

# WCS documents pneumonia outbreak in endangered markhor

January 5 2012

---



Known for their impressive corkscrew horns and their spectacular climbing ability, the markhor (a wild goat species) is now threatened by a pathogen that causes pneumonia in its host. A recent die-off of markhor in Tajikistan in 2010 reduced that country's population by an estimated 20 percent. Credit: Tanya Rosen

If they didn't have enough to worry about from dodging poachers, snow leopards, and landslides in Central Asia's rugged mountains, a population of endangered markhor—a majestic wild goat species—has contracted pneumonia, detected for the first time by the Wildlife Conservation Society and partners in Tajikistan and France.

Markhor are known for their impressive corkscrew horns that can reach nearly five feet in length, and their spectacular climbing ability that

enables them to climb cliffs—and despite their large size, even trees—to feed. The pneumonia outbreak, which occurred in Tajikistan during September and October of 2010, is believed to have killed at least 65 markhors—as much as 20 percent of the [population](#) remaining in the country. Fewer than 2,500 markhor exist across their entire range.

The study appears in the December issue of the journal *Emerging Infectious Diseases*. Authors include Stéphane Ostrowski of the Wildlife Conservation Society; Francois Thiaucourt, Lucía Manso-Silván, and Virginie Dupuy of Centre de Coopération Internationale en Recherche Agronomique pour le Développement of Montpellier, France; Mulojon Amirbekov, Abdurahmon Mahmadoev, and Orom Ziyoev of Tajikistan's Ministry of Agriculture; Dustmurod Vahobov of the Tajikistan's Academy of Agricultural Sciences; and Stefan Michel of Tajikistan's Nature Protection Team. The work was supported in part by the German federal agency for international cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit).

The authors of the study believe that the markhor may have contracted the disease from domestic goats. Raising goats in habitats used by markhor is a necessity for local communities with few other livelihood options. This cohabitation increases the risk of transmission of infectious agents from domestic stock to wildlife.

The authors believe that a newly recorded pathogen in markhor may be responsible for the pneumonia outbreak. The case emphasizes the need for continuous disease surveillance in domestic animals that have contact with valuable wildlife resources, the authors said.

"So far, no new outbreaks have been reported since 2010," said Dr. Ostrowski, lead author on the study. "Recent investigations in the area of the outbreak have revealed that domestic goats test positive for a *Mycoplasma* bacteria that may cause pneumonia in both domestic and

wild goats. The Nature Protection Team, a Tajik nongovernmental organization, is working with communities to minimize contacts between domestic animals and markhor."

WCS has been leading efforts to save the remarkable markhor across its range. In the mountains of northern Pakistan, WCS now works with more than 20 communities to stop poaching and train community rangers to monitor markhor and enforce local hunting bans. In Afghanistan, WCS recently conducted wildlife surveys along the border of Tajikistan and discovered previously unrecorded populations of markhor in the Badakhshan Province. WCS, with funding from the American Association for the Advancement of Science (AAAS), is also bringing together health officials in Tajikistan, Afghanistan, and Pakistan to assess disease threats to markhor and other wildlife in the region.

Provided by Wildlife Conservation Society

Citation: WCS documents pneumonia outbreak in endangered markhor (2012, January 5) retrieved 26 April 2024 from <https://phys.org/news/2012-01-wcs-documents-pneumonia-outbreak-endangered.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.