

It's not too late – yet – to save the Philippine pangolin, study finds

by [Leilani Chavez](#) on 27 January 2021

- *Philippine pangolins, found only in the island province of Palawan, are among the most heavily trafficked mammals in the world, with nearly 7,000 seized from traffickers between 2018 and 2019.*
- *But unlike some populations of other pangolin species, the Philippine pangolin might have a chance of bouncing back if the appropriate conservation measures are set up to protect the species.*
- *A new study, which uses locals' sightings and knowledge of the species, shows the Philippine pangolin is widely distributed across its range and knowledge of the species is high. However, sightings were either rare or very rare and declines were reported across the survey areas.*
- *The survey also showed a high level of willingness among communities to protect the species, suggesting that local conservation efforts may work, researchers say.*

MANILA — Knowledge of the Philippine pangolin, the only pangolin species in the country, is scant. Sightings of the animal are rarer still. But unlike other pangolin species around the world that teeter on the brink of extinction, a new study suggests that with the appropriate conservation measures, the Philippines' endemic pangolin still has a shot at bouncing back.

In a [study](#) published last December in the journal *Global Ecology and Conservation*, researchers conducting a comprehensive survey found that Philippine pangolins (*Manis culionensis*) have been spotted in 17 of the 24 municipalities in Palawan, the island province that's the only place on Earth where this species occurs.

"This is promising for the Philippine pangolin and suggests it is not too late to establish conservation efforts across the species' range," lead author Lucy Archer, from the Zoological Society of London (ZSL), tells Mongabay.

An enigmatic species

So little is known about the Philippine pangolin that even as the IUCN considers the species to be critically endangered, there is no accepted estimate for its baseline population. The scientific literature suggests the species was never common, and interviews with Indigenous communities carried out in 2018 suggest it has been in sharp decline since the 1980s, [the IUCN notes](#).

However, the newly published survey gives reason for optimism.



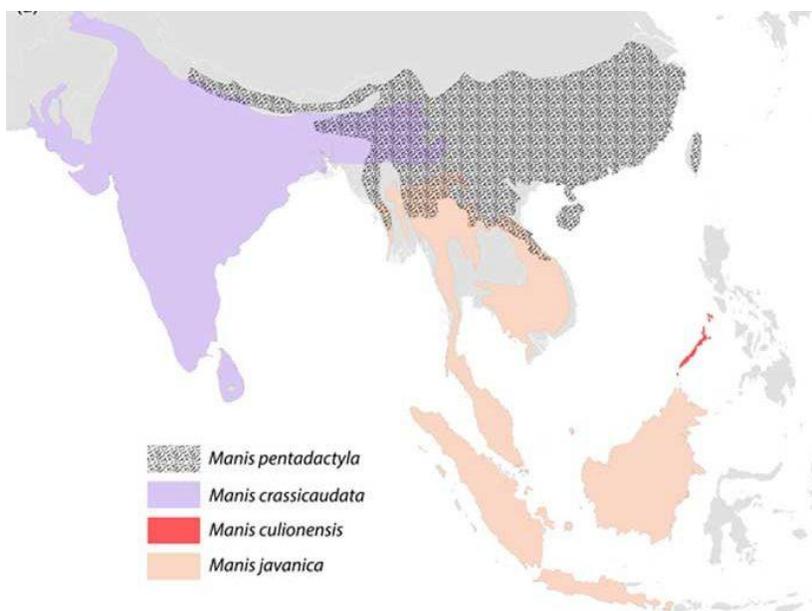
A Philippine pangolin pup and its mother, a critically endangered species endemic to the Palawan island group. Photo by Gregg Yan, licensed under CC BY-SA 4.0

Similar comprehensive surveys assessing locals' knowledge of pangolins, done in West Africa for the giant pangolin (*Smutsia gigantea*) and in China and Vietnam for the Chinese pangolin (*Manis pentadactyla*), show that locals strongly believe that their pangolin species are extinct: sightings are rare or non-existent. This isn't the case with the Philippine pangolins: locals are still seeing them, albeit very rarely, and the number of areas where they can be found is high.

"Compared to similar studies on pangolin species elsewhere, these results suggest that Philippine pangolin populations may not have reached the critical levels shown by Chinese pangolins in China and Vietnam, or by giant pangolins in Benin," Archer says. "This provides some hope for the species."

The survey ran from January to June 2019 and helps establish the species' distribution area based on residents' sightings. Locals call the animal *balintong*, which means "somersault," in reference to its habit of rolling away to hide from danger.

The Philippine pangolin was until 1998 thought to be a separate population of the Sunda pangolin (*Manis javanica*), which occurs across much of Southeast Asia, but not the Philippines. Its recognition as its own species coincided with a local poaching boom: high demand for pangolin scales in China and Vietnam, combined with increased enforcement on known Sunda pangolin trafficking routes, saw traffickers turn their attention to the Philippine pangolin.



Range of the four Asia pangolin species: the Chinese, Indian, Sunda and Philippine pangolins. A mix of colors within the maps indicates an overlap in the different species' distributions. The species' ranges are based on the IUCN Red List assessments (IUCN 2014). Note: The distribution maps are currently being updated by the IUCN Pangolin Specialist Group. Image courtesy of University of Adelaide/TRAFFIC. Image courtesy of University of Adelaide/TRAFFIC

Local conservationists also link an increase in Chinese projects in the Philippines to growing demand for pangolin meat in restaurants in Manila catering to the influx of Chinese workers and visitors. In a span of two years, Philippine pangolins became one of the most trafficked species in the country, pushing them to critically endangered status both on the IUCN and the national red lists.

Initial trafficking seizures often turned up shipments carrying both pangolins and various turtle species. But since 2018, Philippine authorities have been intercepting shipments consisting solely of pangolin parts. In September 2019, authorities in Puerto Princesa City, the capital of Palawan, made the largest-ever seizure of Philippine pangolin scales: 1,154 kilograms (2,545 pounds), for which at least 3,900 pangolins would have been killed.

From 2018 to 2019, local authorities seized 6,894 Philippine pangolins, according to a recent [report](#) released by wildlife trade monitoring group TRAFFIC. The figure is alarming, conservationists say, because there are no clear estimates for how many of the animals remain.

But while researchers are [racing](#) against time to save the local pangolin population, studies are limited by the pangolin's peculiar and cryptic habits. Pangolins are solitary, nocturnal, non-vocal and semi-arboreal. While these traits haven't been enough to protect them from poachers, they make it very difficult to study the species in the wild, Archer says.

"Imagine walking through a forest at night and trying to find something that makes little noise and might be found alone up a tree," she says. "It would take a lot of time and effort!"



Philippine pangolins are known for their cryptic habits, making them hard to study in the wild. Image by L. Archer/ZSL

These cryptic behaviors result in low detection probabilities, meaning the chances of spotting one, even if it's nearby, is "very small," Archer adds.

"General biodiversity surveys therefore rarely record pangolins and so specific targeted monitoring methods are needed," she says. "However, such methods are still in development for pangolins so we don't yet have accepted or standardized monitoring methods ... partly because they are so difficult to find which therefore makes the development of such methods difficult!"

Locals offer clues

This is where the study by Archer and her team comes in. It adds to the existing knowledge base by drawing from what's called local ecological knowledge (LEK), a type of data that builds on first-hand observations or interactions of locals in an area where a species can be found.

"LEK is based on the premise that local people can often hold more information and provide important information and knowledge on rare species that utilize the same environments as them," Archer says. "It is clear from this result that local people hold a wealth of important knowledge on wildlife in their local areas — they are the real experts."

But while it has been used in conservation, particularly in community-led conservation efforts, locals' knowledge of their environments remains a largely underutilized data source. "Its benefits lie in being able to collect lots of information over wide geographical areas over a relatively short time frame and at low costs — this study took place over 6 months," Archer says.



Philippine pangolins are hunted for their meat, blood and scales. Rampant poaching to fuel the wildlife trafficking ring drove the species to critically endangered status in a span of two years. Image by L. Archer/ZSL

“Hopefully, studies like this will aid the development of such methods as new monitoring methods can be trialed in areas where we at least know the species exists. We can also use local knowledge to target specific habitats and places where people have recently seen the species,” Archer says.

Eighty-seven percent of respondents in the Palawan survey could identify and provide information on the Philippine pangolin, but said sightings are rare or very rare, even compared to other threatened species. This points to an urgent need to establish localized conservation initiatives, the study says. And the survey notes a high level of general local support for wildlife protection, particularly of the pangolin.

“With high knowledge levels and high willingness to be involved in conservation efforts reported by respondents in this study, I think local people are really well placed to help guide and develop conservation efforts,” Archer says.

The study forms the basis for ZSL’s conservation action and community engagement in the municipality of Taytay in northern Palawan, one of the identified conservation priority areas. Archer says a second phase involves using

camera traps to monitor the species, which will hopefully aid in creating a community conservation area.

“We hope this will provide a useful body of information that local governments and conservation organizations can use to inform conservation efforts, and which future research can be compared to in order to track trends in species status and threats,” she says.

Citation:

Archer, L. J., Papworth, S. K., Apale, C. M., Corona, D. B., Gacilos, J. T., Amada, R. L., ... Turvey, S. T. (2020). Scaling up local ecological knowledge to prioritise areas for protection: Determining Philippine pangolin distribution, status and threats. *Global Ecology and Conservation*, 24, e01395.

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https://news.mongabay.com/2021/01/its-not-too-late-yet-to-save-the-philippine-pangolin-study-finds/?fbclid=IwAR0mcpJGDh1tYLcDaaSZ6mK1Uxpe_uUpOxMiiZfbCtxMn25vUoViLNYk0