

## END OF SEASON REPORT

Tyndall Creek Station      Paul Atkinson      1989

The 1989 season was another relatively quiet one at Tyndall. Backpacker use on the John Muir Trail was up slightly in the area, but I still could go days in some of the higher trailless areas without seeing anybody at all. It was a dry summer following a dry winter (for the third year in a row): snow was almost completely melted by the end of June, and we had only a couple of good thunderstorms throughout the summer. Creeks were mere trickles by August.

I hiked into Tyndall over Shepherd Pass on 06.24.89 and flew out on the Park helicopter on 09.21.89. It was a good season that, as usual, zoomed by all too quickly.

### Bears

The entire Upper Kern seemed to be devoid of bears this summer except for a single two-week period in late July when one bear showed up at Tyndall. The bear was extremely skittish. I never saw it during the daytime, and the slightest noise at night sent it flying. It got food that was poorly hung at the Tyndall Creek campsites on three occasions. I lay in wait for it for many nights before I was finally able to ambush it as it climbed a tree for my stuffsacks full of rocks. I pummelled it with stones and it never came back.

To prevent any further bear problems, however, I made proper food storage one of my major emphases. Every night I patrolled the area campsites, making sure food was properly hung. Well over half (58 percent) of the time food was incorrectly stored and I spent many long hours assisting people. Results of my food-storage compliance check are summarized in Attachment A.

The Tyndall bear probably would have stuck around much longer and gotten more food if I hadn't put in such long exhausting hours patrolling and rehangng food for people. My food-storage compliance check clearly shows that most people cannot properly counterbalance their food. Because of this, and because we have seen bears here for the past two years, I am requesting three bear boxes for the

Guard area to 11,200 at Sheep Camp Meadows. Virtually all the subalpine forest ecosystems that we are trying to protect with our fire limits occur below 11,200'. We are not protecting anything.

One of the trees that grows in these high subalpine areas is the Foxtail Pine. Besides the Southern Sierra, it grows only one other place in the world. Foxtails are known to live to ages well in excess of a thousand years, and the wood of dead foxtails just south of the Park has been radiocarbon dated at 6,300 years (Scuderi, Nature 325, 242-245, 1987). Wood that took over a thousand years to grow, wood that has been on the ground for millennia, is gone -- burned in our campfires -- in a night.

To get some sort of quantitative handle on how much dead and down wood there is in these high areas I did a ground fuel inventory at the Tyndall Creek crossing (elevation 10,900') in September using the standard Planar Intersect (Brown) Method. Results are shown in Attachment C. The data obtained verify what is obvious to anyone camping there: by the end of the season, dead-and-down wood is almost non-existent. Campfires have no doubt contributed substantially (if not exclusively) to this condition.

I wish I'd had time to do similar transects elsewhere in the Upper Kern, and at different times during the season (early and late). The results, I'm sure, would conclusively show that 1) there is little wood to be burned, and 2) what little there is is all being torched in campfires.

For a long time, I think, we've been reluctant to limit campfires any further because we've feared a huge public outcry. I decided to test the public's reaction to tighter campfire restrictions by conducting an informal survey. Throughout the summer I asked backpackers at the Tyndall Creek campsites (elevation 10,900') if their trip would be affected if fires weren't allowed. Out of 90 groups surveyed, the overwhelming majority (84 groups, or 93 percent) said their trips would not be affected. Obviously, fires are not of primary concern to most wilderness users anymore.

Many backpackers, in fact, do not expect to be able to have a fire here at all. Many of the people I asked who didn't have a fire mistakenly thought fires weren't allowed in the Parks anywhere, or that they were only allowed below 10,000', as they are in Kings Canyon. And of the people I questioned who had a fire, many were apologetic, saying they had lit the fire only to keep away the mosquitoes or burn trash or dry out socks.

In late July, Meadow Monitor Mike Neuman made a five-day trip through the Upper Kern, looking at meadows and stock-use impacts in the area.

Stock use in the Upper Kern drainage concerns me. At present, use is low compared with places like Rock Creek or the Lower Kern. But as we saw this summer at Milestone, all it takes is two stock trips to foul one of these high pristine meadows. We must take quick action to prevent something like this from happening again.

With the exception of the John Muir Trail, the trails in the Upper Kern are not suited to stock use. Most of them are not maintained and, according to the Stock Use and Meadow Management Plan, should not be used by stock at all. Some have sections that fade away and are almost impossible to find. Most are very rocky, and many have extremely steep sections, with grades of up to 44% (the NPS Trails Management Handbook recommends that trail grades for stock should ideally be less than 7%, and not greater than 10%). Trails in the area that should be closed to stock travel, and my reasons why, are listed in Attachment D.

In setting grazing limits and closures in the past, it seems to me that we have asked only one question: Is grazing causing irreparable damage to the meadow? The immediate aesthetic impacts of stock use have been ignored. We must recognize that not everybody nowadays grew up with stock, that not everybody going into the backcountry enjoys the smells, the flies, the noise and the dust of the barnyard -- or at least that they aren't going into the backcountry to experience those things. After Milestone Basin had been grazed by the Trail Crew's stock this year, I received a flood of complaints from visitors who were extremely unhappy to find not an untrammelled wilderness but instead a "stinking cesspool" (one gentleman's words).

Just as we designate smoking and no-smoking areas in government buildings, so should we designate stock and no-stock areas. The Upper Kern drainage is a prime spot to set aside for human use only. It is rugged and remote, with meadows that are vulnerable to stock damage. Its trails are not maintained for stock travel. I argue that we close the entire area -- from the Kern-Kaweah and Wright Lakes Basin north to the Kings-Kern Divide -- to all stock use.

#### Medicals/Searches/Visitor Assists

Fire engine chasers in the Upper Kern were disappointed this summer. I had no major medicals, medivacs or searches.

### Aircraft

This year was no different than last with regard to military aircraft: they careened and roared across the sky all summer long. I reported only five low-flying military jets, but the noise of the thousands of others that flew over was every bit as obnoxious and irritating. I recommend that we request Congress to ban all military overflights in the Parks.

### Sensitive Plants/Archaeological Sites

I found no new populations of sensitive plants, nor did I find any new archaeological sites.

### Signs

This season I planted eleven signs that were ordered last year. It took more than half the summer of hassling to finally get all the signs. First, they hadn't been made, then the helicopter never had any room for them (twice I hiked down to Cold Spring Camp thinking my signs were coming in on a Trail Crew flight, only to find that the signs had been preempted by caseloads of beer for the Trail Crew). It was very frustrating.

All trails (including those in the Crabtree area) were measured with a measuring wheel to get distances for new trail signs. Fifteen new signs have been ordered. Trail distances that I measured are listed in Attachment E.

### Group Size

Maximum group size for many trailheads in the Parks is 25. I recommend lowering it to 15. Large groups concentrate use into small areas. Even the biggest campsites in my area cannot handle ten or twelve tents without some resource damage, particularly around the periphery of the site, and the end result is that campsites get bigger and bigger and more and more trampled.

Also, bear boxes cannot accommodate the huge quantities of food carried by large groups. Even if all the food does fit, there is no room left for other backpackers. This was frequently the case at the bear boxes at Vidette Meadow and Wallace Creek.

stance. If we are serious about protecting the resource, we need to write all of these basic rules into the Superintendent's Compendium.

### Wilderness Permits

I was surprised this summer to learn that we allow commercial packers to write wilderness permits for backpackers who receive a food drop from the packer midway through their trip. This just circumvents the whole permit process, since packers are exempt from trailhead quotas. Why should these backpackers be granted any sort of privileges over other backpackers? They should be required to get their permits like any other backpacker through the regular channels.

### Communications with USFS

It's a shame that the Sierra Crest is split smack down the ridge by two entirely different governing agencies. Not only does this make it difficult for all of us to consider the mountains as a whole, but it makes it difficult for everyone to work together to manage them well. It's pretty sad when I hardly even know the names of the East Side wilderness rangers, let alone what sorts of things they're doing over there -- just three miles away over Shepherd Pass. In my opinion, communications between SEKI and Inyo National Forest personnel (especially between Sierra Crest wilderness and trailhead rangers) is something we need to develop and nurture.

There are two simple things we could do to improve the situation. First, adding Forest Service frequencies to our radios would allow us to communicate directly with them. We could thus, for example, advise them directly of any problems that they should be aware of (bears, trail conditions, etc.), and vice versa.

Second, I suggest that we invite Inyo's wilderness personnel to one of our back-country training days at the beginning of the season (just as we've been including our own trailhead people recently). It would be a time for us all to get to know one another, a time to exchange ideas and suggestions and frustrations. We would all benefit, and, in the end, wilderness users and our wilderness areas themselves would benefit as well.

### Volunteers

programs. By sending out requests many months in advance, we could match the right group to the right project and develop strong communications with these volunteers. Projects could be planned carefully. Volunteers would understand precisely what we expected of them, and we would know better what we were getting.

A first step would be to request from each ranger a list of projects that would lend themselves to group work, along with an estimate of numbers of volunteers and days needed to complete the project. The next step would be to mail out a form letter to scout councils, etc. And then after that it would just be a matter of matching groups with projects.

#### Department of Water Resources/Army Corps of Engineers

I removed the aerial snow survey poles from both Tyndall Meadow and the Upper Tyndall snow sensor site. The poles and cement foundations still need to be flown out.

Because the Army Corps apparently didn't even know what equipment it had at the Upper Tyndall snow sensor site, I photodocumented it for them. This fall they were supposed to fly in to remove all the unnecessary junk (including a buried cement vault containing radioactive cobalt!), but they never made it. I expect to see them there next summer.

Herm Raimundo and Bob Carbajal from the DWR arrived in September to restock the cabin for the winter. In contrast to last year's fiasco, their stay went very smoothly and was, surprisingly enough, even enjoyable.

Once again, the DWR sent d-CON mouse poison in to my station this year. Once again, I threw it all out. d-CON is a nasty, slow-acting hemorrhagic poison that is illegal to use in the parks. I ask that DWR be requested to desist from using it.

The DWR uses their own propane stove and lantern in the cabin during the winter. These both use little propane canisters which are unrefillable and must be thrown away after they're used up (they don't last very long). We need to look into finding some sort of alternative canisters that can be reused and are more environmentally acceptable.

Because the DWR has had a long history of violating NPS regulations, I suggest

Junction Meadow and used as a powder magazine. Nearly sixty years have elapsed; the structure is now crumbling. The roof is caved in and the bottom logs are rotten.

The place is literally a dump. People treat it with no respect at all. It collects garbage and is used all too frequently as a toilet. Almost every time I go by it I can bet on finding human feces, wads of toilet paper and other items of interest inside.

The cabin is not listed by the park as an "historic structure." It is a hazard and an eyesore. I recommend that it be incinerated.

#### Radio Call Numbers

Over the course of the summer I noticed a lot of confusion over radio call numbers. The first number of a call number is often chopped off or unreadable over the radio. Are they calling 2-1-3 or 3-1-3? Was that 2-1-6 or 3-1-6? Suk was answering for Atkinson, Durkee for Malengo and Scattaregia for Kenan.

The system of assigning each subdistrict a separate number is neat and sensible (even though the distinction between the 1's and 2's is not very clear). But with very few rangers in the backcountry, all of us could easily be lumped together for clarity's sake. And that, as weird and radical as it may sound, is just what I propose we do.

## ATTACHMENT A: COUNTERBALANCE COMPLIANCE

Tyndall Creek Campsites, John Muir Trail -- Summer, 1989

Total number of groups contacted at campsite in evenings: 119  
Number of groups that counterbalanced food properly: 50 (42%)

Of those 69 groups that didn't store their food properly,

- 37 (54%) hung food <6' from tree trunk (too close)
- 15 (22%) were going to sleep with their food
- 12 (17%) hung food but tied off rope (not counterbalanced)
- 9 (13%) hung food <10' above ground level (too low)
- 7 (10%) hung food from a dead limb (brittle, breaks easily)
- 5 ( 7%) had no rope with them so couldn't store their food properly --  
    I had to lend rope
- 3 ( 4%) hung food on a line tied between trees

### Notes

1. Percentages add up to >100% since there can be multiple problems (e.g., hung on dead branch and too close to tree trunk).
2. Because the Tyndall area is remote and difficult to get to, backpackers camping here tend to be much more experienced and sophisticated than those using other areas of the backcountry. The 42 percent compliance at Tyndall is therefore probably very high compared to most other areas.



## ATTACHMENT C: GROUND FUEL INVENTORY

### Planar Intersect (Brown) Technique

Area Inventoried: Campsites on John Muir Trail at Tyndall Creek crossing. .

Species Composition: Lodgepole Pine

Transect Location: Beginning at second campfire pit to the south of the John Muir/Tyndall Creek crossing, on the east side of the creek. Transect runs due east (90 degrees) for 1400 feet.

Elevation: 3320m - 3380m (10,900' - 11,100')

Plot Locations: Every 100 feet along transect. Thus plot #1 is at 0' (right in campsites), plot #2 is at 100' and plot #15 is at 1400' (over 1/4 mile from campsites).

Sampling Plane Lengths: Lengths determined for light fuel loads (Brown, 1974, pp.3,22)

0-1" diameter material:	6'
1-3"       "       "	: 12'
>3"       "       "	: 50'

### Notes

1. To minimize bias, transect location and azimuth, plot locations and sampling plane lengths were determined before entering sample area. Sampling plane azimuths were determined randomly by the toss of a die.

2. Because fuel loads in the area are very light (indicated by the plethora of zeros on the data sheet), far more sampling planes would need to be used to calculate the amount of downed fuel precisely. However, my purpose here is not to provide an exact figure in tons/acre, but rather to show the extreme dearth of dead-and-down wood in the area. The data I collected from my fifteen sampling planes show that quite clearly.



## ATTACHMENT D: CONDITION OF UPPER KERN TRAILS

Seven trails in the Upper Kern drainage are currently in extremely poor condition and should not be used by stock. The trails, and reasons for closing them to stock travel, are listed below.

### Upper Kern Loop

1. Trail is not maintained.
2. Trail is difficult to follow in many places.
3. Section of trail through Lake South America Col Meadow is routed directly through the meadow.
4. Section of trail up Lake South America Col has grades of up to 42 percent (grade is almost all greater than 35 percent); footing is all loose decomposed granite.

### Upper Kern Cutoff

1. Several sections of trail just above the Kern have grades of 25-34 percent.
2. Dust in steep sections of trail was up to five inches deep after stock had used it in August.
3. Several sections of trail are very rocky.

### John Dean Cutoff

1. Trail is not maintained.
2. Entire lower portion of trail is extremely steep with grades of up to 44 percent (slope that trail goes down has a 53 percent gradient).
3. Lower trail is extremely rocky with very loose footing.

### Colby Pass Trail

1. Trail is not maintained.
2. Several steep sections of trail have grades of 26-40 percent.
3. Steep sections of trail are extremely rocky with loose footing.

Milestone Basin Trail

1. Trail is not maintained.
2. Trail fades out and is impossible to follow after 3/4 mile.

Wright Lakes Basin Trail

Trail hasn't existed for many years and is now almost impossible even to find.

**ATTACHMENT E: UPPER KERN AREA TRAIL MILEAGES**

Measured Summer 1989 by Paul Atkinson, Tyndall Creek Ranger

John Muir Trail (Forester Pass to Mount Whitney)

	running total	distance between pts
Forester Pass		
Upper Kern Cutoff Trail Junction	4.7	4.7
Tyndall Creek Crossing	4.9	0.2
Shepherd Pass Trail Junction	5.0	0.1
John Dean Cutoff Trail Junction	5.1	0.1
Tyndall Frogpond outlet Crossing	5.5	0.4
Bighorn Plateau	6.8	1.3
Wright Creek Crossing	8.7	1.9
High Sierra Trail Junction	9.4	0.7
Pacific Crest Trail Junction	12.8	3.4
Crabtree Ranger Station Junction	13.6	0.8
Crabtree Ranger Station	(13.8)	(0.2)
Timberline Lake (at outlet)	15.0	1.4
Guitar Lake (Arctic Lake Creek)	16.3	1.3
Whitney Trail Junction	19.2	2.9
Trail Crest	(19.3)	(0.1)
Mount Whitney	21.1	1.9

High Sierra Trail (Lower Kern River Trail Junction to JMT)

	running total	distance between pts
Upper Funston Meadow Campsites	(0.2)	
Lower Kern River Trail Jct.		(0.2)
Kern Hot Springs (bulletin board)	1.8	1.8
Whitney Creek Crossing	7.2	5.4
Wallace Creek Crossing	9.1	1.9
Colby Pass Trail Junction	9.3	0.2

John Dean Cutoff Trail (JMT to Upper Kern Canyon Trail)

	running total	distance between pts
John Muir Trail		
Tyndall Ranger Station	0.6	0.6
Shepherd's Cabin	1.5	0.9
Upper Kern Canyon Trail Junction	3.5	2.0

Shepherd Pass Trail (John Muir Trail to Shepherd Pass)

	running total	distance between pts
John Muir Trail		
Trail Re-Route Sign	2.0	2.0
Shepherd Pass	3.4	1.4

Crabtree Loop (Crabtree R.S. to Lower Crabtree Mdw. to JMT)

	running total	distance between pts
Crabtree Ranger Station		
Ranger Station South Junction	0.1	0.1
Ranger Station North Junction	0.2	0.1
JMT/PCT Trail Junction	1.0	0.8
Lower Crabtree Meadow Trail Jct.	1.7	0.7
Ranger Station South Junction	2.8	1.1

Pacific Crest Trail (JMT Junction to Rock Creek Ranger Station)

	running total	distance between pts
John Muir Trail Junction		
Lower Crabtree Mdw (Whitney Creek)	0.7	0.7
Guyot Pass	4.0	3.3
Lower Rock Creek Crossing (*)	6.3	2.3
Rock Creek Ranger Station (*)	7.0	0.7

Colby Pass Trail (High Sierra Trail Junction to Colby Pass)

	running total	distance between pts
High Sierra Trail Junction		
Top of "Chute"	1.8	1.8
Gallats Meadow	5.3	3.5
Colby Pass	8.5	3.2

Upper Kern Canyon Trail (HST to Milestone Basin Trail Jct.)

	running total	distance between pts
High Sierra Trail Junction		
Powder Magazine	0.2	0.2
Tyndall Creek Crossing	0.9	0.7
John Dean Cutoff Trail Junction	1.9	1.0
Milestone Basin Trail Junction	4.7	2.8
Upper Kern Cutoff Trail	4.9	0.2

Upper Kern Cutoff Trail (JMT to Upper Kern Canyon Trail)

	running total	distance between pts
John Muir Trail		
Upper Kern Loop Trail Junction	0.7	0.7
Upper Kern Canyon Trail Junction	3.2	2.5

Upper Kern Loop Trail (Upper Kern Cutoff Trail to Upper Kern River Trail)

	running total	distance between pts
Upper Kern Cutoff Trail		
Lake South America Col	1.9	1.9
Lake South America Trail Junction	2.2	0.3
Lake South America	(2.4)	(0.2)
Upper Kern River/Cutoff Trail Jct.	5.3	3.1
Milestone Basin Trail Junction	5.5	0.2