Romania recently lifted a ban on hunting brown bears.

PHOTO: LAJOS BERDE

LETTERS

Edited by **Jennifer Sills**

Romanian brown bear management regresses

In 2016, Romania passed a ban on hunting bears (*1*), but in the years since, the country undertook no efforts to implement strategies to prevent human-carnivore interactions. In July 2024, the Romanian Parliament responded to a human fatality involving a brown bear by passing legislation that allowed hunters to kill 426 brown bears by the end of 2024 and an additional 426 individual bears in 2025 (*2*). The legislation emulates regulations in Sweden, but Sweden collects in-depth data about their brown bear population (*3*), whereas Romania lacks the relevant scientific data (*4*). The hunting quotas and management system included in this legislation will not address the risk of human-bear interactions and will undermine progress toward science-based management.

Hunting is unlikely to reduce human-bear conflict because the spatial distribution of quotas fails to take bear demography into account, and hunting does not necessarily target high-conflict areas or times of the year when conflict is most likely (*5*). Moreover, this approach ignores the roots of conflict, which include the management of factors that attract bears, such as waste and food; the habituation of bears to people; the degradation and fragmentation of habitats; tourism that involves unpredictable human behavior; and shifting perceptions of wildlife (*6*, *7*). Instead, the quota system encourages professional hunters, who keep pelts and skulls as trophies, to target the largest animals in the population (*8*). In addition to the lack of data informing the new policy, the legislation includes neither clear management objectives nor any measure that can be used to assess the cull's success on human-bear conflict mitigation.

Instead of relying only on hunting to decrease population size, Romania should implement proven strategies that promote coexistence. For example, the government could fund waste management that includes bear-proof containers, install warning signage for tourists in areas with a high density of bears and during sensitive periods, and ban people from feeding bears in urban and suburban areas. If other strategies fail, the government could facilitate the removal of problem bears on a case-by-case basis (*9*).

Romania should engage in public outreach and education to ensure that the public tolerates the level of brown bear abundance that is necessary for ecosystem sustainability (*10*). Romania's policies should also take into account the brown bear's status as a "strictly protected species" according to the Bern Convention (*11*). To protect its people and its bears, the Romanian government should capitalize on the growing knowledge generated by the scientific community and replace the hunting policy with a transparent, inclusive, multidisciplinary science–based wildlife management strategy.

Mihai I. Pop[1,2], Ruben Iosif[3], Barbara Promberger-Fürpass[3], Silviu Chiriac[4], Ágnes Keresztesi[1], Laurentiu Rozylowicz[5], Viorel D. Popescu[5,6]*

[1]Research and Development Institute for Wildlife and Mountain Resources, Miercurea-Ciuc, Harghita, Romania. [2]Association for Biodiversity Conservation, Focsani, Vrancea, Romania. [3]Foundation Conservation Carpathia, Brasov, Brasov, Romania. [4]Vrancea Environmental Protection Agency, Focsani, Vrancea, Romania. [5]Center for Environmental Research, University of Bucharest, Bucharest, Romania. [6]Department of Ecology, Evolution, and Environmental Biology, Columbia University, New York, NY, USA.
*Corresponding author.
Email: dvp2110@columbia.edu

REFERENCES AND NOTES

1. V. D. Popescu, M. I. Pop, S. Chiriac, L. Rozylowicz, *Science* **364**, 1041 (2019).
2. Portal Legislativ, Law 242/23.07.2024 [in Romanian]; https://legislatie.just.ro/Public/DetaliiDocument/285830.
3. C. Milleret, P. Dupont, G. Chapron, J. E. Swenson, R. Bischof, *Science* **385**, 1052 (2024).
4. V. D. Popescu, K. A. Artelle, M. I. Pop, S. Manolache, L. Rozylowicz, *J. Appl. Ecol.* **53**, 1248 (2016).
5. Romanian Ministry of Environment, "Brown bear authorizations and hunting report for 2024" (2024) [in Romanian]; https://www.mmediu.ro/articol/situatia-centralizata-privind-autorizatiile-si-rapoarte-le-de-derogare-intocmite-conform-l-242-2024-actualizate-la-data-de-31-12-2024/7759.
6. M. I. Pop *et al.*, *Cons. Sci. Pract.* **5**, e12884 (2023).
7. A. C. Neagu, S. Manolache, L. Rozylowicz, *Nat. Conserv.* **50**, 65 (2022).
8. V. D. Popescu, M. I. Pop, L. Rozylowicz, *Science* **372**, 1049 (2021).
9. M. L. Lute, N. H. Carter, J. V. López-Bao, J. D. C. Linnell, *Biol. Cons.* **218**, 223 (2018).
10. J. D. C. Linnell, L. Boitani, "Developing methodology for setting Favourable Reference Values for large carnivores in Europe" (European Commission, 2025).
11. A. Trouwborst, L. Boitani, J. D. C. Linnell, *Biodiv. Cons.* **26**, 37 (2017).

10.1126/science.adv0410

Equitable access needed in clinical research

In her News story "Cornerstone medical ethics guidelines get a major update" (1 November 2024, p. 473), C. O'Grady describes recent changes to the Declaration of Helsinki (*1*). Although the revision includes improvements, O'Grady explains that some issues were overlooked, such as obligations to research participants and their communities. These oversights are particularly stark in tuberculosis (TB) research, and the resulting disparities illustrate the importance of addressing inequities systemically.

Everyone has the right to enjoy the benefits of scientific progress and its applications (*2*, *3*), but this right remains neglected in the design, implementation, and application of TB clinical research. TB disproportionately affects communities in resource-poor settings (*4*), and the development of new drugs and diagnostics requires research participation from local populations. Yet disparities result from the lack of preapproval (*5*) and postapproval access (*6*) to medications. Early trials of the new TB drug delamanid, for example, were conducted in South Africa (*7*–*9*). When the drug was found to be effective, its cost was too high for widespread use in the country (*7*). Patent enforcement has further limited access to more affordable generic versions in South Africa and in other high-burden TB settings whose communities contributed to the drug's development (*10*).

Much more work is required to ensure equitable access to life-saving medical products. Instead of serving only as trial participants, vulnerable groups should participate in the full research process, from its conception through finalization. Vulnerable groups must benefit from the products they

helped to create. Too often, lack of preapproval access, such as compassionate use programs (also known as expanded access programs) that provide investigational drugs to those without other treatment options, prevents medications from reaching those who need them most. High pricing, enforcement of unjustified patents, and lack of product registration in the country of the clinical trial (a legal prerequisite before local procurement in all countries) can also hinder equitable access (*11*).

By failing to endorse preapproval and postapproval access for all populations, the updated Declaration of Helsinki misses an important opportunity to enshrine this right for the communities whose brave decisions to participate in clinical research benefit everyone. Therefore, product and research sponsors must include posttrial access plans at the time of protocol submission, and governments must hold them accountable for delivering on these access plans. To uphold human rights, the next amendment of the Declaration must codify pre- and postapproval access to the fruits of research.

Gisa Dang[1]*, Christophe Perrin[2], Jennifer Furin[3]
[1]Treatment Action Group, San Diego, CA, USA. [2]Médecins Sans Frontières (Doctors Without Borders), Paris, France. [3]Department of Global Health and Social Medicine, Harvard Medical School, Boston, MA, USA.
*Corresponding author.
Email: gisadangjsh@gmail.com

REFERENCES AND NOTES

1. World Medical Association, *JAMA* **333**, 71 (2024).
2. M. Frick, I. Henry, E. Lessem, *Health Hum. Rights* **18**, 9 (2016).
3. United Nations, "International Covenant on Economic, Social and Cultural Rights, Article 15" (1966); https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-economic-social-and-cultural-rights.
4. S. Litvinjenko *et al.*, *Lancet Infect. Dis.* **23**, 1395 (2023).
5. C. A. Rodriguez *et al.*, *Pub. Health Action* **9**, 32 (2019).
6. E. Lessem *et al.*, *Int. J. Infect. Dis.* **32**, 56 (2015).
7. M. Pai, J. Furin, *eLife* **6**, e25956 (2017).
8. Otsuka Pharmaceutical Development & Commercialization, Pharmacokinetic and safety trial to determine the appropriate dose for pediatric patients with multidrug resistant tuberculosis, ClinicalTrials.gov ID NCT01856634 (2018); https://clinicaltrials.gov/study/NCT01856634.
9. Otsuka Frankfurt Research Institute GmbH, Safety, efficacy and pharmacokinetics of OPC-67683 in patients with pulmonary tuberculosis, ClinicalTrials.gov ID NCT00401271 (2007); https://clinicaltrials.gov/study/NCT00401271.
10. Médecins Sans Frontières, "DR-TB drugs under the microscope 2022" ed 8 (Médecins Sans Frontières, 2022); https://msfaccess.org/dr-tb-drugs-under-microscope-8th-edition.
11. J. E. Miller *et al.*, *JAMA Netw. Open* **4**, e217075 (2021).

10.1126/science.adv2394

OUTSIDE THE TOWER

Women-driven community education in Nepal

Under a tent near the local high school in rural Nepal, parents and teachers gathered on the grass to watch students perform the play they had written to emphasize the importance of maternal and neonatal health. The students playing doctors advised those playing parents-to-be that they should deliver in a hospital, attend routine pre- and postnatal checkups, and avoid smoking and alcohol consumption during pregnancy. The adults in the audience, who usually receive such messages only from members of nongovernmental organizations visiting from nearby cities, listened attentively. "We didn't realize our students were becoming such influential community leaders," one school principal remarked with pride.

The event was part of a community engagement initiative that we launched in 2024, supported by the Bill and Melinda Gates Foundation, to address urgent public health challenges in rural Nepal and strengthen science, technology, engineering, and mathematics (STEM) education. We developed a curriculum that included topics such as nutrition, infectious diseases, teenage pregnancy, and the basics of microbiome science in the context of diet and antibiotics. We used the lessons to train six Nepali women with basic nursing backgrounds, revising the curriculum along the way in response to their input about the needs of their communities. The nurses then led monthly discussion sessions with high school students, facilitating conversations that bridged scientific knowledge and local concerns. The students also took part in engaging activities such as debates, presentations, and performance arts. The performance about maternal health served as a testament to their newly gained knowledge.

Watching the students participate in community events to share their knowledge has reinforced our belief in the value of context-specific, community-driven engagement. We hope that the participants, including the trained nurses and the students, will continue to foster curiosity and trust in science in their communities, contributing to the development of the next generation of local public health advocates and leaders.

High school students in Nepal perform an original play about maternal health for the community.

PHOTO: AASHISH JHA

Arya Gautam[1], Sandesh Ghimire[1], Aashish R. Jha[2,3,4]*
[1]Sabitri Sciences, Kathmandu, Nepal. [2]Genetic Heritage Group, Program in Biology, New York University Abu Dhabi, Abu Dhabi, UAE. [3]Public Health Research Center, New York University Abu Dhabi, Abu Dhabi, UAE. 4Center for Genomics and Systems Biology, New York University Abu Dhabi, Abu Dhabi, UAE.
*Corresponding author. Email: jhaar@nyu.edu

10.1126/science.ads8799

Call for submissions

Outside the Tower is an occasional feature highlighting scientists' advocacy experiences. Submit your advocacy story at http://cts.sciencemag.org.