# TREATED ROUND FENCE POSTS.

by D. Spriggins

The type of jarrah tree capable of yielding good quality, easily split fence posts will usually also produce good quality millable timber, either to-day or in the future.

The exploitation of such trees for posts, if allowed, could reduce the amount of millable timber available from the forest. Although this amount is probably not great at the moment it could, over the years, become quite significant. Quite apart from this, the splitting of posts from otherwise millable timber is invariably wasteful of actual wood volume and would yield a much smaller royalty return per tree than if the tree was milled into sawn timber.

To overcome the problem, an attractive alternative in quality to the split post is required. This is available in the treated round fence post. There is, in the forest and on many farmers' properties, a large volume of marri and jarrah saplings capable of producing good quality round posts suitable for treatment, and it is in our interest to promote the use of this class of timber.

The methods of treatment are fairly well known to most foresters and they are summarized briefly:

a) Pressure treatments - used exclusively by commercial firms.
b) Non-pressure treatment - suitable for farmer himself.

a) Pressure

Either creosote or water borne salts of Copper-Chrome-Arsenic base are used. Posts must be dry. They are placed in a special cylinder, subjected to a vacuum to remove air and then after filling the cylinder with creosote or water borne salts, subjected to a pressure of about 200 lbs./sq. inch to force the preservative into the wood vessels.

b) Non-pressure

i) Creosote - Posts are cut, barked and stacked to dry for 2 - 3 months dependent on weather. Butts are soaked to 20" depth for 5 - 7 days, tops given a few hours. Variations include heating the creosote to reduce the soaking time to hours instead of days.

ii) Water borne salts - Posts are cut, barked and stood upright in a container of Cu - Cr - As solution the same day they are cut. The sap is gradually displaced by the salt which remains "fixed" in the timber.

The cost of creosote or salt used in the Non-pressure treatments is approximately 1/1d. per post.

Commercial plants charge 2/- to 3/- per post, dependent on size for treatment (i.e. 5/- per cubic foot). This is in comparison with 2/10d. per post

(£14 per 100) which is the current charge for split posts. Obviously, if the farmer's time to cut and treat the post himself or deliver to a commercial plant for treatment, is allowed for at, say 2/5d. per post, the split post at 2/10d is cheaper on initial cost compared with 3/6d. for a treated post.

If, however, we compare the costs of posts on an annual charge basis, defined as the cost per year necessary to extinguish to initial cost of the post over the life of the post, by means of equal annual payments, a different picture is obtained.

| Post type | Life | Cost/Post | Annual Charge/Post |
|---|---|---|---|
| Split jarrah in hill country | 25 | 2/10d. | 2.4d |
| Split jarrah in irrigated flats | 10 | 2/10d. | 4.4d. |
| " " | 15 | 2/10d. | 3.3d. |
| " " | 20 | 2/10d. | 2.73d. |
| Round marri (treated) cut and treated by farmer | 45 | 3/6d. | 2.4d. |
| Round marri, cut by farmer, carted to and treated by a commercial firm | 45 | 4/- | 2.7d. |
| Treated pine bought ex Picton plant. | 45 | 6/6d. | 4.4d. |

Assuming a 5% rate of interest.

Interesting points from this comparison are:

i) 2/10d. per split post, provided it lasts 20 years, is the best buy for the farmer. Many farmers in the Harvey irrigation area are not getting more than 10 - 15 years per post and in these places a treated post at 3/6d. is more economical.

ii) A cost of 2/10d. per post is very low compared with Eastern States price of 4/- (Euc. obliqua), lower durability than Jarrah, 6/- (River Red Gum) comparable with Jarrah, 6/6d. (Euc. melliodora - Yellow Box), superior to Jarrah. Obviously at these prices the treated round fence post is a most attractive competitor.

Until the price of split posts is raised it is doubtful if there will be a big swing to the use of treated posts in the South-West.

At Harvey, some interest in treated posts is being displayed by a few farmers who have irrigation country where split posts are lasting in some cases less than 15 years.

Traditional use of the split post dies hard, however; and any interest in treated posts has been aroused only after discussion with the farmer in that common meeting ground, the saloon bar of the Harvey pub. Whilst the farmer's defences are lowering after he downs his ninth schooner, the following advantages of treated posts are usually hammered home:

i) Greater life (45 years compared with 15-20 for split jarrah).

ii) Posts can be pointed before treatment and driven, instead of digging holes first and this gives a firmer post.

iii) By the use of $1\frac{1}{2}$ - 2" staples, wire can be attached direct to posts and the need for boring eliminated.

iv) By using fabricated fencing and staples, erection time can be reduced considerably.

v) The round post is stronger and more resistant to fire than a split post.

After this treatment the farmer is usually convinced and several have promised to put in a trial fence of treated posts.

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