



# Monitoring of mountain-bike activity within the Poulter valley

2007–2010



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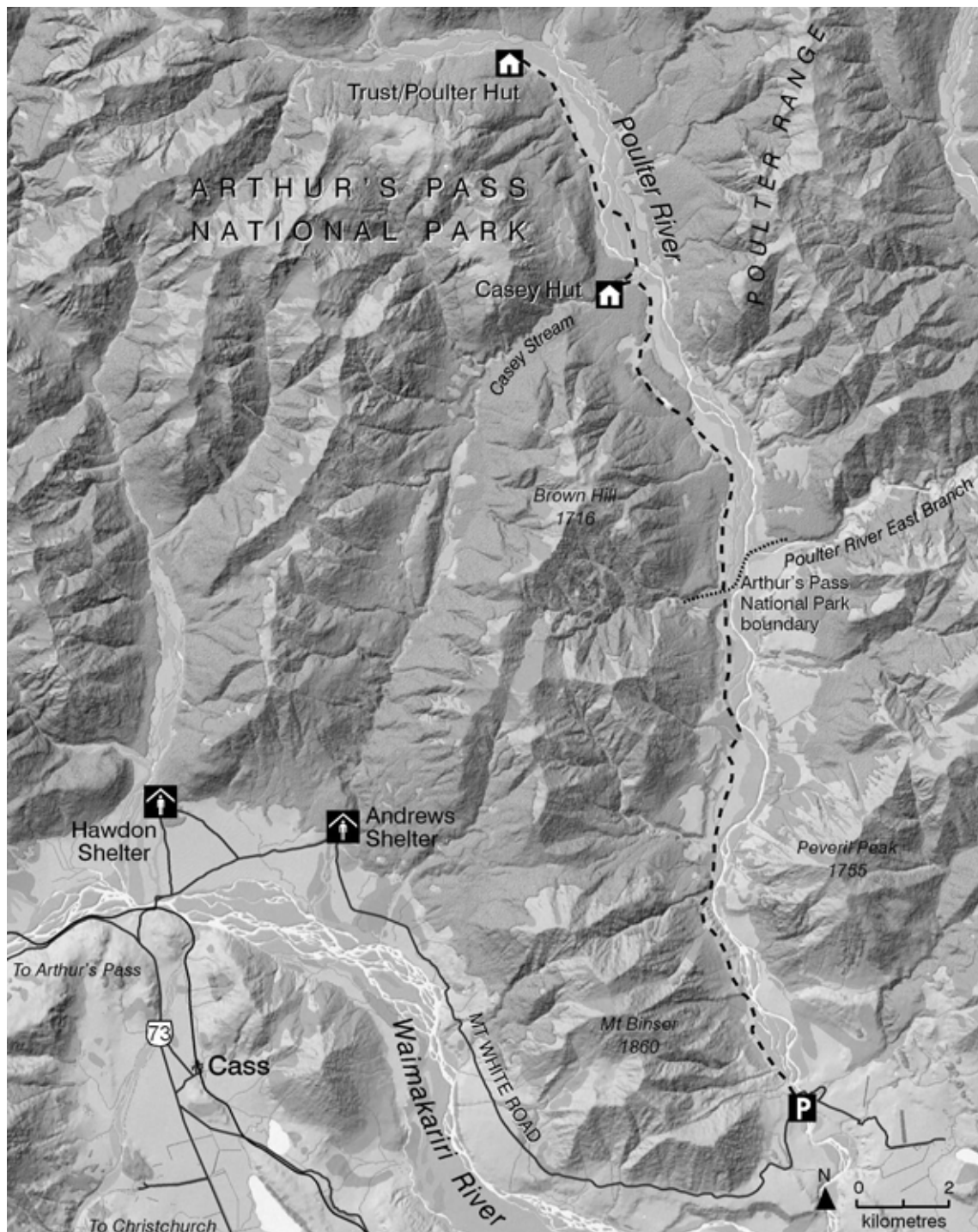




# 1. Introduction

The Arthur's Pass National Park Management Plan (Department of Conservation, 2007) allows a three-year trial of mountain biking up the Poulter valley to the Trust / Poulter Hut. The allowed route follows the ex-4WD track from the park boundary to Casey Stream, then the Stream and Poulter River beds, then back to the ex-4WD track as far as Trust/Poulter Hut (figure 1). Before and during the trial prospective mountain bikers and the public were informed of this opportunity through information provided on the Department's website. A brochure detailing the route and trial – *Poulter Valley Mountain Biking, Route Guide 10a* – was also provided at Department visitor centres. Mountain-bike websites [vorb.org.nz](http://vorb.org.nz) and [groundeffect.co.nz](http://groundeffect.co.nz) provided information at the beginning of the trial, as well as hosting web-based visitor feedback forms.

Figure 1. Poulter valley mountain-bike route.



The park plan sets out a monitoring programme under Method 6.3.6(e) to consider the effects on mountain biking, and Policy 6.3.6(f) allows for the activity to continue, or be ended, or that additional controls be put in place should adverse effects or other impacts be minimal, or significant.

In order to meet monitoring requirements, a monitoring programme and indicative thresholds for assessing the extent of effects have been developed by the department and the New Zealand Conservation Authority NZCA (Palmer, 2007). A site visit 16–17 October 2007 by Waimakariri visitor assets staff and TSO-recreation collected baseline data for the monitoring programme. The mountain-bike trial period began on 13 December 2007 for a three-year period. A second site visit was made 19–20 May 2010 to re-monitor and assess the impacts of the activity over the trial period. Use and impact data was also collected over the trial period using a number of methods including hut and intention books, staff and visitor comment, and an internet-based feedback form.

This document outlines the monitoring programme and requirements, and work done to date to meet those requirements. It also presents and discusses initial results and makes some recommendations about the continuation of mountain bike activities in the Poulter valley.

## 2. Monitoring programme

This section outlines the key components of the monitoring programme. For each of these, the required monitoring is outlined and the results are discussed. Where relevant, the indicative thresholds for use in management decisions are also outlined.

### 2.1 Baseline data

#### Monitoring required

- Surveys and/or photo points on the track and adjacent tracks to determine the absence/presence of mountain-bike activity off or beyond the allowed track, acknowledging that there has been some unauthorised pre-trial use (see section 2.3 for further details and results).
- Surveys and/or photo points of the mountain-bike track itself at any key-soft-ground localities identified in the pre-trial period and at any localities should impacts become apparent during the trial period (see section 2.4 below for further details and results).
- Hut-book analysis for the period preceding the trial for Casey and Trust Poulter huts, to determine, as far as possible, existing public use types and numbers in the valley. This information is available in separate documents.

#### Results

- Baseline data outlining pre-trial survey and photo points of the mountain-bike track and adjacent tracks are outlined in sections 2.3 and 2.4 below.
- Pre-trial data for Casey Hut was available from November 2005 to the start of the trial period in December 2007. Total hut numbers for complete years were 768 (2006), and 753 (2007), with an expected seasonal fluctuation in use (figure 2). The predominant activity is tramping, with 95% and 91% of visitors undertaking this activity in 2006 and 2007 respectively; trampers made up 100% of visitors in seven of these months. Of the

other activities hunting is the most popular, with 3% and 5% overall for 2006 and 2007. A small percentage of mountain biker non-compliance is also noted (see figure 3). Of those users 82% in 2006 and 77% in 2007 were from New Zealand (see figure 4).

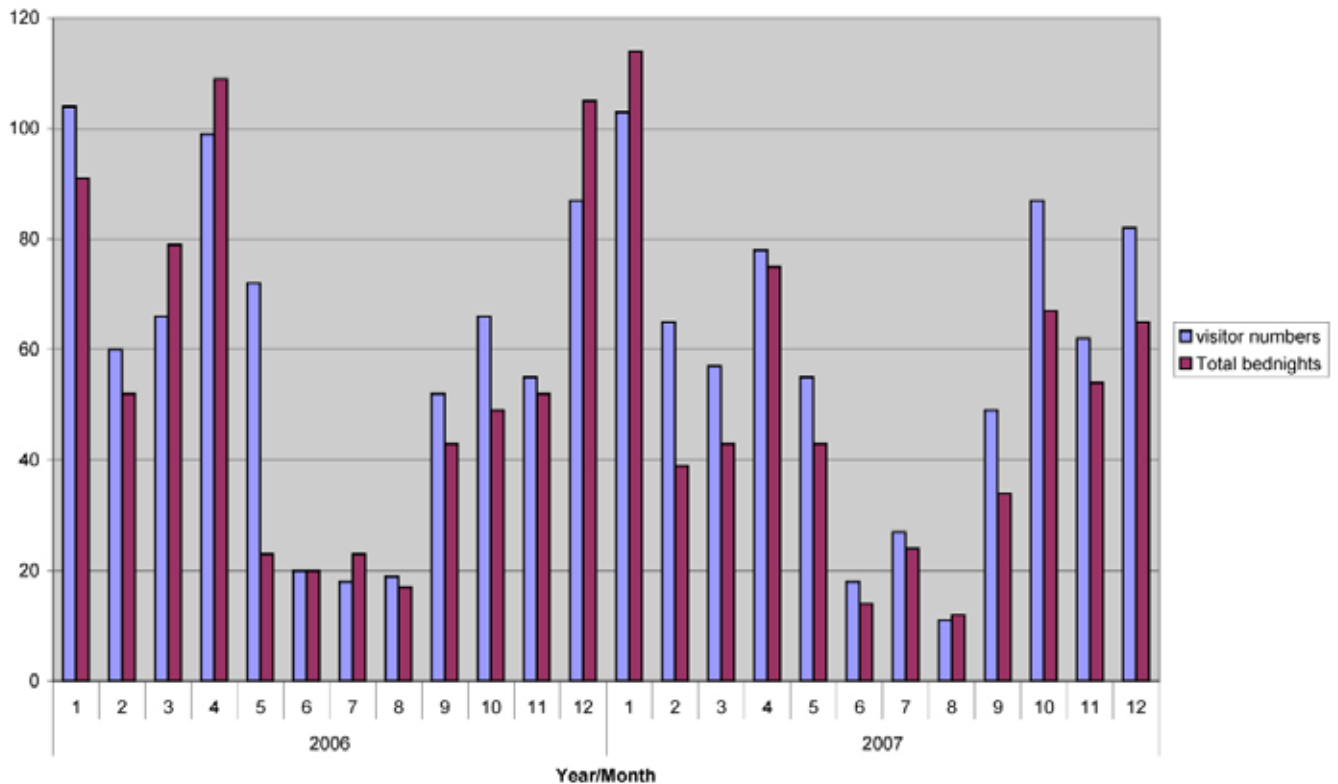


Figure 2. Visitor numbers and bed nights for Casey Hut – pre-trial

- Casey Hut has sleeping capacity for 16. Trampers account for the majority of bed nights recorded here, including 100% occupancy during eight months of 2006 and five months of 2007. A comparison of total trumper numbers and bed nights indicates that over the 2 years 91% of trampers who walked the Poulter valley chose to stay overnight at Casey Hut. The smaller number of hunters and fishermen who pass through also generally choose to stay at the hut. For a full breakdown of bed nights for each user group refer to appendix 6.3.1.

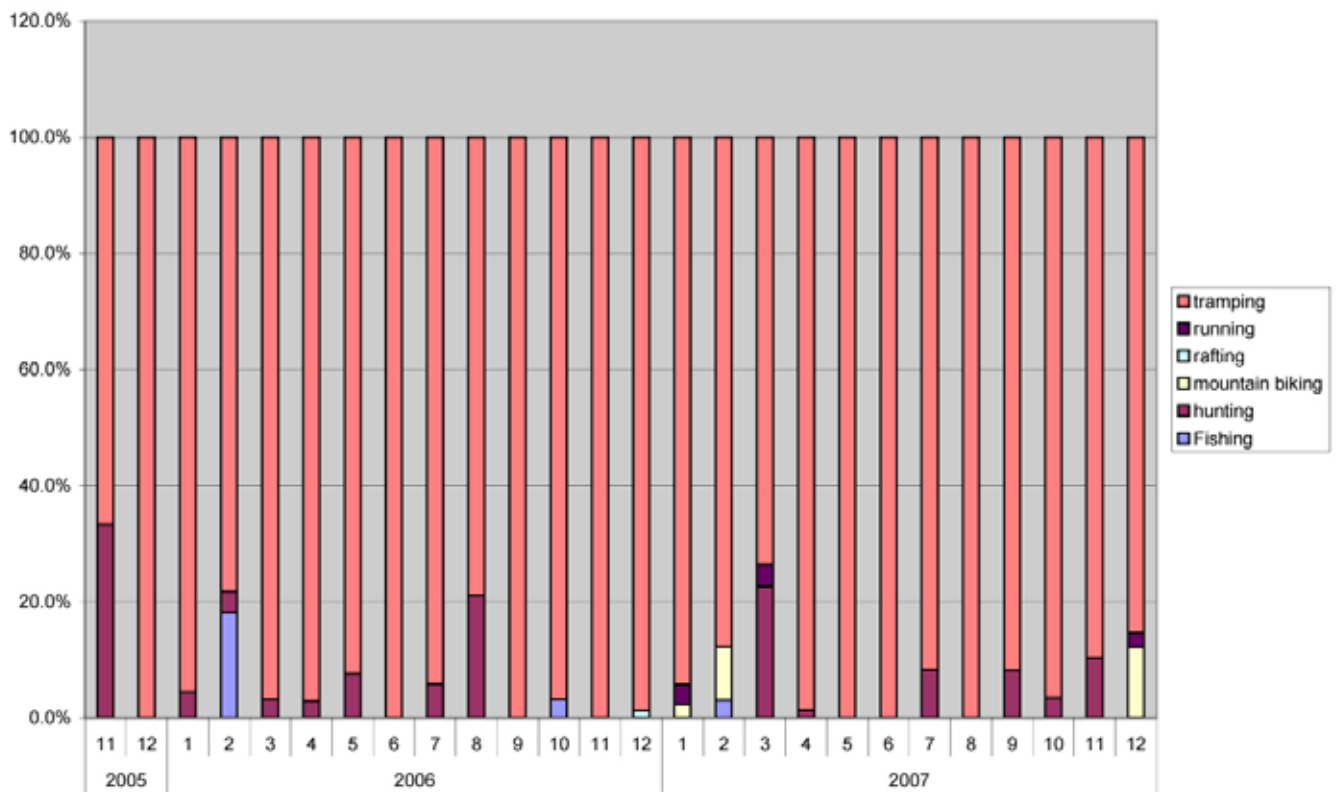


Figure 3. Activity types recorded at Casey Hut – pre-trial

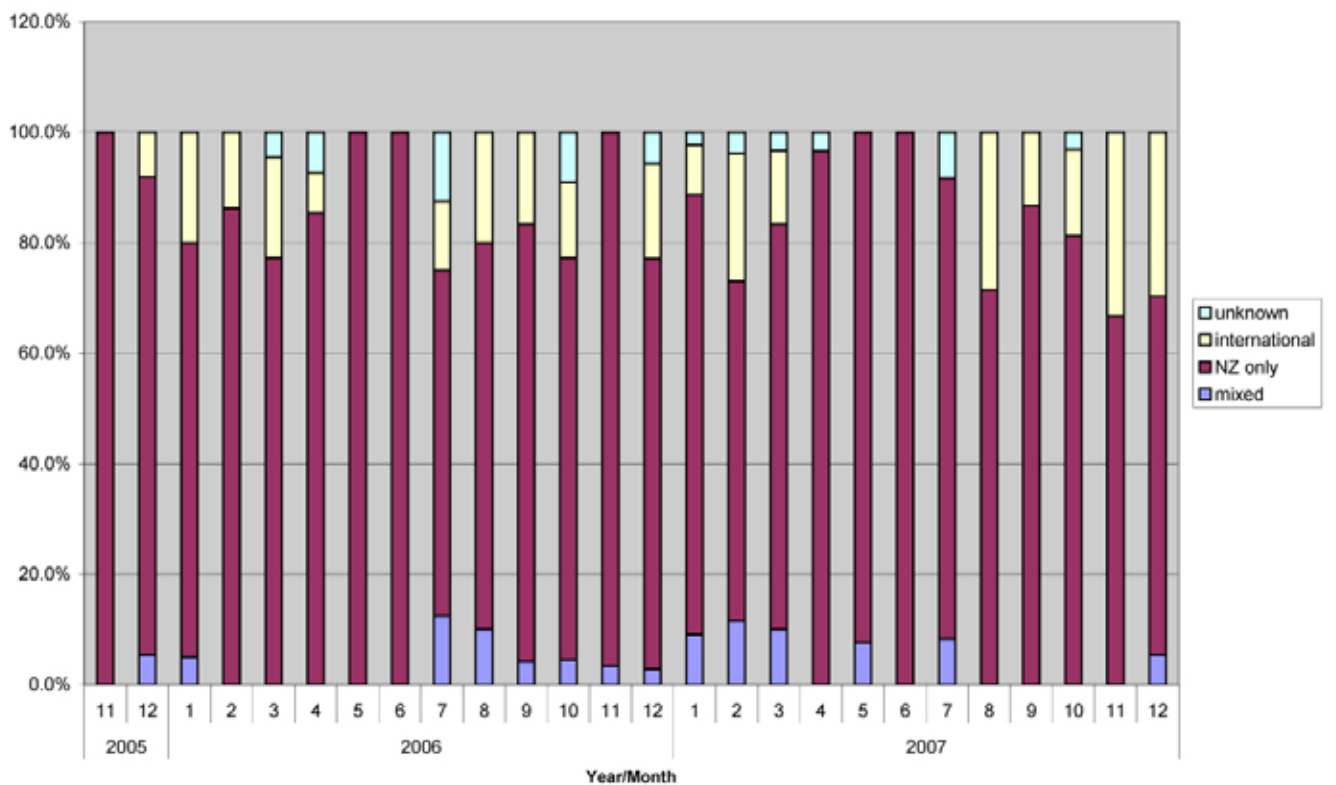


Figure 4. Casey Hut visitor origins – pre-trial.



- Complete years were available for the Trust Poulter Hut from 2003–2006. Data was available for 2007 but was incomplete. Total visitor numbers for the Trust Poulter are significantly lower than for the Casey Hut, likely reflecting Casey Hut’s location within the popular Casey Saddle / Binser Saddle circuit. Annual visitor numbers were highest in 2003 at 220, with the lowest the following year at 157, with a general seasonal fluctuation as visits drop off during the winter months (figure 5). The most dominant activity is tramping, accounting for around 80% of hut visitors per annum. Hunting and fishing account for, on average, 11% and 3% respectively of the visitor numbers. Predictably, tramping numbers generally drop off in the winter months, whilst fishing increases in the summer. Hunting shows no particular pattern of use (figure 6). Of those visitors 93% in 2003, 94% in 2004, 89% in 2005 and 96% in 2006 were from New Zealand (figure 7).

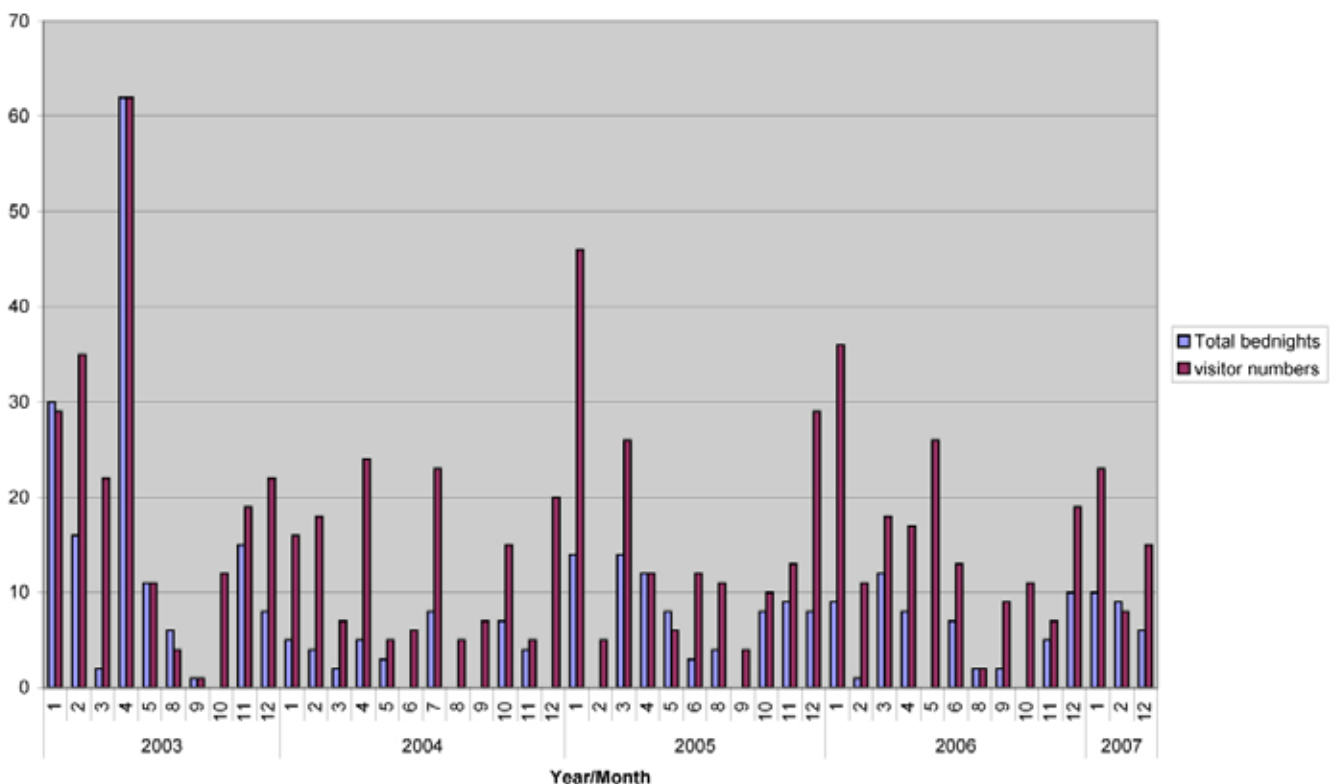


Figure 5. Visitor numbers and bed nights for Trust Poulter Hut, pre-trial

- The Trust Poulter Hut has sleeping capacity for six, with trampers as the majority user in terms of actual number of bed nights (although this is a very popular overnight spot for the small number of hunters who pass through). However, relative to overall numbers and compared to Casey Hut, bed nights are greatly reduced, indicating that the majority of visitors use this hut as a stop-off point before continuing to their end of day destination. For a full breakdown of users and bed nights for the pre-trial period refer to appendices 6.3.2. and 6.3.3.

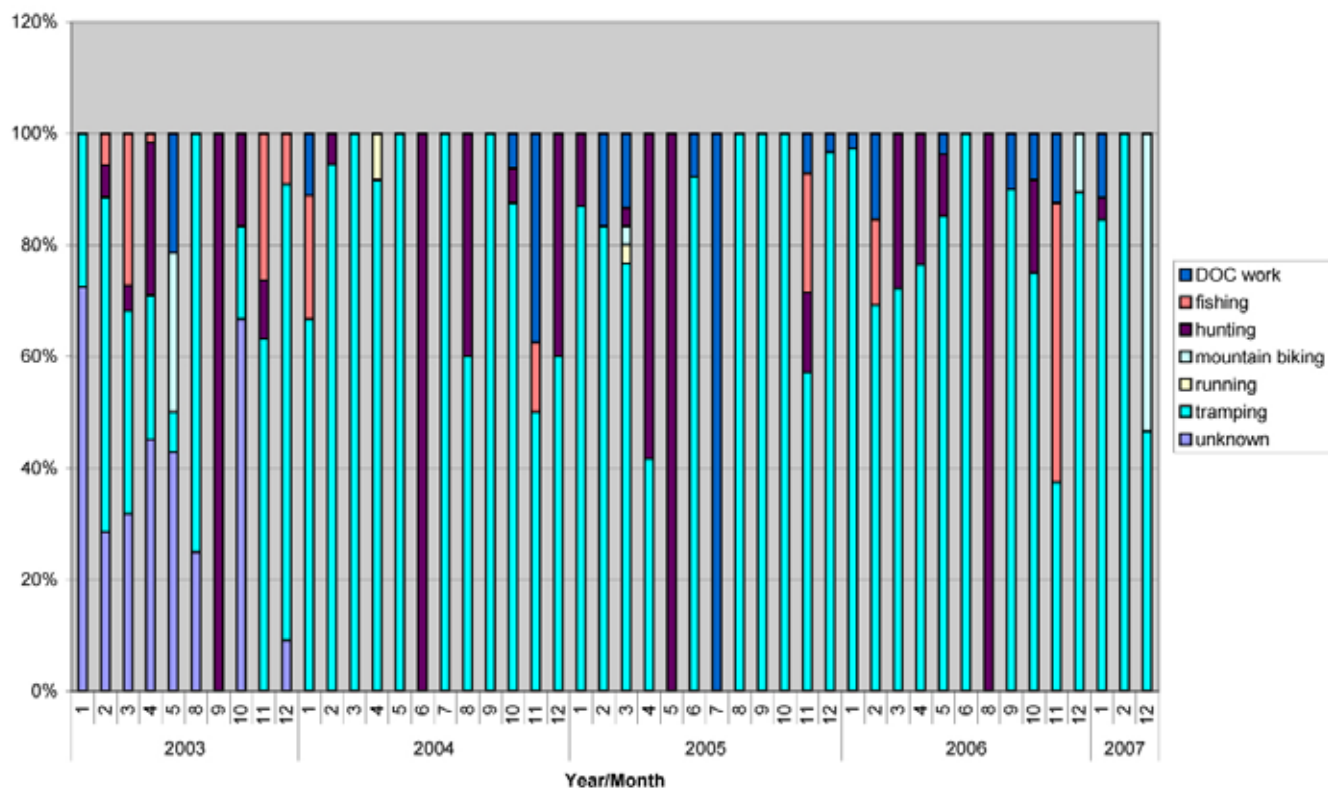


Figure 6. Trust Poulter Hut, visitor types – pre-trial

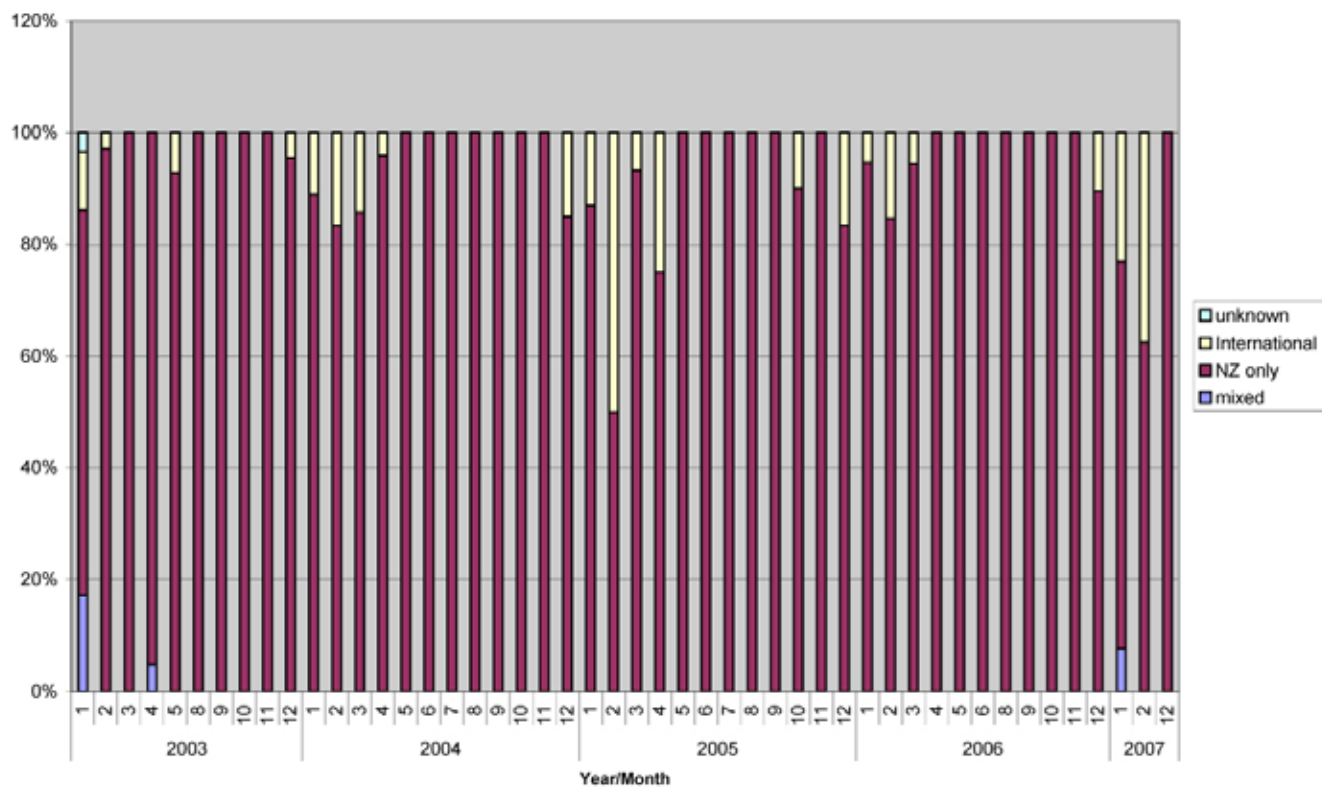


Figure 7. Trust Poulter Hut, visitor origins – pre-trial

## 2.2 Degree of MTB use of allowed track

### Monitoring required

- The establishment of a sign-in book at the Mt White Road end.
- Ongoing hut book analysis for Casey and Trust Poulter huts.
- Direction observation of mountain-bike use by DOC staff working in the area to record any unauthorised activity (date, numbers, any breach of allowed mountain-bike use). The current frequency of staff movements for Operation Ark work in the valley is generally continuous between October and April and monthly outside this period, and twice per year for recreation asset management work, usually spring and autumn.
- The establishment with Mountain Bike NZ of a Poulter info 'page' on local mountain-bike websites, for rider information and where riders can log usage and comments. These have been set up at [www.vorb.org.nz](http://www.vorb.org.nz) and [www.groundeffect.co.nz](http://www.groundeffect.co.nz). A feedback form was also established on the DOC website at [www.doc.govt.nz](http://www.doc.govt.nz) for trampers or hunters using the Poulter valley who encountered mountain bikers.

### Indicative thresholds

There are no thresholds set for the degree of mountain-bike use of the allowed track. Numbers using the track is not in itself an issue. The concern is the effect of those numbers on the track or on other users.

### Results

The most comprehensive analysis of use over the trial period is taken from hut book analysis of Casey Hut. Measures of use are also available from hut book analysis for Trust Poulter Hut, the Mt White Road-end intentions book, and the internet feedback survey forms that were made available on the Ground Effect and Vorb websites.

- In the first year of the trial there was a notable increase in the total number of visitors to Casey Hut. However, the following years are not significantly different from those of pre-trial years. Annual numbers are 801 (2008), 723 (2009) and 764 (2010). Again there is a seasonal fluctuation similar to that of pre-trial years (figure 8).
- During the trial period tramping remained the dominant activity, although as a percentage of overall activity this decreased. After removing DOC work and 'unknown', tramping accounted for 71% (2008), 82% (2009) and 84% (2010) of overall visits to Casey Hut, whilst mountain biking accounted for 25%, 12% and 11%. (figure 9). The first year of the trial attracted the greatest number of mountain bikers, although there were no visits during July, August or September, likely due to a particularly wet winter. The number of mountain bikers more than halved for 2009 and 2010, with both years showing a drop-off in visits during the winter months. The decrease in visitation is likely due to the novelty of the experience offered in that first year; many local riders may have added it to their list of must do rides for that year. It may also indicate a lack of repeat visits. Although tramping has decreased as a percentage of overall visitors, the actual numbers of trampers in the last two years did not vary significantly from pre-trial years. This is similar for all other activities.
- For the trial period 86% of visitors in 2008 were from New Zealand. In 2009 and 2010 this figure was 72% and 77% respectively. Again, overseas visitors reduced to 0% in the winter months and increased during spring and summer (figure 10).

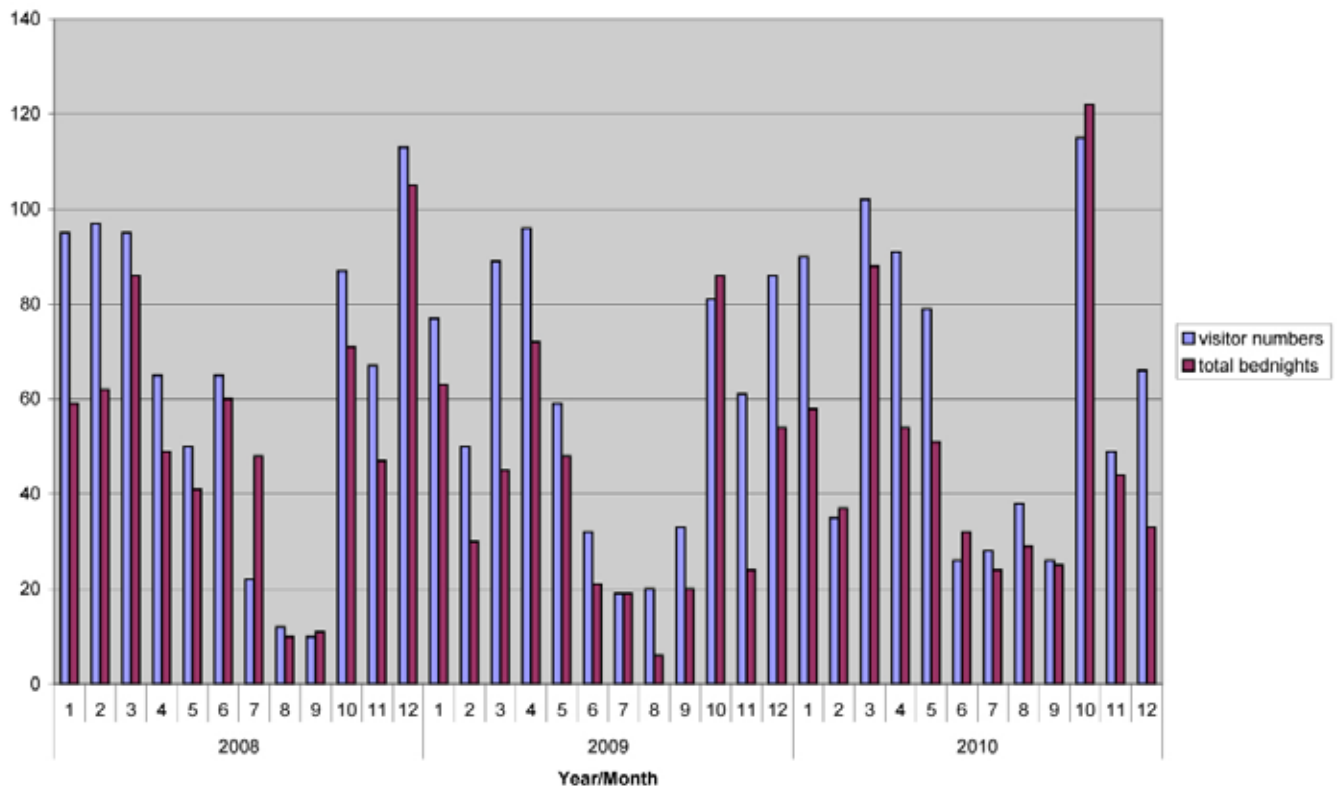


Figure 8. Visitor numbers for Casey Hut – trial period.

- Data indicates a general increase in bed nights for the trial period at Casey Hut over pre-trial years. 2008 saw the highest number of mountain bikers and the highest number of mountain- biker bed nights. However, as a percentage, only 36% of those bikers chose to stay in the hut. The following two years saw a drop in rider numbers and a drop in bed nights. To compare, 19% and 42% of riders stayed in the hut during 2009 and 2010, compared with 79% and 85% of trampers, and there are no bed nights recorded for mountain bikers during August and September of either year. The ratio is even lower for the Trust Poulter Hut, suggesting that a significant percentage of riders came with day-trip intentions. A nominal hut capacity can be calculated by multiplying a hut's sleeping capacity by the number of nights per annum for which it is reasonable to expect the hut to be used, such as Saturday nights and long weekends. A basic calculation indicates that, taking into account this small increase in bed nights at Casey Hut, use is still well within capacity. This is also true for the Trust Poulter Hut.
- Data for the Mt White/Poulter road-end intention book is unfortunately incomplete, as this was not in place throughout the entire trial period. Of note for the only complete year (2010) are the higher mountain-bike numbers recorded at the road end (125), as compared with Casey Hut (82) and the Trust Poulter Hut (21). Given the low numbers recorded at the Trust Poulter, it is likely that a number of riders chose not to ride this far (rather than just not signing into the hut intentions book), possibly finding the track harder than expected, alluded to in a number of comments made on the internet visitor feedback forms; ("Steep climbs challenging for riders inexperienced, heavily laden, or not pretty strong"). Some also noted the difficulty of crossing the river and walking up the riverbed immediately after Casey Hut and had difficulty with the signage ("track was easy to follow until the river section from the Casey"), which may have caused some riders to turn around at this point.
- The number of trampers recorded at the road end is also much lower than for Casey Hut. As mentioned previously, Casey Hut is part of the Andrews Saddle/Binser Saddle circuit, and the more obvious starting point for this walk is at Andrews Shelter, rather than the Poulter road-end.

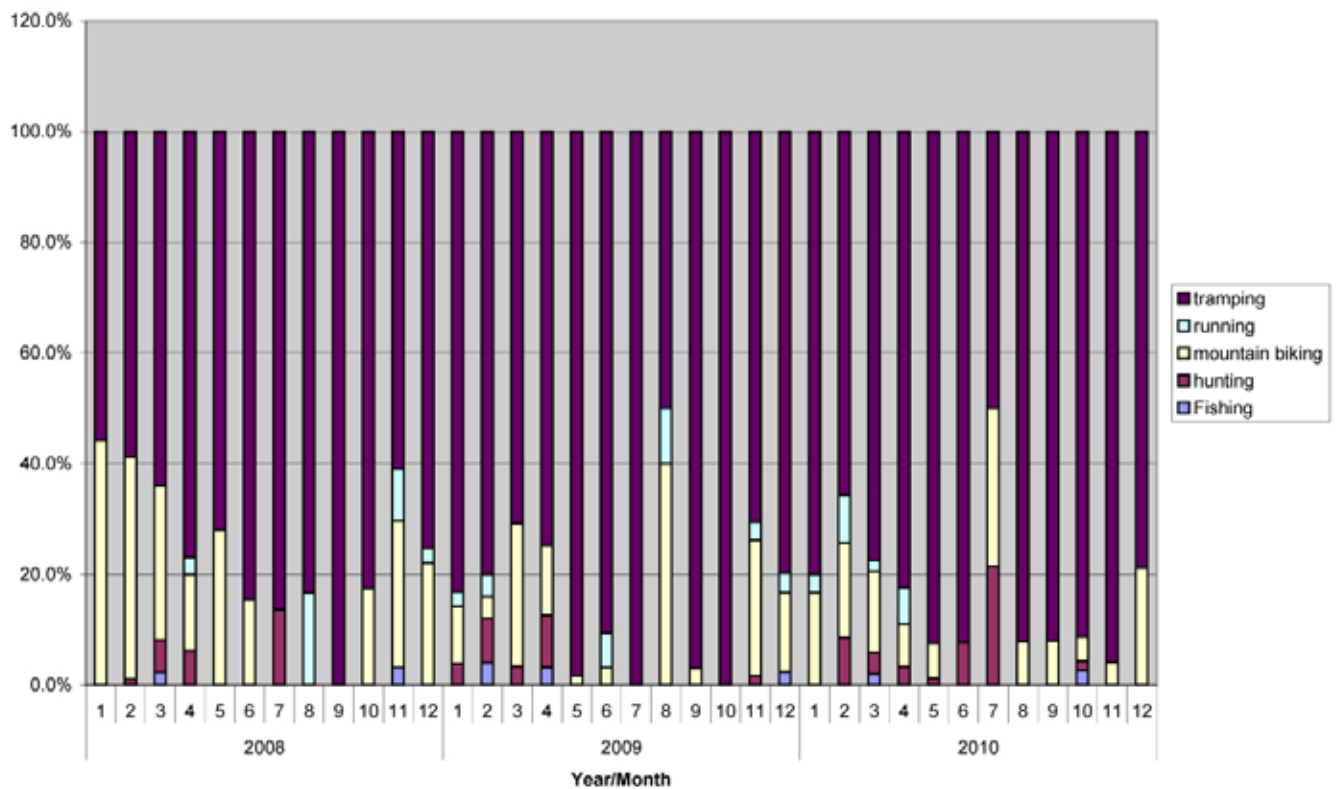


Figure 9. Visitor types, Casey Hut – trial period

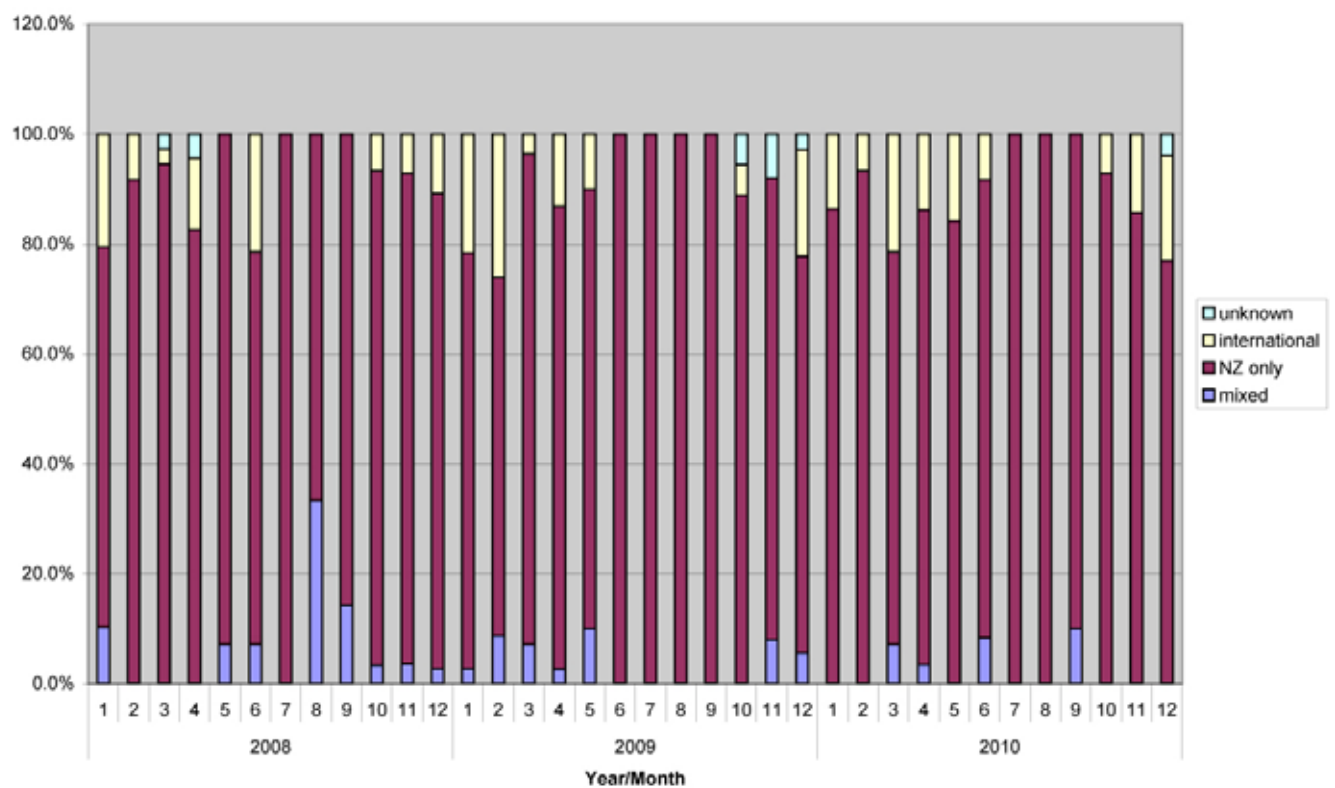


Figure 10. Visitor origins, Casey Hut – trial period

## 2.3 Absence/presence of MTB activity off or beyond allowed track

### Monitoring required

- Surveys for wheel tracks along the first 100 m of each of the Binser and Casey Saddle tracks, the bush track beyond Casey Hut, the track beyond Trust/Poulter Hut, and in any locations identified where potential desire lines could occur to the side of the mountain bike track.
- Photo points at suitable points along the 100 m survey lines and at potential desire line locations using the methodology provided in the department's photo point monitoring standard operating procedure SOP (Department of Conservation, 2005).
- The establishment of a process with tramping clubs and other visitors to collect comments and reports of unapproved activity. This included the recording by department staff of any comments received on an ad hoc basis, via on-going regular user group forums, and from a feedback form on the DOC website at [www.doc.govt.nz](http://www.doc.govt.nz) for trampers or hunters using the Poulter valley who encountered mountain bikers.

### Indicative thresholds

There should be very low numbers of incidents and effects, preferably zero. The aim is 100% compliance with mountain bike activity remaining on the allowed track.

Any departure from this should trigger consideration of additional measures to achieve compliance.

### Results

#### *Poulter Valley mountain bike route*

No potential desire lines along the track were identified during the pre-trial visit or over the trial period. The terrain is reasonably robust, and the difficulty of riding a mountain bike off-track along the route is likely to deter the majority of mountain bikers from venturing off the main track. During the May 2010 visit, several wet sections of track were noted, but these are associated with river crossings and have a hard rock substrate, hence diminishing the incentive for vehicles to by-pass them. No evidence of off-track activity was found in these areas or at any other points along the main track.

#### *Binser Saddle Track*

The first section of the Binser Saddle Track from the junction with Poulter River Track consists of several short steep sections of track through low shrubs on a rock and mud substrate, interspersed by two flat grassy terraces, and giving rise to a third top terrace where the track leads into bush. The steepness and difficulty of negotiating these sections with mountain bikes is likely to deter the majority of users. There is potential that some users may carry bikes up and/or down steep sections, but the Binser Saddle Track is unlikely to provide an attractive mountain-bike opportunity due to the high-level skill and specialised equipment that would be required to ride it.

The first section of the track up to the top terrace and along the track leading into the bush was walked and surveyed for wheel tracks on 17 October 2007. There was no evidence of any mountain-bike activity and no wheel tracks were evident. No formal photo points were established as there were no areas of particular concern and no impacts were evident. A series of informal photos were taken to record the state of the track pre-trial (see photos 1-4 below). The weather was wet and overcast.



The same first section of track was walked and surveyed for wheel tracks on 20 May 2010. Again, no evidence of any mountain bike activity was found and no wheel tracks were evident. Again, no formal photo points were established although the series of informal photos that had been taken in 2007 were replicated and are shown below. The weather was fine and dry with some low cloud.



Photo 1a. (J. Borchers, 17 October 2007)



Photo 1b. (J. Borchers, 20 May 2010)

Photos 1 a and b show the junction of the Poulter River Track with Binser Saddle Track before the first steep section leading to the first terrace. Note that photo 1b shows a new track junction sign installed over the trial period.



Photo 2a. (J. Borchers, 17 October 2007)



Photo 2b. (J. Borchers, 20 May 2010)

Photos 2 a and b show the first section of track on top terrace



Photo 3a. (J. Borchers, 17 October 2007)



Photo 3b. (J. Borchers, 20 May 2010)

Photos 3 a and b show the first clay section of track on top terrace





Photo 4a. (J. Borchers, 17 October 2007)



Photo 4b. (J. Borchers, 20 May 2010)

Photos 4 a and b show the second clay section of track on top terrace, before the track leads into the bush

### *Casey Saddle Track*

Casey Saddle Track joins the Poulter valley at Casey Hut. The first section of the track beyond Casey Hut from the bush edge to the first steep climb was walked and surveyed for wheel tracks on 17 October 2007. There was no evidence of any mountain-bike activity and no wheel tracks were evident. The same first section of track was walked and surveyed for wheel tracks on 20 May 2010. Again, no evidence of any mountain-bike activity was found and no wheel tracks were evident.

This section is easily accessible from Casey Hut and the approved mountain-bike track, and it was considered that this section of track linking back to Andrews Shelter may be attractive to some riders in order to provide an alternative return loop. Again the nature of the track and its terrain is likely to deter the majority of mountain-bike users.

While no areas of particular concern were identified nor were any impacts present, two formal photo points were established to record the current state of the track during the baseline monitoring visit in 2007. Both were replicated during the 2010 re-monitoring visit. The first photo point, CS1, was established where the track starts at the bush edge, and two photo frames were taken (Borchers, 2007; see photos 5 and 6).

The second photo point, CS2, was established approximately 100 m inside the bush just before the first steeper section of track, and again two photo frames were taken (Borchers, 2007; see photos 7 and 8).



Photo 5a. (J. Borchers, 17 October 2007)



Photo 5b. (M. Brown, 20 May 2010)

Photos 5 a and b show photo point CS1, photo frame 1, looking along the track from the bush edge back towards Casey Hut





Photo 6a. (J. Borchers, 17 October 2007)



Photo 6b. (M. Brown, 20 May 2010)

Photos 6 a and b show photo point CS1, photo frame 2, looking along the track from the bush edge back away from Casey Hut



Photo 7a. (J. Borchers, 17 October 2007)



Photo 7b. (M. Brown, 20 May 2010)

Photos 7 a and b show photo point CS2, photo frame 1, about 100 m inside the bush edge along Casey Saddle track from Casey Hut, and looking back towards Casey Hut



Photo 8a. (J. Borchers, 17 October 2007)



Photo 8b. (M. Brown, 20 May 2010)

Photos 8 a and b show photo point CS2, photo frame 2, about 100 m inside the bush edge along Casey Saddle track from Casey Hut, and looking along the track towards Casey Saddle



### ***Beyond Trust Poulter Hut***

The section of track beyond Trust Poulter Hut was walked and surveyed for wheel tracks on 18 October 2007. There was no evidence of any mountain-bike activity and no wheel tracks were evident. The same first section of track was walked and surveyed for wheel tracks on 20 May 2010. Again, no evidence of any mountain-bike activity was found and no wheel tracks were evident.

No formal photo points were established as there were no areas of particular concern and no impacts were evident. However, some informal photos were taken beyond Trust Poulter Hut, where the tramping track finished and a route continues across the river bed and further up the valley. Two photos were taken from a position approximately 700 m up the track from Trust Poulter Hut, and replicated during the re-monitor visit in 2010 (see photos 9 and 10 below). These illustrate the terrain, which is rocky and consists of a robust substrate, and informally record the state of the area pre-trial and towards the end of the trial period.



Photo 9a. (J. Henderson, 18 October 2007)



Photo 9b. (J Borchers, 20 May 2010)

Photos 9 a and b show the track beyond Trust Poulter Hut, looking up valley towards Poulter Hut, which can be seen next to the river in the distance



Photo 10a. (J. Henderson, 18 October 2007)



Photo 10b. (J Borchers, 20 May 2010)

Photos 10 a and b show the track beyond Trust Poulter Hut, looking down valley in the direction of Trust Poulter Hut

## 2.4 Biophysical impacts of the MTB track itself

### Monitoring required

Photo points at any key soft-ground localities identified in the pre-trial period, and at any locations should impacts become apparent during the trial period. Identification of any key soft-ground localities occurred during the pre-trial site visit, and was reassessed on an ad hoc basis through out the trial period by visitor assets staff during their visits to the valley for asset management purposes.

### Indicative thresholds

These are very hard to quantify due to the difficulty of distinguishing mountain-bike effects on a track that is also used by Department quad bikes. Should there be significant impacts, it is likely that Departmental use is the primary cause, and avoidance and/or remedial action will be required by those using quad bikes on the track as part of their work.

### Results

The mountain-bike track itself includes the section from the National Park boundary to Casey Hut and on to Trust Poulter Hut via the riverbed and some sections of track. An informal inspection of the track was carried out by DOC staff during the hut maintenance visit into the Poulter valley in October 2007 before the start of the mountain-bike trial. This inspection was repeated in May 2010 and during the trial period by visitor assets staff on their visits into the valley for visitor asset management purposes.

The track from the park boundary to Casey Hut consists of a single braid along most of its length. There is significant use by quad bikes for management purposes from October to April mainly associated with Operation Ark biodiversity work. No specific concerns about biophysical impacts along this track currently exist. While there are some wet and muddy sections, the track has a rock substrate and quad bike users know to keep to the main track line. It is unlikely that mountain bikers will be tempted to ride around these wet and muddy sections as there is little alternative terrain which would be ride-able.

Should they walk around these sections, any biophysical impacts created are likely to be no more significant than walkers who may do the same thing. Hence no areas of concern were identified, and no photo points were established during the pre-trial period. No further concerns were raised by visitor assets staff over the trial period.

During the trial, there were some comments received from visitors about the lack of clear signs indicating where the mountain-bike route splits from a tramping track section through bush before Casey Hut. This resulted in the sign showed in photo 11 being installed during the trial period.



Photo 11. Direction sign indicating the point where the mountain-bike route and tramping track diverge south of Casey Hut (J. Borchers, 20 May 2010).



During the re-monitor visit in May 2010, the first section of tramping track just beyond this sign was walked to check for any signs of mountain bikes using this section. While there was some evidence that ATVs follow the first tussock section of this track as far as the bush edge, there was no evidence that mountain bikes were doing the same or any impact concerns. The first 100-m section of track within the bush was walked and surveyed for wheel marks and none were evident. A steep section of track was identified about 2–3 minutes inside the bush line as a location where mountain-bike impacts would be likely to be seen due to braking if such use were occurring. A formal photo point, PV3, consisting of two photo frames, was established here to record that no such impacts currently exist and to allow these to be monitored into the future if required (Borcherds, 2010; see photos 12 and 13 below).



Photo 12. (J. Borcherds, 20 May 2010). Photo point PV3, photo frame 1, overview of steeper section of tramping track looking towards Casey Hut



Photo 13. (J. Borcherds, 20 May 2010) Photo point PV3, photo frame 2, overview of steeper section of tramping track looking towards junction with mtb track and Mt White Rd end



The track from Casey Hut to Trust Poulter Hut follows the river initially, then an ex-4WD track as far as Trust Poulter Hut. There is currently little use of this section of track by department quad bikes, as these are usually used to access Casey Hut only. The riverbed is usually followed should traffic continue on beyond Casey Hut, and the riverbed is the intended route for mountain bikes north of Casey Hut before the ex-4WD track is re-joined. The route in the riverbed is variable in terms of difficulty and comfort depending on river flow and movement.

While no areas of particular concern were identified along the mountain-bike route itself, two photo points were established on the first section of track through the bush beyond Casey Hut. The mountain-bike route intends that mountain bikes miss this section of track and use the river bed and these photo points were established to see whether there was demand for, and impacts from, any mountain-bike use of this section that may occur.

The first photo point – PV1 – was established c.f. 15-min walk beyond Casey Hut, and two photo frames were taken (Borcherds, 2007; see photos 14 and 15 below). While it is evident from the replicated photo points that the track appears more open and may be receiving more use, there were no specific mountain bike impacts visible and no concerns over the track state at this location.



Photo 14a. (J. Henderson, 17 October 2007)



Photo 14b. (J. Borcherds, 20 May 2010)

Photos 14 a and b show photo point PV1, photo frame 1, overview of Poulter Valley Track beyond Casey Stream c.f. 15-min walk beyond Casey Hut looking towards Casey Hut



Photo 15a. (J. Henderson, 17 October 2007)



Photo 15b. (J. Borcherds, 20 May 2010)

Photos 15 a and b show photo point PV1, photo frame 2, about 100 m inside the bush edge along Casey Saddle track from Casey Hut, and looking along the track towards Trust Poulter Hut



The second photo point, PV2, was established c.f. 20-min walk beyond Casey Hut on an incline section of the track, and two photo frames were taken (Borcherds, 2007; see photos 16 and 17 below). If they were to occur, mountain-bike impacts would be likely to be seen here due to braking on slope, although it is significant that scouring by water also occurs here. However, the substrate consists of rounded stones of medium size and is quite robust, meaning that significant impacts are not necessarily expected. Again, while it is evident from the replicated photo points that the track appears more open and may be receiving more use, there were no specific mountain bike impacts visible and no concerns over the track state at this location.



Photo 16a. (J. Henderson, 17 October 2007)



Photo 16b. (J. Borcherds, 20 May 2010)

Photos 16 a and b show photo point PV2, photo frame 1, about 20-min walk from Casey Hut towards Trust Poulter, looking uphill along the track line



Photo 17a. (J. Henderson, 17 October 2007)



Photo 17b. (J. Borcherds, 20 May 2010)

Photos 17 a and b show photo point PV2, photo frame 2, about 20-min walk from Casey Hut towards Trust Poulter, looking downhill along the track line



In addition to these formal photo points on this track section in the bush beyond Casey Hut, three boggy areas were identified and recorded with photos and grid references (see photos 18, 19 and 20 below). There were no concerns around current mountain-bike users on these sections, given they do not form part of the current approved route and no impacts specifically related to mountain-bike use were evident. However, should there be demand for vehicles to use this track section, these areas may require some hardening to mitigate any future impacts.



Photo 18a. (J. Borchers, 20 May 2010) First bog on section of track through bush directly north of Casey Hut looking in the direction of Trust Poulter Hut.



Photo 18b. (J. Borchers, 20 May 2010) First bog on section of track through bush directly north of Casey Hut looking in the direction of Casey Hut.



Photo 19. (J. Borchers, 20 May 2010) Third bog on section of track through bush directly north of Casey Hut looking in the direction of Trust Poulter Hut.



Photo 20. (J. Borchers, 20 May 2010) Second bog on section of track through bush directly north of Casey Hut looking in the direction of Trust Poulter Hut.



Informal photos were also taken further up the valley to illustrate the track terrain (see photos 21, 22 and 23). These photographs were taken near to a cairn in the centre of the track at the junction where the side track leads off the main track to Trust Poulter Hut. This is about 100 m from Trust Poulter Hut, at GPS location E2415496 N5816344.



Photo 21a. (J. Henderson, 18th October 2007)



Photo 21b. (J. Borchers, 20 May 2010)

Photos 21 a and b show Poulter Valley Track looking from the main track along the side track into Trust Poulter Hut



Photo 22a. (J. Henderson, 17 October 2007)



Photo 22b. (J. Borchers, 20 May 2010)

Photos 22 a and b show the Poulter Valley Track looking along the main track to the north from the track junction with the side track into Trust Poulter Hut



Photo 23. The Poulter Valley Track looking along the main track to the south from the track junction with the side track into Trust Poulter Hut (J. Borchers, 20 May 2010). Note no photo is available for 2007.

## 2.5 Enforcement incidents and outcomes

### Monitoring required

A record of all incidents whether reported by public or staff, any enforcement actions undertaken either as warnings or other, and known outcomes including mountain-biker responses, need to be recorded. Staff in the field are limited to verbal warnings unless they are warranted for enforcement action. Many of the Operation Ark staff and some recreation staff will not be.

### Indicative thresholds

There should be a low incidence of enforcement incidents, preferably zero, and high success in enforcement outcomes whether through statutory or informal processes. As with monitoring requirement 3, the aim is 100% compliance with mountain bike activity remaining on the allowed track. Any departure from this should trigger consideration of additional measures to achieve compliance.

### Results

Any enforcement actions or incidents during the trial period would have been recorded on a spreadsheet that was updated as and when required. There are no incidents or enforcement actions recorded for the trial period. Several mountain bikers admitted on the website feedback forms to walking their bikes along the section of walking track prior to Casey Hut, due to inadequate signage and a desire to avoid the riverbed. One comment contends that the Trust Poulter cannot safely be reached without using the walking track after Casey Hut (rather than dropping down and crossing the river).

## 2.6 Damage to or removal of signs

### Monitoring required

- A record of the location and extent of any damage or removal to signs.
- A check of hut books for adverse comment about signs. This was monitored through the ongoing hut book analysis for Casey Hut and Trust Poulter Hut.
- A record of any other public comments made to DOC or elsewhere about signs or damage/removal to them.

### Indicative thresholds

Damage to, or removal of signs should be no greater than normal for non-road-end back country situations. Some degree of sign damage is expected, and unless caught in the act could not be directed at mountain-bike riders. Where caught in the act, management would need to consider additional measures to achieve compliance.

### Results

There is no mention of damage to any signs along the Poulter valley in either the Casey or Trust Poulter hut intention books for the trial period. Visits to the Poulter valley track and communication with area DOC staff confirm this.

## 2.7 Casey and Trust/Poulter huts use and any conflicts with existing tramper use

### Monitoring required

- A record of direct observation by staff and possible hut wardens of any specific incidents.
- A check of hut books for records of mountain-bike use and any conflict/harmony comments. This was monitored through the ongoing hut-book analysis.
- A record of any public comments made to DOC or elsewhere about user conflicts.

### Indicative thresholds

As for other backcountry conflict thresholds, there should be less than 25% of visitors who are disturbed by the presence of mountain bikers on the track. The monitoring techniques proposed will not initially allow a rigorous statistical determination of any dissatisfaction levels, but will allow for a general perception to be gained which can be further investigated and monitored if necessary.

### Results

Questions prompting visitor interaction comments were included in the web-based visitor feedback forms. Comments gathered over the trial period indicate negligible inter-group conflict which, statistically, falls well below the 25% threshold (0.06% over the trial period and 0.18% for 2008)

One negative comment, provided by a tramper, was recorded in relation to mountain-biker behaviour (although the comment was not placed on the feedback form until one year later). There are no other negative comments provided by other visitor groups against mountain bikers for the trial period. Similarly, there are no negative comments provided by mountain bikers against other visitor groups (one rider noted some damage from 4WDs near to the start of the route but stated that the 4WD was being driven gently). Several walkers posted positive comments on the DOC feedback form regarding mountain bikers in the Poulter valley, noting either friendliness, and / or supporting their opportunity to ride the track. There are no adverse comments in either the Casey or the Trust Poulter hut books relating to visitor conflict for the three-year trial period.

## 3. Discussion

Overall, the results indicate that the mountain-bike trial in the Poulter valley has had neither bio-physical impact on the route, nor significant social impact on traditional users. Given the established use of the track, including recreational 4WD and Department ATV on sections up to the park boundary and up to and beyond Casey Hut, there was little concern about accelerated damage from mountain-bike use. There are, however, accessible alternate walking tracks along the route that may prove attractive to more adventurous mountain bikers (Casey Saddle and Binser Saddle track). Established photo points have indicated no evidence of mountain-bike use. It has also been noted that due to the technical nature of the alternate tracks, they would only be attractive to a small minority of highly skilled riders. Should mountain-bike use of the Poulter valley track continue, there is little evidence to indicate off-track mountain bike use becoming a management problem.

Analysis of the available data should give a good, if general, indication of visitor interaction and any potential visitor conflict issues generating adverse impacts on others use and



enjoyment of the Poulter valley. The data and feedback indicates positive visitor interaction, with no significant adverse social impacts regarding the introduction of a new recreational activity into an area with pre-established user groups.

Displacement of existing users through the introduction of mountain bikers could have been a possible outcome. The data recorded through the trial period indicate that numbers for the most popular activity, tramping, have remained steady, if not slightly increased, suggesting little impact. Similarly there appears to be no impact on other group numbers such as hunters, fishermen or 4WD enthusiasts. Data also indicates that mountain bikers have been unaffected by exiting user groups on the route, providing positive interaction feedback. It is possible that the trial status has influenced mountain-biker behaviour therefore, if mountain biking is to continue in the Poulter valley, monitoring of visitor numbers and interactions should continue.

Increasing pressure on track / park facilities can adversely impact on visitor experience and enjoyment and can have management implications. The introduction of a new visitor group to the Poulter valley may put increased pressure on hut facilities, manifest in a lack of bed space for traditional users. Casey Hut did show an increase in bed nights, the greatest being during the first year of the trial, with an 11% increase over the lowest recorded bed nights from pre-trial years. However, the calculation of a nominal annual hut capacity indicates that numbers are well within capacity. Further, bed nights dropped off significantly for mountain bikers for the last two years of the trial, and do not present a management concern. Expected primary use was as a day trip, and data from the Casey and Trust Poulter hut books has confirmed this. If mountain biking is to continue in the Poulter valley it is likely that the pattern of hut use would be similar, however, ongoing monitoring of hut use is suggested to detect any change or increase in use.

The number of riders appeared stable in the last two years of the trial; whether numbers will increase significantly over the coming years is unknown. The current low-use levels and small group numbers of mountain bikers is in keeping with the backcountry setting and expected group sizes in the ROS spectrum, which may have helped with the acceptance of this activity. Given the intermediate nature of the track (in terms of the expected fitness and skill level of a mountain biker) and its location, it is unlikely that numbers will increase significantly, but this is something that will require monitoring if the activity is to continue.

There were a number of concerns raised in the feedback forms regarding safety along some mountain-bike route sections. In particular, the mountain-bike route has to deviate away from the established walking track after Casey Hut and follow the Poulter riverbed upstream, before rejoining the track about 1 km further upstream. In order to follow the riverbed mountain bikers are required to cross the river, and this in particular presented a concern:

*'if people tried to cross this river in swollen conditions with a bike and a pack on their backs, this could easily lead to drowning with a perfectly suitable track on the true right'*

*'It is VERY difficult to negotiate a riverbed & the various streams of the river with a bike with panniers on it. An unprepared person with NOTHING on their bike could pick it up & wade across & back as necessary. It was not safe for us to carry one bike between us across a stream that was mid-thigh high. To portage our bikes repeatedly in this manner would have been exhausting & not what the trip or the MTB experience was about.'*

*'The 'push' from Casey Hut, crossing the Poulter River in a number of places was certainly not a pleasure and in the conditions probably not very safe, with the danger of the bike and footman being swept down stream. We are experienced trampers accustomed to river crossings and their techniques, but I suspect for many MTB riders this would be an ill advised route in high river conditions.'*

*'Navigation was difficult and time consuming during the Poulter River crossing just above the Casey Stream.'*

(Quotes taken from Department of Conservation website feedback form)

In a backcountry setting, visitors are expected to come across navigable rivers and have a moderate degree of backcountry skills. However, taking into account the additional difficulty of river crossings with a bike, these are regarded to be legitimate concerns raised by visitors. Requiring mountain bikers to cross a river with bikes that may be loaded with panniers, whilst there is a safe potential alternative, presents an unnecessary visitor danger. Further to this, the route along the Poulter riverbed would appear to diminish the overall experience, as mountain bikers are generally unable to ride this section. For many this will not be the experience they are expecting. Route-finding along this section has also presented difficulties for mountain bikers. The above comments regarding river crossing are also relevant for Operation Ark, as DOC staff who access this area for monitoring work are required to take ATVs across the river, rather than follow the walking route. This has presented difficulties in the past. When considering visitor safety, the safety of DOC staff, the apparent acceptance of this activity with current user groups, and the provision of a satisfactory visitor experience, the current short section of walking track from Casey Hut up river presents a more suitable route to use, rather than the riverbed. The track would require hardening of some wet sections to allow for this.

Additionally, there is a case for considering the short section of walking track leading up to Casey Hut from the Poulter Road end, where mountain bikes currently have to deviate from, and follow the riverbed for a short section, to gain Casey Hut. The current deviation in route would appear to have caused some confusion (although this was helped with the addition of signage during the trial). Again, mountain bikers are required to drop down to the riverbed, before climbing back up again to access Casey Hut, rather than following the standard walking route to the hut. The requirement to follow the riverbed again diminishes from the overall experience for mountain bikers, who are forced to push their bikes along this section, the riverbed being unridable for the large majority. The current walking route is generally flat; therefore mountain bikers would have little opportunity to gain excessive speed. The relatively flat gradient would lead to few instances of skidding through heavy braking; therefore accelerated erosion should not be a concern. There is generally good visibility along its length, lessening the chance of startling walkers or other users. The data from the three-year trial suggests no significant conflict between visitor groups; on the contrary, there has been positive feedback from other visitors regarding mountain biking in the Poulter. Taking all this into consideration, allowing mountain bikers along this section of trail should not create any management issues and would further increase the experience and satisfaction levels for this user group.

## 4. Recommendations

- As per policy 6.3.6(f)(i), monitoring has indicated minimal adverse effects on national park values, and little effect on the benefit, use and enjoyment of other people. Therefore mountain biking in the Poulter valley should be allowed to continue for the remaining term of the national park plan.
- That monitoring of the track should continue. Photo points established to monitor off-track mountain biking on the Casey Saddle track and Binser Saddle track should be revisited every five years.
- That monitoring of visitor numbers and interactions should continue through ongoing hut-book analysis for both Casey and Trust Poulter huts.
- That there is a change in route to allow mountain bikers to use the bush track leading up to Casey Hut. Currently mountain bikers are confined to the route described in policy 6.3.6(c)(i). A plan change will be required in order to allow riders to deviate from this prescribed route.
- That there is a change in route to allow both mountain bikers and DOC ATVs to use the bush track leading from Casey Hut towards the Trust Poulter Hut. Currently mountain bikers are confined to the route described in policy 6.3.6(c)(i). A plan change will be required in order to allow riders to deviate from this prescribed route.

## 5. References

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- Palmer, P. (2007) Arthur's Pass National Park Management Plan (2007) Monitoring of mountain bike activity within the Poulter valley. Unpublished report. DOCDM-125273
- Various (2007–2010) Photos of monitoring visits into Poulter valley. Stored on CD in file RVR 02.

## 6. Appendices

### 6.1. Casey Hut

#### 6.1.1. Casey Hut visitor numbers pre-trial

YEAR	MONTH	SUM OF GROUP SIZE	SUM OF BED NIGHTS
2006	1	104	91
	2	60	52
	3	66	79
	4	99	109
	5	72	23
	6	20	20
	7	18	23
	8	19	17
	9	52	43
	10	66	49
	11	55	52
	12	87	105
2006 total		718	663
2007	1	103	114
	2	65	39
	3	57	43
	4	78	75
	5	55	43
	6	18	14
	7	27	24
	8	11	12
	9	49	34
	10	87	67
	11	62	54
	12	82	65
2007 total		694	584

#### 6.1.2. Casey Hut visitor numbers trial period

YEAR	MONTH	SUM OF GROUP SIZE	SUM OF BED NIGHTS
2008	1	95	59
	2	97	62
	3	95	86
	4	65	49
	5	50	41
	6	65	60
	7	22	48
	8	12	10
	9	10	11
	10	87	71
	11	67	47
	12	113	105
2008 total		778	649
2009	1	77	63
	2	50	30
	3	89	45
	4	96	72
	5	59	48
	6	32	21
	7	19	19
	8	20	6
	9	33	20
	10	81	86
	11	61	24
	12	86	54
2009 total		703	488
2010	1	90	58
	2	35	37
	3	102	88
	4	91	54
	5	79	51
	6	26	32
	7	28	24
	8	38	29
	9	26	25
	10	115	122
	11	49	44
	12	66	33
2010 total		745	597

### 6.1.3. Casey Hut activities pre-trial

YEAR	MONTH	FISHING	HUNTING	MOUNTAIN BIKING	RAFTING	RUNNING	TRAMPING
2005	11	0.0%	33.3%	0.0%	0.0%	0.0%	66.7%
	12	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
2005 total		0.0%	1.1%	0.0%	0.0%	0.0%	98.9%
2006	1	0.0%	4.5%	0.0%	0.0%	0.0%	95.5%
	2	18.2%	3.6%	0.0%	0.0%	0.0%	78.2%
	3	0.0%	3.1%	0.0%	0.0%	0.0%	96.9%
	4	0.0%	2.9%	0.0%	0.0%	0.0%	97.1%
	5	0.0%	7.6%	0.0%	0.0%	0.0%	92.4%
	6	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	7	0.0%	5.9%	0.0%	0.0%	0.0%	94.1%
	8	0.0%	21.1%	0.0%	0.0%	0.0%	78.9%
	9	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	10	3.2%	0.0%	0.0%	0.0%	0.0%	96.8%
	11	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	12	0.0%	0.0%	0.0%	1.3%	0.0%	98.7%
2006 total		1.9%	3.1%	0.0%	0.2%	0.0%	94.9%
2007	1	0.0%	0.0%	2.3%	0.0%	3.4%	94.3%
	2	3.1%	0.0%	9.2%	0.0%	0.0%	87.7%
	3	0.0%	22.6%	0.0%	0.0%	3.8%	73.6%
	4	0.0%	1.4%	0.0%	0.0%	0.0%	98.6%
	5	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	6	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	7	0.0%	8.3%	0.0%	0.0%	0.0%	91.7%
	8	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	9	0.0%	8.2%	0.0%	0.0%	0.0%	91.8%
	10	0.0%	3.4%	0.0%	0.0%	0.0%	96.6%
	11	0.0%	10.3%	0.0%	0.0%	0.0%	89.7%
	12	0.0%	0.0%	12.2%	0.0%	2.4%	85.4%
2007 total		0.3%	4.3%	2.8%	0.0%	1.1%	91.5%

#### 6.1.4. Casey Hut activities trial period

YEAR	MONTH	FISHING	HUNTING	MOUNTAIN BIKING	RUNNING	TRAMPING
2008	1	0.0%	0.0%	44.2%	0.0%	55.8%
	2	0.0%	1.0%	40.2%	0.0%	58.8%
	3	2.3%	5.8%	27.9%	0.0%	64.0%
	4	0.0%	6.2%	13.8%	3.1%	76.9%
	5	0.0%	0.0%	28.0%	0.0%	72.0%
	6	0.0%	0.0%	15.4%	0.0%	84.6%
	7	0.0%	13.6%	0.0%	0.0%	86.4%
	8	0.0%	0.0%	0.0%	16.7%	83.3%
	9	0.0%	0.0%	0.0%	0.0%	100.0%
	10	0.0%	0.0%	17.4%	0.0%	82.6%
	11	3.1%	0.0%	26.6%	9.4%	60.9%
	12	0.0%	0.0%	22.1%	2.7%	75.2%
2008 total		0.5%	1.7%	25.5%	1.7%	70.6%
2009	1	0.0%	3.9%	10.4%	2.6%	83.1%
	2	4.0%	8.0%	4.0%	4.0%	80.0%
	3	0.0%	3.4%	25.8%	0.0%	70.8%
	4	3.2%	9.5%	12.6%	0.0%	74.7%
	5	0.0%	0.0%	1.7%	0.0%	98.3%
	6	0.0%	0.0%	3.1%	6.3%	90.6%
	7	0.0%	0.0%	0.0%	0.0%	100.0%
	8	0.0%	0.0%	40.0%	10.0%	50.0%
	9	0.0%	0.0%	3.0%	0.0%	97.0%
	10	0.0%	0.0%	0.0%	0.0%	100.0%
	11	0.0%	1.6%	24.6%	3.3%	70.5%
	12	2.4%	0.0%	14.3%	3.6%	79.8%
2009 total		1.0%	2.9%	11.9%	1.9%	82.4%
2010	1	0.0%	0.0%	16.7%	3.3%	80.0%
	2	0.0%	8.6%	17.1%	8.6%	65.7%
	3	2.0%	3.9%	14.7%	2.0%	77.5%
	4	0.0%	3.3%	7.7%	6.6%	82.4%
	5	0.0%	1.3%	6.3%	0.0%	92.4%
	6	0.0%	7.7%	0.0%	0.0%	92.3%
	7	0.0%	21.4%	28.6%	0.0%	50.0%
	8	0.0%	0.0%	7.9%	0.0%	92.1%
	9	0.0%	0.0%	8.0%	0.0%	92.0%
	10	2.6%	1.7%	4.3%	0.0%	91.3%
	11	0.0%	0.0%	4.1%	0.0%	95.9%
	12	0.0%	0.0%	21.2%	0.0%	78.8%
2010 total		0.7%	2.8%	11.0%	1.9%	83.6%



### 6.1.5. Casey Hut visitor origins pre-trial

YEAR	MONTH	MIXED	NZ ONLY	OS ONLY	UNKNOWN
2005	11	0.0%	100.0%	0.0%	0.0%
	12	5.4%	86.5%	8.1%	0.0%
2005 total		4.4%	88.9%	6.7%	0.0%
2006	1	5.0%	75.0%	20.0%	0.0%
	2	0.0%	86.2%	13.8%	0.0%
	3	0.0%	77.3%	18.2%	4.5%
	4	0.0%	85.4%	7.3%	7.3%
	5	0.0%	100.0%	0.0%	0.0%
	6	0.0%	100.0%	0.0%	0.0%
	7	12.5%	62.5%	12.5%	12.5%
	8	10.0%	70.0%	20.0%	0.0%
	9	4.2%	79.2%	16.7%	0.0%
	10	4.5%	72.7%	13.6%	9.1%
	11	3.4%	96.6%	0.0%	0.0%
	12	2.9%	74.3%	17.1%	5.7%
2006 total		2.8%	81.9%	12.2%	3.1%
2007	1	9.1%	79.5%	9.1%	2.3%
	2	11.5%	61.5%	23.1%	3.8%
	3	10.0%	73.3%	13.3%	3.3%
	4	0.0%	96.6%	0.0%	3.4%
	5	7.7%	92.3%	0.0%	0.0%
	6	0.0%	100.0%	0.0%	0.0%
	7	8.3%	83.3%	0.0%	8.3%
	8	0.0%	71.4%	28.6%	0.0%
	9	0.0%	86.7%	13.3%	0.0%
	10	0.0%	81.3%	15.6%	3.1%
	11	0.0%	66.7%	33.3%	0.0%
	12	5.4%	64.9%	29.7%	0.0%
2007 total		5.0%	77.4%	15.4%	2.2%

### 6.1.6. Casey Hut visitor origins trial period

YEAR	MONTH	MIXED	NZ ONLY	OS ONLY	UNKNOWN
2008	1	10.3%	69.2%	20.5%	0.0%
	2	0.0%	91.7%	8.3%	0.0%
	3	0.0%	94.6%	2.7%	2.7%
	4	0.0%	82.6%	13.0%	4.3%
	5	7.1%	92.9%	0.0%	0.0%
	6	7.1%	71.4%	21.4%	0.0%
	7	0.0%	100.0%	0.0%	0.0%
	8	33.3%	66.7%	0.0%	0.0%
	9	14.3%	85.7%	0.0%	0.0%
	10	3.3%	90.0%	6.7%	0.0%
	11	3.6%	89.3%	7.1%	0.0%
	12	2.7%	86.5%	10.8%	0.0%
2008 total		4.3%	85.7%	9.3%	0.7%
2009	1	2.7%	75.7%	21.6%	0.0%
	2	8.7%	65.2%	26.1%	0.0%
	3	7.1%	89.3%	3.6%	0.0%
	4	2.6%	84.2%	13.2%	0.0%
	5	10.0%	80.0%	10.0%	0.0%
	6	0.0%	100.0%	0.0%	0.0%
	7	0.0%	100.0%	0.0%	0.0%
	8	0.0%	100.0%	0.0%	0.0%
	9	0.0%	100.0%	0.0%	0.0%
	10	0.0%	88.9%	5.6%	5.6%
	11	8.0%	84.0%	0.0%	8.0%
	12	5.6%	72.2%	19.4%	2.8%
2009 total		4.4%	82.5%	11.5%	1.6%
2010	1	0.0%	86.4%	13.6%	0.0%
	2	0.0%	93.3%	6.7%	0.0%
	3	7.1%	71.4%	21.4%	0.0%
	4	3.4%	82.8%	13.8%	0.0%
	5	0.0%	84.2%	15.8%	0.0%
	6	8.3%	83.3%	8.3%	0.0%
	7	0.0%	100.0%	0.0%	0.0%
	8	0.0%	100.0%	0.0%	0.0%
	9	10.0%	90.0%	0.0%	0.0%
	10	0.0%	92.9%	7.1%	0.0%
	11	0.0%	85.7%	14.3%	0.0%
	12	0.0%	76.9%	19.2%	3.8%
2010 total		2.0%	85.3%	12.3%	0.4%

## 6.2. TRUST POULTER HUT

### 6.2.1. Trust Poulter Hut visitor numbers pre-trial

YEAR	MONTH	SUM OF BED NIGHTS	SUM OF GROUP SIZE
2003	1	30	29
	2	16	35
	3	2	22
	4	62	62
	5	11	11
	8	6	4
	9	1	1
	10	0	12
	11	15	19
	12	8	22
2003 total		151	217
2004	1	5	16
	2	4	18
	3	2	7
	4	5	24
	5	3	5
	6	0	6
	7	8	23
	8	0	5
	9	0	7
	10	7	15
	11	4	5
	12	0	20
2004 total		38	151
2005	1	14	46
	2	0	5
	3	14	26
	4	12	12
	5	8	6
	6	3	12
	8	4	11
	9	0	4
	10	8	10
	11	9	13
	12	8	29
2005 total		80	174
2006	1	9	36
	2	1	11
	3	12	18
	4	8	17
	5	0	26
	6	7	13
	8	2	2
	9	2	9
	10	0	11
	11	5	7
	12	10	19
2006 total		56	169

### 6.2.2. Trust Poulter Hut visitor numbers trial period

YEAR	MONTH	SUM OF BED NIGHTS	SUM OF GROUP SIZE
2008	1	5	36
	2	10	33
	3	5	33
	4	6	17
	5	5	15
	6	6	10
	7	2	10
	8	2	2
	9	0	6
	10	15	18
	11	3	26
	12	4	30
2008 total		63	236
2009	1	8	16
	2	5	15
	3	3	25
	4	5	15
	11	2	11
	12	6	6
2009 total		29	88
2010	1	13	24
	2	0	7
	3	3	27
	4	10	23
	5	2	16
	6	0	1
	7	0	4
	8	0	2
	9	0	4
	10	9	38
	11	0	12
	12	5	11
2010 total		42	169

### 6.2.3. Trust Poulter Hut visitor activities pre-trial

YEAR	MONTH	UNKNOWN	TRAMPING	RUNNING	MOUNTAIN BIKING	HUNTING	FISHING	DOC WORK
2003	1	72%	28%	0%	0%	0%	0%	0%
	2	29%	60%	0%	0%	6%	6%	0%
	3	32%	36%	0%	0%	5%	27%	0%
	4	45%	26%	0%	0%	27%	2%	0%
	5	43%	7%	0%	29%	0%	0%	21%
	8	25%	75%	0%	0%	0%	0%	0%
	9	0%	0%	0%	0%	100%	0%	0%
	10	67%	17%	0%	0%	17%	0%	0%
	11	0%	63%	0%	0%	11%	26%	0%
	12	9%	82%	0%	0%	0%	9%	0%
	2003 total	38%	40%	0%	2%	11%	7%	1%
2004	1	0%	67%	0%	0%	0%	22%	11%
	2	0%	94%	0%	0%	6%	0%	0%
	3	0%	100%	0%	0%	0%	0%	0%
	4	0%	92%	8%	0%	0%	0%	0%
	5	0%	100%	0%	0%	0%	0%	0%
	6	0%	0%	0%	0%	100%	0%	0%
	7	0%	100%	0%	0%	0%	0%	0%
	8	0%	60%	0%	0%	40%	0%	0%
	9	0%	100%	0%	0%	0%	0%	0%
	10	0%	88%	0%	0%	6%	0%	6%
	11	0%	50%	0%	0%	0%	13%	38%
	12	0%	60%	0%	0%	40%	0%	0%
	2004 total	0%	80%	1%	0%	11%	3%	4%
2005	1	0%	87%	0%	0%	13%	0%	0%
	2	0%	83%	0%	0%	0%	0%	17%
	3	0%	77%	3%	3%	3%	0%	13%
	4	0%	42%	0%	0%	58%	0%	0%
	5	0%	0%	0%	0%	100%	0%	0%
	6	0%	92%	0%	0%	0%	0%	8%
	7	0%	0%	0%	0%	0%	0%	100%
	8	0%	100%	0%	0%	0%	0%	0%
	9	0%	100%	0%	0%	0%	0%	0%
	10	0%	100%	0%	0%	0%	0%	0%
	11	0%	57%	0%	0%	14%	21%	7%
	12	0%	97%	0%	0%	0%	0%	3%
	2005 total	0%	80%	1%	1%	12%	2%	5%
2006	1	0%	97%	0%	0%	0%	0%	3%
	2	0%	69%	0%	0%	0%	15%	15%
	3	0%	72%	0%	0%	28%	0%	0%
	4	0%	76%	0%	0%	24%	0%	0%
	5	0%	85%	0%	0%	11%	0%	4%
	6	0%	100%	0%	0%	0%	0%	0%
	8	0%	0%	0%	0%	100%	0%	0%
	9	0%	90%	0%	0%	0%	0%	10%
	10	0%	75%	0%	0%	17%	0%	8%
	11	0%	38%	0%	0%	0%	50%	13%
	12	0%	89%	0%	11%	0%	0%	0%
	2006 total	0%	82%	0%	1%	9%	3%	4%

#### 6.2.4. Trust Poulter Hut visitor activities trial period

YEAR	MONTH	DOC WORK	FISHING	HUNTING	MOUNTAIN BIKING	RUNNING	TRAMPING	UNKNOWN
2008	1	0.0%	0.0%	8.3%	30.6%	0.0%	61.1%	0.0%
	2	5.7%	0.0%	0.0%	57.1%	0.0%	37.1%	0.0%
	3	5.7%	0.0%	0.0%	37.1%	0.0%	57.1%	0.0%
	4	0.0%	0.0%	17.6%	47.1%	0.0%	35.3%	0.0%
	5	0.0%	0.0%	0.0%	80.0%	0.0%	20.0%	0.0%
	6	23.1%	0.0%	0.0%	0.0%	0.0%	76.9%	0.0%
	7	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
	8	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
	9	14.3%	0.0%	0.0%	0.0%	0.0%	85.7%	0.0%
	10	5.3%	0.0%	0.0%	10.5%	0.0%	84.2%	0.0%
	11	0.0%	0.0%	0.0%	73.1%	3.8%	23.1%	0.0%
	12	0.0%	0.0%	0.0%	16.7%	0.0%	83.3%	0.0%
2008 total		3.7%	0.0%	2.4%	37.6%	0.4%	55.9%	0.0%
2009	1	0.0%	0.0%	0.0%	25.0%	0.0%	75.0%	0.0%
	2	6.3%	12.5%	0.0%	0.0%	0.0%	81.3%	0.0%
	3	13.8%	0.0%	0.0%	51.7%	0.0%	34.5%	0.0%
	4	0.0%	6.7%	46.7%	0.0%	0.0%	46.7%	0.0%
	11	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
	12	0.0%	0.0%	0.0%	0.0%	33.3%	66.7%	0.0%
2009 total		5.4%	3.2%	7.5%	20.4%	2.2%	61.3%	0.0%
2010	1	7.7%	19.2%	0.0%	7.7%	0.0%	65.4%	0.0%
	2	0.0%	0.0%	0.0%	71.4%	0.0%	28.6%	0.0%
	3	0.0%	0.0%	7.4%	3.7%	0.0%	88.9%	0.0%
	4	0.0%	0.0%	17.4%	17.4%	0.0%	65.2%	0.0%
	5	0.0%	0.0%	12.5%	25.0%	0.0%	62.5%	0.0%
	6	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
	7	0.0%	0.0%	0.0%	50.0%	0.0%	50.0%	0.0%
	8	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
	9	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%
	10	0.0%	7.9%	5.3%	0.0%	0.0%	86.8%	0.0%
	11	0.0%	0.0%	0.0%	8.3%	0.0%	91.7%	0.0%
	12	8.3%	0.0%	0.0%	16.7%	0.0%	75.0%	0.0%
2010 total		1.7%	4.7%	5.8%	12.2%	0.0%	74.4%	1.2%

### 6.2.5. Trust Poulter Hut visitor origins pre-trial

YEAR	MONTH	MIXED	NZ ONLY	OS ONLY	UNKNOWN
2003	1	17%	69%	10%	3%
	2	0%	97%	3%	0%
	3	0%	100%	0%	0%
	4	5%	95%	0%	0%
	5	0%	93%	7%	0%
	8	0%	100%	0%	0%
	9	0%	100%	0%	0%
	10	0%	100%	0%	0%
	11	0%	100%	0%	0%
	12	0%	95%	5%	0%
	2003 total	4%	93%	3%	0%
2004	1	0%	89%	11%	0%
	2	0%	83%	17%	0%
	3	0%	86%	14%	0%
	4	0%	96%	4%	0%
	5	0%	100%	0%	0%
	6	0%	100%	0%	0%
	7	0%	100%	0%	0%
	8	0%	100%	0%	0%
	9	0%	100%	0%	0%
	10	0%	100%	0%	0%
	11	0%	100%	0%	0%
	12	0%	85%	15%	0%
	2004 total	0%	94%	6%	0%
2005	1	0%	87%	13%	0%
	2	0%	50%	50%	0%
	3	0%	93%	7%	0%
	4	0%	75%	25%	0%
	5	0%	100%	0%	0%
	6	0%	100%	0%	0%
	7	0%	100%	0%	0%
	8	0%	100%	0%	0%
	9	0%	100%	0%	0%
	10	0%	90%	10%	0%
	11	0%	100%	0%	0%
	12	0%	83%	17%	0%
	2005 total	0%	89%	11%	0%
2006	1	0%	95%	5%	0%
	2	0%	85%	15%	0%
	3	0%	94%	6%	0%
	4	0%	100%	0%	0%
	5	0%	100%	0%	0%
	6	0%	100%	0%	0%
	8	0%	100%	0%	0%
	9	0%	100%	0%	0%
	10	0%	100%	0%	0%
	11	0%	100%	0%	0%
	12	0%	89%	11%	0%
	2006 total	0%	96%	4%	0%

### 6.2.6. Trust Poulter Hut visitor origins trial period

YEAR	MONTH	MIXED	NZ ONLY	OS ONLY	UNKNOWN
2008	1	13.3%	73.3%	13.3%	0.0%
	2	11.8%	82.4%	5.9%	0.0%
	3	0.0%	85.7%	14.3%	0.0%
	4	0.0%	100.0%	0.0%	0.0%
	5	0.0%	100.0%	0.0%	0.0%
	6	0.0%	100.0%	0.0%	0.0%
	7	0.0%	100.0%	0.0%	0.0%
	8	0.0%	100.0%	0.0%	0.0%
	9	0.0%	100.0%	0.0%	0.0%
	10	0.0%	100.0%	0.0%	0.0%
	11	0.0%	87.5%	12.5%	0.0%
	12	0.0%	100.0%	0.0%	0.0%
	2008 total	3.7%	90.7%	5.6%	0.0%
2009	1	0.0%	88.9%	11.1%	0.0%
	2	0.0%	80.0%	20.0%	0.0%
	3	0.0%	100.0%	0.0%	0.0%
	4	0.0%	93.3%	6.7%	0.0%
	6	0.0%	100.0%	0.0%	0.0%
	7	0.0%	100.0%	0.0%	0.0%
	8	0.0%	100.0%	0.0%	0.0%
	9	0.0%	100.0%	0.0%	0.0%
	10	0.0%	100.0%	0.0%	0.0%
	11	0.0%	100.0%	0.0%	0.0%
	12	0.0%	100.0%	0.0%	0.0%
	2009 total	0.0%	94.0%	6.0%	0.0%
2010	1	0.0%	83.3%	16.7%	0.0%
	2	0.0%	100.0%	0.0%	0.0%
	3	0.0%	77.8%	22.2%	0.0%
	4	0.0%	88.9%	11.1%	0.0%
	5	0.0%	100.0%	0.0%	0.0%
	6	0.0%	100.0%	0.0%	0.0%
	7	0.0%	100.0%	0.0%	0.0%
	8	0.0%	100.0%	0.0%	0.0%
	9	0.0%	50.0%	0.0%	50.0%
	10	0.0%	100.0%	0.0%	0.0%
	11	20.0%	80.0%	0.0%	0.0%
	12	14.3%	85.7%	0.0%	0.0%
	2010 total	3.2%	87.1%	8.1%	1.6%

## 6.3. Bed nights

### 6.3.1. Tramper bed nights pre-trial Casey Hut

Tramping			
YEAR	MONTH	SUM OF BED NIGHTS	SUM OF GROUP SIZE
2006	1	52	64
	2	42	43
	3	79	62
	4	88	67
	5	14	61
	6	20	18
	7	16	16
	8	13	15
	9	41	50
	10	48	61
	11	52	55
	12	99	78
2006 total		564	590
2007	1	79	82
	2	37	57
	3	40	39
	4	72	72
	5	43	43
	6	14	15
	7	19	22
	8	12	11
	9	34	45
	10	63	84
	11	46	52
	12	63	70
2007 total		522	592

### 6.3.2. Tramper and MTB bed nights trial period Casey Hut

Mountain biking				Tramping	
YEAR	MONTH	SUM OF BED NIGHTS	SUM OF GROUP SIZE	SUM OF BED NIGHTS	SUM OF GROUP SIZE
2008	1	14	42	45	53
	2	5	39	57	57
	3	10	24	66	55
	4	9	9	39	50
	5	8	14	33	36
	6	6	10	54	55
	7			39	19
	8			10	10
	9			11	10
	10	11	15	60	71
	11	3	17	30	39
	12	5	25	100	85
2008 total		71	195	544	540
2009	1	2	8	55	64
	2	0	2	28	40
	3	11	23	34	63
	4	0	12	66	71
	5	0	1	48	58
	6	1	1	20	29
	7			19	19
	8	0	8	6	10
	9	0	1	20	32
	10			86	81
	11	0	15	24	43
	12	2	12	52	67
2009 total		16	83	458	577
2010	1	5	15	53	72
	2	4	6	27	23
	3	13	15	71	79
	4	0	7	53	75
	5	2	5	49	73
	6			32	24
	7	6	8	8	14
	8	0	3	29	35
	9	0	2	24	23
	10	3	5	113	105
	11	0	2	44	47
	12	2	14	31	52
2010 total		35	82	534	622

### 6.3.3. Tramper bed nights pre-trial Trust Poulter Hut

YEAR	MONTH	SUM OF BED NIGHTS	SUM OF GROUP SIZE
2003	1	3	8
	2	9	21
	3	0	8
	4	12	16
	5	1	1
	8	3	3
	10	0	2
	11	13	12
	12	4	18
2003 total		45	89
2004	1	1	12
	2	4	17
	3	2	7
	4	5	22
	5	3	5
	7	8	23
	8	0	3
	9	0	7
	10	7	14
	11	2	4
	12	0	12
2004 total		32	126
2005	1	12	40
	2	0	5
	3	11	23
	4	0	5
	6	3	12
	8	4	11
	9	0	4
	10	8	10
	11	1	8
	12	8	29
2005 total		47	147
2006	1	9	36
	2	1	9
	3	9	13
	4	8	13
	5	0	23
	6	7	13
	9	2	9
	10	0	9
	11	1	3
	12	8	17
2006 total		45	145

### 6.3.4. Tramper and MTB bed nights Trust Poulter Hut trial period

Mountain biking				Tramping	
YEAR	MONTH	SUM OF BED NIGHTS	SUM OF GROUP SIZE	SUM OF BED NIGHTS	SUM OF GROUP SIZE
2008	1	4	11	1	22
	2	7	20	3	13
	3	0	13	5	20
	4	4	8	0	6
	5	5	12	0	3
	6			6	10
	7			2	10
	8	2	2		
	9			0	6
	10	0	2	15	16
	11	2	19	1	6
	12	1	5	3	25
2008 total		25	92	36	137
2009	1	2	4	6	12
	2			5	13
	3	1	15	2	10
	4			1	7
	11			2	11
	12			4	4
2009 total		3	19	20	57
2010	1	2	2	9	17
	2	0	5	0	2
	3	1	1	0	24
	4	0	4	6	15
	5	2	4	0	10
	6			0	1
	7	0	2	0	2
	8			0	2
	9			0	2
	10			7	33
	11	0	1	0	11
	12	0	2	5	9
2010 total		5	21	27	128



## **6.4. Extracts from the Arthurs Pass National Park Management Plan relating to the Poulter valley mountain-bike trial.**

### **Policy**

#### **6.3.6(c)**

To allow non-motorised mountain bike use within the Poulter River valley in accordance with the following criteria:

- i. Their use is confined to the track marked on Figure 4, being the former vehicle track up the Poulter valley from the Park boundary at Mt Brown Creek to Casey Stream, then a poled route within the active bed of Casey Stream and the Poulter River, then back onto the former vehicle track up-valley to the site of the Trust/Poulter Hut.
- ii. The use is for an initial three-year trial period from the date of Plan approval (13 December 2007).

#### **6.3.6(e)**

To monitor the use and effects of mountain bikes, including any noncompliance with Policy 6.3.6(c), during the three-year trial period.

#### **6.3.6(f)**

As a result of the monitoring under Policy 6.3.6(e) either:

- i. Should the monitoring indicate minimal adverse effects on national park values and that the benefit, use and enjoyment of other people can be protected, then continue to allow the mountain bike use for the remaining term of the Plan, with ongoing monitoring if considered necessary; or
- ii. Should monitoring indicate significant adverse effects or other impacts then, in consultation with the Conservation Board, the following actions will be taken:
  - (a) seek additional controls by way of voluntary agreement and/or bylaws to overcome the identified effects and/or impacts ; or
  - (B) end the use forthwith.

### **Method**

#### **6.3.6(c)**

1. Seek an amendment to the Arthur's Pass National Park Bylaws 1981, clause 9, to allow for the above non-motorised mountain bike use.
2. In conjunction with Mountain Bike New Zealand Inc. provide information to the public on the allowable mountain bike use within the park.
3. By means of signs, clearly identify the limits of the Poulter valley mountain bike track.

#### **6.3.6(e)**

Establish and run a monitoring programme, seeking the support of recreational users, to record, inter alia, the following:

- i. The degree of any pre-trial mountain bike use, albeit unauthorised;
- ii Degree of mountain bike use of the track;
- iii. Absence or presence of mountain bike activity off or beyond the allowed track;
- iv. Any biophysical impacts;
- v. Any enforcement incidents and their outcomes;
- vi. Any damage to or removal of signs; and
- vii. Casey Hut and Trust/Poulter Hut use and any conflicts with existing tramper use activity, by monitoring hut book comments and recording these and any other comments to the Department.