

# Traditional Burning Practices

Lessons Learnt from Cape York  
Indigenous Fire Knowledge Workshop  
2016



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*“Baya wundi baja Yalanjinga Nyungkul warra nga bubungu”*

*“Bringing fire back to Yalanji Nyungkul country”*

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## Document Control

### Revision History

Version	Revision date	Summary of changes
1		

### Approvals

This document requires the following approvals. A signed copy should be placed in the project files.

Name	Title	Signature	Date of Issue	Version
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### Acknowledgments

The authors wish to acknowledge the traditional owners of the land the workshop was conducted in being Jabalbina, Eastern Kuku Yalanji people.

We respect and are grateful for the wisdom of the Elders past, present and future, their dedication to their communities and for preserving the knowledge and rich cultural heritage of the natural resources for all to appreciate.

We thank the people of the Wujal Wujal community for their warm welcome and hospitality and Wujal Wujal Mayor Desmond Tayley for his generosity.

We also acknowledge and thank the Emergency Services Foundation for having the vision and will to support this venture for the benefit of the Victorian Traditional Land Owners, Victorian Fire Services and the community.

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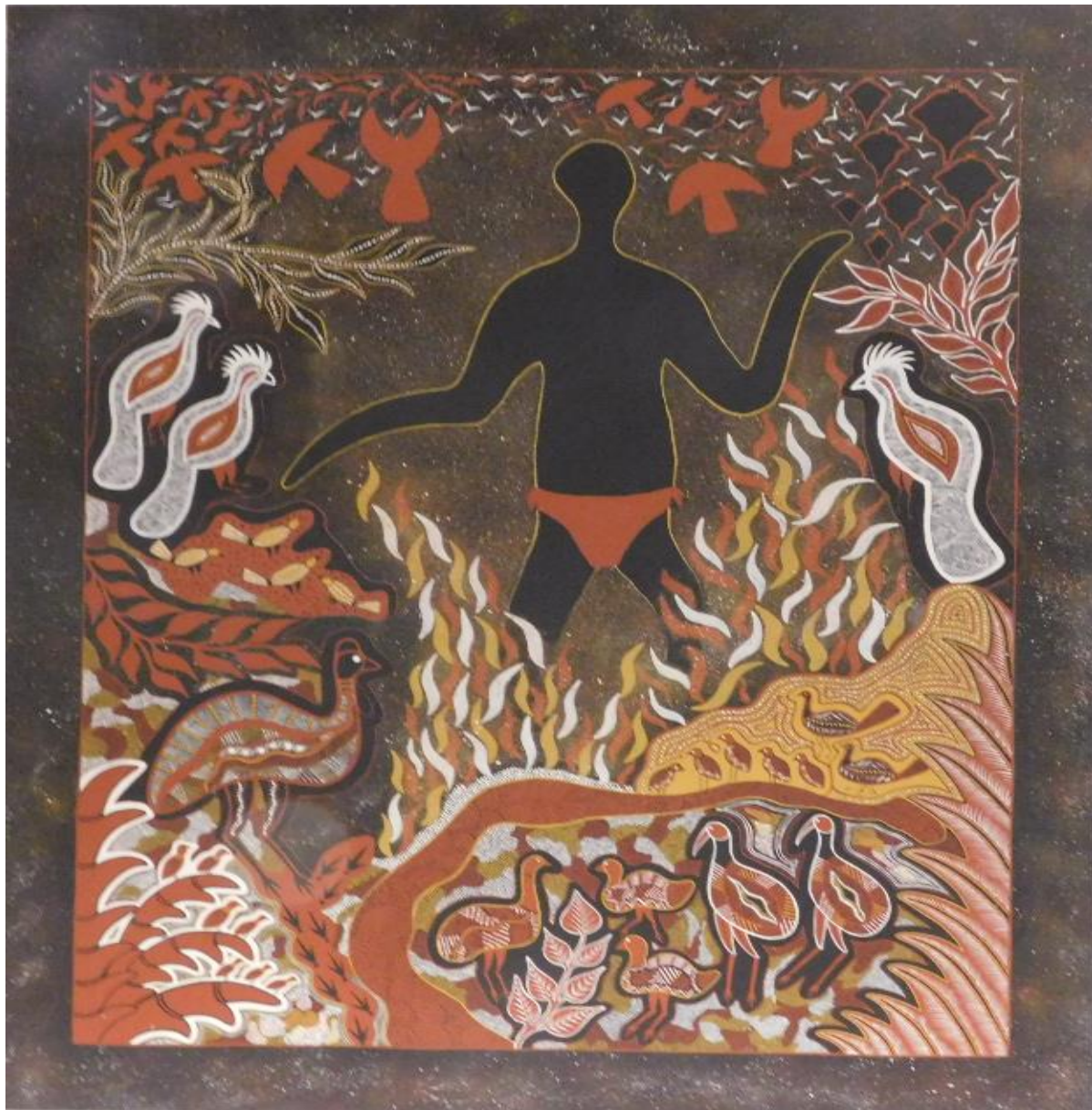
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### 1. Purpose of Report

The purpose of this report is to share and understand the knowledge gained by attending the Cape York Indigenous Fire Knowledge Workshop 2016 with the intention of supporting the CFA Koori Inclusion Action Plan (KIAP) outcomes and building on the knowledge and skills of CFA's planned burning practitioners.





## 2. Summary

The 8<sup>th</sup> Annual Cape York Indigenous Fire Knowledge Workshop hosted by the Jabalbina Aboriginal Corporation in conjunction with Mulong Productions, Jabalbina Rangers and Cape York Natural Resource Management was held in Eastern Kuku Yalanji Bubu to learn about and recognise the role of traditional burning practices.

For the past eight years, traditional owners and non-indigenous from all Australian states and territories have gathered on Cape York to share traditional fire knowledge. This year 130 participants witnessed fire methodologies developed specifically for each landscape put into practice based on a sound understanding of the flora and fauna and ecological characteristics of this land.

Representing the community of Wujal Wujal, Mayor Desmond Tayley and the Elders of the Wujal Wujal community welcomed the participants of the workshop to their traditional lands using smoke in the traditional way to welcome visitors to country.

Workshop participants were involved in a series of cultural awareness and practical skill based activities.

Participants are given a responsibility of sharing the lessons learned from the hosts. A number of key messages about agency contribution, partnership and initiatives to enhance the application of traditional burning practice and knowledge are identified.



### 3. Workshop

#### 3.1 Background

The five day onsite Indigenous Fire Knowledge workshops have been conducted in various locations throughout Cape York for the past eight years sharing knowledge of fire management continuously handed down from elder to elder for many thousands of years. This knowledge sharing empowers traditional owners to reconnect with country, to practice the traditional ways and allows non-traditional Australians an opportunity to learn and understand the methodology of Indigenous Fire Knowledge and culture.

Using coloured wrist bands, the 130 participants were broken up into smaller groups. These groups then workshopped:

- Traditional burning
- Retrospective monitoring
- Traditional hand crafts and skills
- Traditional plant use and places of cultural significance

#### 3.2 Traditional Burning

Traditional Fire Knowledge practitioner Victor Steffenson and Jabalbina Rangers took the group to an area south west of Wujal Wujal just above Cape Tribulation to burn grassy woodland surrounded by rainforest. The “knowing” of country (understanding the vegetation, the soil, the moisture and the purpose) enabled the burn to be contained in this grassy woodland without the use of mineral earth control lines or wetted breaks. Using natural features such as damp gullies, existing tracks and damper forest, the burn was confined to the defined area.

Soil moisture plays an important role in the decision to burn. Moisture should be found at 30 centimetres below the surface. If the soil is too dry, the burn will scorch the earth and damage the plants and ecosystems of the forest. Scorch height is also very important and the protection of the canopy from scorch paramount. The fire should be of a low intensity that allows it to “trickle through the landscape like water”.

The fire is not ignited on an edge of the burn site, it is lit in the middle, with a single point of ignition. This allows the fire to develop slowly and spread from this one point. This in turn allows creatures in the landscape time to become alerted to the fire and relocate to a safer area away from the fire. The safety of these creatures contributes to maintaining the continuous cycle of balance of life in the forest, with all creatures forming part of that life cycle.

Colour of smoke is also important with white smoke being the preferred outcome. Dark or black smoke indicates the fire is too hot and is damaging the forest.

As the fire completed its journey in the forest floor it was pleasing to see coarse woody debris still unburnt on the ground. No trees were ignited and the fire essentially went out when it reached the defined perimeters of the burn site.



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Single point ignition commencing the burn.



U- OG commentising a wet gully as a natural control line

### 3.3 Retrospective Monitoring

The use of fire to care for country is part of Australian Aboriginal being. In a contemporary land management context, traditional owner use of fire is commonly described as healing sick country. For example fire may be used to remove unwanted weeds.

Fire is also being used to restore natural forest following the occurrence of intense wildfire. An unplanned fire near Wujal Wujal in 2013 caused significant damage to bushland due to the fire occurring when conditions were not appropriate for fire in the landscape. The scorching fire took away the canopy of the forest and exposed the forest floor. The 'upside down forest' was the result with bare wooden branches of canopy trees pointing to the sky and abundant Acacia growth overtaking the forest floor. Understory species became the canopy species.

With the scientific support of the Cape York Natural Resources Network, this site is being "treated" with low intensity fire to remove much of the Acacia and allow eucalypts to reseed and grow to restore the canopy.

Retrospective monitoring allows the project to measure changes resulting from the application of fire. Monitoring methods include establishing transects and photo points to capture change over time. Fire scars, regrowth types and vegetation structure is documented and soil moisture depths are monitored.

This work is expected to deliver information of value for future decision making about land management.



Retrospective monitoring site



### 3.4 Traditional Handcrafts and Skills

During the workshop members of the Wujal Wujal community facilitated hand craft working groups that provided a hands on experience of traditional skills for weaving baskets, making clap sticks and spears.

The baskets are skilfully made by stripping local reeds into usable strands and then woven into a variety of baskets. The clap sticks are made from Black Palm, a hard surfaced wood that has a very pithy interior making it somewhat easy to work and shape. The end result is a very robust clap stick with an almost steel like sound when stuck together.

The spears are made using a 2-3 metre length of bamboo with a steel insert bound and glued to the end. The spears made by participants were then put to good use at an evening spear throwing competition back at base camp. The spears could be thrown large distances, with great accuracy, by those who knew what they were doing.



Basket weaving



Clap stick production

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## 3.5 Traditional Plant Use and Places of Cultural Significance

Wujal Wujal and its surrounds are rich and diverse in cultural significance. Wujal Wujal means 'many falls' and the Bloomfield falls are an example of the beauty Mother Nature has to offer in the area. These falls are culturally significant to the local community and are just one of many falls in the area. Some sites are not able to be visited by non-locals due to the cultural significance of these sites.



Bloomfield Falls

Jabalbina Rangers shared their knowledge of bush foods, bush medicines as the workshop participants were taken along the Bloomfield River to view the Bloomfield Falls.

Green ants, bush coconut, abortion trees, alfoil trees (the leaves are used to wrap food for cooking) were some of the many plants and animal resources the the bush has to offer - providing you know what you are looking for. Preserving this rich cultural heritage and willingly sharing this knowledge of natural resources is a credit to the Jabalbina Rangers.



Jabalbina Ranger Colin Doughboy explaining plant uses.

## 4. Outcomes

Workshop participants were encouraged by the hosts to reflect on what they observed and learned so that they could share knowledge when they returned to their home.

CFA workshop participants list the following key observations:

- Indigenous Fire Knowledge is the intellectual property of Indigenous people. Understand and respect this.
- Indigenous fire management practices are different .....it may mean burning in different times of the year and in different conditions to what is currently being undertaken by non-aboriginal land managers and fire management agencies.
- Multiple benefits are outcomes from the practice of traditional burning by Traditional Owners. These include social, cultural, economic, environmental, ecological, physical and mental health outcomes for Aboriginal people. Risk management outcomes include fuel reduction which reduces bushfire intensity and impacts.
- Traditional Owner fire practitioners have an intimate knowledge of the land they apply fire to.
- Soil moisture is important to ensure the fire does not burn too hot and cause damage to soil structure.
- As soils change so does vegetation and consideration to this change must be catered for with the application of fire.
- Where circumstances permit, single point ignition is preferred to allow slow build-up of fire enabling creatures within the forest time to move away from the burn.
- Colour of smoke indicates the intensity of the burn. White smoke is preferred.
- The tree canopy is sacred and fire should not be allowed to climb into the canopy. This is a fundamental rule to ensure country is cared for. This requires that a fire is kept low in intensity.
- Natural barriers such as tracks, wet gullies and waterways are used as control lines instead of using mineral earth breaks which can harm plants and soils.
- Fire frequency can be increased when utilising cooler burns
- A single species should not dictate the terms of fire being introduced into the landscape. Fire benefits all.



## 5. Discussion

The capacity of Traditional Owners to practice tractional burning on country is a significant factor in cultural wellbeing and identity for Aboriginal people.

In Victoria very little land is owned by Traditional Owners, therefore the opportunity for the Traditional Owners to practice traditional burning is very limited. A partnership approach between Traditional Owner groups, land owners, and fire services could significantly increase these opportunities. The agencies will need a comprehensive understanding of cultural aspects of traditional burning for this to occur, in particular the critical importance for partnerships and initiatives to be led by Aboriginal people.

Fire and land management agencies need an understanding and respect for the cultural as well as the practical aspects of traditional burning. Hands on learning, on country, such as that experienced by the workshop participants, is a powerful way for agencies to grow this capability. Participation by Victorian fire agency staff and volunteer members in the Queensland workshops, on an ongoing basis, is recommended.

A number of land managers and Aboriginal organisations sent their members to the workshop to bring knowledge home where there might be knowledge gaps. Some Aboriginal organisations identify a potential for Aboriginal people to generate income from provision of land management services based on traditional burning practice.

Participating fire and land management agencies wanted to understand how the practice of traditional burning could be used to mitigate bushfire risk or to restore ecosystem resilience.

In the Victorian agency context, incorporation of aspects of knowledge about traditional burning culture and practice into existing bushfire mitigation or planned burning programs would be readily achievable. Agency interventions that enable the practice of traditional burning by traditional owners would directly benefit Aboriginal people.

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## 6. Conclusion

Participation in the workshop has confirmed that activities based on the knowledge and spirit of traditional burning practice has a significant potential to facilitate cultural exchange between Aboriginal and non-Aboriginal Australians, and well-being outcomes for Aboriginal people. The application of fire, based on traditional practice could also extend the capability of land managers to treat bushfire through applying a wider range of planned burning intensity, cover, and age class (fire mosaic) yielding ecological benefits.

Understanding of the cultural aspects of traditional burning by fire and land management agencies will be key to success. Participation in this workshop has enhanced that understanding.