

WILDFIRES IN THE ESPERANCE AREA

Sarah Comer & Alan Clarke

The 2015 spring saw a number of bushfires in the Esperance District, and several of these had significant impact on the habitat of the critically endangered western ground parrot (*Pezoporus flaviventris*) and the endangered Australasian bittern (*Botaurus poiciloptilus*).

In mid-October lightning strikes started three separate bushfires in Cape Arid National Park. Two of these burnt more than 15,000 hectares of the park, and impacted significantly on the known western ground parrot habitat. Habitat burnt included one of the core areas that the Parks and Wildlife team had been hoping to target while seeking birds to supplement the captive population at Perth Zoo. Despite this setback the project team, assisted by volunteers, were able to locate enough birds in listening sessions to proceed with the capture of two young birds for the Zoo. Capture efforts had to be called off when lightning strikes again resulted in fires throughout the district in mid-November. Another two fires in Cape Arid National Park burnt through 150,000 hectares: these in combination with the October fires resulted in the loss of an estimated 90% of the known ground parrot habitat, leaving only two areas of known habitat unburnt.



Above: Western ground parrot. *Photo: Brent Barrett*

Below: Clear views into the distance at Cape Arid National Park postfire. *Photo: Sarah Comer*



EDITORIAL

Greetings everyone!

It is a great pleasure to present this issue of Western Wildlife. It is fortuitous that this issue coincides with an exciting development for the Land for Wildlife (LFW) program in WA. The Department of Parks and Wildlife is very pleased to be joining with WA's Natural Resource Management Program (NRM WA) in a collaborative approach to delivering the Land for Wildlife program. The department and NRM WA have recently signed a partnership agreement to provide support to registrants at a local scale. NRM organisations are key members of local communities and are well aware of local issues that affect LFW registrants. We intend to work together to seek additional resources to expand *LFW* presence in the regions in the future.

We are looking forward to developing this partnership and continuing to support members in managing their bush for wildlife.

LFW has welcomed the owners of five new properties into the program over the past year. I have developed and trialled an evaluation method for *LFW* registration based on landholder-provided information and other available data. The landholders and I then identify management options that will support wildlife on the property. Please continue to encourage landholders to consider joining the program.

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This issue of *Western Wildlife* contains several different articles about fire, a dynamic element in our landscapes. Spring fires have had a significant impact on threatened fauna of the South Coast, with urgent protection underway to prevent extinctions. A CSIRO and Ngadju team looks in detail at traditional burning knowledge from the Great Western Woodland area, with the ultimate intention of meshing this knowledge with 'western' practices and developing best practice fire management in that part of the State. We also look at banksia woodland recovery after fire, and the ways different plant species regenerate over time.

Fauna surveys of a bush remnant near Kulin provide a very interesting insight into the area's ecology, and indicate that in high quality habitat, small animals are able able to persist even with the presence of introduced predators.

I welcome contributions from *LFW*ers about their successes and trials, so learnings can be shared with other members. Please let me know if you have reached a milestone – perhaps birds nesting in your revegetation, a new animal or interesting behaviour on the remote camera, phascogales moving into the nestbox you put up, or getting somewhere at last with weed control.

I also welcome your feedback about *Western Wildlife*, including suggestions for feature articles.

All the best, Gillian Stack Land for Wildlife Coordinator



Left: A (scarcely there) spinytailed gecko.

Photo: Mark Dickinson

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Over summer the Parks and Wildlife team retrieved some of the automated recording units (ARUs) that were deployed after the October fires and conducted surveys of the two unburnt pockets in Cape Arid and Nuytsland Nature Reserve. A small number of birds were heard in an unburnt patch between the fires in early February, which is encouraging, and also in Nuytsland. The challenge now is to continue with management of introduced predators under *Western Shield*, as the parrots (and other animals) are more vulnerable without cover.

Parks and Wildlife conducted an emergency delivery of the feral cat bait *Eradicat*® in Cape Arid in December, and the Integrated Fauna Recovery Project team trapped for feral cats around the unburnt pockets of ground parrot habitat. Seven feral cats were removed in November, and 10 in January. Minimising pressure from introduced predators is a key recovery action and a priority for the future.

Australasian bittern habitat was also impacted by significant fires in the Merivale area, east of Esperance. Big Boom Swamp has been a hotspot of activity for this species in recent years. This area and surrounding wetlands to the north of Cape Le Grand National Park were burnt during the November fires. Water and bittern monitoring equipment situated in the wetlands was lost in these fires, but ARUs have been reinstalled to monitor bittern activity at this site along with reestablishment of the depth and rainfall logging equipment.

Surveys to investigate the impact of fire found that approximately 80% of the wetland was affected, including sedges in standing water. A narrow section of reeds in fairly shallow water provided some remnant habitat at this important site. Three Australasian bitterns were flushed out by surveyors, but no others were seen or heard calling. One predator-killed bittern was also found, highlighting the vulnerability of the birds in this thinner cover, closer to shore than would be preferred.

In the months since the fire the major sedge present (jointed twig rush; *Baumea articulata*) has regenerated across the burnt area to a height of 80cm. It is unlikely to be suitable for breeding this spring, but there is a good chance it will be next year. With time, Big Boom Swamp will recover and thankfully for the bitterns, there are viable options a short flight away for their ongoing requirements.

The nearby Cape Le Grand National Park has a large number of wetlands with varying depths and habitat types and was not impacted by this fire. Some of these wetlands have habitat and water levels that would have been good enough to provide temporary refuge for the bitterns during the fire events and importantly, provide alternative breeding and feeding habitat across fluctuating yearly winter rainfall.

Australasian bittern seem to have very specific breeding habitat requirements in WA and only a few wetlands are regularly used for breeding. With the degradation of bittern-friendly wetlands in the Muir-Unicup area, the greater Le Grand area is now unique in its ability to provide a suite of suitable, freshwater wetlands that are not dependant on consistent rainfall and because of the large area, are relatively safe from the impacts of any one fire.

[For more information on Australasian bitterns see Western Wildlife 16/1, and for western ground parrots see WW 13/3 and 12/1. See the publications page of the website for the last two. Editor].

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Above: Australasian bittern. Photo: Alan Clarke