

Animal Welfare: Limping Towards Eden

A practical approach to redressing the problem of our
dominion over the animals

John Webster

Emeritus Professor of Animal Husbandry, Department of Clinical
Veterinary Science, University of Bristol, UK



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To Lizzie with love. Let us limp together . . .
the best is yet to be.

Contents

<i>Preface</i>	x
<i>Acknowledgements</i>	xii
1 Introduction: Facts and Values	1
1.1 Husbandry and welfare	4
1.2 Definitions of welfare	5
1.3 Sentience	10
1.4 The Five Freedoms and Provisions	12
1.5 Ethics and values in animal welfare	16
1.6 Human attitudes to animal welfare: desire and demand	19
1.7 Limping towards Eden: stepping stones	22
2 Challenge and Response	24
2.1 Stress, adaptation and exhaustion	26
2.2 The General Adaptation Syndrome	27
2.3 Physiological stress: the alarm response	30
2.4 Physiological responses to challenge: the cost of adaptation	33
2.5 Adaptation to cold stress: an example of habituation	35
2.6 Exhaustion	37
2.7 Behavioural responses to challenge	38
2.8 Behavioural indices of good and bad welfare	41
2.9 Integration of measures: triangulation	43
3 Sentience, Sense and Suffering	46
3.1 A sentient view of the world	47
3.2 Motivation: the analysis of behavioural needs	52
3.3 Altered and abnormal behaviour	57
3.4 Mind and brain: the neurobiology of sensation and emotion	60
3.5 More triangulation: design and interpretation of studies of animal feelings and motivation	62
3.6 Sources of suffering	62

4	Husbandry and Welfare on the Farm: Assessment and Assurance	77
4.1	Provisions and outcomes	79
4.2	Tailoring QA schemes to individual needs	81
4.3	Comparison of current schemes for assessing on-farm welfare	83
4.4	Development of the Bristol protocol for animal-based welfare assessment	86
4.5	The dairy cow protocol	88
4.6	Development of welfare-based quality control procedures	92
4.7	Implementation of welfare-based quality assurance and quality control	95
5	Animals for Food: Industrialised Farming, Pigs and Poultry	97
5.1	The industrialisation of livestock farming	97
5.2	Welfare problems inherent to factory farming	101
5.3	Breeding animals fit for purpose	105
5.4	Problems and progress in animal welfare: analysis of systems	110
5.5	The welfare of pigs	110
5.6	The welfare of laying hens	120
5.7	The welfare of poultry reared for meat	125
6	Animals for Food: Cattle and Other Ruminants	130
6.1	The welfare of the dairy cow	132
6.2	The welfare of dairy calves	145
6.3	The welfare of beef cattle and sheep	149
7	Animals for Food: Handling, Transport and Slaughter	157
7.1	Stockmanship and the human–animal bond	160
7.2	Humane handling	163
7.3	Welfare in transport: what is wrong with going on a journey?	169
7.4	Welfare at the place of slaughter	171
7.5	Religious slaughter	177
8	Animals for Science and Biotechnology	180
8.1	Experiments with animals: the moral debate	181
8.2	Use of animals within the Animals (Scientific Procedures) Act	185
8.3	Assessing the cost of scientific procedures	188
8.4	Assessing the welfare of laboratory animals	191
8.5	Assessing the welfare of GM and mutant mice	194
8.6	Impacts of science and biotechnology on the food animals	197
8.7	Are animal scientists failing society?	203

9	Animals for Sport	205
9.1	Games people play with animals	208
9.2	The Protection of Wild Animals Act	209
9.3	Ethical principles	211
9.4	Fox hunting with hounds	212
9.5	Deer hunting	216
9.6	Hare coursing	220
9.7	Shooting game birds	220
9.8	Fishing	221
9.9	Horse riding	222
9.10	Greyhound racing	224
9.11	Bullfighting and rodeo	224
9.12	Conclusions	225
10	Animals as Pets	227
10.1	Behavioural problems in pet animals	228
10.2	Dogs	229
10.3	Cats	232
10.4	Horses	235
10.5	Rabbits and other caged pets	238
10.6	Breeding for fashion	238
10.7	Ownership: the duty of care	242
10.8	Striving to keep alive: the responsibility of the veterinarian	245
11	Limping Towards Eden: Stepping Stones	249
11.1	Right action	250
11.2	Sentience, suffering and wellbeing	251
11.3	The politics, philosophy and economics of animal welfare: what <i>should</i> be done and what <i>could</i> be done	253
11.4	Education in animal welfare	267
11.5	A curriculum for animal welfare	269
11.6	Finally, but not in conclusion	271
	<i>Further Reading</i>	272
	<i>Index</i>	279

Preface

The title of this book, *Animal Welfare: Limping Towards Eden*, was agreed with my publisher on the grounds that it would attract most attention if it appeared to be a second edition of its predecessor, *Animal Welfare: A Cool Eye Towards Eden*, first published in 1993. They, who understand these things, reasoned that all books with a scientific base have a finite life span. A new edition would both attract new readers to the same important subject and help to bring old readers up to date. However, I must at the outset make it clear that *Limping Towards Eden* is not a second edition of its predecessor, *A Cool Eye*; it is an entirely new book (albeit on the same subject). Thus, so far as I am concerned, my intention is not that you should read *Limping* in preference to *A Cool Eye*. You should read them both.

Animal Welfare: A Cool Eye Towards Eden was subtitled *A constructive approach to the problem of man's dominion over the animals*. It was written at a time when the scientific approach to the understanding of animal welfare was relatively new. *Part I: How Is It For Them?* drew on science and good animal sense to categorise and analyse welfare problems perceived by the animals themselves as they seek to meet their own physiological and behavioural needs. *Part II: What We Can Do For Them* was part science, part polemic and part practical husbandry as it sought to explore specific problems arising from our determination not to leave animals well alone, but to manipulate their environment, their diet and their very constitution for our own purposes. Its main aim was therefore to set out the ground rules for understanding animal welfare and acting upon that understanding.

The last ten years have witnessed an explosion of active concern in matters of animal welfare and a smaller, though still quite impressive amount of constructive action. This has become manifest in new legislation, new codes of practice for the husbandry of farm animals, new codes of ethics for the treatment of laboratory animals, and new developments in quality-assured, high welfare schemes for food production. All this has been fed by new research and new understanding of animal welfare science. The time has come to review progress. *Animal Welfare: Limping Towards Eden* is subtitled *A practical approach to redressing the problem of our*

dominion over the animals. It is a review of our halting progress towards that unachievable destination where man and animals can coexist without causing each other to suffer, written in full knowledge of the impossibility of arriving at that destination, but with the enthusiasm of one who travels hopefully and the common sense of one who carries a good map.

The first chapter examines animal welfare from a broader perspective than I have attempted previously. It addresses the role of science and the limitations of science and seeks to complement them with an analytical (dare I say scientific?) approach to practical ethics. Chapters 2 and 3 re-examine the ground rules that define animal welfare: first the nature of the challenges faced by animals and their capacity to cope, then an exploration of the fundamental basis of sentience and suffering. In Chapter 4 I introduce the central theme (the 'Big Tune') of this book: namely the development of practical, robust protocols for the assessment and control of animal welfare in real-life circumstances (e.g. on the farm) rather than within the confines of the controlled laboratory experiment. Successive chapters then examine current high-priority problems arising from our practice of using animals, individually or *en masse*, for food and clothing, for science and technology, for sport, or to be our companions. Finally, I try to assemble these pieces into a series of stepping stones on the infinitely long pathway to Eden.

At the time of writing *A Cool Eye* it was relatively easy to set down the principles that underpin our understanding of animal welfare and the practice of good husbandry, partly because the scientific and other forms of 'literature' on the subject were then in their relative infancy, and partly because most principles remain principles whatever new knowledge may accrue. It is inherently more difficult to review progress, particularly when so much has been going on. In this book I have had to be selective, both in the subjects I cover and in the sources I quote. Many references cited for further reading are reviews that provide a point of entry for readers wishing to explore matters in greater depth. I tend to cite original communications only when the material is very new or strictly necessary to support a potentially contentious assertion. I have also spared both you and me from long, comprehensive recapitulation of national and international codes of practice, regulations and legislation, not least because most of this is available free on the world-wide-web. It is, of course, essential to be aware of and act according to regulations and codes of practice. They do *not*, however, explain *why* you should do what they tell you to do, nor give much attention as to how the animal in receipt of this recommended practice might feel as a result of your actions. My aim is not to impose codes of practice on animal owners alone but to guide all us humans who care both for and about animals first towards a better understanding of how animals feel and thus towards standards of conduct more in keeping with their welfare. That would make all sentient creatures (them and us) feel better.

Acknowledgements

In my journey on the path of animal welfare I have been educated and encouraged by fellow travellers too numerous to mention. I am most grateful to you all and shall try to thank you personally when next we meet. I must, however, identify some of my closest colleagues and mark them out for special thanks both as contributors to the information that is presented in this book and as critics of my opinions. Special thanks therefore (in alphabetical order) to Nick Bell, Matt Leach, David Main, Mike Mendl, Mohan Raj and Becky Why.

Introduction: Facts and Values



Everything should be kept as simple as possible, but no simpler.

Albert Einstein

‘Man has dominion over the animals whether we like it or not.’ These were the opening words of *Animal Welfare: A Cool Eye Towards Eden* (Webster, 1994). Their stark message is that any enquiry into animal welfare must start from the premise that the quality of life for most other sentient animals with whom we share the planet is largely governed by how and where we let them live and what we let them do. ‘We may elect to put a hen in a cage or to create a game reserve for a tiger, but in each case the decision is ours, not theirs. We make a pet of the hamster but poison the rat.’ The fact that we are in charge makes it our responsibility to get it right. Hence the subtitle: *A constructive approach to the problem of man’s dominion over the animals*. The argument was presented in two parts. *Part I: How Is It For Them?* was an analysis of the nature of welfare and suffering in sentient animals. *Part II: What We Can Do For Them* was advocacy; an exposition of the main welfare problems currently faced by animals, especially farm animals, and a series of recommendations for action. It was written at a time when the scientific basis for defining and evaluating animal welfare was becoming established and the first steps were being taken to put this evidence into effect. It defined and developed the concept of the ‘Five Freedoms’, as a comprehensive, practical protocol for assessing the welfare of animals, whether on farm, in the laboratory or in the home. It then used this protocol to explore practical problems in animal husbandry and seek ways to resolve them. This approach was essentially pragmatic. Most matters of emotion, public concern and philosophical debate were either taken as read or simply fell off the edge of the page.

The expression ‘a cool eye towards Eden’ needs some explanation. Eden was presented as a simple image of that ideal state where ‘the lion lies down with the lamb and a little child leads them’. When viewed with a cool eye, such a paradigm is seen to be impossibly distant. Nevertheless it is still a good direction in which to look and a good direction in which to travel. This new book, *Animal Welfare: Limping Towards Eden*, written ten years later, critically reviews our progress.

The expression ‘limping towards Eden’ is intended to convey the cautious optimism of one who has always accepted that the road would be long and hard. The new subtitle, *A practical approach to redressing the problem of man’s dominion over the animals*, conveys the message that this second book does not seek merely to update our understanding of the problem; its primary aim is to offer solutions.

It is necessary to acknowledge at the outset that the expression ‘animal welfare’ means different things to different people (and other animals). The scientist defines it as ‘the state of an animal as it attempts to cope with its environment’ (Fraser & Broom, 1990) and gathers evidence relating to the physical and mental state of a sentient animal (i.e. how it feels) as it seeks to meet its physiological and behavioural needs. This is easier said than done. You would think me presumptuous if I were to speak with authority on how *you* feel. Thus we may both conclude that any attempt by us to define how a cow or a rat may feel is a matter to be approached with extreme caution.

For most people, ‘animal welfare’ is an expression of moral concern. It arises from the belief that animals have feelings that matter to them which means that they should matter to us too. The nature of this belief will obviously be governed by how we think they feel. Our perception *may* carry the authority of scientific understanding or a lifetime of practical experience with animals. It may, at the other extreme, be uninformed, anthropomorphic and sentimental. A concern for animal welfare may be considered a virtue, whether well informed or not. However, all those who express a moral position with regard to our use of animals or work actively to create a good life for animals should see it as their duty to seek a better understanding of animals so that their perception of what is good and bad for animal welfare should accord as closely as possible with how the animals feel about these things themselves.

It is necessary therefore to give due attention to animal welfare as a matter for scientific investigation, a matter for moral concern and a matter for action. Wherever possible, I use the scientific method to review the evidence as it relates to the welfare of sentient animals and, wherever possible, I use established ethical principles to review the elements that can and should define the value that we humans give to other animals. Throughout, I shall seek to distinguish analysis from advocacy. I shall also seek to make a clear distinction between scientific evidence and ethical values. However, I shall not let these stern paradigms of scientific caution and moral rigour divert me from my primary aim, which is to get things done; to work towards real, practical improvements in animal welfare. To quote Thomas Carlyle: ‘The end of a man is an action and not a thought, though it were the noblest’.

One of the first steps to right action is to acknowledge that our attitude towards animals is governed almost entirely by our own self interest and, if viewed from their perspective would appear to be grossly unfair. We may be motivated to devote a great deal of care to a valuable racehorse, or a well-loved pet, almost



Figure 1.1 Intrinsic v. extrinsic value: Cordelia at play.

none to a time-expired hen on a commercial farm, and violent harm to a rat in a drain. Our actions towards the other animals – whether we care for them, simply manage them or seek to destroy them – is defined not by their own sentience but by how we categorise them in terms of their *extrinsic value* (i.e. their value, or otherwise, to us). This does not necessarily make us good or bad people; it is just an amoral but inescapable fact of life. In *Eden I*, I drew attention to our duty to respect the *intrinsic value* of the life of any sentient animal and illustrated the point by reference to Cordelia, the rat in the larder (Figure 1.1). When surprised by the presence of a rat in a larder, the typical, normal human response will be to categorise it as unhealthy vermin and seek to remove it ‘with extreme prejudice’ (i.e. to exterminate it). However, when we discover that this rat is, in fact, a well-loved pet and her name is Cordelia, our attitude changes. We now care for her (and may even, eccentrically, dedicate a book to her). While I do not subscribe to the extreme Buddhist view that we should seek to preserve the life of all animals at all times, we must acknowledge that the quality, and thus the intrinsic value of the life of a rat, or any other animal, is defined by its own sentience, not by our definition of its extrinsic value (as pet or vermin). Thus I firmly believe that we have a duty of respect to all sentient life, not just those whom we see as our friends.

In the ten years between *A Cool Eye (Eden I)* and *Limping Towards Eden (Eden II)* the animal welfare story has advanced apace. The most notable new developments are as follows:

- a huge increase in the expression of public concern for animal welfare;
- a parallel increase in the scientific study of animal welfare;
- political action for new legislation to improve animal welfare;
- development of voluntary, welfare-based quality assurance schemes for farmed livestock;
- advent of new biotechnology, which makes almost anything possible in the design of animals to suit our own needs.

It is high time to review progress. *Limping Towards Eden* sets out to review critically but constructively what advances have been made in understanding animal welfare through scientific research and clinical observations, what we have achieved in promoting animal welfare through legislation or voluntary codes of practice, how we should deal with problems emerging from the new technologies and where do we go from here. The intention is to map our progress so far and, from this, plot a bold but not foolhardy course into as yet uncharted waters.

To this end, I shall assemble four key navigational aids:

- (1) Comprehensive, robust protocols for assessing animal welfare and the provisions that constitute good husbandry.
- (2) A sound ethical framework which affords proper respect for the value of animals within the broader context of our duties as citizens to the welfare of society and the living environment.
- (3) An honest policy of education that can convert human desire for improved welfare standards into human demand for these things.
- (4) Realistic, practical, step-by-step strategies for improving animal welfare within the context of other, equally valid aspirations of society.

1.1 Husbandry and welfare

I take it as self-evident that all who are directly concerned with the management of animals have a responsibility to promote their welfare through the practice of good husbandry. This applies whether the animals are on a farm, in the home, in the confinement of a laboratory or a zoo, or in the expanse of a nature reserve. Husbandry is a good word. Whether it is applied specifically to the care of animals or more generally to care of the living environment, it readily incorporates a proper understanding and application of scientific and economic principles. Moreover, it commands us to cherish and preserve the intrinsic value of the lives over which we have dominion. A good definition of animal husbandry is ‘animal science enriched by tender loving care’. This attitude may be criticised by some as paternalistic, but what else could husbandry be?

Since the primary aim of these books is to contribute, through improved understanding, to real improvements in animal welfare, it follows that much of what I

write is addressed to those directly involved in the study and practical care of animals. For them I have sought to create a comprehensive structure for the analysis and assessment of animal welfare and, from this, explore ways by which the cause of animal welfare may be advanced on the farm, in the home, in the laboratory and in the wild. My secondary, equally important target audience is anyone who wishes to develop an educated understanding of the elements of good and bad welfare in animals; the aim here being to bring human perception of animal welfare as close as possible to welfare as perceived by the animals themselves. Most of the pressure for changes in the care and management of animals arises from those who have no direct dealings with animals. For the sake of the animals it is important that you get it right too.

1.2 Definitions of welfare

It is in the nature of those who study animal welfare to create their own definitions of animal welfare according to the ‘Humpty Dumpty’ principle that ‘When I use a word, it means just what I choose it to mean, neither more nor less’. The most generally accepted single-sentence definition of animal welfare is that of Fraser & Broom (1990), i.e. ‘the state of an animal as it attempts to cope with its environment’. The merit of this definition is that it recognises that the welfare state of an animal is the outcome of its impressions of incoming stimuli from the environment and the success or otherwise of its actions designed to accommodate these stimuli. Its limitations are many. It does not begin to define what the stimuli may be, whether they emerge from the external environment (like fear in the presence of a predator) or the internal environment (like hunger in the absence of food), or a combination of the two (like anxiety in the absence of a specific threat but awareness that threats exist). Moreover it makes no attempt to say what constitutes good or bad welfare. In essence, it merely says that the welfare of an animal is defined by its welfare state, which is unarguable but not very helpful.

More detailed approaches to define the welfare of an animal as the outcome of its success, or otherwise, in responding to incoming environmental stimuli have revolved around three questions. These three questions appear in Table 1.1, defined both in scientific language and common parlance. I believe that both sets of definitions are necessary to achieve a proper understanding of animal welfare and a proper empathy with animals. The simple question ‘Is the animal happy?’ appears particularly fuzzy and sentimental at first sight but acquires a degree of scientific rigour when based on evidence of mental satisfaction or freedom from mental distress. It is therefore the responsibility of the welfare scientist to discover reliable indices of mental satisfaction and/or distress. However, the danger with focusing on specific measurable indices is that you may see with perfect clarity the things you are looking for, but overlook things that are not actually staring you in the face. Having, for example, sought and failed to identify scientific markers of mental

Table 1.1 Key questions in the assessment of animal welfare.

Everyman	Scientific
<ul style="list-style-type: none"> • Is the animal living a natural life? 	<ul style="list-style-type: none"> • Is the animal living in an environment consistent with that in which the species has evolved and to which it has adapted?
<ul style="list-style-type: none"> • Is the animal fit and healthy? 	<ul style="list-style-type: none"> • Is the animal able to achieve normal growth and function, good health and to sustain fitness in adult life?
<ul style="list-style-type: none"> • Is the animal happy? 	<ul style="list-style-type: none"> • Is the animal experiencing a sense of mental satisfaction or, at least, freedom from mental distress?

distress in an animal exposed to a putative source of stress, it does help to stand back and say ‘Yes, but is it happy?’.

It also appears self-evident to me that the approaches to welfare assessment defined by these three sets of questions are not mutually exclusive. Indeed it is my firm belief that all three approaches are necessary to help us understand what we mean by animal welfare. However, this belief is not universal. Many advocates of animal welfare, scientific or otherwise, argue on the basis that only one of these three premises is necessary to establish a sufficient picture of animal welfare. Debates between advocates of the different positions tend to be unproductive. In order to justify the use of all three approaches it is necessary to examine the strengths and weaknesses of each when viewed in isolation.

1.2.1 The ‘natural’ argument

Here are three images to illustrate the ‘natural’ argument: the cow grazing grass in a green field, the lioness hunting on the African plains, the domestic cat asleep in front of an open fire. All these images convey a sense of good welfare because, in everyman’s language, all these animals are behaving in a way that they were ‘meant’ to behave. In evolutionary terms, the cow and the lioness are both free to engage in behaviour that is well adapted to the environment in which they evolved. The cat that curls up before an open fire is not displaying a biological response to natural selection in the conventional meaning of the phrase, but it is obviously doing something that is very natural to a pleasure-seeking cat. Here, everyman’s interpretation of the question ‘Is it natural?’ appears to work better than that of the scientist.

The natural argument is key to very many approaches to the design of environments to promote animal welfare. Most modern zoos and game parks seek to recreate as many features as possible of the natural environment for animals in captivity. This is, of course, partly to improve the educational/entertainment