canyon 20 stock nights. The heaviest stock impacts were in McClure Meadow near the ranger station and across Evolution Creek near the stock camp on the southwest side of the meadow.

The guided commercial trips had all their papers in order (Rock Creek P.S. with "SP" as guide, SoYos Mountain Guides with Laura as guide) and their camps were left in proper order. Bishop Creek P.S. did not have any trips in this area, and Muir Trail Ranch had three small drop-off trips with only three head of stock.

### **Campfires**

Above Piute Creek and below 10,000 feet on the JMT all firepits are of a low profile and all ashes have been removed. Visitors constantly add rocks, dirt, and foil, so all firepits needed continued maintenance throughout the season.

### **Medicals**

There were only two medivacs in the area. The first was an elderly man at Evolution Lake with high blood pressure and weakness. The other was a 20-year old female with Achilles tendonitis who was not able to walk and who also presented with signs of high-altitude pulmonary edema (HAPE). Having lost her acclimatization after taking a week off at sea level to rest her tendonitis, she developed HAPE signs upon resuming her hike: dry cough, could not eat or drink for 24 hours, and lung sounds. She also had a history of high-altitude cerebral edema (HACE) from a trip in the Andes when she was 16 years old.

The only other medical was a man with two sprained ankles. 5-1-2 was able to arrange a stock evacuation via HSPS.

### **Search and Rescue (SAR)**



I was called to participate in four SARs this season. The first was for a 13-year old who became separated from his group at Piute Bridge. He returned to North Lake (where he started) and the search was called off.

The second search was for (b) (6) who was four days overdue on Mt. Goddard. Shortly after I arrived at Martha Lake with 5-1-2 and 1-1-8, the subject was found at Davis Lake by the trail crew search team and helicopter (b) (7) from Independence. Patient was flown to the west side. He had a compound fracture of the lower leg.

The third search was for another 13-year old from the Bench Lake area. I was notified to be ready the next day but the subject was found by the trail crew when they got back to camp.

The fourth search was for (b) (6) who was left behind at Davis Lake by his hiking partners. This search was caused by his group leaving him behind and prematurely calling for a search. I performed a "hasty" search to Davis Lake (the "point last seen") and returned to the JMT and McClure Meadow. The subject was found by 5-5-12 on the LeConte trail at approximately 1800 hours.

### **Ranger Station**

The ranger station is in a good location, off the trail enough to be unobtrusive but close enough to be found by those who need assistance. There is not currently a sign directing visitors to the station, and there probably should be one. Hikers traveling south sometimes miss seeing the ranger station. I estimate that approximately 30 percent of visitors miss seeing the ranger station. (b) (5)

The cabin is in good repair, with a sink and good mouse-proof cupboards and cabinets for storage. There are a lot of mice entering, and it is necessary to continually trap them so they don't "take over." I trapped 48 mice this season.

The propane and wood stoves work well. The solar system works well. The AC system for charging batteries is working. The DC system needs a new plug-in to be operable.

From the Fourth of July until Labor Day, visitation at the ranger station was steady. Most visitors either want a weather forecast or just to visit the ranger and see the ranger station, and of course take a picture of the station and/or ranger.

### **Trails & Cross-country Routes**

(b) (5)

Lamarck Col—a popular off-trail route from the Inyo NF (North Lake) into Kings Canyon—may be the most frequently traveled cross-country pass in the Sierra. For two

years now, it has been possible to traverse the pass without having to cross snow (global warming?). Still this is a very strenuous route and involves a lot of boulder hopping; it is not for everyone. Many people are overwhelmed by how difficult it is and should not be doing it. This season I found a "best route" that is now quite extensively "ducked." My plan for next season is to fine-tune the cairned route and attach a sign on the col (attached to entry sign) instructing visitors to leave the cairns in place (and not add new ones) to help prevent multiple trails.

### **Statistics**

Miles hiked = 665

Visitors contacted = 1,546

Firepits re-habbed = 51

Firepits eliminated = 35

Stock nights:

McClure Mdw. = 52

Evolution Mdw. = 34

Goddard Canyon = 20

### **Needs**

Sign with two sides pointing to ranger station

Chain for Homelite chain saw, 24"

### **Supplies on Hand**

#2 D cylinders oxygen, with regulator

Kitchen utensils, all needed

Tools: good variety of hand tools

Lock box with key (east corner under eve)

Propane: 23 gallons on hand



# Pear Lake Ranger Station End of Season Report 2014

Lucy Lieberman

Staffed: June 23-September 23



Upper Big Bird Lake from the the Tablelands

## General Summary

2014 marked the third year of severe drought throughout California, making the winter snowpack 31% of normal. The Lakes Trail was snow free by the first week of July and the creek behind the station dried up initially in late July, and after early August thunderstorms, it dried up for good the third week of August. Weather throughout the season was marked by above average temperatures and roughly a week of afternoon thunderstorms in late July and early August. Two lightning-caused wildfires occurred in July; the first fire I called in on July 24th and was characterized by 150 feet of smoke along the Alta Ridge. The second smoke was called in the next day and was one hundred yards down the Alta Ridge towards Heather Lake. Ash Mt Fire provided reconnaissance to the area and determined they were both small and had no spread potential due to their rocky and isolated nature.



Alta Ridge Fire 7/25/14



Wildflowers above Aster Lake

# 1. A. Pear Lake Statistics 2014

Table A

E=Emerald P=Pear		May/June	July	August	September	Total
<b>Illegal Fires</b>	<i>E</i>	6	5	10	0	21
	<i>P</i>	1	2	3	0	6
	<i>Other</i>	5-Heather 1-Marble Fork	0	1-Frog Lake	0	7
<b>O.B. Camping</b>	<i>E</i>	1	6	1	0	8
	<i>P</i>	0	2	1	1	4
	<i>Other</i>	0	0	0	0	0
<b>Dogs</b>	<i>E</i>	0	0	1	0	1
	<i>P</i>	0	0	0	0	0
	<i>Other</i>	1-Lakes Trail	0	0	0	1
<b>EMS</b>	<i>E</i>	0	0	1	0	1
	<i>P</i>	0	0	0	0	0
	<i>Other</i>	0	0	1-Ranger Station	0	1
<b>No Permit</b>		0	0	1	0	1
<b>Wildland Fire</b>		0	2	0	0	2
<b>Overflights*</b>		0	1	1	1	3
<b>Other Violations</b>		5-Per 618 verbal warning to 5 for PCS marijuana	0	0	0	5
<b>Visitor Contacts (Day/Night)</b>		D:145 N:75	D:560 N:502	D:408 N:462	D:235 N:248	D:1,348 N:1,287
<b>Miles</b>		83.3	159.2	261.4	102.8	606.7

<b>Patrol Days</b>		7	19	19	14	59
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\*Overflights were only called in if the aircraft was spotted less than 3000' above the mountains. This does not take into account other aircraft that had a major sound impact but were flying above 3000' which happened much more frequently.

## **B. Lakes Trail Visitor Use 5 Year Trends** (Visitors Contacted including day and overnight hikers)

*Table B*

	<b>May/June/July</b>	<b>August</b>	<b>September</b>	<b>Total</b>
<b>2014</b>	1282	924	483	2689
<b>2013</b>	965	503	391	1859
<b>2012</b>	603	538	310	1451
<b>2011</b>	539	743	476	1758
<b>2009</b>	533	532	451	1516

\*Data for 2010 not located

## **C. Lakes Trail Permits System Data**

*Table C*

	<b># of Permits Issued for Emerald and Pear Lake Camps</b>	<b># of People</b>	<b>VUN's</b>
<b>May</b>	21	54	154
<b>June</b>	94	262	547
<b>July</b>	123	370	807
<b>August</b>	143	408	899
<b>September</b>	81	221	501
<b>Total</b>	462	1315	2908

## **2. Visitor Services**

### **A. Popular Visitor Destinations**

<i>Day Hikes:</i>	<i>Overnight Hikes:</i>	<i>Cross Country Hikes:</i>
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<ul style="list-style-type: none"> <li>• Heather Lake</li> <li>• Watchtower</li> <li>• Emerald Lake</li> <li>• Pear Lake</li> <li>• Alta Peak</li> <li>• Panther Gap</li> </ul>	<ul style="list-style-type: none"> <li>• Emerald Lake</li> <li>• Pear Lake</li> <li>• Mehrten Meadow</li> <li>• Alta Meadow</li> <li>• Panther Gap</li> </ul>	<ul style="list-style-type: none"> <li>• Moose Lake</li> <li>• Tablelands</li> <li>• Silliman Peak/Crest</li> <li>• Big Bird Lake</li> </ul>
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## B. Stock Use (Observed)

Table D

	<i>May/June</i>	<i>July</i>	<i>August</i>	<i>September</i>	<i>Total</i>
<i>Stock</i>	Ranger Station (R.S.) Mob (Pear)-1 Historic Pres. Mob (Pear)-1	Outward Bound Resupply @ Pear-1 USGS @ Em-1	Outward Bound Resupply @ Pear-1 Bearpaw Resupply near Panther Gap-1	R.S. De-Mob (Pear)-1 Maintenance/toilets -2	10



NPS Packer Dan Baker demobilizing.

## C. Groups Observed

- Outward Bound Service Project x2
- Boy Scouts of America x3
- Sierra Club x2
- UC Santa Cruz x2
- Sierra Summer Camp x1

(b) (6)



Two Outward Bound groups performed service projects at Pear Lake this season.

#### **Recommendations:**

I received many comments this summer regarding the group size limit of 15 backpackers on the Lakes Trail as well as the surrounding cross country zones. The impact of a 15 person group is tremendous in this area due to the open landscape and the ability to see other visitors ahead of you and behind you on the trail. This fact combined with the natural increase of noise from such groups negatively affects one's sense of solitude in wilderness.

I strongly recommend a group size limit for day hikers. There was one incident in particular this summer where over ninety trail runners were on the Hump Trail at one time and all met up at Heather Lake. This made an incredibly large impact to the area both visually and audibly. It was difficult for other hikers to get through and I received several comments from other visitors about the their wilderness experience being negatively affected. I recommend a group size limit of 12 for day hikers, 12 for overnight hikers, and 8 overnight and day hikers in the cross country zones.

#### **D. Law Enforcement**

See *Table A* for specific law enforcement statistics.

Multiple verbal warnings were issued for citable offenses this season including out-of-bounds camping, food storage, resource damage and littering. Unfortunately, only one illegal fire was discovered while the group was still present, which led to a citation when the group arrived at the trailhead. Most law enforcement contacts were education-based. The one time a law enforcement ranger patrolled the Lake Trail with me this season, one verbal warning and one written citation were issued.



Violations: Table E

Date	Location	Issue	Outcome
August 2	Pear Lake	Staging gear in the restoration zone at Pear, food not stored properly	Citation for food storage issued by (b) (7)(F)
August 2	Emerald Lake	PCS marijuana	Verbal warning to 5 by (b) (7)(F)
August 23	Emerald Lake	Illegal fire	Citation issued at trailhead by (b) (7)(F)
August 24	Emerald Lake	Dog on trail	Turned the group around immediately
August 31	Heather lake	Hiking with the intention of camping at Emerald with no permit	Turned the group around and directed them to the Forest Service as our quota had been reached



Illegal Fire pit at Emerald Lake



Out of bounds camper at Pear Lake

## E. SAR / Medical Incidents

Table F

	Location	Type	Evacuation
7/10/14	Goddard SAR	Missing person	Helicopter evaced before insertion
8/3/14	Emerald	Chest pain/SOB	(b) (7)(F) escorted to Wolverton



8/3/14	Pear Lake R.S.	4 visitors with mild hypothermia	Treated at station and self-evacuated
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### **3. Use Patterns**

Overall the Lakes Trail attracts a majority of novice hikers and a minority of experienced wilderness travelers. Many novice hikers were underprepared for the mileage and elevation gain to Heather Lake. Inadequate water supplies and groups lacking essential items such as maps were common. This lack of hiking experience led to a large amount of toilet paper around Heather Lake and on the first two miles of trail.

#### *Data/Visitor Trends:*

I was told to document day and overnight hikers on the trail this season, however this system does not allow us to track wilderness use trends effectively or accurately as a whole. For example, I document hikers outside the Lakes Trail and in cross country zones (xc zones), but since they aren't documented separately, we are unable to tell which trails and xc zones are getting more or less use over time and therefore we are unable to track trends effectively. I recommend a coded system for trails and xc zones so that wilderness rangers can document visitor use per individual trail and xc zone. This would also account for the different ways in which rangers patrol and differentiate the time on and off trail. For example, other than the permit system, there is no current way of tracking exactly how much use the Moose Lake area is receiving compared to Alta Meadows or the Silliman Crest.

#### *Methodology for Counting Visitors:*

All visitors were counted on the trail and separated by whether or not they were day or overnight hikers. Since one of the main purposes of documenting visitor use on the trails is to track the wilderness character of solitude, I acted as though I was tracking use from the perspective of a visitor each day. This meant that if I contacted a group of four on Friday evening camping at Pear, and I went back up to Pear the following morning, I counted that group of four for my Saturday statistics as well. I am not aware of any written policy regarding tracking visitor use, however in order to track data over time, it is important that all wilderness rangers are counting visitors the same way.

The quota was filled on the Lakes Trail 12 times this season.



A yellow-bellied marmot shamelessly sunbathes at Pear.

*Observed Research:*

- Kevin Skeen's Aquatic Team was conducting research at Emerald Lake, Monday through Thursday from July through mid-August.
- A USGS team conducted soil sampling in the Tablelands in July.

*Cultural Resources:*

No cultural resources were documented.

#### **4. Backcountry Facilities**

##### **A. Pear Lake Hut**

The Historic Preservation team worked on the station for several weeks this summer. Thor Riksheim provided the following accomplishments and recommendations regarding the condition of the station.

*Accomplishments:*

- Re-finished front and upstairs doors on exteriors. Added deadbolt, new threshold, weatherstripping, and new stops to front door. Repaired threshold to upper door.
- Repaired and re-hung storage room door. Replaced padlocks with deadbolt.
- Replaced exterior door to Clivus/basement area with rodent proof aluminum door with deadbolts
- Re-pointed mortar on south and west sides of building to exclude rodents
- Replaced 4 cracked or missing window panes. Replaced putty on about half of window panes. Painted metal window sash on all windows interior and exterior
- Re-finished all exterior woodwork. Protected with Natural Pine epoxy stain
- Protected roof with Shakeshield- a water resistant UV blocking stain
- Re-guyed Clivus stack

*Recommendations:*

- Refinish the floor
- Clean up and refinish interior woodwork, especially the kitchen counter

- Replace insulation between main room and attic
- Clean up the various wires associated with the solar system
- On a 5-7 year cycle, re-stain the exterior woodwork



*Historic Preservation Crew Members Thor Riksheim and Brooks Stiltz re-guy the roof wires for the Clivus.*

#### *Solar System:*

The solar system operated between 12-14 volts during the day. On multiple occasions when the lights were on for more than two hours the light would change from green to yellow and it would take 12-15 hours before it went back to green. The solar was only used for the fan in the composting toilet system (drawing .3 volts), to charge radio batteries (drawing 1.2 volts) and for the two lights (drawing .6 volts). On a sunny day the solar collected 2-5.5 amps. Thor adjusted the angle of the panel in July which improved the amps collected slightly.

#### *Clivus Multrum Toilet:*

The cone of solid waste from the winter was pushed down in June as part of opening the station. The toilet functioned optimally this season with no issues.

#### *Mice:*

Despite Thor's crew filling in several mouse holes in the station, mice were active this season. Total mice caught per month-

*Table H*

	<i>May/June</i>	<i>July</i>	<i>August</i>	<i>September</i>	<i>Total</i>
<i>Mice caught</i>	23	17	23	5	68

#### *Propane System:*

There was half a propane tank (20 gallon tank) upon arrival in June. Two more tanks were mobilized in June and I used 1.25 tanks over the course of the season. Occasionally the propane

stove took multiple attempts before it lit, despite both pilot lights being lit. Other than this there were no problems with the propane stove.

#### *Water:*

Over 200 gallons of water were collected in June for the impending summer drought. The creek dried completely in late July, but ran again at a trickle for the first three weeks in August due to storms in early August. The water stored in the station has been sufficient to cover all water needs without carrying down water from Pear Lake.

#### *Solar Cooler:*

The solar cooler is a standard cooler-sized device which has two wires going through the top of the wall to a small solar panel that is not mounted, but lays on the rocks outside. The cooling fan only has power when the sun is on it directly, meaning if a cloud passes over, it shuts off, then turns back on again when it is clear. The power is also very low and does not cool below fifty degrees. This led to cooling and warming throughout the day which caused produce to turn bad at a much faster rate compared to a regular cooler with a constant temperature. It is also not a user-friendly system to have wires constantly needing to be taped together to get power, and to have to worry about the security of a solar panel left on the ground outside. I recommend purchasing a small propane refrigerator because they use a modest amount of propane and will work indefinitely regardless of weather. Follow up with Thor Riksheim for details, as he is familiar with well built propane refrigerator models.

#### *Miscellaneous:*

The pellet stove was not utilized this season. All SNHA signs were packed out to SNHA for them to consolidate and improve. There were many repetitive (repetitive signs what does that mean?) and damaged signs that needed to be revised and updated. For example there were three signs explaining how to use the pellet stove and two signs explaining food storage policies in the station. There is one only S.O.P. sign for NPS use in the cabin and it needs to be revised to reflect updated ranger station policies.

### **B. Pear and Emerald Latrines**

Both Emerald and Pear Lake Latrine solar systems remain broken, and have been recommended to be fixed every year since EOS 2008. The lack of fans provided by the down solar system created a horrific smell and a massive abundance of flies. A work order was written in July to have the batteries and solar system fixed. A maintenance crew emptied out the Pear, Emerald and station composting toilets on September 23-25th. The solar panel is now working for the fans at Pear Lake, although the battery remains dead. The solar panel at Emerald is still down, although the maintenance crew documented what materials are needed to fix it. The cleaning closet between both bathrooms continues to be a haven for mice whose excrement is evident everywhere and creates an unsafe work environment.

Biweekly cleaning occurred at both bathrooms this season which included refilling the wood chip buckets, cleaning the toilet seat structure, sweeping the floors and stirring the contents from the lower chamber. Trash was rarely found in the bathroom structure and flies/smell was the largest complaint from visitors.

## **5. Trails**

No major trail work was conducted this season on the Lakes Trail. There are a few eroded areas and noticeable trail slumping in a few sections before the Watchtower. The five plus stock parties also created trail damage by pushing down rocks onto the trail on the last two miles to Pear lake and widened the trail on the first two miles of trail. Despite my efforts, social trails continue to appear around the Watchtower area creating resource damage and erosion in places. Several downed tree reports were provided to Tyler Johnson early season along with a trail work report/recommendation for the Elizabeth Pass Trail.



Fall color on the Lakes Trail in September.

### *Trail Projects Completed:*

- Brushing of trail to site 10 at Emerald Lake and sawing several impeding branches
- Brushing fifteen feet of overgrown willow between the Ranger Station junction and Emerald Lake
- Covered several social trails around Heather lake and near the stream crossing at the lower Hump Jct.

## **D. Signs**

All trailhead signs are in good condition. Emerald, Pear and Heather Lake birdhouse signs were replaced and re-tacked at the beginning of the season. According to past EOS reports, a number of different signs have been posted at the camps. A parkwide standard needs to be developed that complies with wilderness standards.



The current signs present at each camp include: appendix for camp signs

- Camp Map
- 14' Minimum Impact Requirements
- Fishing Regulations
- Camp specific information

There are also two metal signs adjacent to the birdhouse boards which state “camping in numbered sites only and fires prohibited.”

The Hump/Watchtower sign still has graffiti from last season etched into the metal. Due to the high number of illegal fires this season, a “No fires beyond this point” sign should be placed at the upper Hump Jct (as per EOS 12’).

## **6. Overnight and Day Use Areas**

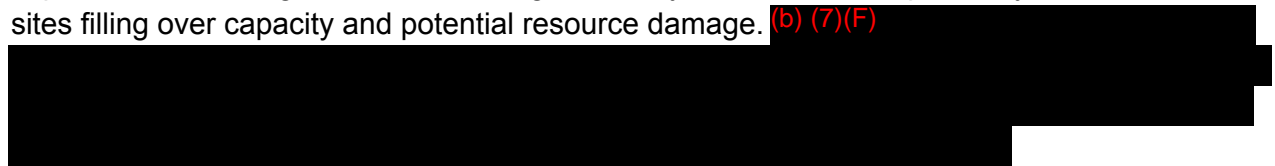
*Overview* (see appendix 1 for site capacity analysis)

Pear and Emerald Lake are the only two camps in Sequoia National Park where there are specific designated sites within each camp. Visitors on the Lakes Trail are required to stay at one of those two sites and this is pre-arranged on their permit. Both camps afford phenomenal alpine views and excellent access to the lakes for swimming, fishing and relaxing.

A camp assessment and site capacity analysis was conducted in July to facilitate the use of sites in a manner that did not lead to resource damage and site expansion. Originally there was no specific management guidance for the operation of the sites at Pear and Emerald Lake. I was informed mid-way through the season from the Trailhead Lead (Liz Quall) that there was a 25 person max at each camp. After observing use patterns the first few weeks I noticed that many large groups would often try to squeeze into one site, creating satellite tent pads and resource damage in places. The goal of the site capacity analysis was to determine a maximum group size for each site so that the Trailhead Rangers can inform visitors how many sites each group need to use, per permit, and which sites would be preferable for their group. I also took note of which sites were the most popular and which were seldom used.

### *Common Issues:*

There were multiple occasions where groups permitted for Pear ended up staying at Emerald due to “physical exhaustion” or simply because they preferred Emerald. I am aware that Trailhead Rangers strongly emphasize the importance of sticking to their permit, however they often do not. This situation proved to be frustrating, because there is no way to verify if they are capable of continuing to hike and having them stay undermines the permit system and leads to sites filling over capacity and potential resource damage. (b) (7)(F)



Another common issue was dealing with groups that were permitted for Moose Lake their first night, but ended up bailing at Pear Lake. As a result of this, Pear Lake would fill above capacity on occasion. To resolve this I spoke with the Trailhead Rangers about creating conservative itineraries for visitors. This problem gradually subsided over the course of the summer as Trailhead Rangers personally hiked to Moose and understood the difficulty of the route. They would also permit a group for Pear if they were hesitant about making it all the way, and if they did decide to go all the way to Moose, I tried to change the permit from the field.

### *Status of Pear Lake (see Graphic 1, page 21)*

Pear Lake has a total of ten sites situated on the northern edge of the lake. Although all of the sites are situated on durable granite, many do not afford a wilderness camping experience due to the lack of solitude from surrounding sites, the trail and the large composting toilet facility. Due to the high use of this area, it is important to concentrate the impact of visitors into these designated sites, however boundaries must still be established to protect surrounding vegetation.

Sites 10, 11, and 12 are situated on the slope to the west of the lake and offer the most solitude. There is at least 25 yards between the sites and those three camps share a food storage locker located between sites 10 and 11.

There is only one site, site 2, which has the trees to support hammocks. A discussion needs to take place as to the policy regarding the use of hammocks outside of tent pads. Site 2 has the best access to the outlet of the lake, and provides shade.

Sites 3 and 4 are extremely inappropriate. They are roughly 10 yards behind the bathrooms and as per EOS 11-13', they do not afford a wilderness camping experience as the smell of human waste and the slamming of doors is astonishingly present. I removed site 4 near the end of the season because of this problem and because I did not see a single group camped there all season.

Site 1 is also inappropriate due to its presence a mere 10 feet from the main trail, and because it is situated in a drainage that floods during storms. This site is also going to be removed.

### *Food Storage:*

There are four food storage lockers at Pear, two of these are the newer model with twisty knobs that are mice-proof, the older model with clips are not mice proof. At the older model locker near sites 5 and 6, mice had a major presence throughout the season eating and contaminating stored food. I switched the food locker and with a newer model and put the older model away from the sites face down. This locker needs to be transported out of the Pear Lake area.

About 30-50% of every time I check a food storage locker, there was trash or cached food left behind. This ranged from small wrappers to upwards of 20 lbs of trash or gear abandoned. Despite the high visitation of the Lakes Trail, with the ease of renting lighter weight

animal-resistant food canisters (A.R.F.C.'s) today, and with the wilderness considerations regarding permanent structures, I recommend considering removing some or all food storage lockers from the Lakes Trail. With education increasing about the proper ways of storing food in bear country, and with other parks and areas requiring food canisters, I believe it is not unreasonable to ask visitors to carry a food canister to these areas.

*Use of Sites:*

Most popular sites-5, 6, 10

Least used-12, 3

*Status of Emerald Lake (see Graphic 2, page 22)*

Emerald Lake has 8 sites which are more spread out than Pear and are all at least 100 feet from the lakeshore. Emerald had more violations this season, probably due to easier access from the Trailhead attracting more novice hikers and day hikers.

Site 10 is separated from the rest and has several tent pads that would make it excellent for a group camp area. Due to it's distance from the other sites, it could potentially be used as a designated group site for larger groups.

*Food Storage:*

Emerald Lake has two food storage lockers which are the older model and is thus susceptible to mice entering (although this wasn't as common as it was at Pear).

I recommend that in the near future a conditions assessment be completed to ensure that all camps are within park and wilderness standards. The conditions assessment should include square footage of each tent pad, distance from trail, distance to water, distance to closest camp, distance to food storage locker, and photo documentation. This assessment should be used as a justification for adjusting the amount of sites and moving them to comply with park camp standards.

*Use of Sites:*

Most popular sites-3,4,5,7

Least used-6,10,1

*Status of Heather Lake*


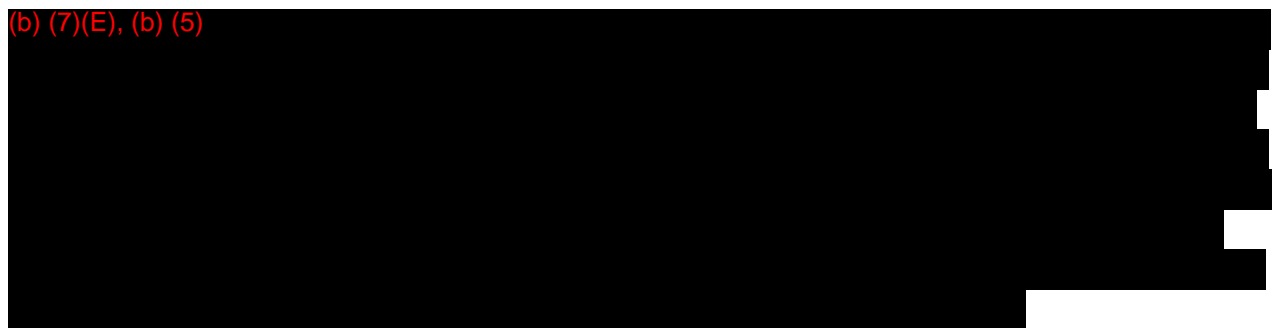
Heather Lake received extremely high day use this summer. Toilet paper and various other trash was a common occurrence strewn around the north shore of the lake. There appears to be riparian damage due to the many social trails that have popped up. Visitors enjoy swimming, fishing and relaxing on the "island" on the west shore, as well as the slab rocks closest to the trail on the north shore. There is evidence of a designated trail around the shore line, but due to several downed trees, visitors are now walking around the trees and trampling the vegetation that is within five feet of the water. Multiple fire scars on the rocks are also evident in the common picnic areas.

Recommendations:

Remove the downed trees and use the logs to form a wall protecting the more fragile areas of shoreline where damage is present. Research methods for removing fire scars on rocks.

**7. Radio Communications**

(b) (7)(E), (b) (5)



**8. Permit System and Trailhead Operations**

Nearly all backpackers received their permit from the Lodgepole Permit Desk. There was 100% turnover in staff at the permit desk this season, but they learned quickly on the job despite no official training on backcountry patrol procedures. Also, only the trailhead lead attended training on the permit system and. All Trailhead Rangers provided excellent trail and camp information.

Throughout the season the Trailhead Rangers and I worked on a system for increasing communication regarding overnight groups on the Lakes Trail. On Friday and Saturday afternoons, they would attempt to get a hold of me on general use and inform me how many groups were staying at each camp and the group size of each. This helped to ensure that I contacted each group. I was also notified when the quota filled on busy weekends.

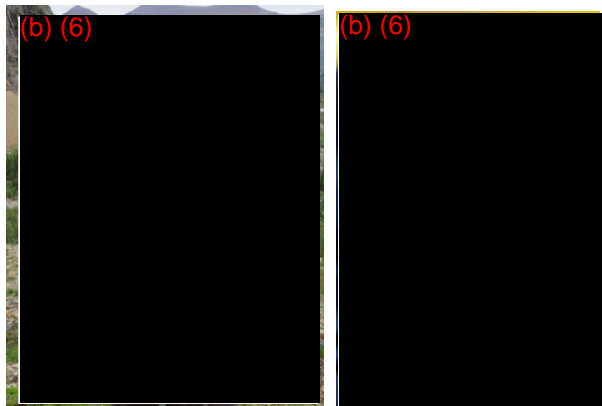
Recommendations:

The amount of information on the Minimum Impact Requirement form is simply overwhelming to visitors. It is not possible to digest all of that information on the two page single spaced sheet. I have witnessed multiple visitors nodding off during the MIR talk given by myself during the one time I covered the permit desk, and I feel that a majority of violations I incurred in the field is a direct result of visitors not learning and retaining the basic LNT information regarding food storage, fire use, sanitation and camping on durable surfaces. I suggest meeting with a marketing professional to design an easy to use and image based pamphlet that fuses the 7 LNT principles in combination with SEKI specific requirements in an easy to comprehend format.

All Trailhead Rangers patrolled the Lakes Trail at least two times this summer, however I recommend that in the future all Trailhead Rangers patrol the Lakes Trail and to Moose Lake within the first two weeks of the season to assist visitors with trip planning to the cross country areas, and be able to describe routes appropriately. I also recommend that Trailhead Rangers are conservative in developing itineraries with visitors that include Moose Lake because so many visitors I contacted did not make it to Moose Lake and ended up camping at Pear.

It was unclear how to handle permit changes from the field this season. It was extremely difficult to get a hold of the permit desk on busy weekends and it was difficult to change them retroactively when I returned to the office because I hiked out infrequently. There was also no expectation or specific policy from the Wilderness Office regarding permit changes to make the system more accurate.

When approaching a camp with a tent occupying a site but no visitors were present, it was difficult to ascertain whether or not they had a permit. This led to difficult situations when another group with a valid permit would show up hoping to camp there. More than once I ended up waiting around for a group to return to make sure they were camping legally in that site. I recommend permits that are able to be attached to the outside of the tent when the group is not present. This can be accomplished by either placing the permit into a plastic bag with a twisty tie, or using water-resistant paper so that we can attach a twisty tie after the permit has been printed.




Example of wilderness permit with ability to be attached to backpack. This also makes checking the permit dramatically easier on the trail.

### **General Recommendations:**

Overall there was a general lack of direction between the function of the Wilderness Office and the Lodgepole Operations. From what I understand the Wilderness Office disseminates information and manages the online reservation permit system. The Lodgepole front country law enforcement follow up on Law enforcement infractions in Wilderness and assist with supervising backcountry operations. It is not clear how/if these two entities interact and communicate wilderness policies effectively. It seems like there needs to be park-wide protocols established on basic wilderness patrol duties and visitor interactions such as dealing with illicit drugs in the backcountry, visitors with no permits, dogs on the trail, camp fire maintenance, etc.



(b) (5), (b) (7)(E)



**Professional Development:**

*Pre-season trainings attended-*

- EMS (24 hrs)
- Swift Water Rescue (24 hrs)
- SAR (8 hrs)
- Wilderness Training (16 hrs), however no specific guidance to Lakes Trail regs/policies
- Operational Leadership (16 hrs)

*Recommended Trainings-*

- Wilderness Training: SEKI Wilderness history, trends, common issues
- Patrol Procedures: Sequoia specific guidance on LE issues, policies for visitor contacts, etc.
- LNT Training (trainer course as a minimum)
- Mentor patrol for first year Wilderness rangers
- Intro to SEKI permit system

**Needs:**

- 3 Katadyn Ceradyn ceramic filters (there is currently no back-up to the existing ones)
- Pump/spigot for 55 gallon drum (noted in EOS 13')
- 7 bags of wood shavings (3 each for Emerald and Pear Lake)
- 1 roll of Duct tape
- 1 roll of packing tape (for de-mob)
- Clorox wipes, 2 cans (1 each for Emerald and Pear Lake)
- Rubber gloves, 2 boxes (1 each for Emerald and Pear Lake)
- Emergency radio for station
- Small propane refrigerator

**Relevant Inventory:**

- 1 full tank and  $\frac{3}{4}$  tank of propane currently hooked up to the propane system
- multiple containers of bleach and other cleaning supplies
- 4, 8oz containers of isobutane fuel for pocket rocket stove
- $\frac{3}{4}$  box of plastic gloves
- 15+ new sponges
- 6+ full dish liquid
- 2 brooms

- 2 mops in good condition
- 2 sleeping bags (last washed June 2014)
- 1 full and 1 half bag full of pine chips in the cleaning closet for station use
- The metal storage cans at Pear and Emerald Lake bathrooms are completely full of wood chips
- 4+ packs of AA batteries

#### Projects for the Future:

(b) (5)



Pear Lake

#### *Appendix 1: Site Capacity Analysis of Pear and Emerald Lake*

##### **Pear Lake Site Capacities**

(b) (5)

#### Site 2: Capacity-6

- 2, 2-person tents and 2, 1-person tents in 3 tent pads
- Hammocks acceptable in this site, lots of shade and good creek access when flowing
- 4 stars, pic 700, 701, 702

Site 3: Capacity-4

- 2, 2-person tents or 1, 4-person tent
- granite tent pad just behind bathroom
- 2 stars because way too close to bathroom
- not used often, close to bear box
- pic 703

Site 4: Capacity-8

- 2, 4-person tents
- Behind bathroom on granite slabs
- 2 stars because way too close to bathroom, not used often

Site 5: Capacity-6

- 3, 2-person tents or 1, 4-person tent and 1, 2-person tent
- popular site near bathroom, great view to NW
- Tent pad is granite slabs and dirt
- 1 satellite tent pad in restoration area, covered
- 3 stars, pic 707

Site 7: Capacity-4

- 2, 2-person tents
- Dead tree separating the one tent pad into two smaller ones
- Dirt tent pads, more privacy
- 4 stars, pic 706

Site 6: Capacity-6

- 3, 2-person tents or 1, 4-person tent and 1, 2-person tent
- Popular site just in front of the bathroom on granite slabs
- Close to food storage locker
- 3 stars because of proximity to bathroom and to site 9
- Pic 707

Site 9: Capacity-8

- 2, 4-person tents or 1, 4-person tent and 2, 2-person tents
- Most popular site on granite/dirt combo tent pads
- Satellite tent pad close to lake, covered
- Close to bear box
- 3 stars, pic 708

Site 10: Capacity-5

- 2, 2-person tents and 1, 1-person tent
- Lowest of the three camps up the slope to the west of the outlet of the creek

- Excellent view of lake and privacy from other sites
- Close to bear box which is 30' above the camp
- 5 stars, pic 698, 699

Site 11: Capacity-6

- 1, 4-person tent or 2, 2-person tents
- One long tent pad behind the camp sign post roughly 20' from bear box
- Privacy from other sites
- 4 stars, pic 696

Site 12: Capacity 4

- 2, 2-person tents or 1, 4-person tent
- Highest camp on the ridge overlooking the lake
- Hammock friendly, shady and great views
- Far from water and bathroom access
- One tent pad to left of large rock about 20' behind camp sign post
- 2 satellite tent pads down ridge, covered
- 4 stars, pic 697

### **Emerald Lake Site Capacities**

Site 7: Capacity 6

- 3, 2-person tents or 1, 4-person and 1, 2-person tent
- 2 tent pads
- Adequate isolation and view to the north

Site 1: Capacity 4

- 2, 2-person tents or 1, 4-person tent
- 2 satellite tent pads which have been covered
- Close to main trail, partial shade

Site 6: Capacity 4

- 2, 2-person tents or 1, 4-person tent
- Inappropriate campsite, way too close to trail and water source
- 1 long tent pad

Site 3: Capacity 8

- 2, 4-person tents or 4, 2-person tents
- Very large, bombed out area with tent pads not clear in certain areas
- 2 commonly used satellite tent pads have been covered
- Close to bear box

Site 2: Capacity 4

- 1, 4-person tent or 2, 2-person tents
- 1 satellite tent pad, covered
- close to bear box

Site 4: Capacity 4

- 1, 4-person tent or 2, 2-person tents
- 1 large tent pad adjacent to trail to lake, dirt pad
- close to bear box
- 2 satellite tent pads, covered

Site 5: Capacity 8

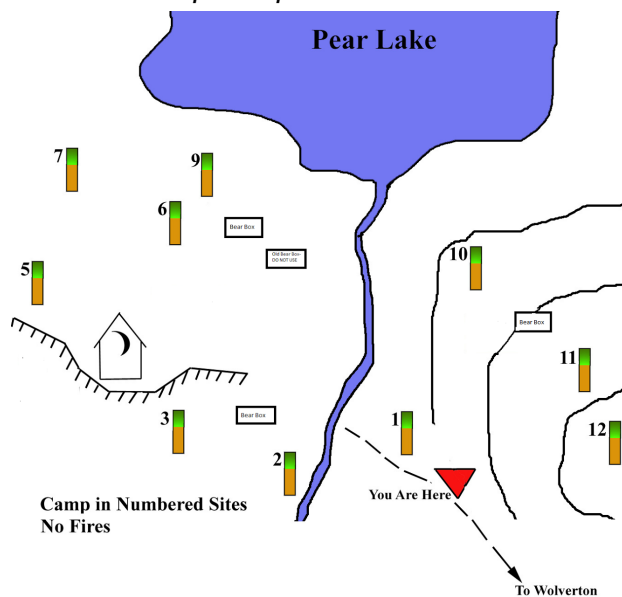
- 2, 4-person tents or 4, 2-person tents
- Nice view and privacy, more open
- 1 large dirt tent pad

Site 10: Capacity 8-10 (?)

(b) (5)

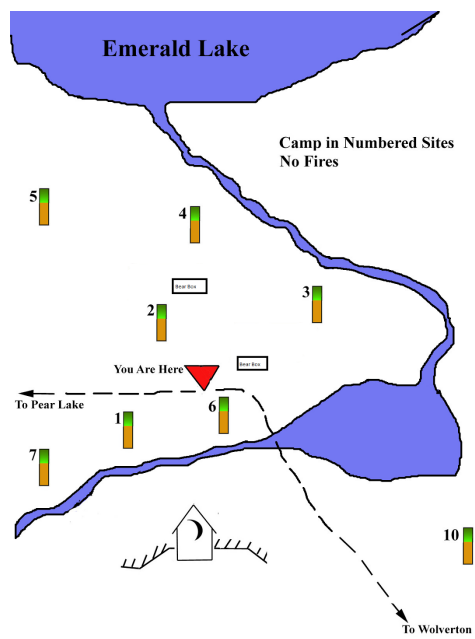
- Very isolated from the other sites but very far from a bear box
- Excellent view and close to bathrooms
- Path to site 10 is often difficult for people to find, consult map

*Pear Lake Map: Graphic 1*



*Emerald Lake Map: Graphic 2*





# **Sierra Crest – Rae Lakes End of Season Report 2014**

## **A. General Summary**

The Rae Lakes Ranger Station was staffed from June 23<sup>rd</sup> to September 25<sup>th</sup> this summer. This was the third year in a row of dry conditions in the Sierras. Record low snowpack in the Kings River drainage made the high country accessible very early in the season and brought a high level of visitation to the Rae Lakes area throughout the summer. Most of the PCT hikers had already passed through the area when I arrived at the station, as evidenced by many illegal fire rings sprinkled about the high country.

The Rae Lakes area stayed very busy all summer--it was not uncommon for me to encounter 80+ people when patrolling north on the JMT. Though use was high, there were rarely complaints of overcrowding from visitors. I believe the one night per lake limit worked very well this season in keeping people spread out in the Rae Lakes basin and I had very few complaints about that regulation.

With the Bench Lake station once again unstaffed, the area was covered minimally by myself and the LeConte ranger, as well as the East Side trailhead rangers. The lack of a constant ranger presence at Bench Lake was felt by everyone this season. Many major incidents occurred in the Bench Lake area this summer, making incident management more difficult by not having a ranger nearby. The trail crew at the South Fork was utilized multiple times to assist with these incidents, though that pulled them away from their main duties. I was only able to make long patrol through the Bench Lake area in July, and the lack of a constant ranger presence there was very noticeable. Many new fire rings dotted the JMT between Mather Pass and Pinchot Pass and busy spots like Lake Marjorie and the South Fork crossing were rife with piles of trash.

## **B. Visitor Services**

### **1. Statistics**

	<b>Visitor contacts</b>	<b>Miles Patrolled</b>
<b>June (7 days)</b>	124	43
<b>July</b>	586	167
<b>August</b>	785	181
<b>September</b>	379	122
<b>Totals</b>	<b>1,874</b>	<b>513</b>

The vast majority of contacts were with backpackers, though I heard of about two groups of a dozen joggers running the Rae Lakes loop in July.

Visitation was very high this summer. Of the visitors I contacted, roughly 60% were thru-hikers on the JMT or PCT, 35% were hiking the Rae Lakes loop, and 5% were hiking miscellaneous routes to places like Baxter Lakes, Woods

Lake, Gardiner Basin, or 60-Lakes Basin. Use in the area is heavily concentrated along the JMT corridor, and areas like Baxter Lakes, Woods Lake, and Gardiner Basin only saw a few groups throughout the summer to my knowledge.

I encountered six Boy Scout groups, two Southern Yosemite Mountain Guides groups, one Sierra Mountain Guide group, and one 3 Corner Round group this summer.

#### **a. Stock**

Nearly all of the stock use in the Rae Lakes area this summer was commercial. I contacted one private stock user with two horses who was section-riding the PCT. She was carrying feed and not planning to graze anywhere in the park. I also found some evidence in early July of a stock party having camped at Arrowhead Lake and high-lined improperly right off the trail. The meadow crew was in the area around the same time and Erik Frenzel seemed to think he knew the party in question--he has had problems with them in the past.

Most of my encounters with stock users were with Sequoia/Kings Pack Station. They resupplied multiple groups at Rae Lakes throughout July and August and packed gear in for a few parties heading into 60-Lakes Basin to do some climbing. I contacted one group from Rock Creek Pack Station with 20 head of stock who were camping at Lower Rae and grazing at Baxter and heard of another group from Rock Creek traveling north on the JMT. All of my encounters with commercial stock users this summer were pleasant and professional. I did have to ask one packer from Sequoia/Kings Pack Station to move his tent off the meadow at Baxter Drift Fence, but otherwise all of these users were very compliant.

## **2. Law Enforcement Incidents**

The vast majority of my contacts this summer were pleasant and educational. I gave multiple verbal warnings for camping on vegetation, camping in a restoration site, camping too close to water, and improper food storage.

I responded to 60-Lakes Basin to a report from the aquatic restoration crew of an uninvited visitor in their camp. He had met the two crew members briefly in Bishop some days before and hiked to their camp, expecting to spend several days with them. The aquatic crew was uncomfortable with his presence, having not invited him to stay with them, so I asked him to leave and escorted him to a campsite away from the crew's camp. I stayed with the crew in 60-Lakes that evening at their camp and had them spend the last night of their hitch down at the ranger station to avoid any more contact with this individual.

## **3. Search, Rescue, and Medical Incidents**

<b>Date</b>	<b>Location</b>	<b>Type</b>	<b>Outcome</b>
7/31	Rae Lakes R.S.	Chest Pain	Helicopter evac
8/11	North of Wood's Xing	SPOT Activation	Self-evac
9/9	Bullfrog Lake	Overdue Party	Unfounded

9/10	Glen Pass	Seperated Party	Party located
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I was only involved in one major medical incident in the Rae Lakes area this year, though I dispensed general medical advice and/or basic medical supplies at least two dozen times throughout the season. Several medical incidents occurred in the Bench Lake area this year which were handled well by the trail crew based on the South Fork of the King's River. With two EMTs on their crew, they became an incredibly helpful resource for both SAR and medical incidents in the unstaffed Bench Lake area this season.

Several major SAR incidents occurred in the Rae Lakes/Bench Lake patrol area this season—two in the vicinity of Arrow Peak and one in Gardiner Basin. I responded to three smaller SAR incidents this season—one for a SPOT activation by an injured hiker just North of Wood's Creek Crossing on the JMT who hiked out to Road's End, one for an overdue party at Bullfrog Lake who hiked out to Onion Valley, and one for a separated party on Glen Pass who was reunited with his group less than 24 hours after he was last seen.

#### **4. Ranger Station**

The Rae Lakes Ranger Station served me well this summer with very few problems. I caught a total of about 15 mice, mostly in the first few weeks of my time there, and the rodent population was kept pretty well under control for most of my stay.

The biggest problems were the two gaps in the south wall between the top logs and the roof—big enough that you could see inside the cabin. In September, 5-5-4 was able to do work on chinking the gaps in the cabin and I helped him seal up most of the holes around the station. This seemed to help greatly with the rodent problem, and I also noticed significantly fewer moths in the cabin after we had sealed it up.

Our work on the major gaps in the south wall, however, was met with serious resistance by a chickaree and a wood rat that have been attempting to make a nest in the roof all season long. The critters pulled out most of the foam used to fill in those gaps within a day, but I was able to stop them by stacking some large rocks snugly over the openings. This is a temporary fix as I had neither the time nor the tools to make any kind of permanent repairs. This will need to be addressed again next season.

### **C. Wilderness Protection**

#### **1. General Conditions**

The Rae Lakes area remains a very heavily used part of the Sequoia/Kings Wilderness. As the busy summer season progresses, evidence of this heavy amount of use becomes more and more apparent. The most notable impacts are seen along the JMT corridor, where new campsites crop up mere feet from the trail every few miles. Heavily used areas like Wood's Creek Crossing and the Rae Lakes Basin (from Dollar Lake on), though severely impacted, can look presentable with regular maintenance from the ranger.

North of Wood's Creek Crossing, nearly all of the impacts to natural resources occur along the JMT corridor. JMT hikers seem to be afraid to camp out of site of the trail, as evidenced by half a dozen or more new campsites appearing along the JMT between Pinchot Pass and Rae Lakes throughout this season. The most severely impacted areas were the lake just west of the JMT as it follows the ridge east of Twin Lakes, the area around the Sawmill Pass junction, 1 mile north of Wood's Creek Crossing, and the first creek crossing south of Wood's Creek Crossing. Most of these areas were well vegetated and showed little sign of being suitable campsites at the beginning of the season, but were smashed to bare ground by late September. I believe that some of this is due in part to JMT guidebooks which list campsites in poor locations (Sawmill Pass junction being one good example) and the herd mentality of many inexperienced backpackers who don't wish to seek out more suitable sites that may require more work to locate.

## **2. Drift Fences**

The drift fences in the Rae Lakes area were all in good condition this year, having received a lot of maintenance last season. 5-1-11 did some minor maintenance on the Baxter Drift Fence early in the season, but the rest of the fences remained in good condition throughout the summer.

I am uncertain about the efficacy of the White Fork drift fence—it seems too far from both Twin Lakes and Wood's Creek Crossing to help contain any stock in those areas. To the best of my knowledge, Twin Lakes and the Wood's Lake basin meadows were only grazed once each throughout this summer and do not normally see an extensive amount of use. Does this drift fence really need to be here?

## **3. Food Storage Lockers**

I was pleasantly surprised by the cleanliness of the food storage lockers in the Rae Lakes area this season. My experience in the past around the Lodgepole area gave me the impression that these lockers were used as often as trash cans as they were for food storage. I collected a very minimal amount of trash this season from the lockers in the Rae Lakes area, usually from the one functional locker at Wood's Creek Crossing.

There is still one disassembled new locker under the bridge at Wood's Creek Crossing and one non-functional one south of the JMT. The non-functional one needs to be removed, but I do not think that it necessarily needs to be replaced with a new locker.

Given that the Rae Lakes loop is a required zone for bear canisters, I think the area has more food storage lockers than it needs. More often than not, I find bear canisters placed inside food storage lockers simply because they're there. I understand that the lockers are there for thru-hikers who are exempt from the canister requirement, but since other sections of the JMT outside these parks require canisters, nearly everyone traveling in the area has one. Given how little these lockers seem to be used, I think that one locker at Middle Rae and the locker



at Arrowhead Lake or Lower Rae could be removed with little change in visitor use patterns.

#### **4. Meadow Management**

All of the Rae Lakes area meadows opened on schedule this year, with the exception of Castle Domes Meadow which was opened a few days early on 6/28 by (b) (7). Tom O'Day, (b) (7), trained me to collect residual biomass samples in early September, and we were able to collect data for Baxter Drift Fence Meadow, Wood's Creek Crossing Meadow, and Castle Domes Meadow. We also established a new core plot at Wood's Creek Crossing.

Baxter Drift Fence and Wood's Creek Crossing meadows saw considerable use this year, mainly by Sequoia/Kings Pack Station and Cedar Grove Pack Station, respectfully. Castle Domes Meadow seemed to dry up very fast and did not appear to have been grazed much at all. After some discussion with Erik Frenzel, I decided to allow Baxter Drift Fence meadow to be grazed beyond its recommended stock nights of 28 to approximately 80 nights. Tom O'Day assessed the meadow in early September when we collected RB samples there and judged that the meadow was just about at its limit, but could probably withstand another 5-10 stock nights.

Tom also discovered a small meadow near the smaller Wood's Creek Crossing stock camp east of the bridge and south of the JMT. This meadow had been heavily grazed this summer but is not officially open to grazing. It is located at approximately N 36°52.328 W 118°26.223. Roughly 80% of this meadow's forage had been grazed and there is some potential for damage to the small stream bank if grazing continues here. I've attached a few photos and Tom also collected some good data on the area which will need to be addressed soon.

#### **5. Signs**

All of the signs in the Rae Lakes area seem to be in good condition. There is a relatively new, metal sign at the park boundary on Sawmill Pass next to a very old, heavily weathered, and barely legible wooden sign that is much larger. I'm not sure if this is an NPS sign or a Forest Service sign, but it is unsightly and made redundant by the newer sign and should be considered for removal.



#### **6. Bear Incidents**

No significant bear incidents were reported to me this season. I received a half dozen or so reports of bears walking through campsites and being difficult to haze at Wood's Creek Crossing. The trail crew also had to chase a couple of bears out of their camp at Wood's Creek early in the season several times.

## **7. Wildlife observations**

I was lucky enough to have a variety of spectacular wildlife observations this season. The usual suspects were active all summer--Clark's nutcrackers, marmots, deer, chickarees, ground squirrels, juncos, etc. I saw a herd of 9 bighorn rams near the top of 60-Lakes pass, and had several reports throughout the season of bighorn sightings in that same area.

I also saw a golden eagle swoop down on a young mule deer, a coyote wander through my camp below Pinchot Pass, an inquisitive short-tailed weasel bouncing around Dragon Lake, and an osprey diving for fish in Arrowhead Lake.

## **8. Resources Impacts/Issues**

The largest resource impacts are mentioned throughout this report. New campsites cropping up along the JMT corridor, heavy use at Wood's Creek Crossing, and inadequate campsites at Dollar Lake are some of the most pressing issues.

The small meadow south of Wood's Creek at the crossing which was grazed heavily and illegally this summer is also of great concern. I was unaware of this meadow's existence until Tom found it while looking for a reference meadow in the area, but it would be worth attempting to discover who was grazing there this summer so we can direct them towards Wood's Creek Crossing meadow in the future. It should also be closely monitored by the Rae Lakes ranger in the future as the meadow is not officially open to grazing.



(b) (7)(E), (b) (5)

[REDACTED]

## 9. Minor Resource Projects

I completed a few minor resource projects in the Rae Lakes area this summer with some assistance from the Cedar Grove trailhead rangers. (b) (7), John Blakeley, helped me rehabilitate some campsites around Middle Rae Lake, burying rocks in sites too close to the lake and removing some large rock walls around several campsites.

(b) (7), Ellyse Deldin, assisted me in relocating the restoration site sign that is meant to keep people from camping on the LZ by the ranger station. The sign was previously tied to a small tree with p-cord, facing



away from the trail. I had to ask several groups to move their camps off the LZ in the early part of the summer because of this sign's ineffectiveness. (b) (7) and I mounted the restoration site sign to a pole and stood the sign next to a large boulder, facing the trail. Since relocating the sign, I had no issues with visitors attempting to camp on the LZ.

## 10. Camp Area Conditions

A total of 70 fire rings were removed and/or rebuilt this season in the Rae Lakes area. Most of the illegal fire rings were discovered right along the JMT and around Wood's Creek Crossing.

Wood's Creek Crossing, as the funnel point for JMT and Rae Lakes loop hikers, requires constant attention. With the occasional help of the Cedar Grove trailhead rangers, I removed approximately 20 extraneous fire rings around Wood's Crossing throughout the season. The 6-8 fire rings located near the main camps required regular maintenance (dismantling, rebuilding, and emptying of ash) about every two weeks throughout the summer.

The pit toilet which was in operation at Wood's Creek Crossing a few seasons ago is in dire straits. When I found it early on in the season, it was in severe disrepair. Hikers discovered (or perhaps rediscovered) it sometime this summer, and the platform was shoddily reconstructed by them. The toilet saw very little use, but its existence needs to be dealt with by either removal or proper



reconstruction of it. As the toilet sits now, it is a danger to anyone who uses it. It would be difficult for the ranger to dissuade visitors from using the toilet without drawing more attention to its existence. Given the level of use that Wood's Creek Crossing sees, I would recommend reconstructing the toilet rather than removing it and placing a sign at the Paradise Valley/JMT junction informing visitors of the toilet's location.

The Rae Lakes Basin, though heavily impacted, is generally in good condition. Visitors seem to use established campsites on the peninsula and isthmus regularly and I very rarely found evidence of new campsites in the vicinity of Rae Lakes. Dollar Lake is the most troublesome area in the basin. With no camping allowed between the JMT and the lakeshore, there are very few suitable campsites there for the amount of use it gets. I had several visitors complain to me this summer about the crowded conditions there. I also had to move groups off the restoration site areas on several different occasions—the area between the trail and the lakeshore has too many appealing campsites for hikers who like to do their campsite scouting from the trail. Even the campsites on the northern shore, where the Baxter Pass Trail joins the JMT, are too close to the lake. This area is in need of some serious rehabilitation to keep campers at an acceptable distance from the lake.

## 11. Cultural Resources

The only historic site I knew of before starting this season was one of (b) (3) (B)

Only a few logs of the cabin remain stacked together, and the site is most likely overlooked by most visitors. I saw no obvious damage to the site the few times I stopped by there throughout the season.

During the Arrow Peak SAR (7/28-7/29), I came across an old shepherd's stove located at (b) (3) (B)



## D. Recommendations

1. Rodent-proofing the cabin is still a top priority for the station. Though the work done this season has greatly improved the rodent problem, there are still a few small problem areas that need more long term fixes. The holes in the corners of the south wall should be sealed off entirely with some kind of wire mesh to keep the rodents from continuing to break into the cabin. There may also be a few areas near the back window above the loft where rodents are gaining access to the ceiling.

2. Revisiting the idea of a pit toilet at Wood's Creek Crossing would also be a great benefit to the Rae Lakes area. Wood's Creek Crossing is one of the busiest spots along the trail with both JMT hikers and Rae Lakes loop hikers converging there. Several visitors complained to me about sanitation in the area throughout the season, and almost all of the TP I picked up this summer was at the crossing. As the toilet sits now, it is a danger to any visitors attempting to use it and should not be left as it is any longer. Dave Gordon suggested a new location for the pit toilet in his 2013 EOS at 371848 x 4081757 UTM's, which is east of the bridge and south of the trail. This seems to be a much better location as it is more centrally located to the main campsites instead of across the bridge from them.



3. The Bench Lake ranger station needs to be staffed. I was only able to make one patrol through the Bench area this season and the lack of ranger presence in the area was obvious. Many major incidents were hindered by not having a nearby ranger to respond. The JMT corridor had many illegal fire rings and lots of trash at popular camping areas. The area was covered minimally by myself, the LeConte ranger, and the East side trailhead rangers during the summer, but the area is in need of a regular ranger presence.

## **E. Equipment Needs**

BLS Bag  
Paper Towels  
Small Trash bags x10  
Large trash bags x10  
Super glue  
Mop  
Kitchen sponges x2  
TP x2  
More recent patrol logs  
Backpacking fuel x4  
Hatchet  
Staple gun and staples

### **Inventory on hand**

6 park radio batteries



3 4oz. backpacking fuel  
Plenty of bleach and Simple Green cleaner  
5 boxes of matches  
3 stove lighters  
15 small trash bags  
5 large brown trash bags  
8 AA batteries  
14 AAA batteries  
1 roll duct tape  
10 mouse traps  
8 rolls TP  
15 gallons propane  
6 boxes firelogs  
2 boxes medical gloves

# Sequoia and Kings Canyon National Park



## 2014 Roaring River Wilderness Ranger End of Season Report

From: Cindy Wood, Roaring River Ranger

Through: Tom Parrack, Grant Grove Sub-district Ranger

Read and approved: --Signed-- Date: 11-15-14

Through: Ned Kelleher, Kings Canyon District Ranger

Read and approved: \_\_\_\_\_ Date: \_\_\_\_\_

To: Gregg Fauth, Wilderness Coordinator

Read and approved: \_\_\_\_\_ Date: \_\_\_\_\_

ROARING RIVER RANGER STATION  
End of Season Report - 2014  
Cindy J. Wood

A. GENERAL SUMMARY

I was on duty at Grant Grove, Roaring River and the Kings Canyon Wilderness from 5-11-2014 to 10-3-2014. During the season I patrolled 780 miles of trail. I patrolled 708 miles on stock and 72 miles on foot. I contacted 1,276 people during the season.

B. VISITOR SERVICES

a. Contacts

- i. 640 Backpackers
- ii. 405 Day Hikers
- iii. 148 NPS & FS
- iv. 12 Hunters
- v. 24 Administrative Stock Users with 108 head of stock  
14 Private Stock Users with 33 head of stock  
23 Commercial Stock Users with 62 head of stock  
10 Day Riders with 10 head of stock

b. Law Enforcement

Educational contacts were made concerning food storage, camping, grazing regulations, fires, Leave No Trace ethics, leaving trash and food in the bear boxes and firepits.

c. Citations - none were issued this season.

d. Search, Rescue, Medical Incidents

DATE	LOCATION	TYPE	EVACUATION
5-28-2014	Ferguson Meadow	SAR	Helicopter
7-11-2014	Grant Grove Area	BOLO	Located at Stony Creek
9-04-2014	Roaring River RS	Visitor Assist/Self Evac.	Horse Evac-Horse
10-01-2014	Rae Lakes Loop	SAR	NPS Stock
	Support/Self Evac.		

e. Fatalities - None

f. Weather

It was another very dry winter and there was very little snow in the mountains in May, only on the higher passes. Roaring River was running fast in May, but it had only half of it's normal volume. Small creeks went dry in July and Sugarloaf and Ferguson creeks were barely running in Aug/Sept. There were a few good rains in August which really helped the dry meadows. Fall was warm with two light snow storms at the end of September.

C. USE PATTERNS

a. Backpackers

There was steady use in Roaring River in June, July and August. There was a lot of use in the fall on the Rae Lakes Look as I did demobs in mid-Sept. and during the SAR in Oct. Many Backpackers in Roaring River said they were glad that they were allowed to have campfires during the dry summer. I didn't meet any school groups this fall, maybe they are going to different areas?

A group that has searched for the missing P 40 plane in the past, returned to Roaring River to search again, this time near Little Brewer lake and near the old Brewer trail. I went along on part of the trip and found that the cairned route to Little Brewer lake is getting harder to find and has very few cairns left. I had a wreck while going up the wrong ridge to the lake. I was trying to untie stock when "DD" threw himself down the steep hillside, I got the rope wrapped around a tree to stop their fall, but then somehow the pressure was suddenly off my lead packhorse "Rick" and he slammed me against the tree. Ouch! I got them all up and then unpacked and repacked Junior on the steep hillside and finally made it to the lake. For some unknown reason my GPS unit wouldn't show the local map, so I was only using it to guide me by the elevation. The group searched, but didn't find anything, but said they hoped to search again next year.

b. Stock

A few private stock groups came into Roaring River this year. Commercial use seemed to be low this year. There were a few trips to Roaring River and trips to Seville Lake. A stock group illegally grazed at Seville Lake and another group that was spotted into Seville Lake were chopping on live and dead trees. Someone left hay out at Grave Meadow and built an illegal firepit at the meadow edge, this was during a rainy week when the main camp might have flooded.

Administrative stock use in Roaring River Trail Crew was similar to last year, they sent in a 2 person logging crew early to clear most trees off of the trails and then the regular crew came in later to work the area. Luis was the leader this year. They spent most their time at Scaffold and Cloud Canyon based at Grand Palace. Work was also done on Colby Pass.

The Chief of Maintenance, Dan Blackwell, rode up and over Avalanche Pass from Cedar Grove to visit the crew in Roaring River and then he and his mules went out over Silliman Pass.

I packed for and saw many NPS Resource employees, various Rangers and Trail Crews. I packed for mobilizations and demobilizations to Charlotte Lake and Rae Lakes. I took gear that was left at Woods Creek and packed it up to the Rae Lakes Station. I packed out trash and old cots from the Paradise Cache and trash from the Castle Domes Cache. I packed out trash, old food and an old ruptured 50 gallon barrel from the Monarch Cache. I moved supplies for resource crews and the Historic Preservation crew to Granite Basin, Junction Meadow, Roaring River and Moraine Ridge and brought out tools and old windows from Charlotte Lake for Maintenance. I packed and rode with Ari to search for a route into the Sugarloaf RAWS site and she rode back to Roaring River Station. I packed for the Rae SAR with Chris Trotter at the end of the season out of Roads End up Bubbs Creek to Charlotte Creek and our team assisted the group out and packed their gear. I packed in a large Rubbermaid water trough to Roaring River for use in JR Pasture...well Rosy did most of the work to get it in.....I did repack it twice. On one trip as I was coming down from Castle Domes, a smoke had been reported by visitors near the Baily Bridge out of Roads End, I was able to locate the site, take photos, GPS location and put a scratch line around the 2 x 3 ft fire, so no fire crew had to hike into check the cold fire which the visitors who reported it had carried a lot of water and did a good job of putting it out. They had

also put up flagging which guided me into it, as there was no smoke and it was about 50 feet off trail behind a giant boulder. It was in an area where people go to dig cat holes and do their business, so I think someone tried to burn their toilet paper and were not cautious enough.

While packing up gear and trash at Granite Basin, my horse "Rick" collapsed while I was packing him, I cut the rope that tied him to a big tree where he was choking out and he went crashing down. I got the packs off him, but he was barely breathing and his eyes were glazing over. I thought he was next to dead....I was pulling and trying to get him up and did a few thumps to his chest and was relieved when he finally got up. He wandered to the grass and started eating....acting like nothing had happened. This happened once last year also...We took him to the Vet in Exeter for a check up and blood test, but no answers were found. He's my favorite lead horse and he has never done this while I am riding him or packing him on the trail, but it does worry me! Speaking of "Rick" he has always been a little "Cinchy" and threatens to bite, but never has...until I was done cinching at Castle Domes meadow in the fall during the Rae Lakes Demob...I leaned down to snap the breast collar snap to his front cinch and he bit my left shoulder...hard.... and he had a mouthful of my shoulder and didn't let go! I dropped down to get him to let go and ended up tripping on a small log and fell under him, he seemed a little surprised and embarrassed and stood solid while I climbed out from under him and he has been ok since then. Of course, it may have been the 5 minutes of running in circles that I made him do after the event!! For safety, I am keeping his nose bag on him while I saddle him. Then there was the long night patrol on Shadow....but that's a long story and all went well!!

NPS Rider Training and intro to Trail Riding was conducted at Grant Grove and Cedar Grove for NPS Rangers: Ned Kelleher, Tom Parrack, Erin Warrem, Jod Booker, Dario Malengo, Jim Syvertsen, Andy Riordan, Ari \_\_\_\_\_ and Chris Trotter. Training Patrols to: Grant Grove trails and campgrounds, Redwood Canyon, Don Cecil Trail, Mitchell Peak and Bubbs Creek.

Thanks to the Mineral King Rangers for loaning us their 2 horses at the end of the season. This helped a lot to have extra stock for demobs and fence dropping in Roaring River and taking in propane and barley for next season and for other riders. I brought out and hauled 2 horses to Ash Mtn to be used on the squad trip to Hockett. During the summer we left extra stock at Grant Grove or Cedar Grove. Thanks Erin for Feeding and caring for my stock and all the feeding you did out at Sweeney for Rex and I. We trailered a lot more this year, Thanks to JT for loaning us his truck, especially during the times when we need 4 wheel drive and to Tom Parrack for loaning us his new truck.

#### c. Commercial

I met a few guided backpacking trips and commercial stock trips. It seemed to be fewer than other years.

### D. NATURAL RESOURCES

#### a. Bear Activity

I did not see the bear that was such trouble at Roaring River last year. I did see a light brown cub near JR pasture a few times and at Scaffold Meadow, but he would run off or climb a tree and was being a good wild bear. The trail crew said they saw him near their camp. Other bears were seen in Deadman Canyon and below Vidette Meadow and Cloud Canyon.

#### b. Wildlife

Three Rattlesnakes were seen above Mist Falls, two by Sugarloaf Meadow and one at Junction Meadow.



Fewer deer were seen around Roaring River Station area. I looked for but did not see the Porcupine at Grand Palace that I had seen last fall. The trail crew did not see it either.

#### c. Vegetation

Meadows were very dry this spring and many were ready to open before the posted opening dates. (JR, Scaffold, Sugarloaf, Junction Meadow and Castle Domes) I also packed in Alfalfa Pellets to Castle Domes, Charlotte RS, Roaring River "Yard" as I couldn't use JR Pasture and Seville and Ranger Lakes. I packed and fed a lot more grain to keep weight on the horses and to keep the mules happy.

During a Redwood Canyon patrol, we saw about 10 cows grazing and going to water at the junction of the 3 trails. This is probably the only water in the area and they had been grazing and causing a lot of damage along the creek. We checked the gate at the cattle guard and it was closed, but there were cow trails going up from there. What we could see of the fence was up, but the past fire that burned along the fence could have caused a tree to fall across or damage it.

Bull Thistles: 70 plants were pulled and burned this year in Roaring River. They were at the same area downstream from the station below the spring where I pulled 38 plants last season.

I did RB Meadow monitoring on Roaring River meadows, I was unable to do Sugarloaf Meadow due to two rainstorms and then a lack of time at the end of the season.

### E. CULTURAL RESOURCES

#### a. Prehistoric Sites

Known sites were visited during the season. No new sites were found.

#### b. Historic Sites

The (b) (6) Cabin and sign are in good shape. The (b) (3) (B), (b) (6) cabin is in great shape after last years work. The Moraine Shorty's cabin needs some stabilization and repairs. More shakes were packed up to the site for future repairs. I revisited the Woods Creek and Bubbs Creek cabins.

I visited a lot of the (b) (6). I photographed more carvings on the aspens in (b) (6). I bought rice paper this fall on ebay, so I hope I can start doing the rubbings next year.

### F. BACKCOUNTRY FACILITIES

a. The Roaring River ranger station came through the light winter fine with no damage. The solar batteries were left at full charge, the system is working well. The animals are still chewing on the outside wires and the exposed connection, this may cause problems in the future. It would be good to have one more set of connectors at the site where the wires connect to the panel wires. I cleaned the propane refrigerator burner in the spring and it had some black soot and there was an odd smell inside and outside the station at the vent all season. I think the wooden vent that was added is restricting the airflow and causing this problem. I put the new clamp on the stove pipe. I tried to drill for the sign posts, but the drill didn't have enough power. I got the new draft intakes for the water system and installed one on the main line and set up the other for the spring "short" line. The river was extremely low and slow in the fall and the moss kept covering the draft intake, I moved it farther out. I bought a special adjustable spanner for

the oversize compression fittings which made the work go much easier. Thanks for the parts!! The "bunkhouse" tent has not been replaced yet. It was sadly missed when NPS people needed it during the rains!!

I returned to the station after being gone for 5 days and when I went in and it didn't "stink", I knew something was wrong.....someone had cooked at the stove and used the station and had turned off the propane at the outside tank. I am not sure why they turned it off, but it shut off my refrigerator and I lost all the food in the refrigerator and the freezer defrosted my food. It was a loss of food, a moldy stinky mess to clean up and a financial loss for me.

The station rail fence needs yearly maintenance and the bulletin board needs to be rebuilt in the same rustic style and reset. The abandoned west side fence at the station needs to be rebuilt to hold stock. I had to use the yard to hold stock, since JR pasture was closed most of the season due to trespass trail crew stock. I put up ropes to corral them in as a temporary measure.

The two hitch rails at the station are good. The trail crew rebuilt the hitchrail at the trail crew camp. The hitch rails at Sugarloaf and Cement Table are still broken. The two trail crew hitch rails at Lackey cabin are in good shape.

The station refrigerator needs to be cleaned and burner and soot checked next year. The cracked west bedroom window and damaged window frame needs to be assessed. The bear also tore up that screen. The screen door needs to be attached to the front door frame and hopefully will work with the front door and outside door in the same jam? I bought self closing spring loaded hinges, but I don't know if they will work if we try to keep all three doors on at the same time? Other hinges may be needed. The light switch in the bedroom probably needs to be replaced.(no spare at the station) It is the push button type and it is very difficult to push. Assess hazard trees and/or remove. Question: does a part exist....an adjustable hanger for the screens that would allow us to drop the frames of the screen to fit tight against the bottom jam of windows? If so, we need 12 for the station repair. Or measure of strips to fix the gaps, but the gaps vary in size....

This is the first time in known history that the water stopped at the corral at Sweeney Swamp. They used a truck to haul water and we made it through the season.

#### b. Signs

The "Entering Kings Canyon" sign at Kanayer Gap still needs bolts, it is currently wired in place. I tried to drill for the "Ranger Station" sign at the Avalanche/Cloud jct, but the drill didn't have enough power. I think I will need to haul it out next year and use a drill press. Silliman Pass needs a sign: Sequoia NP/Kings Cyn NP sign with the elevation and on a post.

The Forest Service workers at Rowell Meadow said they are trying to get new signs made for the Mitchell Peak junction and a Marvin Pass sign for Rowell Meadow junction. There large "Jenny Lakes Wilderness" signs have disappeared from Kanayer Gap and Sugarloaf Entrance. Their road sign for Marvin Pass Trailhead was not there this year either, I put up a temporary paper sign on the Sequoia High Sierra Camp sign to keep people from getting lost.

Some Grant Grove and Redwood Canyon signs are missing or confusing. The Road sign at the NPS/FS boundary at the top of Lookout Peak needs a new sign. It could mimic the "Don Cecil" sign at Cedar Grove and also say No Hunting/Park Boundary.

The sign post on Bubbs Creek at the Sphinx/Avalanche junction still needs a bear box sign. And in Granite Basin area, the missing "State Lakes/Horseshoe Lakes" sign at the lower junction could be added. The "Stock Bypass" sign in info board was not moved to the new bypass trail 200 feet farther down the trail.....someone just tore off the laminated sign and set it by a pile of rocks at the new crossing. This should be a metal sign on a metal post installed at the new junction. The Stock Bypass at Woods Creek Crossing should also be improved, see last years report.

## G. TRAILS

a. It was a light downed tree year, but some trees kept falling during the season. There were a lot of large and small trees that were not cut out during the last few years that really need to be cleared, some areas include Avalanche Pass(3?), Silliman Pass(6), Kanayer Gap(2), Sugarloaf entrance(2) Sugarloaf creek crossing(1), near Ranger Lake(4), Redwood Canyon(4) and the Don Cecil trail(6). It was difficult on the stock and on the backpackers. The downed trees are causing social trails and resource damage to get around and some long ride-a-rounds with stock. Some have 2 or more ride-a-rounds depending on when you see them with stock, or whether you are going uphill or downhill. Many trails need overhead pruning and low limbs cut, these threaten to pull riders out of the saddle or jab out an eye.

I heard much needed work was done up near Colby Pass on the dirt switchbacks....then a big rock was moving down and may have destroyed some trail.

### b. Problem Areas

The reroute on Kanayer Gap has taken a lot of water damage and needs waterbars. The steep hill between Sugarloaf Creek and Ferguson Creek had a flood take out the dirt waterbars five years ago and is only getting worse with no waterbars. A rock needs to be moved off the lower Silliman Pass trail,(2 ft. x 3ft), it is difficult to get stock across. A retaining wall needs repair on the lower Bubbs switchbacks, the trail is sluffing off and the trail is narrowed down to 1 foot wide and is dangerous with stock.

Drift Fences and Gates: All need work every year. I no longer work 6 days a week and with my new roaming duties on top of that, I have less time to work on them. There have been a lot of trees falling on fences the last few years that have not been cut off. The trail crew has added some good posts and added bigger rocks to keep some gate posts functioning. Many of the posts were only put 6 inches in the ground and did not survive the winter, mostly at Lackey Pasture and Sugarloaf fences. I put up and worked on Roaring River fences and reset the post at the Upper Deadman gate and cut and hauled new rails. Most fences need drop posts added and repairs where someone has put up wire solid to trees and posts or crimped and tightened the wire so tight that I could not drop it in the fall and had to cut wire.

I put up the JR Pasture fence early to protect it and save it for my use, along with the wire gate fence, swinging gate fence and Lackey Pasture fence and then I left to work out of Cedar Grove. The trail crew stock kept breaking down the JR Pasture fence and/or coming in through the back where the fence was added a few years ago to keep them out. It is weak with few posts. I packed in a large water trough this year so my animals could have water in the pasture, since they no longer have access to the river. I added rope to this section, but it was taken down and animals kept coming through during the season and used up all my grazing nights and then some. This is also the close area that I can hold them and I can carry 50 lb. bags of alfalfa pellets to them throughout the season, so it made it very difficult for me when I was unable to use it this year. I tried to use the station "yard", but many rails are low or broken and the west fence no longer exists. I ran rope along the west end, but the trail crew stock

kept breaking into my yard area over the low rails or breaking more rails and uprights JR Pasture was officially closed down for the season, but the stock kept breaking in, apparently not reading the large white Closure signs. (b) wanted me to leave the gate open so they could get out after breaking in, but this is not an answer and something needs to be done to keep them out. I also wanted it posted and closed so no private stock users would use it as they did last year. (b) tried bringing in watering tubs to put at his camp, but it didn't stop the problem. They also added stays to the wire where the posts are 16 to 20 feet apart, this did seem to help, but they just kept finding the weaker spots to break down. This has been a problem off and on for the last few years, but this year it was a continuous problem. I think a hot wire will need to be put up to "retrain" the stock and possibly Rex putting out alfalfa pellets in the upper dry meadow to retrain them to go there would help. His stock also started breaking through or going up and around the wire gate fence and trying to head out. I think I would have just tied and fed them one day a week and avoided all the other damage. They also broke through the gate and fence below Grand Palace. I have a small hot wire set at the station that I have never used, so I am not sure if it works or how long it is, but it may be something to try next year.

I put up and repaired fences at Junction Meadow, Baxter Creek, Castle Domes and the Lip, but more work is needed. I heard East Lake fence needs work.

### C. Camp Areas

#### a. Conditions

Most camps are in good shape. I was able to clean camps at Seville Lake and reduce fire ring size. Standing dead trees were chopped on and a tall 150 ft tree was left after it had been chopped 3/4 of the way through. It was a hazard and was taken down by the trail crew. I went back and naturalized the stump and area. Lost Lake needs more clean up work and Ranger Lake camps are in good condition.

#### b. Sanitation

The 2 pit toilets in Roaring River need new seats. The pit at the trail crew camp will soon need to be moved and redug, a new floor, riser and seat would be good to install at that time.

#### c. Fire Rings

Many fire pits in Roaring River, Seville Lake, Lost Lake and Ranger Lake were cleaned, down-sized or obliterated. The added pit too close to Grave meadow was obliterated and the area naturalized. A new ring too close to Ranger Lake was cleaned up. I burned 2 years worth of pine needles at Roaring River station and 70 Bull thistles and did a good clean up of that fire pit.

#### d. Firewood Availability

Good in all areas

#### e. Food Storage

I bought and added repair snaps at Comanche meadow (2) and need to repair 1 at Lost Lake next year. We need the medium size brass snaps with the open hammer down end. I left one with Erin so she will know what we need for the future, every station should have 10 or so for repairs. Many of the boxes in Roaring River are old and rusty, is there spray paint available to improve this? I need to change the bottom of the new box at Ranger Lake, it was put in upside down and it holds water and makes it difficult to use. This also needs to happen to fix some up Woods Creek area. It is good to have a helper on this project. Hope to get it done next year.



### H. PERMIT SYSTEM

a. Trailheads

Most people seemed well informed. Some stock groups were not getting or understanding the grazing rules and meadow locations.

I. COMMUNICATIONS

(b) (7)(E), (b) (5)



J. NEEDS FOR NEXT YEAR

NPS STOCK: I need 2 good solid riding/pack animals to work into the string. After talking to Nick Knutson, I think good riding mules might be the best answer. Good for riding and leading a string and then better and safer for packing in a string. Usually the more horses you pack, the more trouble you have...as I experienced near Little Brewer and elsewhere. Apparently he got some for his string from the draft horse auction last year. Red died in pasture last winter, so I had Rick and Ernie as lead animals and I also tried and tested the Mineral King horses this fall on a few trips. Shadow does well at leading, riding and packing, he just needs work to stand still for mounting. Doright might have eye problems the way he shys away and behaves during bridling or movement around his head. He is also a lot slower and can't carry as much weight and he tries to trot to keep up and trips and stumbles a lot on the trail. Ernie is getting better at crossing logs and going cross country and is a solid horse and calm for new people or hurt people. Rosy and Junior were both solid. DD does not do well around visitors and in campground situations and he tests riders and spins around or will try to slam into people on the ground or other stock. He does ok in the lead with an experienced rider but is still a safety concern when stopping to talk to visitors. So, if two solid riding mules were found, I would turn back DD and Doright to better the string. If that happened, we would make sure Mineral King had 2 solid riding animals and or have their riders go with me on a mob for training and to see what animals would suit them best for their patrols. We are talking about borrowing and shifting stock as needed for work, mobs & demobs as needed. Whatever works best, reduces grazing and gets the work done. Also open for suggestions on our current ideas and future plans for the Ranger stock program.

The Grant Grove Corral needs welding work. There are 2 broken rails that need to be welded back up for safety. A gate needs to be welded and set at the main opening or a pre fab gate? There is a old panel being used now, but it is large heavy and dangerous to move stock in and out of, especially when working alone. But it might be used to make the gate? The other small gate does not open well, could this be looked at? The other old panel is needed for the Hay protection.(4) There are other sections of the main corral that might need work.....does NPS maintain this? We have also been using their water trough...

Thanks again to JT, Fire Division and Tom Parrack for loaning us trucks to use to trailer stock and haul hay. I transported a lot of stock this year, to and from Ash Mtn, Grant Grove & Cedar Grove and also rode the Don Cecil instead of hauling when it made more sense or when a truck wasn't available. We tried to keep stock at GG or CG to reduce hay use and water use at

Sweeney and reduce grazing in Roaring River. Thanks to Erin for all the planning, talking to other divisions to set up dates for gear to go in and for feeding and stock care during the summer!! Tom's truck really helped during the Demobs to haul gear and stock to Roads End to take in and the all the ranger gear, saddles and gear and trailering after coming out.

I fed about 14 bags of grain this season and 6 bags of pellets.

Thanks to Larry Smith, GG Fire Crew for loaning me 2 large fire extinguishers to take into Charlotte RS and Rae Lakes RS. I brought out the old extinguishers to be recharged.(one was from 1987!) So the recharged extinguishers need to go back in next spring and we should check on McClure and LeConte.

## K. RECOMMENDATIONS

There are many dead trees around the Roaring River Ranger Station now. There is a large dead tree NE of the station outside the fence, but it is tall enough to fall on the station and two trees that were blocking it have fallen in safe directions, but now the large one is more of a hazard. There are 8 within the fence that are a concern. I would like someone to evaluate these or take action.

It was good to get to go back to Roaring River at the end to drop fences and close down, but this caused the demobs to happen mid Sept. which was tougher on those rangers. It would help to be able to work 1 - 2 weeks into October.

Chris Trotter mentioned that Beet Pulp mash is good for stock to keep weight on them. Has anyone used this item? How did it work? She said it worked well for the stock she worked with. This might help the older stock in the fall. Please check with her if you have questions.

The corrals sent me a different kind of feed in a purple bag in the spring, 4 out of 6 of the bags were sour and rotting. I ended buying two 70 lb bags of dry cob to make up for the rotten feed. This is why I prefer dry cob.

When anyone delivers stock to a dirt corral, they need to feed the stock and notify us that stock has been hauled! This happened again this year! Later 4 horses were hauled to Sweeney and not fed and the gate that was holding in the mules was not opened and this caused fighting and problems with too many animals in too small a corral. Later when Rex tried to fix the problem, the two MK horses almost ran him down to get out and he had to chase and catch them down the dirt road. Please notify us before or by radio!! Erin put up a "feeding chart" and this helped a lot to know who fed when and how many bales. But at Sweeney we often "double feed" and if stock is added....feed needs to be added.

I requested pack saddles for the Mineral King horses, as they were to be used for demobs, but riding saddles were left instead. Luckily, I had picked up a horse tree to convert, so I lost a day, but rigged 2 pack saddles to use on them. We already had my 2 riding saddles and the 2 govt. wade saddles.

I got 4 new matties from the corrals and had them printed with the wilderness ranger logo. I also got 4 new nose bags. Thanks!! I hauled hay back to Grant Grove and Cedar Grove when I hauled horses to Ash Mtn. for the Squad Trip. We also hauled and unloaded hay at Sweeney. Thanks for the three panels for protecting hay from the deer at Grant Grove, we found a 4th panel and it worked well.



Signs needed.....see sign section

Small Bulletin boards for the three lakes and repair to the RRRS bulletin board.(twin lakes style)

Sugarloaf hitch rail---top rail still needs to be replaced...and now the uprights are loose also...it's becoming a bigger project as it waits for repair. (Year 6? of request)

#### L. PERTINENT INVENTORY at RRRS

3/4 can of sweet/dry cob mix (1 empty can)

1 can alfalfa pellets and 6 bags of alfalfa pellets

1 bag alfalfa cubes

1 large white salt block

1/2 mineral block at RS

1/2 mineral block at Lackey Cabin

1 white small camp salt

5 full propane tanks(1 brought out to refill)

3 fire extinguishers (2014) Left at station( 2012 extinguishers were used at Sweeney then brought to GG to get recharged for next year)

#### RRRS/NPS Wish List for 2015

2 doz. AA Batteries

1 doz AAA Batteries

2 duct tape

2 pit toilet seats

2 locks or bolts and washers for bear box chains

1 Large tent(rectangle) for "bunkhouse" use behind the ranger station, with good rain fly, approx. 10 x 16

4 water hoses- 100 feet long for stock use at Grant Grove and RRRS

4 large(Milk Carton size) Epsom salt for stock/people injury (1 for GG, CG, RRRS & Sweeney)

1 Gallon brown paint for the RRRS (Visalia Pittsburgh Paint-Spice Tone/ award series, interior/exterior, 100% acrylic, semi gloss enamel, 997.85 neutral base/ spectra-tone paint

1 Dolly for GG Garage and mob/demob use....wide platform on bottom for moving boxes and large items

4 9x12 heavy duty brown tarps(Walmart)1 for hay @GG/1 for hay @CG/1 for Ranger Lake Cache/1 for RR

2 8x10 heavy duty brown tarps(Walmart) for covering saddles at GG & CG

#### NPS CORRALS WISH LIST FOR 2015

2 lead riding/pack mules (15 hands or more if possible)

8 bags dry cob

8 bags mol. cob  
6 bags alfalfa pellets  
2 small mineral blocks salt  
1 bottle of penicillin and needles and syringes for each spot: RRRS, Grant Grove, Cedar Grove and Sweeney Swamp and basic stock first aid kits for GG and CG  
The anvil at CG was not there this summer.....did it get moved???? I need it so I can shape shoes!  
1 Gallon Leather Oil  
2 Larger Size matties for use with large loads  
4-6 older halters and lead ropes for RRRS, they were used and never returned from the Maint. trip a few years ago .....  
Shoes for GG and CG depending on stock, RRRS has plenty of all sizes  
Saddles and Pack Saddles to fit the issued stock  
2 Canvas Cinches for the Pack Saddles  
1 Lash Cinch with flat metal hook, not aluminum  
Hay to GG, CG and Sweeney  
If Riding Mules, then 1 britchin for riding saddle  
4 sets of Bridge Boxes to fit Tupperware Tubs.....or 4 sets of EARS if I get them built plus bottom cinches and straps

# Rock Creek EOS Report 2014

by Laura Pilewski



## **A. General Summary**

It was great to be back at Rock Creek for my sixth season (my twentieth in the wilderness of Sequoia-Kings National Parks). After all these years there are several new trends in the Rock Creek area that may shape wilderness management planning. First, the PCT is booming thanks to the book *Wild* and upcoming movie. Second, stock supported commercial Whitney trips are now rolling through almost on a weekly basis passing through Rock Creek both on the way in and out. Third, the Mt Langley herd of bighorn sheep has grown so large that some are being seen almost daily by visitors. Conversely, bears have been absent. Lastly, Mt. Langley itself is more popular, but thanks to the newly cairned route visitors seem to be concentrating their use to one corridor, impacting the vegetation and sheep less.

After the third consecutive season of drought, user friendly conditions of NO snow, mosquitoes or high water persisted. This may eventually catch visitors off guard in the future. And, the meadows are definitely showing signs of wear as a result of continued grazing but lack of productivity and water.

## **B. Visitor Services**

### **a. Contacts**

#### **i. Backpacker** (approx. 2,000)

See encounter surveys. Commercial use is up. Private numbers seem average with a definite early season spike with PCT'ers.

#### **ii. Day hiker**

There is no consistent way to innumerate day hikers. Mt. Langley can see between fifty to a hundred people a day on a busy August weekend (see summit registers), weather permitting. A fair number of people will walk and or run the Cottonwood/Army Pass routes as well (more often than we know with their dogs even)! (b) (7)(F)

The construction trail crew also provided a uniformed presence most of the summer in this region.

#### **iii. Stock** (approx. 300 head-not including day use)

Commercial trips were the most popular. Most were support for SMC and SMG trips. Rock Creek & Cottonwood Pack stations had approximately ten spot trips each either for clients or for bringing in feed. Approximately 250 commercial head of stock came through the Rock Creek area twice for a total of 500 user nights (they brought feed once the meadows closed). The Kern trail crew only grazed during the ranger mobilization, otherwise they all brought feed or passed through. Sonny went in once or twice a week to supply the construction crew at Army Creek. There were a small number of private users, which stayed primarily in the Lower Soldier Lake area. One llama group started their JMT trip at Horseshoe Meadow, but up north it ended with one llama dying.

**b. Law Enforcement**

N/A

**c. Citations**

I forwarded pictures and information regarding two different parties with a dog on Mt Langley to my supervisor. I also forwarded information to the INFS rangers regarding a person on the summit of Mt. Whitney without a day permit.

**d. SAR & Medicals**

<u>Date</u>	<u>Location</u>	<u>Type</u>	<u>Evacuation</u>
9/16	Funston Lake	plane crash	helicopter

Construction Crew leader EMT Bryant & I responded to a one victim plane crash at Funston Lake. The pilot made a miraculous landing after his propellor apparently snapped during flight. He sustained significant facial trauma, broken ribs and extremity fractures, but survived the night and had stable vitals upon our arrival. He was given pain meds by the park medic then back-boarded and was immediately flown to the hospital. It was a pretty surreal situation to respond to and a very happy ending to an otherwise usually fatal situation!

**e. Fatalities**

<u>Date</u>	<u>Location</u>	<u>Type</u>	<u>Evacuation</u>
6/18	Mt Whitney*	fatality	helicopter
7/29	Mt Whitney	fatality	helicopter
8/19-21	Gardiner Basin	fatality	helicopter
9/9	PCT/Siberian Ps jct.	fatality	helicopter

\*victim found outside park

**f. Weather**

Thankfully for the state of California, it was a somewhat rainy summer. All of the ill prepared hikers, however, were not so pleased. A couple of mid August storms deposited a few to several inches of hail and snow at the higher elevations.

**g. Fires**

These monsoonal storms also produced numerous lightning strikes. Two strikes were reported by the Construction trail crew on the Siberian Outpost and one just south of the park boundary. None of these became anything of consequence. I came across a single tree fire at the Big Arroyo and Kern confluence and reported that. I also re-reported a fire along Wallace Creek that the Tyndall ranger had called in that had been too small for the helicopter to initially locate from the air.

The definition of Stage 2 Fires were modified after a fire ban in Wilderness in 2013, so campfires were allowed. This confused visitors. A lot of visitors self imposed a campfire ban, simply because they thought it appropriate.

## C. Use Patterns

### a. Backpackers

The JMT and PCT are where it's at. I think the encounter surveys serve a purpose, however, they do not represent all areas or cover all times of day. Therefore, before any management decisions are made (i.e.. trail quotas, trail building, etc.) trail counters should be used to supplement this information.

### b. Stock

Stock supported commercial Whitney trips are the most popular. Their distinct pattern is to spend the first night at the lower Rock Creek Crossing, and their last night in upper Rock Creek which helps spread use out and make it easier for their clients to hike to the trail head. However, I have had to encourage them to rotate camps and grazing so as not to over impact certain areas. This has been an experiment in progress. It would help if they include Nathan's more into this rotation and use camps just west (downstream) of the lower Rock Creek Demo Camp in the future. Also, it would be better for them to use camps along the south side of Rock Creek Lake and meadows with the stock tied up at "Cottonwood Pack Station's all expense camp." Furthermore, the PCT especially between Rock Creek and Crabtree is showing lots of signs of wear from these trips. In several places, the stock have been avoiding steps and creating secondary trails (see **Trails**).

### c. Administrative

Rock Creek is still the hub of administrative use. The following crews worked or passed through the area: Meadow Monitors, I&M Forest & Bird, USGS tree demography & Bighorn sheep, Athena Demetry and Patrick Rizzo (Mt Langley Project), the Kern and Construction Trail Crews. Last but not least, the new Kern /Mineral King Subdistrict Ranger Klint Powell took the grand tour from New Army Pass north along the PCT/JMT and out Shepherds Pass.

Administrative stock use was much lower than usual which the very dry meadows appreciated. The Kern and Construction Trail Crews were supplied by stock supported day trips utilizing the INFS corrals at Horseshoe Meadow.

### d. Commercial

(see **Stock**). I only saw one non-stock supported commercial group this season.





## **D. Natural Resources**

### **a. Bear Activity**

Only one bear was spotted by a trail crew member in late July. No incidents were reported. BIM'S forms should be made available on the park website and put the address on the Minimum Impact Sheet.

### **Bear Boxes**

We had complaints early season regarding locked bear boxes at Kearsarge Lakes. (b) of INFS had stated there are now repercussions on their side of the pass with (b) people improperly storing food. This is the most popular resupply point for through hikers. If the PCT use continues to rise, we will need to carefully monitor the implications of removing bear boxes from this area.

The Lower Crabtree bear box and less so the Crabtree Ranger Station bear box are useful. There are still annual bear sightings at the lower meadow and this is where the PCT hikers base camp for Mt Whitney. Only some of them go up to the ranger station to camp. And, their bear cans are still quite full one day out of Horseshoe Meadow resupply. Although these visitors still occasionally leave trash behind, it is much better and easier for the ranger to retrieve it from the boxes versus half buried and strewn about the wilderness.

On a tour of the Kern Canyon, I noticed that the Lower Funston Meadow bear boxes are surrounded by downed trees and virtually inaccessible at this time. I agree with the proposal to remove one of the bear boxes and would recommend placing the other in a safer area within lower Funston Meadow. Furthermore, I would advise placing one of these two newer boxes in Upper Funston Meadow and removing both of those old ones. Removal of the bear box below Tyndall Ranger Station and the one at the Frog Ponds should be considered, since the Tyndall/JMT crossing is a more popular campground. Perhaps in the future, a newer large gray box could replace the old brown one.

### **b. Wildlife**

Countless visitors and administrative users reported seeing the Langley herd when traveling between Cottonwood and Iridescent Lakes drainages including the slopes of Mt Langley. Early season, a red-winged black bird was residing at Lower Soldier Lake. And, a Red-**shouldered** hawk spent the month of September near the Rock Creek Ranger Station which I found unusual. Otherwise, there were plenty of Red-tailed hawks in the patrol area and not many other unique observations (see Wildlife Observation cards).

### **c. Vegetation**

Although meadows received much needed rain this summer, they and even camping areas are starting to show signs of wear. Rodents seem to be the primary cause of bare spots or erosion this year. I collected a couple of plant specimens that may or may not still be needed in the park herbarium.

## **E. Cultural Resources**

**a. Prehistoric**

Area sites appear intact.

**b. Historic**

Area sites appear intact.

**F. Backcountry Facilities**

**a. Ranger Station**

The attic is still not mouse proof and anything placed up there needs to be mouse proof.

### b. Signs

The trail on maps to lower Soldier Lake leads to a "dead end" on the west side of the lake. Since there is no bear box or appropriate camping on this shore, one has to backtrack and then walk through a saturated meadow or, on a normal year, wade across the outlet to get to the main campsites on the peninsula. Unknown to most visitors, a newer, dry trail leads straight to these same campsites without any consequent resource damage.

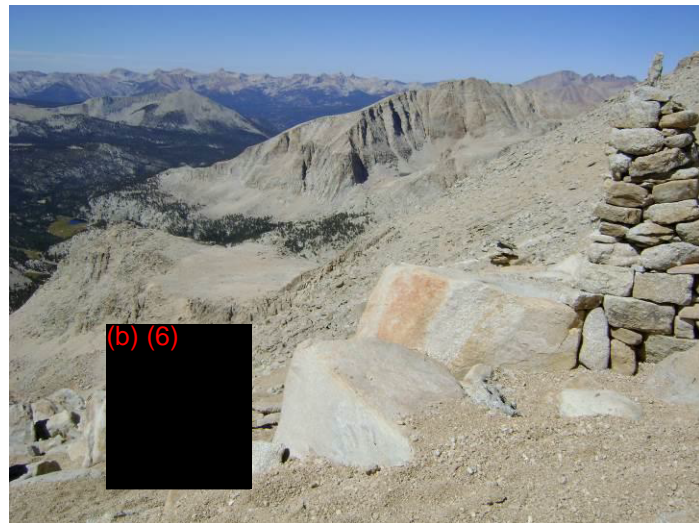
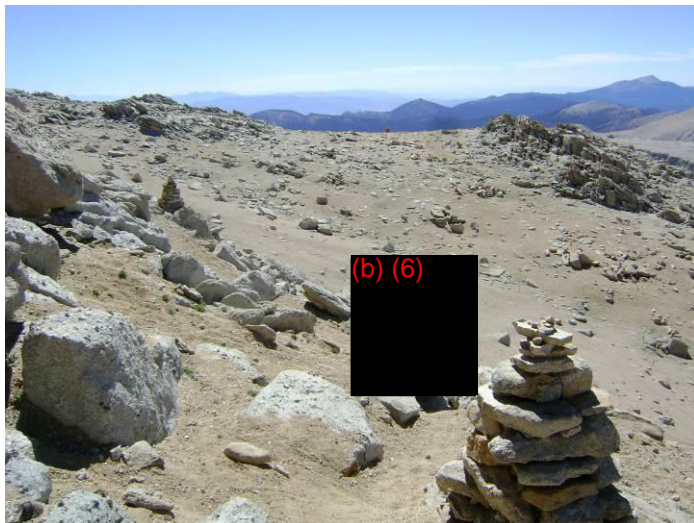
This year, the construction trail crew helped define this preferred trail and helped install three new signs (two shown) to help remedy this confusion. New maps will need to be updated for this minor change to take full effect and alleviate impacts to this sensitive meadow area.



## G. Trails

### a. Trail Activities/ Work accomplished

- After the new signs were placed at Lower Soldier Lake, I rehabbed the trail going along the western shore to discourage use in an area with no appropriate camping. As stated above, the Construction & Kern trail crews defined the preferred trail to the opposite side of the lake.
- The Cons Crew Mt Langley project: After years of patrolling this mountain and watching visitor patterns, I helped choose the preferred route based on a "normal" snowpack and the most appropriate Class 2 route for the weekend warrior crowd. I worked closely with Major Bryant, Patrick Rizzo and Athena Demetry throughout the season (**see appendix**). Note cairns in background as well in first photo, including the horizon.



- Afterwards, I helped rake out old user trails on Mt Langley. A rake has been left at Rock Creek for annual maintenance until the new route fully catches on.

The construction trail crew did an amazing job on the Mt Langley project and it appears to be an immediate success. They also fixed a really bad section of trail coming down from New Army Pass to Army creek. It had been one of the worst "maintained" trail sections in the park. Now it is smooth sailing. In addition to all of this, they also accomplished numerous small projects in the Rock Creek area. They all worked incredibly hard at high elevations and despite very stormy weather. The camp cook was crucial to keeping that crew fed and healthy both mentally and physically. Her camp was always kept clean and bear proof.

The Kern Crew and Construction crew both have excellent EMS providers. Josh Gabik and Major Bryant both played critical roles in two major incidents: the Whitney fatality and the plane crash at Funston Lake. Not only are they both competent medical providers, but they are very personable with the visitors and served as ground helitak in both instances when others needed my assistance. Josh even kept the fire going at

Crabtree to help those who were getting hypothermic during the severe storm surrounding that incident! He was very consoling as well when we had to break the news to the wife of the deceased. I cannot express in words what an incredible job he did.

Members of both crews also were always ready to help on the more minor SAR incidents as well. The rangers and trail crews on the Kern Plateau made a great team this season!

### **b. Problem areas**

With increased commercial use from Horseshoe to Sandy Meadow, these areas should be priority:

- 1) Lower Rock Creek switchbacks.
- 2) Steep section of trail between Rock Creek Ranger Station and first PCT junction to the south (see photos).
- 2) PCT just south of Crabtree drift gate (see photos) where multiple stock trails are being formed around steps. In general, with the dramatic increase in stock supported SMC trips, much more trail maintenance will be needed along this corridor from Horseshoe to Sandy Meadow and Guitar Lake.
- 3) Twenty year old "Temporary" Rock Creek drift fence needs real fence posts, not T posts. It is becoming increasingly difficult to put up and maintain. There are 23 T posts on the north side and 5 on the south side. There is one spool of wire, 4 T posts and hundreds of U hooks in a pile just west of the last, southernmost post on the north side of the trail at the base of a tree. These should be removed if or when this fence is fixed/replaced/removed. If the T posts are kept, more clasps will be needed next season (dozen).

### **H. Camp Areas**

Due to high volumes of traffic, areas are in need of constant maintenance, however all look good.

"Stock Camp" sign at the Lower Rock Creek Crossing was removed last season due to potential hazard trees that cannot be removed on a regular basis in wilderness (although apparently in other National Parks designated sites don't require hazard tree removal). Furthermore, there is now a large manure pile that has accumulated adjacent to the "Stock Demo Camp" high line and is now working its way downhill towards Rock Creek. I removed the cable at the end of the season and would not recommend replacing it in the future. The Demo Camp was a wonderful idea, but I have only seen it used once in four seasons by private users. Now it is used almost weekly by large commercial stock groups, primarily Cottonwood Pack Station who holds and feeds animals at this camp so their animals won't wander home to CPS at night. I think it would be good if they rotated high line areas so that the manure doesn't build up and decomposes better away from the creek.

Regarding human waste, I do not think a pit toilet would work anywhere in Lower Rock Creek. I think that since this is fairly close to the trailhead (only one-two days out) that people would dump trash into it. And, since this is prime bear habitat, it probably would be ripped apart with some frequency making a worse mess. I think highlighting this



issue on a sign on the Lower Rock Creek bear box helps tremendously. Also, I agree with many others who recommend giving out a Ziplock bag with permits labeled "Pack out used TP/feminine hygiene products. Bury human waste xxx paces from water." This also spurs discussion on proper waste disposal and keeps structures that are difficult to maintain out of wilderness.

There is also still an old bomb box south of the Kern Hot Springs Trail Crew camp that is not functional and should be considered for removal from the wilderness.

## **I. Permit System**

A visitor informed me that there is a spot on the Inyo Forest website that asks "will you be bringing a dog?" This question is still asked of those entering SEKI but doesn't state that pets are prohibited in the wilderness of the park. The person who told me this stated that he was glad he didn't bring his pet because once he reached the park boundary, he probably would've continued on so that his vacation would not have been ruined. I would recommend our wilderness office checking out INFS's wilderness reservation website to make sure it is consistent with our rules and regulations.

Also, BIM's forms are still being handed out with most permits this summer. Given the scarcity of bear encounters, perhaps an online link would be better.

It would be nice to target the PCT hikers with modern technology (i.e. apps or websites) that encourage LNT practices and inform them of the different regulations for the different agencies along their route. As a user group, they seem to be having the most negative impact to our patrol areas and normally are long gone by the time we get to our stations so we can't address them in the field.

## **J. Communications**

(b) (7)(E), (b) (5)

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Ironically, if we wanted to increase safety, we would be making an effort to decrease radio traffic. Obviously this does not apply to visitor confrontations, law enforcement, medicals or the relaying of information to dispatch or the wilderness office. This in itself consists of ample air time. But, the calling in of everyday duties such as giving out bandaids, picking up trash or abandoned equipment, or just being nice and helping visitors by giving them basic route or minimum impact information and announcing such just clogs up the airways. I think the appropriate forum for such statistics still remains our EOS report.



## **K. Needs for next year:**

- Pressure cooker or try gasket first (3Qt. Corning Revere). Stored in attic and mice chewed gasket up!
- Dozen clasps for T posts, Rock Creek drift fence.
- Adjustable C collar.
- Glucose
- 12 rolls of Kling
- 4 rolls of white medical tape

## **L. Recommendations**

- Campsites:
  - Make computer generated signs for bear boxes reflecting area issues (see old hand written ones). Perhaps, have permanent plexiglass sleeve for changing them seasonally.
  - Remove high line Lower Rock Creek Stock Camp
- Structures:
  - Old non-functional bomb box south of the Kern Hot Springs Trail Crew camp should be considered for removal out of wilderness.
- Bear boxes: Upper Funston Mdw- remove 1; replace other w/ new one.
  - Lwr Funston Mdw- remove 1; move other one nearby.
  - below Tyndall Ranger station -remove
  - Frog Ponds- remove
  - Crabtree-leave both in place.
- Permits
  - Trail counters should be used to supplement encounter surveys to help with management decisions.
  - Give out a Ziplock bag with permits labeled "Pack out used TP/feminine hygiene products. Bury human waste xxx paces from water." This also spurs discussion on proper waste disposal and keeps structures that are difficult to maintain out of wilderness.
  - target the PCT hikers with modern technology (i.e. apps or websites) that encourage LNT practices and inform them of the different regulations for the different agencies along their route.
  - Tell INFS not to give out BIMS forms. Save money & and a tree!
- Communications
  - Better radio training for all user groups.
  - Minimize radio traffic for safety.
- Administrative:
  - Re-write AUO logs to reflect CAD system and AUO codes. Also, include space for phone, email and/or permit number.

- Re-write EMS inventory for additional supplies not in daily first aid kit or ready bag. Perhaps as one list with three different columns and blank spaces for random supplies like oximizers.
- Have a place on the shared drive for each respective ranger station and include the following categories to avoid losing paperwork and reinventing the wheel every season:
  - Open/Close Duties
  - Patrol Area description (if available)
  - Sign Inventory (w/GPS coordinates & photos)
  - Local signs (bear boxes, wag bag tub, etc.)
  - Sensitive Plant Species Maps/Drawings (digitized yet?)
  - Archeology/Historic Structure Maps
  - Campsite Inventory Maps
  - Station Inventory
  - EMS Inventory
  - Annual request/needs list (personal and station)

## **Appendix:**

### **Mt Langley**

Having watched visitor use patterns on this mountain all summer, I believe the cairn project is already a success. I would rate success as the majority of people using the cairned corridor and impacting the rest of the mountain (both the vegetation and wildlife) less. Since there are shorter, more difficult routes, some people will still choose these. However, the majority of the people that visit this mountain are beginners, and a slightly longer but lower grade Class 2 route was chosen. Also, historically, there is less snow on this route early-mid season.

The size and placement of all cairns was very strategic so that they were visible on the horizon of this otherwise gray, talus background. The crew built as few cairns as necessary. More could be placed in the future if needed and approved. All should be inspected and inventoried whenever the Rock Creek Ranger patrols in this area.

Although I think that this project is already a success, as with many things, it will take years to catch on and rehab all areas that aren't regularly used.

Of course, there will always be some widespread lesser impacts. However, building a trail may not be appropriate for the following reasons:

- Trail psychology: With a sand substrate (i.e. the whole mountain) people would cut any switchbacks. The only place switchbacks could realistically be placed would hold snow later and is where the majority of the alpine vegetation grows. So building a trail here would double the damage as people might not even use the trail to begin with.
- It would greatly affect another adjacent agency, the INFS.
- Old Army Pass would need maintenance and despite dangerous snow conditions in most years, there may be an increase in incidents here since it is a tempting shorter, lower elevation route to the summit.
- Although endangered Sierra Nevada Bighorn Sheep reportedly can tolerate human presence, using explosives for trail building in their home range might displace them.
- Building a new trail up an easy 14'er will increase visitation greatly. Not only will this impact the surrounding environment in both the park and forest, but it will greatly affect the permit system with people now competing for permits for two 14,000' mountains. Day permits might become required and will require additional staff to manage.
- Lastly, a proposed trail through Soldier Lakes drainage to the summit could be a great stress to the ewes raising their lambs in the meadow above upper Soldier Lake. I have never personally seen more than a couple people at a time in this corridor. In fact I have seen more sheep than people when patrolling this area. There is no demand for a trail through here.

**TYNDALL CREEK  
END OF SEASON REPORT  
2014  
Christina Gooch**



## A. General Summary

This season the Tyndall Ranger Station was staffed from June 23 through September 19. As this was my first season at Tyndall, much of my focus went toward gaining area knowledge and developing a familiarity with the unique impacts, needs, and hiker culture along the JMT/PCT corridor. In addition to covering the Tyndall patrol area, I also spent one week at the Crabtree Ranger Station, and made two short patrols into the Rock Creek area. During early June, I also made two early-season patrols along the JMT/PCT in Kings Canyon between Bubbs Creek and Mather Pass.

The JMT and PCT were particularly busy this year, potentially due to the recent emergence of this trail in popular media. The rest of the Tyndall patrol area seems to have stayed below the mainstream radar, attracting climbers, anglers, and wanderers with a little more time on their hands. While there were relatively few incidents in the Tyndall area this season, I was able to shift north and south along the JMT/PCT to provide coverage and assistance during busy periods and larger-scale incidents in other areas. I think Tyndall's central location and accessibility to other high-use areas, in addition to the varied and widespread use within the Tyndall area itself, renders it an important station to keep staffed and integral to comprehensive coverage along the Sierra Crest.

Statistics:

	<b>Visitor Contacts</b>	<b>EMS</b>	<b>SAR</b>
June/July	874	1	0
August	483	1	1
September	186	2	2
<b>TOTAL</b>	<b>1543</b>	<b>4</b>	<b>3</b>

## B. Visitor Services

### a. **Contacts**

#### i. **Backpackers (1369)**

Nearly all of my contacts this season were overnight backpackers. Approximately 75% of these contacts were through-hiking or hiking sections of the JMT or PCT.

#### ii. **Day Hikers (183)**

I encountered few day-hikers this season. Most of these contacts were during two days of patrol in the Mount Whitney area (day-hikers from Whitney Portal), and during my one patrol to the frontcountry over Cottonwood and Shepherd Passes. I also encountered two trail runners in the near the Kern Hotsprings who were running from Whitney Portal to Crescent Meadow in a day.

#### iii. **Stock**

- Commerical: 7 groups (7-20 per group, 63 head total)
- Private: 3 groups (6 head total)
- Administrative: Sequoia Trail Crew

This season the Tyndall ranger station was mobilized by the Sequoia Kern Trail Crew on July 2. Remaining supplies were flown to Tyndall on the Kern Crew's resupply flight on July 24. The station was demobilized by NPS packer

Dan Baker on September 10. I regularly encountered commercial stock groups along the JMT/PCT, mostly from Rock Creek Pack Station. I only encountered 3 private groups in the area, including two groups with llamas.

#### iv. Groups

I contacted several organized groups staying in and passing through the Tyndall area this season, including:

- Boy Scouts of America (4) – at Junction Meadow (9 people), Wright Creek (13 people), and Wallace Creek (12 people).
- Sierra Club (2) – both at Wallace Creek (9 and 15 people).

#### b. Law Enforcement

I encountered very few situations that I felt required a law enforcement officer on scene, and when issues did arise, I was able to connect with law enforcement rangers north or south along the JMT, or to work with frontcountry law enforcement who were available to make contact with parties if necessary.

The most frequent regulation violations I encountered during the season included camping on vegetation (11), improper food storage (7), abandoned property (2 – *see photos*), lack of wilderness permit (2), and an illegal fire (1).



Abandoned camp near Shepherd Pass



Abandoned llama S of Forester Pass

#### c. Citations (in process)

Date	Citation	Description
8/5	Abandoned Property	Camp/gear abandoned near Shepherd Pass
8/10	Abandoned Property	Llama abandoned near Forester Pass

Both of the above citations have not yet been issued, but are being pursued by the Sub-District Ranger. No other citations were issued this season, as the few other infractions I did encounter were addressed effectively through education and communication.

#### d. Search, Rescue, Medical Incidents

Date	Location	Type	Evacuation/Resolution
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6/29	Tyndall Ranger Station	Medical (General Illness)	AMA/TAR
8/8	Junction Meadow	Medical (Back Injury)	Helicopter
9/10	Bighorn Plateau	Medical (Dehydration)	Helicopter
9/17	Upper Kern	Medical (Knee Injury)	Helicopter

There were no searches in the Tyndall area this season. However, I took part in searches near Bench Lake and Mount Whitney, both in late July.

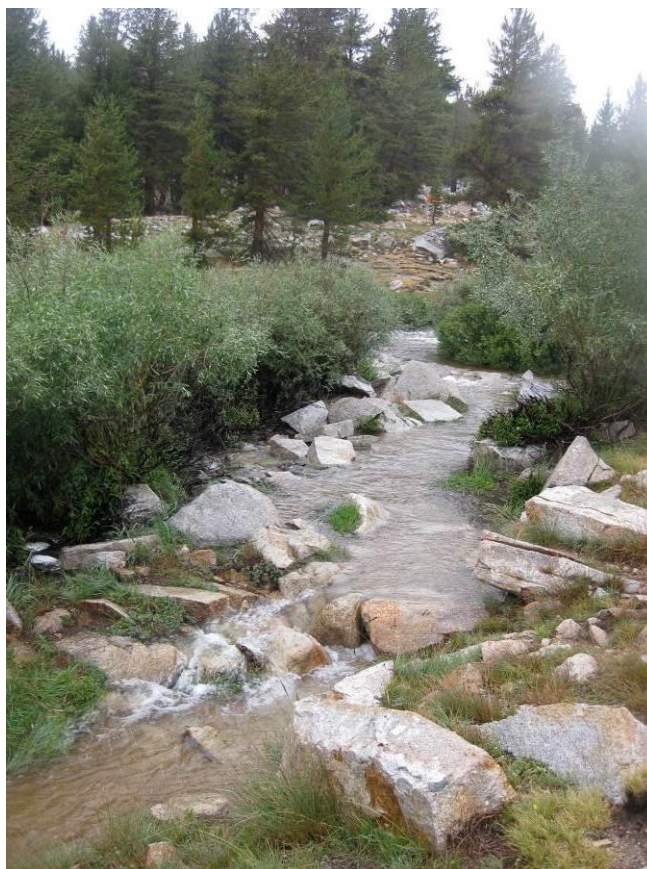
#### e. Fatalities

There were no fatalities in the Tyndall area this season.

#### f. Weather

Due to yet another dry winter, the trails and passes in the Tyndall area had little snow on them when I hiked in on June 23.

The months of July and August were particularly stormy in the high country, with several systems lasting for days with little to no break in the cloud cover. During these periods we received significant rain, hail, thunder, and lightning. Each of these storms resulted in dramatic increases in stream height and intensity, making the crossings of Tyndall, Wright, and Wallace Creeks temporarily dangerous and at times impassable. Many hikers along the JMT/PCT were unprepared for such weather, resulting in lots of cold, wet, and disgruntled campers. Most folks seemed to wait out the storms in good shape; however, I did have one 78-year old JMT hiker (b) (6) spend the night at the ranger station in order to warm up and dry out. (PHOTO: Flooded trail at the Tyndall Creek Crossing)



September was drier and warmer, with just a couple of day-long storms.

#### g. Fires

There were two lightning-strike fires in the Tyndall area this season, both in the Wallace Creek area south of the HST. Both fires were less than .5 acre in size and were allowed to burn with monitoring.

### **C. Use Patterns**

#### **a. Backpackers**

The majority of the backpackers that I encountered this season were hiking along the JMT/PCT. Many of these parties were doing the entire JMT or PCT, while a significant number were doing shorter trips entering and exiting at Onion Valley, Whitney Portal, and Cottonwood Lakes/Pass. Most of these trips included summiting Mount Whitney. A smaller number of hikers on the JMT/PCT entered or exited over Shepherd's Pass. The High Sierra Trail from the Kern Hot Springs to its junction with the JMT/PCT also received a significant amount of use. A smaller percentage of the backpackers I encountered were on routes that included Lake South America and the Upper Kern. I also met a small number of parties (approximately 30 people) climbing peaks in the Upper Kern, the Mount Tyndall/Mount Williamson area, and Kaweah Basin, and about 15 people using the cross-country passes over the Kings-Kern Divide into the Lake Reflection area (with Harrison Pass and Milly's footpass being the most popular).

#### **b. Stock**

I encountered 7 commercial and 3 private stock groups in the Tyndall area this season. Most of the commercial groups (all from Rock Creek Pack Station except for one High Sierra Pack Station trip) were traveling and camping along the JMT/PCT. The private groups included small llama groups, and one solo human/horse JMT team.

Sequoia Trails used stock for their stay in the Tyndall area, camping at Tyndall Creek, Cold Springs in the Kern, and north of Rockslide Lake in the Kern-Kaweah.

#### **c. Administrative/Research**

Many NPS researchers passed through the Tyndall area this season. These visits included folks from I&M surveys of five-needle pines, wetlands, and lakes, Mary Clapp's survey of wilderness soundscapes, The frog crew, who passed through several times en route between their sites at Center Basin and Kern Point), and NPS meadow monitoring, who assisted me with meadow RB at the end of the season). I was able to spend one afternoon at Kern Point with the frog crew, learning more about their project and assisting with electrofishing.

#### **d. Commercial**

I contacted three (non stock-supported) commercial hiking groups this season, two of which were associated with the Sierra Club. The third was run by Andrew Skurka Outfitters, running a trip with 2 guides and 7 clients along the Kings-Kern Divide and Great Western Divide. One of their members was evacuated by helicopter from the Upper Kern on September 17 due to a knee injury. All three of these groups had valid commercial use permits.

**e. Aircraft**

I witnessed 7 low-flying aircraft this season, including 3 F-18s, 2 C-130s, and 2 private fixed-wing planes. I also witnessed one small, low-flying drone above Center Basin.

Noise from air traffic seemed constant at times this season. Most of this traffic was comprised of military fighter jets flying along east-west paths. I received numerous complaints from visitors about this traffic.

**D. Natural Resources**

**a. Bear**

I observed one bear (a large cub) near the lakes east of Kern Point on September 10. This was the only bear I observed in the wilderness this season (at approximately 11,500'), and I heard of no problematic bear encounters from hikers.

**b. Wildlife**

Deer were prevalent throughout the patrol area this season, including a doe and twin fawns that I spotted almost every day next to the ranger station. Happily, I heard and saw pikas regularly throughout the patrol area. I heard coyotes only several times during the season, at Wright Lakes Basin and in the station area. I only saw one coyote all season, being chased aggressively (and at high speed!) by a doe near the station. I spotted a jackrabbit on two occasions near the Wright Creek stock camp, a bald eagle at near Wallace Lake, and the usual abundant marmots, ground squirrels, and chipmunks. Juncos, chickadees, and grouse were also common throughout the area. On the Bighorn Plateau ravens were once again a regular presence throughout the season, and American Coots appeared on the tarn during the month of September.

I also encountered 15 bighorn sheep (3 ewes, 2 lambs, and 10 rams) on Mount Langley while patrolling in the Rock Creek area.

**c. Vegetation**

Due to this year's below-normal snowpack (18% in the Kaweah drainage and 38% in the Kern drainage as of April 1) and early snowmelt, all of the meadows in the Tyndall area opened on their projected dates this season. Wallace Creek Crossing and Tyndall Meadows were grazed to capacity this season and were closed in late August and early September, respectively. Wright Creek received moderate use from private and administrative stock groups, and all other meadows in the area received little to no use.

I did not observe or receive reports of any invasive plant species in the Tyndall area this season.

**E. Cultural Resources**

**a. Historic Sites**

The two historic cabins in the Tyndall area ((b) (3) (B)

) do not appear to have

deteriorated from their previous state. Though they are camped at regularly, I noticed no damage or vandalism to the structures.

## **F. Backcountry Facilities**

### **a. Ranger Station**

Cabin: The cabin seems to be in good condition. It was clean and orderly when I arrived in June. The attic floor that the snow surveyors put in several years ago is holding up very well, and makes the station much easier and more efficient to heat.

Propane: The station propane system worked well this season, aside from what seems to be a small leak in the valve connecting the tank to the rest of the system outside. The tank should be closed when not in use in order to prevent excessive leaking. I did not notice any leaking inside the cabin.

Solar: When I arrived at the station in June, the three solar system batteries were completely dead. It appears that all of the wiring was left connected to the batteries over the winter, draining them. The batteries were also rather old (dated 2001), so it seems new ones would have been in order fairly soon regardless. Fortunately, Laura Pilewski had two new batteries at Rock Creek that were not needed there, and was able to get them shuttled to Tyndall during my mobilization. With the new batteries, the solar system has worked very well. The battery charge indicator light on the solar controller has never dropped below green, and I have had adequate power for all needs at the station.

Toilet: The station privy structure is in decent condition; however, the door is loose on the hinges and should be repaired in the near future. The pit itself is becoming quite full, and a new one should be dug within the next year or two.

### **b. Signs**

- i. Aside from minor dents and scratches, all signs in the area are in good condition.

## **G. Trails**

### **a. Trail Activities (work accomplished)**

The Kern Trail Crew spent about four weeks in the Tyndall area this season (staging in the Tyndall, Cold Springs, and Kern-Kaweah camps), removing downed trees and performing basic trail maintenance. The impressive work completed on Forester Pass last year has held up well, and there were no major trail problems or issues to address this year.

Once again, I received numerous glowing accolades from visitors regarding the quality of the trails in Sequoia and the friendliness and helpfulness of the crew members they encounter. Thanks, Sequoia Trails!

### **b. Problem Areas**

Most of the trails in the Tyndall patrol area are in good condition, and remained so in spite of significant heavy rains this season. The few problem areas include areas of multiple paths/braiding on the trail from the JMT to Shepherd Pass and on the trail between the Tyndall Creek Crossing and Forester Pass (*see photo*). The unmaintained trails in the area, including the Lake South America loop trail and the trail in the Upper Kern-Kaweah to Colby Pass are somewhat difficult to follow in places, frustrating visitors that are unaware these trails are unmaintained. I feel that this is primarily a publicity problem, as many of the popular maps do not differentiate these trails from the maintained trails.



JMT N of the Tyndall Creek Crossing

While out of our control, it's worth noting that the trail on the east side of Shepherd Pass remains in poor condition between Mahogany Flat and Anvil Camp due to washouts in 2013.

## **H. Camp Areas**

### **a. Area Overview**

The highest use camping locations in the Tyndall area are along the JMT/PCT corridor. While campsites exist along this stretch all the way from just south of Forester Pass to the JMT-High Sierra Trail junction at Wallace Creek, the camping is most concentrated at the Tyndall Creek Crossing, the Tyndall Frog Ponds, and the Wallace Creek Crossing, all three of which have bear boxes. The section of trail along Wright Creek gets fairly heavy use as well. I spent a significant amount of time in these areas this season, making visitor contacts and performing campsite and fire ring rehab and maintenance. Of these, the Wallace Creek Crossing seemed to get the most damaging impact, as I regularly found trash and illegal fire rings in the camping areas. The next highest use camping areas include Junction Meadow and the Kern Hot Springs along the High Sierra Trail.

Other areas that received regular use include the Lake South America Loop, the lake just west of Shepherd Pass, the stretch of the Kern River north of Junction Meadow, and the Bighorn Plateau. Off-trail areas receiving regular use include the Upper Kern, the Wallace Lake basin, the Wright Lakes basin, Milestone Creek, and Kaweah Basin. Camping was relatively dispersed in these areas, however, and I rarely encountered major problems or impacts.



## **b. Conditions**

The JMT and PCT were especially busy this year, resulting in considerable impacts to the campsites along the trail. As mentioned above, the Wallace Creek Crossing received a great deal of use (as it is at the junction of the JMT/PCT and High Sierra Trail), and required constant maintenance in terms of trash pick-up and fire ring rehab. This camping area should be of particular concern as the campsites are on the edge of a meadow, and due to the high volume of campers seem in danger of growing, spreading, and encroaching more and more upon the meadow vegetation.

The Tyndall Frog Ponds received a high volume of campers, and vegetation in the area seems to be suffering from widespread, dispersed camping. There are also several persistent spots in the area that are too close to the ponds' outlet stream. I would recommend an overall rehab project for this area next season.

The Tyndall Creek Crossing, while being a popular camping area for JMT/PCT hikers, remained in good shape throughout the season, with only moderate trash and sanitation issues and no illegal fire pits after the initial early-season clean-up. The camping areas south of the crossing at the JMT/Ranger Station junction received slightly more impact, particularly in terms of trash.

Junction Meadow remains a problem area (as it seems to have been for years), with huge fire rings and regular trash in the campsites and bear box. Due to the lack of a Kern Ranger this season, the camping areas south of Junction Meadow did not receive as much attention as they could. I was able to get to the Kern Hot Spring twice this season, and the Mineral King trailhead rangers and the Rock Creek ranger were also able to patrol there several times. Due to the high use the area receives however (it is a very popular spot for layover days), it is highly impacted and should be a high priority of any patrols by rangers in the vicinity.

## **c. Rehab/Restoration**

I completed a number of small rehabilitation projects throughout the season, most of which involved the removal of illegal fire pits (23), the rehabilitation of campsites too close to water (7), and the breaking down of large campsites "improvements" (rock and log structures, etc.). Most of these projects took place at the Wallace Creek Crossing, Junction Meadow Tyndall Frog Ponds, and JMT/Tyndall Ranger Station Junction.

As mentioned above, I recommend a larger-scale rehabilitation project at the Tyndall Frog Ponds next season.

## **d. Sanitation**

Sanitation was a moderate problem throughout the patrol area this season. JMT and PCT hikers seemed particularly ill-informed about proper waste disposal, many of whom seemed lackadaisical about appropriate distances from water/trail/campsites and about packing out toilet paper. Primary problem areas included the Tyndall Frog Ponds, Wallace Creek Crossing, and Junction Meadow, where I regularly found poorly buried waste and toilet paper



**e. Fire Rings**

The number and location of established and maintained fire rings in the Tyndall area is appropriate. This currently includes 3-4 in the Junction Meadow area, 1 in the Kern-Kaweah, 2 in the Kern north of Junction Meadow, and 2 along the HST west of the JMT Junction.

I removed approximately 15 illegal rings throughout the area in the beginning of the season (most likely from late-fall/early-spring use). During the season, I encountered and removed approximately 12 new illegal rings, including 5 at the Wallace Creek Crossing, 2 along Wright Creek, 3 at the Tyndall Frog Ponds, 1 at the JMT/Tyndall Ranger Station Junction, and 1 at the Tyndall Creek Crossing.

Based on firewood availability and the use I observed this season, the fire elevation limit of 10,400' also seems appropriate for the Tyndall area. However, this year's park-wide fire restrictions, did not add additional limits on fires above 6000' in the wilderness, despite yet another dry winter (after having a complete ban on fires last year 2013). The change from 2013 to 2014 was confusing to visitors (who had experienced the total ban last year), and made the current fire regulations more difficult to enforce.

**f. Firewood Availability**

As there are relatively few sections of the Tyndall patrol area in which fires are permitted (below 10,400'), firewood availability is not a great concern. The most problematic area is Junction Meadow, where fires are permitted and common. The area immediately surrounding the main campsites are quite low on downed wood; however, there is a decent supply within a short walk of these sites.

**g. Food Storage**

I ran into relatively few problems with food storage compliance this season. Of the nearly 1600 hikers I contacted, almost 90% were carrying approved bear-proof canisters. Roughly 5% were relying on bear boxes, and about 5% were planning on counterbalancing their food. As mentioned in the following section, there is confusion among regarding the Ursack and whether or not it is approved for use in SEKI. Most of the hikers I encountered, however, were well informed and seemed conscientious about maintaining a bear-proof camp.

**I. Permit System**

**a. Trailheads**

This season I was able to communicate with the Lone Pine and Mineral King trailhead rangers and had the opportunity to meet and patrol with them on four occasions this season. This was extremely useful for exchange of area knowledge and visitor use information. The Mineral King trailhead rangers also did a fantastic job of patrolling the High Sierra trail to the Kern Hot Springs several times throughout the season.

**b. Issuing Office**

Nearly all of the backpacking parties I contacted this season obtained their permits from Yosemite or through the Pacific Crest Trail Association (PCTA). This presented challenges, having an issuing office outside of the park seemed resulting in visitors being less aware of specific SEKI-regulations. Most other parties I encountered had obtained permits from the Interagency Office in Lone Pine, from Roads End, Lodgepole, or Mineral King Ranger Stations.

Visitors reported confusion about approved food storage options in SEKI. I encountered several parties that had gotten their permit from either Yosemite or Lone Pine, and who had not been advised to carry bear canisters or had been told that Ursacks were approved for use in the parks (which they are not). Based on my visitor contacts, the in-park trailheads and the PCTA provided accurate food storage information.

## J. Communications

[illegible]

### **K. Needs for Next Year**

- **Propane** (there is currently ½ of a 10-gallon tank at the station)
- USGS 7.5-minute quads (Mt. Brewer, Mt. Kaweah, Mt. Williamson, and Mt. Whitney)
- super glue or Gorilla Glue
- 4 burlap bags
- 1 grill lighter (for stove)

- (b) (6)