



1(11) May 1984

DEPARTMENT OF PARKS AND WILDLIFE



Graham Genge, Anna Tong, Karen Heath and Glen Yates (L-R) were all smiles last week, when we visited East Maylands Primary School.

In an effort to further publicize Arbor Day (June 8), the Department visited eleven primary schools around Perth to give away posters and young seedlings.

Many of the resulting photographs taken by Cliff Winfield should appear in the community newspapers later this month.



FLINTSTONE !

Cruising around Gnangara last month, we came across this 'flintstone' construction, which Nick Mucciarone assures me will be in use again before planting this year.

The huge offset roller was originally put together, some thirty years ago, by the late George Clover (O.C. Gnangara). It is towed behind the tractor to crush scrub, before burning and planting, and the rail lines are very effective in breaking up the debris, according to Peter Staley (retired).

Peter also told me later that the original

construction did have a steel frame and looked quite 'professional'. However, the rough and tumble work took its toll, and the steel frame had to be replaced with the eucalyptus poles and giant 'U' -bolts.

A classic case of 'making-do' with what's available - and a great advertisement for Australian hardwood. If we keep looking, we may even find Fred's car still in one piece, and parked under a tree.. (It would make a great companion for the 'Mack' fire-engine).

ANOTHER VIEW

There can be only disquiet about the news from Nairobi that halting the spread of the world's deserts is no longer possible, and "global catastrophe" looms large.

The United Nations is the source of this information and, while some of its officials have a vested interest in painting gloomy pictures (so that fund-raising becomes easier), I must say I tend to agree with their predictions this time.

Unfortunately, the world's desertification problems (including those in Australia) are not being tackled at the right pace. The world's tree planting is still too little to have the desired effect.

An estimated six million hectares a year of productive land is being transformed into arid desert each year, according to Dr Gaafar Kerrar, chief of the desertification branch of the United Nations environmental program based in Nairobi. At that rate about one-third of the world's existing arable land will be lost by the end of the century. The spread of deserts threatens about 35 per cent of the world's land surface.

You don't have to be a "greenie" to realise the significance of this to the world's weather, and to the world's capacity to produce food - at a time of exponential population growth.

Nor do you have to be a "dove" about world peace to be appalled by the imbalance between the spending on armaments by world governments and their spending on the problems of halting the spread of deserts.

The question seems to be not whether we'll all be taken out by the "the bomb", but how long we can survive the consequences of environmental inaction on a massive scale, especially in neglecting to plant trees.

Geoff Wilson
Editor, Australian Forest Grower (March 84).



Karen Bell examines seventy year old glass slides, taken in the early days of the Forests Department. (her story below) >

'People Talk'

I was glad to read the two rebuttals published, condemning "the disgraceful misquotation from the report to Parliament of the first Western Australian Conservator of Forests (C. E. Lane-Poole) perpetrated by ... " the CSIRO in the Magazine ECOS 37.

One was from W. Gentle of New South Wales, the other from B. Mitchell of South Australia. Did anybody in the West 'HAVE A GO'?

★ ★

As most people know, Barney White has had more problems following his gall bladder operation and has been re-admitted to Sir Charles Gairdner Hospital.

Jenny White has advised us that he will not require another operation, but that he has been very ill.

It is expected that he will be in hospital till the end of May.

★ ★

After 33 years' service with the Forests Department, Owen Loneragan is retiring in July 1984.

The staff of Como Research will be farewelling Owen at a barbecue lunch on Friday 29 June, from 12-2 pm. They would like you to join in.

Should you like to come, please send \$1 for drinks + a donation for a gift, to John Dorlandt, Como Research by 1 June; and bring your own food (barbecues will be available).

"Bush Telegraph" is the staff journal of the Forests Department in Western Australia. Any views or opinions expressed do not necessarily reflect those of the Department and articles published should not be taken as statements by the Department or the West Australian Government.

All enquiries and comments should be directed to Ian Kay, the editor, phone Como HQ ext. 327.

IN THE PICTURE

Anyone who has attempted to locate material amongst the Department's photographic collection will know what an awesome task this is. My job is to remedy the situation by organizing the collection in such a way that the photographs, slides and transparencies it contains are readily accessible to anybody wishing to use them.

Initially I will be designing a classification scheme which will allow for each item in the collection to be placed in a specific subject category and assigned a corresponding number. An alphabetical index of the subject categories and their classification numbers will then be produced. This will enable a person to look up a required subject in the index, find its corresponding number, and then go to material filed under that number to locate specific items suited to their needs. In the future, when the organization of the collection in this manner has been completed, it is envisaged that the feasibility of producing a computerized photographic index will be investigated. Such a system would allow quick and easy access to individual items via keywords assigned to them.

Anyone with queries, suggestions, or material they would like added to the collection is welcome to contact me. I can be found overseeing the photocopier in 7-G04 (Records block) or reached on ext.289.

Did you know?

The average hard safety hat weighs only 400 grams (compared with a World War II helmet's 1360 grams), but it offers a lot of solid protection.

A 100 gram piece of wood falling 10 metres generates a force of 30 Newtons on impact. This means that such a piece of wood, upon striking an unprotected head, would hit the skull with a force of 254 kg. Meanwhile, the person wearing the hard hat, when the wood strikes, feels the impact of 29 kg upon the neck and spine ... and can, probably, live with it.

Safety experts also say that a hard hat is actually cooler than a cloth cap or a felt hat. Tests in 37°C temperature show that the inside temperature of a cloth or felt hat was only 2° cooler than the prevailing outside temperature. The inside temperature of hard hats, however, varied from 5° to 12° cooler. The material reflection and air space of the hard hat were the governing factors.



No, they are not trying to catch Channel 7. - it is a device for tracking kangaroos. Neil Worrell (Nannup), Martin Lloyd (National Parks), Keith Flanagan (National Parks) and Grant Hansen (Busselton) (L-R) doing their best to tune into the environment at Perup.

PERUP ECOLOGY

The Perup forest is an extensive tract of jarrah forest and wandoo woodland to the east of Manjimup. It has some of the best populations of native fauna in the south-west and contains the largest existing population of the rare and endangered woylie (or rat-tailed kangaroo).

A field study centre has been opened to facilitate research in the area. The building is used by Manjimup Research officers, post-graduate students and other researchers. Short courses in field ecology have been offered to foresters and national park rangers. Conducted by Tub Liddelow and Tom Leftwich, the courses have proved to be highly successful and very tiring!

Early (6 am) starts combined with late (11 pm) finishes enable a range of activities to be covered; radio-tracking kangaroos, spotlighting, bird identification, vegetation analysis, and animal trapping and handling. The activities are designed to add to the overall research effort and long term study of the flora and fauna populations. While the main emphasis is on field ecology, a portion of each day is also allocated to the treatment and interpretation of the data collected.

During the May holidays, a five day course will be held for eight teachers. It is envisaged that the centre will continue to provide a base for research, as well as functioning as a training centre for land managers, educators, tertiary students and naturalists.

Tammie Reid

Dying Eucalyptus papuana on the Ord River plains.

RURAL TREE DECLINE



The following extract, from a recent letter to a landholder in the Kununurra area, may be of interest to readers. Tree decline is by no means restricted to the more intensively grazed areas in the south of the continent. The potential for land degradation, following tree decline in the Kimberley, is frightening, and one of our aims is to show that, with careful selection of species and good site preparation, trees can be returned to the landscape.

"The first examples we looked at were nearly all Eucalyptus papuana (Ghost gum) in various stages of "dying back". The area showed evidence of heavy grazing over a long period of time (i.e. there was little, if any, recruitment of young trees into the upper storey) and compaction was probably the prime cause of the decline of the health of the mature trees. Compaction causes reduced infiltration of air and moisture into the soil, and can, in some cases, cause mechanical damage to surface roots. These effects, along with excessive heating of the ground where it is bare of vegetation, gradually kill even deep rooted trees. Variations in soil types, with respect to their compactability, would account for the variation in health of the trees, along with different grazing intensities in different areas.

"The decline of many of the Gyrocarpus americanus (Helicopter tree) in the same area is probably related to the same cause, but, in addition, they appeared to be suffering some insect defoliation, which may have been exacerbated by compaction decreasing their vigour.

"On the positive side there were a number of trees which appeared to be handling these conditions very well, notably Adansonia gregorii (Boab) and Melia azadirachta (Cape Lilac).

"Some reversal of the tree decline could be expected by exclusion of stock for a period, to allow regeneration in strategic areas. It may be necessary to facilitate water entry by deep ripping techniques.

"The second situation involved an apparently "even aged" stand of Eucalyptus camaldulensis (River gum), which could well have established itself as the result of a major flood in the late 1960's. Its size was consistent with this observation. The site on which this establishment occurred appears to have been marginal for the species, since it is quite high above "normal" water level, and, since the damming of the Ord, has not been subject to annual flooding or even occasional flooding. The tree stocking is fairly dense and it appears that the stand has now overtaxed the water available on the site. The presence of a dense, lush sward of exotic grasses (which are obviously very well adapted to the site), would tend to make the situation less favourable for the trees. Although no evidence of recent fire was seen, fires in this area would undoubtedly have a detrimental effect on the trees.

"The term "die-back" was used a number of times during our inspection. The usual connotation of this term in Western Australia is in relation to the effect of the fungus Phytophthora cinnamomi on Eucalyptus marginata (jarrah) trees in the south west. No evidence of this type of dieback was seen, but soil samples will be taken to test this further. "Die-back" was used as a general term of description of the symptoms shown by many of the trees."

C. C. Done
Kimberley.