SEASON END REPORT CRABTREE MEADOWS JUNE12-OCTOBER 13, 2000

ERIKA JOSTAD

A. GENERAL OBSERVATIONS

CONTACTS

Backpacker/Day hiker-2,848

Stock—219 animals contacted though more used the area. This number included pack and saddle horses, mules and burros. No llamas were contacted but there was evidence of them using the area. Commercial 59% (Cottonwood Pack Station, Rock Creek Pack Station, Reds Meadow Pack Station, Sequoia-Kings Canyon Pack Trains, Mineral King Pack Station), Administrative 25% (Kern Trail Crew, Kern Ranger, Military Overflight Trip), Private 16%.

START OF SEASON—Rangers arrived in the backcountry in late June after two weeks of training. Snow pack was reported at near "normal" for the eastern Kern River drainage. Passes were snow free and creek crossings were low by early June. Snowfall began late in winter (mid-January) and melt began early (late March). These conditions allowed for early backcountry access. There was significant evidence of backpacker and stock use in the park prior to arrival of Rangers, which included garbage in all area food storage boxes, newly built illegal fire rings, and stock use of meadows prior to opening dates.

LAW ENFORCEMENT—Violations addressed in the patrol area included improper food storage, vegetation damage, feeding of wildlife on Mt. Whitney, abandoned property, garbage left in campsites and fire pits, construction of illegal firepits, resource damage and poor practices in stock camps. I continue to successful utilize service projects on the spot where applicable to either remedy the violation or compensate for damage. Visitors typically respond positively to the opportunity to become a caretaker of the National Park wilderness rather than simply a "user" or "violator". This enabled me to accomplish several work projects. This season evaluations were conducted in the field with Incidental Business Permit holders and warnings for violations were registered with the Concessions Office. A visitor on horseback signed into the Mt. Whitney summit register. Dogs continue to do so as well.

ASSISTS—Throughout the season visitors were assisted with calls made via the Wilderness Office and Dispatch to alert families that hikers would be delayed. Equipment was loaned of given to ill prepared hikers including stove fuel, sun screen, sleeping bags, tents, and insect repellent. Several times each week during July and August food was given to long distance hikers who had not planned appropriately.

MEDICALS—Numerous minor medicals were treated at the Ranger Station and in the field which included foot injuries, blisters, strained knees, lacerations (including an eye injury), insect bites and stings and several cases of altitude illness in a range of severity. First aid supplies were distributed so that visitors could continue their trips while caring appropriately for their injuries.

TRANSPORTS—Before Rangers arrived in the backcountry in mid-June a male PCT hiker broke his leg near the summit of Mt. Whitney. We left training in the frontcountry to carry him to the summit and transport by helicopter to Southern Inyo Hospital. A man with altitude illness was transported by helicopter to Southern Inyo Hospital from Lower Crabtree Meadow. A woman with possible ectopic pregnancy was transported by helicopter to Southern Inyo Hospital from

Crabtree Ranger Station. A man with multiple symptoms from altitude illness and fatigue was transported by helicopter from Lower Crabtree Meadow to Southern Inyo Hospital. This patient was initially contacted in the evening and was unable to be evacuated for 10 hours. The Gamow Bag was used with some success, though the patient became intolerant of the bag as his condition improved. A man with chest pain and cardiac history was transported by helicopter from Crabtree Ranger Station to University Medical Center. A transport was conducted independently by military aircraft from within the Park near the summit of Mt. Whitney for a man with an injured leg. I participated in the helitack crew refresher training and continued to be able to fly as both helitack and medic on transports when necessary.

SEARCHES—A search was initiated during a patrol to Tyndall Creek with the assistance of the Trail Construction Crew for a hiker who did not return to Sheep Camp after travelling down Tyndall Creek to the Kern River. The hiker had lost his route upon attempting to return up canyon and ultimately walked the High Sierra Trail to the John Muir Trail in the night. Following a snowstorm in October a search was initiated for an ill equipped female hiker in the Mt. Whitney area. She was located at the base of the Mt. Whitney switchbacks on the west slope attempting to find her way through the snow to Whitney Portal. She was flown to Lone Pine airport.

WEATHER—Winter snow pack was normal (just below 100% of average in the eastern Kern River drainage) though melt began in late March and conditions in the field were tending toward dry. The summer was mostly warm and dry with a couple weeklong monsoon periods in August. A storm in mid-October brought 10" of snow.

FIRES—Several fires were ignited by monsoon lightning activity in the Kern drainage. Most were less than 1/10th acre in size. One lightning strike fire burned just above the John Muir Trail at the Bighorn Plateau. This fire was reported to Rangers several times daily by visitors who emptied their water bottles onto the flames and dug line around burning trees. The Fire Management Office wanted this fire to take its natural course, however, due to persistent efforts by visitors this fire was ultimately extinguished two weeks after it ignited. The "Manter" Fire burned in the Kennedy Meadows area south of the Park for several weeks in mid-summer reaching 75,000 acres. This fire brought thick smoke up canyon on several days obscuring Mt. Whitney from the Crabtree Ranger Station. Hikers going south along the Pacific Crest Trail were rerouted.

B. USE PATTERNS

BACKPACKERS—Access to the area went into January due to late snow (as evidenced from the Mt. Whitney summit register) and began in late spring as snow melted early making passes and river crossings safe. Abandoned food and trash was again collected from all area food storage boxes upon arrival into the backcountry. The John Muir Trail/Mt. Whitney corridor remains the focus of the patrol area. There were slightly fewer visitors using the Crabtree area this season due to the USFS permit process for the year. USFS Ranger Ryan Botte told me that the USFS took back the reservation system from a concessionaire and issued all permits for the summer in March. Due to the long time between visitors making reservations and actually taking their trip, many hikers reserved more spaces than were used. Permits were issued by mail and visitors had no impetus to relinquish unused spaces, as they had no direct contact with a USFS Ranger prior to beginning their trip. Thus spaces included in the trailhead quota went unused. Ranger Botte explained that the reservation system for Mt. Whitney permits would again be revised for the 2001 season to maximize use. The USFS required the use of food storage canisters by all hikers spending a night on the east side of Mt. Whitney. This includes nearly every hiker passing through the Crabtree area. Many backpackers were equipped with canisters and theoretically freed from the need to camp near a food storage box. However, use was not more dispersed as the approach to Mt. Whitney typically includes a night in the vicinity of Guitar Lake.

STOCK—All meadows opened as scheduled ("normal" year opening dates) except Upper Crabtree Meadow, which was delayed by two weeks due to wet conditions. Use was concentrated at Upper and Lower Crabtree Meadows for commercial and private stock and Sandy Meadow for

administrative stock. Significant use was observed at Tyndall Creek Meadow. Stock use nights were comparable to years when the Kern Trail Crew uses this meadow, however all use nights were from commercial and private parties. It is likely that some use was deferred from the restriction on Wallace Waterfall Meadow to Tyndall Creek. Wallace Waterfall Meadow was open only to commercial and private stock for parties with 6 animals and staying only one night. Lower Whitney Creek Meadow remains open to only commercial and private stock. Wallace Waterfall and Lower Whitney Creek Meadows saw no stock use this season. Temporary exclosures were erected in both meadows. Cooperation in the field with packers was good with the exception of those from Cottonwood Pack Station. When they were contacted in camp and specific issues were addressed such as scattering manure, location of hitch lines and feeding animals directly on the ground then camps were subsequently left in passable condition. Even so, the packers operate on the margin of legality and do the least amount of work necessary to remain with in the letter of the law. The spirit of our regulations regarding stock camps is to minimize resource impacts and aesthetically maintain stock camps. It is possible to technically follow regulations and not meet these objectives. The other commercial pack stations using the area left their camps in good condition as did most private users. Additionally we do not have guidelines about how animals use the actual meadows (such as where, when and for how long to turn the animals out). A wide range of practices is utilized (electric fences, compressed hay, free roaming overnight, free roaming only during the day). The most common practice is to turn animals out from the hitch line in camp and allow them to eat where they like. This results in grasses around stock camps grazed to the root crown and significant concentrated impact in the immediate camp area. Cottonwood Pack Station trips into the area had problems also with food storage. Their usual means of protecting their food from bears is to post a guard near the food. This amounts to a packer sleeping near the food overnight and has proved ineffective as a bear in their camp at Upper Crabtree Meadow obtained food. After this incident, a bear attempted to obtain food at the Crabtree Ranger Station (the first time in several years) and reports began to filter in from backpackers about a bear coming through camps in Upper and Lower Crabtree Meadows (again the for the first time in several years). Additionally, a repeat client of Cottonwood Pack Station (Exodus Tours/Adventure Travel West) reported being told by Cottonwood Pack Station when their wilderness permit was issued that there were no bears in the Rock Creek and Whitney Creek drainages and food storage was not necessary. Subsequently, Exodus Tours left their food under a tarp on several occasions. (See recommendations).

ADMINISTRATIVE—The Kern Trail Crew stayed with 12 animals at Sandy Meadow for approximately two weeks in mid-September. A rockslide occurred on the Mt. Whitney switchbacks the week prior to their arrival and much of their efforts were spent putting this trail into passable condition. (Digital photos submitted to Steve Moffit and on Kern Subdistrict computer). A causeway was constructed over the bog on the Pacific Crest Trail near Crabtree. An administrative/military overflight trip spent two nights at Lower Crabtree Meadow. The party included the Chief Ranger, NPS lobbyist, various local and Washington based military personnel, also the Kern Ranger. The ongoing work toward resolving the Parks' military overflight problems was discussed. The Plant Ecologist spent four days in the area visiting meadows and stock camps. The Forest Ecologist reread blister rust plots in the area and found no occurrence of the rust. A mountain yellow-legged frog research crew of three examined every body of water and wet meadow in the area for the presence of the frogs and also fish. They found only one healthy population of frogs in the Whitney Creek drainage in a pond between Hitchcock and Guitar Lakes. They found small numbers of frogs in Crabtree Meadows, Crabtree Lakes and Hitchcock Lakes.

COMMERCIAL—In addition to the aforementioned commercial pack stations contacted in the field, several guided trips used the Crabtree area including Yosemite Mountain Guides, A-16, SNHA, Mt. Whitney Guides, and the Sierra Club. Exodus Tours/Adventure Travel West joined A-16, and Yosemite Mountain guides in guiding bi-monthly trips through the area to Mt. Whitney. These groups are typically in compliance with regulations and well organized. Exodus Tours is an exception. They are new to guiding trips in the park and had been given incorrect information by their permit issuer (Cottonwood Pack Station). They have been spoken with in the field and seem intent on using appropriate practices in the future.

MILITARY OVERFLIGHTS—Very few flights were observed to be low over the patrol area this season. However, the number of flights (not technically defined as low) has increased significantly. Some days the Crabtree Ranger Station feels like it is situated next to an airport. Noise persists from each jet overpass for several minutes.

C. NATURAL RESOURCES

BEAR ACTIVITY—A bear was actively obtaining food in the vicinity of Crabtree Meadows camps in mid-summer. A sign was posted requesting visitors to use the available food storage boxes or canisters when camping in the area. Reported bear activity ceased by mid-September. One night during this period a bear came to the Crabtree Ranger Station and rolled the trash barrels into an adjacent meadow. Second hand reports came throughout the summer of food being obtained north of Forester Pass, east of Mt. Whitney and of cars being broken in to at the Shepherd Pass trailhead. The USFS began requiring canister use on the east side of Mt. Whitney in mid-summer due to bear activity up to Trail Camp. In turn, nearly every back packer coming through Crabtree was carrying a canister. The Ursack was very popular with backpackers this summer though ultimately many reports were received of the bags being torn apart by bear. Some stock groups are using bear proof panniers. Food storage remains problematic for "spot trips."

WILDLIFE—The most exciting wildlife sighting this summer was of a badger at Sandy Meadow. I had the great fortune to spend thirty minutes with the badger watching him hunt and having him sniff at my boot. A credible wolverine sighting was reported from the Bighorn Plateau. A bighorn sheep horn was found along Wallace Creek just east of the John Muir Trail, likely quite old. A group of seven bighorn rams were reported on Pinchot Pass. Raptors were plentiful in the patrol area though the Goshawk of the last two years was not seen nesting in Lower Whitney Creek. A raptor was found killed at Sandy Meadow. The Williamson Bowl bighorn sheep zoological area is posted as closed from July 15 to December 15 on the unmaintained trail at the Park/Inyo NF boundary near Mt. Tyndall. Visitors were found to be using the area during the closed dates coming in and out of the Bowl by way of the Park. The USFS permitted travel through Williamson Bowl to access Lake Helen of Troy (a named lake in the upper reaches of Williamson Bowl). This effectively nullifies the closure. If the closure is to be meaningful, this situation needs resolution. (See recommendations).

VEGETATION—An aquatic plant not previously known to occur within the Parks was found and collected at a small lake north of Mt. Young, <u>Menyanthes trifoliata</u>. Residual biomass monitoring was conducted at Lower Whitney Creek, Upper Crabtree, Sandy and Wallace Waterfall Meadows during a field visit from the Plant Ecologist. We discussed ongoing concerns regarding the location of the Trail Crew camp at Sandy Meadow and its proximity to a delicate seep. Some change in the set up of the camp occurred this season however the seep continues to be severely impacted by stock entering and exiting the camp through the seep area. (See recommendations).

D. CULTURAL RESOURCES

PREHISTORIC SITES—Site visits were made in the Crabtree Meadows area and Sheep Camp on the Tyndall Plateau. These sites consist primarily of obsidian flakes and were found to be intact.

HISTORIC SITES—The Mt. Whitney shelter had a glass window broken out of the administrative side of the building during the winter by visitors requiring access to the emergency equipment therein. The window was replaced upon arrival into the backcountry. Due to the window remaining open all winter, snow filled the interior of the building most of the summer. (See recommendations). The door to the public side of the shelter came off its hinges and was repaired mid-summer.

Whitney Portal...). We are not adequately equipped to handle these impacts (such as designated campsites, permanent toilet facilities, ranger staff to enforce designated camping and maintenance for the toilets). Nor is this necessarily the appropriate means of addressing impacts. If numbers are not reduced in the area we need to reconsider installing a toilet and finding funding to keep it operational. The honey bucket on the summit of Mt. Whitney remains functional. The scent of urine continues to overpower that of sky pilot along the traverse from Trail Crest to the summit due to heavy use.

FIRE RINGS—Three sided fire pits are maintained in most areas and continue to collect garbage. Due to incorrect information issued with USFS permits, visitors were led to believe fires were not allowed in the Crabtree area. Well meaning hikers took apart the established fire pits through the season and pits were continually rebuilt.

FIREWOOD AVAILABITY—Firewood availability is low in all camps with food storage boxes. This season several large down trees were cut up by visitors with hand saws (digital photos on Kern Subdistrict computer). This created saw scars in camps but technically is within our regulations. Visitors continue to be surprised that fires are permitted after entering Crabtree from the Inyo NF or Kings Canyon where fire limits are significantly lower.

FOOD STORAGE—Most backpackers use food storage boxes and with the new USFS requirement of canisters east of Mt. Whitney most also carried canisters. Kevlar Ursacks were popular this season with backpackers but proved ineffective. Some stock parties use bear proof panniers though those that do not leave a hole in our efforts to keep bears on a natural diet. (See recommendations).

G. PERMIT SYSTEM

TRAILHEADS—The permit system is in need of overhaul regarding the "Mt. Whitney Zone." The permit quotas do not effectively protect the Crabtree area from the impacts of excessive use. The numbers are too high to provide sustained use over the years and protect park resources.

ISSUING OFFICE—Permits issued by mail by the USFS continue to go largely unexamined by visitors who remain unaware of NPS minimum impact practices. It is unfortunate that personal contact with a Ranger has been omitted from the permit process even though the USFS is once again issuing its own permits. This season inaccurate information was printed on permits regarding NPS fire regulations. The idea of placing NPS Rangers in the Mt. Whitney Ranger Station in Lone Pine to promote NPS information dispersal is sound. Yet, in practice the Rangers hired into these positions have not previously worked for Sequoia-Kings Canyon and are unfamiliar with our regulations and terrain. These Rangers ultimately become USFS employees in a Park Service uniform. (See recommendations).

H. COMMUNICATIONS

The technical aspect of radio communication was improved this season. A new radio tower was installed on Forgotten Mountain this summer. It is no longer possible for field personnel in Sequoia to communicate with Rangers in Kings Canyon. It would be valuable to have a forum for discussion of common issues in conjunction with morning round-up, such as an update on snow conditions, river crossings, and bear activity.

NEEDS FOR NEXT YEAR

--Wildlife Observation forms

-Bear forms

--Metal dish scrub

--Strapping tape

-Small plastic bags

-- EMS run sheets

-- 2 sponges

--Electrical tape

-- 10 burlap sacks

-- large plastic bags

-- Matches, strike anywhere

--Dictionary

-- Place Names of the Sierra Nevada

--In line fuse for light

--Good chair

-- Good chopping axe

J. RECOMMENDATIONS

--Separate Upper Crabtree Meadow from "Crabtree and Whitney Creeks" opening date. Move Upper Crabtree back 3 weeks.

--Meet with Cottonwood Pack Station and Subdistrict Ranger at beginning of season to discuss conditions and concerns.

-- Reduce numbers of overnight campers at Guitar Lake or install a toilet.

--Require stock users to carry bear proof panniers or metal drums for food storage. Particularly for "spot trip" brought in by commercial packers who have no reasonable means of storing large quantities of food.

--Lower fire limit to 10,000' so that it is below treeline.

--Give weekly radio summary of parkwide trail conditions and pertinent information to improve communications between Sequoia and Kings Canyon field Rangers.

-- Update GIS map of meadows to reflect removal of Lower Whitney Creek drift fence.

-- Remove Mt. Whitney shelter.

--Meet with NPS and USFS trailhead personnel at beginning of season to coordinate activities.

-- Training with commercial packers on the "why" of minimum impact regulations.

--Create forum for visitor complaints received in the field. Visitors bring concerns to the attention of Rangers daily regarding everything from military overflights to crowding on Mt. Whitney. Visitors are encouraged to pursue their concerns, yet from their perspective they have passed on information to a Ranger and are done with it.

--Erect electric fence around seep at Sandy Meadow while Kern Trail Crew uses the area with stock.

--Restore the permit issuing process to the USFS for visitors taking trips with Cottonwood Pack Station so that visitors may receive accurate minimum impact information.

--Continue to pursue the issue of military overflights. Work toward a seasonal reduction during our peak visitation of summer.

--Clarify closure in Williamson Bowl with the Inyo National Forest. If this regulation is to be enforced it is likely to be by NPS level 2 commissioned Rangers. Pursue an MOU with the USFS (If in the revised statewide MOU level 2 commissions are recognized) so that the closure can be enforced.

APPENDIX A USE AT GUITAR LAKE

Numbers for over night use were gathered using an underground trail counter which was periodically monitored. The trail counter was reinstalled this season after it was sent to the manufacturer for maintenance.

DATES	CAMPERS AT GUITAR LAKE (AVERAGE PER NIGHT)
6-30	7
7-2	45+
7 - 3	42
7-4	10+
7-10	36
7-16 to 7-21	23
7-21 to 7-24	36
7-24 to 8-1	52
8-1 to 8-5	184
8-5 to 8-15	63
8-15 to 8-26	61
8-26 to 9-5	51
9-5 to 9-8	36
9-8 to 9-16	28
9-16 to 9-21	16
9-21 to 10-8	14