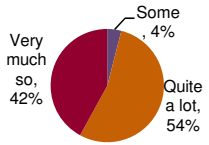
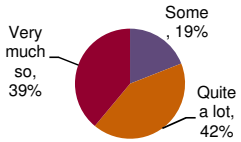
Objectives for the Bungawalbin workshop series

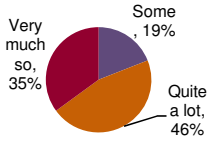
- Discuss strategies to manage fire to reduce risk whilst improving biodiversity and cultural values
- Introduce landholders to fire management planning for their own property
- Address the fear of fire and potential barriers for landholders to conduct planned burns
- Address any confusion regarding procedures and regulations for planned burns
- Explore opportunities for neighbours to collectively create a mosaic (a patchwork) of fire strategies (e.g. burning, weed control) to reduce risk and improve habitat for the endangered North Coast emu population



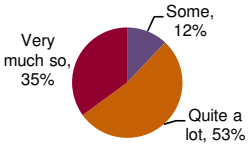
Did this workshop give you a better understanding of how to undertake fire management practices in an environmentally-conscious way?



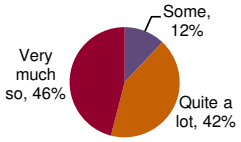
Has this workshop increased your understanding about fire behaviour in the landscape?



Did this workshop improve your understanding of how to plan for and conduct a safe burn?



Did this workshop improve your understanding of the procedures and regulations involved with planning a burn?



Did this workshop inform you about who is involved with fire management around your area, and what they do?

Workshop achievements

- Jimmy Malecki, an award winning photographer and landholder from the Bungawalbin region produced a series of film clips capturing the mix of community fire stories, including stories on the North Coast Emu. These will soon be available via the Hotspots YouTube channel. However, you can preview one landholder's personal experience on the benefits of property fire management planning at www.hotspotsfireproject.org.au/videos.
- Camera traps (automated cameras triggered by movement) deployed at the Hotspots demonstration burn site located site at Main Camp has produced excellent results to date – this includes rare shots of a family of Emus (two adults and three juveniles). This record is of particular importance as it confirms recent breeding activity in an area where no recent breeding has been documented. Last census count (2012) suggested that there are only approximately 130 North Coast emus are left.
- In collaboration with the Macquarie University's National Indigenous Science Education Program and the Firesticks Project, the Hotspots team is continuing to look at ways to support suitable burning strategies for the emu. This includes follow up work with Yaegl elders and the Minyumai community to further explore important fire and cultural associations with the emu.

Under the guidance of the nine project partners in the Advisory Committee, Hotspots is delivered through the coordinated efforts of the NSW Rural Fire Service and the Nature Conservation Council of NSW.

HOTSPOTS FIRE PROJECT

2011 Australian Safer Communities Awards NATIONAL WINNER

BUNGAWALBIN CATCHMENT WORKSHOP SERIES REPORT*

Workshop 1 (23 October 2012) and Workshop 2 (4 December2012)

The Hotspots camera traps picked up a family of five Emus moving through the control demonstration burn site at Main Camp. This is an important sighting for this endangered population which relies on hazard reduction strategies for wildfire protection and to retain important food resources.

> *"The workshop really brought the community together to implement not just individual property level planning but also a far reaching and coordinated approach to managing fire risk as well as biodiversity."*
> **Jimmy Malecki, workshop participant**

The Bungawalbin Creek catchment, "the Bungawalbin", covers the southwest quarter of the Richmond River catchment. It is the largest vegetated floodplain wetland complex in northern NSW, located between Casino, Coraki, Grafton and the Richmond Range.

The Bungawalbin sits within the land of the Bandjalang people and many landscapes and features of this catchment are of great cultural significance.

Most of the region is naturally vegetated with a mix forest types and wetlands. A high proportion of the alluvial flats have been cleared for grazing, tea-tree plantations, sugar cane and farm forestry.

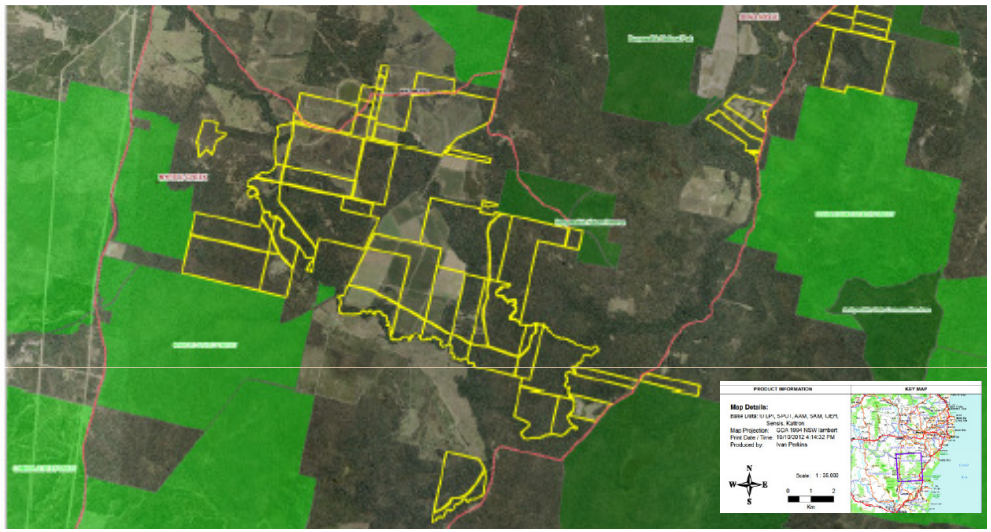
This Hotspots workshop series attracted a mix of participants ranging from agricultural interests (e.g. grazing and farm forestry) through to lifestyle landholdings. Over 30 landholders attended. As a group, this community collectively explored ways in which they could undertake management actions to reduce fire risk whilst also maintaining important habitat for the North Coast Emu (*Dromaius novaehollandiae*).

* This project was funded by the NSW Rural Fire Service

HOTSPOTS FIRE PROJECT

Fire Management for the Bungawalbin Catchment

Content developed October 2012



This fire management landscape overview has been compiled by the Hotspots Fire Project. It serves merely as an aid to planning. The information contained herein reflects our understanding at the time of planning. We are learning more about fire and the environment every day and anticipate that some recommendations may change as new information comes to hand. Thus whilst every effort has been made to ensure the information presented herein is as accurate and well-informed as possible, those involved in compiling this plan take no responsibility for any outcomes, actions or losses resulting either directly or indirectly from the interpretation, misinterpretation or implementation. This plan is intended to be used in conjunction with the help of experts and good neighbour relations. For further information on the Hotspots Fire Project:

Email hotspots@rfs.nsw.gov.au
Or visit www.hotspotsfireproject.org.au
This map has been created by NSW RFS in October 2012

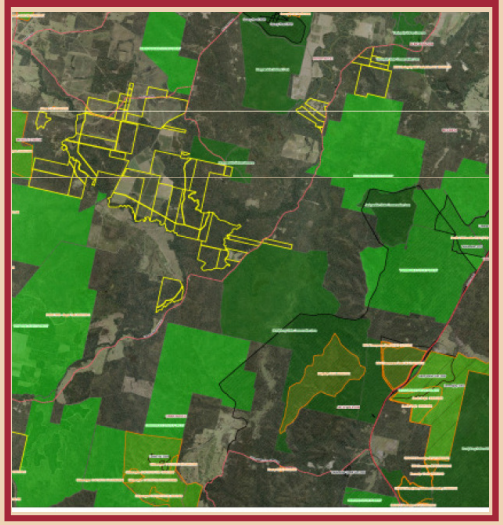
THE LANDSCAPE

•Bungawalbin sits within the lands of the Bandjalang people and many landscapes and features of this catchment are of great cultural significance to the Bandjalang people. It is the largest vegetated floodplain wetland complex in northern NSW .
•The area contains one of the richest assemblages of biodiversity in NSW with many areas known to be Endangered Ecological Communities (8 types) and it provides habitat for approximately 100 threatened species. It also operates as an important corridor between Bundjalung National Park and the Richmond Range.
• It holds a mix of forests types including Rainforests, Wet and Dry Sclerophyll Forests, Grassy Woodlands, Forested and Open Wetlands and Heathlands
• Land uses vary from grazing, cropping, forestry, tea tree plantations through to conservation and lifestyle landholdings

THE VEGETATION & STATE WIDE FIRE INTERVAL GUIDELINE

Vegetation Formation	Vegetation Class	Ecosystem types (Species dominance)	Min Interval	Max Interval	Comments
Rainforest	Subtropical*	*Argyrodendron trifoliolatum* White Booyong	n/a	n/a	No Fire
	Dry*	*Waterhousea floribunda* Weeping Lilly Pilly *Castanospermum australe* Black Bean *Grevillea robusta* Silky Oak			
Wet Sclerophyll Forest (shrubby subformation)	North Coast	*Eucalyptus grandis* Flooded Gum *Lophostemon confertus* Brush Box	25	60	Crown fires should be avoided in the lower end of the interval range
Wet Sclerophyll Forest (grassy subformation)	Northern Hinterland	*E. microcorys* Tallowwood *E. acmenoides* White Mahogany	10	50	Some intervals greater than 15 years are desirable
Dry Sclerophyll Forest (shrub /grass subform)	Clarence	*Corymbia henryi/variegata* Spotted Gum *E. moluccana* Grey Box	5	50	Some intervals greater than 25 years are desirable
Grassy Woodland	Coastal Valley	*E. tereticornis* Forest Red Gum *Angophora subvelutina* Rough Barked Apple	5	40	Some intervals greater than 15 years are desirable
Freshwater Wetlands	Coastal Heath Swamps	*Banksia oblongifolia* Rusty Banksia *Leptospermum liversidgei* Tea Tree	6	35	Some intervals greater than 30 years are desirable. Avoid peat fires
	*Coastal Freshwater Lagoons	*Carex* spp. Tussock Sedges, *Eleocharis* spp. Spike Rushes *Lepironia articulata* Grey Rush			
Forested Wetlands	*Coastal Swamp Forests	*Casuarina glauca* Swamp Oak *Melaleuca quinquenervia* Paperbark *E. robusta* Swamp Mahogany	7	35	Some intervals greater than 20 years are desirable. Avoid peat fires
	*Coastal Floodplain Wetlands	*Lophostemon suaveolens* Swamp Box *E. tereticornis* Forest Red Gum			
	Eastern Riverine Forests	*Casuarina cunninghamiana* River Oak			
Heathlands	Wallum Sand Heaths	*Banksia aemula* Wallum Banksia	7	30	Some intervals greater than 20 years are desirable.
Lowland Rainforest / Swamp Sclerophyll Forest / Subtropical Coastal Floodplain Forest		* Denotes Endangered Ecological Communities listed under the NSW Threatened Species Conservation Act			Swamp Oak Forest / Freshwater Wetlands on Coastal Floodplains / Lowland Rainforest on Floodplain / Coastal Cypress

FIRE HISTORY



IDENTIFIED MANAGEMENT ACTIONS*

This workshop series worked with over 30 landholders

Actions identified in the workshop series include:

*** Hazard reduction works:**
• Undertake mechanical works to maintain fire trails, asset protection zones, plantations, and other structures.
•Implement prescribed burns for hazard reduction and mosaic burning for biodiversity

*** Protect community values:**
•Biodiversity values - Emu and threatened species
•Cultural values - individual sites and the cultural landscapes

*** Manage weeds, including lantana, privet and groundsel**

*** Join a community group, inclusive of:**
•RFS brigade
•Landcare
•Emu surveys
•Community network

*__Please note:__ This is a listing of the types of follow up actions that participating landholders have identified as part of their individual fire management plans.

THREATENED SPECIES

SPECIES AND STATUS	FIRE ECOLOGY (management requirements)*
Pale-headed Snake *Hoplocephalus bitorquatus* Stephens Banded Snake *H. stephensii* (V)	No slashing, trittering or tree removal. Protect hollows and fallen timber.
Green-thighed Frog *Litoria brevipalmata* (V)	No burning of moist grassy habitats in Spring and Summer.
Wallum Froglet *Crinia tinnula* (V)	No burning adjacent to wetlands. No slashing, trittering or tree removal.
Giant Barred Frog *Mixophyes iteratus* (E)	No burning within 100 metres of streams. Protect rainforest from fire.
Glossy Black Cockatoo *Calyptorhynchus lathami* (V)	No burning of *Allocasuarina* thickets. Reduce the impact of burning to retain understorey species, in particular to permit the regeneration of she-oaks. Protect existing and future hollow-bearing trees for nest sites.
Powerful Owl *Ninox strenua* Barking Owl *Ninox connivens* Masked Owl *Tyto novaehollandiae* (V)	No burning around known nesting sites at any time. Apply low intensity, mosaic pattern fuel reduction regimes. Retain large areas of native vegetation, especially those containing hollow-bearing trees that are used as nest sites.
Wompoo Fruit Dove *Ptilinopus magnificus* (V)	No fire. Protect rainforest from fire.
Black Bittern *Ixobrychus flavicollis* (V)	No fire. No slashing, trittering or tree removal. No peat fires.
Brown Treecreeper *Climacteris picumnus* Speckled Warbler *Pyrrholaemus sagittatus* Grey Crowned Babbler *Pomatostomus temporalis* (V)	No slashing, trittering or tree removal.
Bush Stone Curlew *Burhinus grallarius* (E)	No burning from 1 August to 31 March, and no more than once every 2 years. Retain logs on ground. Slashing in winter, but no trittering or tree removal.
Rufous Bettong *Aepyprymnus rufescens* (V)	No slashing, trittering or tree removal. Patch burning to maintain grassy areas.
Yellow Bellied Glider *Petaurus australis* Squirrel Glider *Petaurus norfolcensis* (V)	No slashing, trittering or tree removal. Retain den trees and recruitment trees (future hollow-bearing trees), retain food sources, particularly sap-feeding trees and nectar producing species, retain and protect areas of habitat and maintain connectivity between habitat patches.
Koala *Phascolarctos cinereus* (V)	Apply low intensity, mosaic pattern fuel reduction burns in or adjacent to Koala habitat. Retain suitable habitat, especially areas dominated by preferred feed-tree species. Avoid crown fires.
Little Bent-wing Bat *Miniopterus australis* Common Bent-wing Bat *M. schriebersii* (V)	No fire around known roost sites. Utilise buffer around known roost sites. No slashing around maternity caves.
Eastern False Pipistrelle *Falsistrellus tasmaniensis* (V)	Protect hollows. No removal of trees.
Slaty Red Gum *Eucalyptus glaucina* (V)	No fire more than once every 10 years. No slashing, trittering or tree removal.
Weeping Paperbark *Melaleuca irbyana* (E)	No fire more than once every 25 years. No slashing, trittering or tree removal.
Native Milkwort *Polygala linariifolia* (E)	No fire more than once every 7 years. No slashing, trittering or tree removal.
Native Bedstraw *Oldenlandia galioides* (E)	No fire more than once every 10 years. No slashing, trittering or tree removal.

*__Please note:__ *Fire management recommendations are based on the assumption that the species are being managed in an intact or near intact landscape. Variation in management requirements will be necessary when dealing with disturbed landscapes. It is important to follow up on local knowledge in support of better management decisions. Black text is derived from RFS Codes of Practice. Blue text is derived from expert input.*

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