

# Protection of the African Lion: A Critical Analysis of the Current International Legal Regime

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Date published 26 April 2016

Editor Prof AA du Plessis

## How to cite this article

Watts S "Protection of the African Lion: A critical Analysis of the Current International Legal Regime" *PER / PELJ* 2016(19) - DOI <http://dx.doi.org/10.17159/1727-3781/2016/v19i0a1158>

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## DOI

<http://dx.doi.org/10.17159/1727-3781/2016/v19i0a1101>

## Abstract

This article looks at the current international regime that pertains to the African lion, a species that needs adequate protection across its range (a range that does not adhere to state boundaries). This analysis comes at a time when threats such as habitat and prey loss, retaliatory killing, trophy hunting and trade, are all impacting the remaining populations of African lions. The species is in danger of rapid population decline and possible extinction in the near future. Two decades ago there was an abundance of African lions, roughly 100 000, on the continent. But at present there are less than 32 000, while some believe there to be as little as 15 000 left. This decline is mainly due to the threats noted above.

African lions are currently listed as "vulnerable" on the International Union for Conservation of Nature Red List of Threatened Species. This listing is being contested by commentators who believe that the species now requires an "endangered" status. African lion populations, and the threats to the species, extend across state boundaries. Therefore, international law is of particular importance in providing conservation and protection measures to the species. Creating conservation obligations at a global level allows for more uniform action, implementation and enforcement of legislation at regional and local levels.

Therefore this article looks at each threat to African lion populations in detail and then assesses the international legal regime pertaining to each of these threats, and whether that regime is adequate. The *Convention on Biological Diversity*, *Convention on the Conservation of Migratory Species*, *Convention on International Trade in Endangered Species of Wild Fauna and Flora* and the *Convention on Wetlands of International Importance* are but some of the international instruments that are analysed. This article outlines the arguments that the international legal framework is not acceptable for the protection of the species, and addresses both the positive and negative aspects of this regime.

It is found that the international legal regime for the African lion is in fact not effective in achieving the protection and survival of the species. Some changes are recommended, and the best way forward through an international legal lens is outlined. The security and viability of the African lion is uncertain, and legal protection of the species needs to be clear to start ensuring their survival in the future. With the increase in threats to the species and African lions already regionally endangered in some parts of Africa, it is obvious that some legal changes need to be made to ensure greater protection of the African lion at an international level.

## Keywords

African lion; international environmental law; conservation; hunting; trade; habitat loss; endangered; conventions; agreements.

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## 1 Introduction\*

The International Union for the Conservation of Nature (IUCN) listed the African lion (*Panthera leo*) as "vulnerable" in 1996 following a declining population trend.<sup>1</sup> Despite this listing, there has been a growing concern that African lions need more international law protection.<sup>2</sup> This is due to increasing threats to the species that extend across state boundaries.<sup>3</sup> Although domestic legislation occurs in some range states,<sup>4</sup> for a species such as the African lion whose population dynamics extend across national boundaries, international law is of particular importance.<sup>5</sup> Creating conservation obligations at a global level allows for more uniform action, implementation and enforcement of legislation at local levels.<sup>6</sup> Therefore it is important to ascertain whether there is an international legal regime pertaining to the protection and conservation of the African lion, and whether that regime is adequate to be implemented locally.

This article sheds light on the reality that the current international legal regime for the African lion is inadequate. To fully address the complexities of this statement, one must understand some subsidiary context and background. African lions are valuable in many respects: first, they are valuable for their important role in the balancing of ecosystems in the wild, secondly for their intrinsic cultural and traditional value, and thirdly for their economic value for range states<sup>7</sup>, through tourist revenue.<sup>8</sup> Even with such

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<sup>1</sup> IUCN 2014 [http://www.iucnredlist.org/static/categories\\_criteria\\_2\\_3](http://www.iucnredlist.org/static/categories_criteria_2_3); Bauer, Nowell and Packer 2014 <http://www.iucnredlist.org/details/15951/0>.

<sup>2</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 6.

<sup>3</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 6.

<sup>4</sup> States that have differing strengths of domestic legislation include Angola, Kenya, Cameroon, Congo, Gabon, Ghana, Guinea, Malawi, Mali, Namibia, Niger, Nigeria, Rwanda, Botswana, South Africa, Tanzania, Zambia, Zimbabwe. See Kasiki and Hamunyela "Panthera Leo - Report" 14.

<sup>5</sup> Kasiki and Hamunyela "Panthera Leo - Report" 14; IUCN 2014 <http://maps.iucnredlist.org/map.html?id=15951>.

<sup>6</sup> Sands and Peel *Principles* 512.

<sup>7</sup> In this context a "range state" means any country that exercises jurisdiction over any part of the range of African lions. See *Convention on the Conservation of Migratory Species of Wild Animals* (1980) 19 ILM 15 (CMS).

<sup>8</sup> Braun 2012 <http://newswatch.nationalgeographic.com/2012/12/06/lion-numbers-plunge-as-african-wilderness-succumbs-to-human-pressure/>; Nowell and Bauer *Regional Lion Conservation Strategy* 7.

importance the African lion is exposed to threats such as habitat and prey loss, retaliatory killing, trophy hunting and trade. The concern over these threats first arose in 2004 when the Kenyan Government proposed increased trade protection for African lions at a *Convention of International Trade In Endangered Species (CITES)*<sup>9</sup> CoP.<sup>10</sup> This created awareness around the status of African lion populations, and organisations started to question and demand increased protection for the species.<sup>11</sup>

Further research ascertains whether the current international legal regime includes measures that provide for the protection of the African lion, and if so, whether these measures are effective against the mentioned threats. The best way forward for the species survival is then recommended, through an international legal lens.

### **1.1 The current state of African lion populations**

There is great difficulty in conducting lion population censuses, and there is great divergence in lion population estimates.<sup>12</sup> However, it is widely agreed that there is a downward trend in African lion populations.<sup>13</sup> Population estimates dropped from a million in pre-colonial times to less than 100 000 in the 1990s.<sup>14</sup>

Today, the IUCN estimates that there are fewer than 29 665 free-ranging African lions.<sup>15</sup> Disturbingly, the African lion population in West Africa is listed as regionally endangered by the IUCN, with an estimated number of 850 mature individuals remaining in the wild.<sup>16</sup> For African lions to have a

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<sup>9</sup> *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (1973) 12 ILM 1085 (CITES).

<sup>10</sup> CITES 2004 [http://www.cites.org/common/cop/13/raw\\_props/KE-Lion.pdf](http://www.cites.org/common/cop/13/raw_props/KE-Lion.pdf).

<sup>11</sup> Roberts 2004 <https://awionline.org/content/will-cites-ignore-its-responsibility-contribute-african-lion-conservation>.

<sup>12</sup> This is due to the difficulty of identification, requiring high-resolution cameras and an unobstructed view. See Braun 2012 <http://newswatch.national-geographic.com/2012/12/06/lion-numbers-plunge-as-african-wilderness-succumbs-to-human-pressure/>; Bauer and Van Der Merwe 2004 *OJJC* 26.

<sup>13</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie-12>.

<sup>14</sup> Hazzah, Mulder and Frank 2009 *BioCon* 2428; Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie-12>.

<sup>15</sup> Estimation of 29665 free-ranging lions in Africa. See Hazzah, Mulder and Frank 2009 *BioCon* 2428.

<sup>16</sup> There are genetic differences between lions in East and Southern Africa, and those in West and Central Africa. For the purpose of this article this distinction is not critical, as the lions in both areas are threatened. See Riggio *et al* 2013 *BioCon* 18; Bauer, Nowell and Packer 2014 <http://www.iucnredlist.org/details/15951/0>.

high survival rate in the future, there need to be multiple, genetically diverse, populations connecting across ecosystems within Africa.<sup>17</sup>

## 2 Threats to the African lion's existence

### 2.1 *Habitat loss and prey scarcity*

#### 2.1.1 *African lion habitat loss*

Historically, African lions occurred in almost all African habitats, but they are now found only in savannah habitats across Sub-Saharan Africa.<sup>18</sup> This area is 13.5 million km<sup>2</sup>, but only 3.4 million km<sup>2</sup> is suitable to support African lions, with just 1.08 million km<sup>2</sup> classified as protected by the IUCN.<sup>19</sup> The density of lion populations decreases with increasing distance from conservation areas. Therefore African lions are dependent on protected areas.<sup>20</sup>

Activities that have altered lion habitat are mostly agriculture, livestock grazing and human development.<sup>21</sup> The human population of Sub-Saharan Africa is predicted to increase to 1.75 billion people by 2050.<sup>22</sup> To support this growth, land and resources are under increasing pressure.<sup>23</sup> Due to the loss of habitat, connections for lions between various parks and conservancies no longer exist.<sup>24</sup> This creates difficulty for gene transfer between African lion prides.<sup>25</sup> They have had to expand their home range due to this loss of habitat.<sup>26</sup> This expansion allows for more contact with domestic animals, spreading disease between livestock and lions, resulting

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<sup>17</sup> Lions in West Africa have been separated from other lion populations due to habitat destruction. This has been one of the factors leading to the population decrease. Riggio *et al* 2013 *BioCon* 18; Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 14; Bauer, Nowell and Packer 2014 <http://www.iucnredlist.org/details/15951/0>.

<sup>18</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 10; Kasiki and Hamunyela "Panthera Leo - Report" 4.

<sup>19</sup> Riggio *et al* 2013 *BioCon* 18, 29.

<sup>20</sup> Winterbach *et al* 2012 *MR* 92.

<sup>21</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 18.

<sup>22</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 18; World Bank Group 2014 <http://data.worldbank.org/region/sub-saharan-africa>.

<sup>23</sup> Nowell and Jackson *Status Survey* 149.

<sup>24</sup> Winterbach *et al* 2012 *MR* 96.

<sup>25</sup> Tende *et al* 2014 *PLoS ONE* 6.

<sup>26</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 18.

in increased lion mortality.<sup>27</sup> Desertification further exacerbates this link with human populations.<sup>28</sup> It is predicted that by 2025 land degradation through desertification will lead to a loss of two-thirds of all arable land in Africa.<sup>29</sup> This loss will invariably increase competition between people and lions for land, resulting in less land for lion populations.<sup>30</sup>

### 2.1.2 African lion prey scarcity

A healthy lion population within an ecosystem is limited by prey abundance.<sup>31</sup> Decline in prey relates to the same habitat degradation mentioned above.<sup>32</sup> Linked with this is the proximity of wild ungulates to domestic livestock increasing disease transmission to wild populations.<sup>33</sup> This prey scarcity is also due to an increase in wild game hunting.<sup>34</sup> The commercialisation and illegal trade of bushmeat is also having an impact on wild ungulate populations.<sup>35</sup> Therefore, prey is becoming less abundant for lion populations, resulting in their starvation and death, as well as their need to search for food closer to human populated areas.<sup>36</sup>

## 2.2 Retaliatory and traditional killing

African lions previously followed seasonal herbivore migrations. However, due to livestock abundance near to and often within lions' expanding home ranges, lions are no longer following these migrations.<sup>37</sup> Thus, African lions pose a great threat to local livelihoods through livestock predation as well as attacks on people.<sup>38</sup> Both of these issues result in the retaliatory killing

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<sup>27</sup> Winterbach *et al* 2012 MR 101.

<sup>28</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 19.

<sup>29</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 21.

<sup>30</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 21.

<sup>31</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 19.

<sup>32</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 18.

<sup>33</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 19.

<sup>34</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 19.

<sup>35</sup> Lindsey *et al* *Illegal Hunting* 5.

<sup>36</sup> Valeix *et al* 2012 JAE 77.

<sup>37</sup> Valeix *et al* 2012 JAE 77.

<sup>38</sup> Packer and Kissui 2007 TNAWNRC 4; Valeix *et al* 2012 JAE 73; Bauer 2003 [http://www.carnivoreconservation.org/files/thesis/bauer\\_2003\\_phd.pdf](http://www.carnivoreconservation.org/files/thesis/bauer_2003_phd.pdf) 61.

of lions through poisoning, trapping and shooting, causing further lion population decline.<sup>39</sup>

The killing of lions is also ceremonial.<sup>40</sup> Traditional Sukuma men in Tanzania become prestigious local figures if they kill a lion for retaliatory purposes.<sup>41</sup> Recently, however, Sukuma men have found themselves having to travel far distances in search of lions to kill.<sup>42</sup>

## **2.3 The trophy hunting industry**

### *2.3.1 The hunting of wild lions*

Trophy hunting<sup>43</sup> is often used as an economic incentive for local communities to support wildlife conservation.<sup>44</sup> However, this industry often provides only short-term gains, and as profits increase so do the risks of the overexploitation of lions.<sup>45</sup> This industry lacks the structure and transparency to ensure the sustainability of African lion populations. Often, hunting concessions are divided randomly amongst hunting associations and quotas are increased with no scientific support.<sup>46</sup> It has been estimated that unsustainable trophy hunting has reduced the wild African lion population by thirty per cent.<sup>47</sup>

Trophy hunting gives rise to further threats to African lion populations through the dominant selection of large male targets, often pride holders in the wild.<sup>48</sup> Once these leaders are killed, other males kill the deceased male's offspring, resulting in unnecessary population decline.<sup>49</sup> Lionesses defending their cubs are at times killed as well.<sup>50</sup> Furthermore, the hunting of female African lions results in dramatic population decline.<sup>51</sup> It has been

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<sup>39</sup> Nowell and Bauer *Regional Lion Conservation Strategy* 21.

<sup>40</sup> Fitzherbert *et al* 2014 *BioCon* 84.

<sup>41</sup> Fitzherbert *et al* 2014 *BioCon* 84.

<sup>42</sup> Fitzherbert *et al* 2014 *BioCon* 85.

<sup>43</sup> Trophy hunting entails killing an animal and stuffing the carcass to display the animal as a trophy. See Hargreaves 2010 *JWCLAS* 8.

<sup>44</sup> Whitman *et al* 2007 *CB* 592.

<sup>45</sup> Whitman *et al* 2007 *CB* 593.

<sup>46</sup> Whitman *et al* 2007 *CB* 593.

<sup>47</sup> Kiffner 2008 *ESU* 2.

<sup>48</sup> Kiffner 2008 *ESU* 2.

<sup>49</sup> That these threats are very real was demonstrated by the recent killing a lion in Zimbabwe. See Parry 2015 <http://www.dailymail.co.uk/news/article-3190750/One-Cecil-lion-s-cubs-killed-rival-male-sparking-fears-remaining-seven-just-days-left-live-beast-slaughtered-dentist.html>.

<sup>50</sup> Kasiki and Hamunyela "Panthera Leo - Report" 14; Kiffner 2008 *ESU* 2.

<sup>51</sup> Loveridge, Packer and Dutton "Recreational Hunting of Lions" 114.

found that killing less than three per cent of reproductive females will expose lion populations to overall decline.<sup>52</sup>

### 2.3.2 *The hunting of captive-bred lions*

The captive-bred lion industry has grown significantly in Africa.<sup>53</sup> It involves breeding lions in captivity to be hunted in fenced areas.<sup>54</sup> Due to an increase in captive-bred lion hunting, the demand for wild lion hunts may decrease, thereby reducing conservation incentives for wild lions.<sup>55</sup> In terms of genetic threats, breeders do not keep records of breeding lines and so their lions cannot be incorporated into conservation programmes for wild lion populations.<sup>56</sup> Another growing threat is the poaching of adult wild lions and cubs to add to these breeding facilities.<sup>57</sup> Exact numbers reflecting the rate at which this occurs are unknown, and the practice is uncontrolled, thus posing an even greater risk to the species.<sup>58</sup>

## 2.4 *Trade in African lions, their parts and derivatives*

### 2.4.1 *Legal trade activities*

African lions, their parts and derivatives are traded at both local and international level.<sup>59</sup> There is trade in African lion teeth, claws, skin, skulls, whiskers, fat, bones, bile, testicles, heart and tails, and also in live lions.<sup>60</sup> In 2012 there were 557 reported exports of African lions, their parts and derivatives, from African countries.<sup>61</sup> The quantity of each export differs. For example, just one of these exports contained 452 trophies exported from South Africa to the United States of America.<sup>62</sup> Inconsistencies in export data suggest that captive-bred lions are being exported from South Africa to other African states to be hunted as "wild" lions.<sup>63</sup> This creates the

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<sup>52</sup> Loveridge, Packer and Dutton "Recreational Hunting of Lions" 115.

<sup>53</sup> Lindsey *et al* 2012 *SAJWR* 18.

<sup>54</sup> Lindsey *et al* 2012 *SAJWR* 12.

<sup>55</sup> Lindsey *et al* 2012 *SAJWR* 12.

<sup>56</sup> Anon 2005 [http://www.huntingreport.com/images2/pdf/Final\\_Draft\\_Panel\\_of\\_Expert\\_Report\\_to\\_DEAT.pdf](http://www.huntingreport.com/images2/pdf/Final_Draft_Panel_of_Expert_Report_to_DEAT.pdf) 23.

<sup>57</sup> Anon 2005 [http://www.huntingreport.com/images2/pdf/Final\\_Draft\\_Panel\\_of\\_Expert\\_Report\\_to\\_DEAT.pdf](http://www.huntingreport.com/images2/pdf/Final_Draft_Panel_of_Expert_Report_to_DEAT.pdf) 23.

<sup>58</sup> Anon 2005 [http://www.huntingreport.com/images2/pdf/Final\\_Draft\\_Panel\\_of\\_Expert\\_Report\\_to\\_DEAT.pdf](http://www.huntingreport.com/images2/pdf/Final_Draft_Panel_of_Expert_Report_to_DEAT.pdf) 21.

<sup>59</sup> Kasiki and Hamunyela "Panthera Leo - Report" 8.

<sup>60</sup> Kasiki and Hamunyela "Panthera Leo - Report" 8.

<sup>61</sup> CITES 2012 <http://bit.ly/1RXSRL5>.

<sup>62</sup> CITES 2012 <http://bit.ly/1RXSRL5>.

<sup>63</sup> Hargreaves 2010 *JWCLAS* 18.

impression that wild lion populations are thriving, which is far from the reality.<sup>64</sup>

Another threat to lion populations is the increasing trade in lion bones. The bones are used as a substitute for tiger bones in a Chinese brew known as “tiger bone wine”, which is believed to have healing and medicinal properties.<sup>65</sup> In 2008 there were 70 international exports of lion bone, but in 2010 this number increased to 638 exports.<sup>66</sup> Captive-bred lions are one source of these bones.<sup>67</sup> There is a clear possibility that the international trade in lion parts and derivatives for traditional Chinese medicine may grow uncontrollably, affecting populations, as we have seen in the case of the tiger.<sup>68</sup>

#### 2.4.2 *Illegal trade activities*

Live lions, their parts and derivatives are also traded illegally, domestically and internationally.<sup>69</sup> The unlawful nature of this trade makes it difficult to quantify the extent of such activities.<sup>70</sup> Control of this trade is problematic. Often the legal trade in lion trophies is used as a guise for selling other lion products on the black market.<sup>71</sup> Weak law enforcement and capacity, as well as insufficient knowledge in many African states further allows illegal trade to threaten remaining lion populations.<sup>72</sup>

As stated above, the captive-bred lion industry is fuelling the demand for lion bone.<sup>73</sup> However, due to the fixed and expensive prices of captive-bred lions, the poaching of wild lions may increase.<sup>74</sup> A further stimulant for poaching lions may arise from the market preference in the East for wild animal parts rather than captive-bred counterparts.<sup>75</sup>

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<sup>64</sup> Hargreaves 2010 *JWCLAS* 20.

<sup>65</sup> Parker 2012 <http://mg.co.za/article/2012-07-04-sa-breeders-embrace-growing-asian-demand-for-lion-bones>.

<sup>66</sup> Kasiki and Hamunyela "Panthera Leo - Report" 18.

<sup>67</sup> Hargreaves 2010 *JWCLAS* 20.

<sup>68</sup> Kasiki and Hamunyela "Panthera Leo - Report" 14.

<sup>69</sup> Kasiki and Hamunyela "Panthera Leo - Report" 12.

<sup>70</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 25.

<sup>71</sup> Kasiki and Hamunyela "Panthera Leo - Report" 12.

<sup>72</sup> Nowell and Bauer *Regional Lion Conservation Strategy* 25.

<sup>73</sup> Hargreaves 2010 *JWCLAS* 21.

<sup>74</sup> Hargreaves 2010 *JWCLAS* 21.

<sup>75</sup> Lindsey *et al* 2012 *SAJWR* 21.

### 3 The legal regime

An increase in habitat loss, prey depletion, retaliatory killing, unmonitored hunting activities and trade threats will have a negative impact on remaining lion populations.<sup>76</sup> It is evident that there needs to a regulatory framework to combat or overcome these threats.

#### 3.1 *The legal regime applicable to threats from habitat loss and prey scarcity*

##### 3.1.1 *Conventions applicable to habitat loss*

The conservation and management of African lions and lion habitat are central objectives of the IUCN African lion conservation strategies, which were formulated in 2006.<sup>77</sup> The development of legal and institutional frameworks that provide for wildlife-integrated land-use and lion conservation are important objectives of these strategies.<sup>78</sup> Range states are to promote the sustainable use of natural resources around protected areas, and to create new areas for conservation, and corridors for lion population connectivity.<sup>79</sup>

The *Convention on Biological Diversity* (CBD)<sup>80</sup> is relevant to habitat loss as it provides indirect protection through the establishment of protected areas,<sup>81</sup> which are regarded as important tools for maintaining lion habitat integrity and restoration.<sup>82</sup> All African lion range states are party to the CBD and should establish a system of protected areas with guidelines to manage these areas.<sup>83</sup> In 2010 the CBD CoP revised its "Strategic Plan for Biodiversity",<sup>84</sup> where target 11 calls for 17 per cent of the global terrestrial land surface to be protected by 2020.<sup>85</sup>

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<sup>76</sup> Hazzah, Mulder and Frank 2009 *BioCon* 2428.

<sup>77</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 7; Nowell and Bauer *Regional Lion Conservation Strategy* 8.

<sup>78</sup> Nowell and Bauer *Regional Lion Conservation Strategy* 38-41.

<sup>79</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 21.

<sup>80</sup> *Convention on Biological Diversity* (1992) 31 ILM 818 (CBD).

<sup>81</sup> CBD Arts 8(a) and (b).

<sup>82</sup> Matz 2005 *HJIL* 202; Geldmann *et al* 2013 *BioCon* 230.

<sup>83</sup> CBD 2014 <http://www.cbd.int/information/parties.shtml>; CBD Arts 8(a) and (b).

<sup>84</sup> These Aichi Biodiversity Targets are a move towards a more ecosystem-based approach to regulation and management of the environment. They promote conservation and the sustainable use of resources. See Sands and Peel *Principles* 443, 462.

<sup>85</sup> Geldmann *et al* 2013 *BioCon* 236.

Through the CBD, and in line with the promoted IUCN mechanisms, states are directed to manage biological resources outside of protected areas.<sup>86</sup> To assist states in conservation and sustainable development, the CBD provides Technical Series that provide detail on how best to protect the biodiversity of different habitats.<sup>87</sup>

The *Convention on the Conservation of Migratory Species of Wild Animals* (CMS)<sup>88</sup> attempts to fill the gaps of this broader framework by providing a species-specific approach to conservation.<sup>89</sup> The African lion is not yet listed under the CMS. A listing would provide increased international awareness around the state of African lion populations, with range states committing to increased protection of lions in their jurisdictions, as well as cohesion in conservation actions with neighbouring states.<sup>90</sup> Due to their rate of decline, there has been a Proposal by the Kenyan Government to list the African lion on Appendix II of the CMS.<sup>91</sup> At the CoP11 in November 2014 the Proposal was set aside and a Resolution was adopted instead.<sup>92</sup> The Resolution requests range states to consult with one another over the population status of the African lion.<sup>93</sup> The Resolution also recommends that range states develop regional conservation action plans designed to reverse lion population decline.<sup>94</sup> Range states are then requested to present a review of progress at the 44<sup>th</sup> and 45<sup>th</sup> Standing Committee Meetings in 2015.<sup>95</sup> There is the possibility of re-submission of the Proposal to include the lion in CMS Appendix II at CoP12 in 2017.<sup>96</sup> In the interim, the fundamental principles of the CMS still apply.<sup>97</sup> These principles include

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<sup>86</sup> CBD Art 8(c).

<sup>87</sup> Technical Series No 44 and No 71 are important for lion range states. See Ervin *et al* *Making Protected Areas Relevant*, CBD Secretariat, UNCCD and Oslo Consortium *Valuing the Biodiversity*.

<sup>88</sup> *Convention on the Conservation of Migratory Species of Wild Animals* (1980) 19 ILM 15 (CMS).

<sup>89</sup> Matz 2005 *HJIL* 205.

<sup>90</sup> Without a CMS listing African lion populations have less protection from a transboundary/international perspective, as well as less international awareness.

<sup>91</sup> *CMS Proposal: Proposal for the Inclusion of the Lion (Panthera Leo) in CMS Appendix II* (2014) UNEP/CMS/COP11/Doc.24.1.2/Rev.1 Proposal II/2.

<sup>92</sup> Lenarz 2014 <http://www.cms.int/en/news/global-protection-proposed-sharks-rays-sawfish-polar-bear-and-lions>; *CMS Draft Resolution: Conservation and Management of the African Lion, Panthera Leo* (2014) UNEP/CMS/COP11/CRP4 (*CMS Draft Resolution 2014*).

<sup>93</sup> *CMS Draft Resolution 2014*.

<sup>94</sup> *CMS Draft Resolution 2014*.

<sup>95</sup> *CMS Draft Resolution 2014*. The Standing Committee is responsible for carrying out interim activities on behalf of the CoP. See CMS 2014 <http://www.cms.int/en/meetings/standing-committee>.

<sup>96</sup> *CMS Draft Resolution 2014*.

<sup>97</sup> CMS Art II.

acknowledgement of the importance of migratory species, paying special attention to their conservation status.<sup>98</sup>

The WHC<sup>99</sup> provides indirect conservation of some of the habitat across the range of the African lion. Some African lion populations live in and pass through areas that are World Heritage Sites (WHS) formed under the WHC.<sup>100</sup> There are 40 World Heritage Natural Sites that coincide with the range of African lion populations.<sup>101</sup> The *Convention on Wetlands of International Importance* (RAMSAR)<sup>102</sup> may also provide indirect conservation of African lion habitat. African lions and their prey are reliant on wetlands for habitat and water.<sup>103</sup> Burkina Faso and Zambia both have three listed wetlands, and Namibia, Benin, Cameroon, Congo, and Tanzania each have one listed wetland that supports African lions.<sup>104</sup> The *Convention to Combat Desertification* (UNCCD)<sup>105</sup> could play a role in addressing the problem of drought and desertification.<sup>106</sup> The management of African land and biodiversity could conserve the savannah habitat, which is important to African lions.<sup>107</sup>

Education is a necessity to help growing communities understand their impact on their land.<sup>108</sup> The CBD encourages states to promote understanding and the importance of conserving biodiversity by including these in educational programmes.<sup>109</sup> The WHC encourages states to endeavour to strengthen their people's appreciation and respect of natural heritage, through educational programmes.<sup>110</sup> Education and public awareness are also promoted through the UNCCD to encourage individuals to undertake activities in a sustainable way.<sup>111</sup>

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<sup>98</sup> CMS Art II(1).

<sup>99</sup> *Convention Concerning the Protection of the World Cultural and Natural Heritage* (1972) 11 ILM 1358 (WHC).

<sup>100</sup> WHC.

<sup>101</sup> WHC 2014 <http://whc.unesco.org/en/list/156>.

<sup>102</sup> *Convention on Wetlands of International Importance especially as Waterfowl Habitat* (1972) 11 ILM 963 (RAMSAR).

<sup>103</sup> Kabii "Overview of African Wetlands".

<sup>104</sup> Ramsar Convention 2014 <http://www.ramsar.org/country-profiles>.

<sup>105</sup> *United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa* (1994) 33 ILM 1328 (UNCCD).

<sup>106</sup> UNCCD.

<sup>107</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 19.

<sup>108</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 19.

<sup>109</sup> CBD Art 13(a).

<sup>110</sup> WHC Art 27(1).

<sup>111</sup> UNCCD Art 19.

From a regional perspective there is slightly more targeted conservation of African lions and their habitat, especially with regards to the *African Convention on the Conservation of Nature and Natural Resources (African Convention)*.<sup>112</sup> The *African Convention* calls on states to recognise that the African lion and their habitat need special protection.<sup>113</sup> In reaching some of the IUCN objectives, the states party to the *African Convention* are required to establish areas to ensure the conservation of Annex listed species such as the African lion.<sup>114</sup>

The *Southern African Development Community Protocol on Wildlife Conservation and Law Enforcement (SADCP)*<sup>115</sup> has a broader approach, where states have a general obligation to protect wildlife habitats to ensure that wildlife populations remain viable.<sup>116</sup> However, it adds to the educational provisions of the international Conventions, as states party to the SADCP are required to develop programmes and mechanisms to educate the public and raise awareness over issues concerning the conservation of wildlife.<sup>117</sup>

### 3.1.2 Conventions applicable to lion prey scarcity

All the above Conventions for habitat protection are applicable to ungulate species protection too. The effective conservation and management of lions' prey is also an objective of the IUCN strategies.<sup>118</sup> Specific measures for the management of hunting ungulates are promoted to monitor prey populations.<sup>119</sup> The inclusion of communities in the development of wildlife management regulations is also promoted.<sup>120</sup> The threat to ungulate species from the bushmeat trade was first recognised by CITES in 2000 with the creation of the CITES Bushmeat Working Group at CoP11.<sup>121</sup> Then, in 2011 a CBD bushmeat liaison group established recommendations for

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<sup>112</sup> *African Convention on the Conservation of Nature and Natural Resources* (1968) 101 UNTS 3 (*African Convention*).

<sup>113</sup> *African Convention* Art VIII(1).

<sup>114</sup> *African Convention* Art X(1)(b).

<sup>115</sup> *Southern African Development Community Protocol on Wildlife Conservation and Law Enforcement* (2003) (SADCP).

<sup>116</sup> SADCP Art 7(3).

<sup>117</sup> SADCP Art 7(7).

<sup>118</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 7; Nowell and Bauer *Regional Lion Conservation Strategy* 8.

<sup>119</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 22.

<sup>120</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 22.

<sup>121</sup> CITES Secretariat "CITES and Bushmeat" 9.

addressing the bushmeat trade, in collaboration with the CITES Working Group.<sup>122</sup>

Regionally, the SADC highlights prey scarcity through principles of cooperation to develop approaches for the conservation and sustainable use of wildlife.<sup>123</sup> The Protocol goes further and sets up a Wildlife Sector Technical Committee, which is important for the promotion of sustainable use.<sup>124</sup>

### **3.2 The legal regime applicable to threats from retaliatory and traditional killing**

The IUCN conservation strategies recognise the need for sustainable lion-human cohabitation.<sup>125</sup> Recommendations are made for the equitable sharing of income derived from wildlife conservation.<sup>126</sup> To reduce human-lion conflict it is suggested that livestock monitoring systems are established and support groups are formulated to educate local communities on the status of lion populations.<sup>127</sup>

#### *3.2.1 Conventions applicable to retaliatory and traditional killing*

Even though retaliatory killing occurs at a local level, the international framework does provide some guidance on how states should tackle these issues.<sup>128</sup> The CBD, for example, encourages the development of regulatory provisions that are necessary for the protection of threatened species at a national level.<sup>129</sup> In addition, CBD protected areas keep wildlife away from humans.<sup>130</sup> The use of poison to kill lions that disturb people is a growing threat.<sup>131</sup> The *Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam Convention)*<sup>132</sup> could address this issue, as

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<sup>122</sup> Lindsey *et al Illegal Hunting* 13.

<sup>123</sup> SADC Art 3(2).

<sup>124</sup> SADC Arts 4(1) and 5(7).

<sup>125</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 7.

<sup>126</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 7.

<sup>127</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 23-24; Nowell and Bauer *Regional Lion Conservation Strategy* 36.

<sup>128</sup> Packer and Kissui 2007 *TNAWNRC* 4.

<sup>129</sup> CBD Art 8(k).

<sup>130</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 19.

<sup>131</sup> Packer and Kissui 2007 *TNAWNRC* 10.

<sup>132</sup> *Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade* (1999) 38 ILM 1 (Rotterdam).

it is aimed at assisting developing nations regarding the import of hazardous substances.<sup>133</sup>

It is appropriate to delve into regional instruments addressing this threat, as they contain provisions that are more specific to the local context. At a regional level the *African Convention* adds that states should adopt adequate legislation on hunting and the capture of fauna.<sup>134</sup> This includes legislation prohibiting unauthorised methods of hunting such as the use of drugs or poisons.<sup>135</sup>

As promoted by the IUCN Strategies, incentive-based measures are to be utilised to prevent communities from killing lions for retaliatory and ceremonial reasons.<sup>136</sup> Economic or other incentives to curb lion killing are to be established.<sup>137</sup> The CBD encourages states to implement incentive measures for the conservation and sustainable use of biological diversity.<sup>138</sup> The SADC also requires states to promote incentives in wildlife management and conservation programmes.<sup>139</sup>

In addition, education on the plight of the African lion is also important, as is emphasised by the IUCN strategies.<sup>140</sup> As stated above, education about the conservation of wildlife is addressed in the CBD, WHC and SADC.<sup>141</sup> To engage communities in the conservation of the African lion, the Lion Guardians programme was established in 2007 in collaboration with the Kenyan Wildlife Service.<sup>142</sup> The programme aims to reduce the retaliatory and traditional killing of African lions.<sup>143</sup> Young Maasai warriors are employed as Lion Guardians.<sup>144</sup> Their duty is to protect lions in Amboseli in Kenya, and in Taragire and Ruaha in Tanzania.<sup>145</sup>

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<sup>133</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 47.

<sup>134</sup> *African Convention* Art VII.

<sup>135</sup> The use of poison in poison weapons and poison bait is prohibited. See *African Convention* Art VIII(2)(c)(2).

<sup>136</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 23.

<sup>137</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 23.

<sup>138</sup> CBD Art 11.

<sup>139</sup> SADC Art 7(6).

<sup>140</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 23-24; Nowell and Bauer *Regional Lion Conservation Strategy* 36.

<sup>141</sup> CBD Art 13(a); SADC Art 7(7)(a); WHC Art 27.

<sup>142</sup> KWS 2014 <http://www.kws.org/about/index.html>; Lion Guardians 2014 <http://lionguardians.org/our-tools>.

<sup>143</sup> Lion Guardians 2014 <http://lionguardians.org/our-tools>.

<sup>144</sup> Hazzah *et al* 2014 *CB* 852.

<sup>145</sup> Hazzah *et al* 2014 *CB* 852.

### **3.3 The legal regime applicable to threats from the trophy hunting industry**

The IUCN strategy for East and Southern Africa includes a target of sustainable trophy hunting.<sup>146</sup> To achieve this it promotes the implementation of best management practices in all trophy hunting areas.<sup>147</sup> The IUCN strategy for West and Central Africa proposes lion population monitoring and further research on lions.<sup>148</sup>

#### *3.3.1 Conventions applicable to the hunting of wild lions*

In using the African lion for commercial means, states should adhere to the sustainable use provisions of the CBD.<sup>149</sup> Under the CBD, states have the obligation to exchange information that is relevant to the conservation and sustainable use of biodiversity.<sup>150</sup>

At a regional level, states party to the SADC are required to promote the sustainable use of wildlife.<sup>151</sup> The SADC also calls on states to endeavour to harmonise their legal instruments governing hunting, conservation and the sustainable use of wildlife resources.<sup>152</sup> The lack of regulation associated with the industry conflicts with the SADC, in terms whereof states are required to take measures to ensure the conservation and sustainable use of wildlife with restrictions on the number, sex, size and age of specimens to be taken.<sup>153</sup> The *African Convention* adds more guidance for States on hunting stipulations at a regional level.<sup>154</sup> This Convention allows the hunting, killing, capture and collection of lions if a relevant national authority grants authorisation.<sup>155</sup> States are also required to adopt legislation on the regulation of issuing permits as well as to prohibit unauthorised hunting methods.<sup>156</sup>

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<sup>146</sup> Nowell and Bauer *Regional Lion Conservation Strategy* 28.

<sup>147</sup> Nowell and Bauer *Regional Lion Conservation Strategy* 28.

<sup>148</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 37.

<sup>149</sup> CBD Art 2.

<sup>150</sup> CBD Art 17.

<sup>151</sup> SADC Art 4(2)(a).

<sup>152</sup> SADC Art 6(2)(b).

<sup>153</sup> Lindsey *et al* 2013 *PLoS ONE* 2; SADC Art 7(3)(c).

<sup>154</sup> Lindsey *et al* 2013 *PLoS ONE* 2.

<sup>155</sup> *African Convention* Art VIII(1)(b); Sands and Peel *Principles* 481.

<sup>156</sup> *African Convention* Arts VII(2)(a) and (b).

### 3.3.2 Conventions applicable to the hunting of captive-bred lions

Captive-breeding facilities are created and regulated at the discretion of individual states.<sup>157</sup> However, some provisions from the international framework could apply. For example, provisions pertaining to the poaching of wild African lions for this industry would be applicable.<sup>158</sup> These provisions coincide with those mentioned above on the regulation of wild hunting and protected areas. In addition, provisions from the CBD preamble relate to the genetic threat associated with this industry.<sup>159</sup> Allowing hunting practices that provide contact between captive-bred lions<sup>160</sup> and wild lions disregards the genetic value that the CBD emphasises.<sup>161</sup>

At a regional level the *African Convention* prohibits the capturing of wildlife from protected areas.<sup>162</sup> However, the *African Convention* allows the capture of lions outside of protected areas with the permission of a national authority.<sup>163</sup> Some lions that are raised in captive breeding facilities are flown to wild areas in other parts of Africa, then drugged and killed by trophy hunters.<sup>164</sup> This practice violates the provision of the *African Convention* that encourages states to adopt legislation on hunting, under which the use of drugs is prohibited.<sup>165</sup>

### 3.4 The legal regime applicable to threats from trade

Lions, their parts and derivatives are traded legally and illegally at both local and international levels.<sup>166</sup> One objective of the IUCN strategy for Eastern and Southern Africa is concerned with the prevention of illegal trade in lions and lion products, while promoting sustainable legal trade.<sup>167</sup> The IUCN strategy for West and Central Africa encourages the control of trade in lion parts and products.<sup>168</sup>

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<sup>157</sup> Hargreaves 2010 *JWCLAS* 8.

<sup>158</sup> Anon 2005 [http://www.huntingreport.com/images2/pdf/Final\\_Draft\\_Panel\\_of\\_Expert\\_Report\\_to\\_DEAT.pdf](http://www.huntingreport.com/images2/pdf/Final_Draft_Panel_of_Expert_Report_to_DEAT.pdf) 21.

<sup>159</sup> Lindsey *et al* 2012 *SAJWR* 19.

<sup>160</sup> Captive-bred lions are subject to genetic manipulation. See Lindsey *et al* 2012 *SAJWR* 19.

<sup>161</sup> CBD preamble; Lindsey *et al* 2012 *SAJWR* 19.

<sup>162</sup> *African Convention* Art III(d).

<sup>163</sup> *African Convention* Art VIII(1)(b).

<sup>164</sup> Hargreaves 2010 *JWCLAS* 17.

<sup>165</sup> *African Convention* Art VII(2)(c)(2).

<sup>166</sup> Kasiki and Hamunyela "Panthera Leo - Report" 8.

<sup>167</sup> Nowell and Bauer *Regional Lion Conservation Strategy* 28.

<sup>168</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 37.

### 3.4.1 *The conventions applicable to both legal and illegal trade activities*

The African lion, its parts and derivatives, are used for recreational purposes and commercial purposes, both of which involve international trade.<sup>169</sup> Thus, the African lion is listed on Appendix II of CITES.<sup>170</sup> To trade in any part or derivative of an African lion, an export permit is required from the exporting country.<sup>171</sup> To issue these export permits, the exporting state needs to ensure a number of conditions.<sup>172</sup> These include that a scientific authority has advised that the export will not be detrimental to the survival of African lion populations, and that a management authority is satisfied that the specimen was obtained legally.<sup>173</sup>

The Parties to CITES meet every few years to consider or adopt amendments to Appendix I and II amongst other reasons.<sup>174</sup> At CoP13 in 2004 Kenya submitted a Proposal to transfer the African lion from Appendix II to Appendix I over growing concern for the species' survival.<sup>175</sup> The Proposal was withdrawn, however, and range states agreed that a series of regional conservation workshops would be held, organised by the IUCN.<sup>176</sup>

In 2011 at the 25th CITES Animals Committee meeting<sup>177</sup> the inclusion of the African lion in the Periodic Review was approved and Kenya and Namibia volunteered to conduct this Review in consultation with 15 range states.<sup>178</sup> This Review concluded that African lions should stay on Appendix II, one of the reasons being that there is no science-based information to

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<sup>169</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 45.

<sup>170</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 45.

<sup>171</sup> CITES Arts IV(2) and (4); Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 45.

<sup>172</sup> CITES Art IV.

<sup>173</sup> CITES Art IV(2).

<sup>174</sup> Sands and Peel *Principles* 472.

<sup>175</sup> *CITES Resolution: Review of Significant Trade in Specimens of Appendix II Species* (2004) Conf.12.8/Rev.CoP13.

<sup>176</sup> Nowell and Bauer *Regional Lion Conservation Strategy* 3.

<sup>177</sup> Established to provide scientific advice regarding animals that are, or may become, subject to CITES trade controls, and so provide technical support in decision-making under CITES. See CITES 2014 [http://www.cites.org/eng/disc/ac\\_pc.php](http://www.cites.org/eng/disc/ac_pc.php).

<sup>178</sup> A Periodic Review is an assessment of the current state of a species to ensure that it is appropriately categorised in CITES Appendices. See Sands and Peel *Principles* 648; Kasiki and Hamunyela "Panthera Leo - Report" 1.

conclude that there has been a historical decline in populations due to trade.<sup>179</sup>

To analyse CITES parties' trade legislation the National Legislation Project (NLP) was established in 1992.<sup>180</sup> The NLP divided states' legislation into three categories.<sup>181</sup> Category 1 legislation meets the requirements for CITES implementation, Category 2 legislation does not meet all the requirements and Category 3 does not meet any requirements for the implementation of CITES.<sup>182</sup> In 2012 a number of African lion exporting states were listed under Category 2, such as Botswana, Kenya, Nigeria, Mozambique, South Africa and Tanzania.<sup>183</sup> Furthermore, several African lion exporting states were listed under Category 3, such as the Central African Republic, Chad and Ghana.<sup>184</sup>

At a regional level, the *African Convention* requires authorisation for the exporting of lions, as well as permits for hunting or capture.<sup>185</sup> Authorisations are to include proof of the legal acquisition of the lion or lion product.<sup>186</sup> In addition, the *Lusaka Agreement on Cooperative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora (Lusaka Agreement)*<sup>187</sup> could play a role in trade regulation at a regional level.<sup>188</sup> The Agreement aims at facilitating cooperation between states on issues of illegal trade in wild fauna and flora.<sup>189</sup> It does so by providing for the establishment of a Task Force. To ensure effective enforcement of the Agreement, Parties are expected to adopt legislative measures in that

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<sup>179</sup> Criterion B of Annex 2a. See *CITES Resolution: Criteria for Amendment of Appendices I and II* (2010) Conf. 9.24/Rev.CoP15; Kasiki and Hamunyela "Panthera Leo - Report" 17.

<sup>180</sup> *CITES Resolution: National Laws for Implementation of the Convention* (1992) Conf. 8.4/Rev.CoP8.

<sup>181</sup> *CITES Decision: Interpretation and Implementation of the Convention* (2010) CoP15/Doc. 20.

<sup>182</sup> CITES 2012 <http://cites.org/sites/default/files/eng/notif/2012/E036.pdf>.

<sup>183</sup> CITES 2012 <http://cites.org/sites/default/files/eng/notif/2012/E036.pdf> 4.

<sup>184</sup> CITES 2012 <http://cites.org/sites/default/files/eng/notif/2012/E036.pdf> 6.

<sup>185</sup> *African Convention* Art IX(2)(b).

<sup>186</sup> *African Convention* Art IX(2)(b).

<sup>187</sup> *Lusaka Agreement on Co-operative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora* (1994) 1950 UNTS 35 (*Lusaka Agreement*).

<sup>188</sup> *Lusaka Agreement*, Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 49.

<sup>189</sup> *Lusaka Agreement* 2014 <http://www.lusakaagreement.org>.

regard.<sup>190</sup> However, no specific programme has yet been aimed at the illegal trade in the African lion.<sup>191</sup>

## 4 Analysis of the international and regional regime

It is good to see that the main threats to African lion populations, namely habitat loss, prey scarcity, retaliatory killing, trade and trophy hunting are covered, at least to some extent, by international law.<sup>192</sup> However, some commentators believe that the implementation and enforcement of these regulatory mechanisms are inadequate to address the increasing threats to the species.<sup>193</sup> An analysis of the legal regime in place for each threat to African lion populations follows below.

### 4.1 African lion habitat loss

Habitat protection is emphasised in the international regime. The establishment of protected areas under the CBD encourages the restoration and maintenance of habitat in range states.<sup>194</sup> As lions are also found outside of protected areas, the provisions of the CBD directing states to manage biodiversity outside of protected areas is also encouraging.<sup>195</sup> However, in reality these obligations have not been met by all range states, as there is increasing use of land for development and agriculture within and adjacent to protected areas.<sup>196</sup> The provision is also weak in that it affords states a wide discretion as to the extent and condition of protected areas, and adjacent land, in their jurisdiction.<sup>197</sup> Linked to this, with regards to Aichi target 11, commentators suggest that even if global coverage is achieved, effective management of these areas is unlikely without monitoring and adaptation at local levels.<sup>198</sup>

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<sup>190</sup> Mrema "Lusaka Agreement" 233.

<sup>191</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 49.

<sup>192</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 45.

<sup>193</sup> *CMS Proposal* 2014 16; Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 45.

<sup>194</sup> CBD Art 8; Matz 2005 *HJIL* 205.

<sup>195</sup> CBD Art 8(c).

<sup>196</sup> CBD Art 8(c); CBD Art 8; Matz 2005 *HJIL* 230; Winterbach *et al* 2012 *MR* 101.

<sup>197</sup> The wording "as far as possible and appropriate" in the chapeau to Art 8 affords this discretion. See CBD Art 8.

<sup>198</sup> Geldmann *et al* 2013 *BioCon* 230.

The UNCCD provisions encourage positive action by states in combating desertification and protecting natural habitat.<sup>199</sup> The WHC adds to this positive action by promoting the protection of certain sites that indirectly conserve some African lion habitat.<sup>200</sup> However, like the CBD provisions, the WHC confers too much discretion on states, weakening their obligations.<sup>201</sup> The Ngorongoro Conservation Area in Tanzania is an example.<sup>202</sup> Even with a WHS listing, the lions in the Ngorongoro Conservation Area are threatened due to the increase in the extent of human settlements, land use change, and isolation from other lion populations.<sup>203</sup>

Although the African lion is not yet listed under the CMS, the Convention still has some important provisions which should ensure the protection of lion habitat.<sup>204</sup> Range states are, for example, required to take steps to conserve migratory species as well as their habitat.<sup>205</sup> Since the African lion population is transboundary in nature, this provision potentially offers significant protection to the African lion and its habitat.<sup>206</sup> The recent Proposal by the Kenyan Government to add the African lion to the CMS Appendix II is also encouraging.<sup>207</sup>

What is also particularly positive is the encouragement of community education about their impacts on ecosystems and habitats.<sup>208</sup> The SADC has enhanced this requirement by encouraging education and awareness around the conservation of wildlife at a regional level.<sup>209</sup>

Furthermore, listing the African lion under the *African Convention* provides much-needed species-specific protection across Africa.<sup>210</sup> The Convention includes the protection of African lion habitat necessary for the survival of

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<sup>199</sup> UNCCD 2012 <http://www.unccd.int/en/about-the-convention/Pages/About-the-Convention.aspx>.

<sup>200</sup> WHC 2014 <http://whc.unesco.org/en/list/156>; Kabii "Overview of African Wetlands".

<sup>201</sup> The *RAMSAR Convention's* role in habitat protection is similar to that of the WHC, and so has similar issues. Although RAMSAR provides provisions for the protection of certain wetlands, the implementation of these provisions by range states is questionable. See Gardener and Davidson "Ramsar Convention" 200-201.

<sup>202</sup> Kissui, Mosser and Packer 2010 *PE* 110.

<sup>203</sup> Kissui, Mosser and Packer 2010 *PE* 110; Estes, Atwood and Estes 2006 *BioCon* 114.

<sup>204</sup> CMS Art II.

<sup>205</sup> CMS Art II(1).

<sup>206</sup> *CMS Proposal* 2014 11.

<sup>207</sup> *CMS Proposal* 2014 14, *CMS Draft Resolution* 2014.

<sup>208</sup> CBD Art 13(a); WHC Art 27(1); UNCCD Art 19.

<sup>209</sup> SADC Art 7(7).

<sup>210</sup> *African Convention* Art VIII(1).

the species.<sup>211</sup> Yet it is important to mention that ten of the thirty-two African lion range states are not party to the Convention, thus providing insufficient protection across the range of the species.<sup>212</sup>

Overall, the international regime in place to protect African lion habitat is broad and difficult to implement while human populations continue to grow.<sup>213</sup> There are not enough protected areas and the protected areas that do exist are not connected to allow population interaction.<sup>214</sup> As the conservation of African lion habitat will also impact on the survival of their prey, the above analysis applies to ungulate species too.

#### **4.2 African lion prey scarcity**

The relevant provisions of the CBD encourage range states to promote the wise use of ungulates for meat and other purposes by communities.<sup>215</sup> The mechanisms established by CITES and the CBD to combat the rise in bushmeat trade are commendable.<sup>216</sup>

The SADC's establishment of the Wildlife Sector Technical Committee promotes a more holistic and harmonised approach in the context of prey scarcity.<sup>217</sup> An important aspect of this Technical Committee is the development of policy guidelines for the conservation and sustainable use of wildlife.<sup>218</sup> Furthermore, the *African Convention* lists some ungulate species that require protection, but these species can be hunted with the required authorisation.<sup>219</sup> However, not all African lion range states are party to this Convention. In those that are not, ungulate species are protected only through domestic laws, if any at all.<sup>220</sup>

On the whole, it is problematic that there are no mechanisms in the international regime promoting the specific monitoring of prey populations

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<sup>211</sup> *African Convention* Art VIII(1).

<sup>212</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 47-48.

<sup>213</sup> CBD Art 8; RAMSAR Art 2; *African Convention* Art VIII(1); Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 18.

<sup>214</sup> CBD Art 8; Winterbach *et al* 2012 *MR* 96.

<sup>215</sup> CBD Art 2.

<sup>216</sup> Lindsey *et al* *Illegal Hunting* 13.

<sup>217</sup> SADC Art 5(7).

<sup>218</sup> SADC Art 5(7).

<sup>219</sup> *African Convention* Art VIII(1).

<sup>220</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 47.

to provide a balance between commercial or subsistence hunting of ungulates and the needs of lions.<sup>221</sup>

### **4.3 Retaliatory and traditional killing**

Due to the local nature of retaliatory and traditional killing, the international framework, although providing some broad guidance, falls short on providing specific measures for threat mitigation.<sup>222</sup> Still, the CBD does encourage the establishment of protected areas, which provide for the much needed separation of people and wildlife.<sup>223</sup> However, those that do exist are often poorly managed, lacking adequate law enforcement and regulation.<sup>224</sup> The CBD adds to this by encouraging the development of legislation to protect threatened species at national levels.<sup>225</sup> However, even though this provision is binding, states are given discretion as to the level of protection provided.<sup>226</sup> This wide discretion is evident in the lack of national legislation directed at African lion protection in many range states, resulting in retaliatory killings going unpunished.<sup>227</sup>

The poisons used for retaliatory killing are easily available and inadequately regulated.<sup>228</sup> Most of the pesticides used as poison are banned in developed countries but remain legally registered throughout Africa.<sup>229</sup> The *Rotterdam Convention* offers the potential to involve the international community in combating the use of these pesticides for poisoning through the regulation and prohibiting of certain chemicals globally.<sup>230</sup> Almost all lion range states are party to the Convention, except for Angola, the Central African Republic and South Sudan.<sup>231</sup> However, even some listed pesticides on Annex III of the Convention, such as Aldicarb and Dieldrin, are still being used illegally in range states to kill wildlife.<sup>232</sup>

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<sup>221</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 22.

<sup>222</sup> Packer and Kissui 2007 *TNAWNRC* 5.

<sup>223</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 19.

<sup>224</sup> Creel *et al* 2013 *EL* 3.

<sup>225</sup> CBD Art 8(k).

<sup>226</sup> The wording "as far as possible and appropriate" in the chapeau to Art 8 affords this discretion. See CBD Art 8(k).

<sup>227</sup> Kasiki and Hamunyela "Panthera Leo - Report" 14-17.

<sup>228</sup> Ogada 2014 *ANYAS* 13.

<sup>229</sup> Ogada 2014 *ANYAS* 13.

<sup>230</sup> Ogada 2014 *ANYAS* 13.

<sup>231</sup> Ogada 2014 *ANYAS* 5.

<sup>232</sup> Ogada 2014 *ANYAS* 5, 9. Annex III of the *Rotterdam Convention* lists pesticides that have been banned or restricted for environmental and health reasons. See *Rotterdam Convention* Annex III.

The promotion of education and awareness through both regional and international instruments is possibly the most positive aspect of the regime for this threat. Community engagement and education is key in protecting the species. Linked with this is the promotion of incentive-based measures to engage communities in lion conservation.<sup>233</sup> The support of the international community in programmes such as Lion Guardians provides the plight of the African lion with global as well as local attention.<sup>234</sup>

Overall, the increase in habitat degradation and in the number of human-lion interactions is increasing the prevalence of retaliatory killing.<sup>235</sup> The unregulated availability of dangerous poisons is worrying, as it makes the killing of these animals very easy for communities.<sup>236</sup>

#### **4.4 The trophy hunting industry**

The CBDs provisions on the establishment of protected areas are constructive when regulating trophy hunting areas.<sup>237</sup> However, unregulated trophy hunting still occurs in protected areas.<sup>238</sup> Hunting concessions are also often allocated to significant portions of some protected areas.<sup>239</sup> The regulation of the industry is provided for under the SADC: states are required to enforce restrictions on the number, sex, size and age of hunted wildlife.<sup>240</sup> However, in some range states there seems to be little restriction and regulation in accordance with these parameters.<sup>241</sup> The SADC also encourages a harmonised approach among states towards legal instruments governing conservation and sustainable use.<sup>242</sup> However, range states are not harmonised in their approach to trophy hunting.<sup>243</sup> Some states have imposed bans on the activity, some have incorporated sustainable methods into the industry, while others have no regulation at all.<sup>244</sup>

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<sup>233</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 23.

<sup>234</sup> Hazzah *et al* 2014 *CB* 852.

<sup>235</sup> Valeix *et al* 2012 *JAE* 73; Packer and Kissui 2007 *TNAWNRC* 4.

<sup>236</sup> Packer and Kissui 2007 *TNAWNRC* 10.

<sup>237</sup> In using the African lion for commercial gain, states should adhere to the sustainable use provisions of the CBD. States have an obligation to exchange information that is relevant to the conservation and sustainable use of biodiversity. See CBD Arts 2, 8 and 17; Winterbach *et al* 2012 *MR* 92.

<sup>238</sup> Croes *et al* 2011 *BioCon* 3070.

<sup>239</sup> Croes *et al* 2011 *BioCon* 3065.

<sup>240</sup> Lindsey *et al* 2013 *PLoS ONE* 2; SADC Art 7(3)(c).

<sup>241</sup> Lindsey *et al* 2013 *PLoS ONE* 2; Kiffner 2008 *ESU* 3.

<sup>242</sup> SADC Art 6(2)(b).

<sup>243</sup> Lindsey *et al* 2013 *PLoS ONE* 9.

<sup>244</sup> Packer *et al* "Impacts of Trophy Hunting" 8.

The captive-bred lion industry is mostly unregulated from an international perspective.<sup>245</sup> States have predominantly made decisions on management at their own discretion.<sup>246</sup> This provides for a varied approach to regulating the trophy hunting industry.<sup>247</sup> The sustainable use provisions of the relevant instruments (CBD, SADC) have not been met by range states.<sup>248</sup> States have different quota requirements, and there is no international scientific or governing body to regulate these quotas and to ensure transparency.<sup>249</sup> The associated illegal capturing of wild lions for captive breeding is unregulated at an international level, and insufficiently monitored at local levels.<sup>250</sup>

#### 4.5 Trade activities

The position of the African lion on Appendix II of CITES is one of the more positive aspects of the international regime. This promotes harmonised and sustainable trade.<sup>251</sup> In addition, these trade provisions are reiterated in the *African Convention*, which promotes regional consistency with the international regime.<sup>252</sup>

Although CITES contains these provisions, some commentators have criticised the outcome of the recent Periodic Review.<sup>253</sup> Criticisms include the internal inconsistencies in omitting relevant information about state actions,<sup>254</sup> the use of outdated trade data, and ultimately that the Review is

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<sup>245</sup> Funston "Conservation and Management of Lion" 125.

<sup>246</sup> An example of this gap in regulation is evident in South Africa. Due to growing concerns over the captive-bred industry, the South African Government developed regulations for the industry. However, lion-breeding associations challenged these regulations. This resulted in the delisting of lions as large predators, which ultimately made the regulations null and void to the captive-bred lion industry and associated trophy hunting activities. This judgment is interesting as it deals with regulatory responses to moral concerns and weighs the economic and ethical considerations of the industry against one another. See Hall 2010 *SAJELP* 1; *South African Predator Breeders Association v Minister of Environmental Affairs and Tourism* 2011 2 SA 529 (SCA) (hereafter the *Breeders case*); Lindsey *et al* 2012 *SAJWR* 12.

<sup>247</sup> Lindsey *et al* 2013 *PLoS ONE* 9; Packer *et al* "Impacts of Trophy Hunting" 8.

<sup>248</sup> CBD Art 2; SADC Art 4(2)(a).

<sup>249</sup> Lindsey *et al* 2013 *PLoS ONE* 2; Whitman *et al* 2007 *CB* 593.

<sup>250</sup> Funston "Conservation and Management of Lion" 125.

<sup>251</sup> CITES Art IV(2); see Ch 3 s 5.1. Nowell and Bauer *Regional Lion Conservation Strategy* 28.

<sup>252</sup> *African Convention* Art IX.

<sup>253</sup> Macsween 2014 <http://www.lionaid.org/news/2014/04/the-cites-draft-periodic-review-on-lions-is-a-disgrace-and-could-do-great-damage-to-lions.htm>.

<sup>254</sup> The report makes no mention of studies conducted in Benin, Cameroon, Tanzania, Zambia and Zimbabwe that indicate strong negative consequences of trophy hunting on lion population size and structure. No mention is made that Zambia placed a moratorium on trophy hunting of lions, that it is banned in Uganda, and that Cameroon does not issue export permits for lion trophies. See Macsween 2014

irrelevant to the current state of the African lion.<sup>255</sup> Emphasis was given by Kenya and Namibia, who volunteered to conduct the Review, merely to the commercial value of trophy hunting.<sup>256</sup> Furthermore, there were factual mistakes and errors of omission, which failed to deliver sound conclusions to CITES Parties relevant to the status of African lion populations in reality.<sup>257</sup>

The outcome of the CITES NLP in 2012 is also worrying. The trade legislation of many range states is listed as either Category 2 or 3.<sup>258</sup> As trade increases in Africa, and increasingly to Asia, the ineffective compliance with and enforcement of CITES by range states will result in uncontrollable and unknown trade activity.<sup>259</sup> This is evident in the rising illegal trade in lion cubs and lion bone.<sup>260</sup> There is a lack of awareness of and knowledge about these trade markets, coupled with weak capacity and motivation within law enforcement agencies, making the illegal activity go largely unnoticed.<sup>261</sup> The *Lusaka Agreement* has the potential to increase enforcement measures through the establishment of the Task Force.<sup>262</sup> However, the Task Force does not recognise the African lion as being an animal that is adversely affected by illegal trade.<sup>263</sup>

There is a clear increase in trade in African lions, their parts and derivatives, and so the regulation of trade activities is of the utmost importance to ensure sustainable use.<sup>264</sup> The rise in illegal trade is evident, and unreported and unregulated capturing and trading of lions, their parts and derivatives, will result in unsustainable use and negatively influence the survival of the species.<sup>265</sup> Range states and the international community need to realise

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<http://www.lionaid.org/news/2014/04/the-cites-draft-periodic-review-on-lions-is-a-disgrace-and-could-do-great-damage-to-lions.htm>.

<sup>255</sup> Macsween 2014 <http://www.lionaid.org/news/2014/04/the-cites-draft-periodic-review-on-lions-is-a-disgrace-and-could-do-great-damage-to-lions.htm>.

<sup>256</sup> Macsween 2014 <http://www.lionaid.org/news/2014/04/the-cites-draft-periodic-review-on-lions-is-a-disgrace-and-could-do-great-damage-to-lions.htm>.

<sup>257</sup> Macsween 2014 <http://www.lionaid.org/news/2014/04/the-cites-draft-periodic-review-on-lions-is-a-disgrace-and-could-do-great-damage-to-lions.htm>.

<sup>258</sup> CITES 2012 <http://cites.org/sites/default/files/eng/notif/2012/E036.pdf> 4.

<sup>259</sup> Kasiki and Hamunyela "Panthera Leo - Report" 14.

<sup>260</sup> *CMS Proposal* 2014 13; Hargreaves 2010 *JWCLAS* 20.

<sup>261</sup> *CMS Proposal* 2014 13.

<sup>262</sup> *Lusaka Agreement*.

<sup>263</sup> *Lusaka Agreement* 2014 <http://www.lusakaagreement.org>.

<sup>264</sup> Kasiki and Hamunyela "Panthera Leo - Report" 8; CITES 2012 <http://bit.ly/1RXSRL5>; Hargreaves 2010 *JWCLAS* 20.

<sup>265</sup> Kasiki and Hamunyela "Panthera Leo - Report" 14; IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 25.

the extent of African lion trade activities before it is too late to stop the establishment of markets for lion produce.<sup>266</sup>

## 5 Concluding remarks

The purpose of this article was to determine whether or not the international legal regime for the African lion is effective in achieving their survival. Although the regime as a whole possesses some positive features, it is undermined by the negative aspects, which persist throughout. Implementation, compliance and enforcement issues throughout the regime are of concern. The instruments provide a broad framework for range states, which are then obliged to comply with and enforce the relevant provisions. However, the implementation of environmental laws is often challenging to such states due to their capacity constraints and lack of political will.<sup>267</sup> In addition, some of the instruments that hold important provisions for the protection of African lions do not have sufficient enforcement measures to address non-compliance.<sup>268</sup> It is evident that African lion populations across Africa are in decline.<sup>269</sup> If the current regime were effective in conserving and protecting the species then this would not be the case.

Having found the international legal regime to be inadequate to achieve its aims, a few recommendations are offered below.

### 5.1 Recommendations

#### 5.1.1 African lion habitat and prey protection

To promote African lion habitat protection throughout their range it is suggested that the African lion be listed under the CMS.<sup>270</sup> If the lion were to be listed in Appendix II, the CMS could provide guidelines for the drafting of agreements between range states on the needs and requirements of the species across their range.<sup>271</sup> Possible listing under the CMS is to be

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<sup>266</sup> Kasiki and Hamunyela "Panthera Leo - Report" 12.

<sup>267</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 45; Ogada 2014 *ANYAS* 14; Rose "Gaps in the Implementation of Environmental Law" 11.

<sup>268</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 48.

<sup>269</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 12; Bauer, Nowell and Packer 2014 <http://www.iucnredlist.org/details/15951/0>.

<sup>270</sup> *CMS Proposal* 2014.

<sup>271</sup> Non CMS states, such as South Sudan, Zambia, Malawi, the Central African Republic, Namibia and Botswana can still participate in agreements. See CMS 2014 <http://www.cms.int/en/parties-range-states>; CMS Arts V and IV(2).

negotiated by CITES Parties again at a later date.<sup>272</sup> In the interim, protected area management and regulation in range states needs to become a priority.<sup>273</sup> Outside of protected areas, range states should identify and conserve relevant lion habitat.<sup>274</sup> Habitat conservation should be integrated into national and regional regulations on livestock husbandry and agriculture to ensure better decision making in the allocation and management of protected areas.<sup>275</sup>

### 5.1.2 *Retaliatory and traditional killing*

Range states should adopt landscape level strategies that reduce human-wildlife conflict.<sup>276</sup> These could follow the same design as the Lion Guardian Programme in Kenya.<sup>277</sup> As a deterrent to retaliatory killing through the use of poison, the legal framework addressing pesticide regulation must be strengthened at both an international and a domestic level, enforcing harsher punishments for such a use of poisons.<sup>278</sup> The international community needs to be made aware of the extent of the damage these activities cause to lion populations to ensure international support for range states.<sup>279</sup>

### 5.1.3 *The trophy hunting industry*

It is recommended that the recreational hunting of African lions should be reduced, and that that which does occur should be better regulated.<sup>280</sup> Range states need to have uniform quota levels to ensure that the approach to the industry is equal throughout the range of the species.<sup>281</sup> To encourage sustainability, quotas for female lions should not be granted by range states.<sup>282</sup> As stated above, a CMS Appendix II listing is proposed.<sup>283</sup> It is also suggested that any agreements established by range states should

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<sup>272</sup> CMS Draft Resolution 2014.

<sup>273</sup> Creel *et al* 2013 EL 3.

<sup>274</sup> Creel *et al* 2013 EL 3.

<sup>275</sup> IUCN SSC Cat SG 2006 [http://www.conservationforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservationforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 20.

<sup>276</sup> Creel *et al* 2013 EL 3.

<sup>277</sup> Hazzah *et al* 2014 CB 859.

<sup>278</sup> Ogada 2014 ANYAS 14.

<sup>279</sup> Ogada 2014 ANYAS 14.

<sup>280</sup> Creel *et al* 2013 EL 3.

<sup>281</sup> Packer *et al* "Impacts of Trophy Hunting" 9.

<sup>282</sup> Packer *et al* "Impacts of Trophy Hunting" 9.

<sup>283</sup> CMS Art IV.

include measures to control and manage the legal and illegal hunting, capturing or killing of migratory species.<sup>284</sup>

The sustainable trophy hunting of lions could support the conservation of lions and their habitat, however.<sup>285</sup> Income generated from this industry needs to be put back into African lion conservation efforts.<sup>286</sup> More research is required to enable range states to make informed decisions on hunting quotas.<sup>287</sup>

In addition, the hunting of captive-bred animals should be disallowed. It undermines the conservation credibility of the legitimate hunting industry and has no purpose other than commercial gain for the captive breeders.<sup>288</sup>

#### 5.1.4 Trade activities

In addressing the increase in trade, listing the African lion on CITES Appendix I should be reconsidered by the CITES Committee. However, due to the fact that many range states are struggling to incorporate the necessary CITES provisions into national legislation, a CITES up-listing may be ineffective.<sup>289</sup> Therefore, perhaps a moratorium on trade in African lion bone should be established for a period to allow a thorough analysis of the current trade in lion bone.<sup>290</sup> Range states should not ignore the staggering increase in the lion bone trade, and should act before the market is fully established.<sup>291</sup>

Conversely, it could become the responsibility of importing developed states to curb the increase in the lion trade. Australia, for example, is considering treating trade in African lion specimens as if the species were listed on Appendix I of CITES.<sup>292</sup>

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<sup>284</sup> CMS Arts V(5)(j) and V(5)(k).

<sup>285</sup> Packer *et al* "Impacts of Trophy Hunting" 9.

<sup>286</sup> Packer *et al* "Impacts of Trophy Hunting" 9.

<sup>287</sup> IUCN SSC Cat SG 2006 [http://www.conservaforce.org/pdf/C\\_W\\_Lion\\_Strategy\\_UK.pdf](http://www.conservaforce.org/pdf/C_W_Lion_Strategy_UK.pdf) 24.

<sup>288</sup> Packer *et al* "Impacts of Trophy Hunting" 9.

<sup>289</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 48.

<sup>290</sup> Macleod 2012 <http://mg.co.za/article/2012-07-12-officials-turn-a-blind-eye-to-the-smuggling-of-wild-lions>.

<sup>291</sup> Macleod 2012 <http://mg.co.za/article/2012-07-12-officials-turn-a-blind-eye-to-the-smuggling-of-wild-lions>.

<sup>292</sup> Director: Wildlife Trade Regulation 2014 <http://www.environment.gov.au/biodiversity/wildlife-trade/comment/stricter-measures-import-export-african-lion>.

Ultimately, there will never be reliable data about the extent of an illegal trade, as it is often difficult to monitor illegal activities.<sup>293</sup> Therefore it is recommended that a specific programme be established under the *Lusaka Agreement* Task Force to combat this threat and to take action against those involved.<sup>294</sup> To do so would be consistent with the precautionary principle.<sup>295</sup>

### 5.1.5 Additional recommendations

Compliance and enforcement issues are difficult to address through a broad international framework. Capacity constraints are often the driving reason why developing states do not effectively provide for provisions laid out in relevant Conventions and Agreements.<sup>296</sup> Perhaps the CBD's financial support provision can be applied, to enable range states to comply with and implement the provisions of the CBD for the *in-situ* conservation of African lions.<sup>297</sup>

In addition, the cost of conservation and protection at a landscape level is high.<sup>298</sup> It is suggested that an international fund targeted at African lion conservation and protection be set up to assist range states.<sup>299</sup>

## 5.2 Conclusion

In analysing the effectiveness of the international legal regime in the protection of the African lion, one must not lose sight of the value that the African lion holds as a species.<sup>300</sup> As it is so important it is worrying to see that the population is continuing to decline.<sup>301</sup> It has been shown that any

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<sup>293</sup> Nowell and Bauer *Regional Lion Conservation Strategy* 25.

<sup>294</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 49.

<sup>295</sup> Wiersema 2015 *MJIL* 388.

<sup>296</sup> Rose "Gaps in the Implementation of Environmental Law".

<sup>297</sup> CBD Arts 20(2) and 21.

<sup>298</sup> Managing unfenced lion populations requires roughly US \$2 000 per km<sup>2</sup> per year. See *CMS Proposal* 2014 16.

<sup>299</sup> *CMS Proposal* 2014 16.

<sup>300</sup> African lions are valuable in many respects: Firstly, for their important role in the balancing of ecosystems, secondly for their intrinsic cultural and traditional value, and thirdly for their economic value for range states. See Braun 2012 <http://newswatch.nationalgeographic.com/2012/12/06/lion-numbers-plunge-as-african-wilderness-succumbs-to-human-pressure/>

<sup>301</sup> Hazzah, Mulder and Frank 2009 *BioCon* 2428.

increase in current threats will have a negative impact on the remaining lion populations.<sup>302</sup>

It is evident that there needs to be a regulatory framework to combat, or overcome, these threats before it is too late to save the species. Therefore the African lion has been subject to increasing attention from the global community.<sup>303</sup> Despite their IUCN listing as “vulnerable”, there is a growing concern that African lions need more international protection.<sup>304</sup> The current international legal regime for the protection of the African lion does possess some positive provisions that promote conservation, education and sustainable trade. However, lion populations are still decreasing, and so it is believed that this regime is inadequate to address the current threats to the species.<sup>305</sup> In addition, it is distressing that the 2006 IUCN strategies referred to throughout this article have not been adopted effectively by range states.<sup>306</sup> Recommendations have thus been made in this article to address these issues and to provide a possible way forward in which the international regime could protect this valuable species.

Taking action now to address the gaps in the existing international and regional legal regimes for the protection of the African lion will ensure that the species does not decline to a status of “endangered” or worse.<sup>307</sup> The international community, including the range states, needs to take responsibility and make the recommended changes now. If we wait too long to protect and conserve our lions, it may be too late to save the species.<sup>308</sup>

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<sup>302</sup> Nowell and Bauer *Regional Lion Conservation Strategy* 20.

<sup>303</sup> Bauer, Nowell and Packer 2014 <http://www.iucnredlist.org/details/15951/0>.

<sup>304</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 6.

<sup>305</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 12; Bauer, Nowell and Packer 2014 <http://www.iucnredlist.org/details/15951/0>.

<sup>306</sup> *CMS Proposal* 2014 16.

<sup>307</sup> Place *et al* 2011 <http://www.ifaw.org/united-states/resource-centre/petition-list-african-lion-panthera-leo-leo-endangered-pursuant-us-endangered-specie> 6.

<sup>308</sup> Hazzah, Mulder and Frank 2009 *BioCon* 2428.

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### List of Abbreviations

African Convention	African Convention on the Conservation of Nature and Natural Resources
ANYAS	Annals of the New York Academy of Sciences
BioCon	Biological Conservation
CB	Conservation Biology
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMS	Convention on the Conservation of Migratory Species of Wild Animals
CoP	Conference of the Parties
EL	Ecology Letters
ESU	Endangered Species Update
HJIL	Heidelberg Journal of International Law
IUCN	International Union for the Conservation of Nature
IUCN SSC Cat SG	IUCN Species Survival Commission Cat Specialist Group
JAE	Journal of Applied Ecology
JWCLAS	Journal of the WildCat Conservation Legal Aid Society
KWS	Kenya Wildlife Service
Lusaka Agreement	Lusaka Agreement on Co-operative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora
MJIL	Michigan Journal of International Law
MR	Mammal Review
NLP	National Legislation Project
OIJC	Oryx-International Journal of Conservation
PE	Population Ecology
RAMSAR	Convention on Wetlands of International Importance especially as Waterfowl Habitat

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Rotterdam Convention	Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
SADCP	Southern African Development Community Protocol on Wildlife Conservation and Law Enforcement
SAJELP	South African Journal of Environmental Law and Policy
SAJWR Task Force	South African Journal of Wildlife Research Task Force for Co-operative Enforcement Operations Directed at Illegal Trade in Wild Fauna and Flora
TNAWNRC	Transactions of the North American Wildlife and Natural Resources Conference
UN NCCD	United Nations United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa
WHC	Convention Concerning the Protection of the World Cultural and Natural Heritage
WHS	World Heritage Site