

Observations on Backcountry Management
at Mount McKinley National Park

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1. INTRODUCTION

This report is based on observations made while working at Mount McKinley National Park during the past two summers. During the summer of 1977, we spent a few weeks pre-testing various questions for a backcountry survey. During the past summer (1978), we spent the entire summer season operating the backcountry permit desk at Riley Creek Visitor Center and implementing the backcountry survey. The contents of this report originate primarily from personal observations. Occasionally, we will document our observations with figures from the backcountry permit system, from our pre-test, and from informal data-collection at the backcountry permit desk this past summer. Results from the backcountry survey will not be available until February, 1979 — at the earliest.

Our observations are organized into two main areas of concern. First, the operation of Riley Creek Visitor Center is discussed, focusing primarily on the process for issuing backcountry permits. Second, some specific suggestions are made regarding the overall strategy for managing the backcountry. By virtue of our research mandate and our area of expertise, our orientation is toward the backcountry user and not the backcountry resource. We are aware, however, that any final management plan must integrate both factors. Finally, our intent is not to be exhaustive nor detailed nor "right" — but rather, we aim to provide reasonable ideas for further discussion. We look forward to continuing our dialogue with park managers.

II. BACKCOUNTRY PERMIT SYSTEM

A) Riley Creek Visitor Center Layout

We think that the physical layout of Riley Creek is poorly designed in terms of the sequence of displays and desks that are encountered by the visitor. Upon entering the Visitor Center, the visitor comes across confusing interpretive displays and the backcountry permit desk. The general information desk is behind a slatted partition. Because of this arrangement, entering visitors (especially those new to the park) often turned directly to the backcountry desk for campground or general information. We spent a lot of time this summer explaining the shuttle bus and campground reservation systems, giving directions to the hotel, and answering many of the other usual visitor questions. This was not a problem during slack time. But during busier times, it inconvenienced many of the visitors who often waited in line only to be directed to the general information desk. Backpackers were also inconvenienced as they often had to wait while we went through lengthy explanations to the general visitor. Delays such as these could be exasperating when the backpackers were under time constraints. This situation occurred frequently during the late afternoon rush hours, when backpackers, who arrived on the afternoon train, converged on the Visitor Center, expecting to get into the backcountry that day on the last bus.

The backcountry permit desk is present to fulfill a specific purpose. Therefore, it should be located such that it is separated from the general visitor flow into and through Riley Creek Visitor Center.

B) Backcountry Information

Backpackers arrived at the backcountry permit desk needing three types

of information: 1) explanation of the permit system*; 2) description of the different backcountry zones**; and 3) current information as to vacancies in the backcountry. Much of our time behind the permit desk was spent answering the same questions which could have been answered with a display board, exhibit, or booklet. During peak hours, the time spent answering these general informational questions prevented us from adequately addressing specific or detailed questions such as hiking routes, trail conditions, and the scenic resource. Once the backpacker knows zones must be selected and an itinerary prepared, he could be going through his own preliminary process of zone selection before talking with the backcountry permit officer.

In order to improve the efficiency of the backcountry permit desk as regards the use of the permit officer's time and the dissemination of general information and in order to insure that a consistent message is provided to the backpacking public, we make the following suggestions:

1) First, a display should be set-up which explains in simple language the main components of the backcountry permit system. Emphasis should be given to the mechanics of obtaining a backcountry permit.

Second, a Park Service employee should be present at the train station when the train arrives to make a brief presentation on the permit system to all prospective backpackers (a logical place is near the baggage cart).

* Results from our pre-test (N=41) indicate that, upon arrival at McKinley, although three-fourths of the respondents knew that a backcountry permit existed, over half of the respondents were unfamiliar with the specifics of the permit system.

** Results from our pre-test (N=41) reveal that more than three-fourths of the respondents were on their first overnight hike in the McKinley backcountry. Obviously, many backpackers are unfamiliar with the McKinley backcountry, especially what it has to offer in terms of hiking experiences.

This would help backpackers decide whether first to go to Riley Creek Visitor Center to obtain a permit or to set-up camp at Morino.

- 2) A description of each backcountry zone should be made available to backpackers to assist them in zone selection. This can be done in various way , depending on budgetary and spatial constraints.
 - a) A display map of the entire park consisting of 1:62,500 quads with all backcountry zones delineated would be a valuable addition.
 - b) Several "public copies" of Exploring Alaska's Mount McKinley National Park could be made available for public perusal. Or the zone descriptions written by the backcountry rangers could be made available for public perusal. When we say "made available", we do not mean "behind the desk and available for the asking", but rather visibly placed in the area of the permit desk.
 - c) Better yet, the Park Service could prepare its own booklet describing each backcountry zone. It could be done in such a way so as to give equal "advantage" to each zone. An index could be provided which enabled the reader to quickly identify which zones had views of the mountain or dangerous river crossings or caribou, etc. This booklet could be sold to the public and could also be made available at the permit desk for general public usage.
 - d) Another possibility would be some kind of audio-visual set-up describing the various backcountry zones.
- 3) This past summer we instituted a "zone status blackboard" which we feel worked very well. The blackboard displayed the current status of each backcountry zone so that backpackers (without having to ask) could readily determine if any vacancies were available for the upcoming four nights.

In the end, this was the most important bit of information, since all final selections depended on what was available. We encourage the continued use of this blackboard with some minor modifications. The number of vacancies would be written in each box — if full, write-in 0. For zones that are closed or have unlimited openings, such information would be written-in. This blackboard could also indicate the capacity for each zone, allowing backpackers to determine which open zones have the potential for "too many" hikers. It is important to remember, however, that this blackboard idea only will work if the vacancy status for each zone is kept current.

These suggestions are made in terms of how the Park Service might better serve the backpacking public. We are aware of the argument that the Park Service should provide minimal information about the backcountry — and that backpackers should be encouraged to "explore and discover." But the fact remains that many visitors interested in hiking come to the permit desk wanting to know, in detail, about certain backcountry zones — or wanting to know which zones provide a specific feature of interest (usually a view of the mountain). And in some cases, backpackers want the permit officer to tell them what to do (i.e., to make the decision for them).

Finally, many backpackers who come to McKinley have no definite idea where they want to hike. The Park Service, therefore, by managing the method by which information is made available and the content of this information, can indirectly influence which backcountry zones are selected.

C) Backcountry Personnel

It would be beneficial to both the Park Service and backcountry users to have the backcountry permit desk operated by a staff solely

responsible for the entire backcountry management program: from patrol and rescue tasks, to filling-out permits, to advising prospective backpackers, to tabulating backcountry-use figures. This would replace the present system where the permit desk is operated by a large and diverse group of naturalists who have two or three other distinct job responsibilities and where the backcountry ranger staff is essentially isolated from the permit issuance system and the backpacking public. The actual benefits of such an arrangement would be several:

- 1) Forms (primarily the permit) would be filled-out correctly.
- 2) Communication between the various permit officers would improve. This is especially helpful in handling changes in, or problems with, the permit system. One example would be in keeping current the zone status black-board.
- 3) A consistent and accurate management message would be communicated to backcountry users.
- 4) Backpackers would be given complete and correct information regarding backcountry regulations and current conditions of the backcountry.
- 5) Permit personnel would be able to directly influence use/over-use of the backcountry by encouraging or discouraging specific access or travel routes.

This would mean that the backcountry rangers would divide their time between patrolling the backcountry and operating the permit desk. For this to function properly, the Park Service would need to hire a larger backcountry ranger staff. Realizing that this set-up might be impractical in the near future, a more immediate solution would be to limit the responsibility for the permit desk operation to a portion of the naturalist staff.

These naturalists would work behind the general information desk until the need arose for backcountry assistance. Those assigned to the permit desk would ideally be personnel with previous experience in the McKinley backcountry.

D) The Hiking Party

A common source of confusion in interpreting the zone status blackboard was the meaning of the numbers written in each box. When people saw the word "one" on the board this summer, they nearly always assumed it meant space for one more party, rather than the way we meant it: space for one more person. When we told them this, their usual response was: "we only have one tent." This points to a serious flaw in the permit system: zone capacities are determined on the basis of individual hikers rather than hiking parties. Yet backpackers generally visit the backcountry as members of a party (there are a few who hike alone*); and the average party size has been two persons. There is a lot of confusion at the permit desk when backpackers are attempting to find some zones for their party, for they usually have to translate zone capacities in terms of their party size. In some cases, parties have to split-up because their party is one (or more) person too large.

A reasonable alternative would be to make the hiking party the basis for zone capacities. Thus, for example, given that the average party size is two, a zone which currently allows eight people would have a capacity of four hiking parties. With this new arrangement, a party size limit would be necessary, since too large a party would defeat the purpose of the limits. Once the party size limit was set, any larger party would have to count as two or more

* In 1976 and 1977, 14.9% and 12.3%, respectively, of backcountry users hiked alone.

parties (and thus would need two or more permits). For example, if the party limit is set at four, then a party of five would need two permits and would take up two vacant units; or a party of nine would need three permits and would take-up three vacant units. In other words, each permit would represent one zone capacity unit. A criticism of this arrangement would be that there might be a tendency for there to be more people in a zone than would be permitted using the existing set-up. Our response to this criticism would be threefold.

- 1) By the same token, there might be a tendency for the zones to be under-utilized. In the end, it would all balance out.
- 2) If zones were being over-utilized, the zone capacities or party size limit could be altered.
- 3) Since none of the zone capacities are that exact (i.e., still fairly arbitrary), Park Service policy should allow for "minor" overloads.

In addition, this would simplify the permit issuance process and record keeping. The flip card system in use at the permit desk is useful and effective, but the method of writing the party leader's name and then indicating party size and length of trip with arrows going in all directions can be confusing to read, especially during busy periods. If capacities are in terms of parties and not individuals, then this system would be simplified. Spaces on the flip cards would be larger, as there would be necessity for fewer blocks (e.g., four parties rather than eight individuals). The permit officer would enter the name of the party and its size in one block, with a vertical arrow indicating length of trip. Similarly, the zone status blackboard would be easier to interpret.

E) Zone Overloads

There was never a firm management policy regarding zone overloads: some

managers said no overloads, while others said don't turn anyone away. In theory, nobody has to be turned away because of the unlimited zones. But in reality, this is folly because of the virtual inaccessibility of these zones. They are so distant that hikers have to stay at least one night in a closer zone on their way to the unlimited zone. But if the unlimited zones are functioning as the backcountry management plan intends, the way-station zones would already be full. The idea suggested in section D will help alleviate some possible zone overloads. But if park policy is not to turn people away, then the management plan needs some flexibility. We will suggest some changes in Part III. However, if park policy is no zone overloads, then the Park Service might expect some public discontent and increased permit non-compliance.

F) The Permit

The backcountry permit has two functions. First, it represents a party's pass into the backcountry for a specified time and place. Second, it is a source of data for use by management. We are interested in discussing this second function. In order to make informed decisions regarding the backcountry (or for that matter any other aspect of the park), park managers need to have current information about its backcountry users and use. The backcountry permit is the obvious way to gather this information. However, the information generated from the permits will only be as good as the people who fill them out and as good as the permit is designed. So park managers need to have strict control over: 1) the wording of the permit (i.e., what kind of information is and is not being collected); 2) how well the permit is being filled out by the permit officers; and 3) who analyzes the permit information (i.e., there is a need for speedy and quality work).

G) Backcountry Zone Tally Sheet

For purposes of this summer's backcountry survey, we kept a tally sheet of how each of the backcountry zones were being used (i.e., number of parties and number of hikers) for each day of the summer. This information was collected from the flip cards each day for the preceeding day. By December 1 (if not sooner), we hope to have available a report showing how this information can be used as well as an explanation as to how the tally sheet was kept. We feel the Park Service should continue with this tally sheet for three reasons:

- 1) The information off the tally sheet represents the most accurate record of backcountry use. In other words, the white permit copies fail to record when people return early from the backcountry or did not use their permit at all. Insofar as people report back to the permit desk with such information, numbers on the tally sheet can be changed accordingly.
- 2) The tally sheet represents a compact system for park managers to be able to monitor backcountry use for any given zone at any time during the summer. Such current monitoring would be useful and necessary if the Park Service ever considered a policy whereby zone capacities would be altered throughout the summer depending on the extent of use (a suggestion we will make in Part III of this report).
- 3) This data-gathering system might provide more immediate information on backcountry use than the white permit copies.

H) Permit Reservations

The time has come for the Park Service to consider a plan whereby backpackers have the opportunity to reserve some backcountry zones — similar to what is done for the auto campgrounds inside the park. Or, at the very

least, parties should be allowed to obtain a permit more than 24 hours in advance: possibly a day or two in advance. Many parties arrive at McKinley for about a five-day visit, the first two of which are often spent in preparation for a backcountry trip. Too often this summer, backpackers arriving from far distances or on a brief vacation stint were unable to obtain a permit for their preferred zones. For some, this was quite disappointing. We realize that any reservation system will have its flaws — yet the alternative will be discouraged visitors and possibly an increase in permit non-compliance. If and when a permit reservation system is instituted, there will be the need to maintain a balance between reservations and first-come, first-served.

1) Bus Drivers

Once backpackers have obtained their permits, they are on their own, free at last from Park Service control. Yet, many hikers are still confused about the permit system, especially in terms of finding their appropriate zones. It is at this point that bus drivers are an important link to the successful implementation of the permit system. If a significant number of hikers do not know where their zones are located, then the entire system is meaningless. And given the large number of newcomers to the backcountry, this is quite possible. Bus drivers, however, can provide two important functions for the permit system:

- 1) They can alert backpackers on their bus as to where different zones begin and end.
- 2) They can help to enforce the permit system by being authorized to check permits and possibly issue citations to non-compliers.

Obviously, in this role, bus drivers would need closer supervision by the Park Service. Or, more appropriately, they should be Park Service employees.

III. BACKCOUNTRY MANAGEMENT POLICY

The existing backcountry management plan is generally acceptable as long as backcountry demand is low relative to management-defined supply (i.e., zone capacities). However, recent trends* suggest that the situation at McKinley is fast-approaching (if not already there) a point where backpackers are not obtaining permits for their preferred zone or for "reasonable" alternatives (i.e., those zones other than the unlimited, inaccessible ones or the ones at the park entrance). The following, then, are some ideas that might help improve this situation.

A) Wonder Lake Walk-In Campground

A recurring request at the backcountry permit desk was for a Morino-type campground in the Wonder Lake area. In fact because such a service did not exist, some of these visitors obtained a backcountry permit for zones 3,7, or 1A so as to be able to camp near Wonder Lake, even though they were not particularly interested in hiking. Many prospective backpackers, even those without a preferred zone, had as an objective of their visit as good a view of Mount McKinley as possible: at least one or two nights in the Wonder Lake vicinity or as close to it as possible.** When backpackers came to the backcountry desk announcing that they wanted to go to Wonder Lake, we first tried to fit them into zones 3,7, or 1A. These and zone 8 (which also offers excellent views of Mount McKinley) were usually full for at least a

* In 1974, there were 2,469 backcountry users in the backcountry for a total of 5,746 nights. In 1977, there were 4,481 backpackers for 11,939 user-nights.

** We did attempt some informal documentation beginning August 2 and running through the end of the summer (September 10). Every time a party requested a permit for the Wonder Lake area, whether they got it or not, we tried to document this fact. During the many rush hours, this tally was often forgotten; and thus the figures are probably higher. Our tally, alone, shows 48 parties and 88 people first asked for a zone in the Wonder Lake vicinity.

week in advance throughout July and August (and many times with parties not interested in hiking). As a result, we (and the naturalists at Eielson) sent many backpackers out of the park.

There were also numerous incidents of permit violations in the Wonder Lake area. People who were told that the zones were full and that they could go out of the park took the bus to Wonder Lake and ended-up camping in the park. People who did get permits for zones 3,7, and 1A often paid no attention to either the zone divisions or the fact that camping is permitted only out of sight of the road, campground, and lake. The Wonder Lake patrol ranger moved a lot of people this summer.

We believe that there are visitors who want to camp at Wonder Lake (but not in the auto campground) who will do so with or without a permit. It is unreasonable to think that the number of backpackers in the vicinity of Wonder Lake can be held to 22 (the number currently allowed in zones 7, 3, and 1A combined). Before the area just north of the park boundary is totally degraded; before the area surrounding the lake is gradually degraded by dispersed illegal camping; and before the ranger goes crazy — something must be done to allow for more backpackers to camp in the Wonder Lake area. We realize that this undoubtedly means the "loss" of an area somewhere near Wonder Lake, but we think that it is better to confine the degradation to one area rather than allow it to spread around the lake. Plus, if and when the additional lands are added to McKinley, permit officers will no longer be able to send people "outside the park." So we suggest that a walk-in campground be established near Wonder Lake and left undeveloped, or minimally developed (outhouses, but not bulldozed clear of vegetation). Permits would be given-out on a first-come, first-served basis for an estab-

ished number of parties. The permit would specify the length of stay, and there would be a maximum number of nights allowed.

B) Altering Zone Boundaries

Given a better understanding as to how backpackers use their allotted zones, it might be advisable to alter some of the existing zone configurations. For example, most of those selecting zone 2 (which encompasses some 216 square miles and has a limit of six hikers) were only interested in visiting McGonogall Pass. This meant that other drainages in the zone, such as Carlson and Coal Creeks, were rarely visited, even though some hikers expressed an interest in these drainages but were unable to go because the zone was full (most likely with parties visiting McGonogall Pass). A similar situation might be found for other backcountry zones, which might indicate a need to redesign zone boundaries based on travel patterns.

C) A Dynamic Zone Capacity System

The zone capacity system presently in effect at McKinley assumes that backpackers visit the McKinley backcountry evenly throughout the summer. But in fact, backcountry use is uneven with peak visitation during holiday and regular week-ends, and during late-July and August. Somehow, the backcountry zone capacity system should take this into account: in other words, be more dynamic than static.

One possibility would be to alter zone capacities throughout the summer. During early summer, many zones are under-utilized or not used at all. This might suggest a policy of over-utilization (or higher capacities) during peak-use to meet increased demand. This appears reasonable if the Park Service can establish a biologically determined capacity for each zone for the entire summer: that is, any given zone can only accept so many hiker-nights

for a summer season. Given this biological capacity, the Park Service, then, can establish hiking party capacities for each zone and alter them throughout the summer in such a way that at the end of the summer the number of actual hiker-nights does not surpass the biologically-determined summer capacity. For this to work, the Park Service would need to monitor actual use-figures for each zone on a regular basis. The zone tally sheet outlined in Part II of this report is a good way to do this. From the sociological perspective, we believe this policy would not be detrimental as long as hiking parties have current information as to any zone's capacity and the actual number of parties already in the zone (i.e., the zone status blackboard outlined in Part II), and as long as there is a choice of zones with differing use-levels. With this suggested policy, we are not advocating increasing the total use per zone over the summer — but rather a way to redistribute this total use in such a manner so as to accommodate peak visitation.

Another possibility would be to continue the policy attempted this past summer: assign certain zones as "open zones" (or in fact with capacities of 20 to 30 hikers). These zones could be on either a rotating or a fixed basis. We cannot speak for the biological impacts of such a policy, but again the sociological impacts should be minimal as long as backpackers have a range of use-levels to choose from, and as long as they are given current information as to the actual use-level status of each zone. The existing "unlimited" zones (1 and 13A) are rarely used because of their inaccessibility.

D) Enforcing the Permit System

Nobody really knows the extent to which backpackers are not complying with the permit system: either entering the backcountry without a permit or not following their permit. Our backcountry survey should give us some indi-

cation as to the prevalence of such behavior.* Meanwhile, we can only suggest that, based on intuition and observation, permit non-compliance exists and will more than likely increase as people are turned away from their preferred zones.

We believe that the Park Service must begin to enforce the permit system (i.e., issue citations to non-compliers) in order to protect the integrity of the system. A number of backpackers questioned the purpose of a permit system if it were not enforced. And some have told us that they no longer bother to obtain a permit or to follow its directive, knowing that the permit is not enforced. In the long-run, such a policy of non-enforcement puts the complier at a disadvantage relative to the non-complier — and so encourages compliers to become non-compliers: for they have nothing to lose (i.e., no fine) and something to gain (i.e., their preferred zone).

Of course, enforcement is the negative approach to dealing with non-compliance. Any enforcement policy should go hand-in-hand with an effective public relations program explaining the reasons for the permit system. And a public relations program will only succeed if the permit system has been designed in such a way as to take into account the needs of the backpacking public and not just the protection of the resource. We feel that some of the ideas outlined in this report do just that. In the long run, a permit system

* One way to beat the system is to obtain a permit for as many days as you are inclined to take and then use your permit only on those days where you are assigned your preferred zone. This means that on some days some zones are in fact vacant although filled according to the flip cards. One indication of this may be the fact that since 1975, the average permit trip has steadily risen from 2.2 nights to 2.4 to 2.7 in 1977. In other words, the Park Service has no control as to whether parties actually use all of their scheduled nights. One solution might be to introduce a maximum number of nights for a permit.

which balances resource protection and visitor enjoyment will ideally need minimal enforcement.