

# EURCAW *Ruminants & Equines*

Meeting with Competent Authorities



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# **EURCAW *Ruminants & Equines***

meets

## **Competent Authorities**

# **WELCOME!!**



**Harry  
Blokhuis**

Partner  
SLU, Sweden



**Birgitta  
Staaf Larsson**

Partner, Secretariat  
SLU, Sweden



**Christoph  
Winckler**

Partner  
BOKU, Austria



**Isabelle  
Veissier**

Partner  
INRAE, France



**Evangelia  
Sossidou**  
Partner  
ELGO-DIMITRA,  
Greece



**Silvia  
D'Albenzio**  
Partner  
IZSAM, Italy



**Alison Hanlon**  
Partner  
UCD, Ireland



**Josef  
Schenkenfelder**  
Content Manager  
BOKU, Austria



**Lena  
Tuominen**  
Secretariat  
SLU, Sweden



**Valentin  
Brunet**  
Content Manager  
INRAE, France



**Gillian Power**  
Content Manager  
UCD, Ireland

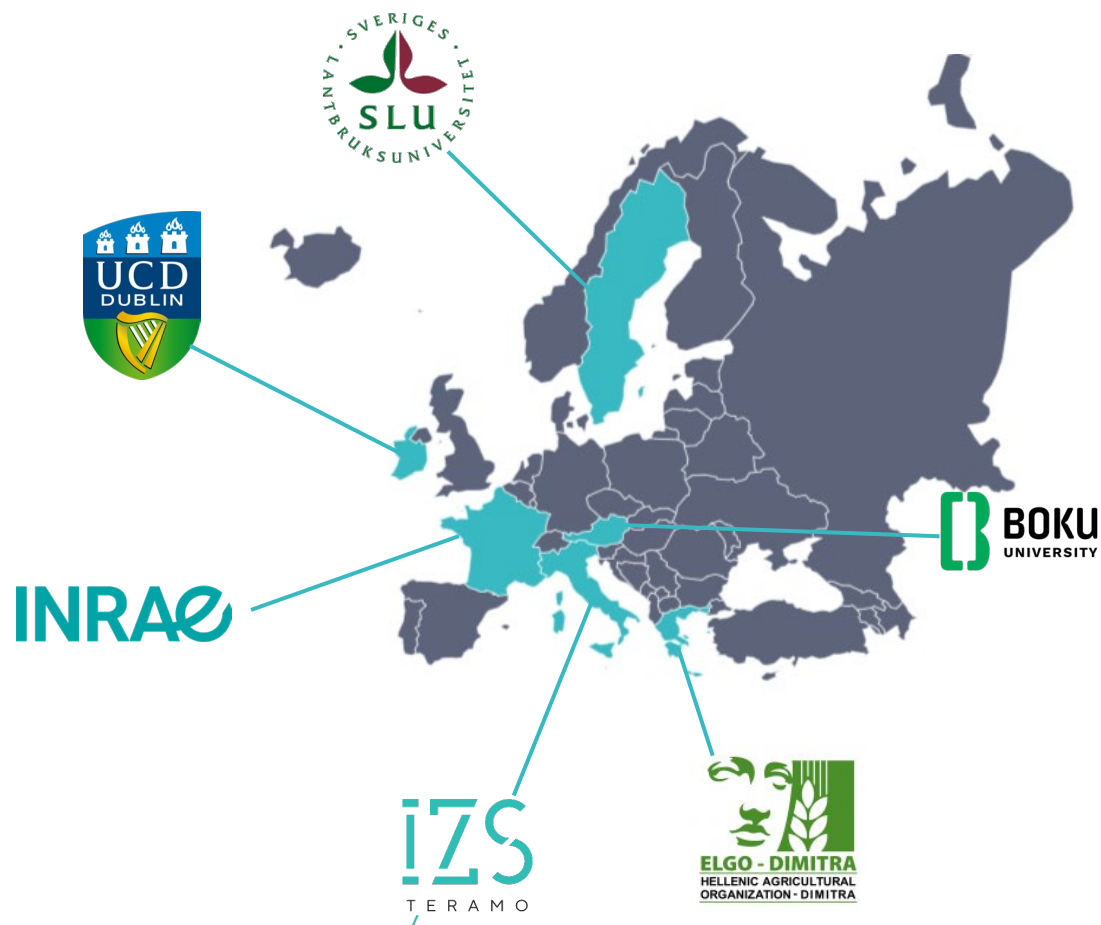


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# The EURCAW Ruminants & Equines

## Partnership





# The role of EURCAW *Ruminants & Equines*

To develop and disseminate knowledge and tools to assist the National Competent Authorities in performing better official controls and enforce EU animal welfare rules



## The main goals of this meeting

- To update the CAs on the Centre's recent activities
- Address welfare related questions raised by CAs, focusing on small ruminants (workshop)
- To get feedback on quality and form of the Centre's output





# Participants

## Competent Authorities

Austria (2)	Italy (1)
Belgium (1)	Latvia (1)
Bulgaria (1)	Lithuania (1)
Cyprus (1)	Luxembourg (2)
Czechia (1)	Malta (1)
Denmark (2)	Portugal (3)
Finland (2)	Slovakia (1)
France (3)	Slovenia (1)
Germany (22)	Spain (2)
Greece (2)	Sweden (3)
Ireland (4)	The Netherlands (2)

**22**  
countries

**59**  
representatives



# Participants

## EU COMMISSION

Ester Alaez Pons	DG SANTE
------------------	----------

## EURCAW TEAM

Harry Blokhuis	SLU
Lena Tuominen	SCAW/SLU
Alison Hanlon	UCD
Gillian Power	UCD
Isabelle Veissier	INRAE
Valentin Brunet	INRAE
Silvia D'Albenzio	IZSAM
Evangelia Sossidou	ELGO-DIMITRA
Christoph Winckler	BOKU
Josef Schenkenfelder	BOKU

**7**  
countries

**11**  
experts





## Agenda

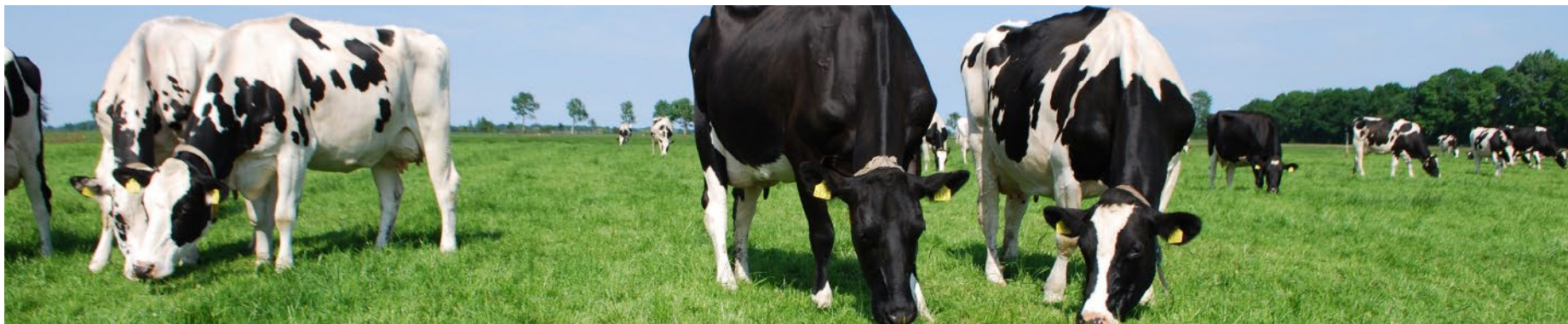
Time	Topic/Activity	Speaker
13:00-13:05	Welcome address	Harry Blokhuis
13:05-13:10	Welcome address DG SANTE	Ester Alaez-Pons
<b>Update on recent activities</b>		
13:10-13:20	Work programme 2025-2027	Harry Blokhuis
13:20-13:30	Factsheets (Fitness for transport, Confinement in horses, Hoof care, Colostrum provision to calves, Painful/stressful procedures)	Josef Schenkenfelder
13:30-13:40	Reviews (Working equids welfare, Quality of care, Confinement in horses, Welfare of animals at pasture, Thermal comfort)	Isabelle Veissier/Valentin Brunet
13:40-13:50	Training activities	Silvia D'Albenzio
13:50-14:05	Dissemination (Community of practice, Inspector@work, Care4dairy)	Alison Hanlon
14:05-14:20	Break	
<b>Specific welfare topics raised by Competent Authorities</b>		
14:30-14:40	Introduction to topics and group discussions	Plenum
14:40-15:15	Group discussions on 1. Protection of sheep (and other animals) against predators* 2. Protection of ruminants and equines against adverse weather conditions* 3. Photovoltaic systems on pastures of sheep and goats* What is a tolerable percentage of fallen stock for different animal categories?	3 parallel groups
15:15-15:25	Online survey on dissemination strategies of EURCAW Ruminants & Equines	Plenum
15:25-15:40	Presentation and discussion of results from group sessions	Plenum
15:40-15:55	Improving cooperation with CAs	Plenum
<b>Closing</b>		
15:55-16:00	Wrap-up and closing of the meeting	Harry Blokhuis

Thank you for your attention!



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# Workplan 2025 - 2027

EURCAW Ruminants & Equines

Harry Blokhuis



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## **Activities of the Centre are described in work programmes**

1<sup>st</sup> workplan: June 2021 – 31/12/2022

2<sup>nd</sup> workplan: 2023 – 2024

3<sup>rd</sup> workplan: 2025 – 2027 (under review)



# **The activities focus on the role of EURCAW *Ruminants & Equines***

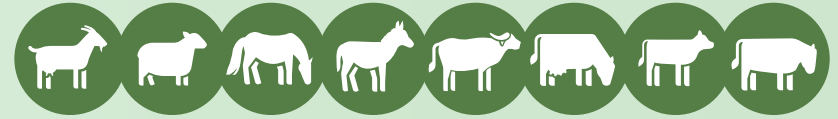
To develop and disseminate knowledge and tools to assist the National Competent Authorities in performing better official controls and enforce EU animal welfare rules



## ○ **Activities targeted at:**

- Competent Authorities, Policy Workers and their 'support bodies'

*Target groups do not include farmers, NGO's or other stakeholders in the livestock production chain*



## ○ Preparation of the work programme

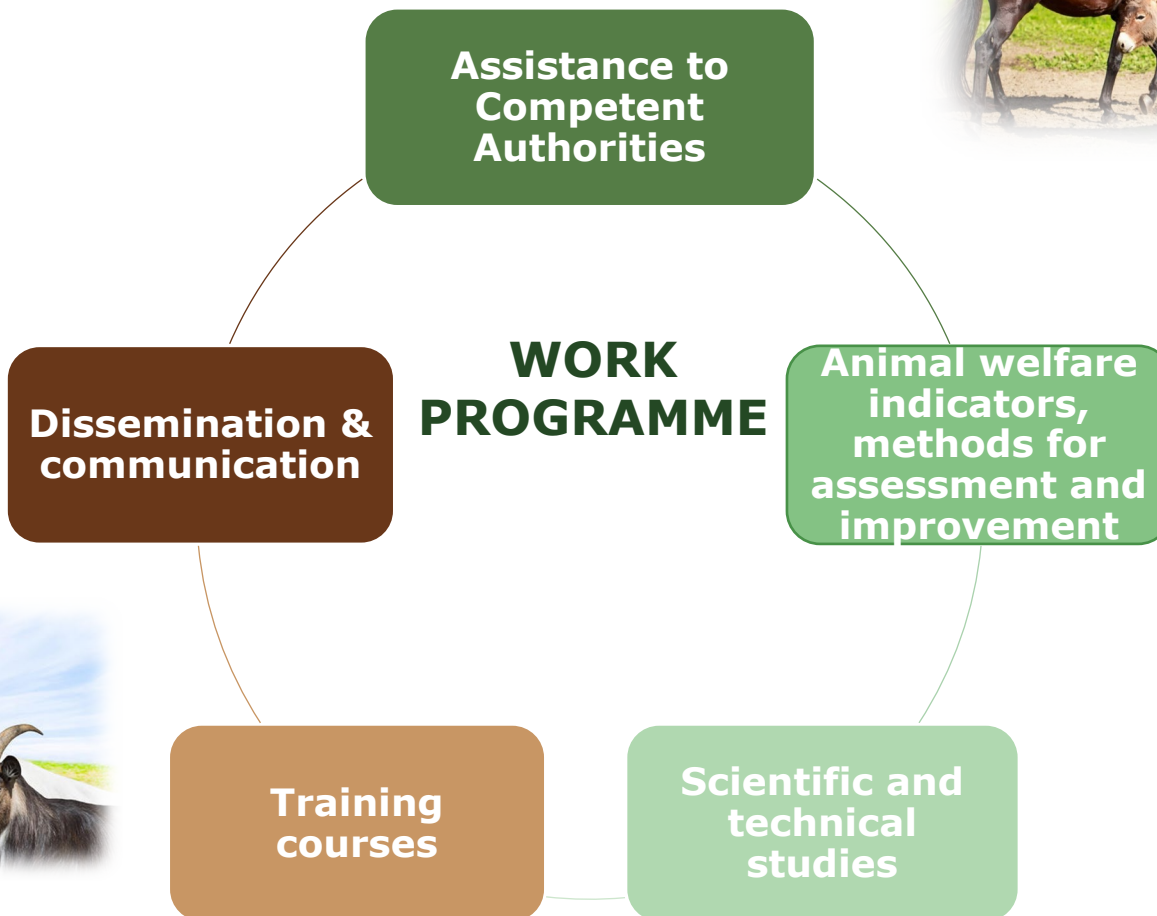
Prioritisation by the Management Team based on:

- Inventory of the views of Competent Authorities and Support Bodies regarding the most pressing welfare issues:
  - Survey 2022
  - Direct contacts/meetings
- Indications from DG Sante
- Views from National Reference Centres and Reflection Board
- Analysis of ongoing work (projects, AW-Platform, EFSA, WOH) to prevent doubling of effort
- Available capacity and budget





## 5 workpackages





## **Core activities of the Centre supporting CAs**

- Providing scientific and technical information
- Provide indicators for compliance
- Define best practices
- Provide training materials and training standards
- Analyse training needs
- Dissemination and communication support



## Reviews and Fact sheets



The collage features several documents from EURCAW Ruminants & Equines. The central document is titled "Review Welfare of working equids in the European Union". To its left, another document is titled "Review Sensory and feeding enrichment in ruminants and equines". Below that, a document titled "Review Environmental enrichment in ruminants and equines: Introduction" is visible. To the right of the central document, there are two fact sheets titled "Visual and tactile contact in individually housed calves" and "Frequency and quantity of milk feeding to dairy calves". Further to the right, a document titled "Environmental enrichment for equines" is partially visible. Each document includes the EURCAW logo and specific details about the review or fact sheet.

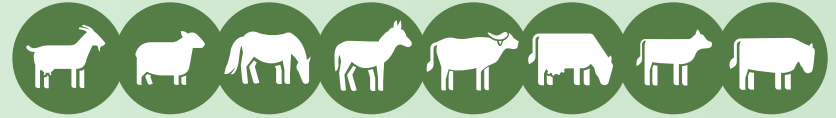


## Reviews and Fact sheets



## Training toolkits

## Webinars and e-learning courses



## Questions to EURCAW (Q2E)

This is a fast-track service offered by  
*EURCAW Ruminants & Equines*

It provides technical and scientific advice on  
ruminant and equine welfare

The Q2E service can be accessed via our  
website



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## Roadshows

New activity

Workshops (1-1,5 day) in selected Member  
States



## Flexibility

To keep possibilities to adapt the Work Programme to changing concerns of target groups or changing policy needs

- Yearly report of activities including a scan of the needs of target groups





## Harmonisation between four Reference Centres



*Since October 2018*



*Since February 2020*



*Since June 2021*



*Since January 2024*

The four Centres will actively search and identify possibilities to collaborate and harmonise their approaches



Once the workplan 2025 – 2027 is accepted, it will be available on EURCAW *Ruminants & Equines* website

[www.eurcaw-ruminants-equines.eu](http://www.eurcaw-ruminants-equines.eu)



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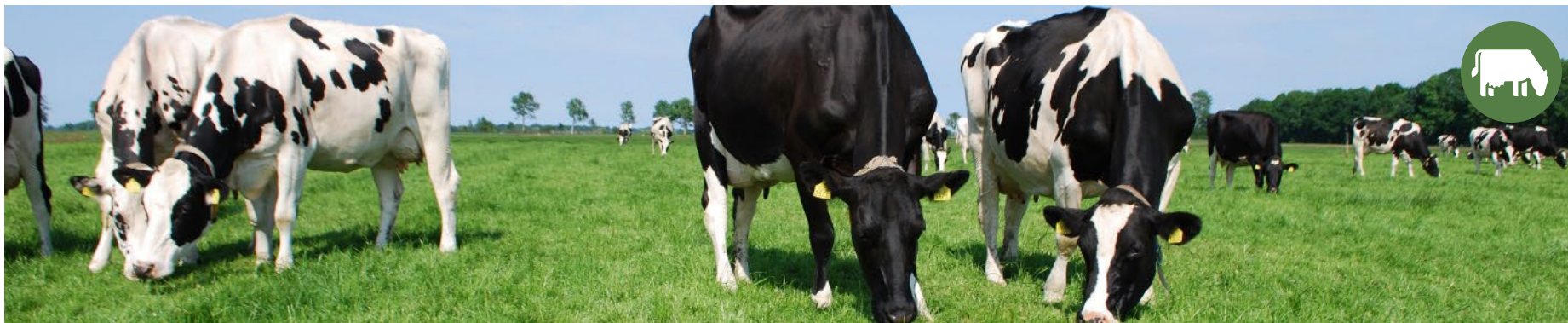


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# Update on Factsheets

Josef Schenkenfelder



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## 1 Overview

Published	TFS	IFS
Fitness for transport (bovine, equine, small ruminants)	X	X
Environmental enrichment (cattle, sheep, goats, equines)	X	X
Colostrum provision to calves	X	X
In the pipeline...		
Outcomes of painful and stressful procedures	X	X
Confinement and restriction of movement and social contact in horses	X	
Hoof care to reduce leg and hoof disorders	X	



## 2 Fitness for transport



### Legal requirements

- No animal shall be transported unless it is fit for the intended journey
- Animals that are ***injured***, that present a ***physiological weaknesses***, or a ***pathological processes*** are not considered fit for transportation
- If only slightly injured or ill they may be considered fit for transport if no additional suffering



© INRAE/MAÎTRE, Christophe



## 2 Assessment using ABIs



Injury	Description of animal-based indicator
<b>Wound</b>	Severe open wound (thoracic, abdominal, cranial cavities opened); reopening surgical wound; a large infected wound, a large wound disturbing the integrity of the body surface (skin, mucosa, or muscle severed), or a severe haemorrhage, it must be considered unfit for transport
<b>Absence of vital resources (e.g. due to bad ventilation, inappropriate temperature, feed, water)</b>	<p>Heat stress: rapid shallow breathing, flared nostrils, unpredictable behaviour and gait, increased body temperature, high respiratory rate, high heart rate and profuse sweating;</p> <p>Cold stress: shivering</p> <p>Dehydration: unresponsive to surroundings, rapid and shallow breathing, drinking excessively for extended periods of time, aggression or threatening behaviour if water is present, dark-coloured or viscous urine (with possibly strong smell), abnormal faeces (loose or very hard, absent or infrequent defecation)</p>





## 2 Assessment using ABIs



<b>Physiological weakness</b>	<b>Description of animal-based indicator</b>
<b>Body condition</b>	An animal in a poor body condition is likely to be more susceptible to the stressors of transport, which is why extremely thin animals are not be considered fit for transport; BCS < 2.0 on a scale of 1 to 5
<b>Unable to move independently without pain or to walk unassisted</b>	If in standing animals weight is not distributed equally on all four limbs, as indicated by repeated weight shifting between legs or permanent resting of one limb, or reluctance to bear weight while walking is observed, it is highly unlikely that an animal is able to move without pain and thus unfit for transportation.
<b>Gestation status</b>	Females for whom 90% or more of the expected gestation period has already passed (last month of pregnancy), or females who have given birth in the previous week.



## 2 Assessment using ABIs



Pathological processes	Description of animal-based indicator
<b>Prolapse</b>	Prolapse refers to the protrusion of an organ (colon, vagina, uterus) that results in an animal no longer being fit for transport.
<b>Diarrhoea</b>	Profuse diarrhoea with a severe disruption of the general condition and a high risk of dehydration rendering animals unfit for transport.
<b>Udder alterations</b>	Acute mastitis (acute inflammation of the mammary gland), engorged or gangrenous udder are painful conditions resulting in animals unfit for transportation



## 2 Fitness for transport



### Recommendations for inspection

- Each animal must be assessed prior to loading
- Assessing pain levels according to Care4dairy may support decision making
- Veterinary advice in case of doubt

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**LIVE ANIMALS**  
**ANIMAUX VIVANTS**  
**LEBENDE TIERE**

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# 3 Colostrum provision to calves



## Legal requirements

- Each calf must receive bovine colostrum as soon as possible after it is born and in any case within the first six hours of life



© INRAE/BOCHE, Jennifer



## 3 Colostrum provision to calves



### Recommendations for inspection

Colostrum provision to calves

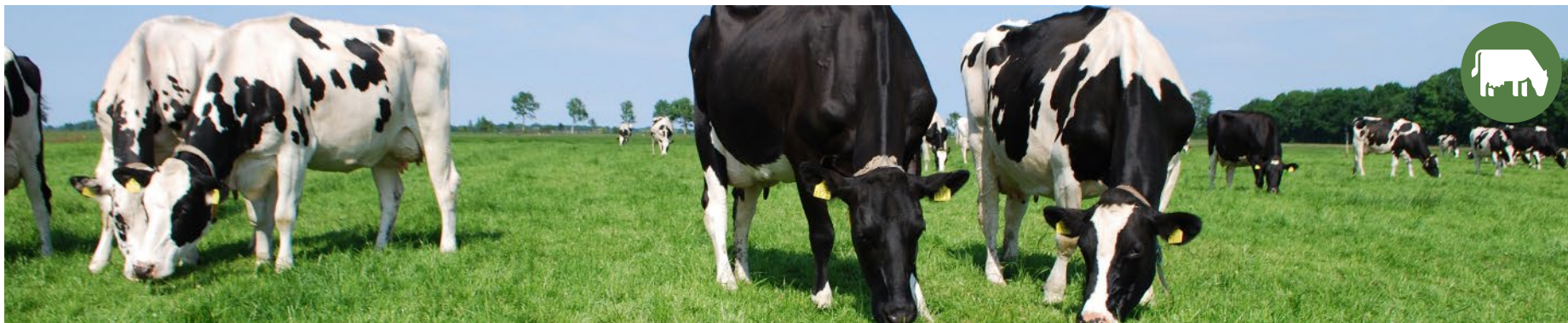
Indicator Factsheet 

#### What to check

The following information regarding the provision of colostrum to newborn calves should be collected from the farmer:

Criterion	Response	Reference
If the calves are let with their dam, what do you do if a calf has difficulties to suckle?		Help the calf to stand up and find the teats
If the calves are let with their dam, how do you check that a calf drunk colostrum from the dam?		Palpation of the calf belly, presence of the suckling reflex
If calves are given colostrum instead of suckling, how this is done?		Use of a teat bottle
How do you clean the equipment used for colostrum feeding?		Cleaning and disinfection after each use
What time after birth are newborn calves provided with colostrum ?	_____ h	Within 2-3 h after birth
Do you provide a second colostrum meal? When?	No ? Yes? _____ h	Yes, within 6-12 hours after birth
What amount of colostrum do you provide during the first 12 h?	_____ L	10% of the calf weight
Do you check the quality of colostrum ? How?	No? Yes?	Yes, with a Brixmeter
What threshold do you use to conclude on the quality of colostrum?		Brixmeter : 22% (50 g/L protein)

What do you do if the cow does not have colostrum or colostrum is of a poor quality?	Use of colostrum from another cow of the herd
Do you have a strategy to collect spare colostrum?	Keeping colostrum from healthy cows that have a very good colostrum (>100 g/L proteins)
How do you store spare colostrum?	Refrigerate or freeze
How long do you keep spare colostrum?	24 h if refrigerated 1 year if frozen (then thawed in a water bath)
Do you have a written protocole in place to ensure colostrum provision to calves?	Yes, see below
If yes, What does it contain?	<ul style="list-style-type: none"> <li>- Time the calf is left with its dam</li> <li>- How to provide colostrum when the dam does not accept the calf for suckling or suckling is not possible because of specific health issues on the farm</li> <li>- How colostrum is collected, frozen and defrosted before use</li> <li>- How the quality of the colostrum is checked</li> <li>- How the amount of colostrum ingested by the calf is managed</li> <li>- How the ingestion of colostrum and the vitality of calves is checked</li> <li>- How equipment is disinfected</li> </ul>



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# Update on Scientific Reviews

Isabelle Veissier, Valentin Brunet (INRAE)



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## Since the last meeting

### 6 reviews have been prepared

- **Relationnal enrichment** released
  - **Working equids** released
  - **Quality of care**
  - **Confinement in horses**
  - **Welfare at pasture**
  - **Thermal comfort**
- to be released  
end of 2024



## 1 Working equids (1/3)

=

an equid that performs a physical activity in the service of the person(s) who owns, keeps or hires it  
→ production, leisure, sport





# 1 Working equids (2/3)

Area of concern	Best practice
Training of animals	Training is <b>tailored to each animal's abilities</b> , temperament and intended tasks Training is based on clear communication, <b>positive reinforcement</b> and the gradual development of skills
Workload	Animals start to work <b>after 3 years old</b> Females do not work from 3 months before foaling Animals carry less than <b>20% (horses) or 30% (donkeys) of their bodyweight</b> The weight is well balanced Animals work a <b>maximum of 6h/d</b> with a <b>break</b> in the middle (at least 30 min) and are given <b>2 d of rest per week</b>
Monitoring	The animal's condition is regularly checked to prevent fatigue and injuries



# 1 Working equids (3/3)

Area of concern	Best practice
Equipment	<b>Equipment and tack fit</b> to the horse's size, conformation and intended use The equipment is regularly checked for wear and tear and adjusted or replaced when necessary
Healthcare	Healthcare includes <b>regular veterinary examinations</b> , vaccinations, medical treatments, dental care and parasite control
Feeding and watering	Animals have <b>free access to roughage</b> The diet is balanced and tailored according to age, workload, and body condition Clean, fresh <b>water is available ad libitum</b> , especially during periods of intense work or hot weather
Environment	Temperature, humidity, and terrain are considered when work is planned Shelter, shade and appropriate underfoot conditions are provided
Training of workers	Professional workers are <b>continuously trained</b> to stay informed about equine welfare and best practices



## 2 Quality of care

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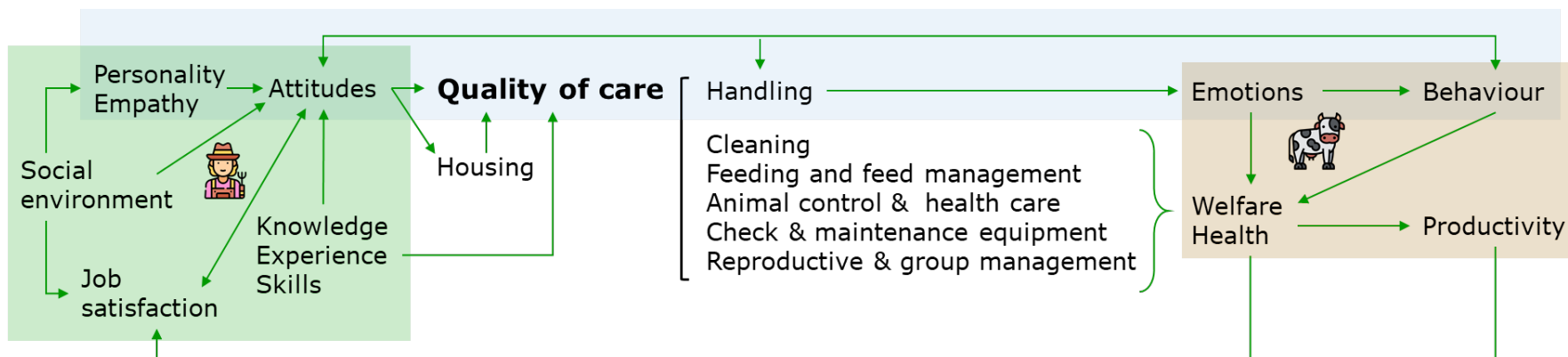
Quality and number of  
stockpersons





## 2 Quality of care

**Quality of stockpersonship is more important than quantity**



Legend:

- Farmer properties
- Animal properties
- Animal-Human Relationship



## 2 Quality of care

- **Other factors discussed in the review**
  - Herd size ; Number of animals per caretaker
  - Consistency of caretakers
  - Frequency and duration in contact with animals
  - Demographic variables (e.g. age, gender)
- **Recommendations**
  - Education and training of caretakers
  - Regular inspections (at least once a day)
  - Good practices for handling
  - To have one person responsible for animal care and welfare on each farm





## 3 Confinement in horses

=

Restriction of  
movement

Isolation



© INRAE/ BEGUEY Alain



## 3 Confinement in horses

- **Impact of confinement**
  - Behaviour (e.g. stereotypies, reactivity, aggressiveness)
  - Physiology and health (e.g. stress, immune functions)
  - Cognition (e.g. learning performances, behav. flexibility)
  - Trainability and safety (e.g. kicking, stress)
- **Recommendations**
  - Social housing should always be promoted
  - The group composition should be maintained
  - Adequate space should be provided to reduce aggression and injuries (e.g. at least 330 m<sup>2</sup> /horse in a paddock)
  - Young horses should be kept with adult horses
  - Social interactions should be checked
  - ...



## 3 Confinement in horses

- **Best practices for individual housing**
- Only for special requirements (e.g. veterinary treatments)
- Minimum dimensions of individual boxes:

Box properties	Formula for calculating dimensions
Surface (m <sup>2</sup> )	$(2 * \text{horse's height at wither})^2$
Shortest surface's side (m)	$1,5 * \text{horse's height at wither}$
Ceiling (m)	Horse's height at wither + 1,2

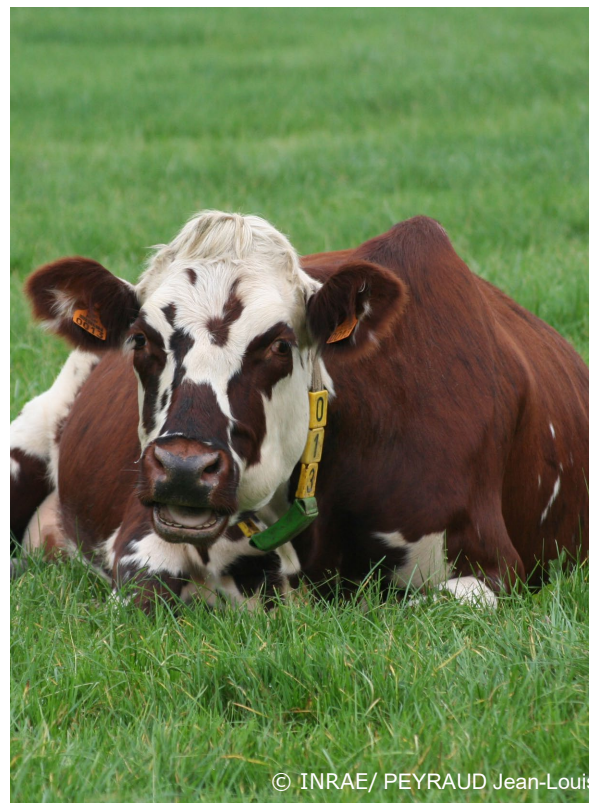
- Visual and physical interaction between horses, ensuring that horses that are placed next to each other get on well
- Enrichment of individual stalls
- Daily turnout in paddock/pasture with at least one conspecific



## 4 Welfare at pasture

=

*outdoor + grazing*





## 4 Welfare at pasture

- **Benefits of pasture and grazing**
  - Expression of natural feeding and exploration behaviours
  - Improvement of some health parameters
  - Expression of more positive emotions
- **Factors for success**
  - Quality/quantity of feed
  - Temperature
  - Walking distance
  - Type of soil
  - Infestations
  - Predation risk
  - ...



## 5 Thermal comfort (1/3)

=

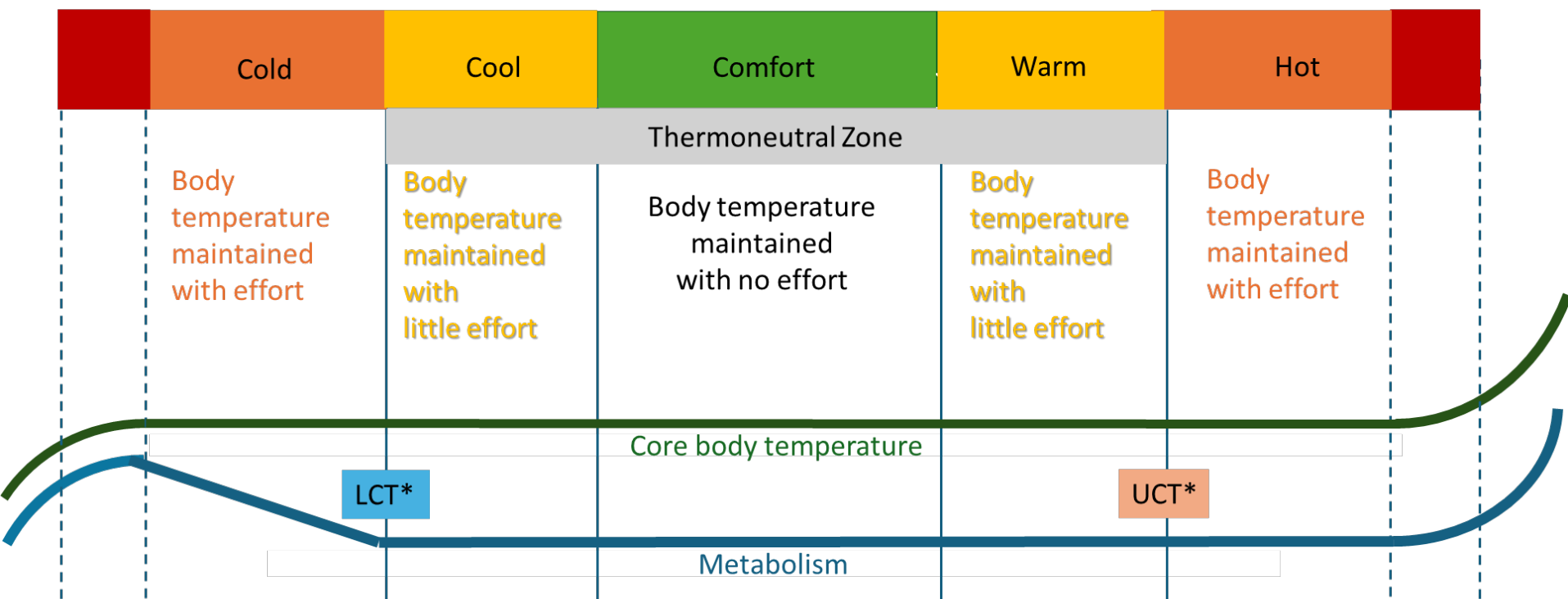
Cold and heat  
and their mitigation





## 5 Thermal comfort (2/3)

According to temperature, humidity, radiation, wind x animal type








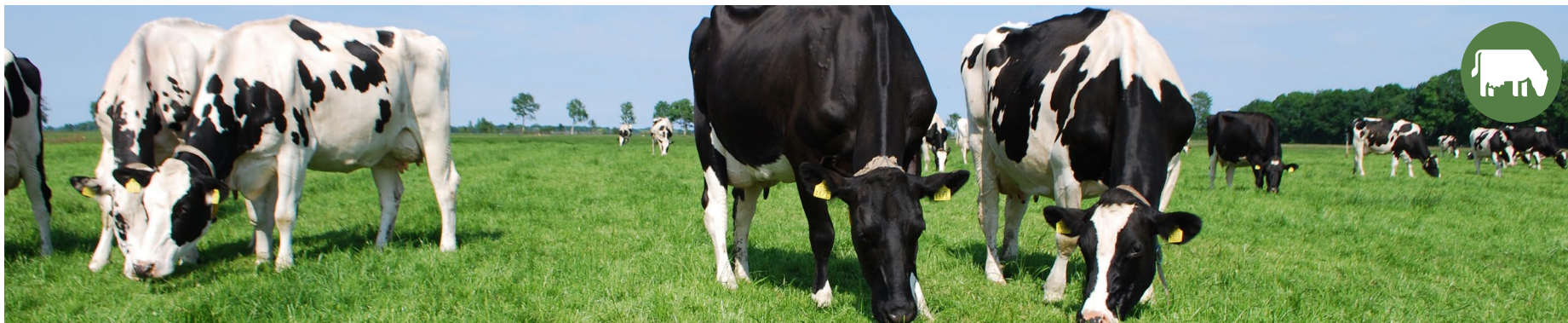
\* LCT, Lower Critical Temperature. UCT, Upper Critical Temperature





## 5 Thermal comfort (3/3) - Mitigation

Heat exchange	Protections against heat in ruminants
Heat production by animals	<ul style="list-style-type: none"> <li>Feeding during coolest hours</li> <li>Low-fibre diets</li> <li>Cool drinking water (24-28 °C)</li> <li>Large space allowance/animal</li> <li>Avoid physical exercise (handling, transport, work)</li> </ul>
Convection	<ul style="list-style-type: none"> <li> Ventilation and fans</li> </ul>
Conduction	<ul style="list-style-type: none"> <li> If ground is warm: ensure the bedding is dry</li> </ul>
Evaporation	<ul style="list-style-type: none"> <li> Ventilation possibly combined with sprinklers</li> </ul>
Radiation	<ul style="list-style-type: none"> <li> Shade: trees, shelter with high roof; pastures exposed North or East, turn animals indoors during hot hours</li> <li> Cool roofs</li> </ul>



**Thank you for  
your attention**



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# Training activities

Silvia D'Albenzio, IZSAM



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Training Need Analysis

2

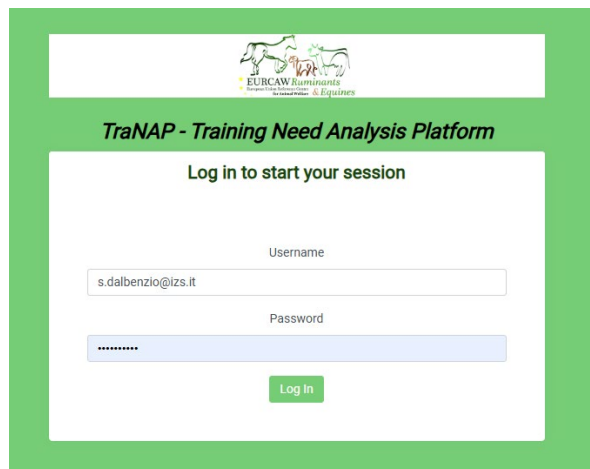
Training EURCAW *Ruminants & Equines* 2021-2024

3

Mapping training on AW a joint initiative of the EURCAWs

# 1 Training Need Assessment

- ❖ The Centre has designed, developed and adopted the platform for the **training need assessment (TraNAP)**. It also designed and produced an IT platform to map training on animal welfare in the EU for the four EURCAWs and tools to assess quality and impact of training on animal welfare in Europe are going to be finalised, according to the work programme 2022-2024



**TraNAP - Training Need Analysis Platform**

Log in to start your session

Username  
s.dalbenzio@lzs.it

Password  
\*\*\*\*\*

Log In

**Active surveys**

Show 10 entries Search:

Survey title	Survey Version	Survey Language	Start date	End date	Target
QUESTIONNAIRE FOR NCAs	1	EN	2022-10-27 00:00	2030-12-09 23:59	NCAs

Showing 1 to 1 of 1 entries Previous Next

**Survey Reports**

Show 10 entries Search:

Survey title	Area	ID	Profile	Country
QUESTIONNAIRE FOR INSPECTORS	INSPECTORS	QUESTIONNAIRE FOR INSPECTORS	QUESTIONNAIRE FOR INSPECTORS	ALI
QUESTIONNAIRE FOR NCAs	NCAs	QUESTIONNAIRE FOR NCAs	QUESTIONNAIRE FOR NCAs	ALI

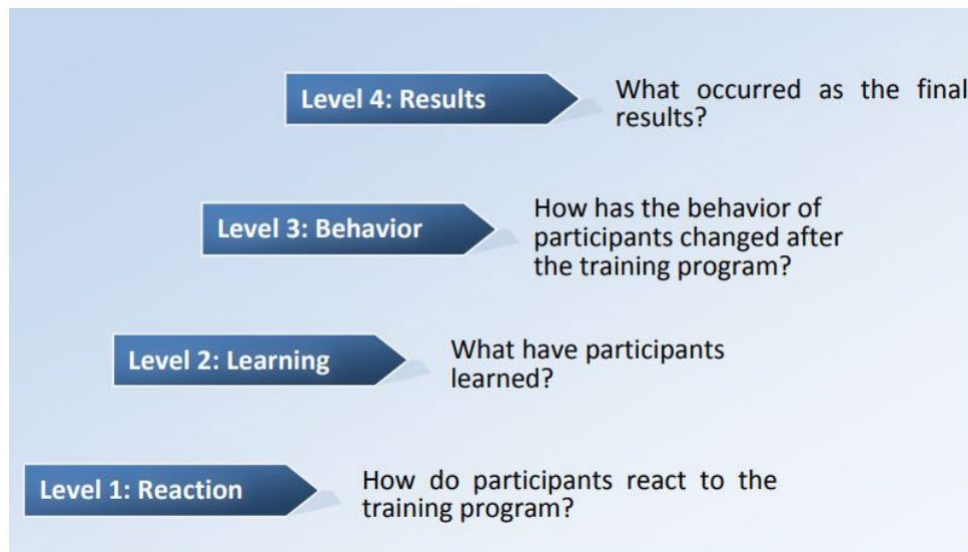
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## 2 Training EURCAW Ruminants & Equines 2021-2024

- ❖ The Centre is finalising IT tools to assess quality and impact of training on animal welfare in Europe, according to the work programme 2022-2024



Training management cycle



Four levels of evaluation





## 2 Training EURCAW Ruminants & Equines 2021-2024

### ❖ Production of 5 training toolkits:

- ✓ Environmental enrichment for ruminants and equines (available)
- ✓ Visual and tactile contact in individually housed calves (available)
- ✓ Frequency and quantity of milk feeding to dairy calves (available)
- ✓ Pain management (ongoing)
- ✓ Horse confinement (ongoing)

### ❖ 5 elearning courses (corresponding to 5 toolkits) 3 already delivered to about **180** beneficiaries

### ❖ Webinar on the presentation of the Toolkit for Trainers on Calf feeding

- ✓ 16 May 2024 (About **90** attendants from CAs and Supportive Bodies)

### ❖ Webinar on the presentation of the Toolkit for Trainers on Environmental Enrichment

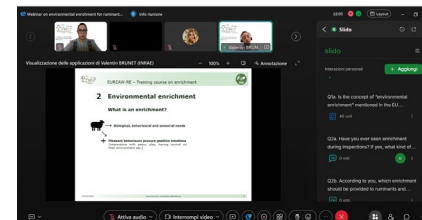
- ✓ 20 September 2024 (about **100** attendants from CAs and Supportive Bodies)

### ❖ Webinar on the presentation of the Toolkit for Trainers on Visual and Tactile contact

- ✓ 28 November 2024 (more than **170** participants already enrolled)



# Total beneficiaries: 540





## 3 Mapping training on AW a joint initiative



Mapping training initiatives on the welfare of ruminants and equines, pigs, poultry, small farmed animals and aquatic animals in the EU Member States

Dear Training Provider,

The four European Union Reference Centres for Animal Welfare (EURCAWs) designated by the European Commission intend to jointly:

- identify areas for improvement in the EURCAWs training offer and, more generally, in the quality of the training services on Farm Animal Welfare in the EU;
- stimulate collaboration between training organisations and the EURCAWs for high-quality training on Farm Animal Welfare.

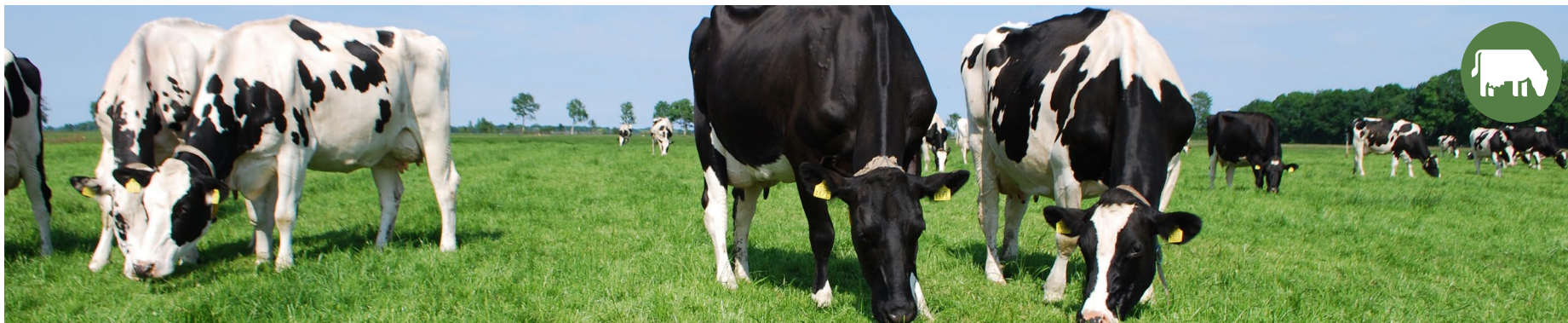
For this reason, the EURCAWs are promoting an initiative aiming at designing a map of past, present and future training initiatives on the welfare of ruminants and equines, pigs, poultry, small farmed animals and aquatic animals in the EU.

The ideal respondents to the survey are all the organisations managing training activities in the field of Animal Welfare, as detailed below:

- Competent Authorities
- National Reference Centres and their Supporting Bodies
- Training agencies/centres dealing with Animal Welfare (both private and public)
- Professional organisations (e.g. farmers' associations, veterinary medical associations)
- Voluntary associations and NGOs

The first round of the investigation will be closed on November 8, 2024.

**[https://izs.qualtrics.com/jfe/form/SV\\_55cA0gztorNbpSm](https://izs.qualtrics.com/jfe/form/SV_55cA0gztorNbpSm)**



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your attention!**



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# Dissemination & Communication

Alison Hanlon



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**1** Community of Practice

**2** Inspector@work

**3** Care4Dairy



# 1 Community of Practice

- Ready for launch!
- Password-protected space
- DGS requested CoP for CAs & Official Inspectors
- 'How to' guide for participants
- Schedule of activities, facilitated by EURCAW
- Opportunity to create a topic for discussion



# 1 Phased roll out of CoP

Small cohort of CAs

Extend to all CAs (1-2 per MS)

Invite nominations for Official Inspectors





## 2 Inspector@work

Knowledge sharing – providing insights into problem-solving and best practice approaches

5 articles – Austria, France, Greece and Sweden (2)

Interviews can sometimes be performed in language of MS, questions sent in advance

Article drafted and sent to Inspector to check

Article published on website in English (and possibly MS language)

We are looking for volunteers!







## Best Practice Guides for Dairy Cattle

# CARE4DAIRY Best Practices Guides & Factsheets



- Best Practice Guides on 4 life stages of dairy cattle & 21 Factsheets
- Review of scientific & technical evidence to identify good and best practice in 4 animal welfare domains
- Consultations with stakeholders & sign off by DG Sante



## Infographics, podcasts & short animated videos – 1 per life stage



### What's important for the calf's environment?

Best practice farms provide clean, comfortable and enriched indoor & outdoor environments to support the social and physical development of calves.

**Provide cow-calf contact until weaning** with either the dam or a foster cow.

**Feed 20% of body-weight in liquid milk/replacer** over at least 4 feeds/day.

**Offer a variety of pleasurable feed-stuffs** to weaned calves.

**Provide a warm environment** 12-22°C for neonatal calves and 10-20°C for older calves.

**Provide ample space** (min. 3m<sup>2</sup>/calf) with daily access to an exercise area (min. 10m<sup>2</sup>/calf).

**Offer calves pasture access** in a sheltered dry location when weather conditions allow.

**Ensure 1 feeding source per calf** (e.g. teat dispenser or nipple bucket) without competition.

**Use feeding equipment** which enables active and frequent natural feeding behaviour e.g. straw racks.

**Provide cow-calf contact or a system that enables natural feeding behaviour** without competition from other calves.

**Provide a warm and dry environment with ample space and designated areas** for feeding, resting, exploration and play.

**Use infra-red lamps or calf jackets** for cold calves (indoors).

**Create a comfortable lying area** with soft rubber flooring and deep straw bedding (indoors).

**Separate areas for resting, feeding and exercise** in pens (indoors).

**Raise calves with their dam or foster cow**, or in paired or group housing systems. Use different types of enrichment to support good mental and physical development of calves.

**Raise calves with their dam or a foster cow** until behavioural weaning.

**Provide straw bales** for enrichment while enabling calves to hide from bulls.

**Use paired or group housing** for calves (max. 4) of a similar age, size and health status.

**Use dedicated clean equipment, clothes and boots** when caring for calves.

**Use cuddle boxes** in cow-calf contact systems to isolate sick calves.

**Create a dedicated hospital area** for sick calves and a medical area for procedures and recovery of healthy calves. Use cuddle boxes in cow-calf contact systems to isolate sick calves. Employ high biosecurity standards to help protect calf health and welfare.

**Create a dedicated hospital area** for sick calves and a medical area for procedures and recovery of healthy calves.

**Use dedicated clean equipment, clothes and boots** when caring for calves.

**Use cuddle boxes** in cow-calf contact systems to isolate sick calves.

[More information](#)

### Podcast: Management strategies to reduce the risks from calf losses

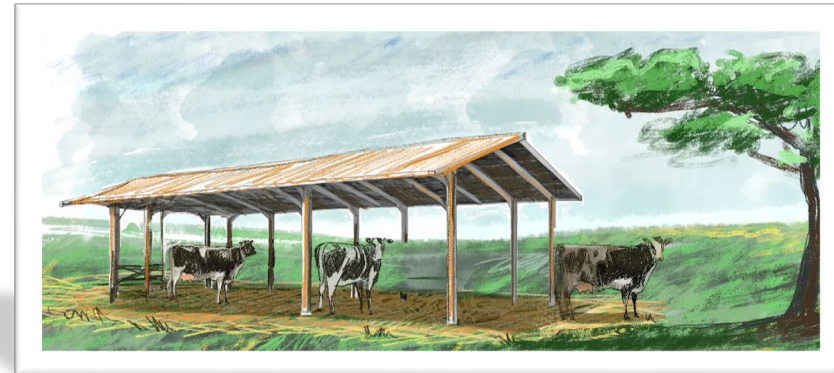


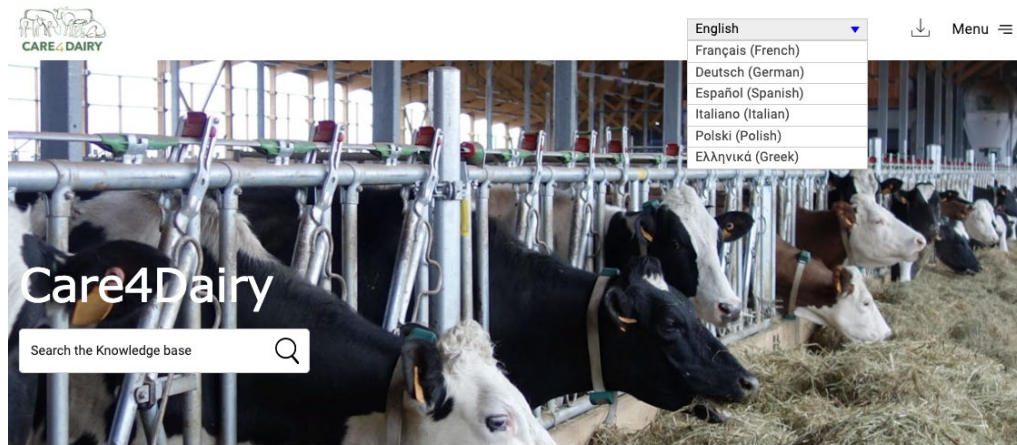
©INRAE

#### SUMMARY

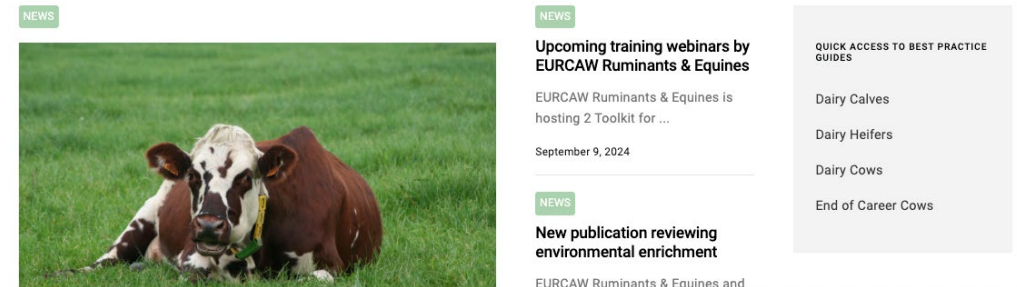
Promoting a strong immune system of the calves and reducing disease challenge through health planning and biosecurity are key success factors for calf survival.

In this podcast we hear from Dr Catherine McAloon, European specialist in bovine health from UCD, Ireland and Dr Claire Littlejohn from the Care4Dairy consortium.





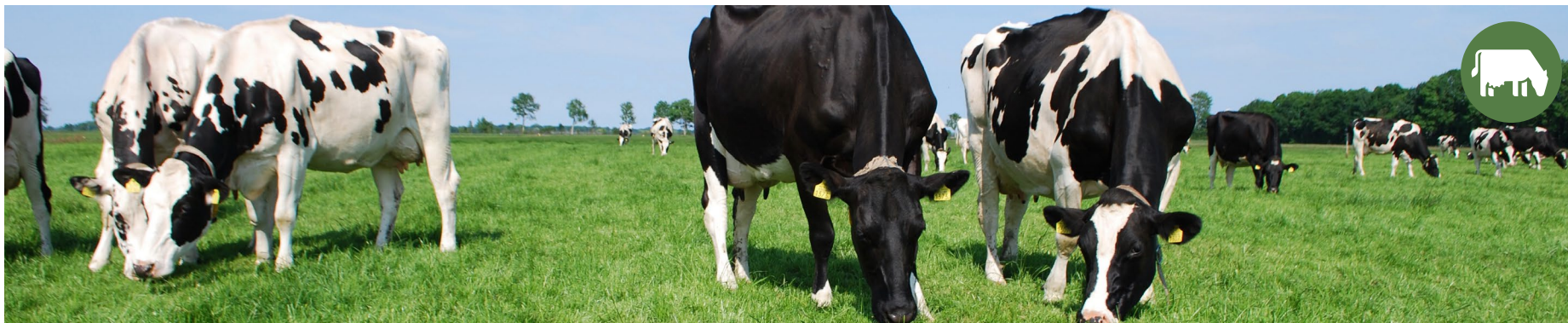
## News



- Responsive
- Navigation via 'Menu' or 'Quick Access' to access to the Best Practice Guides, factsheets, success stories & resources
- News items & newsletter
- Smartphone APP
- Long-term management by EURCAW *Ruminants & Equines*







**Thank you for  
your attention**



Designated by  
the EU Commission

