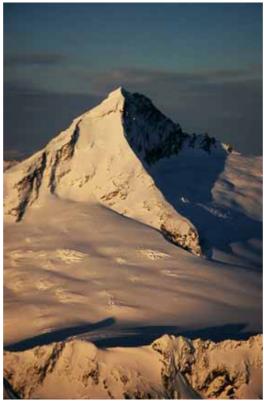


Mount Aspiring National Park Alpine Climber Survey 2006-07

Prepared by: Carolyn Squires (nee Wood) Wanaka Area Office











Objective:

The aim of the survey was to assess climber's experiences in terms of expectations and impacts relating to possible overcrowding, the social impacts of seeing and interacting with other climbers, and the social impacts of helicopter access. The findings of this survey will assist in the development and management outcomes of the Mount Aspiring National Park Management Plan Review.

The key research objectives are;

- 1. To assess the impact of helicopter landing activity at Bevan Col on alpine climbers,
- 2. To assess the impact of increased general climbing activity on alpine climbers,
- 3. To focus on options/ issues related to commercial operators.

Introduction:

Background to the Area

Mount Aspiring National Park straddles the spectacular mountains and valleys of northwest Otago and South Westland, at the southern end of the Southern Alps/ Ka Tiritiri o te Moana. It is renowned for its exceptional beauty and for its large core of wilderness and spectacular alpine environment. The park is listed as part of Te Wahipounamu – *South West New Zealand* World Heritage Area one of the world's places of "outstanding universal value".

The Park has a rich and diverse history, intricately linked to the heritage of the Waitaha, Kāi Mamoe and Kāi Tahu people. Maori names for features of the Park, the rivers, mountains and valleys, are rich in imagery and reflect the reverence for which the land is held. Kāi Tahu's spiritual connection to the park has been formally recognised in the Ngai Tahu Claims settlement Act 1998. Three tōpuni sites are recognised (areas that confirm and place an overlay of Kāi Tahu values on the land). They are Tititea /Mount Aspiring, Pikirakatahi/ Mount Earnslaw and Te Koroka/ Dart/Slip Stream.

The park has a long history of mountaineering. Mt Aspiring/Tititea (3033 m) was first climbed by an English military officer, Bernard Head, and alpine guides Alec Graham and Jack Clarke in November 1909. The Otago section of the NZ Alpine Club was formed in 1930 and this gave impetus to climbing on the main peaks in the Matukituki, Dart/Te Awa Whakatipu and Makarora valleys. The mountainous interior west of the Barrier Range was not explored until the late 1930s after a series of exploratory trips undertaken by A.D Jackson, Jack Holloway and companions, many of them students at Otago University.

The mountains of the park, particularly Mt Aspiring/Tititea, continue to be a focus for today's climbers from around the world. The Mt Aspiring Region presents a broad range of outstanding mountaineering opportunities, from the easier to extreme climbing grades, while still requiring considerable skill and experience due to the remoteness, climate and technical nature of the terrain. In addition, there are innumerable opportunities for new routes of a quality that are internationally recognised.



The challenge for the new Mount Aspiring National Park Management Plan and for management is to provide for appropriate public use and benefit of the park whilst protecting the park's natural values and remote qualities in perpetuity. According to the current management plan, Mount Aspiring/Tititea is situated in a 'remote' zoning of the park, a setting which promotes the values of natural quiet and an unmodified environment. Motorised access and facility development is generally limited and visitors are expected to be self reliant and have a high degree of backcountry skills. Ideally, they should expect few encounters with other parties and where they do meet others the group sizes should be small.

Climbers approaching Mount Aspiring/Tititea typically use or camp near Colin Todd and/or French Ridge huts. These huts are serviced alpine huts, owned by the New Zealand Alpine Club (NZAC), but managed and administered between the Department and the NZAC. In the summer months capacity at Colin Todd hut is frequently exceeded. Unpredictable weather conditions mean that climbers may congregate at the hut waiting out bad weather, or that during fine weather windows flights bring an influx of climbers.

Two main issues are addressed in the survey, the first to do with possible overcrowding of huts and camping areas, and the second regarding helicopter access flights to Mt Aspiring/Tititea. Hut statistics for Colin Todd are gathered by radio contact over the summer because of the extreme remoteness of the hut. These statistics are slightly underrepresented due to incomplete records, however they indicate that in 2005/06, Colin Todd hut was occupied to overcapacity (14 or more people) on 17 occasions, and in 2006/07 on 9 occasions. Both Colin Todd and French Ridge huts are located in a 'remote' zoning in which noise levels and access are generally managed at low levels. Remote zones also require huts to be 12 bunk facilities; however an exception to this in extending the hut to 20 bunks may be considered the most suitable option for Colin Todd. Additional management options under consideration are a bunk booking system, and encouraging climbers to camp.

Active discussion has surrounded the issue of helicopter access to Bevan Col over the last several years. The Mount Aspiring/Tititea climbing experience was traditionally a more self sufficient kind of experience, with most back country users walking in. With the emergence and increased use of access flights over the last 8-12 years, the culture of the park has changed some what to resemble the Aoraki/Mt Cook National Park climbing culture. Climbers flying in generally bring more equipment and food, and a wider range of visitors are able to access the alpine area. The ease and convenience of flights also make trips more feasible for guided parties. Reports of conflict between those walking in, and arriving later in the day, and those flying in have been occasionally reported to Department of Conservation staff. Alternative options for the management of aircraft access include limitations on landings or people per day, limitations on fly-in's during the busy season, or a complete ban.

Literature and Research Background for Crowding and Aircraft Use:

The quality of recreational experiences, and in particular the user's level of satisfaction, has been linked to visitor expectation and their actual experience (see review by Espiner 2006). Burns et al. (2003:366) note that "the recreation experience domain incorporates several potential threats to satisfaction from crowding or conflicts between different types of recreationists". Crowding has been defined by Graefe et al. (1984) and Manning (1999), summarised by Espiner (2006:7) in context of outdoor recreation as occurring when "the number of people within a defined recreation site... reaches a point at which it is perceived to interfere with the values, activities, or intentions of visitors".

Three main variables contributing to the perception of crowding are;

• **personal characteristics of the visitor** (i.e. motivations, expectations, preference for encounters, level of experience in activity or setting and attitude towards management),



- personal characteristics of visitors encountered (particularly the perception of alikeness), and
- **situational variables** (Manning 1999, Cessford 1997).

These distinctions are useful in categorising the types of reasons respondents may give for a negative impact from social interaction.

The Likert-type scale which requires the respondent to judge perceived levels of crowding on a scale from 1-9 has been used in this survey and is particularly valuable in that associated crowding standards (Heberlein and Vaske 1977) can be attributed to the results. The percentage of visitors who report feeling crowded (those who note a score of three or higher on the 9 point scale) provides an indication for the degree of actual crowding occurring. As interpreted by Shelby et al. (1989), if 0-35% of visitors report feeling crowded, density levels are not considered to be interfering with visitor experience (known as 'suppressed crowding'). Similarly, the 35-50% range equates to low density levels ('low normal conditions'). 50% is considered the threshold point for management action, where density levels are approaching carrying capacity ('high normal conditions'), while over 65% indicates that density levels have exceeded carrying capacity and that visitor experiences are being compromised ('more than capacity'). These guidelines are followed by the Department.

The social impacts from aircraft activity have been studied previously by the Department in Westland (Oliver 1995), and Aoraki/Mt Cook (Rogers 1995) National Park, and research is currently being compiled for Fiordland National Park (pers. comm. M. Harbrow). Research from these sites and from overseas indicates that effects from aircraft activity may be both positive and negative, and that a range of variables may influence the visitors' perception of aircraft use. In summary (taken from Booth et al. 1997a) recreationists' reactions to aircraft are likely to be influenced by their;

- Attitude towards aircraft in parks: if they do not want aircraft in parks per se, then they are more likely to be annoyed with aircraft. Attitudes to aircraft use in this case may also be influenced by whether the respondent had themselves used helicopter access.
- **Expectations of aircraft activity**: the greater the expectation of aircraft presence, the lesser the annoyance. Differences between international visitors and New Zealanders may be evident.
- **Previous visits and backcountry experience**: first time visitors are likely to be less sensitive to aircraft; frequent backcountry visitors are likely to be more annoyed, known as the 'last settler syndrome' (Nielsen et al., 1977).
- **Activity**: the greater the effort involved in reaching an area, the greater the likelihood of annoyance with aircraft.
- **Setting**: aircraft appear more acceptable in modified environments and less acceptable in natural environments; also sites that are less easily accessed may attract more sensitive groups of visitors (American National Park Service Study 1994).
- **Perception of the purpose of the flight**: scenic flights are more likely to be annoying, while rescue flights are more likely to be acceptable.
- **Perception of aircraft as entertainment**: some people consider aircraft activity as entertainment.
- Proximity to the aircraft.



The recreationists perception of impact may influence their behaviour, their enjoyment, their choice of location or destination and their overall satisfaction. This survey investigates the impact of helicopter access activity to Bevan Col on alpine climbers by asking whether aircraft were noticed during their visit, and if so, the number of aircraft noticed and whether their reaction to aircraft use was positive or negative.

Methods:

The goal of the survey was to target alpine climbers that were climbing in the Mt Aspiring Region over the 2006-07 peak climbing season. The sample population included both guided and non guided climbers, those flying in and/or out and those walking, and both New Zealand residents and overseas visitors

The distribution sites for the survey were Colin Todd Hut, French Ridge Hut, Aspiring Hut, and the Wanaka Visitor Centre. Surveys were made available at these sites from November 2006 to March 2007. Surveys were self administered at Colin Todd, while at French Ridge and Aspiring huts surveys were distributed to individuals (to alpine climbers only) and retrieved by the hut warden. At the Wanaka Visitor Centre, surveys were administered to climbers filling out intentions forms or to climbing parties (one per individual) applying for landing permits to Bevan Col. Local guiding companies were also advised that they could pick up surveys from the Wanaka Visitor Centre at the start of October to hand out to clients and distribute among guides.

All efforts were made to include as many people as possible, however two possible sources of bias exist. Because the surveys were largely handed out in a remote location and were to some extent self administered, people who feel strongly about the issues within the survey may have been more likely to fill in a form (Booth et al. 1997b). Also, the survey only samples alpine climbers in the region, and does not sample those who may have already been displaced by aircraft activity or crowding and who chose to go elsewhere. Therefore it may be expected that those who chose to climb in the region (and who filled out the survey) were more likely to be accepting of the current level of aircraft use or crowding.

The survey period ran from November 2006 to March 2007. It is not known how many surveys were handed out, although a total of 137 were collected. Bed night statistics for Colin Todd Hut and French Ridge Hut for the 2006/07 season are 892 and 687, respectively. From the survey results, the average trip length was 4.7 nights. Dividing the total bed nights (1579) within the Mt Aspiring alpine region by this value (4.7) indicates that there were approximately 336 visitors to the Mt Aspiring region during the 2006/07 season. This estimate is rather conservative in that many visitors to French Ridge are not alpine climbers. Using this conservative estimate, just on 40% of all alpine climbers visiting the Mt Aspiring region over the season were sampled. No age limit was set for the survey, however only 1% of respondents reported being under 20 years old.

No record was kept of how many surveys were distributed at each of the sites, however approximately half were collected at huts and half at the Wanaka Visitor Centre. Surveys that were more than half uncompleted were discarded, and a total of 135 valid surveys were collated for analysis. Because some surveys were self administered and some handed out by Department staff, an overall error calculation could not be made. See Appendix 1 for the survey questionnaire.

Data entry and analysis was carried out according to the Standard Operating Procedure- *Visitor Monitoring Toolkit: Social Monitoring*, and the Standard Operating Procedure- *Monitoring the Effects*

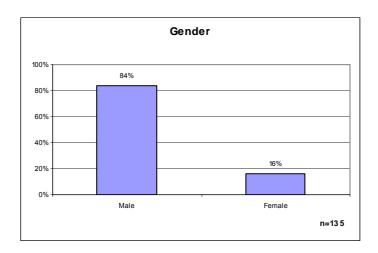
of Aircraft Overflights on Recreationists in Natural Settings. The answers to questions that required a comment or reason were summarised and grouped into categories.

The following results are presented here with the survey question as the heading, however the order of questions have been changed slightly to fit into suitable categories.

Results

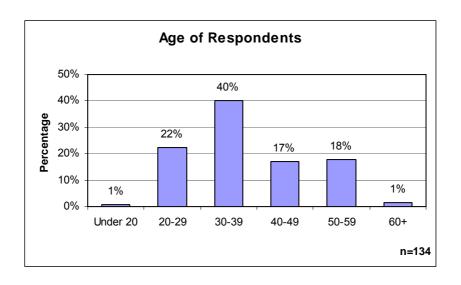
DEMOGRAPHICS

Gender



The majority (84%) of respondents were male, with only 16% female.

Age group



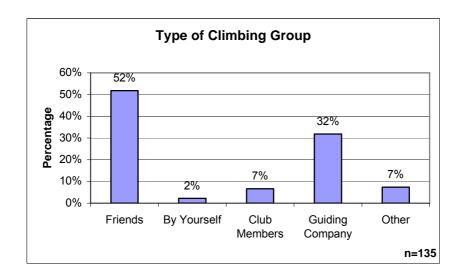
78% of participants were between the ages of 20-49, 18% were 50-59, while only two respondents were over 60 and 1 under 20.

How many people are in your group?

Average group size	2.7
Minimum Value Maximum Value (n=127)	1 8

The average group size contained between 2 and 3 people.

Were you climbing with -



Most respondents were climbing with friends, 32% in association with a guiding company (either clients or guides), while only 7% were climbing as part of a club group and 2% were alone. Of the 7% who reported climbing as 'other', all then stated they were part of a family group.

Where do you live?

New Zealand	40%
Overseas	60%
(n=134)	

New Zealand Residents (n=49):

Local	40%
South Island	68%
North Island	23%
Not Stated	9%

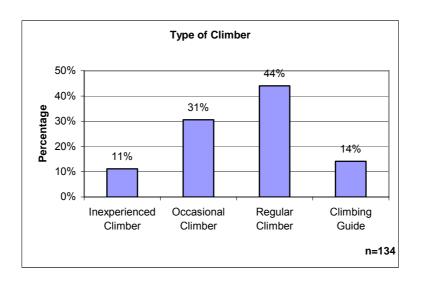
38% of New Zealand climbers were local (Wanaka, Hawea, Luggate Queenstown, Cromwell and Alexandra); 68% were from the South Island and 23% from the North Island.

Overseas Residents (n=81):

Australia	56%
North America	22%
UK and Ireland	14%
Europe	6%
Asia	2%

Most climbers from overseas originated from Australia (56%), with the second most prominent country of origin being North America (22%).

Would you describe yourself as -



The majority of climbers considered themselves to be regular climbers (at least three times a year) or occasional climbers (at least once a year).

CLIMBING HISTORY OF RESPONDENTS WITHIN MT ASPIRING NATIONAL PARK

Is this your first climbing trip into the Mount Aspiring National Park region?

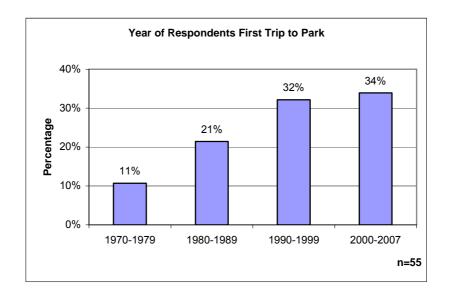
58% of respondents were climbing in the park for the first time.

If not - How many climbing trips have you done in the park region?

Number of Previous Trips	Count (n=54)	Percentage
1-5	28	52%
6-25	17	31%
26-100	7	13%
101-200	2	4%

Of those who had climbed in the region before, the median number of previous climbing trips was 5, covering a range from 1 previous climbing trip to 1000.

- What year was your first climbing trip in the park?



The majority of previous trips to Mount Aspiring National Park had been carried out between 1990 and 2007, although some respondents had been frequenting the park since early 1970.

Of those who had climbed in the park region before:

-Is this your first time climbing on/near Mt Aspiring?

Almost all who had climbed in the region before had also climbed on Mt Aspiring previously (representing 39% of the total sample).

-How many climbing trips have you done on/near Mt Aspiring?

Number of	Count	Percentage
Previous Trips	(n=51)	
1-5	29	57%
6-25	16	31%
26-100	5	10%
101-200	1	2%

Of those who had climbed on Mt Aspiring before, the median number of previous climbing trips to Mt Aspiring was 4, covering a range from 1 to 200 trips.

-What year was your first climbing trip on/near Mt Aspiring? (n=52)

These trips were carried out between 1972 and 2007.

- Have you ever used a helicopter flight for access on past trips on/near Mt Aspiring?

The sample was split fairly evenly as to whether those with a history of climbing experience in the park had previously used helicopter access.

PATTERNS OF USE: HELICOPTER ACCESS

Note: Two main commercial operators are predominately used for this site, Aspiring Helicopters and Alpine Helicopters.

Are you using a helicopter flight for access on this trip?

Yes 57% No 43% (n=135)

The sample was again divided on helicopter use for the current trip, with 57% using helicopter access and 43% walking in.

If no- what are your main reasons for not using a helicopter flight?

Summarised Reasons:	Count	Percentage of
	(n=76)	Cases
Expense/ Cost	40	53%
Experience of walking/ seeing area	27	36%
Not necessary/ Have time to walk	17	22%
Ethically opposed to helicopter use*	14	18%
Achievement of doing whole trip under their own steam	10	13%
Poor weather -Helicopter could not fly on days available	6	8%
Trip itinerary did not include Bevan Col	4	5%
Takes away from challenge of climb	2	3%
Cheating	2	3%

Totalled percentages may exceed 100%, because respondents were able to provide more than one reason.

Summarised Reasons: Ethically Opposed to Helicopter Use	Count (n=14)	Percentage of Cases
Prefer 'purist' approach to climbing	5	36%
Opposed to fossil fuel use	2	14%
Noisy	6	43%
Disturbance to Wildlife	1	7%

Totalled percentages may exceed 100%, because respondents were able to provide more than one reason.

The most common reason stated for not using a helicopter was the **cost**. The second most common reason was the **enjoyment of the walk in** and the **experience** of seeing the area on foot. Quite a few considered the use of helicopters as unnecessary. The achievement placed on doing the whole climb under their own steam was often mentioned as opposed to helicopter use as cheating or taking away from the challenge of the climb.

Several also mentioned being ethically opposed to helicopter use (*) due to noise intrusion, wildlife disturbance, fuel consumption, or because they considered themselves 'purists' and wanted to do the whole climb on foot.

If yes - what are your main reasons for using a helicopter?

Summarised Reasons:	Count	Percentage
	(n=58)	of Cases
Ease of access- convenience and heavy loads	20	34%
Limited time for trip/ Makes trip possible	20	34%
Time trip with weather window	19	33%
Speed of access	11	19%
Access to hut too difficult without helicopter*	7	12%
Safety	5	9%
Efficiency of trip	4	7%
Arranged by guided party	4	7%
Maximise chance of success	4	7%
View country from air	2	3%
Can see same country on walk out	1	2%
Helicopter flight novelty	1	2%
Back flight to Wanaka	1	2%

Totalled percentages may exceed 100%, because respondents were able to provide more than one reason.

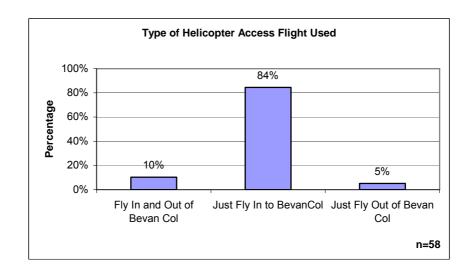
Summarised Reasons: Access too difficult without helicopter	Count (n=7)	Percentage of Cases
Carrying food and climbing gear for long stays	5	71%
Client not capable	1	14%
Ease of access for older folk	1	14%

Totalled percentages may exceed 100%, because respondents were able to provide more than one reason.

The most common reason for using helicopter access to Bevan Col was the **quick and easy access**, the ability to time trips with **weather windows**, and because climbers had **limited time** available for the trip. Other reasons commonly stated were the **increased safety**, and the fact that the approach was too hard without the use of helicopters when both food, camping and mountaineering equipment for several days needed to be carried, or that the clients were not capable of both walking in and making the climb. Older climbers also mentioned the value of using a helicopter for ease of access.

Other reasons include maximising the efficiency of the trip, maximising the success of the climb, the experience of seeing the country from the air, and the fact that a flight was included in the guided parties plans.

- How are you using helicopter flights on this trip?



Most of those using helicopter access flights were just flying in to Bevan Col. No other type of flight was recorded.

- If there was no helicopter access, would you still have chosen to climb here?

For those who used helicopter access, 41% would not have chosen to climb in the region if access by flight had been unavailable.

LOCATION AND TRIP DURATION

How many nights has your trip been to the Mt Aspiring region? (n=132)

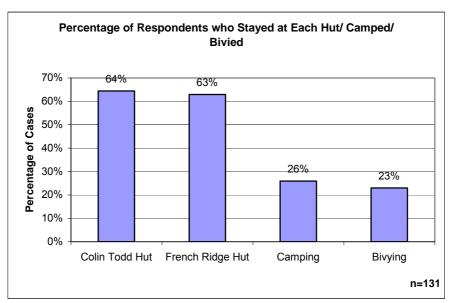
Mean	4.7
Minimum nights	1
Maximum nights	8

Where did you stay and for how many nights?

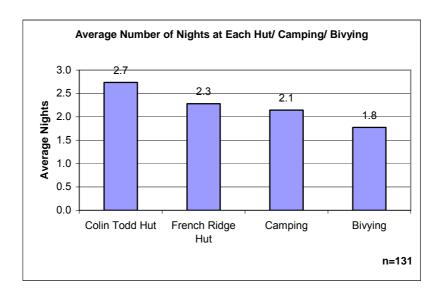
Location (n=131)	Percentage of Cases	Average Nights	Minimum Stay	Maximum Stay
Colin Todd Hut	64%	2.7	1	9
French Ridge Hut	63%	2.3	1	14
Camping	26%	2.1	1	5
Bivying	23%	1.8	1	5

Totalled percentages may exceed 100%, because respondents were able to provide more than one location.

Note: Many respondents combined camping/ bivying and hut use, and many used both Colin Todd and French Ridge Huts.



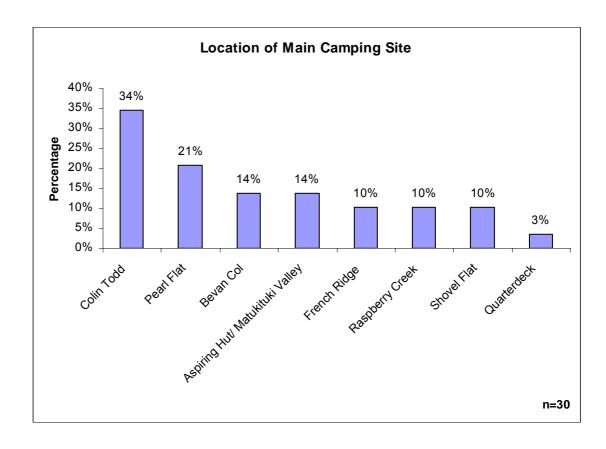
Totalled percentages may exceed 100%, because respondents were able to provide more than one location.



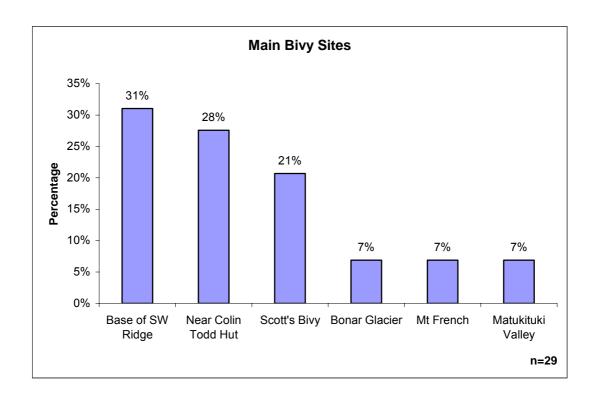
64% of respondents stayed at Colin Todd Hut at some point during their trip. Of those staying at Colin Todd, the average length of stay was 2.7 nights.

63% of respondents stayed at French Ridge at some point during their trip. Of those staying at French Ridge, the average length of stay was 2.3 nights.

26% of respondents camped at some point during their trip. Of those camping, the average duration was for 2.1 nights. The majority camped near Colin Todd hut, a few at French Ridge, Bevan Col, and the Quarterdeck, and the remainder within the Matukituki Valley (Aspiring Hut, Pearl Flat, Shovel Flat, and Raspberry Creek).



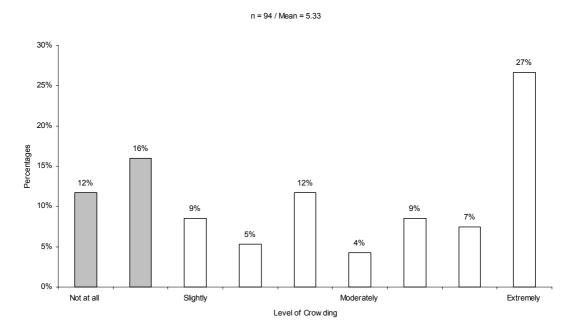
23% of respondents reported bivying at some point on their trip for an average of 1.8 nights. The majority bivied at the base of the South West Ridge of Mt Aspiring, near Colin Todd hut or at Scott's Biv, with the remainder on the Bonar Glacier, Mt French, and in the Matukituki valley.

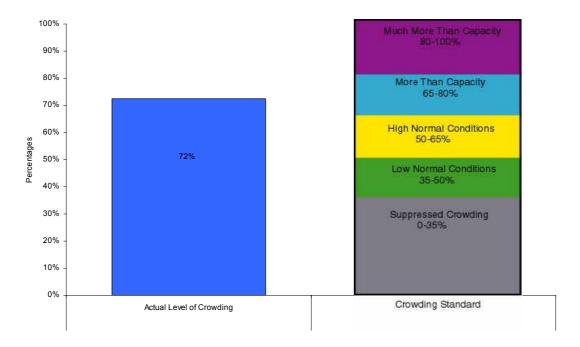


Did you feel crowded at any place on your trip?

Respondents were asked on a scale of 1-9 how crowded they felt at certain locations, where 1 is not at all crowded and 9 is extremely crowded.

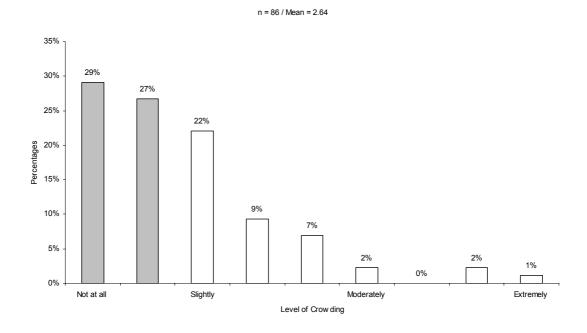
Colin Todd Hut

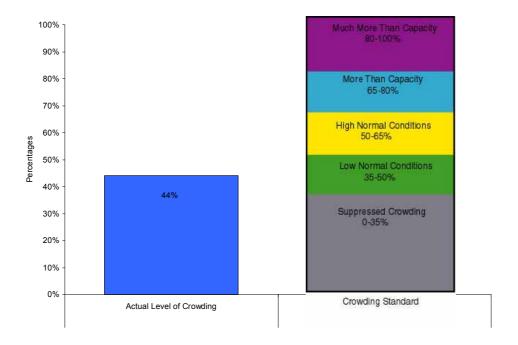




72% of respondents felt crowded to some degree at Colin Todd hut. "More Than Capacity' conditions indicate that management intervention is necessary to preserve recreation experiences.

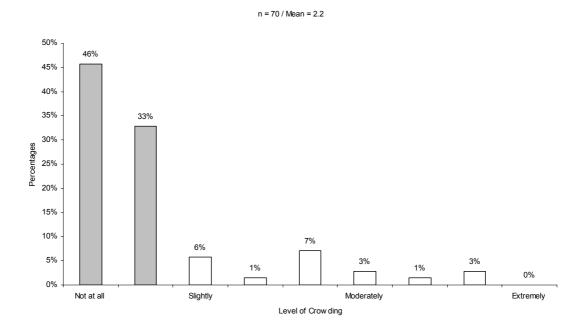
French Ridge Hut

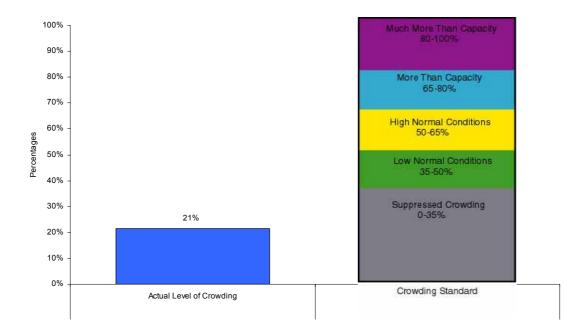




The majority (56%) of climbers did not think French Ridge hut was crowded. 'Low Normal Conditions' indicate than there are no current problems with crowding.

While Climbing

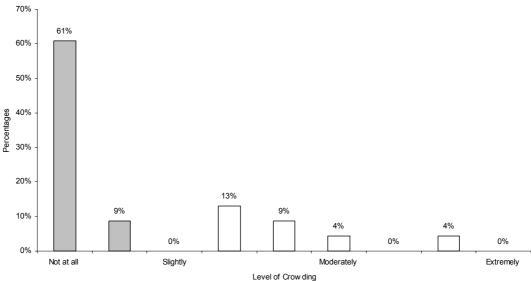


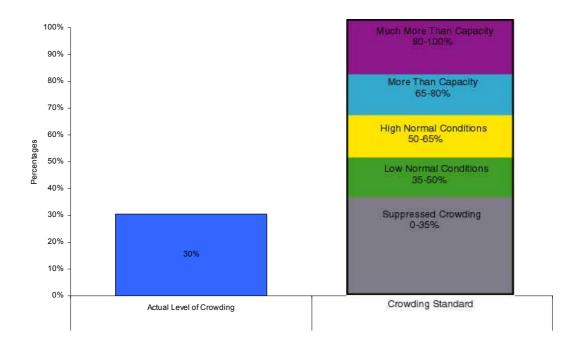


There was very little perceived crowding while climbing.

Other







'Other' locations mentioned were Aspiring hut which ranged from 'not at all crowded' to 'moderately crowded', (n=6), and bivying at the various locations mentioned above, all of which were reported to be 'not at all crowded' apart from one report of Scott's Bivy as 'extremely crowded' (scale 8).

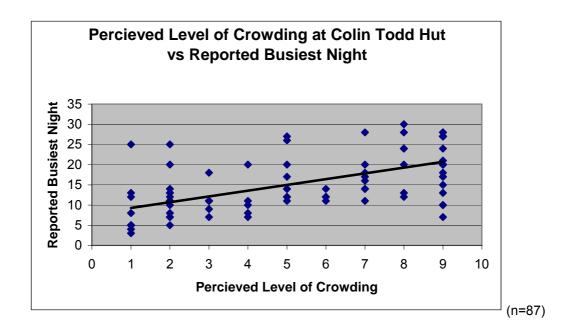
One respondent reported tramping in the park to be 'somewhat crowded' (scale 4). Summiting Aspiring was also on one occasion reported to be 'moderately crowded' (scale 5) with 18 people sharing the summit.

SOCIAL IMPACT OF OTHER VISITORS

If you used Colin Todd Hut, how many people were there on the busiest night?

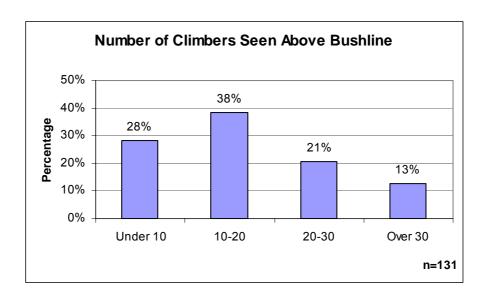
Reported Busiest Night	Average	16
	Minimum	3
	Maximum	30
	(n=95)	

The huts average reported busiest night of 16 people exceeded its full capacity of 12 bunks.



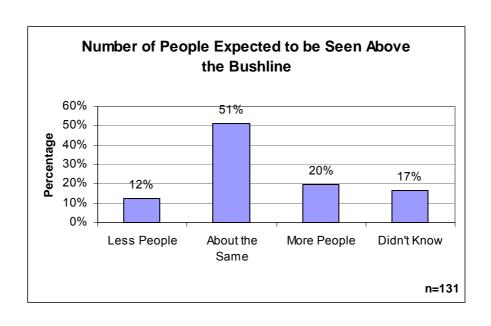
Perceptions of crowding at Colin Todd showed a general increase in relation to the busiest night experienced at the hut, however a broad range of visitor numbers are apparent across all perceived crowding levels.

How many people did you see above the bushline while climbing during this trip?



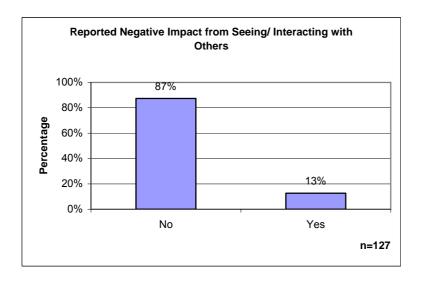
66% of climbers saw fewer than 20 people above the bushline during their trip.

Were you expecting to see -



Most (71%) were expecting to see about the same or more people above the bushline.

Did seeing/ interacting with other people have any negative impacts on your trip here?

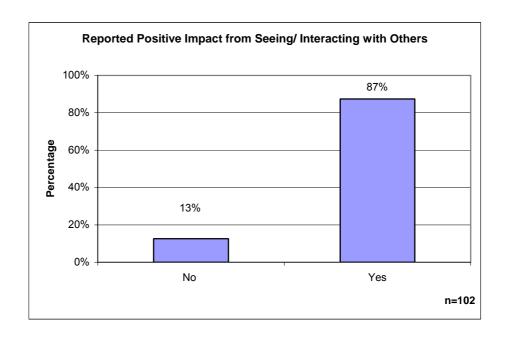


Very few people reported a **negative impact** from seeing or interacting with other climbers.

If Yes- How?

Reasons for Negative Impacts From Seeing/ Interacting With Other People	Count (n=17)	Percentage of Cases
Poor Hut Etiquette	6	38%
Crowded Hut (Colin Todd Hut)	4	25%
Reduction in Solitude/ Remoteness	4	25%
Reduction In Hygiene at Hut	2	13%
Crowded from Commercial Guides	1	6%
Hut Ran Out of Water	1	6%
People Attempting Summit Without Necessary Skills	1	6%

Of those that reported a **negative impact** from seeing or interacting with other climbers, the main reasons involved **crowding** at Colin Todd hut and **poor hut etiquette**. Types of poor hut etiquette mentioned were noises of people waking at different times during the night, snoring, and people removing another persons gear off beds. A reduction in the sense of **remoteness or solitude** was also mentioned as a negative impact.



87% reported a **positive impact** associated with seeing and interacting with others.

If Yes- How?

Reasons for Positive Impacts From Seeing/	Count	Percentage
Interacting With Other People	(n=102)	of cases
Camaraderie and Friendships	44	40%
Gaining Info on Routes/Conditions and Weather	32	29%
Talking and Sharing Experiences	26	23%
General Advice	9	8%
Guides were Helpful	8	7%
Local Area Knowledge	6	5%
Sharing Equipment	4	4%
Safety in Numbers	4	4%
Teaming up with Other Climbers	2	2%
Helping Others	1	1%

The most common reasons stated for the **positive impact** from other climbers involved the **sense of camaraderie and friendliness** in the hut, and **talking and sharing** experiences. **Gaining information** on routes, conditions and weather, and general advice and local area knowledge was also highly valued.

Eight people expressly commented on the helpfulness of guides in sharing this type of information.

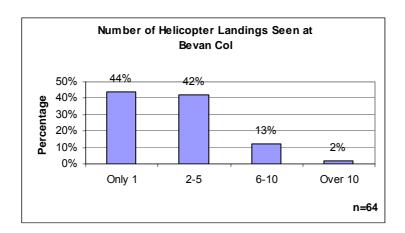
Other reasons mentioned included teaming up with other climbers, sharing of equipment, and a greater sense of security due to safety in numbers.

SOCIAL IMPACT OF HELICOPTER ACCESS

Did you see any helicopter landings at Bevan Col on this trip?

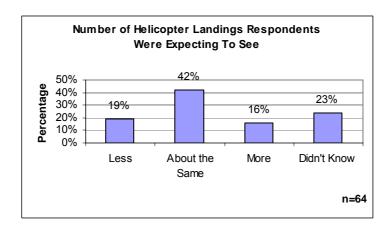
Half of the respondents saw helicopters landing at Bevan Col during their trip.

If Yes- How many landings did you see?



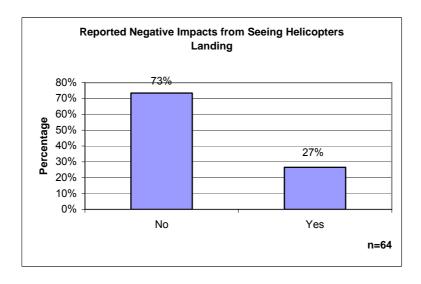
86% of climbers saw fewer than 6 helicopter landings at Bevan Col. Only 2% reported seeing over 10 landings.

- Were you expecting to see-



Most (42%) expected to see 'about the same' number of helicopter landings. A significant amount (23%) were unsure.

Did seeing helicopters landing have any negative impacts on your trip here?



Most (73%) respondents did not think that helicopter landings had created a **negative impact** on their trip.

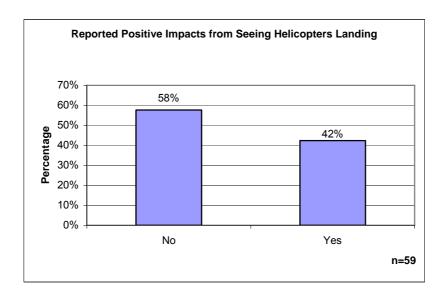
If Yes- How?

Reasons For a Negative Impact From seeing	Count	Percentage
Helicopter Landings	(n=17)	of Cases
Distracts from Experience (Wilderness/ Climbing)	7	41%
Increased Number of People/ Crowding at Hut	6	35%
Noise	6	35%
Cheating Compared to Effort of Getting to Hut	2	12%
Wondering if Beds Would Be Available	2	12%
Brings in Luxuries to Hut	1	6%
Reduced Sense of Remoteness	1	6%
Didn't Expect to See Helicopters	1	6%

Of the climbers who felt helicopter landings had caused a **negative impact**, only 26% gave a reason. The main reasons stated involved the **distraction from the overall experience** of climbing or wilderness, **noise**, and the increase in **crowding** at Colin Todd.

Others mentioned a sense of anxiety over whether beds would be available on arrival and the view that helicopter access was 'cheating'.

Did seeing helicopters landing have any positive impacts on your trip here?



Only 42% of respondents thought that helicopter landings had created a **positive impact** on their trip.

If Yes- How?

Reasons For a Positive Impact From seeing	Count	Percentage
Helicopter Landings	(n=23)	of Cases
Increased Safety- Use for Rescues	13	52%
Enables Use of Weather Window	2	8%
Achieve Climbing Objective	2	8%
Access to Alpine Region that Could Not Otherwise		
Achieve	2	8%
Was Not that Disturbing	2	8%
Back Flight Option	2	8%
See National Park	1	4%
Helpful Guides	1	4%
Scenic Flights Cause Greater Disturbance	1	4%
Quick Access	1	4%
Support Local Business	1	4%
Use for Hut Maintenance	1	4%

Again there was a low response rate of just 35% in providing reasons for a **positive impact** from helicopter landings to Bevan Col. The most widely stated reason involved a **sense of increased safety** having helicopters in the region, and the use of helicopters for rescues.

The remainder of reasons were largely similar to the reasons quoted previously for using helicopter access, covering the use of helicopters in order to achieve the climbing objective, to utilise a weather window, and the ease and speed of access.

Additional Comparative Analysis

*The results from this section have not been statistically tested for significance (the level of reliability that can be attributed to any one statement). As such, they provide a guide only to the types of factors that may influence visitor perception.

A comparative analysis was carried out to determine if certain aspects appeared to influence visitor perception of helicopter activity. The variables investigated included whether the person had climbed in the region before, if they had used helicopter access for the current trip, the number of helicopter landings seen, their expectation of helicopter use, country of origin, type of climber, and the party type.

The percentage of those who reported a negative impact from seeing helicopters landing, and the percentage of those reporting a positive impact was calculated (respondents were able to record both negative and positive impacts).

			Negative	Positive
		n	Impact	Impact
Previous Experience in the	No Previous			
Region.	Experience	25	12.0%	28.0%
	Previous Experience	41	34.1%	43.9%
Access	Walk In	39	41.0%	20.5%
	Fly In/Out	27	3.7%	63.0%
Number of Landings Seen	1 Landing	28	7.1%	46.4%
	2-5 Landings	27	25.9%	33.3%
	6-10 Landings	8	87.5%	25.0%
	10+ Landings	1	100.0%	100.0%
Expectations as to Landings				
Seen	Less	12	75.0%	25.0%
	Same	27	14.8%	44.4%
	More	10	20.0%	40.0%
	Don't Know	15	13.3%	40.0%
Country of Origin	New Zealand	30	23.3%	33.3%
	Overseas	35	28.6%	40.0%
Type of Climber	Inexperienced	6	16.7%	50.0%
	Occasional	18	11.1%	38.9%
	Regular	33	42.4%	27.3%
	Guide	8	0.0%	62.5%
Climbing Party	Friends	35	22.9%	22.9%
	Alone	1	100.0%	0.0%
	Club	5	100.0%	20.0%
	Guiding Company	20	5.0%	70.0%
	Other	5	40.0%	40.0%

Previous experience did not appear to have an influence on how helicopter use was perceived.

Those who walked in were more likely to report negative impacts from helicopter use, and those who flew in were more likely to report positive impacts.

Those who saw just one landing were far more likely to report a positive impact from helicopter use. Those who saw 6-10 landings were far more likely to report a negative impact from helicopter use.

Those who expected to see fewer helicopters landing were more likely to report a negative impact, while those who expected to see about the same or more helicopters, or who didn't know were more likely to report a positive impact from seeing helicopters landing.

Country of origin (New Zealand residents compared to overseas visitors) did not appear to have an influence on how helicopter use was perceived.

Inexperienced and occasional climbers were more likely to report a positive impact from helicopter use; regular climbers were more likely to report a negative impact. No guides reported any negative impact, with a high percentage (63%) reporting positive impacts.

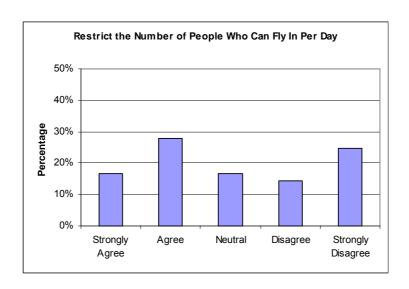
Clubs were more likely to view helicopter use negatively, whereas guiding companies were far more likely to view helicopter use positively.

VISITOR OPINION: OPTIONS FOR AIRCRAFT ACCESS

Participants were asked, on a scale of 1 to 5, to what extent they agreed or disagreed with different helicopter access options, where 1 indicated strong agreement, 3 neutral and 5 strong disagreement.

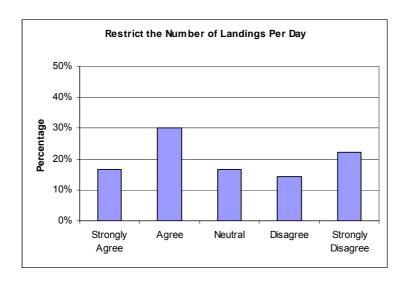
	n	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Restrict the number of people who can fly in per day	126	16.7%	27.8%	16.7%	14.3%	24.6%
Restrict the Number of Landings Per Day	126	16.7%	30.2%	16.7%	14.3%	22.2%
Allow Aircaft Access Only in Quiet Part of Season	124	8.9%	3.2%	29.0%	19.4%	39.5%
Allow No Aircraft Landings At Bevan Col	127	7.9%	3.9%	19.7%	18.9%	49.6%

Restrict Number of People Fly in/Day



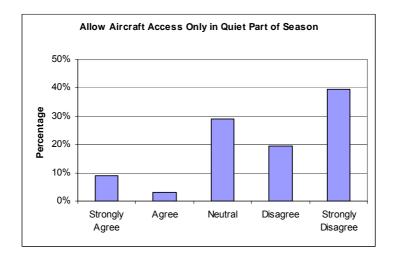
Opinion varied greatly on the option for restricting the number of people who could fly into Bevan Col in a daily basis. The **mean opinion was 3.02 (neutral)** with a standard deviation of 1.44. From the above graph it is apparent that the two most significant groups clustered around 'agree' and 'strongly disagree'.

Restrict Number of Landings/Day



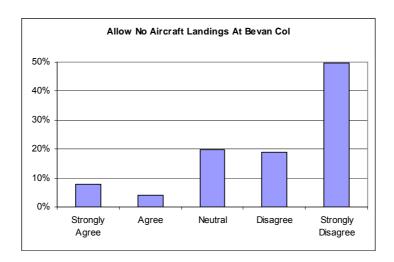
Again opinion varied as to the option for restricting the number of landings at Bevan Col per day. Similar cluster groups around 'agree' and 'strongly disagree' can be observed in the above graph, however the **mean opinion was neutral (2.95)**, with a standard deviation of 1.42.

Allow Access Only In Quiet Season



The mean opinion for allowing aircraft access only in the quiet part of the season was **3.77** (**neutral** – **disagree**), with nearly 40% in strong disagreement and the majority of the remainder in disagreement or neutral. Just over 12% were in agreement. The standard deviation was 1.25.

Allow No Landings At Bevan Col



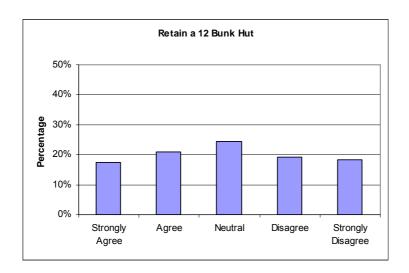
The mean opinion for allowing no aircraft landings at Bevan Col whatsoever was **3.98** (**standard deviation 1.25**), 'disagree'. Nearly 50% of respondents were strongly opposed to this option, while just over 11% were in agreement.

VISITOR OPINION: OPTIONS FOR COLIN TODD HUT

Using the same scale, participants were asked to what extent they supported different options for the management of Colin Todd hut.

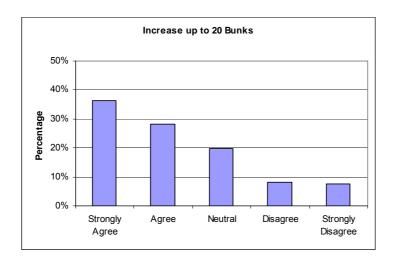
	n	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Retain a 12 Bunk Hut	115	17.4%	20.9%	24.3%	19.1%	18.3%
Increase Up To 20 Bunks	121	36.4%	28.1%	19.8%	8.3%	7.4%
Remove the Hut	117	0.0%	1.7%	3.4%	13.7%	81.2%
Have a Bunk Booking System	119	10.1%	20.2%	23.5%	19.3%	26.9%
Encourage People To Camp	118	15.3%	22.0%	43.2%	10.2%	9.3%
Put Limits on the Number of Guided Parties Using the Hut	119	20.2%	24.4%	13.4%	15.1%	26.9%

Retain a 12 Bunk Hut



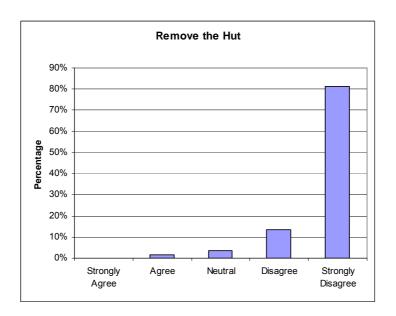
Opinion was widely and almost equally spread on the option for retaining a 12 bunk hut. The overall **mean opinion was neutral (3.00)** with a standard deviation of 1.36.

Increase Hut to 20 Bunks



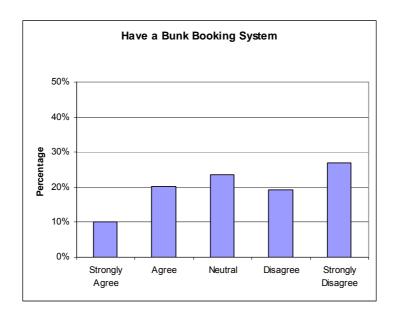
Overall opinion for increasing the hut to 20 bunks was in **agreement with a mean of 2.22** and standard deviation of 1.23. Only a total of 15.7% were in disagreement, with just under 20% neutral.

Remove the Hut



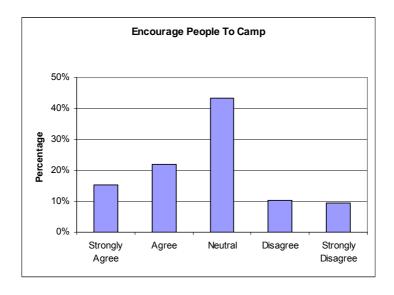
The majority of respondents were strongly opposed to removal of the hut (81.2%). None were in strong agreement. The **mean opinion was 4.74** (disagree – strongly disagree), with a smaller standard deviation of 0.6 indicating the narrow spread of opinion.

Have a Bunk Booking System



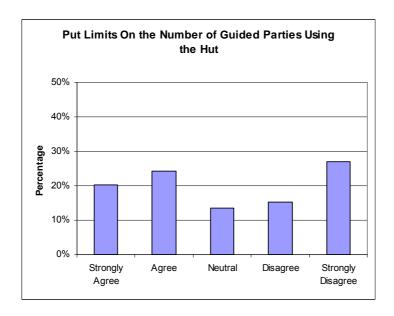
Opinion varied over the option for a bunk booking system at the hut. 27% strongly disagreed, while just 10% strongly agreed. The **mean opinion was neutral (3.33)** with a standard deviation of 1.33.

Encourage People to Camp



Overall opinion was in agreement - neutral on the option for encouraging people to camp with a **mean of 2.76** (standard deviation 1.12). A total of 37.3% were in agreement, while 19.5% were in disagreement.

Put Limits on Guided Parties



Again opinion was spread as to the option for putting limits on the number of guided parties using the hut. The largest proportion (27%) strongly disagreed, while 24% were in agreement. The **mean opinion was neutral (3.04)** with a large standard deviation of 1.51.

COMMENTS

The comments section at the end of the questionnaire allowed respondents to include any general comments about issues raised in the survey or about the Department's management of Mt Aspiring National Park. 60% of respondents provided comments, covering issues relating to hut use, helicopter use, guided parties, suggestions for hut and track management, and positive/negative feedback. The comments are useful in that they illustrate and expand on many of the findings in this report, and also provide additional insights.



Summary:

Demographics

More than half of all climbers surveyed are from overseas, with the greatest proportion from Australia. Quite a high relative percentage of New Zealand climbers are local.

Most climbers within the Mount Aspiring region are climbing as friends, however a third of climbers are climbing as part of a guided group.

Climbing history of respondents

Many climbers are new to the region. Those who do have experience in the region often have a long association with climbing in the park.

Patterns of Use: Helicopter Access

Over half of the respondents questioned were using helicopter access on the current trip.

The main reason stated for not using helicopter access was cost. Only 18% of respondents gave reasons involving a negative stance on helicopter use (i.e. it was 'cheating', noisy, or takes away from challenge of the climb). The remainder of reasons were based around a preference for walking, or the unsuitability of helicopter use for their particular trip (i.e. incremental weather conditions).

The main reasons given for the use of helicopter access were predominately based around the ease, speed and convenience of helicopter flights, often in relation to limited time schedules and making the most of fine weather opportunities.

The majority of climbers surveyed were just flying in to Bevan Col. 41% of climbers flying in (equivalent to 16% of total sample) were reliant on helicopter use for their trip, stating that if there had been no air access, they would not have chosen to climb in the region.

Location and Trip Duration

Most climbers stay at Colin Todd hut, and/or French Ridge hut at some point during their trip. The most popular camping sites are near Colin Todd hut, and the most popular bivying sites are at the base of the SW ridge of Mt Aspiring, and near Colin Todd hut.



Crowding

Colin Todd Hut:

There is a high level of apparent crowding at Colin Todd hut during the peak climbing season. The current level as interpreted by Shelby et al. (1989) is very likely to alter the visitor experience. This level exceeds the guideline (>50% respondents reporting feeling crowded), indicating that management action needs to be taken.

The average busiest night at Colin Todd was 16 people, exceeding the huts current capacity of 12 people, while the busiest recorded night was 30 people at the hut. Despite this, only 13% of people reported a negative impact from interaction with others, and only one quarter of the reasons given for a negative impact involved crowding. In summary, only 3% of all respondents explicitly noted crowding as a negative impact.

One likely explanation as to why there was so little negative reaction to crowded conditions is that the majority of visitors to Colin Todd have similar sets of values, and are engaged in greatly similar activities and intentions. In other words, the personal characteristics of others are perceived to be in harmony with the personal characteristics of the respondent (Manning 1999, Cessford 1997). This explanation is backed up by the significant response from participants indicating that the main reason for positive impacts associated with other climbers is due to the friendships, information sharing, and talking and sharing of experiences.

Other possible explanations are that climbers may have expected to find crowded conditions at Colin Todd and therefore did not feel particularly put out when they experienced crowding, or that many of the respondents were first time users of the park and therefore did not have definite expectations as to the level of crowding. It is also important to remember that displacement of users who know of the level of use in the area and who want to avoid crowding are not represented in the survey.

There seemed to be very little dissonance between guided and private individuals or parties. Only one respondent mentioned 'crowding by guiding companies' as a negative impact, and in comparison 8 people mentioned guides as being particularly helpful in providing information on routes and conditions.

French Ridge Hut:

There is 'low normal' crowding occurring at French Ridge hut over the peak climbing season. This level does not exceed crowding guidelines, however continued monitoring is recommended.

While Climbing:

21% of respondents felt crowded to some degree while climbing. Although this level of crowding is low in context of facilities, when placed in context of alpine environments and alpine climbing it is an indication that some routes and sites are being frequented regularly. This may be due to the influence of weather windows which 'bottleneck' climbing activity after bad weather. Only one comment indicated a negative impact from crowding while climbing, however, where a respondent reported 18 people on the summit of Mt Aspiring/Tititea at one time.



Above the Bushline:

71% of respondents expected to see about the same or more people above the bushline while on their trip. **Most people saw up to 20 people above the bushline**. Remote settings generally involve interactions with very few other parties, therefore it is apparent that alpine areas in the Mount Aspiring region have greater numbers than most other remote settings. Despite this, expectations on the number of people encountered seem to be in line with the actual number encountered. Again, it is important to consider the possibility that expectations are increasing at the same time as increased use.

Helicopter access

Only half of all climbers actually saw helicopters landing. Of these, only one quarter thought helicopter use created a negative impact (equivalent to 13% of all respondents). In comparison, 42% of these thought helicopters created a positive impact on their trip.

As indicated by Booth et al. (1997), recreationists' reactions appeared to be influenced by;

- **Attitude towards aircraft in parks**: Respondents who had themselves used aircraft access appeared more likely to view helicopter use positively.
- Expectations of aircraft activity: Those who expected to see fewer helicopters landing appeared more likely to view helicopter use negatively. Most people saw fewer than 6 landings. Those who saw only 1 landing appeared far more positive towards helicopter use than those who saw between 6 and 10 landings. There was no apparent difference in attitude between New Zealand and international visitors.
- **Previous visits and backcountry experience**: Those who had experience in the region did not appear to view helicopter use differently from those who were new to the region.
- Activity: Climbing in the Mount Aspiring region requires a significant amount of effort and skill in negotiating routes and climbs. Many of those who thought helicopters created a negative impact gave reasons centred on the distraction from the climbing experience in some way (i.e. noise, reduced sense of remoteness). In comparison, many of the reasons given for a positive impact were based on the ease and speed of access allowing the climber to make the most of good weather and achieve their climbing objective.
- **Setting**: The remainder of stated reasons for a negative impact focused on altered conditions at Colin Todd hut, such as increased numbers and concern over bed availability.
- **Perception of the purpose of the flight**: In the comments section of the survey, it was noted that scenic flights were considered far more of a disturbance than flights into Bevan Col. People often mentioned that flights for rescues and for hut maintenance were acceptable forms of helicopter use, while the most prominent reason for a positive attitude towards helicopter use was the perception of increased safety.



Options for Aircraft Access

Opinion was neutral on the option for restricting the number of people who can fly in per day, and on restricting the number of landings at Bevan Col per day.

There was an overall disagreement towards allowing aircraft only in the quiet part of the season, and for disallowing aircraft landings all together.

Options for Colin Todd Hut

Overall opinion was neutral for the option of retaining a 12 bunk hut at Colin Todd, however strong support was shown for increasing the hut to 20 bunks, and strong disagreement was shown for removing the hut.

Opinion regarding a bunk booking system was neutral overall; however the most prominent percentage indicated strong disagreement.

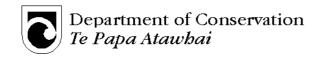
Opinion was also divided over the option for encouraging camping, and on putting limits on the number of guided parties using the hut.



References:

- Booth, K.L., Jone, N.C., and Devlin, P.J. 1997a. *The Effects of Aircraft Overflights on Recreationists in Natural Settings*. Science and Research Division, Department of Conservation.
- Booth, K.L., Jone, N.C., and Devlin, P.J. 1997b. A Manual For Measuring the Effects of Aircraft Overflights on Recreationists in Natural Settings. Science and Research Division, Department of Conservation.
- Burns, R.C., Graefe, A.R., and Absher, J.D. (2003). Alternate measurement approaches to recreational customer satisfaction: Satisfaction-only versus gap scores. *Leisure Sciences*, 25(3), 363-380.
- Cessford, G. (1997). Visitor satisfactions, impact perceptions, and attitudes toward management options on the Kepler Track. *Science for Conservation*, 70. Department of Conservation, Wellington.
- Espiner, Stephen. 2006. Determining indicators of quality outdoor recreation: A review of social impact monitoring and its application to conservation land management in New Zealand.
- Graefe, A.R., Vaske, J.J., and Kuss, F.R. (1984). Social carrying capacity: An integration and synthesis of twenty years of research. *Leisure Research*. 6(4):395-431.
- Heberlein T. A, Vaske J. J. (1977). Crowding and visitor conflict on the Bois Brule River (report WISC WRC 77-04). Madison, WI: University of Wisconsin Water Resources Centre.
- Manning, R. E. (1999). *Studies in outdoor recreation: Search and research for satisfaction*. Oregon State University Press, Corvallis.
- National Park Service, 1994. Report to Congress Report on Effects of Aircraft Overflights on the National Park System. National Park Service, USA.
- Nielsen, J.M., Shelby, B. and Haas, J.E., 1977. Sociological carrying capacity and the last settler syndrome. *Pacific Sociological Review* 20, 4, 568 581.
- Oliver, G., 1995. Social Impacts of Visitors and Aircraft in the vicinity of the Fox and Franz Josef Glaciers: Assessing the Carrying Capacities. Unpublished masters thesis, Aberystwyth University, Wales.
- Rogers, K., 1995. *The Effect of Aircraft Overflights on Visitors to the Mount Cook National Park.* Unpublished postgraduate diploma dissertation, University of Otago, Dunedin.
- Shelby, B., Vaske, J., and Heberlein, T. (1989). Comparative Analysis of Crowding in Multiple Locations: Results from Fifteen Years of Research. *Leisure Sciences*, *11*, 269-291.

Appendix 1



Date: / / 200	
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MOUNT ASPIRING NATIONAL PARK ALPINE CLIMBER SURVEY

Thank you for taking the time to help us out. Your input will provide DOC with valuable information to help manage mountaineering in the Mount Aspiring region. For any questions about the survey contact the survey manager, Annette Smith at the address given at the back.

1.	Is this your <u>first</u> climbing trip into the <u>Mt Aspiring National Park</u> region?									
	☐ YES	S - go to Question 3 NO - I've climbed here before - answer of	questions 1a and 1b							
	- 1a.	How many climbing trips have you done in the park region? - I've do	 ·							
	- 1b.	What year was your first climbing trip in the park? - I first climbed in	the park in							
2.	Is this	s your first time climbing on/ near Mt Aspiring?								
	☐ YES	S - go to Question 3 NO - I've climbed here before - answer	guestions 2a, 2b and 2c							
	- 2a.	How many climbing trips have you done on/near Mt Aspiring? - I've	done trips.							
	- 2b.	What year was your first climbing trip on/near Aspiring? - I first climb	ped here in							
	- 2c.	Have you ever used a helicopter flight for access on past trips on/ne	ear Mt Aspiring?							
		□ YES □ NO								
3.	Are you using a helicopter flight for access on this trip? YES NO									
	- 3a	If NO - what are your main reasons for not using a helicopter flight?								
			(now <u>go to</u> question 4 overlfeaf)							
	- 3b	If YES, what are your main reasons for using a helicopter?	•							
			(now go to question 3c and 3d)							
	- 3c	If YES - How you are using helicopter flights on this trip?								
	To fly b	both in and out from Bevan Col								
	Just to	o fly in to Bevan Col								
	Just to	o fly out from Bevan Col								
	Other f	flight type? - Please describe								
	- 3d	If YES - If there was no helicopter access would you still have chose ☐ YES ☐ NO	en to climb here?							

4.	How many nights has your trip been to the Mt Aspiring region? - Our trip was nights												
5.	Where did you stay and for how many nights?												
	□ Colin Todd Hut for nights												
	☐ French Ridge Hut for nights												
		Ç	☐ Camping for nights - where was your main site?										
				Bivvying for nights - where was your main site?									
6.	Did you feel <u>crowded</u> at any places while on your trip? (circle a number for places you used)												
Loca	Location Not at all Somewhat Moderately Extremely Crowded Crowded Crowded Crowded												
- At C	olin Too	dd Hut	1	2	3	4	5	6	7	8	9		
- At F	rench R	tidge	1	2	3	4	5	6	7	8	9		
Hut													
	nbing on		1	2	3	4	5	6	7	8	9		
Aspiri	•		4	•	•		_	•	_				
- Othe		0	1	2	3	4	5	6	7	8	9		
IT OT	her, wh	ere? -											
7.	If you	used Coli	n Todd	Hut - ho	w many	people we	re the	ere on the b	usiest :	night?			
8.	How n	na <u>ny climl</u>	bers did	you see	above	the bushlir	ne wh	ile climbing	during	this tr	ip?		
		☐ un	der 10		1	0-20		□ 20-30 □			□ over 3	0	
9.	Were	you expec	ting to	see -									
		☐ Le	ss peopl	e	☐ Al	About the same			people	e 🗖 Didn't know			
10.				with oth	er peop	le have any	nega	ative impact	s on ye	our trip	here?		
☐ YE	S	□ NO											
	If YES	- how?											
11. YE		eing/ inte		with oth	er peop	le have any	posi	tive impact	s on yo	ur trip	here?		
	If VES	- how?											
12.								is trip? 🗖		newer	122-12		
12.		used a he					OII tiii	istrip: 🗅			to question	13	
	- 12a.	How ma							I				
		☐ On	nly 1 land	ding	2 -5	5 landings		J 6-10 land	•		ver 10 landi	ings	
	- 12b.	Were you	u expect	ing to se	e -								
		Le: helicopt			☐ Al	bout the san	ne	☐ More	helicop	ters	☐ Didn't	know	
	 - 12c . S □		ng helico	pters lar	idings h	ave any neg	ative	impacts on y	our trip	here?			
-													
										horo			
☐ YF	-12d. S □		ig nelico	pters lar	idings na	ave any <u>pos</u>	<u>ıtıve</u> ir	npacts on y	our trip	nere?			
_ · -													

13. The Department of Conservation is looking at ways it can better manage the climbing experience in the Mount Aspiring region. Indicate how much you support the following by circling the numbers:

Aircraft access to Bevan Col	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Restrict the number of people who can fly in per day	1	2	3	4	5
Restrict the number of landings per day	1	2	3	4	5
Allow aircraft access only in quiet part of climbing season	1	2	3	4	5
Allow no aircraft landings at Bevan Col.	1	2	3	4	5

Colin Todd Hut facilities	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Retain a 12-bunk hut	1	2	3	4	5
Increase up to 20-bunks	1	2	3	4	5
Remove the hut	1	2	3	4	5
Have a bunk booking system	1	2	3	4	5
Encourage people to camp	1	2	3	4	5
Put limits on the number of guided parties using the hut	1	2	3	4	5

	14. Please give us a brief description of yourself						
•		Gender ? ☐ Male	☐ Female	How many people	are in your group	?	
•		Were you climbing	with:	Friend/s By yourself Club members Guiding Compa Other?			
•		Age group?: 60+	☐ Under 20	20-29	30-39	40-49	□ 50-59
•		Where do you live?	New Zea	land - where?			
			Overseas	s - what country?			
			nal climber (at lea limber (at least th		ed climber		

16.	Please add any other comments you might want to make about issues raised in this survey or on the Department's management of the Mt Aspiring National Park and region.
	THANK YOU FOR YOUR TIME
	Please return your completed survey to:
	Hut warden at Aspiring/ French Ridge Huts
	or

Department of Conservation PO Box 93 Ardmore Street WANAKA

Fax: 03 443 8777

Email: wanakavc@doc.govt.nz