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## Meet the Agta, a tribe where a quarter of men have been attacked by giant snakes

By Ed Yong

December 12, 2011 • 7 min read

When [Thomas Headland](#) first met the world's longest snake, he was on the way to the toilet. He was living in the Philippine rainforest with a group of hunter-gatherers called the Agta. On the walk to the outhouse behind his hut, he stumbled across a reticulated python curled up on the trail. "The hairs on the back of my neck stood up and I shouted for help," he recalls. At his cries, six to seven Agta jumped up from the surrounding bushes... and started laughing. Their new American neighbour had fallen for the old previously-killed-python-on-the-path gag. "I didn't know what jokers these people were at the time," says Headland.

Giant snakes frequently attack people in fantasy and science-fiction stories, but such attacks are not merely the stuff of fiction. Through [his extensive work with the Agta](#), Headland has found that a *quarter* of all the men have been attacked by pythons.

Headland and his wife first arrived in the Philippines in 1962, three weeks after they had married each other in Minnesota. They lived solidly with the Agta for 24 years, and they still return to the forests every other year. "I've lived in the rainforest longer than any American scientist," he says. "I've seen things out there that I saw in Tarzan movies when I was a kid."

That includes plenty of giant snakes. “Three or four times, the pythons came into camp and killed chickens. One time, a man saw a snake coiled around his dog, and he killed it with a machete. My wife’s killed one python and I’ve killed one,” says Headland. The biggest he ever saw was a 6.9 metre monster, shot by his neighbour Kekek Aduanan (on the right in the photo). It was the third largest python on record.



The reticulated python is the world’s longest snake. Females typically weigh 75 kilograms (165 pounds) and grow larger than 7 metres (23 feet). The Agta, by contrast, are a small folk. Adults reach around 1.4 metres (4.5 feet) in height and weigh around 44 kilograms (97 pounds). For a snake that can swallow an entire pig, an Agta would make a mere medium-sized mouthful.

In 1976, Headland started formally interviewing the Agta about their encounters with pythons. The entire population includes just 600 individuals, and Headland managed to speak to 120 of them. To account for the possibility of tall tales, he asked careful, searching questions, and corroborated his data with different witnesses.

His survey, “encompassing approximately seven decades of memories” showed that 26 percent of the Agta men had been attacked by pythons, compared to just 2 percent of the women. After all, men spend more time out in the forest. Two unlucky men had been attacked twice, 15 had been bitten and 11 had substantial scars that recorded their encounters.

Mostly, the Agta fend off the serpents with machetes or shotguns. Only six people have actually been killed in the span of 39 years, including a man who was found inside a snake, and two children who were eaten by the same python on one fateful night. Without their iron weapons, the Agta would surely have lost more individuals to python coils.

But the Agta aren’t just victims. They’re proficient python-killers in their own right. All the men had probably killed smaller specimens at least once in their lives. After Kekek Aduanan shot the big python that Headland photographed, three hunters skinned and butchered the snake in under an hour (the skin’s being held out in the top photo).

Headland writes that reptile specialists have “long claimed that giant serpents eat humans only under exceptional circumstances”. But his study with the Agta – one of the few available for any hunter-gatherer groups – suggests otherwise. It shows that humans and giant snakes often come to blows. Headland thinks that the threat of pythons would have significantly influenced the lives of the Agta, especially before they made contact with Westerners and gained access to metal tools.

To see if serpentine threats were a common feature of our evolution, Headland contacted [Harry Greene](#) from Cornell University. Greene mined the natural history literature for encounters between serpents and primates, the group that includes ourselves, other apes, monkeys and lemurs. He found a laundry list of anecdotes. Snakes, both venomous and constricting, have attacked at least 26 species of primates other than humans. No living snakes specialise on killing primates alone, but many pythons, boas and other constrictors will attack them regularly.

But just like the Agta, primates often turn the tables, and many such bouts have ended in defeat for the serpent: a tarsier eating a coral snake; a patas monkey killing a mamba; a black lemur taking on a Madagascan boa; and more. Humans, both prehistoric and modern, have eaten a variety of snakes – once spotted, they’re fairly easy to kill with simple weapons.

“These relationships have long characterized our joint evolutionary history,” says Greene, who points out that the giant constrictors diversified around 100 million years ago, around 20 million years before the origin of the major primate groups.

We should be careful before making specific claims about how snakes affected our evolution, since earlier attempts to address this question have been somewhat fraught. While some scientists have suggested that fear of snakes is innate, young babies don't show such fears; they may, however, have the ability to spot images of snakes more quickly than other objects. Meanwhile, Lynne Isbell has suggested that the need to spot snakes could have driven the evolution of sharper eyesight among primates. This too is debatable, since the quality of a primate species' depth perception is unrelated to its shared history with snakes or the odds of encountering a snake.

Headland and Greene don't make any such claims. Their surveys of both the Agta and the scientific literature can't tell us *how* snakes and primates have evolved together. Modern primates may have more run-ins with snakes than anyone had suspected, but it's still not clear how our two groups have coiled around each other through our long mutual history.

**Reference:** Headland & Greene. 2011. Hunter-gatherers and other primates as prey, predators, and competitors of snakes. PNAS <http://dx.doi.org/10.1073/pnas.1115116108>

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