Foreword

How many academic books lie languishing on library shelves, a tribute to the authors, but of little practical value? Not this one! This book will fulfil a vital role in disseminating research findings to those directly involved in cow husbandry – farmers, vets, agricultural advisers and students. Available to be freely downloaded, this book goes a long way towards filling that major void between the researchers in dairy cow management and those actually doing the work with the cows. And all this was generously made possible by the Crawford Foundation, providing the necessary funds so that the publishers can offer the book free of charge.

The authors, John Moran and Rebecca Doyle, have both been intimately involved in livestock management. Their role in this book, as in John's four previous tropical dairy management books, is to take major texts on the topic and distil them into something that can be used by those working with cows, herdspersons, vets etc. John has spent several decades consulting to the dairy industry, both in Australia and SE Asia and has produced many books, CDs, trainee manuals and journal articles with a dairy extension focus. Rebecca has recently been appointed as a Research Fellow at the Animal Welfare Science Centre at the University of Melbourne and has specialised in livestock emotions for her PhD and subsequent research work.

The book starts with the premise that demand for dairy produce is growing, particularly in Asia where inhabitants are, rightly or wrongly, changing to a Western diet. Unfortunately keeping dairy cows in tropical conditions in developing countries is fraught with risks to their welfare, and performance is usually well below that achieved in Western countries. Although many Asian developing countries are currently importing much of their requirements from the West, most governments there have the intention to expand and develop efficient dairy industries, in which the cows' needs are adequately met.

The book lays the foundation for a sound understanding of how to look after cows by first describing their senses in some detail. The authors tell us how cows talk to each other and how they talk to us, although we often ignore this. Moving into welfare management, the authors describe the signals that cattle provide when their welfare is compromised, from the more obvious ones such as body posture and condition to the more subtle ones, such as rumination and eye white area. Yes, cows' eyelids open wider when they are startled just like ours, revealing more eye white. Who would have thought of looking for the 'presence of cobwebs in the cowshed (because it) is indicative of low air movement'. Scoring systems are

presented that are practical and help novices in particular to describe key features of cow welfare, such as body condition, feet, cleanliness and lameness. Documenting what we see helps us to both remember and compare. As research tools, they must be used judiciously.

Much is written about good handling techniques, because poor handling is at the root of many welfare problems for dairy cows. Having an empathetic, experienced and knowledgeable herdsperson is the key to minimising handling risks, or should it be a cowperson? The authors coin a new term, cowpersonship, which emphasises the importance for every person of understanding each cow, rather than just the herd. Many books fall into the trap of prescribing conditions for the average cows, whereas this book focuses on variation between individual cows and the importance of providing for the welfare of all. Hence the need for good cow observation skills, not easy when intensification is resulting in less and less time being available to spend with the cows. It is no coincidence that in intensive cow units it is getting harder to repeatedly get the cows pregnant, which requires the cowperson to observe oestrous behaviour in a cow if he or she wants to artificially inseminate her. Another meaningful term then emerges, namely, farm blindness (or being unable to see when something is wrong on a farm). Despite the authors' recognition of the essentiality of good cowpersonship, they acknowledge that skilled workers are increasingly hard to find, particularly in situations in which there are competing industries offering higher salaries and better working conditions.

The authors caution of the dangers in going down the route of intensification, using cows that are genetically predisposed to give large quantities of milk, as it often leads to poor welfare and performance. In their words, 'we breed cows to produce more and more milk at the expense of their welfare'. Intensive housing is also critically reviewed for all its faults in attending to cows' daily needs, potentially leading to behaviour problems such as aggression, kicking, and stereotyped tongue rolling. Keeping cows indoors in tie stalls is common in SE Asia due to the shortage of land for grazing systems. Too many potentially high yielding dairy cows have been sent from Australia and New Zealand to SE Asia, only for farmers to find that the cows lose condition and have an appetite that is almost impossible to satisfy, with the result that the milk yields are low and the cows barren. Heat stress compounds this welfare insult.

This book takes a lot of the dairy cow research material that has been generated in the last 20 years and interprets it for the farmer, extracting what is useful in the work that has been done. It is not a lengthy academic text that is entirely evidence-based and copiously referenced, but it is eminently suitable for practising farmers, students and academics who are looking for practical information on cow management. Much of what is written appears common sense and easily put into

practice, until you realise the commercial pressures that many in the dairy industry have to submit to.

The book concludes with the advice that 'Happy cows make happy farmers'. I'd guarantee that all dairy farmers will find something in this book that helps to make their cows, and them, just that little bit happier.

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