

Four decades among fungi - perspectives of an accidental mycologist

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I have been fortunate to work in a fungarium (reference collection of fungi) for much of the last four decades. I trace how my interest in population genetics morphed into a career in mycology, inspired by the simple question "what fungus is that?". I explore the step changes in mycology that I have participated in around nomenclature, bioinformatics, DNA barcoding, conservation and ecology. I emphasise the importance of the reconceptuliasation of fungi from "lower plants" to kingdom Fungi and why fungi-specific language (such as fungarium and sporing body) matters. I highlight the critical role of citizen science in advancing mycology in Australia. I stress the importance of collections and name infrastructure for taxonomic and systematic research on fungi. I have participated in the founding of organisations including the Australasian Mycological Society, Fungimap and Taxonomy Australia and I discuss the challenges around effectively connecting in an under-resourced sector. I take inspiration from the myriad interconnections between fungi and other organisms to underline the importance of mentoring and networking in tackling the task to describe all Australian fungi. I conclude by discussing opportunities for scientists to communicate their research and engage in discussions on pressing issues around habitat protection and the climate emergency.

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