

Supporting Indigenous fire management through collaborative socio-ecological partnerships

Project information



Resilient
Landscapes

National Environmental Science Program



Bunya Mountains National Park, Queensland, Australia. By phototrip.cz via AdobeStock

This project is supporting Indigenous land and fire management groups to better understand the ecological and evolutionary benefits of cultural burning in forests and grasslands in southern Queensland, including Bonye Biar (Bunya Mountains). It will also investigate how collaborative partnerships can support cultural burning.

Fire and ecosystem health

Inappropriate fire regimes threaten the biodiversity and evolutionary capacity of natural ecosystems. They restrict natural processes like plant regeneration and reduce genetic diversity in plant communities.

First Nations people have been managing the interactions between fire and Country for tens of thousands of years, ensuring ecosystem health and longevity.

Supporting Indigenous fire management

The Bunya Peoples Aboriginal Corporation (BPAC) conduct cultural burning in the 'grassy bald' mountain grasslands of the Bonye Biar (Bunya Mountains) in southern Queensland.

In collaboration with BPAC, we're tracking how Indigenous burning can help maintain biodiversity, ecosystem function and evolutionary potential, while enabling cultural, spiritual and provisional connections to Country for Indigenous people. The information gathered will help us develop monitoring techniques and analytical tools to better understand the ecological

effects of cultural burning, and will provide an evidence base for promoting cultural burning as a land management tool.

We will also be identifying strategies to enhance collaborative partnerships between BPAC and other agencies in the future.

Key research goals

To address the challenge of appropriate fire management, this project is:

- identifying potential strategies and social enabling conditions to support cultural fire management
- understanding the ecological and evolutionary outcomes of burning to assist future burning plans and efforts across land tenures
- developing solutions for overcoming institutional barriers to more widespread and frequent cultural burning practices across landscapes.



Bunya Mountains National Park north-west of Brisbane in southern Queensland. Image: Resilient Landscapes Hub.

What is the NESP Resilient Landscapes Hub?

The Australian Government's National Environmental Science Program (NESP) funds environment and climate research. NESP currently supports 4 multi-disciplinary research hubs, each hosted by an Australian research institution. The program:

- provides evidence for the design, delivery and on-ground outcomes for environmental programs
- helps decision-makers, including from Indigenous communities, build resilience
- supports positive environmental, social and economic outcomes.

This project is funded by the NESP Resilient Landscapes Hub, which is hosted by The University of Western Australia. The Resilient Landscapes Hub's research supports the management of Australia's terrestrial and freshwater ecosystems and makes them more resilient to extreme events and pervasive pressures.



Recently burnt Bunya Mountains grassy bald, red-necked wallaby and bunya tree. Photo: Richard Unwin.

Further information

This project is being led by Professor Jennifer Firn from QUT and Dr Angela Dean and Dr Annabel Smith from The University of Queensland.

This document and further information are available from the project website at neslandscapes.edu.au/projects/nesp-rh/indigenous-fire-management/.

Contact: jennifer.firn@qut.edu.au, a.dean@uq.edu.au, annabel.smith@uq.edu.au or neslandscapes@uwa.edu.au.

Or scan the code:



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