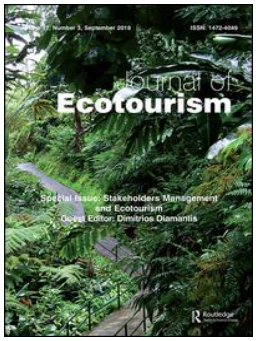

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Towards a model for the assessment of conservation, welfare, and governance in wildlife tourism attractions

David A. Fennell[a], Tom P. Moorhouse [b] and David W. Macdonald[b]

[a]Department of Geography and Tourism Studies, Brock University, St. Catharines, Canada; [b]WildCRU, Department of Biology, University of Oxford, Oxford, UK

ABSTRACT

In the absence of sufficient regulation of wildlife tourism attractions (WTAs), standards of treatment of animals are typically determined by what tourists find acceptable. Under this model there is little motivation for operators to improve standards if tourists do not leave reputationally damaging feedback. Given this current state, the objectives of this paper are twofold. First, we highlight and categorise existing systemic barriers that prevent the operation of an ethical market for WTAs. Second, we combine knowledge of these barriers with a recently published theoretical framework on animal justice to derive an initial, robust set of practical criteria with which non-expert tourists can externally assess ethical standards at WTAs. Viewed at this stage as a prototype, these criteria allow tourists to better understand the scope and consequences of the proper and improper use of animals in tourism along governance, conservation and animal welfare lines.

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Introduction

With biodiversity globally threatened, wildlife tourism has emerged as a powerful lever to provide income and social benefits for local human populations (Charles & Hamid, 2022; Karanth et al., 2012), and to secure habitats, and animal welfare and conservation objectives (Ballantyne et al., 2011; Higginbottom, 2004; Macdonald & Wester, 2021). The willingness of tourists to pay for close interactions with wildlife, however, permits considerable scope for the marketing of wildlife experiences that negatively impact on animals' welfare and their species' conservation status (Moorhouse et al., 2015).

Research by Moorhouse et al. (2015) found that 24 types of wildlife tourist attraction (WTA) collectively negatively impacted the animal welfare status of 230,000–550,000 individual animals, and that 120,000–340,000 animals were maintained in WTAs likely to reduce their species' conservation status. These WTAs hosted an estimated 3.6–6 million tourists per annum, of which ~60% were likely to have supported attractions with negative impacts (Moorhouse et al., 2015). We define WTAs as non-zoo, non-hunting attractions that offer opportunities for tourists to interact with specific taxa of non-domestic animals, either in captive or wild settings, many of which

CONTACT David A. Fennell dfennell@brocku.ca Department of Geography and Tourism Studies, Brock University, St. Catharines L2S 3A1, Canada

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claim benefits for wildlife which they do not deliver (Moorhouse et al., 2017). *Sensu* Moorhouse et al. (2015, 2017) we consider WTAs separately from zoos for a number of reasons: zoos' long history (Baratay & Hardouin-Fugier, 2003) means that tourists are likely to be familiar with their impacts, many zoos are governed by regulatory bodies, and zoos typically host a diversity of captive wildlife which tourists do not expect to interact with closely, whereas non-zoo WTAs usually comprise only one or two subject taxa, with which tourists specifically desire an encounter. Similarly, WTAs differ from hunting attractions in that the tourists' expectation of the impacts on the subject animals are substantially different, i.e. interactions offered by WTAs are typically expected to yield no harm, or a net benefit to individual animals and/or their species (Moorhouse et al., 2017). Examples of WTAs include direct interactions (e.g. touching, feeding, taking selfies) with tigers, lions and dolphins in captivity, trekking to observe gorillas, visiting civet coffee farms, viewing rehabilitated or rescued animals (e.g. orang-utan sanctuaries), or watching wildlife-based shows (e.g. 'snake charming') (Moorhouse et al., 2015).

WTAs are not globally regulated, so in many countries their standards are determined primarily by what tourists find acceptable (Moorhouse et al., 2015). WTAs offering attractive interactions remain profitable, so long as visitors do not object to the animals' conditions and leave reputationally damaging feedback (e.g. Moorhouse et al., 2017; Seele & Gatti, 2015). Without proper governance, raising standards requires tourists to assess a given WTA's likely impacts (e.g. from promotional materials, or other tourists' reviews) and to choose to avoid venues likely to be detrimental to wildlife. Such choices would create an ethical market with economic incentives for WTAs to change their practices to benefit wildlife. Global wildlife tourists are likely to favour WTAs that deliver benefits for animal welfare and/or species conservation (e.g. Ballantyne et al., 2011; Moorhouse et al., 2017, 2019). Tourists may, however, fail to represent WTA's ethical standards in their reviews: on TripAdvisor the percentage of all tourist reviews that were negative increased from 6% to only 17% as WTAs' welfare standards worsened (Moorhouse et al., 2015). Even when behaviours are motivated by personal values or virtues, social norms, systems and structures can inhibit or facilitate their practice (Buchanan, 2002). Barriers that may prevent wildlife tourists acting on their values arise because tourists are not sufficiently expert to gauge the likely impacts of their choice of WTA, may not wish to concern themselves with ethical decisions while on holiday, are easily swayed by external influences such as authority figures (e.g. WTAs' staff), by the actions of other tourists, and by the misrepresentation of ethical standards in WTAs' promotional materials (Moorhouse et al., 2017). A crucial step towards empowering tourists to make ethical choices of WTAs is to equip them to assess venues' ethical standards.

The purpose of this paper is to derive a suite of practical measures by which tourists can assess WTAs. Doing so requires engagement with the philosophical questions of what constitute just and unjust uses of animals in WTAs, and of which actions and circumstances are therefore responsible and sustainable. To provide an ethical framework against which our practical findings can be judged we employ the Scales of Justice framework of Fennell and Sheppard (2020), in which the authors present theoretical and practical conditions surrounding just and unjust uses of animals in tourism and call for empirical investigations on the topic. We meet this call by applying the Scales of

Justice framework to the specific case of the observable correlates of ethical standards at WTAs.

Literature review

Above we identify that in the absence of adequate global governance, ethical standards are *de facto* determined by tourists' feedback and that with respect to animals, WTAs ethical outputs are primarily represented by a venue's conservation and animal welfare. Below we expand upon the issues of governance, animal welfare and species conservation as they pertain to WTAs through a review of literature and a review of two case studies, and by summarising the Scales of Justice framework.

Governance of WTAs

Governance includes interactions between actors and the development of structures and processes for decision-making and the exercise of power. It can be formal through the establishment of institutions (regular practices and behaviours of individuals and groups) or informal through norms and rules (Funnell & Bynoe, 2007; Lebel et al., 2006). A critical precondition in the discourse on governance is that a society is both manageable and open to change (Glasbergen, 1998; see, also, Erkus-Ozturk & Eraydin, 2010). For Glasbergen (1998) such change comes in the form of different models, including regulatory control, market regulation, civil society, self-regulation (e.g. tourism operators coming together to regulate an industry), or cooperative management (several stakeholders coming together to institute change).

Studies on the governance of animal welfare have evolved away from government regulation towards political modernisation based on coalitions of non-state actors responsible for policy reform, greater accountability, and democratic legitimacy (Maciel, 2015; Maciel & Bock, 2012). A more passive role by government represents a shift towards market-based governance, opening the door for greater symmetry between public, volunteer and private (see Sheppard & Fennell, 2019; see also Duffy & Moore, 2011; Fennell & de Grosbois, 2017; Font et al., 2019, for connections between governance in the form of codes of ethics and certification and the use of animals in tourism).

The shift towards market-based governance places a key burden upon tourists as assessors of standards. If tourists were unable to distinguish genuine conservation or animal welfare claims from greenwash (i.e. claims that deliberately portray a false image that the organisation is green or eco-friendly), this could not only direct custom away from virtuous organisations but also, if consumers perceive greenwashing as being commonplace and undetectable, may cause them to lose faith in the reliability of marketing, endangering the functioning of the entire green market (Chen & Chang, 2013; Davis, 1992; Mitchell & Ramey, 2011). Organisations that greenwash may suffer reputational damage if their true impacts are sufficiently recognised, and reported (Seele & Gatti, 2015), but if misleading promotional materials remain undetected then WTAs that greenwash stand to profit through increased attendance without the need to provide benefits.

Animal welfare

Animal welfare represents a constellation of approaches which broadly recognise that we should be cognisant of how animals are coping with conditions when they are being kept or otherwise used for the benefits of human beings (Garner, 1993; Broom, 2011). Animal welfare advocates, therefore, do not necessarily argue against the use of animals per se, but that the quality of care that goes into such use should be carefully scrutinised and maintained (Carr & Broom, 2018; Fennell, 2013a). Evidenced-based research on physiological, behavioural, and emotional factors is viewed as essential in properly protecting animals used for human benefit (Bansiddhi et al., 2020).

The well-cited Farm Animal Welfare Council's (2009) Five Freedoms approach to animal welfare is a widely used assessment tool. It includes freedom from hunger and thirst, discomfort, pain/injury/disease, fear and distress, and the freedom to express natural behaviours parallel to requirements of work, rest and exercise (Bansiddhi et al., 2020; Schmidt-Burbach et al., 2015). Comparatively, the Five Domains model is said to be a more complete welfare standard along physiological, behavioural and emotional lines (Mellor, 2017; Mellor et al., 2020). This model includes (1) nutrition (e.g. water, food and supplements) that leads to an optimal body condition score (Norkaew et al., 2019); (2) environment, (fresh air, good ventilation, and shelter protecting from adverse conditions) (Bansiddhi et al., 2020); (3) health (hygiene, diseases, wounds, malnutrition and obesity, and access to veterinarian and health facilities) (Bansiddhi et al., 2019); and (4) atypical or abnormal behaviours, such as stereotypies (e.g. head bobbing or swaying) (Mason, 1991) and social isolation (Broom, 1988). The amalgamation of these four domains leads to an assessment of mental state, the fifth domain, in gauging the overall welfare of an animal (Mellor, 2017). Improved mental states can be secured through play (Bansiddhi et al., 2020), and proper social development (Vanitha et al. 2011).

The frequency of tourist interactions with target species is a key concern (Davey, 2007; Munanura et al., 2013). The characteristics of visitor presence, activity, density, position, and group size can induce negative changes in animal behaviour and physiology (Davey, 2007). Similarly, direct tourist interactions (touching, feeding, swimming, walking-with) in either captive or semi-captive settings can have very different animal welfare impacts depending on a number of factors, including the type of species, and the frequency and duration of interaction. Close interactions may also promote harmful attitudes among tourists towards the conservation status and appropriate use of wildlife (D'Cruze et al., 2019). Furthermore, small living spaces with high densities of animals, a lack of naturalness in the captive environment (Li et al., 2007), and mobility restrictions (Fennell, 2013c; Vanitha et al., 2011) all contribute to poor welfare.

Several other human-animal management factors have welfare implications. Animal wellbeing and quality of life can diminish in the absence of enrichment devices such as recreational equipment or tools (Makecha & Highfill, 2018). Animals made to entertain tourists through performances and educational programmes, and the intensity and duration of these performances, can also compromise welfare (ABTA Magazine, 2019). Additionally, performers that receive negative reinforcement have been shown to suffer more than those receiving positive reinforcement (Kane et al., 2005). Such factors are

part of a continuum, with severe animal abuse and suffering at one end, and abundant respect and care at the other.

Conservation

Conservation often focuses on attempts to secure 'the long-term viability of whole systems' (Soulé, 1985, p. 727), which may conflict with the interests of individual animals (Sagoff, 1984). Ecotourism and other nature-based tourists engage with animals along a continuum of protection and use. Forms of ecotourism that are more preservationist ('saving from use') focus on non-consumption and minimal impacts on animals (i.e. animals are allowed to disengage from animal-human interactions based on their own needs and interests; Fennell, 2013c). These forms are associated with heightened interest in supporting conservation through rehabilitation, restoration, reintroduction, with a percentage of revenue dedicated to the preservation of biodiversity and habitat (Fennell, 2018a). At the other end of the continuum, types of nature-based tourism such as hunting, fishing, and captive breeding initiatives that support hunting (D'Cruze et al., 2018; Schroeder, 2018) are more consumptive. In such cases, conservation is defined more as 'saving for use'. Some organisations balance preservation and use through a focus on the conservation of habitat (i.e. providing more habitat for more wildlife to hunt).

Tourism may therefore provide direct conservation benefits and/or indirect benefits from encounters that do not individually benefit animals, but which may benefit a species. The conservation mandate also includes educating visitors in captive and wild settings (Ballantyne et al., 2007). To date, few studies have examined whether the marketing claims of WTAs that advertise conservation benefits are likely to be valid, or the extent to which tourists could be expected to be able to identify those that were not (Moorhouse et al., 2015, 2017 provide initial studies and conceptual work that highlight and frame this issue).

The extent to which these issues of governance, conservation, welfare and truth in marketing apply is demonstrated in the following two case studies on tigers in Thailand and lions in Africa because of their popularity as WTAs, their range of acceptable tourist-animal interactions, and based on empirical work on their operations. Both of the sections, the literature review and case studies, will be later subject to thematic analysis in the development of practical measures by which tourists can assess WTAs.

Tiger WTAs in Thailand

Unpublished figures from 2015 estimated there to be 535–830 individual tigers among 17 different establishments in Thailand (J. Schmidt-Burbach, personal communication, 2018). The largest institutions are listed in Supplementary Table 1 and collectively receive over 300,000 visitors a year (Moorhouse et al., 2015). All allow tourists to take 'selfies' with adult tigers and tiger cubs, except for the Samui Aquarium (2018), which does not offer selfies with cubs, and Damnoen Suduak Tiger Zoo, which does not offer selfies with adults (Supplementary Table 1). Furthermore, Schmidt-Burbach et al. (2015) awarded welfare scores of 4 or less, (severely inadequate conditions) to 9 of the 10 venues they reviewed, citing the absence of environmental enrichment, lack of

hygiene, mistreatment by handlers and severe stress or discomfort as a result of show activities or intense interaction with visitors.

The original captive tiger venue in Thailand, the Tiger Temple, began fostering and then breeding tigers in 1999. Tiger Temple stated that it would use entry fees and 'donations in order to build a larger tiger sanctuary which would allow the animals to live in an almost natural environment all day long, with plans to release some of the animals back into the wild' (Tiger Temple, 2016). The venue was, however, criticised for poor welfare standards (Cohen, 2013) and closed by the authorities on 30 May 2016 (BBC Asia, 2016; Holmes & Vidal, 2016). Subsequently (7 June 2016) Thai police found what was thought to be a slaughterhouse and tiger-holding facility used in a suspected 'animal trafficking network' that they believed 'was used by the Tiger Temple to hold live tigers before slaughtering them for their skins, meat and bones to be exported outside the country, or sent to restaurants in Thailand that serve tiger meat to tour groups' (Associated Press in Bangkok, 2016).

Tiger Kingdom is a separate, extant, WTA which also offers tourists the opportunity to take selfies with tigers and to handle and bottle feed cubs. It too claims to benefit both tiger conservation and the welfare status of its captive tigers, although its website has changed a number of times between 2008 and 2019. Prior to 2015 it made no claims to benefit tigers, describing Tiger Kingdom as a 'Tiger Park and Restaurant' (Tiger Kingdom, 2012, 2013), and then in 2014 as 'Nice and Clean Park'.

During 2015–2018, the front page of Tiger Kingdom's website stated that: 'The Tiger Kingdom is another great combination of tourism with wildlife preservation. The proceeds from tourist visits to the Tiger Kingdom are mainly directed to investments in captive breeding of tigers', because 'only around 120 tigers still inhabit the wild … ' and further that ' … Tiger Kingdom aims to increase the tiger population through captive breeding'. Given that these tigers are unable to live in the wild, ' … the proceeds from tourism allows Tiger Kingdom to increase the tiger population through captive breeding, as well as improve the overall living conditions of the tigers through the acquisition of larger areas for them to roam around' (e.g. Tiger Kingdom, 2018).

In the context of the now discredited Tiger Temple, it is unclear how tourists visiting during 2015–2018 might have assessed the veracity of claims made in Tiger Kingdom's promotional materials. Tiger Kingdom effectively made two claims. The first was that breeding tigers was conservation-relevant, and the second that tourist revenue would be used to create better living conditions for tigers. To accurately assess the first claim would require tourists to address the questions of whether captive breeding of tigers is a conservation-relevant activity in general, if so whether specific conditions must be met for this to be the case, and whether such a Tiger Kingdom's activities meet these.

Answering these questions is not straightforward. Tiger Kingdom noted that

> [because] of the looming extinction of the big cats in the wild breeding to perpetuate the species must be done in captivity if the species is to survive. But it should not be done simply to create more cats. It should not be done just so the public will pay to see and/or pet the babies. (Tiger Kingdom, 2017)

This text implies that Tiger Kingdom intended its population to act as insurance against the tiger's extinction in the wild. Judgement about whether Tiger Kingdom's captive population could provide a conservation benefit is therefore complicated by a number

of issues, not least of which is the existence of a further 15,000–20,000 tigers held in zoos and private ownership globally (Luo et al., 2008) – many in zoological institutions that follow formal conservation strategies – which may already be sufficient to ensure the species' *ex-situ* survival. A further complication is that Tiger Kingdom claimed (Tiger Kingdom, 2016) to be specifically breeding the Indochinese subspecies (*Panthera tigris corbetti;* Lynam, 2011), of which only 14 individuals were known to be kept in American zoos in 2010 (Luo et al., 2008). There is no way to assess this claim without examination of records or genetic screening of their tigers, and Tiger Kingdom offers no such proof, but if true Tiger Kingdom's breeding might be valuable to reinforce numbers of a little represented subspecies.

We sketch the above arguments to demonstrate that a relatively simple-sounding claim is far beyond the ability of most tourists to assess while visiting. With respect to Tiger Kingdom's second claim, that they intended to use tourist revenue to create better living conditions of their tigers, their website said that

> In resent [*sic*] years the income from the zoo has remained at the same level. This is a problem, as the number of animals goes up, but the income stays the same. For this reason, on the 24th March 2008 Tiger Kingdom was founded in Chiang mai [*sic*] as a 2nd branch of Ubon Zoo in order to earn more income. As well as providing the much-needed extra cash Tiger Kingdom also provides the extra space and enclosures that the tigers needed to be comfortable. (Tiger Kingdom, 2016)

Tiger Kingdom's claim to be using funds to benefit tiger welfare depends on actions being taken in the future, once a tourist's visit is over. This makes the claim impossible for tourists to assess during a visit, and therefore requires them to trust the organisation. Such trust could be gained by providing concrete timelines with targets against which performance can later be measured. For example, Tiger Kingdom stated in 2016 that 'The establishment of Tiger Kingdom Foundation will be set up, before the end of this year', wording which remained unchanged for two years before being removed entirely in the 2018 update. At the time of writing no mention of the Foundation is made on Tiger Kingdom's website.

In 2018, Tiger Kingdom's conservation and animal welfare justifications were replaced with three sections of text that are extant as of April 2021. The first states that 'Tiger Kingdom is proud to support the Plant a Tree Today Foundation's Ratchaburi Project which actively restores wild tiger habitat in Thailand … ' The PATT Foundation, however, no longer works in Thailand and that project had ended by September 2019 (PATT Foundation, 2019, 2020). The second reads

> Within the park our conservation efforts are concentrated on 'Conservation through Education'. We regularly invite local school children to visit Tiger Kingdom to encourage them to learn about the environment and the impact that humans have on the natural habitat of wildlife. (Tiger Kingdom, 2020)

'Conservation through education' claims are discussed in Case Study 2, but tourist education is not contingent upon the ability to touch tigers, or the presence of an active captive breeding programme and over 100 animals at two sites. Tiger Kingdom's website also states that they established an initiative called 'The Conservation Community', which 'provide[s] much needed financial assistance to conservation projects and communities and ensure funds are utilized correctly', and claims that 'Money raised

by Tiger Kingdom has been donated to fund the platform', with a request that readers 'donate today so that we can get the platform up and running' (Tiger Kingdom, 2020). No link to such a platform currently exists (April 2021). At the time of writing Tiger Kingdom's captive breeding programme was therefore justified on the basis of supporting an ended tree planting scheme, of educating tourists about wild tigers, and on creating a conservation platform that does not yet exist.

In summary, since 2015 externally assessing Tiger Kingdom's promotional claims with respect to their actual contribution to beneficial conservation or animal welfare outcomes would have been extremely difficult for the typical tourist. Without prejudice, there is no evidence of wrongdoing by Tiger Kingdom, and no implication that their intentions were dishonest, but the above justifications are notably similar to those used by the now discredited Tiger Temple. If visiting tourists had been aware of the fate of the (defunct) Tiger Temple - and of the similarity of the claims being made by these separate organisations – this could have led them to question the veracity of Tiger Kingdom's claims.

Lion WTAs in Africa

At the time of writing many institutions across Africa kep captive lions (*Panthera leo*), a large proportion of which are in South Africa (Williams et al., 2015; Supplementary Table 2). The titles of these WTAs vary (e.g. 'reserves', 'parks', 'sanctuaries' and 'farms'), as do their stated intentions, from providing welfare benefits (e.g. housing 'rescued' or 'orphaned' animals), and/or lion conservation, to explicitly stating that they keep and/or breed lions for so-called 'canned hunting' (in which animals are shot under captive conditions, typically within fenced enclosures where options for flight are limited: Ireland, 2002; McClaren, 2012).

We derived a non-exhaustive list of 23 WTAs (derived through internet searches) that breed lions in captivity, of which 12 (52%) claim positive conservation impacts in their promotional material, and one is equivocal (Kusus Rus claims educational benefits for conservation but notes that its volunteer programme does not constitute conservation as lions are 'not endangered'; see Supplementary Table 2). Of these, two venues claim conservation benefits that are predicated purely on educating visitors (Supplementary Table 2). The remaining 10 imply that their captive breeding will benefit lion conservation in the species' range states: four (Horseback Africa, Kwantu Game Reserve (2018), and two venues belonging to the ALERT organisation) directly claim to be, or strongly imply that they are, captively breeding lions as part of a wider reintroduction programme for release to the wild; four claim that they are breeding for conservation, but offer no justification or specific details, and; two (Boskoppie Lion Farm and Letsatsi La Africa) claim to be breeding lions to maintain genetic diversity, so that 'when the time comes' future reintroductions of captive animals are more likely to be successful (Supplementary Table 2). Below we assess whether these conservation claims are likely to be valid.

The major threats facing Africa's lion population arise from conflict, prey-base degradation, disease and loss of range habitats (Hunter et al., 2013b; Lindsey et al., 2017). Conservation-relevant activities should preserve habitats, combat disease, safeguard the wild prey base and ameliorate human-lion conflict. *A priori*, therefore, the captive breeding of lions itself does not comprise lion conservation (Hunter et al., 2013b), especially because

lions breed readily in the wild, and populations can recover swiftly once other threats are removed (e.g. Loveridge et al., 2016). Reintroductions of lions into protected areas do occur: between 1991 and 2007 at least 37 reserves, totalling 6467 km^2, re-established lions using wild founders in Namibia and South Africa (Slotow & Hunter, 2009); and of the free roaming lions in South African reserves ~75% derive from naturally occurring founder populations, and the remainder from the translocations of wild individuals (Williams et al., 2015). All of these reintroductions involved the capture and translocation of wild lions (Hunter et al., 2013b).

To date there have been no successful reintroductions of captively bred lions to the wild. Indeed captive lions habituated to human presence cannot be released because they may be unable to hunt or form a pride effectively, and may pose an increased threat to humans (Hunter et al., 2013b). Two captive-stock reintroductions have taken place into enclosed (fenced) reserves: eight captive born lions were introduced in 2010 into a 1.6 km^2 reserve in Ngamo, Zimbabwe, and seven in 2011 into a 2.86 km^2 reserve, both releases undertaken by the ALERT programme (ALERT, 2016c). These reserves are small and extensively managed, and the lions within them do not constitute free-ranging, self-sufficient populations (which are a key measure of reintroduction success; IUCN, 1998). In August 2015 the stated intention of the ALERT programme was to raise funds to permit the released cohorts, and their offspring, to be moved into a larger 40 km^2 area, and ultimately for the offspring to be translocated to 'range states' from which lions have been extirpated (ALERT, 2015a), and their site claimed that they had 'now reached agreement with the first lion range state to bring back lions to their country' (ALERT, 2015b). This text has since been revised and now reads 'In the reintroduction phase of the programme the second generation lions born to, and raised by, the captive bred prides in the release phase of the programme will be translocated using well-practiced techniques to appropriate national parks and reserves' (ALERT, 2016b).

Whether captive breeding could be a legitimate part of future lion conservation programmes has been vigorously debated (Hunter et al., 2013a, 2013b) and it is not our intention to enter this debate. We simply note that in 16 years of operation since 2005 (see ALERT, 2016a), ALERT's ex-situ breeding programme has not yet increased the number of extant individuals in any wild lion population, nor the number of protected areas large enough to maintain self-sustaining populations. Similarly, of the 23 venues in Supplementary Table 2 – including the 10 that appear to claim direct conservation benefits from lion breeding – none has yet made any *direct* contribution to increasing the numbers or distribution of wild lion populations.

WTAs that keep lions may have *indirect* conservation benefits such as familiarising local communities and tourists with lions and teaching them to value the remaining populations. Such education may require venues to keep lions, but not necessarily to have an attached captive-breeding programme, with cubs available for handling. Indeed, education on lion conservation from institutions with breeding programmes may risk wrongly giving tourists and locals the impression that captive breeding can solve the lion's conservation problems, and so divert attention from more conservation-relevant actions.

There exist a number of reasons to breed lions that are not predicated on providing conservation. WTAs can make a substantial profit by selling them for trophy hunting

and/or through attracting tourist revenue. Lion Park Gauteng, which does not claim to provide conservation benefits, directly states that attracting revenue is their primary motivation for breeding cubs:

> We had every intention of running the new park without cub petting and we tried to replace this with other activities. Unfortunately, this led to a dramatic and unexpected drop in the number of visitors and tour operators. … Reluctantly we had no choice but to temporarily re-introduce cub petting … . (Gauteng, 2017)

Income from tourists participating in 'lion walking' and cub petting programmes may have contributed to a number of educational and community engagement projects, all of which may benefit lion conservation. However, the breeding of the lions itself is of no *direct* relevance – it is rather used as a means to attract tourist revenue, which may or may not then be used to benefit lion conservation through other activities.

In summary, any tourist who has attended a WTA that breeds lions and permits the handling of cubs cannot have contributed financially to activities that *directly* benefit lion conservation. While the proceeds could have funded activities that indirectly benefit lion conservation, this distinction is rarely made in WTAs' promotional materials (see Supplementary Table 2). Moreover, the fact that benefits can only be indirect also makes it practically impossible for tourists to externally differentiate between lion WTAs that retain funds for profit, and those that do contribute a percentage of takings to conservation-relevant activities.

Tourism and animal ethics

The significant number and degree of animal use transgressions in the tourism industry (e.g. Moorhouse et al., 2015) has prompted scholars to advance our understanding of these issues through an emerging tourism and animal ethics sub-field. Examples of theoretical work include papers on utilitarianism (Dobson, 2011), ecofeminism (Yudina & Grimwood, 2016), ecocentrism (Burns et al., 2011), rights (Hughes, 2001), and welfare (Fennell, 2013a). However, until recently, there has been little effort to assemble these theoretical perspectives in larger, holistic models that serve tourism practice in a more comprehensive manner. A recent paper advancing this endeavour is the Scales of Justice framework developed by Fennell and Sheppard (2020). Their framework is based on two different normative models in assessing what we are told to do or believe on the basis of duty, rights, and consequences (Model 1), against what we ought to do or believe as individuals in the tradition of virtue ethics (Model 2) – both relating to deep, intermediate, shallow, and no justice outcomes for animals used in the tourism industry.

Model 1 is rooted in deontology and teleology (duty, rights, ends and consequences) and contains five theoretical perspectives that move from the view that least protects the interests of animals but is most frequent (contractarianism), to the one that is least frequent (animal rights). Contractarianism follows from Rawlsian (Rawls, 1971) justice where animal interests are not protected – no justice – because non-human animals are not rational and are unable to participate in reciprocal arrangements with others. Ecocentrism is equated with shallow justice because although the integrity and stability of the natural world is a central concern, the interests of individual animals reside outside

of this perspective (Fennell, 2013b). Welfare is a constellation of practices broadly concerned with addressing issues around proper management of animals when being used for the benefit of humans, as noted above. Utilitarianism is an ends-based perspective that focuses on balancing costs and benefits in satisfying various interests, like the interest that humans and animals both share in avoiding pain and suffering (Singer, 1975). Finally, rights theory is equated with deep justice as it is the most constraining when it comes to the use of animals in tourism. Animal rights argues that animals are subjects-of-a-life and possess inherent value (Regan, 2004). All theories are normative in the sense that they provide guidance in explaining what we should do in order to be ethical in our decisions and actions.

In contrast, virtue ethics (Model 2 in Figure 1) although also normative and teleological, focuses on the sort of person we should aim to be in making morally praiseworthy decisions. Care ethics, which falls within the boundaries of a virtue ethics perspective (Slote, 2007), includes empathy, responsibility and responsiveness to the needs of others (Held, 2004). It has relevance to animals by an expanding circle of morality based on love, compassion and empathy for animals, no matter how different they are from us (Adams & Donovan, 2007). Fennell and Sheppard (2020) include Pieper's (1955) argument that justice must be executed at the scale of the individual, not institutions and organisations, because it is individuals who ultimately make decisions on behalf of these larger entities. When we transgress, Pieper claims, it is not the act itself that is the real danger, but rather the threat to the balance of community order that is most at stake. In maintaining stasis, three types of justice must be achieved: commutative justice or justice in exchange (individuals and how they relate to each other); justice as the fair distribution of resources (the relations of the social whole, or society, to

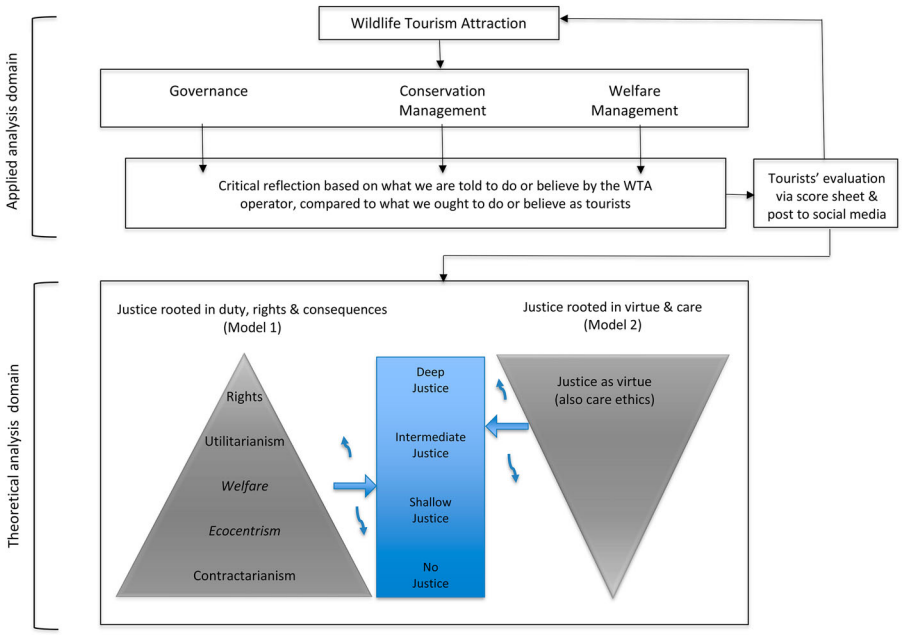

Figure 1. Conceptual framework. Source: Adapted from Fennell and Sheppard (2020).

individuals); and finally, legal or general justice (the relations of individuals to the social whole) (Fennell & Sheppard, 2020).

Methods

In achieving the purpose of this study – to derive tourist-observable correlates of ethical standards at WTAs that are justified with respect to underlying ethical theory – we employ a methodological framework developed within the field of bioethics, called empirical bioethics (Dunn et al., 2012). The main tenet behind empirical bioethics is that theoretical ethical analysis alone cannot provide workable solutions to real-word problems, but nor can empirical research alone lead to normative/ethical conclusions. Normative/ethical recommendations must be examined against empirical data and vice versa, to ensure both justifiability and applicability of any derived solutions (Ives et al., 2017). In our study, the empirical element highlights principal practical issues occurring at WTAs, and the theoretical/ethical framework developed by Fennell and Sheppard (2020) provides the underlying context within which the issues can be understood, with the aim of deriving justified, empirically supported, action-guiding recommendations.

The empirical component employs a case study methodology to derive information and conclusions from disparate sources. Xiao and Smith (2006) provide state-of-the-art coverage of the usefulness of case-study approaches, both generally and more specifically in tourism. In brief however, many types of case study approaches exist, including exploratory, descriptive, single case studies, multiple-case studies, intrinsic, instrumental, and collective (Yin, 2003). We employ our approach *sensu* Simons (2009) who argues that case studies are not methods of themselves but a design frame that often incorporates a number of different methods and perspectives. Accordingly, we adopt a multiple case study approach that allows for analysis both within and across settings in predicting similar results (referred to as literal replication) or to predict contrasting results as theoretical replication (Yin, 2003).

We draw from two primary sources of information. These comprise secondary data from the above literature review, combined with conclusions from the two worked case studies outlined above. Similar approaches have been employed in tourism research by Carvalho and Costa (2011), showing that interviews and surveys, archival records, secondary data, case studies, observations, focus group interviews, and open-ended interviews can be used in various measures to determine facts. Beeton (2005) used multiple data sources in her study on film-induced tourism, which employed used participant observation, photographic recording, surveys, in-depth interviews, and desk research of media stories.

We performed thematic analysis for Sections 2.1–2.5, following Braun and Clarke (2006), with the intention of highlighting observable correlates of good animal welfare, conservation outcomes and governance among WTAs, as well as properties of WTAs that may disallow tourists from accurately assessing their impacts and standards. Braun and Clarke's (2006) six phases of thematic analysis include (1) becoming familiar with the data, (2) generation of initial codes, (3) generating initial themes, (4) reviewing themes against coded data and the dataset in general, (5) defining and naming themes, and (6) providing a thick description of the results. As qualitative research often

entails interpretation and value judgments, these are controlled by having both researchers work independently through the first five phases in reaching consensus.

Upon completion of the thematic analysis, we synthesised these identified practical parameters into a principal table of assessment criteria (Table 1). Each of the criteria was chosen on the basis that it explicitly addresses an issue raised in the thematic analysis and is able to be assessed externally by tourists (see the Applied analysis domain in Figure 1). We then incorporated a scoring methodology across the derived list of criteria to remove subjectivity (see Russell, 1982). Each parameter has three response options describing the current level or state of governance, conservation and welfare at a given WTA. Three options were selected to make assessment of each parameter easier for tourists. These three options were then scored on a five-point scale based on: significant negative impact (−2); some negative impact (−1); no impact (0); some positive impact (+1); significant positive impact (+2). A five-point scale permits asymmetric scoring such that a minor positive (+1) can be outweighed by the more substantial negative (−2). The following example, below, of 'Signs of obesity or malnutrition' serves as an example. Tourists choose one of the three options for the welfare of an animal or species of animals at a WTA. In the example, below, the second option (bolded) is selected. After making this selection tourists would simply apply the weighted scale to this option, i.e. −2 to +2. Given the state of minor signs of obesity or malnutrition, a score of −1 is appropriate, as follows:

Signs of obesity or malnutrition

- Animals appear healthy.
- **Minor signs of obesity or malnutrition. [−1]**
- Outward signs of obesity or malnutrition.

The results of the analysis were then applied to the Scales of Justice framework in providing both an empirical and theoretical assessment and, importantly, an understanding of how these practices can be judged to be right or wrong based on the two models (the Theoretical analysis domain in Figure 1).

Results

Thematic analysis yielded a number of key themes from the literature review on animal welfare, conservation, and governance. Regarding animal welfare, 14 distinctive themes emerged that effectively characterise and capture the range of the impacts that animals experience as captives in WTAs. These include: (1) mobility in enclosures and any obstructions that prevent the movement of animals; (2) naturalness of the captive environment; (3) enrichment devices and stimuli; (4) social interaction for species that are by nature social (e.g. elephants); (5) Hygiene of food and environment; (6) shelters that provide adequate warmth, dryness and size; (7) quality of noise, from little noise causing disturbance to sustained noise causing major disturbance; (8) signs of obesity and malnutrition; (9) nutrition based on diets that replicate food from natural environments compared to non-nature, high-calorie foods; (10) entertainment intensity; (11) touch policy (e.g. selfies, cub petting and feeding); (12) positive versus negative

Table 1. Evidence or appearance of governance, conservation and welfare criteria in captive WTAs (worksheet for tourists to score & report).

Governance Posted by company (website, onsite)	Conservation	Welfare
Locus of power and decision-making in protecting the interests of animals.[1] – Governance through cooperative management involving several stakeholders including citizens, industry, NGOs and state. [+1] – Industry and state only. [0] – **Venue only / Information unavailable. [−1]**	Conservation education messages in the tourist experience.[1] – Active participation in appropriate and responsibly managed conservation outcome (e.g. collecting data through citizen science, manual labour for conservation output). [+2] – **Received conservation education through lecture / programme, etc. [+1]** – No conservation education or messaging received. [−1]	Mobility (size and obstructions)[1] – Animals able to explore large sanctuary environment freely. [+1] – **Some constraints to exploration of captive environment (e.g. not a captive environment of suitable size). [−1]** – Significant constraints to exploration of captive environment (examples chains/ small cages). [−2]
Adoption of Corporate Social Responsibility (CSR) & sustainability values for best practice.[2] – CSR and sustainability a central focus of operations. [+1] – CSR and sustainability a minor focus of operations. [0] – **Complete lack of CSR and sustainability in operations / Information unavailable. [−1]**	Tourist uses of animals that impact conservation status[2] – Totally benign uses only (e.g. wildlife viewing). [+1] – **Indirect consumption of animals through the purchase of animal products at venue (souvenirs, eating animals from venue). [−1]** – Direct consumptive practices (e.g. hunting). [−2]	Naturalness of captive environment[2] – Enclosures with characteristics that replicate natural environment, with a low density of individuals per unit area. [+1] – **Enclosures contain some characteristics that replicate natural environment, with a higher density of animals per unit area. [0]** – Enclosures contain no characteristics that replicate natural environment, and/or with what appears to be too many individuals per unit area. [−1]
Reporting and communication of operations (e.g. annual report made publicly available).[3] – Extensive reporting and communication of operations made easily available. [+1] – Limited reporting and communication of operations, and / or not easily available. [0] – **No reporting and communication of operations. [−1]**	Conservation benefits of captivity[3] – Yes, direct conservation benefits such as rehabilitation, restoration, reintroduction, and/ or lifetime care. [+2] – **Yes, but indirect conservation benefits through education, where evidence that education improves tourist knowledge of conservation issues, and encourages appropriate engagement [+1]** – No– conservation benefits/ Unknown. [−1]	Enrichment devices/stimuli[3] – Animals regularly provided with enrichment devices for cognitive, emotional and physical health. [+1] – **Animals periodically given enrichment devices for cognitive or emotional or physical health. [0]** – No enrichment devices at / Unknown. [−1]
Truth in marketing (e.g. Internet claims versus experience).[4] – Products conform to marketing claims. [+1] – No conformity to marketing and education claims. [−1] – **Deliberate greenwashing (organisations misleading customers regarding their environmental credentials). [−2]**	Stated and validated percentage of income donated towards habitat protection or science/research.[4] [CS1/ 2] – 6% or more. [+2] – 1-5%. [+1] – **0% / Unknown. [−1]**	Social interaction (*Not Applicable; only applies to social species*)[4] – Animals interacting freely with conspecifics. [+1] – Periodic interaction with conspecifics. [0] – No interaction with conspecifics. [−1]
Provision of economic benefits to local people from the venue (e.g. jobs) – Active role (and policy) around providing jobs for local people. [+2] – **Jobs provided, but no deliberate policy. [+1]** – No effort to provide economic benefits to local people. [−1]		

(*Continued*)

Table 1. Continued.

Governance Posted by company (website, onsite)	Conservation	Welfare
Pursuit of best practice in training of employees in welfare and conservation[5] – Policy and proven evidence of training/ skill development for local communities. [+2] – Basic training and allocation of resources, but not in the pursuit of best practice. [+1] – **No training of local people in proper welfare and conservation of animals [−1]** Role in inducing local communities to support conservation and welfare of animals, supported by details of how.[6] – Active role inducing communities to support conservation and welfare regular interaction with the (e.g. working with school groups). [+2] – No policy, but occasional or one-off efforts to induce community to support conservation and welfare. [+1] – **No connection whatsoever with community over conservation and welfare support. [−1]** Support for conservation – or welfare-relevant volunteer programmes.[7] – Volunteer programmes to support genuine conservation and welfare efforts. [+1] – **Volunteer programmes to support venue enterprises with no linked welfare or conservation outputs (e.g. captive breeding in the absence of linked reintroductions). [−1]** – No volunteer programmes. [−1] Regulation of the venue.[8] – Regulation by external authority (e.g. third-party certification schemes) or industry self-regulation. [+1] – Regulation through norms or codes of ethics. [0] – **No regulation / No evidence provided. [−1]**		Hygiene[5] – Animals' food and environment appears to be of optimal hygiene. [+1] – **Animals' food and environment is moderately hygienic (e.g. excrement not regularly picked up; discarded food). [0]** – Animals' food and environment is not at all hygienic (e.g. animal covered in excrement). [−1] Shelter (may be a specific area of the enclosure / cage)[6] – Shelter that provides superior warmth and dryness and is of reasonable size. [+1] – **Shelter that provides inadequate warmth and dryness and is of sub-optimal size. [−1]** – No shelter at all. [−2] Noise quality (including tourist noise)[7] – Little to no noise that may cause disturbance. [+1] – Periodic noise that may cause minor disturbance. [−1] – **Sustained noise that may cause major disturbance. [−2]** Signs of obesity or malnutrition[8] – Animals appear healthy. [+1] – **Minor signs of obesity or malnutrition. [−1]** – Outward signs of obesity or malnutrition. [−2] Nutrition[9] – Evidence from venue that they feed animals a diet that replicates food from their natural environment. [+1] – **Animals fed a combination of natural food and non-natural treats. [−1]** – Animals fed predominantly non-natural, high calorie treats. [−2] Entertainment intensity[10]

(*Continued*)

Table 1. Continued.

Governance Posted by company (website, onsite)	Conservation	Welfare
		– Animals free from having to entertain tourists (Not handled for educational purposes or made to do shows). [+1] – Animals used for educational purposes (e.g. demonstrating to tourists for limited periods). [−1] – **Animals made to regularly perform (jumping through burning hoops, balancing acts, etc. daily and regularly). [−2]** Touch policy for tourists (e.g. selfies, cub petting, feeding).[11] – No touching (e.g. petting), handfeeding, or selfies allowed. [+1] – Time limited petting or selfies allowed, with evidence of strict policing. [−1] – **Petting, feeding and/or selfies allowed. [−2]** Reinforcement[12] – Animals regularly receive positive reinforcement. [+1] – Animals receive both positive and negative reinforcement. [0] – **Animals receive only negative reinforcement. [−1]** Abuse-respect continuum[13] – Never any abuse; abundant care and respect. [+1] – Some care and respect in the absence of abuse. [0] – **Evidence of outward abuse, pain and suffering. [−1]** Visitor control measures.[14] – Evidence of regular control of visitor numbers, group sizes, and group behaviour. [+1] – Evidence of periodic control of visitor numbers, group sizes, and group behaviour. [0] – **– Evidence of no visitor control of numbers, group sizes, and group behaviour. [−1]**

(*Continued*)

Table 1. Continued.

Governance Posted by company (website, onsite)	Conservation	Welfare
Weighted sub-score: – 8 TOTAL SCORE: – 21 [1] Maciel and Bock (2012), Sheppard and Fennell (2019) [2] Fennell and de Grosbois (2017), Font et al. (2019) [3] Case studies 1 and 2 [4] Case studies 1 and 2 [5] Font et al. (2019) [6] Boley and Green (2016) [7] Table 2; Case study 2 [8] Font et al. (2019), GSTC (2020)	Weighted sub-score: 0 [1] Ballantyne, Packer and Hughes (2009) [2] Schroeder (2018); Cohen (2013) [3] D'Cruze et al. (2018); Case studies 1 and 2 [4] Fennell (2018a, 2018b); Case studies 1 and 2	Weighted sub-score: – 13 [1] Fennell (2013c), Vanitha et al. (2011) [2] Li et al., (2007); Case study 1 [3] Makecha and Highfill (2018) [4] Vanitha et al. (2011) [5] Schmidt-Burbach et al. (2015) [6] Schmidt-Burbach et al. (2015) [7] Schmidt-Burbach et al. (2015) [8] Norkaew et al. (2019) [9] Schmidt-Burbach et al. (2015) [10] ABTA Magazine (2019) [11] Moorhouse et al. (2017); Case studies 1 and 2 [12] Kane et al. (2005) [13] Case study 1 [14] Davey (2007), Munanura et al. (2013)

Responses to criteria are **scored** on a five-point scale: significant negative impact (−2); some negative impact (−1); negligible impact (0); some positive impact (+1); significant positive impact (+2).

reinforcement; (13) a continuum of abuse and suffering to respect and care; and (14) evidence of measures to control the behaviour of tourists.

Conservation yielded fewer themes than animal welfare, indicating both the multidimensional nature of animal welfare to human-animal interactions in WTAs, and that conservation is more uniform in how it is discussed in the context of WTAs. Conservation themes from the analysis include conservation education, types of animal use that have conservation implications (consumptive versus non-consumptive), conservation benefits from captivity (e.g. rehabilitation), and the percentage of revenue dedicated to conserving biodiversity and habitat.

Several governance themes were detected from the analysis which have important implications for the management of WTA operations. Most research discusses how governance is communicated to tourists via websites (Fennell & de Grosbois, 2017). As such, WTAs can easily enhance their operations through effective communication on criteria such as: (1) cooperation among different stakeholders; (2) adoption of CSR and sustainability; (3) transparent and regular reporting and communication of operations; (4) truth in marketing; (5) evidence of economic benefits to local people; (6) best practices around training and skill development of local people; (7) providing education and programmes to induce local communities to support animal welfare and conservation; (8) ethical volunteer programmes; and (9) the implementation of standards through certification schemes and codes of ethics to aid in the ethical planning, development and management of WTAs.

Themes yielded by Case Studies 1 and 2, related to the difficulties facing tourists wishing to accurately assess WTAs' claims, were: (1) captive breeding in the absence of a demonstrably effective reintroduction programme making no direct positive contribution to species conservation; (2) tourist education alone as insufficient justification for keeping (large numbers of) animals; (3) unverifiable claims from WTAs regarding conservation and/or animal welfare benefits that can only occur in the future and a lack of defined, time-limited, milestones against which these can be externally assessed; (4) lack

of husbandry details: numbers of animals held, evidence of their genetic origin, where the animals were sourced from, numbers of individuals born and died in a given year; (5) lack of specification of the percentage of the WTA's income that contributes to conservation or animal welfare outcomes.

Table 1 presents the 27 externally assessable criteria from the thematic analysis, and the scoring options for each. Emboldened options for each criterion within Table 1 represents how each criterion would be scored for a WTA of the type found in case study 1, above, i.e. a hypothetical WTA that holds and breeds captive tigers, provides tourist education, and which permits tourist interactions with those tigers (26 are used in this example). These are summed in providing an overall score for the WTA (−21 for our example), but also permit a quick assessment of where a particular WTA may be succeeding or lacking in a given domain. In this example the governance domain shows mostly negative scores in areas such as locus of power, lack of CSR and sustainability, poor reporting and communicating, deliberate greenwashing, the pursuit of best practices, and how the venue is regulated (i.e. no regulation indicated). Marginally better results were achieved in the conservation domain based on conservation education through lectures or programmes (+1), and indirect conservation benefits of captivity (+1). However, poor scores, overall, are observed in the welfare domain. In fact, there are no criteria that were scored positively, with noise quality, entertainment intensity, and touch policy for tourists as the poorest scored criteria.

Synthesis

Figure 2 illustrates how the scores from Table 1 interconnect with the theoretical framework to create a composite tool that tourists can use to gauge, and feedback on, the effectiveness of WTAs along governance, conservation, and welfare dimensions. The figure

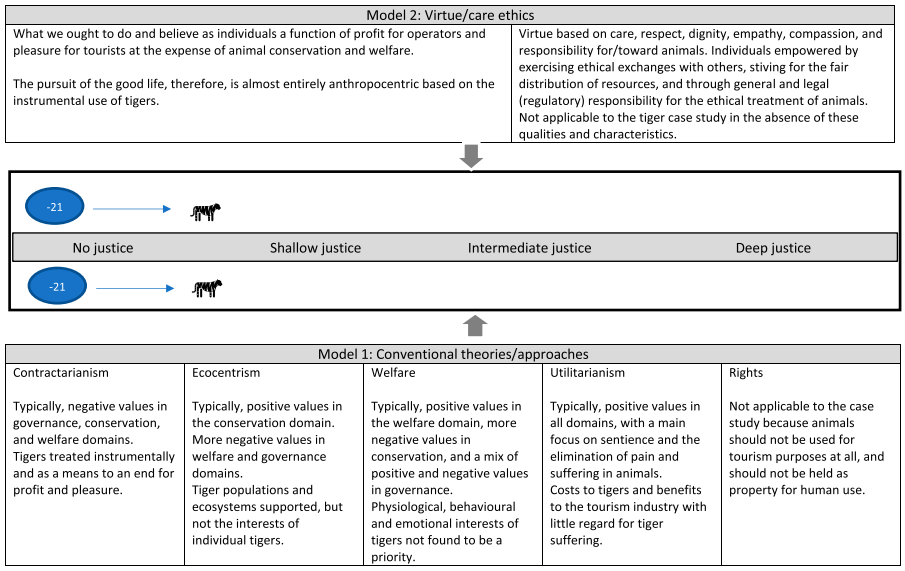

Figure 2. Theories related to, and scores from, a hypothetical tiger WTA.

shows that a score of −21 from Table 1 rests between no justice and shallow justice according to Fennell and Sheppard's (2020) framework.

In looking closer into the theoretical underpinnings of Model 1, tigers in our hypothetical WTA are treated instrumentally for profit and pleasure, which corresponds to a contractarianist perspective. Pure contractarianism would be indicated by negative values for animal welfare, conservation, and governance, and so in this instance the modest approach to conservation adopted by the WTA – resulting in some positive values from conservation education through lectures and programmes, as well as indirect conservation benefits through encouragement to engage conservation issues – pushes the interpretations towards ecotourism. However, all governance and animal welfare values were ≤ 0, showing poor performance in these domains.

With respect to Model 2 (rooted in virtue ethics and concerned with what we ought to do as individuals in pursuit of the good life), the appearance of so many negative values across animal welfare, conservation and governance domains, indicates that central actors like policymakers and operators have failed in the hypothetical WTA to operate in a virtuous manner. Virtue is based on care, respect, dignity, empathy, compassion, and responsibility for/toward animals. Individuals empowered by exercising ethical exchanges with others, stiving for the fair distribution of resources, and through general and legal (regulatory) responsibility for the ethical treatment of animals. Few if any of these characteristics are present in the case study. Instead, welfare is compromised, conservation benefits are meager, and good governance is absent, while pleasure and profit take precedence over the interests of animals following an entirely anthropocentric ethic based on the instrumental use of tigers. Both models indicate a state of 'no justice' for tigers held in our hypothetical WTA as we illustrate by the tiger icons in Figure 2.

Discussion

We highlight the existence of systemic barriers that act to resist attempts to raise ethical standards across WTAs. These barriers comprise unverifiable claims made by WTAs concerning their ethical outputs and a feedback system that fails to equip tourists to differentiate between the enjoyability of an experience and its impacts on animal welfare and species conservation. We emphasise that Table 1 was created as a robust starting point, available for immediate use, but also in the expectation that the listed criteria will stimulate further debate and experience considerable refinement through future discussion and research. If, however, Table 1 were sufficiently adopted, the creation of a new subjective norm – that tourists are expected to limit the wider impacts of their consumption with respect to the welfare and conservation of animals in WTAs – could promote conditions that will permit the functioning of an ethical market for WTAs. As such, operators who are intent on making a considered difference for animals used in tourism will find ways to effectively communicate (de Grosbois & Fennell, 2021) governance, welfare and conservation dimensions to tourists in efforts to push best practice.

We envisage that Table 1 could be used as a benchmark from which to develop assessment tools specific to individual species (i.e. one for tigers, another for elephants etc.) in support of species relativism: '… certain experiences and ways of existing properly valued by members of one species may lack value for the members of another species' (Agar, 2010, p. 12). Doing so could minimise criteria and assure tourists that a given

assessment tool has particular relevance to the animal species they are viewing. Critics may argue that any such assessment tool may be too complicated and difficult for tourists to use in the absence of specialist knowledge on governance, welfare and conservation. We argue that the current absence of such a tool *de facto* disempowers tourists, prevents them from becoming educated about the WTAs they visit, and disincentivizes operators from managing their venues in good faith. As responsibility advances in tourism, there is an increasing need for tourists to be sustainable citizens (Wells & Lekies, 2006) or moral tourists (Fennell, 2018b).

In previous studies, models of animal welfare at WTAs have awarded scores for the treatment of animals in reference to welfare alone (Schmidt-Burbach et al., 2015). However, we argue that assessments of ethical standards at WTAs must go much further by including scores on governance and conservation domains – the reason for not utilising the Five Freedoms or Five Domains models. Welfare, whether good or bad, is a function of the governance structures that are in place for these venues, which are also a function of the political, social, and economic milieu in which these venues exist. Good governance therefore can be assured by expanding the circle of morality to include not only better conditions at these venues, but also through the development of state and national policies that place the interests of animals on a much higher plane (Sheppard & Fennell, 2019). Policy and governance reform are of immediate need so that we can 'make an impact in the world and to be justified in having that impact' (Dunn et al., 2012, p. 467). But as observed by Glasbergen (1998), society, with a deliberate nod here to the tourism industry, must be manageable and open to change. The offloading of government control and regulation to the tourism industry as market-based governance is problematic in that industry will ebb and flow according to the whims of the market (Maciel, 2015; Maciel & Bock, 2012). In cases where responsibility is not a priority for WTAs, and other forms of tourism, a greater burden is placed on tourists to assume a leadership role in defining and enforcing standards.

In making the case for greater responsibility in tourists, research indicates that tour operators have taken a more active role in encouraging tourists to give to charity and engage in conservation work, including citizen science (Hehir et al., 2022). Such strategies are not new to ecotourism, with the literature documenting conservation actions of ecotourists for years (Fennell & Smale, 1992; Galley & Clifton, 2004; Harlow & Pomfret, 2007; Olearnik & Barwicka, 2020), especially between soft path versus hard path ecotourists, with the latter being more conservation-minded over the former. However, Weaver (2002) argues that softer path ecotourists can in fact be more sustainable than hard path ecotourists because of the funds they generate for conservation purposes through the concentration of visitors onto hardened sites, minimising space, and providing visitor management and educational messages for larger numbers of tourists. Moving these sorts of pro-conservation measures and behaviours into the mainstream of wildlife tourism, where there are vast numbers of tourists, represents a new subjective norm as wildlife tourists shoulder some of the responsibility for ensuring good governance, conservation and the welfare of animals. We further contend that operators, and tourists, will increasingly bear social costs if unwilling to change their practices in these changing times.

As such, we feel that non-market approaches to the management of WTAs will increasingly be important in the future in terms of how these venues are run. Dwindling

visitation to places like Marineland in Niagara Falls, Ontario, where this aquarium is on the verge of closure (Robertson, 2021), is a testament to the impact of social media and social costs de-incentivising tourists to visit such venues. This 'social media effect' has recently been documented by Bergman et al. (2022), who show that social media can heighten pro-conservation actions of the public, increase conservation funds, and change policy. These authors stress 'In today's rapidly changing world, social media presents a unique framework that, if used appropriately, can unify our voices and offer an opportunity to mobilize social change for global biodiversity conservation' (Bergman et al., 2022, p. 381).

The next phase of this research could involve the development of an app that tourists can download on WTAs globally. Such an app could host 'user-friendly' questionnaires that are tailored to specific types of WTA (e.g. elephant venues versus dolphinaria) and derived from the inclusive set of criteria in Table 1. These would thereby solicit, and publicly host, tourist reviews that represent ethical conditions at the WTAs, rather than conflating these with other factors (e.g. hedonic pleasure) as currently occurs on single-measure review platforms. Along with this app will be information on governance, conservation and welfare that tourists can access in better educating themselves on the responsible provision of animal attractions. We view this model as one of the best ways to advance moral thinking on being a responsible WTA.

We argue that emerging research on integrative social contract theory (ISCT) has a role to play in meshing differing cultural positions (Fennell, 2022) in wildlife tourism. Dominant macro social contracts as normative theoretical ground rules governing tourism morality (e.g. contractarianism, rights, utilitarianism, welfare, and so on) provide guidance around the right and wrong treatment of animals. Recessive micro social contracts allow for the maintenance of philosophical, cultural and religious distinctiveness (moral free space) in the use of animals, while ruling out extreme relativism. Accordingly, hypernorms such as beneficence, non-maleficence, literacy, justice, recognition of agency, and animal-informed consent provide guidance and take precedence over cultural practices that remain static and utilitarian (Fennell, 2022).

We also contend that there is considerable scope for greater use of the empirical ethics model (Ives et al., 2017) that we employed to intersect our empirical research (case studies) and an ethical lens (the Scales of Justice). If ethics is to have utility in addressing real-world problems, new methods must be considered in tourism to facilitate adaptive change. Finally, future studies should investigate the extent to which review bias provides a fair assessment of the management of WTAs. Research on human subjects indicates that empathy prevents negative review behaviour (Pera et al., 2019). Having empathy for animals in captive situations will possibly induce negative reviews of operations that may not be warranted (e.g. genuine rescue centres where animals are being provided with the highest level of care).

Our paper is not without limitations. The choice to not include zoos in the analysis is of obvious significance owing to the major global role that zoos play as WTAs and the fact that any institution can theoretically label itself as a zoo. The literature review could have been far more robust if the information on zoos had been included, allowing us to possibly expand the criteria used in Table 1. However, this research is a continuation of a larger research project of published work on wildlife tourism attractions that did not include zoos (Moorhouse et al., 2015), which made the use of zoos in the case study

portion of our research (not the literature review) not applicable. Similarly, questions may surface over the differences that exist between cultures in the proper treatment of animals, and also differences on the basis of gender and urban versus rural orientations.

Conclusion

Urgently required is a robust set of criteria by which non-expert tourists can externally assess – and accurately represent to others – standards at WTAs. The criteria in Table 1 represent a step towards delivering this, by providing a prototype that could form the basis of derived, species-specific scoresheets with which tourists could assess individual venues. The hope is that feedback based on these criteria becomes increasingly visible, thereby creating a disequilibrium in tourists around what they formerly viewed as acceptable in the proper treatment of animals at WTAs to one that challenges these beliefs and attitudes. This is not to suggest that the criteria in Table 1 should be universally accepted. Empirical studies should determine which standards are most appropriate and which are most easily interpreted by tourists in an effort to effectively assess the governance, conservation, and welfare of animals at wildlife tourism attractions.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Tom P. Moorhouse http://orcid.org/0000-0002-8889-2175

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