

Lecture Notes and Further reading – Animal Welfare

Andrew Fisher

Development of societal concern for animal welfare

The philosophical position of animals in society has been the subject of human discussion since ancient times. During the Age of Enlightenment in the 18th century, contrasting positions on the capacities of animals were symbolised by the views of the philosophers René Descartes (animals were unfeeling “automata”) and Jeremy Bentham, who argued that animals could suffer. In the 19th century, the debate moved on to whether animals should be granted a degree of protection against suffering. In 1822, Richard Martin pushed for the first anti-cruelty bill in the UK parliament, which granted protection for cattle, horses and sheep. Although, for many at the time, the idea of compassion for animals was seen as a bizarre concept, the formation of what became The Royal Society for the Prevention of Cruelty to Animals (RSPCA) soon followed, in 1824. During the past century, community views on animal welfare have moved from being concerned only with acts of wanton cruelty toward animals, to concerns about standards of animal care. An area of focus of this public concern has been systems where animals are kept for profit, such as agriculture. Intensive farming systems, where animals are managed in man-made environments, have received particular attention from animal welfare interest groups, and were the subject of the first farm animal welfare campaigns and regulatory scrutiny during the 1960s and 1970s.

Concepts of animal welfare and its measurement

It is probably under-recognised that the concepts and definitions involved in animal welfare provoke almost as much debate among professionals directly working within this field as the welfare issue does within society at large. Many people prefer to differentiate between defining animal welfare as a concern for the highest standards of care for animals, and animal rights as a philosophical concept that translates into an avoidance of the utilisation of animals. Within the animal welfare spectrum, some concepts act essentially as checklists that may be used as screening tools, or to support “tick-box” welfare assurance. The UK’s Farm Animal Welfare Council’s “Five Freedoms” are an influential example (Farm Animal Welfare Council 1993). The Five Freedoms incorporate elements relating to nutrition, health, normal behaviour, comfort and psychological stress of animals. As can be seen from Table 1, although concepts such as the Five Freedoms may be a useful screening tool, they do not easily translate to objective measurement for herd improvement or selection purposes.

Table 1. The Five Freedoms

Freedom	Explanatory detail
1. Freedom from hunger and thirst	By ready access to fresh water and a diet to maintain full health and vigour
2. Freedom from discomfort	By providing an appropriate environment including shelter and a comfortable resting area
3. Freedom from pain, injury or disease	By prevention through rapid diagnosis and treatment
4. Freedom to express normal behaviour	By providing sufficient space, proper facilities and company of the animal’s own kind
5. Freedom from fear and distress	By ensuring conditions and treatment which avoid mental suffering

More complex models of animal welfare attempt to understand what constitutes normal levels of these welfare components, and what the consequences may be for the animal if they are not normal. The most widely-utilised definition views animal welfare as an optimal condition of the animal's biology. An alternative model of animal welfare argues that how an animal feels is the prime determinant of its welfare.

The biological state concept of animal welfare readily incorporates the various challenges to animal welfare that can occur, such as infectious disease, congenital defects, physical trauma, thermal challenges, and perturbations in the animal's social environment. The biological responses that result can be used to assess animal welfare. Such responses may include alterations in behaviour, physiological changes, clinical signs of disease, reductions in weight gain and reduced reproduction.

Current concepts of animal welfare seek to integrate the underpinning biology with the importance of animal feelings. An example of this is the 'Five Domains' model, which also uses the components of animal welfare identified in the Five Freedoms.

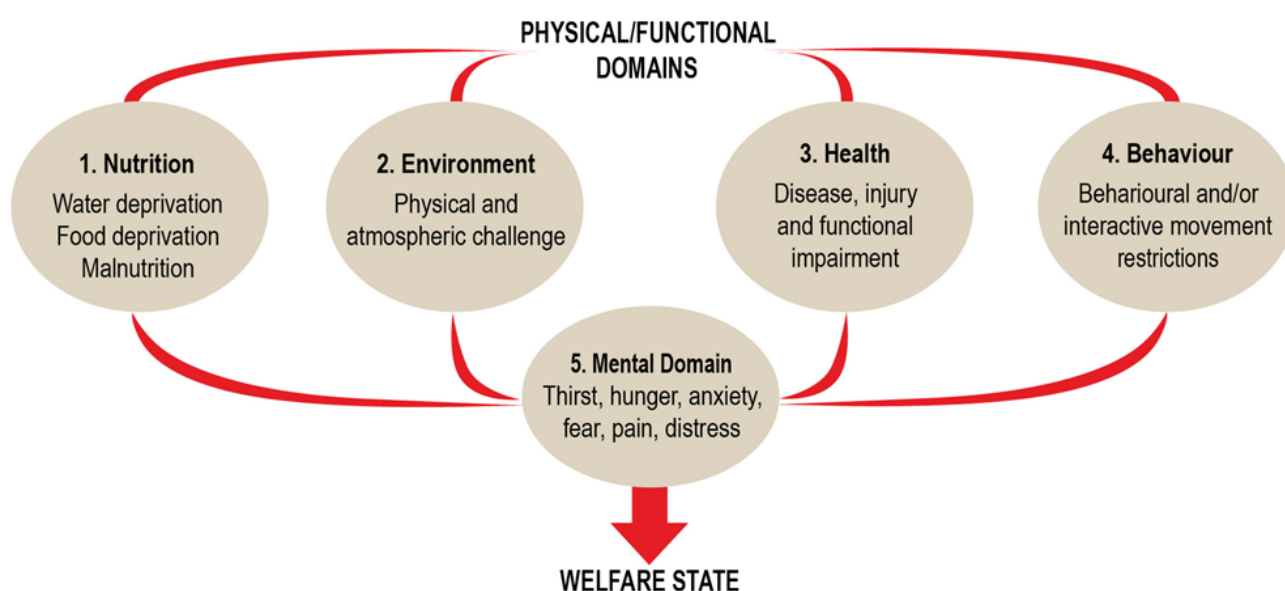


Figure 1. The Five Domains model. From Mellor et al. (2020).
<https://www.mdpi.com/2076-2615/10/10/1870/htm>

Next page: Further reading.

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What is animal welfare? Common definitions and their practical consequences

Bien-être des animaux : quelques définitions et courantes et leurs incidences

Caroline J. Hewson

Introduction

In concluding my first article, I proposed that "...whatever we decide (about animal welfare) as a profession or as individuals, we must be knowledgeable" (1). In this and succeeding articles, some fundamental points will be covered, starting with what animal welfare is and how definitions affect the way animals are treated.

What is animal welfare?

The term "animal welfare" is being used increasingly by corporations, consumers, veterinarians, politicians, and others. However, the term can mean different things to different people. Understandably, in the past, veterinarians and farmers have seen animal welfare chiefly in terms of the body and the physical environment (shelter, feed, etc.) (2): if an animal is healthy and producing well, it is faring well. Research on aspects of animal welfare has also focused on the body, using physiological measures, such as endorphins, plasma cortisol, and heart rate, to examine how the animal is coping with its environment (3). However, there are limitations to seeing animal welfare only in terms of the body. One limitation is that genetics and the environment can produce desirable physical outcomes, even though the animal's mental state is compromised. For example, a canine breed champion may have perfect conformation and be in perfect health, but it may be very anxious in its home environment. Another limitation is that some physical parameters (heart rate, plasma cortisol) are difficult to interpret, because they can be increased by both positive and negative experiences, such as the presence of a mate and the presence of a predator.

The above would suggest that animal welfare includes not only the state of the animal's body, but also its feelings. Most would agree that animals have feelings (fear, frustration), and it has been proposed



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Introduction

J'ai conclu mon premier article en déclarant que «... peu importe ce qu'ils [les vétérinaires, au sujet du bien-être des animaux] décident individuellement et collectivement, leur choix doit être éclairé.» (1). Dans cet article et les suivants, j'aborderai certains points essentiels, comme la définition du bien-être des animaux et les incidences de cette définition sur la façon dont les animaux sont traités.

Comment définit-on le bien-être des animaux?

Le terme «bien-être des animaux» est de plus en plus employé par les entreprises, les consommateurs, les vétérinaires, les politiciens et d'autres. Toutefois, son sens diffère selon celui qui l'emploie. Par le passé, les vétérinaires et les fermiers envisageaient le bien-être des animaux sous l'angle physique (abri, nourriture, etc.) (2) : si l'animal était en santé et qu'il produisait bien, il allait bien. La recherche a porté sur des mesures physiologiques du bien-être des animaux, comme les endorphines, le cortisol plasmatique et le rythme cardiaque, pour déterminer comment les animaux s'adaptent à leur environnement (3). Toutefois, le bien-être n'est pas que physique. Les caractéristiques génétiques d'un animal et son environnement peuvent être favorables, alors que son état mental est compromis. Ainsi, un chien de race champion peut être parfaitement conforme et en bonne santé, mais être très angoissé par son milieu. En outre, certains paramètres physiques (rythme cardiaque, cortisol plasmatique) sont difficiles à interpréter, car ils peuvent être stimulés par des expériences positives et négatives, comme la présence d'un compagnon ou celle d'un prédateur.

Ce qui précède laisse supposer que le bien-être de l'animal ne concerne pas que son état corporel, mais aussi ses sentiments. La plupart des gens conviennent

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that animal welfare consists entirely in feelings and that these have evolved to protect the animal's primary needs (4). Thus, if an animal feels well, it is faring well (4,5). A feelings-based approach to welfare research typically measures behavioral outcomes, such as willingness to "work" (pushing open a weighted door), and behavioral signs of fear or frustration. Such research has led to the conclusion that animals have fundamental behavioral needs that they must be allowed to satisfy for humane reasons (6).

A third view of welfare, linked to the feelings-based approach, is that animals fare best if they can live according to their nature (7,8) and perform their full range of behaviors (8). In this case, physical suffering, such as feeling cold, and mental suffering, such as the fear induced by being preyed upon, may be acceptable. Sectors of the general public favor the "natural living" approach, however, as with physical and mental aspects of welfare, animal welfare scientists have largely discounted this as the sole basis for ensuring optimal welfare. Instead, they propose that the physical, mental, and "natural-living" aspects of welfare are interrelated and are all of ethical concern (9,10). Thus, the most widely accepted definition of animal welfare is that it **comprises the state of the animal's body and mind, and the extent to which its nature (genetic traits manifest in breed and temperament) is satisfied** (11). However, the 3 aspects of welfare sometimes conflict, and this presents practical and ethical challenges.

From definitions to the real world

The situation of laying hens illustrates how the physical, mental, and natural aspects of welfare can conflict, and the difficulty in agreeing on how best to compromise among them. Disagreement occurs because the form of compromise that is acceptable to different animal-oriented groups depends on their values (10,12) and is complicated by the need to consider legitimate human interests (those of the farmer in earning a living).

In the case of laying hens, noncage systems have been advocated, so that the birds might live more according to their nature and thus avoid the frustration of close confinement in barren cages. However, cannibalism is common in noncage systems, perhaps because hens are not adapted to living in the large groups involved in noncage systems (13). These systems can also carry a greater risk of disease and are more labor intensive than are conventional cages. These difficulties can be managed somewhat (cannibalism can be controlled by beak-trimming, which is itself questionable, because it causes neuromas and chronic pain (14,15)), but conventional cages have been considered more desirable in both financial and humane terms. Veterinarians have accepted this compromise, which is consistent with their focus on animals' physical welfare and with their role in helping farmers to provide affordable food. However, conventional cages do not permit hens to express their nature (roost at night, dust-bathe, lay eggs in seclusion). This limitation has contributed to the view that

que les animaux ont des sentiments (peur, frustration); certains croient que le bien-être des animaux ne concerne que leurs sentiments et que ces derniers sont fonction des besoins essentiels de l'animal (4). Si l'animal se sent bien, c'est qu'il va bien (4, 5). La recherche sur le bien-être des animaux fondée sur les sentiments mesure le comportement, comme la volonté de travailler (pousser une porte lourde) et les signes de peur ou frustration. Ce type de recherche a permis de conclure que les animaux ont des besoins comportementaux essentiels, dont dépend leur bien-être (6).

Une troisième définition du bien-être, associée à la recherche fondée sur les sentiments, veut que les animaux se portent le mieux s'ils peuvent vivre conformément à leur nature (7, 8) et présenter l'ensemble de leurs comportements normaux (8). La souffrance physique (avoir froid) ou psychologique (avoir peur d'un prédateur) serait donc acceptable. Une partie du public préconise un mode de vie «naturel»; toutefois, comme dans le cas des aspects physiques et psychologiques, les chercheurs éliminent la possibilité qu'il soit seul responsable du bien-être des animaux. Ils soutiennent plutôt que les aspects physiques et psychologiques, et le mode de vie sont liés entre eux et qu'ils sont d'égale importance du point de vue de l'éthique (9, 10). La définition du bien-être des animaux la mieux acceptée est donc celle qui inclut l'état physique et psychologique de l'animal, et la mesure dans laquelle sa nature (traits génétiques et tempérament de la race) est respectée (11). Toutefois, les trois aspects du bien-être sont parfois en conflit, ce qui pose des problèmes pratiques et éthiques.

Incidences des définitions

La situation des poules pondeuses illustre les conflits éventuels entre les aspects physiques, psychologiques et environnementaux, et la difficulté de concilier ces aspects. Il y a désaccord parce que le compromis acceptable pour les différents groupes de défense des animaux dépend des valeurs de chacun (10, 12) et de la nécessité de tenir compte d'intérêts humains légitimes (comme le besoin des fermiers de gagner leur vie).

Dans le cas des pondeuses, certains préconisent l'élevage hors des cages, pour que les animaux puissent vivre selon leur nature et éviter ainsi la frustration d'être enfermées dans des cages dépouillées. Toutefois, le cannibalisme est fréquent dans les élevages sans cage, peut-être parce que les poules ne sont pas habituées à vivre en grands nombres (13). Ce type d'élevage peut aussi présenter plus de risques de maladie et occasionner plus de travail pour l'éleveur. Ces difficultés sont surmontables (on peut contrer le cannibalisme en coupant le bec des poules, intervention douteuse en soi, car elle cause des névromes et de la douleur chronique (14, 15)), mais l'élevage traditionnel en cage est considéré comme souhaitable sur le plan financier et du bien-être des animaux. Les vétérinaires ont accepté ce compromis, qui concorde avec leur souci du bien-être physique des animaux et leur rôle qui consiste à aider les fermiers à produire des aliments abordables. Toutefois, les cages traditionnelles ne permettent pas aux poules d'avoir des comportements naturels (se percher la nuit, prendre des bains de poussière, s'isoler pour pondre). Ces contraintes étayent l'opposition aux cages

conventional cages are unacceptable and that hens bear too many of the costs of egg production without sufficient benefit. The European Union (EU) has ruled that barren cages be phased out of all member countries by 2012 and that more space be provided for birds in the interim (13). This ruling represents a new compromise among the physical, mental, and natural aspects of hen welfare. The ruling also involves human compromise in that the potential increase in the production costs under alternative systems is estimated at 5% to 50%, depending on the system used (13), which will increase the cost to consumers. The premise of the ruling is that animal welfare is a public good that society must pay to protect. However, some animal welfare scientists argue that there is insufficient scientific evidence to justify the ruling and that welfare may be worse because of it. Other scientists support the ruling, arguing that it is inadequate husbandry and the current market conditions that can reduce welfare under the housing systems required by the EU ruling. Both sides represent a compromise, the acceptability of which depends not only on scientific evidence, but also on values.

Assessing animal welfare

Turning to North America, the existing compromise between human interests and the 3 aspects of animal welfare is being reconsidered. In the United States, the fast-food restaurant industry now requires higher

traditionnelles, qui font porter aux poules une trop grande partie du coût de la production des œufs. L'Union européenne (UE) a décidé que les cages nues disparaîtront des pays membres d'ici 2012 et qu'entre-temps, il fallait fournir plus d'espace aux animaux (13). Cette décision constitue un nouveau compromis pour le bien-être physique, psychologique et environnemental des poules. Elle a aussi une incidence sur le plan humain, car on estime que, selon la méthode de rechange adoptée, les coûts de production pourraient augmenter de 5 à 50 p. 100, augmentation qui serait refilée au consommateur. La décision de l'UE repose sur la prémisse que le bien-être des animaux est un bien public que la société doit payer pour protéger. Toutefois certains spécialistes du bien-être des animaux soutiennent que cette décision ne repose pas sur des données suffisantes et qu'elle risque de compromettre le bien-être des poules. D'autres chercheurs appuient la décision, soutenant que ce sont les pratiques d'élevage inadéquates et l'état actuel du marché qui peuvent compromettre le bien-être des animaux dans les types de logement requis par l'UE. Les deux points de vue représentent un compromis dont l'acceptabilité repose non seulement sur des données scientifiques, mais aussi sur des valeurs.

Évaluation du bien-être des animaux

En Amérique du Nord, le compromis actuel entre les intérêts humains et les trois aspects du bien-être des animaux est à l'examen. Aux États-Unis, l'industrie de la restauration rapide exige maintenant des producteurs

In-practice welfare tip

Educate the public. Many would agree that animal welfare is a public good that should be protected. Consensus on how best to protect welfare and to balance it with legitimate human interests requires informed, public debate. As veterinarians, we are uniquely placed to inform the public about the issues, and most particularly about animals' interests.

- Consider supplying welfare information in your waiting room. Provide a couple of duotang binders with clear covers, containing newsletters or information printed off from reputable Web sites e.g., the Alberta Farm Animal Care Association (<http://www.afac.ab.ca>); the Canadian Veterinary Medical Association (<http://www.animalhealthcare.ca>); l'Académie de médecine vétérinaire du Québec (<http://www.amvq.qc.ca>); the Canadian Federation of Humane Societies (<http://www.cfhs.ca>); the Sir James Dunn Animal Welfare Centre (www.upei.ca/~awc); the University of British Columbia Animal Welfare Program (<http://www.agsci.ubc.ca/animalwelfare/publications/index.htm>).
- Consider including in your client newsletter a regular welfare paragraph, with references if possible.

Le bien-être des animaux à la clinique

Informier le public. Pour beaucoup de gens, le bien-être des animaux est un bien public à protéger. Pour déterminer comment le protéger au mieux en tenant compte des intérêts humains légitimes, il faudra tenir un débat public éclairé. En tant que vétérinaires, nous sommes bien placés pour informer le public sur la question, surtout sur les intérêts des animaux.

- Dans votre salle d'attente, présentez de l'information sur le bien-être des animaux. Prévoyez un ou deux cahiers contenant des bulletins d'information ou des textes obtenus de sites Web fiables, comme ceux de l'Association canadienne des médecins vétérinaires (<http://www.santeanimale.ca>), de l'Académie de médecine vétérinaire du Québec (www.amvq.qc.ca), de la Alberta Farm Animal Care Association (<http://www.afac.ab.ca>), de la Fédération des sociétés canadiennes d'assistance aux animaux (<http://www.cfhs.ca>), du Sir James Dunn Animal Welfare Centre (www.upei.ca/~awc), d'Agri Bien-être (www.tours.inra.fr/BienEtre/accueil.htm) et du University of British Columbia Animal Welfare Program (<http://www.agsci.ubc.ca/animalwelfare/publications/index.htm>).
- Songez à inclure régulièrement dans votre bulletin d'information à la clientèle un paragraphe sur le bien-être des animaux, avec une bibliographie si c'est possible.

welfare standards in the farms that supply its eggs, and it assesses compliance with this requirement through third-party welfare audits (16). This action is market-driven and therefore not a sufficient framework for national reforms in animal welfare standards. In Canada, the restaurant industry and others are debating the feasibility of welfare auditing for food animals.

Auditing implies that animal welfare can be assessed in a practical way, but, as we have seen, welfare is complex. The assessment of animal welfare will be examined in the next article.

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d'œufs qu'ils appliquent des normes plus strictes à l'égard du bien-être des animaux, et elle évalue la conformité à ces normes en faisant effectuer des vérifications par des tiers (16). Ces mesures sont strictement le fruit des pressions du marché; il n'existe donc pas de cadre suffisant pour réformer les normes relatives au bien-être des animaux à l'échelle nationale. Au Canada, l'industrie de la restauration et d'autres étudient la faisabilité de la surveillance du bien-être des animaux destinés à l'alimentation.

La vérification implique que le bien-être des animaux est mesurable à l'aide de critères concrets, mais, comme nous venons de le voir, il s'agit d'une notion complexe. Notre prochain article portera sur l'évaluation du bien-être des animaux.

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