are already signs of problems. Constant watching of TV screens could lead to eye problems. Computers will be more and more involved with leisure time, focusing and controlling TV reception in the home direct from satellites for example.

Already steps are being taken to develop the so called fifth generation computers. Computers that can think and talk. By the 1990s they will be able to recognise features, speak and make decisions like a human being. The implications are that many jobs will go but this is presently not being the case in total. Many go in one area but a greater number are created in other areas, particularly in the creation of such high technology products. Australia however is missing out on those jobs generated as it is importing almost all its computer technology.

BOOK REVIEW

More Beef From Spear Grass Country. Pasture Research at Rodd's Bay Central Queensland, 1945–1977. J. B. Hacker, N. H. Shaw and L. 't Mannetje. C.S.I.R.O. Division of Tropical Crops and Pastures Research Report No. 2 1982.

The authors have achieved their objective of presenting, in a single publication the research work conducted mainly by Mr N. H. Shaw of CSIRO at Rodd's Bay in central coastal Queensland over 32 years. The reasons for selecting this region are given and the programme and results are presented in chronological and logical sequence as each set of results influenced the direction of the next research. The authors point out that most of the work has already been published in Australian scientific literature. This publication provides a condensed version of the work and provides opportunity, through the 24 references, to obtain further detail where required. The use of reference 9 in relation to the wide use of Rhodes grass is incorrect, however. The text covers 39 pages and makes strategic use of tables and figures. Nine excellent quality colour plates (including the front cover) enhance the booklet.

The introduction sets the scene on how and why the particular location was decided upon. Mention is made of the 'state of the art' in the early 30's and the dearth of pasture scientists in Queensland in CSIRO and the Department of Primary Industries in the early 1940s. This is an area that must be treated accurately particularly where names are mentioned. I think it an omission on the authors' part not to link J. L. Schofield with tropical legume research at South Johnstone in the 30s and early 40s followed by T. G. Graham. Mention should also have been made of N. A. R. Pollock's involvement with Townsville stylo in far north Queensland during the 1920s. Also S. L. Everist of Mitchell grass and mulga fame at Blackall from 1937 to 1942 (whilst Roe was at Cunnamulla).

The introduction is followed by a description of the spear grass region and an outline of early studies on the native pastures. The Rodd's Bay programme covered soil nutritional studies, soil characteristics and pasture species evaluation including evaluation under grazed conditions. Emphasis is placed on pasture improvement using Townsville stylo and the second half of the report is devoted to establishment techniques, fertilizer requirements of this legume and animal production from Townsville stylo/spear pastures.

The authors have drawn a number of conclusions based strictly on the Rodd's Bay work and of course this is quite legitimate. However, because this publication is dated 1982 I consider that they could have added an epilogue, based on hindsight. In other words mention should have been made of pasture developments that occurred in the central spear grass region between 1977 and 1982. To complete the story brief comment needs to be made on:- lack of wide adoption of Townsville stylo in spear grass pastures; anthracnose incidence; the role of other stylos such as fine stem stylo, Verano, and the shrubby stylos (the report does foreshadow a possible role of the last two); the beef slump and its effect on maintenance of existing pastures and new plantings; the very limited adoption of leucaena, and the reasons for this, as an alternative protein source; the decline of Siratro due to lack of maintenance fertilizer and over-grazing.

G. R. LEE