

FIGHTING FIRE WITH FIRE

A research program to investigate the behaviour and effect of fires in shrubland ecosystems has started in the Stirling Range National Park.

by
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Fire is a critical factor in the management of parks and reserves which contain large tracts of shrubland vegetation.

Much of it is highly flammable and capable of carrying fast-moving intense fires during dry, windy conditions.

CALM must protect park staff, visitors and neighbours from the threat of fire.

At the same time, action must be taken to ensure that fire regimes within parks and reserves are compatible with conservation.

The research program at the Stirling Ranges is centred on a study area near the southern boundary of the park.

A grid of plots, each four hectares, has been established.

It will be surrounded by a low-fuel buffer strip about 100 metres wide to prevent experimental fires escaping into adjacent bush areas.

Other sections of the park's perimeter have received similar treatment this autumn.

Fuel and vegetation characteristics within each plot will be assessed before the plot is burnt.

Experimental fires will be started over a wide range of weather conditions to monitor the fire's forward rate of spread, flame height, intensity and fire shape.

Strategies

This data will form the basis of a fire behaviour guide for shrublands which could be used in planning strategies for suppressing wildfires, implementing fuel reduction burning in strategic buffer strips, and educating park users about the role of fire.

Experimental burning should start in late autumn and continue for several years.

Vegetation response to fire will be studied in selected plots to examine the effect of fires in different seasons.

The presence of all plant species will be recorded both before, and at intervals after, fire.

Comparable plots have also been established in the buffer strip to examine the response to this treatment.

Seed release and recruitment in selected species such as *Banksia baxteri* will be studied after fire.

Pitfall trapping will be used to research the effect of fire on invertebrates, reptiles, amphibians and small mammals, to compare responses to fires in spring and autumn, and examine faunal populations at sites with a range of past fire regimes.

In all, about 150 hectares of the park's total area of

116,000 hectares will be burnt during the research program.

Staff from the Manjimup and Woodvale Research Centres, park rangers and Albany District staff are contributing to this research.

Knowledge gained from this work will provide a solid basis for future management of the Stirling Range National Park.

WHAT'S NEW?

The following publications have been produced by CALM:

*WURC Report No. 9: Survey of Solid Wood Sizes used by the Furniture Industry in WA.

*Blackwood Valley — Farmland to Forest, recreation brochure.

*CALM in the Wheatbelt, primary objectives and role brochure.

*Technical Report No 22: A spring reconnaissance survey of the flora and fauna of the southern Beekeepers' Reserve.

*Roadside Vegetation Bibliography (Penny Hussey).

*Tree Decline and Vegetation Newsletter (Penny Hussey).

*The Perup — A Living Forest.

*Education Resource Booklet.

*CALM Landnote 1-89 Park Management Planning.

*CALM Strategic Plan 1989-1993.

*Leuwin-Naturaliste National Park, Summary of Public Submissions to Management Plan No 13, \$3.

*Leuwin-Naturaliste National Park, Management Plan No. 13, \$5.

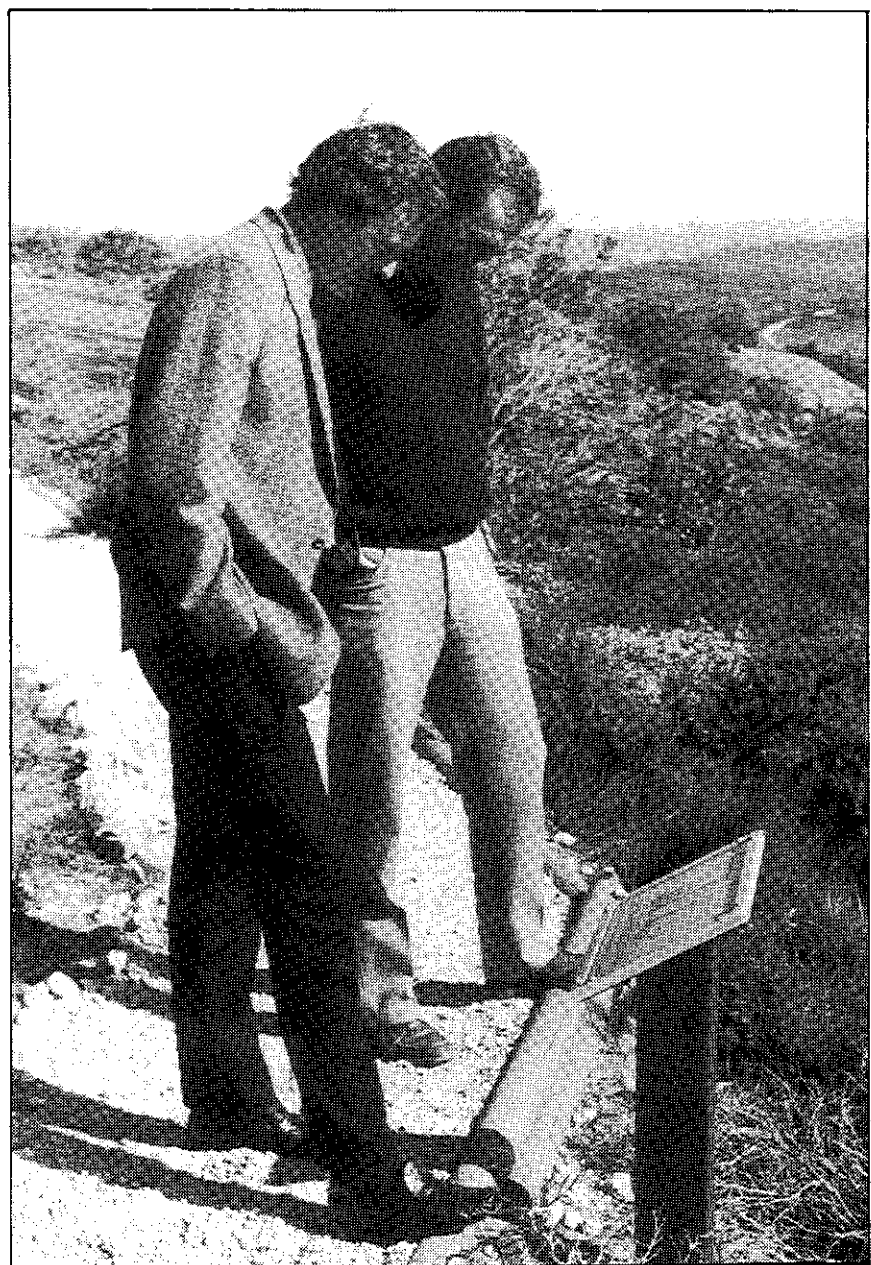
*The South Coast Region Draft Management Plan, \$10.

*Bungle Bungle Management Plan.

*Shark Bay — a coloured book on the natural wonder of the area, \$5.95.

*Hamersley Range National Park, a brochure on the geology of the gorges.

*Walpole — a brochure on the national parks and forests.



CALM Minister Ian Taylor (front) took time out during his visit to Albany to walk the Stony Hill Heritage Trail with Woodvale's Senior Research Scientist Steve Hopper. Picture: JOHN WATSON.

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TRANSFERS

Gardner, Forest Ranger to Allan Thomson, ADFO, Paul Brennan, ADFO, Bussell-Price, Forest Ranger, Man-k Read, Forest Ranger,

RETIREMENT

ect, Northern Forest Region-started work for the Forests in 1961. He specialised in control, visited Kenya as a fire in 1980, and became regional 1985.

FAIR WURC

BELOW: Phil Shedley (left), from CALM's Wood Utilisation Research Centre in Harvey, discusses the centre's activities with Peter and Charmaine Brown.



Speak now . . . or hold your peace

CALM Minister Ian Taylor has urged staff and the public to make submissions on the Draft South Coast Management Plan.

The plan, launched by Mr Taylor in Albany early this month, is open for comment until July 31.

The South Coast Region contains 13 national parks, four State forest blocks, two timber reserves and more than 100 nature reserves, including well-known national parks Stirling Range, Torndirrup, Porongurup, Cape Arid and Two Peoples Bay Nature Reserve.

The plan includes land use proposals, and management issues and proposed strategies for landscape, flora, fauna, cultural areas, recreation and public participation.

It is available at Como, all regional offices, and the Esperance District office. All queries should be directed to Ian Herford, Regional Planning Officer, Albany.

Plan preparation was coordinated by South Coast Regional Manager John Watson in consultation with CALM's General Manager Roger Underwood, specialist branch staff and representatives from other agencies.