

## **Combining spatial ecology, modelling, and conservation science to save the world's biodiversity**

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The world's biodiversity is in serious trouble, with anthropogenic land-use change, climate change, and other pressures projected to drive declines in thousands species across the world, potentially leading to widespread global extinctions. This has profound impacts for humanity, but also will make the world a lonelier, sadder, and less wonderful place.

Understanding how to safeguard biodiversity while supporting a growing human population requires a combination of broad, big picture, thinking; an ability to project how and where human pressures will be greatest; detailed, interdisciplinary, on-the-ground expertise; and a whole load of advanced, spatially explicit modelling. In this talk I will outline what I see as the biggest challenges for 21st century conservation science and focus on the areas where there is a real need for genuine interdisciplinary collaboration. In particular, I will discuss recent international targets for protecting 30% of the world for biodiversity; on why this may be neither sufficient nor necessary to safeguard the world's biodiversity; and on why conservation science need the brains at this workshop to help plot a pathway to a nature-friendly future.