



Peak Charles National Park: a remote eastern goldfields wilderness

Remote and wild, **Peak Charles** National Park harbours rare and endemic plants and animals in the eastern goldfields.

by Sarah Comer and Emma Adams

Rising high above the surrounding sand plain and framed by majestic salmon gums, the granite summits Peak Charles (658 metres) and Peak Eleanora (502 metres) are inspirational landscape features on the southern edge of the Great Western Woodlands and the Yilgarn Craton. Named by Lieutenant John Septimus Roe in 1848 as the Fitzgerald Peaks, these ancient intrusions of Proterozoic bedrock are the centrepieces of the remote Peak Charles National Park—some 40,000 hectares of wild landscape lying south of the Lake King–Norseman Road in the eastern goldfields.

The peaks are framed by a remarkable mosaic of different vegetation types and complexes associated with low-lying

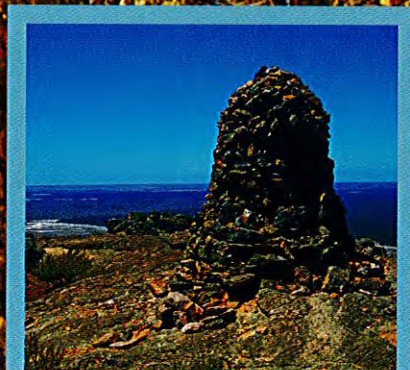
broad valleys dominated by diverse woodlands. Surrounding these are salt lakes that are part of the Lake Sharpe–Lake Tay chain—remnants of ancient rivers that would have once flowed into the Eucla Basin.

The park lies within the Great Western Woodlands, which at approximately 16 million hectares is one of the largest remaining areas of intact Mediterranean-climate woodland on Earth, and recognised globally for its biological richness (see ‘The Great Western Woodlands: protecting our biological richness, *LANDSCOPE*, Summer 2010–11). The woodlands are now the subject of a management strategy to ensure the long-term conservation of areas unique culture and biology.

Wildlife refuge

Biologically, Peak Charles National Park is of significant interest and in recent years a number of flora surveys of the mountain-top communities have been completed. Between 1979 and 1981, biological surveys of sites in the eastern goldfields sampled fauna at eight biological survey sites in the Peak Charles area, recording four amphibians, 59 bird species, 35 species of reptile and eight native mammals.

The south-west endemic turtle frog (*Myobatrachus gouldii*) is at the end of its range in the national park. Reptiles including the racehorse monitor (*Varanus tristis tristis*) and the carpet python (*Morelia spilota imbricata*) are



also close to their distributional limits in the park. Mammals recorded during the survey include the white-tailed dunnart (*Sminthopsis granulipes*) and ash-grey mouse (*Pseudomys albocinereus*).

Mountain-top surveys conducted in 1995 by Sarah Barrett of the Department of Environment and Conservation added some significant finds to the eastern goldfields data, with the discovery of the Lake Cronin snake (*Paroplocephalus atriceps*) on the summit of Peak Charles. In addition, the bush rat (*Rattus fuscipes*), which was not recorded in the eastern goldfields surveys, was found on peaks Charles and Eleanora at the inland limit of its range.

The diversity of habitats provides for a rich avian fauna, and a notable eight species of honeyeater are known from the park including yellow-plumed and spiny cheeked honeyeaters (*Lichenostomus ornatus* and *Acanthagenys rufogularis*). The mallefowl (*Leipoa ocellata*), peregrine falcon (*Falco peregrinus*), crested bellbird (*Oreoica gutturalis*) and crested shrike-tit (*Falcunculus frontatus*) are species of conservation concern with secure populations in the park.

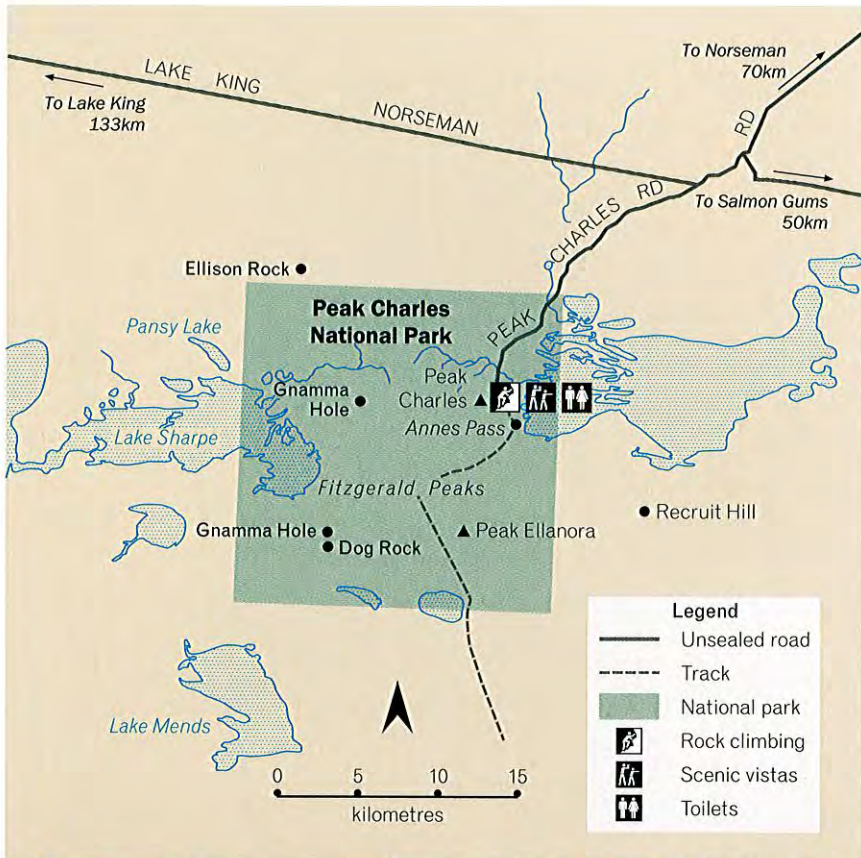
Missing mammals

During a 1984 Nullarbor biological survey, Alexander Baynes from the Western Australian Museum examined surface deposits in caves on Peak

Main DEC staff Anne Cochrane and Emma Adams climbing Peak Charles.
Photo – Sarah Comer/DEC

Inset Top of Peak Charles.
Photo – Jiri Lochman

Charles and found the present-day fauna impoverished when compared to the skeletal remains of fauna from the late 1800s. Missing from the landscape today are the wambenger or brush-tailed phascogale (*Phascogale calura*), dibbler (*Parantechinus apicalis*), western barred bandicoot (*Perameles bougainville*), quenda (*Isoodon obesulus*), brushtail possum (*Trichosurus vulpecula*),



Below left Woylies are among the mammal species that once occurred in the park but have now disappeared from the area.

Photo - Jiri Lochman

species are named after Peak Charles where they were found—*acrocaroli* is from the Greek words *acro* (peak) and *caroli* (Charles). Peak Charles remains the only place they are known to occur.

Peak Charles experienced an intense wildfire in 1991 which swept through most of the northern section of the park and subsequent fires in 2006 and 2008 have affected Peak Eleanora. Understanding of the impacts of fire on the communities in these areas is limited. In recent years monitoring plots have been established at Peak Charles and Peak Eleanora to begin assessing the potential impacts of fire on the different vegetation communities as well as the fire response of target threatened flora species including the Peak Charles *drummondita*.

Finding out more

Thirty years on from the eastern goldfields biological surveys, plans are afoot to revisit some of the historical survey sites in Peak Charles National Park. This work aims to document the current status of conservation values in the park, and to increase knowledge of this wilderness area. Researchers even hope to find evidence of chuditch present in the park.



woylie (*Bettonia penicillata*), black-footed rock-wallaby (*Petrogale lateralis*), and the heath mouse (*Pseudomys shortridgei*).

Interestingly, evidence of chuditch (*Dasyurus geoffroi*) was missing from both the Baynes and eastern goldfields surveys of the park. This threatened species has recently been recorded in both the Lort River catchment, just to the south of Peak Charles, and on the track into the Bremer Range, just north of the park.

Rare plants

The declared rare plant Peak Charles *drummondita* (*Drummondita longifolia*) is known only from Peak Charles, where it is found on the steep granite slopes. There are also a number of other species endemic to the Peak Charles area including *Hibbertia charlesii* and *Gastrolobium acrocaroli*, both of which are 'priority 2' species, meaning they are in need of further study before they can be given a conservation ranking. The latter two



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