

Cool Green Science



Big Questions

Innovations

Nature + You

Our Voices

Topics

| WILDLIFE |

The Largest Mammal That No Scientist Has Ever Seen in the Wild

BY MATT MILLER

NOVEMBER 14, 2016 | [Follow Matt](#)



Saola. Photo © Bill Robichaud

The saola is the largest terrestrial mammal never seen alive in the wild by a biologist. This is not a Bigfoot story. The saola undeniably exists. It roams only in the Annamite Mountains of Laos and Vietnam.

Biologists know very little about the saola. But one thing is clear: They are in big trouble. A poaching crisis in the Annamite Mountains is hammering wildlife, and a rare species like saola stands little chance in a landscape literally covered in snares.

But how do conservationists protect a species that scientists have not even seen in its native habitat? The challenge is monumental. It is, essentially, trying to save a unicorn.

The Remarkable Story of the Saola

Bill Robichaud, is one of the world's experts on saola. At a lecture he gave at Zoo Boise – a funder of saola conservation – he began by attesting that being a saola expert should come with a bit of qualification.

“This could be a short talk,” he said. “We do not know much. There are no dumb questions when it comes to saola.”

But what is known is astonishing enough. In 1992, a joint biological expedition by the Vietnam Ministry of Forestry and the **World Wide Fund** for Nature conducted a survey in the Annamite Mountains, a global biodiversity hotspot. When a biologist visited a local village to pick up vegetables, he noticed horns hanging in a hunter's house of an animal he didn't recognize.

It proved not only to be a new species but a new genus. While it looks superficially like an antelope or perhaps a wild ox, there really are no comparisons. “This is not like a new species of deer or new species of wild goat. The saola was something entirely new,” says Robichaud, who works for the organization **Global Wildlife Conservation** and now heads the **IUCN's Saola Working Group**.

The Annamite Mountains proved to be a biological treasure trove, with other major wildlife discoveries including the bare-faced bulbul, large-antlered muntjac and Annamite striped rabbit. “The saola is the most spectacular chapter of what is a remarkable story,” says



Landscape in Pu Mat National Park, Annamite Range in Vietnam. Photo © [Rolf Müller / Wikimedia](#) through a Creative Commons license

Robichaud.

And the saola chapter has continued. They have since been documented on camera traps. One has been seen alive by outside biologists, but it was captured by a hunter and confined to a general's menagerie. Robichaud, who has now made significant expeditions to the Annamites, was able to spend time with that animal, but unfortunately it died after only 18 days in captivity.

“It was as tame as a domestic pig or goat,” he says. “It was wary of humans but never really got upset.”

Most of the information on saola has been gathered from information from local villagers and hunters. Even locals only rarely see them, and then typically when the animal is bayed by dogs. It is a solitary forest browser, and does not bother village gardens.



Bill Robichaud with saola horns. Photo © Bill Robichaud / Global Wildlife Conservation / Flickr through a Creative Commons license

Population estimates vary from 30 to 300 animals, but it's clear that the animal is in serious trouble. And there is a conservation crisis in the Annamites. "Tigers, elephants and giant pandas get a lot of conservation attention, as they should," says Robichaud. "But the saola faces far greater risks. There is a scarcity of conservation attention, and this is a large mammal that is genetically distinct."

From Bombs to Snares: Saola Under Siege

Biologists don't know how common saola once were, but as with many wildlife species in Southeast Asia, its populations likely suffered greatly during the Vietnam War. During the conflict, Laos became the most bombed country per capita in human history; more bombs rained down on it than on all of Europe during World War II.

This, coupled with defoliation by Agent Orange, likely directly killed saola and fragmented its habitat. Where the distribution of saola is most patchy correlates to areas with the heaviest bombing.

Today, the saola faces a seemingly low-tech threat: snares. A mind boggling number of snares. Hundreds of thousands of wire traps strung across the Annamite Mountains.

"This is not local people hunting for food," says Robichaud. "It is poaching for the Chinese medicinal trade and high-end bushmeat restaurants. The demand for anything valued for



Patrol team with wire snares collected in saola habitat, central Laos (Nakai-Nam Theun National Protected Area). Photo © [Bill Robichaud](#) / [Global Wildlife Conservation](#) / [Flickr](#) through a Creative Commons license

traditional medicine or meat has stimulated a catastrophe.”

A tiger can fetch \$10,000 on the market, a golden coin turtle upwards of \$20,000.

But the saola? Zero. Since they never existed in China or outside the Annamites, they play no role in traditional medicine.

But snares are indiscriminate killers; in some forest areas, nearly every conceivable path is blocked with a trap. “On the one hand, this is incredibly sad. Saola are bycatch, like dolphins in tuna nets,” he says. “But on the other hand, poachers are not racing us to get the last saola like they are tigers and rhinos.”

Silver Linings

Unlike many wildlife conservation stories, this is not a habitat issue. There is still plenty of forest in Laos. While poaching is a difficult problem to tackle, villagers have been huge allies.

“Engaging villagers in saola conservation is very easy,” says Robichaud. “They don’t even eat their crops. People are very open to the message.”



Saola. Photo © [Silviculture / Wikimedia](#) through a Creative Commons license

Many villagers are now taking pride in this endemic animal. Robichaud tells the story of a hunter who asks him about how many saola are in the United States, with all its conservation programs, or Africa, with its great herds. “When I told him they are not even found in Thailand, not even found in other parts of Laos, you could see the realization,” Robichaud says. “Later I heard that he his dogs had bayed a saola and he chose not to kill it.”

With the leadership of local people and support from zoos and other organizations, a massive

snare collection effort is underway. More than 130,000 snares have been collected and destroyed at five key sites since 2011. “When you collect that many snares, you’re helping a lot of other wildlife, too,” he says.

Robichaud visited Zoo Boise to meet with Zoo Teens, a group of young people who volunteer at the zoo and raise money for conservation programs. Their focus has been on funding snare removal in the Annamites. (Full disclosure: my wife works for Zoo Boise).

“Having young people raise awareness and fund our efforts makes a huge difference,” says Robichaud. “People don’t know about the saola. It faces daunting challenges. But it is a challenge where we can make a difference.”

TAGS: [Camera Traps](#), [Endangered Species](#), [Mammals](#)



Matt Miller is director of science communications for The Nature Conservancy and editor of the Cool Green Science blog. A lifelong naturalist and outdoor enthusiast, he has covered stories on science and nature around the globe. Matt has worked for the Conservancy for the past 14 years, previously serving as director of communications for the Idaho program. [More from Matt](#)

 [Follow Matt](#)