



The Ecological Society of Australia Ltd (ESA, www.ecolsoc.org.au) is the peak group of ecologists in Australia, with over 1200 members from all states and territories. Our members work in universities and other research institutions, government departments, NGOs, private industry and consultancies. We are a national not-for-profit organisation formed in 1959.

Response to: Review of Excellence in Research for Australia (ERA) and the Engagement and Impact Assessment (EI)

12 October 2020

The Ecological Society of Australia (ESA) is the peak body of ecological scientists in Australia and welcomes the opportunity to comment on the ERA and EI process. We restrict our comments to the ways that ERA and EI interact with the discipline of ecology (Field of Research code 0602).

The ESA notes that since its inception, ERA has evolved to an important framework for communicating the impact and contribution that Australian science has in relation to global scientific endeavours. This outcome is important for demonstrating the value of Australian research to the wider Australian community.

Here we provide some general comments on the ERA and EI. We also provide responses to individual questions posed within the discussion paper through the online survey form.

General remarks:

- We support the continuation of gender reporting within staffing data, and suggest exploring options to expand this to include other under-represented cohorts such as Aboriginal and Torres Strait Islander people. Reporting of basic metrics like this can be an important first step to enhance focus on diversity and equity issues, and provides a mechanism to measure progress over time.
- The ESA is committed to supporting and advancing the role of indigenous ecologists and indigenous ecological knowledge. Consistent with this we support the inclusion of Indigenous Studies within the ANZSRC 2020, and thus within the ERA and EI Processes. This is an important step to capture the importance of these bodies of knowledge and their contribution to research and society.

There are some perverse outcomes that may arise from the ERA and EI process:

- The ERA focuses on assessing the current research capacity of a University. This focus on currency can create a disincentive to undertaking long-term research activities (10+ years). In ecological research, long-term studies are often necessary to investigate ecosystem processes that operate over decades and centuries. Many influential and impactful studies in ecology have resulted from long-term studies carried out across decades (e.g. long-term studies of [organisms](#) and long-term studies of [ecosystems](#)). A paradigm focused on outcomes achieved in 3-5 year cycles disincentivises researchers from undertaking long-term studies, and is also inadequate for recognising the substantial impact resulting from long-term studies.
- Many research activities in ecology are place-based or organism-based. This means that the relevance of the research may be restricted to a smaller audience. Citation metrics may thus result in publications from such work as being perceived as lower-impact than a more generally and globally applicable study subject. However, that is not an accurate reflection of the quality of the research itself, nor its potential societal impact. For example, research undertaken on a threatened Australian species may make a substantial contribution to preventing the extinction of that

species. This is a profound and positive impact, that would not necessarily be reflected in global citations.

- Citation metrics can undervalue quality, foundational research and thus create a disincentive to undertake this kind of research. It is important to recognise and showcase cutting edge discoveries; however, these discoveries are often predicated on a body of prior work that may not have received similar attention.
- Ecology cuts across multiple FOR codes (disciplines) which may 'dilute' the impact of the discipline itself (at the 4 digit level). ERA methodology discourages Universities from reporting multi-disciplinary science (at the 4 digit level) and may, at worst, reinforce disciplinary silos at a time where interdisciplinary research is frequently highlighted and supported by Australian research funding. It is unclear how recent changes to the ANZSRC will impact upon reporting of interdisciplinary research.

FOR FURTHER INFORMATION

The ESA welcomes the opportunity to provide further information to this Review or to discuss our submission in more detail. We may be contacted using the details below:

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