IMPROVING THE ANIMAL WELFARE OF THE LIVESTOCK FARM OF THE CAN COLL EDUCATIONAL EQUIPMENT

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1 INTRODUCTION

Can Coll CEA, which is regulated by the consortium of Serra de Collserola's natural park , is located in Cerdanyola del Valles's municipality.

The mission of this final degree project is to fix its social need, which tends/drives to a welfare animal model that can accomplish/achieve the society's demands.

2 OBJECTIVES

- Define the animal welfare standards
- Evaluate/Assess the welfare of each species on the farm
- Suggest proposals to tackle the detected deficiencies

4 ANIMAL WELFARE ASSESSMENT PROTOCOL

WELFARE PRINCIPLES:

| GOOD FEEDING | GOOD HOUSING | GOOD HEALTH | APPROPRIATE BEHAVIOUR |

Figure 2: Welfare Quality's principles. Adapted from: Welfare Quality (2009a)

WELFARE CRITERIA AND MEASURES:

ABSENCE OF PROLONGED THIRST
Watter supply
Cleanliness of water points
Animals per drinker
Drinker space

1

ABSENCE OF PROLONGED HUNGER
Body condition score
Feeder space
Small size
Cleanliness of feeders

2

THERMAL COMFORT
Shivering
Panting
Huddling

3

COMFORT ARAOUND RESTING
Bursitis
Beeding
Shelter comfort
Red mites
Dust sheet test
Wet animals
Light quality
Absence of manure on the body
Time needed to lie down
Cleanliness of the animals
Shelter comfort

4

EASE OF MOVEMENT
Space allowance
Access to pasture

5

ABSENCE OF INJURES
Lameness   Integument alterations
Wounds   Keel bone deformation
Tail biting   Foot pad dermatitis
Swollen joints Hairless areas
Toe damage   Risk of injures
Fallen ears

6

ABSENCE OF DISEASE
Coughing   Hampered respiration
Sneezing   Hair coat condition
Prolapse   Cheek palpation
Skin condition Comb abnormalities
Hernias   Dermatophytosis
Discharges   dermatitis abscesses
Diarrhoea   Cleanliness of facilities
Parasities   Age at weaning
Scabies   Enterophaty

7

ABSENCE OF PAIN INDUCED BY MANAGEMENT PROCEDURES
Tail docking
Dehorning
Signs of hoof neglect
Signs of hot branding
Beak trimming

8

EXPRESSION OF SOCIAL BEHAVIOUR
Social interaction
Agonistic behaviours
Isolated animals
Plumage damage
Comb pecking wounds

9

EXPRESSION OF OTHER BEHAVIOUR
Exploratory behaviour   Enrichment measures
Access to pasture   Nesting material
Stereotypies   Access to nest
Use of nest boxes   Free range

10

GOOD HUMAN-ANIMAL RELATIONSHIP
Fear of humans
Avoidance distance
Walking down side
Tail tuck
Training of the personal
Early handling

11

POSITIVE EMOCIONAL STATE
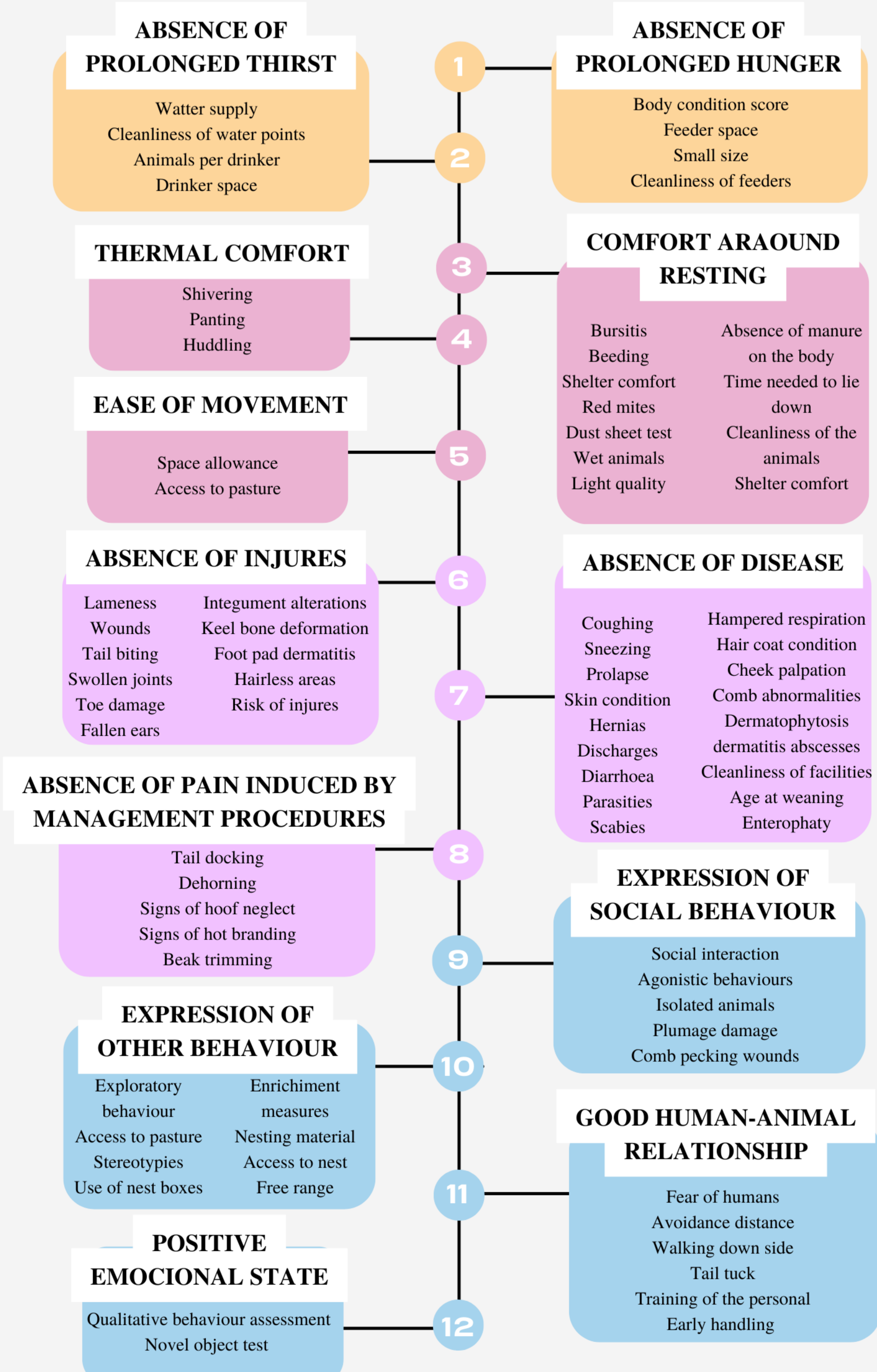Qualitative behaviour assessment
Novel object test

12

Figura 3: Welfare Quality's criteria and the indicators which were used in each protocol. Adapted from: Welfare Quality (2009a); Welfare Quality (2009b); Welfare Quality (2009c); AWIN (2015a); AWIN (2015b); AWIN (2019).

3 DEFINITION OF ANIMAL WELFARE

A definition is provided by the **Five Freedoms**:

Good welfare as freedom:
- To express normal behaviour
- from hunger and thrirst
- from discomfort
- from pain, injury or disease
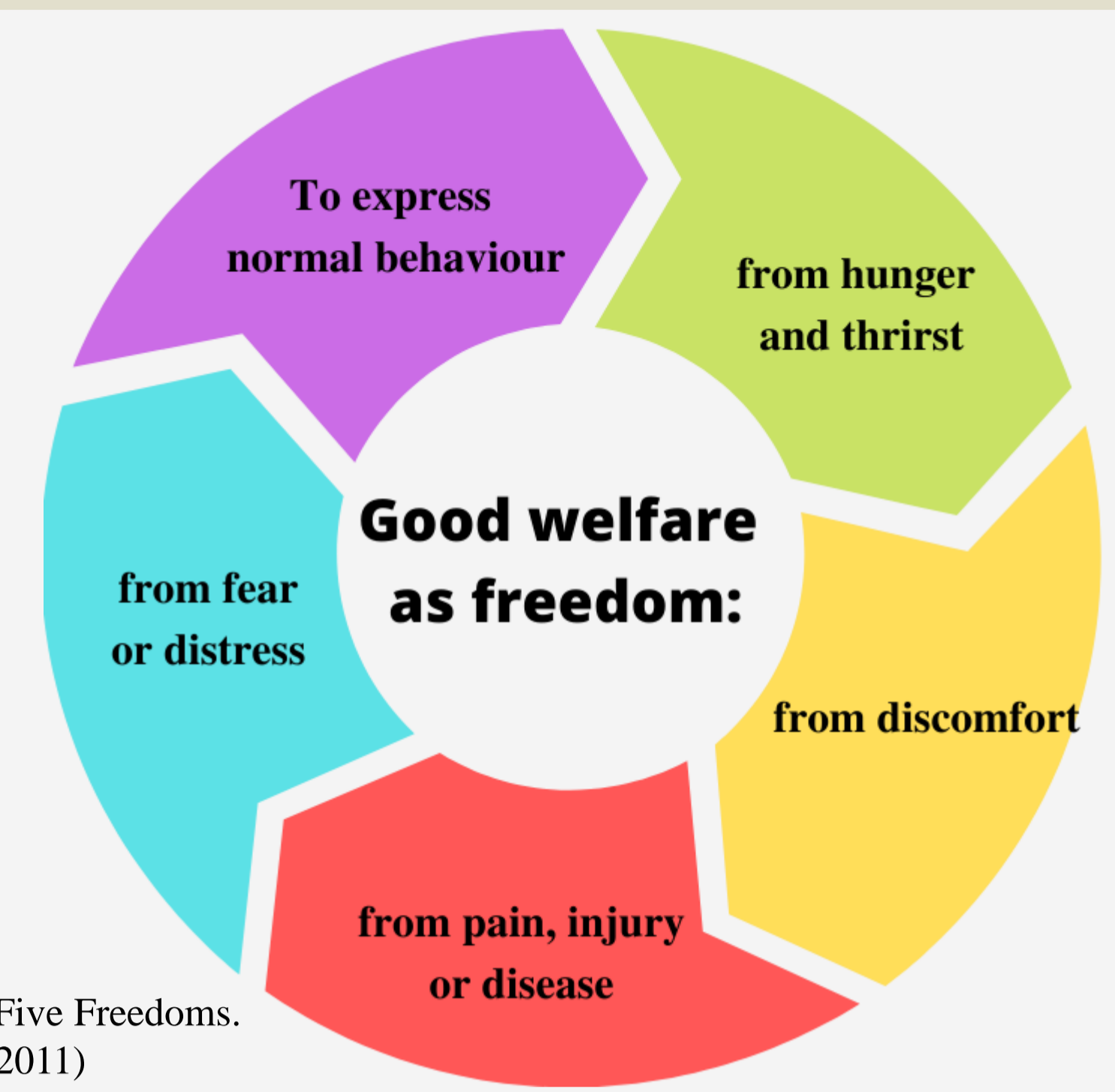- from fear or distress

Figure 1: concept of the Five Freedoms. Adapted from: Keeling (2011)

5 CONCLUSIONS: STRATEGIES FOR IMPROVEMENT

Figure 4: sows

Figure 5: young chicks

Figure 6: muscovy duck

Tail docking: unwound tail up

Feeder: early nutrition

Biosecurity: introducing a net to prevent wildlife interaction
Diarrhoea: a daily visual examination

Figure 7: laying hen

Feeder space: control animal number per feeder
Toe damage: provide veterinary assistance
Expression negative behaviour: separate the target animals
Qualitative behaviour assessment perica hen: reappraise

Figure 8: rabbit

Animals per drinker: provide 2 drinking points per animal
Good housing male rabbit: provide bigger cage
Cleanliness of facilities: diary cleanliness
Enrichment measures: always supplying enrichment material
Nesting material: provide nesting material
Good human-animal relationship: provide animal welfare training + early handling
Tail overgrowth male rabbit: tail trimming

Figure 9: donkey

Water availability: cleaning the water supply points regularly
Bedding: provide sufficient bedding material
Social interaction: setting a closeness with the cow otherwise introducing new donkey
Good human-animal relationship: developing a greater tolerance towards human presence

Figure 10: cow

Water availability: cleaning the water supply points regularly
Lameness: monitoring the animal
Ocular discharge: provide veterinary assistance
Social interaction: setting a closeness with the donkey or introducing new animal

6 REFERENCIES

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