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DEPARTMENT OF PARKS AND WILDLIFE

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MAPPING GOES HI-TECH

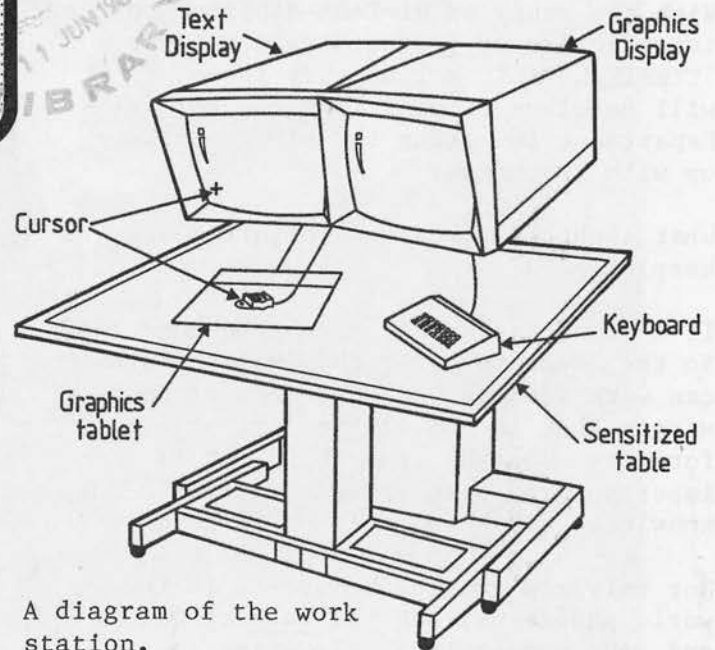
Since February 1983, the Forests Department has been involved in an inter-departmental project operating under the control of the Government's Land Information System Advisory Committee (LISAC).

The project was to look at the requirements for a rural land information system. Information was supplied from two project areas by the participating departments (Lands and Surveys, Public Works, Mines, Fisheries and Wildlife, Agriculture, the Agriculture Protection Board and the Australian Bureau of Statistics) for the shared benefit of all participants.

The Forests Department's project team, under the management of Eric Hopkins, consists of Peter Bowen, Mike Wright and Colin Pearce as active members, with Hugh Campbell, Dexter Johnston and Bruce Ashley advising.

The new information system uses computer graphics equipment, which enables all the 'on-the-ground' and statistical data to be stored, with associated text, ready for retrieval and later manipulation. All the information entry, data processing and retrieval operations are carried out from a workstation consisting of two T.V. display screens and a large sensitized table with a keyboard and hand-held cursor. The workstation is linked to a computer where the information is stored.

Using the large table, maps and diagrams can be laid out and traced with the cursor, to load the graphic detail into the computer and display it on the screen. After loading information from the basic topographic map, other detail such as vegetation, boundaries, planting information, and rainfall isohyets can be added at the same scale, in layers. Different colours can also be used.



A diagram of the work station.

The management possibilities seem endless. For instance, for the Forests Department's use, every compartment of pine can be given a coloured shading to denote the year of planting and its species; and high pruned areas can be separated from low pruned areas.

Associated with each graphical area, the operator can type in (via the keyboard) explanatory information. This information can then be retrieved for display on the adjacent screen when required.

The two displays can be used together to formulate management plans, calculate timber resources and perform a host of other useful functions.

The graphics display equipment has the facility to display whole forests or single compartments (taken from the overall information stored), simply by altering the display scale, and different levels of information can be worked, in isolation of others. Once the desired information has been assembled, either in map or text form, the operator can then request a print-out for personal record or reference.

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"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.

EDITORIAL

With the story on Hi-Tech Mapping and the introduction of Trevor Morgan's first 'TERMINAL TALK' column this issue, it will be clear to most that the Forests Department is making the effort to keep up with the times.

What about your personal effort - are you keeping pace?

It's true, there will always be some room in the Department for the 'artist' who can work wonders with 6 inches of No 8 wire - that is one of the joys of forestry. On the other hand, it is important for each of us to maintain our knowledge and keep to it up to date.

Not only are changes occurring in the world around us, but the rate of change and development is accelerating.

Developments have been so rapid in the computer industry that it has been said that if the car industry had progressed at a similar rate over the past twenty years, a Rolls-Royce would cost just \$20 and use only a hundredth of a litre of petrol every 100 km (282,480 mpg)!

Yet most of us still put up with vehicles which are no more reliable than Henry Ford's 1934 Model A and, technically, aren't much further advanced either.

Australia's motor vehicle industry is now being dragged in to the 21st Century, and it is a painful process.

We should learn from this example, and adjust to change as the need arises.

If new training is offered on the job - go for it. If it is needed - why not suggest it?

In the meantime, if you are like me and still recovering from the mental anguish of metric conversion, I can recommend the library or a good local book shop. Rigby Publishing (Australia) produce an excellent range of illustrated Usborne Guide Books. They will probably be in the children's section but don't scoff - most of our kids know more about computers than we do, and you have to start somewhere.

I.K.

MADE HIS MARK

From out of the east came a quiet man to settle here in the South West. He thought that farming would be his game but he finally gave it best. So he joined the Forests Department, in Nannup wild and hilly, and soon became known to one and all as Tired Tame or Whispering Billy. He was issued a safety helmet and he reckoned it felt so right, that it's still believed throughout the South he wore it both day and night.

Through the ranks rose our Bill, quiet and demure, 'cause he always gave his best, what the 'Manual' said for Bill was law and always stood the test. As Nannup Protection Officer, each wildfire our Bill could tame, with a rakehoe and a packspray he could put a D6 to shame.

Because of his quiet persuasion and the way he got the job done. They finally gave him a transfer to his chosen locale - Busselton. Forget the burning they said to Bill we never have wildfires here. All you need to do now until you retire, is clear bush, plant pines and drink beer.

Well, he's cleared a fair swag of the Sunklands with the contractors that he has ruled and he made them clear to the speci's 'cause our Bill's not a man to be fooled. He's turned lots of new ground since he's been here, planted millions of pines with the crews. But his time has now come for retirement and we wonder who'll fill up Bill's shoes.

Well here's notice to all you young hopefuls and the old friends of Bill in the past. We're holding a send off in August and we hope you won't let it slip past. We'll advise you of date, time and venue, and we hope you will come in a crowd. We are sure as he rounds off his service you'd all like to hear Bill speak loud.

D.A.B.



On the job in the Sunklands, Bill Tame ▲ discusses progress with Alex Thomson (driver) and Fred Cotton in the planting machine. Alex and Fred work as a team to plant and fertilize some 5 ha of pines per day.

It is estimated that by the time Bill retires in August, some 16 million pines will have been planted under his control.

Recent good rains have enabled Forest workers in the Kirup, Nannup and Busselton Divisions to shift the 1984 planting season into top gear, and Bill has been keeping a watchful eye on progress in the Sunklands. The target for his final season: 1600 ha.

Planting in the area began on a broadscale basis in 1975 and by July of this year approximately 8700 ha will have been planted. No further clearing of Sunkland areas is planned, but sites already cleared will be planted with pines.

Before planting starts, all areas are sown with clover. Clover builds up Nitrogen in the soil and provides grazing, firstly for sheep, and later for cattle. In turn, the grazing keeps down the fire hazard and provides further fertilizer.

HI-TECH MAPPING

continued from P.1.

An interesting future development will be the use of a more sophisticated programme which presents the graphic displays in three dimensions.

So far, development of the project's possibilities has been conducted at the Land Information System Support Centre in St George's Terrace, Perth. It is anticipated that an 'Intergraph' Workstation will be installed at Mapping Branch, Como, in the future, and that stations will eventually be installed in each regional office.

UNNATURAL LAWS

HOWE'S LAW

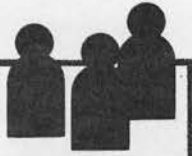
Every man has a scheme that will not work.

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GORDON'S FIRST LAW

If a research project is not worth doing at all, it is not worth doing well.

PEOPLE



Dave Evans, the Minister Assisting the Minister for Forests, officially announced the appointment of Klaus Tiedemann to the Esperance area last week.

Klaus started with the Department in Narrogin, and has been at the Hamel Nursery for more than 10 years. He will be located in the Department of Agriculture's offices in Dempster Street, Esperance.

This new appointment resulted from repeated requests from the farmers in the area, who realize that more trees can reduce soil erosion and help shelter stock. Klaus will advise farmers in the district on all aspects of tree planting and maintenance.

☆ ☆ ☆

Alec Edwards (Northern Region/Como) will soon be retiring, after 29 years of service with the Forests Department.

All personnel and their wives/husbands are invited to a send off at the State Headquarters Canteen on Friday 27 July, from 7 p.m.

Refreshments include drinks and a buffet dinner (8 p.m.), with beer and wine till it lasts. Cost: \$10 per head (includes drinks, buffet, music and covers a presentation).

Please notify Northern Region Office (Lois Cade 367 6333 ext. 356) by Thursday 12 July, so that catering arrangements can be finalized. Monies prior to 20 July.

☆ ☆ ☆

Dr Geof Syme has been elected chairperson for the committee of Greening Australia (WA).

The 24 member committee incorporates the steering committee for the National Tree Programme, and has been involved in distribution of funds for tree projects in many parts of Western Australia over the last two years.

Dr Syme is a social scientist with CSIRO, at Floreat. He has been involved with conservation and environment issues and his main interest is 'public involvement in Greening Australia projects'. Dr Syme's initial appointment is for two years.

TERMINAL TALK

The Department's Perkin Elmer computer has made a healthy return to reliability with an availability of 98.9%. Three callouts of operators in April were all for power failures.

Operators are not on-call after the end of the fire season (11 May). The computer will be left running 24 hours per day for researchers and others to use in the evenings or early mornings. However, if a failure occurs outside business hours operators will not be called in to fix the problem.

Computer Services staff commenced work on the Hardwood Logging project in April. A document outlining its scope was prepared and agreed to by representatives of Harvesting and Utilization, Inventory and Planning, Registration and Accounts.

The high rate of failures of the printers used in Divisions is causing concern. The computer operators are collecting statistics to see if specific problem areas can be identified. Aspects to be examined will include the performance of each printer, the number of problems at each site and the times at which they occur. Recommended action will be advised in due course.

Additional memory for the Perkin Elmer was installed over Easter to minimize disruption to users. It has not had any failures and has improved the internal organization of the machine.

The data communications network has been extended to Manjimup, Nannup, Pemberton and Walpole. Several technical problems were encountered but were overcome within 3 days set aside for installation. All divisions are now using the network. Attempts were made to upgrade the network to its full process speed, but problems were encountered with the Reliance software used by the General Ledger and Pine Logging systems. The problem is the inability of the Perkin Elmer to 'talk' to the network, so alternative methods are being investigated.

Trevor Morgan (Como)