



University of
BRISTOL

Bristol Festival of Nature 2012 Evaluation

Bristol Natural History Consortium

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Introduction

This evaluation is a study of the Bristol Natural History Consortium's Festival of Nature (FoN). The festival took place on the 16th-17th June at Bristol Harbourside. The report will include environmental impact of the festival, demographic profile, attendance, review of the festival and a comparison with the previous year's questionnaires. Many benefits of the festival are intangible and potentially hard to value but the study used survey-based techniques to elicit a range of information including monetary valuations and social benefits. Over the course of the weekend, 158 surveys were conducted and the results are highlighted in the following study.

Attendance

To estimate the number of people attending the festival, we focused on two definable actions which were the number of people who visited the University of Bristol (UoB) tent and the proportion of attendees who visited the UoB tent. This was conducted through an exit survey asking whether the individuals had been to the festival and to the UoB tent and through a hard count conducted at the UoB tent. 253 and 158 exit survey results were gathered on Saturday and Sunday respectively. The hard count figure would then be used with the ratio proportion to estimate the attendance.

Hard count on Saturday: 2621
Proportion Saturday: (253) 161:92
Hard Count on Sunday: 2758
Proportion Sunday: (158) 78:80

Saturday Attendance: 4,118

Sunday Attendance: 5,586

Overall Festival Attendance: 9,704

**Total University of Bristol
attendance: 5,379**

The results showed that Sunday had a greater attendance than Saturday. This is most likely due to the weather over the weekend with Saturday enduring the worst with heavy showers and thunder storms. The figure is lower than the estimated attendance of 13,155 from last years festival, though this again could be as a direct result of the weather over the course of the weekend.

Social Impact

Demographics of the Respondents

54.0% of the respondents to the potential visitor survey were female, 46.0% male. The age distribution of the respondents is shown in the below table (Table 1) In terms of ethnicity 3.0% of respondents were Asian, 0.7% were Black African or Black Caribbean, and 0.7% were mixed race. The

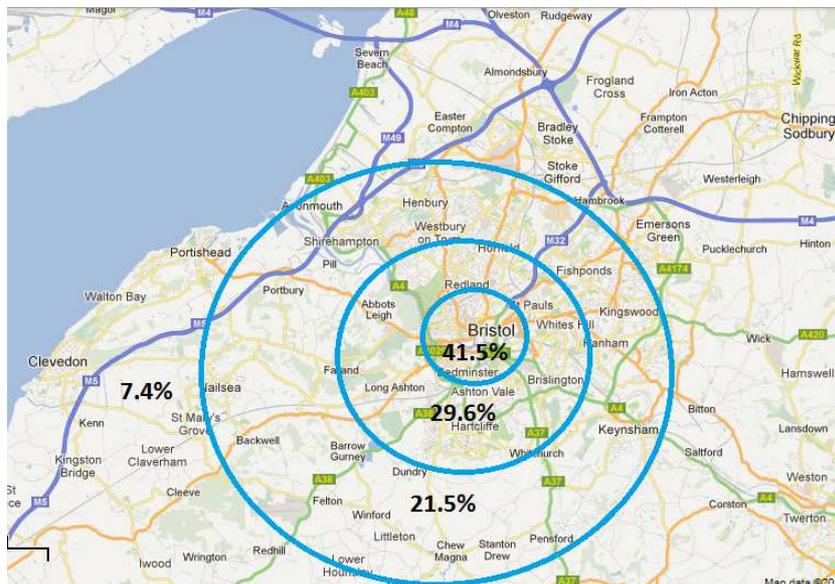
remaining respondents were all white British. We assume that the profile of the survey respondents is fairly representative, at least in terms of their observable characteristics.

Table 1: Age profile of visitors

Age Group	Proportion of sample	Proportion of Bristol Population (16+)
16-24	15.1%	21%
25-34	16.6%	22%
35-44	32.4%	17%
45-54	22.3%	13%
55-64	6.5%	11%
65+	7.2%	16%

85.9% of the FoN goers were from the Bristol area (indicated by the BS postcode). The most observable postcodes in the results were BS6 (Redland) and BS8 (Clifton) with percentages of 13.8% and 10.4% respectively. The majority of the outside of Bristol respondents were from the Bath or Gloucester region. The following figure displays the breakdown of attendees from Bristol (again indicated by the BS postcode).

Figure 1: Breakdown of Bristol Attendees

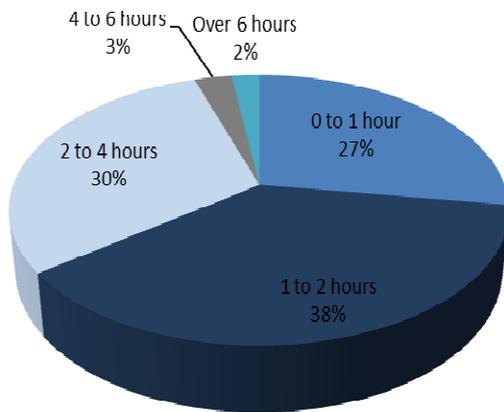


Festival Reception

The results of the general survey would indicate that the festival was very well received with 93.5% of respondents rating the festival either very good or quite good. When asked if they would attend the festival again next year, 97.8% stated that they would. Of those surveyed, only 30.2% had attended the festival in the previous year indicating that it was a new experience for the majority. The chart (Figure 2) below represents the number of hours spent, by the respondents, at the festival. The average time spent was 1hr and 54mins. The questionnaire also asked the festival goers to sum

up their experience in three words. Interesting, educational, awesome, fun, interactive and enjoyable were common recurring words in this section.

Figure 2: How long did you spend at the festival?



Tent Attendance and Feedback

The most popular stall at the festival was the BBC Natural History Unit (69.8% of respondents attended) followed by the University of Bristol tent (61.2%). The food market area was visited by 60% of survey respondents. This is similar to the results of last year with the BBC being the most popular with the UoB tent second. Below is a table of the percentage of respondent's attendance at each tent (Table 2)

Table 2: Which parts of the festival did you visit?

Amphitheatre		Millennium Square		Anchor Square		Market Area	
Bee tent	53.2%	Avon Wildlife Trust	43.9%	Green forum	35.3%	Food	59.7%
Connected Communities	28.8%	BBC Natural History Unit	69.8%			Bar	27.3%
Wild Bristol	50.4%	Bristol Zoo Gardens	54.0%			Provision	24.5%
Edible Garden	34.5%	Clifton College	34.5%			Green Market	41.0%
People and Wildlife	34.5%	Better by Bike	35.3%				
Wildfowl and Wetlands Trust	46.8%	National Trust	49.6%				
Natural England	33.8%	University of Bristol	61.2%				
Escot	28.8%	UWE	41.7%				
iSpot	28.8%						
Land and Marine Cons.	39.6%						
Environment Agency	38.8%						

The survey also picked up qualitative aspects and asked which areas of the festival was enjoyed the most and least and why. Many responses indicated that they enjoyed the interactive nature of the festival and the educational value attached. The favourite stalls indicated by this section of the questionnaire were the BBC tent and the stalls related to animals such as the zoo gardens. Many could not answer the least enjoyed section on the grounds that they had enjoyed the whole festival. However, a common answer for those that did answer is that they did not enjoy the noise created from the whistles being hand out to children. Other than that, there were no other areas negatively received. A further question asked for the respondents recommended areas for improvement. The majority could not answer this question, but those that did mostly answered with reference to the weather. Here are the results for areas for improvement:

- Bigger tents (some became too busy)
- Music
- Free food samples
- Undercover areas (related to the weather)
- Greater organisation, i.e. timetable of events
- More publicity/advertisement

Reasons people visit the festival

The survey was used to get an estimate of how much festival goers value the festival and the most important reasons for visiting the festival. The below table (Table 3) summaries the responses people gave to this question. The strongest response was due to the fact that people live in the city. This most likely is tied into accessibility of the event considering it is local. Further to this, attendees also supported the range of exhibits and the enjoyment they get from the festival (i.e. fun and to a degree atmosphere). The least important factor was shopping. The festival is situated in Millennium Square, which is not in the main shopping area of Bristol. The results to this question were very similar to those gathered from the previous year's festival, demonstrating that people's views towards the festival have not changed.

Table 3: Reasons why people visited the festival

	Not important	Somewhat Important	Important	very important	Don't Know
Because it is in the city I live in	11.1%	9.6%	36.3%	40.7%	2.2%
The atmosphere	7.6%	24.2%	44.7%	23.5%	0.0%
The sense of nature/green /conservation issues	9.0%	18.0%	39.8%	31.6%	1.5%
The educational programmes	21.5%	21.5%	33.1%	22.3%	1.5%
The range of exhibits	5.3%	15.8%	42.1%	36.1%	0.8%
It is a lot of fun	6.7%	16.4%	38.8%	38.1%	0.0%
It is something to take the whole family to	26.3%	9.0%	26.3%	35.3%	3.0%
Shopping	61.8%	19.1%	13.0%	5.3%	0.8%

What people got from the festival

Table 4 details the findings of the response to the questions regarding what they got from the festival. The pattern of results was almost identical to those that were collected from the previous year's survey. Very strong responses when asked about the learning experience and how enjoyable the festival was. Further to this, 88.5% of people stated that they would be disappointed if the festival were to be discontinued.

Table 4: What visitors got from the festival?

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
I think that the Festival is an enjoyable way to learn about conservation/sustainability issues	49.6%	45.3%	3.6%	0.7%	0.7%
I feel I've learned a great deal from the Festival	15.1%	48.2%	23.7%	9.3%	3.6%
Before you came to the Festival, I did not know much about conservation/ nature celebration/green issues or sustainability	6.5%	10.1%	15.8%	55.4%	12.2%
I would be disappointed if the Festival of nature was discontinued next year	52.5%	36.0%	3.6%	6.5%	1.4%
The Festival has changed the way I feel about conservation/nature celebration/green issues or sustainability	3.6%	27.3%	35.3%	30.2%	3.6%

Broader Impact of the festival

Table 5: Social Impact of the festival

	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Children who participate in the festival have the opportunity to learn new things.	59.9%	39.9%	0.8%	0.0%	0.0%
The festival enhances the image of the City and the organisations involved.	50.0%	44.9%	5.1%	0.0%	0.0%
The festival contributes to a sense of community well-being.	44.9%	43.5%	8.0%	2.9%	0.7%
The festival contributes to my personal well-being.	15.4%	49.3%	26.8%	5.8%	2.2%
I feel a personal sense of pride and recognition through participating in the festival.	19.6%	39.1%	31.1%	8.0%	2.2%
The festival is an intrusion into the lives of community residents.	1.5%	5.1%	5.8%	44.2%	43.5%
In general, there is a decreased sense of public involvement in the festival.	1.5%	14.9%	30.6%	41.8%	11.2%
The festival provides opportunities for local residents to experience new activities.	23.4%	70.1%	5.1%	0.7%	0.0%

Local residents who participate in the festival have the opportunity to learn new things.	18.9%	76.1%	3.6%	1.4%	0.0%
Friendships are strengthened through participation in the festival.	13.1%	46.0%	37.2%	3.7%	0.0%

This section of the questionnaire (Table 5) looked to explore the social implications on festival goers. The results demonstrated considerable cultural and education benefits of the festival. This is indicated by the strong response to the opportunities and learning experience for both adults and children. Further to this, there were positive responses to the questions regarding the community. In particular, results show that the image of the city is enhanced and there is contribution to the sense of community well-being. The final point that can be drawn from the results is that the festival is not intruding into the lives of community residents.

Environmental Impact

The festival had a significant social impact as demonstrated by the results from the general survey. As well as the social, the survey also looked to capture economic and environmental impact of the festival. The questionnaire included questions about method of travel to the festival, the level of environmental awareness from the attendees and if the festival had encouraged any change in environmental stance. 30.9% of respondents stated that they engaged with exhibitors in environmental discussion and 44.6% of answers implied that they had been prompted to discuss issues raised at the festival outside the festival. Furthermore, attendees seemed to be environmentally active, with respondents averaging 4 environmental reads a month and 4 environmental events attended a year (see Table 6 and 7)

Table 6: Number of environmental events attended a year

0	1	2-3	4-5	6-7	8-10	10+
6.5%	20.1%	35.3%	15.8%	9.4%	2.9%	10.1%

Table 7: Number of environmental journals/articles read a month

0	1	2-3	4-5	6-7	8-10	10+
22.3%	16.5%	26.6%	12.2%	5.0%	4.3%	12.9%

The final question of the environmental section of the question looked to capture method of transport to the festival. The least environmentally friendly method would be through car travel as this would emit the highest level of pollution per person. The results demonstrate that the majority did not use car as a source of travel with 41.7% of respondents stating that they had walked or cycled to the event.

	Frequency
Walk	34.5%
Bus	10.8%
Bike	7.2%
Car	43.2%
Train	3.6%
Air	0.7%

Economic Impact

Cost-benefit analysis

Economic benefits have been the subject of much discussion and a variety of methods of valuation have been established. There are a number of groups that will experience benefits from attending or being part of the Festival of Nature. These include the festival goers, local residents, volunteers and exhibitors. Within the cost-benefit analysis of the festival, the benefits to attendees and the wider local economy will be the subject of analysis.

Within the questionnaire, there was a section addressing how much people spent at the festival per day, focusing on three different categories: food; drinks and miscellaneous. The results are provided in the below in Table 8. The majority of the expenditure was on food and drink, which will have had a positive impact on traders and temporary businesses providing these services. Food received the highest average spend per person and the quality of the food was supported in the open ended questions.

Table 8: Details of expenditure of visitors

	Nothing.	£1 - £5	£6 - £10	£11 - £20	£20 - £30	£30 - £40	£40 - £50	Above £50	Average
Food	43.5%	18.3%	17.6%	16.0%	2.3%	1.5%	0.8%	0.0%	£5.64
Drinks	62.9%	14.5%	16.1%	4.8%	1.6%	0.0%	0.0%	0.0%	£2.69
Misc.	79.7%	7.3%	7.3%	0.8%	1.6%	0.8%	2.4%	0.0%	£2.61

The average spend per day by the visitors is £10.94. This figure can be used to derive the value of total spending by festival goers. This is equal to the average total spending per person multiplied by the estimated attendance. From the results of the survey, the average number of people per party was 3, which needs to be included in the estimate.

Total spending by festival goers = £10.94 x 9,704/3 = £35,387.25

To take account of secondary benefits from spending (i.e. the impact on local businesses) we apply a spending multiplier. Taking a conservative estimate of 1.38 based on a range of previous studies, the total value of spending by festival goers to the local economy is £35,387.25 x 1.38 = £48,834.41.

Willingness to Pay

Through the survey, a comparison was to be made between the Festival of Nature and another popular Bristol event VegFest. This would allow for a clear view of how the respondents valued the festival experience in comparison to one of Bristol's other popular events. This would then give a further suggestion of the public's willingness to pay for the Festival of Nature. The question was as follows.

Contributions made to Bristol city council are used to fund various projects including festivals, exhibitions and events that benefit the local community. E.g . Harbourside festival received £400,000 from the council this year towards putting on the festival.

Now I am going to tell you about two events and ask you some questions.

1. The Festival of Nature is the UK's largest free celebration of the natural world, giving wildlife enthusiasts of all ages the opportunity to explore, enjoy and get close to the natural world in the heart of Bristol city. The festival involves many interactive stalls where the public can engage and learn about Natural history.
2. Vegfest is the biggest vegan veggie eco-friendly family festival ran in the UK. There are over 100 stalls demonstrating the cause as well as live entertainment and themed games for the general public.

Table 9: Results of the willingness to pay hypothetical scenario

	Festival of nature	Vegfest
£0.00	16.1%	27.0%
£1.00	8.5%	9.9%
£2.00	14.4%	13.5%
£3.00	8.5%	8.1%
£4.00	3.4%	0.9%
£5.00	17.0%	13.5%
£6.00	11.0%	7.2%
Over £6.00	21.2%	19.8%
Average	£3.97	£3.34

Results in Table 9 signify that the public are more willing to pay and accept the Bristol FoN over Vegfest.

The responses indicate that on average, festival goers are willing to pay £3.97 through council tax towards the festival. The average is based on the mid-point from each band and a fairly conservative estimate for the over £6 margin. The estimated value therefore of the FoN, based upon the hypothetical case, is equal to the average by the number of attendees adjusted to the proportion that pay council tax.

Estimated value = £3.97 x 9,704 / 0.812 = £47,444.43

Economic Analysis

In order to create a robust analysis, the direct cost of the festival needs to be used as a comparative tool. The direct cost of staging the festival was approximately £50,000 (provided by the BNHC).

From the two methods used, the value of the festival to festival goers can be considered to be in the region of £47,444.43-£48,834.41.

It is most likely that there are other intangible economic benefits that would add to the attendee value estimation such as the value to exhibitors, volunteers and environmentally. The evaluation of the festival did not look to capture benefits to the volunteers and exhibitors for practical reasons (such as the lack of data available and time constraints). However, considering the decision to participate is voluntary, one can assume that there are direct benefits to the cost of the time being used. Whether this be the experience gained or the value of participating. Therefore, we can assume that the overall benefit figure will most likely exceed the approximated direct cost of the festival.

An Evaluation of the BNHC Festival of Nature

The analysis into the BNHC Festival of Nature shows that there is considerable social, economic and environmental impact of the festival. Firstly, the general survey looked to explore the social implications of staging the festival. Respondents appreciated the interactive nature of the festival and the learning experience provided. The festival added to community well-being and had significant educational value. As demonstrated in the results, the festival was very well received and almost all respondents stated that they would be displeased if the festival were to be discontinued.

The survey also looked to pick up the environmental impact through the use of the general exhibitor survey. The travel methods of getting to the festival were mostly environmentally friendly such as walking, cycling or public transport. This section also captured how the festival had impacted environmentally on the individual and good percentages of respondents stated that the festival had encouraged them to engage in environmental discussion in and outside of the festival.

The value of the festival was seen as significant in the economic impact analysis as the estimated value to the local economy and attendees added to the intangible value will most likely exceed the approximated cost of the festival. All volunteers had stated that they valued the experience and given that participation was voluntary, you can assume that there is significant value attached.

Overall, the festival was a great chance for the community to engage and learn about different environmental issues and was strongly received as indicated by the results of the general survey.