

# **Loch Lomond and the Trossachs National Park**

## **5 Lochs Independent Validation Audit**

**Summer/Autumn 2012**

Keep Scotland Beautiful is the independent charity which campaigns, acts and educates on a range of local, national and global environmental issues which affect people's quality of life. It is committed to making Scotland clean and green, today and tomorrow.

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## **Executive Summary**

During the audit of the 5 Lochs area a total of 209 surveys were conducted within 27 sites. These sites were identified by Keep Scotland Beautiful and Loch Lomond & the Trossachs National Park staff as being problematic for littering or other anti-social behaviour. The sites were audited over an eight week period, generally on Mondays and Tuesdays, during August and September to ascertain the extent and potential cause of the problem.

The result of these 209 surveys was to establish that certain sites were consistently problematic, mainly due to their use, access and secluded nature.

### **Grading of sites**

Of the 209 site surveys carried out 45% of results were found to be acceptable in terms of the Code of Practice on Litter and Refuse (Scotland) 2006, with 55% found to be unacceptable. For further information on the grading of sites please see Appendix 1 on P48.

Of the acceptable surveys 19 (9.1%) were found to be Grade A standard, meaning they were completely free of all litter and refuse and of a very high standard. The majority of surveys (76(36.4%)) were of a Grade B standard, meaning that these surveys were within acceptable levels of cleanliness and did not constitute an environmental problem.

Unacceptable results were made up of Grade C and D sites. Of these unacceptable surveys 69 (33%) were found to be Grade C standard, whilst a further 45 (21.5%) were of the lowest standard (Grade D).

### **Indicators**

Indicators are pre-determined parameters designed to highlight issues which may have a direct impact on the areas surveyed including flytipping, fire sites and fouling. The indicators were chosen due to the nature of the areas surveyed and the impact they can have upon the sites surveyed.

Throughout the course of the eight weeks twelve indicators of environmental quality were assessed for their presence and were tallied to give a quantity present.

Within the 209 sites surveyed, the most frequently recorded 'indicator' was fouling which was noted on 96 occasions. Of these 96, the majority (60) were assessed to be human faeces (only seven were noted to be from dogs) and the remainder were from cows and other animals.

Flytipping was noted in 44 of the 209 surveys. The majority of flytipping was found to be camping related (abandoned tents, chairs, camping equipment), recorded at 37 sites.

Flytipping, due to its nature, cannot be counted by incidence or occasion and therefore the national Flycapture methodology was used. This comprises different grades based on the size of the accumulation (i.e. small van load). For further information on the flytipping measurement criteria please see Appendix 1 on page 49.

During the audit 709 fire sites were recorded. It must be noted however, that these fire sites tended to appear in the same areas week after week.

A total of 73 camp sites (defined as having a tent erected and in apparent use) were noted during the 209 surveys.

### **Litter Items**

A number of specific litter items were noted during the audit and the quantity of these recorded. The most frequently recorded item was drink-related, with 930 items (mainly cans and plastic bottles). Of these 606 (65%) were found to be non-alcoholic brands and 324 (35%) were alcoholic brands.

Confectionery related litter items were noted on 573 occasions, whilst smoking related litter was recorded 217 times.

### **Sources**

Through consultation with National Park staff a number of visitor types were highlighted as the main contributors to the litter and general environmental quality issues associated with the 5 Lochs area, and the park in general. Of these visitors it was concluded that the biggest contributors to the problems highlighted in this report were day trippers. This group was highlighted on 129 occasions; however, overnight social groups were highlighted on 96 occasions and pretend fishermen 76 times.

### **Conclusion & Recommendations**

The 5 Lochs area was found to have particular problems in certain areas rather than a general problem across the whole area. Different areas attract different visitor types, which in turn brought a range of problems. Long stay caravan owners, who may stay for a number of nights and in some cases, weeks, tended to be a source of flytipped domestic waste. Day trippers and overnight social visitors were mainly responsible for general littering.

There were a number of areas where the problems of litter and anti-social behaviour seemed to have less of an impact. These areas tended to be in the middle of the Five Lochs area and therefore the furthest away from the main population bases. They also tended not to attract long stay visitors and pretend fishermen groups for example.

Overall the audit highlighted that despite the continued input of the park authority, rangers and councils it would take a concerted effort by all to provide improved facilities, servicing, and in some cases provision, of bins to reduce the impact of the problems highlighted.

On-going and concerted education aimed at visitors to the area should be continued and consideration should be given to increasing and promoting responsible behaviour perhaps through joint campaigning with local authorities and Keep Scotland Beautiful's "Clean Up Scotland" national campaign.

Although education is an integral part of the continued efforts to improve the National Park for all visitors, service provision and enforcement also play a pivotal role in trying to provide a better environment for visitors and residents alike. It is a common belief that these three pillars of environmental quality are essential in the improvement of any area and to create high quality environments for all attention should be paid to all three.

## **Introduction**

Keep Scotland Beautiful was invited to audit litter and anti-social behaviour within the 5 Lochs area of the Loch Lomond and The Trossachs National Park. This research compliments the work within the park developing and implementing the 5 Lochs Visitor Management Plan. The issues identified by the audit are those which impact on residents and visitors and this report is intended to provide detailed information to allow targeted interventions across the 5 Lochs area.

Due to the nature of the terrain, and anticipated environmental quality issues, the methodology for assessing the impact on environmental quality of the 5 Lochs area of Loch Lomond and The Trossachs National Park (LLTNP) is based on a range of methodologies used by Keep Scotland Beautiful. The initial parameters were agreed with LLTNP staff prior to the commencement of the audit.

However, after the first week of surveys, a number of parameters were added which were not in the original methodology. These were felt to be vital to capture issues within the sites visited.

Through discussions with LLTNP staff a list of the hotspot areas within the 5 Lochs area was drawn up which KSB trained auditors surveyed. These 22 sites were assessed for their environmental quality over a period of 8 weeks.

During the audit additional sites were added to the original 22 due to problems being recorded by the assessors. Thereafter these sites continued to be assessed until the end of the audit in week eight.

By week eight a total of 27 sites had been identified throughout the 5 Lochs area. These were visited over the course of the audit building up a picture of each site and the effect of the public on these sites.

Sites identified, number of weeks visited and therefore number of surveys:

Kilmahog Car Park	8
Loch Venachar East Layby	8
East Lodge	8
Beetle Bay	5
Anie Straight Layby	8
Loch Lubnaig South Car Park	8
Loch Lubnaig North Car Park	8
Ardchuarllarie	7
Strathyre Car Park	7
Saint Fillans North Layby	8
Long Layby	8
Loch Achray Layby	8
Ben A'an Car Park	8
Loch Venachar West Car Park	7

Loch Venachar East Car Park	8
Glanoglehead Car park	8
Lochan Lairig Chiele	8
Horseshoe Layby	8
Derrywood Layby	8
Stroneslavey	8
Inverlochlarig	8
Rhuveag	8
Tulloch	8
Ardvorlch	7
Balimeanach	8
Coillemhhor	8
Finnglen	8

During the course of surveying these sites, KSB staff recorded and commented on the agreed parameters. Using experience of grading environmental issues staff carrying out the audit noted levels of drinks, both alcoholic and non-alcoholic, confectionery litter, fouling issues, both animal and human, site users including campers and caravan owners, and possible sources of problems amongst others.

This information was then used to build a picture of each site:

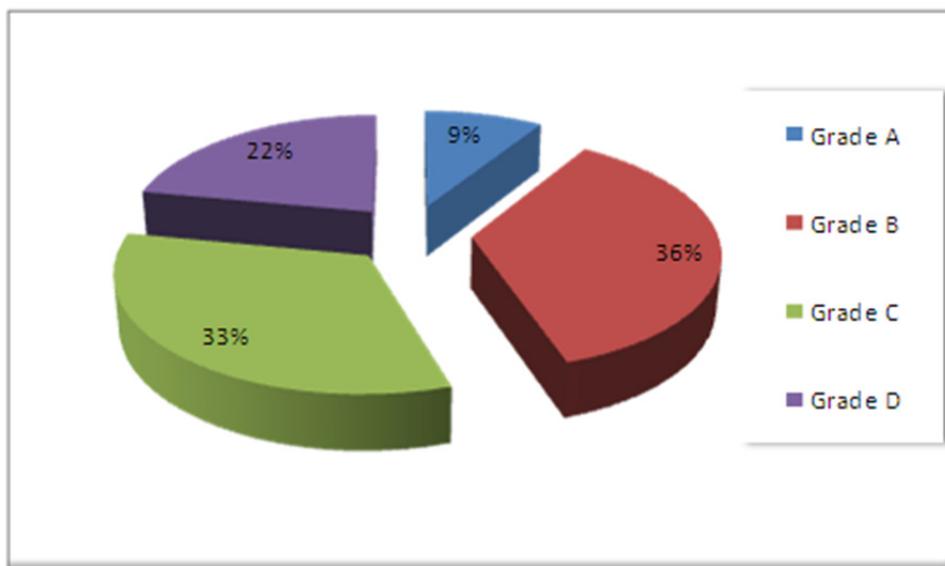
- what problems there were (if any),
- who used the site,
- what or who was determined to be the cause of the problems encountered.

From this we have been able to identify common themes and make recommendations to resolve these issues.

## 1. Grading of Sites

As shown in *Figure 1*, 19 surveys (9%) were of a grade A standard. Of these, five were recorded at the Strathyre picnic site, five at the Stroneslavy Loch Voil South Road site and four at the main car park at Ben A'an. The remainder were recorded at various sites throughout the area.

Grade B surveys were found to be the most commonly recorded grade (76 surveys (36%)). At one site this grade was the only grade noted (South Loch Venachar Road, East Lodge) and was noted on a number of occasions at particular sites (Kilmahog car park, Glenoglehead car park) six or seven times during the eight weeks of surveying.



*Figure 1*

Grade C surveys were noted on 69 (33%) occasions. These surveys are classed as unacceptable and tend to have relatively large amounts of litter, flytipping, general misuse of the area or a combination of these.

Grade D standard surveys are the lowest grade awarded and were noted on 45 (22%) occasions. Again these surveys were awarded this grade due to litter levels, flytipping etc. In general these sites were consistently more problematic than the other sites surveyed.

## 2. Indicators

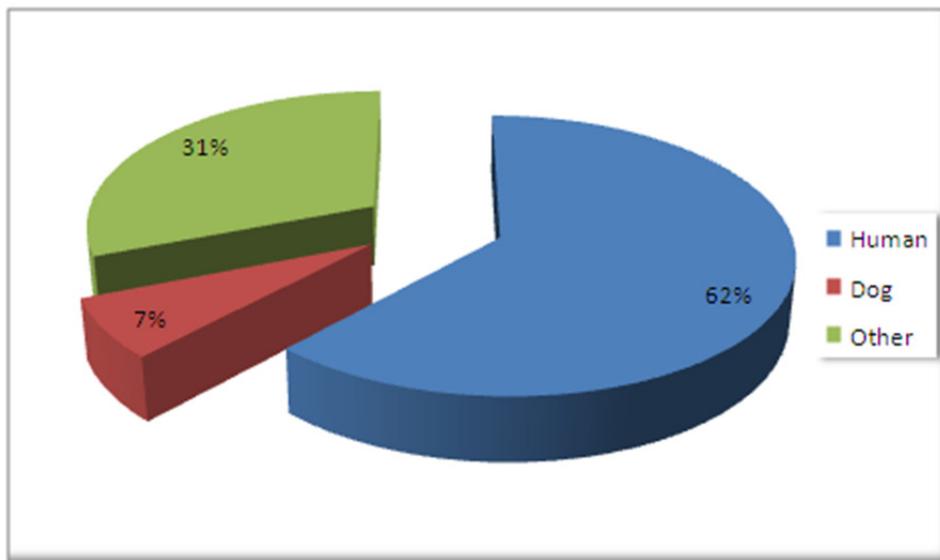
When surveying sites in the 5 Lochs area a list of particular indicators were chosen that would best capture the impact of the public on these areas.

The following section details these indicators individually, and their impact overall on particular sites.

### Fouling

When recording fouling it was decided, due to camp sites and large groups staying overnight on sites, to split the category into human, dog and other to capture the nature of the problem, particularly in relation to certain sites.

*Figure 2* shows the breakdown of fouling by type.



*Figure 2*

Overall, 96 of the 209 surveys found some form of fouling. 60 of these recorded instances of fouling were observed to be of human origin. The Derry Wood layby site was particularly problematic for human fouling with six of the eight surveys carried out found to have human faeces evident. During one survey 15 counts of human faeces were recorded.

Only seven instances (3.3%) of dog fouling were recorded during the audit, whereas 30 instances (14.4%) were noted of other forms of fouling, e.g. livestock/cows and occurred at only two sites (Loch Achray Layby & Inverlochlarig car park).

## **Vandalism**

In assessing vandalism it became clear that this indicator could not be quantified in the same way as other items that can be counted. Therefore the methodology used in the national LEAMS audits was used.

In the LEAMS methodology vandalism is quantified as; 1= no presence; 2 = small presence of vandalism; 3 = Significant presence of vandalism; 4 = severe presence of vandalism.

During the audit vandalism was noted in only six surveys (2.8%), four with a significant presence and two with a small presence.

In relative terms vandalism did not constitute a problem in the 5 Lochs area and in a few cases was recorded due to bins being damaged and car windows smashed.

## **Flytipping**

When assessing the levels of flytipping in park areas the national Flycapture methodology was utilised. This is used throughout the UK to determine levels of flytipping found, from car load to lorry load. For further information on Flytipping grading please refer to Appendix 1 on page 49.

Flytipping in the 5 Lochs area was noted on 44 (21%) occasions. Of these the majority were found to be camping related (37), 12 were found to be domestic waste and two from commercial sources.

The 37 sites found to contain camping related flytipping, generally had camping chairs, tents and tent equipment, whilst the domestic waste comprised a range of items from black bags dumped after social events to gas canisters and tyres dumped in laybys.

## **Litter Bins**

In the 209 sites surveyed during the 5 Lochs audit, there were 183 individual surveys of litter bins. These bins may have been recorded multiple times due to the areas being visited up to eight times each. On average 22.8 litter bins were found each week.

Of these 183 litter bins recorded, only three were found to be overflowing (over 75% full).

For detailed information please see the individual site information section beginning on page 17.

## **Fire sites**

During the audit any evidence of fire sites or pits was noted. This then gave an indication of the recent use of that site and its popularity.

Fire sites were noted regularly in the 209 sites surveyed and on many occasions the same fire sites were noted on an on-going basis in the same areas. In some cases sites were recorded as having 13, 14 and up to 17 fire sites on one occasion.

Fire sites tended to be located at the same locations throughout the course of the audit indicating certain sites attracting certain visitors.

On average 88.6 fire sites were found per week whilst carrying out the surveys.

## **Tents and Caravans**

Whilst conducting the audit the numbers of tents and caravans were noted. This then gave an indication of the nature of the area's use and any problems found could be linked to these campers and caravaners, if appropriate.

Tents (erected) were noted on 73 occasions throughout the audit, whilst stationary caravans, including campervans, were recorded on 83 occasions.

Despite the relatively comparable levels of tents and caravans there tended to be greater problems associated with sites containing caravans rather than tents. This may be due to evidence of some caravans parking up for longer periods of time, in some cases for a number of weeks.

For further information in specific sites please refer to the individual sites section of this report on page 17 of this report.

### **3. Litter Items**

During the course of the audit a number of litter items were specifically recorded. The types of litter items recorded were decided during consultation with LLTNP, and the quantity of items noted.

#### **Smoking**

Smoking related litter is consistently the most abundant litter item disposed of in Scotland.

However, this litter type was not the most commonly found litter type in the 5 Lochs area. This could be due to the nature of the sites visited having mainly scrub bushes, tree areas and shingle beaches making the spotting of the cigarette litter more difficult.

The majority of cigarette litter was noted in hard standing areas such as car parks and paths and was recorded 217 times during the course of the audit.

#### **Drinks**

When recording drinks related litter items it was decided to separate them into two categories; alcoholic and non-alcoholic. This allows the identification of the main type of use of the area inspected. If alcoholic litter was prolific that would suggest overnight gatherings, pretend fishermen etc. However, soft drinks would indicate use by more day trippers and perhaps families.

Overall there were 930 drinks related litter items noted during the audit. Of these 324 (35%) items were found to be alcohol related, whilst 606 (65%) were noted to be non-alcoholic.

#### **Confectionery**

Confectionery related litter was recorded 573 times during the audit. This litter item is the second most prolific litter item found throughout the country and the second most commonly found in the 5 Lochs area. This category includes conventional sweet wrappers, crisp packets, etc.

#### **BBQ items**

As the 5 Lochs area is a popular destination for day trippers and overnight stays, BBQ items such as disposable BBQs and other related items were noted. This also gave an indication of the type of use of the site and who may have made use of it.

BBQ items were recorded 117 times in 63 of the 209 surveys.

## Other items

When carrying out the audit an 'other' category was used to capture all other types of litter found and is described in the comments section.

This category could include, newspapers, fast food items, etc. 374 instances were recorded during the 5 Lochs audit.

Figure 3 shows the breakdown of litter types

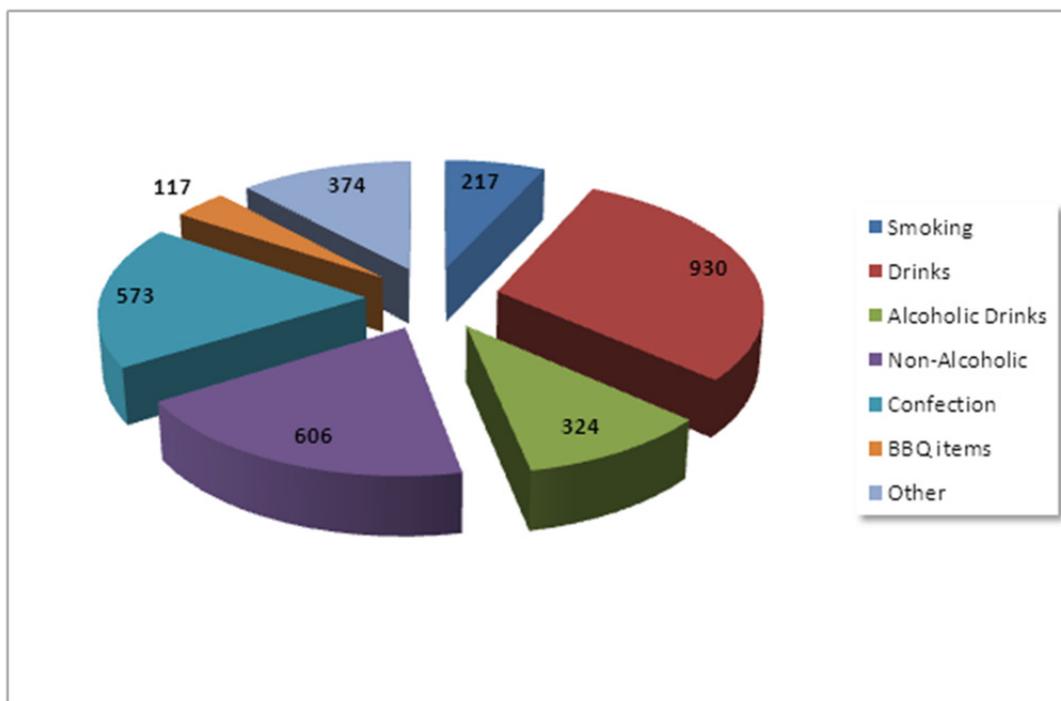


Figure 3

## **4. Sources**

Through consultation with LLTNP representatives a number of categories of park users were selected to represent the main perpetrators of the issues encountered throughout the 5 Lochs area.

Where the category of user was not immediately apparent from the issues encountered the experienced officers from KSB carrying out this audit were able to make the best assumption of the source of the issues encountered at each site.

### **Pedestrian and Individuals**

The pedestrians and individuals category tended to cover the walkers and passers-by category of visitors and was recorded 60 times during the course of the audit.

### **Fishermen and Pretend Fishermen**

When carrying out the audit a number of items left by legitimate fishermen were recorded (70) these were items of fishing tackle, rods, bait boxes, etc.

However, on occasion, it was difficult to distinguish between the legitimate fisherman and the pretend fisherman who appeared to combine fishing with excessive drinking. These pretend fishermen were recorded as sources on 76 occasions and were pinpointed when fishing related debris was found alongside evidence of drinking and general social gatherings.

### **Overnight Social**

This source is the category of visitors who visit the park and set up camp for the night, create a fire site' and eat and drink. This source was noted on 96 occasions and tended to be recorded at particularly problematic sites.

### **Day Trippers**

Day trippers were noted as the highest source of litter throughout the 5 Lochs area. This group of people covers people stopping for a break at the loch side etc.

Despite providing the highest number in the sources section (129) this source generally did not contribute to the major issues noted during the audit and tended to be associated with areas that did not generally have an issue with fire sites or flytipping for instance, but would have an issue with littering.

### **Other**

Other sources were only recorded on six occasions and on the whole this tended to be at laybys and could be attributed to lorry drivers and car drivers stopping at these areas.

### **Long term Stay**

This source was included to indicate issues that could be attributed to people staying for long periods of time at sites in the area. In general the long term stay source was identified at areas with caravans and tents and, in some cases, make shift shelters.

This source was noted only 37 times during the audit. However it had a disproportionately high impact on the area with the sites surveyed including flytipping and human faeces.

## 5. Individual Sites

This section provides details of each of the 27 individual sites surveyed during the eight week audit of the 5 Lochs area.

### Anie Straight Layby



The Anie Straight Layby is situated along the main road between Callander and Strathyre close at the southern edge of Loch Lubnaig.

Ref. No: NN585095

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 1

*Table 1* shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter sources				Litter types			
Fouling	Flytipping	Fire sites	Tents / Caravans	Pedestrians	Fishermen	Pretend fishermen	Overnight visitors	Smoking	Alcoholic drinks	Non-alcoholic drinks	Confectionary
0/8	2/8	8/8	3/8	2/8	3/8	3/8	6/8	7	40	61	28

*Table 1*

The Anie Straight Layby was surveyed from week one and on the whole proved to be a problematic site. With both a layby and riverside shoreline the site attracted a range of users from truck drivers stopping in the layby, to overnight social gatherings and pretend fishermen.

The site only achieved the acceptable standard (grade A or B) on one of the eight surveys. Fire sites were consistently found at this site indicating a continual use for drinking and overnight stays indicated by the large amounts of alcoholic litter noted, particularly during visits six, seven and

eight. The absence of a bin, particularly at the layby area may have contributed to the amount of litter noted at this site.

### **Ardvorlich**



The Ardvorlich pull off is situated on the South Loch Earn Road towards the Lochearnhead end of the loch.

Ref. No: NN632232

Number of site visits = 7

Number of visits that the site achieved the acceptable standard = 7

*Table 2* shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
3/7	5/7	7/7	1/7	0/7	5/7	6/7	6/7	9	33	38	27

*Table 2*

The Ardvorlich site was found to be a problem site for littering and was a popular site for both overnight social groups and fishermen/pretend fishermen.

Overall, 20 counts of fouling were recorded at this site. The majority of these faeces were noted to be human and in particular, on the first visit, 15 human faeces were recorded. However, this still may be fewer than the actual amount as there seemed to be favoured toilet areas at the site in regular use meaning there may be more fouling. Toilet tissue was also evident around these toilet

sites.

Flytipping was also noted throughout the seven visits and varied from camping chairs left behind to BBQ equipment.

A dead tree stump seemed to have been adopted as an unofficial litter bin and used over a number of weeks. A wheeled bin was also evident in weeks 5 to 8.

A number of fire sites were continually noted at this site and there was evidence of the burning of waste.

### **Balimeanach**



The Balimeanach layby is situated on the South Loch Earn Road.

Ref. No: NN645231

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 2

*Table 3* shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
1/8	0/8	8/8	3/8	0/8	5/8	6/8	6/8	19	5	20	19

*Table 3*

As with the Ardvorlich site the Balimeanach site tends to be used mainly by fishermen, pretend fishermen and overnight social groups, although there does not seem to be the significant toilet problems experienced at other sites.

There were bins noted at this site during every week apart from the second visit which may be the reason that this site was less littered than some others, despite the fact it was still very popular with visitors, as evidenced by the number of fire sites noted.

In the initial visits this site was of a reasonable standard. However, by week three, the standard had significantly reduced and remained low throughout the remainder of the audit.

### **Beetle Bay Loch Venachar South Rd.**



The Beetle Bay site is a small unofficial pull of situated on the Loch Venachar south road.

Ref. No: NN597057

Number of site visits = 5

Number of visits that the site achieved the acceptable standard = 0

*Table 4* shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
1/5	0/5	5/5	2/5	0/5	1/5	4/5	5/5	3	3	10	9

*Table 4*

Beetle Bay was first surveyed during week four and was therefore surveyed only five times. However, during the five weeks it became apparent that there were issues associated with this site. The first week this site was grade as grade D and thereafter only reached grade C.

Fire sites were evident during all five surveys with some evidence that litter and waste was burned in these fire sites.

A number of tents were noted during the visits giving evidence that pretend fishermen and overnight social groups were the main sources of issue at this site. Human faeces was also evident during one visit, however fouling did not evidence as a major problem here.

### Coillemhor, Nr Memorial



The Coillemhor site is a small unofficial pull-off situated on the south Loch Earn road.

Ref. No: NN652234

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 2

Table 5 shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
1/8	1/8	8/8	2/8	1/8	5/8	7/8	8/8	3	13	32	29

Table 5

Drinks related litter was again observed to be the most prominent litter type found at this site, however items were mainly non-alcoholic.

Litter in general at this site proved to be a particular problem despite the presence of a bin during most weeks.

### Derry Wood Layby



The Derry Wood layby is a very busy area situated on the north Loch Earn road.

Ref. No: NN652244

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 0

*Table 6* shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
6/8	3/8	8/8	4/8	1/8	2/8	6/8	7/8	42	41	59	70

*Table 6*

The Derry Wood layby proved to be a problem area from the first survey until the last. All eight surveys recorded an unacceptable grade with the majority recorded as grade D standard.

A number of caravans were recorded at this site over the eight weeks. These caravans were noted to have been there for a number of weeks.

It appeared to the surveyors that, due to the presence of these long term visitors, anyone stopping for the day or for a break in this area would move on due to the unwelcoming atmosphere created

by these caravans. The number of dogs tethered to a tree on the beach area exacerbated this as they were persistently barking and driving people away from that section of beach.

In addition to the caravans there were makeshift shelters constructed on the beach and tents were also noted during the audit. The nature of long term stays seems to have contributed to the problem of fouling, particularly human, in this area, and the number of fire sites could be linked to the caravans on site.

Flytipping was also recorded during three of the eight weeks and again could be linked to the caravans and makeshift shelters.

### Finn Glen



The Finn Glen site is a small unofficial pull of situated on the south Loch Earn road.

Ref. No: NN672238

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 1

*Table 7* shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
2/8	2/8	8/8	1/8	0/8	2/8	6/8	8/8	3	25	27	22

*Table 7*

The Finn Glen site was surveyed during all eight weeks and throughout that time proved to be another well-used site by overnight social groups and pretend fishermen in particular.

Following a grade B awarded during the first survey, the site standards declined with only unacceptable standards recorded after that. Human faeces was recorded during two of the surveys, whilst vandalism was also recorded mainly focused around a bin which was found melted in a fire site on one occasion.

Litter bins were noted during each of the eight visits. However these did not appear to reduce the amount of litter noted. The bins were generally found to be serviced (not overflowing). However, some were not in good working order with some broken or vandalised.

This site was very popular for fire sites and during two of the visits 12 fire sites were noted.

Drinks related litter was found to be the most common litter type found and overnight social groups were recorded as the main contributors of the issues at this site.

### **Glenoglehead Car Park**



The Glenoglehead car park site is a small official car park situated at the top of the 5 Lochs area and is the most northerly site visited during the audit.

Ref. No: NN559284

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 8

*Table 8* shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
1/8	0/8	0/8	0/8	5/8	0/8	0/8	1/8	3	1	7	6

Table 8

The Glenoglehead car park site was found to be one of the most consistently well maintained areas visited. All visits to this site were graded as acceptable with week one recording a grade A standard.

A fast food vending van was observed at this site during a number of visits and when present provided a bin for any waste. This perhaps helped with the overall high standard of the area and helped reduce levels of litter throughout the area. The picnic area was the main area for littering, however, it remained above acceptable standards.

The main visitors to this site were found to be pedestrians and individuals, including many cyclists, walkers and day trippers.

### **Horseshoe Layby**



The Horseshoe layby site is an official layby situated on north Loch Earn road.

Ref. No: NN643243

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 1

Table 9 shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
3/8	2/8	8/8	6/8	0/8	5/8	4/8	4/8	25	14	20	28

Table 9

This site continually contained caravans and tents which appeared to have been there for long periods of time. This in itself produced problems particularly with the disposal of waste even with the provision of bins, as there was at this site.

Only one survey was found to be of an acceptable standard with the remaining seven visits recording a grade C or D.

Human fouling was noted at this site on a number of occasions and flytipping was also noted. This flytipping consisted of general black bags left in the layby. However during one week a Calor gas canister was dumped at the water's edge.

The beach area and the layby were generally badly littered with broken glass and disposable BBQ's recorded on a few occasions.

Fire sites were evident during all visits and during week two, 17 fire pits were recorded.

A popular site for social groups, however, the majority of problems seemed to stem from the long stay visitors.

## Inverlochlarig Car park



The Inverlochlarig car park site is an official car park, with shelter for walkers, situated at the end of the north Loch Voil road.

Ref. No: NN447185

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 8

*Table 10* shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
2/8	0/8	4/8	0/8	6/8	0/8	0/8	3/8	1	0	1	5

*Table 10*

This site proved to be consistently tidy and well kept. All visits were found to be acceptable and very few problems were recorded. Fire sites were recorded at this area during the last few weeks of the audit, however, they did not provide the levels of litter and waste associated with other sites where fire sites were in situ.

Very light litter was recorded during the visits and the shelter on site generally seemed unused, mainly due to the bird fouling problem within the shelter. The site was generally used by walkers and day trippers, probably due to the remote nature of the site.

## Kilmahog



The Kilmahog car park is an official car park situated just outside the village of Kilmahog on the North Loch Venachar road.

Ref. No: NN608082

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 7

*Table 11* shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
0/8	0/8	0/8	1/8	7/8	0/8	0/8	0/8	19	0	7	12

*Table 11*

This car park area was generally very well kept and maintained and on only one occasion recorded a grade C standard.

Mainly used by walkers and day trippers the standard was very high and littering seemed to be light and sporadic, dropped from vehicles parked at site.

There were no significant problems at this site.

### Large car park/picnic area (Strathyre)



The Strathyre car park is an official car park in the village of Strathyre on the A84.

Ref. No: NN560169

Number of site visits = 7

Number of visits that the site achieved the acceptable standard = 7

Table 12 shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
0/7	0/7	2/7	1/7	3/7	0/7	0/7	0/7	0	0	1	3

Table 12

The Strathyre car park site proved to be one of the most well maintained and clean sites surveyed in the 5 Lochs area, recording 100% of acceptable sites over the eight weeks with five surveys being grade A and a further two surveys grade B.

One dog fouling bin was noted at the site. The small amount of litter that was found at the site was found at the perimeter of the hard standing area.

This was a very pleasant site, generally used by walkers and day trippers.

## Large Layby (Ardchuarllarie)



The Ardchuarllarie layby is situated on the A84 on the side of Loch Lubnaig.

Ref. No: NN583138

Number of site visits = 7

Number of visits that the site achieved the acceptable standard = 0

*Table 13* shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
0/7	1/7	4/7	0/7	4/7	0/7	1/7	3/7	9	58	97	61

*Table 13*

The Ardchuarllarie site was found to be one of the most problematic areas visited during the course of the audit, recording a grade D standard on every visit.

On first impression this site appeared to be just a layby. However, the beach, accessible from the side of the layby, contained a number of problems and due to the difficulty in accessing it down a steep embankment may be the reason for lack of maintenance of the site.

Two bins are located in the layby, however, on each occasion they were found to be broken in some way.

Fire sites were also located at the site, on the beach, where overnight social groups had made use of the area as evidenced by the amount of drinks litter.

The perimeter of the layby had many items of litter and this looks generally untidy and unpleasant.

### Layby (Loch Achray)



The Loch Achray layby consists of the layby area and a shore front accessible from the layby, on the A821.

Ref. No: NN508063

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 4

Table 14 shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
6/8	2/8	7/8	2/8	3/8	2/8	4/8	5/8	0	14	6	9

Table 14

The standard on this site was variable with one week very poor in standard then the following week very good.

Flytipping was found at this site on two occasions, both of which were found at the side of the layby and appeared to be from park users who were trying to dispose of their waste in a responsible way i.e. filled and tied black bags.

A large amount of fouling was recorded at the site down at the lochside. This fouling was in general from cattle, however, on one occasion human faeces was recorded.

Fire sites were commonly found throughout the course of the audit and tents were present. The fire sites were also used on occasion to burn waste.

Drinks related litter, particularly alcoholic was noted at the site and the main source was found to be pretend fishermen and overnight social groups.

### Loch Lubnaig North



The Loch Lubnaig North car park is situated on the A84 towards the south of the loch.

Ref. No: NN587118

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 3

*Table 15* shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
0/8	2/8	8/8	5/8	0/8	4/8	1/8	4/8	8	18	26	18

*Table 15*

Loch Lubnaig North car park produced a mixture of results. There did not seem to be one particular source of problems and varied from day trippers to long stay caravans and tents. This site was found to be a particularly used by caravans and tents.

Fire sites were popular at this site, and there was an abundance of litter on site over the eight weeks.

Makeshift shelters were also a feature of this site and trees had been chopped for fire wood. Black bags were left, possibly by caravans and tent owners, looking for a place to put their waste. Litter, including broken glass and alcohol bottles was in evidence over the eight weeks.

### Loch Lubnaig South



The Loch Lubnaig South car park is situated on the A84 towards the south of the loch, just south of the North car park.

Ref. No: NN585106

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 3

Table 16 shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
0/8	2/8	8/8	4/8	1/8	5/8	3/8	3/8	9	8	15	25

Table 16

Like the North car park site the South car park has a varied mix of visitors and remarkably similar characteristics in what was found and how the site was used.

Three grade B standards were noted during the last three surveys carried out. Prior to that there had been three grade C standards and two grade D standards awarded, showing an improvement towards the end of the audit.

Again, fire sites were in abundance including 13 recorded during weeks two and four.

Again there was a lot of litter found over the eight weeks and also a number of full black bags left on site, perhaps left by long term stay visitors thinking they were doing the right thing as there are no bins at the site.

### East Layby North Loch Venachar Road



The East layby is situated on the A821 (North Loch Venachar) about halfway along the lochside.

Ref. No: NN578061

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 4

*Table 17* shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
1/8	0/8	3/8	0/8	3/8	0/8	2/8	1/8	6	2	16	35

*Table 17*

The Loch Venacher East Layby site recorded equal numbers of acceptable and unacceptable grades with 4 grade B's awarded, 3 grade C's and 1 grade D. The acceptable grades were all awarded during the first 4 weeks of the audit. Thereafter a decline in standards was noted.

A wind trap beside a wall and tree was a major contributor to the amount of litter observed during the last four weeks. This litter was principally confectionery related and may have been blown into this wind trap.

A few fire sites were noted but the main contributors to the problems at this site tended to be day trippers.

### Lochan Lairig Chiele



The Lochan Lairig Chiele site is situated on the A85 at the north of the 5 Lochs area.

Ref. No: NN559279

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 5

*Table 17* shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretended Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
0/8	1/8	6/8	2/8	2/8	1/8	1/8	6/8	3	4	5	9

*Table 17*

This area appeared well used by canoeing groups and overnight social groups.

Fire sites were noted during the majority of visits, and tents noted on two occasions.

Black bags of rubbish and rubbish left at entrance of site and some flytipped materials may indicate that visitors to this site would have used a bin if one had been provided.

On the whole the site was reasonably well kept and recorded only three unacceptable grades during the eight visits.

### Long layby



The Long Layby site is situated on the A85 on the north road of Loch Earn.

Ref. No: NN658244

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 2

Table 18 shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
3/8	3/8	7/8	8/8	0/8	4/8	3/8	6/8	14	13	32	29

Table 18

A problem area mainly due to the number of caravan owners that had set up for long term stays on the site. Human faeces was evident during the course of the survey and during one visit a chemical toilet had been emptied on site.

Flytipping was also noted on three occasions and ranged from general waste bags and unwanted folding chairs, to tyres and gas canisters.

Disposable BBQs were also evident at site and fire sites were often observed.

The bins present at this site were well used, however, there was still a great deal of litter and waste recorded during the audit particularly around the areas where the caravans were parked.

### **Main car park (Ben A'an)**



The Ben A'an car park is situated on the A821 at Loch Achray.

Ref. No: NN509070

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 7

*Table 19* shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
0/8	0/8	0/8	0/8	4/8	0/8	0/8	0/8	0	0	5	6

*Table 19*

The car park at Ben'Aan was one of the best kept sites during this audit failing to meet the acceptable standard on only one occasion.

This site tended to be used by walkers and day trippers.

## Rhuveag 1



The Rhuveag 1 site is situated on the north Loch Voil road about halfway along the lochside.

Ref. No: NN484197

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 1

Table 20 shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
1/8	4/8	8/8	0/8	0/8	2/8	5/8	7/8	13	15	29	37

Table 20

This problematic area, popular with social groups was found to have a list of problems including flytipping, human fouling and fire sites.

Surveyed eight times this site recorded 1 grade A, 3 grade C and 4 grade D standards. These unacceptable survey results were mainly due to the amount of drinks and confectionery related litter found at site.

Fire sites were also prevalent at this site and flytipping was recorded a number of times. The same litter was found to be present from week to week in some cases and a lot of waste had been partially burnt on the fires. Overnight social groups and pretend fishermen appeared to be the main source of problems at this site.

### Car park (Loch Venachar East)



The Loch Venachar East car park site is situated on the North Loch Venachar Road (A821) between Brig o' Turk and Kilmahog.

Ref. No: NN578061

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 0

Table 21 shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
0/8	4/8	8/8	3/8	0/8	7/8	8/8	1/8	10	11	24	39

Table 21

This small car park area is very popular across all categories of visitor.

The number of fire sites evident and the amount of drinks litter recorded indicates that this site is used mainly as a social area. Day trippers were also evident at the site and there were also caravans and a number of tents recorded during the audit.

Flytipping was prevalent at this site including bags which have been left for someone else to pick up, a grill and butane gas canisters. An electrical cable was also evident during a number of the visits and seemed to have been torn down from overhead poles. Confectionery litter proved to be the most commonly observed litter type at this site. This litter type was by no means the only issue however, with non-alcoholic drinks litter also prevalent throughout the audit.

### Car park (Loch Venachar West)



The Loch Venachar West car park site is situated beside the east car park on the North Loch Venachar Road (A821) between Brig o' Turk and Kilmahog.

Ref. No: NN562062

Number of site visits = 7

Number of visits that the site achieved the acceptable standard = 2

Table 22 shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
1/7	4/7	7/7	3/7	2/7	5/7	6/7	0/7	3	1	21	17

Table 22

This car park was surveyed from week 2 onwards and recorded 2 grade B and 5 grade C standards. Flytipping was noted over the weeks ranging from a pile of bagged rubbish one week to an airbed and camp chair on another.

There were a number of fire site observed during the survey and a significant number of drinks containers, although these were mainly non-alcoholic.

Again fishermen, pretend fishermen and day trippers were the main source of litter noted.

A number of tents were recorded over the seven weeks of surveying in this area indicating that it is a popular site for more than just day trippers.

## East Lodge South Loch Venachar Road



The East Lodge site on Loch Venachar is a car parking area on the lochs south road.

Ref. No: NN593055

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 8

*Table 23* shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
1/8	0/8	8/8	1/8	8/8	0/8	0/8	3/8	0	0	4	10

*Table 23*

The South Loch Venachar Road, East Lodge site was one of the most consistently clean and tidy sites surveyed during the 5 Lochs audit, recording a grade B standard during all eight visits.

Dog fouling, vandalism and fire sites were all recorded at this site but not in great numbers, whilst fire sites were recorded during every survey but usually only one per survey.

The majority of litter noted at this site was found to be confectionery related, whilst the main sources seem to be from day trippers and pedestrians, perhaps walkers.

## St Fillans North Layby



The Saint Fillans North Road layby is situated on the A85 on the shore of Loch Earn just outside Saint Fillans village.

Ref. No: NN689246

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 4

Table 24 shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
1/8	3/8	1/8	2/8	2/8	6/8	0/8	1/8	5	3	17	10

Table 24

The Saint Fillans North Layby recorded four grade B surveys and four grade C surveys. It is a popular site for both fishermen and day trippers who were recorded as being the main source of litter at this site.

With bins placed along both sides of the layby there is an expectation that there should be very little litter observed at this site. However, this was not the case for four of the eight visits where significant levels of litter were observed.

Disposable BBQ's were also found at this site as was some flytipping in the form of broken

camping chairs etc. Only one fire site was observed at this site indicating perhaps that this site only attracts short stay visitors.

### **Stroneslavey Loch Voil South Road**



The Stroneslavey site is situated on the banks of the River Balvag between Balquhiddier and Strathyre.

Ref. No: NN548202

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 8

*Table 25* shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
1/8	0/8	7/8	0/8	1/8	3/8	0/8	0/8	1	1	1	2

*Table 25*

This quiet site on the south of Loch Voil was the most consistently clean and tidy site of all 27 sites surveyed recording five grade A standards and three grade B standards, meaning all 8 visits were found to be acceptable.

There were no major problems found at this site and very few litter items observed during the eight visits.

One fire site was consistently observed week after week and used on occasion to try and burn waste.

This site seems to be generally used by fishermen who seem to take reasonable care of the area.

### Tulloch - unofficial lay-by



The Tulloch site is an unofficial pull-off situated on the north Loch Voil road.

Ref. No: NN509203

Number of site visits = 8

Number of visits that the site achieved the acceptable standard = 7

Table 26 shows the number of visits during which the indicators and litter sources were recorded, and the total individual count of litter types.

Indicators				Litter Sources				Litter Types			
Fouling	Flytipping	Fire Sites	Tents & Caravans	Pedestrians & Individuals	Fishermen	Pretend Fishermen	Overnight Social	Smoking	Alcoholic	Non-Alcoholic Drinks	Confectionery
1/8	1/8	8/8	0/8	5/8	2/8	0/8	3/8	2	1	10	8

Table 26

The Tulloch site was found to be a particularly consistent site in terms of litter and anti-social behaviour. Only during the first visit did this site record an unacceptable grade C standard.

Small instances of human fouling and flytipping were recorded over the eight weeks and fire sites were also noted during each visit.

Low levels of littering were evident during all eight surveys and pedestrians, individuals and day trippers were determined as the main contributors to the problems at this site.

## **6. Conclusions**

In the process of carrying out this audit it quickly became apparent that there are a number of issues facing the National Park in trying to deal with the problems associated with 5 Lochs area.

### **Site Location**

As anticipated, there appears to be a correlation between problem areas and proximity to large population areas. The sites located closest to both Perth (Loch Earn) and Stirling (Loch Venacher and the southern end of Loch Lubnaig) were, on average, more problematic than sites situated in the middle of the park and thus furthest away from these large population areas (Loch Voil).

The audit results indicate that there is a maximum distance which groups of people will travel. As a result the Loch voil area tends to be less affected by anti-social behaviour issues that are more prevalent in the the Loch Earn and Loch Venachar areas.

### **Indicators**

#### Fire Sites

Fire sites were very common throughout the 5 Lochs area and some areas recorded over 12 during visits. Although it may be difficult to stop this practice it can lead to other problems including the burning or partial burning of waste and the chopping of trees to gain firewood. The presence of fire sites was usually an indicator of misuse and was generally associated with other incivilities in the area.

#### Bins

The number of bins within the 5 Lochs area varied from site to site with only eleven sites out of the twenty seven containing bin provision. Bins were typically of 240 litre size and generally in a good state of repair. However, the audit results suggest that the presence of bins of bins alone does not correlate with the amount of litter found at a site.

#### Fouling

When it came to the issue of fouling it was surprising to find that the greater amount of fouling was observed to come from human sources as opposed to dogs or other animals. The problem tended to be worse at areas which attracted pretend fishermen and overnight stay visitors. However this was not exclusive. There were many cases where an area seemed to be designated the toilet area and was usually highlighted by tissues and wipes in the surrounding area.

## Flytipping

Flytipping was not uncommon. However, the make-up of this flytipping was not left behind tents and sleeping bags, as anticipated, but black bags left after a caravan/tent had moved on, or after a group of people had been at the site. This would suggest that many of these visitors wanted to dispose of their rubbish properly but had no easy means to do so. The provision (and servicing) of appropriately sized bins in these locations could reduce the number of black bags left at these sites.

There were also a number of (broken) chairs, tyres and empty gas canisters recorded. This type of flytipping is generally carried out by individuals with no desire to seek out and use a bin and is therefore more difficult to address.

## Sources

### Long Stay Visitors

There seems to be a direct link between poor quality areas and long stay tents and caravans. Where caravans are parked for long periods of time issues tend to arise with regard to disposal of waste. This was evident at some sites where gas canisters had been dumped and waste had built up around caravans that appeared to have been there for quite some time, leaving a footprint of waste. Long stay visitors also appeared to dominate a space, which may make other visitors feel uncomfortable in certain areas

### Day trippers

Day trippers were found to be the most common source of litter throughout the 5 Lochs area. However, this group of visitors were generally more associated with small items of litter, whereas overnight social groups and pretend fishermen tended to be associated with more anti-social behaviour such as flytipping and more significant levels of litter.

The pretend fishermen in particular seemed to be less concerned about leaving the area in a good condition than the more serious fishermen and the overnight social groups tended to just leave everything behind or attempted to burn their rubbish.

### Litter Types

Litter, and in particular drinks litter, proved to be an issue throughout the 5 Lochs area. Non-alcoholic drink litter was a more frequent problem than alcoholic drink litter. BBQ items were an issue at many sites whilst confectionery litter was found extensively throughout the audit.

## **7. Recommendations**

The 5 Lochs area is a particularly scenic and naturally beautiful area of the National Park. However, the audit shows that a few visitors are spoiling the experience for the majority, and for local residents.

Keep Scotland Beautiful recommends that any action taken to deal with local environmental quality issues is linked to three key drivers; service provision, education and enforcement. This is highlighted in the 5 Lochs Visitor Management Plan where actions are identified under the three key tools of infrastructure and service improvements, education, outreach and volunteering and enforcement.

An important outcome of the audit is the identification of drinks related litter as the most common litter items found in the 5 Lochs area. Although non-alcoholic drinks litter made up the biggest proportion of this litter, alcoholic drinks litter was linked to other incivilities and this would particularly benefit from a combination of the tools identified.

Specific actions will be required to meet the needs of individual sites within the area, for example, it may be possible to improve and enhance the most problematic sites by increasing the provision of bins at these sites (i.e. Anie Straight Layby) along with more frequent servicing and regular manual litter-picking. It may also be an option to increase the size of the bins at certain sites, particularly sites that attract caravan owners, in order to provide a means to dispose of the domestic waste associated with long term stay visitors.

In terms of future work on improving standards for visitors to the park a particular focus could be placed upon providing more facilities for use by visitors. In some cases where human fouling was evident it may be viable to provide toilet facilities. Alternatively, guidance on protocols will be appropriate for wild camping.

It would appear that people are more likely to litter when they are less likely to be seen. Opening up the more secluded sites within the 5 Lochs area may therefore lead to a reduction in environmental incivilities at these sites.

With day trippers being the biggest source of litter recorded throughout the audit it is recommended that any further campaigning against littering and other environmental incivilities within the park area be targeted towards this group. Day trippers may consist of individuals passing through or families visiting the park and targeting this group would provide not only the biggest visitor group to the park but also the most potential for behaviour change. The Keep Scotland Beautiful Clean Up Scotland campaign aims to support the National Park, as a key supporter, in promoting these anti-litter messages.

# Appendices

## Appendix 1: Methodology

After consultation with the park authority KSB staff devised a methodology to capture information on the 5 Lochs area. This audit methodology was designed to record information about environmental incivilities within the park.

The information recorded included; Fouling, human, dog and other animals; flytipping, both camping and domestic; amount of fire sites; tents and caravans; smoking, drinks and confectionery litter.

The audit was also designed to categorise the source of issues encountered from day trippers to the area, overnight campers, pretend fishermen, legitimate fishermen and tourists. These groups were anecdotally identified as the main contributors to the litter and flytipping issues associated with the area.

The audit encompassed the whole road network, taking in and assessing all laybys, both official and unofficial, and focussing on the areas around the epicentre of activity. A number of hotspots, identified by national park representatives, were targeted consistently over a period of time. This should highlight the nature of the problem, identifying the main groups using these areas, to build a picture of the problem and collect the factual information to then tackle the issues.

It was acknowledged that there were other problem sites, in addition to the hotspots, identified during the course of the audits. These were added to the list of sites to be audited and were visited on each occasion to assess if the problem is developing.

In order to provide a sufficiently detailed output from the audit, KSB visited every site once a week, over a defined period (eight weeks) during August and September 2012.

The Code of Practice on Litter and Refuse (Scotland) 2006 was used to evaluate the impact of littering in each site of the 5 Lochs area.

### Grading of Sites

Each of the 209 sites surveyed during the course of the 8 week audit were graded A, B, C, D dependent on the environmental standards encountered during each site visit.

The grade was given at the end of each visit and was determined by the incivilities and general standard noted at the time of the visit.

Grade A = Top standard; free of litter and flytipping, however, may still have traces of misuse but has been managed i.e. fire site still evident but may not have been used for a while.

Grade B = Acceptable standard; may have small amount of litter evident or has evidence of some misuse.

Grade C = Unacceptable standard. May be quite badly littered or have evidence of flytipping or some other associated issues.

Grade D = Lowest standard. May be heavily littered, badly flytipped, many areas of misuse and abuse.

### Flytipping Grading

1 = Single item - means one bag or one piece of furniture or equipment. There may also a few small items that would not on their own constitute a fly-tip.

2 = Car boot load or less - means that the rubbish could be broken down and squeezed into a large boot of a car. About 1 cubic metre maximum. Up to 5 large bin bags.

3 = Small van load - means bigger than the car boot load but that the rubbish could be broken down and squeezed into an Astra size van. About 4 cubic metres. Between 6 and 15 bin bags.

4 = Transit vanload - means bigger than the small van but that the rubbish could be broken down and squeezed into a transit size van. About 10 cubic metres. A large 3-piece suite of furniture would fall into this category. Between 16 and 30 bin bags.

5 = Tipper lorry load - means a single load from an 8-wheeled tipper truck.

6 = Significant/multiple loads - means a multiplicity of the above. You will need to enter your estimated or actual cost of removal and disposal.

## **Appendix 2: Data**

[Click here for Data:LLTNP Data Vs 1 29th Nov 2012.xlsx](#)

## **Appendix 3: Photographs**

**See attached Photos.**

**Keep Scotland Beautiful**

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**Strathallan House**

**Castle Business Park**

**Stirling**

**FK94TZ**

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