Where's Weedy? Outlining the case for improved weed data aggregation to improve on-ground outcomes for management

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Abstract

Aggregated biological data that is widely and freely available provides an invaluable resource to underpin the conservation of biological diversity. These data can be used directly by land managers, or by scientific researchers with the aim of informing land management decisions. While many biodiversity aggregation databases are great at capturing the distribution of native collection records, strong biases exist against non-native records. This, in part, relates to the type of data curated and the biases of collectors, as well as the common rationales underpinning non-native observation data. Given that non-native weeds represent one of the greatest threats to terrestrial biodiversity, there are many reasons why we should be looking to improve our knowledge about just where is weedy in Australia. Here we explore the historical context behind the current availability of non-native plant data and what it means for end users of that data. We outline our findings from a pilot study in the Pilbara where we showcase how aggregating disparate data on non-native plants can provide unique insight to help land managers prioritise funding for weed control. Lastly, we highlight how emerging changes in data collection and aggregation approaches may provide a significant improvement on what is currently available.

Speaker biography

Bruce leads the Ecosystem Change Ecology Team based in Perth, Western Australia. This multidisciplinary team generates knowledge on the mechanistic links and synergistic interactions between landscape change, species invasions and native species decline in terrestrial ecosystems. Bruce leads research and develops theory to underpin more effective policy and management actions for conservation, invasion and production challenges in the face of rapid global change.

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Atlas of Living Australia Science Symposium

Tuesday 10 May 2016

To

Friday 13 May 2016

Keiran McNamara Conservation

Science Centre, Kensington, WA