Dr Hart’s study does emphasize that the sooner we in New Zealand start on our forest histories the better. All memories and many records are ephemeral, and time marches on. But we must produce a more digestible story than this.

H.V.H.


This book follows the earlier and well-known Shelterbelts and Microclimate by the same author. It deals in great range and detail with the need for shelter in specific types of land use and park planting. The second half of the book considers the principles of shelter, design, permeability and so on, giving an exhaustive list of tree and shrub species, useful for northern hemisphere planting and, to some extent, for our South Island conditions. The final chapters deal with restoration of old shelterbelts, with shelterbelts for timber, and farming-cum-forestry. Each of these chapters could well be extended to small book size for New Zealand conditions.

The impression that remains after reading this book through for the first time is of the wealth of information that is contained in it. The amount of thought that has been given to each section, for instance that dealing with shelter in relation to market and horticultural gardens, is most impressive. Effects of frost are noted as being most harmful if belts are poorly sited. Means are described whereby shelterbelts of angular design can conduct away descending frost-bearing draughts, maintaining air circulation and avoiding low frost pockets. It is noted that entirely still air is inclined to increase blights of various kinds, so that complete shelter is not desirable. On the other hand, bees and insects can increase fertilization of crops very markedly under sheltered conditions.

A chapter dealing with the shelter of house and garden quotes measurements taken in the United States over a number of houses showing that a windbreak on the northern side saved 20% of the fuel. The author notes that in his opinion the plantations around many of the country seats of Scottish lairds were not planted for adornment. Aye! that could well be so.

Dealing with subjects of particular importance to New Zealand farming, the sections concerned with design of shelter for stock and crops, including grass, are most exhaustive. Results of experiments are quoted where shade and shelter have been of great financial benefit in rich farming districts. The discussion on windbreaks to trap snow would be of interest to South Island farmers and local bodies, particularly after their experiences in last year’s unseasonable storms.

For some reason or other, our agricultural scientists have given little thought to the influence of climate, especially wind, on our grassland and crop production. Many of the new generation of high-pressure farmers, in their quest for more grass, are whacking out their shelterbelts and not replacing them with better, narrower breaks. The provision of shelter is a long-term project needing
sound planning and physical effort. It will take a great deal of talking and hard financial example to persuade many of our farmers that proper shelter could increase productive efficiency by 10 to 20% over this country as a whole.

This is a book that could be of great value to astute and tree-minded farmers, to agricultural scientists and to field officers. It should be especially useful to those universities teaching agriculture and forestry, for it contains much sound practical information, well set out and clearly written.

N.A.B.