FINAL BURNING - JARRAH REGENERATION OPERATIONS

The final burn is one of the more important operations associated with regeneration work in the jarrah forest which has not received the careful study it deserves in all districts. No detailed rules can be held to apply to all classes of jarrah forest, but there are certain guiding principles which should be followed, and a satisfactory technique built up to meet local conditions. These may be considered under the following headings:-

1. TIME TO BURN

With few exceptions, it will be found that most satisfactory results will be secured in the latter half of February. To hold over the work until March is risky, as changes in weather may render it impossible to secure the necessary conditions.

2. WEATHER CONDITIONS

High temperatures associated with steady winds which can be relied upon to continue from the one quarter while the burn is being carried out are essential. The periods during which steady winds can be relied upon from one quarter, when high temperatures prevail, are of infrequent occurrence and, in consequence, a gang of 4 or 5 men is necessary so as to complete the burning of the compartment on lines set out hereunder within a few hours from the time the first fire is started.

3. PERIOD OF TIME BETWEEN TREATMENT AND BURNING.

This is a local problem which must be studied separately for each compartment, but there are two principal considerations which must be constantly borne in mind -

a. The floor of the compartment must be cleaned up so that it will not carry a fire for several years after the burn, and banksia logs and smaller marri and jarrah saplings should be burnt up to an extent that will render controlled burning after the first thinning possible without damaging the regrowth.

b. It is hopeless trying to save coppice which has developed since treatment and odd small saplings at the time of the final burn. The coppice should be completely burnt off, so that a new crop will start from the stool, while the odd small saplings should have been cut down at the time of treatment. Small poles which have been cleared around can be saved if the instructions hereunder with reference to burning in strips are followed.

It is false economy to try to save coppice or saplings a few years old and sacrifice a clean burn on this account. A clean floor with a minimum of damage to the poles, piles, and bigger trees remaining should be the object aimed at.

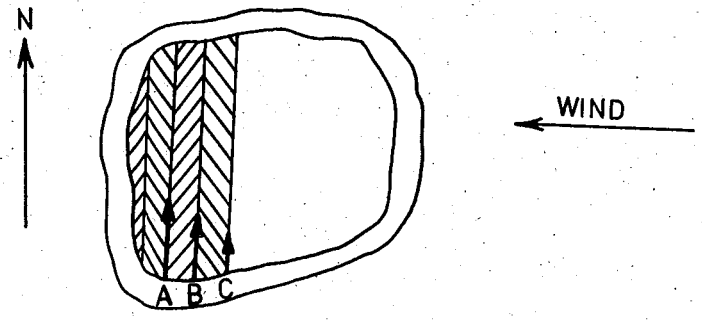
4. ORGANIZATION AND EQUIPMENT NECESSARY FOR FINAL BURN.

It is desirable to have at least four men, if possible, to handle an average compartment on which there is a fairly heavy accumulation of debris. Each man should be supplied with a kerosene torch, axe, rake and water-bag.

5. METHOD OF BURNING

In the majority of cases, it will be advisable to see that the fire belt is burnt when treatment begins or earlier to protect the compartment against an accidental fire while the debris is drying out. The scraper track or plough line round the compartment should be freshened up immediately prior to the burn.

The actual burning should be carried out by setting fires along narrow strips at right angles to the direction of the wind, which should be strong and steady. This is illustrated by the diagram hereunder :-



The first country lit is a narrow strip averaging half to 1 chain in width to allow the fire to burn with the wind to the break on the leeward side of the compartment. When this strip is burnt and the man in charge is satisfied that the fire is safe on the leeward face of the compartment, a man starts the next strip from A, a point 1-2 chains to the east, and when he has advanced a chain or two, a second man starts from the point B, a similar distance from A. This echelon formation is continued until all the men are on the opposite side of the compartment, when the same procedure in an opposite direction is repeated until the compartment has been burnt. It will be found that the strips can be widened to three chains as the work progresses.

The narrow strip method outlined above is important and essential. It prevents whirling and also insures that the whole compartment shall be thoroughly burnt on a hot day without a scorching fire being allowed to develop which will wither off the leaves of the green trees remaining on the compartment. The greater the number of growing trees remaining, particularly in the pole stage, the more important it becomes to keep the strips as narrow as possible.

6. EXCEPTIONS TO THE ABOVE PRACTICE.

There are compartments met with in certain districts which are more or less fully stocked with good regrowth. The major operation on these compartments is therefore in the nature of a thinning and regeneration cleaning is of secondary importance. In such cases, it may be necessary to stack and burn the tops in the small openings made, for the purpose of securing additional regeneration, but care must be taken that unnecessary work is not done in this way, as very often there are sufficient trees to make a final crop.

Perth
28/5/31.
SLK/MD

CONSERVATOR OF FORESTS.