



Fighting Fire with Fire

Implementing Australia's largest
non-government fire management program



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Fire regimes across northern Australia are dominated by extensive, late season wildfires that cause substantial environmental damage and reduce pastoral productivity.

AWC is addressing this threat by implementing the nation's largest non-government fire management program across more than 7.5 million hectares of northern Australia, stretching from the Kimberley and the Top End, to the Gulf of Carpentaria, North Queensland and Cape York. This program is delivering exceptional ecological 'returns' for northern Australia's threatened wildlife and habitats.



The issue:

The impact of altered fire regimes

Traditionally, fire patterns across northern Australia were characterized by smaller, 'cooler,' patchy burns across the landscape. Changes in land use and the failure of government fire management programs have led to a shift in fire regimes across northern Australia. Fire patterns are now dominated by more extensive, high-intensity, late dry season wildfires that can burn more than 1 million hectares every 1-3 years.

In other words, much of northern Australia is now being burnt in large, 'hot' wildfires every 1-3 years that have cascading detrimental impacts on biodiversity and pastoral productivity.

Biodiversity Impacts: when large areas are burnt frequently and intensely, critical habitat is destroyed. This results in a decline of seed-eating birds, such as Gouldian Finches, and small mammals that rely on ground cover for food and shelter from predators, like feral cats.

Pastoral Impacts: regular, extensive wildfires destroy feed for cattle, reduce pasture quality, damage infrastructure, exacerbate weeds and cause erosion. This leads to reduced productivity and increasing costs for pastoralists.

Fighting fire with fire:

changing fire patterns across northern Australia

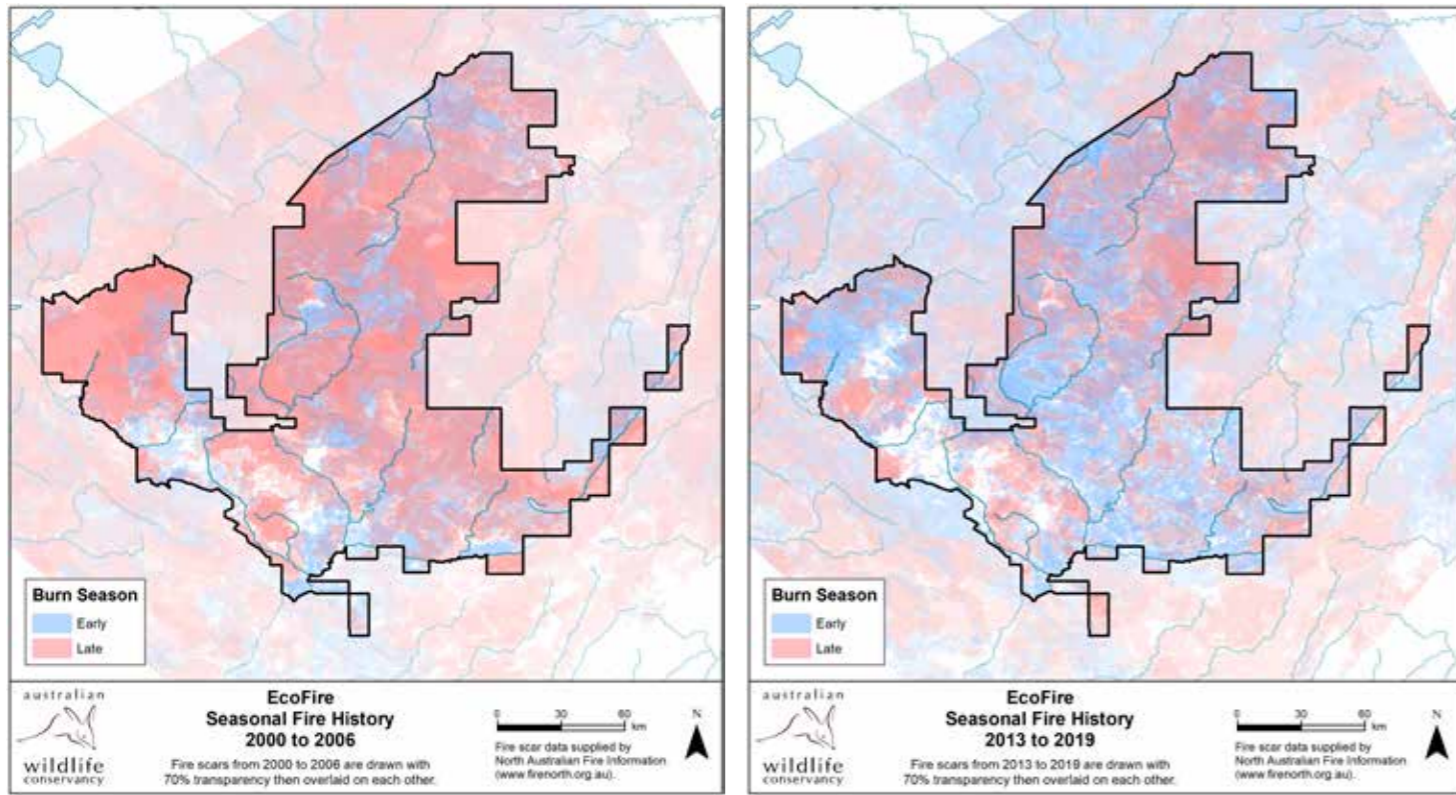
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The primary objective of AWC's Northern fire program is to measurably reduce the frequency and extent of late season wildfires on a vast, landscape-scale. This objective is achieved through the delivery of prescribed burning operations across 7.5 million hectares covering multiple tenures, including AWC land, indigenous land and commercial pastoral land.

Other key objectives include:

- Increasing the level of engagement of key stakeholders including neighbouring pastoralists, Aboriginal communities and government agencies; and
- Generating knowledge to help neighbouring landholders deliver effective fire management.





EcoFire:

the largest non-government fire management project in Australia

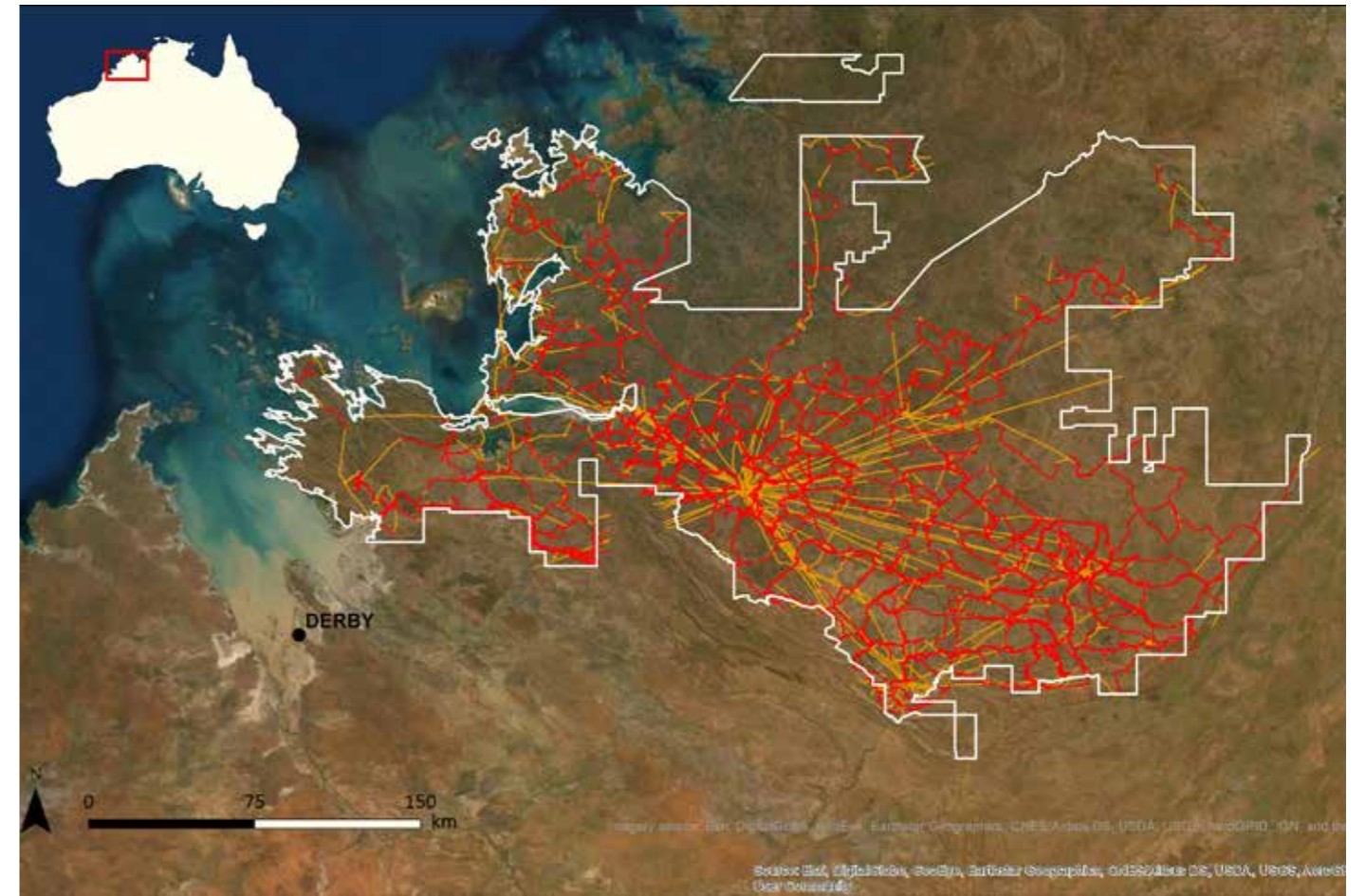
AWC commenced implementing EcoFire in the central Kimberley more than a decade ago. The program has evolved into the largest non-government fire management project in Australia. Ecofire involves the delivery of early dry season, controlled burns across 3 million hectares of the central Kimberley. Indicating the scale of this operation, each year, AWC staff fly >25,000 km and drop >50,000 incendiaries.

The project is a template for best-practice fire management in northern Australia and, since 2007, neighbouring pastoralists and Indigenous communities have been closely involved in the design and delivery of the prescribed burning program. The outcomes are exceptional:

- The incidence of late dry season wildfires has been halved; and
- The area burnt in extensive late season fires has been reduced from 90% to 20-40%.

These results are delivering substantial benefits for native plants and animals, climate change and pastoral productivity. For example, by successfully controlling fire and feral animals – two of the biggest threats to northern Australia’s wildlife – on a vast scale:

- Populations of most small mammals at Mornington Wildlife Sanctuary in the central Kimberley have increased substantially;
- The last decade has seen populations of endangered Gouldian Finches stabilise; and
- Populations of threatened Purple-crowned Fairywrens have increased by 180%.





Extending Ecofire across 6 million hectares of the Kimberley

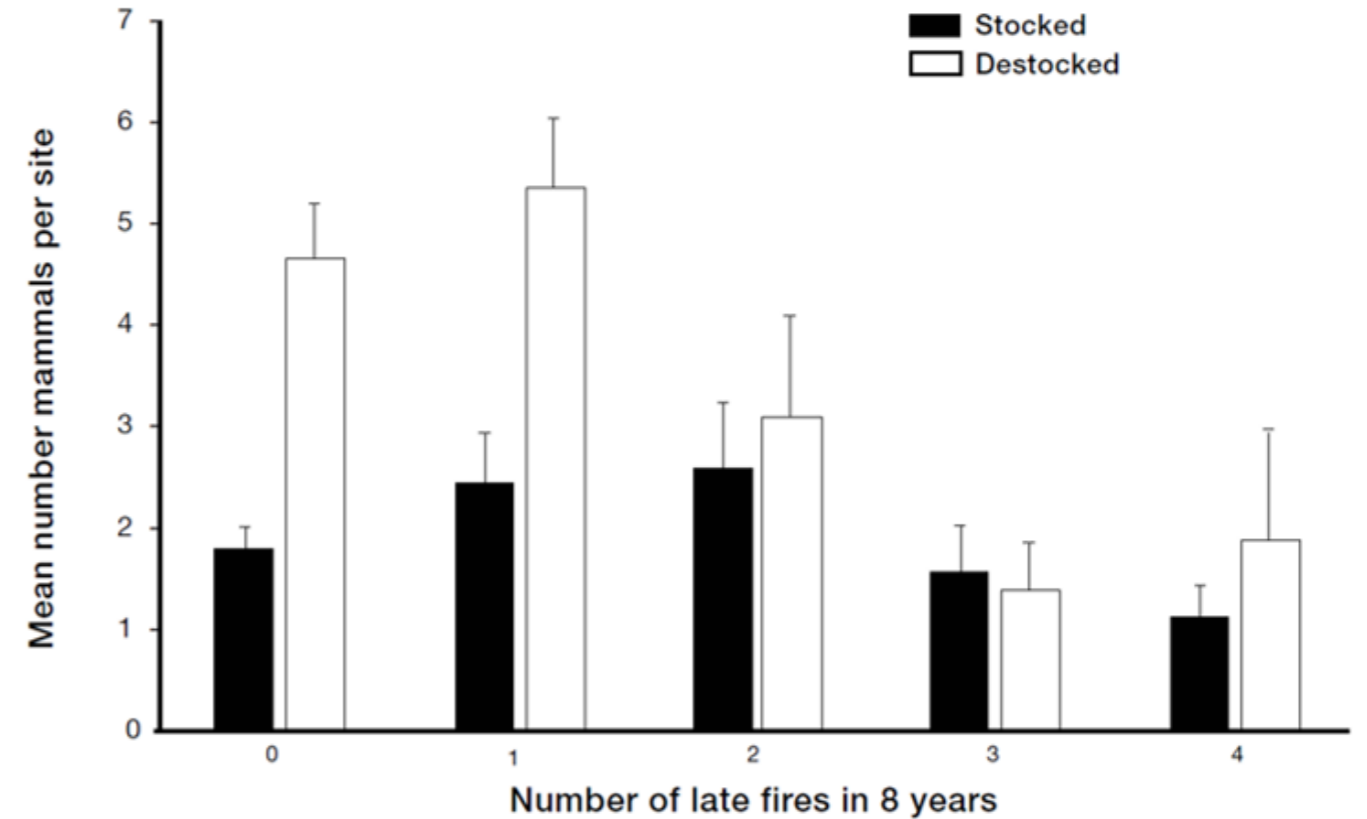
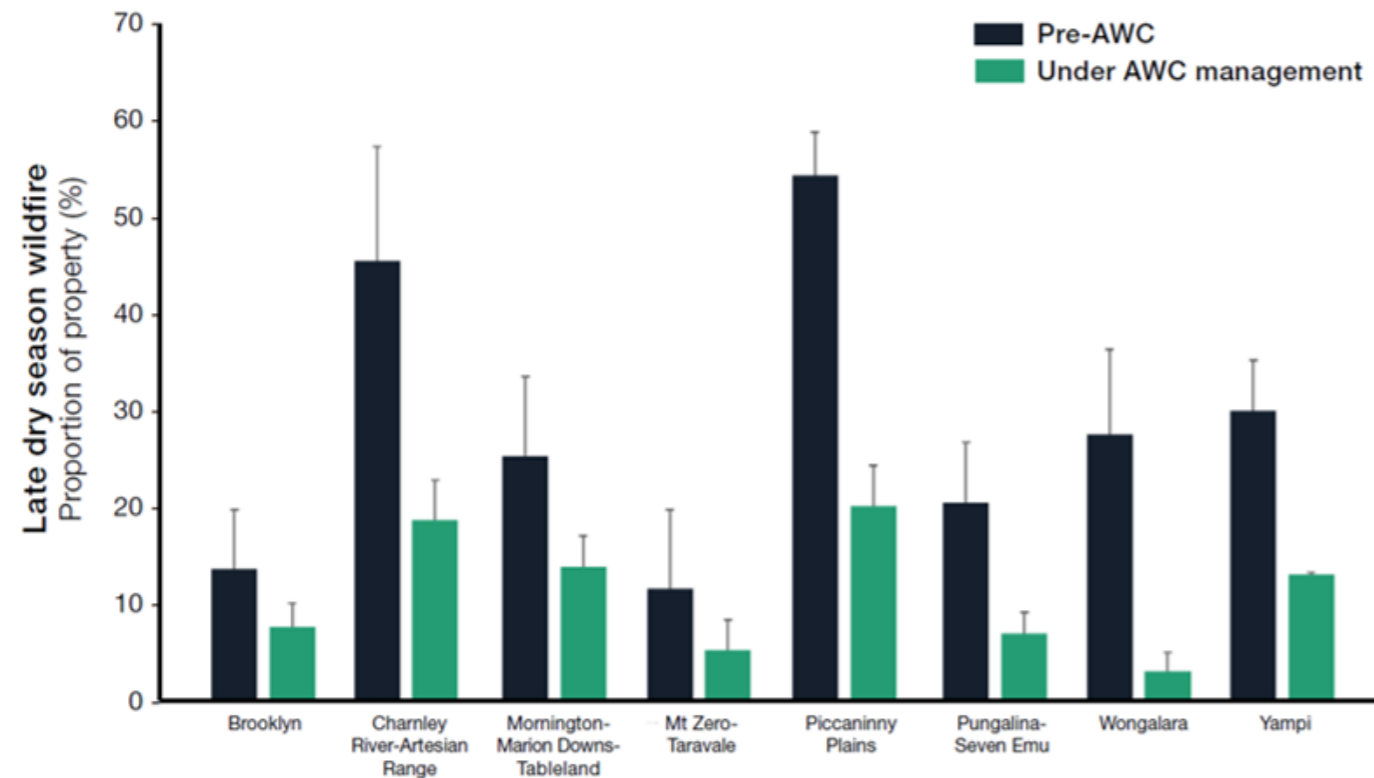
The success of Ecofire has seen the area over which AWC delivers fire management expanded from 3 million hectares of the central Kimberley to more than 6 million hectares, stretching from the Kimberley coast to the central Kimberley - an area approaching the size of Tasmania. AWC has achieved this by partnering with the Department of Defence at Yampi and by working hand-in-hand with Indigenous Rangers and Traditional Owners at Dambimangari and Wilinggin Aboriginal Corporations.

Changing fire patterns across northern Australia

Beyond the Kimberley, AWC's field staff implement controlled burning operations across key regions of northern Australia, including at Mt Zero-Taravale, Brooklyn, Piccaninny Plains, Pungalina, Wongalara and Bullo River Station. Neighbouring pastoralists and Aboriginal communities are closely involved in the design and delivery of the prescribed burning program which takes place early in the dry season. Key steps include; engaging neighbours, developing burn plans, implementing prescribed burning, fire suppression, measuring success and reporting. Now in Year 7, AWC's Northern Fire Project is significantly altering regional fire patterns and measurably reducing the extent of wildfires.

The results are exciting: AWC has significantly reduced wildfires across all our north Australian properties. Not only is this great news for biodiversity – it also has *significant co-benefits for climate change*. In 2019 the reduction in wildfires across our northern properties avoided more than 130,000 tonnes of carbon from being emitted into the atmosphere. The savings in greenhouse gases going into the environment is equivalent to removing more than 37,500 vehicles off the road annually.





Providing a catalyst for change

In north Queensland, AWC's Northern Fire Program is catalyzing change across the region. It has inspired the Upper Mitchell Catchment Fire Management Project involving the delivery of fire management across six pastoral and indigenous properties, three National Parks and Brooklyn sanctuary – an area covering 600,000 hectares of national conservation significance. Implementation of the Fire Management Program has seen wildfires reduced by more than 40% which is another outstanding result for biodiversity and for pastoral productivity.

Measuring success

The success of AWC's fire management at each property is measured against key fire metrics, such as:

- % of each property burnt in controlled burning operations vs late season wildfires;
- % of property that is long unburnt for 3+ years; and
- Distance between burnt and unburnt patches of vegetation.

These metrics are crucial for measuring whether we are delivering a positive 'return' on investment. No other organisation in Australia implements such a rigorous science-based approach for measuring the outcomes of on-ground fire management. environment is equivalent to removing more than 37,500 vehicles off the road annually.

Request for support



Your support will generate positive outcomes for biodiversity, climate change, indigenous peoples and pastoral landholders.

It costs AWC approximately \$0.20 per hectare per annum to deliver ecologically-friendly fire management across 7.5 million hectares of northern Australia (or a total of \$1.5 million per annum).

Your support will see the delivery of fire management across AWC's network of sanctuaries, generating positive, measurable benefits for biodiversity and delivering co-benefits for climate change, pastoral landholders and indigenous peoples.



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