Urgent action required to conserve the Critically Endangered Asiatic cheetah *Acinonyx jubatus venaticus*

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The Critically Endangered Asiatic cheetah *Acinonyx jubatus venaticus* is now restricted to Iran, where fewer than 50 remain (Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 528–533). This could be the next felid to go extinct (Cat News, 2017, 66, 3). Since 2001 efforts to conserve the Asiatic cheetah have been spearheaded by the Conservation of the Asiatic Cheetah Project, managed by Iran's Department of the Environment in conjunction with the United Nations Development Programme (UNDP) and other organizations. The future of this project is now, however, in doubt.

The UNDP recently indicated it was withdrawing from the Conservation of the Asiatic Cheetah Project, leaving it with the Department of the Environment (Nature, 2017, 552, 31). The new head of the Department, however, announced in his first press conference that the Asiatic cheetah is doomed to extinction because of its declining population, and that cheetah conservation is no longer a priority for the Department. This does not bode well for this subspecies, and it is extraordinary that the agency entrusted with its protection appears to have accepted the likelihood of its demise so readily.

A new issue that could contribute to further decline of the Asiatic cheetah is trafficking. On 25 December 2017, in a joint operation between the Iranian Police and the Department of the Environment, an 8-month old female Asiatic cheetah cub was discovered in a house in Tehran (https://www.mehrnews.com/news/4182638/; in Farsi). To prevent future trafficking of the Asiatic cheetah we suggest the Department takes the following steps to

improve the security of the protected areas inhabited by cheetahs: (1) increase the number of wildlife rangers (http://www.icana.ir/Fa/News/309266/; in Farsi); (2) establish ranger stations in each of the districts inhabited by the Asiatic cheetah; (3) ensure that rangers have the equipment, fuel and training they need to work effectively (http://www.donya-e-eqtesad.com/fa/tiny/news-3277503; in Farsi); (4) grant rangers permits to defend themselves in the event of attack by criminals

(https://www.mehrnews.com/news/3694931/; in Farsi); and (5) where necessary, restrict access to important areas of cheetah habitat within protected areas, to hinder access for wildlife traffickers.

In addition, it is critical that other threats to Asiatic cheetahs are ameliorated. The most serious is collisions between cheetahs and vehicles (Diversity and Distributions, 2017, 23, 592–603), with 1–2 cheetahs killed on the roads annually (Cat News, 2007, 46, 8–11). To mitigate this threat we hope that the Department of the Environment will work with the Ministry of Roads and Urban Development to reduce roadkill rates, particularly at roadkill hotspots (bioRxiv, 2017, https://doi.org/10.1101/230581). We suggest a strategic shift in mitigation efforts away from the warning signs currently in use, as there is little evidence they are effective (PLoS One, 2016, 11, e0166941). Mitigation should instead focus on installing fencing in combination with wildlife crossing structures, as this approach is more effective at reducing roadkill rates (PLoS One, 2016, 11, e0166941), and crossing structures are frequently used by large carnivores (Frontiers in Ecology and Evolution, 2017, 5, 122; Wildlife Society Bulletin, 2017, 41, 712–719). We believe this strategy will be more successful in reducing collisions but it would require the full support of the Department of the Environment. To prevent the extinction of the Asiatic cheetah it is therefore critical that the Department makes cheetah conservation a top priority.