

## What are the conservation and livelihood impacts of wildlife farming?

### Why we want to do this science



Illegal wildlife trade remains a leading threat to global biodiversity. The contemporary "poaching crisis" that faces species such as elephants, tigers and rhinos has spurred renewed debate over the most effective and appropriate policy responses. Wildlife farming (also known as captive breeding, ranching, cultivation, aquaculture) is one proposed strategy through which to reduce pressures on wild populations, while continuing to satisfy consumer demand with legal, sustainably farmed alternatives. However, wildlife farming has been subject to little scrutiny, and experiences to date seem to have

yielded mixed conservation and livelihood outcomes. Related debates are increasingly contentious, and are at the forefront of global fora, including the Convention on International Trade of Endangered Species (CITES) that governs international wildlife trade.

To enable more evidence-based decision-making, this research will explore the impacts of wildlife farming on (a) biodiversity conservation, particularly harvesting of targeted wild populations, (b) other species (e.g., feedstock), (c) broader habitats (e.g., rangelands for farmed taxa), and (d) local community livelihoods and rights. Research will involve meta-analysis of diverse taxa subject to wildlife farming, including flora and fauna, different types of wildlife use (e.g., luxury, medicinal) and scales of trade (e.g., domestic, international). Because detailed data on many important parameters do not exist, research will draw on expert knowledge - notably IUCN taxa specialist groups - to evaluate many of these impacts. This will involve interviews/questionnaires and quantitative social science methods such as Delphi iterative process and Qualitative Comparative Analysis. The project will also include field-based research on a target species to ground observations (e.g., with local expert knowledge, socio-economic, attitudinal, and possibly ecological data). The case study taxa and types of data will be selected based on access/data availability, the student's prior travel, research and language skills, and might include *Panthera tigris*, *Andrias davidianus*, Orchidaceae, *Ursus thibetanus*, *Salmo salar*, *Pecari tajacu*.

### What's in it for you

**Inform global policy.** The policy community remains deeply divided on wildlife farming, and this study has a clear opportunity to inform policy debates via NGOs, IUCN and CITES.

**Network with leading conservation agencies.** This project involves collaboration with the University of Queensland, International Union for Conservation of Nature's (IUCN), and TRAFFIC the wildlife monitoring network, and will engage a wide range of taxa experts. As a result, it presents ample opportunities to establish professional ties with leading practitioners globally.

**Field and desk-based experience.** The project involves both desk and field-based work, and different types of data, allowing for a range of experiences and skill development.

**Both hands-on supervision and independence.** This project will involve close collaboration with the supervisors and partner organisations, while also allowing ample scope to shape the project direction/methods, develop additional lines of enquiry, and contribute/develop individual skills.

## Who should apply

We are seeking applications from graduates, or those who expect to graduate in 2015, with a good Masters degree in a relevant field. Candidates should have a demonstrated interest in conservation, experience with quantitative methods, and an interest in expanding their quantitative social science skills and engaging in policy dialogues. Candidates should ideally have experience writing scientific publications and with field research in the tropics.

## The small print

**Studentship funding:** Full studentships (UK/EU tuition fees and stipend (£14,057 2015/16 [tax free])) for UK/EU students for 3.5 years or full studentships (International tuition fees and stipend (£14,057 2015/16 [tax free])) for International students for 3 years.

**Academic Requirements:** First-class or 2.1 (Hons) degree, or Masters degree (or equivalent) in an appropriate subject.

**Deadline for applications:** 14 February 2016

**Provisional Interview Date:** [tbc] Week Beginning 29 February 2016

**Start Date:** October 2016

**For further information** or informal discussion about the position, please contact Dr Jacob Phelps ([j.phelps@lancaster.ac.uk](mailto:j.phelps@lancaster.ac.uk)).

**Application process:** Please upload a completed application form (download from [http://www.lancaster.ac.uk/media/lancaster-university/content-assets/documents/lec/pg/LEC\\_Funded\\_PhD\\_Application\\_Form.docx](http://www.lancaster.ac.uk/media/lancaster-university/content-assets/documents/lec/pg/LEC_Funded_PhD_Application_Form.docx)) and a covering letter outlining your background and suitability for this project at LEC Postgraduate Research Applications, <http://www.lec.lancs.ac.uk/postgraduate/pgresearch/apply-online>.

You also require two references, please send the reference form (download from [http://www.lancaster.ac.uk/media/lancaster-university/content-assets/documents/lec/pg/LEC\\_PG\\_Reference\\_Form.docx](http://www.lancaster.ac.uk/media/lancaster-university/content-assets/documents/lec/pg/LEC_PG_Reference_Form.docx)) to your two referees and ask them to email it to Andy Harrod ([lec.pg@lancaster.ac.uk](mailto:lec.pg@lancaster.ac.uk)), Postgraduate Research (PGR) Co-ordinator, Lancaster Environment Centre by the deadline.

Due to the limited time between the closing date and the interview date, it is essential that you ensure references are submitted by the closing date or as soon as possible.

## Further reading

1. Biggs, D., Courchamp, F., Martin, R., Possingham, H.P. 2013. Legal trade in Africa's rhino horns. *Science* 339:1038-1039.
2. Challender, D.W.S, McMillan, D.C. 2014. Poaching is more than an enforcement problem. *Conservation Letters* 7:484-494.
3. Conrad, K. 2012. Trade bans: a perfect storm for poaching? *Tropical Conservation Science* 5:245-254.
4. Laurance, W.F. *et al.* 2012. Averting biodiversity collapse in tropical forest protected areas. *Nature* 489:290-294.
5. Lyons, J.A., Natusch, D.J.D. 2011. Wildlife laundering through breeding farms: Illegal harvest, population declines and a means of regulating the trade of green pythons (*Morelia viridis*) from Indonesia. *Biological Conservation* 144:3073-3081.
6. Phelps *et al.* 2013. A Framework for Assessing Supply-Side Wildlife Conservation. *Conservation Biology* 28:244-257.

7. Secco, L.D., Pirard, R. 2015. Do tree plantations support forest conservation? CIFOR InfoBrief No. 110. Center for International Forestry Research, Bogor, Indonesia. URL: [http://www.cifor.org/publications/pdf\\_files/infobrief/5485-infobrief.pdf](http://www.cifor.org/publications/pdf_files/infobrief/5485-infobrief.pdf).