



# Animal Welfare Science and Bioethics Centre



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*Collaborating Centre for Animal Welfare  
Science and Bioethical Analysis:*

*Founding Partner*

*<http://animalwelfare.massey.ac.nz>*

**Evolving Veterinary Education  
for a Safer World**  
*Paris – October 2009*

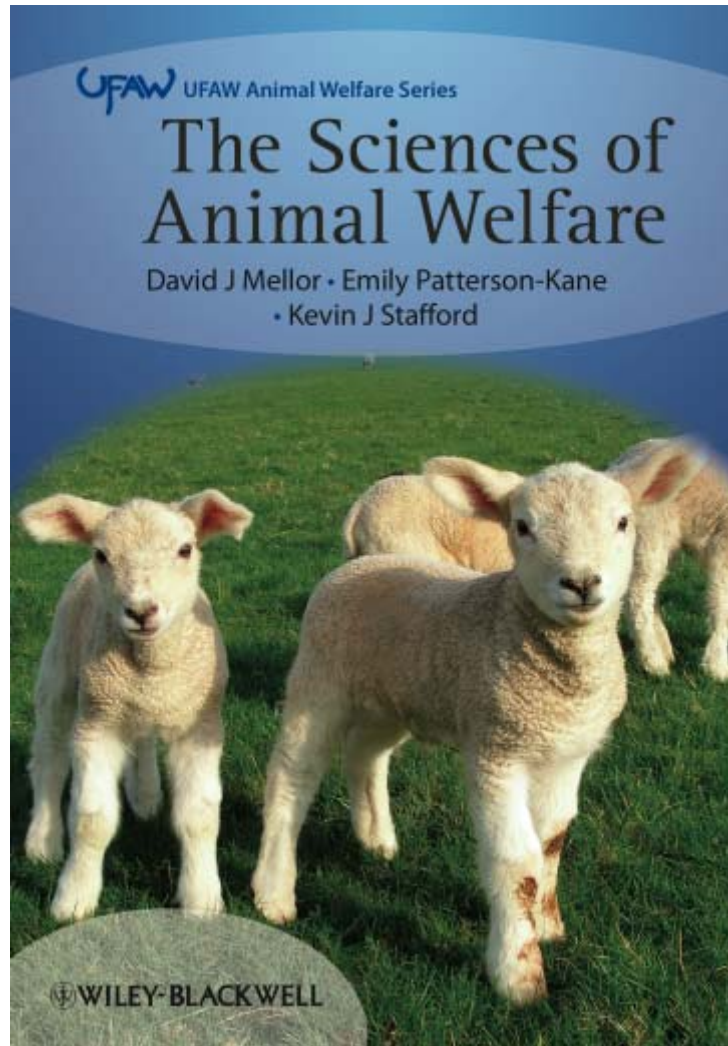
*Animal Pain and OIE Guidelines*

*Professor David J Mellor*

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# Areas considered

- **Domains of animal welfare compromise**
- **Focus on affect or ‘feelings’**
- **Significance of pain**
- **Pain and veterinary education**
- **OIE Guidelines and animal pain**



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# Domains of animal welfare compromise

- **The Five Domains concept – Mellor & Reid 1994**

- Domain 1:            *Nutrition*            Physical/functional
  - Domain 2:            *Environment*
  - Domain 3:            *Health*
  - Domain 4:            *Behaviour*

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  - Domain 5:            *Mental state*            Affect/‘feelings’
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# Domains of animal welfare compromise

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  - Domain 5:            *Mental state*            Affect/‘feelings’
- **Five domains give *comprehensive coverage***
- **Welfare - to date, mainly an *absence of negative states*  
- now, also the *presence of positive states***

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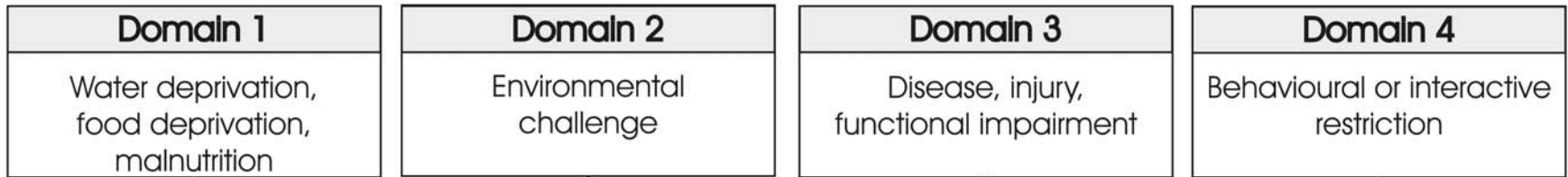
# Focus on affect or ‘feelings’

- Animal welfare = What the animal *experiences*  
= Its *affective state* or ‘feelings’
- ‘Feelings’ can be *negative, neutral* or *positive*
- Welfare compromise = Presence of negative ‘feelings’  
= Absence of positive ‘feelings’
- At present, we still largely focus on negative ‘feelings’

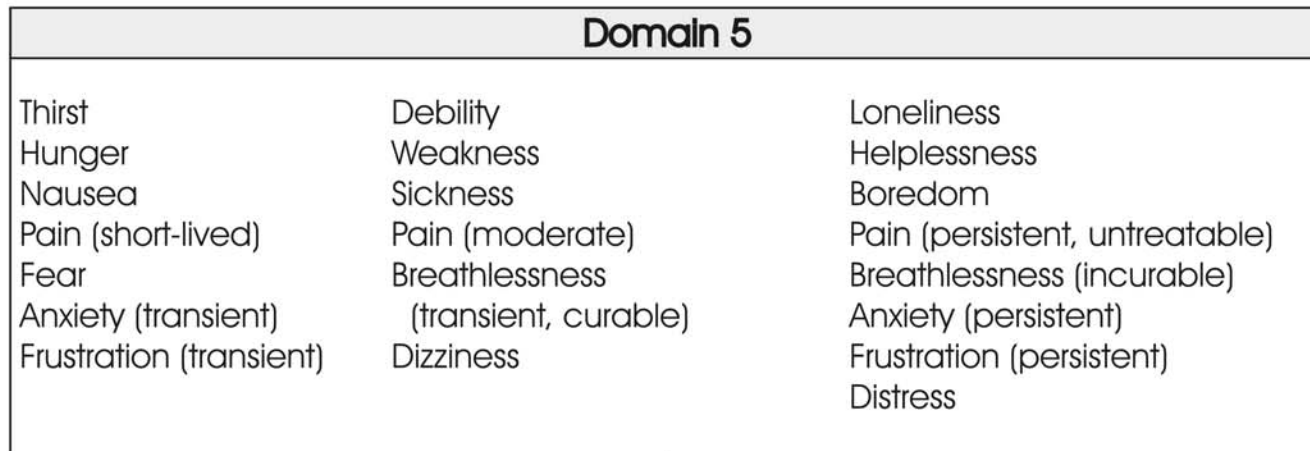
For example:

# Focus on affect or 'feelings'

## PHYSICAL COMPONENTS



## MENTAL COMPONENTS



**Animal Welfare Status**

# Focus on affect or 'feelings'

*Pain is a potent negative feeling*

We will consider that now

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# Significance of pain

## *Attributes of Pain:*

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- It can be a most *unpleasant* experience in humans
- Depending on its *intensity, duration* and *character* it can cause *great suffering*
- Most veterinarians now accepted that *animals can feel pain* and may *suffer as a result*
- *Pain has many causes* – injuries and pathological states
- So it has *many manifestations*; for example

# Manifestations of pain

<i>Aching</i>	<i>Burning</i>	<i>Beating</i>
<i>Throbbing</i>	<i>Shooting</i>	<i>Bursting</i>
<i>Boring</i>	<i>Sharp</i>	<i>Smarting</i>
<i>Drawing</i>	<i>Hot iron</i>	<i>Electricity</i>
<i>Pulling</i>	<i>Soreness</i>	<i>Stinging</i>
<i>Gripping</i>	<i>Knife-like</i>	<i>Pricking</i>
<i>Cramping</i>	<i>Stabbing</i>	<i>Needle-like</i>
<i>Nagging</i>	<i>Toothache</i>	<i>Tingling</i>
<i>Sense of pressure</i>	<i>Tearing</i>	<i>Itching</i>
<i>Gnawing</i>	<i>Hot cords</i>	

Neville Gregory (2004). *Physiology & Behaviour of Animal Suffering* - Blackwell

# Significance of pain

## *Attributes of Pain:*

- **Pain may also be:**
  - Acute
  - Chronic
  - Localized
  - Generalized
  - Physical
  - Emotional
  - Adaptive
  - Maladaptive
- *More than one type can be present at the same time*



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- This contrasts with the *far fewer individual causes of thirst, hunger, nausea, breathlessness and sickness*
- Of course, *these 'feelings' are important* and do merit attention, but, *as a strategy, initially focusing on pain may be more effective in promoting good animal welfare practices*

# Significance of pain

## *Attributes of Pain:*

- Focusing on *pain avoidance* and *pain management* therefore covers *many causes of welfare compromise*
- This contrasts with the *far fewer individual causes* of *thirst, hunger, nausea, breathlessness and sickness*
- Of course, *these 'feelings' are important* and do merit attention, but, *as a strategy, initially* focusing on pain may be *more effective in promoting good animal welfare practices*
- Moreover, pain is *easily understood* by most people as having the potential to be *extremely unpleasant*
- But making a strong link between *human experience* and *animal pain experience* will be important.

# Significance of pain

## *Attitudes towards Pain:*

- Progression in dominant ideas about pain:
  - Animals do not feel pain: until about 30 years ago
  - Animals might feel pain, but we are not sure: last 25-30 years
  - Animals do feel pain: increasing during the last 10-15 years
- Globally, all three still exist among animal users/owners, but the '*might*' and '*do*' ideas are much more common.

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- Globally, all three still exist among animal users/owners, but the '*might*' and '*do*' ideas are much more common.
- **But commitment to *pain management practices* is variable:**
  - *Companion animal clinics*
  - *Farms*
  - *Zoos and game parks*
  - *Wildlife control and conservation*
  - *Laboratories*

# Significance of pain

## *Attitudes towards Pain:*

- **Companion animal clinics:**
  - *Pain relief* is used increasingly
  - Rising pressure from *animal owners* and the *profession*
  - *More analgesics* are available
  - *Dose rates* and *dosing strategies* better understood
  - Increasing numbers of *clients* are *prepared to pay*
  - Emphasis in *UG and PG veterinary teaching* would *accelerate* these developments

# Significance of pain

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- Companion animal clinics
- Farms
  - *Traditionally, pain relief has not been provided for tissue-damaging procedures on farms*
  - *Economic, practical, safety, regulatory, etc, objections raised*

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  - *Growing knowledge of farm animal pain and its management*
  - **Result: analgesic use on farms is increasing – *but slowly***

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  - *Rising demand from food importing companies*
  - *Growing knowledge* of farm animal pain and its management
  - Result: analgesic use on farms is increasing – *but slowly*
  - **Teaching programmes, directed at practicing vets and at UGs, will accelerate this trend**
  - **Positive statements by national animal welfare advisory bodies will also help**

# Significance of pain

## *Attitudes towards Pain:*

- Companion animal clinics
- Farms
- Zoos and game parks
  - *Improved and common practices for companion and farm animals will be applied*
  - *There are problems of unknown dose rates and safe access*
  - *Direct studies of analgesic actions and use in such animals will enhance analgesic use*

# Significance of pain

## *Attitudes towards Pain:*

- Companion animal clinics
- Farms
- Zoos and game parks
- **Wildlife control and conservation:**
  - *Minimising the pain/distress caused by non-lethal and lethal vertebrate ‘pest’ control methods is increasingly emphasised*
  - ‘Pest’ animals can still experience pain and suffer
  - *The pain-producing potential of identification marking methods for valued and endangered wildlife is receiving attention*

# Significance of pain

## *Attitudes towards Pain:*

- Companion animal clinics
- Farms
- Zoos and game parks
- Wildlife control and conservation
- **Laboratories:**
  - *Animals used* – all above + guinea-pigs, mice, rats, rabbits, etc.
  - *Ethical responsibility and regulatory requirement to minimise pain, distress or lasting harm caused are well-recognised*
  - *The Three Rs Principle widely applied* – but needs to be more
  - *Comprehensive method to assess negative impacts is available*
  - *Care of lab animals should be part of vet education*
  - *Laboratory Animal Medicine is a recognised vet speciality*

# Significance of pain

## *Summarising attitudes towards Pain:*

- Vary in different contexts
- Commitment to pain management in all of these contexts could be improved worldwide
- Increasing knowledge of animal pain and its management will help
- *Increasing the attention given in veterinary education to animal pain, its management and how it compromises animal welfare will also help.*

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- **Pain and veterinary education**
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# Pain and veterinary education

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# Pain and veterinary education

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- *Take pain seriously as a form of animal welfare compromise*
- **Features of pain and its management in animals:**
  - *Different contexts in which pain can occur*
  - *Causes and types of pain*
  - *Pain recognition*
  - *Pain mechanisms and their manipulation to control pain*
  - *Administration of pain-relieving drugs*
  - *Pain-alleviation methods that are easy to use, practical and economically realistic in the context of their use.*

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  - *Administration of pain-relieving drugs*
  - *Pain-alleviation methods that are easy to use, practical and economically realistic in the context of their use.*
- **Recognise that pain is only one of numerous negative ‘feelings’ animals may experience:**
  - **Thirst, hunger, nausea, breathlessness, sickness, anxiety and fear being some others**

# Pain and veterinary education

## *Animal welfare and pain in veterinary education:*

- Some veterinary schools have *very well-developed* programmes
- Some may *emphasise pain* but not *animal welfare*
- Some may want to increase the attention given both to *animal welfare* and to *pain and its management*

# Pain and veterinary education

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- Some may want to increase the attention given both to *animal welfare* and to *pain and its management*
- **Some schools may want advice about or support with introducing greater coverage of these topics in their curriculums:**
  - **Personal contacts and exchange visits can be helpful**
  - **More animal welfare texts are being published**
  - **Texts on pain and its control in animals are also available**
  - **WSPA course on animal welfare and ethics**

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# OIE Guidelines and animal pain

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- Prepared by *international experts* and vetted by the *OIE membership*, these guidelines embody the *latest thinking* in the specific areas covered:
  - Transport by land, seas and air
  - Slaughter for human consumption
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- **These could be used as a focus or a starting point educationally**



# OIE Guidelines and animal pain

Also – *OIE Technical Series Volume 10, 2008*

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Volume 10

*Technical series*

## Scientific assessment and management of animal pain

Coordinated by

David J. Mellor, Peter M. Thornber, A.C. David Bayvel & Sarah Kahn

The World Organisation for Animal Health (OIE) is the international animal welfare standard-setting organisation. This timely publication covers all aspects of the scientific assessment and management of animal pain, an essential component of animal welfare. Mainly based on a series of papers presented during the Australian Animal Welfare Strategy (AAWS) Science Summit on Pain & Pain Management (Melbourne, May 2007), it also contains unpublished papers from other parts of the world.

This publication will be essential reading for everyone involved in animal welfare and in the assessment and management of animal pain.

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*Technical series*  
Volume 10

Scientific assessment and management of animal pain

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Organisation Mondiale de la Santé Animale • World Organisation for Animal Health • Organización Mundial de Sanidad Animal

# OIE Guidelines and animal pain

## *OIE Collaborating Centre for Animal Welfare Science and Bioethical Analysis – a bi-national centre*

- Animal Welfare Science and Bioethics Centre (Massey University, NZ)
  - Animal Behaviour and Welfare Research Centre (AgResearch, NZ)
  - Animal Welfare Science Centre (Melbourne University, Australia)
  - Centre for Animal Welfare and Ethics (Queensland University, Australia)
  - CSIRO Livestock Division Animal Welfare Group (NSW, Australia)
- Considerable expertise on the *science of animal pain and its management* is available within the *five partners groups* of this Collaborating Centre.

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  - Clearly, wide-ranging expertise is also available on *numerous other aspects of animal welfare science and animal welfare education* within this OIE Collaborating Centre.

# OIE Guidelines and animal pain

*There are two additional OIE Collaborating Centres that deal with Animal Welfare*

- *Veterinary Training, Epidemiology, Food Safety and Animal Welfare (Teramo, Italy)*
- *Animal Welfare Research (a bi-national Centre involving veterinary faculties in Valdivia, Chile and Montevideo, Uruguay)*

# Summary of OIE Contributions

*The OIE therefore contributes on a global scale, both directly and indirectly, to improvements in our understanding of animal pain and its management.*

*Its published resources can be used in related educational initiatives in veterinary schools that wish to use them.*

*To date, the OIE has recognised three Collaborating Centres with expertise in many aspects of animal welfare and thereby OIE members have access to that expertise.*

*Their contact details are available on the OIE web site.*

# Thank you