

EURCAW Ruminants and Equines:

Activities to promote the welfare of working equids in EU countries'



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Designated by
the EU Commission



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World Organisation
for Animal Health
Founded as OIE

**WOAH Platform on animal welfare for Europe
online event on welfare of working equids.
12th September 2023 10:00 (CEST - Brussels time)**



EU Reference Centre for Animal Welfare *Ruminants & Equines*

The European Union Reference Centre for Animal Welfare (EURCAW) *Ruminants & Equines* is the third Centre designated by the European Commission (Official Controls Regulation 2017/625, Articles 95 & 96),

established in May 2021.

It focuses on ruminant and equine welfare and covers the entire life cycle from birth to the end of life.

EURCAW *Ruminants & Equines*' **main objective is a harmonised compliance with EU legislation regarding welfare in EU Member States.**

EURCAW *Ruminants & Equines* supports

- Inspectors of Competent Authorities (CAs);
- Ruminant and equine welfare policy workers;
- Bodies supporting CAs with scientific expertise, training, and communication.

EURCAW Ruminants and Equines: The Consortium & the Management team



Harry BLOKHUIS



Birgitta Staaf LAARSSON

Sweden, Swedish University of Agricultural Sciences (SLU) including the Swedish Centre for Animal Welfare (SCAW)



Italy, Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise "G. Caporale" (IZSAM)

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Ireland, University College Dublin (UCD)

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Evangelia N. SOSSIDOU

EURCAW Ruminants and Equines: The Experts





Coordinated Assistance

Providing support, networking and responses to Questions to EURCAW (Q2E);



Scientific and technical studies

Preparing scientific reviews of knowledge on welfare topics and identify research needs;



Welfare indicators, Assessment & Best Practice

Identifying animal welfare indicators, including animal based, management based and resource-based indicators, that can be used to verify compliance with the EU legislation;



Training

Developing training materials and training standards for official inspectors;



Dissemination, Research Findings and Innovations

Disseminating research findings and technical innovations and collaborating with Union research bodies in the fields within the scope of their mission.



Q2E-Ruminants-Equines-2022-001
February 2023
Welfare concerns of individually housed horses
<https://doi.org/10.5281/zenodo.7660981>



Question raised by requestor

Does a horse suffer if it is kept alone without company from other horses? And what is the case if it is kept with other non-horse equids or some other species such as cows, lambs or rabbits?



Answer

Social behavior with conspecifics

Under feral conditions or on pasture, horses form groups (harems) that are comprised of several mares, their offspring up to 2–3 years of age and one to six adult males. The group size ranges from 2 to 21 horses. Young colts (> 2 years old) form 'bachelor' bands with up to 16 males, before joining other groups, where the stallion has died or been chased away.



Welcome to Volume 02 of our Newsletter

In this our first newsletter of 2023, we share details with you of our new work programme for 2023-2024, introduce you to one of our hard-working animal welfare scientists, and provide a roundup of recent news items related to ruminant and equine welfare.

New Work Programme for 2023-2024

EURCAW *Ruminants & Equines* has finalised its work programme for 2023-2024. Input on priorities for the work programme was gathered through questionnaires and a workshop with the





Inspector@Work

Inspector@Work is a series of case studies planned from 2023 by the EURCAW *Ruminants & Equines*.

The case studies will describe the first-hand experience of an official inspector working on ruminant and/or equine welfare in the EU.

All the featured Inspector@Work stories will be listed below. The views and opinions presented in the Inspector@Work stories will belong to the interviewees, and not necessarily agree with the views and opinions of EURCAW *Ruminants & Equines*.

Contact EURCAW *Ruminants & Equines*

For any queries or comments, please use our [contact us](#) page to get in touch.

Community of Practice

Welcome to Community of Practice (CoP). The aim of this platform is to support the exchange of knowledge amongst Official Inspectors in EU member states regarding the implementation of animal welfare regulations relating to ruminants and equines.

The CoP is structured around topics – with a focus on those within the EURCAW *Ruminants & Equines* work programme. There is also an opportunity for you to initiate a topic and influence future work programmes. We may also ask for your feedback on current EURCAW activities.

[Please take the opportunity to register here.](#)

 [View all Community Topics \(Access for Approved Users Only\)](#)

Contact EURCAW Ruminants & Equines

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Source: I. Veissier

Each EURCAW *Ruminants & Equines* review provides background information on the biological relevance of the welfare topic. It then presents the most important key areas to focus on during welfare inspections, describes why welfare issues occur and lists specific animal-based indicators that can help official inspectors to identify these welfare issues. Finally, the review summarises good and better practices that can help to solve the previously described welfare issues, and deals with related legislative requirements.

EURCAW *Ruminants & Equines* produces its reviews according to internationally accepted scientific standards, which include an external peer review process. However, it cannot accept liability for any damage resulting from the use of the results of this study or the application of the advice contained in it.

EURCAW Ruminants and Equines: SCIENTIFIC REVIEWS



REV-Ruminants-Equines-2023-02-EN
Version 1.0 – April 2023

Physical and occupational enrichment in ruminants and equines

Review

Physical and occupational enrichment in ruminants and equines

Raphaëlle Botreau¹, Valentin Brunet¹, Clémence Lesimple¹

¹Unité Mixte de Recherche sur les Herbivores, INRAE – Centre Clermont-Auvergne-Rhône-Alpes, Clermont-Ferrand, France

April 2023

This review is a publication of the European Union Reference Centre for Animal Welfare for Ruminants & Equines. EURCAW Ruminants & Equines was designated by the European Commission through implementing decision of 6 May 2021, in accordance with Regulation 2017/625/EU.

Disclaimer

This review can be downloaded for free at <https://doi.org/10.5281/zenodo.7687759>


Relational enrichment



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SUMMARY

Coming soon.

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This review can be downloaded for free at
<https://doi.org/10.5281/zenodo.7687759>

EURCAW Ruminants and Equines: SCIENTIFIC REVIEWS

Table 1: Summary of physical and occupational enrichments found in the scientific literature and their relevance for ruminants and equines species. ✓ = tested and relevant, -- = tested and mitigated effects, X = tested and not relevant, ? = not tested but probably relevant (expertise), ■ = not tested and uncertain

Enrichment		Roles/needs covered	Comment	Cattle	Buffaloes	Bisons	Goats	Sheep	Horses	Donkeys	Camelids	Deer	
Outdoor enrichment	Access to pasture	Expression of natural behaviour (grazing/ browsing), exploration, freedom to choose feed		✓	✓	? ¹	✓	✓	✓	✓	?	✓	
	Exercise area			✓	✓	? ¹	✓	✓	✓	✓	✓	?	
	Shelter		Shade, refuge area, thermoregulation		✓	?	?	✓	✓	✓	✓	?	✓
	Water pond		Expression of natural behaviour (wallowing, bathing), thermoregulation		■	✓	■	■	■	■	■	■	✓
	Dirt, Sand, Mud		Reduce external parasites; facilitate scratching, thermoregulation		X	✓	✓	■	■	✓	?	■	✓
Indoor enrichment	Objects	Play (young), exploration, sucking need (young)	Adult	--	?	■	■	■	--	■	■	■	
			Young	✓	?	■	?	✓	?	?	■	■	
	Partitions	Refuge area, social behaviour	Adult	?	?	■	✓	?	?	?	■	■	
			Young	✓	?	■	✓	✓	?	?	■	■	
	Platforms	Expression of natural behaviour (climbing), dominate surroundings	Adult	■	■	■	✓	?	■	■	■	■	
			Young	■	■	■	✓	✓	■	■	■	■	
Cognitive challenge	Predictability	Stress reduction		--	■	■	■	--	--	■	■	■	
	Controllability	Stimulation, free will, learning	⚠ Unsuitable if too simple or too complex	✓	?	■	✓	?	?	?	■	■	



REV-Ruminants-Equines-2023-03-EN
Version 1.0 – April 2023
Sensory and feeding enrichment in ruminants and equines

Review Sensory and feeding enrichment in ruminants and equines

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April 2023

This review is a publication of the European Union Reference Centre for Animal Welfare for Ruminants & Equines. EURCAW Ruminants & Equines was designated by the European Commission through implementing decision of 6 May 2021, in accordance with Regulation 2017/625/EU.

Sensory and feeding enrichment in ruminants and equines



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SUMMARY

This review presents the current knowledge on sensory and feeding enrichment in ruminants and equines. The specific animal needs, enrichments investigated in the scientific literature and their impact on welfare, gaps in knowledge and recommendations for inspection are presented.

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This review can be downloaded for free at
<https://doi.org/10.5281/zenodo.7687769>

EURCAW Ruminants and Equines: SCIENTIFIC REVIEWS

Table 1: Summary of sensory and feeding enrichments found in the scientific literature and their relevance for ruminants and equines relevant, -- = tested and controversial effects, X= tested and not relevant, ? = not tested but probably relevant (expertise), █ = not tested

	Enrichment	Roles/needs covered	Comment	Cattle	Buffaloes	Bisons	Goats	Sheep	Horses	Donkeys
Sensory enrichment	Light	Supplementary indoor light		--	█	█	█	█	█	█
	Visual horizons	Decrease boredom	Lead to frustration if inaccessible	--	█	█	█	█	X	█
	Music	Decrease stress		✓	?	?	?	?	✓	?
	Friendly human voice	Decrease stress		✓	?	?	?	?	?	?
	Supports to scratch, human stroking/brushing	Grooming, positive emotions	Human stroking: depends on human proximity, prior experience and forced or not	✓	?	?	✓	✓	✓	█
	Odours and pheromones	Decrease boredom and anxiety	Very sparse studies	--	█	█	█	█	--	█
Feeding enrichment	Feed diversity and variety	Stimulate ingestion, pleasure	Choice between feed is better	✓	?	?	✓	✓	✓	?
	Increased feed delivery frequency	Stimulate feeding, decrease competition	Warning if deviates from a predictable scheme	✓	?	?	?	✓	✓	?
	More space at trough	Increase feeding, decrease competition		✓	?	?	?	?	?	?
	Slow-feeder	Increase foraging activity and time	Can lead to frustration if too much slowing effect	█	█	█	?	?	✓	?
	Elevated feeder	Browsing behaviour	For browsing species	█	█	█	✓	█	█	█
	Longer straw/hay particle length	Increase foraging activity and time	Tested on young animals	✓	█	█	█	✓	█	█
	Wet feed	Increase foraging		█	█	█	█	█	✓	█
	Sensory familiarity on new feed	Decrease neophobia		?	█	█	✓	✓	?	█



Donkeys:
No scientific data available

Enrichments for equines



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SUMMARY

Coming soon.

[View PDF](#)

FactSheet
Coming soon

Activities to promote the welfare of working equids in EU countries'



Greek National Workshop: 03 June 2022

Working Group 'Working Equids'



Chair: E.N. SOSSIDOU

External Experts:

- ¹Katerina Marinou
- ²Francisco SERASOLI
- ³Joe A COLLINS



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Working Equids included
in WORKPLAN 2023-2024



**WOAH Platform on animal welfare for Europe
online event on welfare of working equids.
12th September 2023 10:00 (CEST - Brussels time)**



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EURCAW Ruminants and Equines: SCIENTIFIC REVIEW 'Working Equids'

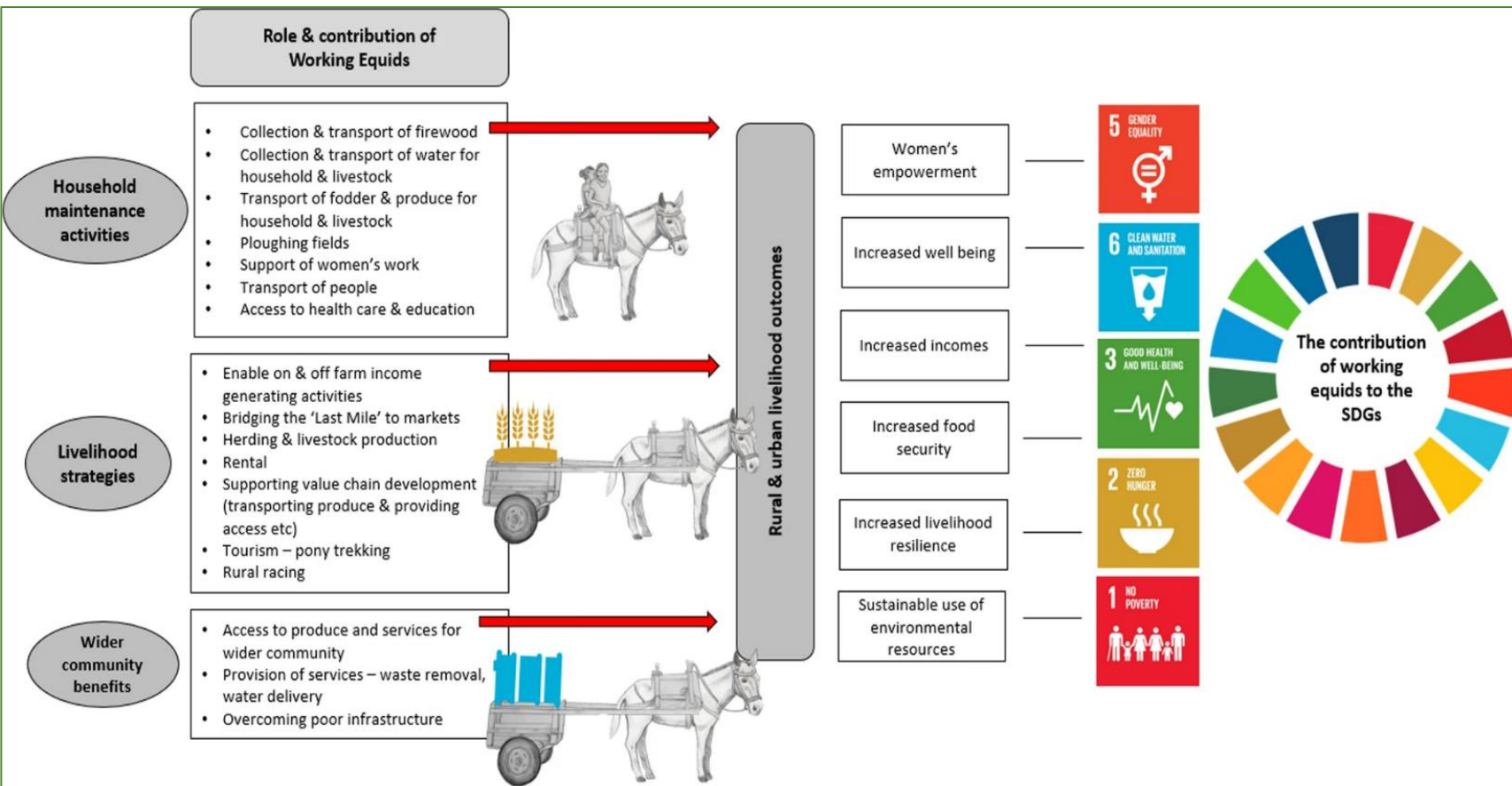


Figure 2. The roles and contribution of working equids in rural communities and smallholder livelihoods (Grace et al., 2022).

EURCAW Ruminants and Equines: SCIENTIFIC REVIEW 'Working Equids'



The French Rural and Maritime Fishing Code has banned pony rides (understood as attractions that allow the public to ride any type of equine animal via a rotating fixed attachment device that deprives the animal of its freedom of movement, Article L214-10-1, 2021) and established strict criteria for Equidae owners and professionals (proof of professional experience, certificate of commitment, animal identification and traceability, Article D214-37-1, 2022).



Hobbling should not be allowed and it is forbidden by national legislation, since it is considered as abuse of an animal, in some Member States such as Greece (Law No 4830/2021, Greek Governmental Gazzette). The use of inadequate handling equipment, beating or whipping should be forbidden. Only humane training practices for equids should be promoted. As far as temporary tethering is concerned, the natural position, movement, resting, self cleaning of the upper respiratory system, shade, access to food and water and a maximum stocking density should be guaranteed.

Heat stress may occur in places with high temperature and humidity, when horses are unable to maintain their body temperature within the normal range (Kang et al., 2023). National rules have been issued in many Member States such as Greece, that define both the number of working days and hours (with intervals), as well as which hours are permitted for working when temperatures are excessive (Law No 4830/2021, Greek Governmental Gazzette). For instance, when temperatures are higher than 35°C, working hours between 13.00-17.00 are forbidden, while when temperatures are higher than 39°C, equids are not permitted to work.

EURCAW Ruminants and Equines: SCIENTIFIC REVIEW 'Working Equids'

Allan, F.K. A Landscaping Analysis of Working Equid Population Numbers in LMICs, with Policy Recommendations. (2021). Brooke/University of Edinburgh, UK, Available online:

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<https://www.eurogroupforanimals.org/files/eurogroupforanimals/2022-12/2022-12-15-Working%20equids%20in%20the%20European%20Union-Report.pdf>

Grace, D.C., Diall, O., Saville, K., Warboys, D., Ward, P., Wild, I., & Perry, B.D. (2022). The Global Contributions of Working Equids to Sustainable Agriculture and Livelihoods in Agenda 2030. *Ecohealth*, 19, 342-353. <https://doi.org/10.1007/s10393-022-01613-8>.

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Raw, Z., Rodrigues, J.B., Rickards, K., Ryding, J., Norris, S.L., Judge, A., Kubasiewicz, L.M., Watson, T.L., Little, H., & Hart, B. (2020). Equid assessment, research and scoping (EARS): The development and implementation of a new equid welfare assessment and monitoring tool. *Animals*, 10, 297. <https://doi.org/10.3390/ani10020297>

Viksten, S., Visser, E., Nyman, S., & Blokhuis, H. (2017). Developing a horse welfare assessment protocol. *Animal Welfare*, 26, 59-65. <https://doi.org/10.7120/09627286.26.1.059>

Voluntary Initiative on responsible ownership and care of Equidae under the EU Platform on Animal Welfare. (2022). Guidance for competent authorities and tourism operators to ensure the welfare of working equids in tourism. Available on:

<https://www.government.nl/documents/publications/2023/01/10/guidance-for-competent-authorities-and-tourism-operators-to-ensure-the-welfare-of-working-equids-in-tourism>

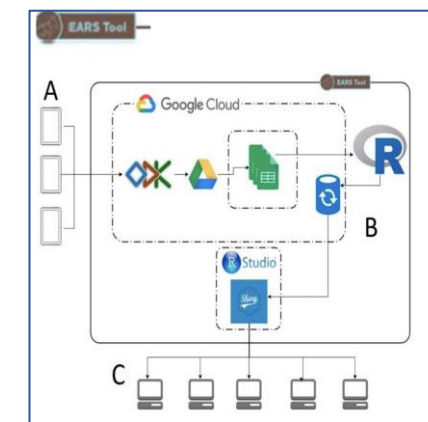
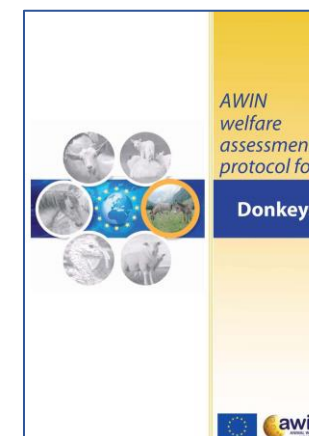
EURCAW Ruminants and Equines: SCIENTIFIC REVIEW 'Working Equids'

Swedish Official Protocol (OP): Swedish protocol for the welfare assessment of horses that focuses establishing legislative compliance (Statens Jordbruksverk, 2012).

The AWIN (Animal Welfare Indicators) project: funded by the European Commission in the Seventh Framework Programme, aimed to improve welfare of several species, including donkeys, by developing scientifically sound and practical on-farm welfare assessment protocols (Dai et al., 2016).

Horse Welfare Assessment Protocol (HWAP): This protocol covers the relevant domains of welfare (good feeding, good housing, good health and appropriate behaviour). It aims to further improve horse welfare through more detailed, scientifically based assessments that focus on the individual animal and the provision of feedback to the animal owner and stable manager (Viksten et al., 2016).

Equid Assessment, Research and Scoping (EARS): A questionnaire-based tool of collecting welfare assessment data in a standardised way, aimed to provide reliable information regarding health and welfare status of equids in any context worldwide (Raw et al., 2020).



EURCAW Ruminants and Equines: SCIENTIFIC REVIEW 'Working Equids'

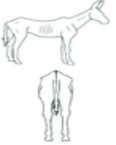



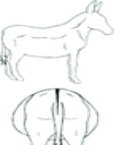
Condition Score	Neck and Shoulders	Withers	Ribs and Belly	Back and Loins	Hindquarters
1 Poor (Very thin) 	Neck thin, all bones felt easily. Neck meets shoulder abruptly, shoulder bones felt easily, angular.	Dorsal spine and withers prominent and felt easily.	Ribs can be seen from a distance and felt easily. Belly tucked up.	Backbone prominent, dorsal, and transverse processes felt easily.	Hip bones visible and felt easily (dock and pin bones). Little muscle cover. May be cavity under tail.
2 Moderate (Underweight) 	Some muscle development overlying bones. Slight step where neck meets shoulders.	Some muscle development overlying bones. Slight step where neck meets shoulders.	Ribs not visible but can be felt easily.	Dorsal and transverse processes felt with light pressure. Poor muscle development either side of midline.	Poor muscle cover on hindquarters, hip bones felt easily.
3 Ideal 	Good muscle development, bones felt under light cover of muscle/fat. Neck flows smoothly into shoulder, which is rounded.	Good cover of muscle/fat over dorsal spinous processes, withers flow smoothly into back.	Ribs just covered by light layer of fat/muscle, ribs can be felt with light pressure. Belly firm with good muscle tone and flattish outline.	Can feel individual spinous or transverse processes with pressure. Muscle development either side of midline is good.	Good muscle cover over hindquarters, hip bones rounded in appearance, can be felt with light pressure.
4 Overweight (Fat) 	Neck thick, crest hard, shoulder covered in even fat layer.	Withers broad, bones felt with pressure.	Ribs dorsally only felt with firm pressure, ventral ribs may be felt more easily. Belly overdeveloped.	Can only feel dorsal and transverse processes with firm pressure. May have slight crease along midline.	Hindquarters rounded, bones felt only with pressure. Fat deposits evenly placed.
5 Obese (Very fat) 	Neck thick, crest bulging with fat and may fall to one side.	Shoulder rounded and bulging with fat. Withers broad, bones felt with firm pressure.	Large, often uneven fat deposits covering dorsal and possibly ventral aspect of ribs. Ribs not palpable dorsally. Belly pendulous in depth and width.	Back broad, difficult to feel individual spinous or transverse processes. More prominent crease along midline fat pads on either side. Crease along midline, bulging fat either side.	Cannot feel hip bones, fat may overhang either side of tail head, fat often uneven and bulging.

Figure 6. Donkey-specific body condition scoring provided by the Donkey Sanctuary (<https://www.thedonkeysanctuary.org.uk/sites/uk/files/2018-10/body-scoring-chart.pdf>).

EURCAW Ruminants and Equines: SCIENTIFIC REVIEW 'Working Equids'

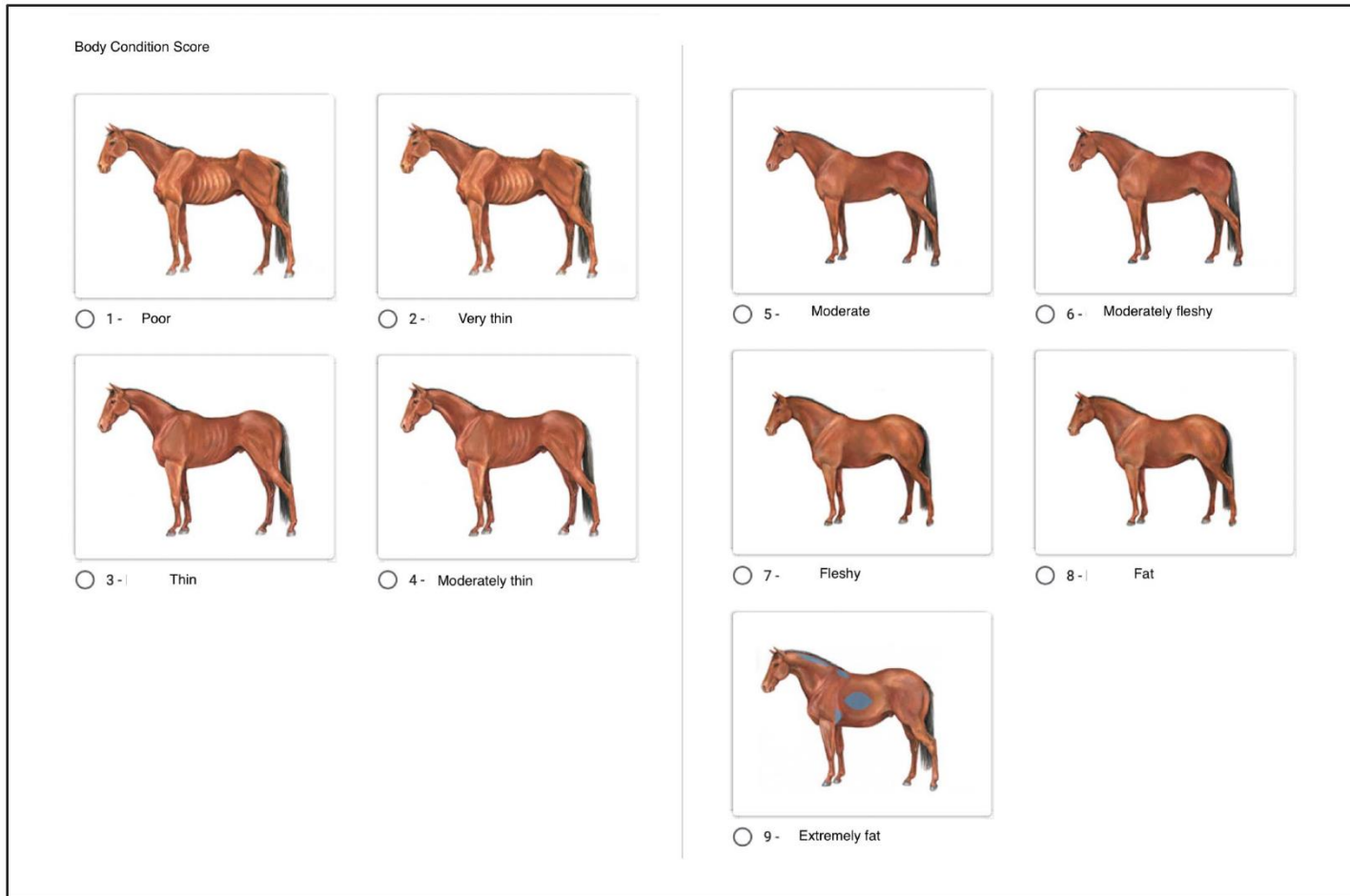


Figure 5. Illustration of the appearance of horses for each body condition score, from the Henneke scale 1-9 (Uldahl et al., 2023).

Minimizing welfare problems/promoting best practices

1. Training of involved personnel
2. Feed and diet
3. Watering
4. Shelter and resting places during work
5. Heat and cold stress
6. Management and best practices
7. Appropriate workloads

Gaps in knowledge & further studies needed

The broad categorisation of equids in EU legislation does not include working equids. Due to such legislative gaps, welfare standards for working equids are not fully recognised. Specific definitions, guidelines and protocols should be implemented as mandatory in each country, to ensure the application of all existing legal welfare regulations to this Equidae category.



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*Thank you
for your kind attention!*



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