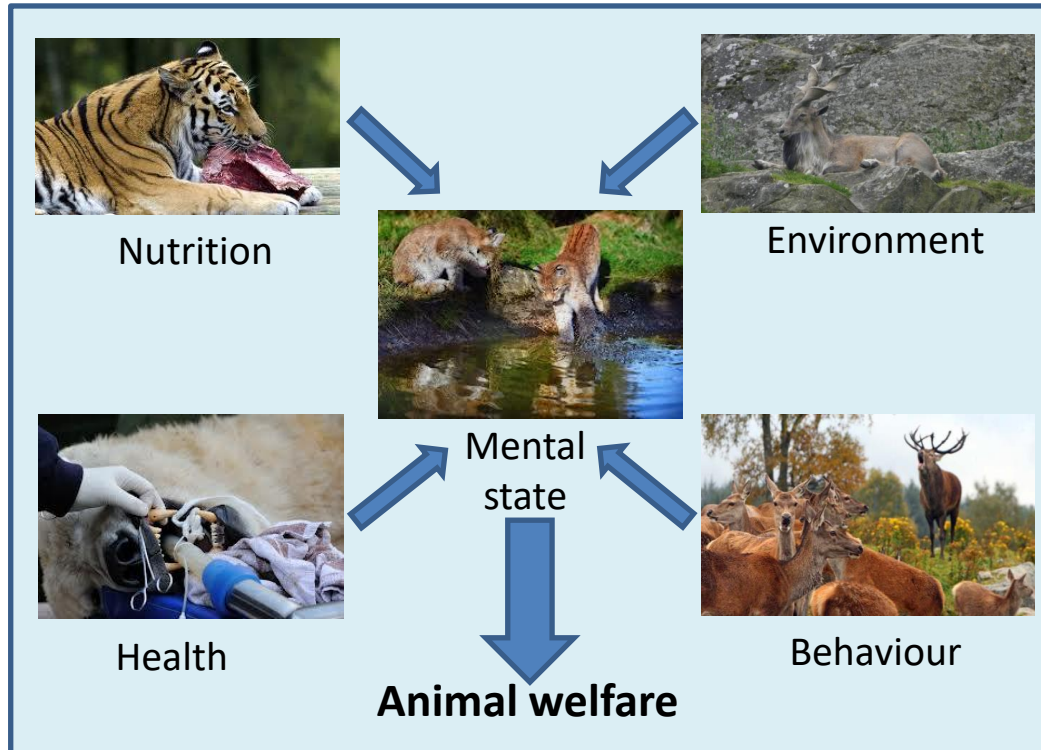# Animal Welfare Exercise

To understand what constitutes good welfare in captive animals, we must find a way to successfully assess and measure welfare. This is not always an easy task due to different species and their varying needs, as well as the consideration of their individual needs. However, in more recent years, science-based assessment of animal welfare in captive animals has benefited from increased interest in and research into consciousness, emotions, stress and pain.

In the past, the Five Freedoms of Animal Welfare have successfully acted as a foundation, defining and underpinning fundamental animal welfare standards and considerations. Yet whilst past focuses have been on negative experiences and minimising distress, recent concepts have led to the consideration of positive factors and the development of various positive welfare measures. This encourages the management of animals to promote positive experiences and mental states.

The model of the **Five Domains of Potential Welfare Compromise** has evolved since its original development and illustrates how compromises in an animal's nutrition, environment, health and behaviour can all impact upon its mental state. These five domains may overlap and have combined effects on the overall welfare status of an individual animal and thus The 'Five Domains' concept can serve to offer a useful framework for the broad assessment of animal welfare.

Nutrition

Environment

Mental state

Health

Behaviour

Animal welfare

In the Five Domains model, the four physical or functional domains (nutrition, environment, health and behaviour) are concerned with biological function, or physical wellbeing, and the fifth domain, the mental state, considers the 'affective state' or psychological wellbeing.

The four functional (physical) domains feed into the fifth domain (mental) domain. This affective state represents the animal's overall subjective feelings and experiences and hence this fifth domain is a key element of animal welfare.

An animal may have positive or negative emotional states and it is the balance between these subjective experiences that can influence an individual animal's 'Quality of Life'.

How to complete the exercise.

This is a worked example below. Please observe the animals for 10-15 mins per species. If there is no noticeable behaviour i.e. laying down the agile category will score 1, if they are moving around they will score 3, 4, or 5

Date: 12/10/2023   **Weather and Temp:** Cold, wet overcast 15°C

See Welfare assessment; Definitions in order to grade the different categories
Grade the Categories: by a score rating (1-5): Full compliance = 5, least compliance / no behaviour recorded = 1

If observing a group please give an overall score with notes indicating individuals of concern.

Species: Capercaillie	Environment						Diet			Health / Body condition							Behaviour																Score
Group or Individual (Please circle) **Nº:** 2	Utilised	Safe	Separation	Challenging	Permanent	Enriching	Suitability	Hydration	Well fed	Agile	Lean	Toned - body	Healthy coat	Healthy	Fitness	Strong	Active	Relaxed	Bright	Playful	Sociable	Purposeful	Communicative	Engaged	Alert	No stereotypical behaviour	Normal breathing	Painlessness	Steady	Calm	Content	Comfort	Total welfare score
Score	5	4	5	4	5	4	4	5	4	5	1	5	5	5	4	4	4	4	3	5	5	1	5	5	5	5	4	4	5	4	4	4	136
Observation notes. (Code) Start time: 11.am **Finish time:** 11.30am		1				2 3					4						5 6 7																

Notes:
Capercaillie
1) Large loops in netting a head height
2) Could add more natural foraging material
3) Could add more natural foraging material and reduce pellet
4) Unable to see body due to feathers
5) Possible anxiety due to people, generally calm
6) Possible discharge from eye
7) Interacted well with female

Notes
This area is for you to add notes, particularly for low scored sections. Please record the species and use a numerical key to relate to the worksheet.
You can also include diagrams if required or take pictures / film to act as an aid.

Total welfare score: 134

Percentage: (Total score / 160 x 100 = %): 136 / 160 x 100 = 85%

Scoring
Add all the scores together and convert to a %. If observing a group please give an overall score with notes indicating individuals of concern.

Group or individual
Circle if the animal is kept in a group or as an individual. If they are kept as a group please record the group size.

"In your informed opinion, do these animals appear to have a good quality of life in captivity. Is the enclosure and social grouping appropriate?"

This simple system should allow a moderately rapid assessment of selected species. Students will have to conduct background research of the study animals with regards to their environment, wild diet, body condition, normal appearance, behaviour and their specific needs.

Category	Description	Definition for full compliance (Score 5 for full compliance and 1 for least compliance. Score accordingly to what you see)
Environment	Utilised	All areas and features of the environment are accessible and are used
	Safe	Environment is free of hazards
	Separation	Animal can choose to distance themselves from the public or other animals
	Challenging	Environment demands suitable movement and intellectual and decision making adaptations
	Permanent	Environment offers full opportunities throughout the year
	Enriching	Environment provides opportunities for free choices, meets the species specific needs and allows full behavioural and physical expression
Diet	Suitability	Zoo diet:
	Hydration	Access to clean water
	Well fed	Good body condition, not to fat or thin.
Health and Body condition	Agile	Physically fit and appropriately active
	Lean	Within normal weight range – free from excessive body fat
	Toned – body	Developed and visible muscles
	Healthy coat	Displays full colour and density
	Healthy	Appearance is healthy
	Fitness	No appearance of injury
	Strong	No appearance of frailty
Behaviour	Active	Exhibits significant activity and engages with items within the enclosure. Spends considerable part of their time on physical activities in the enclosure.
	Relaxed	Shows calmness whilst awake
	Bright	Behaviour is positive
	Playful	Shows object and/or member of the same species directed play
	Sociable	Do they act appropriately to members of the same species
	Purposeful	Intended actions and outcomes are achieved
	Communicative	Relates to members of the same species through vocal and non-vocal signals
	Engaged	Responds attentively to visual and physical stimuli
	Alert	Exhibits awareness of local and distant environment
	Natural behaviour	No unusual behaviours (stereotypical behaviours)
	Normal breathing	Breathing is normal and not laboured or frantic
	Painlessness	Discomfort in movement or expression
	Steady	Steady when moving, no erratic movement (dizzy)
	Calm	No appearance of anxiety
	Content	Relaxed and content within
	Comfort	No appearance of helplessness / distress
Welfare score	Total score	All the scores added together. Score range 32 – 160. 32 – poor, and 160 is exceptional. **Score 32** = 20% - Poor welfare / more study required, **Score 80** = 50% Average, some improvement required, **Score 129** = 80% - Very good welfare

Date: _____ **Weather and Temp:** _____

Score rating (1-5): Full compliance = 5, least compliance / no behaviour recorded = 1

If observing a group please give an overall score with notes indicating individuals of concern.

Species:	Environment						Diet			Health / Body condition							Behaviour																Score
Group or individual (Please circle) Nº:	Utilised	Safe	Separation	Challenging	Permanent	Enriching	Suitability	Hydration	Well fed	Agile	Lean	Toned - body	Healthy coat	Healthy	Fitness	Strong	Active	Relaxed	Bright	Playful	Sociable	Purposeful	Communicative	Engaged	Alert	No stereotypical behaviour	Normal breathing	Painlessness	Steady	Calm	Content	Comfort	Total welfare score
Score																																	
Observation notes. (Code) Start time: **Finish time:**																																	

Observational notes: _____

_____

_____

_____

_____

_____

_____

_____

Total welfare score:

_____

Percentage: (score / 160 x 100 = %):

_____

Please rate the enclosure in its current state. (Please circle)

Do you feel the enclosure meets the animals physical and mental needs?

Poor   Excellent

1   2   3   4   5   6   7   8   9   10

SUMMARY (Highlights of main issues identified in audit):

ACTIONS and RECOMMENDATIONS (Highlights the main solutions to the issues identified in audit):

Total welfare score:

_____

Percentage:
(score / 160 x 100 = %):

_____

Score range 32 – 160.
32 – poor, and 160 is exceptional.
• **Score 32** = 20% - Poor welfare / more study required.
• **Score 80** = 50% - Average, some improvement required.
• **Score 129** = 80% - Very good welfare.