

Bench 2001 BUS KENAN

Introduction

My season unofficially began on June 2 with a hike to Sphinx Lakes. I did a three day hike to the upper lakes and found no snow to speak of. I began working on June 5 in Cedar Grove fabricating the floor for the new Bench Lake Ranger Station. It took two days to get the floor done and ready to be flown into the backcountry. Training began on June 7 and lasted until June 20.

On June 21 I began my backcountry season by hiking up Copper Creek Trail. I traveled over Granite Pass to Simpson Meadow. Then I went up Cartridge Creek and Pass to Bench Lake arriving of June 25th. On the 26th two CCC members arrived to help out for a day moving equipment from the old station to the new location. In the afternoon of the 26th helicopter 552 arrived with two loads for the station. On the 28th 552 arrived with two sling loads bringing in the station floor. I worked the 29th and 30th on the floor and the afternoon of the 30th, I began to feel that "all too familiar" tooth abscessing. Facing the reality about my tooth, I spent the morning of July 1st weatherproofing the floor and all my supplies and took off in the afternoon for Arrow Pass. I got to Cedar Grove on the 2nd and had a root canal done in Fresno on the 3rd. I was back to Bench Lake on July 5th and ready to complete the floor project, so I could get the station set up ASAP. By July 10th the station was totally setup and operational for the season.

The 2001 season at Bench Lake Station was extremely productive and eventful. I contacted approximately 1000 park visitor and covered 900 miles of backcountry patrol. It had been 11 years since I was stationed in this area. I was surprised at the obvious increase in the number of hikers in this area. This increase is due to the increased popularity of the Muir Trail. I estimate that throughout the season 75% of the hikers in this area are doing the Muir Trail. As a result of this significant increase in visitor use of the area Bench Lake Station has become a vital backcountry station that should be manned every year. In the past it has been an "on again off again" station that was manned depending on if money were available. We no longer really have that luxury to not fund Bench every year.

In the early season work was concentrated on moving the station and assembling the new station floor. After the station was set up there was work on the station that continued through most of the season. A cot and a knock down table was built. Hardware cloth (wire mesh) was put around the perimeter of the station to keep the critters from getting under the floor. So, a lot of work was required to finish off the station. Some of the other work accomplished and highlights of the season included the following:

>Early season patrol to LeConte to meet with Sandy and to set up the solar unit.

- >Two patrols to Rae Lakes. One to cover the area when Kay was out and the other time she was there.
- >Established radio communications at Bench Lake Station by putting up a 30 ft long booster antennae in a tree. Prior to this the Bench Ranger had to do all radio communications through relay to Rae or Charlotte Lake Stations.
- >Relocated the station site and built the new station. Also, I rehabilitated the old station site.
- >Was part of the investigation of the Morgenson accident site.
- >Did a lot of cleanup and firering removal all over the backcountry.
- >Provided information to many park visitors to try and enhance their trip.

Morgenson Investigation

In the middle of July, the trail crew on a weekend outing stumbled upon some human remains. Being part of the investigation team, we were able to determine that these were the remains of Randy. This gripping event was ever present throughout the season. It was very important to me that I try to understand how the accident happened and how two search teams could have walked right by the accident site and not have found Randy. Through hiking back over to Window Peak after the investigation, it became more clear to me as to “most likely” how this accident happened. In talking to Dave Gordon during the investigation I realized that he had searched that area early in the SAR with Lori Church. At that time, he did not recall searching down in the gorge where Randy’s remains were found. He told me that he “suspected” the reason was that there was snow and ice in the gorge.

Personally, it took a hike back over to the area after the investigation before the timeframe of when my group searched came back to me. I remembered on this trip that it was the sixth day of the search that we searched here. I was with a team that included Rick Sanger, Charlie Shelz, Dave Pettibone and Ned. We came from the north over Explorer Pass and camped at a small lake ¼ mile north of the accident site. The next morning, this “A team” combed the area down to Window Peak Lake, as we thoroughly searched the gorge. We actually walked feet away from Randy. The only way we would have missed him is that he was totally obscured from view underneath an ice pack. High water in this area would not have hidden him from our view. Also, as a result of this search, I think that it leads us to understanding how the accident happened. It appears to me that Randy fell through a snow bridge, probably knocking himself out and drowned in the stream while being trapped underneath the ice.

Visitor Use

During the main hiking season (July - August), I estimate that 20 people per day would be hiking on the Muir Trail through the area. Some hikers are using Taboose and Baxter Passes to access the area. Lake Marjorie receives a concentrated amount of camping, since it is strategically located at the base of Pinchot Pass. It is a destination site for many Muir Trail hikers. The majority of these hikers are traveling from north to south. Palisades Lakes and Twin Lakes are the other extremely fragile areas that receive a lot of camping impact. Numerous firerings were torn down in these areas this summer. Bench Lake is also a popular destination for hikers. The shore of this most spectacular lake needs to be patrolled on a regular basis to eliminate the firerings that hikers build. Stripped Lakes is a popular fishing lake and I did do some cleanup and fire ring removal this season near the outlet of the lower lake. Woods Lake Basin was patrolled one time this season. From all the work done here cleaning up over the past 15 years, this area looks better. Hikers use this area and stock parties will enter and exit this area through Baxter Pass. It does require regular patrolling and cleanup to keep the area clean. The Rae Lakes Ranger needs to do at least one patrol a season to Woods Lake Basin.

Radio Communications

When I arrived at Bench Lake this season I was unable to hit the repeater. The thirty foot long booster antennae that I requested did the job and allowed me to transmit the rest of the season. It did require some experimenting to find the right tree to make it work right. Also, we had a lot of trouble with the Gould repeater not working properly until the end of July. This made difficult to determine the correct placement of the antennae. How unnerving it was at the beginning of the season to not be able to transmit. Can you imagine if I had a crisis situation and was unable to transmit? At least with the booster antennae, I was able to transmit from the station. Unfortunately a lot of this area north of Pinchot is out of range of any repeater.

Accordingly, there are many places in Kings Canyon backcountry that are out of range. It is a very risky proposition for a backcountry ranger to be put into this situation of being unable to transmit. An immobilizing injury in an area out of range of the repeater could result in a significant problem. If the Gould and Windy repeaters are improved as planned it will be interesting to see the improvement that this makes for transmitting in this area. If after this improvement is made and

there are still a lot of areas out of range, this could force us to go the satellite phone route.

Recommendation: Plans were this season for the radio shop to improve the Gould repeater. This did not happen and should be considered a priority for next season. This should increase the power and range of the repeater and give additional coverage in the Bench Lake area.

Rae Lakes

The peninsula camping area is one of the most impacted camping areas in Kings Canyon backcountry. Many camp sites exist here in this area of sandy soil adjacent to the lake. Taking a good look at this area, half buried feces and toilet paper can be found all over. Certainly, water contamination is a primary concern/problem of this area. Part of the problem of excessive use here is the result of our moving two bear boxes to this location 12 years ago. Prior to that, camping in the Rae Lakes Basin was more dispersed. If this level of impact continues at this site, drastic action such as closing it to camping may have to be taken in the future. An outhouse was there in the past and did not work, so we do want to avoid another outhouse at all cost.

Recommendation: I do recommend that we remove the two bear boxes from this area at the beginning of next season. Also, the Rae Lakes ranger should put up a memo on the sign post at the access trail to the area. The memo would read, "***Due to the overuse of this area in the past and in order to rehabilitate this area, no camping is allowed here for groups of 4 or more. If you are in a group of 4 or more you must camp north of the ranger station or south of the isthmus***". This could be looked at as a trial rehab for a season to see how it works. If it works to significantly decrease the camping here this may be sufficient to resolve the problem. Either way, action needs to be taken next season to try and reduce the amount of camping in this area.

Note: The isthmus between the two upper lakes is also a problem camping area with only a couple spots that are suitable for camping. Often the Rae Ranger will post a note on both sides stating that it is closed to camping. The concern here is that the human waste could easily get washed down into the lake. Thought should be given to permanently closing this narrow strip of land between the two lakes.

Stock Use

Stock use in the area was significantly up from years past. I contacted 5 stock parties and saw evidence that at least 3 other parties came through the area.

1) Cedar Grove Pack Station

They camped for several days 300 yards below the South Fork crossing (below Upper Basin). Orland was the packer and the permit was issued for Dianne Glover. They did have a camp fire here even though it is above 10,000 ft. I think a campfire in this area should be allowed, since it's the only place for a fire from Woods Cr. Crossing to Deer Meadow. They had twenty head of stock.

2) Cedar Grove Pack

Spotted a group into the Lake Marjorie area and returned to south of Pinchot Pass to camp. The packers were the young kids. (one looked to be 12 years old and the other one maybe 14) What is the policy for kids this young packing for a pack station and unsupervised in the backcountry?

3) SEKI Pack Station

Spotted a group in and out of Bench Lake. The packer, while waiting to pack them out, went down to the river to camp for a night. He also camped with his 6 head at the station lake campsite. He camped for a night at the old trail crew site near the Taboose Pass cutoff, which is the best stock camp in the area.

4) Bishop Creek Pack Station

They had a group heading south on the Muir Trail. They spotted their group into Bench Lake and camped just north of the old snow survey meadow (about half way to Bench Lake) The packers were extremely conscientious and did not want to keep their stock at Bench Lake.

5) Tom and Linda Marshall

This was a private party with 5 head traveling from Cottonwood Pass to Yosemite.

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

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

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

Stock Management

It is time that we take a close look at stock use in Kings Canyon backcountry, as significant changes are needed to protect the most fragile areas.... **the high elevation lake basins.** Currently, along the Muir Trail some of the lake basins are closed to grazing. This was done for the obvious reason that the impact got so heavy and devastating that the closure was made. What is the cause of the incredible amount of algae slime that is growing in Rae Lakes. These lakes are literally infested with an algae growing in the lakes. It is not an algae that is growing on the rocks on the bottom of the lakes, but a unique form of slimy algae that grows thick in the water. Has the cause of this ever been studied? No other high country lake that I've ever seen has algae slime like Rae Lakes. Certainly, a common sense observation would be that it is a result of fecal bacteria contaminating the water source - human and stock. Unfortunately, the closure of Rae Lakes to stock grazing was made too late. The algae slime in this lake is irreversible and may continue to get worse.

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

It's time that Kings Canyon learned a lesson from Sequoia about protecting the lake basins. In the Kern region, most all of the lakes are closed to grazing. We have a situation in Kings Canyon that many lakes are unprotected and subject to a similar type of irreversible impact as Rae Lakes. What lakes in Kings Canyon backcountry are still susceptible to this type of impact. Along the Muir Trail, in order to simplify this analysis, there are three main areas. 1)Upper LeConte

LeConte Canyon 2)Palisades Lakes 3)Twin Lakes. On the Monarch Divide Horseshoe Lakes, State Lakes and Volcanic Lakes are unprotected. **As an immediate priority the three basins along the Muir Trail need to be closed to grazing.** I have discussed this over the years and at length with the other backcountry rangers in the Kings and they all agree with this assessment. A more simple way to protect most all of the lake basins would be to have an elevation restriction. For example, not allowing grazing above 10,000 ft. in Kings Canyon would protect all of the lake basins. What will be the future of stock use in the backcountry. With the world wide popularity of this spectacular area, the level of stock use will inevitably continue to increase.

Law Enforcement

I issued two citations this summer. One for an illegal fire and one for illegal camping. The illegal fire was at Bench Lake. The camping violation was at Mist Falls. Two years in a row I've issued citations for illegal camping at Mist Falls. I think there is probably a lot of illegal camping at Mist Falls. It might be a good idea to put a "no camping" sign here on the sign post that says "Mist Falls".

Illegal Firerings

Fires above 10,000 ft continue to be the most common violation in Kings Canyon backcountry. It's difficult to catch this infraction in progress. I did do a lot of firering removal this summer. Areas where this rehabilitation work was done this summer included: Palisades Lakes, Woods Lake Basin, Lake Basin, Marion Lake, Amphitheatre Lake, Lake 10212, Striped Lakes, Upper Basin, Bench Lake, Twin Lakes and Blue Canyon

Trail Crew

The trail crew in the area was the CCC's. This massive twenty people crew began their backcountry season camping in Paradise Valley. They camped at the Woods Creek Crossing for 8 weeks \pm and then moved their camp to the Twin Lakes area for approximately 6 weeks. The focus of their high country work was below Twin Lakes down to the Woods Creek crossing. They did some work on the Woods Lake Basin trail from the cutoff of the Muir Trail up to the basin. They had a spot crew that spent a week on the north side of Pinchot Pass working the trails in this area. Unfortunately the camp at Twin Lakes should never have been

allowed by management. This camp resulted in the worst impact in this area that I have seen in the past 27 years and is probably the worst impact here in the past 50 years. (see photos) The problem with this camp is that it was at 10,500 ft. in an extremely fragile area. This camp was visible from the trail and 90 feet from a stream and a fragile meadow area. Once a week the crew was resupplied by stock, as normally the stock would be in the area for two nights. An estimated 10 head per week were used on these resupplies.

Problems created by this camp include the following:

- >A fire was burning trash throughout the day. This smoke could be smelled and was sometimes visible from the trail.

- >The camp site area was totally littered by the stock manure. The vegetation in the area was literally churned up and killed by the stock. Water contamination from the manure resulted as manure was seen in the water sources in the area.

- >The camp made a statement to the other stock users in the area that it is okay to create this incredible amount of impact in the area since we do it.

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

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

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

Trail Crew Permanent Camps

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

Simpson Meadow

Last season there were two metal boxes located at the main meadow camp. This is one of only three established camps in the Simpson area. This summer one

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

Upper Cloud Canyon

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

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

Conclusion

This was a very productive season for the Bench Lake Station operation. The new station turned out real nice and the floor will last until the next ice age with proper maintenance. Finishing off the floor will be done at the beginning of the next season by boarding it with 1” by 12” pine. This will prevent the marmots from eating the plywood and will provide one more layer to secure the floor. We now have a ranger station in this area that will last for many years that allows us to provide a valuable service and assistance to park visitors in this area.. Bench Lake is now a vital and necessary part of our backcountry operation. The increased

visitation in the area as a result of the popularity of the Muir Trail will only continue in the future.

The biggest challenge we face in the future in managing this backcountry is protecting the water quality. It continues to get worse and worse every year as a result of stock and human waste contaminating the water sources. Backcountry management in a since is a relatively new science. We have made major strides over the last 30 years in protecting the backcountry and the wildlife with trail quotas, fire restrictions, minimum impact regulations, bear boxes, stock closures etc., but there is much more to be done.

The first step in managing this extremely vast backcountry is to understand where the current problems exist. As a result of spending the last 27 seasons in Sequoia and Kings Canyon backcountry, I see lot's of problems that need to be addressed. Hopefully, in working as a team with the backcountry rangers, district & subdistrict rangers, resource management and the superintendent, we can face up to these current problems and make the needed changes to protect this most sacred environment.

Bench Lake Station

Station floor project



Frame bolted together with support bracing



Bench Lake Station



Front view of station



Tarp overhang



