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A study evaluating what best inspires visitor behaviour and attitude changes in zoos, with a small botanical garden comparison: addressing zoos' educational and subsequent conservation values

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The Plymouth Student Scientist
University of Plymouth

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8. Appendix

8.1 Appendix A: Questionnaire

This questionnaire is part of a research project into the effectiveness of conservation attractions awareness promoting methods. Please could you take a few minutes of your time to complete the following questions. Your answers will be anonymous and will be treated with the strictest confidence.

1. **What is the main reason behind your visit?**
   To learn Family day out Escape from the city
   Curiosity Fun/entertainment

2. **Has your perception of the natural world been altered after your visit today? If so circle a word from below that represents your strongest change in outlook.**
   Beautiful Dangerous unruly Interesting
   Dull Controllable Resources
   Separate from mankind Useless Important
   Other *(please add)*_____

3. **A. Do you think the loss of natural environments will affect you?**
   a) Not at all
   b) Slightly
   c) Moderately
   d) Significantly
   e) A lot
   B. Before your visit today would your answer have been different? *(If yes please state what your answer would have been)* _____

4. **Are you more optimistic or pessimistic about the natural world's future after today?**
   _____

5. **After today to what extent has your awareness been improved about the following conservation issues?** *Grade in the boxes to the right of each issue from 1 to 5. (1 meaning you haven't learnt anything from today – 5 meaning you have learn a lot).*

Conservation issues	***1-5***	*Conservation issues*	***1-5***
Deforestation		**Amphibian numbers**	
Over hunting		**Bird numbers**	
Habitat fragmentation		**Plant diversity**	
Biodiversity		**Land pollution**	
Urbanisation		**Water pollution**	
Mammal numbers		**Invasive species**	
Insect numbers		**Human population**	

6. **Do you feel you can make a difference?**
   Yes ☐ No ☐
   If *yes*, how? And if *no* why not?
   _____
   _____

7. **Do you currently participate in any way to conservation?** *(If so please state)*

_____

8. **After your visit to this attraction are you more likely to:**

	Don't know	No	Maybe	Probably	Definitely
Be a more cautious shopper?					
Volunteer?					
Donate?					
Visit other conservation attractions?					
Recycle?					
Other (*please state)*					

9. **Which part/exhibition in the attraction has had the greatest impact on you?**
*Emotionally:*_____ *How was the message conveyed:* _____
*Educationally***:**_____ *How was the information conveyed:*_____

10. **Circle below a learning technique that you came across today, that you felt was the most effective in terms of conservation awareness?**
Talks Audio information points Replicate/3D interactive models
Close Encounters Motion clips Information boards/signs Photos/art
Observing exhibits Other *(please state)*_____

B. What learning technique did you enjoy the most?
Talks Audio information points Replicate/3D interactive models
Close encounters Motion clips Information boards/signs Photos/art
Observing exhibits Other *(please state)*_____

11. **Do you think attractions like these play an important role in conservation?**
Yes ☐ No ☐ No comment ☐

12. **How many times have you visited this attraction? _____**

13. **How old are you?** *(circle relevant answer)*
18-21 22-30 31-49 50+

14. **Education:** *(circle relevant answer)*
No education GCSE'S only A levels (or equivalent)
Undergraduate Postgraduate

15. **Please state your occupation below:**

_____

Thank you for your time.

8.2. Appendix B: Observation Sheets

Presence of attractions sustainability initiatives' *(e.g. recycling bins)*

Paignton Zoo	Dartmoor Zoo
Information boards on their in-situ work Recycling bins Publicise; outreach; adoption; research Batteries disposal next to reception Fair trade and eco-labelled gift shop products Greenhouse – top of range 'Green' stated	A few fair trade products in gift shop Few charity boxes In talk mention 21st century tiger sponsorship Bird boxes

Informing visitors on sustainable living

Paignton Zoo	Dartmoor Zoo
Palm oil – sign stating what individuals can do Many signs such as the one above Next to toilet is information board on conserving water Swamp house- at the end informs people on the real cost of a trip to a supermarket	Mentioned in talks and close encounters

Methods used which promote long-term awareness

Paignton Zoo	Dartmoor Zoo
Leaflets Adopt an animal Graphic photos Memberships Offer day experiences	Leaflets Selling photographs Memberships Offer day experiences

Observations on animal behaviour

Paignton Zoo	Dartmoor Zoo
Tiger pacing Monkeys – very charismatic, climbing, visitors watching for long periods, primates were showing their social caring sides with big families and young (baboons esp.). Elephant – on its own, walking around, looks old Tunnel play area where can observe animals in little glass domes that pop up throughout tunnels – watched up close natural behaviour (collecting hay and going into burrows)	Big cats seemed content Otters very social and charismatic Wolves were very watchful (natural behaviour?)

Observations of exhibits/enclosures

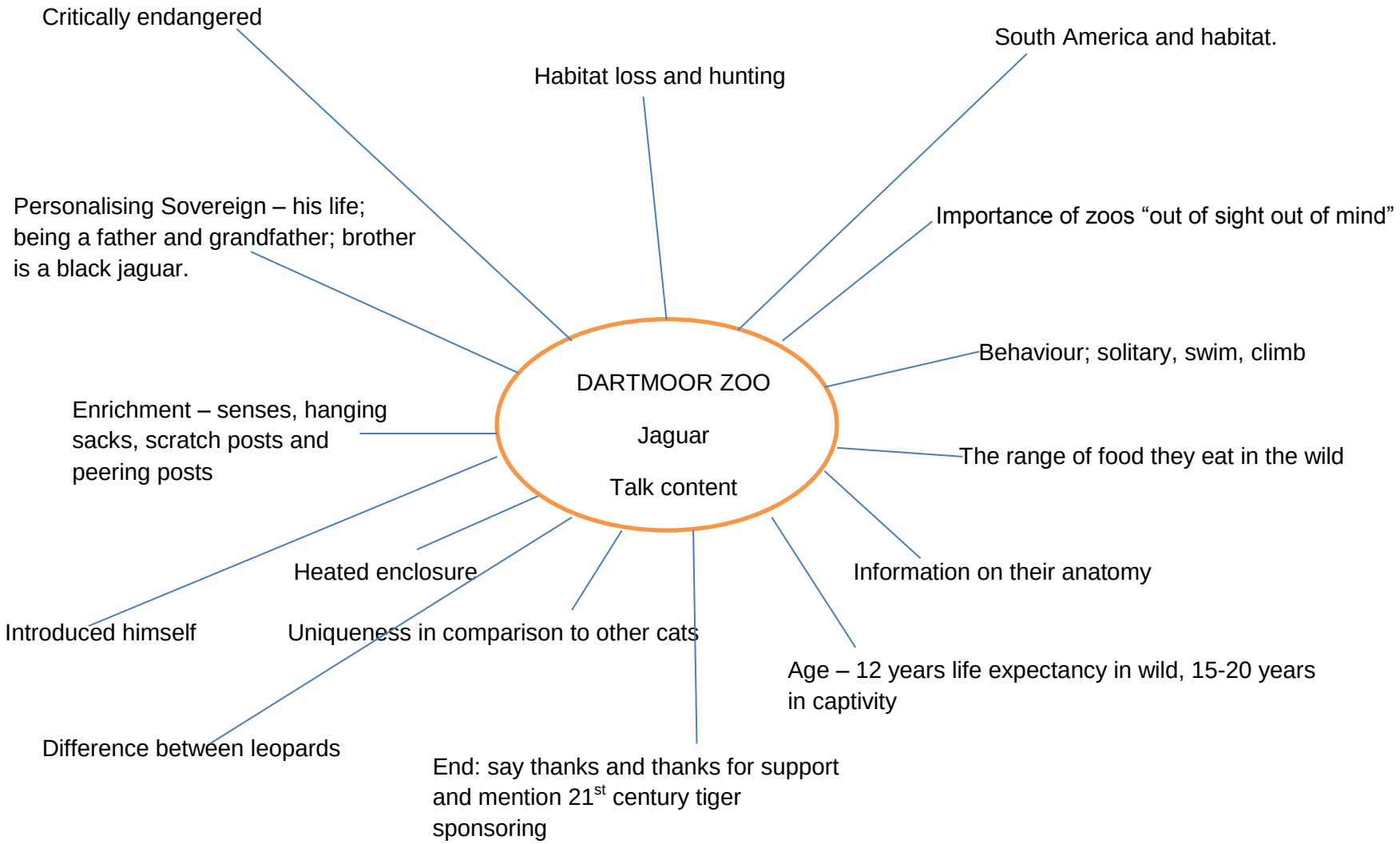
Paignton Zoo	Dartmoor Zoo
Bird aviary – big and open, water source, trees, natural. Lions – water source, trees, look out posts (similar to DZP) Information boards on different ecosystems Positive conservation boards Adoption of animals and plants signs next to enclosures Hard to see many animals – especially wolves Information signs on animals has interesting facts section Block off trees from big cats Tigers – old logs etc, but small water source Show nurseries, incubation rooms Orang-utan – open enclosure separated from public by water, trees, climbing rope Monkeys – similar to DZP Tropical and desert house – large enclosures, open for a few animals, very interactive resembling natural environment really well. Rhinos – enclosure felt small Cheetah – enclosure same as DZP Wolves enclosure- much smaller than DZP All enclosures – trees, enrichment visible, resembling natural environment well Amphibian room – very educational, tanks slightly larger than DZP Swamp house – trail of a story of a traveller with crocodiles with large water source. Enrichment sometimes mentioned – monkeys signs really good	Tazmans enclosure, different, interesting, different topography in enclosure – gives wow factor as not norm. Coatis – a lot of climbing apparatus Bears – mounds, trees, water source General zoo – woodland zoo, good aesthetic value, quaint and family oriented feeling in zoo. Meerkats – skulls, looking out posts, tunnels, sandy soil, enrichment logs. Mimicking natural environment. 3 tiger exhibit – very open, not so able to relate to natural environment, still a few trees and a look out rock and pool Jaguar enclosure – natural Cranes – pond, nice environment Vervet monkeys – climbing, trees, long grass, logs (natural) Lynx – quite small, but over grown natural environment Otters – water source and huge enclosure Close encounters room – (temporary room) normal tanks, like pets. Tapirs and capybara – huge enclosure with pond – very good African paddock – huge open field with random trees.

Additional Observations

	Optimistic/positive communication?	List of different awareness methods seen
Paignton Zoo	Animal noises coming in Conservation information at entrance	Information boards, motion clip, interactive motion clips, photos/art, audio points, on some times additional parts where use touch, educational nurseries.
Dartmoor Zoo	Talks – mention what could be done Mention Bens story	Talks, close encounters, signs, staff/volunteers very present

	Other *e.g. staff presence, importance of invertebrates made clear?*	
Paignton Zoo	Information boards in different ecosystem sections and also can observe some animals, under shelter	
	Local conservation work advertised	Amphibians threat made clear
	Mention evolution on some signs	Inform on tree species around park
	Target businesses	Misty in tropical house
	A lot for kids – tunnels, play areas	Don't do close encounters or open education room in winter
Dartmoor Zoo	Many volunteers present Animals seem happy and relaxed Family feel	

(mind map)


DARTMOOR ZOO
Jaguar
Talk content
Critically endangered
Habitat loss and hunting
South America and habitat.
Personalising Sovereign – his life; being a father and grandfather; brother is a black jaguar.
Importance of zoos “out of sight out of mind”
Behaviour; solitary, swim, climb
Enrichment – senses, hanging sacks, scratch posts and peering posts
The range of food they eat in the wild
Heated enclosure
Information on their anatomy
Introduced himself
Uniqueness in comparison to other cats
Age – 12 years life expectancy in wild, 15-20 years in captivity
Difference between leopards
End: say thanks and thanks for support and mention 21st century tiger sponsoring

8.3 Appendix C: Photos

8.3.1 Paignton Photos:

Sheltered areas to observe exhibits, read signs, and recall what individuals have learnt and seen.

Zoo is separated into ecosystems where by signs are dotted around like below providing information on the specific ecosystem, including their importance.

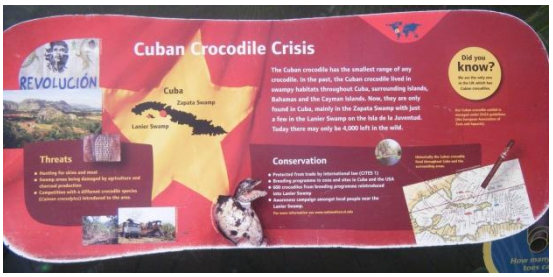
Enclosure (species) signs:

Zoomed in section, seemed to have significant impact on Paigntons good educational results.

Additional enclosure signs:

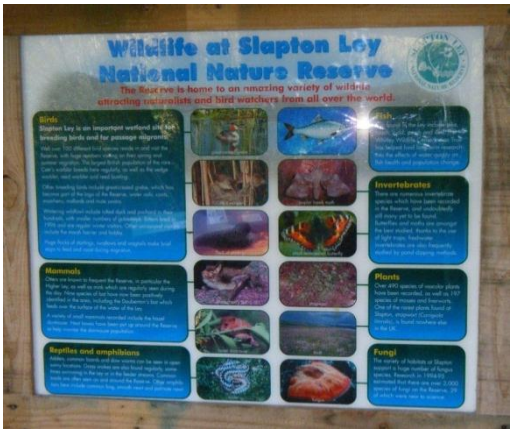
Note what has been circled in red on pictures below (consistent throughout park).

Additional signs found at certain enclosures:

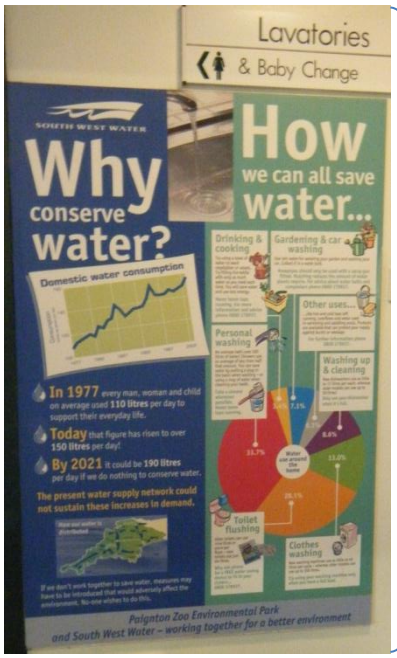


These signs are found at the enclosures of animals which have specific threats associated with them, they can also be the reasoning behind Paigntons good response for education in relation to threats.

Enrichment signs are present, which is beneficial as it seems visitors are concerned for the animals' welfare. Additional enrichment signs are also very prominent for the primates.

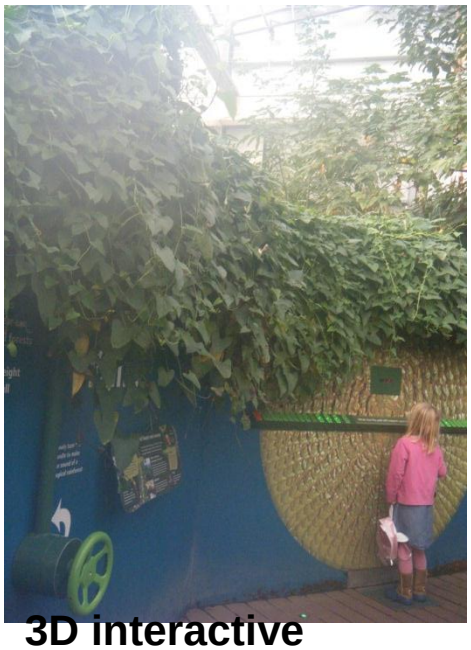


There are also signs on local areas of natural beauty and conservation work going on.

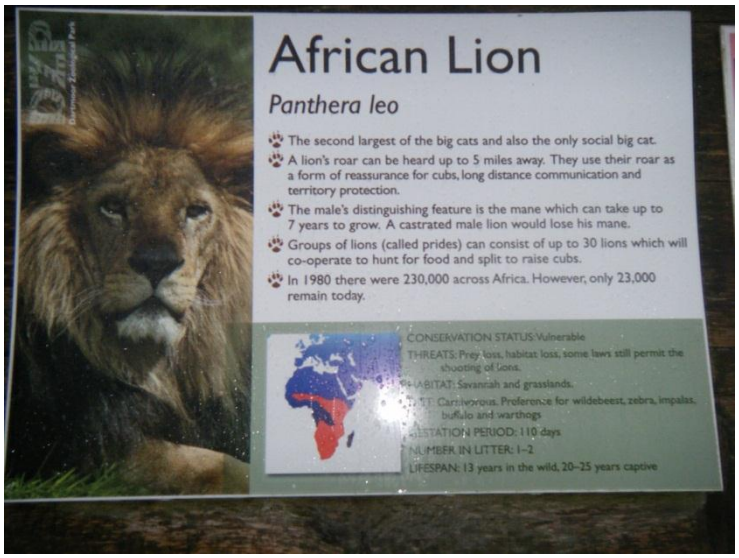


Appropriately placed signs (e.g. near lavatories) on what individuals can do, reducing the sense of helplessness.

Additional learning techniques observed at Paignton Zoo:



8.3.2 Dartmoor's Photos:



General format for all information boards found at enclosures on the specific species.

Information on the individual animal, present for the big cats and monkeys.

Additional information found at brown bears' enclosure on their threats and miss treatment (on left) and on conservation efforts (to right), which held some significance in the open ended question (9) results.

8.4 Appendix D: Tables of Results and Question Comparisons

8.4.1 Dartmoor Relevant SPSS Tables of Questionnaire Results

What is the main reason behind your visit? * What learning technique did you enjoy the most? Crosstabulation

			What learning technique did you enjoy the most?							
			talks	replicate/3D interactive models	close encounters	information boards/signs	observing exhibits	unknown	11.00	Total
What is the main reason behind your visit?	learn	Count	1	0	3	0	1	0	0	5
		% within What is the main reason behind your visit?	20.0%	.0%	60.0%	.0%	20.0%	.0%	.0%	100.0%
	family day out	Count	24	0	22	3	13	8	1	71
		% within What is the main reason behind your visit?	33.8%	.0%	31.0%	4.2%	18.3%	11.3%	1.4%	100.0%
	curiosity	Count	1	0	1	0	1	0	0	3
		% within What is the main reason behind your visit?	33.3%	.0%	33.3%	.0%	33.3%	.0%	.0%	100.0%
	fun/entertainment	Count	10	1	8	0	2	0	0	21
		% within What is the main reason behind your visit?	47.6%	4.8%	38.1%	.0%	9.5%	.0%	.0%	100.0%
Total		Count	36	1	34	3	17	8	1	100
		% within What is the main reason behind your visit?	36.0%	1.0%	34.0%	3.0%	17.0%	8.0%	1.0%	100.0%

What is the main reason behind your visit? * Which learning technique do you feel was the most effective in terms of conservation awareness? Crosstabulation

			Which learning technique do you feel was the most effective in terms of conservation awareness?					
			talks	close encounters	information boards/signs	observing exhibits	unknown	Total
What is the main reason behind your visit?	learn	Count	2	3	0	0	0	5
		% within What is the main reason behind your visit?	40.0%	60.0%	.0%	.0%	.0%	100.0%
	family day out	Count	23	23	12	9	4	71
		% within What is the main reason behind your visit?	32.4%	32.4%	16.9%	12.7%	5.6%	100.0%
	curiosity	Count	2	1	0	0	0	3
		% within What is the main reason behind your visit?	66.7%	33.3%	.0%	.0%	.0%	100.0%
	fun/entertainment	Count	11	5	5	0	0	21
		% within What is the main reason behind your visit?	52.4%	23.8%	23.8%	.0%	.0%	100.0%
Total		Count	38	32	17	9	4	100
		% within What is the main reason behind your visit?	38.0%	32.0%	17.0%	9.0%	4.0%	100.0%

Are you more optimistic or pessimistic about the natural worlds future after today? * Do you feel you can make a difference? Crosstabulation

			Do you feel you can make a difference?			
			yes	no	unknown	Total
Are you more optimistic or pessimistic about the natural worlds future after today?	optimistic	Count	24	9	1	34
		% within Are you more optimistic or pessimistic about the natural worlds future after today?	70.6%	26.5%	2.9%	100.0%
	pessimistic	Count	18	9	0	27
		% within Are you more optimistic or pessimistic about the natural worlds future after today?	66.7%	33.3%	.0%	100.0%
	unknown	Count	7	5	3	15
		% within Are you more optimistic or pessimistic about the natural worlds future after today?	46.7%	33.3%	20.0%	100.0%
	indifferent	Count	21	3	0	24
		% within Are you more optimistic or pessimistic about the natural worlds future after today?	87.5%	12.5%	.0%	100.0%
Total		Count	70	26	4	100
		% within Are you more optimistic or pessimistic about the natural worlds future after today?	70.0%	26.0%	4.0%	100.0%

Has your perception of the natural world been altered after your visit today? * Do you think the loss of natural environments will affect you? Crosstabulation

			Do you think the loss of natural environments will affect you?					
			Not at all	slightly	moderately	significantly	a lot	Total
Has your perception of the natural world been altered after your visit today?	beautiful	Count	0	1	6	6	13	26
		% within Has your perception of the natural world been altered after your visit today?	.0%	3.8%	23.1%	23.1%	50.0%	100.0%
	interesting	Count	1	5	9	18	14	47
		% within Has your perception of the natural world been altered after your visit today?	2.1%	10.6%	19.1%	38.3%	29.8%	100.0%
	controllable	Count	0	0	0	1	1	2
		% within Has your perception of the natural world been altered after your visit today?	.0%	.0%	.0%	50.0%	50.0%	100.0%
	resources	Count	0	0	1	1	0	2
		% within Has your perception of the natural world been altered after your visit today?	.0%	.0%	50.0%	50.0%	.0%	100.0%
	important	Count	0	0	0	3	5	8
		% within Has your perception of the natural world been altered after your visit today?	.0%	.0%	.0%	37.5%	62.5%	100.0%
	other	Count	0	0	1	1	1	3
		% within Has your perception of the natural world been altered after your visit today?	.0%	.0%	33.3%	33.3%	33.3%	100.0%
	no change	Count	0	1	3	4	4	12
		% within Has your perception of the natural world been altered after your visit today?	.0%	8.3%	25.0%	33.3%	33.3%	100.0%
Total		Count	1	7	20	34	38	100
		% within Has your perception of the natural world been altered after your visit today?	1.0%	7.0%	20.0%	34.0%	38.0%	100.0%

Which learning technique do you feel was the most effective in terms of conservation awareness? * Do you think the loss of natural environments will affect you? Crosstabulation

			Do you think the loss of natural environments will affect you?					
			Not at all	slightly	moderately	significantly	a lot	Total
Which learning technique do you feel was the most effective in terms of conservation awareness?	talks	Count	1	1	11	14	11	38
		% within Which learning technique do you feel was the most effective in terms of conservation awareness?	2.6%	2.6%	28.9%	36.8%	28.9%	100.0%
	close encounters	Count	0	3	3	11	15	32
		% within Which learning technique do you feel was the most effective in terms of conservation awareness?	.0%	9.4%	9.4%	34.4%	46.9%	100.0%
	information boards/signs	Count	0	1	4	3	9	17
		% within Which learning technique do you feel was the most effective in terms of conservation awareness?	.0%	5.9%	23.5%	17.6%	52.9%	100.0%
	observing exhibits	Count	0	1	1	4	3	9
		% within Which learning technique do you feel was the most effective in terms of conservation awareness?	.0%	11.1%	11.1%	44.4%	33.3%	100.0%
	unknown	Count	0	1	1	2	0	4
		% within Which learning technique do you feel was the most effective in terms of conservation awareness?	.0%	25.0%	25.0%	50.0%	.0%	100.0%
Total		Count	1	7	20	34	38	100
		% within Which learning technique do you feel was the most effective in terms of conservation awareness?	1.0%	7.0%	20.0%	34.0%	38.0%	100.0%

awareness improvement on mammal numbers * Which learning technique do you feel was the most effective in terms of conservation awareness? Crosstabulation

			Which learning technique do you feel was the most effective in terms of conservation awareness?					
			talks	close encounters	information boards/signs	observing exhibits	unknown	Total
awareness improvement on mammal numbers	learnt nothing	Count	8	7	4	1	1	21
		% within awareness improvement on mammal numbers	38.1%	33.3%	19.0%	4.8%	4.8%	100.0%
	learn a small amount	Count	4	3	1	1	1	10
		% within awareness improvement on mammal numbers	40.0%	30.0%	10.0%	10.0%	10.0%	100.0%
	learn moderate amount	Count	8	10	2	1	1	22
		% within awareness improvement on mammal numbers	36.4%	45.5%	9.1%	4.5%	4.5%	100.0%
	learnt significant amount	Count	12	6	5	4	0	27
		% within awareness improvement on mammal numbers	44.4%	22.2%	18.5%	14.8%	.0%	100.0%
	learnt a lot	Count	2	4	1	2	0	9
		% within awareness improvement on mammal numbers	22.2%	44.4%	11.1%	22.2%	.0%	100.0%
	unknown	Count	4	2	4	0	1	11
		% within awareness improvement on mammal numbers	36.4%	18.2%	36.4%	.0%	9.1%	100.0%
Total		Count	38	32	17	9	4	100
		% within awareness improvement on mammal numbers	38.0%	32.0%	17.0%	9.0%	4.0%	100.0%

awareness improvement on over hunting * Which learning technique do you feel was the most effective in terms of conservation awareness? Crosstabulation

			Which learning technique do you feel was the most effective in terms of conservation awareness?					
			talks	close encounters	information boards/signs	observing exhibits	unknown	Total
awareness improvement on over hunting	learnt nothing	Count	10	7	5	1	1	24
		% within awareness improvement on over hunting	41.7%	29.2%	20.8%	4.2%	4.2%	100.0%
	learn a small amount	Count	4	5	1	3	1	14
		% within awareness improvement on over hunting	28.6%	35.7%	7.1%	21.4%	7.1%	100.0%
	learn moderate amount	Count	15	11	4	1	1	32
		% within awareness improvement on over hunting	46.9%	34.4%	12.5%	3.1%	3.1%	100.0%
	learnt significant amount	Count	1	5	1	3	0	10
		% within awareness improvement on over hunting	10.0%	50.0%	10.0%	30.0%	.0%	100.0%
	learnt a lot	Count	4	2	2	1	0	9
		% within awareness improvement on over hunting	44.4%	22.2%	22.2%	11.1%	.0%	100.0%
	unknown	Count	4	2	4	0	1	11
		% within awareness improvement on over hunting	36.4%	18.2%	36.4%	.0%	9.1%	100.0%
Total		Count	38	32	17	9	4	100
		% within awareness improvement on over hunting	38.0%	32.0%	17.0%	9.0%	4.0%	100.0%

awareness improvement on habitat fragmentation * Which learning technique do you feel was the most effective in terms of conservation awareness? Crosstabulation

			Which learning technique do you feel was the most effective in terms of conservation awareness?					
			talks	close encounters	information boards/signs	observing exhibits	unknown	Total
awareness improvement on habitat fragmentation	learnt nothing	Count	12	5	5	1	1	24
		% within awareness improvement on habitat fragmentation	50.0%	20.8%	20.8%	4.2%	4.2%	100.0%
	learn a small amount	Count	5	9	0	2	1	17
		% within awareness improvement on habitat fragmentation	29.4%	52.9%	.0%	11.8%	5.9%	100.0%
	learn moderate amount	Count	11	9	4	3	1	28
		% within awareness improvement on habitat fragmentation	39.3%	32.1%	14.3%	10.7%	3.6%	100.0%
	learnt significant amount	Count	1	3	2	2	0	8
		% within awareness improvement on habitat fragmentation	12.5%	37.5%	25.0%	25.0%	.0%	100.0%
	learnt a lot	Count	6	3	2	1	0	12
		% within awareness improvement on habitat fragmentation	50.0%	25.0%	16.7%	8.3%	.0%	100.0%
	unknown	Count	3	3	4	0	1	11
		% within awareness improvement on habitat fragmentation	27.3%	27.3%	36.4%	.0%	9.1%	100.0%
Total		Count	38	32	17	9	4	100
		% within awareness improvement on habitat fragmentation	38.0%	32.0%	17.0%	9.0%	4.0%	100.0%

After todays visit are you more likely to be a cautious shopper? * Do you think the loss of natural environments will affect you? Crosstabulation

Count

		Do you think the loss of natural environments will affect you?					
		Not at all	slightly	moderately	significantly	a lot	Total
After todays visit are you more likely to be a cautious shopper?	dont know	0	1	4	2	1	8
	no	1	2	5	7	8	23
	maybe	0	2	6	15	11	34
	probably	0	1	3	7	13	24
	definately	0	1	1	2	4	8
	unknown	0	0	1	1	1	3
Total		1	7	20	34	38	100

After todays visit are you more likely to volunteer? * Do you think the loss of natural environments will affect you? Crosstabulation

Count

		Do you think the loss of natural environments will affect you?					
		Not at all	slightly	moderately	significantly	a lot	Total
After todays visit are you more likely to volunteer?	dont know	0	0	0	1	0	1
	no	1	3	9	18	11	42
	maybe	0	4	5	12	16	37
	probably	0	0	2	1	5	8
	definately	0	0	2	0	4	6
	unknown	0	0	2	2	2	6
Total		1	7	20	34	38	100

After todays visit are you more likely to donate? * Do you think the loss of natural environments will affect you? Crosstabulation

Count

		Do you think the loss of natural environments will affect you?					Total
		Not at all	slightly	moderately	significantly	a lot	
After todays visit are you more likely to donate?	dont know	0	0	0	0	1	1
	no	1	1	2	10	5	19
	maybe	0	5	7	12	17	41
	probably	0	1	5	7	10	23
	definately	0	0	4	3	4	11
	unknown	0	0	2	2	1	5
Total		1	7	20	34	38	100

After todays visit are you more likely to visit other conservation attractions? * Do you think the loss of natural environments will affect you? Crosstabulation

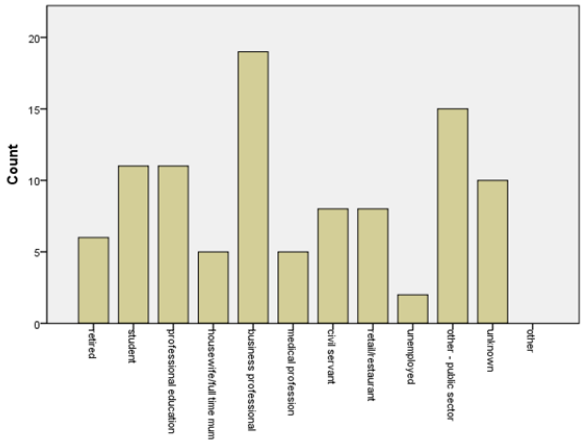
Count

		Do you think the loss of natural environments will affect you?					Total
		Not at all	slightly	moderately	significantly	a lot	
After todays visit are you more likely to visit other conservation attractions?	dont know	0	0	1	0	0	1
	no	1	1	1	1	1	5
	maybe	0	3	3	9	5	20
	probably	0	3	9	13	15	40
	definately	0	0	6	10	16	32
	unknown	0	0	0	1	1	2
Total		1	7	20	34	38	100

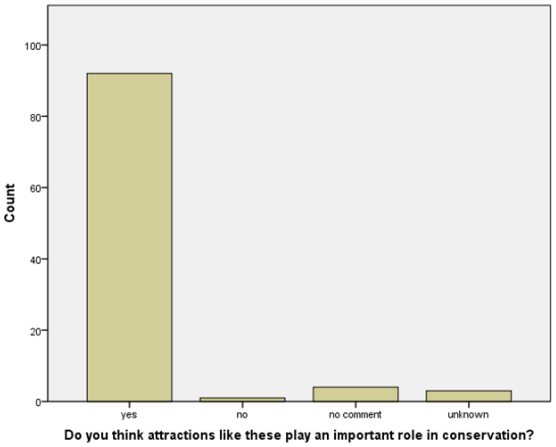
After todays visit are you more likely to recycle? * Do you think the loss of natural environments will affect you? Crosstabulation

Count

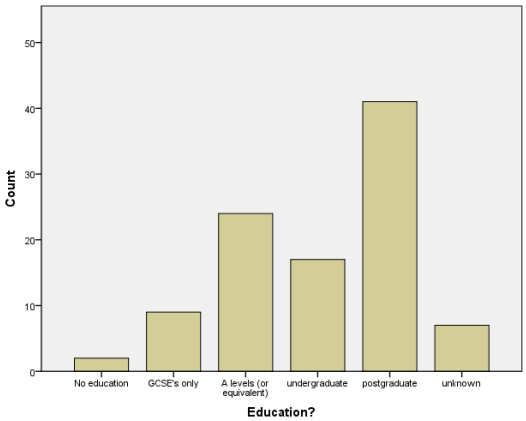
		Do you think the loss of natural environments will affect you?					Total
		Not at all	slightly	moderately	significantly	a lot	
After todays visit are you more likely to recycle?	dont know	0	0	0	2	0	2
	no	1	2	1	6	6	16
	maybe	0	1	1	3	3	8
	probably	0	0	3	6	5	14
	definately	0	4	14	15	22	55
	unknown	0	0	1	2	2	5
Total		1	7	20	34	38	100



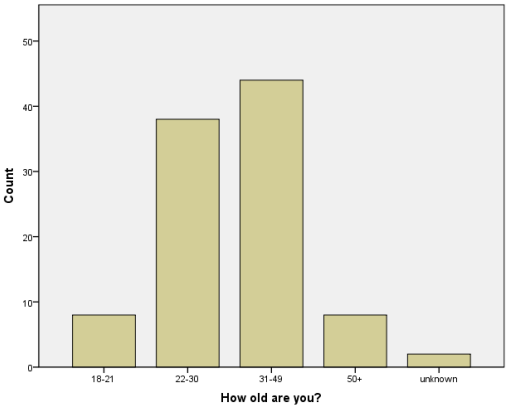
What is your occupation



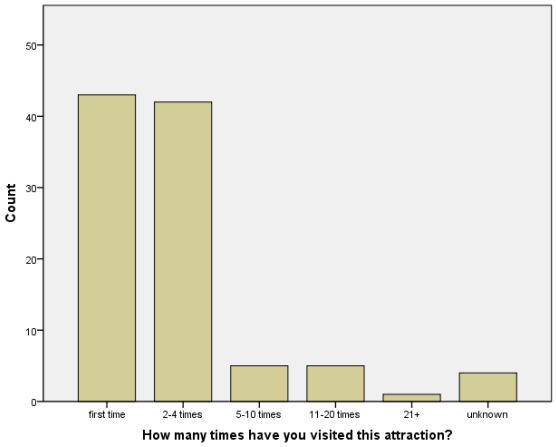
Do you think attractions like these play an important role in conservation?

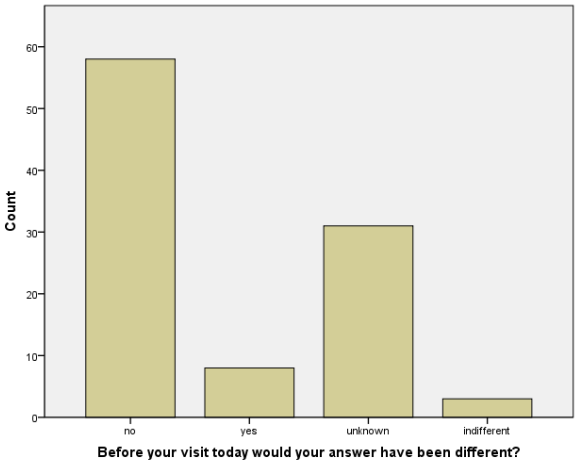


Education?



How old are you?





How old are you? * Are you more optimistic or pessimistic about the natural worlds future after today? Crosstabulation

			Are you more optimistic or pessimistic about the natural worlds future after today?				
			optimistic	pessimistic	unknown	indifferent	Total
How old are you?	18-21	Count	5	1	2	0	8
		% within How old are you?	62.5%	12.5%	25.0%	.0%	100.0%
	22-30	Count	15	11	4	8	38
		% within How old are you?	39.5%	28.9%	10.5%	21.1%	100.0%
	31-49	Count	12	13	5	14	44
		% within How old are you?	27.3%	29.5%	11.4%	31.8%	100.0%
	50+	Count	2	2	3	1	8
		% within How old are you?	25.0%	25.0%	37.5%	12.5%	100.0%
	unknown	Count	0	0	1	1	2
		% within How old are you?	.0%	.0%	50.0%	50.0%	100.0%
Total		Count	34	27	15	24	100
		% within How old are you?	34.0%	27.0%	15.0%	24.0%	100.0%

How old are you? * Do you think the loss of natural environments will affect you? Crosstabulation

			Do you think the loss of natural environments will affect you?					
			Not at all	slightly	moderately	significantly	a lot	Total
How old are you?	18-21	Count	0	0	1	4	3	8
		% within How old are you?	.0%	.0%	12.5%	50.0%	37.5%	100.0%
	22-30	Count	0	5	9	9	15	38
		% within How old are you?	.0%	13.2%	23.7%	23.7%	39.5%	100.0%
	31-49	Count	1	2	7	17	17	44
		% within How old are you?	2.3%	4.5%	15.9%	38.6%	38.6%	100.0%
	50+	Count	0	0	2	3	3	8
		% within How old are you?	.0%	.0%	25.0%	37.5%	37.5%	100.0%
	unknown	Count	0	0	1	1	0	2
		% within How old are you?	.0%	.0%	50.0%	50.0%	.0%	100.0%
Total		Count	1	7	20	34	38	100
		% within How old are you?	1.0%	7.0%	20.0%	34.0%	38.0%	100.0%

How old are you? * Do you feel you can make a difference? Crosstabulation

			Do you feel you can make a difference?			
			yes	no	unknown	Total
How old are you?	18-21	Count	5	2	1	8
		% within How old are you?	62.5%	25.0%	12.5%	100.0%
	22-30	Count	19	18	1	38
		% within How old are you?	50.0%	47.4%	2.6%	100.0%
	31-49	Count	27	15	2	44
		% within How old are you?	61.4%	34.1%	4.5%	100.0%
	50+	Count	1	6	1	8
		% within How old are you?	12.5%	75.0%	12.5%	100.0%
	unknown	Count	1	1	0	2
		% within How old are you?	50.0%	50.0%	.0%	100.0%
Total		Count	53	42	5	100
		% within How old are you?	53.0%	42.0%	5.0%	100.0%

Has your perception of the natural world been altered after your visit today? * Which learning technique do you feel was the most effective in terms of conservation awareness? Crosstabulation

			Which learning technique do you feel was the most effective in terms of conservation awareness?					
			talks	close encounters	information boards/signs	observing exhibits	unknown	Total
Has your perception of the natural world been altered after your visit today?	beautiful	Count	7	7	10	1	1	26
		% within Has your perception of the natural world been altered after your visit today?	26.9%	26.9%	38.5%	3.8%	3.8%	100.0%
	interesting	Count	24	13	4	5	1	47
		% within Has your perception of the natural world been altered after your visit today?	51.1%	27.7%	8.5%	10.6%	2.1%	100.0%
	controllable	Count	1	1	0	0	0	2
		% within Has your perception of the natural world been altered after your visit today?	50.0%	50.0%	.0%	.0%	.0%	100.0%
	resources	Count	1	0	0	1	0	2
		% within Has your perception of the natural world been altered after your visit today?	50.0%	.0%	.0%	50.0%	.0%	100.0%
	important	Count	2	4	1	1	0	8
		% within Has your perception of the natural world been altered after your visit today?	25.0%	50.0%	12.5%	12.5%	.0%	100.0%
	other	Count	1	2	0	0	0	3
		% within Has your perception of the natural world been altered after your visit today?	33.3%	66.7%	.0%	.0%	.0%	100.0%
	no change	Count	2	5	2	1	2	12
		% within Has your perception of the natural world been altered after your visit today?	16.7%	41.7%	16.7%	8.3%	16.7%	100.0%
Total		Count	38	32	17	9	4	100
		% within Has your perception of the natural world been altered after your visit today?	38.0%	32.0%	17.0%	9.0%	4.0%	100.0%

Has your perception of the natural world been altered after your visit today? * What learning technique did you enjoy the most? Crosstabulation

			What learning technique did you enjoy the most?							
			talks	replicate/3D interactive models	close encounters	information boards/signs	observing exhibits	unknown	11.00	Total
Has your perception of the natural world been altered after your visit today?	beautiful	Count	10	1	7	1	4	3	0	26
		% within Has your perception of the natural world been altered after your visit today?	38.5%	3.8%	26.9%	3.8%	15.4%	11.5%	.0%	100.0%
	interesting	Count	20	0	18	0	8	1	0	47
		% within Has your perception of the natural world been altered after your visit today?	42.6%	.0%	38.3%	.0%	17.0%	2.1%	.0%	100.0%
	controllable	Count	1	0	1	0	0	0	0	2
		% within Has your perception of the natural world been altered after your visit today?	50.0%	.0%	50.0%	.0%	.0%	.0%	.0%	100.0%
	resources	Count	0	0	1	0	0	1	0	2
		% within Has your perception of the natural world been altered after your visit today?	.0%	.0%	50.0%	.0%	.0%	50.0%	.0%	100.0%
	important	Count	0	0	6	0	1	1	0	8
		% within Has your perception of the natural world been altered after your visit today?	.0%	.0%	75.0%	.0%	12.5%	12.5%	.0%	100.0%
	other	Count	0	0	1	0	2	0	0	3
		% within Has your perception of the natural world been altered after your visit today?	.0%	.0%	33.3%	.0%	66.7%	.0%	.0%	100.0%
	no change	Count	5	0	0	2	2	2	1	12
		% within Has your perception of the natural world been altered after your visit today?	41.7%	.0%	.0%	16.7%	16.7%	16.7%	8.3%	100.0%
Total		Count	36	1	34	3	17	8	1	100
		% within Has your perception of the natural world been altered after your visit today?	36.0%	1.0%	34.0%	3.0%	17.0%	8.0%	1.0%	100.0%

Do you feel you can make a difference? * After todays visit are you more likely to be a cautious shopper? Crosstabulation

Count

		After todays visit are you more likely to be a cautious shopper?						
		dont know	no	maybe	probably	definately	unknown	Total
Do you feel you can make a difference?	yes	5	13	22	20	8	2	70
	no	3	10	10	3	0	0	26
	unknown	0	0	2	1	0	1	4
Total		8	23	34	24	8	3	100

Do you feel you can make a difference? * After todays visit are you more likely to volunteer? Crosstabulation

Count

		After todays visit are you more likely to volunteer?						
		dont know	no	maybe	probably	definately	unknown	Total
Do you feel you can make a difference?	yes	1	28	27	5	4	5	70
	no	0	14	7	3	2	0	26
	unknown	0	0	3	0	0	1	4
Total		1	42	37	8	6	6	100

Do you feel you can make a difference? * After todays visit are you more likely to recycle? Crosstabulation

Count

		After todays visit are you more likely to recycle?						
		dont know	no	maybe	probably	definately	unknown	Total
Do you feel you can make a difference?	yes	2	9	6	7	42	4	70
	no	0	7	1	6	12	0	26
	unknown	0	0	1	1	1	1	4
Total		2	16	8	14	55	5	100

Do you feel you can make a difference? * After todays visit are you more likely to visit other conservation attractions? Crosstabulation

Count

		After todays visit are you more likely to visit other conservation attractions?						
		dont know	no	maybe	probably	definately	unknown	Total
Do you feel you can make a difference?	yes	1	1	13	27	27	1	70
	no	0	4	4	13	5	0	26
	unknown	0	0	3	0	0	1	4
Total		1	5	20	40	32	2	100

Do you feel you can make a difference? * After todays visit are you more likely to donate? Crosstabulation

Count

		After todays visit are you more likely to donate?						
		dont know	no	maybe	probably	definately	unknown	Total
Do you feel you can make a difference?	yes	0	10	34	13	9	4	70
	no	1	8	5	10	2	0	26
	unknown	0	1	2	0	0	1	4
Total		1	19	41	23	11	5	100

Are you more optimistic or pessimistic about the natural worlds future after today? * After todays visit are you more likely to be a cautious shopper? Crosstabulation

Count

		After todays visit are you more likely to be a cautious shopper?						
		dont know	no	maybe	probably	definately	unknown	Total
Are you more optimistic or pessimistic about the natural worlds future after today?	optimistic	2	6	11	11	3	1	34
	pessimistic	3	7	9	5	3	0	27
	unknown	1	1	6	5	0	2	15
	indifferent	2	9	8	3	2	0	24
Total		8	23	34	24	8	3	100

Are you more optimistic or pessimistic about the natural worlds future after today? * After todays visit are you more likely to volunteer? Crosstabulation

Count

		After todays visit are you more likely to volunteer?						
		dont know	no	maybe	probably	definately	unknown	Total
Are you more optimistic or pessimistic about the natural worlds future after today?	optimistic	1	12	11	6	3	1	34
	pessimistic	0	13	13	0	1	0	27
	unknown	0	5	4	2	0	4	15
	indifferent	0	12	9	0	2	1	24
Total		1	42	37	8	6	6	100

Are you more optimistic or pessimistic about the natural worlds future after today? * After todays visit are you more likely to donate? Crosstabulation

Count

		After todays visit are you more likely to donate?						
		dont know	no	maybe	probably	definately	unknown	Total
Are you more optimistic or pessimistic about the natural worlds future after today?	optimistic	1	5	14	10	3	1	34
	pessimistic	0	4	14	4	5	0	27
	unknown	0	3	4	3	2	3	15
	indifferent	0	7	9	6	1	1	24
Total		1	19	41	23	11	5	100

Are you more optimistic or pessimistic about the natural worlds future after today? * After todays visit are you more likely to recycle? Crosstabulation

Count

		After todays visit are you more likely to recycle?						
		dont know	no	maybe	probably	definately	unknown	Total
Are you more optimistic or pessimistic about the natural worlds future after today?	optimistic	1	4	2	5	21	1	34
	pessimistic	0	5	2	3	17	0	27
	unknown	0	2	2	2	6	3	15
	indifferent	1	5	2	4	11	1	24
Total		2	16	8	14	55	5	100

Are you more optimistic or pessimistic about the natural worlds future after today? * After todays visit are you more likely to visit other conservation attractions? Crosstabulation

Count

		After todays visit are you more likely to visit other conservation attractions?						
		dont know	no	maybe	probably	definately	unknown	Total
Are you more optimistic or pessimistic about the natural worlds future after today?	optimistic	0	1	5	16	12	0	34
	pessimistic	0	1	7	9	10	0	27
	unknown	0	1	3	6	3	2	15
	indifferent	1	2	5	9	7	0	24
Total		1	5	20	40	32	2	100

8.4.2 Paignton Relevant SPSS Tables of Questionnaire Results

What is the main reason behind your visit? * What learning technique did you enjoy the most? Crosstabulation

			What learning technique did you enjoy the most?									
			talks	audio information points	replicate/3D interactive models	close encounters	motion clips	information boards/signs	photo/art	observing exhibits	other	unknown	Total
What is the main reason behind your visit?	learn	Count	0	0	0	0	0	0	0	3	0	1	4
		% within What is the main reason behind your visit?	.0%	.0%	.0%	.0%	.0%	.0%	.0%	75.0%	.0%	25.0%	100.0%
	family day out	Count	1	5	1	1	3	11	7	36	1	4	70
		% within What is the main reason behind your visit?	1.4%	7.1%	1.4%	1.4%	4.3%	15.7%	10.0%	51.4%	1.4%	5.7%	100.0%
	escape from the city	Count	0	0	0	0	0	0	0	1	0	0	1
		% within What is the main reason behind your visit?	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	curiosity	Count	0	0	0	0	0	0	0	3	0	0	3
		% within What is the main reason behind your visit?	.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	100.0%
	fun/entertainment	Count	1	2	1	0	0	3	0	11	0	3	21
		% within What is the main reason behind your visit?	4.8%	9.5%	4.8%	.0%	.0%	14.3%	.0%	52.4%	.0%	14.3%	100.0%
	unknown	Count	0	0	0	0	0	0	1	0	0	0	1
		% within What is the main reason behind your visit?	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
Total		Count	2	7	2	1	3	14	8	54	1	8	100
		% within What is the main reason behind your visit?	2.0%	7.0%	2.0%	1.0%	3.0%	14.0%	8.0%	54.0%	1.0%	8.0%	100.0%

What is the main reason behind your visit? * Which learning technique do you feel was the most effective in terms of conservation awareness? Crosstabulation

			Which learning technique do you feel was the most effective in terms of conservation awareness?							
			talks	audio information points	replicate/3D interactive models	motion clips	information boards/signs	photo/art	observing exhibits	unknown	Total
What is the main reason behind your visit?	learn	Count	0	0	0	0	2	0	1	1	4
		% within What is the main reason behind your visit?	.0%	.0%	.0%	.0%	50.0%	.0%	25.0%	25.0%	100.0%
	family day out	Count	3	7	3	2	26	4	22	3	70
		% within What is the main reason behind your visit?	4.3%	10.0%	4.3%	2.9%	37.1%	5.7%	31.4%	4.3%	100.0%
	escape from the city	Count	0	0	0	0	1	0	0	0	1
		% within What is the main reason behind your visit?	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
	curiosity	Count	0	0	0	0	1	0	2	0	3
		% within What is the main reason behind your visit?	.0%	.0%	.0%	.0%	33.3%	.0%	66.7%	.0%	100.0%
	fun/entertainment	Count	1	3	0	1	6	2	6	2	21
		% within What is the main reason behind your visit?	4.8%	14.3%	.0%	4.8%	28.6%	9.5%	28.6%	9.5%	100.0%
	unknown	Count	0	0	0	0	1	0	0	0	1
		% within What is the main reason behind your visit?	.0%	.0%	.0%	.0%	100.0%	.0%	.0%	.0%	100.0%
Total		Count	4	10	3	3	37	6	31	6	100
		% within What is the main reason behind your visit?	4.0%	10.0%	3.0%	3.0%	37.0%	6.0%	31.0%	6.0%	100.0%

Are you more optimistic or pessimistic about the natural worlds future after today? * Do you feel you can make a difference? Crosstabulation

			Do you feel you can make a difference?			
			yes	no	unknown	Total
Are you more optimistic or pessimistic about the natural worlds future after today?	optimistic	Count	15	13	4	32
		% within Are you more optimistic or pessimistic about the natural worlds future after today?	46.9%	40.6%	12.5%	100.0%
	pessimistic	Count	23	17	1	41
		% within Are you more optimistic or pessimistic about the natural worlds future after today?	56.1%	41.5%	2.4%	100.0%
	unknown	Count	2	2	0	4
		% within Are you more optimistic or pessimistic about the natural worlds future after today?	50.0%	50.0%	.0%	100.0%
	indifferent	Count	13	10	0	23
		% within Are you more optimistic or pessimistic about the natural worlds future after today?	56.5%	43.5%	.0%	100.0%
Total		Count	53	42	5	100
		% within Are you more optimistic or pessimistic about the natural worlds future after today?	53.0%	42.0%	5.0%	100.0%

Has your perception of the natural world been altered after your visit today? * Do you think the loss of natural environments will affect you? Crosstabulation

			Do you think the loss of natural environments will affect you?				
			slightly	moderately	significantly	a lot	Total
Has your perception of the natural world been altered after your visit today?	beautiful	Count	3	2	3	11	19
		% within Has your perception of the natural world been altered after your visit today?	15.8%	10.5%	15.8%	57.9%	100.0%
	interesting	Count	5	8	16	11	40
		% within Has your perception of the natural world been altered after your visit today?	12.5%	20.0%	40.0%	27.5%	100.0%
	resources	Count	0	1	0	2	3
		% within Has your perception of the natural world been altered after your visit today?	.0%	33.3%	.0%	66.7%	100.0%
	seperate from mankind	Count	0	0	1	0	1
		% within Has your perception of the natural world been altered after your visit today?	.0%	.0%	100.0%	.0%	100.0%
	important	Count	2	5	9	7	23
		% within Has your perception of the natural world been altered after your visit today?	8.7%	21.7%	39.1%	30.4%	100.0%
	no change	Count	0	2	4	8	14
		% within Has your perception of the natural world been altered after your visit today?	.0%	14.3%	28.6%	57.1%	100.0%
Total		Count	10	18	33	39	100
		% within Has your perception of the natural world been altered after your visit today?	10.0%	18.0%	33.0%	39.0%	100.0%

awareness improvement on deforestation * Which learning technique do you feel was the most effective in terms of conservation awareness? Crosstabulation

			Which learning technique do you feel was the most effective in terms of conservation awareness?								
			talks	audio information points	replicate/3D interactive models	motion clips	information boards/signs	photo/art	observing exhibits	unknown	Total
awareness improvement on deforestation	learnt nothing	Count	1	3	1	0	9	2	8	1	25
		% within awareness improvement on deforestation	4.0%	12.0%	4.0%	.0%	36.0%	8.0%	32.0%	4.0%	100.0%
	learn a small amount	Count	0	0	0	1	5	1	5	0	12
		% within awareness improvement on deforestation	.0%	.0%	.0%	8.3%	41.7%	8.3%	41.7%	.0%	100.0%
	learn moderate amount	Count	2	3	0	0	9	2	12	1	29
		% within awareness improvement on deforestation	6.9%	10.3%	.0%	.0%	31.0%	6.9%	41.4%	3.4%	100.0%
	learnt significant amount	Count	0	1	1	2	6	1	0	0	11
		% within awareness improvement on deforestation	.0%	9.1%	9.1%	18.2%	54.5%	9.1%	.0%	.0%	100.0%
	learnt a lot	Count	0	3	0	0	5	0	5	0	13
		% within awareness improvement on deforestation	.0%	23.1%	.0%	.0%	38.5%	.0%	38.5%	.0%	100.0%
	unknown	Count	1	0	1	0	3	0	1	4	10
		% within awareness improvement on deforestation	10.0%	.0%	10.0%	.0%	30.0%	.0%	10.0%	40.0%	100.0%
Total		Count	4	10	3	3	37	6	31	6	100
		% within awareness improvement on deforestation	4.0%	10.0%	3.0%	3.0%	37.0%	6.0%	31.0%	6.0%	100.0%

awareness improvement on over hunting * Which learning technique do you feel was the most effective in terms of conservation awareness? Crosstabulation

			Which learning technique do you feel was the most effective in terms of conservation awareness?								
			talks	audio information points	replicate/3D interactive models	motion clips	information boards/signs	photo/art	observing exhibits	unknown	Total
awareness improvement on over hunting	learnt nothing	Count	1	3	1	0	8	2	8	0	23
		% within awareness improvement on over hunting	4.3%	13.0%	4.3%	.0%	34.8%	8.7%	34.8%	.0%	100.0%
	learn a small amount	Count	0	1	0	0	5	0	4	0	10
		% within awareness improvement on over hunting	.0%	10.0%	.0%	.0%	50.0%	.0%	40.0%	.0%	100.0%
	learn moderate amount	Count	1	1	0	1	6	3	11	1	24
		% within awareness improvement on over hunting	4.2%	4.2%	.0%	4.2%	25.0%	12.5%	45.8%	4.2%	100.0%
	learnt significant amount	Count	0	3	0	2	6	1	4	0	16
		% within awareness improvement on over hunting	.0%	18.8%	.0%	12.5%	37.5%	6.3%	25.0%	.0%	100.0%
	learnt a lot	Count	1	2	1	0	9	0	3	1	17
		% within awareness improvement on over hunting	5.9%	11.8%	5.9%	.0%	52.9%	.0%	17.6%	5.9%	100.0%
	unknown	Count	1	0	1	0	3	0	0	4	9
		% within awareness improvement on over hunting	11.1%	.0%	11.1%	.0%	33.3%	.0%	.0%	44.4%	100.0%
	53.00	Count	0	0	0	0	0	0	1	0	1
		% within awareness improvement on over hunting	.0%	.0%	.0%	.0%	.0%	.0%	100.0%	.0%	100.0%
Total		Count	4	10	3	3	37	6	31	6	100
		% within awareness improvement on over hunting	4.0%	10.0%	3.0%	3.0%	37.0%	6.0%	31.0%	6.0%	100.0%

Which learning technique do you feel was the most effective in terms of conservation awareness? * Do you think the loss of natural environments will affect you? Crosstabulation

			Do you think the loss of natural environments will affect you?				
			slightly	moderately	significantly	a lot	Total
Which learning technique do you feel was the most effective in terms of conservation awareness?	talks	Count	1	0	0	3	4
		% within Which learning technique do you feel was the most effective in terms of conservation awareness?	25.0%	.0%	.0%	75.0%	100.0%
	audio information points	Count	2	2	2	4	10
		% within Which learning technique do you feel was the most effective in terms of conservation awareness?	20.0%	20.0%	20.0%	40.0%	100.0%
	replicate/3D interactive models	Count	0	0	2	1	3
		% within Which learning technique do you feel was the most effective in terms of conservation awareness?	.0%	.0%	66.7%	33.3%	100.0%
	motion clips	Count	0	0	1	2	3
		% within Which learning technique do you feel was the most effective in terms of conservation awareness?	.0%	.0%	33.3%	66.7%	100.0%
	information boards/signs	Count	2	10	12	13	37
		% within Which learning technique do you feel was the most effective in terms of conservation awareness?	5.4%	27.0%	32.4%	35.1%	100.0%
	photo/art	Count	0	0	6	0	6
		% within Which learning technique do you feel was the most effective in terms of conservation awareness?	.0%	.0%	100.0%	.0%	100.0%
	observing exhibits	Count	3	5	9	14	31
		% within Which learning technique do you feel was the most effective in terms of conservation awareness?	9.7%	16.1%	29.0%	45.2%	100.0%
	unknown	Count	2	1	1	2	6
		% within Which learning technique do you feel was the most effective in terms of conservation awareness?	33.3%	16.7%	16.7%	33.3%	100.0%
Total		Count	10	18	33	39	100
		% within Which learning technique do you feel was the most effective in terms of conservation awareness?	10.0%	18.0%	33.0%	39.0%	100.0%

awareness improvement on mammal numbers * Which learning technique do you feel was the most effective in terms of conservation awareness? Crosstabulation

			Which learning technique do you feel was the most effective in terms of conservation awareness?								
			talks	audio information points	replicate/3D interactive models	motion clips	information boards/signs	photo/art	observing exhibits	unknown	Total
awareness improvement on mammal numbers	learnt nothing	Count	1	3	1	0	9	2	7	0	23
		% within awareness improvement on mammal numbers	4.3%	13.0%	4.3%	.0%	39.1%	8.7%	30.4%	.0%	100.0%
	learn a small amount	Count	1	1	0	1	3	1	2	0	9
		% within awareness improvement on mammal numbers	11.1%	11.1%	.0%	11.1%	33.3%	11.1%	22.2%	.0%	100.0%
	learn moderate amount	Count	1	1	0	2	9	2	12	0	27
		% within awareness improvement on mammal numbers	3.7%	3.7%	.0%	7.4%	33.3%	7.4%	44.4%	.0%	100.0%
	learnt significant amount	Count	0	2	0	0	6	1	3	2	14
		% within awareness improvement on mammal numbers	.0%	14.3%	.0%	.0%	42.9%	7.1%	21.4%	14.3%	100.0%
	learnt a lot	Count	0	3	1	0	7	0	6	0	17
		% within awareness improvement on mammal numbers	.0%	17.6%	5.9%	.0%	41.2%	.0%	35.3%	.0%	100.0%
	unknown	Count	1	0	1	0	3	0	1	4	10
		% within awareness improvement on mammal numbers	10.0%	.0%	10.0%	.0%	30.0%	.0%	10.0%	40.0%	100.0%
Total		Count	4	10	3	3	37	6	31	6	100
		% within awareness improvement on mammal numbers	4.0%	10.0%	3.0%	3.0%	37.0%	6.0%	31.0%	6.0%	100.0%

After todays visit are you more likely to volunteer? * Do you think the loss of natural environments will affect you? Crosstabulation

Count

		Do you think the loss of natural environments will affect you?				
		slightly	moderately	significantly	a lot	Total
After todays visit are you more likely to volunteer?	dont know	0	2	1	0	3
	no	4	10	15	12	41
	maybe	2	6	11	21	40
	probably	3	0	2	2	7
	definately	0	0	2	1	3
	unknown	1	0	2	3	6
Total		10	18	33	39	100

After todays visit are you more likely to visit other conservation attractions? * Do you think the loss of natural environments will affect you? Crosstabulation

Count

		Do you think the loss of natural environments will affect you?				
		slightly	moderately	significantly	a lot	Total
After todays visit are you more likely to visit other conservation attractions?	no	0	3	4	3	10
	maybe	4	2	3	5	14
	probably	2	7	12	14	35
	definately	3	6	13	15	37
	unknown	1	0	1	2	4
Total		10	18	33	39	100

After todays visit are you more likely to be a cautious shopper? * Do you think the loss of natural environments will affect you? Crosstabulation

Count

		Do you think the loss of natural environments will affect you?				
		slightly	moderately	significantly	a lot	Total
After todays visit are you more likely to be a cautious shopper?	dont know	1	0	0	0	1
	no	0	4	9	4	17
	maybe	5	8	7	11	31
	probably	3	4	12	11	30
	definately	0	2	2	11	15
	unknown	1	0	3	2	6
Total		10	18	33	39	100

After todays visit are you more likely to donate? * Do you think the loss of natural environments will affect you? Crosstabulation

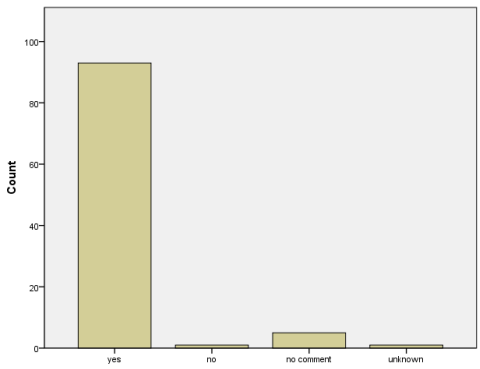
Count

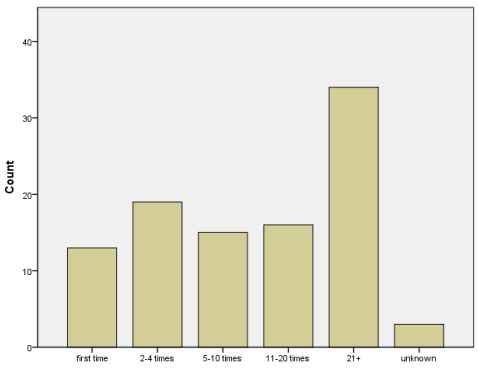
		Do you think the loss of natural environments will affect you?				
		slightly	moderately	significantly	a lot	Total
After todays visit are you more likely to donate?	no	0	3	9	6	18
	maybe	5	7	11	13	36
	probably	3	6	8	12	29
	definately	1	2	5	6	14
	unknown	1	0	0	2	3
Total		10	18	33	39	100

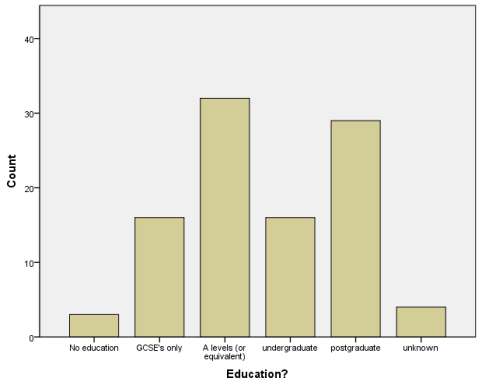
After todays visit are you more likely to recycle? * Do you think the loss of natural environments will affect you? Crosstabulation

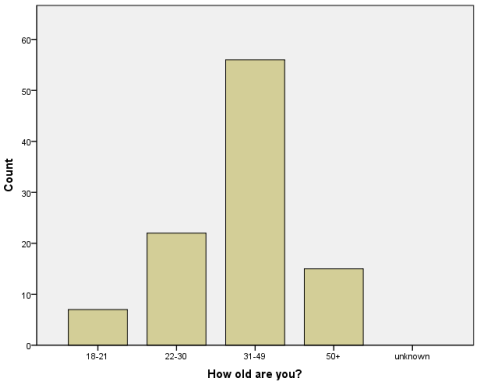
Count

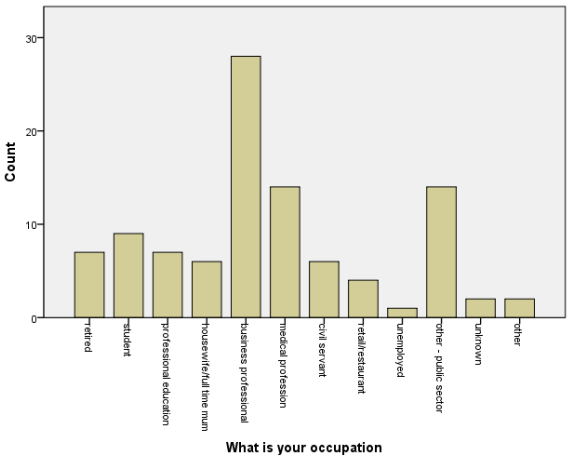
		Do you think the loss of natural environments will affect you?				
		slightly	moderately	significantly	a lot	Total
After todays visit are you more likely to recycle?	no	0	1	2	4	7
	maybe	2	0	1	4	7
	probably	2	2	7	5	16
	definately	6	15	21	24	66
	unknown	0	0	2	2	4
Total		10	18	33	39	100

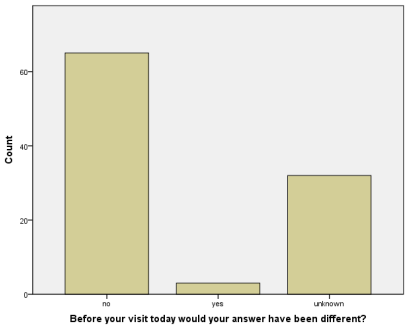












How old are you? * Do you think the loss of natural environments will affect you? Crosstabulation

			Do you think the loss of natural environments will affect you?				
			slightly	moderately	significantly	a lot	Total
How old are you?	18-21	Count	1	0	4	2	7
		% within How old are you?	14.3%	.0%	57.1%	28.6%	100.0%
	22-30	Count	3	4	9	6	22
		% within How old are you?	13.6%	18.2%	40.9%	27.3%	100.0%
	31-49	Count	6	12	13	25	56
		% within How old are you?	10.7%	21.4%	23.2%	44.6%	100.0%
	50+	Count	0	2	7	6	15
		% within How old are you?	.0%	13.3%	46.7%	40.0%	100.0%
Total		Count	10	18	33	39	100
		% within How old are you?	10.0%	18.0%	33.0%	39.0%	100.0%

How old are you? * Are you more optimistic or pessimistic about the natural worlds future after today? Crosstabulation

			Are you more optimistic or pessimistic about the natural worlds future after today?				
			optimistic	pessimistic	unknown	indifferent	Total
How old are you?	18-21	Count	5	2	0	0	7
		% within How old are you?	71.4%	28.6%	.0%	.0%	100.0%
	22-30	Count	3	11	1	7	22
		% within How old are you?	13.6%	50.0%	4.5%	31.8%	100.0%
	31-49	Count	19	20	2	15	56
		% within How old are you?	33.9%	35.7%	3.6%	26.8%	100.0%
	50+	Count	5	8	1	1	15
		% within How old are you?	33.3%	53.3%	6.7%	6.7%	100.0%
Total		Count	32	41	4	23	100
		% within How old are you?	32.0%	41.0%	4.0%	23.0%	100.0%

How old are you? * Do you feel you can make a difference? Crosstabulation

			Do you feel you can make a difference?			
			yes	no	unknown	Total
How old are you?	18-21	Count	2	5	0	7
		% within How old are you?	28.6%	71.4%	.0%	100.0%
	22-30	Count	13	9	0	22
		% within How old are you?	59.1%	40.9%	.0%	100.0%
	31-49	Count	29	24	3	56
		% within How old are you?	51.8%	42.9%	5.4%	100.0%
	50+	Count	9	4	2	15
		% within How old are you?	60.0%	26.7%	13.3%	100.0%
Total		Count	53	42	5	100
		% within How old are you?	53.0%	42.0%	5.0%	100.0%

Has your perception of the natural world been altered after your visit today? * Which learning technique do you feel was the most effective in terms of conservation awareness? Crosstabulation

Count

		Which learning technique do you feel was the most effective in terms of conservation awareness?								
		talks	audio information points	replicate/3D interactive models	motion clips	information boards/signs	photo/art	observing exhibits	unknown	Total
Has your perception of the natural world been altered after your visit today?	beautiful	1	2	2	1	4	2	4	3	19
	interesting	1	6	1	2	15	2	13	0	40
	resources	0	0	0	0	2	0	1	0	3
	seperate from mankind	0	0	0	0	1	0	0	0	1
	important	0	2	0	0	13	2	5	1	23
	no change	2	0	0	0	2	0	8	2	14
Total		4	10	3	3	37	6	31	6	100

Has your perception of the natural world been altered after your visit today? * What learning technique did you enjoy the most? Crosstabulation

Count

		What learning technique did you enjoy the most?										
		talks	audio information points	replicate/3D interactive models	close encounters	motion clips	information boards/signs	photo/art	observing exhibits	other	unknown	Total
Has your perception of the natural world been altered after your visit today?	beautiful	0	3	1	1	1	3	3	10	3	3	19
	interesting	1	2	1	0	1	5	4	24	1	3	40
	resources	0	0	0	0	0	2	0	1	0	0	3
	seperate from mankind	0	0	0	0	0	1	0	1	0	0	1
	important	0	2	0	0	1	3	1	11	0	5	23
	no change	1	0	0	0	0	0	0	7	0	6	14
Total		2	7	2	1	3	14	8	54	1	9	100

Do you feel you can make a difference? * After todays visit are you more likely to be a cautious shopper? Crosstabulation

Count

		After todays visit are you more likely to be a cautious shopper?						
		dont know	no	maybe	probably	definately	unknown	Total
Do you feel you can make a difference?	yes	1	6	11	22	12	1	53
	no	0	11	19	6	1	5	42
	unknown	0	0	1	2	2	0	5
Total		1	17	31	30	15	6	100

Do you feel you can make a difference? * After todays visit are you more likely to volunteer? Crosstabulation

Count

		After todays visit are you more likely to volunteer?						
		dont know	no	maybe	probably	definately	unknown	Total
Do you feel you can make a difference?	yes	2	20	23	3	3	2	53
	no	1	20	13	4	0	4	42
	unknown	0	1	4	0	0	0	5
Total		3	41	40	7	3	6	100

Do you feel you can make a difference? * After todays visit are you more likely to donate? Crosstabulation

Count

		After todays visit are you more likely to donate?					
		no	maybe	probably	definately	unknown	Total
Do you feel you can make a difference?	yes	7	19	15	11	1	53
	no	10	15	13	2	2	42
	unknown	1	2	1	1	0	5
Total		18	36	29	14	3	100

Do you feel you can make a difference? * After todays visit are you more likely to visit other conservation attractions? Crosstabulation

Count

		After todays visit are you more likely to visit other conservation attractions?					
		no	maybe	probably	definately	unknown	Total
Do you feel you can make a difference?	yes	4	7	16	25	1	53
	no	6	6	18	9	3	42
	unknown	0	1	1	3	0	5
Total		10	14	35	37	4	100

Do you feel you can make a difference? * After todays visit are you more likely to recycle? Crosstabulation

Count

		After todays visit are you more likely to recycle?					
		no	maybe	probably	definately	unknown	Total
Do you feel you can make a difference?	yes	4	3	4	41	1	53
	no	3	3	12	21	3	42
	unknown	0	1	0	4	0	5
Total		7	7	16	66	4	100

Are you more optimistic or pessimistic about the natural worlds future after today? * After todays visit are you more likely to be a cautious shopper? Crosstabulation

Count

		After todays visit are you more likely to be a cautious shopper?						
		dont know	no	maybe	probably	definately	unknown	Total
Are you more optimistic or pessimistic about the natural worlds future after today?	optimistic	0	6	7	11	6	2	32
	pessimistic	0	5	15	13	5	3	41
	unknown	0	1	2	1	0	0	4
	indifferent	1	5	7	5	4	1	23
Total		1	17	31	30	15	6	100

Are you more optimistic or pessimistic about the natural worlds future after today? * After todays visit are you more likely to volunteer? Crosstabulation

Count

		After todays visit are you more likely to volunteer?						
		dont know	no	maybe	probably	definately	unknown	Total
Are you more optimistic or pessimistic about the natural worlds future after today?	optimistic	1	9	15	3	2	2	32
	pessimistic	2	17	16	2	1	3	41
	unknown	0	3	1	0	0	0	4
	indifferent	0	12	8	2	0	1	23
Total		3	41	40	7	3	6	100

Are you more optimistic or pessimistic about the natural worlds future after today? * After todays visit are you more likely to donate? Crosstabulation

Count

		After todays visit are you more likely to donate?					
		no	maybe	probably	definately	unknown	Total
Are you more optimistic or pessimistic about the natural worlds future after today?	optimistic	5	13	10	4	0	32
	pessimistic	8	11	13	8	1	41
	unknown	1	1	2	0	0	4
	indifferent	4	11	4	2	2	23
Total		18	36	29	14	3	100

Are you more optimistic or pessimistic about the natural worlds future after today? * After todays visit are you more likely to visit other conservation attractions? Crosstabulation

Count

		After todays visit are you more likely to visit other conservation attractions?					
		no	maybe	probably	definately	unknown	Total
Are you more optimistic or pessimistic about the natural worlds future after today?	optimistic	4	2	12	13	1	32
	pessimistic	4	4	11	20	2	41
	unknown	1	0	3	0	0	4
	indifferent	1	8	9	4	1	23
Total		10	14	35	37	4	100

Are you more optimistic or pessimistic about the natural worlds future after today? * After todays visit are you more likely to recycle? Crosstabulation

Count

		After todays visit are you more likely to recycle?					
		no	maybe	probably	definately	unknown	Total
Are you more optimistic or pessimistic about the natural worlds future after today?	optimistic	1	4	5	21	1	32
	pessimistic	3	0	4	32	2	41
	unknown	1	0	2	1	0	4
	indifferent	2	3	5	12	1	23
Total		7	7	16	66	4	100

8.4.3 Open-ended Questions Responses at Dartmoor and Paignton Zoo

Question 6	**Dartmoor**	**Paignton**
Research	2	0
Voluntary work	5	0
Helplessness- rely on Gov. and big companies	9	14
Litter picking	1	0
Being aware	4	13
Saving energy	4	2
Saving water	1	2
Donating	19	16
Teaching/spreading word	14	9
Watching what you buy	11	11
supporting conservation parks like zoos	7	1
Recycling	1	4
Too much negativity	2	2
consuming less	0	2

Question 7	**Dartmoor**	**Paignton**
No	39	44

Hunting	1	0
Recycling	13	17
Composting	1	0
Donate/Sponsor	16	14
Teach	3	0
Coming to conservation attractions like zoos	3	3
Volunteer	7	8
Careful shopper	5	0
Promote wildlife in garden	2	0
Energy saving	0	2

Question 9A: Dartmoor

Close encounters	7
Big cats	34
Otters	5
Observing all animals	3
Dartmoor pony culling	1
Talks	6
Volunteers	2
Monkeys	2
Foxes	1
Wolves	1
Bears posters	5

Question 9B: Dartmoor

Conversation with volunteer	6
Monogamy between animals	1
About endangered species	1
Conservation	1
Observing	2
Frogs at close encounters	2
Close encounters	10
Talks	23
Information boards	6
Bears	3
Falconry	6

Question 9A: Paignton

Elephant	9
Information boards	3
Red pandas	1
Animals relationships	1
Tigers	10
Primates	12
Rhino	2
Birds (Aviary)	1

Amphibians	3
Giraffes	2
Crocodile swamp	1
Observing	1
Young	1
Photo display	2
interactive display	1
Cheetah	1

Question 9B: Paignton

Primates	8
Information boards	6
Crocodile swamp	2
Importance of Zoos	1
Amphibian centre	5
Reptile house	2

8.4.4 Eden Questionnaire Results (as sent)

Number interviewed: 110

Q1 main reasons behind visit
To learn 9, family day out 48, escape the city 0, curiosity 34, fun/entertainment 15

Q2 perception etc.
Beautiful 14, dangerous 0, unruly 0, interesting 52, dull 0, controllable 0, useless 0, resources 7, important 37

Q3A

(a) 9
(b) 7
(c) 65
(d) 17
(e) 11

3B
87 said answers would not have been different; 33 would have

Q4
47 pessimistic BUT alternative choice i.e. optimistic not appropriate as most of the remaining 63 were neutral, rather than optimistic

Q5
ALL the options listed scored 1 – except plant diversity with only 12 people scoring this at 3 (nothing higher) & only 9 people scoring biodiversity, also at 3 with nothing higher

Q6
92 out of the 110 questioned said they 'couldn't make a difference'; only 18 felt they could
Reason: problems at a global level in terms of solutions, so individuals impotent in doing anything that would make a difference

Q7 no one I interviewed was involved in conservation of any sort

Q8
More cautious shopper 55 don't know; no 0, 12 maybe, 35 probably 8 definitely
Volunteer 36 don't know 62 no, maybe 6, probably 6 definitely 0
Donate 35 don't know, 56 no, maybe 11, probably 8, definitely 0
Recycle 23 don't know, no 56, maybe 14, probably 4, definitely 17

Q9
Emotionally –none!
Educationally 33
Information conveyed: written information

Q10 information boards/signs 52; photos/art 23; observing exhibits 35; rest 0

Q11
33 yes; 77 no (didn't think site was to do with conservation!)

Q 12
92 once; 18 more than once (but mainly e.g. teachers or coach drivers!)

Q13
18-21: 4
22-30: 15
31-49: 33
50+: 58

Q14
No education: 44
GCSE or equivalent 37
A level 16
Undergraduate 11
Postgraduate 2

Q15
Occupation (I've summarised these as percentages)
40% retired/semi-retired
45% semi-skilled/manual/retail
15 % professional

8.5 Appendix E: Approval and guidelines

8.5.1 University of Plymouth Ethical Approval Form

UNIVERSITY OF PLYMOUTH FACULTY OF SCIENCE AND TECHNOLOGY

Human Ethics Committee

APPLICATION FOR ETHICAL APPROVAL OF RESEARCH INVOLVING HUMAN PARTICIPANTS

All applicants should read the guidelines at the end of this application

This is a WORD document. Please complete in WORD and extend space where necessary.

*All applications must be word processed. Handwritten applications **will** be returned.*

Postgraduate and Staff must send one signed hard-copy to Paula Simson and send an unsigned electronic copy of your application to SciTechHumanEthics@plymouth.ac.uk

Undergraduate students should pass on the completed and signed copy of this form to their School Representative on the Science and Technology Human Ethics Committee.

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1. TYPE OF PROJECT

1.1 What is the type of project? (Tick 1 only)

STAFF should tick one of the three options below:

Specific project ☐

Tick this box if you are seeking approval for a specific study, or set of studies, with methods that are explained fully in the following sections. This form of approval is appropriate for funded projects with a clear plan of work and limited duration.

Thematic programme of research

☐

Tick this box if you are seeking approval for a programme of work using a single paradigm. This form of approval is appropriate for pilot work, or routine work that is ethically straightforward. Note, the maximum period of approval for thematic ethical clearance is 3 years.

☐

Practical / Laboratory Class

Tick this box if you are seeking approval for a teaching activity which involves student involvement in the role of an experimental participant.

1.2 Tick 1 only

POSTGRADUATE STUDENTS should tick one of the options below:

Taught Masters Project ☐

M.Phil / PhD by research ☐

UNDERGRADUATE STUDENTS should tick one of the two options below:

☒

Student research project

☐

Practical / Laboratory class where you are acting as the experimenter

2. APPLICATION

2.1 TITLE of Research project
The effectiveness of awareness promoting methods in three ex-situ conservation attractions.
2.2 General summary of the proposed research for which ethical clearance is sought, briefly outlining the aims and objectives and providing details of interventions/procedures involving participants (no jargon)
Aim: To identify which awareness methods used in Dartmoor zoo, Paignton zoo and Eden Project are the most influential, educational and relevant to conservation. Outcomes: justification for zoos, and help guide these attractions and similar attractions in improving their educational and influential impact on visitors. The aim will be achieved by the completion of a hundred questionnaires from each attraction, which will be handed to visitors 18 years plus, who are exiting. Once all the data has been collected the results will be graphed up and similarities will be analysed in relation to favoured awareness methods and the most effective, the visitor type (classification questions) and educational impact and degree of influence which was achieved, as well as comparison of attractions and the general effect each attraction achieves. (*In the questionnaire name or contact details are not asked for).*
2.3 Physical site(s) where research will be carried out
At the exits of Paignton Zoo, Dartmoor Zoo and The Eden Project
2.4 External Institutions involved in the research (e.g. other university, hospital, prison etc.)
2.5 Name, telephone number, e-mail address and position of lead person for this project (plus full details of Project Supervisor if applicable)

Undergraduate collecting the data and writing up analysis:

Sophie Lancaster

Number: 07814628861

E-mail: sophs_@hotmail.co.uk

Project Supervisor:

John Bull

Tel: +(0)1752 584582 (direct line)
Tel: +(0)1752 584709 (School office)

E-mail: J.N.Bull@plymouth.ac.uk

2.8 Start and end date for research for which ethical clearance is sought (NB maximum period is 3 years)
Start date: November 2011 End date: December 2011
2.9 Name(s) of funding source(s) if any
2.10 Has funding already been received?
No ☑ In-part ☐ Yes ☐
2.11 Has this same project received ethical approval from another Ethics Committee?
No ☑ Yes ☐
2.12 If yes, do you want Chairman's action?
No ☐ Yes ☐
If yes, please include other application and approval letter and STOP HERE. If no, please continue

3. PROCEDURE

3.1 Describe procedures that participants will engage in, Please do not use jargon
Visitors leaving the attractions will be asked if they would like to fill out a questionnaire which consists of a one double sided A4 sheet.
3.2 How long will the procedures take? Give details
Depending on participant 5-15 minutes
3.3 Does your research involve deception?
No ☒ **Yes** ☐
3.4 If yes, please explain why the following conditions apply to your research:
a) Deception is completely unavoidable if the purpose of the research is to be met
b) The research objective has strong scientific merit
c) Any potential harm arising from the proposed deception can be effectively neutralised or reversed by the proposed debriefing procedures (see section below)
3.5 Describe how you will debrief your participants
There is a statement at the beginning of the questionnaire stating the reasoning for questionnaire and that there answers will be anonymous. This will be also told to them if they agree to participate in the questionnaire; no one will be forced to participate under any

circumstances.
3.6 Are there any ethical issues (e.g. sensitive material)?
No ☐ **Yes** ☑
3.7 If yes, please explain. You may be asked to provide ethically sensitive material. See also section 11
Questions ask peoples emotional and educational viewpoint on the state on natural systems, and their contribution to conservation. However, their answers are anonymous.

4. BREAKDOWN OF PARTICIPANTS

4.1 Summary of participants

Type of participant	*Number of participants*
Non-vulnerable Adults	*Approx.:250-300*
Minors (< 16 years)	*0*
Minors (16-18 years)	*0*
Vulnerable Participants *(other than by virtue of being a minor)*	*0*
Other (please specify)	*0*
TOTAL	*300*

4.2 How were the sample sizes determined?
100 completed questionnaires from each attraction, would give a fair representation of the effect each attraction has on its visitors, also it is a manageable size.

4.3 How will subjects be recruited?
They will be asked when leaving the attraction whether they would like to participate.
4.4 Will subjects be financially rewarded? If yes, please give details.

5. NON-VULNERABLE ADULTS

5.1 Are some or all of the participant's non-vulnerable adults?
No ☐ **Yes** ☑
5.2 How will participants be recruited? Name any other institution(s) involved
I will come up to any visitors 18+ exiting the attraction if they would like to take part in a questionnaire.
5.3 Inclusion / exclusion criteria
5.4 How will participants give informed consent?
They are not forced to take the questionnaire and answers are anonymous
5.5 Consent form(s) attached
No ☑ **Yes** ☐
If no, why not?

Participants are not forced to take questionnaire and the answers are anonymous, the questionnaire is only to see if the attraction has had an impact on them influentially and educationally, conservation wise.
5.6 Information sheet(s) attached
No ☑ **Yes** ☐
If no, why not?
Straight forward questionnaire with a paragraph at the beginning of questionnaire stating its purpose and that answers are anonymous.
5.7 How will participants be made aware of their right to withdraw at any time?
They will be told that if they decide not to complete questionnaire then it is fine and questionnaire will be disposed of, once again participants are not obliged to take part in questionnaire.
5.8 How will confidentiality be maintained, including archiving / destruction of primary data where appropriate, and how will the security of the data be maintained?
Contact details are not asked for; there is no way of tracing participants. Completed questionnaires will be disposed of once results are processed.

6. MINORS <16 YEARS

6.1 Are some or all of the participants under the age of 16?
No ☒ **Yes** ☐
If yes, please consult special guidelines for working with minors. If no, please continue.

6.2 Age range(s) of minors
6.3 How will minors be recruited? (See guidelines). Name any other institution(s) involved
6.4 Inclusion / exclusion criteria
6.5 How will minors give informed consent? Please tick appropriate box and explain (See guidelines)
Opt-in ☐ **Opt-out** ☐
6.6 Consent form(s) for minor attached
No ☐ **Yes** ☐
If no, why not?
6.7 Information sheet(s) for minor attached
No ☐ **Yes** ☐
If no, why not?

7. MINORS 16-18 YEARS OLD

7.1 Are some or all of the participants between the ages of 16 and 18?
No ☑ **Yes** ☐
If yes, please consult special guidelines for working with minors. If no, please continue.

7.2 How will minors be recruited? (See guidelines). Name any other institution(s) involved
7.3 Inclusion / exclusion criteria
7.4 How will minors give informed consent? (See guidelines)
7.5 Consent form(s) for minor attached
No ☐ **Yes** ☐
If no, why not?
7.6 Information sheet(s) for minor attached
No ☐ **Yes** ☐
If no, why not?

7.7 Consent form(s) for parent / legal guardian attached
No ☐ Yes ☐
If no, why not?
7.8 Information sheet(s) for parent / legal guardian attached
No ☐ Yes ☐
If no, why not?
7.9 How will minors be made aware of their right to withdraw at any time?
7.10 How will confidentiality be maintained, including archiving / destruction of primary data where appropriate, and how will the security of the data be maintained?

8. VULNERABLE GROUPS

8.1 Are some or all of the participants vulnerable? (See guidelines)
No ☑ **Yes** ☐
If yes, please consult special guidelines for working with vulnerable groups. If no, please continue.

8.2 Describe vulnerability (apart from possibly being a minor)
8.3 How will vulnerable participants be recruited? Name any other institution(s) involved
8.4 Inclusion / exclusion criteria
8.5 How will participants give informed consent?
8.6 Consent form(s) for vulnerable person attached
No ☐ **Yes** ☐
If no, why not?
8.7 Information sheet(s) for vulnerable person attached
No ☐ **Yes** ☐
If no, why not?
8.8 Consent form(s) for parent / legal guardian attached
No ☐ **Yes** ☐

If no, why not?
8.9 Information sheet(s) for parent / legal guardian attached
No ☐ **Yes** ☐
If no, why not?
8.10 How will participants be made aware of their right to withdraw at any time?
8.11 How will confidentiality be maintained, including archiving / destruction of primary data where appropriate, and how will the security of the data be maintained?

9. EXTERNAL CLEARANCES

Investigators working with children and vulnerable adults legally require clearance from the Criminal Records Bureau (CRB)

9.1 Do ALL experimenters in contact with children and vulnerable adults have <u>current</u> CRB clearance? Please include photocopies.
No ☐ **Yes** ☐ **N/A** ☑
9.2 If no, explain
9.3 If your research involves external institutions (school, social service, prison, hospital etc.) please provide cover letter(s) from institutional heads permitting you to carry out research on their clients, and where applicable, on their site(s). Are these included?
No ☐ **Yes** ☐ **N/A** ☐
If not, why not?

10. PHYSICAL RISK ASSESSMENT

10.1 Will participants be at risk of physical harm (e.g. from electrodes, other equipment)? (See guidelines)
No ☑ **Yes** ☐
10.2 If yes, please describe
10.3 What measures have been taken to minimise risk? Include risk assessment proformas.
10.4 How will you handle participants who appear to have been harmed?

11. PSYCHOLOGICAL RISK ASSESSMENT

11.1 Will participants be at risk of psychological harm (e.g. viewing explicit or emotionally sensitive material, being stressed, and recounting traumatic events)? (See guidelines)
No ☑ **Yes** ☐
11.2 If yes, please describe
11.3 What measures have been taken to minimise risk?
11.4 How will you handle participants who appear to have been harmed?

12. RESEARCH OVER THE INTERNET

12.1 Will research be carried out over the internet?
No ☑ **Yes** ☐
12.2 If yes, please explain protocol in detail, explaining how informed consent will be given, and right to withdraw maintained, and confidentiality maintained. Give details of how you will guard against abuse by participants or others (see guidelines)

13. CONFLICTS OF INTEREST & THIRD PARTY INTERESTS

13.1 Do any of the experimenters have a conflict of interest? (See guidelines)
No ☒ **Yes** ☐
13.2 If yes, please describe
13.3 Are there any third parties involved? (See guidelines)
No ☐ **Yes** ☐
13.4 If yes, please describe
13.5 Do any of the third parties have a conflict of interest?
No ☐ **Yes** ☐
13.6 If yes, please describe

14. ADDITIONAL INFORMATION

14.1 [Optional] Give details of any professional bodies whose ethical policies apply to this research
14.2 [Optional] Please give any additional information that you wish to be considered in this application

15. ETHICAL PROTOCOL & DECLARATION

To the best of our knowledge and belief, this research conforms to the ethical principles laid down by the University of Plymouth and by any professional body specified in section 14 above.

This research conforms to the University's Ethical Principles for Research Involving Human Participants with regard to openness and honesty, protection from harm, right to withdraw, debriefing, confidentiality, and informed consent

Sign below where appropriate:

STAFF / RESEARCH POSTGRADUATES

	Signature	**Date**
Principal Investigator: _____	_____	
Other researchers: _____	_____	
_____	_____	
_____	_____	

Staff and Research Postgraduates should send the completed and signed copy of this form to Paula Simson, Secretary to the Science and Technology Human Research Ethics Committee, 009 Smeaton.

UG Students

	Signature	**Date**
Student: _____	_____	
Supervisor / Advisor: _____	_____	
_____	_____	
_____	_____	

Undergraduate students should pass on the completed and signed copy of this form to their School Representative on the Science and Technology Human Ethics Committee.

	Signature	**Date**
School Representative on Science and Technology Faculty Human Ethics Committee _____	_____	

SAMPLE SELF-CONSENT FORM

UNIVERSITY OF PLYMOUTH

FACULTY OF SCIENCE AND TECHNOLOGY

Human Ethics Committee Sample Consent Form

CONSENT TO PARICIPATE IN RESEARCH PROJECT / PRACTICAL STUDY

Name of Principal Investigator

Title of Research

Brief statement of purpose of work

The objectives of this research have been explained to me.

I understand that I am free to withdraw from the research at any stage, and ask for my data to be destroyed if I wish.

I understand that my anonymity is guaranteed, unless I expressly state otherwise.

I understand that the Principal Investigator of this work will have attempted, as far as possible, to avoid any risks, and that safety and health risks will have been separately assessed by appropriate authorities (e.g. under COSHH regulations)

Under these circumstances, I agree to participate in the research.

Name: ……..

Signature: .....…….. Date: .....……..

Faculty of Science and Technology Human Research Ethics Committee List of School Representatives

School of Psychology	Prof Judy Edworthy (Chair)
	Dr Matt Roser
School of Geography, Earth and Environmental Sciences	Dr Rupert Hodder
	Dr Sanzidur Rahman
School of Biomedical & Biological Sciences	Dr David J. Price
School of Marine Science & Engineering	Miss Emily Beaumont
School of Computing & Mathematics	Mr Martin Beck
	Dr Mark Dixon
External Representative	Mrs Rachael Hincks Knight
Lay Member	Rev. David Evans

Committee Secretary: Mrs Paula Simson

email: paula.simson@plymouth.ac.uk

tel: 01752 584503