

1991 Annual Report

Little Five Lakes Ranger Station

by Thomas Suk

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SEQUOIA and KINGS CANYON NATIONAL PARKS

Backcountry Ranger Annual Report Summary Information

1991

STATION: Little Five Lakes LENGTH of SEASON: June 10 - Sept 21

1. Total Visitor Contacts: 1032
 - Day hikers: 36
 - Backpackers: 926
 - Stock Users: 60

2. Stock Observed: 138
3. Llamas Observed: 0
4. Total Miles Covered: 410
 - Hiked: 410
 - Rode: 0
5. Trash Removed (pounds): 200
6. Total # Firerings Worked: 64
 - Rehab/Cleaned: 40
 - Removed: 24
7. Total Campsites Worked: 10
 - Rehabilitated: 10
 - Removed: 0
8. Total Law Enforcement Contacts: 20
 - Citations: 0
 - Type Violation:
 - improper food storage (4)
 - illegal grazing (4)
 - collecting wood from standing trees (4)
 - camping too close H₂O (3)
 - camping on vegetation (3)
 - illegal campfire (2)
 - Written Warnings: 1
 - Verbal Warnings: 19
9. Emergency Operations: 1
 - Searches: 1
 - Rescues: 0
 - Medivacs: 0
10. Special Projects:
 - analysis of grazing opening dates
 - _____
 - _____
 - _____
 - _____
 - _____

THE VISITOR

I contacted over one thousand visitors in the backcountry this year. I will summarize some general observations. These do not apply to everyone, nor do the views expressed necessarily agree with my own. I present this mainly to give managers a general feeling for public attitudes and opinions.

- * Despite all the warnings, many visitors do not believe a particular area is frequented by bears until they see one.
- * Many visitors feel that once their food is hung in a tree, it is safe.
- * Despite our encouragement, many visitors are scared to throw rocks at bears.
- * Many visitors do not believe bears will wander above treeline.
- * Many visitors want more food storage lockers. Some feel that we should simply destroy problem bears. Very few want to carry bear-resistant food containers.
- * Hikers do not like stock wandering through their campsites.
- * Hikers object to being told to camp 100 feet from water when they see stock urinating and defecating in and near streams and lakes.
- * Visitors have a difficult time burying their excrement.
- * If visitors see a firepit (or campfire scar), they think it is OK to have a fire.

Some suggestions to consider:

- * **BEARS:** Emphasize the following points:
 1. Hanging food is ONLY a "delay tactic."
 2. You must: a) counter balance food as well as possible, and b) **CAMP NEARBY** (i.e. within rock-throwing distance) to chase bears away.
- * **HUMAN WASTE DISPOSAL:** Let's consider buying plastic hand trowels in bulk, and pass them out (or sell them for cost) at trailheads. ("When you empty your bowel, use your trowel.")

- * **HIKER/STOCK CONFLICTS:** Tell irate hikers that there is not conclusive evidence that horses spread human-infective Giardia. This usually calms them down. (Although horses have been shown to carry Giardia, they have not yet been studied to see if it is the same strain of Giardia which infects people.)

- * **CAMPFIRE IMPACTS:** Spend sufficient time/resources to completely eliminate fire scars in closure areas, or visitors will rapidly rebuild firepits. Backcountry rangers already know this, but managers and trailhead supervisors often allocate insufficient resources to do the job "right."



PACK & SADDLE STOCK, issues/incidents

Mineral King Pack Station (MKPS) operated the 1991 season with little regard for grazing regulations (see case/incident no.'s 100549, 100660, 100704, 101005), food storage regulations (see case/incident no.'s 100662, 100663, 100926, 101005), and minimum impact camping regulations (see case/incident no.'s 100704 and 101005).

MKPS packers were completely ignorant of grazing opening dates, and were generally uncooperative when I contacted them in the field. Photographs of impacts resulting from violations by Mineral King Pack Station are attached.

I feel that it is poor land stewardship to allow Mineral King Pack Station to issue their own backcountry permits. We should require all pack station clients to obtain their permit from the NPS. (Reasons for this are numerous; see my '89 and '90 reports for a detailed discussion.)

I contacted two private stock groups this year (led by Jim Wells of Three Rivers and Ruth Heuer of Strathmore). In contrast to the commercial packers, these private stock parties were well informed and cooperative.

I have several specific recommendations regarding stock management in the Little Five patrol area. See the Action Items section of this report.

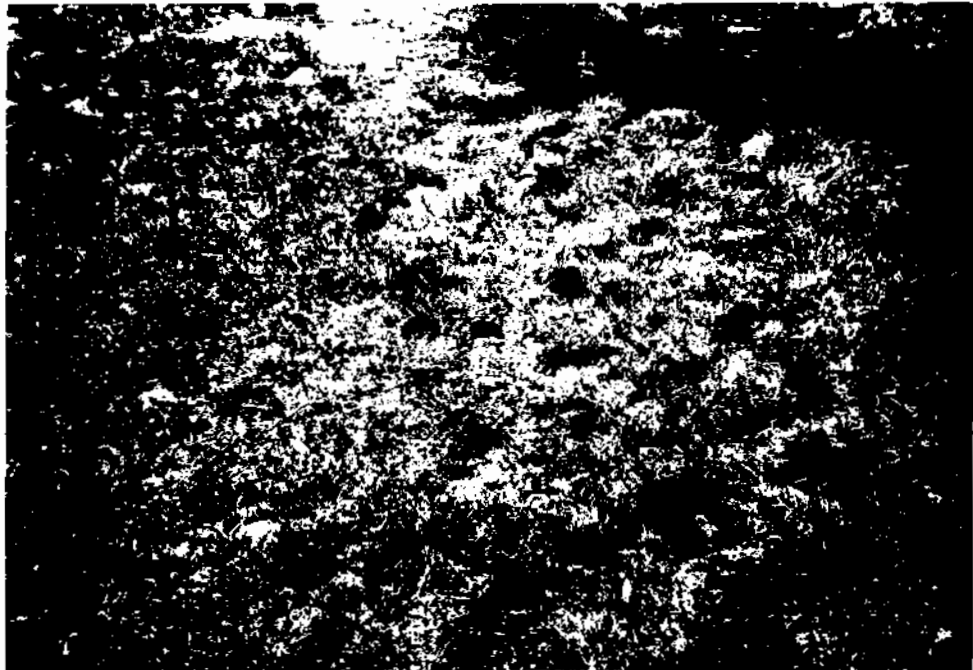


Case 100660. "Forester Meadow." Opening date: July 15. Mineral King packer grazed 10 head night of July 3. Meadow was still very wet. Forage was just coming up and was very short. The packer ignored my instructions and returned to graze the meadow again on July 5.



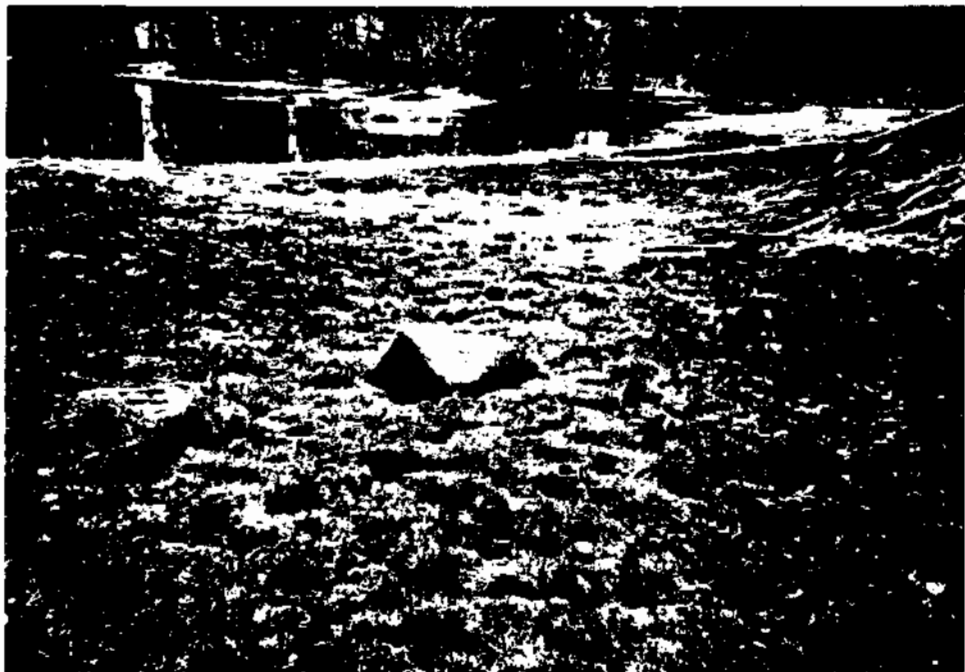


Case 100704. Little Five Lakes. Opening date originally July 15, amended to July 20 due to wet soil conditions. Mineral King packer grazed 11 head nights of July 11-12. Grazing was concentrated on fine forage in the saturated areas.





Case 101005. Little Five Lakes. Wet stringer meadow permanently closed to grazing since 1978. Mineral King packers grazed 18 head nights of August 4-5. Stock seem to prefer the fine forage in the wettest areas.





Case 100549. Big Five Lakes. Opening date August 1. Much of the forage area at Big Five is perpetually wet in normal years. After meeting with packers' organizations in early July, NPS amended the opening date and allowed commercial pack station to begin grazing on condition that stock be "kept out of wet areas." Photos taken July 25 show lingering wet condition of soils and soil loss from trampling impact.



BEARS

The bears had a big year in my area. I personally received dozens of bear incident reports. Unfortunately, the only immediately available alternatives for decreasing incidents in the area appear to be: destroying "conditioned" bears and/or installing food lockers "one day apart" on popular trails, such as the High Sierra Trail and the Black-rock/Sawtooth loop. However, only a few lockers are presently available, and installing other food storage devices (i.e. barrels) is even more controversial.

Bear(s) got through a properly functioning electric fence and broke into my station while I was away in August. (Approximately \$200 damage to the tent...and they broke my graphite fishing rod.) They did not get any food. It is critical that the Little Five ranger store all food and trash in the lockers when away on patrol. The electric fence is a useful deterrent, but it will not keep all bears out. I even put breakable items on the floor when I went on overnight patrols, so they wouldn't be knocked off shelves by marauding bears. Proper food/trash management is very time consuming. Constructing a bear-proof cabin for the ranger at Little Five should be seriously considered.

Acute problems existed this season at: Pinto Lake, Cliff Creek (at Timber Gap crossing), Spring Lake, Columbine Lake, Little Five Lakes, Nine Lake Basin, and upper Big Arroyo. Solutions will not be easy. An understanding of site-specific problems is critical to developing a response.

Pinto Lake. A popular first-night and last-night camp for both backpackers and stock parties. One locker currently exists; it is full to capacity most nights in August. This problem is exacerbated by the fact that MKPS drops "spot" trips at this location and instructs them to use the locker. One option is to install a second locker. However, capacity would still be exceeded when stock parties and/or commercial "spot" trips are present. A second (and more effective) option is to install another locker (for hikers), plus a barrel for stock groups' exclusive use. This could provide storage capacity for spot trip clients, as long as they don't bring ice chests. ("Coolers" will not fit in the barrels.) Large (or extended) stock parties would still have to sleep

near and defend their food. Packers would occasionally lose food to bears under this option, as happened at least once this year (case/incident 100926). The barrels will not be effective unless Don Bedell assures that all "spot" parties have no more food than they can fit inside the barrel(s), (i.e. no ice chests). A third option is to limit use instead of increasing food storage capacity. We could reduce the present Timber Gap trailhead quota and require packers to operate under the quota system.

Cliff Creek Crossing. Not as popular as Pinto Lake. Stock parties do not camp here since there are no large campsites. One locker currently exists. Capacity is exceeded only when commercial spot trips are present. One option is to install a barrel for use by pack station clients (spot trips). Again, this will be effective only if trips are planned so that all food fits in the barrel. A packer informed me that MKPS previously used a site downstream of the crossing ("Judge's Camp") for spot trips, but they now drop clients at the crossing site due to bear activity. Installing a food barrel away from the crossing site (i.e. at Judge's Camp) has advantages: 1) barrel would not be in view of large numbers of visitors, and 2) flat spots for camping are limited at the crossing. (I do not know of any LZ's in this area; barrel would probably have to be dropped off with a long line and someone on the ground to direct the drop and unload the net.) Another option is to prohibit MKPS from leaving clients in the Cliff Creek drainage without a packer to defend their food, and requiring MKPS to leave enough room in the existing lockers for other visitors. A third option is the same as that listed previously under Pinto Lake.

Spring Lake. This is a popular cross-country destination. A "user trail" exists over Glacier Pass, but it is badly eroded, and getting worse. A few trees exist, but good "hanging" branches are few. Hikers approach the lake from four distinct directions (which makes it impossible to place a locker with confidence that everyone will find it). One option is to install a locker. This would be a major philosophical leap, as no lockers have yet been placed in off-trail areas. This would encourage more use of an already over-used location. Second option is to recommend that visitors not camp at Spring Lake due to presence of bears and lack of good hanging trees. Third option is to reduce trailhead quota over Glacier Pass to one group per day. This would reduce overcrowding and ensure that everyone has at least a "marginal"

tree in which to hang food. Fourth option is to require groups camping at Spring Lake to carry bear-resistant food containers.

An opportunity exists to take the long overdue step of reducing use at Spring Lake. Installing a food locker would have the opposite affect. I prefer the second and third options, and monitoring the situation further.

Columbine Lake. This is a popular first/last campsite on the Blackrock/Sawtooth loop. Only a few trees; no good hanging branches. Great fishing. Very scenic. People really want to camp there. Dozens of bear incidents this season. Our first reaction was to request installation of a locker. The major problem (re: effectiveness of placing a locker) is that there are several trails between the outlet of Columbine Lake and Sawtooth Pass. The "main" or "official" trail is impossible to distinguish from the array of user trails. Most hikers would have a hard time finding the locker because of the varied terrain. If we install a locker and advertise that it exists at Columbine, hordes of hikers would plan on camping there. If significant numbers of hikers don't find the locker, incidents will continue and perhaps even increase. A related problem is that there is no single area at Columbine which offers enough good (i.e. flat) areas for camping. Three candidate locations are: 1) chained to one of the trees near (just below) the small lake, 2) between the first location and the outlet, and 3) approximately lake level near the flat spots at the inlet. If not chained, people and/or bears will probably move the locker. Due to steep terrain, bears could roll the locker and get it "stuck" in very difficult-to-move places (or damage it beyond usefulness). Location #1 offers the only site (i.e. a few trees) where the locker can be chained, but large groups will end up camping on the shore of the small lake (only large flat spot nearby) quickly destroying the vegetation there. Locations #2 and #3 also don't have enough flat areas to support the number of visitors who will flock to Columbine if they know a locker exists there.

I recommend re-constructing the trail wherever the trail crew leader believes it will last, if possible through the camping areas at locations #1 and #2, and avoiding the meadow area at the inlet. Then place a locker, visible from the trail, at whichever location along the "new" trail offers the most camp areas. It may become necessary to install a second locker for two reasons: 1) not enough campsites near the first locker (folks will be unwilling to hike from many of the sites regardless of where we place the locker...too much distance and verti-

cal), and 2) one locker probably won't have enough storage capacity for the magnitude of folks who want to camp at Columbine Lake. The critical item for '92 is to get the trail fixed up so people can stay on the "official" trail and find the locker.

Little Five Lakes. The ranger station lake has the only locker east of the Great Western Divide on the Sawtooth/Blackrock loop. This year, almost everyone saw a bear (or had an incident), or camped nearby someone who did, on their way in to Little Five (i.e. at Columbine, Pinto, Spring, etc.). Many legions of visitors altered their plans to "lay over" at the ranger station lake because they knew about the locker there. (They also knew they could have a fire there, which added to the "magnetism" of the ranger station lake.) The result is that 5-10 groups camped here most nights during August, the locker overflowed, and I had to store extra food in the barrel behind the station. This was only a problem for two reasons: 1) I had to stay "home" or people would hang and lose the overflow, and 2) I received numerous complaints about overcrowding. Option one is to install a locker at Big Five Lakes, to alleviate overcrowding and overflow of the locker at Little Five. I recommend chaining the locker to a tree, visible from the trail, at the lowest Big Five Lake (i.e. Big Five #1 at 9830 elev.), and placing a note on the trail junction sign north of Big Five (at the top of the switchbacks leaving Big Five #1 for Little Five) guiding visitors coming from the north towards the locker. (Visitors coming from the south will pass, and should see, the locker.) Many experienced visitors like to camp at the upper Big Five Lakes, but ample trees are present, and they should be able to hang and defend their food. Option 2 is to remove the locker at Little Five and let the bears have everyone's food. (Just seeing if you're still awake.)

High Sierra Trail. Many incidents occurred this summer in upper Big Arroyo and Nine Lake Basin. I did not have time to evaluate specific sites for locker placement. Next year's ranger should evaluate the HST to see if additional locker(s) make sense. (The first camp area east of Kaweah Gap, and the Chagoopa Plateau are possibilities for completing a network of lockers which would be "one day apart.")

PATROL NOTES

Mineral King road patrol and trailhead rangers did not have a working system for picking up pack station permits and relaying trip itineraries to me. Despite several requests for advance notice of trip itineraries, I received only one radio call the entire summer from Mineral King staff to relay stock group itineraries. A system needs to be in place whereby permits are picked up daily from the Mineral King Pack Station, and itineraries relayed to the appropriate (i.e. Little Five, Kern, Hockett) backcountry rangers. It is critical that the backcountry rangers know the trip plans of stock parties and large backpacking parties, so that we can contact these groups in the field to deliver the minimum impact message.

It would be far better if pack station clients were issued permits by the NPS, because we could then control the information they receive prior to entering the backcountry, and we would know their plans (and be able to alter them before violations occur, such as grazing before opening dates). However, even if permits are issued by the NPS, trailhead or other sub-district staff must be responsible for relaying trip itineraries to the backcountry ranger(s), so that contact can be made in the field. Such systems work well at Grant Grove, Cedar Grove, and Lodgepole, and need to be implemented at Mineral King.

I was very surprised to learn that Mineral King trailhead staff rarely went on overnight patrols. The late afternoon, when visitors are "setting up camp," is the most common time to observe violations (i.e. tents on vegetation, camping too close to water or otherwise illegally, building illegal firepits, collecting firewood, etc.). Sierra District has recognized this by scheduling many backcountry/trailhead personnel on 1100-2000 patrol days. By only going on dayhikes, Mineral King trailhead personnel are missing the best opportunities to educate visitors in the field and to avoid violations before they occur. Trailhead personnel would be more effective if they "camped out."

I was also surprised to learn that Mineral King trailhead staff rarely ventured out of the Mineral King Valley. Other outlying areas need extra coverage by trailhead personnel, but have been mostly ignored (i.e. Cliff Creek, Pinto Lake, Forester Lake, etc.). Trailhead personnel also need to get into the backcountry to become familiar with the areas they are responsible for telling visitors about.

Three persons is not enough to adequately operate a trailhead operation in the Mineral King area. An additional one or two persons would allow them more time to complete work projects and patrol areas outside of the Mineral King Valley itself.

The Cliff Creek area, although technically in the Giant Forest sub-district, needs more coverage by the Mineral King trailhead staff and the Little Five ranger. Violations of the campfire prohibition occur regularly at Spring Lake, and this site requires a substantial effort to keep free of fire rings and fire scars. It would be a good site for a directed Scout or Outward Bound work project, if this can be arranged (to remove evidence of campfires). Pinto Lake should be closed to fires. If managers make the decision, a large effort will be required to remove all the historic firepits.

I suggest that a cache box be installed at Pinto Lake for rangers' use. It should contain all the basics: sleeping bag, pad, tent, stove, fuel, utensils, food, tools, etc. This would make it possible for back-country, frontcountry and/or trailhead rangers to efficiently patrol the area. For instance, if a cache were present at Pinto Lake, Mineral King staff could hike over Timber Gap, clean up the Cliff Creek crossing sites and proceed to Pinto Lake. They could then comfortably camp at Pinto, and work around Pinto the following day, spending a second night there. The third day, proceed up Cliff Creek, work for a few hours at Spring Lake, and hike out over Glacier Pass, all without having to carry heavy loads (just a super-light bivy bag & shovel, and some extra food). We could pack in the supplies each spring on a mule when the commercial packers (or trail crew) are going that way (i.e. plan ahead so it doesn't require a special trip). Have everyone purchase and mark their own food at the beginning of the season and have it ready with the gear to get on the first available trip. One of us will have to be at Pinto Lake to meet the packer and pack the cache. In the fall, bring the tent, sleeping bag and stove out "on foot" (heavy food items will have been consumed) for winter storage. Similar systems work great up in "the other Park" (i.e. Kings Canyon).

ACTION ITEM #1

Kern drainage campfire regulations

THE PROBLEM:

Most everyone agrees that the campfire limit (11,200 ft.) in the Kern River drainage is too high. Impact continues to occur in areas where fuels are scarce; visitors exhaust ground fuels and seek firewood from standing trees. Concern has also been expressed that downed logs are being damaged which may provide significant information to researchers studying past climatic history.

DISCUSSION:

Resolution of the problem has been controversial. At the SEKI fall backcountry management meeting in 1989, a proposal was tentatively adopted to lower the elevational campfire limit in the Kern. This proposal was later dropped when strong objections were received from the Backcountry Horsepersons, who felt that campfires should only be prohibited at specific (posted) sites where a demonstrated shortage of fuel exists.

The current system of campfire regulation in the Kern drainage has several shortcomings. First, by adopting site specific closures as opposed to an elevational limit, it becomes necessary to attach a detailed list of fire regulations to visitors' backcountry permits. This is problematic because visitors have a "saturation point" beyond which information received is not assimilated. At least two distinct processes are at work here: 1) as permit attachments grow in volume, visitors become overwhelmed by the size of the "mess" they've just been handed, and they tend to disregard the whole package, and 2) the most important minimum-impact messages (i.e. bury your excrement, store your food, and extinguish your fire, etc.) become "lost" in a heap of paper. We should strive for a single permit attachment which clearly emphasizes the most important points, yet contains all the pertinent regulations. I shall return to this point later.

The second major shortcoming of site-specific campfire closures is that they are more difficult for the visitor to understand. Visitors often do not see fire closure signs (profusion of signs is another problem) and/or do not receive this year's permit attachment. Elevational fire limits are much easier to understand and enforce.

Thirdly, and most importantly, site-specific campfire closures address only the symptoms, and not the real problem. The problem is that significant ecosystem alterations may result when campfires are allowed in high-elevation areas where fuel production is low. Site-specific wood shortages are merely a symptom resulting from the current (and past) distribution of use. By waiting for a demonstrated ground fuel shortage before closing a low production area to campfires, we are allowing foreseeable impact to occur before taking action.

If we continue to close only specific sites to fires, visitors will tend to shift to nearby areas where fires are allowed (as happened this summer at Little Five Lakes). As shortages occur in these areas, the list of closed sites will increase, and probably be amended almost annually. This will require more permit attachments, more work and confusion for permit issuers (who are often unfamiliar with the specific sites), and an incredibly complex network of closed areas.

RECOMMENDATION:

I recommend that SEKI adopt a conservative campfire elevation for the Kern drainage (such as 10,400 feet), and study areas above that elevation for specific opening to campfires. This offers several advantages:

1. Areas where wood production is low would be proactively protected from impact resulting from shifting use patterns.
2. The permit attachment (minimum-impact sheet) could simply state:

Wood fires are permitted only in the following areas:

KINGS CANYON NP - BELOW 10,000 FEET

Except: Fires prohibited at Granite Basin

KERN RIVER DRAINAGE - BELOW 10,400 FEET

Except: Fires prohibited above 10,000 ft. at
Nine Lake Basin/Big Arroyo

KAWEAH RIVER DRAINAGE - BELOW 8,000 FEET

NOTE: Fires are permitted above these elevations at a few specific locations. Contact the nearest ranger station for details.

This leaves room for more critical messages on the handout, and helps to prevent overwhelming the visitors with too much information.

3. As opposed to posting site-specific closures, only a few signs would be needed (at the trail entries to the Kern) which state: "FIRES PROHIBITED ABOVE 10,400 FEET IN THE KERN RIVER DRAINAGE".
4. I do not feel that areas above 10,400 ft. open to fires need to be posted. However, if managers decide to post excepted open areas, it is much more positive to post open areas than closed sites.
5. As fire regulations are amended (for example, to open specific areas above 10,400 ft.), we can avoid the annual enforcement nightmares that occur when visitors fail to learn about new closures. (It is not nearly as much of a problem if visitors are uninformed of newly opened areas, as if they are uninformed of newly closed areas.)

ACTION ITEM #2

Kaweah drainage campfire regulations

THE PROBLEM:

Downed firewood at Pinto Lake is scarce. Wood production is low. Visitors have exhausted ground fuels and are taking wood from standing trees.

DISCUSSION:

The current campfire limit in the Kaweah drainage is 9,000 feet, although Hamilton Lake (8200 feet) is closed to fires. Pinto Lake (8700 feet) should also be closed to fires (see reports by previous back-country rangers, including Bearpaw rangers).

Lowering the fire limit to 8,000 feet would make more sense than adopting a site-specific closure for Pinto Lake. An 8,000 foot limit recognizes that ample firewood does not exist in most areas above that elevation in the Kaweah drainage. An 8,000 foot limit would exclude both Pinto and Hamilton Lakes, preventing the need to list current (and future) problem areas as exceptions to the inadequate 9,000 foot limit. (Any areas between 8,000 and 9,000 feet which are determined to have adequate fuels for campfires could be opened as in the discussion for Action Item #1.)

RECOMMENDATION:

Prohibit fires in the Kaweah drainage above 8,000 feet.

ACTION ITEM #3

Stock management at Little Five Lakes

THE PROBLEM:

Stock continue to trample the closed meadow at the Little Five ranger station lake.

DISCUSSION:

The stringer meadow south of the ranger station has been closed to all grazing since 1978. The meadow is perpetually wet and is highly susceptible to trampling impacts.



Photo 3-1 shows the proximity of the "closed" meadow to the "open" meadow.

The open meadow is too dry to support significant forage, and contains predominantly coarse, non-preferred feed such as Antennaria, etc. (Photo 3-2 shows non-preferred condition of the open meadow). Since the closed meadow contains fine grasses/sedges which are preferred by stock, animals released anywhere in this area quickly drift to (and remain in) the closed area, causing trampling impacts (see photos 3-3 through 3-10).



photo 3-2

TITLE LITTLE FIVE LAKES



Made in U.S.A.



page 31



3-4

1991

closed stringer
south of Little S
ranger station

3-3

1991 closed stringer south
of Little S ranger station

3-6

1991

closed stringer south of
Little S ranger station

3-5

1991

closed stringer south of
Little S ranger station

ONE MILLION FIVE LAKES



DE IN U.S.A.



page 33



3-6

1991
closed stringer south of
Little S ranger station

3-7

1991
closed stringer south of
Little S ranger station

3-10

1991
closed main south of
Little S ranger sta.

3-9

1991
closed stringer south of
Little S ranger station

Three options were explored in detail:

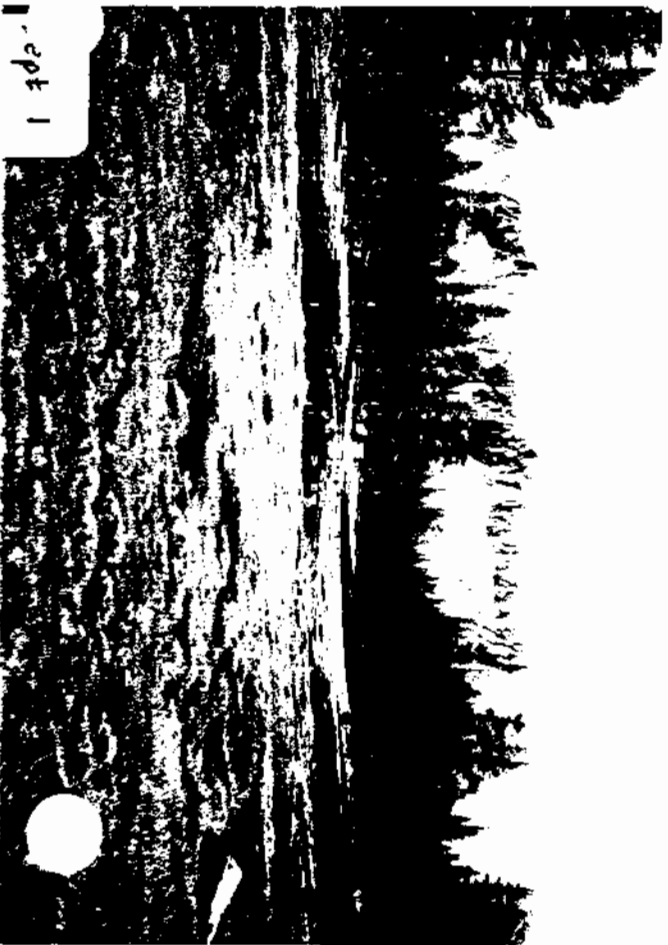
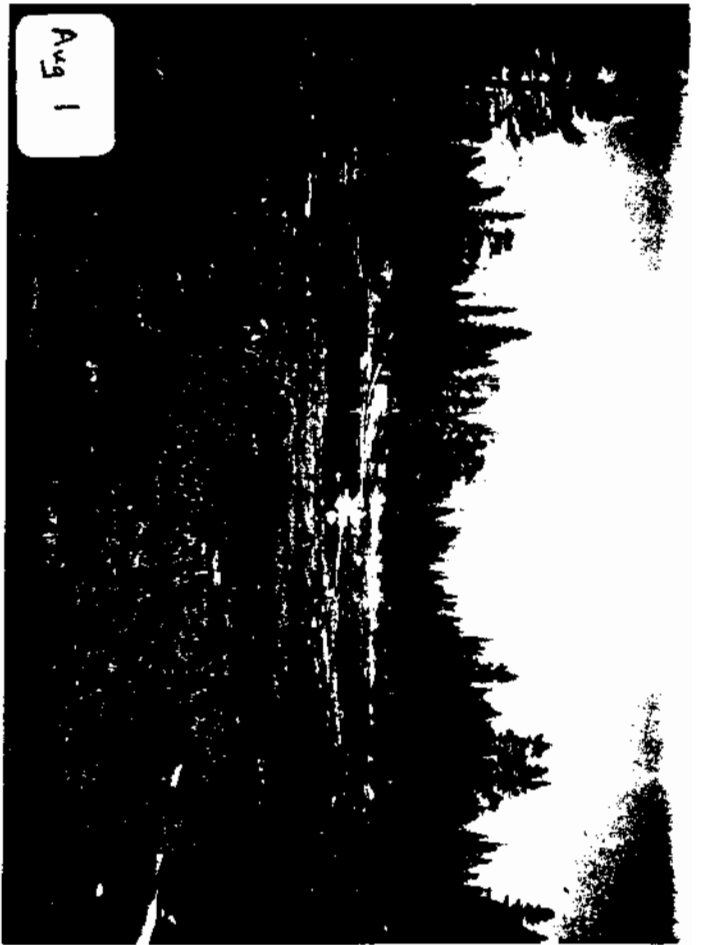
1. Allow grazing in the currently closed meadow, but adjust the opening date to provide time for the wet areas to dry out.
2. Prohibit grazing within 1/2 mile of the ranger station lake, to provide effective protection for the perpetually wet (closed) meadow.
3. Construct drift fences to keep stock out of wet areas.

I explored the first option since it was suggested previously in a report by Mike Neuman (Range Conservationist). Note that Mike visited the area during dry years. This year, the snowpack was estimated at 73 percent of normal, within the 50% to 150% range for a normal precipitation year.

Soils in the closed meadow remained wet throughout the 1991 season. Since the meadow does not dry out during a "normal" year, adjusting the opening date cannot realistically provide adequate protection. To illustrate this, I took photos at three points in the closed meadow on July 15, August 1, August 15, and September 1. (See photos 3-11 through 3-22). Seasonal changes in the vegetation are quite obvious, however if you look closely, you can see that the soil remained wet into September. Opening this meadow to grazing, even with adjusted opening dates, would result in increased (and in my view unacceptable) trampling impacts.

Drift fences do not appear to be feasible as at least one-half mile of fence would be required to exclude stock from the closed meadow, and the fence would have to be built right to the shore of the lake (which would not be popular with fisherpersons or photographers).

I spent considerable time looking for alternative forage areas, in hopes that something might be available near enough to be a feasible substitute yet far enough away to preclude stock from drifting back to the closed meadow. Don Bedell stated that he has used the meadow just north of the trail to Big Five at approx. 10,200 feet elevation. This meadow could be grazed by groups who want to camp at Little Five Lakes, although several concerns are noteworthy. First, stock will probably drift from this meadow up into the closed meadow. (Releasing stock here will reduce, but not eliminate, drift into the closed meadow at



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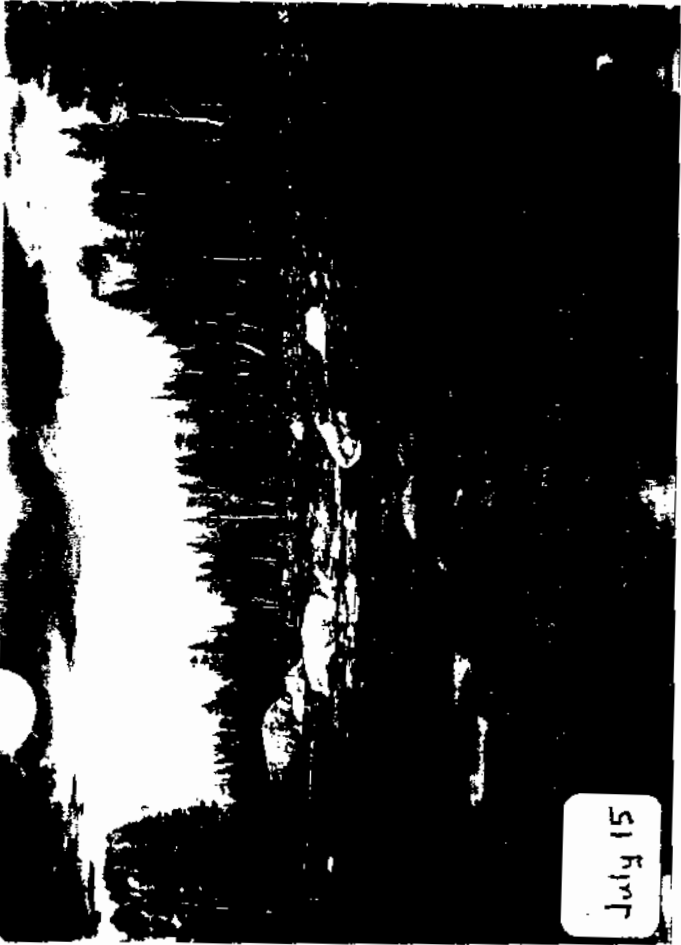
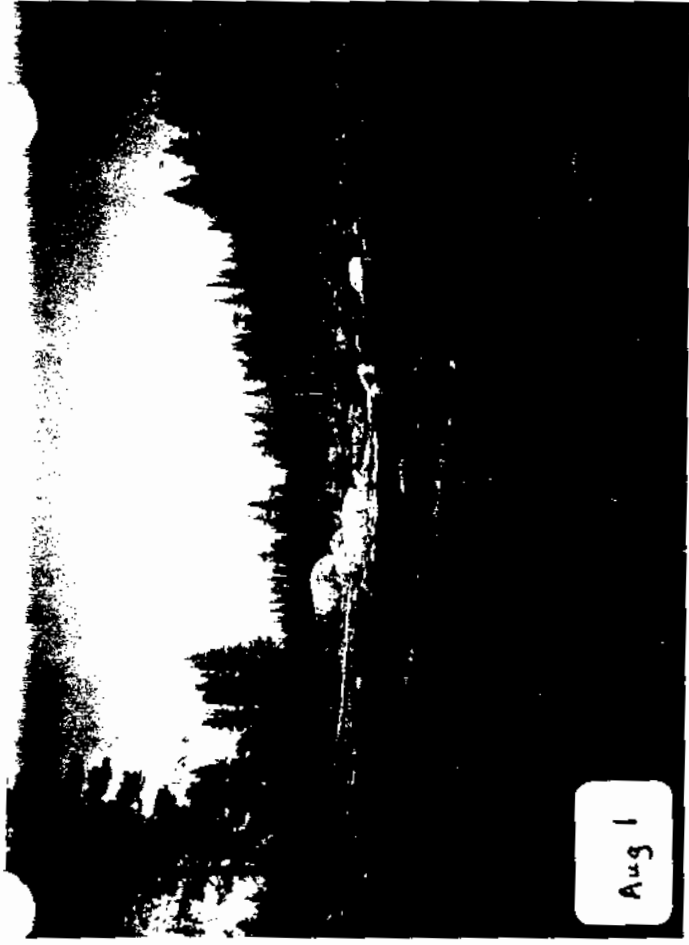


Photo-Dover
Made in U.S.A.

VUE-BALL

TITLE LITTLE FIVE LAKES



July 15



Aug 1

page 41



Aug 15



Sept 1

the ranger station). Second, this meadow, and areas along its inlet creek where stock will likely drift, stay wet well into the summer. If grazing is allowed, opening dates should be adjusted to prevent grazing until 7/15 (dry), 8/1 (normal), 8/15 (wet). Third, the meadow does not offer much feed, and would not support alot of use. Fourth, it would be a long walk for packers camped at Little Five to bring stock down to this meadow to graze. The temptation to release stock uphill of this meadow would be great, increasing the chance of drift into the closed area.

The "Long Lake drainage" is the only area at Little Five which could be responsibly grazed before the 7/15, 8/1, 8/15 opening dates. Only experienced packers who are familiar with the site (i.e. have been there before), and who will take extra measures to keep stock on the side slopes and away from the wet lakeshores and creekbeds should be allowed such a privilege. Stock should be released near where the main trail crosses the drainage, and NOT up at the traditional packer camp near Long Lake. (This requires packers to take stock about 1/2 mile down-canyon from the traditional camp before releasing their stock for the night.) The slopes around and above Long Lake dry out much later than the slopes downstream near the main trail. Stock are generally cooperative if released on the ridge just northwest of where the main trail crosses the drainage. There is only, however, enough forage here to accomodate a few early-season trips. The area should only be opened after being checked by the ranger, and early-season use should be strictly limited to only two or three trips.

Two other alternatives, which would be the most effective at reducing trampling impacts, are to allow only burros/llamas, or to prohibit grazing entirely and require packers to supply feed all season long when camped at Little Five Lakes.

RECOMMENDATION:

To provide protection for wet meadow areas, prohibit grazing at Little Five Lakes except by burros & llamas, or prohibit grazing entirely. This is necessary to prevent trampling impacts which occur when horses and mules drift from open areas into the closed wet meadows.

ACTION ITEM #4

Stock management at Big Five Lakes

THE PROBLEM:

Erosion is visibly evident in the forage areas at Big Five Lakes. Soil loss & compaction and streambank impacts are present in the meadow areas between lakes #4 and #5, and in the meadow areas leading up to "Hands and Knees Pass."

DISCUSSION:

Big Five is a very popular subalpine lake basin; visitors often complain about stock impacts present there. Trampling by stock has caused accelerated soil loss and streambank destabilization in the forage areas above Big Five #4 (see photos 4-1 through 4-8). The access route (basically an unmaintained user trail) to these upper Big Five Lakes is badly eroded due to stock use.

Don Bedell of Mineral King Pack Station has stated that his packers can keep stock out of the wet areas. I have seen nothing to indicate that this is likely or even possible (without packing in feed).

Options include closing the area to grazing, limiting grazing, and/or conducting research to provide additional information. Grazing will need to be significantly curtailed for limitations to be effective. (The soils remain saturated throughout the season in much of the forage areas; only a few nights of grazing per year by heavy animals may prevent this area from "healing.") One option (to avoid prohibiting grazing entirely) would be to allow only private walking burro (or llama) parties of five head or less.

RECOMMENDATION:

Prohibit grazing, or limit grazing to private walking burro (or llama) parties only, with a five head limit, and perhaps also a one-night or two-night limit. Adopt the opening dates of 7/15 (dry), 8/1 (normal), and 8/15 (wet), as recommended by the SEKI Range Conservationist ("Recommendations for 1991 Meadow Management," by Michael Neuman, January 17, 1991).

TITLE BIG FIVE LAKES

Photo-Saver
Made in U.S.A.

MUG-BILL
PHOTO-SAVERS



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7-25-91

mbw @ inlet of Big Five #4

4-2

Big Five Lakes #4 and #5

meadow is at inlet of lake #4

4-1

)

7-25-91

mbw @ inlet of Big Five #4

4-4

7-25-91

mbw @ inlet of Big Five #4

4-3

DATE 1997 NO.

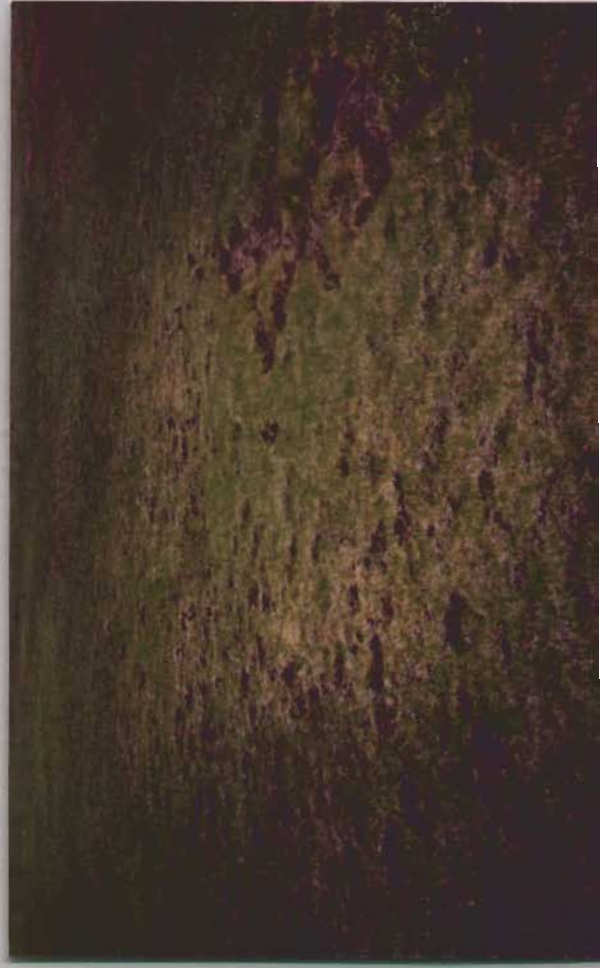
TITLE BIG FIVE LAKES

VUE-ALL
MULTI-PURPOSE

Photo-Saver
Made in U.S.A.



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ndw @ inlet of Big Five #4

4-6

7-25-91

ndw @ inlet of Big Five #4

4-8

1991 ndw @ inlet of Big Five #4

4-5

Big Five Lks

ndw @ inlet of lake #4

shows example of streambank trampling

4-7

ACTION ITEM #5

Stock management at Lost Creek and Soda Creek

THE PROBLEM:

Opening dates for grazing at Lost Creek and Soda Creek are insufficient to protect soils/meadows from trampling impacts.

DISCUSSION:

This year the forage areas in Lost and Soda Canyons remained wet over two weeks past the July 1 opening date. Tyler Johnson (Kern trail leader) visited upper Lost Canyon on July 15 and described it as "very wet." Jim Harvey (NPS packer) also passed through Lost Canyon on July 15, and commented that the meadows at the Big Five junction were only "marginally" ready for grazing due to wet soils. Case/incident report 100549 contains my own detailed observations.

Lost and Soda Canyons are physiographically similar to upper Rattlesnake Canyon, yet Lost/Soda currently opens for grazing two weeks earlier.

RECOMMENDATION:

Adjust opening dates (for all precipitation years) at Lost Creek and Soda Creek to coincide with opening dates at Upper Rattlesnake Creek.

APPENDIX A

GEAR NEEDING REPAIR FOR 1992

1. Door flap of main tent was ripped by bears. Needs repair.
2. Straps for tying both main tent and rainfly doors were torn and/or removed by bears. Repair and replace straps.
3. Recharge two batteries for electric fence.



APPENDIX B

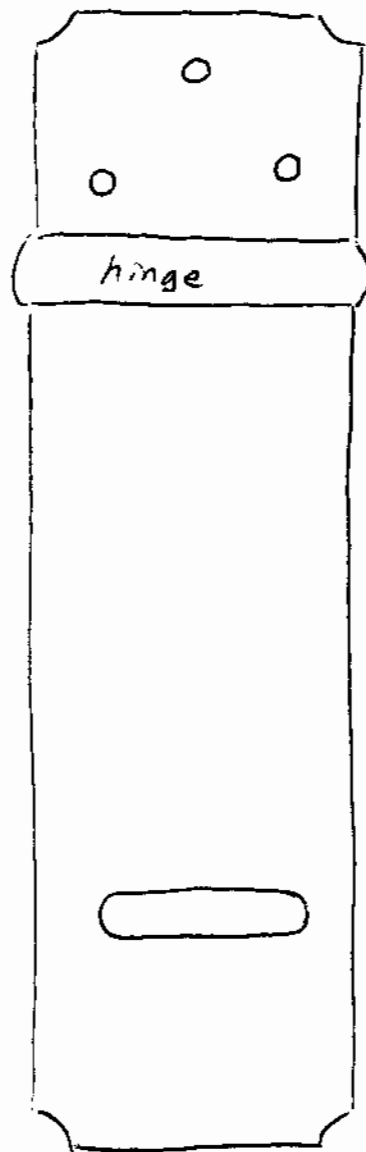
STATION NEEDS FOR 1992

To be purchased:

1. 1 piece 3/8" or 1/2" plywood, 40" X 24.75" (to replace door piece broken by bears)
2. 2 pieces 3/8" plywood, 3' X 4' (to lay atop food boxes for bed)
3. 1 piece thick (i.e. comfortable) foam mattress, 6' X 4' (to lay atop plywood for bed), preferably with cloth cover (removable for washing). This cannot be a bulky cotton type mattress...it has to fit in storage boxes at station over the winters. (NOTE: items #2 and #3 can be slightly larger in both dimensions, but not smaller).
4. 4 pieces 4" X 4", 22" lengths, (support legs for bed...cheap lumber is fine)
5. 2 books, both available at SNHA:
 - a) Field Guide to Birds of North America (National Geographic Society). The station has a copy of "Discovering Sierra Birds" but needs a better book to help identify birds. Note: Research Div. may pay for this if you ask Dave Graber.
 - b) Place Names of the Sierra Nevada, (Browning).
6. 2 large coffee mugs (to replace those broken by bears).
7. 1 roll heavy duty aluminum foil (heat shield to protect tent from wood stove).
8. 2 replacement dowels for seat of "directors" (folding) chairs
9. 2 hasps for food lockers, see diagram (attached)
10. 6 insulators for electric fence
11. 1 wire strippers (I cut my hand stripping insulation off wires with my pocket knife...be careful!)
12. 2 lantern generators: #290-5891 (for Coleman lantern model 290A700 at station)
13. 1 solar shower (a sturdy one...about \$15-\$20 at any outdoor equipment store)

Items at Ash Mtn needed at station next spring (from Sierra Dist cache or warehouse):

1. tent and fly (sent out for repair)
2. Coleman stove, 2 or 3 burner, (sent out for repair), and at least one extra generator. Note: There is one extra generator (model 426-5621) at the station which may work depending on the model of stove sent out next year.
3. 200-300 feet of parachute cord
4. 2 batteries (recharged!) for electric fence, "marine" type; black with yellow caps
5. 20 gov't messenger (holo) envelopes
6. 1 pad lined paper
7. 1 "handful" paper clips (or stapler)
8. 10 burlap ("gunny") sacks
9. 20 each, large (garbage can size) and small (office litter basket size) trash bags
10. approx one dozen tool handle wedges (assorted sizes)



NEED TWO OF THESE AT LITTLE FIVE R.S.

APPENDIX C

NOTES FOR THE 1992 LITTLE FIVE RANGER

1. Instructions on how to set up the station are found in the station manual under "Station Closing." Don't forget to have the station manual flown in with the tent or you won't have the diagrams for assembling the station shelves, stove, etc. (It takes about five days to get the station set up...it's a real pain...have patience.)
2. Other instructions, such as for the electric fence, are in a cardboard box inside the "bomb case" behind the station.
3. A fair amount of firewood is split and stacked under a tarp slightly uphill and west of the privy. A little bit of firewood is in the boxes at the station...hope it's enough to get you by until the snow melts.) If the trail crew is working in the area, you can ask them to come by and cut some more rounds for firewood. (Their camp is down in the Big Arroyo, on the west side of the creek, about 1/4 mile downstream of the patrol cabin area.)
4. A good spot for a shower is about 100 feet uphill of the privy. Already up there is: a pulley to hang a solar shower, and a pallet to stand on. Shouldn't be too hard to find. (Bring your own solar shower if Sierra Dist doesn't purchase one this winter.)
5. The pieces for the station shelves, and some other supplies, are stacked against a tree up the hill about 100 feet from the wet (snowy?) meadow just outside the station. The privy is just uphill of the stack of lumber. If the snow is real deep, you'll know where to start digging by finding a couple long two by fours leaning up against a lodgepole pine. Good luck.