

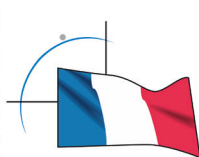
# ANIMAL WELFARE

## FROM SCIENCE TO LAW

INTERNATIONAL SYMPOSIUM  
PARIS, 10-11 DECEMBER 2015  
UNESCO



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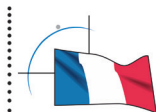
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# ANIMAL WELFARE, FROM SCIENCE TO LAW: AN EXPECTED INTERNATIONAL SYMPOSIUM

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**Louis SCHWEITZER, president of The Foundation for Animal Law, Ethics and Sciences (LFDA).**

Three years ago, the Foundation for Animal Law, Ethics and Sciences organized a high-level international symposium, the theme of which was “Animal suffering, from science to law”. After the conferences and debates, we saw that a link exists between advances in science and advances in law, with advances in science calling and instigating advances in law, in France, in Europe and in the world. Since then, facts have confirmed this observation.

We announced that the next symposium would deal with animal welfare, using the same approach: associating advances in science to advances in law.

For three years, science has progressed at a sustained pace, while advances in law were less visible, but the more important, in western countries, is that the general public shows higher expectations on the subject of animal welfare.

Public authorities, large corporations, ought to take these expectations into consideration. For instance, the scientific advisory committee for the German ministry of agriculture notes that society does not and will not accept that cruel husbandry practices persist, while the French ministry for agriculture is publishing a national strategy for animal welfare. Similarly, major food and catering enterprises require that their suppliers apply rules that are more respectful of animals’ sensitivity. However, we need to know how to evaluate animal welfare without reducing it to the mere absence of suffering or simply “good treatment”.

Animal welfare is a rich and rapidly evolving research discipline; no public or professional body can ignore the question of animal welfare and how to improve it, which involves knowledge, standards, laws and regulations, the ability and the will to implement effective controls, and public information. The symposium by the Foundation for Animal Law, Ethics and Sciences will be a unique opportunity to exchange knowledge and experiences. I am convinced that it will lead to new advances in science and law.

**08:00** *Opening of the registration desk*

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**09:30 Welcome Speech**

Pr Jean-Claude NOUËT (vice-president, honorary president of LFDA, France)

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**09:40 Introduction**

Dr Sophie HILD (General Coordinator of the Symposium, Director of LFDA, France)

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SESSION I

09:50 – 12:30

**WHAT IS ANIMAL WELFARE?**

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**09:50 Animal welfare: a brief history**

Pr Ian DUNCAN (University of Guelph, Canada)

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**10:10 How to access sentience in animals?**

**Close relations between emotions and cognition**

Dr Alain BOISSY (INRA Clermont-Ferrand, France)

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**10:30** *Break & Press conference*

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**11:00 Assessing the welfare of farm animals**

Dr Isabelle VEISSIER & Dr Raphaëlle BOTREAU (INRA Clermont-Ferrand, France)

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**11:20 The weight of words: semantic and translational differences between “bien-être” and “bientraitance animale” (“welfare” and “well-being of animals”)**

Astrid GUILLAUME & Sonja WANDELT (University Paris-Sorbonne, France)

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**11:40 To which animals does animal welfare apply and for what reasons**

Thierry AUFFRET VAN DER KEMP (marine zoologist, France)

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**12:00** *Questions/Answers*

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**12:30** *Lunch break*

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## ANIMAL WELFARE: A BRIEF HISTORY

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**Pr Ian J.H DUNCAN, professor emeritus of animal welfare, department of Animal Biosciences, University of Guelph, Canada.**

Philosophers, from Aristotle in the 4<sup>th</sup> century BC, through Aquinas in the Middle Ages, to Descartes, Hobbes, and Kant in the 17<sup>th</sup> and 18<sup>th</sup> centuries, were firm in their claim that human beings have a special attribute that makes them distinct from all other animals and that having this special attribute makes human beings objects of direct moral concern. The special attribute was rationality. The consequence of this claim was that animals have no moral standing and human-kind could use animals as they wished. Changes came during the Enlightenment when Hume began to dispute these previous views. It was evident to him that at least the mammals had some rationality and deserved moral consideration. Then Bentham argued that rationality is not the relevant matter but whether or not the animal can suffer.

The first scientific approach to animal welfare appears in the middle of the 19<sup>th</sup> century by Youatt, an English veterinarian who wrote of animals' senses, emotions, consciousness, attention and memory, and criticised many of the ways in which animals were treated. Thirty years later, in

*The Descent of Man and The Expression of the Emotions in Man and Animals*, Darwin described the expression of emotions in various species but said little about the subjective experience of having emotions. This was left to his friend and follower, Romanes who described the subjective nature of pleasures and pains very clearly in his book *Mental Evolution in Animals* published in 1884. Therefore, by the end of the 19<sup>th</sup> century everything was in place to develop a science of animal welfare. However, the rise of Behaviourism, with its insistence that subjective feelings cannot be investigated scientifically, meant that the development of animal welfare science was delayed for another 80 years. In the second half of the 20<sup>th</sup> century, the writings of Ruth Harrison and Astrid Lindgren criticising intensive animal production practices stirred public concern and eventually prompted scientific investigations into animal welfare problems. At first there was argument as to whether welfare should be based on the biological functioning or on the feelings of the animals under consideration, but these differences have now been largely resolved.

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### Key words

- Biological functioning
- Subjective feelings
- Suffering

# HOW TO ACCESS SENTIENCE IN ANIMALS? CLOSE RELATIONS BETWEEN EMOTIONS AND COGNITION

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**Dr Alain BOISSY, ethologist, research director, INRA UMR1213 Herbivores, INRA Clermont-Ferrand-Theix, France.**

The question of animal sentience is a societal concern due to the evolution of ethical issues and the use of animals for both experimentation and production issues. Farm animals now have the status of sentient beings (Lisbon Treaty, 2009) that structures several directives on animal protection in Europe (see European Convention for the Protection of Animals kept for Farming Purposes). However, access to emotional experiences of animals remains difficult due to the lack of verbal language. We will show here that a scientific approach of the animal's subjectivity is possible. Based on studies conducted in sheep, we will investigate the close relationships between emotions and cognition.

First, we will see that animals evaluate their environment with a limited number of cognitive processes that are similar to those that induce emotions in humans. Sheep are sensitive to the novelty and pleasantness of the eliciting situation, to the way that situation meets their expectations, and to the opportunity they have to predict and to control the situation. Taking into account the appraising capabilities of the animals in addition to the study of their behavioural and physiological reactions offer now a scientific exploration of their emotional repertoire.

Later, we will show how an emotion can temporarily bias the way animals evaluate their environment, and thus alter their subsequent emotional sensitivity. After being trained to approach or

avoid a food bucket depending on its position in a pen, sheep are exposed to the bucket placed this time between the position to be avoided and the one to approach; after exposure to a frightening event before entering the pen, sheep are more reluctant to approach the bucket placed in the intermediate position.

Finally, we will see how the accumulation of emotions biases the evaluative process for a long-lasting duration. Sheep who underwent prolonged negative experiences in early life (i.e. pre- or post-natal stress) systematically interpret negatively the ambiguous events such as the bucket in intermediate position. The persistence of such a cognitive bias helps to understand how a long-lasting emotional state is set up even if the triggering event has disappeared. It is therefore possible to access the sentience of the animals from an ethological approach combined with a cognitive psychology's framework. The study of the relationships between emotions and cognition offers new perspectives to develop both farming strategies and innovative behavioural therapies that not only minimize stressful experiences but also induce positive emotions that guarantee a real welfare state in farm animals.

*This work was supported by the AgriBEA network, INRA and the French Research Agency (project EmoFarm ANR- 09-BLAN-0339-01 and PsySheep project ANR-11-PDOC-01601).*

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## Key words

- Animal welfare
- Appraisal
- Cognitive bias
- Emotions



# ASSESSING THE WELFARE OF FARM ANIMALS

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**Dr Isabelle VEISSIER, veterinarian, director of UMR1213 Herbivores, INRA UMR1213 Herbivores, INRA Clermont-Ferrand-Theix, University of Clermont-Ferrand, France.**

**Dr Raphaële BOTREAU, INRA UMR1213 Herbivores, INRA Clermont-Ferrand-Theix, University of Clermont-Ferrand, VetAgroSup, France.**

It is now widely accepted that animal welfare is a complex concept. It may be affected by many factors and it includes both physical and mental health. In the Welfare Quality® project, we established four principles that are essential to maintain and improve the level of welfare of animals: good housing, good feeding, good health and appropriate behavior. These principles provide a starting point for building a system to assess the welfare of animals. These principles are broken down into 12 criteria:

1. Absence of prolonged hunger
2. Absence of prolonged thirst
3. Comfort around resting
4. Thermal comfort
5. Ease of Movement
6. Absence of injuries
7. Absence of disease
8. Absence of pain induced by management procedures
9. Expression of social behaviours
10. Expression of other behaviours
11. Good human-animal relationship
12. Positive emotional state

The welfare of an animal depends on how it perceives the situation in which it lives. The assessment system proposed by Welfare Quality® gives greater importance to measures taken on animals to verify that the 12 criteria are met (for example, physical state, injury, fear). Welfare Quality® also provides a rating system of farms in four categories reflecting the overall level of welfare of animals: not rated, acceptable, improved, and excellent. This assessment is inherently linked to ethical questions such as:

- Should we consider the average condition of the animals or take a closer look to animals in poorer conditions?
- Should we consider that a bad result on a criterion may be counterbalanced by good results on other criteria?
- Should we define the theoretical limits between the 4 categories of overall welfare or take into account what can be realistically achieved on farms?

Welfare Quality® consulted experts in order to better address these issues and to build an assessment tool that reflects their ethical choices.

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## Key words

- **Animal welfare**
- **Assessment**
- **Ethics**
- **Farming**

# THE WEIGHT OF WORDS: SEMANTIC AND TRANSLATOLOGICAL DIFFERENCES BETWEEN “BIEN-ETRE” AND “BIENTRAITANCE ANIMALE” (“WELFARE” AND “WELL-BEING OF ANIMALS”)

.....

Astrid GUILLAUME, semiotician, lecturer, University of Paris-Sorbonne, France.

Sonja WANDEL, english language expert, University of Paris-Sorbonne, France.

Section L.214.1 of the rural code and the code of Maritime Fishing (formerly article 9 of the Act of 10 July 1976) stipulates that “*each animal is a sentient being and as such must be placed by its owner in conditions compatible with the biological imperatives of its species.*”

In order to respond to this reality of the *animal as a sentient being*, which by now has also been recognized in the civil code, the issue of respect for the *welfare (bien-être)* of animals becomes paramount. However, the actions on the ground are inextricably linked to words that are not always correctly defined and used in dictionaries or the law.

For different reasons the expression “*bientraïtance animale*” (*good treatment of animals*) has become the expression that is predominantly in use by breeders and the food industry. While the two terms *bien-être* and *bientraïtance* are already not equivalent terms in French, their translation into English is even more problematic.

Indeed, the translation, or maybe one should say the untranslatability of these terms, generates inaccuracies, misunderstandings, oddities, and semantic shifts that almost guarantee the *mal-être animal* (*the lack of well-being of animals*), and even the *maltraïtance animale* (*maltreatment of animals*). Welfare and well-being are not equivalents of *bien-être* and *bientraïtance*. And sentient, increasingly used in English and French alike, is not an equivalent of the French *sensible*.

The focus will be on the definition and translation of key words and expressions of animal protection; because if these terms are used incorrectly or translated inadequately, the suffering of animals, rather than the elimination of animal suffering, is endorsed and even legally sanctioned.

When words generate suffering, then it is time to redefine these words with respect to the most current scientific findings and to learn how to use them properly.

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## Key words

- Good treatment
- Sentience and sensibility
- Welfare and Well-being

## TO WHICH ANIMALS DOES ANIMAL WELFARE APPLY AND FOR WHAT REASONS?

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**Thierry AUFFRET VAN DER KEMP, marine zoologist, ex research engineer, ex chief of the life sciences department at the Palais de la Découverte, ex director of LFDA, France.**

Careful examination of law and regulation pertaining to animal welfare around the world reveals, according to the country, the existence or absence of definitions, which can be vague or accurate, broad or on the contrary very restrictive, of what are animals, what is their sensitivity and what is their welfare.

Should we talk for instance about the welfare of oysters or mussels, worms or snails? Do these invertebrate animals have sensitive abilities of comparable nature to that of mammals or fish? Must the category of living «animal», which welfare ought to be protected by laws, be restricted to vertebrate animals only, or domesticated animals only, or animals held captive by humans only, or else to all animals, be they small invertebrates or vertebrates, smooth-skinned or scaly, with hair or feathers, wild or domesticated?

The definitions of an animal, its sensitivity and its welfare, as found in legal texts, are reviewed for nearly 30 countries from 4 continents. This legal overview shows that the criteria used to define animals address 3 orders of consideration: economic, philosophic or scientific, depending on the case.

But can we effectively legislate so that a good life is insured for the human-dependent animals, if no rational and precise definition of their nature, their sensitivity or their welfare is given in the law? The need to establish such legal definitions on a sound scientific basis, meaning based on zoological, ethological and neurobiological criteria, is more and more needed today, especially in Europe. A few examples of recent propositions will be given.

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### Key words

- **Animals**
- **Animal welfare**
- **Definitions**

SESSION II  
14:00 - 17:20

## ANIMAL WELFARE AS TAKEN INTO ACCOUNT BY LAW AROUND THE WORLD: GLOBALISATION AND DISPARITIES

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**14:00 The European union legislation on animal welfare: state of play, enforcement and strategy for the future**

Dr Vet Andrea GAVINELLI (head of unit Animal Welfare, DG Sanco, EU Commission, Belgium)

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**14:20 Legal standards and animal welfare in European countries**

Dr Muriel FALAISE (Lyon 3 University, France)

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**14:40 Why animal-protective legislation doesn't always «stick» in America and the path forward?**

Pr Mariann SULLIVAN (Columbia University Law School, USA)  
& Pr Taimie L. BRYANT (UCLA School of Law, USA)

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**15:00 Questions/Answers**

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**15:30 Break**

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**15:50 Animal welfare in Central and South America: what is going on?**

Pr Carla F. M. MOLENTO, Ana Paula DE OLIVEIRA SOUZA  
& Luana OLIVIERA LEITE (Federal University of Paraná, Brazil)

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**16:10 Animal welfare in Africa: strength of cultural traditions, challenges and perspectives**

Dr Nenene QEKWANA, Pr Cheryl M.E MCCRINDLE (University of Pretoria, South Africa) & Pr Beniamino CENCI-GOGA (University of Perugia, Italy)

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**16:30 Animal welfare in Asia: specific flaws and strengths, future trends and objectives**

Dr Quaza NIZAMUDDIN (ministry of agriculture, Malaysia) & Dr Abdul RAHMAN (President of the Commonwealth Veterinary Association, Bangalore, Inde)

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**16:50 Questions/Answers**

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**17:20 Conclusion and closing day**

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# THE EUROPEAN UNION LEGISLATION ON ANIMAL WELFARE: STATE OF PLAY, ENFORCEMENT AND STRATEGY FOR THE FUTURE

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**Dr Vet Andrea GAVINELLI, head of Animal Welfare Unit, DG Health and Food Safety,  
EU Commission, Belgium.**

The European Union (EU) has since 1974 established a wide range of legislative provisions concerning animal welfare. Under the EU treaties, animals are recognised as sentient beings, and as a consequence, the EU and the Member States are due to pay full regard to the welfare requirements to animals when preparing and implementing EU policies like agriculture or internal market. Today the EU legislation on the welfare of animals covers the farming of poultry, calves and pigs as well as, for all species, transport and slaughter operations. This legislation is one of the most advanced in the world for a major global agricultural producer like the EU. In particular the EU has banned traditional cages for laying hens and has required group housing for sows.

While Member States are primarily responsible for the daily implementation of these rules, the Commission monitors the implementation of the animal welfare legislation. The Food and Veterinary Office of the European Commission performs regular audits to check that the competent authorities are performing appropriate official controls. Non-compliant Member States may be brought to the Court of Justice of the EU.

The European Commission also contributes to raise awareness to animal welfare through training programmes organised in the EU and in Third Countries. The role of international stakeholders is essential in driving the proper implementation of the standards and their application.

The EU also works on animal welfare on a global level by promoting the adoption of international standards and actively promotes consideration of animal welfare within the framework of veterinary agreements and cooperation forums with trading partners. For this reason the EU contributes to the work of multilateral organisation such as the World Organisation for Animal Health (OIE) in order to increase the global knowledge on animal welfare standards.

The European Commission adopted an EU strategy for the protection and welfare of animals 2012-2015, where priority is given to enforcement actions. The Commission is currently working in completing the initiatives foreseen in the strategy. Meanwhile a special focus is given to better develop the integration of animal welfare with food safety, public health and sustainable agriculture policies.

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## Key words

- Breeding
- European Union
- Inspection
- Legislation
- Slaughter
- Transport

# LEGAL STANDARDS AND ANIMAL WELFARE IN EUROPEAN COUNTRIES

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**Dr Muriel FALAISE, lecturer in Law, Lyon 3 University, France.**

In Europe, legal protection of animals went through several historical phases during which animals were understood and protected based on various grounds. The first phase, starting from the beginning of the 19th century, saw the adoption of laws punishing cruel treatment of domestic animals. It originated from the compassion that humans could feel towards animals. The second half of the 20<sup>th</sup> century saw a second phase that started with the emergence of the notion that respect was due to the animal as a living being. Then, thanks to scientific advances supporting that animals are sentient beings, a third phase started in the end of the 20th century, during which the need to ensure good welfare to animals was recognised.

If all European countries have legislation which is intended to protect animals against abuse and cruelty, the qualification of an animal as a sentient living being varies strongly from country to country. Yet, since it is scientifically admitted that animals are living beings endowed with sensitivity, able to experience physical and psychological pains, it matters that we include this dimension into the law by recognising their right to welfare. In order to identify national legal dispositions in that field, one must first and foremost outline the triangular relationship law – animal – welfare, which will then lead to the presentation of the countries that have integrated animal welfare into their constitutional or legal standards.

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## Key words

- **Animal welfare**
- **Comparative law**
- **Legislation**

# WHY ANIMAL-PROTECTIVE LEGISLATION DOESN'T ALWAYS “STICK” IN AMERICA AND THE PATH FORWARD?

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**Pr Mariann SULLIVAN**, adjunct professor of Animal Law, Columbia University Law School, and Program Director, Our Hen House, Inc., USA.

**Pr Taimie L. BRYANT**, professor of Law, UCLA School of Law, USA.

In the United States, it is difficult to enact federal legislation, and legislation to protect animals is no exception. Since states have sovereignty over the property within their borders and animals are legally the property of humans, animal law reform generally occurs at the state or local level, if it occurs at all. Advocates are relieved and happy when animal-protective legislation is passed because passage is so difficult. This is particularly true of farmed animal law reform. However, relief and happiness are often short-lived. After identifying some reasons that it is difficult to pass animal-protective legislation, especially in the farmed animal context, this article explores why many animal-protective laws do not “stick” after enactment. In particular, we consider the case of California’s ban on the production and sale of foie gras and California’s attempt under Proposition 2 of 2008 to reduce the intensity of confinement for some farmed animals. In the case of the ban on the production and sale of foie gras, a court held that a state could ban in-state production of foie gras but cannot prohibit the sale of foie gras because it is a “poultry product” regulated by a

federal law that pre-empts state law. Proposition 2 withstood a legal challenge that it was unconstitutionally vague, but a subsequently enacted law prohibiting sale in California of eggs intensively produced elsewhere is still under challenge as violating the federal constitution’s Commerce Clause. If successful, this lawsuit could undermine California’s own ability to regulate its egg producers. In other words, in the current political climate, animal law reform in the United States is realistically feasible only at the state level but may be significantly reduced or eliminated due to federal law provisions. In light of these difficulties, campaigns to encourage retailers to embrace more rigorous standards, as well as vegan advocacy, have been embraced by animal advocacy organizations in the United States. Retailers have proven to be easier to persuade than legislators. Also, some lawyers have begun representing vegan businesses as a means of legal work on behalf of animals because vegan product consumption can significantly reduce the number of animals harmed and can lead to the obsolescence of businesses premised on animal exploitation.

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## Key words

- Animal Cruelty
- Factory-farming
- Vegan

## ANIMAL WELFARE IN CENTRAL AND SOUTH AMERICA: WHAT IS GOING ON?

.....

**Pr Carla FORTE MAIOLINO MOLENTO**, veterinarian, professor of animal welfare, Animal Welfare Laboratory, Federal University of Paraná, Brazil.

**Ana Paula DE OLIVEIRA SOUZA**, veterinarian, PhD candidate, Animal Welfare Laboratory, Federal University of Paraná, Brazil.

**Luana OLIVIERA LEITE**, veterinarian, MSc candidate, Animal Welfare Laboratory, Federal University of Paraná, Brazil.

Our aim was to study animal welfare (AW) policies and initiatives in Central and South America. Our main method was a questionnaire sent to specialists in 20 countries; Argentina, Chile, Colombia, Ecuador, Suriname and Venezuela responded, and we added Brazilian data. Responding countries represent 85.5% of cattle, 81.4% pigs and 77.3% poultry production; perceptions expressed may be restricted due to potentially limited AW teaching in these two continents. Brazil, Chile and Colombia maintain animal protection, transport and slaughter regulations. Even then, respondents from five countries considered animal transport and slaughter as priorities to be addressed, suggesting the need for better regulations and enforcement mechanisms. Farmer educational level seems an important issue since elementary education was the most common level mentioned. Other characteristics with negative impacts on AW are discussed, such as inaccurate AW information on animal product labeling. Availability of higher welfare products is also a field to be explored. Initiatives to improve animal handling were cited by all. Governmental funding to improve AW exists in Brazil, Chile, Colombia

and Ecuador. International trade with European Union (EU) was mentioned by respondents from all countries, except Ecuador; partnership with the European Union was considered an important way to exchange information on AW. The adoption of European norms is common in export slaughterhouses in Brazil and Chile. The adoption of foreign regulations, such as certification schemes and assessment protocols, requires adaptation to local characteristics of each country, as reported by Brazilian and Chilean respondents. We have also collected information on laboratory animal use: Argentina, Brazil, Chile, Colombia and Venezuela maintain regulations for laboratory animals, which require institutional ethics committees. Trends on pig and laying hen farming and on laboratory animals are discussed. Central and South American AW issues other than those in farm and laboratory scenarios remain to be studied; it was difficult to obtain information about AW in the continental level. A structure to constantly monitor this information and support planned strategies to improve AW is welcome, including AW higher education and mechanisms for regulation enforcement.

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### Key words

- **Animal welfare regulation**
- **Farm animal**
- **Laboratory animal**



# ANIMAL WELFARE IN AFRICA: STRENGTH OF CULTURAL TRADITIONS, CHALLENGES AND PERSPECTIVES

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**Dr Nenene QEKWANA**, veterinarian, faculty of Veterinary Science, section veterinary public health, department of paraclinical science, University of Pretoria, South Africa.

**Pr Cheryl M.E MCCRINDLE**, school of health systems and public health, faculty of health sciences, University of Pretoria, South Africa.

**Pr Beniamino CENCI-GOGA**, department of veterinarian medicines, University of Perugia, Italy.

Cultural traditions that can impact on animal welfare in Africa include religious ceremonies, animal production norms and ways of interacting with wildlife. The diversity of culture and species of animals involved is a major challenge to optimising welfare. Another challenge is disconnects between the African perspective on human-animal interaction and the perceptions of animal welfare bodies from other countries.

Traditional religions in Africa are described as primal religions, because they exist independently, with no apparent historical relation to each another, or to global religions like Christianity, Islam, Hinduism or Buddhism. Animals are sacred in African religions as offerings to gods and ancestors, and in healing, initiation and atonement ceremonies.

The major African ethno-linguistic divisions are Afro-Asiatic, Niger-Congo, Nilo-Saharan and Khoisan. Although diverse, all of these recognise cattle, sheep, goats, chickens, horses, donkeys,

dogs and cats within their cultures. Camels are important in the deserts of West and North Africa. Certain wild animals can also be the archetypal symbol in tribal or clan affiliations, for example the Bataung symbol is the lion (Tau) and the Bafokeng will never kill or eat a rabbit.

Traditionally, animal production in Africa is mainly nomadic pastoral, or settled agropastoral systems. Welfare challenges include endemic diseases, transboundary diseases, predation, malnutrition and stocktheft. In modern society, traffic accidents are also a problem as roads run through the grazing areas.

Understanding the complexity of human animal relationships in Africa is a challenge to those seeking to provide rules about animal welfare that are globally applicable. The route to successful animal welfare is to include Africans in dialogue and decisions made about animal welfare norms in Africa.

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## Key words

- Africa
- Human-animal relationship
- Traditionally

# ANIMAL WELFARE IN ASIA: SPECIFIC FLAWS AND STRENGTHS, FUTURE TRENDS AND OBJECTIVES

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**Dr Quaza NIZAMUDDIN**, deputy director-General of Veterinary Services, department of veterinary services, ministry of Agriculture, Malaysia.

**Dr Abdul RAHMAN**, president of the Commonwealth Veterinary Association, chairman of the working group on animal welfare to the OIE, India.

The Asian continent with many developing nations with half the world's population and animals had in the past been regularly reporting many cases of pets, livestock and wildlife being treated cruelly. This includes animals suffering from malnutrition, overloading, ill-treatment and animals not being slaughtered in a proper manner. This condition prevailed due to the lack of knowledge and understanding of animal welfare amongst most stakeholders. Several countries already have laws related to animal welfare but suffered poor implementation or enforcement. Others were lacking in policies and regulations. In many countries the priorities, funding and personnel are lacking to ensure improved animal welfare. Non-governmental organisations have been playing an important role where there is nascent or little emphasis from the government. Poverty, starvation, disease and environmental disasters remain as potential welfare threats to animals.

Lately concerns on animal welfare have been gaining traction. The inclusion of animal welfare in the third strategic plan(2001-2005) by the World Organisation for Animal Health(OIE) recognised the increasing public awareness and the need for governmental leadership in the development of animal welfare policies and guidelines. In 2008, Australia spearheaded the development and for-

mation of the Regional Animal Welfare Strategy for Asia, Far East and Oceania (RAWS) based on the Australian Animal Welfare Strategy to improve animal welfare.

RAWS with membership from several countries like Malaysia, Bhutan, China, Indonesia, Republic of Korea and Thailand lead the changes and improvements on animal welfare. Malaysia for example had laid down a National Strategic Plan for Animal Welfare since 2012 and a new Animal Welfare Act to be enacted. Other countries have also improved through new or improved legislation, training and public awareness program. Experiences from these countries are shared with other countries through direct interactions and through digital media. All these efforts have proved to be positively reinforcing with tangible improvements in animal welfare in the region.

In moving forward there needs to be further concerted efforts to deliver clear goals. These strategies must be shared through each country's OIE Animal Welfare Focal Point. The strategies include improving communication, education, training, skills, knowledge, improvement of legislation, obtaining high-level support, sustainable improvements on animal welfare, cooperation with NGOs, international organisations and key trading partners.

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## Key words

- Asia
- Animal welfare
- RAWS
- Strategies

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**08:00** *Reception Registration Opening*

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**09:00** **Welcome Speech**  
Louis SCHWEITZER (president of LFDA)

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SESSION III  
9:10 – 12:30

**ANIMAL WELFARE IN THE FACE OF SOCIO-ECONOMIC  
AND CULTURAL FACTORS**

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**09:10** **The costs and benefits of animal welfare**  
Pr Alan TILBROOK (University of Adelaide, Australia) & Pr Paul H. HEMSWORTH  
(University of Melbourne, Australia)

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**09:30** **Impact of international trade on environmental and welfare norms**  
Katherine MERCIER (legal expert in agricultural and international law, France)

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**09:50** **What aspects of animals' life do people refer to when they talk about animal welfare? The role of marketing, media and experts in proposing ideas for a good life for animals**  
Pr Mara MIELE (University of Cardiff, Wales)

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**10:10** *Questions/Answers*

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**10:40** *Break*

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**11:00** **Farm size and animal welfare**  
Pr Daniel M. WEARY, Jesse ROBBINS & Pr Marina A. G. VON KEYSERLINGK  
(University of British Columbia, Canada)

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**11:20** **Initiatives and achievements from farmers and the livestock sector in favour of animal welfare**  
Dr Jean-Louis PEYRAUD (INRA Saint-Gilles, France), Luc MIRABITO (Institut de l'Élevage, France) & Dr Isabelle VEISSIER (INRA Clermont-Ferrand, France)

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**11:40** **Consumer information complements animal welfare legislation**  
Sara WEHRLI (Swiss Animal Protection (SAP), Switzerland)

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**12:00** *Questions/Answers*

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**12:30** *Lunch break*

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## THE COSTS AND BENEFITS OF ANIMAL WELFARE

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**Pr Alan J. TILBROOK**, chief of research, Animal Welfare Science Centre, South Australian Research and Development Institut, University of Adelaide, Australia.

**Pr Paul H. HEMSWORTH**, director Animal Welfare Science Centre, faculty of and Agricultural Sciences, University of Melbourne, Australia.

There is good evidence that improving the welfare of farmed animals is beneficial both in terms of the physiology and behavior of the animal and for productivity. Determining the level of physiological and behavioral improvement in animal welfare requires a robust evidence-based means of assessing animal welfare. There are several science-based frameworks for understanding animal welfare including the “biological functioning”, “affective states” and “natural living frameworks”. Recently, we highlighted the usefulness of the biological functioning conceptual framework extended to emphasize affective outcomes for animals when assessing aspects of pregnant sow housing. For example, both the quantity and quality of floor space are important and when both are less than optimal it can result in negative consequences including stress, aggression and reduced immune competence and reproductive performance. While it appears that optimizing floor space and pen design features will improve welfare resulting in increased production efficiency, the actual economic benefit is challenging to evaluate. Indeed, in what sense does animal welfare have an economic value? Knowing this is

important when confronting decisions about the conditions under which we keep animals because improving their welfare has an economic cost. For instance, reconfiguration of pens, administration of pain killers and training stock persons are all costs of improving animal welfare. If cost and value are considered as monetary terms then, strictly speaking, they are only relevant to items that are traded but this does not necessarily apply to animal welfare. While the costs and value of increased production efficiency from improving animal welfare can be clearly determined in some cases, many of the other benefits are less obvious. These include human health, economic, social consequences and environmental impacts, among others. Thus, determining the worth of the acceptable use of animals can involve difficult and complex choices. Scientific research has an essential role in underpinning societal decisions on acceptable animal welfare. This research should consider the full spectrum of costs and benefits (e.g. economic, environmental and social) of preventing and ameliorating negative animal welfare as well as increasing positive welfare states of animals.

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### Key words

- Agronomic industries
- Natural living
- Professionalism

# IMPACT OF INTERNATIONAL TRADE ON ENVIRONMENTAL AND WELFARE NORMS

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**Katherine MERCIER, legal expert in agricultural and international law, France.**

Consumers have become aware of the importance of international trade for animal welfare thanks to the Transatlantic Trade and Investment Partnership negotiations. They now know that national norms, the most visible, are often the consequences of supra-national negotiations. Establishing high animal welfare standards adds costs to the production of marketed goods. For this reason, national norms are often perceived as “impediments to trade” during international exchanges, and are therefore strictly regulated. In addition, those rules are regularly the object of litigation at the international level within the World Trade Organization (WTO) and bilateral treaties negotiated outside the WTO.

The main leadership forum for international trade is the GATT, which became the WTO in 1995. Since its creation in 1947, this structure has significantly changed, and in a favourable way, towards animals. In 1995, knowledge about the environment and sustainable development has grown in surprising ways, and the terms “animal welfare” were coined in decisions by the WTO

Dispute Settlement Body. If a “race to the bottom” was long considered, the WTO welcomes ethical and environmental-friendly legislation in a more and more favourable way.

Nevertheless, the WTO is not the only leadership forum for international trade and faces strong competition with bilateral treaties that often work with their own investor-state dispute settlements (ISDS). Their proliferation threatens the WTO, even though this forum starts to accept links between international trade, environmental issues and ethical consumption.

All bilateral treaties do not have the same impact on the level of wildlife protection and animal welfare. We must figure out which treaties allow a levelling-up approach to animal welfare norms from those that threaten this approach. Two factors must be taken into account: the economic weight of the contracting parties and their ability to dictate their legal model and the inclusion of an ISDS into the treaty, which, if not written restrictively, may block environmental and ethical norms.

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## Key words

- International trade
- ISDS standards
- WTO

# WHAT ASPECTS OF ANIMALS' LIFE DO PEOPLE REFER TO WHEN THEY TALK ABOUT ANIMAL WELFARE ? THE ROLE OF MARKETING, MEDIA AND EXPERTS IN PROPOSING IDEAS FOR A GOOD LIFE FOR ANIMALS.

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**Pr Mara MIELE, sociologist, professor in Human Geography, Cardiff University, School of Planning and Geography, Wales.**

Consumers tend to encounter farm animals in the form of 'representations' such as images or short stories in food adverts on TV, on internet or marketing campaigns. Food products are largely featuring farm animals, and they picture them as living an idealised life on farms. In some cases food labels specify some technical aspects of animal husbandry, such as free-range or organic, or they might refer to access to pasture for cows or provision of straw for pigs, or they carry more general claims about animal welfare, e.g. freedom food, but a much richer message is conveyed by

the images on the packaging. If you pay attention to all these representations of animals' lives, you will find that most of them tell a story of happiness, freedom and naturalness. In this presentation I will address the public understanding of animal welfare and I will argue that the 'marketization' of farm animals has promoted a specific understanding of what is a good life for animals based on positive emotions that has challenged animal welfare experts to develop tools and measures for giving an account of the emotional life of animals.

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## Key words

- **Animal emotions**
- **Food adverts**
- **Marketing**
- **Public understanding of animal welfare**

## FARM SIZE AND ANIMAL WELFARE

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**Pr Daniel M. WEARY**, Animal welfare program, faculty of land and food systems, university of British Columbia, Canada.

**Jesse ROBBINS**, Animal welfare program, faculty of land and food systems, university of British Columbia, Canada.

**Pr Marina A. G. VON KEYSERLINGK**, Animal welfare program, faculty of land and food systems, university of British Columbia, Canada.

Concerns about the welfare of farm animals often revolve around the issue of farm size. Many critics suggest that animals on larger farms are less likely to receive individual attention and instead are treated only as units of production, and that the shift to larger farms results in a decline in standards of care and ultimately in the quality of life for animals. In this talk we outline the historical background of this criticism, drawing parallels with the earlier debate over the shift from an agrarian to an industrial society. We also argue that farm size influences different aspects of animal welfare in different ways. For example, larger farms may

permit more specialized and professional management of animal health, but make it difficult to provide access to pasture for dairy cows. We also review the limited empirical literature linking farm size and welfare and conclude that available research provides little support for any simple relationship. In conclusion, increases in farm size provide opportunities to improve the welfare of farm animals but also create welfare risks. Policy and advocacy efforts, instead of trying to reverse the increase in farm size, would be better directed toward generalizing the welfare benefits and minimizing the risks.

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### Key words

- **Industrial agriculture**
- **Natural living**
- **Professionalism**

# INITIATIVES AND ACHIEVEMENTS FROM FARMERS AND THE LIVESTOCK SECTOR IN FAVOUR OF ANIMAL WELFARE

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**Dr Jean-Louis PEYRAUD**, agronomist, head of the Scientific Interest Group «Élevage demain», PEGASE unit, INRA Saint-Gilles, France.

**Luc MIRABITO**, project manager animal welfare, Institut de l'Élevage, France.

**Dr Isabelle VEISSIER**, veterinarian, director of UMR1213 Herbivores, INRA Clermont-Ferrand-Theix, University of Clermont-Ferrand, France.

Driven by citizens' concern and supported by the European legislation, animal welfare has become a non-negotiable stake for livestock breeders.

**Initiatives and achievements** are numerous and diverse in their approach to reduce behavioural restrictions. To name a few, calf rearing has changed towards collective pens, laying hens production has evolved thanks to enriched cages, loose housing or aviaries, and tethering or individual cages were banned for sows or force-fed ducks. Concurrently, a large number of specifications, codes of practice or reinsurance systems have developed. Following the results from European projects such as Welfare Quality ® or EFSA reports that showed an interest for an approach to welfare with animal-based measures when investigating risks of multifactorial origins, the animal-centred approach is now implemented in projects managed in the poultry, pork and dairy sectors.

**In the future, new technologies in precision livestock farming** (biocaptors, big data...)

will enable a more precocious detection of problems, improved risk management and lifetime traceability of animal welfare. The European project EU-PLF illustrates the possibilities in this field.

**Livestock production, agro-ecology and animal welfare:** animal welfare can be considered as one component of agro-ecology as it constitutes a natural process that can be used to develop efficient and socially acceptable livestock farms. We know for instance that group mixing in cattle (cows or young bulls) reduces production during periods of varying length. However, one should not adopt an angelic view of extensive alternative production systems as a systematic source of well-being.

**To conclude**, we reiterate that the human-animal relationship is topical in the search of solutions to improve animal welfare but also systems efficiency and the implementation of practices to reduce the need for therapeutic methods. Progressively, it takes its central place in reference guides and training contents.

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## Key words

- Agro-ecology
- Initiatives
- Precision farming



## CONSUMER INFORMATION COMPLEMENTS ANIMAL WELFARE LEGISLATION

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**Sara WEHRLI, director of the Wild Animals unit, zoologist at Swiss Animal Protection (SAP), Switzerland.**

In Switzerland, ethical animal husbandry is standard. However: Switzerland is not a farm animal paradise! There are still calves raised for white meat, dairy cows forced to higher performance and sows giving birth to more piglets than they have teats. Narrow pens without straw bedding or free range are still legal. Agrarian policy wants to open the borders to import of groceries from production systems that are illegal in Switzerland. Animal welfare (AW) in Switzerland is under pressure, and there is still need for action!

The Swiss AW legislation is comparatively strict and includes specific requirements for animal keeping. But it is only an instrument that draws the lines between legal and illegal husbandry. It does *not* guarantee ethical husbandry! According to SAP's experience, a combination of commercial and governmental measures is the best way of improving farm AW. There should be both: a market for label produce and national facilitation of ethical husbandry through subsidies. SAP works for this aim through close cooperation with Coop, Switzerland's largest retailer, within the framework of Coop's «*Naturafarm*» AW label. Our unannounced inspections guarantee high standards of animal keeping and treatment. There exist

comparable labels in other European countries, such as the «*Tierwohlinitiative*» in Germany and «*RSPCA Assured*» in Great Britain, but according to our knowledge Switzerland's is the only system where audits are being carried out by an NGO working in direct cooperation with a retailer, are never announced, and take place not only on the farm, but also during transports and the whole slaughter process.

Animal protection firstly necessitates one's own *personal responsibility* and only secondly state-aided measures. Consumers need to understand the correlation between AW and their own *buying behaviour*. Government needs to prohibit cruel animal keeping and to fine abuse. Furthermore, *Government* should take action in case of market failure, e.g. through import bans, a liability of retailers to declare foods, and fostering of animal-friendly production systems.

The legitimacy of national efforts for AW is based on the fact that the Swiss population is strongly in favour of ethical husbandry and ready to invest public money – a consequence of more than two decades of public awareness raising!

\*Former "Freedom Food"

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### Key words

- Ethical husbandry
- Market
- Welfare label

SESSION IV – DECEMBER 11, 2015  
14:00 – 16:30

## OBJECTIVES FOR THE FUTURE: FINDING ALTERNATIVES, OVERCOMING THE SHORTCOMINGS

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**14:00 Legally accepted pain and other poor welfare in animals**

Pr Donald M. BROOM (University of Cambridge, United Kingdom)

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**14:20 Importance of the environment for the welfare of captive animals:  
behaviours and enrichment**

Dr Cédric SUEUR (University of Strasbourg, France) & Dr Marie PELE  
(Ethobiosciences, France)

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**14:40 French strategy for animal welfare**

Patrick DEHAUMONT (Director-General, Directorate for food, French Ministry  
for Agriculture, Food and Forest, France)

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**15:00 Animal welfare, law and ethics, conclusion**

Louis SCHWEITZER (president of LFDA)

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**15:30 Questions/Answers**

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**16:00 Conclusion of the Symposium**

Louis SCHWEITZER (president of LFDA)

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# LEGALLY ACCEPTED PAIN AND OTHER POOR WELFARE IN ANIMALS

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**Pr Donald M. BROOM, professor emeritus of animal welfare, centre for Anthrozoology and Animal Welfare, department of Veterinary Medicine, University of Cambridge, United Kingdom.**

Animals kept as pets or for farming, including all mammals, birds and fish, have pain systems and their welfare can be poor because of pain or fear. The extent of pain can be measured using physiological and behavioural measures such as thermography or grimace scales in sheep, horses and mice. It is important to evaluate the magnitude of poor welfare, a function of severity and duration.

In general, our laws prohibit treatment of animals that causes pain or other poor welfare. However, there are exceptions in laws for reasons of tradition, financial cost, gastronomic preference, convenience in management or breeding, or avoidance of other problems. Some activities that harm animals are considered to be “sport”. For example the bull pierced by numerous lances in the corrida, the deer chased by dogs and by humans on horseback, or the dog or cock forced to fight. These “sports” have entirely negative effects for the animal. Another example is the animal killed during shechita or halal slaughter without prior stunning. The justifications for this are: tradition, edict from an interpretation of a holy

book, and the mistaken belief that blood in a carcass is in some way unclean.

Evidence from welfare assessment studies shows that: cutting the throat without prior stunning causes up to two minutes of extreme pain. Castration, disbudding, or beak-trimming, without anaesthetic or analgesic causes pain for many hours, and often leads to more prolonged pain because of neuroma formation. Tail removal prevents normal defence against flies in cattle and social signalling in pigs and dogs. Tail-biting by pigs and injurious behaviour by hens can be prevented by giving the animals manipulable materials and more space. This costs more but the painful procedures can be avoided. Foie-gras production necessitates confined rearing conditions, aversive force-feeding and failure of the detoxifying function of the liver so that death would result soon after the normal killing time. Caponising is a major operation that is painful and the wounds take some days to cease to cause pain. In all these cases, the main beneficiary is human and the cost is borne by the animal.

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## Key words

- Law
- Pain
- Welfare

# IMPORTANCE OF THE ENVIRONMENT FOR THE WELFARE OF CAPTIVE ANIMALS: BEHAVIOURS AND ENRICHMENT

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**Dr Cédric SUEUR, ethologist, researcher/lecturer at the University of Strasbourg, France.**

**Dr Marie PELE, ethologist, Ethobiosciences, consulting in animal welfare and animal behaviour research and expertise, France.**

Animal welfare can be defined on the principle that a captive animal should be able to experience positive emotions in the long term. This state of welfare might be obtained thanks to physical and social enrichment allowing animals to display the full range of their behavioural repertoire resulting in homeostasis. In recent years, livestock operations or zoological parks have made progress in improving animal welfare by applying ergonomic concepts or so called “environmental enrichment”. The latter should result in animals having a daily activity satisfying their physical, physiological and cognitive needs and should lead to:

1. an increase in behavioural diversity,
2. a decrease in abnormal behaviours frequency such as stereotypies,
3. an increase in the use of their enclosure.

This requires a full knowledge of the behavioural repertoire of the species in its natural environment but also knowledge about its ecology and biology. Five categories of enrichment were defined: physical, social, foraging, sensory and cognitive. Many improvements were made concerning physical enrichment: the enclosure size or the presence of structures and accessories are now first handled. However, other welfare enhancement can be done, specifically social enrichment. The sociality and captivity in group is too often neglected. Concerning foraging enrichment, we can observe many issues, particularly with social carnivores; in general, food items are not diversified enough in their composition and spatiotemporal distribution. Such enhancements could not be done without integrating the concept of animal welfare at all levels of our society.

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## Key words

- **Animal Behaviour**
- **Animal Welfare**
- **Enrichment**
- **Ethology**

## FRENCH STRATEGY FOR ANIMAL WELFARE

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**Patrick DEHAUMONT, Director-General, Directorate for food, French Ministry for Agriculture, Food and Forest, France.**

Animal welfare for production, laboratory or companion animals has become the object of a major political action on European and French levels, as well as on international levels (OIE). France is facing changes in social expectations. In 2014, the status of the animal was debated and questions about animal welfare benefited from a significant media coverage, in particular on the subjects of husbandry and slaughter. Consumption practices are changing too, and some types of agricultural production are reconsidered.

In order to answer such societal developments and to be a driving force in animal welfare, the French Directorate for food has developed a draft strategy for 2015-2020. This project defines the guidelines and priorities of action for the ministry of agriculture in relation to animal welfare. This strategy aims at combining a better production with animal welfare, competitiveness of agricultural sectors, food safety and environmental considerations.

In these times of crisis for French livestock farming, animal welfare cannot be side-lined or put on hold. Indeed, animal welfare does not mean imposing new constraints on producers, but in

fact it is an integral part of a global improvement process for our farms on ecological, economical and ethical levels. Animal welfare is a sustainability factor for farming, which is why the animal welfare strategy must be part of the agro-ecological project promoted by the “Loi d’avenir pour l’agriculture et la forêt” (the Future of agriculture and forestry Act, October 2014).

The strategy intends to involve all actors from the agricultural sectors as part of an improvement process. It was thus co-developed with all stakeholders. Five priority axes were defined:

1. To develop and share knowledge while stimulating innovation
2. To involve stakeholders at all levels of the strategy
3. To pursue the efforts towards more humane practices at every stage of animal production
4. To prevent and address animal abuse
5. To communicate on the progress of the program

This new strategy will lead to legislative progress to establish animal welfare lastingly in our husbandry practices and in our society.

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### Key words

- Agro-ecology
- Animal welfare
- Husbandry practices changes
- Livestock farming
- Strategy

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