

“Animal welfare can be estimated using an Animal Needs Index” (p 12) appear overly simplified, and indeed in other places the fallacies of this are emphasised. Different aspects of research into animal welfare are highlighted, including the dilemma connected with industry funding, in particular the reluctance to fund research which may lead to increased production costs.

This is not a book to introduce novices to the subject of animal welfare, but it is a book which has sections that enlighten and sections that may provoke the informed reader.

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The Domestic Duck

C and M Ashton (2008). Published by The Crowood Press, Crowood Lane, Ramsbury, Wiltshire SN8 2HR, UK. 200 pp Paperback (ISBN 978-184797-050-3). Price £14.99.

This book provides comprehensive information for novice duck-keepers, from those wanting to have a couple of ducks in their backyard to those wishing to breed larger numbers and become involved in showing.

Roughly half of the book provides information on breeds of duck, their characteristics, history and (for the designer ducks) information on the genetics of their production. The remainder is given over to the behaviour and management of adult ducks together with specific information on breeding.

The authors provide a focus on breeding of ducks for specific, desired, characteristics but the negative aspects of this breeding are not overlooked. The importance of the health and vigour of breeding stock, including the mating of unrelated birds, is stressed as a vital aspect of successful breeding. The book specifically states that inbreeding is not advisable and that selection for more than just one trait (eg crests) is to be encouraged. The reduced fecundity of greatly inbred birds is described together with the hardiness caused as a result of recent crossbreeding vigour.

The authors provide great detail regarding the genetics required for certain traits, together with the consequences of inbreeding, such as lethal genes, and the problems involved in continuing to breed birds carrying these genes. The results of breeding experiments should not come as too great a surprise to someone experimenting with crossbreeding, who has read this book, and this information may help to reduce numbers of unwanted young. The issue of culling non-desired colour variants is mentioned but the authors also discuss reasons to keep mismatched young. Emphasis is repeatedly placed on how hard it is to breed perfect birds and the need for good stock, together with suggestions for record-keeping and the need for pedigrees to encourage responsible breeding.

The necessity of breeding birds for characteristics other than appearance, such as their personality, is also touched upon in order to produce birds that are less likely to suffer from stress and behavioural issues. Management techniques for stress reduction from a young age are also described,

such as ensuring that new ducklings are not afraid of their owner. The positive aspects of allowing the maintenance of inbuilt natural behaviours in captive birds are discussed, including allowing birds the freedom to decide where to nest (ensuring that this is balanced with preventing predation). The welfare issues of predator reduction are also mentioned, including highlighting humane pest control options and emphasising identifying the correct predator to ensure the use of the right traps.

A large number of the issues relating to welfare in this book are not significantly highlighted, simply described as part of correct management techniques.

Simple advice and tips are provided down to the most basic of husbandry tools which would be ideal for a novice duck-keeper or breeder and tips such as where to place the shed to make the ducks easier to herd in at night may help to reduce stress to both the ducks and the owner!

In a number of areas, the merits of different options are discussed, such as varieties of bedding, to provide new owners with options they can choose from to suit their circumstances. These merits include simple issues such as ease of cleaning and management of parasites such as mites. Specific points are highlighted for certain breeds in order to reduce the risks of problems which may not have been considered by a novice owner. Easily understood descriptions of temperature management will also help novice keepers to reduce stress and problems with their birds in this area.

From the moment the eggs are laid, welfare is described as key and there are many points made to increase the health and viability of offspring and their long-term welfare. Stress is placed on the need for constant care and regular checking of eggs and ducklings so that any issues can be dealt with at the earliest opportunity. The prevention of problems such as splayed legs by not using newspaper as a substrate is reiterated in order to ensure it is remembered and it is simple suggestions like this that are at the heart of the animal welfare implications of this book. This focus on welfare is carried though all aspects of the ducks' life, up to and including humane methods of slaughter and legal regulations relating to it.

Another, often overlooked, aspect of breeding ducks in which welfare is vital is the use of broody hens to hatch eggs. These birds require greater care because they are being asked to incubate duck eggs for longer than they would their own and this leads to increased strain on their systems. The need for this care and ways in which to provide it are fully detailed in the text.

Focus is placed throughout the book on measures to avoid problems occurring rather than treating them once they are present. The requirement for planning before buying ducks is repeatedly stressed, together with the need to start slowly with a small number of ducks and be ready to adapt the environment as necessary. The need for owners to be aware and watch their birds to learn more of their habits is also frequently reiterated and may help them to discover problems before they become significant.

Simple instructions to improve the welfare of birds, in-transit, such as the use of the correct carriers and the need to secure boxes will help to reduce the stress of birds during this time. The requirement for specific conditions in different breeds is frequently described together with the problems that may be encountered if these needs are not met, eg eye problems in Pekins not provided with sufficient clean water.

A number of important points are reiterated throughout the book to ensure they are taken on board, such as the correct ratio of males to females to prevent rape and injury to the females. This point is highlighted with regard to the breeds kept (it is a particular problem in light breeds) and provides an example of how normal wild behaviour can become a welfare issue if it is not properly managed in captivity. The need to keep drakes away from ducklings to prevent injury is also pointed out.

This book goes into great detail on the subject of the correct diet and feeding regime for ducks. The information ranges from the type of food that should be used in each season (including elements that should and should not be present within it) to correct storage and the amount to provide. The point that medicated feeds should only be used when needed is also well made.

The necessity of not using food to influence the size of birds or when they start to lay is also discussed, due to the secondary problems it can lead to. The provision of water and how to rectify interruptions in supply without exacerbating the problems it may have caused are also well described.

The simple point that healthy birds, fed a good diet, lead to the best production is reiterated well.

If there is any negative aspect to this book it is, to me, that the information on 'Keeping Ducks Healthy — Preventative Care' is only an appendix and not a full chapter in the book. It contains a helpful list of health problems including some good advice regarding when to contact the vet, eg if egg-binding occurs, and also at what stage euthanasia may become necessary in certain conditions, which will help the owners to be prepared to make a potentially difficult decision. Information regarding the prevention of conditions by the manipulation of diet (eg angel wing) and environment is readily provided and should help to prevent these conditions occurring. The treatments and preventative regimes described include both veterinary drugs and 'home remedies' that have obviously been used historically with success. I have to disagree, however, with some of the statements made in this appendix, especially regarding the effectiveness of skin-testing ducks for avian tuberculosis as, in my experience, this method is not a reliable test for this disease in ducks.

I believe that it would also be beneficial for some of the issues in this appendix, such as the quarantining of new stock, to have been further stressed in the main text as these measures can be a major tool in prevention of disease entering an established group.

In conclusion, I would highly recommend this book for anyone interested in keeping and breeding ducks and I would advise reading it before any ducks are purchased.

The discussion of a wide range of issues regarding breeding, housing, managing ducks and possible problems that may be encountered are extremely useful and well described. This book also offers advice and then reiterates the reasons behind it which make the most important points easier to remember. If all ducks were kept to the high welfare standards described in this book then many of the problems commonly encountered with domestic ducks could be greatly reduced.

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The Future of Animal Farming: Renewing the Ancient Contract

Edited by MS Dawkins and R Bonney (2008). Published by Blackwell Publishing, 9600 Garsington Road, Oxford OX4 2DQ, UK. 256 pp Paperback (ISBN 978-1-4051-8583-7). Price £14.99.

Whilst animal welfare is the central theme to this collection of essays, the book delivers more than a simple review of the current state of welfare in our farmed animals. Eminent authors dig deep into the principles of farming animals, and leave the reader with unanswered questions about the future of animal agriculture. This is a book that takes a long and sometimes uncomfortable journey to provide a big picture of farm animal agriculture.

The foreword by Peter Singer sets the scene with a critical look at our current state of farm animal welfare, typical of which is the comparison of the contract between farmed animals and their keepers akin to the slave trade. The complicity of the consumer in this contract is an argument that recurs through the book.

The first part of the book, 'Voices for Change' gives authoritative and renowned philosophers such as Bernie Rollin, Mary Midgely and Joyce de Silva, the opportunity to indulge in their passionate beliefs. Indeed, the whole book may be viewed as an indulgence by the authors to promote their beliefs (and their publications) without risk of dissent or question. The content of the book would make for a superb conference, where the coffee time debates would be the highlight of the day; but such debate is denied by the structure of the book and the selection of the contributors.

Bernie Rollin's view from his side of the Atlantic is not an optimistic one. He argues that the conflict between industrial agricultural production and animal husbandry is not easy to settle, but his examples are typical of many of the contributors who rely on anecdote and personal experiences rather than the broader picture, and the realities of what many of us see day-to-day. The adverse effect of intensive farming on animal welfare is reinforced in typically robust fashion by Joyce de Silva who delivers great arguments and philosophies which have had a major influence on farming practice and attitudes from those who can control the future, but are backed by precious little other than dogma and anecdote. It is unfortunate that the weak science that she uses to substantiate the claims