

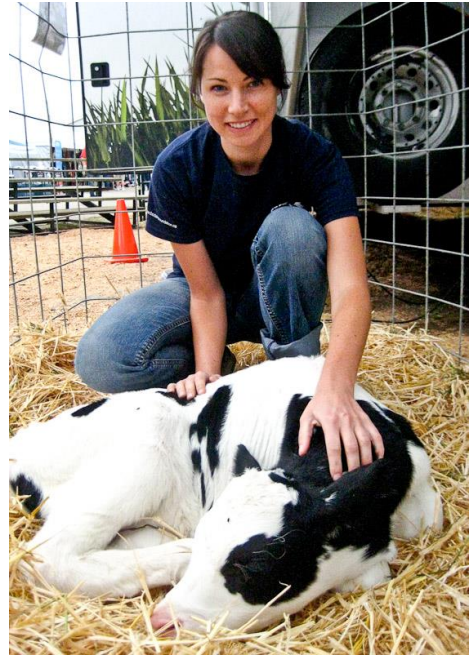
On-farm welfare assessment: How do we know if dairy cows have good welfare?

Katy Proudfoot, M.Sc., Ph.D

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THE OHIO STATE UNIVERSITY
 COLLEGE OF VETERINARY MEDICINE







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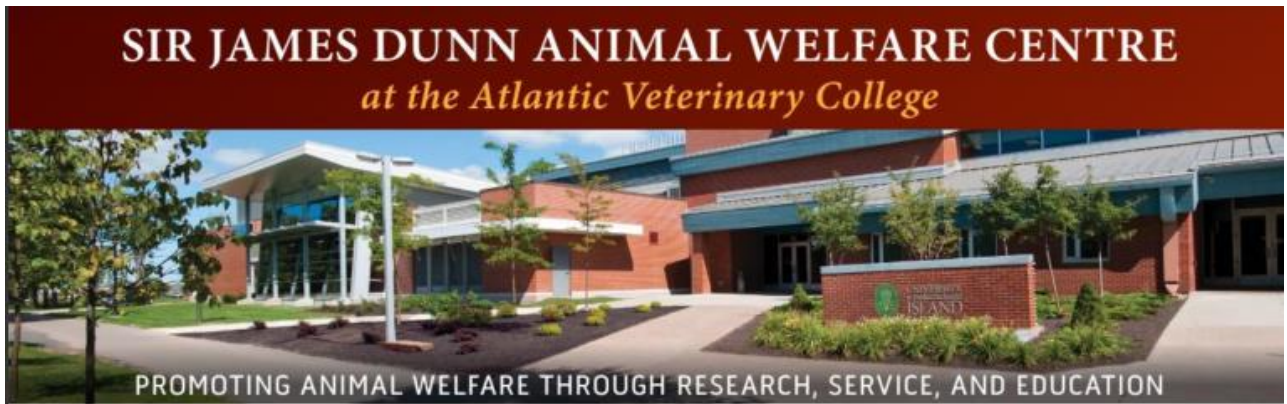
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• Kathryn "Katy" Proudfoot, MSc, PhD

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How do we know if dairy cows
have good welfare?

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How do we know if dairy cows
have good **welfare**?

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What is '**animal welfare**'?

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animal welfare = how we *can* +
how we *ought* to care for animals

9

animal welfare = how we *can* +
how we *ought* to care for animals

10

animal welfare = how we *can* +
how we *ought* to care for animals

11

animal welfare = Science +
Values care for animals

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What are the **values** we have about the welfare of dairy cattle?



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Ventura et al., 2015

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Calf management Injuries
 Restriction of behaviors Cow comfort
 Stockmanship **Lameness** Mortality
 Disease Cull cow management
Painful procedures



Dairy Industry

Ventura et al., 2015; the size of the word does not necessarily mean higher importance

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Citizens

Ventura et al., 2016

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Safe environment Respect

Natural behaviors Low stress and fear

Adequate rest **Pasture access** Absence of pain

Companions Food and water access

Humane care



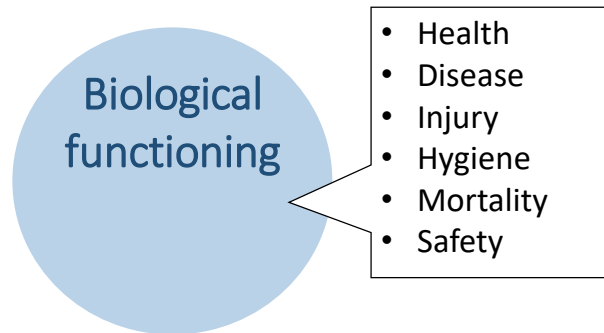
Ventura et al., 2016, the size of the word does not necessarily mean higher importance

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Shared values?

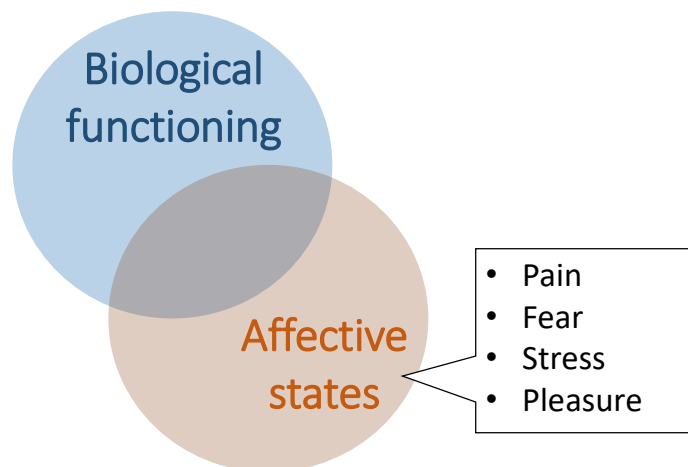


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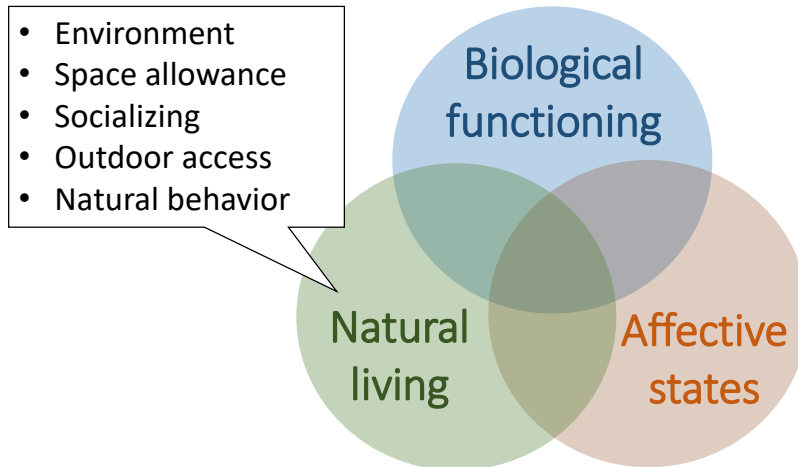
Fraser et al., 1997

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Fraser et al., 1997

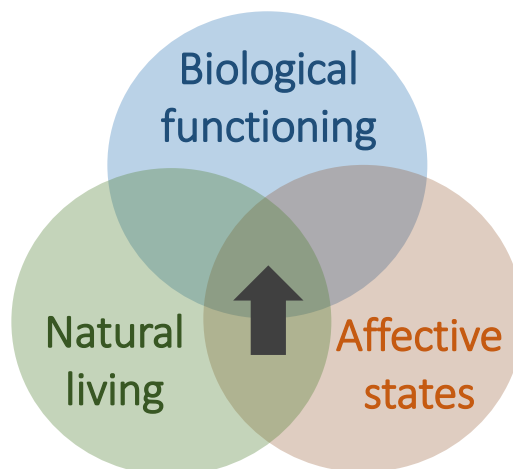
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Fraser et al., 1997

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animal welfare =



Fraser et al., 1997

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The Five Freedoms

1. freedom from hunger, malnutrition and thirst
2. freedom from fear and distress
3. freedom from heat stress or physical discomfort
4. freedom from pain, injury and disease
5. freedom to express normal patterns of behaviour

UK Farm Animal Welfare Committee; World Organization for Animal Health (OIE)

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The Five Freedoms

1. freedom from **hunger**, **malnutrition** and **thirst**
2. freedom from **fear** and **distress**
3. freedom from **heat stress** or **physical discomfort**
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5. freedom to express **normal patterns of behaviour**

UK Farm Animal Welfare Committee; World Organization for Animal Health (OIE)

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How do we know if dairy cows have good welfare?

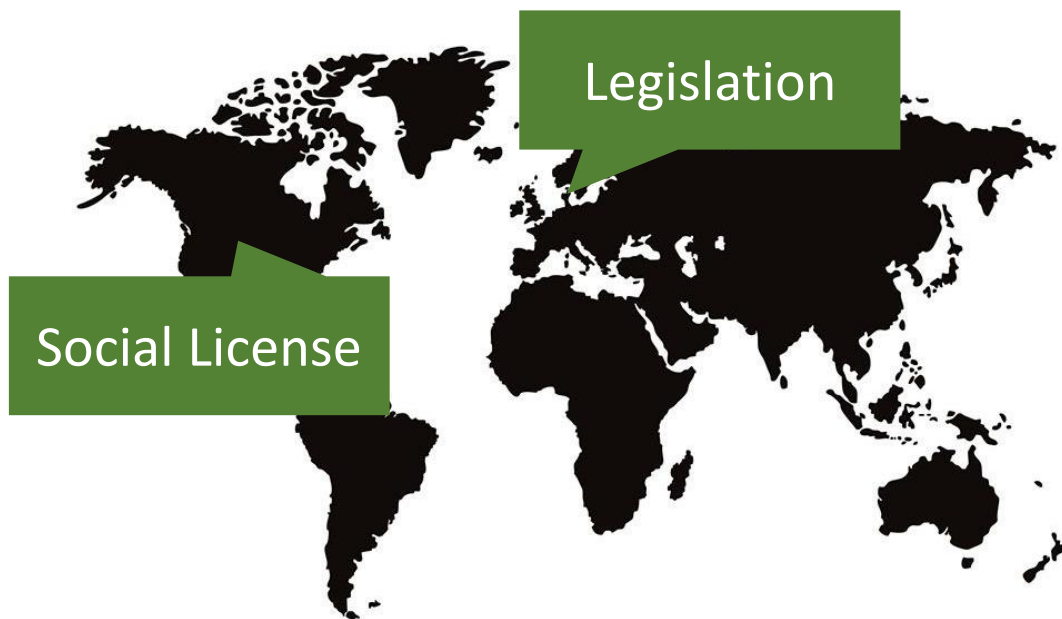
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Are my/my client's farming practices sustainable?

Is the milk that I buy coming from cows that are treated well?



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Social License

The public puts its trust in dairy farmers to properly care for their animals. Dairy farmers must rely on continued public trust for their right to operate.

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social license \neq educating the public

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Educating the public about **value-laden** animal welfare topics **does not work**

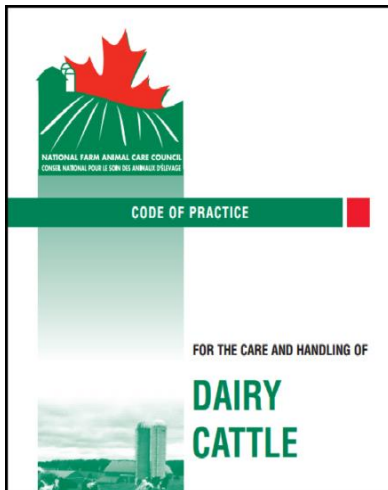
Ventura et al., 2016; Ryan et al., 2015

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Animal welfare assessment programs

Programs that have been developed to set **standards of care** for food animals, ideally using input from all stakeholders.

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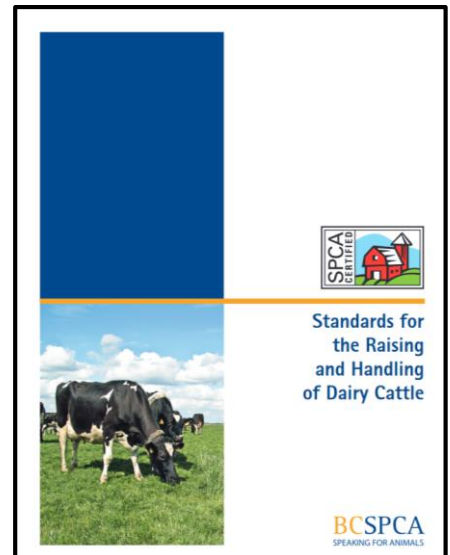
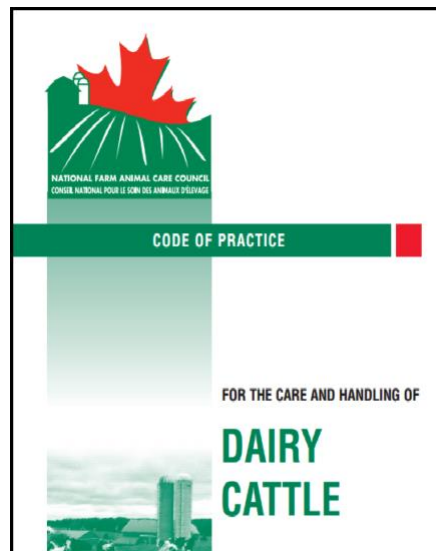


*pre***Action**®



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Standards
of care



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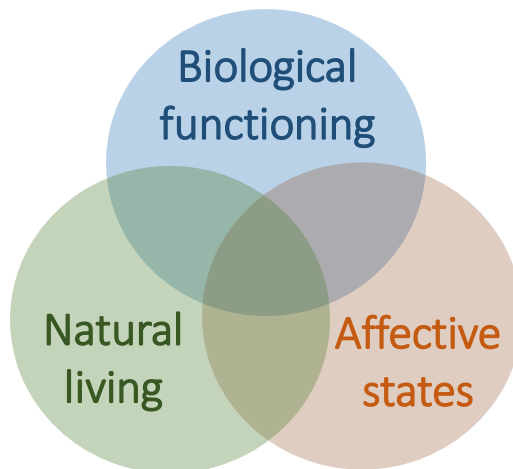
Standards
of care

- *Producers*
- *Veterinarians*
- *Industry reps*
- *Scientists*
- *Animal advocacy*
- *Public comment*



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Standards
of care



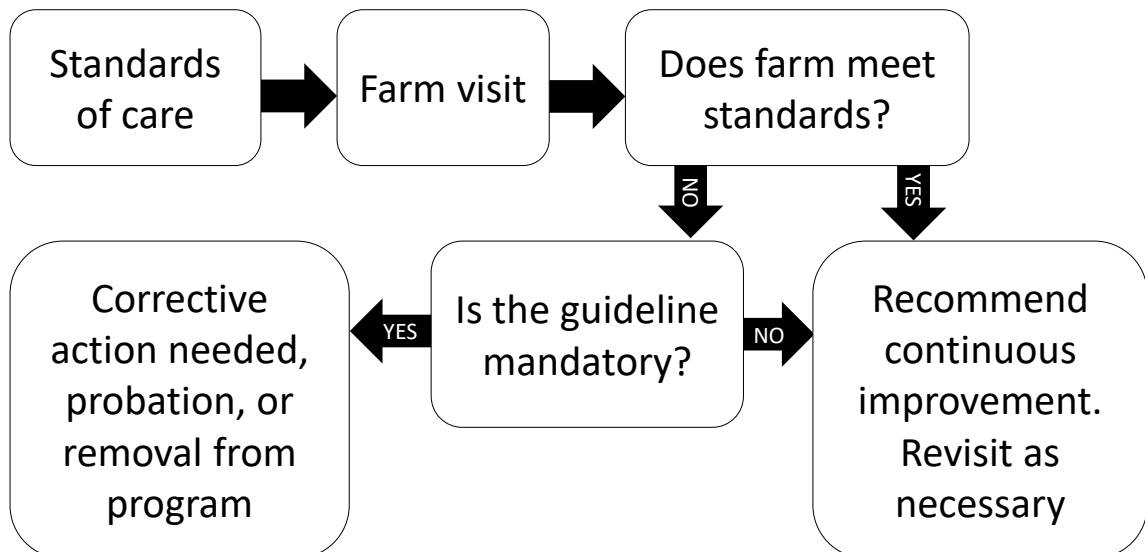
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2nd party = can have an association with the farm (e.g., veterinarian, Holstein Canada, etc.)

3rd party = cannot have any association with the farm

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What is **mandatory**?

Depends on the program, but often includes:

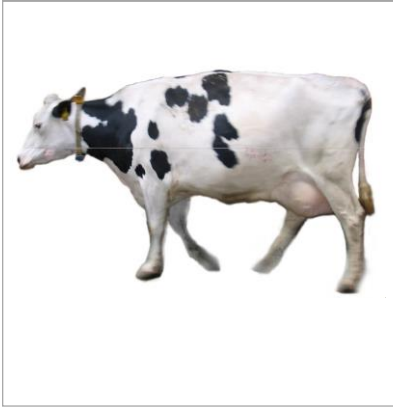
- ✓ Veterinarian-Client-Patient Relationship (VCPR)
- ✓ Housing that allows animals to rest comfortably
- ✓ Good access to feed and water
- ✓ Segregation area for sick animals
- ✓ Pain control for painful procedures
- ✓ Individual animal identification
- ✓ Prompt, acceptable method for euthanasia
- ✓ No unnecessary procedures (e.g., tail-docking)

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How do we know if **dairy cows**
have good welfare?

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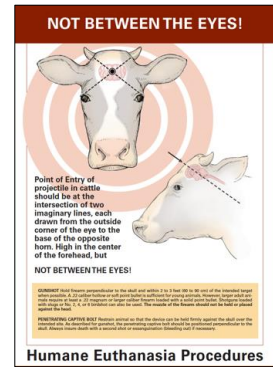
Animals



Resources



Protocols



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Animal-based measures

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Body Condition Scoring



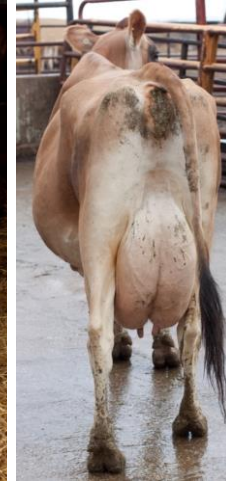
Score of 1



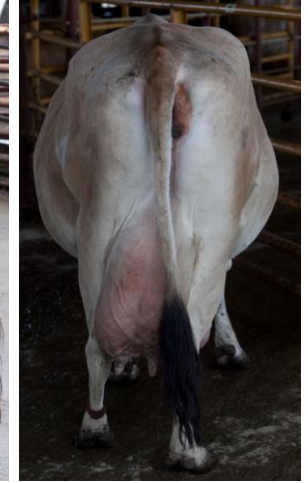
Score of 2



Score of 3



Score of 4



Score of 5

Photos courtesy of NMPF

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Photos courtesy of NMPF

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Hygiene Scoring



Photos courtesy of NMPPF

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Photos courtesy of NMPPF

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Hock and Knee Lesion Scoring



1 = Healthy
(can have hair loss
<quarter)

2 = Hair loss
(hair loss >quarter
NO swelling)

3 = Swelling
or
Lesion

Photos courtesy of Cornell Cooperative Extension

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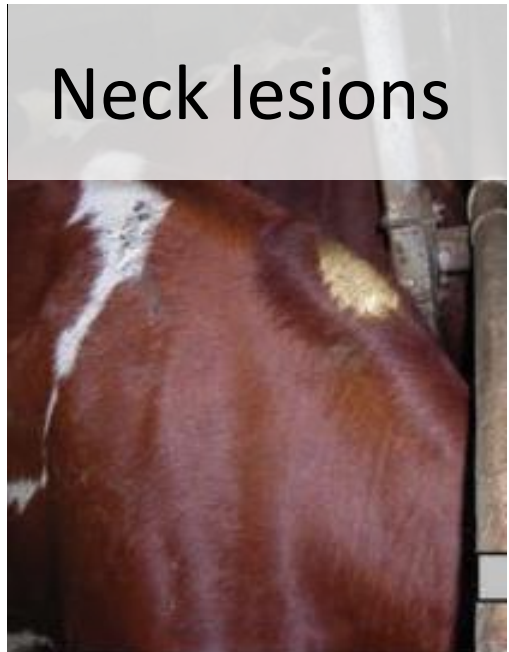


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Broken tails



Neck lesions



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Resource-based measures

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Food and water



51

Comfort and cleanliness



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Stocking density



53

Outdoor/pasture access



54

Protection from heat and cold



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Special needs housing



Photos courtesy of NMPF

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Restriction of movement/behaviour



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Social environment



Photo: R. Meagher / UBC Animal Welfare Program



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Enrichment

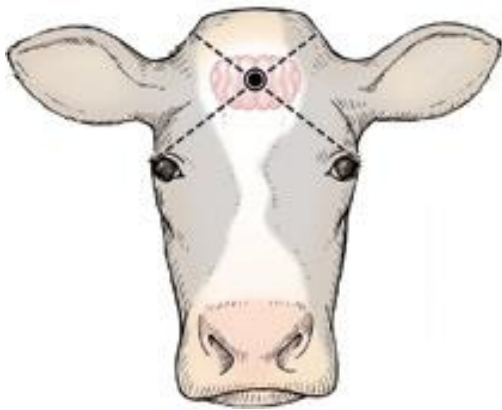


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Protocol-based measures

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Euthanasia/end of life care



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Painful procedures



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Protocol-based measures

- Evidence of a **Veterinarian-Client-Patient Relationship** (VCPR)
- Evidence of **stockmanship training**, and/or signed cattle ethics agreement with all employees
- **Herd health plan** updated annually and signed off by veterinarian

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How do we know if dairy cows
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- In North America, dairy farmers are given social license to care for their animals

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- Housing and management of dairy animals must be aligned with societal expectations to remain sustainable

66

How do we know if cows have good welfare?

- In North America, dairy farmers are given social license to care for their animals
- Housing and management of dairy animals must be aligned with societal expectations to remain sustainable
- Animal welfare assessment programs are one way to measure animal welfare on-farm

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Thank you!

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