

Sustainable Nature Based Tourism: Planning and Management

Report on Visitation and Use at Kulki, Far North Queensland, 2009/2010



Julie Carmody and Bruce Prideaux



Australian Government
Department of the Environment,
Water, Heritage and the Arts



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Kulki, Far North Queensland, 2009/2010

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Australian Government
**Department of the Environment,
Water, Heritage and the Arts**

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Acronyms and Abbreviations

DERM	Queensland Department of Environment and Resource Management
MTSRF	Marine and Tropical Sciences Research Facility
N	Entire survey sample
n	Portion of survey sample
QPWS	Queensland Parks and Wildlife Service
WTMA	Wet Tropics Management Authority
WTWHA	Wet Tropics World Heritage Area

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Key Findings

The following key findings are based on a visitor survey (N = 204) undertaken at Kulki between August and October 2009. Where findings are reported as a mean, 1 represents the lowest level of agreement with given statements by survey respondents, while 6 represents the highest level of agreement.

Respondent Profile

- Both domestic (44.8%) and international (55.2%) respondents completed the survey.
- Respondents ranged from 16 to 65 years, with the average age being 36.5 years.

Travel Patterns

- Respondents travelled to Kulki from Port Douglas (18.2%), Cairns (11.0%) and the Daintree (7.7%).
- After visiting Kulki respondents travelled to Port Douglas (28.1%), Cairns (15.3%) and Cape Tribulation (8.7%).
- Word-of-mouth (37.5%), travel guides (36.5%) and tourist maps (33.0%) were the major information sources used prior to their visit.

Reasons for Visiting Kulki

- Respondents visited Kulki to experience the natural features of the site (mean = 5.41) and to be close to nature (5.13).

Activities

- Observing the scenery (89.2%), short walks (83.3%), photography (65.5%) and relaxing (59.9%) were the main activities participated in.

Perceptions of the Natural Environment

- The natural environment at Kulki was considered interesting (mean = 5.35), in good condition (5.29) and appealing in terms of scenic beauty (5.27).

Perceptions and Use of the Site Facilities

- The site facilities were considered to be in reasonably good condition (mean = 4.84).
- The presence of a ranger at the site was endorsed (mean = 4.10).
- The most popular facilities were the walking track (76.1%), viewing platform (65.7%), boardwalk (64.2%), and toilets (52.3%).

Perceptions of Signage

- Information about rules and safety was considered easy to understand (mean = 5.04).
- Information on the site's Aboriginal culture, natural environment and wildlife is desirable.

Satisfaction with the Visitor Experience

- The rainforest, natural beauty and tranquillity of Kulki enhanced the visitor experience.
- Overcrowding is not perceived as an issue at Kulki.

CAPE TRIBULATION - DAINTREE NATIONAL PARK

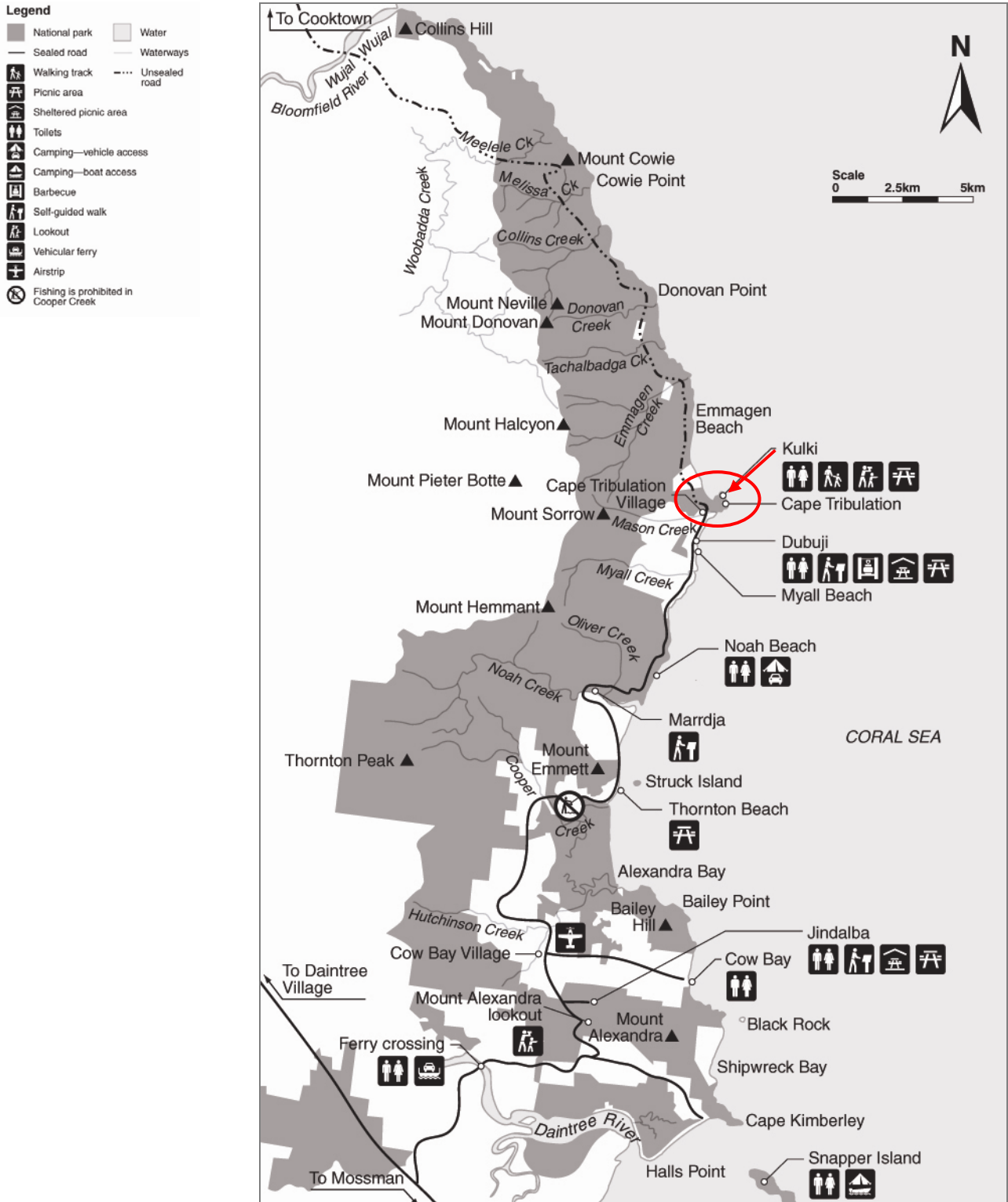


Figure i: Cape Tribulation (Daintree National Park), showing the Kulki visitor survey site. Map courtesy of Queensland Parks and Wildlife Service, Department of Environment and Resource Management.

1. Introduction

This report is one of a series of ten that examine visitor activity at sites within Wet Tropics rainforests. The aim of the research was to provide a snapshot of visitor activity to inform management on how sites are used and investigate visitors' views on site management. Visitor data was collected using a self-completed visitor survey. Collectively the series of reports will provide an overall understanding of how visitors use the rainforest and provide managers with feedback that can be used for site management and future planning.

Responsibility for the management of the Wet Tropics rainforests is shared by the Wet Tropics Management Authority (WTMA) and the Queensland Department of Environment and Resource Management (DERM). The WTMA was established after listing of the Wet Tropics as a World Heritage site and is responsible for the planning of visitor sites across the Wet Tropics World Heritage Area (WTWHA). The Queensland Parks and Wildlife Service (QPWS), an agency of the DERM, has responsibility for the day to day management of site infrastructure including toilets, car parking, signage, viewing lookouts, boardwalks, walking trails and other recreational facilities. The Wet Tropics has a large number of visitor sites, some of which have high rates of visitation. A number of sites have relatively low visitation rates, but all offer unique nature-based visitor experiences.

1.1 Site Location and Description

The Kulki visitor site is located in the Cape Tribulation section of the Daintree National Park, which encompasses an area of approximately 17,000 ha stretching in a narrow strip from the Daintree River in the south to the Bloomfield River in the north and bordered by the McDowall Range in the west. The site forms part of the traditional land of the eastern Kuku Yalanji people and was a meeting place where traditional owners gathered materials to make tools as well as natural medicines and food. Daintree National Park was declared in 1981 by the former Queensland Premier Sir Joh Bjelke-Petersen in response to protests against clearing of the rainforest by landholders. The Park was included in the World Heritage Area listing in 1988.

The visitor site was opened in 1988 and upgraded in 1997 with funds from the Daintree Rescue Program. Up to the early 1980s the beach was used as a road for vehicles travelling to campsites further north. It was also a locally known nudist beach. The Kulki visitor site (formerly known as the Cape Tribulation site) is the most northern developed visitor site within this section of the Daintree National Park and is managed by the QPWS. A picnic area and bio-toilets have been constructed at the site. A map of Kulki with the approximate location of the survey collection is provided at Figure i.

The site's main facilities are a walkway that connects the car park to the beach and a 600 metre boardwalk that commences at the picnic area and extends up a ridge to a lookout named in honour of two senior Yalanji custodians, Numbaji and Jinabaji. The most significant natural features of the site are the wide, gently sloping beach and exceptional views of the ocean and the rainforest.

1.2 Previous Research

A visitor use monitoring strategy was commissioned by the WTMA in 1993 to gain an understanding of visitor use and travel patterns. Manidis Roberts Consultants conducted visitor surveys during the wet season (March/April) and again during the dry season (September/October) of 1993 across 56 individual visitor sites and three conglomerate sites within the WTWHA. The research approach included traffic counts, site observations and visitor interviews. Three versions of the visitor survey were developed – one for independent travellers, one for those travelling with a commercial operator and one left at sites as a self-registration survey.

Kulki visitor site (previously Cape Tribulation) was surveyed and the results included in a Daintree-Cape Tribulation conglomerate. In their survey, Manadis Roberts (1994) estimated that the site received more than 148,000 visitors annually. Other findings of note were that visitors mostly travelled as a couple or with family or friends; averaged 0.7 hours at the site; and travelled by private four-wheel drive (4WD) motor vehicle containing an average of 2.9 people per vehicle. The majority of visitors were on their first visit to the site; went for a short walk and observed the scenery. The most recent estimate of visitation to the site indicates that the site receives over 220,000 visitors annually (Bentrupperbäumer *et al.* 2004).

1.3 Traffic Counter Data

Traffic data was collected at the site in 2009 by QPWS rangers. Table 1 outlines this data on a monthly basis and indicates that the peak period for visitation occurs between April and October, with the peak month being July (8,466 vehicles recorded).

Table 1: Counts of vehicular traffic recorded at Kulki during 2009. Data courtesy of Queensland Parks and Wildlife Service, DERM.

Month	Vehicles per month	Average vehicles per day
January	1,879	60.6
February	1,504	53.7
March	3,820	123.2
April	5,058	168.6
May	5,058	163.2
June	5,367	178.9
July	8,466	273.1
August	6,980	225.2
September	6,980	232.7
October	5,422	174.9
November	2,189	73.0
December	3,892	125.5

As can be clearly seen in Figure 1, visitation to Kulki decreased significantly during January, February and November 2009.

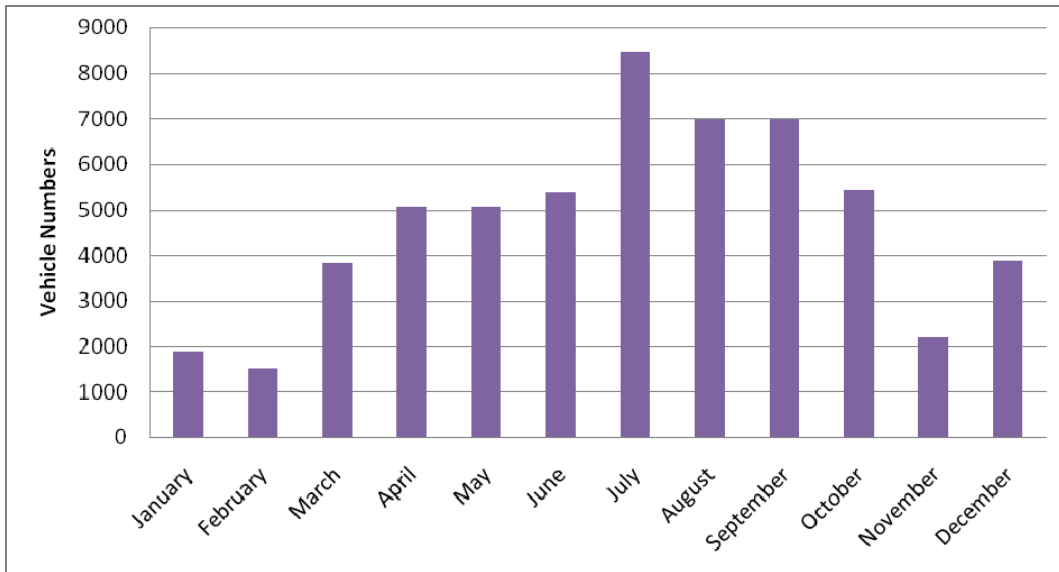


Figure 1: Counts of vehicular traffic recorded at Kulki during 2009. Data courtesy of Queensland Parks and Wildlife Service, DERM.

2. Methodology

The aims of this report are to:

- Investigate visitor activities undertaken at Kulki; and
- Identify visitors' views about aspects of the site including its management.

Specific objectives of the research were to:

- Provide a snapshot profile of visitors to Kulki;
- Understand visitors' perceptions of the management of the site;
- Understand visitors' perceptions of the natural environment at the site;
- Gain an understanding of visitors' travel patterns within the Wet Tropics region; and
- Assess the suitability of the interpretative information provided at the site.

A convenience sampling technique was used and data was analysed with the SPSS v17 statistical package.

This research complements earlier research (Carmody and Prideaux, 2008) that investigated how local residents used the Wet Tropics and their views on its management.

2.1 Survey Instrument

To collect data on a range of issues related to visitor expectations and experiences, a survey (Appendix 1) was developed in conjunction with officers from the WTMA. The survey instrument was based on a previous survey used in 2001/2002 which enabled some general comparisons to be made with earlier research. The self-completed survey contained 29 closed and open-ended questions and provided space for respondents to write additional comments. Open-ended questions were used because they can test specificity of knowledge more effectively (as shown by Whitmarsh, 2009), provide richer responses (Altinay and Paraskevas, 2008) and can minimise social desirability bias (Budeanu, 2007). Survey questions were grouped into eight sections commencing with demographic data. Table 2 outlines the components of the survey. Survey staff recorded site details including location, date, time of collection and weather conditions on the front cover of the survey instrument.

Table 2: Components of the Kulki visitor survey.

Section A	Background information	Place of residence, occupation, education, age, gender
Section B	Travel and transport	Organised tour or free and independent traveller, travel party, mode of transport, pre- and post-visit of site, experience of protected natural areas
Section C	Reasons for visiting	Motivations, activities, time spent at site, willingness to pay
Section D	Natural environment	Perceptions of the natural environment
Section E	Site facilities	Use of site facilities, expectations of facilities, perceptions of facilities, ranger presence
Section F	Information	Prior information search, perceptions of on-site information, additional information required
Section G	Visitor experience	Aspects of visit that enhanced and detracted from experience, perceptions of crowding
Additional comments		Open-ended to allow for any comments and feedback

2.2 Survey Collection

Surveys were carried out at the Kulki visitor site by two experienced research assistants who were stationed in the carpark. Using a convenience sampling technique, visitors returning from the walk were approached on their return from either the beach or the boardwalk and asked to complete the survey. Researchers explained the purpose of the survey and the approximate time for completion. A postcard or WTMA cassowary sticker was offered as a token of appreciation to those returning the survey. Table 3 outlines the schedule and collection of surveys for the Kulki site.

Table 3: Kulki visitor survey collection times and details (N = 204).

Date	Day	Weather	Visitor Frequency	Percent of Total
1 August 2009	Saturday	Overcast	155	76.0
25 October 2009	Sunday	Sunny	3	1.5
28 October 2009	Wednesday	Sunny	19	9.3
29 October 2009	Thursday	Sunny	27	13.2
Total			204	100.0

Surveys were collected between 9.00 am and 6.00 pm on the survey days (Figure 2). The majority of surveys were collected on the 25 October 2009 between 11.00 am and 5.00 pm.

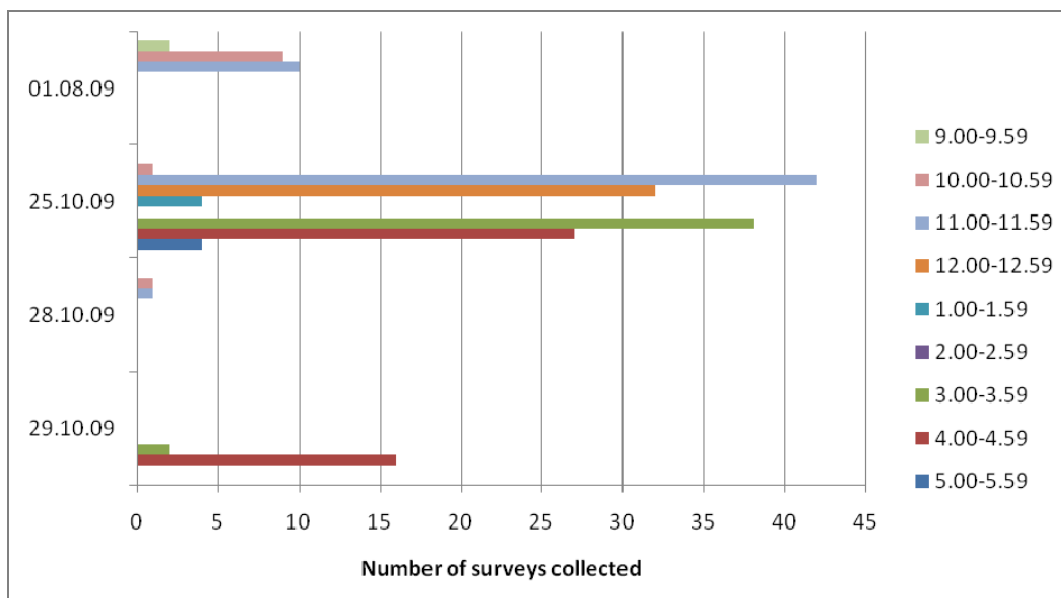


Figure 2: Surveys collected at Kulki by date and time (N = 204).

2.3 Non-response and Observations

Refusals to complete the survey were recorded on-site and are presented in Table 4. Over the four day survey period, 252 people were approached to complete the survey. The non-response rate was 19.1% (n = 48) and 'lack of time' (8.3%) and 'lack of interest' (4.4%) were the main reasons given for not participating in the survey.

Table 4: Reasons given for not participating in the Kulki visitor survey (n = 48).

Reason for not participating in survey	Frequency (n)	Percentage of total number of people approached (n = 252)
No time	21	8.3
Not interested	11	4.4
Language barrier	9	3.6
On holiday	4	1.6
No – I'm working	2	0.8
No – I'm hungry	1	0.4
Non-Response	48	19.1

2.4 Limitations

There were some limitations associated with the research that should be considered prior to generalising the results:

- First, the surveys were collected randomly during a six-month period and may not be representative of all visitors to the Kulki site;
- Second, the sample size was limited by time and budget constraints, therefore a target of 200 surveys was set;
- Third, the survey was only available in English, resulting in a possible under-reporting of some nationalities visiting the site;
- Fourth, there was potential for social desirability bias occurring where respondents offered answers that are seen to be desirable or acceptable but may not reflect their true opinions. In most cases it is difficult to determine the level of social desirability for any given question;
- Finally, although Kulki is a popular site for commercial tour operators, it was difficult to secure completed surveys from visitors who were travelling with a tour operator. The need to remain on schedule was the main reason given by tour operators for visitors not being able to complete their surveys. On a number of occasions, tour guides asked the interviewers to refrain from surveying their clients.

Understanding the Results

Both closed questions with specific response options and open-ended questions were used in the visitor survey. The advantage of closed questions is that it allows the researcher to investigate specific issues of interest while open-ended questions provide a good indication of top-of-mind responses and concerns of interviewees. Closed response questions generally asked respondents to use a six-point Likert scale. In the following discussion, the results of closed questions are reported as means and as the percentage breakdown by the six items on the Likert scale. Means are useful for ranking in order of importance while percentage breakdown gives a clearer indication of the strength of agreement or disagreement with a particular given statement. The following discussion should be read with these considerations in mind. It should also be noted that not every question was answered by all respondents, thus the 'n' values of tables and figures may vary. The 'n' value reports valid responses. The 'N' value reports the entire sample.



View from Kulki lookout (Photo: Julie Carmody)

3. Findings

The results presented in this report are from the Wet Tropics Visitor Site Level Survey distributed at Kulki in 2009.

3.1 Respondent Profile

The survey was completed by both females (52.5%) and males (47.5%) (N = 204).

Place of Residence

Respondents' places of residence are provided in Table 5. Just over half (55.2%) of all respondents were international visitors with the largest groups being from Europe (28.4%) and the United Kingdom (18.9%). The largest group of domestic respondents was from New South Wales (19.4%) followed by Victoria (11.4%) and Queensland (10%).

Table 5: Origin of Kulki survey respondents (n = 201).

	Frequency (n)	Percent (%)
DOMESTIC		
New South Wales	39	19.4
Victoria	23	11.4
Other Queensland	10	5.0
Far North Queensland	10	5.0
South Australia	3	1.5
Western Australia	3	1.5
Northern Territory	1	0.5
Tasmania	1	0.5
Domestic Total	90	44.8
INTERNATIONAL		
Europe	57	28.4
England/ UK	38	18.9
North America	11	5.4
New Zealand	4	2.0
Asia-Pacific	1	0.5
International Total	111	55.2
Total Domestic and International	201	100.0

Occupation

The occupation of the respondents is provided in Figure 3. The largest occupational group was professionals (32.0%) followed by students (16.7%), those who are self-employed (10.8%), retirees/semi-retirees (9.4%) and managers (9.4%). Further analysis ($p < .005$) indicates a significant proportion of international students (14.8%) and domestic retirees/semi-retirees (7.9%).

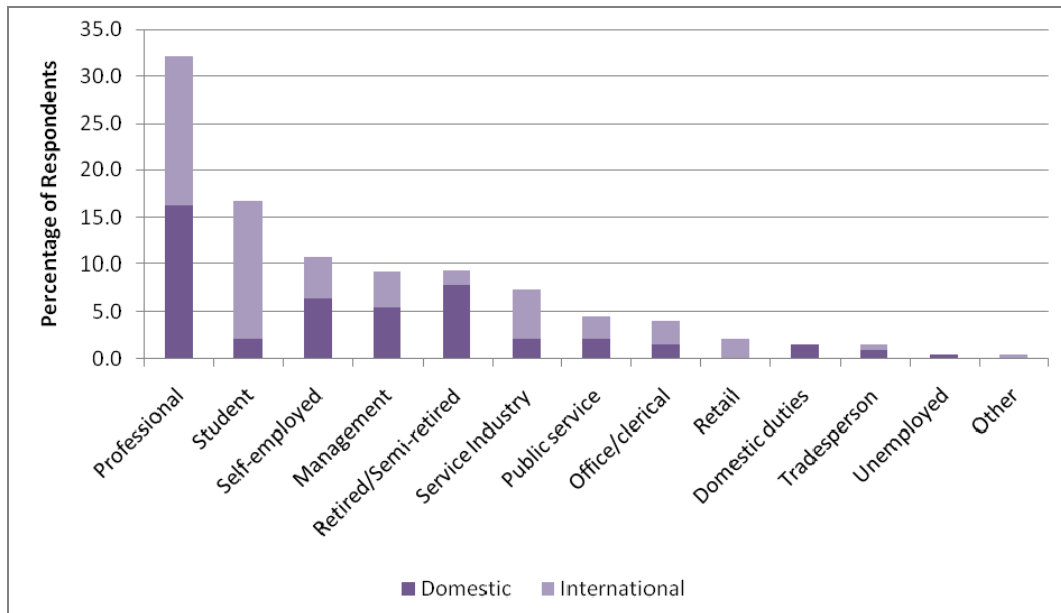


Figure 3: Occupations of Kulki survey respondents (n = 203).



Kulki (Photo: Julie Camody)

Age

Figure 4 highlights the age ranges of respondents by whether they were domestic or international visitors. International visitors aged 20-29 years (32.0%) were the largest group of respondents followed by those aged 30-39 years (11.3%). The mean age of respondents at Kulki was 36.5 years, with a range of 16 to 65 years old. The standard deviation was 14 years. Domestic visitors were represented across all age groups, with those aged 50-59 years (10.8%) being the largest group surveyed. Overall, the largest group of respondents was aged 20-29 years (41.4%).

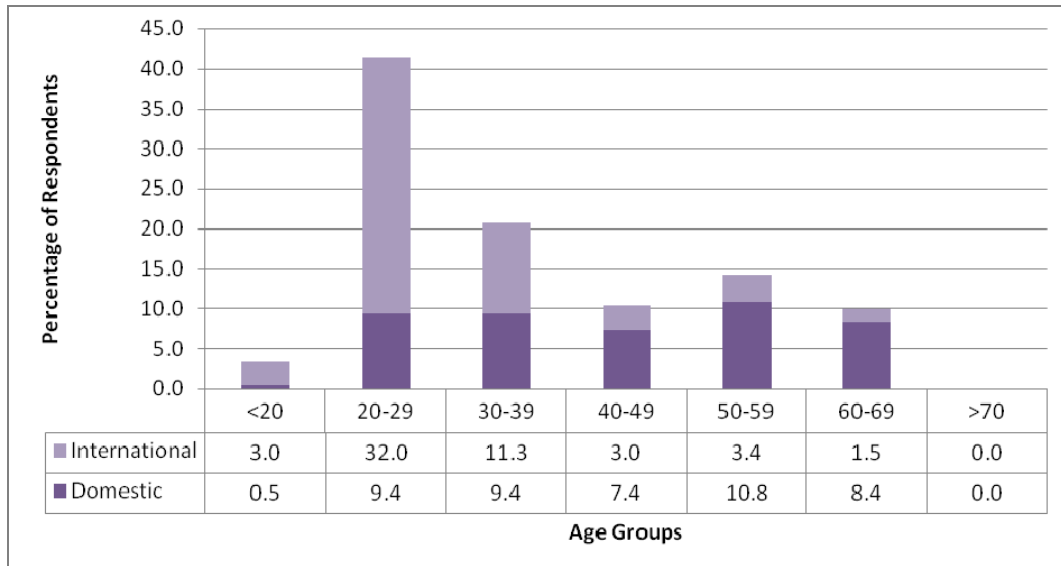


Figure 4: Age groups of Kulki survey respondents (n = 203).

Education

Figure 5 highlights survey respondents' education levels, where Tertiary A is defined as technical or further education, and Tertiary B is defined as a university qualification. For the whole sample, 63.3% of respondents reported having a Tertiary B qualification, 20.3% reported having a Tertiary A qualification and 16.3% reported having a secondary qualification. More international (37.7%) than domestic respondents (25.7%) held Tertiary B qualifications.

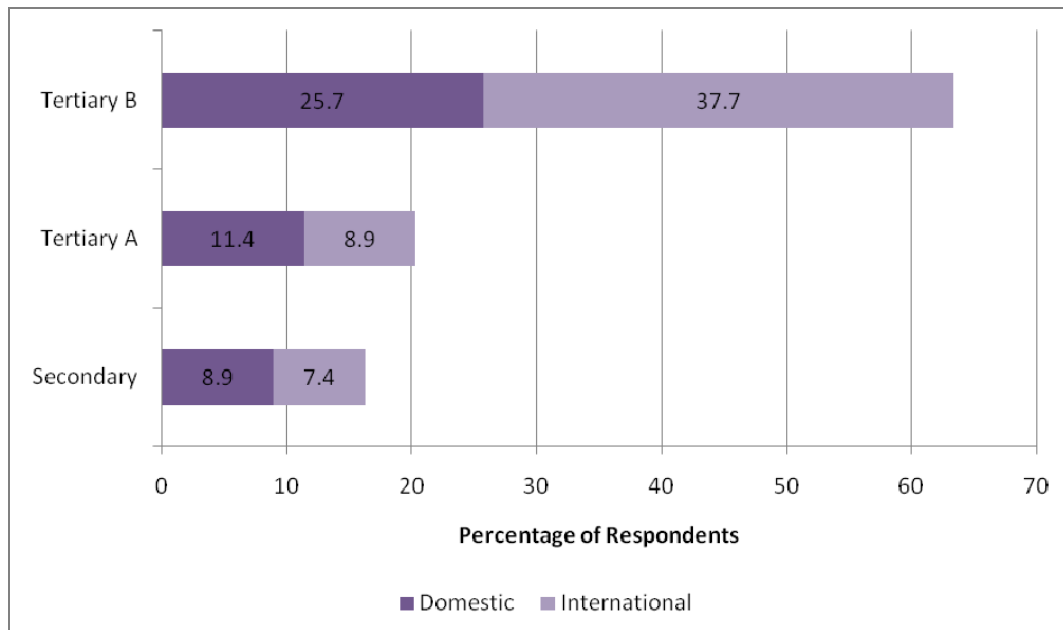


Figure 5: Levels of education attained by Kulki survey respondents (n = 202).

A cross-tabulation analysis of respondents' age and education is provided in Table 6. The largest group of respondents had a Tertiary B education (63.4%) and was aged 20-29 years (30.2%).

Table 6: Respondents' age and education (n = 202).

Age Group	Primary (%)	Secondary (%)	Tertiary A (%)	Tertiary B (%)
< 20 years	-	2.5	0.5	0.5
20-29 years	-	4.0	6.9	30.2
30-39 years	-	2.5	3.5	14.9
40-49 years	-	0.5	3.0	6.9
50-59 years	-	4.5	3.0	6.9
60-69 years	-	2.5	3.5	4.0
> 70 years	-	-	-	-
Total Respondents (n = 202)	-	16.3% (n = 33)	20.3% (n = 41)	63.4% (n = 128)
Domestic	-	8.9% (n = 18)	11.4% (n = 23)	25.7% (n = 52)
International	-	7.4% (n = 15)	8.9% (n = 18)	37.6% (n = 76)

Travel Party and Mode of Transport

More than seventy percent of respondents reported travelling to Kulki by hired vehicle (76.3%) while 23.8% travelled by private vehicle. Figure 6 indicates domestic visitors were significantly ($p < .001$) more likely to use private vehicles (18.0%) whilst international respondents were more likely to be travelling in a hire vehicle (47.5%).

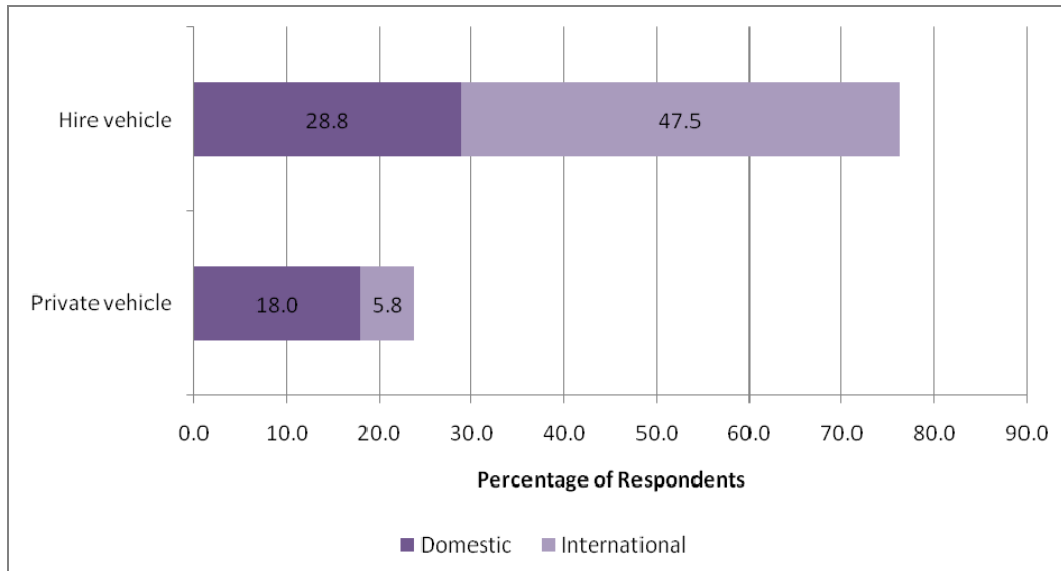


Figure 6: Modes of transport used by survey respondents to travel to Kulki (n = 139).

Table 7 reports on travel party composition. Most respondents indicated they were travelling as a party of two adults with no children (n = 69) or as groups of four adults with no children (n = 29). The average number of adults per vehicle was 2.82.

Table 7: Composition of visitor travel parties to Kulki.

	1 adult	2 adults	3 adults	4 adults	5 adults	6 adults
0 children	4	69	4	29	11	4
1 child	-	5	2	-	-	-
2 children	1	3	1	1	2	1
3 children	-	3	-	-	-	-
Adults per vehicle 2.82 ± SD 1.22 (range 1-5)						
Children per vehicle 0.24 ± SD 0.66 (range 0-3)						

Organised Tour Visitors

Table 8 shows that the majority of survey respondents were travelling with a commercial tour operator that was carrying 14 guests or less (n = 23). As previously noted, the time constraints imposed by commercial tour operator itineraries limited the number of surveys completed by tour group members.

Table 8: Kulki survey respondents travelling with an organised tour operator (n = 31).

Tour Operator	Number of guests on the tour				Total
	6 or less	7-14 guests	15-30 guests	30+ guests	
Tony's Tropical Tours	1	3	-	-	4
Jungle Tours	2	1	-	-	3
Foaming Fury	-	-	-	2	2
Tropics Explorer	-	1	2	-	3
Daintree Wonder	2	-	-	-	2
Cape Tribulation Connections	1	3	3	-	7
Adventure Tours	-	2	-	-	2
Daintree Safaris	2	-	-	-	2
Tribal Travel	2	-	-	-	2
Cape Tribulation Tours	-	2	-	-	2
Can't recall / Don't know	1	-	1	-	2
Total	11	12	6	2	31

Travel Flow

Respondents were asked about their travel patterns on the day of the survey, including where they had been and where they intended to go after leaving the site. Results are outlined in Tables 9 and 10. Respondents reported travelling from Port Douglas (18.2%), Cairns (11.0%), Daintree (7.7%) and Cape Tribulation (7.2%). A small number reported travelling from other visitor attractions including Mossman Gorge (6.1%) and the Daintree Discovery Centre (6.1%). Further examination of the towns and attractions visited before and after Kulki suggest the site is just one element of the Daintree-Cape Tribulation experience.

Table 9: Visitors' reported previous stop before arriving at Kulki (n = 181).

	Frequency (n)	Percent (%)
Towns		
Port Douglas	33	18.2
Cairns	20	11.0
Daintree	14	7.7
Cape Tribulation	13	7.2
Mossman	6	3.3
Thornton Beach	5	2.8
Trinity Beach	5	2.8
Cooktown	3	1.6
Cow Bay	3	1.6
Sydney	3	1.6
Mareeba	2	1.1
Mission Beach	2	1.1
Speerwah	2	1.1
Bloomfield/ Track/ Falls	1	0.6
Coconut Beach	1	0.6
Hamilton Island	1	0.6
Innisfail	1	0.6
Kuranda	1	0.6
Lucinda	1	0.6
Mt Molloy	1	0.6
Whitsunday Islands	1	0.6
Wonga Beach	1	0.6
Natural Attractions		
Mossman Gorge	11	6.1
Mason's Waterhole	6	3.3
Alexandra Range Lookout	4	2.3
Daintree walk	3	1.6
Myall Beach	3	1.6
The beach	3	1.6

	Frequency (n)	Percent (%)
Mt Mutchinson	2	1.1
Emmagen Creek	1	0.6
Other Attractions		
Daintree Discovery Centre	11	6.1
Motel / resort	6	3.3
Nowhere / Kulki is first stop	3	1.6
Information centre	2	1.1
Mason's Shop and Visitor Information Centre	2	1.1
PK's Jungle Village	2	1.1
Daintree River Cruise	1	0.6
GBR Ocean Cruises	1	0.6
Total	181	100.0

As outlined in Table 10, respondents reported that after leaving Kulki they would travel to Port Douglas (28.1%), Cairns (15.3%), Cape Tribulation (8.7%) and Daintree (7.1%). Analysis of the results outlined in Tables 9 and 10 indicate that the typical daily travel pattern of visitors to Kulki was to visit sites of interest on the way to Cape Tribulation and then return directly to their overnight accommodation in the afternoon.

Table 10: Intention of survey respondents to visit other places within the region after Kulki (n = 196).

	Frequency (n)	Percent (%)
Towns		
Port Douglas	55	28.1
Cairns	30	15.3
Cape Tribulation	17	8.7
Daintree	14	7.1
Mossman	7	3.6
Sydney	5	2.6
Thornton Beach	5	2.6
Darwin	3	1.6
Brisbane	2	1.0
Cooktown	2	1.0
Wonga Beach	2	1.0
Ayers Rock	1	0.5
Bloomfield/ Track/ Falls	1	0.5
Coconut Beach	1	0.5
Cow Bay	1	0.5

	Frequency (n)	Percent (%)
Ellis Beach	1	0.5
Kuranda	1	0.5
Mission Beach	1	0.5
Natural Attractions		
Marrdja Boardwalk	4	2.0
Daintree Ice-cream Company	2	1.0
Rainforest	2	1.0
Emmagen Creek	1	0.5
Mason's Waterhole	1	0.5
Mt Sorrow	1	0.5
Noah Beach	1	0.5
The beach	1	0.5
Other Attractions		
Don't know	11	5.6
PK's Jungle Village	6	3.1
East coast	3	1.6
Exotic Fruit Tour	3	1.6
Daintree River Cruise	2	1.0
Home	2	1.0
Bug museum	1	0.5
Cooper Creek	1	0.5
Daintree Discovery Centre	1	0.5
Motel/resort	1	0.5
The Cape Restaurant	1	0.5
Up north	1	0.5
West coast	1	0.5
Total	196	100.0

Visits to Protected Natural Areas

Respondents were asked about the frequency of their visits to protected natural areas. Figure 7 shows that domestic respondents reported visiting protected natural areas between two and five times a year (22.0%), a frequency that is double that of international respondents (11.5%). International respondents also reported a lower level of visitation in the 5+ times per year range (14.1%). These results provide an indication of visitors' experience in protected natural areas. Further analysis showed there were no significant differences between frequency of visitation to natural protected areas and respondents' places of origin, age, occupation or education.

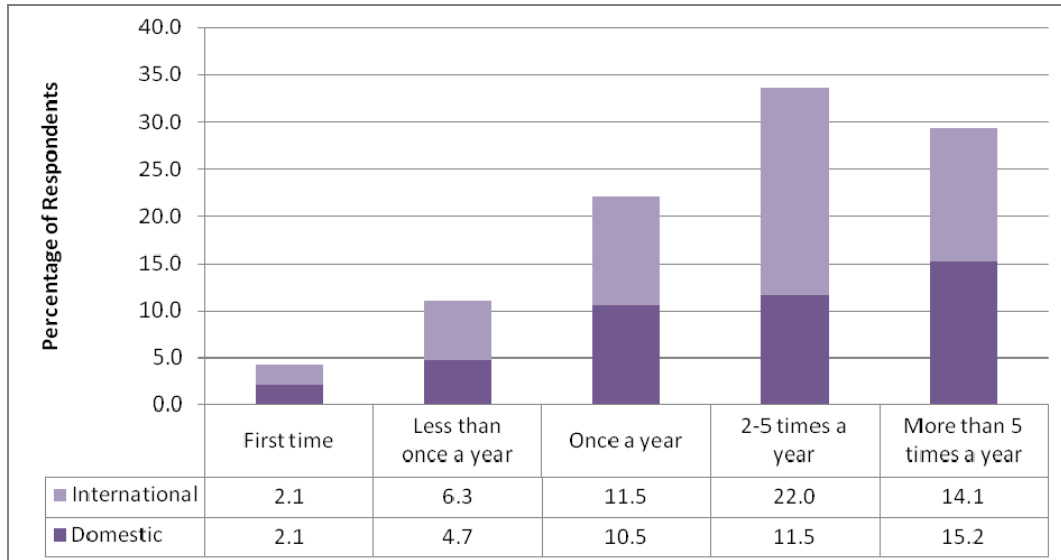


Figure 7: Survey respondents' frequency of visitation to protected natural areas (n = 191).



Reasons for Visiting Kulki

Respondents were asked to respond to a series of questions about their motivations for visiting Kulki. A six-point Likert scale of 1 (being 'not important') to 6 ('very important') was used. Table 11 shows respondents were mainly interested in seeing the natural features and scenery at the site (mean = 5.41), being close to nature (5.13), and experiencing tranquilly (4.34). International visitors were more motivated to experience the natural features of the site (mean = 5.45), learn about native plants and animals (5.18), and enjoy the short walks (4.19). Domestic visitors were more interested in the opportunities for tranquillity (mean = 4.51), to visit a World Heritage Area (4.33) and for rest and relaxation (4.27).

Table 11: Comparative domestic and international visitors' motivations to visit Kulki.

Reasons for visiting Kulki	n	Overall Mean	Domestic visitors (mean)	International visitors (mean)
See natural features and scenery	201	5.41	5.37	5.45
Be close to/ experience nature	201	5.13	5.07	5.18
Experience tranquillity	200	4.34	4.51	4.21
Because it is a World Heritage Area	199	4.17	4.33	4.05
Opportunities for short walks	199	4.16	4.12	4.19
Learn about native animals and plants	201	4.03	3.73	4.30
Rest and relax	200	3.98	4.27	3.74
Because it is a National Park	198	3.93	4.11	3.79
Outdoor exercise	197	3.65	3.69	3.62
Learn about Aboriginal culture	197	3.49	3.29	3.64
Opportunities for long walks	195	3.49	3.36	3.60
Socialise with family or friends	197	3.30	3.54	3.09

The results outlined in Table 12 show the level of importance ascribed to each motive on a scale from not important to very important. Results show that 99% of respondents considered the opportunity to see natural features and scenery was an important motivation (moderately to very important) for visiting the site with 61.7% of the respondents indicating that this motive was very important. Socialising with friends, opportunities for long walks and to learn about Aboriginal Culture were the least important reasons for visiting the site; however even these reasons were rated as relatively important.

Table 12: Survey respondents' most cited reasons for visiting Kulki.

Reasons for visiting Kulki	Percentage of survey respondents					
	Not important	Slightly important	Moderately important	Important	Quite important	Very important
See natural features and scenery	-	1.0	2.0	13.4	21.9	61.7
Be close to/ experience nature	1.0	1.5	6.5	15.4	25.9	49.7
Experience tranquillity	4.5	7.5	15.0	21.5	26.0	25.5
Because it is a World Heritage Area	7.5	7.5	17.2	19.6	24.6	23.6
Opportunities for short walks	4.0	9.0	14.6	26.6	31.2	14.6
Learn about native animals and plants	4.0	10.4	19.9	26.4	22.4	16.9
Rest and relax	5.5	10.5	19.0	29.0	18.0	18.0
Because it is a National Park	8.1	10.6	22.7	17.7	20.7	20.2
Outdoor exercise	9.1	12.7	22.8	25.9	17.8	11.7
Learn about Aboriginal culture	11.7	17.2	24.4	16.8	17.2	12.7
Opportunities for long walks	11.3	17.4	19.5	25.1	15.9	10.8
Socialise with family or friends	22.8	14.7	14.7	21.3	10.2	16.2

Other reasons (n = 5) given for visiting Kulki included the rainforest (three responses), the ability to gain an historical context and understanding of early explorers in northern Australia (two responses) and to visit somewhere new (two responses).

Activities

Respondents were asked to indicate which activities they had undertaken at Kulki. Results are outlined in Figure 8. Both domestic and international visitors indicated they had observed the scenery (89.2%), taken short walks (83.3%), taken photographs (65.5%) and relaxed (59.9%). International visitors were more inclined to observe wildlife (27.2%) and participate in photography/painting/drawing (36.9%) than domestic respondents. A small number of the respondents indicated camping (7.4%) although Kulki is not an approved camping site.

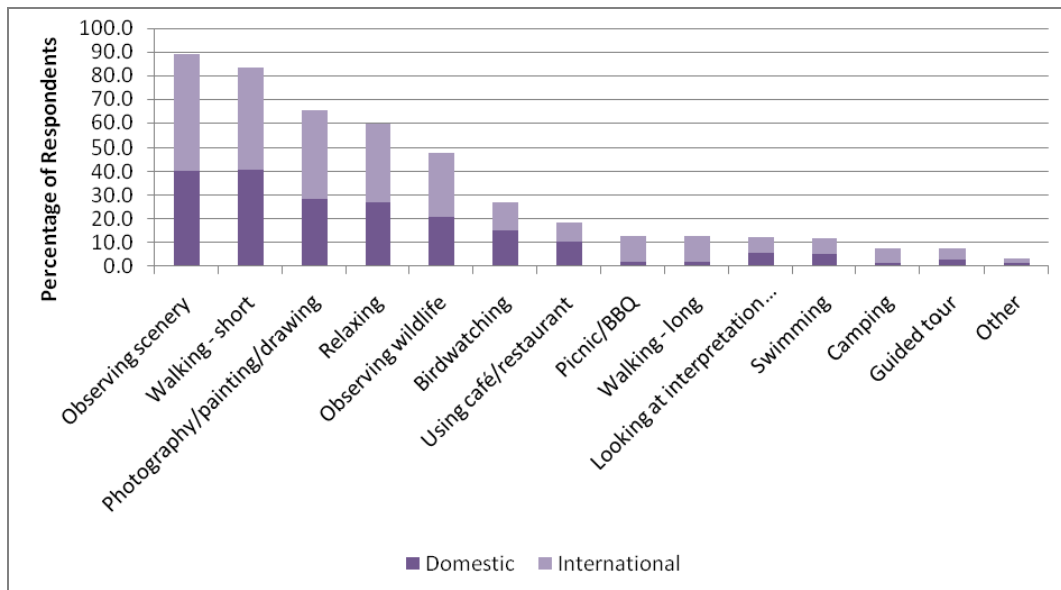


Figure 8: Activities undertaken at Kulki as cited by survey respondents (n = 203) in response to a multiple-response survey question.

Using an open-ended survey question, respondents were asked to indicate if there were activities that they would have liked to have participated in, but could not. As shown in Table 13, fifty respondents (24.5% of the sample) indicated 54 activities they would have liked to have participated in. Thirty respondents indicated they would have liked to have gone swimming, but did not due to the risk of crocodiles or stingers, or adverse weather conditions. Other responses included seeing a cassowary (four responses) and taking a longer walk (three responses).

Table 13: Activities which survey respondents would like to have undertaken at Kulki, but could not (n = 50).

Activity	Overall (n)	Domestic (n)	International (n)
Swimming due to risk of crocodiles or stingers, or due to poor weather conditions	30	16	14
See a cassowary	4	2	2
Take a longer walk	3	2	1
See a crocodile	2	-	2
Kayaking	2	2	-
Stay longer – didn't know you could stay overnight	2	1	1
Snorkelling/ visit reef but too windy	2	-	2
See wildlife	2	2	-
Coffee shop	2	1	1
Watch sunrise but too overcast	1	1	-
Visit the town	1	1	-
Stay dry	1	-	1
Photography but raining	1	1	-
Cape Tribulation shore	1	-	1
Total	54*	29	25

* Note: Multiple responses were given by individual respondents.

Figure 9 illustrates the length of time visitors spent at Kulki. A one-hour visit was most popular (33.0%) followed by visits up to thirty minutes (21.4%) and one hour (33.0%). International respondents were more likely to stay two hours (13.9%) while both half-hour and one-hour visits were equally popular with domestic and international visitors. The majority of respondents (80.6%) stayed two hours or less at the site.

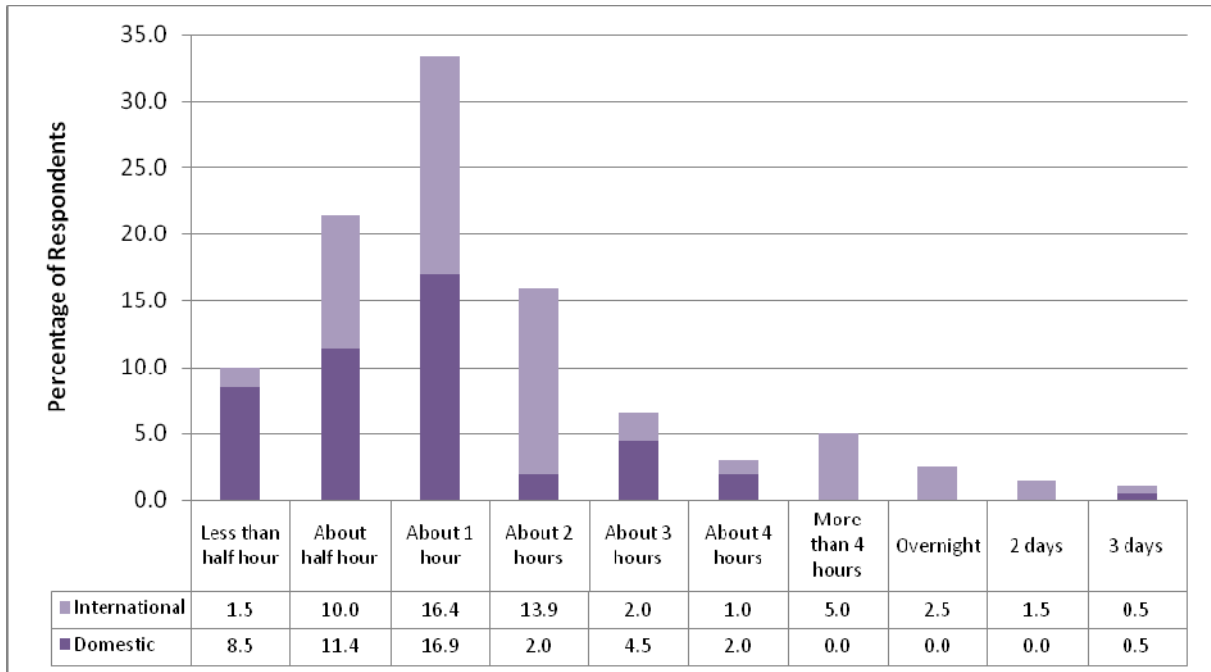


Figure 9: Approximate time spent at Kulki by both domestic and international visitors (n = 201).

Willingness to Pay

Currently, visitors to protected natural areas in Queensland are not charged an access/entry fee. Respondents were asked to indicate how much they would be prepared to pay if an entrance fee was introduced at the Kulki visitor site.

Figure 10 shows 41.2% of respondents believed that they should not have to pay a fee, while 20.1% were prepared to pay between \$5 and \$10 and 24.6% were prepared to pay between \$2 and \$4.

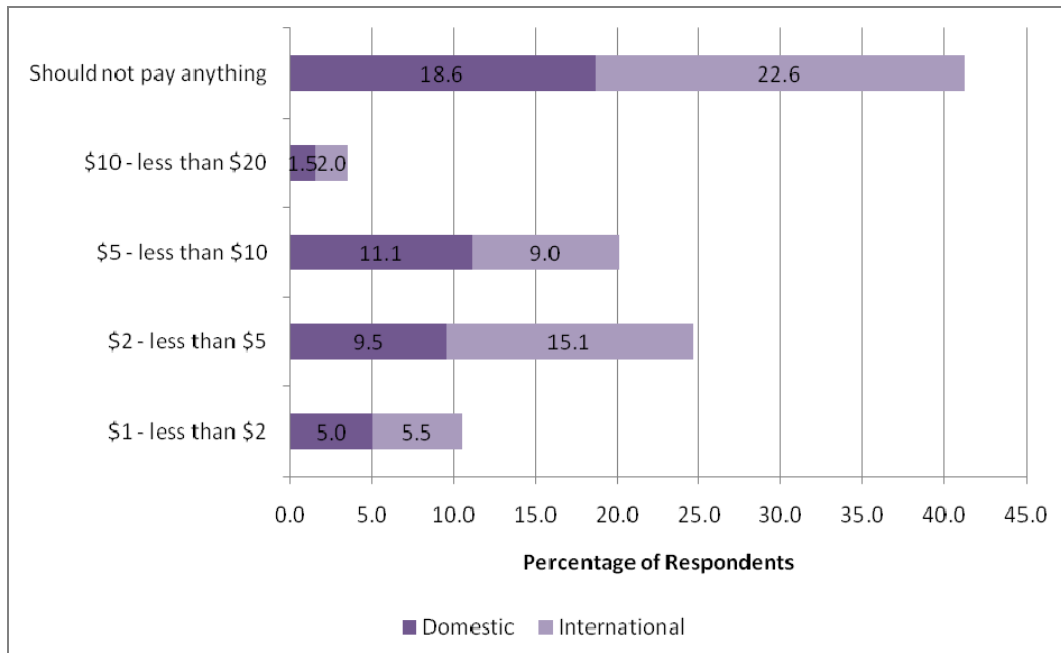


Figure 10: Survey respondents' willingness to pay an access/entrance fee to visit Kulki (n = 199).

3.2 Perceptions of the Natural Environment

A series of statements were used to gather respondents' views on the natural environment at Kulki. Respondents were asked to indicate their views using a Likert scale where 1 = 'strongly disagree' and 6 = 'strongly agree'. Table 14 summarises respondents' perceptions measured as a mean. Visitors generally considered the site to be interesting (mean = 5.35), in good condition (5.29), appealing (5.27) and well managed (5.15). While there was not a strong sense that the site had been seriously disturbed (mean = 2.70) both domestic (4.13) and international (4.22) respondents expressed relatively strong concern about the impacts of human activity. Both international and domestic respondents expressed a strong desire to spend more time at the site.

Table 14: Domestic and international visitors' perceptions of the natural environment at Kulki.

Perceptions of the natural environment at Kulki	n	Overall Mean	Domestic visitors (mean)	International visitors (mean)
The natural environment at this site is interesting.	200	5.35	5.33	5.36
The condition of the natural environment at this site appears to be good.	201	5.29	5.30	5.28
In terms of natural attractions and scenic beauty this site is appealing.	196	5.27	5.21	5.31
The natural environment at this site is well managed.	200	5.15	5.15	5.15
I would like to spend more time exploring this natural environment.	197	4.86	4.90	4.82
I am concerned about the impacts of human activity on the natural environment at this site.	199	4.18	4.13	4.22
This site appears to be disturbed and impacted.	199	2.70	2.77	2.64

Levels of agreement/disagreement with statements about the natural features of the site measured as a percentage are summarised in Table 15. Almost all respondents (97.5%) indicated that the natural environment was interesting while 97.0% thought the natural environment appeared to be in good condition and was well managed 96.5%. Just over two-thirds of respondents (70.6%) expressed some level of concern over the impacts of human activity, however only 28.1% thought the site appeared to be disturbed and impacted.

Table 15: Survey respondents' perceptions of the natural features at Kulki.

Perceptions of the natural environment at Kulki	Percentage of survey respondents					
	Strongly disagree	Somewhat disagree	Mildly disagree	Mildly agree	Somewhat agree	Strongly agree
The natural environment at this site is interesting.	0.5	1.0	1.0	11.5	33.0	53.0
The condition of the natural environment at this site appears to be good.	0.5	0.5	2.0	8.0	44.2	44.8
In terms of natural attractions and scenic beauty this site is appealing.	0.5	1.0	2.5	13.3	32.7	50.0
The natural environment at this site is well managed.	0.5	1.0	2.5	15.5	40.0	40.5
I would like to spend more time exploring this natural environment.	0.5	3.0	6.1	22.8	35.6	32.0
I am concerned about the impacts of human activity on the natural environment at this site.	4.5	10.6	14.1	27.1	20.6	23.1
This site appears to be disturbed and impacted.	17.6	37.7	16.6	15.0	11.6	1.5

3.3 Perceptions and Use of the Site Facilities

As with all Wet Tropics visitor sites sampled, the survey asked respondents to comment on given statements about site facilities using a Likert scale of 1 = 'strongly disagree' to 6 = 'strongly agree'. As illustrated in Table 16 respondents thought the overall condition of the site's facilities appeared to be good (mean = 4.84) and well managed (4.76), were adequate (4.66) and presented in a manner that made the site look appealing (4.56). A positive response was recorded to the statement regarding the importance of a ranger at the site (mean = 4.10). Domestic respondents indicated a greater level of support for a ranger at the site (mean = 4.30) than international respondents (3.92).

Table 16: Domestic and international visitors' perceptions of the site facilities at Kulki.

Perceptions of the site facilities at Kulki	n	Overall Mean	Domestic visitors (mean)	International visitors (mean)
The overall condition of the facilities at this site appears to be good.	197	4.84	4.87	4.82
The facilities and infrastructure at this site are well managed.	198	4.76	4.84	4.70
The facilities at this site are adequate.	197	4.66	4.75	4.59
This site is appealing in terms of the character and attractiveness of the facilities.	194	4.56	4.73	4.42
The presence of a ranger at sites like this is important to me.	197	4.10	4.30	3.92

The percentages for agreement/disagreement with each statement are shown in Table 17. The majority of respondents (91.4%) agreed that the facilities were in good condition while 90.1% thought that the facilities were well managed. More than two-thirds (68.0%) supported the presence of a ranger at the site.

Table 17: Survey respondents' perceptions of the site facilities at Kulki.

Perceptions of the site facilities at Kulki	Percentage of survey respondents					
	Strongly disagree	Somewhat disagree	Mildly disagree	Mildly agree	Somewhat agree	Strongly agree
The overall condition of the facilities at this site appears to be good.	-	1.5	7.1	22.3	43.7	25.4
The facilities and infrastructure at this site are well managed.	0.5	2.5	6.1	25.3	42.4	23.2
The facilities at this site are adequate.	-	4.1	9.1	26.4	37.1	23.3
This site is appealing in terms of the character and attractiveness of the facilities.	1.0	4.1	8.2	32.0	33.6	21.1
The presence of a ranger at sites like this is important to me.	4.6	12.2	15.2	24.9	23.3	19.8

Presence of a Ranger On-site

As shown in Figure 11, almost half of all respondents felt an on-site ranger would be able to provide information and education (56.0%), would enhance safety and security (43.5%) and could answer questions (42.0%). Only 6.5% thought a ranger would be helpful for lodging complaints about the behaviour of other visitors. The level of agreement for the presence of a ranger was relatively even by both domestic (33.0%) and international visitors (35.0%). Other reasons given (n = 6) for having a ranger on-site at Kulki included ‘to stop people abusing the site and facilities’ and ‘to rehabilitate, monitor and maintain the natural environment’. Four respondents did not offer an explanation for their reasons.

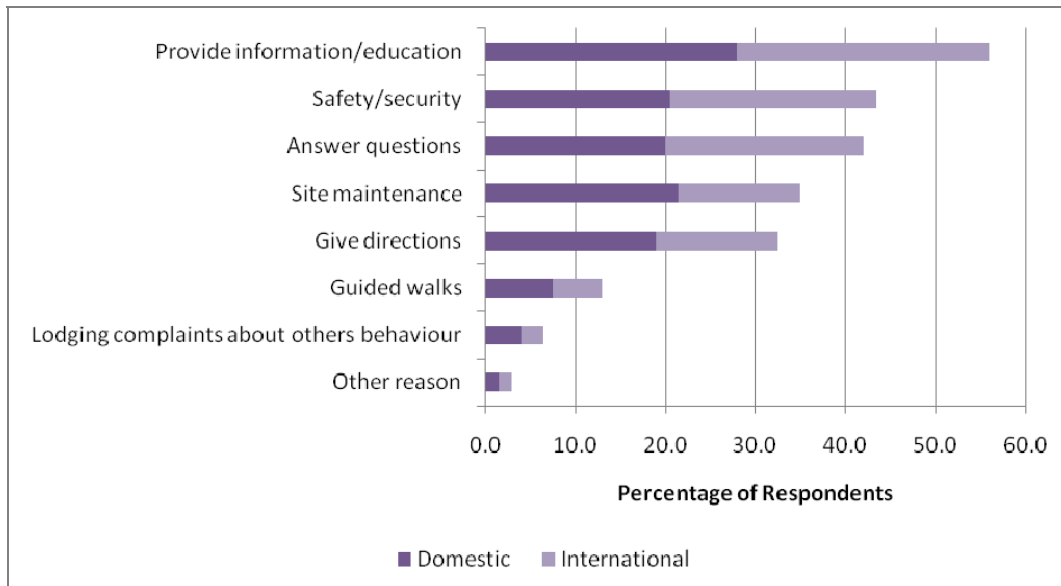


Figure 11: Survey respondents’ suggested uses of an on-site Park Ranger at Kulki in response to a multiple-response survey question (n = 200).

Use of Site Facilities

A multiple-response format was used to ensure respondents had the opportunity to indicate the facilities they had used at the Kulki site. Results outlined in Figure 12 show that the walking track (76.1%), viewing platform/lookout (65.7%), boardwalk (64.2%) and toilet (52.3%) were mostly used. International visitors were more inclined to use these facilities than domestic visitors. Domestic respondents (11.9%) were more likely to use a picnic table than international respondents (8.0%).

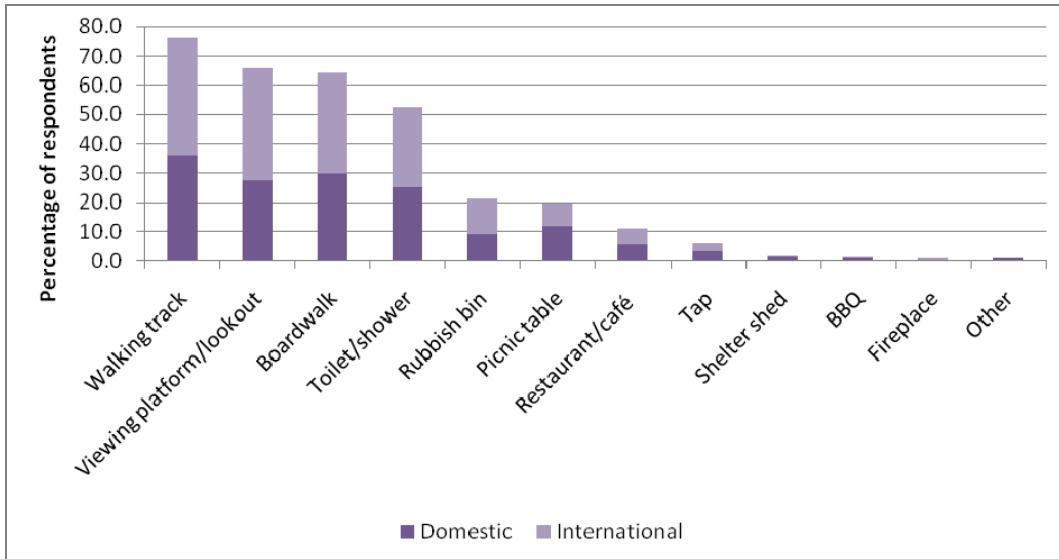


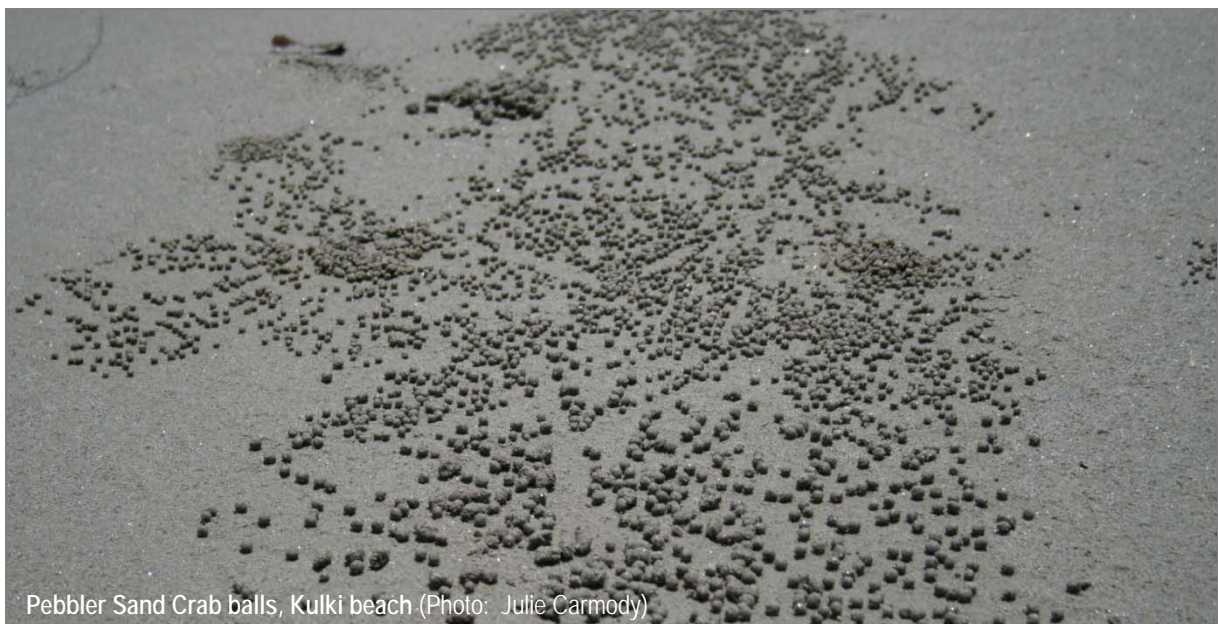
Figure 12: Most popular Kulki site facilities used by survey respondents, cited in response to a multiple-response survey question (n = 204).

Expected Site Facilities

Respondents were asked to indicate if there were facilities that they would have liked to have seen at the Kulki site. Responses were received from thirteen survey participants (6.4% of the sample) (Table 18). The most common expected facility was a shop or canteen – both of which are available at the Cape Tribulation village approximately five kilometres from Kulki.

Table 18: Facilities expected to be available at Kulki by survey respondents (n = 13).

Expectation	Total
Shop/ canteen	2
Crocodiles	1
Free camping zone	1
More bins – they are all full	1
More specific information -- local area/directions/maps	1
Not so 'touristy'	1
Rubbish bin	1
Service station – air for tyres	1
Signage of walks and lengths	1
Signs of what to do in an emergency, as no phone available	1
Swim	1
Viewing platform/ lookout	1
Total Responses	13



Information about Kulki

Survey respondents were asked to indicate the sources they had used to gain information about the Kulki site prior to their visit. Figure 13 illustrates the main sources of information used by both domestic and international respondents. The most significant was word-of-mouth (37.5%) followed by a travel guide or book (36.5%) and a map which indicated Kulki as a tourist site (33.0%). International respondents used each of these sources at a rate that was higher than that of domestic respondents. Only 10.5% of domestic visitors had previously visited the site. Other sources (n = 7) of prior information mentioned included 'an interest in the area and always wanted to come here', 'a part of profession as cartographer', 'school', 'Sunday Mail [newspaper] travel section' and 'came across it on a walk'.

The majority of respondents (88.0%) indicated that the information they had referred to was accurate. Those who suggested the information was not accurate (n = 9) felt they were not well informed about the dangers of swimming because crocodiles and stingers may be encountered – information was not detailed enough and/or out of date – and the location of the nearest service station needed to be made clearer.

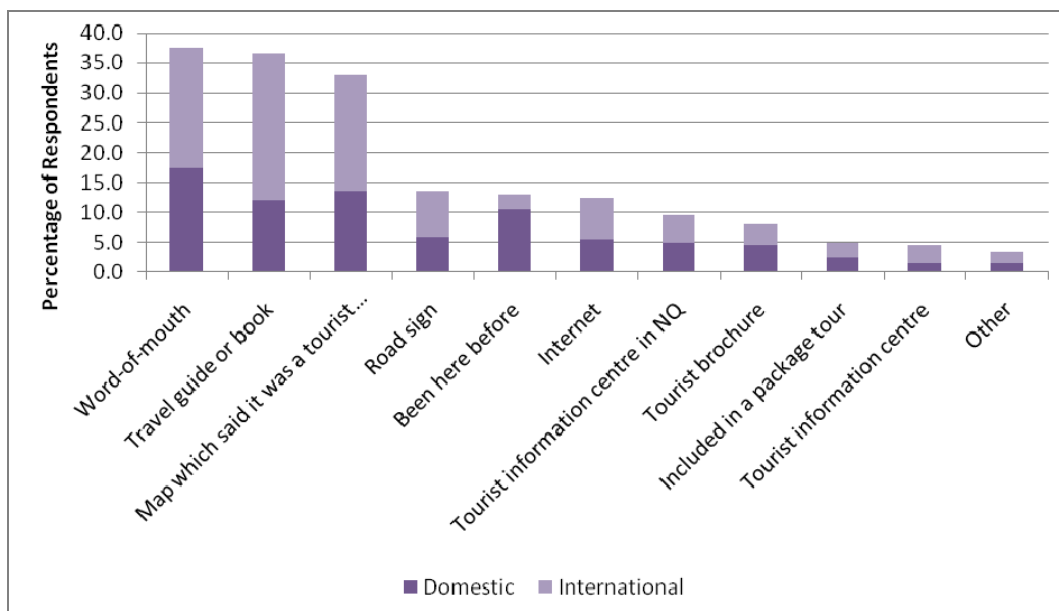


Figure 13: Sources of information consulted by survey respondents prior to visiting Kulki (n = 204).

On-site Signage

Interpretative and directional signs are important features of the infrastructure at any visitor site. Nearly two thirds of respondents (62.5%) reported using the interpretative information available at the site. Cross-tabulation analysis of results did not reveal a specific group who were more or less likely to use on-site information.

Tables 19 and 20 report on respondents' agreement/disagreement with statements pertaining to the quality of information available at the site. A Likert scale of 1 = 'strongly disagree' to 6 = 'strongly agree' was used for ranking responses. Table 19 reports on means. Respondents generally felt the rules and safety information was easy to understand (mean = 5.04) and addressed any interests and concerns (4.83). International visitors (mean = 5.12) reported no difficulties in understanding safety information. Respondents did not give a high rating to the statement that Aboriginal cultural information was interesting and informative (mean = 3.68) nor that this information helped them to understand the significance of the area to rainforest Aboriginal people (mean = 3.61).

Table 19: Domestic and international survey respondents' perceptions of on-site signage at Kulki.

Perceptions of on-site information at Kulki	n	Overall Mean	Domestic visitors (mean)	International visitors (mean)
Signs, maps and directions				
Were easy to find	194	4.75	4.80	4.72
Helped me to find my way around	193	4.66	4.72	4.61
The rules and safety information				
Were easy to understand	191	5.04	4.94	5.12
Addressed my interests and concerns	191	4.83	4.84	4.82
The information about natural features and values				
Was interesting and informative	189	4.56	4.51	4.59
Helped me to better appreciate the special natural features of the area.	191	4.51	4.51	4.52
The Aboriginal cultural information				
Was interesting and informative	179	3.68	3.63	3.73
Helped me to understand the significance of this area for rainforest Aboriginal people	180	3.61	3.55	3.67

Table 20 outlines the percentage of responses for each level of agreement/disagreement to statements about on-site information at Kulki. The majority (83.4%) of respondents thought that signs and maps were easy to find while 93.2% of respondents thought the rules and safety information was easy to understand, and 91.1% said it addressed their safety concerns. Most respondents also thought information about the natural environment was interesting and informative (85.7%) and helped them to understand the special features of the site (82.2%). Respondents were less positive about Aboriginal cultural information with 40.7% disagreeing that it was interesting and informative. Similarly, 44.4% disagreed with the given statement that information helped them to understand the significance of the area to rainforest Aboriginal people.

Table 20: Survey respondents' perceptions of on-site tourism information provided at Kulki.

Perceptions of on-site information at Kulki	Percentage of survey respondents					
	Strongly disagree	Somewhat disagree	Mildly disagree	Mildly agree	Somewhat agree	Strongly agree
Signs, maps and directions						
Were easy to find	2.6	5.2	8.8	13.4	38.0	32.0
Helped me to find my way around	4.1	2.1	9.3	20.7	35.8	28.0
The rules and safety information						
Were easy to understand	0.5	1.6	4.7	15.7	41.9	35.6
Addressed my interests and concerns	1.1	0.5	7.3	25.7	36.6	28.8
The information about natural features and values						
Was interesting and informative	1.1	3.2	10.0	31.7	32.8	21.2
Helped me to better appreciate the special natural features of the area.	1.6	3.6	12.6	28.8	30.9	22.5
The Aboriginal cultural information						
Was interesting and informative	11.7	15.0	14.0	25.7	19.6	14.0
Helped me to understand the significance of this area for rainforest Aboriginal people	12.8	17.2	14.4	20.6	21.7	13.3

Using an open-ended question, survey respondents were asked for suggestions on additional interpretative information they would like to see at the site. Forty respondents (19.6% of the sample) provided 44 suggestions. Results outlined in Table 21 indicate a desire for more information about Aboriginal people and their culture (18 responses); more information about the natural features, wildlife, plants and forestry (nine responses); and additional information about the historical significance of the site (three responses).

Table 21: Survey respondents' suggested additional visitor information that could be made available at the Kulki site (n = 40).

Suggested additional information	Overall (n)	Domestic (n)	International (n)
Aboriginal information, practices and unique features	18	7	11
More information about natural features/wildlife/forestry	9	4	5
Discovery dates and by whom/ simple heritage information/ age of environment	3	-	3
Anything	2	2	-
Alternative safe swimming destination (e.g. cannot swim here but go to ... for safe swimming)	1	1	-
Crocodile information	1	-	1
Graded road	1	-	1
Kilometres between sites on signage	1	-	1
Full list of services/ population	1	1	-
More informative travel guides, not easy to understand what to expect	1	-	1
Site specific information	1	1	-
Track description/ signage and flora signage	1	-	1
Jellyfish information	1	-	1
When gravel road starts	1	-	1
Wildlife identification charts/ Aboriginal culture	1	-	1
More distance signs to attractions/viewpoints	1	-	1
Total responses	44*	16	28

* Note: Multiple responses were given by individual respondents.

3.4 Visitor Experience

Visitors were asked to comment on aspects of their visit that enhanced or increased their enjoyment of the site using an open-ended survey question. Over a quarter (28.9%) of respondents (n = 59) indicated there were aspects of their visit to Kulki which enhanced or increased their enjoyment at the site and results are outlined in Table 22. The major factors were peace and tranquillity (11.9%), the fact that Kulki is a beautiful place (10.2%), the rainforest (6.8%), information about the site (6.8%) and the few other tourists (6.8%). These are interesting results considering the high levels of visitation experienced at Kulki.

Table 22: Aspects that visitors considered enhanced or increased their enjoyment of Kulki (n = 59).

	Frequency (n)	Percentage (%)
Natural		
Beautiful place	6	10.2
Rainforest	4	6.7
Water lookouts	3	5.1
Nature – plants & wildlife	3	5.1
Great weather	3	5.1
Unspoilt nature of the site	1	1.7
Seeing the fish	1	1.7
Seeing a crocodile	1	1.7
Seeing a cassowary	1	1.7
Diversity of beach/ rainforest	1	1.7
Facilities		
Wonderful information about the site	4	6.7
Boardwalk	3	5.1
Maintained walkways	1	1.7
Well maintained facilities	1	1.7
Area is clean and looking like minimal impact	1	1.7
Track signage	1	1.7
Psycho-social		
Peace and tranquillity	7	11.9
Few other tourists	4	6.7
Very relaxed	2	3.4
Socialising with friends/family	2	3.4
Meeting Aboriginal community members in the area	2	3.4
Freedom to walk at pleasing pace	1	1.7
Guide providing information	1	1.7
Interaction with nature	1	1.7

	Frequency (n)	Percentage (%)
Other		
Not a commercial area – yet?	2	3.4
Driving, scenery, atmosphere	1	1.7
Radio reception	1	1.7
Total Responses	59	100.0

A small number of respondents (18.6% of the sample) indicated there were aspects of their visit that took away from or detracted from their enjoyment of the site. Responses are outlined in Table 23. The weather (ten responses), crowding (five responses) and toilets (three responses) were the main aspects mentioned.

Table 23: Aspects visitors considered took away or detracted from their enjoyment of Kulki (n = 34).

	Frequency (n)	Percentage (%)
Natural		
The weather	10	28.5
March flies and mosquitoes	2	5.7
Facilities		
'Atrocious' state of the toilets	2	5.7
Facilities unsatisfactory, carpark too small, no shop for food	2	5.7
Toilet paper and some litter	1	2.9
Rules / Regulations / Safety		
Not being able to swim safely	2	5.7
Worrying about crocodiles and jellyfish	1	2.9
Psycho-social		
Too many people	5	14.3
Only other people	1	2.9
Mass tourism in Daintree	1	2.9
Other		
Litter on track	2	5.7
Tourists littering and breaking trees	1	2.9
Cars	1	2.9
No motor cross available	1	2.9
I have to leave and go back to work	1	2.9
Arrogance from tour operators – they should be more considerate of the general public	1	2.9
This unnecessarily long survey	1	2.9
Total Responses	35	100.0

Other Visitors

The behaviour of other visitors at a site can affect the level of enjoyment an individual derives from visiting that site. In circumstances where overcrowding occurs the overall level of enjoyment could be expected to fall. However, the link between perceived crowding and satisfaction is weak and is dependent on personal norms, situational variables and site infrastructure (West, 1981; Stankey and McCool, 1984; Kalisch and Klaphake, 2007). A series of statements were presented in the survey and respondents were asked to comment using a Likert scale of 1 = 'strongly disagree' to 6 = 'strongly agree'. Table 24 outlines responses as a mean. The highest ranking was recorded in response to the statement that the behaviour of others at the site was environmentally responsible (mean = 4.09). The remaining statements received a much lower mean, indicating a high level of disagreement with statements that were negative in orientation. For example the mean for the statement there were too many people at the site was low at 2.58.

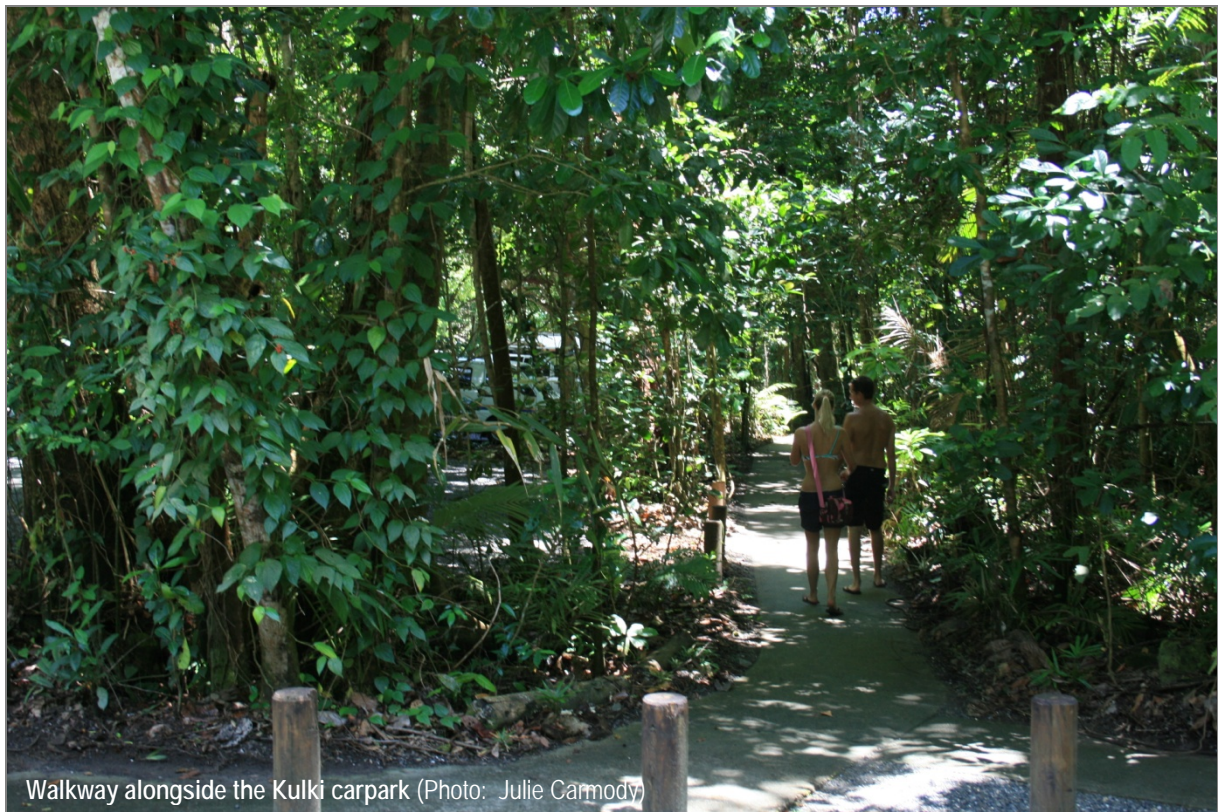
Table 24: Domestic and international visitors' perceptions of other site visitors.

Perceptions of other site visitors at Kulki	n	Overall Mean	Domestic visitors (mean)	International visitors (mean)
The behaviour of other visitors at this site has been on the whole environmentally responsible.	184	4.09	4.23	3.97
There were too many people at this site today.	185	2.58	2.51	2.65
The presence of other people at this site prevented me from doing what I wanted to.	185	1.88	1.79	1.96
The behaviour of some visitors at this site detracted from my enjoyment of this site.	184	1.86	1.73	1.97

Table 25 provides respondents' levels of agreement/disagreement with statements relating to perceptions of other visitors at the site. Respondents did not feel the presence of other visitors detracted from their level of enjoyment of the site (90.8%). Three quarters (74.6%) of respondents did not believe there were too many people at the site.

Table 25: Perceptions of other visitors at Kulki.

Perceptions of other site visitors at Kulki	Percentage of survey respondents					
	Strongly disagree	Somewhat disagree	Mildly disagree	Mildly agree	Somewhat agree	Strongly agree
The behaviour of other visitors at this site has been on the whole environmentally responsible.	13.6	10.9	8.2	9.2	36.4	21.7
There were too many people at this site today.	28.1	29.2	17.3	11.4	9.7	4.3
The presence of other people at this site prevented me from doing what I wanted to.	44.3	34.1	15.1	4.3	-	2.2
The behaviour of some visitors at this site detracted from my enjoyment of this site.	46.2	36.4	8.2	4.8	3.3	1.1



3.5 Additional Comments

The survey instrument provided respondents with the opportunity to record comments on any aspect of their visit. Twenty responses were received with most describing the Kulki visitor site and beach as beautiful.

Date	Comment
1 August 2009	'Maybe this site is just too touristy. We're looking for a more natural site – and the ferry crossing is very expensive. But I enjoyed my travel in Australia.' <i>French visitor, female, 21 years</i>
1 August 2009	'Beautiful and very well managed.' <i>UK visitor, male, 28 years</i>
1 August 2009	'Too many questions!' <i>Switzerland visitor, male, 52 years</i>
1 August 2009	'Get some free camping places around here, thanks.' <i>Netherlands visitor, female, 23 years</i>
1 August 2009	'Visitor behaviour good, except for rubbish in the toilets.' <i>UK visitor, male, 47 years</i>
1 August 2009	'Well managed at the time we visited.' <i>South Australian visitor, female, 40 years</i>
1 August 2009	'Very beautiful here.' <i>Austrian visitor, female, 35 years</i>
1 August 2009	'A lot of tourist brochures are a load of b*llshit describing facilities and beauty.' <i>New South Wales visitor, female, 56 years</i>
1 August 2009	'Please keep this area as unspoilt and natural as possible. NO mod-cons and shops are needed. Thank you.' <i>Victorian visitor, female, 65 years</i>
1 August 2009	'Great infrastructure, well managed, good balance.' <i>Greek visitor, female, 39 years</i>
1 August 2009	'A great place to be, maybe add a bench or two by the beach to relax on.' <i>USA visitor, female, 16 years</i>
28 October 2009	'This is a lovely spot, well sign posted and good road. Walks and scenery were interesting and the beach just perfect. Take me home James!' <i>Victorian visitor, female, 52 years</i>
28 October 2009	'There were cigarette butts left on the beach.' <i>Victorian visitor, female, 25 years</i>

Date	Comment
28 October 2009	'Believe all public beaches and National Parks should be free and accessible to all. Our taxes pay for upkeep of these facilities.' <i>Victorian visitor, female, 54 years</i>
28 October 2009	'A fabulous place – hope it stays this way!' <i>UK visitor, female, 44 years</i>
28 October 2009	'I didn't answer Question No. 25 because I did not look at information at this site.' <i>Canadian visitor, female, 23 years</i>
28 October 2009	'Just a beautiful area – really glad I came here from Trinity Beach. Would love to come back for longer. The boardwalk was very interesting.' <i>Victorian visitor, female, 52 years</i>
29 October 2009	'Amazing part of Australia!!! Don't change it, manage it.' <i>Other Queensland visitor, male, 38 years</i>
29 October 2009	'A beautiful site that we will recommend to others back home.' <i>Victorian visitor, female, 25 years</i>
29 October 2009	'Although I was enjoying my time and ready to move on I was happy to fill in this questionnaire although I felt it was too long. It may be worth bearing in mind a bit.' <i>UK visitor, male, 38 years</i>

4. Management Considerations

Kulki is a popular visitor site in the Cape Tribulation area, attracting a large number of visitors. The findings of this survey suggest management consideration is given to the following matters:

- Visitors expressed high levels of satisfaction with the site facilities and the natural environment.
- Although Kulki is a high visitation site, there were few concerns about overcrowding.
- There is support for upgrading on-site signage to make it more interesting and informative. Specific suggestions include additional Aboriginal cultural information and information about the site's natural features, wildlife and plants.
- Signage recommending alternative swimming areas during periods when the beach is closed should be considered.
- Some consideration could be given to enhancing the visibility of road signage.
- There was strong support for stationing a ranger on site specifically to provide information and undertake education programs. In part the provision of information could be achieved through enhanced interpretative signage. A second option may be to make a ranger available at set times each day to provide interpretative tours and answer questions.
- The use of on-site picnic tables is low. One reason could be the lack of shade or weather protection over the tables, which could be discouraging people from using them.
- There are moderate levels of satisfaction with the condition of the site's facilities. Refreshment of the current facilities may be required.
- Additional signage promoting the site's World Heritage status should be considered.
- There were some minor concerns for the state of the toilets and litter.
- Photography is a popular activity at this site. Consideration could be given to installing a map that identifies the best places and subject matter for taking photos. Informative guides to taking great photos could also be installed.
- The site's World Heritage status was not a major 'pull factor' for visiting the site. This finding highlights the need for a more vigorous and coordinated strategy to promote the Wet Tropics' World Heritage status. One element of this strategy may be to encourage destination marketing collateral to include the World Heritage logo.
- Install a visitor counter (similar to toilet counter) at the entrance to the boardwalk to develop a more detailed picture of visitor numbers and daily visitor patterns. Data of this nature, combined with the results of this survey will give managers a better understanding of how the site is used on a daily, weekly and monthly basis.

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Appendix 1: Site Survey Instrument



Visitor Site Survey in the Wet Tropics World Heritage Area

Interviewer:

Survey Location:

Survey Date: Time:

Weather: Sunny Overcast Raining Hot Warm Cool

Other Comments: (e.g. windy, smoky, mist)

.....

Dear Visitor,

We are researchers from James Cook University, School of Business – Tourism, and on behalf of the Wet Tropics Management Authority we are exploring visitors’ expectations and experiences of this Wet Tropics site. We would be very grateful if you would participate in the study by completing this questionnaire.

Your participation will help to improve visitor services and the continued management of sites by understanding visitors’ needs and views.

The questionnaire is **voluntary** and all **responses remain completely anonymous**.
The questionnaire will take approximately **15 minutes** to complete.
Thank you very much for your participation.

If you would like any more information about this project please contact the project manager. If you would like to discuss any ethical matters regarding this project please contact the Ethics Administrator. This project has Human Ethics approval H3100 from James Cook University.

**PLEASE DETACH AND RETAIN THIS INFORMATION
PAGE ONLY FOR YOUR FUTURE REFERENCE**

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9. In your travels today, where did you **previously visit** before coming to this site?
(e.g. township, visitor site)

.....

10. In your travels today, where do you plan to go **after leaving this site**?

.....

11. How often do you **visit natural areas** like this (e.g. National Parks)?

- This is my first time
- Less than once a year
- Once a year
- Between 2 and 5 times a year
- More than 5 times a year

SECTION C: REASONS FOR VISITING

12. Please indicate how important the following **reasons** were for you **visiting this site** today.

	Not important	Slightly important	Moderately important	Important	Quite important	Very important
See natural features and scenery	1	2	3	4	5	6
Be close to / experience nature	1	2	3	4	5	6
Social with family or friends	1	2	3	4	5	6
Rest and relax	1	2	3	4	5	6
Experience tranquility	1	2	3	4	5	6
Outdoor exercise	1	2	3	4	5	6
Opportunities for short walks	1	2	3	4	5	6
Opportunities for long walks	1	2	3	4	5	6
Because it is a World Heritage Area	1	2	3	4	5	6
Because it is a National Park	1	2	3	4	5	6
Learn about native animals and plants	1	2	3	4	5	6
Learn about Aboriginal culture	1	2	3	4	5	6
Other (please specify)	1	2	3	4	5	6

13. What **activities** did you engage in at this site today?

- | | |
|---|---|
| <input type="checkbox"/> Observing scenery | <input type="checkbox"/> Walking – short (1 hour or less) |
| <input type="checkbox"/> Bird watching | <input type="checkbox"/> Walking – long (1-6 hours) |
| <input type="checkbox"/> Observe wildlife | <input type="checkbox"/> Swimming |
| <input type="checkbox"/> Photography / painting / drawing | <input type="checkbox"/> Guided tour |
| <input type="checkbox"/> Picnic / barbeque (BBQ) | <input type="checkbox"/> Looking at interpretation material |
| <input type="checkbox"/> Using café / restaurant | <input type="checkbox"/> Relaxing |
| <input type="checkbox"/> Camping | <input type="checkbox"/> Other (please specify): |

.....
.....

14. Were there particular things you wanted to do today at this site which you were unable to do?

- Yes
 No

If you answered 'Yes', please specify:

.....
.....

15. How **long** have you spent at this site today?

- | | |
|--|--|
| <input type="checkbox"/> Less than half an hour | <input type="checkbox"/> About 3 hours |
| <input type="checkbox"/> About half an hour | <input type="checkbox"/> About 4 hours |
| <input type="checkbox"/> About 1 hour | <input type="checkbox"/> More than 4 hours |
| <input type="checkbox"/> About 2 hours | <input type="checkbox"/> Overnight |
| <input type="checkbox"/> Days (please specify) | |

16. If an **entrance fee** were introduced to access this site today, how much would you be willing to pay?

- \$1 – less than \$2 (AUD)
 \$2 – less than \$5 (AUD)
 \$5 – less than \$10 (AUD)
 \$10 – less than \$20 (AUD)
 I do not think I should pay anything to access this site as a day visitor.

SECTION D: NATURAL ENVIRONMENT

17. The following statements are about the **natural features** of this site. Please rate the extent to which you agree or disagree with each statement.

	Strongly disagree	Somewhat disagree	Mildly disagree	Mildly agree	Somewhat agree	Strongly agree
The natural environment at this site is interesting.	1	2	3	4	5	6
I would like to spend more time exploring this natural environment.	1	2	3	4	5	6
In terms of natural attractions and scenic beauty this site is appealing.	1	2	3	4	5	6
The condition of the natural environment at this site appears to be good.	1	2	3	4	5	6
The natural environment at this site is well managed.	1	2	3	4	5	6
I am concerned about the impacts of human activity on the natural environment at this site.	1	2	3	4	5	6
This site appears to be disturbed and impacted.	1	2	3	4	5	6

SECTION E: SITE FACILITIES

18. What facilities have you used at this site today? (Tick as many as applicable)

- | | |
|---|---|
| <input type="checkbox"/> Picnic table | <input type="checkbox"/> Walking track |
| <input type="checkbox"/> Shelter shed | <input type="checkbox"/> Boardwalk |
| <input type="checkbox"/> Restaurant / café | <input type="checkbox"/> Viewing platform / lookout |
| <input type="checkbox"/> Rubbish bin | <input type="checkbox"/> Fire place |
| <input type="checkbox"/> Toilet / showers | <input type="checkbox"/> Barbeque |
| <input type="checkbox"/> Tap | |
| <input type="checkbox"/> Other (please specify) | |
| | |

19. Were there particular **facilities at this site you were expecting** to find which were not available?

- Yes
- No

If you answered 'Yes', please specify:

.....

20. Please rate the extent to which you agree or disagree with each of the following statements about the **facilities and management** at this site.

	Strongly disagree	Somewhat disagree	Mildly disagree	Mildly agree	Somewhat agree	Strongly agree
The site is appealing in terms of the character and attractiveness of the facilities.	1	2	3	4	5	6
The facilities at this site are adequate.	1	2	3	4	5	6
The overall condition of the facilities at this site appears to be good.	1	2	3	4	5	6
The facilities and infrastructure at this site are well managed.	1	2	3	4	5	6
The presence of a ranger at sites like this is important to me.	1	2	3	4	5	6

21. If you **agreed the presence of a ranger was important**, what are the reasons for this?

- To provide information / education
- To give directions
- To answer questions
- For lodging complaints about others' behavior
- To take us on guided walks
- For site maintenance
- For safety / security
- Other (please specify)

.....

SECTION F: INFORMATION

22. How did you **find out about this site**?

- | | |
|---|---|
| <input type="checkbox"/> Have been here before | <input type="checkbox"/> Travel guide or book |
| <input type="checkbox"/> Road sign | <input type="checkbox"/> From the web |
| <input type="checkbox"/> Word of mouth | <input type="checkbox"/> The trip here was included in a package tour |
| <input type="checkbox"/> Map which said it was a tourist site | <input type="checkbox"/> Tourist brochure (which one?) |
| | |
| <input type="checkbox"/> Tourist information centre in North Queensland | <input type="checkbox"/> Tourist information centre (other) |
| | |
| <input type="checkbox"/> Other (please specify): | |

23. If you obtained **prior information** about this site, was the information accurate?

- Yes
 No

If you answered 'No', please specify:

.....

24. Did you refer to any of the information available at this site today? Yes
 No

25. Please rate the extent to which you agree or disagree with the following statements about **information available** at this site.

	Strongly disagree	Somewhat disagree	Mildly disagree	Mildly agree	Somewhat agree	Strongly agree
Signs, maps and directions...						
were easy to find	1	2	3	4	5	6
helped me to find my way around	1	2	3	4	5	6
The rules and safety information...						
were easy to understand	1	2	3	4	5	6
addressed my interests and concerns	1	2	3	4	5	6
The information about natural features and values...						
was interesting and informative	1	2	3	4	5	6
helped me to better appreciate the special natural values of the area	1	2	3	4	5	6
The Aboriginal cultural information...						
was interesting and informative	1	2	3	4	5	6
helped me to understand the significance of this area for Rainforest Aboriginal people	1	2	3	4	5	6

26. If you were to visit this site again, is there any **additional information** you would like?

Yes

No

If you answered 'Yes', please specify:

.....

SECTION G: VISITOR EXPERIENCE

27. Were there any particular aspects of your visit that **increased / enhanced your enjoyment** of this site?

Yes

No

If you answered 'Yes', please specify:

.....

28. Were there any particular aspects of your visit that **took away / detracted from your enjoyment** of this site?

Yes

No

If you answered 'Yes', please specify:

.....

29. Please rate how strongly you agree or disagree with the following statements about **other visitors at this site** today.

	Strongly disagree	Somewhat disagree	Mildly disagree	Mildly agree	Somewhat agree	Strongly agree
There were too many people at this site today.	1	2	3	4	5	6
The presence of other people at this site prevented me from doing what I wanted to do.	1	2	3	4	5	6
The behavior of other visitors at this site has been on the whole environmentally responsible.	1	2	3	4	5	6
The behavior of some visitors at this site detracted from my enjoyment of this site.	1	2	3	4	5	6

ADDITIONAL COMMENTS:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

THANK YOU VERY MUCH FOR YOUR PARTICIPATION

Appendix 2: Site Photographs

Kulki site facilities



Photographs by Julie Carmody (JCU)

Kulki site signage



Photographs by Julie Carmody (JCU)