

OPENING ADDRESS

by

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A young lady once said to my wife, "My mother says there are only two classes of Australian women - those who can make Pavlovas and those who can't". I suppose the classification of people could proceed almost- endlessly; but, for the purpose of this particular exercise, there are two classes who broadly determine our outlook on the environmental situation - the Radicals and the Conservatives. The ultra-Conservative is prepared to accept the existing position, mainly because there is little that he can do to revert it, but is utterly opposed to further change of any description whatsoever. Somewhere within this group, we find the type of people we refer to as "Conservationists" - a group devoted to the preservation for future generations of the really worthwhile natural values which are the remnants of our inheritance.

After 136 years of European, occupation, there is no part of this State which has not, to some extent, been disturbed. The extent of that disturbance ranges from absolute change to relatively minor effects brought about mainly by the impact of forest fires, for a great deal of which mankind must be held responsible. With rapidly increasing population and mechanised tools provided by science and industry to aid in the speed of so-called development, the impact upon our natural surroundings is tremendous. The whole environment and all the living forms within it are subject to pressure. The conservationist, aware of what has happened and fearful of the future, desires to preserve what is left of diminishing species of fauna and flora, of plant associations (particularly in the form of forests) and of beauty of landscape. He grimly accepts the inevitability of change, but is prepared to fight against the reckless, self-seeking attitude of certain elements within the community. To the forester he is a friend and supporter, even if at times he pulls us up with a short, sharp jerk and demands, as on this occasion, an explanation of what is going_ on.

The early settler, with experience only of European conditions, faced a formidable task in endeavouring, despite sweat, sickness, starvation and isolation, to carve out a holding within a wooded environment. He quickly learned that, under certain conditions, the vegetation was inflammable and that fire could be used as a most effective tool, not only in his clearing operations, but in keeping unwanted fires away from his boundaries.

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It was not long before he and his pioneer brethren came to learn with bitterness the tragedy associated with uncontrolled wildfire which, according to our records, swept relentlessly through the countryside at least twice before the end of last century and on far too many occasions in this.

'The forester was at his wit's end. He suffered the experience time and time again of seeing a life's work brought to ruin by devouring fires which came from beyond the territory of his control. He received little or no co-operation from the rural public, the majority of landholders adopting a 'sauve qui peut' attitude towards the common menace. He adopted back burning procedures, which were moderately effective on all except the very bad days. Much public money was expended in constructing firebreaks and maintaining them, although he knew full well that, under the influence of high temperatures, gale-force winds and low relative humidity, raging forest fires spotted far ahead and rendered all firebreaks and similar barriers utterly useless. In short, until 1939, the forester found he was able to do an effective job against the relatively easy fires, but was completely overwhelmed by raging fires on really bad days. Such fires destroyed the forest and the fauna within them and left indelible scars, not only on the land but in the hearts and minds of the people. Strangely enough, despite the great disaster of 1939 when more than 3 million acres of forest land were swept in this State, 71 lives were lost and hundreds of thousands of pounds worth of damage was done, it was not until the extensive and tragic grass fires of 1943/44, following so soon afterwards, that the people of Victoria were sufficiently aroused to deal with the situation.

Since 1939, the Victorian forester has learned many things about his fire problem. Firstly, he realised that the great wildfires are the relentless, all-consuming destroyers and that, by comparison, the average summer fire is a relatively minor affair. This does not signify that any summer fire, no matter how small, can be regarded as unimportant, but the relativity stands. Secondly, he learned that the commercially important, intensively vulnerable, unlogged, mountain ash forest had never been the site of origin of a really bad fire. They have always been swept by fires which originated in the surrounding mixed species forests. Thirdly, fires caused by lightning average 16/a of all fire causes but, in a season of considerable lightning activity, they may amount to as much as 28% of all known or suspected causes. Fourthly, while controlled burning is an effective weapon under average conditions, many fires did in fact break away under the sudden onset of high temperatures and strong winds and just as much damage was done by an escape from a so-called controlled burn as if the fire had originated accidentally.

The Victorian forester has searched avidly for the truth elsewhere within this country and particularly within North America, whose fire history is even more frightening than our own. We sought fact and efficiency. We rejected the flamboyant. It has been interesting to observe that, despite the vast amount of equipment of a sophisticated character and an expenditure measured in hundreds of millions of dollars, which the North Americans have turned into their fire protection effort, they still suffer the most appalling fire disasters, illustrated only two summers ago in Washington, Idaho and Montana.

Every fire-fighting organisation in the world - whether it be a metropolitan brigade or a forest fire service - recognises that the keynote of success is speed of attack. That has been our first line of policy; but there has always been the occasion when, despite our finest efforts under very severe climatic conditions, fire will break away and, unless it can be stopped, disaster will ensue. It is against just such a contingency that we must, as a community, direct our attention. This is the fundamental consideration now. Our facilities for detection and accurate location of outbreaks, for instant communication, and for the rapid movement of fire-fighting personnel are at a high level of efficiency. While we are not perfect, we believe that, in these particular fields, *vie* in Victoria have every reason to be pleased with our performance in recent years. Nevertheless, we still require pre-fire season preparation of broad bands of hazard reduced country as an assurance against the possibility of the development of rapid spread of wildfire within the forest and national park areas.

Mr. A. G. McArthur of the Commonwealth forestry and Timber Bureau has perfected a method of measuring the inflammability of the fuel on the forest floor at any particular time. This enables the forester to gauge the speed and intensity of fire which might occur in that type of fuel. Other fire researchers have demonstrated that the heat intensity of a forest fire is directly proportional to the square of the inflammable fuel on the forest floor. This accumulation commonly varies between 4 and 20 tons per acre. Any accumulation in excess of 6 tons per acre is regarded as dangerous. Research personnel have demonstrated that it is possible, both economically and safely, to reduce that accumulation by cool, slow, low-flame fires. There is no necessity to employ fast-moving fires, which are potentially dangerous. There is no practical reason why burning of this description cannot be undertaken in a relatively dry period in the depth of winter, when the risk of damage is at a minimum. A great deal of winter and spring burning is now being done in this State.

There is always a temptation to the forester to get the maximum amount of burning done in a short period to reduce the costs involved in having a great deal of manpower assigned to the task. One of the more sophisticated methods of accomplishing the objective has recently been by the aerial distribution of incendiary material. The conservationist asks, with justification, what will be the effect upon the forest ecotone if this practice is to be adopted as a recurring procedure through the years ahead. To this question we have no positive answer, but we are prepared to do everything in our power to obtain it. To this end the Commission has held conversations with experts in the fields of soil conservation and wildlife management. "We have had discussions with representatives of CSIRO and of the universities. We hope to establish a carefully planned and directed investigation of the questions which now assail us, under an entitlement such as "The impact of fire within the forest environment". It is our hope that within a short time we will have established a Steering Committee comprising representatives of CSIRO, the Victorian universities and the chiefs of the various State Departments dealing with environmental factors, particularly forests, fisheries and wildlife and soil conservation. The field of investigation within such a title is vast and the scope for individual investigators is limited only by their personal capacity. For these reasons it will be necessary for the Steering Committee to determine time and material limits, for we cannot afford to wait until the close of the century to obtain the information required, even though in the end we may find we have to do so.

Let it not be said of us in future years that we failed to recognise the potential, the hidden facts or the side issues in the protective programmes of our determination; but, above all else, let it not be said of us that we allowed our forests and parks to be destroyed through fear of criticism of our actions and lack of faith in our own technology.