## WANDOO REGENERATION RESEARCH BURN

The beautiful wandoo woodlands on the northern and eastern margins of the main jarrah forest belt have been logged for sleepers and other sawn products for many years. The woodlands have mainly regenerated from coppice or the occasional seedling. In the past, there have been both operational and research trials to regenerate wandoo by various methods including seed tree retention followed by burning and planting out of seedling stock. However, the results of such trials have met with mixed success. The most desirable techniques for regenerating wandoo is by using prescribed fire to create ashbed and to stimulate a maximum, synchronized seed release from capsules in the canopies. However, there are many factors determining the success of this operation in terms of producing adequate regeneration. These include the quantity of viable seed in the canopy, the extent of ashbed created, which in term is a function of fuel and weather factors and the fate of both seed and seedlings following the burn.

A joint research project with Jarrahdale district and fire research staff to examine these factors is underway at Wearne Block, east of Jarrahdale. The 300 ha study site was burnt under warm, dry conditions last autumn. Fire intensities ranged from 150 kw/m to 3000kw/m. The dry fuel conditions ensured good fuel removal and a considerable area of ashbed. Tree canopies were searched, capsules dried and the desired synchronized seed release was achieved. It is too soon to evaluate the success of wandoo regeneration but the ideal burn followed by good opening rains are encouraging signs.

A recent field inspection revealed numerous "Y" shaped cotyledenous seedlings of wandoo, which is also encouraging. Sample plots are currently being fenced to minimize the expected impact of grazing by kangaroos. Intense grazing pressure following relatively small burns in eastern forests and woodlands has been a serious problem in the past. The tiny seedlings have many hurdles to overcome before reaching sapling stage including graziers, insects, drought, competition and even fire.

Post burn seedling counts are due in October 1988 and will then be done annually in an attempt to monitor mortality. If this regeneration technique can be successfully repeated, then the backlog of areas requiring regenerating will be treated. Following regeneration, the new woodlands will be "locked away" from deliberate disturbance for 25 years to allow seedlings to develop to maturity.

.....Nell Burrows

## RESEARCH INFORMATION NEWS

Department of Conservation and Land Management ONSERVAT

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WESTERN AUSTRALIA

No. 7/88



**July 1988** 

**EDITORIAL** 

It is pleasing to see such a wide variety of articles in this edition. Information on three coming seminars, a run down on the Kimberley Rainforest Survey and another episode in our "Who's who" series are only some of the articles contained inside.

Contributions do not only have to be in the form of written submissions - I would love to receive any cartoons, illustrations etc that staff would like to forward.

Hope you enjoy this issue - which would seem to be our biggest yet. Thanks to all contributors.

Ed.

	ISSUE	DEADLINE	DISTRIBUTION
DEADLINE FOR NEXT ISSUE	AUGUST '88	26 AUGUST	EARLY SEPTEMBER