



Southern Gulf
NRM

FIRE MANAGEMENT for the
Carpentarian Grasswren

PHASE TWO PROJECT REPORT

Kayler Plant

Background

Southern Gulf NRM established a fire management project to address the recovery of the Carpentarian Grasswren (*Amytornis dorotheae*) in 2016, when the bird was first listed as endangered. The initial project was funded by the Australian Government and Glencore's Community Program North Queensland and took place on Calton Hills station, owned by the Kalkadoon Tribal Council¹. The outcomes of this initial project are summarised in the Phase One Report *Crowley & Plant 2018. Fire Management for the Carpentarian Grasswren - Phase One Project Report*.

Further funding was secured in August 2018 to continue the project through to June 2019, supported by Southern Gulf NRM through funding from the Australian Government's National Landcare Program. This *Phase Two* report outlines the achievements of the project.

2019 burn program

Planning for the second round of proactive fire management across Calton Hills Station occurred in October-December 2018, following widespread rain. Priority areas for the 2019 burn program were established with input from project partners including Calton Hills management, BirdLife Northern Queensland, Friendly Fire Ecological Consultants and Queensland Fire and Emergency Services and Adaptive NRM, resulting in the station's Wildfire Mitigation Plan⁴. The plan was developed to include areas of priority for both station assets and Carpentarian Grasswren habitat protection. This included implementing cool burns along high tensile barb-wire fence lines to protect them from hot late season wildfires as well as burning in areas to break up high fuel loads to protect locations where Carpentarian Grasswrens had been previously recorded⁴.

Widespread rain occurred in February 2019 with a total of 278 mm recorded at Mount Isa Airport. This created ideal burn conditions in March. The three-day aerial incendiary operation burnt 16,928 hectares throughout the property

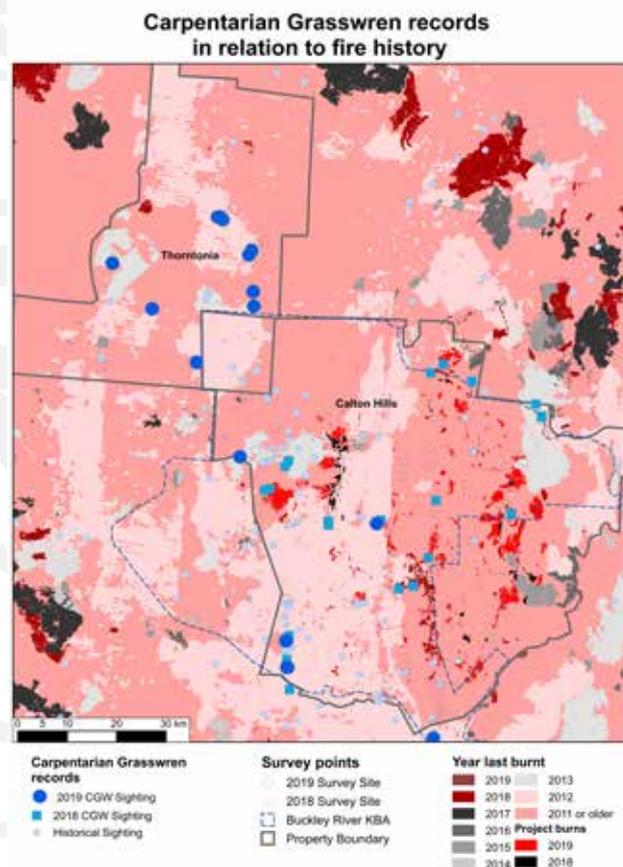


Figure 1: Carpentarian Grasswren records in relation to fire history across the project area.

creating the desired mosaic range of vegetation age (Figure 1)³. Patch burnt mosaics of vegetation age reduce the impact of late season wildfire with recent fire scars forming breaks in the fuel load that impede wildfire spread. Patch fire scars also create important refuge areas that native animals use for protection in the event of late season wildfires^{1,3,4}.





Male (Left) and Juvenile (right)
Carpentarian Grasswrens
Photo Credit: Anthony Woodbine

2019 BirdLife Northern Queensland grasswren survey

BirdLife Northern Queensland organised 16 volunteers for the 2019 survey of 59 sites at Calton Hills. The methods used to survey for grasswrens were consistent with those used in previous years^{1,2}. Carpentarian Grasswren groups were found at six of the survey sites² on Calton Hills (Figure 1). The results from the 2019 survey and the survey site locations will form the basis for long-term monitoring to assess the impacts of Southern Gulf NRM's wildfire mitigation plan on the endangered Carpentarian Grasswren¹.

During the 2019 survey period, two teams of volunteers also conducted surveys in the northwest sector of Boodjamulla (Lawn Hill) National Park using a helicopter supplied by Queensland Parks and Wildlife Service². Only one group of Carpentarian Grasswrens was found². 11 sites were also surveyed on neighbouring station Thornton with an additional five sites covered by opportunistic sightings².

Over the entire survey, 18 groups of Carpentarian Grasswrens were located. Five groups of Carpentarian Grasswrens comprised more than two individuals, and three of these groups had identified juveniles, indicating successful recent breeding². The overall results are similar to those from the 2018 survey in terms of percentage of sites with grasswrens and the distribution of sightings across different fire age categories².

Regional partnerships grow adaptive capacity and reliance

The Queensland Fire and Emergency Services (QFES) continues to be an important partner throughout the project. Southern Gulf NRM work with QFES to extend the department's regional fire management initiatives. The Rural Fire Service's annual Fire Management Group meetings were held throughout the North West region in March and April 2019. In addition, a QFES Northern Region Primary Producers Summit was also held in Cloncurry in May. These events provided valuable opportunities to discuss and plan collaborative fire management approaches to protect both

biodiversity and pastoralist assets. Cumulatively, 53 regional stakeholders took part in the fire management sessions providing valuable information for local priorities and gaining access to additional support. Furthermore, the Rural Fire Service delivered two nationally accredited Minimum Fire Fighter Skills training sessions with the project. This collaboration builds regional capacity as well as increases volunteer numbers throughout the North West Highlands bioregion. All 16 participants signed up to become members of either the Camooweal Country or Spinifex Rural Fire Primary Producer Brigade.

The future

Southern Gulf NRM has received confirmation that the project will continue to be supported by the Australian Government until June 2023. Through the extension of the project, Southern Gulf NRM seeks to expand fire management across contiguous properties to form a fire management corridor connecting Calton Hills station to the southern section of Boodjamulla National Park. The extension of this project will include further regional capacity development initiatives and continuation of support for the annual BirdLife Northern Queensland grasswren surveys.

References

1. Crowley & Plant 2018. *Fire Management for the Carpentarian Grasswren -Phase One Project Report* (Southern Gulf NRM).
2. Harrington & Shurcliff 2018. *BirdLife Northern Queensland Grasswren Survey for May 2019*. (Internal Southern Gulf NRM Report)
3. Blackman 2019. *Southern Gulf NRM 2019 Burn Program Report*. (Internal Southern Gulf NRM Report)
4. Plant 2018. *Biodiversity Bright Spots Carpentarian Grasswren in Buckley River IBA – Calton Hills 2019 Burn Plan*. (Internal Southern Gulf NRM report)

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