Correspondence

Protect environment from armed conflicts

The United Nations' International Law Commission is meeting this month to push forward a 2013 programme to protect the environment in regions of armed conflict (go.nature.com/2ewdyj). We call on governments to incorporate explicit safeguards for biodiversity, and to use the commission's recommendations to finally deliver a Fifth Geneva Convention to uphold environmental protection during such confrontations.

Despite calls for a fifth convention two decades ago, military conflict continues to destroy megafauna, push species to extinction and poison water resources (see, for example, J. C. Brito *et al. Conserv. Lett.* https://doi.org/gfhst9; 2018). The uncontrolled circulation of arms exacerbates the situation, for instance by driving unsustainable hunting of wildlife.

A Fifth Geneva Convention would provide a multilateral treaty that includes legal instruments for site-based protection of crucial natural resources. Companies and governments need to work together to regulate arms transfer (see go.nature.com/2lgtfx). And the military industry must be held more accountable for the impact of its activities.

Sarah M. Durant *Zoological Society of London, UK.*
José C. Brito *University of Porto, Portugal.*
Supported by 22 signatories; see go.nature.com/2yfrjrw.
jcbrito@cibio.up.pt

Citizen surveys could map snakebite risks

Snakebites kill an estimated 81,000–138,000 people and disable 400,000 globally every year. The World Health Organization and the Wellcome Trust are both taking action (go.nature.com/2xxrizc and *Nature* https://doi.org/c8jk; 2019). We suggest that citizen science could also help to reduce the toll.

More than 50 Facebook groups share snake images and related metadata. Crowdsourced photographic evidence is being used to rapidly identify snake species globally (see go.nature.com/2xge7b2 and go.nature.com/2xlecpq).

Such data could increase our understanding of snakebite epidemiology. By combining this information with human-population data, we could identify populations that are most at risk from snakebites. This would help us to attribute clinical symptoms to particular species and steer treatments to where they are needed.

Rafael Ruiz de Castañeda, **François Grey** *University of Geneva, Switzerland.*
David J. Williams *University of Melbourne, Parkville, Victoria, Australia.*
rafael.ruizdecastaneda@unige.ch

Diversity helps to manage wildfires

As professionals who study the control and prevention of wildfires, we argue that reducing the resulting loss of life and property calls for the involvement of socially diverse local communities.

People from different cultural backgrounds respond differently to wildfire risk, as do men and women (C. Eriksen *Gender and Wildfire: Landscapes of Uncertainty*; Routledge, 2013). This presents practical and policy challenges for firefighting agencies. For instance, fire prevention and emergency warning must be tailored to specific groups. And engagement with local communities could be an awkward fit with wildland firefighting institutions, which are strongly hierarchical and have a masculine culture (A. M. S. Smith and E. K. Strand *Fire* **1**, 45; 2018).

Fire-prevention strategies should include public education and real-time mass communication (see also A. M. S. Smith *et al. Bioscience* **66**, 130–146; 2016). Communities need advice on managing fire risk. This requires devolution of political power from centralized bureaucracies to local organizations, and promotion of disciplinary, sectoral and social diversity among fire scientists, policymakers and wildfire managers.

David M. J. S. Bowman *University of Tasmania, Hobart, Australia.*
Cathelijne Stoof *Wageningen University, Wageningen, the Netherlands.*
david.bowman@utas.edu.au

Strategic science advice for Europe

What the European Union is doing right in research is encouraging scientists to collaborate across borders (see *Nature* **569**, 455; 2019). It also boosts communication between researchers and decision makers at the science–policy interface. This is a daunting endeavour in the European Parliament's volatile, multilingual and multicultural political environment.

An internal source of strategic advice is therefore crucial for providing the scientific facts needed to resolve difficult arguments in negotiations. This source is the Panel for the Future of Science and Technology (STOA), which works with parliamentary committees on issues related to science and technology. It has an impartial agenda-setting role in the EU policy cycle, creating policy options for different scenarios and assessing their likely social impact. STOA's findings are made public.

For example, a STOA study on the ethics of cyberphysical systems helped to shape the European Parliament's resolution on civil-law rules on robotics (see go.nature.com/2xeji9n). Another study, on precision agriculture, fed into the legislative proposals on the common agricultural policy beyond 2020 (see go.nature.com/2xjft4u).

Gianluca Quaglio, **Lieve Van Woensel**, **Theodoros Karapiperis** *European Parliament, Brussels, Belgium.*
gianluca.quaglio@europarl.europa.eu

Borexino project's safety record

Contrary to allegations about conditions in our underground laboratory and the threat to local drinking water, Italy's Borexino Collaboration has worked responsibly with the local community for 27 years to protect safety and well-being (see *Nature* **569**, 466; 2019).

Our world-class experiment has measured 99% of the processes that power the Sun. The system has been continuously monitored since 2007, and has been certified as safe by independent hazard and operability professionals. The detector is designed to withstand earthquakes with a peak ground acceleration that exceeds maxima so far experienced in the Gran Sasso region. The Borexino laboratory was undamaged by local seismic events in 2009, 2016 and 2017.

The 2002 spill was less than 50 litres owing to internal safeguards. There is no evidence that it polluted the community's drinking water. Since then, the Italian government has further barricaded and monitored the lab. Borexino's liquid system is completely enclosed and isolated from water-collection points.

Borexino has been approved since 2004 as fully compliant with European regulations against major accidents involving dangerous substances.

Gioacchino Ranucci* *National Institute of Nuclear Physics, Milan, Italy.*
**On behalf of the Borexino Collaboration; see go.nature.com/2jxjzds.*
gioacchino.ranucci@mi.infn.it