THE SAVANNA BURNING PROJECT



Andrew Edwards, Cameron Yates and Jeremy Russell Smith

Darwin Centre for Bushfire Research, Research Institute of the Environment & Livelihoods, Charles Darwin University, Darwin NT 0909 Australia

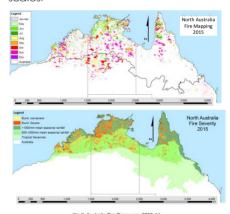
PROVIDING MAPPING TOOLS FROM DETAILED RESEARCH, MODELLING AND ANALYSIS OF THE OCCURRENCE AND EFFECTS OF FIRE IN SAVANNA LANDSCAPES IN NORTHERN AUSTRALIA TO ASSIST WITH FIRE MANAGEMENT

MAPS

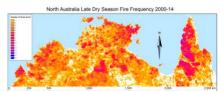
The Savanna Burning Project seeks to provide information illustrating the effects of fire on native savanna vegetation.

Since 2002, the **Darwin Centre for Bushfire Research (DCBR)** has been providing timely mapping of the occurrence of fire on the **North Australia Fire Information (NAFI)** web site.

This information can be used to derive more sophisticated fire metrics which can be illustrated at small and large scales.







COLLABORATION

DCBR works with land managers and land management organisations across north Australia, so that the information is pertinent to their needs. This includes the fire agencies, pastoralists, park rangers, indigenous rangers and traditional owners.



Workshop in Ngukurr (South East Arnhem Land) with traditional owners, Aboriginal Research Practitioners Network staff, and B&NH CRC researchers.

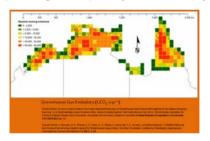
DCBR researchers and PhD students develop field methods, to create algorithms to apply to satellite imagery to derive spatial information to make map products that reflect user needs.



PhD student Grigorijs Goldbergs and his supervisor Dr Andrew Edwards assess the effects of high severity fires on Mataranka Station, 400 km south of Darwin. This information provides validation for the fire severity mapping.

MODELLING

The research undertaken by DCBR has led to the development of several metrics and sophisticated algorithms that assist land managers with fire planning, both spatially and seasonally.





FUTURE RESEARCH

- 1. The satellite sensors have an expiry date, research must include testing and methods development of new satellite sensor data.
- 2. The mapping needs to be refined to the regional and property scale, calibration of higher resolution satellite imagery needs to be developed.
- 3. Managers also need to monitor and report the effects of their fire management. We currently have rudimentary reporting tools. We need to develop an on-line reporting standard with a range of fire metrics calculated on-the-fly.









