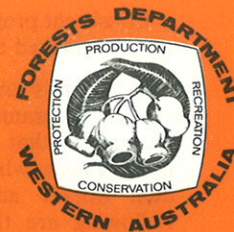




# INFORMATION SHEET

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## SAFETY IN FORESTRY OPERATIONS

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The Western Australian Forests Department's work area and workforce of over 1 000 people is spread over almost 2 million hectares—an area more than half the size of Holland.

Forestry, due to its variety of operations, has always been recognised as one of the most difficult fields in which a successful accident prevention programme could be applied.

In a relatively hazardous work area many of the dangers cannot be eliminated, i.e. falling limbs, steep and uneven slopes, dense undergrowth and debris, rocks, insects, snakes, strong winds, heat, rain and fires.

Prior to 1967 it was generally accepted that because of these dangers associated with the numerous jobs performed, accidents just had to happen, and for the workman to remain free from injury depended on the skill with which they used their tools of trade—and on lots of luck. This somewhat fatalistic outlook resulted in the unenviable safety record of an average of 184 lost time accidents a year. (A lost time accident is an accident which results in the injured worker being declared unfit for work for a full day or more, any time after the day on which the injury occurred.)

In addition, more than 500 medical treatment accidents were sustained each year. (A medical treatment accident is one which requires treatment by a medical practitioner but does not result in lost time other than that incurred by receiving medical attention.)

Add to these the countless minor injuries sustained, such as cuts, abrasions, splinters, insect bites, etc., and it can be seen that the accident problem was indeed a matter of concern, not only from the humanitarian viewpoint but also from the production aspect.

Over 3 000 man days were lost each year by the departmental workforce, and the Workers' Compensation premium kept rising. But in addition to the direct, or known costs, such as insurance, there are many other costs associated with each accident that are not always easily measured, i.e. property damage, loss in production, replacement costs, investigating costs, etc., which are known to be many times higher than the direct costs.

An earlier attempt to decrease the accident rate in the Forests Department was made in 1959 when the Government instructed all Government departments to direct their attention to accident prevention. Safety Committees were formed and recording of accident statistics was commenced in the Forests Department. It is not suggested that these procedures were useless, but in the light

of later experience it is obvious that they are only part of a management programme required for success and cannot stand alone. The major mistake made at that time was that the very top levels of management opted out of the area of safety. Safety administration was allocated to middle level management as a part time job. Another mistake made in this first attempt was that safety training was directed at only the lower level officers and overseers within the wages staff.

This situation continued until 1966 and no real improvement in the accident rate in the Department was evident. The picture was not a good one and management realised that more positive action was necessary.

The turning point for the Forests Department occurred when most senior officers were required to attend a special three-day Accident Prevention Course for supervisors and managers at the National Safety Council (now the Industrial Foundation for Accident Prevention) in 1966. It was realised that an accident control programme must start with top management's announced and demonstrated interest to succeed. This interest must be vocal, visible and continuous. A safety scheme was initiated with three actions.

**First:** Two senior field staff officers were sent to a ten week Safety Officer Training School run by the National Safety Council. For a period both men were required to report, train, publicise and advise on implementation of accident prevention principles as part of their duties as Senior Fire Control Foresters. Later one of these officers was given these duties on a full time basis and was required to advise and report to all levels of the operational chain of command and was made directly responsible to top management.

**Second:** A statement of departmental policy on various aspects of safety was prepared, circulated and given continuous support from the most senior officers down. This ensured implementation of accident prevention methods by all staff and supervisors as part of every job, rather than as a separate job to be handled by specialists.

**Third:** The Safety Officer then commenced a series of Accident Prevention Training Courses which all staff down to overseer level attended. These courses were held in a number of centres over a long period and the training was oriented to forest work situations. The courses have been repeated for newly appointed staff and for refresher training where necessary.

Consistent progress has since been made as the figures on the attached table indicate.

During this latest phase of a sustained accident prevention programme which commenced in 1967, it was recognised that industrial safety is basically good management, which is based on concern for the individual worker and recognition of personal dignity. Following are the management principles that were applied and which formed the basis of the programme.

- (a) Induction and training to achieve understanding of safety principles by staff and supervisors.
- (b) Insistence that staff in authority involve themselves in implementation of safety and account for failings.
- (c) Accident investigation to identify and remove causes but not aimed at placing blame.
- (d) Regular inspections to locate hazards and follow up to have them removed or guarded.
- (e) Proper job placement, induction and training of employees.
- (f) Good housekeeping.
- (g) Safety talks and publicity (films, posters, etc.)
- (h) Establishing safety awareness.
- (i) Recording of all accidents and near misses.
- (j) Costing of all Lost Time Accidents and Medical Treatment Accidents, including all direct and indirect costs.
- (k) Development of Accident Prevention Committees including representatives from management, supervision and employee levels.

There have been a few ups and downs over the last years, but overall the results have been very gratifying. Success came gradually but consistently. The need for sound safety practices has been acknowledged and accepted by all ranks from the Conservator of Forests down to the forest worker in the bush. A number of divisions have worked without a lost time accident for many years. Those divisions that work for 12 months without a disabling injury accident qualify for the Conservator's individual safety award. All personnel in these divisions are presented with a small personal present, and the presentations have always been attended by the Minister for Forests and the Conservator.

Recognition of the Forests Department's safety achievement has also come at State as well as Commonwealth levels. In 1978 the Department was declared winner of the inaugural C.M.L. Award for Industrial Safety for both the State as well as the National trophy. The following year, in 1979, the department was runner-up in Western Australia for this prestigious award.

In a relatively hazardous work area where many of the hazards cannot be eliminated, it is probably impossible to eliminate all accidents. The conventional factory-type accident prevention methods with emphasis on engineering and guarding in a centrally situated location have only limited application.

The answer lies in education, training, induction of safety awareness and recognition of the various hazards. It also lies in an approach to accident investigation that does not try to fix blame, but endeavours to establish all the underlying causes which, when eliminated, will prevent similar accidents from happening again.

The future of the Forests Department's success in further lowering its accident rate will depend on the extent to which these principles are integrated and accepted as part of its routine management.

We believe that this integration process, now well on the way, will be a successful one.

| Year    | Number of lost time accidents | Man days lost | Frequency rate* |    |
|---------|-------------------------------|---------------|-----------------|----|
| 1960/61 | 188                           | 3 015         | 100-200†        |    |
| 1961/62 | 188                           | 2 516         |                 |    |
| 1962/63 | 200                           | 2 763         |                 |    |
| 1963/64 | 172                           | 3 498         |                 |    |
| 1964/65 | 181                           | 3 700         |                 |    |
| 1965/66 | 179                           | 2 455         |                 |    |
| 1966/67 | 185                           | 3 244         |                 |    |
| 1967/68 | 124                           | 1 701         |                 | 65 |
| 1968/69 | 96                            | 1 738         |                 | 48 |
| 1969/70 | 70                            | 721           |                 | 37 |
| 1970/71 | 48                            | 458           | 27              |    |
| 1971/72 | 41                            | 275           | 23              |    |
| 1972/73 | 45                            | 414           | 26              |    |
| 1973/74 | 45                            | 359           | 27              |    |
| 1974/75 | 55                            | 634           | 31              |    |
| 1975/76 | 31                            | 383           | 18              |    |
| 1976/77 | 32                            | 620           | 19              |    |
| 1977/78 | 26                            | 731           | 15              |    |
| 1978/79 | 44                            | 810           | 24              |    |
| 1979/80 | 32                            | 938           | 17½             |    |
| 1980/81 | 24                            | 490           | 13              |    |
| 1981/82 | 19                            | 459           | 10              |    |

\* Frequency rate = number of injuries per million man hours worked.

† Figures available for man hours worked during this period applied only to wages employees, and are not consistent with the Australian Standard applied after 1967.

