

# Ratio of Sown to Native Pasture in Sheep. Production

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## SUMMARY

Native pastures on the Northern Tablelands consist mainly of summer growing perennials which do not provide adequate nutrition for sheep during the winter months. Sheep on these pastures, even when stocked at less than one sheep per acre, lose weight in winter and losses from malnutrition and parasitism may be heavy. On the other hand, sown pastures of grass clover mixtures have been shown to support the growth of three or four sheep per acre per annum.

Eventually most native pastures may be replaced with sown pastures, but in the transition period the problem arises of utilising sown and native pastures in conjunction. The present study, which commenced in April, 1953, examines the growth response of different classes of fine wool Merino sheep to different amounts of sown pasture supplement and gives a measure of the overall production from "flocks" on sown pasture-native pasture units.

Pasture areas were subdivided to provide units with ratios of sown to native pasture as follows: 1:0.75, 1:2.25, 1:24.3. It was assumed that the sown pasture, of phalaris, subterranean and white clover, would support 3 sheep per acre per annum and the native pasture 1.3 sheep per acre. Weaners, ewes and wethers were run together on these units and were provided with different levels of sown pasture supplement.

Individual and overall benefits in liveweight and wool production were obtained with sown pasture supplements. The magnitude of these benefits depended on the amount of sown pasture available to the individual or the "flock".

The results are discussed in relation to economic considerations and to the particular requirements of each class of stock.

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