

# nature

## Nature is committed to diversifying its journalistic sources

The latest data are in on the diversity of people interviewed for the journal's News, Features and Careers articles, and audio and video content.

How can *Nature's* journalists reach out to the broadest possible set of scientists and research-associated professionals in our journalism? That's the question at the heart of our three-year effort to track the diversity of the sources interviewed in the journal's News, Features and Careers articles, and in audio and video content.

Journalism is a mirror of the community in which it exists – as communities and societies change, journalistic practice and content have to keep up, both to stay relevant and to reflect the needs and priorities of audiences accurately. That's why, in April 2021, *Nature's* journalism teams began recording three characteristics of diversity for their written, audio and video content: the pronouns of the people interviewed, their geographical location and their career stage.

Men dominate the senior rungs of science and, historically, scientists and institutions in North America and Europe have dominated scientific publishing. Both trends are starting to change, albeit at different speeds.

We published an initial set of statistics last February, covering the period from 1 April 2021 to 31 January 2023. Here, we provide an update for 1 February 2023 to 31 January 2024 (see 'Diversity in *Nature's* journalism').

Our previous analysis of 1,241 written articles, podcasts and video content revealed that 59.6% of sources quoted or paraphrased used he/him pronouns; 76.6% were from North America or Europe; and 67.9% were established in their careers.

For the 862 journalistic pieces in the current analysis, *Nature's* staff journalists and freelance writers interviewed 3,679 sources. Of these, 3,569 (97%) provided their pronouns. These broke down into 2,147 sources (60.2%) who used he/him pronouns, 1,401 (39.3%) who used she/her and 21 (0.6%) who had they/them or other pronouns. These ratios are broadly unchanged from our earlier data.

In total, 3,635 sources gave their geographical location. Of those, 2,865 (78.8%) were based in either North America or Europe, and 770 (21.2%) in the rest of the world. That represents a decrease in regional diversity compared with our previous analysis, which showed that 23.4% of sources

were outside North America and Europe.

Finally, when it comes to career stage, 3,478 sources provided data. Of these, 2,158 (62%) identified as established in their careers – including sources, such as professors and those who hold tenure, and non-academic ones with senior roles. Some 18.8% of sources fell in the 'early career' category, including graduate students, postdocs and non-tenured faculty members, compared with 19.6% previously. Around 19.1% fell into the 'other' category, which includes people in non-academic environments, such as industry, campaign organizations and policy. This group's share in *Nature's* journalistic content has increased from 12.5%.

There are some caveats to our analysis. These data were gathered by *Nature's* journalism teams in North America, Europe and the Asia-Pacific region. They do not include journalistic content commissioned by our other offices. Nor do they include content written by external authors, such as World Views and Careers columns. Furthermore,

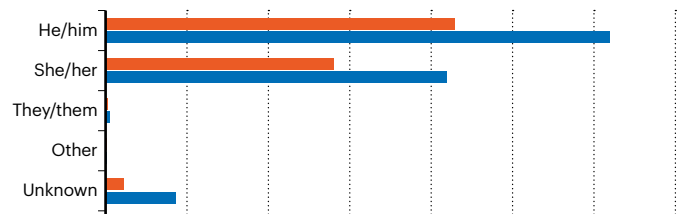
### DIVERSITY IN NATURE'S JOURNALISM

Breakdown of 5,492 people quoted or paraphrased in *Nature's* journalistic content (written articles, podcasts and videos) published between 1 April 2021 and 31 January 2023, and 3,679 interviewed between 1 February 2023 and 31 January 2024.

February 2023 to January 2024 April 2021 to January 2023

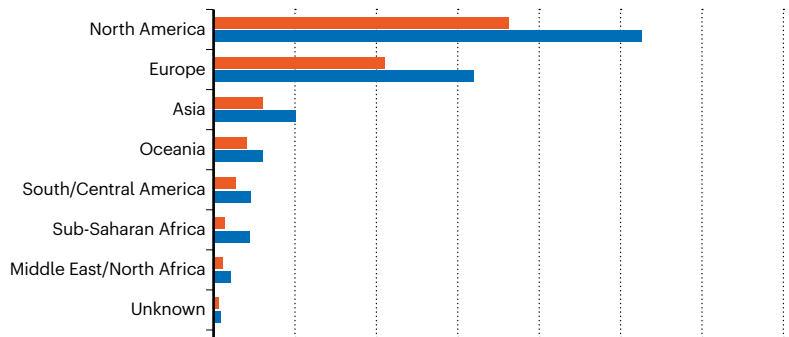
#### Breakdown of people quoted by gender

Pronouns that people identify with



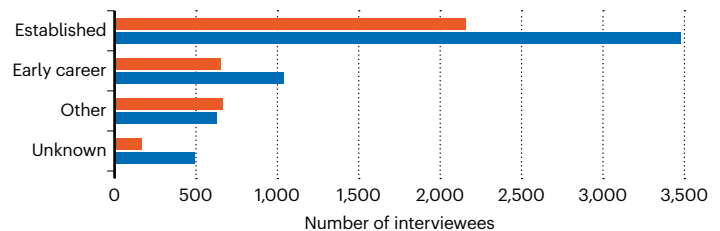
#### Geographical location

Where people are based



#### Career stage

The proportion of professors, postdocs and policymakers



the results have not been tested for statistical significance.

Still, the results provide a good overview for a large proportion of *Nature's* journalism. We realize that reporting our findings is only the first step towards improving the diversity of our sources. *Nature's* journalism teams are currently expanding their networks and are also looking at best practice in media and publishing industries.

Diverse sources produce stronger journalism – and better represent today's global scientific community. The shape and priorities of world science are changing, and we must adapt to reflect those changing realities.

## Don't rush into commercial deep-sea mining

**Why are companies and governments determined to start commercial-scale mining for rare metals, when so little is known about its wider impacts?**

**F**or more than a week, representatives of nations around the world have been meeting at a session of the International Seabed Authority (ISA) in Kingston, Jamaica. The ISA was established under the UN Convention on the Law of the Sea 30 years ago with the task of protecting the sea bed in international waters – which comprise roughly half of the world's ocean. The goal of the latest meeting is to write the rules for the commercial mining of metals such as cobalt, manganese and nickel. These are needed in increasing quantities, mainly to power low-carbon technologies, such as battery storage.

The meeting is set to end on 29 March, and there's mounting concern among researchers that the final text is being rushed, not least because some countries including China, India, Japan and South Korea want to press ahead with commercial exploitation of deep-sea minerals. Some in the mining industry would like excavations to begin next year.

China dominates the global supply of critical minerals and so far has the most sea-bed exploration licences of any country. These permits do not allow commercial exploitation. One company, meanwhile, The Metals Company, based in Vancouver, Canada, wants to apply for a commercial permit, potentially in late July.

There is little justification for such haste. Commercial sea-bed mining is not permitted for a reason: too little is known about the deep-sea ecosystem, such as its biodiversity, and its interactions with other ecosystems, and the impact of disturbance from commercial operations. Until we have the results of long-term studies, the giant robotic underwater excavators, drills and pumps that are ready to go must remain parked. Researchers have told *Nature* that



**Commercial sea-bed mining is not permitted for a reason: too little is known about the deep-sea ecosystem."**

the text is nowhere near ready, and that important due diligence is being circumvented. Outstanding issues need to be resolved, such as what is considered an acceptable level of environmental harm and how much contractors should pay the ISA for the right to extract minerals.

Last month, the ISA published the latest draft of its mining regulations text. This ran to 225 pages, and researchers and conservation groups were alarmed to see that, unlike previous drafts, it incorporated proposals that would speed up the process for issuing commercial permits, and it also weakened environmental protections.

Worryingly, a few of the changes in the latest text were not identified by square brackets – the practice in international negotiations to highlight wording that has not been agreed on by all parties. Nor were the sources for some changes attributed.

Furthermore, in an earlier version of the text, there was a proposal to include measures to protect rare or fragile ecosystems, but this wording is not in the latest draft. Another suggestion was to require that mining applications be decided on within 30 days of their receipt, rather than waiting for the ISA's twice-yearly meeting – an idea that has support from some in the industry and that does appear in the latest draft.

Proposing changes to draft texts is normal in a negotiation, but failing to publicly identify who is proposing them is not. It is damaging to trust and a risk to reaching an outcome in which all parties are happy.

Questions are rightly being asked of the leadership of the ISA secretariat, which organizes meetings and is responsible for producing and distributing texts, as well as the leadership of the ISA's governing council. *Nature* has reached out to the secretariat with questions, but no response was received by the time this editorial went to press. We urge the ISA to respond, engage and explain.

It is possible that the benefits to low-carbon technologies outweigh the risks of deep-sea mining if these are mitigated. But some 25 countries are calling for a moratorium on the practice, at least until the science is better understood. The European Parliament also backs a moratorium. This is also the official view of the High Level Panel for a Sustainable Ocean Economy, a group of 18 countries that pledged to not undertake commercial deep-sea mining in their national waters – despite founding member Norway's decision to open up applications for commercial licences, which the European Parliament has criticized.

The UN Convention on Migratory Species is urging that its member states should neither encourage nor engage in deep-sea mining "until sufficient and robust scientific information has been obtained to ensure that deep-sea mineral exploitation activities do not cause harmful effects to migratory species, their prey and their ecosystems".

The ISA and its member states should exercise care, make their decisions on a consensus of evidence and be transparent in doing so, because transparency is foundational to the success of international relations. The deep seas are the least explored parts of the planet; we should not allow for their loss before we even understand their complexities.