

Darwin Centre for Bushfire Research

The Darwin Centre for Bushfire Research (DCBR) delivers applied fire management research and training opportunities to land managers in northern Australia, South East Asia, Africa and South America. We apply field sampling, spatial analysis and Indigenous knowledge to develop 'savanna burning' methods, including greenhouse gas emissions reduction and carbon sequestration.



RIEL

Research Institute for
the Environment and
Livelihoods

Services

The Centre builds on 20 years of world-class applied fire management research in collaboration with Bushfires NT, Indigenous and conservation land management groups. Our services include:

- Development and online support of fire mapping, information and analytical tools;
- Supporting the development of northern Australia's fire carbon and offset policies;
- Conducting fire management training for remote communities and stakeholders;
- Supplying fire mapping to support rural fire management and conservation agencies;
- Evaluating ecosystem services (ES), particularly for Indigenous and local communities;
- Developing Payments for Ecosystem Services (PES) mechanisms.

Research focus

- Support best practice fire management for environment and land management.
- Methods for greenhouse gas abatement and sequestration to enhance biodiversity.
- ES-economies to support Indigenous and local communities.
- Innovative technology development for improved fire safety in rural communities.

- Indigenous environmental knowledge and land management as a training and scientific resource.
- Long term monitoring and research of the ecological implications of fire regimes.
- Environmental spatial science apprenticeship programs and digital technological teaching tools.

PROJECTS

- Monetarily value savanna ecosystem services - water quality, land condition, biodiversity.
- Community benefits of fire management projects in savannas and central Australian rangelands.
- Remote sensing for measuring fire severity and patchiness in fire-prone savanna landscapes.
- Build decentralised capacity for geospatial analysis in northern Australia and South East Asia.
- 3D fire behaviour simulations for community engagement and strategic fire management planning.

Further information

Leader - Cameron Yates
0438 870 536 | cameron.Yates@cdu.edu.au

Prof Jeremy Russell-Smith
0447 200 929 | jeremy.russell-smith@cdu.edu.au

Contact us | riel.cdu.edu.au | +61 8 8946 6413 | dcbr@cdu.edu.au