Technical Sheet for Solution Implementation

Foal Weaning & Rearing Management

Thematic Area: Health and Welfare of Equines.

Priority: How to accommodate horses while ensuring their well-being?

Need: Practical solutions: applying on-farm knowledge to ensure well-being: What concrete solutions to improve well-being on the farm?; How do I ensure that my practices meet the fundamental needs of horses? (Lack of basic knowledge about health care and physiological needs of horses).

Solution EU Number: WE-04.

Content of the Solution:
Support natural mare–foal bonding through delayed and gradual weaning, social rearing with adult companion horses, and age-appropriate positive human interactions. These practices promote healthy behavioural development, social competence, welfare, and positive human–horse relationships.

Key Contacts:
- Aleksandra Górecka-Bruzda (a.gorecka@igbzpan.pl)

Reasons for Implementing this Solution

Early weaning can cause significant stress and may negatively affect the behavioural development of foals. Maintaining the mare–foal bond for longer and providing appropriate positive human interactions can support welfare, social development, and future manageability.

Description of Solution Strategies

In the second half of the 19th century, it has been observed that maternal milk production declines sharply by the third month of lactation and no longer meets the nutritional needs of 3–4 month-old foals. As a result, early weaning was considered beneficial for optimising foal development and quickly became common in both professional and small-scale breeding farms. Today, early weaning is justified by practical, economic, and safety reasons, including earlier marketing, easier nutritional management, increased human–foal interaction, and improved reproductive efficiency of mares. However, some of these reasons are rooted more in tradition or questionable beliefs than in real foal's needs and considerations of its welfare. Early weaning results in several health and behavioural problems, including negative effects like elevated cortisol (stress hormone) levels and immune response, disturbed gut microbiota, sleep impairment and depressive-like state of foals. Moreover, using brain imaging and long-term behavioural observations, it was found that staying longer with the mother in early life supports healthy brain development, especially in areas linked to social skills and emotional regulation. Young animals that experienced prolonged maternal care were also more socially competent and showed better feeding behaviours.

As in the majority of ungulates, the bond between a mother and foal is very strong in the foal's early life. Despite under natural conditions, mothers deny suckling to their 9-month-old foals, the bond remains for a longer time, until young horses migrate to form their own social groups as late as 1.5–2.5 years of age. In traditional stable breeding, foals are artificially weaned at a younger age, usually when they are 4 to 6 months old. For practical reasons, they then live separated from their mothers and the familiar group of other broodmares. It has been shown that artificial weaning is a traumatic event for both the foal and the mare. It has numerous

consequences, as shown by a modification of the time budget during the first days following weaning. Moreover, it leads to a long-term transcriptomic fingerprint and has an impact on the development of the foal's brain. Scientific study confirmed that artificial weaning does not break the bond between the foal and its mother and the bond is maintained despite the separation. In the study, when the foals 5 months after the weaning could approach its mother or a familiar mare, the foals, especially fillies, evidently preferred to stay in the proximity of their mothers. So, the social support of the mother is still needed by the foal long after the separation.

Habituating foals to gradual separation from their dams reduces weaning-related stress at both behavioural and physiological levels compared to the abrupt method. Although weaning remains a stressful event regardless of method, trained foals showed lower stress behaviours and cortisol levels immediately after weaning. Some effects may be long-lasting, particularly when habituation begins one month before final weaning.

Nevertheless, age is a crucial factor in reducing weaning stress. There is no scientific evidence supporting the need for earlier separation of the mare–foal pair. At this later stage, suckling bouts are brief and not energetically demanding for the mare. Therefore, artificial weaning can reasonably be performed at this age.

The introduction of 'nanies' (adult mares or geldings) into a group of weanlings did not reduce the weaning stress, but has been found to stimulate the social behaviour among foals. Thus, the presence of adults in rearing weanlings is highly recommended in practice.

During pre- and post-weaning period, the positive perception of humans may be built by gentle handling. Scientific studies have shown that gentle handling of the mare in the presence of her foal can positively influence the foal's later manageability and attitude towards humans. For example, during the first 5 days after foaling, passive human presence near the mare, gentle grooming of the mare for approximately 15 minutes, and hand-feeding of the mare can encourage positive human–foal associations. Foals exposed to such interactions have been shown to approach humans more readily, accept handling more easily, and display fewer flight responses, with effects persisting for more than one year.

After weaning, gentle handling may still be practiced, as it has been shown to reduce fearfulness towards humans. Foals appear to be particularly receptive to handling immediately after weaning or following a temporary move into a stable, for example for routine management procedures. Short handling sessions (e.g. approximately 5 minutes per day for 10 days) have been associated with improved learning and reduced reactivity, with effects remaining detectable several months late; handling introduced more than 15 days after weaning becomes less effective.

Foal Weaning & Rearing Management

Implementation Steps

1. Parturition and immediate post-foaling management

- Allow the mare to move away from the group if she is kept in a herd.
- Limit human intervention to the strict minimum before the first suckling.
- Respect the mare–foal bonding period, which involves intensive sniffing and licking of the foal by the mare during the first 30–60 minutes after birth.
- Allow the foal to stand up and suckle colostrum on its own whenever possible.
- Only intervene if there is a pathological problem or an excessive delay in standing and nursing.
- If the foal is born in a box:
  - Disinfect the umbilical cord.
  - Ensure that the foal is not urinating through the umbilicus.
  - Administer tetanus antiserum if the mare has not been vaccinated.
  - Check for normal passage of meconium.
- Confirm that the foal has successfully suckled within the first 3 hours after birth.

2. Respect the establishment of the mare–foal bond

- Observe mare and foal behaviour discreetly, especially the timing of the first suckling (ideally within 3 hours after birth).
- Avoid intense, intrusive or excessive handling during the early neonatal period.
- Allow the mare–foal bond to develop without disruption during the sensitive early phase.
- Early and excessive handling at a very young age may negatively influence later behaviour, including:
  - delayed independence from the mare.
  - increased aggression towards humans and/or other horses.
  - higher emotional reactivity.

3. Delay Weaning Whenever Possible

- Keep foals with their dams for as long as management conditions allow.
- Aim for weaning at approximately 9–10 months of age whenever feasible.
- Ensure adequate nutrition for both mare and foal through:
  - selective feeding systems for foals if required,
  - ad libitum forage for mares,
  - appropriate management of pregnant mares.

4. Weaning method

- If possible, start a gradual separation process approximately one month before final weaning.
- Use short, temporary separations in a familiar environment.
- Maintain visual and physical contact through a barrier when possible.
- Ensure that weaning is not abrupt whenever management conditions allow.
- Be aware that inappropriate or too early separation can negatively affect both foal and mare welfare, regardless of the method used.

5. Post-weaning rearing

- Where possible, raise weanlings in groups on pasture including adult horses ("nannies").
- Adult horses (e.g. older mares or geldings) can support social learning and behavioural development.
- Introduce "nanny" horses ideally before weaning to allow familiarisation.
- Provide group housing that reflects natural social structure with both juveniles and adults.
- Encourage stable social group formation to support emotional and behavioural development.

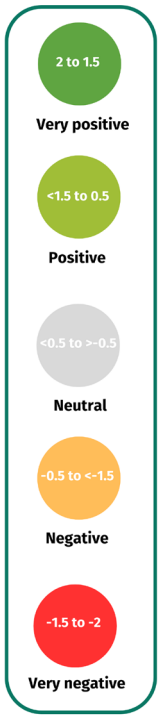
6. Building a positive perception of humans (pre- and post-weaning)

- Build positive human–horse interaction through indirect exposure via the mare in the first days after foaling.
- From Day 1 to Day 5 after foaling:
  - allow passive human presence near the mare.
  - perform gentle grooming of the mare (~15 minutes).
  - use hand-feeding of the mare to create positive associations.
- These early interactions help the foal develop a more positive perception of humans later in life.
- After weaning, continue with gentle, consistent handling of the foal.
- Handling should remain calm, predictable and positive to reduce fear responses.
- Short, regular handling sessions (e.g. ~5 minutes per day for about 10 days) can improve learning and reduce reactivity.
- Handling introduced shortly after weaning is generally more effective than delayed introduction.
- Early positive experiences can have long-lasting effects on behaviour and manageability.

Foal Weaning & Rearing Management

How Will this Solution Impact the Performance of your Farm ?

TOPIC	SCORE
Social	0.25
Economics	0
Welfare	0.50
Health	0
Environmental	0
Pasture access and management	0
Global	0.13



Color coding explanation

Socioeconomics: This solution will not have effect on the social performance of the farm because although later weaning and improved rearing practices may be positively perceived by the public as welfare-friendly approaches, they also require additional time, supervision, and labour. The positive image associated with improved foal welfare is therefore balanced by the increased workload for farm staff, resulting in a generally neutral effect on overall social performance. This solution will not have effect on the economic performance of the farm because extending the mare–foal relationship and delaying weaning increases management time and labour requirements, while reducing some of the operational simplicity associated with earlier weaning. Although welfare benefits may improve foal development, no clear direct economic gains or losses were identified, leading to an overall neutral impact on farm profitability and capital.

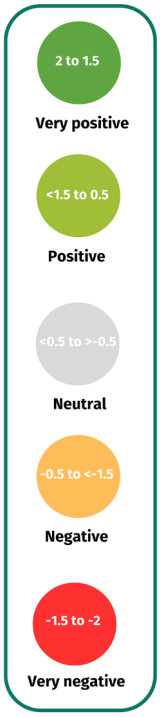
Health & Welfare: This solution is expected to have a neutral effect on the farm's health performance, as it does not directly contribute to reducing pain, mortality, or drug use. However, by reducing weaning-related stress and promoting the gentle habituation of foals to human handling, it may help lower cortisol concentrations during weaning and the subsequent rearing period without the mare. It may also support a more stable and balanced gut microbiota during this critical developmental stage. This solution is expected to improve equine welfare by promoting more positive emotional states compared with early, abrupt weaning and by providing welfare-friendly social conditions through the presence of adult horses. In addition, short but consistent training sessions not only facilitate the routine handling of foals during daily care but also reduce stress associated with common husbandry procedures, such as conformation measurements, blood sampling, hoof trimming, and deworming.

Foal Weaning & Rearing Management

Environmental Sustainability: This solution will not have effect on the environmental performance of the farm because weaning and rearing do not have direct effect on climate change mitigation and adoption, halting biodiversity loss or water management. This solution will not have effect on the land access or management performance of the farm because the solution does not have direct effect on grassland management practices. Although foal rearing and weaning management influence equine growth and feeding behaviour, their direct impacts on farm-level grassland management are not explicitly documented. However, evidence from sheep and cattle systems suggests that livestock management practices, including weaning, can indirectly affect grazing pressure and pasture condition, thereby influencing grassland management outcomes.

How Will this Solution Impact the Resilience of your Farm?

TOPIC	SCORE
Social	0.25
Economics	-0.13
Welfare	0.25
Health	0.21
Environmental	0
Pasture access and management	0
Global	0.10



Socioeconomics: This solution will not impact social performance of the farm facing external challenges assessed because its effects remain largely independent of most external challenges. Delayed weaning and improved rearing practices continue to support foal welfare under normal and crisis conditions, but they do not substantially alter the farm's social resilience to inflation, pandemics, extreme weather events, or land-access restrictions. The main exception is in the context of stricter welfare standards, where farms already applying later weaning are better aligned with societal expectations and future regulatory requirements. This solution will not impact economic performance of the farm facing external challenges assessed because the costs and management requirements associated with foal rearing increase under inflation regardless of the weaning strategy adopted.

Foal Weaning & Rearing Management

The solution does not significantly modify the farm's ability to cope with pandemics, extreme weather events, or land-access constraints, although it may provide a modest economic advantage under stricter welfare standards if buyers place additional value on foals raised under welfare-friendly weaning practices. Overall, its contribution to economic resilience remains limited and generally neutral.

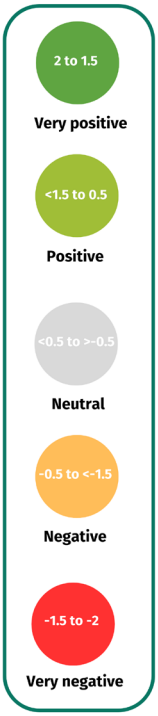
Health & Welfare: This solution is expected to have a neutral effect on the farm's health performance, as it does not directly reduce pain, mortality, or the need for medication when the farm is affected by external pressures such as inflation, pandemics, extreme weather, or limited access to land. However, it may help reduce stress and its negative effects on the animals. This solution is also expected to have a neutral effect on the farm's welfare performance. Although it improves housing conditions and promotes more positive emotional states, these benefits may not be enough to overcome the challenges caused by external pressures, such as economic and environmental problems or stricter animal welfare regulations.

Environmental Sustainability: This solution will not impact environmental performance of the farm facing external challenges assessed because delayed weaning and improved rearing practices continue to support foal welfare under normal and crisis conditions, but they do not substantially effect on farm's ability to cope better in terms on climate change mitigation and adoption, halting biodiversity loss or water management when it faces inflation, pandemics, high welfare standards, infectious disease extreme weather events, or limited or lost access to grassland. This solution will not impact land access or management performance of the farm facing external challenges assessed because substantially effect on farm's ability to cope better in terms on grassland management when it faces inflation, pandemics, high welfare standards, infectious disease extreme weather events, or limited or lost access to grassland.

Foal Weaning & Rearing Management

How Can this Solution Help your Farm Cope with Specific External Challenges to Become More Resilient?

CHALLENGES	SCORE
Inflation	0.17
Pandemic	0
High welfare standard	0.46
High infectious diseases	0.25
Extreme weather event	-0.04
Loss/limited access to grassland	-0.25



Inflation & Social Crises: Social challenge: This solution will not impact the global performance of the farm facing pandemics because delayed weaning and adapted foal rearing practices are largely unaffected by pandemic-related disruptions. While they continue to support foal welfare and development, they do not significantly change the farm's capacity to cope with labour shortages, movement restrictions, or market disruptions. Their contribution to resilience during pandemics therefore remains limited and overall neutral. Economic challenge: This solution will not impact the global performance of the farm facing inflation because the costs of raising foals increase under inflation regardless of the weaning strategy adopted. Although welfare-friendly rearing may provide some added value in specific markets, it does not substantially reduce feed, labour, or production costs. Consequently, the solution neither significantly strengthens nor weakens the farm's economic resilience to rising input prices, resulting in an overall neutral impact.

Welfare & Diseases: Health challenge: This solution has a neutral effect on the overall performance of the farm during an infectious disease outbreak. When such an outbreak occurs, it can be difficult to maintain good animal health and welfare and to meet economic and environmental goals. Although gentle handling of foals may improve their health and reduce stress, it is unlikely to be enough to reduce the overall impact of an infectious disease outbreak.

Welfare challenge: This solution is also expected to have a neutral effect on the overall performance of the farm when stricter animal welfare legislation is introduced. However, gentle handling of foals supports good animal welfare and may help farms comply with higher animal welfare standards.

Climate Change & Access to Land: Environmental challenge: this solution will not impact the global performance of the farm facing abnormally high temperatures and/or drought because it does not directly influence most of the key factors affected by these challenges. While it can provide some positive effects in terms of social outreach, it may negatively affect working conditions and farm profitability. In practice, delayed weaning and enhanced rearing may increase the workload, which can become more difficult to manage when the farm is already under pressure from extreme weather conditions.

Land access/management challenge: this solution will not impact the global performance of the farm facing loss or limited access to agricultural land because it does not address the root cause of the problem, which is the limited availability of agricultural land on the farm. As a result, it is assumed that foals are weaned in stable conditions rather than in pasture. Under this assumption, the solution has a small positive effect on social outreach. The solution is considered to have a neutral impact on grassland management.

Foal Weaning & Rearing Management

Cost-Benefit Analysis

Costs

Socioeconomics:

- Increased workload for farmers, as foals remain longer with the mare.
- Gradual weaning methods require additional time, planning, and handling effort.
- Slightly increased management adjustments may be necessary depending on herd structure.

Health & Welfare:

- Weaning occurs in winter (e.g. January–February), pasture-based group socialisation may not be possible, requiring indoor group housing.
- Indoor housing after weaning may increase the risk of minor injuries if new groups of unfamiliar foals are formed.

Environmental Sustainability:

- No direct environmental costs are consistently associated with extended mare–foal contact.
- Indirect effects may occur through changes in management intensity (e.g. housing adjustments for winter socialisation).

Benefits

- Potential improvement of the farm's image and marketing value through welfare-oriented management practices.
- Possible added market value for foals raised longer with their mothers, depending on buyer preferences and market acceptance (not universally confirmed).

- Reduced weaning stress when separation occurs at a later age (e.g. around 9 months).
- More stable behavioural and emotional development due to prolonged maternal contact.
- Support for more natural brain and social development.
- Reduced disruption of gut microbiota compared to early abrupt weaning.
- Lower likelihood of developing stereotypic behaviours and stress-related issues.
- Improved overall behavioural resilience.

- Potentially more stable pasture use patterns if foals remain longer in mare-integrated systems.
- Indirect contribution to more extensive, less intervention-intensive breeding systems

Foal Weaning & Rearing Management

Costs

Cooperation between farms:

- Higher coordination effort between farms for horse placement, group formation, and socialisation planning.
- Need for agreements regarding timing of weaning and group housing strategies, especially when farms follow different management philosophies.
- Logistical complexity when foals or mares are temporarily moved between farms for management reasons.
- Potential mismatch in management standards or handling practices between cooperating farms.
- Increased communication and planning effort to ensure animal welfare continuity across locations.

Benefits

- Possibility to organise joint weaning groups, allowing foals from multiple farms to be socialised together in larger, more stable groups.
- Sharing of infrastructure for post-weaning group housing (e.g. barns, paddocks, winter housing).
- Exchange of mares, foals, or “nanny horses” to improve social learning environments.
- Reduced individual pressure on single farms to manage all developmental stages alone.
- Knowledge exchange on breeding, handling, and weaning strategies between farms.
- Improved flexibility in managing seasonal constraints (e.g. winter-born foals, limited pasture availability).
- Potential to create regional cooperation networks for welfare-oriented breeding systems.

Additional Resources

Publications

- Crowell-Davies, S.L., Weeks, J.W., 2005. Maternal behaviour and mare-foal interaction. In The domestic horse. The evolution, development and management of its behaviour (ed. Mills, D. and McDonnell, S.), Cambridge University Press, p. 126 - 138.
- Crowell-Davis, S.L., 1986. Spatial relations between mares and foals of the Welsh pony (Equus caballus). Animal Behaviour 34, 1007-1015. doi:https://doi.org/10.1016/S0003-3472(86)80159-2.
- Górecka-Bruzda, A., Suwała, M., Palme, R., Jaworski, Z., Jastrzębska, E., Boroń, M., Jezierski, T., 2015. Events around weaning in semi-feral and stable-reared Konik polski foals: Evaluation of short-term physiological and behavioural responses. Applied Animal Behaviour Science 163, 122-134. doi:https://doi.org/10.1016/j.applanim.2014.11.004.
- Henry, S., Hemery, D., Richard, M. A., Hausberger, M., 2005. Human–mare relationships and behaviour of foals toward humans. Applied Animal Behaviour Science, 93(3-4), 341-362. https://doi.org/10.1016/j.applanim.2005.01.008
- Henry, S., Richard-Yris, M. A., Hausberger, M. 2006. Influence of various early human–foal interferences on subsequent human–foal relationship. Developmental Psychobiology: The Journal of the International Society for Developmental Psychobiology, 48(8), 712-718. https://doi.org/10.1002/dev.20189
- Henry, S., Sigurjónsdóttir, H., Klapper, A., Joubert, J., Montier, G., Hausberger, M. 2020. Domestic foal weaning: need for re-thinking breeding practices?. Animals, 10(2), 361.
- Henry, S., Zanella, A. J., Sankey, C., Richard-Yris, M. A., Marko, A., Hausberger, M. 2012. Adults may be used to alleviate weaning stress in domestic foals (Equus caballus). Physiology & Behavior, 106(4), 428-438. https://doi.org/10.1016/j.physbeh.2012.02.025
- Jezierski, T., Jaworski, Z., & Gorecka, A. 1999. Effects of handling on behaviour and heart rate in Konik horses: comparison of stable and forest reared youngstock. Applied Animal Behaviour Science, 62(1), 1-11. https://doi.org/10.1016/S0168-1591(98)00209-3
- Lansade, L., Bertrand, M., & Bouissou, M. F. 2005. Effects of neonatal handling on subsequent manageability, reactivity and learning ability of foals. Applied Animal Behaviour Science, 92(1-2), 143-158. https://doi.org/10.1016/j.applanim.2004.10.014
- Lansade, L., Foury, A., Reigner, F., Vidament, M., Guettier, E., Bouvet, G., Soulet, D., Parias, C., Ruet, A., Mach, N., Lévy, F., Moisan, M.-P., 2018. Progressive habituation to separation alleviates the negative effects of weaning in the mother and foal. Psychoneuroendocrinology 97, 59-68. doi:https://doi.org/10.1016/j.psyneuen.2018.07.005.
- Lansade, L., Lévy, F., Parias, C., Reigner, F., Górecka-Bruzda, A. 2022. Weaned horses, especially females, still prefer their dam after five months of separation. Animal, 16(10), 100636.
- Mach, N., Foury, A., Kittelmann, S., Reigner, F., Moroldo, M., Ballester, M., Esquerre, D., Riviere, J., Salle, G., Gerard, P., Moisan, M.P., Lansade, L., 2017. The Effects of Weaning Methods on Gut Microbiota Composition and Horse Physiology. Frontiers in Physiology 8, 535. doi:10.3389/fphys.2017.00535.
- Valenchon, M., Reigner, F., Lefort, G. et al. 2026. Affiliative behaviours regulate allostasis development and shape biobehavioural trajectories in horses. Nat Commun 17, 47. https://doi.org/10.1038/s41467-025-66729-1
- Waran, N.K., Clarke, N., Farnworth, M., 2008. The effects of weaning on the domestic horse (Equus caballus). Applied Animal Behaviour Science 110, 42-57. doi:http://dx.doi.org/10.1016/j.applanim.2007.03.024.
- Weary, D.M., Jasper, J., Hötzel, M.J., 2008. Understanding weaning distress. Applied Animal Behaviour Science 110, 24-41. doi:http://dx.doi.org/10.1016/j.applanim.2007.03.025.
- Villalba Mata, D., Casasús, I., Martín-Collado, D., Muñoz-Ulecia, E., Bernués, A., & Peral, A. T. (2024). Can traditional management practices help mountain livestock farms in the Spanish Pyrenees cope with climate change? Regional Environmental Change, 24(1), Article 15. https://doi.org/10.1007/s10113-023-02170-8

Foal Weaning & Rearing Management

Video

- In English:
  - https://www.youtube.com/shorts/9hZ5AjWBuT0
  - https://www.youtube.com/watch?v=irruc83nTNU
  - https://www.youtube.com/shorts/CZjIeEkGVE8
- In Polish:
  - https://www.youtube.com/watch?v=oo017hYd5Cs
  - https://www.youtube.com/watch?v=QKxgvqNykXc
- In French:
  - https://www.youtube.com/watch?v=HGaEwvDxuXc

Websites

- https://equipedia.ifce.fr/recherche?s=manipulations+poulains&q=manipulations%2520poulains
- https://horsesport.com/magazine/behaviour/best-practices-for-handling-foals/
- https://equipedia.ifce.fr/elevage-et-entretien/elevage/poulain/le-sevrage-du-poulain-comment-faire
- https://www.insb.cnrs.fr/fr/cnrsinfo/du-role-des-interactions-sociales-lors-du-developpement-cerebral-ce-que-nous-apprennent
- https://www.inrae.fr/actualites/maintenir-presence-maternelle-atout-developpement-cerebral-social-poulains?fbclid=IwY2xjawSfR15leHRuA2FlbQIxMABicmlkETFBM2t2VEhlc1BJVk52VG4zc3J0YwZhcHBfaWQQMjIyMDM5MTc4ODIwMDg5MgABHiiWKy2DxhJt70O9KR1OMs62B5TSfVvtcybQpAZgA-WqGZOLoTZjDXgeQuid_aem_V319VzKDPOOZwMy8v2kXPg
- https://www.worldhorsewelfare.org/advice/weaning-mares-and-foals
- https://ker.com/equinews/common-methods-weaning-horses/

Funded by the European Union

This project has received funding from the European Union under Grant Agreement No. 101086551.

Views and opinions expressed are however those of the authors only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.

Technical Sheet for Solution Implementation

Foal Weaning & Rearing Management

Annex

Ideas to Animate a Workshop About the Solution

- Identify and invite a breeder association, equine welfare organisation, or veterinary advisor specialised in foal development, breeding management, or equine behaviour to sponsor or support the workshop.
- Collaborate with a model stud farm that applies late weaning or group-based rearing systems to host the workshop.
- If possible
  - involve multiple farms to demonstrate different weaning and rearing approaches under real conditions.
  - Include a live demonstration of mare–foal group management and structured weaning practices (e.g. gradual separation setups, group housing with “nanny” horses).
- Let the participants actively take part
  - Let participants observe or design a simple weaning and post-weaning management plan in small groups (e.g. timing, group composition, housing options).
  - Organise a practical exercise where participants evaluate foal behaviour in different social settings (mare-present vs. weaned groups).
  - Include a comparison of different rearing systems (early weaning vs. late weaning vs. group rearing with adults), ideally using real case examples or farm data.
- Facilitate a group discussion on management constraints such as seasonality, housing capacity, and social grouping strategies.

Proposed Structure for the Workshop on Foal Rearing and Weaning Management in Equine Farms

1. Introduction to foal rearing and weaning strategies
- Overview of different weaning approaches (early, gradual, late weaning).
- Role of mare–foal bonding in early development.
- Natural vs. conventional management systems.

2. Benefits of prolonged mare–foal contact and structured weaning
- Reduced stress and improved behavioural development in foals.
- Support for social learning and emotional regulation.
- Improved handling and human–horse relationship development.

3. Practical applications on equine farms
- Group rearing systems with foals and adult horses (“nannies”).
- Gradual separation techniques and timing strategies.
- Integration of foals into stable social groups.

4. How to plan and implement a welfare-oriented weaning process
- Assess available space, housing, and group management options.
- Plan the timing of weaning according to foal development and farm conditions.
- Prepare mares and foals for gradual separation where possible.
- Organise suitable post-weaning social groups and adult companions.

5. Hands-on demonstration
- Observation of mare–foal interactions and group dynamics.
- Simulation, video or demonstration of gradual separation setup.
- Practical group exercise: designing a weaning plan for a case study farm.

6. Management and organisation
- Group formation strategies for foals.
- Integration of “nanny” horses.
- Seasonal planning (pasture, (open-) stables).

7. Case studies and real-world examples
- Farms using late or gradual weaning systems.
- Outcomes in behaviour, management, and handling.
- Lessons learned from different breeding systems.

8. Discussion and decision-making tools
- Balancing welfare, logistics, and farm constraints.
- Risk management in foal development.

9. Q&A session
- Open questions on management, welfare, and implementation challenges.

10. Wrap-up and resources
- Summary of key principles in foal rearing.
- Further reading and advisory contacts.
- Examples of practical implementation guidelines.