



## ACSA Publications Listing

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### *Journal Articles - Conference Proceedings Articles Dissertations - Books & Chapters*

From the moderator

Thank you to everyone who contributed to this issue of the ACSA Publications Listing.

The ACSA Publication Listing is a quarterly electronic listing of publications in the field of citizen science within the Australian community. The listing is intended to share information with those interested in the Australian citizen science community. The deadline for contributions is announced two weeks prior to the listing. Contributions may be submitted at any time.

Please only submit those publications where you are the author (to prevent duplication) and only include those that have been accepted for publication.

Colleen Foelz

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### Abstracts of recently published journal articles

#### **How do marine and coastal citizen science experiences foster environmental engagement?**

**Angela J. Dean**<sup>1,2,3</sup>, **Emma K. Church**<sup>4,5</sup>, **Jenn Loder**<sup>4,6</sup>, **Kelly S. Fielding**<sup>3</sup>, **Kerrie A. Wilson**<sup>1,2</sup>

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Citizen science programs enable community involvement in scientific research. In addition to fostering greater science literacy, some citizen science programs aim to foster engagement in environmental issues. However, few data are available to indicate whether and how citizen science programs can achieve greater environmental engagement. We survey individuals choosing to attend one of seventeen reef citizen science events and examine the extent to which attendees reported three indicators of greater environmental engagement: (i) willingness to share information, (ii) increased support for marine conservation and citizen science, and (iii) intentions to adopt a new behavior. Most participants reported being willing to share information about reef conservation

(91%) and described increased support for marine science and conservation (87%). Half of participants (51%) reported intentions to adopt a new conservation behavior. We found that key elements of the citizen science experience associated with these outcomes were learning about actions to protect reefs and coasts (procedural learning), experiencing surprise, and experiencing negative emotions about environmental problems. Excitement was also associated with positive outcomes, but only in participants who were less likely to see themselves as environmental or were less frequent visitors to reefs and coasts. Importantly, the association between factual learning and environmental engagement outcomes was limited or negative. These findings suggest that the way citizen science experiences make people feel, may be more important for fostering future environmental engagement than factual-based learning. When designing citizen science programs for community members, these findings provide a reminder to not focus on provision of factual information alone, but to highlight environmental impacts while providing meaningful experiences and building environmental skills.

Published in *Journal of Environmental Management*, 2018, 213, 409-416.  
doi: <https://doi.org/10.1016/j.jenvman.2018.02.080>

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## **Building trust among marine protected area managers and community members through scientific research: Insights from the Ningaloo Marine Park, Australia**

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The success of participatory marine governance arrangements is influenced by the levels of trust that exist between decision-makers and diverse stakeholder groups within the community. While the benefits of high levels of trust among these groups is well established, specific approaches to building trust remain largely unknown. The aim of this study is to understand the extent to which scientific research programs can enhance trust among [marine protected area](#) (MPA) managers and community members via an evaluation of the Ningaloo Research Program - a large-scale program of marine research in the Ningaloo [Marine Park](#). Results from a survey of 125 local residents show that community members along the Ningaloo coast believe that scientific research is important for the management of the marine park, and strongly support government investment in scientific research in the region. Results also suggest that science undertaken through the Ningaloo Research Program has increased the extent to which community members trust local managers, which study participants believe has led to improved social and environmental outcomes in the region. Finally, additional opportunities are identified to maintain and further enhance trust between community members and MPA managers, via targeted communication and engagement programs that account for different personality 'types'. In particular, the establishment of citizen science programs might

further build trust. These results suggest that scientific research could be used as a means to increase trust among decision-makers and community members when coupled with an effective communication and outreach program, thus enhancing the success of participatory marine governance arrangements.

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Abstracts of recently published books and chapters

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