Livestock housing

Modern management to ensure optimal health and welfare of farm animals

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Preface

Sustainability has become an important keyword in connection with modern animal production. There is an expectation from society that animal products must originate from housing environments where both the health and welfare of livestock have neither been impaired nor endangered.

This book is written for all those who seek to optimise the health and welfare conditions of housed animals in commercial practice. We hope that animal scientists, veterinarians, agricultural engineers and other professional scientists in related areas, students and people, who work in different livestock industries, will recognise this comprehensive book as a useful tool for optimising the management of livestock and their environment.

The emphasis throughout the book is on livestock buildings and their key design elements that have to be managed correctly to create environmental conditions that will enhance the health and welfare of livestock as well as the health of farm workers and people living near farming operations. The appropriate design of livestock buildings is a fast-changing and ever-improving professional endeavour, and the stagnation of housing developments could compromise the welfare and the health of the different livestock species.

Contributions to this book have been solicited from specialists from around the world. The following key areas of housing management are reviewed in this book: analysis of prevailing housing systems; feeding and watering of livestock; thermal and aerial environment together with ventilation; light and noise-related issues; controlling emissions; the roles of bedding and waste management; maintaining cleanliness in livestock buildings; use of modern technological tools in the service of livestock management; challenges in regard to the occupational health and safety of farm staff and other closely related issues.

As a unique feature of this book, the main reviews are followed by two to five specific articles presenting information on current research. These articles give experts from around the world an opportunity to report on the results of the most recent studies related to the main reviews. These articles also give more freedom to authors to report on the outcomes of surveys or trials that might fall outside the normal limitations posed by journal or conference articles. Thus the research articles provide a unique forum for leading experts to report on specific aspects of the main topics reviewed in general terms by their peers.

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