

Tiwi Fire Management for Carbon Stocks and Biodiversity

An aerial photograph of a coastal region, likely in the Tiwi Islands. The image shows a large, irregularly shaped landmass with a complex network of waterways and mangrove forests. The water is a deep blue, while the land is a mix of dark green and brown, indicating dense vegetation and possibly some cleared areas. The coastline is highly irregular with many inlets and peninsulas.

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Australian Government
Australian Research Council



National Environmental Science Programme



Australian Government

Indigenous Land and Sea Corporation



The ILSC GROUP



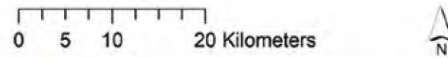
INPEX



Savanna burning for carbon

- Tropical savannas contain around 30 per cent of Australia's terrestrial carbon stocks and are the continent's most fire prone biome.
- Savanna fires produce ~4% of Australia's greenhouse.
- Greenhouse gas emissions can be reduced by burning earlier in the year, and these reduced emissions can then be sold in carbon markets.
- These changes can also have implications for the management and conservation of threatened species.



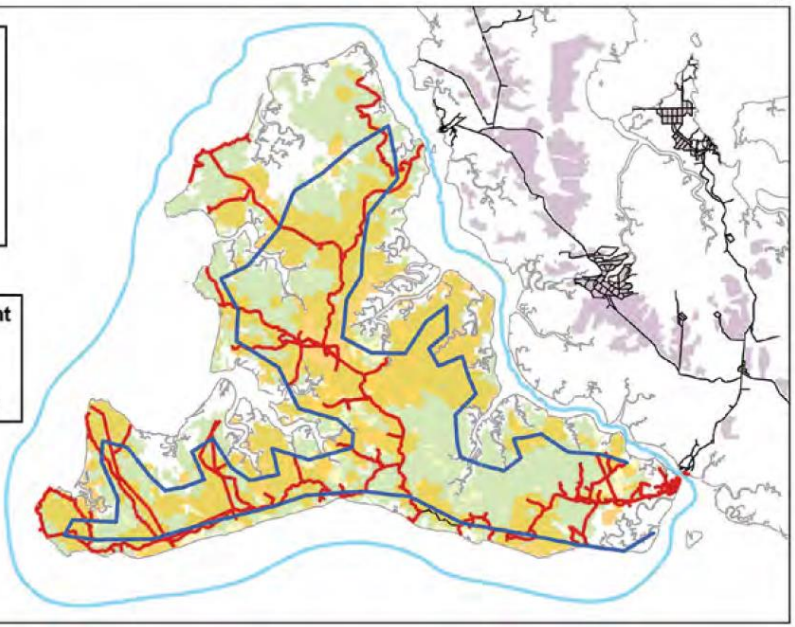


Vegetation

- Other
- Open forest
- Woodland
- Plantation
- Burnt 2018

Fire management

- Road break
- Boundary
- Helicopter Break



- We create fire plans at the start of the year
- We start burning on the 8th of May.
- We work with Tiwi Forestry to help protect plantation.
- We take requests from TO's to burn country during dry season



Fire season is here



Willie Rioli at the 2019 Savanah Fire Forum

The **Fire season** is fast approaching and Tiwi Rangers have been preparing for a busy couple of months.

In **February** Ranger Supervisor Willie Rioli and Tiwi Fire Coordinator Bruce Holland attended the 2019 North Australia Fire Forum in Darwin where more than 200 people discussed the impact of late dry season fires on country. Willie also attended the International Indigenous Carbon Forum in Melbourne in early May.

Late dry season fires destroy more country and kill small mammals. They also help wild cats to kill animals and birds. For the past 3 years, early dry season burning by Forestry and Rangers has reduced these late fires. Over the next 8 weeks Tiwi Rangers and Forestry Fire Crews will be out burning to protect the plantations and outstations. Aerial burning with the helicopter will also happen in the middle of June. Firebreaks around outstations and Tiwi College are being graded at the moment.

Mana.



If you want your country burnt please talk to one of the Rangers or call Willie on 0488949809 or Bruce on 0475262158
Please tell everyone Karluwu Yikwani

BURN SCHEDULE 2019



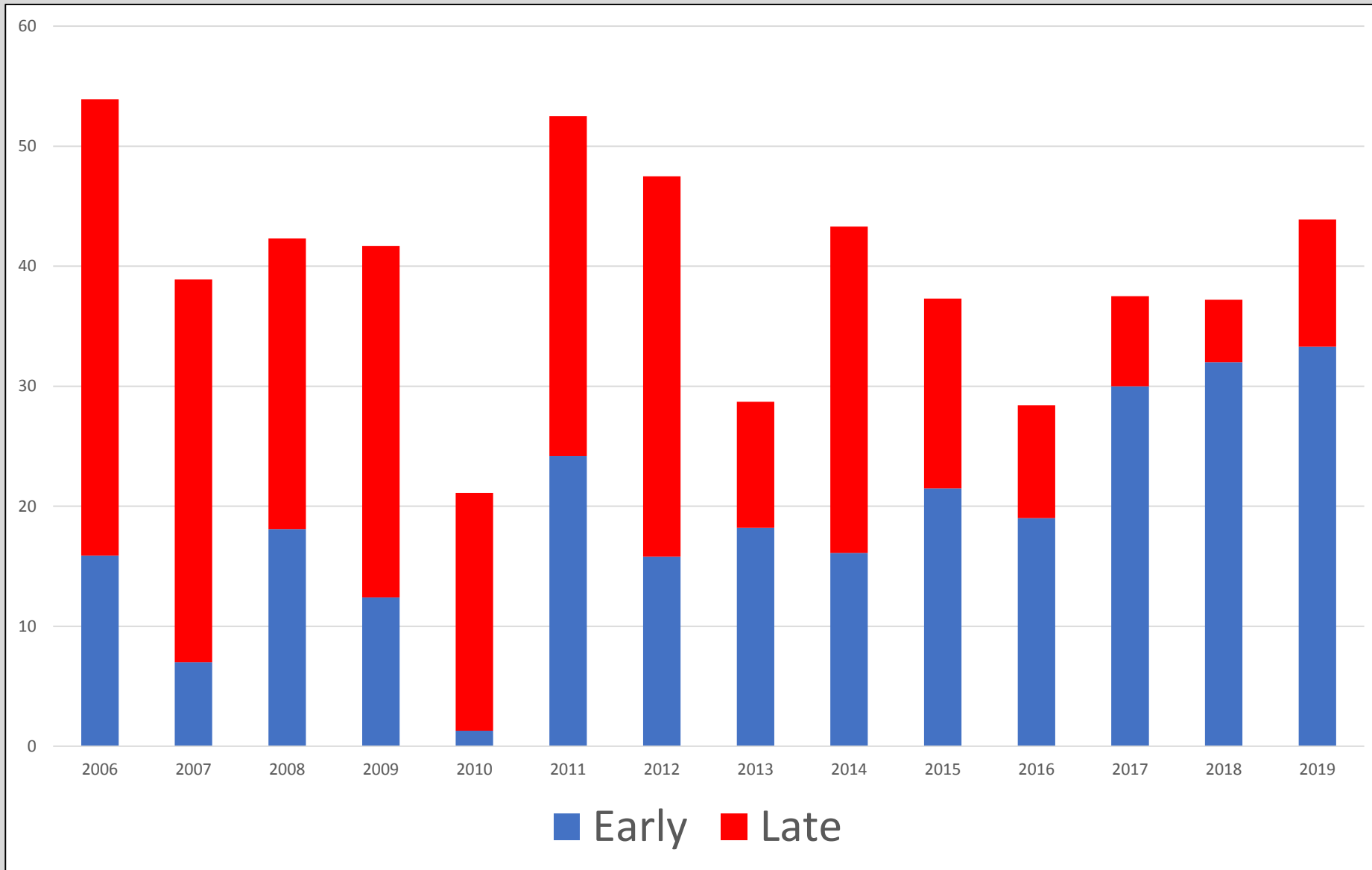
- We use road burning to reduce fuel loads and grade fire breaks
- Tiwi Marine Ranger help us via boats and we work with Outback Helicopters for helicopter burning.
- Dragonballs allow us to create fires in areas that are only accessible via boat and helicopter



- Every year we do a Fire Roadshow
- We go to all the communities to talk on when and when not to burn.
- Our message is **Kimirrakinari** is the season of fire.
- This time of the year “No more burns”
- Recently helped with NT Emergency services delivering campfire safety in Tiwi Language



Early vs Late Burns



- From 2006 – 2015 on average 26% of country was burnt late dry season
- From 2016-2019 on average 8% of country was burnt late dry season



- We work with CDU to look at how early dry season fires influence small mammals
- We look at the impact of feral cats by monitoring the number of small mammals, like bandicoot and possums.
- We also look at the impact of fire on tree hollows which are homes for mammals like possum and savanna glider
- Other projects have included desexing cats, feral pig control and weed management.

What we are working towards...

- Reducing our overall emissions from savanna fires on Tiwi Islands
- Continue participating in the carbon trading scheme to invest in future Tiwi Projects
- Help our biodiversity thrive to retain hunting and traditional knowledge for future generations
- Continuing best practice fire management as we set up the Tiwi Islands as an Indigenous Protected Area

