

Science journalism and a multi-directional science-policy-society dialogue are needed to foster public awareness for biodiversity and its conservation

Jonas Geschke, Matthias C. Rillig, Katrin Böhning-Gaese, Thomas Potthast, Adina Arth, Lynn V. Dicks, Fritz Habekuss, Daniela Kleinschmit, Harald Lesch, Eva M. Spehn, Silvio Wenzel, Markus Fischer, Alexandra-Maria Klein

Correspondence to: jonas.geschke@unibe.ch

S2 Text

Glossary of terminologies (that we feel are important to define)

- Science communication – Communication and exchange of scientific ideas, research, findings, and knowledge in a way that is accessible, understandable, or useful to and with non-expert audiences.

Further reading:

- Burns, T. W., O'Connor, D. J., & Stocklmayer, S. M. (2003). Science communication: a contemporary definition. *Public understanding of science*, 12(2), 183-202.

- Evidence-based knowledge – Knowledge that has been objectively proven through research results. Strong evidence is given when results are based on synthesizing many studies such as in form of a meta-analysis.

Further readings:

- Mupepele, A. C., Walsh, J. C., Sutherland, W. J., & Dormann, C. F. (2016). An evidence assessment tool for ecosystem services and conservation studies. *Ecological Applications*, 26(5), 1295-1301.
- Jensen, E. A., & Gerber, A. (2020). Evidence-based science communication. *Frontiers in Communication*, 78.

- Fake news – News that is made-up or manipulated without scientific evidence and spread fast primarily via the internet and social media.

Further readings:

- Gelfert, A. (2018). Fake news: A definition. *Informal Logic*, 38(1), 84-117.
- Tandoc Jr, E. C., Lim, Z. W., & Ling, R. (2018). Defining “fake news” A typology of scholarly definitions. *Digital journalism*, 6(2), 137-153.

- Biodiversity-related sciences – Scientific disciplines that work with or on biodiversity, as well as those that are indirectly or directly interlinked with biodiversity.

Further reading:

- CBD – Convention on Biological Diversity. Biodiversity-related Conventions. URL: <https://www.cbd.int/brc/>

- Global (environmental) crises – Changes at a global extent for which scientists predict that the current status of a measure (e.g. temperature, ecosystem functioning) is close to its tipping point with irreversible consequences for the planet and/or human kind.

Further readings:

- Ripple, W. J., Wolf, C., Newsome, T. M., Gregg, J. W., Lenton, T. M., Palomo, I., ... & Rockström, J. (2021). World scientists' warning of a climate emergency 2021. *BioScience*, 71(9), 894-898.
- WEF – World Economic Forum (2021). The Global Risks Report 2021, 16th Edition.
- Lenton, T. M., Rockström, J., Gaffney, O., Rahmstorf, S., Richardson, K., Steffen, W., & Schellnhuber, H. J. (2019). Climate tipping points—too risky to bet against. *Nature* 575, 592-595.
- Oliver, T. H. (2016). How much biodiversity loss is too much?. *Science*, 353(6296), 220-221.

- IPBES – the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.

Further reading:

- <https://ipbes.net/about>

- Kunming-Montreal Global Biodiversity Framework (GBF) – the strategic plan of the Convention on Biological Diversity (CBD) from 2023 till 2030.

Further reading:

- The CBD press release on the GBF: <https://www.cbd.int/article/cop15-final-text-kunming-montreal-gbf-221222>
- The text of the GBF: <https://www.cbd.int/doc/c/e6d3/cd1d/daf663719a03902a9b116c34/cop-15-1-25-en.pdf>

- Science journalism – Journalism trained to report on research findings in a dialogue with experts, politics and the public.

Further readings:

- Dunwoody, S. (2021). Science journalism: Prospects in the digital age. In *Routledge handbook of public communication of science and technology* (pp. 14-32). Routledge.
- Guenther, L. (2019). Science journalism. In *Oxford research encyclopedia of communication*.