

Captive-bred Tigers and the Fate of Wild Tigers

Authors: JIANG, ZHIGANG, LI, CHUNWANG, FANG, HONGXIA, MENG, ZHIBIN, and ZENG, YAN

Source: BioScience, 57(9) : 725

Published By: American Institute of Biological Sciences

URL: <https://doi.org/10.1641/B570922>

The BioOne Digital Library (<https://bioone.org/>) provides worldwide distribution for more than 580 journals and eBooks from BioOne's community of over 150 nonprofit societies, research institutions, and university presses in the biological, ecological, and environmental sciences. The BioOne Digital Library encompasses the flagship aggregation BioOne Complete (<https://bioone.org/subscribe>), the BioOne Complete Archive (<https://bioone.org/archive>), and the BioOne eBooks program offerings ESA eBook Collection (<https://bioone.org/esa-ebooks>) and CSIRO Publishing BioSelect Collection (<https://bioone.org/csiro-ebooks>).

Your use of this PDF, the BioOne Digital Library, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Digital Library content is strictly limited to personal, educational, and non-commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne is an innovative nonprofit that sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

Captive-bred Tigers and the Fate of Wild Tigers

Dinerstein and colleagues (2007) urged in *BioScience* that action be taken to ensure the protection of wild tigers (*Panthera tigris*). We agree that this is necessary, but unlike Dinerstein and Colleagues, we believe that captive breeding is part of the answer.

Conservation breeding aims to release captive-bred tigers to the wild, but these tigers lack the skills to successfully hunt and kill prey (Norris 2005). Moreover, it is difficult to find places in which to release them, because these locations must have adequate food resources and offer little opportunity for the animals to interact with people. Although nature reserves are a small step toward tigers' protection, we should look elsewhere.

It is undeniable that a demand exists for tiger parts and products in China. Captive breeding will not only meet these demands but also increase the probability of the survival of tiger populations. Dinerstein and colleagues argued that the reopening of the trade in tiger parts from what they call "tiger farms" would encourage poaching and lead to the "laundering" of tiger parts, because "killing wild tigers is far cheaper than farming them." We disagree. It is extremely difficult to find a tiger in the wild: People have searched for wild tigers in south China for many years and have yet to find even one (Tilson et al. 2004). Also, the punishment for poaching is severe. One smuggler of tiger skins was sentenced

to death in 2005 (SFA 2007). The cost of killing a wild tiger is thus very high and creates a disincentive to do so.

The reopening of the tiger part market from the products of captive-bred tigers will suppress poaching and smuggling because legal parts will be readily available. The entering of laundered tiger products into the market is not possible, as all wild animal products in China, such as ivory and musk, are given state-approved wildlife product labels and are registered in an Internet database. Poached tiger products will be easily identified under this system, so the opening of a limited, controlled tiger-part trade is feasible. This trade would

generate funds for field conservation of tigers, defray the cost of captive breeding operations, and help sustain overall conservation.

Captive-bred tigers have the capacity to meet tiger-part demand and can simultaneously conserve the species. In some cases, tigers bred in captivity may be the only survivors of their subspecies. Captive breeding has already led to tiger conservation and protection in China, and the fate of wild tigers depends on the fate of captive-bred tigers.

ZHIGANG JIANG
CHUNWANG LI
HONGXIA FANG
ZHIBIN MENG
YAN ZENG

Zhigang Jiang (e-mail: jiangzg@ioz.ac.cn), Chunwang Li, and Hongxia Fang are with the Institute of Zoology at the Chinese Academy of Sciences. Zhibin Meng and Yan Zeng are with the Endangered Species Scientific Commission in China.

References cited

- Dinerstein E, et al. 2007. The fate of wild tigers. *BioScience* 57: 508–514.
- Norris KM. 2005. Born to be wild: Tiger persecution and advocacy from 1800 to the present. Master's thesis. Virginia Polytechnic Institute and State University, Blacksburg, VA.
- [SFA] State Forest Administration, Department of Wild Fauna and Flora Conservation. 2007. Brief Introduction to Tiger Conservation in China. Proceedings of the International Symposium on Tiger Conservation Strategy. 1–6 July, Guilin/Beijing/Harbin (China).
- Tilson R, Hu D, Muntifer J, Nyhus PJ. 2004. Dramatic decline of wild South China tigers *Panthera tigris amoyensis*: Field survey of priority tiger reserves. *Oryx* 38: 40–47.

doi:10.1641/B570922
Include this information when citing this material.



Letters to the Editor

BioScience

1444 I Street, NW, Suite 200
Washington, DC 20005
E-mail: bioscience@aibs.org

The staff of *BioScience* reserves the right to edit letters for clarity without notifying the author. Letters are published as space becomes available.