LETTERS

Edited by **Jennifer Sills**

Editor's note: Harassment policy

We have heard from readers with concerns about the publication of the Letter "Harassment charges: Injustice done?" (A. Moya *et al.*, 17 August, p. 655). At *Science*, we take harassment issues very seriously. We are working to develop policies that adhere to our editorial principle of airing a wide range of perspectives and that also prevent causing further harm to the targets of harassment.

Publication of a Letter does not represent an endorsement by the editorial staff at *Science*. Past practice has been based on the understanding that reader-submitted Letters are intended to reflect conversations taking place in the scientific community. The published Letter in question did that by raising concerns about the transparency of the investigatory process. This point touched on the challenges institutions face when determining how the processes and outcomes of harassment investigations should be shared, decisions that must weigh the benefits of transparency against important privacy concerns. However, the Letter also discussed the personal conduct and scientific accomplishments of the individual found guilty of harassment.

In the future, we will not publish Letters in which authors argue that an individual accused or found guilty of harassment is likely innocent because others have interacted with that person without incident; this argument is logically flawed. In addition, although some information about a person's scientific achievements is at times necessary to establish context, we will not publish Letters in which authors argue that professional achievements have any bearing at all on the likelihood that the individual engaged in harassment. Such arguments not only lack relevance to harassment behavior but also may result in further harm to the targets of harassment and exacerbate the already daunting process that targets face in coming forward publicly.

We are striving to increase our understanding of all facets of the issue of harassment and to review and modify our editorial processes accordingly.

Jeremy Berg
Editor-in-Chief

10.1126/science.aav6183

PPR virus threatens wildlife conservation

Peste des petits ruminants (PPR), a viral disease that affects domestic small ruminants with high morbidities and mortalities across more than 70 countries, engenders a global cost of US$2.1 billion and compromises livelihoods of some 900 million poor and low-income people (*1*, *2*). PPR has generally been regarded globally as only a livestock problem (*1*), but it is also a wildlife conservation challenge.

PPR has spread from its historic range of Africa, West Asia, and the Middle East to the vast and remote steppes and mountains of Eastern Asia, threatening even more wildlife. The mass mortality event affecting more than two-thirds of the critically endangered Mongolian saiga (*Saiga tatarica mongolica*) population in 2017 is one example of PPR's reach (*3*). PPR has also been diagnosed in mountain ungulate mortalities in the Middle East (*4*) and detected along the Himalayas (*5*) and the Tian Shan and Altai ranges (*6*).

PPR clearly threatens saiga populations, but its impact on other steppe and mountain ungulates of Asia is unknown. The inaccessibility of their habitats, together with the lack of wildlife health surveillance programs across large areas, contributes to underestimating and underreporting of PPR mortality events. The circulation of PPR in Asia may have grave consequences in wild populations that already struggle with overhunting, poaching, livestock competition, and stochastic climatic events. For example, in 2018, multiple PPR-related mortalities of the Siberian ibex (*Capra sibirica*) were recorded in Mongolia (*7*), and PPR-related mortalities of wild ungulates were found in

PHOTO: WILDLIFE CONSERVATION SOCIETY (WCS) MONGOLIA

The peste des petits ruminants (PPR) viral disease has decimated the Mongolian saiga population.

Flooding during hurricanes increases the chance of chemicals contaminating the environment.

Iran (*8*). PPR is also of special concern for the conservation of the susceptible markhor (*Capra falconeri*), argali (*Ovis ammon*), and goitered gazelle (*Gazella subgutturosa*), considered vulnerable by the IUCN (*9*), and for the survival of the snow leopard (*Panthera uncia*), which relies on prey abundance. A robust assessment will require better baseline information on population size and trends. More efforts to conduct PPR surveillance and integrate wildlife protection into control strategies are urgently required.

Xavier Fernandez Aguilar,[1]* Amanda E. Fine,[2] Mathieu Pruvot,[2] Felix Njeumi,[3] Christian Walzer,[2,4] Richard Kock,[1] Enkhtuvshin Shiilegdamba[2]

[1]Department of Pathobiology and Population Sciences, Royal Veterinary College, London NW1 0TU, UK. [2]Wildlife Conservation Society, Bronx, NY 10460, USA. [3]Food and Agriculture Organization of the United Nations, FAO, 00153 Rome, Italy. [4]Research Institute of Wildlife Ecology, University of Veterinary Medicine, A-1160 Vienna, Austria.
*Corresponding author.
Email: xfdezaguilar@gmail.com

REFERENCES

1. "Global strategy for the control and eradication of PPR" (Tech. Rep. FAO-OIE, 2015).
2. B. Jones *et al.*, *PLOS ONE* **11**, e0149982 (2016).
3. R. Kock, "Investigation of peste des petits ruminants (PPR) among wild animals and its potential impact on the current PPR situation in livestock" (Crisis Management Centre for Animal Health, Tech. Rep. FAO-OIE, 2017).
4. M. Marashi *et al.*, *Emerg. Infect. Dis.* **23**, 704 (2017).
5. J. Bao *et al.*, *China Res. Vet. Sci.* **90**, 238 (2011).
6. J. Li *et al.*, *Transbound. Emerg. Dis.* **64**, e43 (2017).
7. Science for Nature and People Partnership (SNAPP) team: Steppe Health (https://snappartnership.net/teams/steppe-health/).
8. ProMED-mail, "Peste des petits ruminants - Iran: (AL) wildlife" (Archive number 20180928.6058637, 28 September 2018); www.promedmail.org.
9. The IUCN Red List of Threatened Species, *Gazella subgutturosa* (www.iucnredlist.org/details/8976/0).

10.1126/science.aav4096

Preventing chemical release in hurricanes

With the promise of a dramatic hurricane season, the Perspective "Regulate to reduce chemical mixture risk" (A. Kortenkamp and M. Faust, 20 July, p. 224) provides additional context about the environmental risk from chemical mixtures. As a result of climate change, coastal cities around the world are predicted to experience severe storms and strong hurricanes with greater regularity, taxing infrastructure and the resources of response agencies (*1*, *2*). Storm-related flooding and coastal storm surges increase the risk of effluent release and transport (*3*), exposing populations to chemical and waste products and the potential for long-lasting health impacts (*4*, *5*). The combination of sewage overflow, petroleum runoff from roads, and discharge from chemical plants, such as those that occurred under Hurricane Harvey (*6*) and Hurricane Florence (*7*), can damage the health of first responders, the local population, and the physical environment (*7*–*10*).

As Kortenkamp and Faust explained, local, state, and national pre-disaster risk models have not yet comprehensively incorporated into their algorithms the location and potential for sudden effluent or chemical release during a natural disaster. We must work to update these models in order to protect both human and ecosystem health (*11*). Ensuring the stability of chemical and sewage infrastructure to prevent unregulated compound mixing in the environment is critical to securing health under an increasingly volatile climate regime. A coastal urban ecosystem already suffering from storm damage must be protected from uncontrolled pollution exposure, and this reality needs to be integrated into long-term planning for regional and national agencies.

Kimberley Miner,[1,2]* Nicole Wayant,[2] Heather Ward[2]

[1]Climate Change Institute, University of Maine, Orono, ME 04469, USA. [2]Geospatial Research Lab, U.S. Army Engineer Research and Development Center, Alexandria, VA 22315, USA.
*Corresponding author.
Email: kimberley.miner@maine.edu

REFERENCES

1. C. Rosenzweig, W. Solecki, *Glob. Environ. Chang.* **28**, 395 (2014).
2. U.S. National Climate Assessment, *Climate Change Impacts in the United States* (2014).
3. A. Kenward, N. Zenes, J. Bronzan, J. Brady, K. Shah, "Overflow: Climate change, heavy rain, and sewage" (2016); http://assets.climatecentral.org/pdfs/Overflow_sewagereport_update.pdf.
4. M. Nadal, M. Marquès, M. Mari, J. L. Domingo, *Environ. Res.* **143**, 177 (2015).
5. V. Kapoor, I. Gupta, A. B. M. T. Pasha, D. Phan, *Environ. Sci. Technol. Lett.* **5**, 322 (2018).
6. H. Tabuchi, S. Kaplan, "A sea of health and environmental hazards in Houston's floodwaters," *New York Times* (2017); www.nytimes.com/2017/08/31/us/houston-contaminated-floodwaters.html.
7. K. Pierre-Louis, K. Popovich, H. Tabuchi, "Florence's floodwaters breach coal ash pond and imperil other toxic sites," *New York Times* (2018): www.nytimes.com/interactive/2018/09/13/climate/hurricane-florence-environmental-hazards.html.
8. J. Cabral-Oliveira, J. Pratas, S. Mendes, M. A. Pardal, *Hum. Ecol. Risk Assess.* **21**, 135 (2015).
9. M. Al Aukidy, P. Verlicchi, *Sci. Total Environ.* **607–608**, 483 (2017).
10. R. Herbert *et al.*, *Environ. Health Perspect.* **114**, 1853 (2006).
11. J. Xie *et al.*, *Environ. Model. Softw.* **95**, 143 (2017).

10.1126/science.aav3822

TECHNICAL COMMENT ABSTRACTS

Response to Comment on "U-Th dating of carbonate crusts reveals Neandertal origin of Iberian cave art"

D. L. Hoffmann, C. D. Standish, M. García-Diez, P. B. Pettitt, J. A. Milton, J. Zilhão, J.J. Alcolea-González, P. Cantalejo-Duarte, H. Collado, R. de Balbín, M. Lorblanchet, J. Ramos-Muñoz, G.-Ch. Weniger, A. W. G. Pike

Slimak *et al.* challenge the reliability of our oldest (>65,000 years) U-Th dates on carbonates associated with cave paintings in Spain. They cite a supposed lack of parietal art for the 25,000 years following this date, along with potential methodological issues relating to open-system behavior and corrections to detrital or source water ^{230}Th. We show that their criticisms are unfounded.
Full text: dx.doi.org/10.1126/science.aau1736

Editor's note: Harassment policy

Jeremy Berg

Science **362** (6411), 165.
DOI: 10.1126/science.aav6183