

FIRE ON KARST AT YANCHEP, WESTERN AUSTRALIA

- Robyn McBeath

Yanchep National Park is a popular recreational area situated approximately sixty kilometres north of Perth and five kilometres inland from the Indian Ocean. The park is managed by the Department of Conservation and Land Management (CALM). The 2842ha National Park is predominantly tuart (*Eucalyptus gomphocephala*) and bull and firewood banksia (*Banksia grandis*, *B. menziesii*) woodlands and includes lakes, wetlands and cave systems.

Within the Yanchep karst there are around 1000 known caves and karst features. These are mostly within the National Park but also extend south to the Wanneroo area, a rapidly developing suburb on the outskirts of Perth.

Most of the caves are shallow and small, having developed in a thin dune limestone, known as *Tamala Limestone*, approximately 10m above the water table. A few of these caves have roots from the tuart trees reaching down into pools and streams within them. These root mats support stygofauna communities listed as critically endangered due to declining water levels.

Early in the New Year, as a result of arson, two fires started on the park's southern boundary. They converged to eventually burn about 70% of the National Park, including the land over well known Crystal, Cabaret and Yonderup Caves. The fire was sustained by temperatures of 37

degrees and a strong south westerly wind causing spotting to occur up to 100 metres ahead of the fire front.

This intense wildfire burnt over a two day period, 6 and 7 January, with widespread crowning in the 35–40m tuarts and the banksia and balga (*Xanthorrhoea preissii*) understorey was burnt bare. All of the available fuel load including trash and leaf litter were completely consumed, exposing extensive areas of mineral soils. The fire finally burnt into an area with three year old fuel loads and was able to be contained by firefighters backburning.

When I visited the park three weeks after the fire, much of the recreational area had reopened with no damage having occurred to the main visitor attractions, Yanchep Inn and Indigenous Interpretive Centre, both being heritage listed buildings, the koala boardwalk, and picnic areas.

In other areas of the park extensive works programs will be needed to replace damaged infrastructure, including damaged homes, one rangers house was destroyed, and a firefighter seriously injured from a falling branch. The walk trails, caves and golf course remain closed until further notice.



Stefan Eberhard surveying the fire damage in Yanchep National Park