



FRCAW Newsletter 60

June – July 2026

Editorial

Animal welfare at the heart of farm sustainability: international and national directions of travel



Photo from the [Idele website](#)

Over the past few months, publications in the news have pointed to a convergence of thinking on the relationship between animal welfare and sustainability in farming, both internationally and in terms of national policies.

An [opinion paper published in Animal Welfare](#) has proposed a novel interpretation of the United Nations' sustainable development goals (SDGs). The authors take the view that the absence of explicit reference to animal welfare in the goals need not necessarily be viewed as detrimental, suggesting instead that animal welfare could and potentially should be an integral part, 'anywhere and everywhere', in sustainable development measures. They assert that animals, their products and the ecosystems of which they are a part cannot be sustainable without due consideration to animal welfare. This view appears to be shared by the European Commission, which has issued a

[press release on its new strategy for livestock farming](#), in which animal welfare features explicitly as a central part of the identified priorities for a sustainable and competitive livestock sector.

Science has an important role to play in guiding EU policy on animal welfare and the sustainability of livestock farming systems. An interview-based study carried out in 2025 for the Collaborative Working Group (CWG) on Animal Health and Welfare (AHW) of the Standing Committee on Agricultural Research (SCAR) has examined how the [interface between science and EU policy](#) on livestock currently operates, mapping barriers and pathways and identifying practices that can improve it. In the report, policy on fish welfare warrants its own sections, and the continued lack of attention paid to it by terrestrial livestock-focused ‘hubs’ is noted. The report proposes directions for policy-driven research, stressing the importance of project co-creation and the practical application of research outcomes. It also proposes pathways to increase knowledge transfer from science to policy. The research priorities of the main responding institutions showed particular interest in a One Health approach, the development of animal-based measures and smart farming, Positive Animal Welfare (PAW), human-animal interactions, the protection of animals during transport, welfare in aquaculture and animal adaptation to climate change.

Animal welfare is thus no longer viewed as a separate issue, but is considered to be an integral part of sustainable farming policies, where greater reliance on scientific knowledge to shape decisions for the future can be observed.

Indeed, the authors of an [article published in Frontiers in Animal Science](#) question the objectivity of scientific knowledge on livestock welfare, which they suggest is influenced by funding availability and operational constraints, a phenomenon they term ‘pragmatism bias’. They suggest that this phenomenon manifests in tendencies to focus on intensive production systems, short-term gains, and symptoms rather than root causes. To enable research to continue to inform decision makers through objective scientific outputs, the authors recommend that transparent communication about the issue among researchers should become the norm (through training, in particular). The authors also argue for neutral funding systems to support animal-centred research, and for research to be broadened to include alternative livestock farming systems that would allow animals to flourish.

2025 European Report on Animal Law



Photo from the [2025 european report on animal law](#) - The European Institute for Animal Law & Policy - © Wald1siedel

In its [annual report for 2025](#) on recent developments in EU animal law, the European Institute for Animal Law and Policy lists a number of advances in relation to animal welfare, particularly that of fur-producing animals, and looks ahead to the adoption in May 2026 of the new regulation on the welfare of dogs and cats (now implemented). The thinktank nevertheless reminds its readers that other policy orientations are more concerning, such as reduced protection for some wild species, and the fact that a number of awaited legislative texts, particularly on farm animals and transport, have been subject to delays since 2023. In its [July release of its Strategy on Livestock](#) (see above), the European Commission has now announced its intention to propose targeted revisions of animal welfare rules for laying hens and broilers (end of 2026) and pigs (2027), with a focus on phasing out cages, practical on-farm welfare indicators, ending the systematic killing of male chicks, and introducing WTO compliant equivalent import requirements.

Funding the transition towards cage-free farming



Photo from the [Ifip website](#)

The phasing out of caged farming systems is now widely embedded in the European political agenda. Following a [question in the European Parliament](#) on the progress of the End the Cage Age European citizen's initiative, the European Commission has reasserted its commitment to propose, between now and the end of 2026, an initial revision of the legislation for the phasing out of cages in European farming. But, as the regulatory deadlines for the changes approach, one issue has moved to centre stage: how will the transition be funded and what help will be given to farmers to implement it? [A report from the Institute for European Environmental Policy](#) (IEEP) has concluded that the binding constraint is financial rather than technical. The investments that are required to alter buildings, reequip farms and adapt practices remain substantial. Moreover, uncertainty over the timetable for the prospective European legislation has slowed investment decisions by farmers. The report also stresses that the current CAP provisions still reward the maintenance of existing systems over their transformation. Among its recommendations, the IEEP calls for the creation of species-specific transition plans (that include financing packages, advice and training) and to prioritise animal-welfare investments within CAP Strategic Plans. In its [Strategy on Livestock, the European Commission](#) does indeed plan to explore a specific financial instrument to bridge the financing gap for investments in the transition to higher welfare. It also intends to explore, with the European Investment Bank, preferential access to loans for farmers engaged in a transition towards cage-free farming systems.

Meanwhile, in France, at the request of the French Ministry for Agriculture, Agri-food and Food Sovereignty (MAASA), the [IFIP has launched a survey](#) of pig farmers, seeking to identify the drivers and barriers for action for those working in the sector, along with the support they would need in the phasing out of cage farming for breeding sows and boars.

Measures to cope with heatwaves on farms



Photo from the [French Ministry for Agriculture, Agri-food and Food Sovereignty website](#) (MAASA) - © Cheick Saidou

This summer, Europe has already witnessed a succession of record-breaking heatwaves. Livestock professionals and private pet owners now have easy access to the information they need on preventive and precautionary measures to protect their animals from these extremes of temperature, as part of a [compilation of the most up-to-date information](#) on measures to take during a heatwave published by MAASA on its website. From an animal welfare perspective, key information includes how to house farm animals, the restrictions on animal transport during a heatwave, and the actions private individuals can take. This targeted national information campaign is one of the measures contained in the French National Heatwave Plan, which has been in place since the summer of 2003. The French professional bodies are also active in providing support. For its part, the IFIP has collected together the recommendations in its existing publications to create a [complete practical guide to the adaptation of pig farming practices to heatwaves](#). A separate [guide for the transport of pigs in heatwaves](#) is also available. Last, the IDELE, the livestock farming institute, has published a dossier of simple and quick modifications to buildings that can [reduce the impact of thermal stress on dairy cattle](#). In a broader context, the IDELE also offers four [training courses](#) of varying lengths on adaptation to climate change on ruminant farms.

Table of content

Editorial	1
Animal feed	9
23/05/2026 : Research on Cattle Feeding and Nutrition in Relation to Animal Welfare: A Bibliometric Analysis	9
Animal husbandry and human-animal relationship.....	9
20/07/2026 : Canicule : les bons réflexes à adopter en élevage de porcs.....	9
09/07/2026 : Canicule : Prioriser ses actions pour limiter l'impact du stress thermique des bovins laitiers	11
17/06/2026 : Sommes-nous les parents de nos chiens ou de nos chats ?	11
17/06/2026 : Domestic goats can follow the direction of human voices to solve a hidden-object task	12
04/05/2026 : Behavioral challenges and welfare implications in lambs raised under intensive dairy sheep production systems	13
Animal welfare initiatives	14
20/07/2026 : Country consultation on AH&W priorities and challenges.....	14
07/07/2026 : Professionnels, consommateurs : les précautions à prendre en cas de canicule	15
30/06/2026 : EURCAW Ruminants & Equines Newsletter - Vol 14.....	16
26/06/2026 : EURCAW-Poultry-SFA newsletter edition 16	16
16/06/2026 : Enquête éleveurs sur la transition vers la fin des cages en élevages porcins.....	17
03/06/2026 : 16th Newsletter EURCAW-Pigs.....	17
29/05/2026 : Fish welfare becomes certifiable	18
14/11/2025 : The science-policy interface on farm animal welfare in the EU	19
Cognition – Emotions	20
17/06/2026 : Timescapes of non-human experience.....	20
16/06/2026 : Music and animal welfare: from behavioral and physiological effects to potential applications in animal husbandry.....	20
09/06/2026 : Review: The roles of individuality and social life in shaping positive animal welfare in livestock species	21
03/06/2026 : Octopus bimaculoides can learn to utilize a mirror to localize a reward outside the line of sight	22
02/06/2026 : Plaisir animal : au bonheur des bêtes.....	22
Ethics – sociology – philosophy – animal rights	23

16/07/2026 : Pragmatism bias in farm animal welfare science	23
18/06/2026 : A critical review on gender differences in attitudes, perceptions, and behaviours about farmed animals	24
Housing and enrichment	25
19/06/2026 : Risk assessment: Difficult to ensure good animal welfare for exotic birds	25
08/06/2026 : Review: Free-stall bedding management for enhanced dairy cow health and welfare	26
12/05/2026 : Grooming using brushes in cattle: A review of benefits, influencing factors, and monitoring opportunities	27
05/05/2026 : Financing the transition to cage-free farming in the EU	28
Invertebrates	29
03/07/2026 : Decapod Crustaceans in Animal Welfare Law: Fragmentation, Gaps, and Emerging Models in Europe and Oceania	29
13/05/2026 : Flexible self-protection as evidence of pain-like states in house crickets	30
One Welfare	30
06/07/2026 : A one welfare perspective on calf health: a qualitative study of knowledge, attitudes, working conditions, working atmosphere, and communication among farmers and calf-care teams on large Saxon dairy farms	30
15/05/2026 : No mention of animal welfare in the United Nations' sustainable development goals? But this may be a good thing!	31
30/04/2026 : Managing trade-offs between economic, environmental, and animal welfare performance in French suckler cattle farms through feeding practices	32
Population management and animal welfare	32
30/06/2026 : L'observatoire de la protection des carnivores domestiques (OCAD)	32
16/06/2026 : Part 1: A Sector-Wide Survey of UK/British Isles Shelter Organisations Caring for Cats: Caregiver-Reported Approaches to Housing, Husbandry and General Care Provision	34
07/06/2026 : Comparative effectiveness of culling and birth control in free-roaming animal management: A systematic review	34
Precision farming and AI	35
09/07/2026 : Multi behavior recognition and health assessment of laying hens using RSA YOLO under welfare oriented farming	35
08/06/2026 : Invited Review: Precision livestock farming technologies in swine intensive production	36
18/03/2026 : Comparing the performance of deep learning video-based models and trained veterinarians in cattle pain assessment	37
Regulation	37



07/07/2026 : Commission sets the direction for prosperous livestock sector and a self-sufficient protein system	37
03/07/2026 : Parlement européen : Réponse écrite à la question E-001795/2026 : Non-compliance with European legislation on farm-animal welfare in pig holdings and state of play regarding the 'End the Cage Age' initiative	39
25/06/2026 : Évolutions du droit de l'animal dans l'Union européenne (2025)	40
11/06/2026 : La protection des chats et des chiens en droit de l'Union européenne	41
27/05/2026 : Parlement européen : réponse écrite à la question E-004785/2025 : Transport de veaux non sevrés	41
11/05/2026 : Sénat - Interdire la manipulation et la sélection génétique des animaux de compagnie (exposé des motifs)	43
03/2026 : Évaluation de l'impact du PSN sur le bien-être animal-rapport final	45
Transport, slaughter, pick-up	47
20/07/2026 : Canicule : recommandations pour le transport des porcs	47
18/05/2026 : Electrophysiologic evidence of loss of consciousness in cattle during slaughter with and without stunning: a systematic review and methodological overview	48
11/05/2026 : Raising the bar for animal welfare standards	48
07/05/2026 : Vibrations and driving events inside a pot-belly trailer and related effect on pig behavior during transport	49

Animal feed

23/05/2026 : Research on Cattle Feeding and Nutrition in Relation to Animal Welfare: A Bibliometric Analysis

Document type: scientific synthesis published in [Animals](#)

Authors: Ana María Herrera, Emilia Ponce, Robert Emilio Mora-Luna

Preview: Research on cattle feeding and nutrition has increasingly integrated animal welfare considerations in response to evolving scientific, societal, and production challenges. This study aimed to characterise the global scientific landscape on this topic through a comprehensive bibliometric analysis. A structured methodological framework was applied using the Web of Science database, covering the period from 2009 to 2025, limited to literature published in English, Spanish, and Portuguese. The analysis followed five stages: research design, data collection, analysis, visualisation, and interpretation, using a broad search strategy combining terms related to cattle production, nutrition, feeding, health, stress, and welfare. Bibliometric indicators and science mapping techniques were implemented using the Bibliometrix package in R (Biblioshiny), including collaboration network analysis, keyword co-occurrence, thematic evolution, and Bradford's Law to identify core journals. In total, 424 documents were analysed. The results showed sustained growth in scientific production, particularly from 2016 onwards, indicating consolidation of the field. Output was concentrated in a limited number of countries, institutions, and journals, supported by increasingly interconnected collaboration networks. Thematic trends revealed a shift towards integrative approaches linking nutrition with stress, health, and productivity, positioning nutrition as a key tool to enhance welfare and efficiency, although behavioural and socio-economic aspects remain underrepresented.

Animal husbandry and human-animal relationship

20/07/2026 : Canicule : les bons réflexes à adopter en élevage de porcs

Document type: good practice guide published by the [IFIP](#)

Authors: Yvonnick Rousselière, Nathalie Quiniou, Sylviane Boulot, Alexia Aubry

Preview: Following a series of heat waves that have impacted the pig industry across all regions of France, the IFIP has produced a compilation of recommendations from its existing publications, forming a comprehensive, practical, and easily accessible online guide. In doing so, it helps pig farmers to better prepare for such events by adapting their farming practices to the changing climate (that can be downloaded for free). Table of contents:

1 – BEFORE A HEAT WAVE: MAKE SURE CONDITIONS ON FARM ARE AS GOOD AS POSSIBLE

- Check that the ventilation system is working properly
- Reduce stocking density towards the end of finishing
- Restrict competition for resources (water and feed)
- Use summer feed formulas
- Prepare breeding stock
- Prepare for insemination
- The human factor is important
- Consult your technician and veterinarian

2 – DURING EXTREME HEAT: IMPROVE ANIMAL COMFORT

- Observe animals to assess their perceived temperatures
- Avoid actions that lead to activity spikes in the middle of the day
- Increase water intake
- Spray water on animals outside the barns
- Increase air intake surface area
- Create airflow onto the animals
- Mist with water near the air intakes
- Restrict rises in bedding temperatures
- Anticipate peaks of heat by managing feeding times, portion sizes, and the distribution of special feed
- Accurately detect when animals come on heat
- Protect semen doses
- Inseminate using flexible protocols
- Monitor gestation so failures can be quickly detected – Monitor sows in the maternity area

3 – AFTER EXTREME HEAT: PLANNING FOR THE FUTURE

- Reduce the building's heat absorption
- Restrict the sunlight that enters the building
- Invest in a cooling system
- Invest in a ground-source heat pump
- Return to a normal feeding schedule
- Long-term effects
- Conduct a post-heatwave assessment of reproduction

4 – PRACTICAL INFORMATION

- Cost of major accidents that occur in pig farming
- Early warning tools
- IFIP training

[Click here to download the guide to pig farming during heat waves \(in French\)](#)

09/07/2026 : Canicule : Prioriser ses actions pour limiter l'impact du stress thermique des bovins laitiers

Document type: report published on the website of [KeepCool](#) by the [Idele](#)

Authors: Bertrand Fagoo (Institut de l'Élevage), Tanguy Morel (Institut de l'Élevage), Dominique Lagel (BTPL – Bureau Technique de Promotion laitière), Pierrick Eouzan (Chamber of Agriculture of Brittany)

Preview: To address heat stress affecting dairy herds, there are certain steps you can take quickly before considering broader adaptations to your barns:

- Comfort inside the barn and improved hygiene (...)
- Water, water, water! (...)
- Adjusting food service practices (...)
- Protection from solar radiation: a major challenge! (...)
- Maximizing ventilation...while protecting against the sun (...)
- Cooling solutions (...)

17/06/2026 : Sommes-nous les parents de nos chiens ou de nos chats ?

Document type: article published in [The Conversation](#)

Authors: Emilie Dardenne, François-Xavier Roux-Demare

Preview: France is home to 79.8 million pets, including some 33 million fish, nearly 17 million cats, and 10 million dogs. But what are the bonds that bind us to these beings who share our daily lives? Are they part of our family? Are they our children?

This is one of the questions addressed by animal studies researcher Émilie Dardenne and legal scholar François-Xavier Roux-Demare in the *Que sais-je?* volume on pets. Here are some snippets. The 2025 Ipsos–Santévet survey shows that pets, particularly cats and dogs, play a central role in the lives of the French. 67% of the French population will not consider a romantic relationship with someone who does not like animals.

This bond can also be observed in their daily lives: many adapt their leisure activities (55%), and some would even go so far as to change partners for the sake of their pet (22%). The younger generations seem particularly committed: 18- to 24-year-olds say they are willing to make changes

to their work, leisure activities, or accommodation for the welfare of their pets.
The status of family member for two-thirds of the French population

These results can be interpreted as an indication of an emerging “zoo-inclusive” trend, though whether it is unprecedented in historical terms still remains to be confirmed. The French widely consider their pets to be family members (69%), or even children or best friends. Their pets are included at Christmas and their birthdays are celebrated, and nearly one-third of owners let them sleep in their beds.

The study is evidence of a shift in attitudes: pets play a major role in people's emotional lives, often comparable to that of a close human relative. The survey suggests that the relationship between the French and their pets is becoming increasingly close and emotional. More than a third consider their non-human companions to be their children, and this proportion is even higher among women (42%), particularly those aged 35–44 (46%).

This intimate, “parental” bond is stressed by many owners, who describe a bond comparable to that of a parent towards their child. The perceived mental health benefits are also significant: 95% of pet owners say their companion animal improves their well-being. Dogs, in particular, provide a sense of security (69%). [...]

A Relationship with Multiple Benefits

While the benefits of sharing one's life with a pet do not come free of certain health risks, such as rabies or toxoplasmosis, the relationship brings with it several physiological advantages, helping to reduce anxiety, lower blood pressure, and decrease the risk of heart disease. Taking your pet out also promotes physical activity and increase the likelihood of striking up conversations with other people—whether owners are out walking their own dogs or others are simply drawn to an animal (although there is sometimes also annoyance at the animal's presence and the risk of bites or waste left in public places).

Pets provide their human companions with a form of “ontological security” in an era marked by the breakdown of traditional values and institutions. Ontological security (a sociological concept formulated by Anthony Giddens) is the basic sense of stability and continuity that allows a person to feel secure in the world. It is founded on the reassurance of routine, the reliability of relationships, and a coherent sense of identity.

Pets contribute to this security by offering a stable and predictable presence to their caregivers, by helping to establish daily routines and rituals (walks, meals, grooming), by providing a secure emotional foundation free from judgment or disruption, and by reinforcing the sense of being useful, recognized, and loved. Thus, pets would appear to foster a sense of ontological security and bring meaning to the lives of their human companions. [...]

17/06/2026 : Domestic goats can follow the direction of human voices to solve a hidden-object task

Document type: scientific article published in [Royal Society Open Science](#)

Authors: Stuart K. Watson, Christian Nawroth, Alan G. McElligott, Federico Rossano, Simon W. Townsend

Preview: An underexplored dimension of vocal referentiality is the ability to process the direction in which a vocalization is emitted as a cue towards its referent. Here, we investigated whether domestic goats (*Capra hircus*, $n = 29$) can use human voices as a directional cue in a hidden-object task. In each of three conditions, subjects were individually presented with a human experimenter obscured by a barrier, and two identical containers, one of which was baited with food. In the ‘reward-directed speech’ condition, the experimenter vocalized excitedly towards the baited container while sitting closer to the unbaited container, and then the goat was able to select which container to explore. Subjects chose the baited container at above chance level. Two control conditions were identical to the reward-directed speech condition, except that the experimenter was either silent (‘no speech condition’) or directed their voice away from both containers (‘non-reward-directed speech condition’). Subjects did not choose the baited container at above chance level in either control condition. We conclude that goats are capable of attending to the directional cues provided by human voices and discuss the possible roles of domestication and experience with humans in the emergence of this ability.

04/05/2026 : Behavioral challenges and welfare implications in lambs raised under intensive dairy sheep production systems

Document type: scientific synthesis published in [Frontiers in Animal Science](#)

Authors: Simeonov M, Harmon DL and Freitas-de-Melo A

Preview: Intensive dairy sheep production systems, which represent a substantial and growing portion of the global livestock sector, present significant behavioral and welfare challenges for lambs. This review aims to summarize and critically evaluate current knowledge on the behavioral challenges and welfare implications of rearing lambs in intensive systems. It also examines the natural social and feeding behaviors of lambs to establish a framework for understanding their behavioral needs, while contrasting these with constraints inherent to intensive livestock production.

Key management challenges include precocious or early mother-young separation, which disrupts nutritional and social learning and can influence how lambs respond to environmental challenges later in life. These challenges are multifaceted, including adaptation to artificial rearing systems with variable milk replacer composition; transition from milk replacers to solid feed; and relocation and social regrouping for fattening. The combined effects of suckling cessation, transport, social mixing, and abrupt dietary transitions constitute highly stressful events for lambs. *

Natural social behaviors, including the establishment of the ewe-lamb bond and access to maternal models, are critical for the development of efficient feeding strategies and environmental interaction. Disruption of these processes during sensitive neonatal periods can lead to heightened stress sensitivity, reduced feeding efficiency, and impaired social integration. In group-housed

systems, social structure and competition determine access to resources and welfare outcomes, with dominant animals holding advantages in feeding behavior while subordinate individuals adopt adaptive but often energetically inefficient strategies.

However, welfare outcomes are highly management-dependent, and the costs of intensive systems are not inevitable. Emerging evidence identifies practical interventions that substantially improve outcomes, including: (1) positive human-animal interactions to reduce mortality; (2) physical enrichment to boost early weight gain; (3) the use of older “tutor” animals to accelerate solid feed adaptation via social learning; and (4) optimized grouping strategies to minimize aggression. Furthermore, providing manipulable bedding and high-quality milk replacers is critical for physiological stability.

While intensive systems present inherent challenges, evidence-based management practices can effectively mitigate negative impacts. Understanding and applying knowledge of social hierarchy, individual adaptability, and critical developmental windows is essential for promoting productivity.

Animal welfare initiatives

20/07/2026 : Country consultation on AH&W priorities and challenges

Document type: report published by the [SCAR](#) Animal Health & Welfare Collaborative Working Group

Authors: [SCAR](#) Animal Health & Welfare Collaborative Working Group

Preview: This report summarises the responses to the online survey conducted by the Animal Health & Welfare (AH&W) WG of SCAR in 2025. The aim of the survey was to collect and share the members’ research priorities and challenges in the field of animal health and welfare, thus contributing to research and innovation policy-making, research coordination and a common strategic research agenda. The questionnaire focused on the period from 2025 to 2026 and was open from 4 March to 8 October 2025.

Unsurprisingly, respondents articulated their priorities within the established framework of preparedness, emphasizing the interrelated domains of prevention, detection, and response; many referred to One health as the most appropriate approach:

- Surveillance and monitoring of animal health and welfare of animals, both terrestrial and aquatic.
- Diagnostics of infections and diseases, and detection of welfare issues (indicators, precision livestock farming), including the development of new tools.
- Characterization of pathogens, including the development of new tools, and AMR.
- Data, data collection and sharing; use of artificial intelligence.
- Epidemiology and risk assessment for both health and welfare, including the development of new tools/methodologies.

- Prevention measures including biosecurity and vaccines (also immunological tools and platforms).
 - Treatments and control, recovery.
- [...]

With respect to animal welfare, respondents expressed the greatest interest in the following issues, reflecting areas considered most critical for upcoming research:

- Housing systems and manipulation of animals.
- Indicators and animal-based measures, precision livestock farming.
- Welfare during transport and at end of life.
- Positive welfare, human-animal interaction and welfare.
- Welfare in aquaculture.

Worthwhile domains of research include the effects of climate change on animal health and welfare, the trade-offs between health, welfare and the economic sustainability of farming systems, and advances in breeding and genomics aimed at improving animal resilience, reducing greenhouse gas emissions, and enhancing pathogen resistance.

07/07/2026 : Professionnels, consommateurs : les précautions à prendre en cas de canicule

Document type: article published by the [Ministry of Agriculture, Agri-Food, and Food Sovereignty](#) (MAASA)

Author: MAASA

Preview: Agricultural professionals, food companies, farmers concerned with animal welfare, pets, animal feed, the cold chain and transport... This article provides you with the list of precautions to take during heat waves.

Professionals: Looking after Farm Animals (...)

=> [Find out more about the recommendations for livestock professionals \(in French\)](#)

Excess mortality in livestock (...)

=> [Find out more about excess deaths in livestock \(in French\)](#)

Transport of livestock (...)

During heat waves (orange alert and above), animal transport is prohibited between 1:00 p.m. and 6:00 p.m., and journeys lasting more than eight hours where temperatures below 30°C are not guaranteed are prohibited.

=> [Find out more about transporting animals during heat waves \(in French\)](#) (...)

Private pet owners

Protect your pets

=> [Cet été, ayez les bons réflexes pour prendre soin de votre animal de compagnie](#) (practical guide in French) (...)

30/06/2026 : [EURCAW Ruminants & Equines Newsletter - Vol 14](#)

Document type: Newsletter No. 14 from the [EURCAW Ruminants & Equines](#)

Author: EURCAW Ruminants & Equines

Preview: Welcome to the second edition of the EURCAW Ruminants & Equines newsletter for 2026. This edition takes a look at the management of painful procedures in bovines, the latest Welfare Topic published by the Centre. This new resource comprises a thematic factsheet and an animal welfare indicator factsheet, which are designed to support competent authorities and stakeholders in assessing and promoting animal welfare. We also address a recent 'Question to EURCAW' (Q2E) regarding accidental lead poisoning in cattle, and provide a summary of the collaborative meeting of the four EURCAWs that took place in Rome in June.

We are delighted to announce the launch of the redesigned EURCAW Ruminants & Equines website. The updated design offers a more dynamic and user-friendly layout, making it easier to navigate the Centre's resources and access its growing range of outputs. Explore our [website](#) to discover the latest tools, publications, training materials and activities.

A new episode of the series Inspector@work, which highlights the work of an official inspector in Ireland, is also featured in this edition. In addition, we present our new YouTube video about the thematic factsheet on environmental enrichment for ruminants and equines and two new audio versions.

Finally, we share highlights from our recent Care4Dairy training webinar, details of our new initiative to engage with EU competent authorities through regular online briefings, the latest developments regarding the European Commission's transport initiatives, a survey from the EU Partnership for Animal Health & Welfare, new reports on transportation from the French National Reference Centre for Animal Welfare and news from TransformDairyNet.

26/06/2026 : [EURCAW-Poultry-SFA newsletter edition 16](#)

Document type: EURCAW-Poultry-SFA Newsletter No. 16

Author: EURCAW-Poultry-SFA

Preview: EURCAW-Poultry-SFA Newsletter – Edition 16

Contents:

- Q2E-Poultry-SFA-2025-011: [Second stunning in broilers](#)
 - Q2E-Poultry-SFA-2026-002: [Broiler fasting](#)
 - A new [video](#) and a [slideshow](#) are available online – Focus on turkey output: on farm, during transport and at the time of killing
 - A new [Indicator Factsheet](#): Use of enrichment in broilers
 - New [factsheets translated in French](#)
- and more news...

16/06/2026 : Enquête éleveurs sur la transition vers la fin des cages en élevages porcins

Document type: survey proposed by the [IFIP](#)

Authors: Yvonnick Rousselière, Christine Roguet, Anne Hémonic

Preview: The banning of the use of crates for farrowing and the housing of boars is now a central issue in planning for the future of pig farming. This change comes as a response to strong societal expectations regarding animal welfare, but it also raises many practical questions. Farm buildings, capital costs, animal handling, work organization, farmer safety, and technical performance are all directly affected. Since every farm has its own constraints, it is essential to improve understanding of the real-life situations encountered by farmers.

For this reason, at the request of the French Ministry of Agriculture, Agri-Food, and Food Sovereignty, the IFIP is conducting a survey of pig farmers in order to identify the main barriers and drivers for industry stakeholders in relation to this transition, and to establish what the necessary conditions would be to consider this shift in farming systems.

The results will provide an accurate assessment of the current situation, enable objective economic assessments to be made, and identify any potential needs for training or for feedback from farmers on their experiences. The results will be freely available at the end of the investigation, in early 2027, to help the industry to better predict the impacts of such a change and identify solutions to support farmers in this process.

Are you a pig farmer interested in participating in this initiative? Answer the online survey in 10 minutes: [click here to participate](#)

(No personal data or identification of your farm is required)

03/06/2026 : 16th Newsletter EURCAW-Pigs

Document type: Newsletter No. 16 from the European Reference Centre for Pig Welfare ([EURCAW-Pigs](#))

Author: EURCAW-Pigs

Preview: It is with great pleasure that we present you the 16th EURCAW-Pigs newsletter, which highlights our activities and relevant and actual information to support the enforcement of pig welfare legislation.

Comparison of checklists used in assessment of tail-docking in pig farms : [Explore the overview](#)

Q2E on group housing facilities for lactating sows : [Our answer](#)

Reflection Board meeting 2026 : [Go to agenda](#)

Videos webinar “What is a pig” [now available](#)

Q2E on space requirements in loose farrowing pens : [Our answer](#)

Q2E on assessment of body condition score of pigs : [Our answer](#)

29/05/2026 : [Fish welfare becomes certifiable](#)

Document type: article published in [Fish Focus](#)

Author: Fish Focus

Preview: Fish welfare is emerging as one of the most significant issues in the global food sector, at a time when more than half of the fish consumed worldwide now comes from intensive farming. Experts point out that factors such as stocking density, water quality, stress management, and slaughter methods can significantly impact fish health and welfare.[...]

The Fish Welfare Project

It is in this context that the [Fish Welfare Project](#), developed by Friend of the Sea together with the World Sustainability Foundation, takes shape. Launched in 2017, the initiative aims to make fish welfare a measurable, verifiable, and certifiable parameter and is supported by Open Philanthropy (now Coefficient Giving), one of the leading international philanthropic organisations.

The project is founded on the scientific assumption that fish are sentient beings and that their welfare represents a new frontier in the sustainability of the fisheries sector. The aim, therefore, is to translate scientific research into operational standards applicable to both aquaculture and fisheries to reduce stress, suffering, and mortality.

From research to practice: standards and implementation

The project is structured around two main lines of action.

- Aquaculture : In collaboration with Fair Fish and Fish Etho Group, 24 species-specific standards have been developed, with criteria for assessing and improving farm welfare and for certifying companies that adopt compliant practices.
- Fisheries : In collaboration with CCMAR, Fair Fish, Fish Etho Group and Demos (CareFish Catch project), five certification standards have been developed, applicable to both small-scale fisheries and large global fleets. The standards are based on the main fishing methods (nets, longlines, lines and other systems) and aim to reduce stress and injuries during capture.

Operational phase and impact

The Fish Welfare Project is now in its operational phase, with activities focused on testing standards, certifying companies and trialling improved practices.

In recent months, the project has entered a critical validation phase, with field trials launched directly at aquaculture farms as well as on fishing vessels and fleets. [...]

The ultimate goal is to make fish welfare a recognised international standard, integrated into sustainability certification systems.

A paradigm shift that could redefine the sustainability criteria of the entire sector in the years ahead. [...]

14/11/2025 : The science–policy interface on farm animal welfare in the EU

Document type: R&I analysis report for the EU [SCAR](#) Animal Health & Welfare Collaborative Working Group

Authors: Ciska De Ruyver, Frank Tuytens

Preview: The EU’s agri-food sector is highly regulated, with animal welfare (AW) science gaining importance for ethical, sustainable, and evidence-based policies. Despite significant advances in both regulation and research, important gaps remain between the farm animal welfare scientific and policy domains. Therefore, the Standing Committee on Agricultural Research (SCAR) Collaborative Working Group (CWG) on Animal Health & Welfare (AHW) commissioned a study to map barriers and pathways and identify best practices to improve policy uptake of AW research, and align research with EU policy needs.

The study examined how the EU science–policy interface on farm animal welfare currently operates and how it can be strengthened. Therefore, an interview protocol comprising thirteen questions on the current EU AW science-policy interface was developed. Interviews were conducted with 20 key experts representing a wide range of stakeholders, including four from different Directorate-Generals within the European Commission (EC), two from the European Food Safety Authority (EFSA), one from the EU Partnership on Animal Health and Welfare (EUPAHW), four from EU Reference Centres for animal welfare (EURCAWs), two from the SCAR CWG AHW Subgroup on Animal Welfare, four from regional or national research institutes, one from Eurogroup for Animals, one from COPA-COGECA (the voice of farmers and agri-cooperatives in the EU), and one from AVEC (the voice of Europe’s poultry meat sector). The interviews were analysed following the framework of Miles and Huberman (1994) to ensure systematic interpretation of the data.

This analysis provided a clear picture of the current state of affairs and highlighted opportunities for improvement. Firstly, this report examines existing hubs, highlighting key enablers and barriers for the AW science-policy interface, and giving dedicated attention to fish welfare policy, which remains only marginally addressed within livestock-focused hubs. Secondly, it presents policy recommendations across four domains: governance and coordination; research structures and funding; knowledge gaps and data; and societal and economic awareness. Thirdly, it suggests directions for policy-driven research, emphasizing project design, collaboration and co-creation, and the translation and uptake of research outcomes. Finally, it outlines possible pathways for developing a toolkit to strengthen science–policy knowledge transfer.

The insights from this study are intended to guide both policymakers and researchers in advancing future farm animal welfare regulations, reinforcing the central role of science–policy collaboration in shaping the future of animal farming in the EU.

Cognition – Emotions

17/06/2026 : [Timescapes of non-human experience](#)

Document type: scientific synthesis published in [Trends in Cognitive Sciences](#)

Authors: Singhal I, Birch J, Seth A

Preview: How can we investigate non-human experiences scientifically? Given substantial differences in sensory abilities and the private nature of consciousness, this remains an open question. In this review, we propose a way to gain empirical traction on one key feature of experience: its temporal structure, or ‘timescape’. Perceptual contents follow systematic temporal principles—synchronisation, revision, and persistence—and are sampled across attentional windows and vary in stability. These principles can be explored through temporal illusions and experimental paradigms. We conceptualise an animal’s timescape in terms of five key windows, all of which are experimentally testable, and analyse evidence across animal species to highlight varying timescapes. Together, these ideas lay the foundations for a research programme comparing the temporal Umwelts of non-human animals.

Publication leading to an article in Science on June 18, 2026: [Do animals perceive time differently from humans?](#)

16/06/2026 : [Music and animal welfare: from behavioral and physiological effects to potential applications in animal husbandry](#)

Document type: scientific synthesis published in [PeerJ](#)

Authors: Zhu G, Wang L, Wu Z, Feng L, Shao F.

Preview: Music, as a complex auditory stimulus, has become a significant topic of interdisciplinary research due to its diverse impacts and underlying mechanisms. Numerous studies demonstrate that music not only profoundly affects human physiological and psychological well-being, but also has important effects on animal behavior and physiology. This review synthesizes previous research and explores the scientific foundations of interactions between music and animals across five key dimensions. Given the heterogeneity of species and interventions, findings were synthesized narratively.

First, it explores the neurological basis of animal music perception from a neurobiological perspective, including the evolutionary traits of auditory systems, interspecies differences in music

perception, and the neural pathways through which musical stimuli are transmitted within animal nervous systems.

Second, using comparative studies across multiple species, it uncovers the distinct ways in which various animals perceive musical elements—such as tempo, rhythm, and pitch—and the behavioral responses they exhibit. Some species even demonstrate rudimentary musical creativity.

Third, the review analyzes the positive effects of music on animal neural and endocrine functions, immune function, and welfare, particularly its role in reducing stress responses, improving emotional states, and enhancing quality of life.

Finally, this review summarizes recent advances in studies using fish to investigate the effects of music on animals, highlights the broad potential of fish as experimental models in this research field, and provides representative examples illustrating how such findings may contribute to future improvements in animal welfare and the efficiency of aquaculture practices. Moreover, research on music perception in fish may provide indispensable insights into the evolutionary origins and biological foundations of musical perception in vertebrates.

09/06/2026 : Review: The roles of individuality and social life in shaping positive animal welfare in livestock species

Document type: scientific summary available prior to publication in [Animal](#)

Authors: Charlotte Goursoot, Sara Hintze, Maria Vilain Rørvang, Océane Schmitt, David Arney, Xavier Boivin, Anita Koni, Camille Montalcini, Ruth C. Newberry, Céline Tallet, Manja Zupan Šemrov, Sébastien Goumon

Preview: Positive animal welfare (PAW) emphasises “a good life” marked by the experience of predominantly positive affective states, and the development of competence and resilience according to species-specific and individual capabilities. Even though the concept of PAW has received increasing attention in past years, guidance for shaping future PAW-friendly farming systems is lacking. As highly social species, farmed animals have the potential to experience a rich social life that can influence their welfare. This has often been studied through the lens of negative interactions.

However, to advance research on PAW, a focus shift on how affiliative interactions can contribute to and maintain positive group dynamics is needed. Affiliative interactions are mostly based on social preferences that are, in turn, dependent on the individuals involved and their contribution to group cohesion. Acknowledging the uniqueness of each individual in their perception, cognition and appraisal is a challenge for ensuring PAW not only at the individual level but also at the group level.

In this narrative review, we argue that combining the study of individuality and social life will generate practical knowledge that can be used for promoting PAW. We first examine how individual differences in sensory and cognitive capabilities shape vertebrate animals’ appraisal of their environment and influence PAW. We then discuss key features of (intraspecific and interspecific) social life, such as affiliative interactions, social facilitation and socialisation, and their relevance for

PAW. Finally, we explore how the interplay between individuality and social life can create conditions conducive to PAW. For this, we focus on the concepts of sociability and social competence as promising future research areas.

Collectively, this review illustrates a complex framework emerging from the interplay between individuality and social life, and paves the way for promoting PAW on farms and improving animal management.

03/06/2026 : *Octopus bimaculoides* can learn to utilize a mirror to localize a reward outside the line of sight

Document type: Scientific article published in [Current Biology](#)

Authors: Mary Kieseler, Marvin R. Maechler, Kelly R. Finn, Carl Harris, Jay Michael Vincelli, Zachary Hoffman, Navneet Dhanoa, Jean Fang, Scott Gies, James McHugh, Julia Valenti, Mira Ram, John O. Fitzgerald, Madison Augusto, David Edelman, Peter U. Tse

Preview: Mirror-mediated localization of hidden objects is well documented in vertebrates but has never been demonstrated in invertebrates. Using mirrors to locate otherwise occluded objects is a form of mediated perception, linking a visible reflection to an occluded location and is seen by some as a precursor to self-recognition.

Cephalopods offer a fascinating test case of convergent cognition, having independently evolved sophisticated perceptual and cognitive abilities that are similar to mammals, after diverging from a common ancestor over 520 million years ago. In addition, they react to mirror images as though they were conspecifics. We projected a virtual crab that was visible only via mirror reflection onto a tank wall. Three *Octopus bimaculoides* were trained to navigate to the projection site instead of the mirror. All three octopuses learned this task, successfully choosing the correct side in 73% of trials. Critically, octopuses sometimes moved away from the visible reflection and climbed over the side walls of the start chamber to reach visually occluded locations that were spatially aligned with the reflected prey location. This behavior suggests (1) the ability to inhibit a direct approach to salient visual stimuli, and (2) a spatial representation that integrates mirror information with knowledge of 3D tank geometry.

These findings extend mirror-use capabilities to invertebrates, demonstrating that cephalopods can employ mirror reflections for spatial navigation. The independent evolution of cognitive capacities underlying mirror use across diverse taxa suggests that common solutions may have evolved to solve spatial navigation challenges.

02/06/2026 : Plaisir animal : au bonheur des bêtes

Document type: podcast from [France Culture](#) published on [Radio France](#)

Authors: Agatha Liévin-Bazin and Michel Kreutzer

Preview: Traditionally, Western ethologists like to link their ideas to the view of Descartes that animals are machines lacking internal emotions or reflection. Behaviorists have perpetuated this view by focusing solely on stimuli and responses, relegating the emotions and desires to the realm of naive anthropomorphism. Yet, from Darwin to Jane Goodall, a different view has always existed: one that recognizes that animals have genuine emotional lives, not just reflexes.

The reward circuit as a neurobiological marker of desire

In the 1950s, researcher James Olds discovered what is now known as the *reward* system. He demonstrated that animals are not driven solely by their basic needs. They actively seek out pleasurable situations and avoid others. In short, they have desires. How, then, can we study pleasure? Partly through sound - nearly 50 species, ranging from great apes to dolphins and crows, produce vocalizations similar to human laughter. But also through play. Long interpreted merely as a preparation for adult life, it is now recognized as an end in itself: adult animals play, engage in make-believe, and become bored. Bumblebees roll wooden balls, and crows go sledging. The pleasure of the action is the most important thing, going far beyond any adaptive usefulness.

Non-reproductive hedonistic behaviors: beyond the adaptive paradigm

Darwin had foreshadowed *this view* with his theory of sexual selection where the pursuit of pleasure can take precedence over utility. Masturbation is a perfect example. It is observed in many vertebrates, from primates to birds and cetaceans. Female macaques have orgasms, and bonobos have turned pleasure into a social bond that goes beyond mere reproduction. Yet these behaviors have long been ignored or deemed aberrant because they did not fit into the utilitarian framework of reproduction. Recognizing pleasure for pleasure's sake remains a challenge for some members of the scientific community.

Ethics – sociology – philosophy – animal rights

16/07/2026 : [Pragmatism bias in farm animal welfare science](#)

Document type: Scientific article published in [Frontiers in Animal Science](#)

Authors: Mandel R, Read E, Forkman B, Keeling LJ, Sandøe P, Tuytens FAM, and Nicol CJ

Preview: A fundamental role of farm animal welfare science is to generate evidence-based knowledge on animals' needs and well-being to inform decision-makers, and ultimately society at large.

However, we argue that the knowledge produced by welfare science is systematically affected by pragmatic considerations that shape what problems are studied and how, limiting the information available. This phenomenon, which we term 'pragmatism bias', manifests in tendencies to focus on

intensive production systems, short-term gains, and symptoms rather than root causes. In the absence of sufficient information, decisions are made with whatever knowledge is at hand. As a result, systems regarded as economically efficient, yet which offer unsatisfactory animal welfare become entrenched, systemic welfare issues are addressed incrementally, and the discipline's epistemic progress is constrained. We argue that funding availability and operational constraints are central in driving pragmatism bias, yet equally significant is the way researchers, under these pressures, frame and pursue their investigations.

To counteract pragmatism bias, we propose a multifaceted approach that includes strengthening researchers' responsibility to acknowledge how pragmatic constraints shape scientific work. We recommend normalising transparent, reflexive communication about these influences through training, manuscript requirements, and professional dialogue. Meanwhile, funding structures should be reformed so that neutral, bottom-up mechanisms support open-ended, animal-centred inquiry. Science-based knowledge should be broadened to include a wider range of conditions outside of currently economically viable alternatives, including those that enable animals to thrive. Lastly, we suggest that researchers engage more with emerging frameworks for formal animal representation to support more systemic and ethically grounded change.

[18/06/2026 : A critical review on gender differences in attitudes, perceptions, and behaviours about farmed animals](#)

Document type: narrative review published in [Applied Animal Behavior Science](#)

Authors: Elisa Cesário Pereira Stadnick, Maria José Hötzel

Preview: Debates about animal ethics have gained increasing prominence in recent decades, with gender emerging as a significant factor shaping views on animal welfare. We conducted a narrative review examining gender differences in beliefs about animal sentience, attitudes toward animal use, empathy for farmed animals, and consumer behaviours. We explored these gender differences, drawing on existing insights and discussions from studies identifying this effect, and contextualized them through sociological, anthropological, and historical perspectives on gendered social roles, the gendered division of labour, and patriarchal structures.

Research shows that women consistently demonstrate a greater concern for animal welfare, attribute greater cognitive and emotional capacities to animals, and are more likely to oppose animal confinement and painful procedures than men. Additionally, they are more likely to engage in animal rights movements, support stricter welfare regulations, and express a higher willingness to pay for animal-friendly products.

In contrast, masculinity is often associated with greater acceptance of meat consumption, hunting, and other practices that involve harm to animals. These patterns have been identified in many countries and across diverse groups, including the general public, students, veterinarians, farmers, and consumers. Gender differences are also evident in agriculture, where modernization has reinforced a masculine culture, sidelining women from high-value roles like dairy farming, while

relegating them to caregiving tasks with reduced decision-making power. This gender divide may harm animal welfare, as women often report greater empathy for animals.

Although women are increasingly entering the veterinary profession, men still dominate large animal care, reinforcing gendered roles. Women's contributions to animal behaviour and welfare research and teaching are significant, yet they remain underrepresented in leadership positions globally. Future research should address the intersectionality of gender with other social factors and expand studies beyond Western contexts.

We conclude that the topic of animal ethics is deeply permeated by gender. We propose reflecting on two key questions: what can the human perspectives on non-human animals tell us about gender issues, and how can gender policies influence the lives of farmed animals? Ultimately, we argue that developing joint strategies for a more dignified life for women and non-human animals can guide us toward a more democratic future. Emphasizing a feminine perspective on animals can be valuable in bringing care and empathy to the centre of this debate. The historically hegemonic, patriarchal approach to dealing with animals has historically failed these beings. Adopting a more empathetic ethical approach must be on the agenda.

Housing and enrichment

19/06/2026 : Risk assessment: Difficult to ensure good animal welfare for exotic birds

Document type: report published by [VKM](#)

Author: VKM

Preview: Approximately 400 tropical bird species and about 195,000 individuals were kept as companion and hobby animals in Norway in 2023. However, the report about animal welfare to the Storting (Meld. St. 8 (2024-2025)) highlighted the limited knowledge about their welfare needs. The Norwegian Food Safety Authority commissioned VKM to evaluate the welfare for 27 parrot and toucan species when kept as companion and hobby animals, focusing on the optimal living conditions, feeding, activation, supervision, care, and other welfare-relevant factors.

VKM has reviewed available scientific literature and other relevant articles and reports on the selected species and assessed their welfare needs in private care. VKM has also conducted a risk assessment of the welfare challenges for each species and described various mitigation measures.

VKM's findings

-Housing with limited opportunities to perform natural flying behaviour is a high risk for negative welfare.

- Housing in spacious aviaries may meet some of the birds' behavioural needs, but free, unrestricted flight is necessary to allow for a full range of flying behaviour.
- Feather clipping is detrimental for the birds, preventing movement and natural behaviour.
- These birds need substantial cognitive and social stimulation. Keeping them alone severely harms their welfare. In most cases, housing in appropriately composed flocks is best.
- Deficiencies in the physical environment can lead to boredom and chronic stress, and lack of environmental enrichment poses a high risk for reduced welfare. Frequent change and a high variety of enrichment objects are crucial.
- Hand-rearing of chicks has traditionally been implemented to socialise the birds to humans. However, hand-rearing deprives the birds of parental contact and the development of vital social skills. This increases the risk of developing abnormal behaviours and results in poor welfare.
- Feeding mainly seed-based diets will lead to excessive amounts of calories and malnutrition, posing a serious welfare issue. A formulated diet supplemented with fruits and vegetables best meets the birds' dietary needs.

"Our assessment shows that the welfare needs of all 27 species are challenging to meet when kept as companion and hobby animals. In addition, seven species are at particularly high risk for poor welfare in captivity, and the suitability of white cockatoo, sulphur-crested cockatoo, galah, Moluccan eclectus, chestnut-eared aracari, toco toucan, and white-throated toucan as companion and hobby animals is therefore questionable", says Janicke Nordgreen, scientific leader of the report.

Furthermore, due to lack of studies, VKM cannot conclude whether the eastern rosella, green-cheeked parakeet, and ochre-marked parakeet are suitable as companion and hobby animals.

The risk assessment is approved by VKM's Panel on Animal Health and Welfare.

VKM provides independent scientific assessments on issues relevant to food and environment. VKM does not offer advice or take a position on how risks should be managed.

08/06/2026 : Review: Free-stall bedding management for enhanced dairy cow health and welfare

Document type: scientific review published in [Applied Animal Science](#)

Authors: N. Siachos, R.F. Smith, J.M. Neary

Preview: Purpose - The primary objective of this review was to synthesize and present current scientific knowledge on the key properties, benefits, risks, and best management practices associated with common bedding materials used in free-stall dairy farms.

Sources - This review is based on an examination of peer-reviewed scientific literature, university extension publications, and conference proceedings pertaining to dairy cattle housing, management, health, and welfare.

Synthesis - Sand is widely regarded as an optimal bedding choice for promoting cow comfort and lying time, and its inorganic nature limits bacterial growth, thereby reducing the risk of intramammary infections. However, it poses significant challenges for manure-handling systems and

equipment durability. Organic bedding materials, including straw and sawdust, offer high absorbency and cow comfort but can support rapid microbial proliferation if not managed diligently for moisture and hygiene. Recycled manure solids are an economical and environmentally sustainable option that provides a soft, nonabrasive surface but requires stringent management protocols such as composting or anaerobic digestion to control pathogen loads and ensure cow health.

Conclusions and Applications - The selection of any bedding material presents a trade-off among cow health benefits, farm economics, and management requirements. The effectiveness of any material is critically dependent on providing adequate bedding depth and maintaining a clean, dry lying surface through frequent and consistent management. This review provides dairy farmers, bovine veterinarians, and consultants with evidence-based, practical guidance to make informed decisions on bedding selection and management to improve overall cow health, welfare, and farm efficiency.

12/05/2026 : Grooming using brushes in cattle: A review of benefits, influencing factors, and monitoring opportunities

Document type: scientific review published in [Applied Animal Behaviour Science](#)

Authors: Habeeb Muraina, Borbala Foris

Preview: Grooming in cattle serves important functions in maintaining hygiene and social relationships. Brushes are provided on farms as environmental enrichment to facilitate grooming. It has been suggested that brushing, as a behavior not necessary for survival, declines in association with illness and could thus serve as welfare indicator. However, an overview of the scientific evidence about optimal brush provision and their role in improving and monitoring welfare is missing.

This review 1) synthesizes evidence on cattle brush use across production systems while identifying main influencing factors, 2) evaluates associations between brush use and welfare, and 3) outlines monitoring tools and areas for further research on the role of brushing in welfare surveillance. Cattle are motivated to use brushes, which improve coat hygiene, and may promote relaxation. However, evidence on the benefits for production traits such as milk yield or weight gain is limited. Brush use is sensitive to time and energy constraints; however, the evidence regarding changes in response to illness is inconclusive. While some studies reported suppressed brush use in association with lameness, respiratory disease, or metritis, responses depend on disease severity, environmental context, and the brush use variable considered, and not all studies found a difference between healthy and sick cattle. Brush use levels also vary across healthy groups and individuals according to production stage, housing system, and dominance, underlining the need for individualized baselines for welfare assessment.

Further evidence is needed to clarify in which settings brushes help induce or monitor positive welfare. Integrating automated measures of brush use into welfare assessment and behavioral studies could help refine its role in welfare improvement and surveillance.

05/05/2026 : Financing the transition to cage-free farming in the EU

Document type: report published by the Institute for European Environmental Policy ([IEEP](#))

Authors: Godfroy, A, Muro, M, Nadeu, E, Wedl, I. Jadziska, J

Preview: [...] This report provides a comprehensive and up-to-date assessment of how to finance the EU-wide transition to cage free systems, drawing on scientific evidence, EU policy analysis, national case studies (France, Germany, Poland and Spain), and interviews with sector experts.

Key learnings

1. Legislative certainty unlocks investment

Uncertainty about EU legislation is the single biggest barrier to farmer investment. Countries with clear legal timelines (e.g., Germany on hens and sows) show faster and more confident transitions.

2. Upfront investment is the binding constraint

Structural housing changes, e.g. for retrofits, new barns, land reconfiguration, represent the largest financial hurdle across all species. Access to capital remains limited.

3. Transitions differ substantially between species

Laying hens: mature alternatives but higher running costs (+22% barn/aviary; +34% free range).

Pigs: well-designed free farrowing can match performance but requires significant investment.

Rabbits: need further technical optimisation for breeding does.

Calves: collective housing feasible with minimal long-term cost impact.

4. CAP funding currently rewards maintenance over transformation

Only a handful of schemes directly support phasing out cages; most payments go to farms already compliant.

5. Demand side measures are powerful but underused

Retailer commitments have driven major progress in Germany and Poland, but mandatory labelling for processed products is still absent, limiting consumer impact.

Key recommendations

For the EU

- Adopt the revised animal-welfare legislation swiftly, with species-specific transition periods and accompanying technical guidance.
- Clarify rules for transitional State Aid so Member States can support structural investments linked to future legal requirements.
- Strengthen demand-side tools, especially harmonised EU animal-welfare labelling (including processed products).
- Ensure trade policy prevents unfair competition from low-welfare imports.

For Member States

- Develop species-specific transition plans that include financing packages, advisory services, and training.
- Prioritise animal-welfare investments within CAP Strategic Plans and National/Regional Partnership Plans under the future CAP.
- Use the EIB agriculture and bioeconomy facility more strategically, ensuring intermediaries offer products that explicitly support better housing.

[Financing the transition to cage-free farming in the EU \(pdf report\)](#)

Invertebrates

03/07/2026 : Decapod Crustaceans in Animal Welfare Law: Fragmentation, Gaps, and Emerging Models in Europe and Oceania

Document type: scientific review published in [Animals](#)

Authors: Lorenzo Fruscella, Diego Antonio Sicuso, Daria Vitale, Annamaria Passantino

Preview: In recent decades, the exponential growth of the global seafood industry has intensified the exploitation of aquatic invertebrates, particularly decapod crustaceans, whose commercial value continues to rise alongside consumer demand. This expansion has coincided with significant scientific advances recognizing these animals as sentient beings capable of experiencing pain and exhibiting complex behavioral responses to noxious stimuli. Nevertheless, legal systems have been slow to integrate such evidence, resulting in a persistent misalignment between scientific knowledge and regulatory practice.

This article critically examines the legal status of decapod crustaceans within animal welfare law, underscoring a pronounced disjunction between well-established scientific evidence of their sentience and the limited protections they receive. Despite extensive research supporting their capacity for suffering, the prevailing legal paradigm continues to construe these animals predominantly as commodities. Through a comparative analysis of regulatory regimes across the European Union, Italy, and selected extra-European jurisdictions, including UK, Australia, and New Zealand, the study identifies a significant regulatory lacuna alongside considerable legislative fragmentation. It scrutinizes a spectrum of normative models, ranging from indeterminate, principle-based provisions to more exacting and technically prescriptive standards.

The article finally advocates for a harmonized, science-driven regulatory framework to ensure coherent and effective welfare protections for decapod crustaceans within the global food industry.

13/05/2026 : Flexible self-protection as evidence of pain-like states in house crickets

Document type: scientific article published in [Proceedings of the Royal Society b-biological sciences](#)

Authors: Manzi, O, Lynch, KE, Allman, DM, Latty, T, White, TE

Preview: The possibility that insects experience pain is a frontier question at the intersection of behaviour, cognition and philosophy of mind. Interest has been fuelled not only by anatomical discoveries but also by expanding behavioural and comparative evidence. Leading frameworks emphasize behavioural indicators of pain-like experience such as flexible, targeted responses to harm beyond reflexive withdrawal. Here, we tested for such responses in the house cricket (*Acheta domesticus*), a species of evolutionary and commercial importance. Using a fully blinded, within-subjects design, we applied noxious heat, innocuous tactile contact or no-contact to a single antenna under lower- and higher-stress environmental conditions and recorded grooming behaviour. Crickets were significantly more likely to groom the noxiously stimulated antenna and did so for longer than under control or tactile treatments. Grooming also showed a distinct temporal profile, with elevated activity sustained across the early observation period. Environmental conditions and sex had no effect, indicating that self-protective grooming was expressed consistently throughout. These findings provide robust evidence of flexible, site-directed self-protection in Orthoptera, addressing a key gap in evidence for pain-like states outside vertebrates. This strengthens the case for consideration of insect welfare and bears on how felt experience is distributed across the animal kingdom.

One Welfare

06/07/2026 : A one welfare perspective on calf health: a qualitative study of knowledge, attitudes, working conditions, working atmosphere, and communication among farmers and calf-care teams on large Saxon dairy farms

Document type: scientific synthesis published in [Frontiers in Veterinary Science](#)

Authors: Douay–Ryckelynck M, Retzler P, Meier KK, Merle R, Müller K-E, Stock A, and Jensen KC

Preview: Knowledge, attitudes, and working conditions of personnel may influence the health and welfare of animals under their care. Within a One Welfare framework, this qualitative study explored these factors on nine large dairy farms in Saxony, Germany, focusing on herd managers and calf-care team members, with particular attention to working atmosphere and communication. Semi-

structured interviews were conducted and transcribed verbatim. Data were analyzed using qualitative content analysis. Findings were related to calf health outcomes. Calf health was assessed using a composite health rank incorporating mortality and the prevalence of diarrhea, respiratory disease, and omphalitis.

Communication practices varied considerably among farms. Notably, the two farms with the best calf health outcomes did not conduct regular team meetings but relied primarily on informal communication such as direct conversations, messages, and written notes. Regarding the working atmosphere, on the three farms with the poorest health ranks, farmers and/or team members reported a deficient working atmosphere.

Although not explicitly addressed in the interview guide, some farmers raised gender-related issues, while team members referred to challenges associated with apprentices.

When asked about their interest in further training, team members from the two farms with the best calf health ranks expressed the greatest interest.

When being asked about attitudes toward calves, all farmers attributed high importance. The motivations of team members for working in calf care rather than in other farm sections varied considerably, and no clear association with calf health outcomes could be identified. Despite being based on a small, non-representative sample, this study provides in-depth insights by linking qualitative “soft factors” such as communication, attitudes, and working atmosphere to quantitative indicators of calf health. The findings highlight the relevance of communication, further training, and working atmosphere for calf health.

15/05/2026 : No mention of animal welfare in the United Nations’ sustainable development goals? But this may be a good thing!

Document type: Opinion paper published in [Animal Welfare](#)

Authors: Jacob Bull, Birte L Nielsen, Anna Silvera, Håkan Tunon, Linda J Keeling

Preview: In this Opinion Paper, we argue that the absence of animal welfare in the United Nations’ sustainable development goals (SDGs) may not be as detrimental as some suggest. We put forward the view that the welfare of animals is an integral part of the concept of sustainability, that development which affects animals cannot be sustainable without due consideration to their welfare, and we give examples in support of this position. Put simply: no mention means animal welfare could be, and potentially should be, anywhere and everywhere in the goals. For livestock species, we submit that the synergies between the SDGs when animal welfare is included greatly outweigh the conflicts usually highlighted. Further, considering animal welfare as both an achievable goal and as a mechanism for sustainable development allows improvement of animal welfare to carry the weight it warrants: an animal with poor welfare is not a sustainable animal. By extension, products from animals with poor welfare cannot be considered sustainable, and animal welfare is necessarily included in a well-functioning ecosystem. Through the paper we argue that the challenge

is not to add in animal welfare, but to think sustainability with animal welfare. We conclude by giving directions to where animal welfare can be integrated when developing sustainable actions.

30/04/2026 : Managing trade-offs between economic, environmental, and animal welfare performance in French suckler cattle farms through feeding practices

Document type: scientific article published in [Agricultural Systems](#)

Authors: Larissa Mysko, Claire Mosnier, Patrick Veyssset, Isabelle Veissier, Jean-Joseph Minviel

Preview: CONTEXT Economic, environmental and animal welfare performance objectives are often not achieved simultaneously due to antagonistic relationships related to farming practices. OBJECTIVE Here, we aim to 1) understand which performance objectives are in conflict on suckler cattle farms and 2) examine how these conflicts can be managed. METHODS We first determine the relationships between the different performance indicators via a bioeconomic model focusing on variables impacting feeding and analyse the conflicts between performance indicators. We then explore how the trade-offs can be managed via a compromise programming approach. RESULTS AND CONCLUSIONS The obtained compromise solutions show that, compared with feed margin-driven optimisation, environmental and animal welfare performance can be substantially enhanced, with foregone feed margins of approximately 15% of the optimum values. These compromises can be achieved by reducing herd size and animal fattening, increasing the share of grassland in farmland and reducing the purchase of concentrate feed. SIGNIFICANCE Combining bioeconomic modelling with compromise programming is a promising first step in providing farmers with guidance on how to ensure good performance in multiple objectives and in providing public policy-makers with the means to develop policies along these lines.

Population management and animal welfare

30/06/2026 : L'observatoire de la protection des carnivores domestiques (OCAD)

Document type: article published by the [Ministry of Agriculture, Agri-Food, and Food Sovereignty](#) (MAASA)

Author: MAASA

Preview: The OCAD brings together all those working on the protection of domestic carnivores in its steering committee, including representatives from nonprofit organizations, animal pounds and shelters, breeders, pet stores, veterinarians, those who run the registers for pedigrees, industry representatives, and the French Association of Mayors. The OCAD also welcomes two permanent invited parties: the French Reference Centre for Animal Welfare FRCAW), which acts as the expert body responsible for the execution of requests from the OCAD Steering Committee; and the French identification database for domestic carnivores (I-CAD), which provides data of use to the expert body's analysis based on its own database and the [French operator database](#) for dogs, cats, and ferrets. Last, the French Ministry of Agriculture provides the administrative support for the OCAD. The OCAD's Steering Committee is responsible for defining the key directions of OCAD's work. It discusses and issues opinions based on the expert reports carried out by the FRCAW at its request.

Framework Agreement on the definition and organization of the OCAD

The joint-working procedures for the various members of the Steering Committee are set out in a *Framework Agreement* signed by all members. This agreement also defines, in the Appendix describing the internal regulation of the OCAD Steering Committee, the membership rules for the committee.

FRCAW Expert Reports requested by the OCAD

All FRCAW expert reports to the OCAD are available on the FRCAW website <https://www.cnr-bea.fr/expertise-avis-travaux/#animaux-ocad>.

Summaries of the opinions issued by the OCAD Steering Committee

The first task entrusted to the OCAD by the French Minister of Agriculture concerned animal abandonment, an issue that requires expert analysis to inform the organization of actions to combat abandonment.

An initial expert report by the FRCAW was submitted to the members of the Steering Committee on March 4, 2022. The report aimed to provide an [overview of the current situation regarding the abandonment of dogs and cats in France](#). A summary of the Steering Committee's opinions on this initial expert report was approved by Steering Committee members in March 2023. A second expert report from FRCAW was submitted to the members of the Steering Committee on July 12, 2023. Its purpose was to [develop a proposed definition of abandonment and closed list of reasons for dogs and cats to enter and leave the care of facilities and organisations](#). A summary of the Steering Committee's opinions on this second expert report was approved by the Steering Committee members in June 2026.

Survey data collected by the OCAD

Number of Abandoned Dogs and Cats in France in 2025

Following the second expert opinion produced by the FRCAW for the OCAD, which includes a definition of "abandonment" as a prelude to quantification, the OCAD steering committee agreed a formula for the calculation of the annual numbers of abandoned dogs and cats, which may evolve over the years in light of the data that is available and in a form that can be exploited (...) Thus, for

the year 2025, the total number of abandoned dogs and cats is estimated to have been between 281,000 and 398,000, depending on the calculation method used. (...)

16/06/2026 : Part 1: A Sector-Wide Survey of UK/British Isles Shelter Organisations Caring for Cats: Caregiver-Reported Approaches to Housing, Husbandry and General Care Provision

Document type : scientific article published in [Veterinary Sciences](#)

Authors: Laurent R. Finka, Ana M. Barcelos, James Waterman, Avni Bhatia, Jenni L. McDonald, Rae Foreman-Worsley, Beth Skillings

Preview: Meeting the physiological and psychological needs of shelter cats through appropriate care is critical to reducing stress and disease risk, as well as enabling positive homing outcomes. Shelter organisations across the British Isles provide care for many cats; however, little is known about the types of housing and husbandry approaches applied. This study, therefore, aimed to quantify current approaches to cat housing, husbandry, and general care practices, in addition to providing information relevant to local site capacity, considering reported practices against sector minimum standards where applicable. Nine hundred and sixty-one shelter organisations and/or sites caring for cats were identified and invited to complete an online survey including predominantly multiple-choice questions. A total of 393 unique responses were collected from employees and volunteers, and quantitative data were summarised descriptively. In most cases, the results provided evidence of majority alignment with sector standards, although substantial variations in reported practices were also consistently captured. While most responses described approaches supportive of meeting cats' basic physiological needs (e.g., access to veterinary care and basic resources), psychological needs were addressed less consistently (e.g., general housing and husbandry approaches), potentially leading to poor welfare outcomes. Identified opportunities to better meet cats' needs include more cat-friendly, low-stress approaches to pen cleaning and cat handling; greater and more consistent provisioning of within-pen resources; and improved approaches to multi-cat housing and associated decision-making. Additional opportunities to enhance both cat and human wellbeing include more structured intake and assessment processes and capacity management to support optimal cat-to-staff ratios, staff working hours, cat lengths of stay and more consistent access to isolation and emergency intake facilities.

07/06/2026 : Comparative effectiveness of culling and birth control in free-roaming animal management: A systematic review

Document type: meta-analysis published in [Preventive Veterinary Medicine](#)

Authors: Anastassiya Perfilyeva, Olzhas Zhorayev, Kira Beshpalova, Yuliya Perfilyeva

Preview: Introduction: This review evaluates the effectiveness of culling and birth control interventions for managing free-roaming dogs (FRD) and cats (FRC) worldwide across key outcome domains-population metrics, zoonotic disease indicators, shelter indicators, public metrics, animal welfare, ecological externalities, and cost-effectiveness-and identifies contextual conditions determining intervention effectiveness.

Methods: Following PRISMA, we conducted three separate systematic searches in PubMed, Web of Science, and Scopus (up to 16 October 2025) addressing culling, birth control, and modelling studies. Empirical evidence was synthesised using descriptive, stratified analyses. Modelling studies were synthesised to identify conditions associated with effectiveness.

Results: Ninety-one empirical studies were included (33 culling; 58 birth control), alongside 18 modelling studies. Birth control interventions were more frequently classified as effective than culling, with statistically significant differences in effectiveness distributions between intervention types ($p = 0.045$). Culling effectiveness was context-dependent and largely confined to island systems, particularly for FRC, while FRD-targeted culling was rarely effective, especially for zoonotic disease indicators and public metrics. Birth control-particularly multi-component, long-term programmes-showed higher effectiveness across domains and in open mainland settings. Temporal analyses showed a decline in both the volume and reported effectiveness of culling studies since 2010, alongside increasing and geographically broader evidence for birth control. Modelling studies identified high population coverage, sustained implementation, and control of population inflow as key conditions for effectiveness.

Conclusions: Culling has limited, context-dependent effectiveness, whereas birth control within integrated strategies more consistently achieves sustained outcomes across domains. Effectiveness depends on coverage, duration, and addressing drivers of population inflow, including abandonment and uncontrolled breeding.

Precision farming and AI

09/07/2026 : Multi behavior recognition and health assessment of laying hens using RSA YOLO under welfare oriented farming

Document type: scientific article published in [Smart Agricultural Technology](#)

Authors: Panqi Pu, Junge Wang, Yue Gao, Dapeng Li, Geqi Yan, Hongchao Jiao, Xianyao Li, Hai Lin

Preview: In welfare-oriented farming, laying hen behavior is a critical health indicator, yet automated assessment is often limited. This study introduces a framework for multi-behavior recognition and health assessment using an improved RSA-YOLO model. By integrating RFACnv, C3k2_KSFA, and ATFL loss into YOLOv11n, the lightweight model (2.75 M parameters) achieved 88.3% mAP@50 for six behaviors (standing, feeding, roosting, preening, feather pecking, resting), outperforming

baseline models. A Health Composite Index (HCI) was developed, weighting feeding, movement, and resting behaviors. A pilot study revealed a healthy reference cage had a superior HCI (98.2) and feeding ratio (32.6%) compared to a cage with mortality (70.1 and 12.4%, respectively). In this pilot study, significantly, behavioral changes, such as decreased feeding, preceded a drop in egg production by approximately one week, demonstrating the framework's early-warning potential. This research offers an automated, quantitative tool for on-farm health monitoring in poultry farming.

08/06/2026 : Invited Review: Precision livestock farming technologies in swine intensive production

Document type: scientific synthesis published in [Applied Animal Science](#)

Authors: Giovanni Buonaiuto, Eleonora Nannoni, Luca Sardi, Simona Belperio, Chris Sanzò, Giovanna Martelli

Preview: Purpose - The intensification of swine production has raised concerns about animal welfare, environmental impact, and productivity. Precision livestock farming (PLF) technologies offer innovative solutions by leveraging sensors, automation, and artificial intelligence to enhance monitoring and management in pig farming. This review explores the current state of PLF applications in swine production, identifying key benefits and challenges associated with their implementation.

Sources - This review is based on a systematic analysis of peer-reviewed literature, including studies published between 1990 and 2024. Data were gathered from electronic databases such as PubMed, Web of Science, and Scopus, focusing on technologies for health monitoring, feeding optimization, microclimate control, and welfare assessment in pigs.

Synthesis - Precision livestock farming technologies have demonstrated their potential to improve productivity, health, and welfare through early disease detection, automated feeding, and environmental control. Camera-based systems, sound analysis, and radio-frequency identification tracking enhance real-time monitoring, and predictive maintenance reduces system failures. However, adoption remains limited because of high costs, technical complexity, and the need for producer training.

Conclusions and Applications - Precision livestock farming represents a promising approach for optimizing swine production, but broader adoption requires cost-effective solutions and interdisciplinary collaboration. Future research should focus on integrating PLF tools into practical farm settings, ensuring accessibility and user-friendly implementation to support sustainable and ethical pig farming.

18/03/2026 : Comparing the performance of deep learning video-based models and trained veterinarians in cattle pain assessment

Document type: scientific article published in [Scientific Reports](#)

Authors: Feighelstein M, Tomacheuski RM, Elias G, Shashoua N, van der Linden D, Luna SPL, Zamansky A

Preview: Accurate pain assessment in animals is crucial for ensuring animal welfare and guiding veterinary interventions. Traditional pain evaluation relies on scoring of pain behaviours by veterinarians, which can be influenced by observational variability and individual expertise. There is a growing interest in using AI tools, and the question whether Artificial Intelligence (AI) can outperform humans in animal pain recognition is only beginning to be explored. This study is the first to address cattle pain recognition in this context. Namely, we compare the performance of trained veterinarians in the task of pain recognition in cattle using video-based analysis. Our results show that machine learning models achieve high accuracy in pain classification and demonstrate performance comparable to trained veterinarians, with some advantages in video-based assessments. These findings highlight the potential of machine learning to enhance pain assessment in veterinary medicine, offering a scalable and more objective tool for improving animal welfare.

Publication leading to an article in Faunalytics on June 16, 2026: [AI Can Detect Cow Pain Better Than Humans — What Now?](#)

Regulation

07/07/2026 : Commission sets the direction for prosperous livestock sector and a self-sufficient protein system

Document type: press release from the [European Commission](#)

Author: European Commission

Preview: Today, the European Commission adopted the Livestock Strategy to ensure Europe's valuable livestock sector remains strong and resilient in the long term. The Strategy, the first of its kind, sets out actions to help livestock farmers address economic, environmental and market challenges. This long-term vision recognises the essential role of sustainable livestock farming in Europe's future to protect Europe's food security and support rural communities in all their diversity.

The Livestock Strategy sets out the following five priorities:

– **A resilient livestock sector prepared for crisis.** The Commission is stepping up preparedness to reduce risk exposure and enable farmers to recover more quickly after crisis. It will strengthen risk-

management tools and explore a new scheme for insurance and re-insurance. It will also support Member States in managing the impact of animal diseases to strengthen prevention, early detection and early action. Investments into climate resilience and reducing import dependencies remain a key priority.

– **A competitive livestock sector – in the EU and globally.** The Commission will work to boost profitability and uptake of innovation, and to bolster competitiveness and sustainability, so that the sector can thrive. In addition to the important role of the future EU budget, the Commission will explore how access to finance can facilitate the transition to cage-free systems and support permitting procedures, circularity, bioeconomy, and biomass valorisation. Furthermore, with fairness at the core of the Strategy, it will focus on fair income of farmers and ensuring international reciprocity. To deliver on this, the Commission will work on greater alignment of production standards, especially on animal welfare, in line with World Trade Organisation obligations. Efforts to promote new market opportunities through agri-food diplomacy will also be strengthened.

– **A sustainable livestock sector.** Given the diversity of livestock farming across the regions, the Strategy will promote a tailored approach to address sustainability challenges. **It proposes measures to improve animal welfare through targeted revisions for laying hens, broilers and pigs, which will be evidence-based and accompanied by adequate transition periods and financial support.** Moreover, the EU will develop harmonised methods for calculating livestock emissions at farm level, climate mitigation practices, nutrient management, and sustainable circulation of resources. It will strengthen cooperation from farmers to producers and support sustainability and socio-economic goals in the sector.

– **A livestock sector fit for all farms and regions.** The link between livestock farming and the territory is an essential one as livestock provides economic, environmental and social benefits in rural areas. The Commission will work with Member States on a plan to bring back sustainable livestock production to vulnerable regions, in particular those at risk of abandonment, with the support of a Land Observatory and supporting EU demography policies. The Livestock workstream will develop a roadmap for low-capacity and/or mobile slaughterhouses, contributing to fostering locally integrated livestock value chains, reducing animal transport and regenerating local economies.

– **Excellence in livestock production.** Quality is Europe's strategic asset. The Commission will make the EU's excellence in production more visible and rewarding through strengthened EU origin labelling and quality recognition. It will develop a European Excellence scheme to better valorise higher standards, sustainability, and specific production characteristics. In addition, it will promote sustainable EU livestock products through dedicated promotion policies, geographical indications, the Buy European campaign and organic production systems. (...)

For more information: [COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS EU strategy on livestock](#)

03/07/2026 : Parlement européen : Réponse écrite à la question E-001795/2026 : Non-compliance with European legislation on farm-animal welfare in pig holdings and state of play regarding the 'End the Cage Age' initiative

Document type: Answer from the [European Commission](#) to Question E-001795/2026

Authors: Question: César Luena (S&D). Answer: Mr. Várhelyi on behalf of the European Commission

Question: According to the press and NGOs^[1], certain European pig holdings have serious shortcomings with regard to animal welfare (wounded or dying animals not being given appropriate care, cannibalism, lack of hygiene, inadequate carcass management, etc.), thereby jeopardising biosecurity and public health. Moreover, it has come to light that these large-scale farms are supplying products to distributors bearing an 'animal welfare' and sustainability seal.

This raises questions about the enforcement of EU rules, in particular Directive 98/58/EC (reasonable steps to ensure the welfare of farm animals) and Directive 2008/120/EC (minimum standards for the protection of pigs), as well as Article 13 TFEU and green labelling. All this is happening while the European Citizens' Initiative 'End the Cage Age' (with more than 1.4 million signatories) is still awaiting announced legislative proposals.

In light of the above:

1. What measures does the Commission envisage to strengthen the uniform implementation of Directives 98/58/EC and 2008/120/EC in intensive pig holdings?
2. What is the state of play regarding the reform resulting from the End the Cage Age initiative?
3. Is it considering more stringent verification and audit requirements for animal welfare labels/claims to prevent greenwashing?

^[1] https://www.eldiario.es/aragon/sociedad/cerdos-enfermos-cannibalismo-restos-cadaveres-suelo-granja-horrores-aragon_1_13075016.html.

Answer: Member States have the primary responsibility for the implementation, application and enforcement of said Council Directives. Common requirements for official controls to verify compliance with these Directives are laid down in Regulation (EU) 2017/625^[1]. To further ensure harmonisation, the Commission regularly performs audits to verify that Member States control systems fulfil the common requirements.

The EU Reference Centre on pig welfare^[2] provides publicly available guidance, supporting uniform implementation of EU rules. As stated in the EU Vision for Agriculture and Food^[3], the Commission intends to closely exchange with farmers, the food chain and civil society, and on that basis present proposals on the revision of the existing animal welfare legislation, including its commitment to phase out cages. This work is progressing as planned and a legislative proposal for the first sector(s) is expected to be adopted by the end of 2026.

The Commission is not considering more stringent verification and audit requirements for animal welfare labelling. Regulation (EU) No 1169/2011^[4] clearly prohibits any food information, including

labels or claims, that is ambiguous, not based — where appropriate — on relevant scientific data, or could confuse or mislead consumers regarding the nature, identity, properties, method of production or other characteristics of the food. The competent authorities of the Member States are responsible for the enforcement of these provisions, by conducting regular, risk-based official controls.

[1] Official Controls Regulation, <https://eur-lex.europa.eu/eli/reg/2017/625/oj/eng>.

[2] https://eur-lex.europa.eu/eli/reg_impl/2018/329/oj.

[3] COM/2025/75 final.

[4] Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers, amending Regulations (EC) No 1924/2006 and (EC) No 1925/2006 of the European Parliament and of the Council, and repealing Commission Directive 87/250/EEC, Council Directive 90/496/EEC, Commission Directive 1999/10/EC, Directive 2000/13/EC of the European Parliament and of the Council, Commission Directives 2002/67/EC and 2008/5/EC and Commission Regulation (EC) No 608/2004 — OJ L 304, 22.11.2011, pp. 18-63.

25/06/2026 : Évolutions du droit de l'animal dans l'Union européenne (2025)

Document type: report published by [The European Institute for Animal Law & Policy](#)

Author: The European Institute for Animal Law & Policy

Preview: Overall, 2025 has been a difficult year for animals, with the notable exception of fur animals. At EU level, positive developments include the listing of the American Mink (*Neogale vison*) as an invasive alien species, which will result in a ban on the keeping of mink beginning August 2027. However, one Member State, Denmark, has already announced its intent to apply for an exemption from this EU ban.

Less positive for animals, 2025 also brought a weakening of wolf protection rules in the short term, following the downgrading by the Commission and the Member States of the wolf's protection status in international law (Bern Convention) and EU law (Habitats Directive). The Commission further removed wild habitat protection rules in the Common Agricultural Policy (CAP) Regulations, thereby ending the few wild animal requirements that existed in the rules regulating the distribution of farming subsidies.

Several salient key developments have emerged in the Member States. Firstly, efforts to ban fur farming at national level have continued and succeeded. In Bulgaria, the Supreme Court confirmed the legality of the national mink farming ban in a landmark ruling that upheld the 2022 regulation prohibiting the breeding and import of American mink. Poland, one of the top EU fur producers, succeeded on their third attempt to enact a law banning fur farming. The new Polish law prohibits the establishment of new fur farms with immediate effect and requires all existing facilities to close by the end of 2033. It introduces a compensation mechanism to support farmers transitioning out

of the sector. Secondly, and less positive for animals, 2025 saw the rise of aggressive moves to restrict the uptake of animal-based alternatives, by restricting commercial speech by food manufacturers (France) and prohibiting cultivated products (Hungary). Overall, this yearly review shows the need for continued advocacy and commitment in the legal sphere.

Looking ahead, 2026 will likely see the adoption of the new EU regulation on the welfare of dogs and cats, published in 2023⁹ and finalized in 2025 following more than two years of political negotiations. This will be a welcome development considering the delays in the implementation of new national companion animal welfare laws (for instance, in France and Spain) and the shelving of proposals (in Portugal). There is also hope that 2026 will be the year the Commission publishes new legislative proposals on the welfare of farmed animals, which have been delayed since 2023.

[Link to the report \(PDF\)](#)

11/06/2026 : La protection des chats et des chiens en droit de l'Union européenne

Document type: book published by [The European Institute for Animal Law & Policy](#)

Author: The European Institute for Animal Law & Policy

Preview: To mark the adoption of the new regulation on the welfare of dogs and cats, we have published a white paper on the protection of dogs and cats under EU law. This document, co-published with the Fondation 30 millions d'amis and the Fondazione Capellino, examines the significant contributions of this new regulation, as well as its limitations. Download the white paper as a PDF: [The Protection of Cats and Dogs in European Union Law](#)

27/05/2026 : Parlement européen : réponse écrite à la question E-004785/2025 : Transport de veaux non sevrés

Document type: answer from the [European Commission](#) to Question E-004785/2025

Authors: question: Emma Fourreau (The Left). Answer: Mr. Várhelyi on behalf of the European Commission

Question: On 26 March 2025, Brittany Ferries resumed the transport of cattle from Rosslare (Ireland) to Cherbourg (France), including unweaned calves travelling in indecent conditions, stacked in livestock vehicles without being able to rest, drink or feed. Regulation (EC) No 1/2005 on the protection of animals during transport and related operations provides that unweaned calves should be given a break after nine hours of transport in order to rest and be watered and fed. In May 2025, the Commission noted that 'for journeys involving long ferry legs, calves are not fed at

the required intervals'. The transport of calves between Ireland and France is therefore in breach of EU legislation on animal welfare.

What plans does the Commission have concerning:

1. Penalties for transport companies which fail to comply with the legislation on rest time for unweaned calves?
2. Improving controls on the application of animal transport legislation?
3. Banning the transport of unweaned animals?

Answer: The welfare of unweaned calves during long-distance transport, including by means of roll-on roll-off vessels from Ireland to France, remains a matter of concern for the Commission, the Member States, and the wider public.

The report of the audit of Ireland carried out by the Commission in 2022[1] confirmed that unweaned calves are not fed on roll-on roll-off vessels as it is required by Regulation (EC) No 1/2005[2] posing an infringement to the current rules.

The Commission will continue working with the tools at its disposal to ensure full enforcement of this requirement. These include the close monitoring of efforts by the Irish authorities to address the identified shortcomings and achieve full compliance with Regulation (EC) No 1/2005. The information provided by the authorities shows the efforts being made to develop a system for automatic feeding of calves at ferry journeys.

The Commission legislative proposal for a regulation on the protection of animals during transport[3] provides for stricter rules aimed also at facilitating better enforcement through clearer provisions, and more harmonised penalties.

The proposal better defines which of the involved actors bears legal consequences of infringements. The proposal is currently examined by co-legislators.

Concerning the transport of unweaned animals, based on the scientific opinions provided by the European Food Safety Authority (EFSA)[4], the proposal sets stricter rules for the transport of young animals and clear requirements for feeding of calves with milk or milk replacement in detailed intervals, and for using automatic feeding systems for long journeys.

[1] Audit Number: 2022 — 7503: <https://ec.europa.eu/food/audits-analysis/audit-report/details/4700>.

[2] Council Regulation (EC) No. 1/2005 of December 22, 2004, on the protection of animals during transport and related operations and amending Directives 64/432/EEC and 93/119/EC and Regulation (EC) No. 1255/97 (OJ L 3, Jan. 5, 2005, p. 1).

[3] Proposal for a Regulation of the European Parliament and of the Council on the protection of animals during transport and related operations, amending Council Regulation (EC) No. 1255/97 and repealing Regulation (EC) No. 1/2005 (COM(2023) 770 final).

[4] <https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/j.efsa.2022.7442>.

11/05/2026 : Sénat - Interdire la manipulation et la sélection génétique des animaux de compagnie (exposé des motifs)

Document Type: Text No. 607 (2025-2026) submitted to the [Senate](#) on May 11, 2026

Authors: Mr. Daniel SALMON and several of his colleagues

Preview: Ladies and Gentlemen,

Among the forms of abuse that humans inflict on animals, there is one that is particularly troubling: the use of genetic selection leading to the development of disease or functional disorders, causing lasting suffering for the animal. The establishment of breed standards for dogs in the 19th century and for cats, mostly in the 20th century, has turned out to be a trap in which the health of individual animals is secondary to the “beauty” of the breed (...)

In France, purebred dogs registered in the French Stud Book (LOF) account for about a quarter of the canine population (2.4 million out of 9.7 million). Among them, hundreds of thousands of animals suffer from breed-specific hereditary diseases. (...)

For cats, the problem is less acute but is nonetheless concerning. In 2023, 60,000 cats were registered in the Official Feline Pedigree Registry (LOOF), with 646,000 registered between 2003 and 2022—just over 4% of an estimated population of 15 million cats. Large cat breeds (Maine Coon, Sacred Birman) accounted for more than 80% of purebred cat births in 2020. They are at high risk of multiple orthopedic conditions and also suffer from hypertrophic cardiomyopathy (HCM). Brachycephalic breeds account for approximately 25% of births (Persian, British Shorthair). These cats suffer from brachycephalic obstructive airway syndrome, as do dogs. (...)

The scientific evidence attesting to animal suffering is very compelling, and this has justified the positions adopted by numerous national and international veterinary bodies, such as the Federation of Veterinarians of Europe (FVE), the Federation of European Companion Animal Veterinary Associations (FECAVA) and, in France, the Veterinary Academy and the French association of companion animal veterinarians (AFVAC).

The current French legal framework does not allow for an effective response to this situation. (...) At the European level, some countries have developed relatively structured frameworks to combat breeding for excessive traits. (...)

This bill forms part of the ongoing European initiative following the adoption by the European co-legislators of a new regulation that prohibits the breeding, competition entry, and exhibition of dogs and cats with extreme physical characteristics recognized as harmful to their health and welfare. This regulation will be supplemented by a delegated Act, scheduled to take effect in 2030, which will precisely define the genotypes and phenotypes in question — that is, the breeds or morphological types that will be subject to the ban — along with the scientific criteria for identifying them. France, which has helped make this European legislation an ambitious tool for the protection of companion animals, has every interest in anticipating this development by enacting national legislation now. Such an initiative will enable our country to influence discussions regarding the drafting of this Act, contribute its scientific and veterinary expertise, and ensure the rapid upward harmonization of

practices. Indeed, this Bill goes further than the European regulation by specifically prohibiting the marketing and advertising of such animals.

That is why Article 1 of this Bill seeks to amend the Rural and Maritime Fisheries Code to provide a wording that would:

- prohibit the breeding, raising, sale, and importing of companion animals produced through genetic selection or manipulation that leads to characteristics significantly impairing their welfare, but would also prohibit advertising and sales communications aimed at promoting or profiting from such animals;
- ban the sale of dogs and cats that have the appearance of a breed ten years after the law is enacted, to allow breeders time to adapt. Only animals registered in the stud book will be able to claim breed status after this period;
- assign the implementation of the principles set forth above to a decree issued by the Council of State. A review every five years is planned, as scientific knowledge on the subject is constantly evolving;
- ban breeds considered to carry too many inherent risks for the animals, following the example of Norway and the Cavalier King Charles Spaniel. These breeds would be included in a regularly updated list to take account of evolving scientific knowledge and market trends. This provision takes precedence over that defined in the first paragraph of item 1;
- make the breeding of purebred cats and dogs contingent on screening tests for hereditary conditions they are likely to transmit. The list of the conditions in question and the screening procedures are laid down in a single decree issued by the Council of State, subject to revision every five years, in order to ensure the consistency of the regulatory framework and to avoid any discrepancies between parallel texts;
- specify the conditions under which breeding is authorized;
- prevent conflicts of interest between veterinarians and breeders. Indeed, public health veterinarians and their certified breeders often have close ties;
- make the veterinary certificate issued upon the transfer of a cat or dog a tool to enforce prohibition of commercialization. Thus, when issuing this certificate, the veterinarian would be responsible for verifying that the animal has no hereditary conditions, based on tests conducted in accordance with Section IV of Article L. 214-6-2. If the animal does have such conditions, the veterinarian would not issue the certificate, thereby effectively preventing the sale. A five-year transition period is proposed to allow breeders to adapt;
- require that, upon obtaining pedigree status for an animal (confirmation of pedigree for dogs; Level 1 of the breeding animal qualification system for cats), the breeder must provide a health certificate issued by a veterinarian attesting to the absence of genetically inherited breed-specific diseases;
- add to the legal notices in sales advertisements the requirement to publish the results of mandatory screening tests for dogs and cats, whether or not they are recognized breeds;
- make the sale of an animal as a purebred contingent upon the presentation of a certificate of registration in the pedigree database, effective ten years after the law's enactment, consistent with the transition period provided for in the third paragraph of Article L. 214-3-1;

– exact a penalty of one year of imprisonment and a fine of 15,000 euros for any violation of the prohibitions laid down in Articles L. 214-3-1 and L. 214-3-2, for breeding in violation of Section IV of Article L. 214-6-2, as well as for the sale of dogs or cats whose appearance is that of a specific breed in violation of the third paragraph of Article L. 214-3-1.

Article 2 proposes to expand the scope of legal action that animal protection organizations can take, enabling them to better ensure compliance with regulations.

03/2026 : Évaluation de l'impact du PSN sur le bien-être animal-rapport final

Document type: Report published by the French [Ministry of Agriculture, Agri-Food, and Food Sovereignty](#)

Author: EY

Preview: Within the framework of the European Union's Common Agricultural Policy (CAP), the Ministry of Agriculture, Agri-food and Food Sovereignty (MAAFS) commissioned an evaluation of the impact of the CAP Strategic Plan (CSP) on animal welfare in France. [...] This evaluation was conducted from a thematic perspective focusing on animal welfare and covers the years 2023 and 2024, corresponding to the first two effective years of programme implementation. The evaluation work makes it possible to analyse the contribution of CAP interventions to animal welfare, as well as their coherence and complementarity with other relevant measures. The evaluation was carried out over a 12-month period (January 2025–January 2026) and structured into three phases: the scoping phase (January–March 2025), the data collection and analysis phase (April–September 2025), and the finalisation and recommendations phase (October 2025–January 2026).[...]

Recommendation 1: Ensure territorial equity in access to animal-welfare measures, taking account of regional specificities

Implementation actions:

- ▶ Improve existing coordination between regions to make animal welfare a cross-cutting objective of agricultural policy: strengthen regular State–Region dialogue and establish shared milestones, so that animal welfare is systematically integrated into the design, targeting and evaluation of all agricultural schemes;
- ▶ Appoint a national animal-welfare focal point, responsible for ensuring coordination between regions and guaranteeing coherent and equitable implementation of schemes across the entire territory;
- ▶ Launch a co-construction process with under-represented sectors to adapt and calibrate animal-welfare schemes (investments, animal-welfare AECMs) to the specific characteristics of monogastric and rabbit sectors.[...]

Recommendation 2: Improve and strengthen training and support

Implementation actions:

- ▶ Develop a modular animal welfare training offer by sector, combining on-farm practical sessions, peer-to-peer experience sharing and short “animal welfare essentials” modules;
- ▶ Assess the effectiveness of training and support through systematic participant feedback and simple indicators of practice uptake;
- ▶ Develop a specific training offer dedicated to the preparation of support applications for measures directly targeted at animal welfare;
- ▶ Map public and private good practices related to animal welfare [...]

Recommendation 3: Strengthen existing indicators for the 2028 Programming Period by introducing indicators based on animal welfare, following the Welfare Quality methodology

Implementation actions:

- ▶ Extend the scope of indicator R.44, or any other animal-welfare-related indicator, to all sectors, using a Member State-level consolidation method (for example, including monogastric sectors);
- ▶ Conduct EU-level animal welfare studies based on the Welfare Quality® methodology, which relies on physiological, health and behavioural characteristics to assess animal welfare at farm level;
- ▶ Publish results annually and organise a European review process to adjust schemes accordingly. [...]

Recommendation 4: Strengthen, for the 2028 programming period, the incentive effect and targeting of animal-welfare support through an adaptation of eligibility criteria

Implementation actions:

- ▶ Recalibrate schemes to strengthen their incentive effect (rates / budgets): - Re-examine the allocation of funding within AECMs to increase the share dedicated to measures that most directly contribute to animal welfare, for example by reassessing the relative weight of the forage self-sufficiency AECM, while maintaining consistency with the objectives pursued by existing AECMs; - Reassess area-based compensation levels for animal-welfare AECMs targeting monogastric sectors.
- ▶ Remove access barriers and strengthen the leverage effect of on-farm animal-welfare investments: - Differentiate aid ceilings and eligibility thresholds for on-farm investments that directly improve animal welfare; - Adjust eligibility parameters by sector and production system type, taking into account technical and sanitary constraints as well as farm size.
- ▶ Update sector-specific guidance documents and application notes to clarify eligibility criteria, secure administrative processing and make expected levels of commitment explicit.

Transport, slaughter, pick-up

20/07/2026 : [Canicule : recommandations pour le transport des porcs](#)

Document type: good practice guide published by the [IFIP](#)

Authors: Patrick Chevillon, Eric Gault

Preview: Following successive heat waves that have impacted the swine industry across all regions, the IFIP has compiled recommendations from its existing publications to offer a comprehensive, practical, and easily accessible online guide, thereby helping to better prevent such events by adapting pig transport practices to climate change (available for free download). Following a series of heat waves that have impacted the pig industry across all regions of France, the IFIP has produced a compilation of recommendations from its existing publications, forming a comprehensive, practical, and easily accessible online guide. In doing so, it helps those in the pig industry to better prepare for such events by adapting their pig transport practices to the changing climate. The guide can be downloaded for free. Table of contents:

1 – HOW TO PREPARE PIGS ON FARM BEFORE TRANSPORT

- What to do if a heat wave is forecast 5–10 days in advance?
- Fasting: a crucial element of preparation!
- Designing the loading area to help pigs to rest
- Guidelines for farmers

2 – JOURNEY PLANNING TO PROVIDE BOTH PIGS AND DRIVERS WITH THE GREATEST POSSIBLE COMFORT

- Weather forecasts and extreme weather warnings
- Guidelines for journey planning

3 – THE DRIVER PLAYS A KEY ROLE!

- Equipment to increase comfort
- Guidelines for drivers
- Any prolonged stop is harmful
- 2 behaviors to look out for in pigs during a heat wave
- If the abattoir accommodation is full up...

4 – RECEIVING OF PIGS AT THE ABATTOIR

- Guidelines for extreme heat

[Click here to download the guide on the transport of pigs during a heat wave \(in French\)](#)

18/05/2026 : Electrophysiologic evidence of loss of consciousness in cattle during slaughter with and without stunning: a systematic review and methodological overview

Document type: systematic review of the scientific literature published in [Frontiers in Veterinary Science](#)

Authors: Haut SR, Parmentier T, Fisher RS, and Khalil NM

Preview: Background: Slaughter without prior stunning as practiced under Jewish and Islamic religious law raises certain particular animal welfare issues, notably the time between the incision and loss of consciousness (LOC). LOC marks the point at which cortical processing required for perception, including pain, is no longer possible. Quantifying time to LOC in animals is challenging. To date, the most direct and potentially objective means of doing so is the use of electrophysiologic methods. These are the focus of this paper.

Methods: This paper includes a concise discussion of electrophysiology as applied to slaughter, addressing a critical gap in foundational electrophysiologic knowledge required to interpret LOC and insensibility in the veterinary literature. Then, using a PRISMA-guided systematic approach, this review synthesizes neurophysiologic evidence on time to LOC in cattle. A review was conducted using PubMed/MEDLINE, Web of Science, Cochrane Library, and Google Scholar (through December 2025). Experimental cattle studies using EEG, ECoG, or evoked potentials were included, while non-bovine, behavioral-only, or methodologically insufficient studies were excluded. Nine studies were included, and risk of bias was assessed using ROBINS-I.

Results: Overall risk of bias across included studies was judged to be moderate. Studies using electrocorticography (ECoG) reported electrophysiologic markers consistent with LOC occurring between 4.4 and 13 seconds after incision, with mean values ranging from 7.5 to 10.8 seconds. Reported times vary across studies, particularly those using scalp EEG, likely due to methodological differences and limitations.

Conclusions: The highest-quality available electrophysiologic data, suggests that LOC occurs rapidly following slaughter without stunning.

11/05/2026 : Raising the bar for animal welfare standards

Document type: article published in [Air Cargo Week](#)

Author: Edward Hardy

Preview: The [2026 update to International Air Transport Association's Live Animals Regulations](#) introduces stricter standards for training, documentation, container performance and welfare controls across the live animal airfreight sector, increasing compliance expectations for airlines, handlers and forwarders.

New rules place greater emphasis on formal competency-based staff training, tighter pre-acceptance checks, and higher-specification transport containers capable of withstanding complex operational conditions, particularly on long-haul and interline shipments.

The revised framework strengthens welfare-focused measures, including closer scrutiny of high-risk breeds, stricter environmental controls and more rigorous journey planning, while also increasing operational costs and reducing cargo flexibility due to higher space requirements and tighter handling standards.

07/05/2026 : Vibrations and driving events inside a pot-belly trailer and related effect on pig behavior during transport

Document type: scientific article published in [Frontiers in Animal Science](#)

Authors: Conte S, Devillers N, Crowe TG, Zhang QY, Yan X and Faucitano L

Preview: This study assessed the relationship between in-transit pig behavior and the vibrations recorded in a two-axle pot-belly trailer. During seven shipments (135 km) of pigs (125 kg) to the slaughter plant, five compartments (front-top [C1], rear-top [C4], front-middle [C5], center-middle [C7], and front-bottom [C9]) were equipped with accelerometers at the floor level. Four route sections (RS) lasting 17 min each were selected, and acceleration data were processed to calculate the vibration dose value (VDV) on the vertical, horizontal and lateral axes and the global vibration exposure (VDVv). Percentage of pigs standing, lying and sitting and the number of loss of balance (LOB) on the horizontal, lateral and vertical directions were observed in C1, C4 and C5. Data were analyzed for the effect of route section and compartment location using mixed models. The effect of compartment location on VDV differed between route sections. Horizontal VDV was higher in C5 and C7 than C4 in RS1 ($p = 0.005$), whereas it was higher in C4 than C1, C5 and C9 in RS2 ($p = 0.001$). Lateral VDV in C1 was always the highest in every route section ($p \leq 0.001$). C4 had the highest and C9 the lowest values for vertical VDV and VDVv for RS2, RS3 and RS4. Finally, C7 had the highest, and C5 the lowest vertical VDV and VDVv in RS1 ($p \leq 0.05$). A greater percentage of pigs were standing in C5 compared to C1 and C4 ($p \leq 0.05$), while pigs in C4 showed more vertical LOB than in C1 and C5 for all route sections. Finally, pigs in C4 had the lowest number of lateral LOB during RS2, but the highest during RS3 and RS4 ($p \leq 0.05$). No clear relationship could be established between vibration levels and behavioral reaction of pigs. In the top rear compartment, more affected by vertical vibrations, pigs showed more instability during the end of the journey, whereas in front compartments, pigs showed more instability during RS2 which included roundabouts. The impact of vibrations and jolts in the trailer on pig behavior is most likely the result of several interacting factors.