Wunta

Traditional Fire Management Plan

Stage 1

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on behalf of Wunta Aboriginal Corporation.

July 2013.

CARING FOR OUR COUNTRY

Summary

This document is to support the re-introduction of an indigenous practical fire management action plan to the Nesbit river area in Cape York Peninsula. The project is a stage one plan that will develop over time with further stages and to encompass more fire managed land in the area. The initial first stage covers the ecosystems along the access road from the Chester river to the main camp on the Nesbit River.

The aim of the stage one plan is to burn fire managed ecosystems to protect no fire country types that are threatened by wild late season fires. The fire plan also takes in consideration burning for country with heavy fuel loads and bringing the diverse ecosystems back to their natural curing stages to enrich the biodiversity of the flora and fauna in the area.

The intent of the methodology is to apply Indigenous fire knowledge while incorporating contemporary management issues to deliver a burning plan in consideration of all involved parties and issues. The application of traditional knowledge of fire comes from twenty years of project experience from the Traditional Knowledge Revival Pathways program.

Project Objectives

- To burn ecosystems individually to bring them back to a mosaic pattern of a natural fire breaks and right timing of year in harmony with the curing of native grasses.
- To consider the protection of cultural heritage in the Nesbit river area.
- To develop a fire management strategy that addresses the eradication and control of weeds, by burning for better conditions for native grasses and plants.
- To burn for the protection of no fire ecosystems such as the dry rainforest and scrub country systems.
- To implement and share traditional fire knowledge to improve the fire strategies for the Cape York area, and create a case study to assist other areas in Australia considering simular management strategies and projects.

Site Description and Country Codes.

The Nesbit River area is made up of many country types and has a large majority that is threatened from fire - country that does not burn such as the dry rainforest and the scrub country. Within this area is a significant scattered amount of dry woodland country types that need fire management to enrich these systems and to protect the no fire ecosystems.

There are many diverse types of dry woodland forests that do need fire, but have heavy fuel loads which needs to be addressed to bring back the mosaic burning patterns to ensure the right timing for each of the country types. These country types are listed as

- BW - Bloodwood Country
- TTREE - Tea Tree Country
- OPENP - Open Plain Country
- MIXT - Mix Tree Country
- GUMT - Gum Tree Country
- CPALM - Cabbage Palm Country
- SRIDGE - Sand Ridge Country
- GRASSP - Grass Plains

Basic Traditional Burning Points

- No drip torches are to be used as they create a hot fire. Single spot fires in the right place for ignition points.
- Burning strategies are designed to burn at the right time to prevent any damage to the canopy at all burns and all country types.
- Timing of the burns are never set in stone, they always vary either way every year depending on the seasons. Sometimes it might even fall as far as two to three months off season, especially with climate change impacts. Basically this is called reading country, which has been essential to proper traditional fire management for thousands of years.
- Some systems are in better condition that others which means there may be recommendations to apply different times and fire types to bring the system back to its preferred natural state. You cannot blanket one strategy for all the areas of one type of country, conditions apply.

GUMT - Gum Tree Country

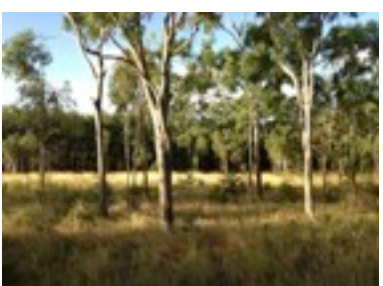
Timing - May\June

Description

The Gum Tree country is a early burn system and is crucial to burn these systems to maintain a low fuel load and a healthy grass cover. Burning the gum country early produces good native grass regrowth and helps the system fight against weeds, woody weeds, and t-tree invasions. These systems also provide a good feeding ground for a lot of animals and makes good hunting grounds early in the year. The early burns also encourage young gum trees to shoot and grow to maintain its place as the parent tree.

Burning these systems late in the year will cause a hot fire and will handicap the native seed bank in the soils and produce a poor regrowth. Poor regrowth will encourage invasive weeds and woody undergrowth to take over the system over time.

When the system is ready, the grass seeds will be fallen and the grass should be about 60% cured with 40% of green grass still showing. Wind will be needed at this time of year to help it burn. If there is a heavy fuel load and the grass seem very dry, burn against the wind with a single spot burn on the edge of the system.



A small but a fairly healthy gum tree patch which is almost ready to burn.

TTREE - Tea Tree Country

Timing - June\July

Description

The Tea Tree trees are quite invasive into country that is not theirs on Wunta country. This can be seen when parent trees such as gums and bloodwoods are scattered amoungst them. There are very clear pure breed tea tree systems that are obvious as tea tree country but there is a lot that needs to be burnt back every year to reduce the impact of tea tree infestation and give other parent trees a chance to come back again.

As soon as the grasses have cured to 80%, the t-tree should be burnt every year for the next three years, to give a good cool but clear burn to force the invasive trees into their respected countries. Where there is 100% tea tree is proper t-tree country. Where there are other parent trees, it is more likely to be sand-ridge country and should be burnt to bring back the diverse trees that where most likely slowly declined by hot fires over the past recent years. It will be good to monitor the reduction of the t-tree and see if more parent trees and small food plants start to grow back in their place.

If tree country and trees are not burnt, they will create a heavy fuel load for late season fires that will be a threat to no burn ecosystems in the Wunta area.

Looks like Tea Tree country but there are bloodwoods and gums present that indicate otherwise.

OPENP - Open Plain Country

Timing - June\July

Description

This open plain country is not quite like the very large open grass lands as they are smaller and tend to be around a lot of t-tree systems. They also sometimes tend to have very small wet lands in them and signs of ant beds. It is good to maintain these systems and don't let them get over grown by their t-tree neihbours. Although they appear to be only small areas, they still need to be managed. Most times you will find that these systems are ready to burn before tea tree country and is very easy to see the different curing colours in the grass. If you see these systems in the middle of another system, you should walk out to it and burn them which will give more of a mosaic pattern no matter how large or small the system.

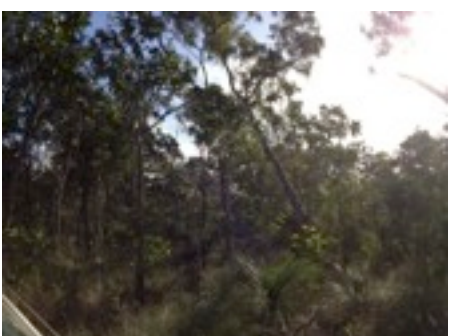
Sam burning to reduce the invasive t-tree suckers in this small open plain country.

SRIDGE - Sand Ridge Country

Timing - June\July

Description

Most of the sand-ridge country along the access road to the Nesbit is being invaded by tea tree and woody under growth which is an indicator of hot fires in the past and a lack of cool burns. The sand-ridge country needs cools fires as it has a diverse range of small medicine plants and other trees such as wattles, grevillea, black boys, cocky apple, and others. These systems need to be burned to reduce the tea tree suckers and scrub and bring back the diverse small plants and parent trees. There is also a lot of fuel in these systems on Wunta country and needs to be reduced, which is also important to bringing back the sand-ridge quality plants and grasses. Tea Tree is a sand-ridge tree, but it should not take over the system and make it scrubby. Once these systems are cleaned up and showing signs of divers regrowth of traditional plants. It can be spelled for up to two years before becoming a risk to late season wild fires.



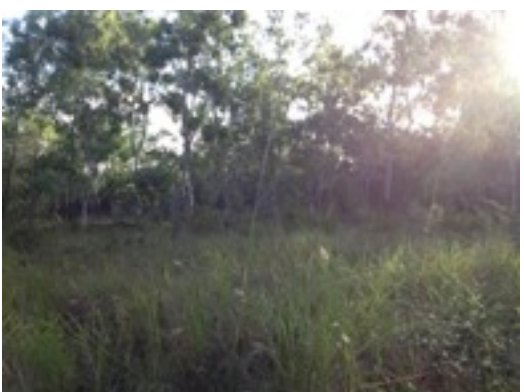
This sand-ridge country is starting to be taken over by lots of tea tree.

BW - Bloodwood Country

Timing - July\August

Description

The Bloodwood country is a sandy grey soil usually and is a system that burns a little later than the earlier systems. These systems have good grass cover and should be burned every one to two years without fail to keep it clean and open. There are a few bloodwood systems on Wunta country and some of them are being over run by tea tree. Bloodwood trees provide good habitat for many animals with their hollows. The systems on Wunta need more cool seasonalfires to reduce the amount of woody under storey and promote more bloodwood trees instead to populate the systems. Blood wood country also has a number of food plants that also grow from the application of cool burns.



A section of bloodwood country right on the Chester River, this shot taken early July still shows the system way to green to burn.

MIXT - Mixed Tree Country

Timing - August\September

Description

Mixed tree country is when you have a mix of many different trees in one system. The soil in these systems are usually a sandy grey and sometimes with a darker mix. This country is one of the last fire burning countries to burn in the early season before it really gets dry. The mix tree country is usually a good fire break for country that burns earlier and is too hard to burn in earlier times.

The Mixed Tree country on Wunta lands have too much old fuel that has been sitting for a few years. This is a real threat to massive hot wild fires at the end of the year. These systems need to be burnt at the right time as they contain a lot of trees that can be killed by fire. Some of the mix tree country on Wunta can burn early in the year because there is so much old fuel. It is suggested to burn these systems with heavy fuel loads early in the year to prevent a hot fire, then the systems can be burnt at the traditional times in the following years. Mixed tree country burns should a lot cooler than the other systems than burn earlier.

Mixed Tree country on Wunta lands, these systems can get too much fuel if left too long.

CPALM - Cabbage Palm Country

Cabbage palm country is special country and does not burn too often. There is lots of shade in cabbage palm country which means less grass. Over time these systems gather lots of its old leaves on the ground and can build up into a time bomb. In the old days the people used the leaves for weaving and food so they where pruned and kept clean. The cabbage palm country on Wunta has a heavy load of old leaves that can destroy the whole forest if a late season burn arrives. It is best to monitor these systems so that they do not get too much fuel and clean them as a early burn when all the other country is green, other wise it will be very hot. This also protects this system from other burns on systems conducted at times of year. Cleaning the cabbage palm country can be done every three to five years. The cabbage palm country needs to be cleaned on Wunta country now and then monitored into the future.

This cabbage palm country is quite clean and can be left for another three years before the next burn.

GRASSP - Grass Plains

Timing - Every two to three years - July\August

Description

There are three major grass plain countries on the first stage plan of the Wunta fire program. These plains are a very important system for many grasses and animals. The grass plains on Wunta are under threat from being taken over by scrubby country and introduced weeds. This has been caused by no fire management and hot late season fires. The plains need a burn at the right time to kill the invasive weeds and scrubby country trees.

The advice for Wunta is to burn all three plains at first and then burn them one by one each year apart separately. This will eventually give each plain a two to three year spell between burns and should promote a healthier grass regrowth with the right cool temperatures. Burning the pains separately after the first year is a good way to monitor and compare the outcomes to promote healthier systems. If the plains are left for too long they will build up too much fuel and become very destructive as they are surrounded by dry rainforest and scrubby country which does not burn at all. There are signs of bad fringe effects on the rainforest hills near by the grass lands caused by hot fires from these grass plains. This is usually caused by dropping bombs from helicopters and wrong times of the year.

Grass plain 1 with signs of scrubby country trees taking over which is a threat to species that depend on these systems.