

The Why Should You Care Project



WhyShouldYouCare.Org

Cheetah Outreach, South Africa

By Brittnei Miller
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Background for the Why Should You Care Project...

I realize that the project summary you are about to read is written in a much more relaxed style than most scientific papers. However, please know that this is the goal of the Why Should You Care project; to provide investigative, down to earth, and raw information capable of aiding in the effort to conserve wildlife. So before you read project results, please take a moment to read about the reasoning for *Why Should You Care* and about the value I believe this project has...

It is no secret that conservation is a growing field that requires a large amount of public support. For example, many conservation organizations depend on public sources of funding to continue their work - or on the power of the public voice to implement long-term management plans. However, during my time at Edinburgh Napier University, I discovered that most of the general public is not as involved with and knowledgeable of conservation efforts as scientists would like. I also learned that this lack of knowledge is not necessarily because the public does not care about wildlife, but simply because most do not know *why* they should.

After months of continued reading, my despair at the lack of public concern increased. Other published conservationists whose work I read also felt the lack of public engagement with wildlife conservation. Many scientists even cited this lack of involvement and understanding as being one of the *largest threats to wildlife protection* around the world. Not only are humans degrading and encroaching on natural areas - but most don't understand why this is such a long-term problem. And if you don't understand - *why should you care?*

So, having completed my graduate thesis on *Methods to Enhance Public Understanding and Involvement With Conservation Science* - I decided to create my own project, *Why Should You Care*. The goal of the WSYC project is simple - *to get a deeper look into how the public is/ can be influenced for conservation and to use this information to help conservation groups more effectively spread their wildlife conservation messages.*

Realizing how busy wildlife non-profits are, I believe it is a responsibility of mine to help conservation groups take a deeper look into how their work is influencing the public - and thus protecting a species. WSYC does this by investigating how the minds, the behaviors, and the hearts of the public are influenced by the activities of a conservation organization.

By taking an innovative, relaxed, and investigative approach to conservation based social research - I hope to support scientists' wishes to better understand methods to increase public involvement with wildlife conservation. WSYC will not reveal all of the answers, but I do believe it can provide some insights capable of influencing the global spread of conservation knowledge.

The research of WSYC is exploratory, insights are backed up with qualitative data, and final results are capable of decreasing one of the biggest threats to wildlife conservation; *a lack of public awareness and involvement.*

It is my hope that you find the results of this project valuable, insightful, and refreshing.

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THE CHEETAH OUTREACH PROJECT SUMMARY

1. Scientific Support for Why Should You Care

Researchers within the field of wildlife conservation have expressed a growing need to understand how a more holistic approach to conservation can impact the uptake and creation of global wildlife management plans (Hagerman et. al, 2009). Many scientists even suggest that emerging generations of conservationists consider moving beyond documenting threats to species - and towards a better understanding of how to increase public knowledge of such threats (Cowling, 2005).

Realizing that biological studies of a species alone cannot provide all of the answers to conservation related conflicts (Balmford and Cowling, 2006), it is imperative that further research on methods to influence human attitudes and behaviors towards conservation science is undertaken (Saunders et. al, 2006). Such research should investigate how to create sustained relations between the public and conservation groups (Jensen and Buckley, 2012) by increasing knowledge, changing attitudes, influencing behaviors, and by promoting the global spread of conservation messages (Jenks, et. al, 2010).

In sum, conservationists must investigate into one of the most misunderstood threats to biodiversity; the issue of reconnecting people with nature and wildlife (Balmford and Cowling, 2006).

2. WSYC and the Cheetah Outreach

Aim: It is the aim of this specific WSYC Cheetah Outreach project to provide the organization with a deeper look into how their activities are influencing visitors towards cheetah conservation. Project results should hold valuable qualitative feedback for the Cheetah Outreach on potential ways to enhance/continue their on-site activities for the benefit of cheetah conservation. Helping organizations to more thoroughly investigate how their work impacts the public is of valuable assistance to wildlife conservation efforts (Jenks. et. al, 2010).

An additional project aim is to provide the Cheetah Outreach with visually compelling footage that can be used to spread the knowledge of their work with outside organizations and individuals. Footage focuses on the education program, volunteer program, and on the purpose and background of the Cheetah Outreach overall.

Objective: It is WSYC's overall long-term objective to use an adapted form of the Theory of Change Template (Figure 1), to better understand how specific human attributes are/ can be altered to reduce the identified project threat of *a lack of human involvement with wildlife conservation* (Jenks, et. al, 2010). Studies have shown that positively influencing one or all of the five metrics can increase public conservation engagement and education (Dewan, et. al,

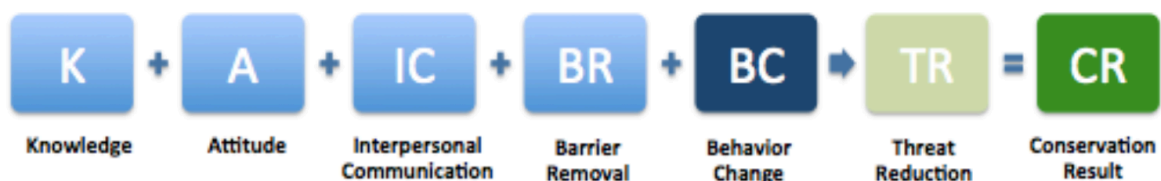


Figure 1 - Theory of Change Template and metrics leading to a threat reduction and overall conservation result.

2013). This overall objective will be reached using a survey based approach that analyzes visitor feedback to conservation organizations using the Theory of Change Metrics.

3. WSYC Cheetah Outreach Methods

Project methods were quite simple - distribute a survey link to as many Cheetah Outreach visitors as possible during an 18 day stay in Somerset, South Africa. This was done by passing out a WSYC custom made flyer that included a short project description and a link to the project survey (Figure 2).

The project survey was created using survey monkey and asked a series of 8 likert scale and free response questions (Appendix 1). Questions focused primarily on assessing the Theory of Change Metrics (Figure 1). Respondents were in no way able to be identified after submitting responses. Certain respondents who were willing to be interviewed for the video footage portion of the project provided their consent prior to filming. Other on-site project details included discussing the goals and purpose of the Cheetah Outreach with volunteers and staff members to gain a better understanding of the program.

In addition to passing out survey links, video footage of Cheetah Outreach activities and public involvement was gathered each day. Permission was given to film by the Cheetah Outreach and by any individuals interviewed. Once home from the Cheetah Outreach, the

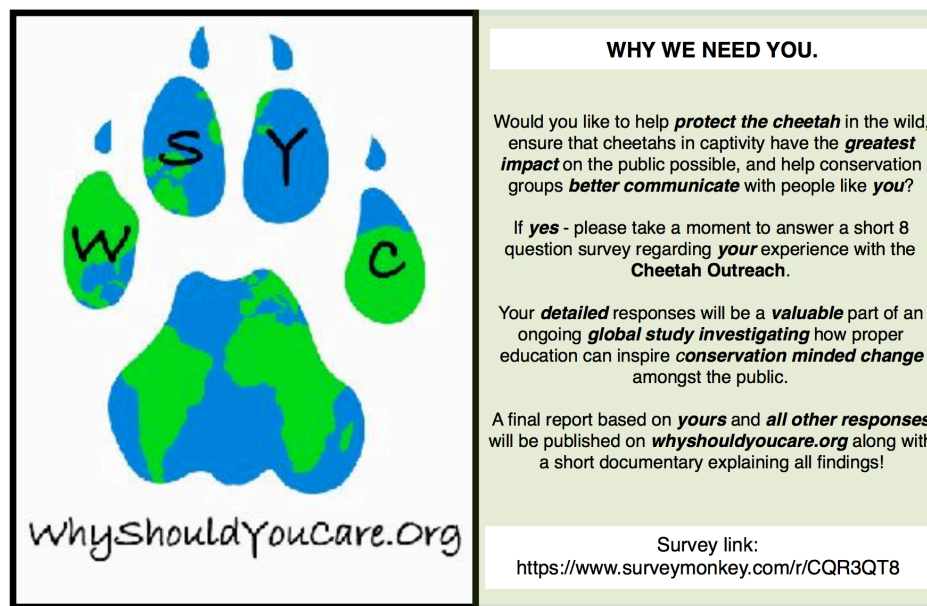


Figure 2 - The survey flyer passed out to visitors at the Cheetah Outreach.

project videographer and researcher began compiling footage to make the short documentary videos. The videos were uploaded on a Vimeo site (vimeo.com/whyshouldyoucare) for free use by the Cheetah Outreach at fundraising and/or other educational events. Video files were also emailed directly to the Cheetah Outreach.

In addition to the creation of videos, qualitative survey response analysis was carried out using Nvivo for Mac data analysis software. Nvivo allowed for the import of all response data once extracted from Survey Monkey (Appendix 2). Data analysis used coding for specific words related to each question's associated Theory of Change Metric (Charmaz, 2006). In this way,

themes and ideas that emerged from survey responses were able to be identified along with information about how visitors connected with the work of the Cheetah Outreach (Table 1).

4. WSYC Cheetah Outreach Results

While over 60 survey fliers were passed out during the 18 day period, a total of 13 respondents completed the survey via survey monkey. In addition, 15 in person interviews were also carried out for video footage inclusion and data interpretation. Future WSYC projects will consider how to encourage higher response rates, but data analysis given the 13 valuable responses (Appendix 2) proved insightful nonetheless.

Questions 1 and 2 asked each respondents gender and age. Based on survey results, 46.15% of respondents were between the ages of 15-30 years old, 38.46% were 31-46 years of age, and 15.38% were between the ages of 47-62. Of the 13 respondents, 8 were female and 5 were male.

4a. Qualitative Themes and Coding

After selecting a desired likert scale response to questions 3-7 (Appendix 1), respondents were then given the option to provide a brief open-ended explanation of the reasoning for their answers to each question. Each survey question was pre-designed to correlate specifically with one of the five Theory of Change metrics (Table 1).

Table 1. Survey questions and associated theory of change metric.

Survey Question	Associated Theory of Change Metric
Q.3 - After visiting the Cheetah Outreach, my knowledge of the reasons for cheetah conservation has...	Knowledge
Q.4 - After visiting the Cheetah Outreach, my attitude towards cheetah conservation has...	Attitude
Q.5 - After visiting the Cheetah Outreach, my ability to talk to others about cheetah conservation has...	Interpersonal Communication
Q.6 - After visiting the Cheetah Outreach, my ability to do something to help protect the cheetah has...	Barrier Removal
Q.7 - The likelihood of me actually doing something different to help protect the cheetah has...	Behaviour Change

In Nvivo, open-ended responses to questions 3-8 were then coded and categorized into emergent themes based on their correlation to each pre-set Theory of Change metric (Appendix 3). Coding for emergent themes within the already pre-set Theory of Change metrics allowed for new insights into response data (Table 2). Such emergent themes were not pre selected - but based simply on commonalities discovered between responses during analysis (Charmaz, 2006).

Question 8 did not offer a likert response choice, only a final free-response option for visitors. Responses to Question 8, *"In your opinion, what three things will you remember about your time at the Cheetah Outreach and why,"* provided emergent responses categorized as either scientific, emotional, or descriptive statements.

Table 2 - Emergent response themes coded for within each related Theory of Change Metric.

Theory of Change Metric	Emergent Themes Coded For
Q3 - Knowledge	Increases in knowledge
	Prior gaps in knowledge
	Topics of knowledge
Q4 - Attitude	Attitude before
	Attitude after
Q5 - Interpersonal Communication	Increased likelihood of sharing
	Topics to be shared
Q6 - Barrier Removal	Inability to help
	What can be done to help
Q7 - Behaviour Change	Unsure how to change
	Ideas to change
Q8 - "Final Say"	Descriptive memories
	Scientific memories
	Emotional memories

4b. Quantitative Results

In addition to qualitative analysis using the metrics and emergent themes coded for, a brief quantitative analysis of survey results showed how respondents were influenced for each metric. Survey respondents did not know that each question they answered was related to a specific Theory of Change metric. However, quantitative data analysis of responses suggests *how* that metric was impacted if/at all for each Cheetah Outreach visitor. Having a numeric value to represent metric influence per question is important to understanding how the overall goal of conservation education is reached.

Question 3 results - Knowledge:

*"After visiting the Cheetah Outreach, my **knowledge** of the reasons for cheetah conservation has..."*

Survey Answer Choice	Percentage of Respondents
Strongly changed	46.15%%
Changed	30.77%
Remained the same	7.69%%
I do not feel I have knowledge of the reasons for cheetah conservation	15.38%

Question 4 results - Attitude:

*“After visiting the Cheetah Outreach, my **attitude** towards cheetah conservation has...”*

Survey Answer Choice	Percentage of Respondents
Strongly changed	38.46%
Changed	7.69%
Remained the same	30.77%
I do not have a specific attitude towards cheetah conservation	23.08%

Question 5 results - Interpersonal Communication:

*“After visiting the Cheetah Outreach, my **ability to talk to others** about cheetah conservation has...”*

Answer Choice	Percentage of Respondents
Strongly changed	38.46%%
Changed	38.46%%
Remained the same	7.69%%
I do not feel I have the ability to talk to others about cheetah conservation	15.38%

Question 6 - Barrier Removal:

*“After visiting the Cheetah Outreach, my **ability to do something** to help protect the cheetah has...”*

Answer Choice	Percentage of Respondents
Strongly changed	23.08%%
Changed	38.46%
Remained the same	15.38%
I do not feel I have the ability to do something to help protect the cheetah	23.08%

Question 7 - Behavior Change:

*“After visiting the Cheetah Outreach, the **likelihood** of me actually doing something different to help protect the cheetah has...”*

Answer Choice	Percentage of Respondents
Strongly changed	23.08%
Changed	30.77%
Remained the same	30.77%
I do not currently plan to do something to help the cheetah	15.38%

5. WSYC Cheetah Outreach Discussion of Results

Knowledge:

Based on quantitative responses, 77% of survey respondents had a change in knowledge after their visit to the Cheetah Outreach. However, 15.38% stated that they did not have knowledge of the reasons for cheetah conservation. A total of 8% of respondents felt that their knowledge remained the same and did not change after visiting the Outreach.

Based on quantitative responses, the knowledge metric appeared to be overall positively influenced among visitors. Many visitors shared similar responses which were coded under the emergent theme - *increases in knowledge*. This coding theme included statements of increased knowledge of the “threats that cheetahs face in the wild” and pleasant “surprise” with the knowledge of the guarding dog program. Another respondent stated that the handlers had “good explanations” that also lead to their increases in knowledge.

However, one visitor stated that they “did not learn anything new” because they “did not participate in a tour”. *Perhaps this suggests that visitors who do not pay for a tour or a wildlife encounter might be offered another interactive avenue to learn about cheetah conservation.* There were several visitors who attributed their *prior gaps in knowledge* to “ignorance,” “being unaware,” and “not realizing,” the decline of cheetahs in the wild.

Interestingly, some themes were also found within the knowledge metric that helped to identify what topics visitors remembered. One respondent included in the *prior gaps in knowledge* category (Appendix 3) that they did not know about the “abuse directed towards cheetahs.” Knowledge of the abuse towards cheetahs was non-existent for this respondent prior to their Cheetah Outreach visit. Knowing of the abuse (to this respondent) had an impact on visitor knowledge experience. Another respondent shared that prior to visiting, they thought the Cheetah Outreach was a “zoo.” *This could suggest that further distinguishing between the work of a zoo and of an ambassador animal program might be of value to the work of the Cheetah Outreach.*

Knowledge of the importance of cheetahs to their surrounding environments and the roles they play within their natural habitat was not mentioned. *Gains in this knowledge might give visitors a more well rounded view of the cheetah inspiring them to value their presence in the wild in addition to just having knowledge of the challenges they face.* Overall, increases in knowledge were positive, but perhaps a great focus could be placed on the value of an ambassador program and the importance cheetahs have within their ecosystems.

Attitude:

Of the respondents, 46% claimed that their attitudes towards cheetah conservation did change after visiting the Outreach while 31% claimed that their attitudes remained the same. *This suggests that perhaps methods to change the attitudes of Cheetah outreach visitors might be an area worth future focus.*

Despite claiming their attitudes changed, most respondents were not able to give specific examples of how they changed. Interestingly, more respondents shared statements suggesting explanations of further gains in knowledge rather than attitudes. *However, based on all other provided responses, it is fair to infer that visitors' attitudes towards cheetah conservation became more sympathetic after visiting the CO.*

The emergent codes of *attitude before* and *attitude after* visiting the Outreach included statements such as, "I was unaware of the conflict between cheetahs in the wild and farmers." Another included that cheetahs are "extremely complex creatures" which suggests a potential attitude of appreciation for the species.

The fact that respondents associated knowledge related statements with an attitude specific question is interesting. One respondent did say that they already thought cheetah conservation was "important before their visit." *This suggests that perhaps identifying ways to bring others to the Cheetah Outreach who are not immediately interested in wildlife conservation could enhance changes in the public's attitudes.* Drawing people to the Outreach who don't know about cheetah conservation might be a greater way to reach a wider audience - not just those already looking forward to interacting with a cheetah. *This could be possibly done by reaching out to various donors and sharing the online video portion of this project with them.*

It would be interesting to ask the 23% of respondents who claimed they had no specific attitude towards cheetah conservation *why* that is. Changing visitors' attitudes is an important step in the effort to encourage public involvement with conservation. Like in the knowledge category, *it might be useful to educate visitors of the natural value of cheetahs to surrounding wildlife and ecosystems as well.* Perhaps in this way, the attitudes of visitors will become more globally minded - in addition to the emotional impact felt from interacting with an ambassador animal.

Interpersonal Communication:

A total of 77% of respondents stated that their ability to talk to others about cheetah conservation had changed after visiting the Cheetah Outreach. This is a strong percentage suggesting that the knowledge gained at the Cheetah Outreach increases the ability of visitors to share what they have learned with others. Interpersonal communication survey results held the greatest amount of feedback amongst survey responses.

From the open-ended communication responses, the emergent codes - *increased likelihood of sharing* and *topics to be shared* - were created in Nvivo. One respondent shared, "I feel I have more knowledge to talk" while another also attributed gains in knowledge to feeling more "comfortable educating" others. Another respondents shared that having a "first hand experience" helped them to be more likely to talk about cheetah conservation. *Overall, it seems that the greater the increase in their knowledge - the more likely visitors are to discuss what they learned with others.* Through this spread of knowledge - it is possible to also inspire changes in attitudes amongst a larger audience as visitors travel back home. In addition to reaching out to donors directly, interpersonal communication can encourage others outside of wildlife conservation to possibly show an interest in visiting the Cheetah Outreach. *It is important that visitors continue to walk away feeling excited to share what they learned from a global perspective.*

Further respondents included that they would share how “beautiful and engaging the species is,” “the challenges they face,” and “issues cheetahs face with inbreeding.” It is positive to see that they are willing to share about specific examples of cheetah conservation rather than just their beauty. It would be interesting to see how many visitors come to the Cheetah Outreach after learning of the program from previous visitors. Sharing knowledge and talking with others is one way to encourage conservation, but direct action from the public must also be taken. *Researching how increased communication leads to direct action would be interesting. This might be done by following up with visitors weeks or months after their Outreach visit to inquire what if any actions they have taken to encourage cheetah conservation.*

Barrier Removal:

In this study, the “barrier” was an inability to do something to help cheetah conservation. Results show that 62% of respondents felt that their ability to do something to help cheetah conservation did change. 23% felt that they did not have the ability to help with the work of cheetah conservation while 15% claimed their ability to help remained the same.

Using Nvivo, responses were coded into two emergent themes - *unsure how to change* and *ideas to change*. Within the first theme, one respondent shared that “no one explained how” to do something to help cheetah conservation. Another respondent felt that because they “live in a country with no cheetahs” they could do nothing to help.

These responses suggest that perhaps a portion of Cheetah Outreach activities should inform visitors of what they directly can do to help cheetah conservation - whether or not they live near to them. In fact, one respondent shared that “more focused needs to be placed on informing people how they can help” cheetah conservation.

However, other respondents shared that they could help by donating and volunteering. *While these are needed and great methods to help, perhaps examples of how to get involved influencing others for change and living more sustainable lives could also be shared.* More evidence should be provided to guests that makes them feel a part of the solution - not that they just know more about the problem. Making wildlife conservation relatable and accessible might also influence changes in attitudes amongst the public regarding their ability to make a difference. Encouraging the value of public action for the plight of the cheetah might be beneficial to the conservation of cheetahs in the wild. *Perhaps informing visitors of additional groups working to protect natural areas in Africa could provide better connectivity and inspire ideas amongst visitors. This would also increase interpersonal communication leading to the spread of more conservation information.*

Behavior Change:

Lastly, just over half of respondents (54%) claimed that their likelihood of doing something different to help protect the cheetah changed. However, 30.77% of respondents claimed that their likelihood of taking action remained the same as when they first entered the Cheetah Outreach.

Two emergent codes were created in Nvivo - *unsure how to change* and *ideas to change*. Respondents shared that they “really want to” do something, but they are “not sure how”. Accompanying this idea, another visitor shared that there needs to be “more focus on how humans can change their ways to protect these animals.” Of the responses on how to change their ways - it appears that “financial donation” was the first inclination.

This information suggests that visitors don’t leave the center knowing exactly how they can make changes to help. Perhaps relating cheetah conservation to everyday activities and environmental decisions might be an area of future educational focus. While staff and volunteers are kept quite busy each day with tasks at the Cheetah Outreach - *it is important that visitors leave knowing at least one or two things they can personally do to help protect wildlife.*

Increased discussion, knowledge, and changes in attitudes are important steps in wildlife conservation, but without changes in public behavior - a piece of the puzzle remains missing. *Perhaps a board showcasing how visitors can directly get involved at home (in addition to donating) can be placed near to the Cheetah Outreach entrance/exit. An interactive “educational experience” encouraging visitors to gather and discuss ideas of what can be done to help cheetah protection would also benefit the work of the Outreach.* Group discussion leads to the advancement of ideas, increases in interest, and eventually inspired action.

Question 8 Final Say:

Answers to the question, “*In your opinion, what three things will you remember about your time at the Cheetah Outreach and why,*” fell within the descriptive, emotional, and scientific emergent codes.

Visitors shared they would remember that cheetahs “purr loudly” and that “they are as playful as domestic cats.” Others included that they would remember the “cheetah cub encounter” and how “calm the cheetahs can be.” These are all great descriptions of the cheetahs that left lasting impressions on the visitors.

Additionally, many responses included statements of emotional reflections. For example, visitors shared that cheetahs are a “graceful and beautiful animal that needs help in a hostile and ignorant world.” Another shared that they felt “really emotional after” their cub encounter. Importantly, another respondent included that they “previously thought all big cats were for the most part dangerous to be around.” *This is important to know that the culture of being afraid of cheetahs and seeing them as cruel predators can be positively influenced by the Cheetah Outreach.* Culture has been cited by researchers as one of the leading influences against wildlife conservation. Realizing this, the Cheetah Outreach should continue to maximize on encouraging a shift in culture for visitors that encourages the appreciation of wildlife in their natural habitat. *This might be done by relating how the presence of cheetah influences other trophic levels that we ultimately depend on as one planet.*

Another respondent also shared that they would remember how “ignorant” they were of the “risks the species face” before coming to the Outreach. Two respondents shared they would remember the “farm dog program” while another included the “fragile state of the cheetah population.” Several respondents also included statements recognizing the “knowledgeable handlers” and “informed staff”. Overall, it appears that visitors to the Cheetah Outreach do leave with all around positive memories of their time.

It is worth sharing that one respondent did not feel that they were able to learn much at the cheetah outreach because of the lack of “organization” when “handling visitors.” This respondent further shared that their group was left with “mixed messages about the outreach” because of their “frustration with lines and tour groups fighting to get into the interactions.” *Perhaps a better explanation on busy days of how the waiting process works could be shared with visitors before they purchase a ticket and head to the enclosure area.*

6. WSYC Cheetah Outreach Concluding thoughts

Changes in visitor knowledge is the first step to initiate further conservation related changes in an individual based on the Theory of Change Metrics (Figure 3). Overall, it appears that the Cheetah Outreach does do a great job at spreading knowledge of certain aspects of cheetah conservation with visitors. Of all survey question responses, positive changes within the knowledge metric were among the most frequently shared. However, knowledge of the importance of cheetahs to their surrounding environments and the roles they play within their natural habitat could be of future focus. Gains in this type of knowledge might give visitors a more well rounded view of the cheetah - inspiring them to value their presence in the wild from a more holistic view point. Consideration should also be given to provide a more educational

experience for visitors who do not participate in an encounter or tour. Perhaps updating signs or creating interactive diagrams and discussions hosted by volunteers could increase knowledge.

Interestingly, although certain gains in knowledge were easily shared by respondents, specific reasons for changes in attitudes were not. Of all the metrics, the attitudes of visitors to the Cheetah Outreach were the least positively impacted. Further research might consider how changing attitudes is possible and what prevents changes in attitudes from occurring - despite gains in knowledge. One respondent did share that they already thought cheetah conservation was “important before their visit.” This suggests that perhaps identifying ways to bring others who do not have prior attitudes of interest in cheetah conservation to the Outreach might be beneficial. Interestingly, there were no emotional comments from respondents related to their attitudes towards cheetah conservation. Influencing the attitude metric among visitors should be of future focus.



Figure 3 - Theory of Change Metrics in order of influence on Cheetah Outreach visitors
(1 = influenced the most, 5 = influenced the least)

However, what visitors lacked in changes in attitude they made up for in their desire to share what they learned and felt at the Cheetah Outreach with others. While the information shared with others could be a bit more well-rounded, visitors were more likely to talk nonetheless. Communication and the sharing of information and experiences is an important way to encourage change amongst the Theory of Change template. It is exciting to know that visitors to the Cheetah Outreach do feel more capable of sharing what they gain in knowledge with others. Because visitors come from around the world - the work of the Cheetah Outreach is able to be more easily shared from first-hand accounts. However, this is all the more reason why special care should be taken to ensure that information regarding all areas of cheetah conservation is presented to visitors; *like their roles in the wild, how they impact ecosystems, the human-wildlife conflict, and the roll of ambassador animals like those at the Cheetah Outreach.*

Informing visitors of how they can directly help with cheetah conservation outside of donations should be of future consideration. There were not many respondents who were able to give more descriptive and knowledge fueled responses for how they can aid in the Cheetah Outreach's global effort to encourage the conservation of the cheetah. But they did share that they enjoyed the experience that they did have fun while visiting the Cheetah Outreach. Perhaps making visitors feel partly responsible for the endangerment of cheetahs in the wild - whether through their own decisions or lack of action - is one way to motivate changes in attitude.

In a similar way, providing visitors with examples of how they can make lifestyle changes to conserve the planet and cheetahs' ecosystems might be beneficial (in addition to making donations and volunteering). Many visitors felt that they were moved and touched by their interactions and time spent at the Cheetah Outreach, but not enough were able to carry home what they learned to make definitive changes - based on response data. Respondents shared that they were likely to share with others the threats cheetahs face, but were unsure of other ways to help outside of making donations. Realizing this, it would be interesting to see how

many visitors continue to make a donations after leaving the Cheetah Outreach. Understanding how visitors' experiences translate into donations would be of potential interest to the Cheetah Outreach in order to gain more public financial support. A small study following up with visitors or tracking donations based on activities undertaken at the Cheetah Outreach might prove valuable towards understanding how to encourage public involvement.

Finally, when looking at the flow of the Theory of Change metrics (Figure 3) the Knowledge and Interpersonal Communication metrics among visitors was greatly enhanced. The Barrier Removal metric, or the ability of visitors to do something to help with cheetah conservation was also enhanced, but could be of more focus. Lastly, the Attitude and Behavior Change metrics were the least impacted based on survey feedback. These insights into how visitors are impacted at the Cheetah Outreach based on metrics can help the organization have a deeper look into the effectiveness of the work done each day for cheetah conservation.

In conclusion, the Cheetah Outreach is taking great strides to increase the public's involvement and understanding with wildlife conservation. Together, the results of this project summary suggest that the Cheetah Outreach is capable of reducing the threat of a lack of human involvement with wildlife conservation. Reducing this threat can lead to the ultimate conservation goal of enhancing the public's education with wildlife conservation.

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Appendix 1 - Survey Questions

1. What is your gender?
2. How old are you?
3. After visiting the Cheetah Outreach, my knowledge of the reasons for cheetah conservation has... Please provide detail for your answer below...
4. After visiting the Cheetah Outreach, my attitude towards cheetah conservation has... Please provide detail for your answer below...
5. After visiting the Cheetah Outreach, my ability to talk to others about cheetah conservation has... Please provide detail for your answer below...
6. After visiting the Cheetah Outreach, my ability to do something to help protect the cheetah has... Please provide detail for your answer below...
7. After visiting the Cheetah Outreach, the likelihood of me actually doing something different to help protect the cheetah has... Please provide detail for your answer below...
8. In your opinion, what three things will you remember the most about your time at Cheetah Outreach and why?

Appendix 2 - All survey responses taken directly from Survey Monkey

Question 3:

After visiting the Cheetah Outreach, my knowledge of the reasons for cheetah conservation has...

1. I did not know about the abuse directed towards cheetahs, largely due to ignorance
2. Wasn't aware of just how endangered the cheetah is in its natural habitat
3. Good explanations, handlers took time to answer questions and provide a very personalized experience

4. I did not realize how drastically the number of cheetahs had declined in the past several years. It is very encouraging to see that the conservation of the cheetahs has been a well thought out process that is beneficial to many
5. No one explained to us anything
6. I thought the conservation's purpose had a lot more to do with trying to bring the animals back in to certain areas of the wild where they aren't currently. I was surprised to see how much work they do to protect the animals through the farm dog program.
7. I'VE BEEN MADE AWARE OF THE VARIOUS CHALLENGES CHEETAH'S SURVIVAL FACE, AND THE INCREASING THREAT HUMAN BEHAVIOUR CAUSE TO THEIR EXISTENCE.
8. I work with cheetah, so already have a reasonable amount of knowledge on cheetah conservation. However I gained some more knowledge during my visit to cheetah outreach
9. Before i tought it was a zoo, but apparently it is far beyond that.
10. We did not participate in a tour, we just looked around so I didn't learn anything new, just enjoyed seeing the animals.

Question 4:

After visiting the Cheetah Outreach, my attitude towards cheetah conservation has...

1. Now much aware of just how endangered the cheetah is, and also unaware of the conflict between cheetahs in the wild and farmers fearing for their livestock. Issues of inbreeding and reduced natural propagation of species in the wild I was totally unaware of.
2. I believed before my visit that cheetah conservation was important and still do now
3. I've always understood the need to protect these animals.
4. CHEETAHS ARE EXTREMELY COMPLEX CREATURES THAT REQUIRES SPECIALIST CARE, AND IS NECESSARY TO REHABILITATE AND RE-INTRODUCE TO WILD.
5. Cheetah conservation is something I am very passionate about
6. As above

Question 5:

After visiting the Cheetah Outreach, my ability to talk to others about cheetah conservation has...

1. I feel I have more knowledge to talk about the risks that cheetahs are facing in their natural habitat, from competition for food with other large predators, from reduced habitat as people encroach on land, from threats by farmers, and the issues the cheetah is facing with breeding, inbreeding, and reduced numbers of Cubs being born. Also I think that my encounter with the Cubs showed me just how beautiful and engaging the species is, which makes it even more appealing to try to educate people that I encounter about the risks the cheetah faces.
2. After visiting I am able to share more facts about conservation itself as well as the way that the cheetahs effect the environment as well as the other animals
3. I don't have information about the cheetahs except of nationality geographic
4. I'm definitely much more knowledgeable on the topic so I'd feel comfortable educating people on it.
5. I AM FACTUALLY MORE INFORMED TO INFORM OTHERS RE CHEETAH CONSERVATION AND THE CHALLENGES THEY FACE.
6. Having first hand experience at cheetah outreach and gained Ng more knowledge helps me to talk about this
7. In a positive way.

Question 6:

After visiting the Cheetah Outreach, my ability to do something to help protect the cheetah has...

1. Knowledge and education is always the first step in attempting to try to help protect an endangered species. Talking about the program and the ambassador role the cheetah has in education of the public is a great way to draw attention to the risks the cheetahs face. Encouraging other people to learn for themselves and educate themselves and others can help. Fostering education, donation, animal sponsorship through programs like this should help.
2. I am able to help by supporting these cheetahs and other animals through my donation and awareness
3. No one explained how to do so
4. I definitely see new ways I could confidently help the cause through donating or volunteering.
5. I DO BELIEVE THAT MORE FOCUS SHOULD BE PLACED ON INFORMING PEOPLE HOW THAT CAN HELP IN CHEETAH PROTECTION.
6. As above. More knowledge and having visited myself now
7. Live in a country with no Cheetahs

Question 7:

After visiting the Cheetah Outreach, the likelihood of me actually doing something different to help protect the cheetah has...

1. Not sure how I can help, apart from financial donation. My awareness is raised in the event I see an opportunity to make a difference
2. Just learning they are just so majestic and beautiful yet so at risk was quite shocking to me. It makes me really want to do something to. Help them.
3. Now that I know the goals and the efforts of the conservationists, I am able to apply my support in various ways remotely
4. MORE FOCUS REQUIRED ON THE VARIOUS PRACTICAL CHALLENGES THESE ANIMALS FACE AND HOW WE AS HUMANS CAN CHANGE OUR WAYS TO PROTECT THESE ANIMALS.
5. Will continue to educate people as part of my job.

Question 8:

In your opinion, what three things will you remember the most about your time at Cheetah Outreach and why?

- 1 Cheetahs are a graceful and beautiful animal that needs help in a hostile & ignorant world; they purr loudly; they are as playful as domestic cats
2. Cub encounter was incredible, and I felt really emotional afterward, especially at my ignorance of the risks the species face.
The ambassador role of these cheetahs is a great way of engaging the general public in their plight, as are the encounters to personally involve people.
The passion and care of all the staff at the centre for their work and the animals they work with and for was inspiring.
3. Cheetah cub encounter, the utmost care to put the animals first, knowledgeable handlers
4. I will remember the fact that there is a way to help conserve animals without harming others. The addition of the dogs is very clever and truly shows that the conservationists have all animals in mind.
5. The farm dog program that helps prevent farmers from killing cheetahs and several other animals. 2) How calm the cheetahs can be around humans. Previously I thought all big cats are for the most part dangerous to be around under any circumstance. 3) Seeing how social the meerkats were.

6. THE INFORMED STAFF THE FRAGILE STATE OF CHEETAH POPULATION THE VARIOUS CHALLENGES THESE ANIMALS FACE.
7. Friendly people. Meeting Grace the Caracal and learning how they are effected my farmers and the guarding dog program as well. Learning about the cheetah scent dogs
8. Anotolian shaperds, one leged fox and of course our encounter with the cheetahs
9. The need for the Cheetah Outreach to better organize how they handle visitors. The petting and interactions needed to be better managed or visitors given a number/time to interact. The frustration with lines and tour groups fighting to get into the interactions left myself and my group with mixed messages about the outreach
10. Male cheetahs are more "social" than females. 2. I appreciated the number of volunteers helping out 3. Loved the other animals as well as the cheetah
11. Ebony the Cheetah, getting to meet her and get up close and personal. The staff friendliness and willingness to share information. Although If I did a tour I feel I could have gained a lot more knowledge. I enjoyed meeting volunteers from abroad and seeing their excitement and enthusiasm about being there.

Appendix 3 - Example of a set of coded responses to question 3

Screen shot taken from Nvivo Data Analysis Software.

Internals\\survey responses\\Q3 Responses (KNOWLEDGE)

9 references coded, 13.48% coverage

I did not know about the abuse	<i>Reference 1: 1.03% coverage</i>
due to ignorance	<i>Reference 2: 0.60% coverage</i>
Wasn't aware of just how endangered	<i>Reference 3: 1.29% coverage</i>
I did not realize how drastically the number of cheetahs had declined	<i>Reference 4: 2.50% coverage</i>
No one explained to us anything	<i>Reference 5: 1.12% coverage</i>
I thought the conservation's purpose had a lot more to do with trying to bring the animals back in to certain areas of the wild	<i>Reference 6: 4.44% coverage</i>
was surprised	<i>Reference 7: 0.52% coverage</i>
Before i tought it was a zoo	<i>Reference 8: 0.95% coverage</i>
I didn't learn anything new,	<i>Reference 9: 1.03% coverage</i>