

KEYNOTE SPEECH

DOI 10.20315/SilvaSlovenica.0028.1



Rooted in Diversity: Women Changing and Shaping the Future of Science (and Forestry)

Zarja Muršič¹

¹ Freelance Science Communicator, zarja.mursic@gmail.com

Keywords: *women in science, diversity*

Extended summary

Science is commonly seen as a purely objective pursuit to find answers to research questions. It should not be affected by any biases or preconceptions we might have of the world around us. In reality, it does not work like this. In my work as a science communicator, I use a quote from British science writer Ed Yong, who stresses the importance of diversity, equity, and inclusion in science reporting. Yong says: “Science is often caricatured as a purely empirical and objective pursuit. But in reality, a scientist’s interpretation of the world is influenced by the data she collects, which are influenced by the experiments she designs, which are influenced by the questions she thinks to ask, which are influenced by her identity, her values, her predecessors, and her imagination.”

Of the many fields in which women have made an impact, two are close to my heart. These are ornithology and primatology. In studies of bird songs, male birds received most of the attention. The common understanding of this behaviour was that males sing to attract females. In the last few decades, researchers started noticing that females also sing and started updating their understanding of bird song and its function. Studies in the last decade have shown that females sing in up to 70% of birds (Odom et al. 2014; Webb et al. 2016). Studies of female birds have been predominantly led by women researchers (Haines et al. 2020). Women in primatology changed our understanding of male-female sexual dynamics and female roles in primate societies. For example, early primatologists in the first half of the 20th century focused on male behaviours and explained their behaviours as hierarchy forming. When women researchers eventually entered primatology and observed primates in their natural environment for a longer time, they discovered that female primates also play an important role in group dynamics (Tang-Martinez 2020). These changes in the understanding of animal behaviour would not have happened if women would not have entered these fields.

We are currently living in a climate crisis and the field of climate change studies is still heavily represented by men researchers, especially in the IPCC (Intergovernmental Panel on Climate Change) reports. The current report was co-authored by 33% of women researchers.

Our understanding of the world around us improves if it is rooted in diversity, inclusion, and equity. Science and society suffer through missing out on the contribution and imagination of underrepresented minorities.

We need to corroborate we are good role models for the younger generations and encourage women to enter fields of science and work that are predominantly seen as male professions, such as forestry. We also need to make certain women's perspectives and solutions are heard and used. Not because women offer them but because they might be different to the current

solutions as well as more suitable for the current issues. Science and forestry are better shaped thanks to the imagination, values, identity and unique perspectives of women and underrepresented minorities.

References

Yong, E. 2020. *What Even Counts as Science Writing Anymore?* *The Atlantic*.

<https://www.theatlantic.com/science/archive/2021/10/how-pandemic-changed-science-writing/620271/>

Tandon, A. 2023. *IPCC authors has changed over three decades.* *Climate Brief*.

<https://www.carbonbrief.org/analysis-how-the-diversity-of-ipcc-authors-has-changed-over-three-decades/>

Odom, K.J., Hall, M.L., Riebel, K., Omland, K.E. and Langmore, N.E., 2014. *Female song is widespread and ancestral in songbirds.* *Nature communications*. 5, 1: 3379.

<https://doi.org/10.1038/ncomms4379>

Webb, W.H., Brunton, D.H., Aguirre, J.D., Thomas, D.B., Valcu, M. and Dale, J., 2016. *Female song occurs in songbirds with more elaborate female coloration and reduced sexual dichromatism.* *Frontiers in Ecology and Evolution*. 4, 22.

<https://doi.org/10.3389/fevo.2016.00022>

Tang-Martínez, Z. 2020. *The history and impact of women in animal behaviour and the ABS: a North American perspective.* *Animal Behaviour*. 164: 251-260.

<https://doi.org/10.1016/j.anbehav.2019.12.011>

Haines, C.D., Rose, E.M., Odom, K.J. and Omland, K.E., 2020. *The role of diversity in science: A case study of women advancing female birdsong research.* *Animal behaviour*. 168: 19-24.

<https://doi.org/10.1016/j.anbehav.2020.07.021>