**Title**

Pitfalls and opportunities in the changing landscape of biodiversity science

**Abstract**

Summarizing the current state of scientific knowledge has always been critical to research, but the rate at which new work is being published makes synthesis increasingly challenging. Ensuring that new research is an asset to researchers – rather than a burden – requires new ways to track changes in scientific information. In this talk, I will discuss developments in research synthesis, distinguishing between two broad yet complementary paradigms. Research that treats science as a collection of *facts* is seeing massive growth in standardised methods for collecting and aggregating research findings, which can then be used to inform management or decision-making. Simultaneously, research that treats science a collection of *ideas* is drawing on developments in NLP and text mining to deliver insights into the development of scientific concepts. In combination, these paradigms offer a powerful toolkit for understanding biodiversity science.

**Bio**

Martin Westgate is Science Advisor to the Atlas of Living Australia and a Visiting Fellow at the Fenner School of Environment & Society (ANU). His research focusses on ways to quantify changes in biodiversity through a combination of empirical research and evidence synthesis. Martin is also a statistical programmer and co-founder of the Evidence Synthesis Hackathon event series.