

Global Appetite for Frog Legs Threatens Species

Jessica Marshall, Discovery News

Jan. 27, 2009 -- The world's [frogs](#) face yet another threat to their survival: overeating by humans.

A global team of researchers has estimated that the international trade in frog meat represents 200 million to 1 billion frogs eaten each year, or about 11,000 tons of frog meat.

The team analyzed commodity-trading data from the United Nations to obtain the best possible estimates of the international [frog leg trade](#).

"We don't have the global culture of eating frogs in our minds," said study author Corey Bradshaw of the University of Adelaide in Australia. "We wouldn't consider them a staple, but for a lot of people in Asia and South America, it is a staple."

The largest destination for frog legs is, predictably, France. "Most people would probably be surprised that the U.S. is a very close second," Bradshaw said.

Indonesia is the largest exporter by far. But international trade is only part of the picture. The researchers estimate that the domestic consumption of frogs in Indonesia dwarfs the nation's exports by at least two- to seven-fold.

The U.N. estimates are rough, the researchers point out, and much remains unknown. For instance, it is almost impossible to identify which species are being traded. Endangered populations -- inadvertently or not -- may be part of the trade.

"They have a general idea of what species are taken, but the details are practically nonexistent," Bradshaw said.

"We don't know what species are getting hit, and the trade might be increasing on these species," agreed co-author David Bickford of the National University of Singapore.

The potential for frog population collapse from over harvesting is similar to what has happened with the world's marine fisheries, Bradshaw said. "We should have learned our lesson from fish, and exactly the same thing is happening with frogs."

The threat from human consumption sits against the background of global amphibian decline. At least 30 percent of all amphibian species are [threatened with extinction](#).

In an earlier study, the researchers analyzed data showing that habitat loss is by far the greatest contributor to decline. Disease and global warming are additional threats. But the contribution from hunting has been underestimated, the researchers suggest.

"The first and foremost [contribution] is habitat loss, and harvest comes in a close second," Bradshaw said.

Trade alone may not be enough of a problem to drive frog species to extinction, but when added to other threats the frogs face, the combination may be enough tip some species over the edge.

"It's rarely a single thing that drives things to extinction," Bradshaw noted. "We're losing species faster than you can say 'boo' in the amphibian world."