

The fencing of the primary burn presents a problem. The value of fences is inestimable as a means of stock-control on the area to be grazed, and their erection is really a great feat, both in skill of erection and in choice of a site. Both are essential in farming hill country. Ridge boundaries are invariably chosen where at all possible, both from the point of avoiding damage to the fence subsequently by slips and in helping to separate shady faces from sunny faces. All standing trees that later would endanger the fence by falling on it are felled when clearing the fence-line.

The grassing experiments on the primary burn consisted largely in determining a standard primary-burn seed mixture for the Whangamomona class of country, and it was hoped to glean some information on the part the seed mixture played in avoidance of the fern and scrub successions which normally arise on that country. There is a feeling that if the farmer in the initial stages of breaking in that country had more specific knowledge on suitable seed mixtures to sow, virtually all secondary-growth problems would disappear or would never arise. This point is of immense importance to decide one way or the other, for on it depends largely the potential value of that country as determined by viewing it in its virgin state. If the country can be successfully grassed by closer attention to seed mixtures, fencing, stocking, &c., without deterioration and the consequent loss of feed and need of further burning and reseeded or necessity to severely punish stock, then the potential value of that country is great, whereas if breaking-in and maintenance costs are high then the original value of that country is low and may even be of a minus nature.

The experience of the past seven years on primary-burn grassing in Whangamomona County holds out little hope of avoiding the appearance and spread of certain classes of secondary growth. True, given a good burn and the most suitable seed mixtures, the class and amount of secondary growth that puts in an appearance can be largely governed, but I claim on no conditions could a sward entirely free of secondary growth be secured from the offset on primary-burn country of Whangamomona and similar country. Wineberry, fuchsia, water fern, and bracken can largely be controlled, but in controlling these the conditions are rendered extremely favourable for the spread of hard fern, and this secondary growth may dominate the burn after some four years, despite the seed mixture sown and irrespective of how careful the stocking. The successful establishment of brown-top, Lotus major, and *Danthonia pilosa* in the initial seeding does greatly slow up the spread of hard fern, and even though the swards are overrun with hard fern these species persist to some extent in the hard-fern growth and come away after a secondary burn has been secured.

Secondary burns, then, of logs, timber, and secondary growth must be regarded as part of the breaking-in processes of hill country from the primary forest, and the cost of reseeded such burns and the loss of feed sustained during the period leading up to a sufficiently dense growth to carry a second fire must all be taken into account in putting an initial value on primary-forest country.

There is no doubt, however, that the seed mixture sown does play an enormous part in the ultimate successful breaking-in of primary-forest country. Even though we have to face hard-fern encroachment