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Mammal Research Institute  
Reproductive Biology Laboratory (RBL)  
c/o Supervisors: Dr Imke Lüeders & Prof. André Ganswind  
cc: Dr Isabel Callealta  
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Dear Dr Lüeders, Prof. Ganswind and Dr Callealta,

26 September 2018

### **LION CUBS BORN THROUGH ARTIFICIAL INSEMINATION AT UKUTULA CONSERVATION CENTRE & BIOBANK**

We are writing to you today to express our deep concern about recent news articles linking your scientific work with the highly questionable lion breeding industry in South Africa. In particular, we would like to call to your attention to the fact that your work is being used by those involved in this industry to claim that the industry is contributing to conservation of lions, and perhaps even other threatened wild felids, when nothing could be further from the truth. We are confident that, as scientists, you would wish to distance yourselves from this industry once you are aware of the facts.

The undersigned includes some of the world's leading lion conservation and research organisations, and representatives from multiple sectors including animal welfare, animal protection, multi-cultural and faith-based NGO's. Based on our cumulative knowledge and experience, we do not support the captive breeding of lions, whether assisted or not, because it does not contribute to biodiversity conservation or address the main threats to wild lion conservation. Furthermore, the captive lion breeding industry in South Africa is associated with the exploitation of lions through interaction activities (lion cub petting and lion walks), canned trophy hunting of lions (the trophy hunting of tame lions in enclosed spaces) and the lion skeleton trade.

We have perused the press releases<sup>1</sup> and media articles<sup>2</sup> detailing the birth of two cubs born through artificial insemination (AI) in a joint project conducted by the University of Pretoria's (UPta) Mammal Research Institute and Ukutula Conservation Centre & BioBank (UCCBB). According to this information, the focus of the UPta research study<sup>3</sup> is "on filling knowledge gaps in the reproduction

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<sup>1</sup> <http://ucc-biobank.org/world-first/>; [https://www.up.ac.za/en/news/post\\_2716009-up-project-leads-to-worlds-first-lion-cubs-born-through-artificial-insemination-](https://www.up.ac.za/en/news/post_2716009-up-project-leads-to-worlds-first-lion-cubs-born-through-artificial-insemination-)

<sup>2</sup> <https://www.iol.co.za/news/south-africa/north-west/pics-lion-cubs-born-through-artificial-insemination-a-world-first-for-sa-16861837>; <http://www.dailymail.co.uk/sciencetech/article-6126743/Birth-worlds-test-tube-lion-cubs.html>; <https://www.iol.co.za/pretoria-news/lion-hearted-tuks-scientists-16877026>

<sup>3</sup> <https://www.linkedin.com/in/isabel-callealta-421027101/>

physiology of lions, as well as on developing a suitable non-invasive artificial insemination protocol for the species, through research into modern conservation breeding and assisted reproduction efforts, thereby opening new opportunities to improve breeding of captive and free ranging lion populations, and thereby assisting conservation efforts on this species.”

South Africa’s lion breeding industry houses > 8,000 lions in captivity in some 260 facilities. By comparison, there are approximately only 3,000 wild lions in South Africa, where the subspecies is classified as “Least Concern” on South Africa’s Red Data List. South Africa has far more lions in captivity than in the wild. Therefore, *the breeding of lions* is not in question or of concern, and AI is not a prime conservation requirement for the species.

Furthermore, lack of ability to breed is not a recognized conservation threat to the wild lion. In fact, managers of reintroduced lion populations in small reserves (<1000 km<sup>2</sup>) in South Africa are challenged by high rates of population increase and how best to control them, often resorting to contraceptive methods<sup>4</sup>. The International Union for the Conservation of Nature (IUCN) Red List of Threatened Species recognizes the following as major conservation threats:<sup>5</sup> human-lion conflict; prey depletion; use of lion bones and body parts for traditional medicine; and trophy hunting. With respect, your research addresses none of these threats.

In 2016, the African Lion Working Group, comprised of lion scientists, stated, “Captive breeding of lions for sport hunting, hunting of captive-bred lion and the associated cub petting industry are not conservation tools.”<sup>6</sup>

Also, in 2016, the IUCN World Conservation Congress issued a Motion (No. 009)<sup>7</sup> urging the government of South Africa to “terminate the practice of breeding lions in captivity for the purpose of 'canned shooting' through a structured, time-bound process” and “restrict captive breeding of lions to registered zoos or registered facilities whose documented mandate is as a recognised, registered conservation project.”

The links between captive lion breeding facilities, their associated spin-off industries including cub-petting and lions walks, canned trophy hunting and the lion bone trade are well documented<sup>8</sup>. Many of the undersigned attended the Parliamentary Portfolio Committee on Environmental Affairs

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<sup>4</sup> <http://www.bioone.org/doi/pdf/10.3957/056.044.0107>

<sup>5</sup> <http://www.iucnredlist.org/details/15951/0>

<sup>6</sup> [http://www.africanliongroup.org/uploads/5/0/0/7/5007626/alwg\\_statement\\_on\\_captive-bred\\_lion\\_hunting\\_1.pdf](http://www.africanliongroup.org/uploads/5/0/0/7/5007626/alwg_statement_on_captive-bred_lion_hunting_1.pdf)

<sup>7</sup> <https://portals.iucn.org/congress/motion/009>

<sup>8</sup> [www.blodlions.org](http://www.blodlions.org); <http://www.panthera.org/sites/default/files/HUNTER-2012-WalkingWithLions-ORYX.PDF>; <http://blog.africageographic.com/africa-geographic-blog/hunting/how-lions-go-from-the-petting-zoo-to-the-dinner-plate/>;

[http://www.earthisland.org/journal/index.php/elist/eListRead/canned\\_hunting\\_and\\_cub-petting\\_are\\_big\\_business\\_in\\_south\\_africa?utm\\_content=bufferf9f87&utm\\_medium=social&utm\\_source=facebook.com&utm\\_campaign=buffer](http://www.earthisland.org/journal/index.php/elist/eListRead/canned_hunting_and_cub-petting_are_big_business_in_south_africa?utm_content=bufferf9f87&utm_medium=social&utm_source=facebook.com&utm_campaign=buffer)

Colloquium on Captive Lion Breeding for Hunting on 21 and 22 August 2018 and/or a follow-up informal workshop on Captive Lion Breeding on 23 August 2018. We believe that the key outcomes of the colloquium<sup>9</sup> were:

- There is no conservation benefit to captive breeding of lions<sup>10</sup>;
- There is no conservation value in the lion bone trade<sup>11</sup>;
- The captive lion industry smears South Africa's image as a conservation leader<sup>12</sup> and damages our tourism industry<sup>13</sup>;
- The use of lion bones, body parts and derivatives in commercial trade, including for scientifically unproven medicine, is one of the major threats to wild lions and serves as a cover for illegally wild-sourced lion and other big cat parts<sup>14</sup>;
- The lion bone trade primarily operates within an illegal market and is run by criminal networks<sup>15</sup>; and
- There is a general abhorrence to the industry across multiple sectors including animal welfare, animal protection, conservation, hunting, multi-cultural and faith-based organisations, which echo the sentiment of the South African and international public<sup>16</sup> at large.

We add that many other issues surrounding the captive lion breeding industry have generated much debate and concern, including:

- The welfare of captive lions<sup>17</sup>;
- The ethical considerations of captive breeding and keeping of lions and the use of their parts and hunting trophies<sup>18</sup>;

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<sup>9</sup> [https://pmg.org.za/committee-meeting/26878/?utm\\_campaign=minute-alert&utm\\_source=transactional&utm\\_medium=email](https://pmg.org.za/committee-meeting/26878/?utm_campaign=minute-alert&utm_source=transactional&utm_medium=email)

<sup>10</sup> <https://portals.iucn.org/congress/motion/009>;

LION CONSERVATIONISTS (2017) The African Lion Conservation Community's Response to the South African Predator Association's Letter. <https://conservationaction.co.za/resources/reports/open-letter-secretary-zinke-african-lion-conservation-communitys-response-south-african-predator-associations-letter/>

<sup>11</sup> Hunter, L. T., White, P., Henschel, P., Frank, L., Burton, C., Loveridge, A., & Breitenmoser, U. (2013). Walking with lions: why there is no role for captive-origin lions *Panthera leo* in species restoration. *Oryx*, 47(1), 19-24.; Bauer, H., Packer, C., Funston, P.F., Henschel, P. & Nowell, K. 2016. *Panthera leo*. The IUCN Red List of Threatened Species 2016: e.T15951A107265605. <http://dx.doi.org/10.2305/IUCN.UK.2016-3.RLTS.T15951A107265605.en>; BORN FREE FOUNDATION (2018) Cash Before Conservation: An Overview of the Breeding of Lions for Hunting and Bone Trade. Horsham.

<sup>12</sup> [https://www.panthera.org/cms/sites/default/files/Panthera\\_PressRelease\\_LionBones.pdf](https://www.panthera.org/cms/sites/default/files/Panthera_PressRelease_LionBones.pdf)

<sup>13</sup> [http://saiia.org.za/wp-content/uploads/2018/08/Harvey\\_180818\\_WorkingPaper\\_PredatorBreedingSA.pdf](http://saiia.org.za/wp-content/uploads/2018/08/Harvey_180818_WorkingPaper_PredatorBreedingSA.pdf); <https://conservationaction.co.za/wp-content/uploads/2018/08/CACH-Brand-SA-Review-August-2018.pdf>

<sup>14</sup> ENVIRONMENTAL INVESTIGATION AGENCY (2017) The Lion's Share: South Africa's trade exacerbates demand for tiger parts and derivatives. London.

<sup>15</sup> As above, EMS FOUNDATION & BAN ANIMAL TRADING (2018) The Extinction Business: South Africa's Lion Bone Trade.

<sup>16</sup> [http://www.hsi.org/assets/pdfs/public\\_opinion\\_poll\\_on\\_south\\_african\\_lion\\_breeding\\_08\\_20\\_2018.pdf](http://www.hsi.org/assets/pdfs/public_opinion_poll_on_south_african_lion_breeding_08_20_2018.pdf);

EMS FOUNDATION & BAN ANIMAL TRADING (2018) The Extinction Business: South Africa's Lion Bone Trade.

<sup>17</sup> CENTRE FOR ENVIRONMENTAL RIGHTS, ENDANGERED WILDLIFE TRUST. (2018) Fair Game? Improving the well-being of South African wildlife. Review of the legal and practical regulation of the welfare of wild animals in South Africa, 2018;

<https://nspca.co.za/truth-captive-lions/>

<sup>18</sup> <http://www.cannedlion.org/ethical-issues.html>; <http://www.bloodlions.org/breeding-exploitation-predators-no-place-ethical-tourism/>

- The risk of human health and safety posed by zoonosis (an infection or disease that is transmissible from animals to humans under natural conditions) including tuberculosis, parasite transmission and possible exposure to lethal immobilising compounds (if the animal is humanely immobilised before being shot) that may have deposited in the bones<sup>19</sup>.
- The significant risk to human safety, including fatalities, through physical interactions with tamed lions and other carnivores, resulting in at least 37 incidents affecting no less than 40 victims since 1996 and including 12 deaths<sup>20</sup>;
- The global trend of responsible tourism moving away from exploitative wildlife interactions<sup>21</sup> and
- The trade of lion bone skeletons with known criminal syndicates<sup>22</sup>.

The UPTa's news page<sup>23</sup> states that part of the study is "the development of artificial insemination protocols for this species, which could be used as a baseline for other endangered large wild felids". Whilst we support in-situ conservation strategies that purposefully address conservation threats, we do not support the AI study in lions. However, we acknowledge that AI could be useful for other imperilled wild felid conservation e.g. in the cheetah (*Acinonyx jubatus* and all 5 subspecies) that suffers from low genetic diversity, has poor sperm quality, are specific about the mates that they choose and have delicate reproductive cycles<sup>24</sup>.

A meeting was convened with Prof. Millar and the Blood Lions® team in 2015, where the concerns about UPTa's support of captive lion breeding facilities was discussed at length. With all the additional information that demonstrates global resistance to South Africa's captive lion breeding industry, as well as the direct links between captive lion breeding and the exploitative spin-off industries, we respectfully request that the UPTa and the Mammal Research Institute:

- a) Publicly distance itself from captive lion breeding facilities;
- b) Review its Ethic's Approval for this study as the AI cubs will remain at the facility and may be subjected to the same exploitative cycles outlined herein;
- c) Stop all research in the AI of lions as this does not benefit the conservation of wild lions.

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<sup>19</sup> See attached letter from Emeritus Prof. Modlin of Yale University School of Medicine regarding tuberculosis in African mammals; CACH. 2017. Dying for a Myth. [www.cannedlion.org/blog/dying-for-a-myth](http://www.cannedlion.org/blog/dying-for-a-myth)

<sup>20</sup> <https://conservationaction.co.za/recent-news/open-letter-to-government-regarding-captive-carnivore-interactions/>

<sup>21</sup> <http://www.bloodlions.org/born-to-live-wild/>; See attached letter from coalition to SATSA calling for an end to exploitative animal interactions

<sup>22</sup> EMS FOUNDATION & BAN ANIMAL TRADING (2018) The Extinction Business: South Africa's Lion Bone Trade.

<sup>23</sup> [https://www.up.ac.za/en/news/post\\_2716009-up-project-leads-to-worlds-first-lion-cubs-born-through-artificial-insemination-](https://www.up.ac.za/en/news/post_2716009-up-project-leads-to-worlds-first-lion-cubs-born-through-artificial-insemination-)

<sup>24</sup> <https://www.tehrantimes.com/news/422611/Artificial-insemination-an-option-for-captive-breeding-of-Asiatic>; <https://www.tehrantimes.com/news/421836/Low-genetic-diversity-biggest-threat-to-Asiatic-cheetahs-academic>

In conclusion, whilst the study may likely prove useful for the broader reproductive data pool, the message and context thereof have been incorrectly packaged and provide accreditation to the captive breeding of lions that cannot be supported.

We look forward to further constructive engagement with your team through a meeting at your convenience.

Signed:

African Lion Working Group	Sarel van der Merwe
Animal Talk Africa	Wynter Worsthorne
Ban Animal Trading	Smaragda Louw
Beauty Without Cruelty	Toni Brockhoven
Blood Lions®	Pippa Hankinson
Born Free Foundation, UK	Mark Jones, Dr
Conservation Action Trust	Francis Garrard
EMS Foundation	Jean-Pierre Roux
EMS Foundation	Michele Pickover
FOUR PAWS Animal Welfare Foundation	Fiona Miles
Future 4 Wildlife	Stefania Falcon
Global White Lion Protection Trust	Linda Tucker
Green Girls in Africa	Louise de Waal, Dr
Humane Society International	Teresa Telecky, Dr
Humane Society International - Africa	Audrey Delsink
OSCAP	Kim Da Ribeira
Panthera	Paul Funston, Dr
Southern African Faith Communities' Environment Institute (SAFCEI)	Frank Molteno
Wildlands Conservation Trust	Andrew Venter, Dr
Wildlife Act	Mark Gerrard
Wildlife Act	Simon Morgan, Dr