



Executive Summary

The “Assessment of Python Breeding Farms Supplying the International High-end Leather Industry” is the first report delivered under the Python Conservation Partnership. A collaboration between Kering, the International Trade Centre (ITC) and the Boa and Python Specialist Group of the International Union for Conservation of Nature, the Python Conservation Partnership was established in November 2013 with the aim of contributing to the improved sustainability of the python skin trade and to help facilitate industry-wide change. The Partnership’s program of research is focusing on research and recommendations around improving sustainability, transparency, animal welfare and local livelihoods for the python skin trade.

The wild harvest of two species of Southeast Asian pythons (the Burmese Python *Python molurus bivittatus* and Reticulated Python *P. reticulatus*) has been ongoing for more than eight decades, and concerns have been raised about the conservation impacts of trade on wild populations and the potential issues related to illegal trade and animal welfare. In response, the high-end leather industry has expressed an interest in captive breeding production systems to ensure that international demand for python skins can be met in a way that is globally acceptable in terms of sustainability and animal welfare standards. However, conservationists and wildlife managers have queried the biological and economic feasibility of breeding pythons for skins, casting doubts about the applicability of this system.

Under the Python Conservation Partnership, the IUCN/SSC Boa and Python Specialist Group (BPSG) aimed to screen and assess facilities presently farming *P. m. bivittatus* and *P. reticulatus* for their skins within closed-cycle breeding facilities. Information within this resulting report was obtained by consulting national CITES Management Authorities, farming associations, python keepers and breeders, python farmers, fashion houses and tanneries, and relevant scientific experts. Data gathered were augmented by visits to 39 small to large python captive breeding farms in China, Thailand and Viet Nam that are currently producing pythons for the global skin trade.

The present report provides information on how pythons are farmed in Asia, farming’s impact on local livelihoods and the relative contribution of captive python skins to the total trade. In addition, recommendations are offered on the prospects of using both a ranching approach to supply python skins for trade and a closed-cycle captive breeding approach to meet current and future demands for python skins. These recommendations have been developed with the aim of providing guidance for the industry and conservation policy on future monitoring of the trade in captive-bred python skins.

Commercial captive breeding farms for python skins are currently located in China, Thailand and Viet Nam. Wild harvest of *P. reticulatus* still takes place in Indonesia and Malaysia, but in no other countries. *P. m. bivittatus* are not legally harvested from the wild anywhere within their range. Records from the CITES Trade Database indicate that, between 2005 and 2011, 99% of *P. m. bivittatus* and 24% of *P. reticulatus* skins originated from captive-bred stock. All exports of skins using a CITES source code “C” (meaning that the specimens are bred in captivity) originating from Cambodia, Indonesia, Lao People’s Democratic Republic (PDR) and Malaysia should be treated with caution. In the case of Indonesia and Malaysia, national CITES authorities and trade associations deny that commercial captive breeding of pythons occurs in their country, while claims of captive breeding in Lao PDR remain unproven. Cambodia reportedly exported skins with source code C over a decade ago, in 2000, but there are no recent records of registered python farms in the country.

Two broad closed-cycle captive breeding systems for pythons are currently used: (1) self-contained farming in Thailand, whereby all python food is raised on-site and live pythons remain on-site for the duration of their life; and (2) satellite farming in China and Viet Nam, whereby a small number of large farms produce many hatchlings that are given or sold to a large number of small “satellite farms” for raising. After approximately one-year satellite farms then sell adult pythons back to the large farms for slaughter and/or export.

Several uncertainties in production figures for farmed pythons remain. For example, despite large exports of python skins from Lao PDR with a CITES source code C, this study found no evidence that python farming is currently taking place. Another issue is that the locations, sizes and registration status of many satellite farms in Viet Nam remain unknown, making it difficult to verify Vietnamese annual production figures for captive-bred pythons. As a result, it is important that all farms in Viet Nam be registered and a verifiable and regularly validated reporting system be implemented in order for the fashion industry to commit to Viet Nam as a source country for python skins.

Key results of this report include that farming pythons may assist the conservation of the two species considered in this study only if it: (1) reduces unsustainable wild harvests, and (2) does not encourage illegal laundering of wild-caught pythons through farms. However, commercial production through closed-cycle captive breeding, completely disassociated from the wild, may create commercial incentives favouring extinction (and thus increase the value of captive stock) rather than favouring recovery of wild populations that could potentially compete in the market place with captive-bred stock. Thus, python farming may undermine conservation through sustainable use objectives because it provides little or no incentive for protection of wild pythons and their habitats.

The report also shows that python farming can provide a source of income for many people, and that satellite farming plays a larger role in income generation for small-scale farmers than self-contained farms. However, closed-cycle captive breeding of pythons in general generate benefits for a smaller number of people and communities than other python production systems (e.g., wild harvests), provided that the latter are sustainable.

Recommendations

General trade management:

1. Python skin exports using a CITES source code “C” from countries other than China, Thailand and Viet Nam (e.g., Cambodia, Indonesia, Laos PDR and Malaysia) should be treated with caution until improved data on farms, management and monitoring systems are in place to verify captive production capacities.
2. To facilitate control and monitoring by national and local authorities, python farmers breeding pythons in China, Thailand and Viet Nam should be encouraged to keep eggshells as evidence demonstrating their ability to breed. These can be collected and destroyed by enforcement officials each year to prevent re-use. Python farms in Lao PDR, and any future breeding operations in Cambodia, Indonesia and Malaysia, should be asked by national authorities to do the same.
3. It is important that python farming is part of a holistic approach to sustainable trade, which may include management and sourcing from wild harvest systems that promote in situ species conservation.

Captive breeding in Viet Nam:

4. The Vietnamese CITES Management Authority and Provincial Forest Protection Departments should work together to provide verifiable data relating to the number of pythons capable of being legally, sustainably and humanely bred in captivity in Viet Nam to promote transparency and trust within international markets.
5. Provincial Forest Protection Departments should endeavour to conduct inventories and register all households and satellite farms raising pythons for the skin trade.
6. The Vietnamese CITES Management Authority should consider making it mandatory for python skin export companies and large farms to provide them with records of all satellite farms supplying them with pythons, and the number of pythons sourced from each, thus enhancing monitoring and traceability.
7. When available, these data should be routinely analysed by the Vietnamese CITES Management Authority and reported to the CITES Secretariat in order to provide further verification of their captive-breeding capacity.

Captive breeding in China and Thailand

8. There is higher transparency in the Chinese and Thai python farming systems than in Viet Nam because there are only single companies producing pythons for the skin trade. Strict controls should be maintained in China and Thailand if more/larger farms become established in these countries.

Future research:

9. Field surveys should be considered in Viet Nam, and neighbouring countries (Cambodia, China, Lao PDR, Thailand), to determine if wild collection of pythons is still occurring, and if so, at what scale and impact to local populations.
10. Southeast Asian CITES Management Authorities, together with industry and other relevant stakeholders, should research the use of techniques (e.g., stable isotopes) to unequivocally differentiate between the skins of captive-bred and wild-caught pythons.

Farming improvements:

11. China, Thailand and Viet Nam should consider the recommendations from the study on humane killing of reptiles and employ appropriate slaughter methods that ensure brain destruction.
12. Industry in Europe and python range States should consider promoting a certification system for farms, linked to a central administration point (e.g. a website), that provides stakeholders with confidence that they are sourcing python skins from verified sustainable, legal and humane sources.

For further information please see the complete report.