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The Impacts of Profound Wildlife Experiences

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Abstract
Profound experiences with wildlife have been identified as potential triggers for changing the way people feel and act towards wildlife. However, there has been little systematic research into the impacts of these experiences on the lives of those who experience them. This qualitative study investigated the types and strength of impact associated with profound wildlife experiences. A rigorous process of analysis of in-depth interviews with individuals who self-identified as having had profound wildlife experiences revealed common themes about how they perceived their experience to have impacted their feelings and actions toward the species experienced. Findings ranged from experiences perceived to have had little or no impact to having been a watershed or pivotal moment in their lives. In this latter category, the experience was perceived by interviewees to have led to marked attitudinal impact and behavioral change. It is suggested that there are several potential beneficiaries of profound wildlife experiences, including the human participants themselves, wildlife tourism operators, and the species concerned. Several avenues for future research are outlined.

Keywords: attitudes, behavior, impact, profound experience, wildlife

Profound experiences can sometimes be responsible for significant changes in the lives of those who experience them (see, e.g., Waldron 1998). However, investigations linking the perceived impact of profound experiences with factors that trigger them are relatively rare. This is certainly the case for profound experiences that have been triggered by interaction with, or observation of, wildlife. A popular view, exemplified by Valentine and Birtles (2004, p. 15), is that "Humans often have extremely intense and deeply personal experiences through wildlife watching and this may lead to outcomes that are extraordinary in their impacts on people's lives." While such an assertion can be corroborated by anecdotal observations, there is little systematic evidence to validate it, or which has explicitly examined the nature or character of this "extraordinary" impact. Understanding the ways in which profound wildlife experiences impact humans is useful, because if the impacts are significant, a rationale emerges for strategically fostering their occurrence, particularly when benefits both to the individual and animal result.

Is there reason to believe that human encounters with wildlife can actually produce the magnitude of outcomes suggested by Valentine and Birtles, among others? The aim of this study was to investigate answers to this question from the perspective of people who believe they have had profound experiences with wildlife. Our central objective was to identify the form and extent of impacts they associated with their experiences as a step toward understanding how such encounters might be theoretically linked both to improving people's lives and to strengthening support for wildlife conservation. Since profundity requires explanation, we begin by presenting the construct of profound experience and highlighting examples of significant impacts on individuals associated with them.

Qualities of Profound Experience

Although no standard definition of profound experience appears in popular use, related constructs have been established. Among these are mystical experience (James 1929), numinous experience (Otto 1959), ecstasy (Laski 1961), peak experience (Maslow 1968; 1994), extraordinary experience (Arnould and Price 1993), and the concept of flow (activity where the skills of an individual match the difficulty of the challenge) as introduced by Csikszentmihalyi (1975; 1990). While each is described with different words and is examined in a range of different contexts, four experiential qualities recur in descriptions of these types of experiences. These qualities are:

1. Loss of temporal and spatial perception.
2. Loss of self consciousness.
3. Detachment from everyday life.
4. Intense focus on a stimulus or object.

DeMares (2000), in one of the few studies on profound experiences involving wildlife, found five invariant themes in her examination of peak experiences with cetaceans: those of intention (the feeling that the animal wanted or chose interaction), reciprocity (a sense of exchange between the human and the animal such as through eye contact), aliveness (positive and ineffable feelings), connectedness (a lasting connection with the individual animal and species), and harmony (an appreciation of how the animal(s) live in harmony with their surrounds). While DeMares' themes differ with respect to the aforementioned experiential qualities, they appear different mainly in that they are more specific to human–wildlife encounters.

In addition to common qualities of profound experiences, there is also some agreement about common causes. Research on profound experience generally, and the limited research into profound wildlife experience specifically, has often focused on identifying factors that trigger the onset of such experiences. Indeed, the stimuli that facilitate profound experiences have been called triggers (Laski 1961), although other terms such as "requisite stimulus" (James, 1929, p. 378) have also been used. Explanations of mystical, peak, numinous, ecstatic, flow, and extraordinary experiences have invoked a range of possible triggers. These include sexual activity (Laski 1961; Maslow 1968, 1994; Quarrick 1989), religious experience (James 1929; Otto 1959; Laski 1961; Greeley 1974; Csikszentmihalyi 1975, 1990; McDonald and Schreyer 1991) and experiences in nature (James 1929; Laski 1961; Greeley 1974; Rosegrant 1976; Hood 1977; McDonald and Schreyer 1991; Arnould and Price 1993; DeMares 2000). Both DeMares (2000) and Laski (1961) have specifically noted that wildlife interaction and observation can act as causal factors for peak and ecstatic experiences, respectively.

Psychological Impacts of Profound Experiences

Anecdotes abound in the published literature about the impact of profound experiences. Maslow (1994, p. 59), for example, describes people's tendency to perceive the world as a unified whole during peak experiences, stating that this revelation "can be so profound that it can change the person's character and his Weltanschauung [life view] forever." Elsewhere, Maslow's (1968; 1994) observation of patients who had been spontaneously cured of psychological disorders following peak experiences led him to conclude that peak experiences are often regarded by these people as being among the most important in their lives. Braud (2001, p. 109) wrote that the memories of his own experiences of experiencing tears of "wonder-joy," "serve a guiding function" in his life. Csikszentmihalyi (1990) offers accounts of people whose thought processes appeared to be changed as a result of experiencing flow state and suggests that flow therapy might be a potential solution to suicidal personalities (an assertion previously advanced by Maslow). Similarly, Csikszentmihalyi and Csikszentmihalyi (1992) suggest that beneficial effects of flow include improved interpersonal relations and decreased stress levels. Improved well-being and happiness (Walker, Hull and Roggenbuck 1998), improved mental organization (Laski 1961), and a reduction in stress and anxiety (Csikszentmihalyi 1990) also have been cited as positive psychological outcomes of profound experience.

In relation to wildlife experiences, evidence suggesting a marked impact on psychological wellbeing is limited. While the potential of animal-assisted therapy (AAT) is now well recognized (Nimer and Lundahl 2007), AAT programs are generally limited to encounters with domestic or domesticated animals. While there is debate about the impact of wild animal interactions on the animals involved, some analysts have also commented on the potential of encounters with wild animals to produce positive psychological outcomes. For example, DeBergerac (1998) argues that particular brainwave patterns experienced during dolphin interactions can lead people to overcome addictions, anxiety, illness, depression, and phobias. She also asserts that long-term personality transformations are possible, with an increase in "abstract thinking, stability, conscientiousness, boldness, imaginativeness, and self-control" (p. 124) resulting from profound experiences with dolphins. Similarly

DeMares (2000) suggests that peak wildlife encounters can be associated with a reduction in stress and anxiety.

Behavioral Impacts of Profound Experiences
Profound experiences may also influence people's short-term and long-term behavior. The behavior could be as simple as recalling and recommending the experience to others, or it could be as significant as changes in the *modus operandi* of the individual concerned. Waldron's (1998, p. 131) study on life impact resulting from transcendent experiences with a strong quality of noesis (knowing) led her to conclude that such a feeling "demonstrates a significant shift in the lives of people." In her analysis, manifestations of this shift included changes in lifestyle, occupation, and philosophy. Likewise, Csikszentmihalyi (1990) cites an example of a young boy who was so deeply affected by a diving experience that he pursued a career in marine science.

Similar outcomes have been linked anecdotally to profound wildlife experiences. Charlton (2001) presented a collection of narrated stories about the "shaping and powerful moments" park visitors have experienced in Western Australian parks and protected areas, including several personal accounts of profound wildlife interaction. Behavioral impacts described by Charlton's participants varied widely but included such actions as taking up new hobbies like bird watching, becoming involved in research projects, and expressing oneself through poetry. Another example is Almagor (1985, p. 44), who describes being impressed by the numerous pictures and artifacts of lions at an acquaintance's house:

> But what attracted attention was the number of pictures and images of lions which filled every corner of his house. When the author asked him about all these, his answer was: "My encounter with the lions was such a thrill that one never forgets. Since then a lion is with me all the time."

Further accounts of behavioral impact are found in DeMares (2000), some of whose participants professed to have new or modified behavioral intentions about seeing more cetaceans or becoming involved in advocacy following their peak wildlife experiences.

In sum, the potential for profound wildlife experiences to produce beneficial psychological and behavioral outcomes has been a frequent focus of discussion, and anecdotal accounts of such impacts are widespread. Although discussions of these impacts are found (e.g., Valentine and Birtles 2004), they are largely not based on empirical research. The purpose of the present study was to investigate the impacts perceived by people who have had profound experiences triggered by wildlife.

Methods
Given the pre-theoretical status of this research area, the study adopted a qualitative research design, applying the principles and methods of Wengraf (2001), Creswell (1998), Tashakkori and Teddlie (1998), and Lincoln and Guba (1985). Procedures were used that would capture the subjective assessments of a sample of human participants regarding the personal impacts they felt had resulted from their profound experiences with wildlife.

Purposive sampling was employed because of the need to recruit individuals who reported having had profound wildlife experiences. According to Tashakkori and Teddlie (1998), purposive sampling is recommended in lieu of random sampling primarily when researchers are faced with the challenge of identifying individuals on the basis of predetermined criteria (in this case, having had a profound wildlife experience) and whose purpose is to explore the range of variation in responses rather than to test statistical hypotheses about theorized relationships in the data.

Because of the subjectivity of profundity, and logistical difficulties involved in locating people who have experienced wildlife in "profound" ways, three methods were used to identify and recruit participants who were both suitable and accessible for participation in this research:

1. Persons already known to or referred to the researchers;

2. A call for participation which was placed in *Zoo News*, a quarterly magazine sent to Friends of the Zoos (FOTZ), an association of supporters and volunteers at Melbourne Zoos' properties, most of whom reside in the Melbourne, Australia metropolitan area;

3. Additional people identified via snowball sampling.

The question of whether a given experience is objectively "profound" has sometimes been addressed by noting the presence or absence of certain experiential qualities, such as those identified by James (1929), Otto (1959), and Laski (1961), which were outlined earlier in this paper. However, imposing such criteria can be problematic because they may not match an individual's own subjective interpretation of the experience. For this reason, the only criterion used to determine whether potential interviewees could be included in the sample was their own assessment of whether their experience was profound.

Following employment of the recruitment methods, we collected details of people responding until no one had contacted us for two weeks and all snowball "leads" had been followed up. Eighteen potential interviewees were identified and thirteen were interviewed. Five were excluded because of time or distance constraints. Each interview began with a general question aiming to induce narrative, "Tell me about your experience." Participants were encouraged to talk at length about their encounter, after which more specific open-ended probing questions were used to explore the nature and strength of impact associated with their experience (e.g., In what way was your experience profound? Has anything resulted from your experience? How? Can you tell me more?). Interviews ranged in length from 25 to 65 minutes. All interviews were audio recorded, and notes were taken during the interview to supplement the recording.

Data Analysis

Prior to data analysis, pseudonyms were assigned to each of the interviewees ~~in order~~ to preserve anonymity. Analysis of the interview data involved several steps to reduce researcher subjectivity both in transcribing and analyzing interview data, in order to strengthen what Lincoln and Guba (1985) have termed the "trustworthiness" of the data. In the present study, this involved first deriving the researchers' initial thoughts

and inferences from the interview notes to create journal entries. These journal entries were written immediately after the interview and contained initial impressions of the impacts interviewees felt their profound wildlife experiences had had on them. Subsequently, the interviews were transcribed from the audiotapes, leading to further inferences being added to the journal entries.

Following guidelines outlined by Lincoln and Guba (1985), revised journal entries were then subjected to peer debriefing. A panel of four independent academic researchers was given the original interview transcripts and journal entries, and each panelist was asked to assess her/his level of agreement between the inferences drawn in the journal entries and the original transcripts. The journal entries were again refined, taking into account comments from the panel.

Following the procedure advanced by Richards (2005), data from the interview transcripts were coded in NVivo 2.0 according to themes that became apparent during the creation and refinement of journal entries. The data were initially divided into two main literature-derived theme categories, *impact on psychological wellbeing* and *impact on behavior*, and then further divided into sub-themes that emerged. Interviewee statements, along with corresponding journal entries, were used to develop a list of impacts that participants perceived their experiences had had on their lives.

The coding of interviewees' statements was subjected to intercoder reliability analysis (Lincoln and Guba 1985). A panel of three non-academic coders independently assigned interviewees' statements to the themes generated. Unanimous agreement in coding resulted for 92% of the statements. Statements that were not unanimously coded were discarded from the data.

Results and Discussion

Although aligning qualities of experience was not the aim of this study, many of the qualities of profound experiences identified in the introduction (loss of self-consciousness, focused attention, ineffability, loss of temporal and spatial orientation, and detachment from everyday life) were apparent. Invariant themes identified by DeMares (2000) were also apparent. For example, three of the interviewees stated that the animals chose to interact with them, supporting DeMares' (2000) "intention" theme. Similarly, eye contact, a part of DeMares' reciprocity theme, was mentioned by five respondents.

All interviewees were able to recall their experience in great detail. Indeed most stated explicitly that they frequently continued to think about their experiences. Interviewees' responses varied widely with respect to the nature and magnitude of the impact they perceived (Table 1). Themes came from the journal entries following peer debriefing, and quotations were taken from the pool of theme-allocated statements following intercoder reliability. In Table 1, these are presented subjectively in order from highest to lowest based on the participants' own assessment of the magnitude of the impact.

Table 1: Interviewees' experiences and statements about its impact

Interviewee	Species and location	Perceptions of impact
Howard	Whales, Australia	Felt that the experience "was a watershed moment". Although he was already interested in animals, it started him off on a journey with a specific interest in whales. He believes that "ever since that point there has been this underlying connection with whales" and states that he has "pursued that interest a lot".
Abigail	Whale, Australia	Felt it was a "great pivotal point or turning point" in her life at the time of the experience. Since her experience, Abigail started work in a zoo and tried to help a stranded whale.
Mary	Whales, Australia	Felt that she is now "more tuned in" to the plight of whales. When she sees "something on the news about whale strandings" she thinks "what can I do to help". She also has sought out other whale experiences and continues to desire to have marine mammal encounters.
Elwood	Tiger, Malaysia	Felt that the experience was a "significant day" in the context of his "life transition from lack of respect for some animals to admiration for all animals."
Yvonne	Providence petrels, Lord Howe Island (Pacific Ocean off Australia)	Stated that she had and would continue to "highly recommend" the experience to others and that if she hears "anything about Lord Howe Island" her "ears prick up and notice".
Mitch	Lions, hippos, rhinoceros and sea turtles, Africa	Realized that (for the first of his recalled experiences) observing the impact on others had an impact on him and that, as a guide, "you can actually influence somebody".
Katherine	Gorilla, Africa	Stated that she often thinks "of that moment" and that she can "relate to" others who have similar experiences.
Louise	Elephant, Africa	In the broader context of her life and her trip to Africa, felt that she achieved what she "set out to do" and that her elephant experience was part of that.
Libby	Penguins and seals, Macquarie Island (near Antarctica)	Worried that she may have "done damage by going there".
Saxon	Wolves, USA	Felt that the experience along with other similar experiences made him "appreciate what he had" and that it made him "think about how you go about things".

Adrian	Unknown cat species, Nepal	Felt that the experience helped him "grow as a person".
Hal	Elephant, South Africa	Felt it had little impact but believed that it was "one of the catalysts" for taking part in an overnight zoo experience.
Edwina	Albatross, New Zealand	Felt it had little impact because she already knew that she "was really interested in and passionate about wildlife".

Despite the wide range of responses, the majority of interviewees felt their experiences had some degree of impact on their lives. All saw their experience primarily as positive, but varied in their assessment of the degree of impact it had on them. Impacts ranged from "a watershed moment" (Howard) and "a great pivotal or turning point" (Abigail) to little impact (Edwina).

As shown in Table 1, the higher impact end of this spectrum is consistent with assertions made by some authors about the effects of profound experiences on people's lives. The descriptors used by Howard ("a watershed moment") and Abigail ("turning point") seem consistent with previous accounts of profound (or similar) experiences that have resulted in relatively sudden but overarching new perspectives on what is important, and/or acted as a catalyst for the individual to take new directions. For example, Abigail's decision to volunteer at the zoo is reminiscent of Csikszentmihalyi's (1990) account of the boy whose diving experience led him to pursue a career in marine science.

While in the cases of Howard and Abigail the impacts appear to be significant and align with the type of impacts suggested earlier, this was not the case for all interviewees. In reference to the impact on psychological wellbeing, some interviewees made statements about how the experience "made me grow as a person" (Adrian) or made them "think about how you go about things" (Saxon). These perceived impacts do not appear to be of the same ilk as those experienced by Howard and Abigail. The lack of consistent and strong psychological outcomes may stem from variability in psychological state or well-being of percipients at the time of the experience. Respondents did not, for example, suggest that they were suffering from stress or anxiety prior to their experience, as the subjects of Maslow, Csikszentmihalyi, and others were. A number of other factors could also contribute to the impact taking a different form (e.g., variability in experience, life stage, lead-up events).

Impact on Attitudes

Maslow (1994) asserts that peak experiences are often associated with attitudinal shift. It is thus useful to consider attitudes as a specific category of impact. At the more pronounced impact end of the spectrum, the attitudes of interviewees toward the animals experienced and their conservation appear to have shifted dramatically, whereas at the other end, existing attitudes may have been reinforced. Attitudes are positive or negative evaluations of an attitude object whether it be a thing (e.g., an individual animal or a species), a concept or idea (e.g., species or habitat conservation), or a particular behavior (e.g., donating money or volunteering to help wildlife conservation), and can be defined as "a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object"

(Fishbein and Ajzen 1975, p. 6). Importantly, attitudes are subject to change with new information (Fishbein and Ajzen 1975; Anderson 1981) and, according to Ham (2007), this change can take three forms. First, an existing attitude might be reversed (going from neutral or negative to positive or vice-versa). Attitude reversal was not obvious among any of the interviewees except Elwood, whose attitude toward animals was reversed over a prolonged period, although he chose to discuss an experience which he didn't identify as a catalyst for the change. A second possibility is that an existing attitude might be reinforced or strengthened (such as for Edwina who entered her experience with a previously established positive attitude toward animals and wildlife). A third possibility is that a new attitude might be created. This occurred with Howard, who reported having no previous attitude toward whales ("I had never much thought about whales before") but developed a positive attitude toward whales ("and I began to think … whales are pretty extraordinary stuff"). Similarly, Mary had a neutral attitude toward whales before her encounter ("It wasn't like I didn't … I didn't not care about them … I just didn't think about them much") but reported afterward that she was now "more tuned in" to issues to do with protecting whales.

Howard's, Abigail's and Mary's experiences all were with whales and were associated with strong impacts. Despite the increasing number of people going on dedicated whale watching trips (Hoyt 2000), it is probable that most people do not encounter whales in their everyday lives and hence have limited opportunity to form attitudes towards whales based on actual experiences (as opposed to vicarious experiences such as watching television documentaries). Because direct experience with attitude objects has been shown to have a stronger influence on attitudes toward the object than indirect experience (Fazio and Zanna 1981; Fazio 1990), a first direct encounter with a whale appears to be associated with a marked attitudinal shift. If true, this underscores DeMares' (2000) decision to focus on cetaceans in her study of peak experiences with wildlife.

The interview with Mitch also provided evidence for attitude formation. Although his interview was qualitatively different to the other twelve because of his many years of experience of being a guide, Mitch was able to express how his attitude towards his work and the role he played in facilitating wildlife experiences formed. Following an experience with sea turtles in South Africa, Mitch described how he reappraised the impact he could have on his visitors:

> you weren't just telling them a story or showing them animals doing things, it was … it got to me … it dawned on me that this was … that you can actually influence somebody … they were crying, watching this turtle nesting and it was a pretty emotional night.

Libby's interview provided a counterpoint to Mitch's in that she also indicated a new attitude had been formed, but her new attitude was about the impact that visitors could have on places where wildlife can be seen. She was worried about the impact she had on the wildlife on Macquarie Island and indicated that she would be nervous about returning, despite having a profound ("amazing, wonderful") wildlife experience while there.

While evidence of attitude formation toward various attitude objects was found in many interviews, attitude reversal also appeared. Elwood credited his tiger experience

for producing a strongly positive attitudinal impact toward wildlife generally, but what is perhaps noteworthy in his case was the role his tiger encounter played in a long-term attitudinal reversal that began much earlier in life. He described his childhood attitude toward animals this way:

> I'd grown up with the ideology that you killed every snake that you saw … you killed every rabbit you saw … and even when I was walking to primary school … it was a two or three mile walk … I used to carry a 22 rifle … and I was a very good shot with it … then … because I was a very good shot … I even worked as a deer culler in New Zealand, for a period.

Elwood claims that his attitude toward animals changed dramatically over the course of his life to one of care and respect for all animals. Although he attributes the time he spent culling deer in New Zealand as being initially responsible for a reversal in attitude, when questioned about the role that his tiger and canopy fauna experience had in this transformation, Elwood responded:

> that first experience with the tiger … and even with the canopy fauna … was a very significant day along that route.

Elwood's account suggests that the broader context of the experience cannot be ignored. His experience as a deer culler may have triggered an initial attitudinal reversal and this reappraisal appears to have been reinforced through a series of other wildlife experiences during his life. In this sense, the experience as a deer culler may have been a more profound experience in terms of life impact. Throughout the interview, Elwood referred to several interactions with wildlife he felt had played a role in reinforcing his attitudinal reversal, but he did not nominate his deer experience (which appeared to be most influential) as profound.

Another case in which the broader life context appears important is that of Edwina who, in describing her albatross experience, also spoke of several previous animal experiences, including a significant childhood experience:

> when I was six I walked out into the backyard of my grandmother's place … It was a little single fronted house … the back was all asphalt … fences … paling fences all around it … and my grandma followed me out and I don't know how it got in but there was this little kitten, it would have been about a month old … a month, six weeks old … and my grandmother picked it up and hurled it over the fence and I'll cry, even today. I still wonder what happened to that poor little animal … I was only a kid … I couldn't get out the gate … it was locked … and I couldn't help that little animal … and besides being upset I was very angry and I took to my grandmother … I hit her … I hit her like … you know she got pretty cross and went in and said [to my mother] your daughter is attacking me and my mother said what did you do to make my daughter angry … as a result of that I have always hated any cruelty to animals.

The impact of her childhood experience appears to have been particularly influential, as evidenced by her description of her attitudes toward animal cruelty and the different ways in which she had acted to inform others about the importance of wildlife, such as teaching wildlife values and voluntarily guiding at a zoo. Like Elwood, not only was Edwina's attitude toward the object (wildlife) influenced, but it appears her attitude toward the concept of wildlife conservation was also impacted.

Of the 18 prospective participants identified through recruitment methods, none indicated that they wanted to talk about negative experiences with wildlife. All experiences identified by participants as profound were seen as positive, suggesting that interviewees link profundity in experience with positive wildlife encounters. It is conceivable that an individual could have a profound negative experience with wildlife, and that this could lead to impacts on attitudes and behaviors related to wildlife, but interviewees in this study did not choose to talk about such experiences.

Some participants reported that their experience had very little attitudinal impact. However, this appears to be a sort of ceiling effect in the sense that these individuals already had strong wildlife-relevant attitudes and hence perceived little impact. Hal, for example, indicated that he perceived little impact from his elephant experience. Edwina downplayed the impact of her albatross experience saying that it might have been stronger had she not already possessed a deep interest in wildlife. This sort of ceiling effect on attitudinal impacts has been documented elsewhere among knowledgeable and experienced nature-based tourists (e.g., Beaumont 2001; Wiles and Hall 2005; Ham 2007).

In sum, three types of attitudinal impacts were apparent from the interviews. These are reversing existing attitudes, reinforcing existing attitudes, and creating new attitudes. Of the three, evidence associated with the formation of new attitudes was most apparent, particularly when experiences were with whales. Attitude reversal, while observed in some interviewees, was not directly associated with profound wildlife experiences. Attitude reinforcement was more difficult to detect. While these attitudinal impacts seem commensurate with the profundity of the experiences described by participants, what may be of more interest and importance is how these attitudinal influences manifest in subsequent behavior.

Impact on Behavior

Some interviewees described ways in which their behavior had changed as a result of their experience. A variety of behaviors were identified. Perhaps the most noteworthy case was that of Howard who stated that his experience triggered a commitment to whale conservation both in the form of seeking employment at a zoo and in his subsequent choices of recreational pursuits and volunteer experiences. Howard stated that he has been back to the site of his experience "several times since" and has also been a field assistant on a number of whale projects:

> I'd been seriously bitten by the bug of whales … and … and as it turned out … upon my return I was interviewed for a position here at Melbourne Zoo and got a position in the primate department and really enjoyed working with gorillas and all sorts of other fabulous animals … but there has been this … ever since that point … there has been

> this underlying connection with whales and I've pursued that … outside of my zoo work … I'm passionate about whale conservation … and I've done a number of … field assistant work for whales, in fact, I returned to that spot the very next year … doing exactly the same thing.

Abigail stated that she had tried to help a stranded whale shortly after her experience:

> It was only … about two months after … I went to help a whale that was stranded … but they'd already got the whale … I think it was a pilot [whale] … or something similar … back in.

Mary's whale experience appears to have influenced her behavior in several ways:

> I've never had a particular fascination with aquatic stuff, but yeah I always watch when there's something about whales, and like when I see something on the news about whale strandings or stuff like that it's like … oh my god what can I do to help …

She also acknowledges the impact of her experience on her decision to take part in other similar experiences. She spoke of a second whale-watching trip two years after her profound experience (which was her first whale watching experience) and also expressed her intention to undertake another experience with marine mammals:

> it actually makes me think about doing something about going to swim with dolphins and seals in the bay. So I'll do that.

A third case is that of Hal, who believes that his experience with an elephant in Africa may have been influential in his decision to choose an overnight safari camp as venue for a staff Christmas party:

> the experience we'd had at Sabi Sabi was one of the catalysts for me looking up the website zoo and thinking that the overnight experience there … whilst it wasn't going to be replicated as it was in Sabi Sabi … was at least a taste that the staff I would have thought and subsequently did, thoroughly enjoy … sort of the remoteness of it all, under the stars, the tent experience, view down over the flood plain there where the animals were grazing …

Yvonne also reported changing her behavior as a result of her experience:

> I do keep telling people that I've been there and I recommend it to people … and if they are physically fit and able to climb up the mountain … I would suggest it.

The behavioral impact of these interviewees can be categorized into two types. First, there are those behaviors which are hedonic in nature. That is, interviewees enjoyed their experience and either expressed or had acted on a desire to experience more, or similar, experiences. Where this is the case (such as with Howard, Mary, Hal and Yvonne), there are possible implications for providers of wildlife experiences (e.g.,

parks, wildlife tourism operators, zoos, aquaria). Mary and Hal have sought out similar experiences to their recounted experience. Howard returned to the place of his experience suggesting that repeat visitation is also a possibility. Finally Yvonne had told people that she recommended going to Lord Howe Island and climbing Mount Gower, the place where her experience occurred.

The second type of behavioral impact is where interviewees engaged in behavior that helped, or could help the species concerned. Howard's ongoing engagement in whale research and Abigail's attempt to try to help a stranded whale could be considered in this way.

In general, perceived behavioral impacts associated with profound wildlife experiences were less apparent than attitudinal impacts. As with attitudes, however, they ranged from marked changes to no impact. The types of significant life changes that were discussed in the introductory section of this paper were the exception rather than the rule, with most interviewees reporting that they had not, or only minimally, changed their behavior as a result of their experience.

Conclusions and Future Research

Results of this investigation add credibility to claims about the potential impacts of profound wildlife experiences. While the significance of these impacts in people's lives varies according to individual circumstance, the proposition that a wildlife encounter can lead to outcomes that are beneficial to both humans and the species encountered seems warranted. However, much remains to be learned about the processes involved and the ways in which we might expect such experiential outcomes to occur more systematically, rather than idiosyncratically.

The perceived impacts of profound experiences on interviewees' attitudes and behaviors varied greatly in this study, and in any case the small and purposive sample make it inappropriate to draw firm conclusions about the nature and magnitude of such impacts. In most cases, however, participants seemed to associate their experiences with a strengthening or positive shift of attitudes toward wildlife and wildlife protection. Three types of attitudinal impact were observed during the interviews: changes in existing attitudes (although not directly associated with profound wildlife experiences), reinforcement of existing attitudes, and the creation of new attitudes. Some interviewees reported that they had altered their behavior (in both hedonic and conservation-oriented ways) as a result of their experience. Interviewees mentioned revisiting the site and seeking out similar experiences (hedonic), and volunteering and trying to help wildlife (conservation-oriented), as behaviors resulting from their experiences.

These results suggest numerous avenues for future research. First, qualitative investigations of this type need to be conducted with a wider population of people known to have had profound wildlife experiences. Aside from DeMares' (2000) pioneering work, this study has been the first known investigation into the impacts profound wildlife experiences can have on people. It has revealed the plausibility that a certain class of outcomes can occur and that these outcomes have the potential in some cases to benefit both people and the animals they encounter. But it is unlikely the thirteen interviews have uncovered the universe of potential impacts or the ways in which each might be manifested in cognitive, affective, and behavioral outcomes.

Toward this end, additional phenomenological explorations of such impacts seem urgently needed if we are going to advance this important area of research to the stages of theory development and empirical testing.

It also seems important to advance our understanding of the time frame in which certain kinds of outcomes are likely to occur (immediate, short- and longer-term) and whether profound experiential impacts can be expected to influence a person's thinking and behavior later in life. Longitudinal research also could assess how such impacts, both perceived and objectively measured, might manifest and change over time.

Most research, including this study, has focused on the results and consequences of profound wildlife experiences. But from the perspective of those in the wildlife tourism industry who seek to foster such outcomes, more needs to be known about the *inputs* into such experiences. A long-term goal of our research is to discover ways in which tour operators, zoos, and other providers of wildlife experiences, can purposefully develop experiential products that stand the greatest chance of being profound for their customers. To do this requires a greater understanding of the input variables associated with profundity. Which suite of qualities (environmental-contextual, social, interpersonal, etc.) might correlate strongly with profundity of wildlife experience, and do these qualities vary according to the species encountered?

Conducting experimental research on the outcomes of profound wildlife experiences is difficult, due mainly to the obvious challenge of reliably orchestrating such experiences and systematically administering them to representative samples of people. Nonetheless, quasi-experiments might investigate the impacts of pre-designed experiential products (those specifically designed to produce the types of outcomes previously outlined) as a step toward better understanding the relationship between input variables and experiential outcomes. Such research should be undertaken with statistically representative samples in order to provide more generalizable findings about the impact of wildlife experiences known to possess identified precursors of profundity. Undertaking a larger-scale study would also provide an opportunity to examine variations with particular species and variations in percipients such as age, previous experience with wildlife, and pre-experience attitudes and behaviors toward wildlife.

Studies are needed that first identify potentially causal factors in profound wildlife experiences and then filter them based on the extent to which they can be manipulated by third parties such as tourism operators. A spectrum of perceived impacts has been presented. At one end are impacts resulting in new attitudes and actions that could benefit species or habitats, while at the other end are existing attitudes and behaviors that can be reinforced. Tourism operators interested in achieving attitude and behavior outcomes might well be interested in examining their experiential products for how they can increase the likelihood of producing these outcomes. They appear to have good cause to do so, given the invariantly positive impacts that profound experiences seems to have on those involved.

Of paramount importance, of course, is ensuring that the orchestrating and delivering of profound wildlife experiences ultimately benefits the wildlife species as well as the humans who come to enjoy them. Growing a more sensitive and supportive

constituency for wildlife conservation is a worthy cause and one which we hope facilitators of wildlife experiences subscribe to, but if doing so ultimately comes at the expense of the very species we hope to benefit, we would have to question it on both ecological and ethical grounds. This would be tantamount to loving our wildlife to death.

Finally, investigations into profound negative wildlife experiences could be important. While disturbing encounters with wildlife might in some cases lead to phobias or prolonged dislike of the species involved, others might nevertheless result in respect for the species or even positive attitudes toward its right to survive in the wild.

Worldwide, species of wildlife are increasingly under threat due to human action and inaction, making it important to consider whether people can be motivated to behave differently through fostering a culture of care for those who share our planet. A fledgling but growing body of research envisions profound wildlife experiences (those that impact the attitudes and behaviors of human beings in positive ways) as one way in which such a culture can be achieved. It is our belief that the research reported here adds a step in that direction.

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