

Walking with Lions: reconfiguring 'wild(er)ness',  
'domestication' and 'captivity' through ALERT's lion  
rewilding project

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**Candidate Number: 623467**

**Year Sitting Finals: 2012**

**Word Count: 11,998**

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### Abstract

Animals have a crucial and active role to play in the environment, shaping and being shaped by shifting urban, rural and conservation assemblages. Drawing on 'more-than-human' and animal geography, and paying particular attention to Haraway's (2003) 'becoming with', Whatmore's (2002:37) "multisensual business of becoming-animal" and Fuentes' (2007:127) "in-between" domestication, this dissertation explores how the contemporary and increasingly significant conservation practice of rewilding is experienced and made manifest by embodied skill shared between animals and people within an increasingly integrated human-animal social ordering. In so doing, this dissertation examines how, through the performance of rewilding, the widely-theorised concepts of 'wild(er)ness', 'domestication' and 'captivity' are reconfigured in practice, through this co-production of knowledge of lion and human bodies. It achieves this through focussing on the case study of the African Lion and Environmental Research Trust's (ALERT) "rehabilitation and release into the wild" program, operated by Lion Encounter in Livingstone, Zambia. A combination of qualitative methods were employed during a five-week research placement, including: in-depth semi-structured interviews, focus groups and most significantly, ethnographic participatory observation. Concordant with actor-network theory (ANT), and non-representational theory (NRT), moving with the bodies of humans and lions on the key practice of lion walks, and all other practices within the project, I 'learnt to be affected' (Lorimer, 2010b) through new interspecies engagements, as I became part of the lions' pride.

The dissertation argues that this co-production of interacting bodies, through dynamic spaces and multisensual 'becoming with' haptic encounters, constitutes a fluid interplay between the conceptual references of 'wild(er)ness', 'domestication' and the reconfigured "in-between" 'more-than-captive'. Through ALERT's dynamic practices of rewilding, whereby humans play an *active* role in the lions' becoming (re)wild(ed), the socio-spatiality of the reciprocal interspecies relations configures both lions and humans as co-constitutive of a 'tug of war' between simultaneously becoming 'wild' and 'domestic', as lions are simultaneously "dangerous beasts" and "friendly cats". The study then places this practical fluid configuration of becoming 'wild', 'domestic' and 'more-than-captive' within a wider perceptual conservation assemblage, demonstrating how ALERT's rewilding project has facilitated a closer and more positive (social, cultural, perceptual, economic and haptic) integration of humans and lions. The dissertation concludes by ultimately suggesting that whilst becoming (re)wild(ed) for lions is simultaneously and necessarily a process of becoming with domestication and becoming 'more-than-captive', it is equally about humans becoming (re)wild(ed) through both experiencing, and appreciating the benefits of, 'wild(er)ness'. It is through this dual process of rewilding that the fluidity of the concepts of 'wild', 'domestic' and 'captive' is demonstrated. The dissertation suggests that both human geography and conservation must attend more closely to the agency of conceptual referents, grounded in particular vocabularies, in affecting human-animal relations. Practical and perceptual reconfigurations of certain concepts could therefore contribute to the geographies and conservation practices addressing issues such as human-wildlife conflict.

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## **List of Abbreviations**

**ALERT** African Lion and Environmental Research Trust

**ANT** Actor-Network Theory

**CLW** Client Lion Walk

**LE** Lion Encounter

**LW** Lion Walk

**MoNP** Mosi-Oa-Tunya National Park

**NRT** Non-representational theory

**SFWE** “Spatial Formations of Wildlife Exchange”

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## **Acknowledgements**

I would like to acknowledge the research grant contribution that eased the significant financial burden of the research process. I would like to thank my tutor and supervisor, whose time and insightful responses have been invaluable.

I would also like to acknowledge the support of the African Lion and Environmental Research Trust before and during my placement at the project base in Zambia, who made this dissertation possible.

I gratefully acknowledge the time afforded to me by all interviewees - both within and outside of the project – who provided an enjoyable, useful and rewarding experience.

I would like to thank my family and friends for their support and encouragement for the entirety of this dissertation process

Finally, as promised to the headmaster, I would like to thank Muanga Basic School for its support in allowing me to conduct interviews and a focus group there; a copy of the final dissertation will be sent to the school shortly.

## 1 Introduction

Although “animals have long had a presence in geography as a discipline” (Wilbert, 2009), they have historically been undervalued and consigned to the margins of the discipline. With the advent of Modernity, animals have either been relegated to the background of society (Berger, 1980) or treated as mute subjects incapable of influencing affairs or social outcomes. Working against this current, more recent work, especially in the nascent field of animal geography, has begun to focus on nonhuman-animal relations, unpacking the conceptual “blackbox” of ‘Nature’ to rethink the role of animals in our understandings of the world (Emel *et al.*, 2002; Latour, 1999; Wolch and Emel 1995). In a similar manoeuvre, geographers working in poststructuralist and posthuman signatures of thinking have brought the nonhuman back into the fold of the social, resulting in a decentering of human agency and a consequent blurring of the Modern categorical binaries of nature-culture and human-nonhuman (Cloke and Johnston, 2005; Haraway, 2003, 2008; Hinchliffe, 2007; Hinchliffe *et al.*, 2005; Lorimer, 2010a Whatmore, 2002, 2006).

One such binary that has plagued both geography and the practice of conservation science is that of the wild-domestic. Traditionally, the 'wild' refers to beasts occupying places ‘out there’ expunged of human contact and activity, whereas the 'domestic' is that of the tame, genetically modified, closer to home, and subject to human domination. This binary, and the associated conservation and geographical concepts- ‘wild(er)ness’, ‘domestication’ and ‘captive’- have become the subject of significant theoretical exploration (see Buller, 2004, 2008), with eventful and conceptually variable histories. Theoretically, ‘wild(er)ness’, ‘domestication’ and ‘captive’ have been conceived of as positions along a dynamic ‘wild’-‘domestic’-‘captive’-continuum, rather than as discrete, preconfigured categories (Buller, 2004, 2008). However, there is little work on how these terms interplay and are deployed *in practice*, notably by those who interact with animals in different stages of this continuum. A critical exploration of these terms would not only contribute to the ongoing project of reanimating cultural geography (Whatmore 2006), but also toward developing a more nuanced practice of how we (ethically) relate to nonhuman others (Davies, 2008; Lulka, 2009).

This dissertation seeks to examine how practices of lion rewilding configure and complicate simple distinctions between the terms ‘wild’, ‘captive’ and ‘domestic’. First, it draws upon recent work on interspecies encounters to flesh out a theoretical basis for understanding how

encounters between people and lions configure these terms. This involves posthuman, animal and ‘more-than-human’ geography approaches (Whatmore, 2002), particularly Deleuze and Guattari’s (1988) take on ‘becoming-animal’, Haraway’s (2008) ‘becoming with’ and Thrift’s (1996) ‘spatial formations’. Second, it outlines how the concepts of ‘wild(er)ness’, ‘domestication’ and ‘captivity’ have been both historically theorised and explored within geography (Whatmore, 2002; Haraway, 2003, 2008; Wolch and Emel, 1995) and environmental anthropology (see Cassidy and Mullin, 2007).

The dissertation then provides a case study of the African Lion and Environmental Research Trust (ALERT) rewilding project, to explore how multisensual interactions and dynamic spatial practices configure the lions as ‘wild’, ‘domestic’ and ‘captive’, and how these mobile beings become part of a wider shifting assemblage. Located in the Mosi-Oa-Tunya National Park (MoNP) near Livingstone, Zambia, ALERT provides a palpable example of *in* and *ex-situ* bodies and spaces entwined together within one project. The project is based on four-stages to transform captive-bred lions into socially stable prides, whose offspring can be released into game reserves and national parks.

There is a paucity of work within human geography on lions (*Panthera leo*), which is surprising considering their global popularity, and the relative abundance of work on other charismatic species (see J. Lorimer, 2009a; 2010a, 2010b; Whatmore and Thorne, 1998, 2000; Jepson *et al.*, 2011; Barua, 2010). The conservation of African lions is of alarming importance given its conservative categorisation by the International Union for Conservation of Nature (IUCN) as “vulnerable” (Bauer *et al.*, 2008) following recent estimates of rapid population decline (Chardonnet, 2002; Myers, 1975; Bauer and van der Merwe, 2004 (at 23,000)), from previous IUCN estimates of up to 100,000 in the early 1990s (Nowell and Jackson, 1996). Moreover, despite criticisms of the concept of anthropomorphism- especially in relation to domesticatory practices (Milton, 2005)- attending to Johnston’s (2008) “responsible anthropomorphism”, its significance in facilitating an affective (and/or) embodied relationship with a nonhuman individual or species is significant to this study. As embodied in Disney’s ‘The Lion King’, lions – “possess[ing] and perform[ing]” nonhuman charisma (Lorimer, 2007) – can be anthropomorphised through their mammalian familiarity and portrayals as strong, respectful, loving and engaging in fundamental social relations. Also, often perceived as perhaps the most archetypally ‘wild’, dangerous and ‘other’ animal species, their charismatic “apocalyptic potential” (Lorimer, 2009a) may engender ‘anthropomorphobia’ (Baker, 2000), which derives

from a “Nietzschean antipathy towards the domestic sphere” (Lorimer, 2009a). Straddling the boundary between both anthropomorphism and anthropophobia, and offering a sense of ‘jouissance’ (a corporal contingent of nonhuman charisma that can be fulfilled at ALERT’s rewilding project), lions are an ideal species for a ‘more-than-human’ geography exploration of the broad and fluid ‘wild’-‘domestic’-‘captive’ continuum.

Drawing conceptually from recent work on interspecies encounters (Haraway, 2003, 2008; Bear and Eden, 2011; Bear 2011, Whatmore, 2002; Besio *et al.*, 2008), and methodologically from Nonrepresentational and Actor-Network Theory (ANT) to “follow” moving bodies and practices (Law, 2000), this dissertation will flesh out how these categories are performed, predominantly in the first stage of the program: lion walks. Through this engagement, the dissertation seeks to contribute to contemporary theorizations of rewilding and human-lion encounters, and thus offer a more nuanced conceptualisation of the ‘wild’-‘captive’-‘domestic’-continuum.

The dissertation therefore has the following aims:

1. To explore how the practice of rewilding configures the ‘wild’-‘captive’-‘domestic’-continuum through multisensual and experiential interspecies encounters between lions, people and spaces.
2. To investigate how these concepts of ‘wild(er)ness’, ‘domestication’ and ‘captivity’ are intrinsic to the performance of rewilding.
3. To demonstrate the increasing interactive and spatial entanglement of lions within the social ordering(s) of people, and what conservation and human geography implications stem from this

## 2 Interspecies encounters

### 2.1 Interspecies encounters: Posthuman, Animal and More-than-human Geography

The “sucking quicksand[]” (Haraway, 2010) of posthumanism represents a broad theoretical shift in focussing on re-examining the nature-culture interface, challenging the plethora of self-other dualisms that have “characterised modernity” (Jepson *et al.*, 2011; Latour, 1993) such as man/woman, and theory/practice; perhaps the most significant of these is the humanist binary of human/nonhuman (Lorimer, 2009b).

The posthumanist shift of animal geography has focussed more specifically on different modes of human-*animal* relating. As exemplified by Philo and Wilbert (2000), the spatiality of human-animal encounters has become a significant aspect of animal geographies in both urban (Hinchliffe *et al.*, 2005; Philo and Wilbert, 2000; Griffiths *et al.*, 2000) and rural (Buller, 2004) ecologies. The continuum of domesticated animals such as dogs pervading human social spaces and 'wild' dangerous animals being excluded to the peripheries of human spaces has been re-examined (Emel *et al.*, 2002). Urban-wildlands border zones of metropolitan regions remain stubbornly permeable to both people and animals (Philo, 1995); zoos import wild species into lively spaces of cities (Wolch, 1998) and human-fish encounters blur water and land spaces (Bear and Eden, 2011). This spatial inclusion/exclusion continuum is particularly relevant to re-introduction programs, as humans are (re)determining (in this case: opening up) the spaces that animals can inhabit.

Allied to posthuman and animal geography, the more vitalist-inflected ‘more-than-human’ approach (Whatmore, 2002) has explored the “interconnected *becoming* of life in its more-than-human form” (Panelli 2010; emphasis added). Drawing on Deleuze and Guattari’s (1988) understanding of ‘becoming’ (and their focus on ‘becoming-animal’), as a fluid vitalist ontological process, more-than-human approaches to and within animal geography seem to point to how animals’ characteristics are relentlessly heterogeneous, shifting according to the spatialities of their engagements or participations within certain assemblages (Wilbert, 2009). Humans and animals are being drawn into encounters with each other, and are now intimately connected within affective and embodied imbroglios of ‘more-than-human’ “friendship” (Bingham, 2006) whereby social life is recognised as “always coproduced” “in terms of relations between people and things” (Bingham, 2006). The ‘more-than-human’ attention to the

dynamic processes of entanglement and human-animal relations has focussed on the sociality of these hybrid interconnections. Humans and animals are increasingly interconnected in both a practical socio-spatial sense (e.g. urban areas and zoos) and perhaps in a theoretical sense through animal/'more-than-human' geography.

### **2.1.1 Actor-network theory and Non-Representational Theory**

ANT, conceptualised by Latour (1983), Law (1987) and Callon (1987) is an important 'actor' itself in posthuman, animal, and particularly 'more-than-human' geographies. By rejecting hierarchical and hegemonic ontological structures, processes and entities, ANT proposes an equal but multiple playing field of heterogeneous actors/*actants* interacting within a given 'network'. As with posthumanism, ANT challenges dualisms (such as human/nature, animal/machine, wild/domestic) largely through the principle of 'general symmetry' (Callon, 1986), as their "properties are blurred by a proliferation of multiple hybrid entities and networks" (Whatmore, 2000:26). ANT's proposal that differences between entities are a relational effect and cannot be predetermined (Murdoch 1998) is therefore crucial in understanding, analysing and re-determining/re-placing interspecies encounters and socialities.

Furthermore, NRT (Thrift, 1996) has permeated many parts of animal and 'more-than-human' geographies (Braun, 2005, 2008; Johnston, 2008). NRT is essentially a new *means* of engaging with and deconstructing the practices of everyday life; it does not try to explain and represent, but instead provide a different style of analysing the 'lively' human and non-human actors, practices and processes that take place and constitute the materiality and places within our world. NRT writes about animals as though their liveliness matters, exploring the ontological question of what beings (or indeed becomings) we include in society, as well as the semantic question of which knowledges matter. NRT can be used to analyse how knowledges cross between human and nonhuman (mobile) bodies, co-producing knowledge through these heterogeneous interspecies encounters. Indeed, geographers engaging in non-representational modes of thinking have focussed on the interactions between mobile bodies and how they are also generative of /generated by (affective) spaces (McCormack, 2003).

Drawing on Thrift's (1996) 'Spatial Formations' and Whatmore's (2002) 'Spatial Formations of Wildlife Exchange' (SFWE), the dissertation will therefore explore the heterogeneous, dynamic and affective interplay between humans, lions and spaces, which will also build on Rodaway's (1994) 'Haptic Geographies', to elucidate the embodied experience of relating (interspecies)

mobile bodies. Non-representational “new practices of witnessing” (Haraway, 1997:267) will therefore be used in analysing the actual relations between lions, people and spaces, in order to map out, understand and explore the interconnectedness of human-lion entanglements within a rewilding project, and how this reconfigures 'wild(er)ness', 'domestication' and 'captivity'.

## **2.2 Interspecies encounters re-configured: 'wild(er)ness', 'domestication' and 'captivity'**

The following section will explore the historic and contemporary understandings of the traditional categories of 'wild', 'domestic' and 'captive'.

### ***2.2.1 Wild(er)ness and conservation***

Literature on wilderness and wildness has been copious and commonly contradictory. ‘Wilderness’ is crucial to the theory and practice of conservation and geography. Two different conservation approaches highlight this intrinsic link between conceptualisations of 'wild(er)ness' and conservation practice. ‘Fortress conservation’ demonstrated the founding of conservation on Western ideas of ‘wilderness’ (Anderson and Grove, 1987) through its traditional exemplification of the theoretical and practical (socio-spatial) separation between humans and untouched and undomesticated 'wild' animals/‘wilderness’; it was hence produced through the prevailing theorisations of ‘wild(er)ness’ as both dangerous and aesthetically beautiful. The recent proliferation of Community-Based Natural Resource Management also reflects this conceptual interrelationship, by attempting to bring humans and animals into mutually beneficial and harmonious (social and spatial) relationships, thus connecting 'wild' animal and human lives (Wolch and Emel, 1998) through “reconfiguring the wild on the ‘inside’” (Whatmore, 2002:34). Despite reproducing the very human/nature dualism that environmentalism should be working to overcome (Cronon, 1995), theorisations of 'wild(er)ness' are fundamental to conservation practice and human geography’s focus on human-animal relations within the nature-culture binary.

### ***2.2.2 More-than-human 'Wild(er)ness'***

Recent geographical and related (inter)disciplinary work, drawing on posthuman, animal and ‘more-than-human’ geography, has explored the importance of social, spatial and relational interactions between humans and animals in configuring ‘wild(er)ness’. Perhaps the most significant effort in achieving this has been by Whatmore (2002) through her concepts of

“topologies of wildlife” and SFWE. ‘Wild(er)ness’ is performed through “multiple places and fluid ecologies” (Whatmore and Thorne, 1998) of relational heterogeneous social networks of myriad human and nonhuman *actants*. Re-imagining space *and* agency, drawing on Thrift’s (1996) dynamic “spatial formations” and going beyond Foucault’s (1980) ‘exteriorized’ carceral contours of heterotopic (panoptic) sites, Whatmore (2002:34) attends to a Deleuzian biophilosophy advocating a reconfiguration of the ‘wild’ on “the inside”- that is: ‘wildness’ instead of ‘wilderness’. As the “beleaguered space[s]” (Cassidy, 2007:1) of traditional wildernesses’ are being globally eradicated, it is perhaps now increasingly more appropriate to understand and conceptualise such spaces as being contingent on a shifting network topology and assemblage of actors which themselves are in a process of becoming-‘wild’. Compared to Whatmore (2002), Wolch’s animal geography approach to future city spaces provides a less *topological* interweaving of in and ex-situ bodies and spaces, through focussing on the social and spatial entanglement of ‘wild’ animals in cities: transspecies urban theory (Wolch *et al.*, 1995), ‘zoopolis’ (Wolch, 1998) and ‘Anima urbis’ (Wolch, 2002). Additionally, Hinchliffe *et al.* (2005), through a “cosmopolitical experiment”, trace the entanglement of watervoles in the city as “urban wild things”. Buller (2004) examines the iconographical reconfiguration of the rural domestic-wild binary, as large faunistic icons (mythologized alien big cats and re-introduced wolves) are engendering a shifting relational conceptualisation of nature and the ‘wild’.

In addition, studies of interspecies encounters have increasingly explored the heterogeneous, commodified and multisensual human-animal relational experience of ‘wild(er)ness’. For Besio *et al.* (2008), social meanings in the discourses of “wild sexy beasts” (dolphins) conform to human perceptions of a ‘wild’ nature. The discourses of (‘domestic’) “devotional mums” are simultaneously juxtaposed with (‘wild’) “sexy beasts”, demonstrating the fluid interplay between experiences and configurations of wild(er)ness and domestication (*ibid*). Cloke and Perkins (2005) also argue that the ‘wild’ is being brought into “the performative space of travel” through a relational achievement and shifting assemblage, as the “crossover” between humans and ‘wild’ dolphins/whales is “literally an embodied or kinaesthetic experience” (*ibid*). Therefore, such existential experiences which promote ‘wild(er)ness’, enfold tourists as actors within the “[‘wild’ dolphin’s] watery spaces” (Besio *et al.*, 2008). The visceral and haptic experiences (as opposed to distanced viewing on a safari for example) of these performative encounters, embody and promote nature/animals as ‘wild’. The social and spatial entanglements of this dolphin-tourist assemblage are therefore in a heterogeneous process of “becoming-nature

or becoming-animal” (Franklin and Crang, 2001:18), with wild(er)ness becoming something that can be experienced, encountered and co-constituted of humans and nonhumans.

### **2.2.3 Historic ‘Domestication’**

‘Domestication’, like ‘wild(er)ness’, is a complex concept with a conflicting theoretical history. Commonly understood as the binary antithesis to ‘wild(er)ness’, ‘domestication’ is defined by many as a process of *genetic* and behavioural modification at the species- not individual/aggregate- level (see Clutton-Brock, 1994; Driscoll *et al.*, 2009; Price, 1999; Trut *et al.*, 2004): this explains the popular distinction between ‘domestication’ and taming. The “conditioned [individual] behaviour modification” (Driscoll *et al.*, 2009) of ‘tame’ captive tigers which have a high incidence of human attacks (Nyhus *et al.*, 2003), or extensively trained Asian elephants over thousands of years (Sukumar, 2003), have been considered distinct from the domestication of species such as dogs/cows, despite some suggestions to the contrary (Jainudeen, 1970). ‘Domestication’ is a complex and semantically-variable process, and one that thus needs analytical reflexion in a practical and geographical context through this dissertation.

### **2.2.4 More-than-human ‘Domestication’**

Work within, related to, and outside of more-than-human and animal geography has explored the process and concept of ‘domestication’ through different interspecies social and relational configurations. Haraway’s (2003, 2008) grounded theorisation of domestication through the entanglement and relational ‘becoming with’ between humans and dogs as ‘companion species’ (an “undecided category” (Haraway, 2008:165)) extends across species divides. Human-dog ‘becoming with’ training relationships are changeable, reciprocally communicative and mutually constitutive rather than exploitative, “hierarchical and patriarchal” (Cassidy, 2006). The dissertation therefore explores this ‘becoming with’ training relationship in relation to the ‘training’ of lions to develop 'wild' instincts, and how this becoming (re)wild(ed) is mutually constitutive of a 'domestic' becoming with interspecies encounter.

Applying Haraway’s (2008) suggestion that humans dynamically ‘become’ through being with other (companion) species, humans too can be configured as becoming with 'domestication'. This can be explored in contrasting understandings of the process of (active and passive) habituation; humans can either become directly involved in animals’ (baboons) social relations

(Smuts, 2001) or, in NRT terms, become normalised as part of a “background hum” (Lorimer, 2005) within animals’ (meerkats’) socio-ecological system (Candea, 2010). Candea (2010) argues that there is a paradoxical symbiosis between engagement (through habituation) and detachment (through a lack of anthropomorphism), whereby an “inter-patient” (ibid) human-animal relationship can be constitutive of both forms of relations, and border on the 'domestic'. Although he does not attribute this heterogeneous ‘habituated’ relationship as specifically ‘domesticatory’ within his particular context, he nonetheless confirms its blurring of the 'wild' and ‘domestic’. Paying attention to Ochieng’-Odero’s (1994) proposal that ‘domestication’ consists of habituation and conditioning to environmental stimuli associated with the captive environment, the dissertation will nonetheless remain reflexive and open to the practice of habituation as quasi-domesticatory.

The domestication of ‘wild(er)ness’/ 'wild' animals has been explored by various authors. Fuentes (2007:127) explores the “in-between” of macaque monkeys, who are configured as 'domestic', or at least subject to domesticatory practices, through anthropomorphism and physical contact (Fuentes, 2006), as well as the commodification of both their agricultural coconut-picking labour and their “theatrical [temple] performance[s]” (Fuentes, 2007:130). Brooks *et al.* (2011) suggest that the “African wilderness experience” is what is being sold by new developments; this ‘third nature’ (Hughes, 2005) is being imagined, commodified and culturally and politically constructed, as a domesticated ‘wild’ experience; the addition of luxury residential homes within this new wildlife region and “commodified wilderness” (Brooks *et al.*, 2011) exemplifies this sense of domestication. Indeed, within tourism studies, human (embodied) encounters with ‘wild(er)ness’ have been configured as domesticatory (Bulneck, 2005; Franklin 1999; Fabian 2000), whereby “nature is domesticated for consumption” (Besio *et al.*, 2008) and nature's ‘wilderness’ is brought in and nurtured (Anderson, 1997). Besio *et al.* (2008) explore how the anthropomorphism of dolphins through discourses of “devoted mums”, transforms the ‘wild’ animals (dolphins) and spaces (sea) into being part of a domesticated and commodified actor-network; yet even this domesticatory assemblage has underlying intentions of conservation of 'wild' dolphins. Thus, ‘domestication’ can be understood as a temporary and fluid process, whereby landscapes, 'wild' animals, spaces, experiences and humans can be configured as simultaneously 'domestic', 'wild' or 'captive'. The dissertation will therefore explore the extent to which this friction plays out in practice.

### **2.2.5 More-than-human 'captive'**

Unlike 'wild(er)ness' and 'domestication', the *concept* of 'captive' has been significantly underexplored within geographical fields of study, with most focus being put on its place within wider assemblages or as a relational term. Anderson's (1995) study of the 'captive' "cultural institution" of Adelaide Zoo is perhaps the most notable exception, along with Whatmore's (2002) blurring of the 'wild'-'captive' divide in the practices of conservation/science through her exploration of Paignton Zoo, and Wolch's (1998:124) construction of "zoopolis" through the "re-enchantment" and re-naturalisation of 'wild(er)ness' within urban areas. For Anderson (1995, 1997), through captive breeding and the cultural institution of Adelaide zoo, the 'captive' inhabitants/spaces are culturally constructed, commodified and "supremely domesticated" (Anderson, 1997). This fluidity between the concepts of 'captive' and 'domestic' (within an ex-situ conservation context) is also explored by Wolch (1998:127), whereby the (embodied and disembodied) commercialisation and commodification of wildlife configures even ('domestic') pets as "captives"- meaning that the concept of 'captive' is applicable for both 'wild' and 'domestic' animals. Indeed, referring to the ultimate aim for Adelaide zoo's 'captive animals as their reintroduction into the 'wild', Anderson (1995) encapsulates the dynamic interplay between these concepts, and especially the role of captivity: "freedom has come to justify captivity- 'wildness' now legitimizes domestication- in a fresh regulatory practice at today's Adelaide Zoo." 'Captivity' is thus essentially domesticated, and seen as *temporarily* the antithesis of "freedom"; yet 'captivity' is simultaneously a means of achieving this 'wild' "freedom". The rewilding and reintroduction of captive bred animals (lions) is therefore an ideal focus of study to explore how this configuration of 'captive' as temporary and fluid plays out in practice, thus attending to the established contention of how 'wild' zoo-bred animals really are (Paull, 1985) through the lens of rewilding.

## **2.3 Rewilding**

Rewilding and re-introductions have grown in prominence in conservation theory and practice, with the potential to be the approach representing the future of biodiversity conservation (Vera, 2000; Donlan *et al.*, 2006). Conservation biologists Soulé and Noss (1998:2) define 'rewilding' as the "restoration and protection of big wilderness and wide-ranging, large animals – particularly carnivores". Spatiality is fundamental to the rewilding of both spaces/landscapes (Donlan *et al.*, 2006) or animals (usually through reintroduction), with rewilding particularly focussed on charismatic/keystone landscapes or nonhumans. Although rewilding can be

understood at the population level, such as de-domestication (rewilding at the level of genes (Gamborg *et al.*, 2004)), rewilding can also be understood at the individual (often reintroduction) level, which is the most relevant theorisation to this dissertation.

Although there has been an overall lack of success of carnivore captive-breeding programmes (De Boer 1992) and of mammalian re-introductions (Kleiman, 1989), which have (perhaps therefore) been under-studied within geographical literature, the increasing significance of the conservation practice of rewilding has led to some geographical attention, (Buller, 2004, 2008; Lorimer and Dreissen, forthcoming) of which more is needed. Lorimer and Dreissen (forthcoming) examine the fluid political-ecologies of rewilding Heck cattle and explore the “friction” between rewilding and conservation. Importantly, Kleiman (1989) argues that despite a change in the relationship, humans still usually have agency over the future of re-introduced captive-born animals through monitoring, protection or determining their adaption success; even in conservation theory human control over the wild is pervasive. The practice of rewilding and re-introduction is an ideal context within which to explore the concepts of 'wild', 'domestic' and 'captive', not least because conceptually it fundamentally challenges the boundaries of these terms, as suggested in Buller's (2008) reconstruction of the 'domestic'-wild' binary through wolf reintroduction. Perhaps more than any other conservation approach, the aim and *notion* of 'wild(er)ness' is intrinsic to the practice of rewilding, which has both an individual (wildness) and a spatial (wilderness) element. Additionally, through captive-breeding and commercial mobilisation of funds, notions of 'domestication' and 'captivity' are also significant. Theoretically, rewilding can be understood as a 'more-than-human' hybrid form of conservation, whereby humans become important in producing the animal's wildness, but simultaneously the animals are re-agentised in embodying the much sought-after 'wildness' through the “freedom” of release” (Anderson, 1995). In practice, however, the assemblage of both humans and animals, performed through rewilding, has been left unexplored in its configuration of hybrid human-animal encounters and the 'wild'-'captive'-'domestic'-continuum.

## 3 Method

### 3.1 Study Area

#### 3.1.1 *Why ALERT?*

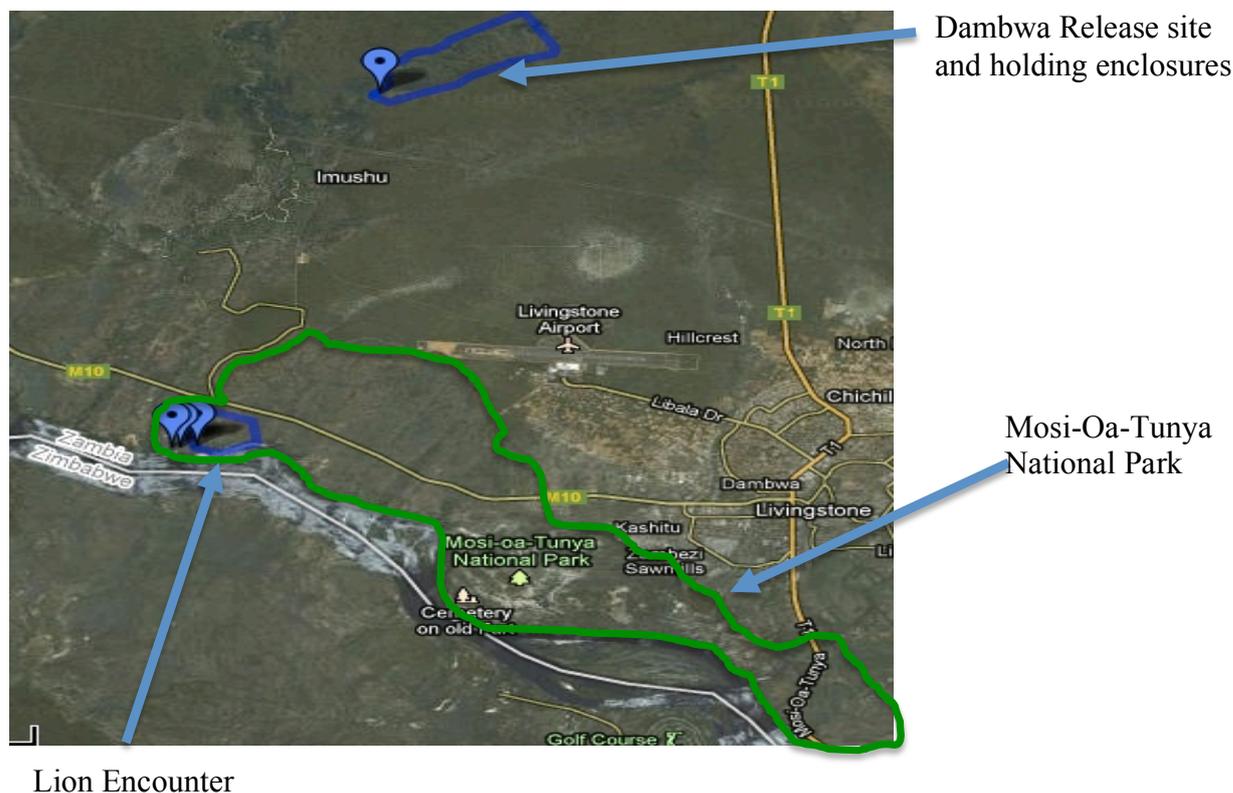
This study was carried out in association with the registered charity, African Lion and Environmental Research Trust (ALERT), supported by its commercial partner: Lion Encounter (LE). LE is the sister project to the much larger organization ‘African Encounter’, under which there are two other lion rewilding projects in Zimbabwe: at Victoria Falls and Antelope Park. This rewilding and re-introduction project, compared to similar ventures, is unique in its *active* rewilding/“rehabilitation” (ALERT, 2009) of captive-bred lions through a four-stage program (table 4.1) that is specifically tailored for its ethically-sound long-term conservation benefits. It is the stage 1A practice of walking with the lions to develop their wildness, that not only makes the program unique (at least originally when it began 10 years ago in Zimbabwe under the same organisation), but also provides perhaps the most embodied, affective, anthropomorphised and anthropomorphobic conservation-based interspecies encounter appropriate for this study. Importantly, ALERT offers the opportunity to study the rewilding of lions as “keystone species” (Soule and Noss, 1998:22), which are particularly significant to this study, since “true wilderness” (Foreman *et al.*, 1992:4) is a function of ‘wildness’ and wildness requires the presence of keystone species, including large predators (Hintz, 2005:87). That LE and ALERT are increasingly at the forefront of holistic wildlife-community conservation in sub-Saharan Africa, combined with the project’s intricate placing within Livingstone’s socio-economic, cultural and political (the Zambian ex-president was ALERT’s patron) orderings, means this dissertation can incorporate non-Western local perceptions/configurations that many conservation and geographical studies (particularly those conceptualising ‘wild(er)ness and ‘domestication’) have not, and thus attend to Jepson *et al.*’s (2011) call “for more work on geographies of conservation engagement and how these have interacted with local conservation and cultural institutions and environments to create ‘conservation biogeographies’”.

#### 3.1.2 *Location*

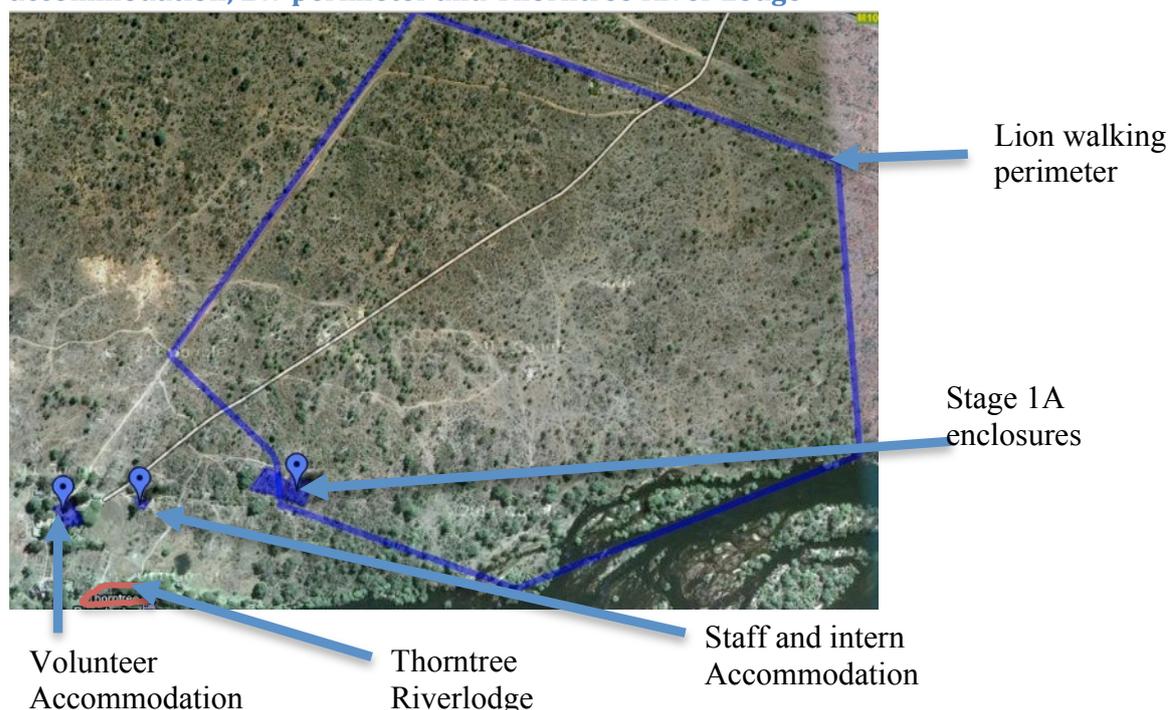
This study was undertaken at LE’s project base located within the Mosi-Oa-Tunya National Park (MoNP) in Livingstone, Zambia. The project’s location (fig.3.1) and spatial distribution (fig.3.2) is particularly significant to the research; by exploring the notions of ‘wild(er)ness’, ‘domestication’ and ‘captivity’ whilst inside a lion’s enclosure 100m from the project’s living

accommodation, 10m from the Zambezi river and walking within a national park with elephant, rhino and buffalo, certainly served as a destabilising counterpoint for perceptual and practical configurations of 'wild(er)ness', 'domestication' and 'captiveity'. The stage 1B and 2 release site is located 10km from LE in the Dambwa Forest (fig.3.1).

**Figure 3.1: Locating Lion Encounter and the Dambwa Forest release site near Livingstone town. Source: Google maps, author)**



**Figure 3.2: Map showing the spatial distribution at LE of accommodation, LW perimeter and Thorntree River Lodge**



## 3.2 Qualitative Methods

A variety of qualitative research techniques were employed in the study over the five-week placement: ethnographic participatory observation, semi-structured interviews and focus groups. Qualitative research was the most appropriate approach in order to establish “what happens in a particular [human and lion] social setting” (Holliday, 2007), exploring both practices and perceptions.

### 3.2.1 “Experience as Data”: Participatory Observation

The underlying technique employed was a short case study form of ethnography: ‘deep hanging out’/ ‘participatory observation’. Concordant with calls in both ANT to “follow the actors” (Law, 2000) and the moving cultures ‘turn’ to think with and through embodied generative spaces (McCormack, 2008), I walked with the moving bodies of lions and people to understand and *learn* how the performance of rewilding is constituted by an array of rhythms, habits, movements, practices, emotions, and embodied interactions, and how these are generative of (affective) spaces. This deconstructed and exposed the heterogeneous practices/processes of human-lion co-habiting entanglement, beyond representation through ‘learning to be affected’ (Lorimer, 2010b; Hinchliffe *et al.*, 2005), as I participated fully in volunteer/intern/handler/guide/staff activities including LWs (25), client lion walks (CLW) (10), meat preparation (4) (fig.3.3), enclosure cleaning (10) and feeding (10) – which enabled an holistic and intimate experience (as data).



**Figure 3.3 Volunteer and handler preparing a freshly slaughtered donkey for the Lions in stage 1B at Dambwa**

By always carrying a notebook, dictaphone and (video)camera (providing “photographs as co-constructed texts” (Holliday, 2007:111)), I was able to capture and record moments, practices, conversations, perceptions and anecdotal evidence in whichever way was most appropriate. Importantly, it also meant that even comments during meals, whilst in a taxi, camping in Chobe National Park or during activities such as LWs, proved to be rich in data. Spending some time socializing with the volunteers and indigenous Zambian staff, I was able to truly experience and explore the project as a ‘social’ setting and the social lives of the actors within it. I also organised my research placement specifically to overlap with the release of the lions into stage 2; I was also lucky enough to be present when the vet flew in to dart, collar and vaccinate the lions for release (fig.3.4). Thus, both my general and specific focused experience(s) at the project became data (Holliday, 2007) for this study.



**Figure 3.3: Cara (lion manager) and vet carrying out vaccinations and health checks on the 6 lions released a week later**

### **3.2.2 Interviews and Focus Groups**

Thirty-two organized semi-structured interviews (see example and list in appendices) and four focus groups allowed for a deeper and more individual exploration and challenging of perceptual and personal configurations of a variety of human actors’ different relations with the lions. Selected on the basis of their relation to LE, I interviewed almost all human actors at the project (handlers, guides, Dambwa staff, permanent British staff, and several volunteers and

interns), as well as local farmers, teachers and pupils at Muanga Basic School, the senior headman of a local tribe, the Permanent Secretary for Tourism and the ZAWA area warden. I gained invaluable, in-depth and contrasting representative local and institutional perceptions, which constituted the wider and variant cultural configuration of LE and their human-lion interactions. Arranging the interviews, especially with those outside of the project, was time-consuming and challenging, requiring persistence, persuasion and understanding. Mwape (ALERT's community liaison officer) helped to facilitate and translate interviews with the farmers, head chief, and teachers/pupils at Muanga Basic School. Following the first few interviews, I learnt that amending the order of questions and taking a very adaptable and personal approach to each individual interviewee was the most effective way to explore people's real (conscious and/or subconscious) understandings of particular concepts and human-lion relations; this was particularly important due to the inherently subjective and relational nature of the key concepts. Indeed, whilst the general format of the interviews was the same, each one followed different tangents on different issues, providing a rich and eclectic array of results. One focus group arose naturally during a 'cub sit', the others were pre-arranged. Following examples such as Willis (1977), the focus groups "offer[ed] a valuable lens into the social world of individuals as part of a group dynamic" (Hofmeyer and Scott, 2007), informing and complementing the individual interviews.

### **3.2.3 Reactions to interviews and researcher**

Reactions to both interviews and the researcher were varied; none were negative, but some particularly challenging- either due to the questions (when defining 'wild': "this is horrible"), language barriers, or a reluctance to expand on their initial views or challenge certain institutions ("I don't want to say anything that would be bad"). With off-the-cuff remarks such as "I'm enjoying this interview", "you are a friendly force", and "when is our next interview", I was encouraged by the positive relationship that I created with the community, and regularly interviewees seemed to reconsider their understandings of the concepts of 'wild(er)ness', 'domestication' and 'captivity'.

### **3.2.4 Treatment of data**

The interviews (which usually lasted one hour, but varied between 26-112 minutes) and focus groups were recorded using a dictaphone (having obtained written consent – see appendix) and then, along with all other informal recordings, transcribed and coded; all written field notes were also typed up and coded.

### **3.3 Limitations**

The research was conducted by a white male undergraduate, which will no doubt have impacted the research, as not only would “no other scholar ...discover the same categories” (Erlandson *et al.*, 1993:118, citing Lincoln and Guba), but interviewees may also have tempered their responses accordingly. My integration into the project and the sociality of the setting was also perhaps affected by my role as a research student– meaning that people may have been careful of what they said and how they acted around me. This may have been avoided if a more in-depth ethnography (more than 6 months) had been possible. Furthermore, this study was based on a short five-week window, when the walking lions were between 7 and 9 months old. Had there been six-week old cubs and 17-month old walking adolescents, my experience, how people related to/perceived the lions and certain practices would have been different. However, since all the handlers and guides have experienced all ages of lions, their perceptions should not have varied too much. Since stage 3 or 4 has not been reached yet (at any of the projects), this also limited the depth and validity of the study. Finally, the number of CLWs that I was allowed on was limited to when there were small numbers of both clients and volunteers.

## 4 Performing rewilding

This section will explore *how* rewilding is performed through various multisensual and embodied human-lion *interactions* and dynamic transformative *spaces* at ALERT's four-stage rehabilitation and release into the wild project. The process of becoming (re)wild(ed) through these fluid spatial interspecies encounters configures the lions, and spaces they engage with, as simultaneously becoming 'wild', 'domestic' and 'more-than-captive'. The table (4.1) below outlines the main aims and practices of ALERT's rewilding project:

Main aims and practices	Stage 1A	Other practices
<p>Cubs born at Lion Encounter are removed from their mother at three weeks old. A designated guide spends the whole of each day caring for and bottle-feeding the litter, substituting as the role of the mother, until the cubs are 6 weeks old.</p> <p>From six-weeks old, groups of lions are taken on (non-client walks into the Mosi-Oa-Tunya National Park at least once a day with experienced guides, handlers and volunteers). After 3 months, cubs also go on client walks, which can happen once, twice or zero times a day). The lions are given every opportunity to build their confidence in their natural environment during the day, as they start to take an interest in the game species they encounter on the walks. By about 11 months old they will usually start making kills.</p>		<p><b>Feeding:</b> From 6 weeks old, the cubs are fed meat every one to three days, depending on the lion's age. The type of meat is usually either donkey or chicken. The chickens are provided freely by factories. The donkeys are bought by Lion Encounter; they are then slaughtered humanely when needed, and some are even bought pregnant who are then allowed to give birth and raise their fowl to independence before being slaughtered. The meat is cut up, weighed and mixed with bone marrow by volunteers and staff. Below 6 months old, the meat is taken inside the enclosure by handlers and volunteers; at 6 months or older, handlers and volunteers use adjacent management enclosures to bring the meat inside.</p> <p><b>Cub sitting:</b> At least once a week volunteers and staff spend one of the day's sessions inside the cubs' enclosure. This is done to provide volunteers with some time to spend with the cubs, and also to develop bonds between the lions and humans (an extension of the lion walk aim)</p> <p><b>Enclosure Cleaning</b> This is done every other day by volunteers and handlers. It includes emptying, cleaning and refilling the drinking troughs, and removing any bones or faeces.</p> <p><b>Behavioural Enrichment (BE)</b> This is done once a week by handlers and volunteers. Using natural materials found in the National Park; different assemblages are made to stimulate the lions' behaviour.</p>
Main aims and practices	Stage 1B	Other practices
<p>At 18 months the lions are considered too dangerous to be on the ground with, and are "retired" from walking. They are then translocated 10km away to the Dambwa Forest site, where they are taken on day and night "encounters" in the 800 acre release site, with the guides and guests in a vehicle. They are given the opportunity to work co-operatively to bring down prey species stocked in the site (Zebra, impala, waterbuck), as they become "seasoned Hunters" (ALERT, 2009)</p>		<p><b>Feeding:</b> This is the same as in Stage 1A, but it is every 4 days and the portions are larger.</p> <p><b>Cub sitting</b> This is done on the outside of the enclosure, and is done more for providing company to the lions.</p> <p><b>Enclosure Cleaning</b> This is done in the same way, except the lions are put in their management enclosures.</p> <p><b>Behaviour Enrichment (BE)</b> This is again the same as in Stage 1A, although the objects are usually bigger.</p>

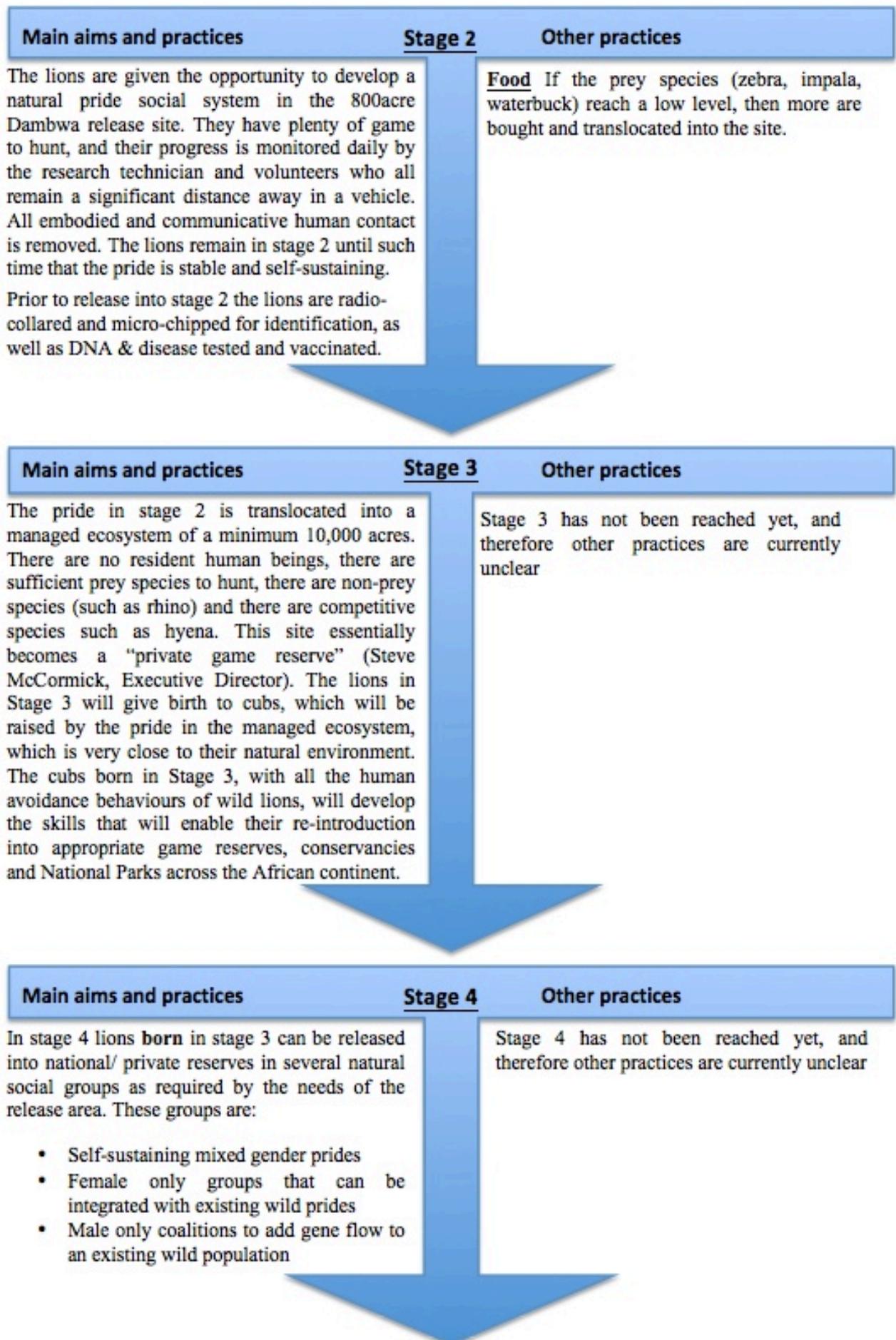


Table 4.1: ALERT’s main aims and practices

## 4.1 Becoming part of the pride

### 4.1.1 *Motherly affection and fatherly discipline*



**Figure 4.1: Kennedy (handler) walking behind Munal along the Zambezi River on a LW**

Stage 1A facilitates, and necessitates, the most human-centred interactions for the lions through cub sitting and LWs (fig.4.1), and is the only stage with haptic encounters without any physical barrier (in stage 1B humans can touch the lions as they rub against the fence of their enclosure – figs.4.16, 4.17). At the beginning of the walk, handlers enter the enclosure to get the group of lions that are being walked (every lion in stage 1A is part of a walking group of two/three lions of the same age and family). The handlers take a ‘disciplinary’ approach to encourage or force the lions out of the enclosure, depending on their willingness to leave, sometimes resorting to hitting their sticks hard on the floor next to the lions; as in natural ‘wild’ prides, cubs are often reluctant to walk and follow the pride. Once out, the volunteers and the guide lead the walk calling the lions to follow (equated by Goodson (handler) as “*singing a song to them*”), whilst the handlers remain behind the lions ensuring they move forward and not too far off the ‘path’ (fig.4.2). On client walks, volunteers remain between the clients and the lions, encouraging the lions to follow and providing a protective barrier to the clients. This basic order of guides/volunteers leading and handlers behind is a physical manifestation of the social hegemonic exploitation that is fundamental to the walks and to stage 1.



**Figure 4.2: Zaria and Zamfara on a LW with two handlers (Goodson and Mwiya)**

The sociality of a lion pride, perhaps lions' distinguishing feature (compared to all other solitary cats), plays a key role in all the project's stages. Like in a natural 'wild' pride, where mothers provide a caring and affectionate relationship and the fathers engage with their cubs in a far more distant, disciplined and respectful way, the various (groups of) actors who interact with the lions must do so in a manner representative of this mother/father role (see appendix for LE's



**Figure 4.3 Cephas stroking Damara's stomach, providing affectionate embodied relations akin to stroking a dog**

handling manuals). Guides, who lead and narrate client or training LWs, exploit the social position of the mother acting as maternal substitutes, providing affective, communicative, caring and embodied interactions (calling them, stroking their heads and even stomachs (fig.4.3), removing ticks (fig.4.4), and allowing their hands to be licked (fig.4.9)); volunteers also fulfil this role, but do not have sufficient time to build such strong

‘maternal’ bonds with lions, and hence become “aunts” (Nicola, general manager) instead. The handlers also build dominance over the lions, but to ‘become’ the father they do this through discipline and specific disciplinary dominance-building practices: ankle tapping, occasionally covering the lions’ eyes with their hands for a moment, forcing the lions to move (from the enclosure and during walks) and rarely offering affectionate interactions. These heterogeneous multisensual (haptic and emotional) interspecies social encounters, paralleling Whatmore’s (2002:37) “multisensual business of becoming animal”, therefore illustrate the contrast between dominance-building through both affective becoming-mother relations and discipline-orientated becoming-father relations.



**Figure 4.4: Zick (guide) removing ticks from Madoda’s face. Without a prior existing dominant relationship with Madoda, he wouldn’t ‘allow’ a person to touch his face like this**

Drawing on Deleuze and Guattari’s (1988) ‘becoming-animal’, this social hegemonic exploitation, understood as a process of ‘becoming-lion’ through an engagement in the rhythms, habits and patterns of the lions (walking in front or behind, providing affection/ discipline), allows the humans to ‘become with’ (Haraway, 2008) the lions’ (albeit artificially engendered) natural social ordering/ ‘wild’ system. Becoming is a process of deterritorialization and a means of undoing identity (Baker, 2000) where the human becomes something other than itself (here a member of the lions’ pride). The idea of becoming-lion/‘wild’ thus complicates these human-lion boundaries as “distinct registers of being” (McCormack, 2009). Humans are not automatically members of the pride; volunteers/staff “become [different] members of the pride”

(EIA, 2007) and become with (Haraway, 2008) lions, through these various multisensual interactions.

Furthermore, these interactions, and thus becomings, are dynamic and fluid. Guides sometimes walk at the back and discipline the cubs, whilst handlers may lead a walk or engage in affective relations (fig.4.3); indeed, as Nicola put it:

*“It’s important to note that within a pride the complexities of social boundaries are much more intense and massive... They follow anyone that is dominant, females and male [lions/humans] are all dominant”.*

As the lions progress through the stages, this human-lion interactive social organization changes. In stage 1B, the lions still follow the vehicle within the release site whilst on day/night encounters; in this sense, the socio-technological assemblage of the vehicle (and the guides/handlers/clients within it) is also drawn into this ‘becoming’-lion and/or ‘becoming’-mother. By stage 2, the lions ignore the vehicle (within one week of release, most of the lions did not even look at the research vehicle), as they are habituated to it like lions in a national park, seeing humans as *“just another rock”* (Jacqui, research technician). These captive-bred lions can here be configured, perceptually at least, like ‘wild’ lions in a national park. This palpable change in human/vehicle-lion interaction importantly shows not only the dynamism and fluidity of the relationship(s), but also the success of the rewilding process as the lions are becoming ‘wild’.

This process of becoming mother/father, and therefore becoming with a lion pride, is fundamental to the process of becoming (re)wild(ed). This social exploitation and building of social bonds through reciprocal interspecies affective relationships is crucial in the lions’ rewilding development by facilitating the practice of LWs. Different types of embodied relations (affection/discipline) ensure that potentially dangerous animals are able to be temporarily released into a human-filled national park and even engage with clients “to the point that they’re safe to walk with in the Bush” (EIA, 2007); cubs also feel confident enough to be out of their enclosure and follow the ‘pride’. Additionally, habitual embodied interactions provide *“security for natural engagement in play behaviour”* (David Youldon, ALERT’s CEO). Indeed, LWs allow the lions to become (re)wild(ed) through an engagement in an interactive ‘wild’ assemblage of hunting (fig.4.5), climbing trees (fig.4.6), playing and developing strong social bonds- which have proved invaluable with the released pride so far

(figs.4.7, 4.8); these are activities that would be absent without LWs. Lastly, Friday (guide) considered embodied interactions “like grooming” and therefore a substitutionary social “wild action giving the cubs more confidence” to follow the guides and develop their 'wild' instincts. Thus, lions enter into a conservation process of becoming (re)wild(ed) through the gendered multisensual ‘habituated’ process of humans becoming mother/father and part of the pride.



**Figure 4.5: Madoda (male) with a vervet monkey that has just been killed by Zambezi (female) on a LW**



**Figure 4.6: Madoda and Munali having climbed a tree on a LW**



**Figure 4.7: Zulu greeting the female members of the pride (Kela, Kwandi, Leya and Loma) after having been released into stage 2, showing the existence of social bonds as pride that developed during their interactions in stages 1A/B (Source: Jacqui Kirk, research technician)**



**Figure 4.8: Kela Kwandi and Leya feeding on a waterbuck that they have just cooperatively killed in stage 2 (Source: Jacqui Kirk, research technician)**

#### 4.1.2 ***‘Tug of War’: Becoming (re)wild(ed) and habituated***

*Female client on CLW: “People keeping lions as pets is obviously very nice, but it’s much better when they are in the wild. This project is good because there is no interaction in stage 2: they are left alone”.*

ALERT’s distinctive human role in *actively* engendering the rewilding process of the lions ‘becoming’ wild, through the haptic and multiple substitutionary process of humans becoming part of the pride, can be understood as constitutive of a ‘tug of war’ between becoming (re)wild(ed) and becoming ‘domestic’. This is exemplified by the above quotation which highlights this ‘tug of war’ between keeping and domesticating lions and simultaneously rewilding them through the removal of human interaction in stage 2. This can be understood as a process of becoming ‘domestic’ as the lions effuse nonhuman corporeal charisma (Lorimer, 2007) through multisensual encounters as handlers/guides/volunteers develop relationships with the lions (on an individual and species level), which engender an obligation to care through touching (Haraway, 2008), as the lions are anthropomorphised as loving and loveable beings. Lions, through social similarities and anthropomorphism (*“in terms of socialness we are closest to lions”*- Zick, guide), ostensibly open up the possibilities of interspecies affective encounters. It is the habitual nature of these relations, whilst simultaneously attempting to rewild the lions, that constitutes this paradoxical ‘tug of war’.

Furthermore, the gendered multisensual becoming-mother/father is crucial in the LW’s *governance* (the lions follow the affective calls of the guides and they respect the handlers and therefore move when they encourage/discipline them to do so) and *performance* for financial reward as the lions are able to financially self-sustain themselves (lion-guide relations facilitates client/volunteer-lion embodied interactions (fig.4.9) which are usually commodified through the photographic lens) – therefore subjugating lions to domesticatory practices (Fuentes 2007; Anderson 1997). Indeed, advertised as offering “[lion] walks deep into the wilds of Africa” (‘Lion Country’, season 2 episode 1), human consumption of the lions and MoNP landscape is an example of packing and “producing wildlife” (Suzuki, 2007:229), which includes the project’s breeding of lions. Lions are thereby subject to a commodifying gaze, as they almost become passive agents in this performative and economically driven assemblage whereby the notion and practices of ‘wild’ is enacted, ‘performed’ and domesticated (Fuentes, 2007). This performative ‘domestic’ configuration of the lions is exemplified by the vocabulary of the lions

being “retired” (staff and EIA, 2007), which is used when the lions progress into stage 1B. The ‘tug of war’ between rewilding and domesticatory performance is illustrated by Mwiya’s (guide) assertion that: “*we want to keep them as wild as possible; they are not photogenic*”. Finally, the very practice of a human walking an animal is imbued with a societal view of ‘domestication’ (as exemplified by a client’s comment that “*it’s like taking a dog out on a walk*”) and a notion of dominance (evidenced by Steven’s (handler) admission that: “*they are force[d] to interact with people*”), as lions are habituated to human presence in order to control them in a similar way to controlling a dog.



**Figure 4.9: Friday (guide) mediating a human-lion embodied interaction with Dendi now about to lick the volunteer’s hand on a training lion walk**

Moreover, this ‘tug of war’ can be extended to the process of *humans* becoming with ‘wild(er)ness’ and ‘domestication’. The *humans* who relate to the lions and become part of the pride can also be understood as ‘becoming’ domesticated through processes of habituation, as they learn to interact with the lions in an institutionally/ethically appropriate way, and in a way that relates to the lions as naturally as possible (so that the lions ‘accept’ them within their pride and interact in a non-aggressive way). Additionally, the guides (all male) in particular are configured in ‘domestic’ terms through the affective notion of assuming the (traditionally ‘domestic’ human) role of a “devoted mum” (Besio *et al.*, 2008). However, despite this quasi-

artificial process of ‘becoming-habituated’ into the pride (Candea, 2010), conversely, the active role of producing ‘wildness’ through walking with and becoming-lion can facilitate humans becoming-wild through an affective and visceral experience of 'wild(er)ness'. Differing from the deeply personal active experience of hunting animals (Marvin, 2003; Emel, 1998), humans engage in a visual and ‘more-than-wild’ experience of walking and being/becoming with the lions, through the commodified performative experiential spectacle of observing on the ground, lions hunt (fig.4.10). By simultaneously becoming with natural and ‘wild’ lion social positions as they become part of the pride, humans temporarily become-lion and ‘wild’. Therefore, together with the awareness and education that arises from one’s experience at the project, not only lions, but humans too, experientially, relationally and educationally become (re)wild(ed). Engagements in interspecies social bonds thus constitute a human ‘tug of war’ between becoming both ‘wild’ and ‘domestic’.



**Figure 4.10: Dendi and Damara hunting a troop of baboons on a CLW**

Thus, rewilding is performed in a habitual and quasi-domesticatory manner through the gendered, multisensual and reciprocal engagement in the social choreography of a lion pride, as humans also pay to experience a “natural African wildlife adventure” (LE website). Through walking with these moving bodies and becoming-mother/father, both humans and lions are configured as constitutive of a fluid multiple conceptualisation and ‘tug of war’ between becoming (re)wild(ed) and becoming habituated and ‘domestic’.

## 4.2 Spatial 'Becomings'

The following section will explore how the practice of rewilding is experienced and made manifest by embodied skill shared between lions and people through spatial configurations, as certain spaces also enter into a *process* of becoming 'wild', 'more-than-captive' and 'domestic' as they relate to humans and lions in dynamic ways.

### 4.2.1 *Becoming-'wild' space*

Many interview responses highlighted the significance of 'space' as a key determinant and characteristic of the 'wild'-'domestic'-'captive' continuum, such as:

Cephas (handler): *"the more a lion is out of the enclosure the more wild it becomes...the less time out of enclosure the more domestic it becomes"*.

There is a fundamental spatial element to the lions' progression through ALERT's four-stage program, as they travel through 1169m<sup>2</sup> enclosures, the 66km<sup>2</sup> MoNP, a 707-acre (2.86km<sup>2</sup>) and then a 10,000-acre (40.5km<sup>2</sup>) release site, with their offspring eventually fully released into national parks or private reserves. This spatially constitutive process of becoming (re)wild(ed) is far from linear however. In stage 1A they are (temporarily) on LWs in the MoNP, where they encounter (traditionally configured) 'wild' animals such as free-roaming elephants (fig.4.11) and crocodiles in the Zambezi River. Indeed, it is in stage 1A and B, that lions originally develop crucial 'wild' instincts such as hunting, thereby perhaps configuring stage 1 as constituting the lions' richest state of developing 'wildness'. Furthermore, periodically volunteers and handlers use an axe to break up and recycle the enclosure's soil (fig.4.12) if there is an adult male (in stage 1A/B) who scent-marks his territory on a daily basis. This is done both to reduce bacteria build-up, but more significantly to neutralise the 'Tomcat' (from urine) thereby essentially providing a new (seemingly more mobile) space for the male's natural 'wild' practice of territory reclamation. This can therefore be seen as a spatial re-configuring of the 'captive' space (and inhabitants) of the enclosures as dynamically becoming 'wild'.



**Figure 4.12: One strip of hard soil having been churned up with axes inside the enclosure**



**Figure 4.11 Charles (scout) ahead of a CLW waiting for a heard of free-roaming elephants to pass**

The non-linear spatial progression of becoming 'wild' is highlighted by the fact that despite the increased space and self-sufficiency of the lions in stage 2 onwards, electric perimeter fences nonetheless essentially act as larger quasi-enclosures. This means that the lions are “*still constrained by a non-wild element: a fence*”, and the project therefore “*uses the term semi-wild*” because a level of management is still required (David Youldon). This continued spatial restriction therefore stabilises the configuration of the lions as 'captive' despite their progression

through the program. Conversely, since stages 2 and 3 provide the lions with increasing permanent space within which to live self-sustainably (human stocking of the release site of game is still necessary), there is nonetheless a progression of 'wildness' in the spaces and lions as they become (re)wild(ed).

Perceptually-speaking, if wildness is taken at the species level (see Matless *et al.*, 2005; Bear and Eden, 2011), this further complicates the categorical placing of 'wild', 'domestic' and 'captive' lions and spaces. This was highlighted by Sunday (handler): “*a lion is a lion even if in captivity*”, Cephas (handler): “*it’s just the mind that knows these are captive lions and those are wild lions*”, and Bright (Muanga school teacher) who saw the enclosures as 'wild' because “*it (enclosure) has wild things in it*”. When the lions are configured at the species level, they remain innately 'wild', and therefore have active agency in relating to the spaces they inhabit in transforming them into (temporary) spaces of ‘wildness’. Travelling through these dynamic spaces, lions transform both themselves and the spaces as simultaneously becoming-'wild' and 'captive'; in this sense, space can indeed be considered as a verb rather than a noun (Doel, 1999).

#### **4.2.2 *Becoming-‘more-than-captive’ space***

Through the physical, multi-sensual and perceptual transcendence of spatial boundaries these captive-bred lions can be configured as “in-between” ‘more-than-captive’.

One volunteer (Alison) when I was stroking and playing with Munalu through the fence, commented, “*it’s like visiting your girlfriend in prison*”, highlighting several key issues. In ANT terms, the use of “prison” stabilises the configuration of the enclosures and lions as *being* 'captive' (implicitly against their will) within the metal barrier of the fence. The use of “*girlfriend*” on the one hand also stabilises the traditional conceptualisation of relationships between humans and 'captive' animals in zoos- a relatively caring individual relationship that exists with a mediating spatial barrier and includes the provision of food, medication and perhaps behavioural stimulation (fig.4.13). On the other hand, “*girlfriend*” highlights a ‘more-than-captive’ gendered and affective (almost human) relationship that transcends the spatial barrier of the metal enclosure fence, through embodied and powerfully intimate multisensual human-lion interactions that (unlike with zoos) occur outside, inside and *through* (figs.4.14, 4.15) the enclosure fences. In most instances in this rewilding actor-network, moments of ('captive') stabilisation are seemingly transcended by destabilising relations and configurations.



**Figure 4.13: Behavioural Enrichment: Impala made out of dried grass, sticks and elephant dung (all collected in the MoNP) placed in the lions' enclosure**



**Figure 4.14: Volunteer touching Nyka (4 year old lioness) through the holding enclosure fence at Dambwa**



**Figure 4.15: Intern and volunteer stroking younger walking cubs through the fence**

Furthermore, a varying assemblage of intermixing spaces, animals, fires, technologies and humans constitute both the enclosures and the Dambwa release site as 'more-than-captive' actor-network ensembles. Nicola's comment highlights the unsettled divided between 'captive' and 'wild':

*“We like to make them [enclosures] as natural as possible, and less zoo-like, less commercial. As wild as possible. But perhaps not now I don’t know what wild means”.*

Theoretically for the project there is meant to be something different about the changing enclosed spaces of the project (compared to a zoo), as the 'captive' enclosures are in a process of becoming 'wild'. Indeed, a plethora of different (natural) *actants* (Haraway, 1991) interact with, challenge and traverse the 'captive' spatiality of the enclosures and release site, configuring the spaces and lions in a ‘more-than-captive’ assemblage. A swarm of African bees passing through the MoNP flew just over my head and settled on a branch within the enclosure for several days (fig.4.16); herds of elephants (seasonally migrating between Botswana, Zambia and Zimbabwe) and buffalo often walk past at night; and snakes pass through the enclosures, occasionally biting the lions (fig.4.17). Aside from the occasional enclosure visit from human-ridden elephants (fig.4.18), the other actors that interact with(in) and through the enclosures and the lions, are mobile and unconstrained. The technically 'captive' enclosures are therefore transformed into a heterogeneous and relational process of becoming-'wild', 'domestic' and ‘more-than-captive’, through a relational assemblage of mobile and 'wild' actants and human-imprinted elephant-lion interactions.



**Figure 4.16: Swarm of African bees temporarily resting above cubs’ enclosure (source: author)**



**Figure 4.17: Puff Adder tracks passing through the stage 1B enclosure were found whilst 2 handlers and myself where enclosure cleaning. 22 month old Ruma had clearly been bitten on her face, and was treated accordingly**



**Figure 4.18: Human-ridden elephant from neighbouring project approaching the cubs' enclosure; it's handler soon encourages it away**

'Captivity' can perhaps most appropriately be understood as temporary and "in-between" through this transcendence of fixed spatial barriers. On my first day at the project, 9m flames crossed into and engulfed half of the release site (figs.4.19, 4.20) even getting within 1m of the Dambwa holding enclosures (fig.4.21). Paralleling the fire's uncontrollable/'wild' capacity to traverse such boundaries, Alex's (farmer) main concern with the project was that he believed that: *"whatever fence you put in, an elephant is an animal, it will pull the fence down"*, therefore allowing the released lions to escape, and because the *"lions are trained to hunt...the charcoal burners (who work in the Dambwa Forest) will be targets"*. Perceptually and practically then, the lions are temporarily being held 'captive' until they inevitably escape the constraints of the 'captive' or "semi-wild" (David, CEO of ALERT) space, into a free, open and 'wild' one. Thus, Fuentes' (2007:127) categorisation of 'domestic' as "in-between" 'wild' and 'captive', can perhaps be reconfigured, instead placing the fluid and temporary concept of (more-than) 'captive' as "in-between" the 'wild'-'domestic' interface.

Thus, just as the practice of rewilding unsettles the classical domestic-wild binary it also challenges traditional conceptualisations of 'captivity' through a destabilisation of the lion-human-space actor-network as spatially dynamic and interactively 'more-than-captive'. Given that: the enclosures are located *within* a national park; humans and lions interact (haptically) within, through and around the enclosures; and that the lions are temporarily released from their enclosure, thus this constitutes a processual and "in-between" more-than-'captive' configuration of the lions and the spaces they inhabit (which are also simultaneously in a process of becoming 'wild', 'domestic' and 'captive').



**Figure 1.19: Fire engulfing the Dambwa release site on my first day. My direct research was delayed as I joined the staff and volunteers to in trying to control it**



**Figure 4.20: By late evening, the fire was beginning to be controlled using firebreaks**



**Figure 4.21: The fire got within 1m of the Dambwa enclosures**

### 4.2.3 *Becoming-'domestic' space*

The relational moving bodies of humans and lions through different spaces of rewilding is also generative of dynamic becoming-'domestic' space.

Following a focus group with several handlers, I discovered that before LE was established, there were almost daily robberies at Thorntree Lodge (100m from LE- fig.3.2); however, since LE's inception three years ago, there have been no recorded robberies. This is attributed by the handlers as being because the "*community in Livingstone and surrounding towns heard that there were wild lions nearby*". The lions (here viewed at the *species* level), through their perceptual/cultural configuration as "*wild beasts*" (Lovewell, handler), act as guard dogs, which are traditionally viewed as 'domestic' pets; this parallels with Suzuki's (2007:241) "domestic" configuration of two lions as "family pets" that provided protection on army patrols. This unsettled wild-domestic perception transforms the (MoNP) landscape into a protected and stabilized 'domesticated' space, as the lions take on a functional 'domestic' role. The lions thus have agency over the space and the people within (protecting) and outside (preventing) the project.

Under about 11 months old, cubs are often reluctant to leave their enclosure for LWs, and usually trudge slowly- often sitting down (fig.4.22)- towards the guide calling in front. As the walks start to turn back towards the enclosures, there is a palpable difference in the lions' behaviour and pace, with Zaria and Zamfara (the youngest set of cubs) in particular actively running back. This relational/ interactive transformation of their enclosure space as (temporarily) 'domestic' is partly instilled by the project staff who leave the cubs in the enclosure for 3 weeks before they are first walked so that they identify it as "*their home*" (Cephas, handler) and grow in confidence. Even whilst developing 'wild' instincts stalking an impala, Madoda was identified by Zick as showing "*a look of wanting to go home*". The conception of a 'home' for lions is unnatural (except for a 10,000-acre 'home range'), and *their* human-imprinted active transformation of their enclosures as a home (they chose to return unlike zoo animals), configures such a space as affectively and relationally 'domestic', and in turn transforms themselves (lions) as 'domestic'.



**Figure 4.22: Dennis (handler) with Munali outside the enclosure who is reluctant to follow the volunteers on a LW**

However, this transformative process is dynamic and fluid as the lions progress through the program. Several handlers and guides explained that once the lions start killing on walks (i.e. developing natural 'wild' instincts) they run out of the enclosure *“not putting much mind on us”* (Steve, handler), and resent returning. Therefore, as the lions are habituated to a more natural environment on walks, their walking area in the MoNP is transformed (temporarily) into a becoming with 'wild' space, constituted and enacted particularly by lions hunting prey. Furthermore, their active transformation of their enclosure space as 'domestic' segues into a configuration of an “in-between” 'captive' space, which prevents the lions from fully expressing their wildness by 'holding' the lions in place, like 'captive' zoo animals, which (unlike the younger, less 'wild' developed cubs) would otherwise now 'escape' (as seen with the Ohio Zoo escape of 52 “wild animals” (BBC, 2011) in October 2011). This progression from 'domestic' (home) space to “in-between” 'more-than-captive' space, which temporarily inhibits, but also demonstrates the existence of, the process of becoming-'wild', highlights the fluid interplay between the spatiality of these concepts.

Moreover, the 100m spatial propinquity of enclosures and staff /volunteers' living accommodation (fig.3.2) challenged conceptualisations of the lions, and the spaces they inhabit, as being totally distinct from 'domestic' configurations. Most interview responses (and as defined etymologically) identified 'domestic' as being “of the *home*”. When I equated their definition of 'domestic' as, for example, “being kept close to humans” (Fred, foreman), to apply to the location of the lions at the project, many interviewees were visibly confused, and offered

little suggestion of a difference between 'captive' and 'domestic' lions. The lions therefore transform the spaces of their enclosures, and the area of the MoNP (which connects the enclosures and the accommodation), as 'domestic' due to the lions' propinquity to human 'domestic'/living habitation; this is exemplified by Alex's concern that the lions' location means, "*it's like you are putting lions more or less in town*". The fact that the stage 2 release site is distinctly separated from the project by 10km, conveniently manifests and parallels the 'wild(er)ness' progression (of spaces and lions) through the program. Thus, the spatial distribution of lions, barriers, homes and people ensures that the performance of rewilding configures 'wild(er)ness', 'domestication' and 'captivity' as dynamic and *in praxis*.

In addition, the spatial practices of LWs can also be understood as being in a process of becoming 'domestic'. All walks follow well-trodden paths (fig.4.23) connecting different "meeting points". These sites are named/characterised by how the lions interact(ed) with a particular place (e.g. 'Kela Kwandi Pools'- where Kela and Kwandi always used to play in the puddles). Through the habitual practice of repetitive walks along the same paths and to the same sites, the environment becomes ecologically habituated (fig.4.23), and both lions ("[Munali] *knows where she's going*"- Cephas) and people ("*I'm about to leave, and I only now know where 'Beach 3' is*" - volunteer) eventually *learn* where to go and where to stop and 'play'. This spatial becoming-habituated process of learning for humans and lions, is facilitated through the handlers' governance/control of the LWs; lions are ushered back to the path through paternal discipline practices, whilst volunteers and clients are also repetitively kept to the paths (when I once walked slightly to the left of the path I was told: "*you are going the wrong way*" (John). Humans also become habituated to other spatial barriers such as electric fences; one volunteer who was shocked was labelled as "*fence-trained*" (Richard, general manager). However, when hunting prey, both lions and humans were permitted to challenge these normal spatial barriers on LWs both to allow the lions to become (re)wild(ed) through hunting practice, and simultaneously to allow humans to engage in a performative and commodified experiential becoming with 'wild(er)ness'. Furthermore, the dynamic spatial human-lion interrelationship is exemplified by the lively agency of the different sites to engender rewilding and performative ('domestic') lion behaviour. Hot open areas encourage relaxation and therefore embodied interactions for clients; river sites encourage play behaviour development and photographs; locations replete with prey usually instigate hunting. Thus, through the lively spatial habituation of lions, humans and the environment, these mutually dynamic and transformative interactions

configure the process of becoming (re)wild(ed) as simultaneously co-constituted of becoming habituated 'domestic' space.

The fluid and “relentlessly heterogeneous” (Murdoch, 1997) spatial relationship between the lions, people and environment destabilises the configuration of the lions as 'wild'/'domestic'/'captive'. Instead, this assemblage of lions, people and spaces can be configured as (simultaneously) becoming 'wild', 'more-than-captive' and 'domestic', as the lions progress through the spatially-variant practices and stages of rewilding. Spatiality is thus intrinsic in configurations of these concepts of 'wild(er)ness', 'domestication' and 'captivity'.



**Figure 4.23 John and Kennedy (handlers) and Zaria and Zamfara walking along a 'well trodden path' that has been ecologically habituated to lion walks over time**

## 5 Conservation assemblage

The notion of ‘assemblage’ has been used by “geographers to understand the formation of a range of spatial forms”, emphasising “emergence, multiplicity and indeterminacy” between “heterogeneous elements that may be human and non-human” (Anderson and McFarlane, 2011). This section will explore how the practices and perceptions of rewilding are part of a wider shifting conservation assemblage – constituted of myriad assemblages and actors- that is affected by and affects the interchangeable and dynamic concepts of 'wild(er)ness', 'domestication' and 'captivity'.

### 5.1 Socio-cultural Assemblage

Socio-cultural perceptions and benefits- the “human dimension” (Jacobson and Duff, 2008)- are an increasingly intrinsic aspect of conservation. As highlighted by many interviewees, the pejorative community conceptualisations of ‘wild’, ‘nature’ and ‘lion’ have been reconfigured through social assemblages and within the wider conservation assemblage:

Mwape (community Liaison Officer): *“what was too wild [a lion], when captivated [captured], can be friendly and you can live with it. What was frightening has become a friend and useful for cohabiting and in socio-economic sectors...the dangerous beast is actually friendly”*

Steven (handler): *“I thought wild is something you can’t encounter or come close to. Now I touch these lions”*

Cephas (handler): *“Before, a wild thing was something you couldn’t stand near or be close to; where as now you can be near these wild lions”*

Peter Mumba (Permanent secretary for Tourism): *“Before I thought of lions to hunt...now I see they are priceless”.*

A focus group with some children at Maunga Basic School (fig.5.1) demonstrated that following LE’s introduction nearby, they have learnt of the importance of conserving lions- particularly for economic benefits (“lions bring money”)- compared to snakes/spiders, which “are harmful to [people]”. This highlights that even from a young age, the lions are now

becoming important and appreciated in a community that originally actively opposed the project. Unlike national/private reserves, this rewilding project has brought lions into a local community in a way they have never previously existed (in Zambia). For handlers/guides and indigenous Zambians who come on a LW, haptic and multisensual encounters engender affective and anthropomorphic social relations. For Cephas (handler): *“touching a lion is like touching someone you love”*; whilst for Zick (guide), when you touch a lion you *“just feel the nature and the love they have...amazing...feel a symbol of love for Africa”*. Charles (scout) drew a particularly interesting anthropomorphic similarity of lions as soldiers which therefore complements the 'domestic' configuration of the lions as guard dogs:

*“Lions I like because at first I used to take them to be dangerous animals, but when I came to learn that you can tame the lions, you can train them and actually they are social...They are like soldiers, they follow orders, like the ranks, they know who to respect...the lion is intelligent to know all these things”*.

These anthropomorphic and perceptually-'domestic' and multisensual human-lion relations configures the lions as a “companion species” (Haraway, 2003) in its narrowest form, drawing parallels with human interactions with 'domestic' pets – which many interviewees alluded to (Zambians gleefully, British staff reluctantly). John (handler) suggested on a training LW: *“pet them...feels good”*; Bernard (Dambwa staff) viewed them as *“friendly, like pets”*; a local farmer commented: *“these are domesticated ones; nice pets to look at...like my livestock, they know the relationship between a stranger and those always with them”*; Nicola jokingly admitted: *“what I’m saying is a lion is the same as a pet dog”*. For Zambians, 'wild(er)ness' is experienced and made manifest(ly positive) through an experiential and perceptual 'domestic' configuration of lions; a practical and perceptual 'domestic' reconfiguration of 'wild(er)ness' is necessary for more positive human-nature relations within the wider Livingstone community. The handlers/guides even explained how they send videos to their extended families and boast to their friends of their daily intimate and social relations with the lions, therefore demonstrating the wider emergent assemblage effect of anthropomorphic and multisensual interspecies encounters in reconfiguring 'wild(er)ness'. Rewilding as a practice therefore takes on power and agency within the wider conservation assemblage in reconfiguring conceptions of what ‘wild’ means; the community has become more accepting of the project, and education about lions and ‘wildness’ is spreading. In this sense, as indigenous Zambians become part of the lions’ pride- both they themselves (handlers/guides- who often previously disliked lions, and other

community members who have been on special CLWs) and the wider community through education and awareness – become perceptually and/or experientially (re)wild(ed). The emergent product of this assemblage has hence been to re-work cultural perceptions of 'wild(er)ness'/lions, whereby such reconfigurations can be actively mobilised to benefit both lions and humans. Thus, through an ontological restructuring of becoming-lion, 'wild' and 'domestic', there is simultaneously a semantic reconfiguring of these terms. Indeed, through particular knowledge practices, such as rewilding (especially LWs), the 'wild' can become 'domestic'; the fearful can become exciting and enjoyable; the unimaginable can become possible; the 'other' can become intimate/friendly; the 'captive' can become 'wild'.



**Figure 5.1: Pupils and their headmaster at Muangwa Basic School waving goodbye after my visit there**

## **5.2 In and Ex-situ Assemblage**

Unlike most other projects offering interspecies embodied experiences, ALERT (supported by LE) is a non-profit charity registered organisation. Its array of different practices ultimately constitutes a conservation-driven rewilding project, whereby the lions are subject to 'domesticatory' and 'captive' practices ultimately for their own good: to become (re)wild(ed). Rewilding here is performed through a direct blending of in and ex-situ lion bodies and spaces, attending to Whatmore's (2002) blurring of the 'wild' and 'captive' in the practices of conservation/science. The enmeshing of captive-bred (at LE) ex-situ lions and 'more-than-captive' (and simultaneously 'domestic') enclosure spaces within the in-situ becoming 'wild' and 'domestic' MoNP, thus constitutes a becoming (re)wild(ed) assemblage of entangled in- and ex-

situ bodies and spaces, as the lions ultimately become emergent, in-situ reintroduced and rewilded bodies.

The practice of genetic identification, monitoring and controlling, so as to avoid inbreeding and incorrect breeding, is an important aspect of stage 1A. The controlling of breeding and genetic management borders on a domesticatory practice, drawing on Clutton-Brock's (1999) definition of domestication as (socially and) genetically determined. Indeed, this is alluded to by the project's EIA (2007), which confirms:

*P68: “[the] project’s commitment to breeding a reserve pool of lions with the maximum chance of survival in the wild and to preserve genetic diversity”*

*P96: “if the breeding behaviour of lions is not properly managed...this may result into domestication”.*

The lions are thus subject to genetic control in order to reproduce genetically pure, and by definition, more ‘natural’ bodies that, as well as lacking any embodied human imprint, will transport their developed wildness into new (distant) spaces such as game reserves and national parks.

The prospect of a becoming (with) ‘wild’ (walking, not in a car on safari) and ‘more-than-captive’ (touching the lions, not just seeing them through a fence in a zoo) experience, mobilises a network of people, money, education/awareness and changed perceptions, which are all constitutive of the wider rewilding conservation assemblage. To understand ‘wild(er)ness’, indigenous Zambians needed to understand it in *relation* to notions of ‘domestication’ and ‘captivity’, which, through the blending of in- and ex-situ bodies/spaces and haptic lion encounters, has brought the concepts of ‘nature’ and ‘wild(er)ness’ and (“dangerous”) lions within positive social orderings and assemblages. These ‘more-than-human’ assemblages unfold in heterogeneous spaces as ‘wild(er)ness’, ‘domestication’ and ‘captivity’ are relationally constituted of, and constitute, such assemblages. Furthermore, this assemblage simultaneously deconstructs, and produces, such concepts. Indeed, to become-‘wild’ a process of becoming-‘domestic’ and ‘more-than-captive’ also takes place. Rewilding thus configures a dynamic heterogeneous ‘becoming’ conceptualisation of these concepts within an emergent assemblage.

This assemblage of configurations, which are fluid and mutable (exemplified by “*the beast is now friendly*”), therefore have agency to affect wider conservation efforts.

## 6 Conclusion

### 6.1 'Wild(er)ness', 'domestication' and 'captivity' reconfigured

This study ends with several important conclusions that enable geographers to develop a more nuanced understanding of the terms 'wild', 'domestic' and 'captive'.

First, the performance of ALERT's rewilding program constitutes a dynamic 'tug of war', between the lions becoming (re)wild(ed) and simultaneously becoming 'more-than-captive' and 'domestic'. The multisensual and anthropomorphic encounters between humans and lions within the practice of LWs facilitate the development of the lions' wildness, whilst also subjecting them to domesticatory habituation. Humans and lions become habituated to each other and 'learn to be affected' (Lorimer, 2010b) through multisensual haptic reciprocity with humans becoming part of the pride. Combined with the ecological habituation and spatial imprinting (on humans and lions) of sites and paths, habituation is clearly intrinsic to the practice of rewilding. Whilst these processes of habituation in stage 1A can be configured as 'domestic', the different processes of habituation in stage 2, whereby humans become, in NRT terms, a "background hum" (Lorimer, 2005), are more akin to Candea's (2010) "inter-patient" habituation, constituted of "detached" research-based relations. Ultimately, lions are habituated to the very notion of wildness, through the gradual and repetitive process of being taken on LWs and progressing through the program. Thus habituation and domestication is fundamental to the semantics and practice of rewilding; to become (re)wild(ed), lions (and people) must also become habituated and 'domesticated'.

Second, this co-production of knowledge through interacting bodies is also applicable to human reconfiguration, as humans too can become (re)wild(ed). As humans become part of the lions' pride on LWs, they engage in a corporeal chorographical interspecies co-habiting. Therefore, humans not only become ('wild') through being with (lions) (Haraway, 2008) and integrating within their social 'wild' system, they simultaneously become 'domestic' through the gendered multisensual embodied and social substitutionary process of becoming mother/father. Moreover, in paying to experience 'wild(er)ness', humans domesticate nature (Anderson, 1997) as lions become "domestic things" (Bernard) through performative acts such as hunting and being touched by clients (Fuentes, 2007). Given that education and awareness is an important aspect of ALERT's aims and practices, it is perhaps fair to conclude that becoming part of the lions' pride (for clients, volunteers, Zambian handlers) is as much about 'rewilding' *humans* as

lions. Indeed, through a wider socio-cultural and economic network assemblage, even the wider Livingstone community are 'rewilded'- in the sense that they now view 'wild(er)ness' and lions as positive and beneficial. The integration of humans in the social orderings of *lions* is a fascinating inversion of Wolch and Emel's (1998:22) "animal moment", which is a recognition of the place of nonhuman creatures in the fabric of *human* social life (Whatmore, 2002).

Thirdly, rewilding is uniquely therefore a practice through which humans actively (in the case of ALERT) or passively give agency to animals to become 'wild'. This particular rewilding project goes beyond the (passive) presence of human intervention and agency of re-introductions (Buller, 2008), into a lively 'becoming with' power of humans to engender, not just re-place, 'wildness'. Wildness is achieved in, and with, the lions through the process of rewilding, whereby affective, haptic and spatially dynamic human-lion interactions are at play. Here one might attend to Whatmore's (2002) geographical reconfiguration of the term 'wilderness' as 'wild(er)ness', which implies an intimate mode of reconfiguring 'wilderness' as including people. Thus, rewilding may be understood as a practical and perceptual exemplification of increasing integration of humans and nature within similar spaces and (interactive) relationships.

Fourthly, this human-animal integration is demonstrated through a heterogeneous conservation assemblage of: haptic and affective lion encounters and strong anthropomorphic reciprocal relations (now seen as "nice pets"); tangible economic benefits (such as local people gaining jobs); and lions acting as protective 'domestic' guard dogs. Lions are becoming enmeshed and accepted within the community and its imagination, as they are now entering the social orderings of people in a positive way through a more-than-human "friendship" (Bingham, 2006). Through haptic interspecies encounters, and the process of humans becoming-lion, rewilding shatters the spatial, interactive and perceptual boundaries between humans and lions. This has facilitated the breaking of dualisms that, to varying degrees, have been at the heart of human geography: nature-culture, human-nonhuman, 'wild'-'domestic'. In a similar fashion, lions are simultaneously "dangerous beasts" and "friendly cats", implying a multiplicity and becoming that problematizes rigid categories of the 'wild' and the 'tame'.

Finally, the mutually co-constitutive process of humans and lions becoming (re)wild(ed) unsettles traditional configurations of 'wild', 'domestic' and 'captive' within and outside of the discipline of geography. As humans and lions increasingly co-habit space, their social worlds

collide. There is a fundamental spatiality to the configuration of these concepts; this is exemplified by the transformative affective interaction between lions and humans over the changing spaces (LWs in the MoNP, 'more-than-captive' enclosures, and release sites) through which lions travel to become (re)wild(ed). As the lions become (re)wild(ed), they enter into a dynamic and transformative relationship with different spaces, thus attending to Whatmore's (2002) SFWE and the closer integration of 'captive' and 'wild' (configurations of) spaces/lion within and through a rewilding project. More nuanced and relational conceptualisations are therefore necessary. ALERT's rewilding project thus engenders the ontological and semantic socio-spatial reconfiguration of these conceptual referents as becoming 'wild', 'domestic' and "in-between" 'more-than-captive'.

Whilst caution is needed in basing universal recommendations on a single case study, the theoretical findings above have implications for human geography and the practices of conservation. Interdisciplinarity is becoming increasingly important in both fields and "it is an inescapable fact that terms will assume categorical meanings" (Jepson *et al.*, 2011). Yet, this dissertation suggests that the concepts of 'wild', 'domestic' and 'captive' are 'more-than-referents' with agency in conservation practices to actively both deconstruct and (re)build bridges between the interfaces of nature-culture and human-nonhuman animals. The coproduction of reconfigurations of 'wild(er)ness', 'domestication' and 'captivity' is an emergent quality in its agency within human-conservation assemblages. This is particularly applicable both for conservation projects like rewilding, and where conservation solutions are needed, such as human-wildlife conflict (which is increasingly studied in human and animal geography). As Nicola admitted, "in a few years time, research might prove us wrong" on ALERT's significant conservation benefit; however, whether or not the particular practices of ALERT, which thus far have proved successful, are worthwhile following, the popular practice of rewilding would regardless do well to pay attention to the significance of particular concepts. Indeed, this study has contributed to the nascent field of the geography of rewilding, and provided a retheorization of key conservation and rewilding concepts that will support future geographical investigations of individual and species-wide human-animal relations within the context of rewilding.

This dissertation has opened up new potential avenues of enquiry. There is a need for a better understanding of the popular usage of these conceptual referents of rewilding, within particular cultural contexts such as the media (Barua, 2010; Candea, 2010; Dietz & Nagagata, 1986) through the project's representation in 'Lion Country'. There is also a need for individual

animal geographies (following Bear's (2011) call for writing about individual animals in a fashion that gives them voice, rather than accumulating interpretation under collectivities such as 'lion'), which might imply a multispecies ethnography, centred on the lives of only a few lions as they progress through different stages of rewilding. Finally, interdisciplinary explorations such as this study could provide conservation practitioners with more insights and reflexivity as to how they *conduct* conservation, and the implications these have for the natures we want to preserve in the twenty-first century.

## 7 References

### 7.1 Bibliography

- Anderson, D. and Grove, R. (1987) *Conservation in Africa: People, Policies and Practice*. C.U.P
- Anderson, K. (1995) Culture and Nature at the Adelaide Zoo: At the Frontiers of Human Geography. *Transactions of the Institute of British Geographers*, 20(3): 275-294
- Anderson, K. (1997) A walk on the wildside: a critical geography of domestication. *Progress in Human Geography*, 21(4): 463–485
- Anderson, B. and McFarlane, C. (2011) Assemblage and Geography. *Area*, 43(3): 124-127
- Baker, S. (2000) *The postmodern animal*. London: Reaktion
- Barua, M. (2010) Whose issue? Representations of human-elephant conflict in Indian and international media. *Science Communication*, 32(1): 55-75.
- Bauer, H., and van der Merwe, S. (2004) Inventory of free-ranging lion *Panthera leo* in Africa. *Oryx*, 38(1): 26–31.
- Bear, C. (2011) Being Angelica? Exploring individual animal geographies. *Area*, 43(3): 297-304
- Bear, C. and Eden, S. (2011) Thinking like a fish? Engaging with non-human difference through recreational angling. *Environment and Planning D: Society and Space*, 29(2): 336-352
- Berger, J. (1980) Why Look at Animals. In Berger, J. (ed.), *About Looking*, London: Writers & Readers, 1-26
- Besio, K., Johnston, L., and Longhurst, R., (2008) Sexy beasts and devoted mums: narrating nature through dolphin tourism. *Environment and Planning A* 40(5): 1219-1234
- Bingham, N. (2006) Bees, butterflies, and bacteria: Biotechnology and the politics of nonhuman friendship. *Environment and Planning A*, 38(3): 483-498
- Boer de, L.E.M., 1992. Ex situ propagation programmes as a contribution to the conservation of biodiversity. In Sundlund, O.T., Hindor, K. and Brown, A.H.D (eds.), *Conservation of biodiversity for sustainable development*, Oslo: Scandinavian University Press, 214-229
- Brooks, S., Spierenburh, M., Van Brakel, L., Kolk, A. and Lukhozi, K.B. (2011) Creating a commodified Wilderness: Tourism, Private Game Farming and ‘Third Nature’ Landscapes in Kwazulu-Natal. *Tijdschrift voor economische en sociale geografie*, 102(3): 260–274
- Bruan, B. (2005) Environmental issues: writing a more-than-human urban geography. *Progress in Human geography*, 29(5): 635-650

- Braun, B. (2008) Environmental Issues: inventive Life. *Progress in Human Geography*, 32(5): 667-679
- Bulbeck, C. (2005) *Facing the Wild: Ecotourism, Conservation and Animal Encounters*. Earthscan, London
- Buller, H. (2004) Where the wild things are: the evolving iconography of rural fauna. *Journal of Rural Studies*, 20(2): 131-141
- Buller, H. (2008) Safe from the wolf: biosecurity, biodiversity, and competing philosophies of nature. *Environment and Planning A*, 40(7): 1583-1597
- Callon, M. (1986) Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of St Brieuc Bay. In J. Law (ed.), *Power, Action and Belief: A New Sociology of Knowledge* London: Routledge, 196-233.
- Callon, M. (1987). Society in the Making: the Study of Technology as a Tool for Sociological Analysis. In Bijker, W.E., Hughes, T.P., and Pinch, T.J., (Eds.), *The Social Construction of Technical Systems: New Directions in the Sociology and History of Technology*. Cambridge, Mass. and London, MIT Press: 83-103.
- Candea, M. (2010) I Fell in Love with Carlos the Meerkat: Engagement and Detachment in Human-Animal Relations. *American Ethnologist* 37(2): 241-258
- Cassidy, R. (2006) I Want to Know about the Dogs. *Theory Culture Society*. 23(7-8): 324-328
- Cassidy, R. and Mullin, M. (2007) (eds.), *Where the wild things are now: domestication reconsidered*, Oxford: Berg.
- Cassidy, R. (2007) Introduction: Domestication Reconsidered. In Cassidy, R. and Mullin, M (eds.), *Where the wild things are now: domestication reconsidered*, Oxford: Berg, 1-25
- Chardonnet, P. (2002) Conservation of the African Lion: Contribution to a Status Survey. *International Foundation for the Conservation of Wildlife, France and Conservation Force, USA*. Available from: <http://www.conservationforce.org/pdf/conservationoftheafricanlion.pdf>
- Cloke, P. and Johnston, R. (2005) Deconstructing human geography's binaries. In Cloke, P. and Johnston, R. (eds.), *Spaces of Geographical Thought*. Sage: London, 1-20
- Cloke, P. and Perkins, H.C. (2005) - Cetacean performance and tourism in Kaikoura, New Zealand. *Environment and Planning D: Society and Space* 23(6): 903-924
- Clutton-Brock (1994) The Unnatural world: Behavioural aspects of humans and animals in the process of domestication . In Manning, A. and Serpell, J.A. (eds.), *Animals and human society: changing perspectives*. London: Routledge, 23-35

- Clutton-Brock, J. (1999) *A natural history of domesticated mammals*. Cambridge University Press, Cambridge.
- Cronon, W. (1995). The Trouble with Wilderness; or, Getting Back to the Wrong Nature. In W. Cronon (Ed.), *Uncommon Ground: Toward Reinventing Nature*. New York: W.W. Norton, 66-90
- Davies, G. (2008) Thinking, reasoning and writing with animals in the biosciences. *Biosocieties*, 3(4) 446-451
- Deleuze, G. and Guattari, F. (1988). *A Thousand Plateaus* (trans B. Massumi). London: Athlone.
- Dietz, L.A., and Nagagata, E. (1986) Community conservation education program for the golden lion Tamarin. In Atkinson, J. (Ed.), *Building support for conservation in rural areas: Workshop proceedings*, Ipswich, MA: QLF-Atlantic Center for the Environment, 8-16
- Doel, M. (1996). A hundred thousand lines of flight: A machinic introduction to the nomad thought and scrumpled geography of Gilles Deleuze and Felix Guattari. *Environment and Planning D: Society and Space* 14(4), 421-439.
- Donlan, C.J., et al. (2006) - Pleistocene Rewilding: An Optimistic Agenda for Twenty-First Century Conservation. *The American Naturalist*. 168(5): 660-681
- Driscoll, C.A., Macdonald, D.W. and O'Brien, S.J. (2009) From wild animals to domestic pets, an evolutionary view of domestication. *PNAS*, 106(Supplement 1): 9971-9978
- Emel, J., Wilbert, C. and Wolch, J. (2002) Animal geographies. *Society and Animals: Journal of Human-Animal Studies*, 10(4): 407-12
- Emel, J. (1998) Are You Man Enough, Big and Bad Enough? Wolf Eradication in the US. In Wolch, J. and Emel, J. (Eds.), *Animal geographies: place, politics, and identity in the nature/culture borderlands*, London: Verso, 91-116
- Environmental Impact Assessment (EIA): Envsol Consult (2007) Dambwa Forest No.22 Joint Management Area Lion Rehabilitation Project. Commissioned by ALERT
- Erlandson, D.A., Harris, E.L., Skipper, B.L. and Allen, S.D. (1993) *Doing Naturalistic Naturalistic Enquiry*. Newbury Park, CA: Sage
- Fabian, J. (2000) *Out of Our Minds: Reason and Madness in the Exploration of Central Africa*. University of California Press, Berkeley, CA
- Foreman, D., Davis, J., Johns, D., Noss, R. and Soule, M. (1992) The Wildlands Project Mission Statement. *Wild Earth*, Special Issue on the Wildlands Project, 3-4
- Foucault, M. (1980) *Power/Knowledge: Selected Interviews and Other Writings, 1972-1977*, edited by: C. Gordon, New York: Pantheon.

- Franklin, A. (1999) *Animals and Modern Culture: A Sociology of Human ^ Animal Relations in Modernity*. Sage: London
- Franklin, A. and Crang, M. (2001) The trouble with tourism and travel theory. *Tourist Studies*, 1(1): 5-22
- Fuentes, A. (2006) Human culture and monkey behaviour: assessing the contexts of potential pathogen transmission between macaques and humans. *American Journal of Primatology*, 68(9): 880-896
- Fuentes, A (2007) Monkey and Human Interconnections: The Wild, the Captive and the in-between. In Cassidy, R., and Mullin, M. (eds.), *Where the wild things are now: domestication reconsidered*, Oxford: Berg, 123-145
- Gamborg, C., Gremmen, B., Christiansen, S.B. and Sandøe, P. (2010) De-Domestication: Ethics at the Intersection of Landscape Restoration and Animal Welfare. *Environmental Values* 19(1): 57-78
- Geertz, C. (1993) *The Interpretation of Cultures: Selected Essays*. London: Fontana
- Griffiths, H., Poulter, I. and Sibley, D. (2000) Feral cats in the city. In Philo, C. and Wilbert, C., (eds.), *Animal spaces, beastly places*, London: Routledge, 56-70
- Haraway, D, J. (2010) When Species Meet: Staying with the Trouble. Response to reviews of *When Species Meet* Davies, G., Lorimer, J., Hird, M., Beisel, U., Hinchliffe, S. and Greenhough, B. *Environment and Planning D: Society and Space*, 28(1): 53-55
- Haraway, D.J. (2008) *When Species Meet*. University Of Minnesota Press: Minneapolis
- Haraway, D.J. (2003) *The companion species manifesto: dogs, people, and significant otherness*. Chicago: Prickly Paradigm Press
- Haraway, D, J. (1997)  
Modest\_Witness@Second\_Millennium.FemaleMan©\_Meets\_Oncomouse™ Routledge, London
- Haraway, D. (1991), A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century. In Haraway, D.J. (ed.), *Simians, Cyborgs and Women: The Reinvention of Nature*, New York: Routledge, 149-181
- Hinchliffe, S. J. (2007) *Geographies of Nature*. London: Sage.
- Hinchliffe, S. *et al.* (2005) Urban wild things: a cosmopolitical experiment. *Environment and Planning D: Society and Space*, 23(5): 643-658
- Hintz, J., G. (2005) Pragmatism and the politics of re-wilding nature: the case of Grizzly Bear reintroduction in Idaho. Thesis (D.Phil.), University of Kentucky. Department of Geography. College of Arts and Sciences

- Hofmeyer, A. T., & Scott, C. M. (2007). Moral geography of focus groups with participants who have preexisting relationships in the workplace. *International Journal of Qualitative Methods*, 6(2): Article 5. Available from:  
[http://www.ualberta.ca/~iiqm/backissues/6\\_2/hofmeyer.pdf](http://www.ualberta.ca/~iiqm/backissues/6_2/hofmeyer.pdf)
- Holliday, A. (2007) *Doing and Writing Qualitative Research*. 2<sup>nd</sup> ed., London: Sage
- Hughes, D.M. (2005) Third Nature: Making Space and Time in the Great Limpopo Conservation Area. *Cultural Anthropology*, 20(2): 157–184
- Jacobson, S.K. and Duff, M.D. (2008) Training Idiot Savants: The Lack of Human Dimensions in Conservation Biology. *Conservation Biology*, 12(2): 263-367
- Jainudeen, M.R. (1970) The use of etorphine hydrochloride for restraint of a domesticated elephant (*Elephas maximus*). *Journal of the American Veterinary Medical Association*, 157(5): 624-626
- Jepson, P., Barua, M., Ladle, R.J. and Buckingham, K. (2011) Towards an intradisciplinary biogeography: a response to Lorimer's 'lively biogeographies' of Asian elephant conservation. *Transactions of the Institute of British Geographers*, 36(1): 170–174
- Johnston, C. (2008) Beyond the clearing: towards a dwelt animal geography. *Progress in Human Geography*, 32(5): 633-649
- Kleiman, D.G. (1989) Reintroduction of captive mammals for conservation. *Bioscience*, 39(3): 152-161
- Latour, B. (1983) Give me a laboratory and I will raise the World. In Knorr-Cetina, K.D. and Mulkay, M.J. (eds.), *Science observed: perspectives on the social study of science*, London: Sage, 141-170
- Latour, B. (1993) *We have never been modern* (trans C. Porter). Harvester Wheatsheaf, Hemel Hamstead
- Latour, B. (1999). On Recalling ANT. In Law, J. and Hassard, J. (Eds.), *Actor Network and After*. Oxford: Blackwell
- Law, J. (1987) Technology, closure and heterogeneous engineering: the case of the Portuguese expansion. In Bijker, W.E., Hughes, T.P. and Pinch T.J. (eds), *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*, Cambridge, Mass: MIT Press, 111-134.
- Lorimer, J. and Driessen, C. (forthcoming) Bovine biopolitics and the fraught biogeographies of rewilding with Heck cattle, *Geoforum*.

- Lorimer, J., (2010a) Elephants as companion species: the lively biogeographies of elephant conservation in Sri Lanka. *Transactions of the Institute of British Geographers*, 35(4): 491-506.
- Lorimer, J. (2010b) Moving image methodologies for more-than-human geographies. *Cultural Geographies*, 17(2): 237–58
- Lorimer, J. (2009a) Natures, Charismatic. In Kitchin, R. and Thrift, N. (eds), *The International Encyclopaedia of Human Geography*, Oxford: Elsevier, 324-330
- Lorimer, J. (2009b) Posthumanism/Posthumanistic Geographies. In Kitchin, R. and Thrift, N. (eds.), *The International Encyclopaedia of Human Geography*, Oxford: Elsevier, 344-354
- Lorimer, J. (2007) Nonhuman charisma. *Environment and Planning D: Society and Space*, 25(5): 911-932
- Lorimer, H. (2005) Cultural geography: the busyness of being 'more-than-representational'. *Progress in Human Geography*, 29(1): 83-94
- Lulka, D. (2009) The residual humanism of hybridity: retaining a sense of the earth. *Transactions of the Institute of British Geographers* 34(3): 378-393
- Marvin, G. (2003) A passionate pursuit: foxhunting as performance. *The Sociological Review*, 51(Issue supplement s2): 46–60
- Matless, D., Merchant, P. and Watkins, C. (2005), Animal landscapes: otters and wildfowl in England 1945–1970. *Transactions of the Institute of British Geographers*, 30(2): 191-205
- McCormack, D.P. (2003) An event of geographical ethics in spaces of affect. *Transactions of the Institute of British Geographers*, 28(4): 488-507
- McCormack, D.P. (2008) Geographies for moving bodies: Thinking, dancing, spaces. *Geography Compass*, 2(6): 1822-1836
- McCormack, D.P. (2009) Becoming. In, Kitchin, R. and Thrift, N. (eds.), *The International Encyclopaedia of Human Geography*. London: Elsevier, 277-281
- Milton, K (2005) Anthropomorphism or Egomorphism? The Perception of Non-Human Persons by Human Ones. In Knight, J. (ed.) *Animals in Person: Cultural Perspectives on Human-Animal Intimacies*, Oxford: Berg, 255–271
- Murdoch, J. (1997) Inhuman/nonhuman/human: actor-network theory and the prospects for a nondualistic and symmetrical perspective on nature and society. *Environment and Planning D: Society and Space*, 15(6): 731–56
- Murdoch, J. (1998) The spaces of actor-network theory. *Geoforum*, 29(4): 357-374
- Myers, N. (1975) The silent savannahs. *International Wildlife* 5(5): 5-10

- Nowell, K., and Jackson, P. (1996) *Wild Cat: Status Survey and Conservation Action Plan*. IUCN Publications, Cambridge, UK
- Nyhus, P.J., Tilson, R.L. and Tomlinson, J.L. (2003) Dangerous animals in captivity: ex situ tiger conflict and implications for private ownership of exotic animals. *Zoo Biology*, 22(6): 573-586
- Ochieng'-Odero, J.P.R. (1994) Does adaptation occur in insect rearing systems, or is it a case of selection, acclimatization and domestication? *Insect Science and its application*, 15(1): 1–7
- Panelli, R. (2010) More-than-human social geographies: posthuman and other possibilities. *Progress in Human Geography*, 34(1): 79–87
- Paull, D. (1985) *The conservation role of captive breeding: a case study of rare and threatened animals indigenous to South Australia*. Unpublished, honours thesis, University of Adelaide
- Philo, C. (1995) Animals, geography and the city: notes on inclusions and exclusions. *Environment and Planning D: Society and Space*, 13(6): 655–81
- Philo, C. and Wilbert, C., (2000) Animal spaces, beastly spaces: an introduction. In Philo, C., Wilbert, C. (Eds.), *Animal Spaces, Beastly Places: New Geographies of Human–Animal Relations*. Routledge, London, 1–34.
- Price, E.O. (1999) Behavioural development in animals undergoing domestication. *Applied Animal Behaviour Science*, 65(3): 245-271
- Rodaway, P. (1994) *Sensuous geographies: body, sense and place*. London and New York, Routledge.
- Smuts, B. (2001) Encounters with Animal Minds. In Thompson, E. (ed), *Between Ourselves: Second-Person Issues in the Study of Consciousness*. Thorverton, UK: Imprint Academic. 293–309
- Soulé, M. and Noss, R. (1998) Rewilding and Biodiversity: Complementary Goals for Continental Conservation, *Wild Earth*, 8(3): 19-28. (Accessible at: <http://academic.evergreen.edu/curricular/MES/rewilding.pdf>)
- Sukumar, R. (2003) *The Living Elephants: Evolutionary Ecology, Behavior and Conservation*. Oxford University Press, New York
- Suzuki, Y. (2007) Putting the Lion out at night: Domestication and the taming of the wild. In Cassidy, R. and Mullin, M. (eds.), *Where the wild things are now: domestication reconsidered*, Oxford: Berg, 229-247
- Thrift, N. (1996) *Spatial formations*. London: Sage
- Trut, L.N., Plyusnina, I.Z. and Oskina, I.N. (2004) An experiment on fox domestication and debatable issues of evolution of the dog. *Russian Journal of Genetics*, 40(6): 644-655

- Vera, F.W.M. (2000) *Grazing ecology and forest history*. CABI, Wallingford.
- Whatmore, S. and Thorne, L. (1998) Wild(er)ness: Reconfiguring the Geographies of Wildlife. *Transactions of the Institute of British Geographers*, 23(4): 435-54
- Whatmore, S. and Thorne, L. (2000) Elephants on the move: spatial formations of wildlife exchange. *Environment and Planning D: Society and Space*, 18(2): 185–203
- Whatmore, S. (2000) Animals, Geography of. In Johnston, R.J., Gregory, D. Pratt, G. and Watts, M.J. (eds.), *The Dictionary of Human Geography*, 4th ed., Oxford: Blackwell, 25-26
- Whatmore, S. (2002) *Hybrid Geographies: Natures Cultures Spaces*. Sage, London
- Whatmore, S. (2006) Materialist returns: practising cultural geographies in and for a more-than-human world. *Cultural Geographies*, 13(4): 600-610
- Wilbert, C. (2009) Animal Geographies. In Kitchin, R. and Thrift, N. (eds.), *The International Encyclopaedia of Human Geography*. London: Elsevier, 112-116
- Willis, P. (1977) *Learning to labour*. London: Gower Press
- Wolch, J. and Emel, J. (Eds.), (1995) Bringing the animals back in. *Environment and Planning D, Society and Space* (guest editorial issue) 13, 631–730.
- Wolch, J., West, J.R., West, K. and Gaines, T.E. (1995) Transspecies urban theory. *Environment and Planning D: Society and Space* 13(6): 735–60.
- Wolch, J. (1998) Zoopolis. In Wolch, J. and Emel, J. (Eds.), *Animal geographies: place, politics, and identity in the nature/culture borderlands*, London: Verso, 119-138
- Wolch, J. and Emel, J. (1998) (Eds.), *Animal geographies: place, politics, and identity in the nature/culture borderlands*, London: Verso
- Wolch, J. (2002) Animal Urbis. *Progress in Human Geography*, 26(6): 721-742

## **7.2 Web resources**

- Bauer, H., Nowell, K., Packer, C. (2008) *Panthera leo*. In: *IUCN Red List of Threatened Species*, IUCN, 2008, Gland, Switzerland. Available from:  
<http://www.iucnredlist.org/apps/redlist/details/15951/0> [accessed online: 10<sup>th</sup> November 2011]
- ALERT, 2009. <http://www.lionalert.org/pages/lion-program.html> [accessed online 12th December 2011]
- Lion Encounter website. Available from:  
[http://www.lionencounter.com/pages/visit\\_livingstone.html](http://www.lionencounter.com/pages/visit_livingstone.html) [accessed online 10/11/11]

- Nasaw, D. (2011) BBC News online. *Why wild animals do not make good pets*. Available from: <http://www.bbc.co.uk/news/world-us-canada-15378039> [accessed online: 20th October 2011]
- BBC News online (2011) *Bears, tigers, lions and wolves escape from Ohio zoo*. Available from: <http://www.bbc.co.uk/news/world-us-canada-15364027> [accessed online: 20th October 2011]

### **7.3 Films and Television programs**

- '*Lion Country*', Television program, 2009, ITV Studios Home Entertainment. Available from: <http://www.youtube.com/watch?v=KU1wffs-yLI>
- '*The Lion King*'. Walt Disney Pictures, 1994. Directors: Minkoff, R. and Allers, R. DVD

### **7.4 Background reading**

- Abbott, B. and Van Kooten, G.C. (2011) Can domestication of wildlife lead to conservation? The economics of tiger farming in China. *Ecological Economics*, 70(4) 721–728
- Anderson, K. (1998) Animal Domestication in Geographic Perspective. *Society and Animals: Journal of Human-Animal Studies*, 6(2): 119-135
- Byrne, J. and Wolch, J. (2009) Nature, race, and parks: past research and future directions for geographic research. *Progress in Human Geography*, 33(6): 743-765
- Dewsbury, J.-D. (2011) The Deleuze-Guattarian assemblage: plastic habits. *Area*, 43(2): 148–153
- Eden, S. and Bear, C. (2011) Reading the river through 'watercraft': environmental engagement through knowledge and practice in freshwater angling. *Cultural Geographies*, 18(3): 297-314
- Hinchliffe, S. and Whatmore, S.J. (2006) Living Cities: Towards a Politics of Conviviality. *Science as Culture* 15(2): 123-138
- Legg, S. (2011) Assemblage/apparatus: using Deleuze and Foucault. *Area*, 43(2): 128–133.
- Lorimer, J. (2008) Living roofs and brownfield wildlife: towards a fluid biogeography of UK nature conservation. *Environment and Planning A*, 40(9): 2042-2060.
- Lorimer, J. and Whatmore, S.J. (2009) After the 'king of beasts': Samuel Baker and the embodied historical geographies of his elephant hunting in mid-nineteenth century Ceylon. *Journal of Historical Geography*, 35(4): 668-689
- Lulka, D. (2004) Stabilizing the herd: fixing the identity of nonhumans. *Environment and Planning D: Society and Space*, 22(3): 439-463

- Kitzinger, J. (1995) Qualitative research. Introducing focus groups. *British Medical Journal*, 311(7000), 299-302
- Matless, D., Merchant, P. and Watkins, C. (2005), Animal landscapes: otters and wildfowl in England 1945–1970. *Transactions of the Institute of British Geographers*, 30(2): 191-205
- McFarlane, C. and Anderson, B. (2011) Thinking with assemblage. *Area*, 43(2): 162-164
- Nelson, M.P. and Callicott, J.B. (eds.) (2008) *The wilderness debate rages on: Continuing the great new wilderness debate*. University of Georgia Press
- Paterson, M. (2009) Haptic geographies: ethnography, haptic knowledges and sensuous dispositions. *Progress in Human Geography*, 33(6): 766-788
- Peterson, M.N. *et al.*, (2005) Wildlife loss through domestication: The case of endangered key deer. *Conservation Biology*, 19(3): 939-944
- Sanderson *et al.*, (2002) The Human Footprint and the Last of the Wild. *Bioscience*, 52(10): 891-904
- Warren, C.R. (2009) 'Wilderness'. In Kitchin, R. and Thrift, N. (eds.), *The International Encyclopaedia of Human Geography*. London: Elsevier, 254-259
- Watson, M. (2003) Performing place in nature reserves. In Szerzynski, B., Heim, W. and Waterton, C. (eds.) *Nature Performed: Environment, Culture and Performance*, Blackwell, Oxford. 145-160

#### **7.4.1 Web resources**

- Ruming, K. (2008) A new network direction in housing studies: the case of actor-network theory. *Australasian Housing Researchers' Conference*. Was available from: <http://www.fbe.unsw.edu.au/cf/publications/presentations/attachments/AHRC08Ruming.pdf> [accessed online 25<sup>th</sup> September 2011]
- Vanderwees, C. (2009) *Companion Species under Fire: A Defense of Donna Haraway's The Companion Species Manifesto*. Nebula Publishing. Available from: [www.nobleworld.biz/images/Vanderwees.pdf](http://www.nobleworld.biz/images/Vanderwees.pdf) [accessed online: 20th December, 2011]

## 8 Appendixes

### 8.1 Appendix A - List of interviews and focus groups

#### **Staff:**

David Youldon (ALERT chief operating Officer) (15/8/11 and 1/9/11)  
 Jacqui Kirk (Research Technician) (31/8/11)  
 Nicola Leach (General Manager) (12/8/11)  
 Mwape Walumba (Community Liaison Officer) (31/8/11)  
 Steve McCormick (Executive Director) (26/9/11)

#### **Politician/ authorities**

Mr Peter Mumba (Permanent Secretary) (26/8/11)  
 Moses (ZAWA Chief Area Warden) (29/8/11)

#### **Handlers/ Guides/ Scouts**

Zick Kolola (Guide) (28/8/11)  
 Friday (Guide) (3/8/11)  
 Mwiya Lusenge (Guide) (1/9/11)  
 Charles Silomba (Armed Scout) (31/8/11)  
 Goodson Chidakwa (Handler) (30/8/11)  
 Cephass (Handler) (22/8/11)  
 John (Head Handler) (5/8/11)  
 Sunday Kongwa (Handler) (25/8/11)  
 Lovewell Siloozi (22/8/11)  
 Steven (7/8/11 and 21/8/11)

#### **Dambwa Staff**

Bernard (3/8/11)  
 Fred Malisana (30/8/11)

#### **Local Community members**

##### Head Teachers

Bright (6/8/11)  
 Joseph (6/8/11)  
 Howard (teacher) (6/8/11)  
 Differ Nama Kobo (Foreman from Muhila's Ranch) (6/8/11)  
 Webster Madima (Vice Chairman of the Joint Forest Management Committee (6/8/11)  
 Senior Headman Siulu (26/8/11)  
 Alex (Farmer) (22/8/11)  
 Anonymous (Farmer) (13/8/11)

#### **Volunteers/ Interns**

Rebecca Williams (volunteer) (15/8/11)  
 Jamie Jolly (animal management intern) (26/8/11)  
 Hannah Jowett (volunteer) (22/8/11)

#### **Focus Group:**

12/8/11

Kennedy Hachi (Handler)

Kennedy II (Handler)  
Dennis Simbeye (Handler)

10/8/11

Stephen Trench (intern)  
Jamie Jolly (intern)  
Hannah Jowett (volunteer)  
Sarah Malcolm (volunteer)

15/8/11

Lovewell (Handler)  
Kennedy II (Handler)  
Goodson Chidakwa (handler)

6/8/11

5 children from Muanga school

## 8.2 Appendix B - Example interview with Nicola Leach (General manager)

*So firstly, why did you come out here?*

NL: As a volunteer, I was searching for projects with lions. I definitely wanted it to be with cats, and I wanted to go to Africa. To be fair actually, I read a book by Kobie Kruger, the wife of game ranger, who raised a lion and I thought it was pretty cool.

*What did you think of lions before you came out here? Has it changed?*

NL: Difficult to say- I can't remember. I know I had a poster in my room. I think I probably liked them more than I do now. I think I've grown up a lot since then, I think and feel things differently to how I did then. It's hard to compare. I think that I have a normal volunteer perception of them as not cuddly, I'm not that stupid. But you know they are beautiful and magnanimous and whatever. And now I've seen them and they kill animals and I don't like that. I guess I just know more now. Back then, living in the UK you have no idea how African lions fit into the community of Africa, how they fit in to the total ecosystem. You just think the lions are happy and everyone is happy with them being there but working with them you understand it is not like that at all. You have to work your arse off to get people to care about lions and to see them in the same way that you do. The biggest difference is that it is so different out here, the role of the lions isn't what I thought. You thought, O Lion King its lovely, everyone loves lions, lions Africa go together its all one and the same thing, but its not once you get here. Lots of people don't like them, they want to shoot them.

*Do you think you've taken some of their attitude?*

NL: I'm much more realistic, to get lions to survive relies on other changes to the continent before just going out and saving a load of lions which is what ALERT and Lion Encounter are trying to do. We need a holistic management approach which I had never considered before hand.

*Do you miss not working with lions on a day to day basis? What do you miss most?*

NL: Yes, definitely. I came to Africa to be with lions to watch them grow up and learn about their behavior and their personalities, and now I sit behind a desk. But that is my decision, and I'm doing it for the good.

*How would you describe your relationship with the lions now?*

NL: Some lions I don't really have one. I make sure I make a conscious effort to see them once a day/every other. Its part of my job role, but I make sure I know about their stories, their mishaps their medication. It is partly my job, but it is also partly because I want to. I know what's going on in their lives so I feel close to them but they don't feel particularly close to...I think some of the ones at Dambwa know me but these ones [in Stage 1A] perhaps don't. I probably wouldn't be able to tell you which one's which unfortunately if I'm honest. I wish it was different but it isn't. Actually no, I probably would.

*What is the role of Zawa for you? What do they think of the project?*

NL: We will be relying on them heavily throughout the programme, it will not survive without them being on board. They control the land, they control wildlife, it belongs to Zawa. They have got to know us a bit better. I think they do care about the lions, and the project, but in Zawa they've got a lot going on because they've got poaching and national parks to run. It's hard because you've got Zawa here in the office, the provincial office and the national office. I think that they are pleased that we are here, and that "they agree we are doing some good". How

we affect their day to day running, not a lot really.

*How wild would you say the different lions are?*

NL: I think you can never tame a lion, it will still kill a human.

*How would you define tame?*

NL: It's not gonna sit when you tell it to sit, its not gonna look at people they way a pet dog would. Its all instinctual, you can't squash instinct. People often ask us, you know ohh they aren't gonna hunt for themselves if the babies haven't seen the mother's hunt, its not going to happen, but its instinct.

*So you would define wildness by instinct?*

NL: Well I guess so, to a point yeah.

*But what about a pet cat chasing a mouse? Isn't that instinct?*

NL: Yeah that is instinct. They aren't wild. Hmm, OK well they are wild in the fact that you are never gonna be able to teach them tricks and get them to understand the way a human can benefit them.

*So it's a about human benefit?*

NL: I'm not sure, like a dog for example, loves me because you feed it.

*What about lions?*

NL: A lot of guides would say they do, because they have that interaction because they are fed. They are social animals aswell, but its been recorded that lions have eaten their keepers who feed them everyday, but I don't think a dog would, but I suppose they bite their owners as well. They are just wild, you can't tame a wild animal. You can never trust an animal, wild or domestic. I wouldn't put it past a lion, captive bred or wild bred to kill a human, eat a child, eat a donkey whatever. But I wouldn't put it past a dog, domestic or otherwise to bite someone. What I'm saying is a lion is the same as a pet dog: I'm only joking.

*What would you define as a wilderness?*

NL: A wilderness...(pause)...I don't know what the dictionary definition is, a large expanse of land, with trees and stuff.

*Would you say the Mosi-oa-Tunya national park is a wilderness?*

NL: No, too much human interaction. Kruger is a wilderness because its massive and there are no houses for miles. An area big enough to have wild stuff in it, that doesn't need constant management. If you get stuck in the wild or the wilderness, you have to be like bear grills to make it out. If you get stuck here (MoNP), you just walk to the road, a car will be with you in like 5 minutes. It's a space thing; the enclosures aren't wild, they're captive. In Chobe [National Park], they've [animals] got a choice to move away. There are places in CHobe that people aren't allowed to go that are kept away.

Space is important. It's the freedom, we decide what they eat, what they can see, a wild lion has got more freedom.

*How does wildness change through the project? And is it meant to?*

NL: Its meant to definitely, but then I think a lion in the wild, their wildness changes anyway if you think about it. Because they are dependent on HANG ON it depends on definition of wild. Yeah it definitely changed because at the moment they are living in cages, small cages. I think

that's [size of enclosure] one element of many elements.

Size of the enclosure, the fact that we feed them, touch them, handle them. You can't call a lion that has been brought up in a cage and captivity wild. You can't say it is wild but you can say it progresses. They are a little bit wilder, but a little bit. Judge them on a scale of 1 to 100 they are certainly more at 10 than the babies at 1. Its still very far to the end goal of being wild, and these guys never will be but they are a little bit more progressed.

*How will that change when they are released [into stage 2] on the 26<sup>th</sup>?*

NL: They will become more wild I guess. Although I don't know if being wild is the right word, they aren't wild they always will be captive bred. They are getting wilder in the fact that they are getting more independent. So if you look at wildness as independence then maybe, but maybe you can't even use the word wild.

*What about stage 3 and 4?*

NL: In Stage 4 the cubs will be wild. Because they are born as wild lions, its because they haven't been fed. Whatever the definition is. You can't have anything wilder than a lion in the middle of a national park being born to a pride and living their own independent lives, in my opinion. If that's not wild then nothing is.

*During what moments does the lions' behaviour change?*

NL: Obviously meat, they are naturally very possessive animals anyway, it is in their nature to be possessive they get dominating. At dollar block [original release site in Zimbabwe] when the pride was released the boys and girls were always fairly separate, when the two females were killed it made a difference to how the other females fitted in. They were killed by the male lions. They'd been in the site for months, and suddenly they divided to kill her, but when that happened, there was an atmosphere change. It was natural, but tragic. Before when I thought lions were just cute, they are horrible, they kill each other, they eat each other. They eat animals before killing them, they rip out stomachs, they are not very nice really. We saw a documentary the other day of a male walking around with half a cub in its mouth, the cub looked sliced in half, walking around with it. They are not very nice animals. But Africa needs lions so we shouldn't let them be extinct.

*How would you describe the process of stage 1A?*

NL: I wouldn't call it taming (I don't like that word, you've got to respect them as wild animals). Captive rearing maybe. Basic training to avoid danger, helps. I don't know what word I would use. I guess it is just familiarization with lions, being familiar with knowing that we are not a threat to them at this point. The cubs don't see us as a threat to them. There are moments that we are dominant over them, but not as a threat. We do need to be familiar with them. But you do need to be dominant with them, you can't not be dominant. The oldest lions are at the age that they could do serious damage.

*How much of the protocols that you wrote are about the lions themselves and their welfare and safety and progression and how much is about making it safe for humans?*

NL: A lot of it is to do with animal welfare. I have a motto which is 'always choose the safest option'. You are only going to do what is necessary; you have to put it in terms of relevance to human safety. For example, if a lion was being dangerous, and you had to hit the lion with a stick, which contravened lion welfare, then it is necessary because in the grand scheme of things you aren't gunna damage a lion with a stick. So if by doing that you have saved a human then that was the right thing to do. Everything has to keep the animals welfare in mind. I think

we have been able to keep a balance. I don't think the two are mutually exclusive.

*If LE and ALERT already had all the money they 'needed' from commercial activities (volunteers and guests), would the program change at all?*

NL: The financial responsibility of the lions rests with LE. To feed them, house them. Alert doesn't build release sites, LE did. Practically, if we were millionaires, then we wouldn't have the guests, why go to that hassle? Yes it raises awareness but why bother.

The volunteers are a bit different because you'd have as many volunteers as you need. The point of the lion walks is to get the cubs used to the bush. It happens with or without guests. We can have 5 lion handlers taking them out every day with millions.

*Are guests then, a useful coincidence?*

NL: Yes I guess so! The lions are earning their keep. Like keeping a horse, you offer horse rides. Or at a zoo, if there are no animals, there are no guests to get the money to feed the animals"

*How actually important are the walks to the lions rehabilitation and rewilding?*

NL: Personally I think very important. We haven't got to the stage to look at comparative data, because we haven't done it yet. Our project is very new. At this point we think it provides the lions with the opportunities they need to develop and learn their skills before they go on to future stages. I believe that if the lions hadn't had the stages they had had, they would not be as well equipped in future stages. By providing them with experience in the bush we are giving them a higher chance of survival, that's my opinion. But, as I said, in a few years time, research might prove us wrong.

*When the lions are out in the bush on lion walks, how is it decided exactly where and when guides and handlers allow the lions to go off the path? For example, yesterday they were in a tree, and the handlers then decided to call the lions to follow and return to the enclosures. What in relation to other animals in the MoNP?*

NL: LE's view on that is that you give the lion as much freedom as it wants, that is in the restrictions of what is safe and what is legal. For example, it wouldn't be safe to have that lion go off into thick bush by itself, because you don't know where its going you could lose it whatever. However, you can leave it to get 10m up a tree. By legal I mean boundaries. However, you ask staff and they might tell you it depends what time it is, is it coming up to breakfast time (laughs) whatever. Everyone has their own agenda

I do believe everyone cares very much about the lions and that they will be sticking to those guidelines. Give them as much freedom as they can, as long as it is safe and within reason. As for the other animals, that is really on a case by case basis. Let them play by the river, but don't if there's a crocodile there, you know. Let them play on anthills, but if elephants are coming into the area, you move on. Sometimes you want to let them sleep because it's hot. And other times you want to make cubs move because in the pride they are so subordinate, when they say move you move, the pride will leave. Like with Dendi (8 months old at the time), sometimes we will make her move when she doesn't want to, because that's a lesson she would learn in the wild. Not every single day.

*So are they not allowed to go the river if there's crocodile?*

NL: Kwandi got bitten by a small crocodile. They are lions they are pretty hardy, its good experience and exposure for them.

*Do we avoid the elephants and crocodiles for the lions' or our benefit?*

NL: Yeah I'd say it's for both. In the wild, these young lions wouldn't be taking on big elephants. It would be the lioness's job to moving them out of the way. They would be hidden. So I'd say it was 50/50 but we've got duty of care for our staff.

*If the handlers are dads and the guides mothers, what are the volunteers?*

NL: I won't say its as simple as that, it's a good way of explaining it, but its important to note that within a pride the complexities of social boundaries are much more intense and massive. But I guess volunteers are sisters and aunties, although it's not that simple. Ask David [Youldon] to explain that a bit better.

*Shouldn't it be the mums, and therefore the guides, at the back of the walk and dads (handlers) leading?*

NL: They follow anyone that is dominant, females and males are all dominant so they follow who they are told. In a pride, its not a case of all the lions always moving together, sometimes that pride might just be male and cubs, the pride isn't together 24 hours all the time so it will depend on what the situation is at different times.

*What are the protocols for touching the lions through the fence?*

NL: Umm, it depends what stage are we in. Obviously stage 2 you never touch them. But in Stage 1, as long as its not injuring the lions then I guess it's fine. When Nyika got operated on, we fed her mince balls so the most practical way to do it was to put her medication in them on your flat palm on the fence, and because she was like that for long she started to get sores on her face from rubbing her face against the fence. When that starts to happen you need to make changes to stop that happening. But in general if the lions are just rubbing up against the fence, then that's ok to touch their sides. Again it is one of those things where it depends on the situation,

*What about putting fingers through the fence? There is not anything about it in the protocol.*

NL: I suppose I should think about it really

*Why don't the guests see the enclosures?*

NL: Quite a few reasons. Practically, they don't need to, and it's always been the way we have run it here at LE which I know isn't the same [compared to the projects in Zimbabwe]. But I believe that the cubs have enough people time on their walks that in their enclosures they should be left to be as chilled as they want. Cubsits are a bit different.,but if the volunteers know if they are sleeping they can just sit and stroke them or whatever. If we were just surrounding the enclosures with hoards of people all day every day then...the enclosures are just somewhere they can sleep and chill and not be bothered by people, and there is no reason for the guests to have to see them. We like to make them as natural as possible, and less zoo like, less commercial. As wild as possible. But perhaps not now I don't know what wild means.

*How did you determine the size of enclosures?*

NL: I think ZAWA suggested an area of land. The first enclosure has been here way before LE existed, because someone was eager. For Zambia specifically but various animal welfare groups have come up with their own standards, PAAZAB the association for zoos and aquaria, they've come up with their own protocols and what they think the sizes of enclosures should be, and the WWF actually, a variety of people have decided enclosure sizes. Umm and we make sure we stick to most of them, as many as we possibly can. We are definitely way past the minimum sizes though. They are reasonable standards; we know what lions habits are so we have got a personal opinion as to what lion enclosures have.

*What stopped you making them even bigger?*

NL: I don't know, limitations, how much land we can reasonably take and materials and finances I guess. The regulations are tiny, so we are going past them regardless. The big cat rescue standards are like a gazillion times smaller than what we have. 22m squared per animal is sufficient...[Shows paper of enclosure protocols] and this is the size of our project - average per lion is 412m squared, so it's quite easy to hit the standards. I mean you'd have to be quite sick not to!

*Do the protocols change as the lions get older?*

NL: There is a welfare standard we stick to at all times. Again, it's the greater good its, yeah, the protocols change as they get older but not welfare. Like how we move around them, open the gates and stuff and how we act. The general changes are just practical like how many people can go in the enclosure with cubs of various ages like for a cub of a month old I'd have no problem with one person going into the enclosure on their own but as they get older you need to be accompanied by several handlers.

*Is that protocol something you quantify or just a kind of general consensus at the time*

NL: Yeah because they can grow at different rates, its pretty much me and Richard {other general manager] because it will depend on individual situations such as how many lions there are. For example, when the Dambwa lions arrived we had 8 lions in one large enclosure, now we've got 7, its very case by case situation, but yeah it goes on size and how many lions you've got and stuff. I mean we've got a team of a head handler, a lion manager, two general managers and David Youldon. So the 5 of us can sit and make sure we can make the best decisions possible. And we have Head of Department meetings once a month, and we have management meetings once a week and staff meetings once a day.

*I think that's pretty much all I have for now, so thank you very much*

NL: I'm sure none of that's useful!

*It was great, thank you.*

### 8.3 Appendix C – Example interview permission form

Dear Participant,

You are asked to participate in a research study conducted by \_\_\_\_\_ from the School of Geography at the University of Oxford. He is undertaking an undergraduate dissertation research study.

The purpose of the study is to analyse how the lions at ALERT's captive-bred re-introduction program are framed by those who have either experienced the project, or been affected in some way by it. The study is designed to explore the practices of re-wilding and how particular conservation terms are framed within this context.

The researcher would love to have the opportunity to have a relaxed interview with you about your opinions of the lions.

You may ask as many questions about the study and about the researcher before the interview begins, and you may opt-out (without penalty) before or during the interview. There is no set length to your interview, although they will probably last about one hour.

This project has been reviewed by, and received ethics clearance through, the University of Oxford Central University Research Ethics Committee (CUREC). Confirmation of this is attached.

In accordance with ethical protocol, all interview data will be stored in a locked cabinet, \_\_\_\_\_ and used only by the researcher \_\_\_\_\_ of this study. The research will be written up in England, and at the end of the research, the data will be destroyed, and only the final published study will remain.

If you would like a copy of the final study or your interview, then upon request, this can be made available to you.

If you have any questions, concerns or complaints about the research, please feel free to contact either:

Jacqui Kirk: (from ALERT, Zambia) (0)213327122

#### Declaration

Please tick:

- I have read the above participant information sheet:
- I understand who will have access to personal data provided, how the data will be stored; and what will happen to the data at the end of the project:
- I understand that this project has been reviewed by, and received ethics clearance through, the University of Oxford Central University Research Ethics Committee:
- I understand where the research will be written up as a student's thesis, understand how personal data included in that thesis will be published and stored:
- I understand how to raise a concern and make a complaint:
- I agree to participate in this study:

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: 30-08-11

I agree to the interview being audio recorded (which will be solely for transcription purposes; and after which, the recording will be destroyed):

Signature \_\_\_\_\_

## 8.4 Appendix D – LE’s Lion Handling protocols



### **Basic Safety with Lions**

#### **Summary**

The lions that you will walk with still have all their natural instincts and therefore should not be taken lightly: they are NOT DOMESTIC ANIMALS.

The Basic Safety with Lions course covers the basic principles so employees can reduce the risks involved with working with a wild animal as much as possible.

#### **Course Materials**

Basic Safety Instructions

#### **Course Content**

Stay alert

Do not panic

Do not run

Do not crouch down

Stand your ground

Stay in the group

Always approach a lion from the rear

Do not touch the lions' ears or face

Do not put anything on the ground and be careful of dangling objects

How to use a stick



## Basic Safety with Lions

Working with lions takes a lot of patience and understanding. It takes a lot of dedicated practice and experience to be able to do it well such that it can be done safely, and to the benefit of the animal and the organization.

All cubs have different characters and their attitude and temperament changes daily according to when they were last fed, last walked and the prevailing weather conditions. They must be dealt with as an individual, with your handling skills adjusted accordingly. You can never stop learning and never become too confident because you WILL get caught out.

Lions are opportunistic hunters and this trait comes out in their play as well. As such, you can never let your attention wander nor become complacent.

**The lions that you will walk with still have all the natural instincts, therefore should not be taken lightly, they are NOT DOMESTIC ANIMALS.** These Ten Commandments, if followed, will ensure your safety working with any lion. 99.9% of all incidents are caused by a failure to comply with these basic commandments. We do require guides and handlers to break some of these rules under certain circumstances, however, if, as a result of doing so an incident is anticipated through reading the body language of the lion, these basic rules become the fall back position to which you should return.

### 1. STAY ALERT

You should always know where all the lions are and what they are doing. As opportunistic hunters lions will take advantage of any situation given the chance. A playful attack will usually come from the rear on an unsuspecting subject. Lions are less likely to tackle anything if they feel they have been spotted unless they do not see you as dominant. Also, by knowing what the cubs are doing you can read their body language and pre-empt virtually all dangerous situations before they arise.

As a staff member you are also responsible for the safety of all guests on the walk, who are likely to be far less observant. You can only effectively ensure their safety by knowing where the lions are and what they are doing and anticipating their behaviour. In doing so you can advise your guests accordingly or divert the lion from a certain behaviour.

### 2. DO NOT PANIC

No matter what happens during a walk, stay calm. A cub can sense fear through your body language and will likely pick on you because of it. If a lion puts its claws or teeth on you, or jumps up onto you the worst thing you can do is panic and try to move, as this will cause the lions' retractable claws to come out more. Stay still, and calmly call for assistance.

### 3. DO NOT RUN

Running is never a good thing because the lions will assume that you want to play and come after you. You cannot out-run a lion! Running to keep up with a hunting lion is ok if necessary, and guests can be encouraged to do so as well, provided everyone remains as a tight group, and only when the lion is focused on the prey animal. You should return to a walk as soon as any lion's attention drops from the hunt as they are likely to want to come back to you, and will want to play if they see people running, scattered around.

### 4. DO NOT CROUCH DOWN

Do not crouch down, unless you know that all the lions are some distance in front of you. Do not allow guests to crouch until you give them the word that it is safe to do so, having already told them the safety procedures for

this. If you crouch, you bring your eye level to the same level as the lion and reduce your dominance. The cubs will often want to play and jump on you and they will hurt you out of sheer playfulness.

Whilst crouching one knee should be on the floor and the other raised. This allows for extra balance and speeds standing up if that becomes necessary.

## **5. STAND YOUR GROUND**

Many people get scared when a lion is stalking them, which is normal, but the best thing to do is walk confidently toward the lion with your stick outstretched or your hands in the air and say 'NO' in a firm voice. This way you are showing them you are not scared and they will back away.

## **6. STAY IN THE GROUP**

If you separate yourself from the group the lions will pick you out and see you as the weak part of the 'pride'.

## **7. ALWAYS APPROACH A LION FROM THE REAR**

You should always approach a lion from the rear, talking to it as you approach so that it knows you are there. With experience and understanding of the individual character of a lion you may find that it is safe for you to approach certain lions from the front, however you should always consider that any lion, no matter how well you think that you know it, is unpredictable. As such, the approach should be made standing up, leaning forward with an outstretched flat palm facing the lion. Take the lion by the muzzle and only when you are confident that the lion is not in a playful mood should you crouch.

## **8. DO NOT TOUCH THE LIONS EARS OR FACE**

The worst place to touch a lion is on the head from the tip of the back of the ears to the tip of the nose. This area is vital in communication for a lion and they do not like being touched here. They will see it as a threat and may growl or snap at you. You can touch them underneath their chin, on their belly, on their back or by the base of the tail.

However, as part of building dominance with the lions we require guides to break this rule under certain circumstances.

## **9. DO NOT PUT ANYTHING ON THE GROUND AND BE CAREFUL OF DANGLING OBJECTS**

Do not put anything, and we mean anything on the ground. Lions are inquisitive and they will want to investigate anything on the ground with their teeth. They are also very possessive and will give nothing back without a fight. The moment you put anything down on the ground the chances are you will not get it back or if you get it back it will be in little pieces.

Lions are very playful and everything to them is a game. Watch out for dangling camera straps, camera bags, jackets etc. as they can get the lions attention and they may want to jump up to grab it.

## **10. USING A STICK**

The stick that you are given is purely a distraction and intimidation tool. If the lion gives you a "naughty look" point the stick at it saying "NO" in a firm voice, or use the stick to play with something to distract the cub. Never hit the cub with the stick.



## Advanced Safety with Lions

### Summary

The lions that you will walk with still have all their natural instincts and therefore should not be taken lightly: they are NOT DOMESTIC ANIMALS. To supplement the Ten Commandments of basic safety with lions guides and handlers should consider a range of safety aspects in order to reduce the risks involved in working with lions.

The Advanced Safety with Lions course covers the basic principles so employees can reduce the risks involved with working with a wild animal as much as possible.

### Course Materials

Advanced Safety with Lions Instructions

### Course Content

Don't be afraid to call for help

Never get complacent

Do not get overconfident

Always know where all the cubs are

Avoidance is better than cure

Take great care handling a cub on its back

Do not play with cubs that are playing together

Eye level vs. dominance

Plant yourself firmly when kneeling

Never interact with a cub in a manner that will develop a behaviour that could later become dangerous

Showing a guest the features of the lions, such as teeth and claw

**STANDING UP IS ALWAYS YOUR BEST DEFENSE TO RESOLVE ANY SITUATIONS**



## Advanced Safety with Lions

Working with lions takes a lot of patience and understanding. It takes a lot of dedicated practice and experience to be able to do it well such that it can be done safely, and to the benefit of the animal and the organization.

All cubs have different characters and their attitude and temperament changes daily according to when they were last fed, last walked and the prevailing weather conditions. They must be dealt with as an individual, with your handling skills adjusted accordingly. You can never stop learning and never become too confident because you WILL get caught out.

Lions are opportunistic hunters and this trait comes out in their play as well. As such, you can never let your attention wander nor become complacent.

1. **Don't be afraid to call for help:** Even the most experienced handler can find themselves in a difficult situation every so often. There is no shame in asking for help, and doing so can help ensure that you are not harmed.
2. **Never get complacent:** The lions can be very affectionate and appear docile, however their temperament can change quickly, and they can become very playful or even aggressive. Handlers who start to take their mind off the fact that they are working with wild lions are the ones that get hurt, and also put the other people around them, and the lions, at risk.
3. **Do not get overconfident:** Extending your handling skills far beyond your capabilities will almost always land you in trouble and result in you getting harmed in some way.
4. **Always know where all the cubs are:** As soon as you take your eye off what you are doing is the time when a lion will surprise you, either by disappearing, or harming you.
5. **Avoidance is better than cure:** By learning to read the lions' body language and behaviour you can identify possible problem situations before they arise, and stop it. For example, a naughty look often turns into a charge. You can prevent the charge usually by distracting the cub as soon as you see the naughty look.
6. **Take great care handling a cub on its back:** Lions have lightning fast reactions and can get from a lazy position on its back to jumping in your face very quickly. In addition, they use their back feet to "bunny kick" with their claws out. It's enough to rip open your stomach.
7. **Do not play with cubs that are playing together:** If you get involved with cubs whilst they are playing they will assume that you want to play in the same manner as they are. You'll get ripped to shreds!
8. **Eye level vs. dominancy:** Always remember where your eye level is in relation to the lions. As your eye level rises, so does your dominancy, which is why standing up is always such good defense. Remember then that if a lion is on a rock or in a tree and your eye level is the same you probably do not want to stand too close! In addition, lions are afraid of heights, and if you stand near them when they are off the ground they may feel threatened and lash out.
9. **Plant yourself firmly when kneeling:** Lions are heavy, and if you do not plant yourself properly you will be knocked over and are then vulnerable to playful claws and teeth. Always keep one knee up so that you can push against the oncoming weight of lion, and more importantly, you can stand up quickly should you need to.

10. **Never interact with a cub in a manner that will develop a behaviour that could later become dangerous:** When the cubs are smaller it may be seen as safe to play with a cub in a certain way, however, you are teaching that cub a behaviour that it will keep as it gets older, and that behaviour may become dangerous. For example, teaching a young cub that it can climb on you, or jump up to get a toy will likely result in a lion that has no fear of jumping on humans as it gets older. Always consider what behaviour you may be teaching the lion when interacting with it and decide whether that behaviour may become dangerous as the lion gets older.

12. **STANDING UP IS ALWAYS YOUR BEST DEFENSE TO RESOLVE ANY SITUATIONS**



## **Giving a Safety Briefing**

### **Summary**

All guests to the Lion Encounter are given a safety briefing prior to any interaction with the lions. This briefing must be concise yet cover all points.

The Giving a Safety Briefing course covers the basic principles so employees can ensure that effective briefings are given to guests in order to reduce the risks involved with them walking a wild animal as much as possible.

### **Course Materials**

Safety Briefing Guidelines

### **Course Content**

- Stay alert
- Do not panic
- Do not run
- Do not crouch down
- Stand your ground
- Stay in the group
- Always approach a lion from the rear
- Do not touch the lions' ears or face
- Do not put anything on the ground and be careful of dangling objects
- How to use a stick
- Checking the guests are ready



## Giving a Safety Briefing

You can make the safety talk what you want, as long as you put the right message across to the guests. Try and make it fun so that the guests become relaxed, but serious enough to know that you are not joking about what they are about to do. You should also have copies of the basic safety rules available in different languages for those for whom English is not their first language.

Here is a sample script for a safety briefing:

*First of all I want to thank you for joining us at the Lion Encounter. Your involvement here today is directly assisting in the conservation of the African lion, and we will be telling you later what opportunities there are for you to help us in our mission even further.*

*Before we meet the lions there are some instructions that I must give you in order that we can ensure our safety whilst with them. You should be aware that the lions that we are walking today have not been drugged nor de-clawed for entertainment purposes but have all of their natural instincts intact. They are not domesticated in any way and should not be taken lightly.*

### 1. STAY ALERT

*The golden rule is to stay alert to where the lions are and what they are doing. A lion may occasionally give you what we call a naughty look where they crouch down in a stalking position with their eyes firmly fixed on you. This is their preparation to run and jump, but if a lion thinks it has been spotted it will likely stop that play and go do something else instead. You will only be able to spot these playful looks if you remain alert. If you do see one of these naughty looks, simply point your stick at the lion and say "no" in a firm voice. Remember the lion handlers and guides are here for your safety, so will also be looking out for this.*

### 2. DO NOT PANIC AND STAND YOUR GROUND

*Even if a lion runs at you or grabs hold of your clothing or leg, stay calm. If you panic you will cause the lion to bring out its claws and you could get injured. Lions can read body language and will pick on those who act nervously so even if you are feeling scared inside show a confident attitude on the outside. Always stand your ground. Just point your stick at the lion and say "no" in a firm voice. You can also raise your arms to make yourself look bigger.*

### 3. DO NOT RUN AND STAY IN THE GROUP

*Lions are far quicker than you are, so do not try to run away from it. If the lions start to hunt something I may invite you to run with me to keep up. You must stay as a group at this time and stop running as soon as I say so, which will be if any lion stops hunting. Always stay with the group throughout the walk or the lion will pick you out as something to play with.*

### 4. DO NOT CROUCH DOWN

*Unless one of the staff tells you otherwise do not crouch or sit down at any time. If the lions are calm and relaxed we will invite you to approach the lion from the rear and crouch down near its rump so you can get some photos. Whilst crouching one knee should be on the floor and the other raised. This allows for extra balance and speeds standing up if that becomes necessary. If the lion starts to show an interest in you just gently place the stick near its mouth, or scratch it on the ground in front of the lion. This will distract it.*

### 5. DO NOT TOUCH THE LIONS EARS OR FACE

*Lions do not like to be touched from the top of their neck, by their ears or on their face. You may see the staff doing this but this is part of our way of building dominance over the cubs and we do not suggest you try this as you will likely get bitten.*

#### 6. DO NOT WALK BY A LIONS HEAD

*As the lions are walking along, feel free to walk alongside them and stroke them, but keep behind their head. If a lion walks up behind you simply stand to the side and let it pass it front of you.*

#### 7. DO NOT PUT ANYTHING ON THE GROUND

*Lions are very inquisitive and show their interest through biting and chewing new objects. If you put anything down and the lion gets it we will only be able to give it back to you in pieces*

#### 8. ALWAYS LISTEN TO SAFETY INSTRUCTIONS

*If you hear a safety instruction such as, look out behind or stand up, please always assume we are talking to you. Act on the command and then check to see who we were talking to.*

*The cubs are not going to be walking with us the whole time. The intention of the walks is for the cubs to have the opportunity to build their confidence in the Bush and to explore their natural surroundings. They will be allowed to do so and we will follow which should give some good opportunities for some natural photographs. However lions are quite lazy animals so there should be plenty of chances to get a photo next to them when they lie down. Lions do not sit patiently for you to pose the perfect shot, so take your photos quickly.*

*IMPORTANT NOTE: Wild Elephants, and Buffalo are known to frequent the area. Being on foot on the ground with these animals can result in dangerous situations if not handled correctly. Whilst we are walking with the lions you may notice a couple of guys walking some distance away carrying firearms. Don't worry, these are our qualified game scouts who are checking the area around us for dangerous game, such as elephants. If they spot them we will get a radio call to advise us to change the direction of the walk to avoid any dangerous situations. YOU MUST ALWAYS FOLLOW INSTRUCTIONS IMMEDIATELY. YOU WILL NEED TO KEEP QUIET AND IT IS IMPERITIVE YOU REMAIN AS A GROUP.*

*Finally, please leave behind in our lockable cabinet any bags, water bottles, extra clothing or anything else you absolutely cannot do without on your walk. You will only need your cameras with any spare batteries and flashcards.*

*Thank you again for joining us here at the Lion Encounter, I hope you enjoy your walk.*

*As guests are putting away their bags and preparing for the walk, just check people's clothing to make sure any dangling objects are left behind.*