



CITES & LIVELIHOODS CASE STUDY 2022

Reticulated Python Harvest and Trade in Indonesia

SPECIES, USE AND TRADE

Wild reticulated pythons (*Malayopython reticulatus*) are harvested and sold by rural people in Indonesia for commercial production of skins, meat, and medicines. Skins are purchased by Indonesian tanneries, which are exported for the international leather trade. Reticulated pythons are widespread across Southeast Asia. Their natural habitat is tropical moist rainforest but the species has adapted successfully to a wide range of anthropogenic landscapes such as oil palm and other agricultural plantations, as well urban areas (e.g., Jakarta).

Poverty rates in rural Indonesia are high. Traditional uses of pythons include meat for consumption, skins for various decorative and utility purposes, and fat and other body

parts for traditional medicine. Aside from basic income, the skin trade gives rural communities the opportunity to increase wellbeing and strengthen livelihood resilience.

Reticulated pythons are one of the most abundant large vertebrates in Indonesia. The majority of harvest occurs in palm oil plantations. The Directorate General of Conservation of Natural Resources and Ecosystems regulates trade at the national level. The harvest is managed using a quota system (currently allowing the collection of 175,000 pythons annually), minimum harvest size limits (only snakes larger than 240 cm snout-vent length), skin size limits, and annual harvest monitoring at processing facilities.

LIVELIHOOD BENEFITS

Reptile harvests are an important source of food, medicine, and income generation for rural communities. An estimated 190,000 Indonesians are involved in the python skin trade (from hunters to tanneries and exporters). The total value of exported skins is around US\$ 15 million annually, with around 50% of this value accruing in rural areas (i.e., by harvesters and processing facilities). Harvesters earn on average US\$25-30 per python (Fig. 1). Python meat and fat provide a cheap and readily available source of nutrient dense food and medicine. The skin trade provides low-skilled and low-income households with an opportunity to diversify and strengthen livelihood resilience. The benefits generated are particularly important during times of shock (e.g. such as during the COVID-19 outbreak) when this continuously available and open-access resource substitutes incomes from less stable industries (e.g., seasonal cropping, tourism).



INDONESIA



RETICULATED
PYTHON
*Malayopython
reticulatus*



APPENDIX II



LEAST
CONCERN





Many local communities perceive reticulated pythons as a threat to personal safety and household livestock, and therefore support ongoing harvests. There have, however, been numerous calls from western NGOs to ban the trade in python skins. Doing so would have the following impacts:

- Almost 200,000 rural people would lose a resilient source of income;
- Undernourished households would lose a source of protein;
- Indigenous communities would lose a means of preserving cultural heritage;
- Levels of human wildlife conflict would increase;
- The Indonesian government would lose a sustainable rural industry.

CONSERVATION IMPACTS

Indonesia's pythons have been commercially exploited for over 100 years with no evidence of population declines (e.g., there is a consistency in the numbers and demographics of the snakes brought to processing facilities over time). Pythons are generalist species that are resilient to harvesting and are tolerant of anthropogenic land use change. Livelihood surveys have indicated that without the python harvest, rural communities in remote areas may be incentivised to engage in illegal exploitation of endangered wildlife.

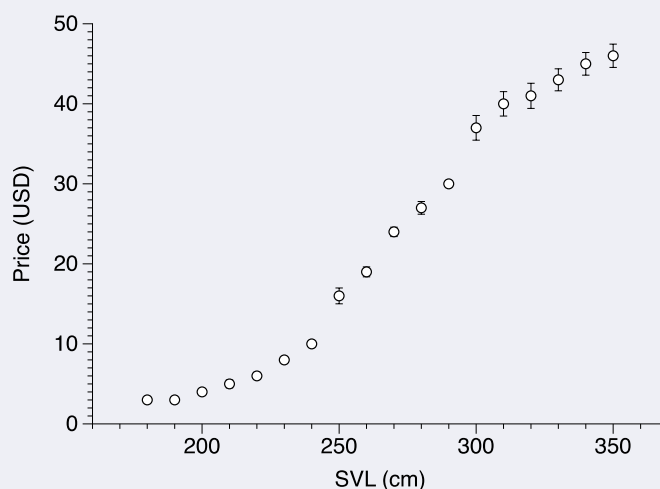


Fig. 1. Mean sale prices (and standard errors) for live reticulated pythons of different snout-to-vent lengths (SVL).

LESSONS LEARNT AND DIRECTIONS

The commercial harvesting and trade of wild reticulated pythons in Indonesia provides a resilient income and valuable source of protein for many rural households. In so doing, it not only supports livelihoods but also helps to reduce levels of human-wildlife conflict.

KEY CHALLENGES INCLUDE:

- Lack of an adequate education and awareness component. Therefore, despite extensive scientific research and publication, the public remains largely oblivious to the sustainability credentials of the trade.
- Weak alignment of traditional Indonesian supply chain practices with international expectations and standards.
- Scientific assessments of non-detriment in python harvests are grounded in an understanding of temperate rather than tropical reptiles. This hinders effective dialogue between Parties and presents a challenge for implementation of trade regulations (e.g., harvest quotas).

Case study prepared by Amir Hamidy, Patrick Aust, Daniel Natusch.

IN COLLABORATION WITH:



Sustainable Use
and Livelihoods
Specialist Group

The presentation of material in this publication does not imply expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory or area, or concerning the delineation of its frontiers or borders. The views of the author(s) do not necessarily reflect those of the CITES Secretariat; the responsibility for the contents rests exclusively with its author.

www.cites.org



For the full case study see
cites.org/eng/prog/livelihoods