Conservation research is not happening in the right places

March 29 2016

Conservation research is not being done in the countries where it is most needed - a situation which is likely to undermine efforts to preserve global biodiversity. That's the conclusion of a new study publishing in the Open Access journal *PLOS Biology* on 29th March, led by Associate Professor Kerrie Wilson from The University of Queensland and the Australian Research Council Centre of Excellence for Environmental Decisions (CEED).

"Our analysis revealed that comparatively less conservation research is undertaken in the world's most biodiverse countries such as Indonesia and Ecuador" says Kerrie Wilson.

The study analysed over 10,000 conservation science papers from over 1,000 journals published in 2014. The researchers then compared the countries where these studies were done (and by whom) with the world's most important countries for biodiversity conservation. What they found suggested a massive mismatch in terms of need and effort.

"If you dig a little deeper, it gets worse. The science conducted in these countries is often not led by scientists based in those countries and these scientists are also underrepresented in important international forums." What this adds up to, says Wilson, is a widespread bias in the field of conservation science.

"If research is biased away from the most important areas for biodiversity conservation then this will accentuate the impacts of the

global biodiversity crisis and reduce our capacity to protect and manage the natural ecosystems that underpin human well-being," says Wilson.

Biases in conservation science will also undermine our ability to meet Target 19 of the Convention on Biodiversity (CBD). Target 19 states that "By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied."

"Our comprehensive analysis of publishing trends in conservation science literature suggest we won't meet this target if these biases aren't addressed," says Wilson.

The researchers believe that a range of solutions is needed. These include reforming open access publishing policies, enhancing science communication strategies, changing author attribution practices, improving representation in international processes, and strengthening infrastructure and human capacity for research in countries where it is most needed.

"We won't change the situation by simply ignoring it," says Wilson."Researchers need to examine their own agendas and focus on areas with the greatest need."

More information: Wilson KA, Auerbach NA, Sam K, Magini AG, Moss ASL, Langhans SD, et al. (2016) Conservation Research Is Not Happening Where It Is Most Needed. *PLoS Biol* 14(3): e1002413.DOI: 10.1371/journal.pbio.1002413

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