

**ProHand**   
Maximise your Positives, Minimise your Negatives




[www.animalwelfare.net.au](http://www.animalwelfare.net.au)

## Why animal welfare matters

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The Animal Welfare Science Centre 

## Outline

- ◆ What is welfare?
- ◆ Relevance to working dogs
- ◆ Role of the trainer/carer
- ◆ An example from the livestock industries
- ◆ Role of research
- ◆ Drivers for change





## Animal welfare - the five freedoms

- ♦ **Freedom from Hunger and Thirst** - by ready access to fresh water and a diet to maintain full health and vigour.
- ♦ **Freedom from Discomfort** - by providing an appropriate environment including shelter and a comfortable resting area.
- ♦ **Freedom from Pain, Injury or Disease** - by prevention or rapid diagnosis and treatment.
- ♦ **Freedom to Express Normal Behaviour** - by providing sufficient space, proper facilities and company of the animal's own kind.
- ♦ **Freedom from Fear and Distress** - by ensuring conditions and treatment which avoid mental suffering.

Brambell Report, December 1965



## Animal welfare – Relevance to working dogs



The Five Freedoms <sup>a</sup>	Relevance to livestock in intensive husbandry systems	Relevance to working dogs?
<b>Freedom from hunger and thirst</b>	Dependence on carer for food and water	✓
<b>Freedom from discomfort</b>	Dependence of carer for housing	✓
<b>Freedom from pain, injury or disease</b>	Dependence on carer for treatment of disease and injury	✓
<b>Freedom to express normal behaviour</b>	Dependence on carer for access to exercise, and expression of natural behaviours	✓
<b>Freedom from fear and distress</b>	Need to be cared for in a way that minimises fear and distress	✓

<sup>a</sup>=Brambell Report, December 1965



## Role of the carer (English, Fowler, Baxter and Smith (1988))

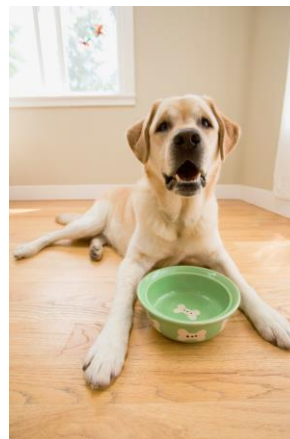


Stockperson characteristics	Relevance to working dog carers?
1. A sound basic knowledge of animals and their requirements	✓
2. Attachment and patience with stock	✓
3. The ability and willingness to develop a good relationship with their stock	✓
4. Keen sensitivity for recognising the slightest departure from normal behaviour	✓
5. Must be able to manage priorities during the day and have a ready willingness to be side-tracked from routine duties as pressing needs arise and to attend to the animal most in need of attention	✓



## 1. A sound basic knowledge of dogs and their requirements

- ◆ Nutrition
- ◆ Health and fitness
- ◆ Housing
- ◆ Exercise
- ◆ Cognitive abilities
- ◆ Temperament/Personality





## 2. Attachment and patience with stock

### 3. The ability and willingness to develop a good relationship with their stock

- ◆ Relevant trainer/owner characteristics
- ◆ Knowledge
- ◆ Skills
- ◆ Motivation
- ◆ Work/Job satisfaction
- ◆ Empathy
- ◆ Attitudes/beliefs



Retrieved 28 October, 2013 from  
[www.police.wa.gov.au](http://www.police.wa.gov.au)



## 4. Keen sensitivity for recognising the slightest departure from normal behaviour

- ◆ Knowledge of normal behaviour
- ◆ Dog responses to illness/stress/injury challenges





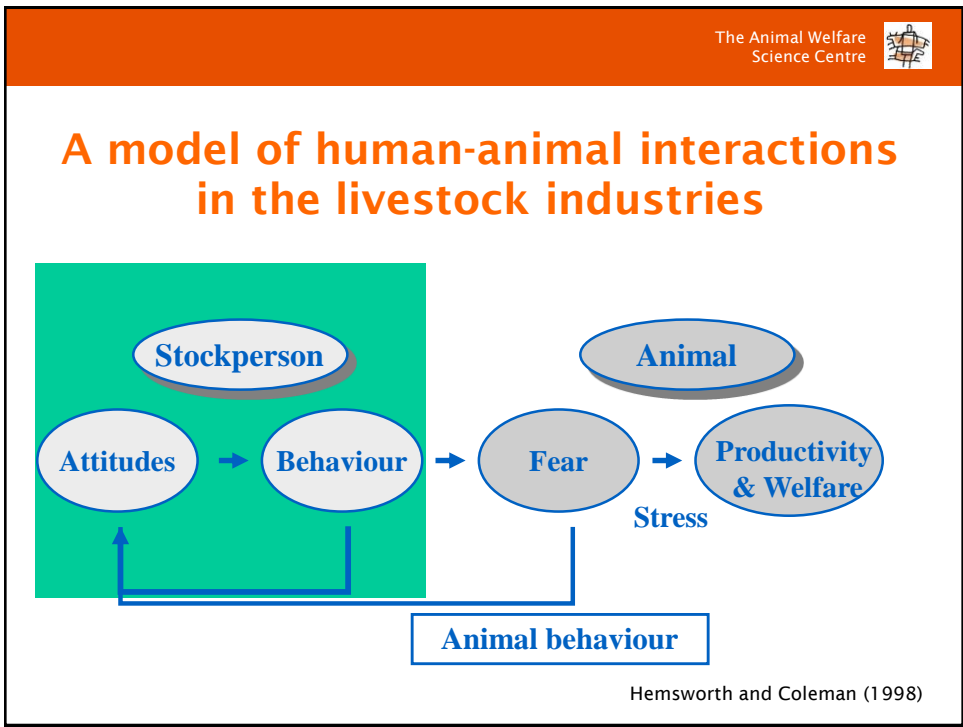
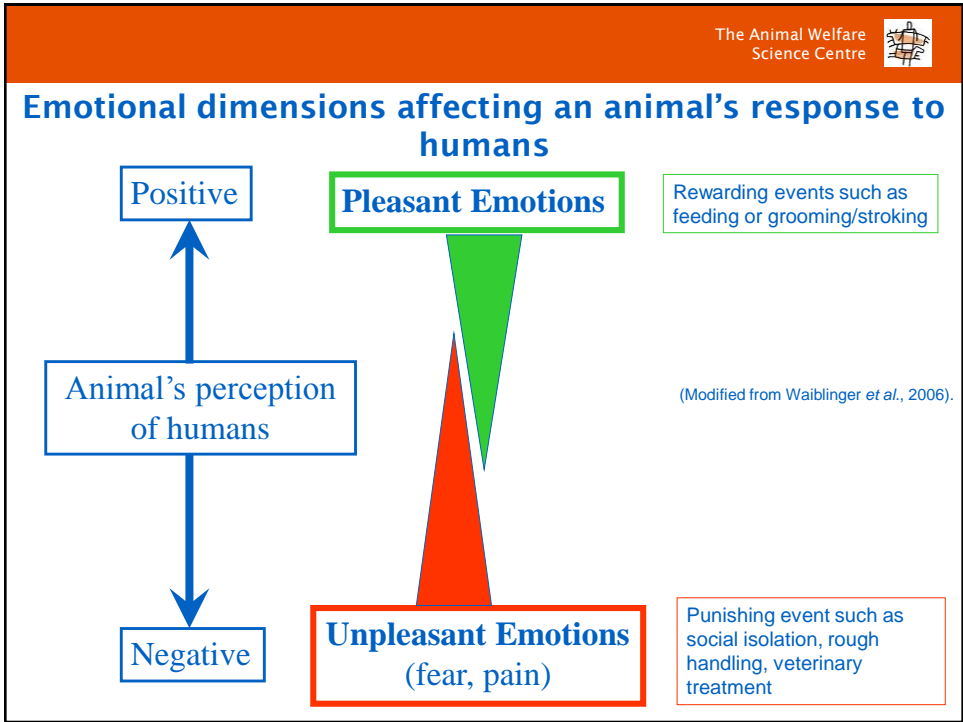
## 5. Must be able to manage priorities during the day and have a ready willingness to be side-tracked from routine duties as pressing needs arise and to attend to the animal most in need of attention

- ◆ Prioritising welfare
- ◆ Systems to manage emergencies



## Welfare and handling

- ◆ Good handling in a work context entails
  - Knowledge of the cognitive and perceptual capabilities of the animal
  - Awareness of how HA interactions impact on performance
  - Awareness of how HA interactions affect the state of the animal
  - Awareness of how to deal with animals as individuals





## Handling, fear and stress physiology in dairy cows (n= 48)

Variable	Handling treatment		P value
	+ve	-ve	
<b>Behavioural response to humans</b>			
Flight distance (m)	2.16	4.55	0.001
<b>Acute cortisol response (nMol/l)</b>			
At 5 minutes after human exposure	19.4	28.5	0.01
<b>Basal free cortisol concentrations (nMol/l)</b>			
Morning	1.42	2.82	0.10
Afternoon	1.90	2.78	0.05

From Breuer et al. (2003)



## The effects of cognitive- behavioural training on stockperson and cow variables (Study 1, n= 29)

Variables	Treatments		P value
	Control	Training	
<b>Stockperson attitudes</b>			
“Little effort to handle” subscale	27.7	32.0	0.01
<b>Stockperson behaviour</b>			
- ve (%)	80.6	40.1	0.001
Forceful -ve (%)	10.1	2.6	0.001
<b>Cow behaviour</b>			
Flight distance (m)	4.5	4.2	0.05
<b>Cow physiology</b>			
Milk cortisol (nM/L)	2.05	1.40	0.06

From Hemsworth et al. (2002)



## The effects of cognitive- behavioural training on cow productivity variables (Study 2, n= 94)

Variables	Treatments		P value
	Control	Training	
Milk yield (L/cow/month)	550.6	579.8	0.02
Milk protein (kg/cow/month)	17.1	18.5	0.03
Milk fat (kg/cow/month)	22.8	23.8	0.04

From Hemsworth et al. (2002)



## Relevance to dogs

- ♦ Much of what we do is based on beliefs about good practice in husbandry, handling and training
  - What are the effects of housing - e.g. confinement, tethering, etc?
  - How do we best deal with aversive husbandry - eg veterinary interventions?
  - How should transport best be managed?
  - What are the roles of reward and punishment in training?
  - What are appropriate human animal interactions for working dogs?
  - What are the knowledge and beliefs that underpin these practices?
  - What are the outcomes of interest and how do they impact on performance (eg effects of stress on learning, running speed, detection skills, ability to guide, etc)?





## A systematic approach to animal welfare

- ♦ Should be theory driven
  - Cognitive abilities and learning
  - Reward and punishment
  - Temperament/personality
  - Owner attitudes/beliefs and behaviour
- ♦ Should be underpinned by good experimental and field research
- ♦ Relevant aspects of practice need to be clearly articulated
- ♦ Outcomes need to be clearly enunciated
  - Welfare indicators
  - Performance indices (speed, time, accuracy, etc)
  - Cost/benefit



## Examples of tradition-based practice

### **Cesar Millan: Dog Training Tips**

Got a problematic pooch and need some fast and effective dog training tips? "Dog Whisperer" Cesar Millan to the rescue! The legendary dog-training guru shares his proven techniques for humans to be strong pack leaders and improve their dogs' behavior.



<http://www.sheknows.com/pets-and-animals/articles/820099/Dog-Whisperer-Cesar-Millan-s-top-dog-training-tips>



## Problems with communicating research

- ◆ For Johnson, what makes a good dog handler - and what makes for best practice in the breeding, housing and training of working dogs - has been tried and tested and handed down "over hundreds of years". To call the lore into question is as upsetting as, well, telling a woman she's doing a lousy job as a mother. "It gets up your nose," Johnson says.
- ◆ In the training programs that have been adopted in the livestock industries, one of the main initial points is to communicate:
  - This is about research, not judgments
  - Explicitly addressing denial, taking offence, perceived barriers
  - Good practice can always be informed by good research
  - Eg - advice on vaccines, nutrition etc



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## Evidence-based practice

- ◆ Practice needs to be based on real data - there is a complex interaction between relevant background variables such as breed, temperament, age, prior experience, etc.
- ◆ Outcome variables may not simply be the proximal outcome, such as learning a specific task, or reaching a desired level of fitness, but will also include other variables such as:
  - Motivation
  - Temperament/personality
  - Distractability
  - Fear/avoidance
  - Health/injury
- ◆ Dealing with these certainly adds complexity to the situation, but only when doing the research; often evidence-based best practice produces an optimal outcome in terms of many of these variables



## Current state of research

- ◆ No clear articulation of a model of working dog performance and welfare
- ◆ Funding:
  - Linkage grants
  - Industry grants
  - Commissioned research
  - Benevolent trusts
- ◆ Universities and other research organisations hampered by funding so research is often opportunistic and not systematic.



## Drivers for change

- ◆ There appears to be substantial wastage in dog training
- ◆ Public attitudes have already had a substantial impact on intensive farming practices, jumps racing, and are beginning to impact on aquaculture, wildlife management, zoos, etc.
- ◆ Existing codes of practice in many livestock industries are much more developed than for working dogs



## Wastage in training

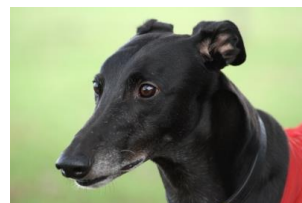
- Survey done by Branson, Cobb and McGreevy (2009)
- Note the sample is not random (ie voluntary self-report)
- The most common reason for dogs not succeeding in training was behaviour

Working dog industry	Graduate	Used in other WD programs	Used as breeding stock	Exported for the same work interstate	Exported for the same work internationally	Unsuccessful
Private Industry	84%	18%	33%	15%	2%	18%
Government	70%	15%	14%	13%	1%	30%
Assistance	65%	18%	11%	10%	1%	35%
Sport	74%	15%	28%	12%	1%	30%



## Public attitudes

- Surprisingly little data
- Not usually assessed in surveys on animal welfare
- However:
- **Tuesday, 22 October 2013, 3:33 pm**
- **Press Release: Greyhound Racing New Zealand**
  - Greyhound Racing New Zealand is reviewing an amendment to its dog welfare code after a case of “disrespectful” treatment of the bodies of deceased dogs.
  - The three dogs were euthanized at the farm by a vet on the instructions of their owner. A water-logged grave forced the trainer to attempt a cremation. The trainer did not discover the dogs had not been fully cremated until much later.
- These kinds of incidents bring welfare into the spotlight and history tells us that they polarise public attitudes to welfare more generally.
- Further, it is often human behaviour rather than housing or other issues that achieve prominence





## Victorian codes of practice

- ◆ Standard for Restricted Breed Dogs in Victoria\*
- ◆ Code of practice for the debarking of dogs\*
- ◆ Code of practice for the operation of dog training establishments\*
- ◆ Code of practice for the Operation of Greyhound Establishments\*
- ◆ Code of practice for the private keeping of dogs
- ◆ Code of practice for the operation of boarding establishments\*
- ◆ Code of practice for the operation of breeding and rearing establishments\*
- ◆ Code of practice for the management of dogs and cats in shelters and pounds\*



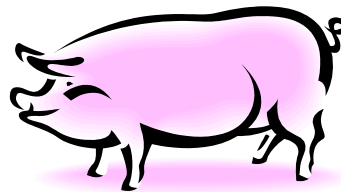
## Welfare relevant aspects of the codes

- ◆ Dog training establishments
  - The purpose of the Code is to specify the minimum standards of accommodation, management and care which are appropriate to the physical and behavioural needs of dogs being trained in dog training establishments.
  - Reasonable care must be exercised by the trainer or training establishment, to ensure the safety and well being of the client and dog at all times
  - **Undue force must not be used when training any dog.**



## Pig welfare model code

- ◆ Competence of the stockperson
  - Pigs must be cared for by personnel who are skilled in pig husbandry and are competent to maintain the health and welfare....
  - Personnel should be appropriately instructed on how their actions may affect a pig's welfare



## Benefits of good dog welfare practice

- ◆ Less wastage in dog training
- ◆ There may be an improvement in dog performance if welfare considerations are an integral part of training methods
- ◆ The level of job satisfaction amongst dog trainers and handlers may be improved by a better HA relationship
- ◆ Systematic experimental research can help identify the relevant variables and the magnitude of their effects on dog welfare and performance
- ◆ Funding is a major issue because, unlike the livestock industries, there are no R&D funding bodies
- ◆ Serious consideration should be given to ARC linkage grant partnerships



Thank you



Retrieved 28<sup>th</sup> October from <http://cdn.viralnova.com/wp-content/uploads/2013/06/napping-dog.jpg>