#### END OF SEASON REPORT

Tyndall Creek Station Paul Atkinson 1990

The 1990 season in the Upper Kern was similar in many ways to previous seasons at Tyndall: backpacker use-levels were comparable, it was another very dry year, military aircraft continued to roar overhead, and people kept right on pitching their tents on the grass. It was, however, a much busier summer. There were more searches, more medicals, and bear activity increased significantly. Also notable was the fact that stock use skyrocketed, with a corresponding increase in stock impacts in many areas of the Upper Kern.

I hiked into Tyndall over Shepherd Pass on 18 June, and left by park helicopter on 24 September.

#### **Bears**

Halfway through the summer, after bears had definitely discovered Tyndall and were getting a fair amount of anthropogenic food, I finally received two bear boxes. Before I got the boxes, food storage compliance was a remarkably poor 21 percent (down from 42 percent last year) [see Attachment A], but even when food was counterbalanced relatively well, bears were still plucking it out of the trees. It got to the point where I couldn't be sure if any food at all was safe, no matter how well it was hung.

The bear boxes worked wonders. Once they arrived, incidents stopped completely, even though the bears were still around (evidenced by overturned boxes, scat and isolated sightings). More than ever, I am convinced that bear boxes are needed along high-use trail corridors with bear problems, and that some heavily used camping areas need multiple boxes -- the capacity of one bear box is simply not enough when several large groups are camped together. Many times I've watched people (usually boy scouts) shoving and pushing and jumping up and down on bear box doors trying to cram everything in.

Three of the five hoves I requested last year still need to be placed: one at

or to replace a broken box). Harold Werner thinks we may be able to buy boxes in small quantities in the future, which would make this a relatively simple matter.

Bear boxes do concentrate use. When I put a box at the campsites on the north side of the Tyndall Creek crossing, the campsites on the south side were used almost not at all; likewise, use increased significantly at the Frogponds after the box was placed there. I am not convinced that this is such a horrible thing, though. The campsites around these two bear boxes were already heavily impacted years ago, with huge firepits and large barren areas of compacted dirt. The increased use they saw this summer didn't appear to affect them in the slightest. In fact, the crossing sites look even better now that the firepits have been removed.

## Campfires

Fires were banned from within 300 feet of the Tyndall Creek crossing this year. The result was nothing short of spectacular. After just three months the campsites look infinitely better (and this in spite of increased use due to the new bear box!).

The regulation as it is written, however, is unrealistic. Only four campsites fall within 300 feet of the crossing. These four are all on the north side of the creek and constitute less than half the total number of sites in the area. To prohibit fires at one site but allow them at an adjacent site just a few feet farther downstream makes no sense. The amount of fuelwood is no greater 400 feet from the trail crossing than it is at 300 -- in fact, some of the campsites which are over 1,000 feet from the crossing (on the south side of the creek) have far less wood. If we are going to close an area to fires, we must close all the campsites in that immediate area, not just a few of them.

The argument that 300 feet is the standard distance used by the forest service for such restrictions just doesn't hold water. At Anvil Camp, only five miles away over Shepherd Pass in Inyo National Forest, fires are prohibited within 1,000 feet of the Shepherd Creek crossing (which includes the entire camping area); in the Onion Valley, Whitney Portal and Cottonwood areas, the Forest Service has closed the entire drainages to fires.

To quantify the fact that dead-and-down wood is scarce or non-existent in many areas where fires are still allowed, I did ground fuel inventories in ten different places. This data has been combined with that gathered by other Kern

At the risk of sounding like a broken record, I once again recommend that we prohibit the use of saws and axes in the backcountry, and that we limit the size of wood that people can burn to a maximum of four inches in diameter. [See Attachment C.] I also recommend that we lower the elevational limit on campfires from 11,200 feet to 10,400 in the Kern River drainage. I have repeated my reasons over and over for the past three years. None of these reasons have changed.

## Stock Use/Meadow Management

As predicted, the opening of Shepherd Pass to pack animals this year flooded the Upper Kern with stock. This summer saw a 157 percent increase in the number of stock in the area over last summer and a 183 percent increase over two summers ago. Of my visitor contacts this summer, 14 percent were stock users compared to six percent last year and four percent in 1988.

Two commercial pack outfits, Rock Creek and Rainbow Pack Stations, accounted for almost all of the stock use in the area. All of the packers I encountered from these two stations were friendly and cooperative, and I enjoyed working with them. They did commit a few resource violations (written up on Case Incident forms), but overall I feel they honestly cared about the backcountry and were trying to do their best in working within our framework of regulations.

The three areas in the Upper Kern that were hit hardest by this increase in stock use were the Tyndall Frogponds, Milestone Basin and the Kern River area near the Milestone trail junction.

Stock use in Milestone Basin was restricted this year to fifteen head per party with a two day limit. This was interpreted by Sierra District, however, to mean that a party could take any number of stock into the basin as long as they grazed only fifteen animals at a time. Thus, exactly the same number of animals grazed in Milestone as would have if it weren't regulated at all; the only difference is that they grazed in shifts. As a result, Milestone suffered even more damage than last year. [See attached photos.]

To argue whether this damage is permanent or not is beside the point. The point is that these high alpine meadows are easily impacted by stock, and these impacts remain visible for the duration of the summer. Anyone visiting mid- to late-season sees an area that is definitely not "untrammelled wilderness."

The Upper Kern Canyon near the Milestone junction and at the lake just a half-mile north (Mitochondria Lake) received extremely heavy stock use as well. Although the area is somewhat less fragile than Milestone Basin, it is in a narrow canyon with very restricted camping. Stock parties ended up camping over and over at the same small campsites. By the end of the summer, the area looked completely worn out and in much worse condition than ever before. [See attached photos.]

Once again, I propose that we create stock-free zones by closing several of the high basins in the Kern to all stock use. Without question, Milestone and Wright Lakes Basins are two that should be closed. Milestone has suffered under the heavy hooves of horses and mules long enough; Wright Lakes Basin's meadows are similarly wet and fragile. Backpackers deserve places where they can escape from stock completely if they want.

I also suggest that we take a closer look at our own administrative use of stock. For example, the Kern Trail Crew's use of stock seems to me to be excessive. There is no reason why each crewperson needs a riding horse; on foot they could clean waterbars, rock the trail, and do other light trail maintenance as they travelled. With eleven head of stock, the crew is limited to only certain camps and a lot of time is wasted travelling back and forth to worksites. Without stock, the crew could be much more flexible, camping right at worksites, for example, and thus a lot more productive. This is not an unrealistic idea. Since the trail crew is supplied once a week by helicopter, it is not tied to stock for basic provisions. The forest service employs backpacking trail crews which, according to a friend of mine who used to be on one, work well. There's no reason why they couldn't work here.

# Backpacker Use

Backpacker use patterns were much the same as in years past: highly concentrated along the John Muir Trail and dispersed elsewhere. I still recommend that we limit group sizes to fifteen on trails and six for cross-country travel. Large groups tend to enlarge campsites by camping on peripheral vegetated areas, and they fill up bear boxes so others cannot use them. In remote cross-country areas, large groups not only have an unacceptably high physical impact, but they can be a visual intrusion as well.

The forest service's newly rebuilt Shepherd Pass trail held up amazingly well, despite the heavy stock traffic up and down it all summer long. The upper section did get narrower and narrower due to small rockslides as the season progressed, and one switchback slipped completely away, but the packers always managed to shore things up enough to keep it open. Regardless of its condition, though, this trail remains difficult for both stock and backpackers. The packers never did like it, even early in the season when it was three feet wide. There were numerous wrecks, and one horse, early in the season, fell it its death (it remains there to this day, and still reeks). [See attached photos.]

## <u>Signs</u>

All trail signs in the area now contain accurate trail mileages and are uniform in appearance (ugly anodized aluminum with rusty metal posts). In addition to twelve junction signs, I also replaced the signs on Colby and Forester Passes with new ones that give the pass name and elevation. The Milestone junction sign had to be installed using a steel bar drilled into solid granite. It's not as permanent as it might seem, however, since I drilled the hole near the edge of a large granite flake. If we ever want to remove the sign, a few good whacks on the post with a sledgehammer should chip off the edge of the flake, leaving no evidence of the hole at all.

To my great surprise, the black coating on these signs scratches off remarkably easily; in fact, even when helitack was unloading them out of the helicopter at Tyndall, several got badly scratched. I fear it won't be any time at all before all our fine new signs bear the initials of every moron who passes by.

Bulletin boards became necessary in order to inform people of the campfire restriction at the Tyndall Creek crossing (especially since it wasn't on any regulation sheets and virtually no one was told about it when they got their permits). I used blank 12x18 anodized aluminum signs and placed them on either side of the crossing. I kept them neat and tidy and many backpackers commented positively on them. [See attached photos.]

## <u> Aircraft</u>

As in years past, military jets roared and rumbled over the Upper Kern in a constant stream every day, all day long. Only rarely did they fly less than 3,000 feet above ground level, but frankly, their constant noise at high alti-

Two people were evacuated from the area by helicopter for medical reasons: Marvin Carr had pneumonia which was exacerbated by high altitude, and Missy Jennings cut her leg deeply on a foxtail snag and required stitches. I monitored two other medical cases, both of which were children who were feeling nauseous and feverish, but who recovered after a day of rest. Three people complained of knee problems; they required nothing more than ace bandages.

During the Marvin Carr medivac at the Tyndall Creek crossing the park helicopter clipped a tree with its tail rotor and was temporarily grounded. Mechanics shuttled in and out of the area for days to replace the tail boom and put the ship back in operation. [See attached photos.] The wreck of a private airplane that had been missing since last January was discovered mid-summer by some backpackers just east of Colby Pass. It was removed soon after by park personnel.

### Regulations

All summer long I had to ask people not to camp on vegetation (31 times, in fact). This is one regulation that just doesn't seem to be a part of people's common sense repertoire. Many people simply could not understand what was wrong with putting their tent on some dead-looking, dried-up Carex. I received several complaints about this regulation from backpackers who claimed that they were doing far less damage to the vegetation than horses did when grazing.

Rock Creek Pack Station made a practice this summer of digging their own firepits at all their camps in the Upper Kern. Their intentions were good since they were trying to avoid blackening any more rocks; however, they often dug pits right next to perfectly good, long-established firepits. This certainly saved nothing at all since the rocks in the existing pits were already black. Also, these new pits, even when covered over with dirt, oftentimes were quickly reexposed, usually by animals. I am not at all convinced that this is a beneficial practice. Since there are plenty of existing firerings throughout the backcountry that can be used, I believe we should prohibit the construction of any type of firepit or fireplace and should modify the wording on our minimum impact sheet accordingly.

# Upper Tyndall Snow Sensor Site

In mid-July, two technicians from the Army Corps of Engineers flew into the Upper Typdall spow sensor site to remove the old radioactive cobalt yault and the

#### Ozone Station

One of my most enjoyable projects this summer was servicing the ozone monitoring station (PLOMS) set up by Resources Management near Junction Meadow for the summer. The purpose of the project was to determine if the ozone levels at Junction Meadow are elevated or not. If they're normal, we will be able to collect baseline data on the jeffrey pines there. This data can then be used to compare these unaffected pines with pines elsewhere in the parks that are being damaged by high concentrations of ozone.

I helped set up the station and serviced it several times a month throughout the summer (including completely re-erecting and re-initializing it once when a bear ravaged it). [See attached photos.] At the end of the season I shut it down, dismantled it and flew it out to Ash Mountain. I will be analyzing the data we collected over the winter.

## Archaeological Sites/Sensitive Plants

I located many of the sites surveyed by Kristina Roper Wickstrom in 1987 in the Sheep Camp area, but found no new ones. No new populations of sensitive plants were found in the Tyndall area.

## **Balloons**

Each summer I seem to find more and more deflated helium balloons in the back-country. This summer I found seventeen. Sometimes they carry messages, advertising KJUG country radio station in Fresno, for example, or telling you to phone a certain number to collect a Cancer Society prize. Personally, I find these objects, with their bright ribbons and non-biodegradable plastic stoppers, to be highly offensive, mostly because they drop out of the sky into some of the remotest, most pristine spots in the backcountry -- the last places you'd ever expect to find garbage. I realize it's something that, like military aircraft and ozone pollution, we have no direct control over. Nevertheless, it does seem to be getting worse, and I do consider it to be a problem....

#### SUMMARY

Tyndall Creek Station Paul Atkinson 1990

#### <u>Observations</u>

- 1. Bear boxes were extremely effective in controlling bear problems at Tyndall.
- 2. Bear boxes concentrated use, but no increase in impacts was noted.
- 3. Impacts decreased significantly in sites where campfires were prohibited.
- Tree mutilation and other resource damage is becoming worse in areas where firewood is scarce.
- 5. Stock use increased dramatically in the Upper Kern this year.
- 6. Milestone Basin experienced significant resource damage due to stock use.
- 7. The Upper Kern area at the Milestone trail junction was heavily used by stock with some resultant resource damage.
- 8. Camping on vegetation continues to be a common resource violation.
- 9. Helium balloons are littering the backcountry in increasing numbers.

## Special Projects

- 1. Monitored small lightning-set fire on lower Wallace Creek for several weeks.
- 2. Inventoried fuelwood at ten sites in Upper Kern for possible fire closure.
- 3. Checked food storage compliance at Tyndall Creek crossing.
- 4. Built several waterbars on trail above ranger station to improve drainage around cabin.
- Installed twelve new replacement signs along trails, plus three bulletin boards.
- Serviced ozone monitoring station at Junction Meadow throughout the summer for Resources Management.
- 7. Inventoried numerous lakes for mountain yellow-legged frogs.
- 8. Worked on vegetation maps for area.
- Flew out three old aerial snow survey markers from Tyndall, Upper Tyndall and Bighorn Plateau.
- Flew out radioactive cobalt vault and other unused equipment from Upper Tyndall snow sensor site.

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### Recommendations

- 1. Close Milestone and Wright Lakes Basins to all stock use.
- 2. Lower fire limit in Kern River drainage to 10,400 feet.
- 3. Prohibit the use of saws and axes in the backcountry.
- 4. Limit the size of wood that visitors can burn to four inches in diameter.
- 5. Limit group sizes to fifteen on trails and six for cross-country travel.
- 6. Buy a supply of bear boxes specifically for backcountry use.
- 7. Tape bear box location sheets inside all bear boxes; bolt boxes to 4x4 wood runners.
- 8. Re-evaluate the Kern trail crew's need for riding and support stock, as well as other administrative uses of stock.
- 9. Re-route sections of Kern Cutoff Trail; build switchbacks to improve grade.
- 10. Prohibit the construction of any type of firepit in the backcountry, including pits dug in the soil.

#### ATTACHMENT A: COUNTERBALANCE COMPLIANCE

Tyndall Creek/Frogpond Campsites, John Muir Trail -- Summer, 1990

Total number of groups contacted at campsite in evenings: 47 Number of groups that counterbalanced food properly: 10 (21%)

Of those 37 groups that didn't store their food properly,

- 18 (49%) hung food <6' from tree trunk (too close)
- 9 (24%) hung food <10' above ground level (too low)
- 8 (22%) were going to sleep with their food
- 8 (22%) hung food but tied off rope (not counterbalanced)
- 5 (14%) hung food from a dead limb (brittle, breaks easily)
- 3 (8%) had no rope with them (I had to lend rope)

#### Notes

- 1. Percentages add up to >100% since there can be multiple problems (e.g., food hung too low and rope tied off).
- 2. Compliance checks were done between 23 June and 27 July. On 28 July two bear boxes were flown into the area. Food storage compliance jumped straight to 100% for the remainder of the summer.

## ATTACHMENT B: REQUEST FOR BEAR BOXES

Tyndall Creek Station Paul Atkinson 1990

#### Tyndall Creek Crossing, John Muir Trail: 1 additional box.

The dozen or so campsites here are heavily used throughout the summer. About half of these sites are located on the north side of the creek; the other half are about a quarter mile away on the south side. Quite a few bear incidents occurred in the area this summer. One bear box was placed this year near the north-side campsites, but this box has proved insufficient for the number of people camping in the area -- there were many days when it filled completely and some people had to hang their food. Another box on the other side of the crossing, as originally requested, would help alleviate this problem.

# Wallace Creek Crossing, John Muir/High Sierra Trail Junction: 1 additional box.

These campsites, at the intersection of two major trails, are also heavily used. One box already exists here, but I have received numerous complaints over the past three years that it has inadequate space when large groups are camped in the area. The additional box would also better accommodate the campsites on the other side of the creek during high-water conditions when the crossing is difficult.

# Wheelbarrow Camp, John Muir Trail: 1 box.

This camp is located on the north side of Forester Pass at about the 11,000-foot level. The only trees around are scrawny whitebark pines, all unsuitable for hanging food. These campsites are surprisingly heavily used since they are the last good places to camp before the long haul south over Forester Pass. Bear incidents occurred here with alarming frequency this year. A bear box at Wheelbarrow Camp would also help relieve much of the congestion people complain about the Bubbs/Center Basin box since more people would move on and camp at

#### ATTACHMENT C: PROPOSED ADDITIONS TO COMPENDIUM

Tyndall Creek Station Paul Atkinson 1990

 $\S 2.1(a)(4)(iii)$ 

Dead-and-down wood greater than four inches in diameter may not be gathered.

Justification: By placing limits on the size of wood that may be gathered, we could, to a great extent, control the size of wood that people burn in their campfires. This would tend to keep campfires smaller, and since smaller fires consume less wood, the drain on dead-and-down wood would be lessened. Smaller fires also mean smaller firepits, which are less damaging to the resource and are less visually intrusive in a wilderness setting.

Unless you've got a giant bonfire going, large logs do not burn well. Usually what is left at the end of the evening is a charred spot on a portion of the log -- the log is permanently and unnaturally scarred. However, if a log really does get going in a big bonfire, the fire can be difficult to completely extinguish. The log can smoulder for days and can become a fire hazard.

 $\S 2.1(a)(4)(iv)$ 

Saws, hatchets, axes and other cutting tools may not be used to gather wood.

Justification: The stump ends of logs that have been cut with saws and hatchets are distinctly unnatural and unsightly blights in a wilderness setting. Such impacts have long been evident in the front country, especially in areas around campgrounds, but they are also showing up more and more frequently in the back-country. This is occurring most frequently in places where firewood is in scarce supply -- people are turning to large logs to stoke their fires, and in all their hacking and whacking, they are permanently disfiguring what is left behind.

# SIERRA DISTRICT

# BC RANGER ANNUAL REPORT SUMMARY INFORMATION

1990

STATION: TYNDALL CREE	1	L <b>en</b> gth	of SEA	SON:	6.18	<b>-&gt;</b> 9-	24.3 34.5	
1. Total Visitor Contac	cts: 1608	<del></del>				- 150 - 150		
Day hikers: 66	(4%)	Count	each o	nly	once	per	day	
Backpackers: 1319	(82%)	Count	each o	nly	once	per	day )	
Stock users: 223	(14%)	Count	each o	nly	once	per	day.)	
2. Stock Observed: 280	0 (	Count	each o	nly	once	per	day	
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3. Total Miles Covered	: 799							
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4. Trash Removed: ~4	00 lbs	.1.		ugh 69	low 34			
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