

Foaling Monitoring – EasyFoal



Thematic Area: Health and Welfare.

Priority: What practices can be implemented to promote biosecurity measures and prevent emergent diseases?

Need: Reproductive performance issues: discreet heat, resorptions of the embryo, miscarriages... How can I improve reproductive performance on my farm?

Solution EU Number: HE-07.

Content of the Solution:

EasyFoal is a sensor-based foaling detection system that monitors the mare's behavior via a tail-mounted sensor, sending real-time alerts to farmers to enable timely assistance during foaling, with reliable wireless communication and easy installation.

Key Contacts:

- Breeders association, sellers.

Reasons for Implementing this Solution

Installing the EasyFoal sensor on the mares is quick and easy, with no stress on the horses. The system generally warns the farmer between 5 and 20 minutes before foaling, enabling him to attend and thus better manage complicated foalings. The system replaces belts and magnets.

Description of Solution Strategies

The EasyFoal system is an innovative and reliable monitoring solution for early detection of foaling in mares. It is based on behavioral analysis in the hours leading up to parturition and enables timely alerting of the horse owner or farm staff. The aim is to improve reproductive performance and increase safety for both mare and foal by enabling quick intervention.

Functionality

EasyFoal uses a motion sensor that is attached to the mare's tail and continuously monitors various behavioral parameters. These include:

1. Restlessness, such as frequent lying down and standing up,
2. Signs of discomfort or colic-like behavior,
3. Contractions and other characteristic pre-foaling movements.

Based on these indicators, the system can reliably detect the onset of labor. When foaling signs are identified, the system automatically sends:

- A voice call to notify the farmer or caretaker directly,
- A text message (SMS) including the specific sensor ID for clear identification.



Foaling Monitoring – EasyFoal

System Components

The EasyFoal package includes:

- A **sensor** to be attached to the mare's tail,
- A **receiver unit (collector)** with antenna and power supply,
- **Mounting straps** for secure sensor attachment,
- A **charging station / standby holder** for the sensor,
- A **complete installation and user guide**.

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- A text message (SMS) including the specific sensor ID for clear identification.

Technical Specifications

- **Range:** Up to 1 kilometer between the sensor and the receiver unit (depending on environment and terrain).
- **Signal transmission:** Alerts are sent via mobile network (GSM), either through voice call and/or SMS.
- **Battery life:** The sensor features an energy-efficient standby mode and long battery autonomy.
- **Localization:** If the sensor is lost in the field or pasture, a geolocation function allows for its retrieval.

Tips: For even greater convenience, it is recommended that this system be paired with a camera system.

Position in the Market

While various systems for foaling detection exist, EasyFoal offers a non-invasive, behavior-based solution that does not rely on physical or chemical interventions. It is compatible with pasture and stable environments and operates independently of video surveillance.



Foaling Monitoring – EasyFoil

Implementation Steps

1. Procure the EasyFoil System

Order the complete EasyFoil package from the authorized distributor or supplier. Ensure sufficient units are available for the number of mares expected to foal during the season.

2. System Setup and Configuration

- Install the receiver unit (collector and antenna) at a suitable location with reliable power supply and GSM network coverage.
- Perform an initial system setup according to the installation guide.
- Enter and configure the phone numbers of the people who should receive alert calls and SMS notifications (e.g. stable staff, veterinarian, owner).

3. Sensor Preparation

Before each expected foaling, charge the sensor fully and attach it securely to the mare's tail using the provided mounting straps. The timing of installation should correspond to the mare entering the pre-foaling observation period (typically 1–3 days before expected foaling).

4. System Testing

Conduct a test run to verify that the sensor is functioning correctly and that the receiver is able to transmit alerts. This includes sending a test SMS or call to the configured recipients.

5. Monitoring Phase

Once installed, the sensor continuously monitors the mare's behavior. The system remains in standby mode and automatically sends an alert when pre-foaling behaviors are detected.

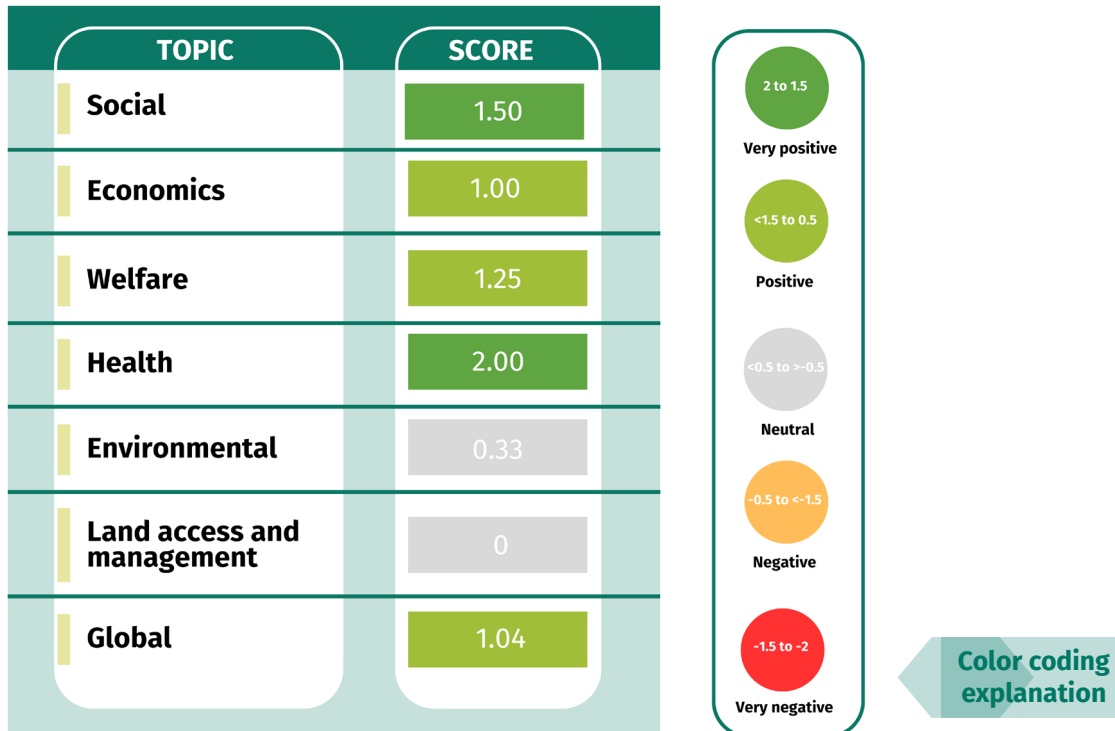
6. Response to Alerts

Upon receiving a voice call or SMS alert from the system, the responsible person should promptly attend to the mare to supervise the foaling process and provide assistance if necessary.

7. Post-Foaling Handling

After foaling, remove the sensor from the mare, clean it, and return it to the standby holder or charging station for future use. Review the alert history if needed.

How Will this Solution Impact the Performance of your Farm ?



Socioeconomics: This solution will support the social performance of the farm because it improves breeders’ working conditions, ensures better reproductive monitoring, and promotes animal welfare—factors that contribute to a positive image of the farm among clients and professionals.

This solution will support the economic performance of the farm because it enhances reproductive efficiency and can generate additional income through equipment sharing or rental, making it a cost-effective strategy.



Health & Welfare: This solution will support the farm’s health performance by enabling the recognition of impending labour and, consequently, early monitoring of the health of both the mare and foal. It will also enhance the farm’s welfare performance, as its use can help prevent or allow early detection of suffering or neonatal problems. Even if this solution will not have impact on access to forrage, it can help to let the mares to have access to freedom exercise and friends while still being under monitoring.

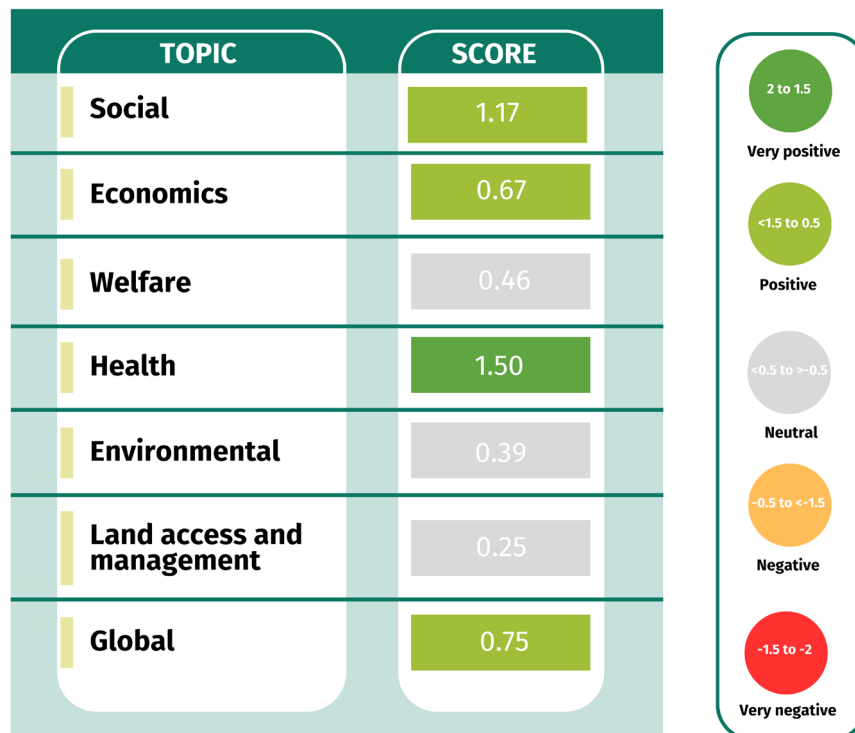


Environmental Sustainability: This solution has a neutral effect on farm performance related to environmental sustainability and grassland management.

So globally, this solution will support the performance of the farm.

Foaling Monitoring – EasyFoal

How Will this Solution Impact the Resilience of your Farm?



Socioeconomics: This solution will support socioeconomic performance of the farm facing external challenges because it contributes to both cost-efficiency and improved animal health outcomes. By reducing the need for frequent on-site visits from staff and veterinarians—especially during pandemics or disease outbreaks—it minimizes operational disruptions and lowers the risk of disease transmission. Furthermore, remote monitoring and reproductive technologies improve foal viability, leading to higher-quality offspring and potentially better market value. In extreme weather events, it ensures safer and more flexible management practices. So whatever the challenge faced, whether it be staff shortages or rising costs, this solution will help to support the socio-economic performance of the farm.



Health & Welfare: This solution will significantly enhance the health performance of the farm when facing external challenges. It helps reduce pain, mortality, and the need for curative medication in cases of delivery or post-natal complications. By addressing issues related to parturition and minimizing treatment side effects, horses—particularly mares and foals—are more likely to remain healthy. The solution will limit vet costs and medication use compared to a farm without the solution. Over time, with healthier animals, the farm can allocate its resources more effectively and focus on managing other external pressures.

How Will this Solution Impact the Resilience of your Farm?



Health & Welfare:

The solution will also have a modest positive impact on welfare performance, primarily by supporting positive emotional states in horses. This results from maintaining good health in mares and foals and preventing discomfort related to delivery or post-natal issues, ultimately helping breeders cope more effectively with broader operational challenges.



Environmental Sustainability: This solution has a neutral effect on farms resilience related to environmental sustainability and grassland management as the solution doesn't impact the performance of these areas. However, it does have a minor positive effect in a case of most of the challenges in all measured areas (climate change mitigation and adoption, halting biodiversity loss, water and access, use and management of grassland). This effect is due to less use of medication if the solution is in use compared to farms which do not use it. Therefore, there less harmful leakages and contamination to soils, water, flora and fauna.

So globally, this solution will support the resilience of the farm. It will help to maintain global performance of the farm facing external challenges.

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

CHALLENGES	SCORE
Inflation	0.83
Pandemic	0.96
High welfare standards	1.00
High infectious diseases	0.79
Extreme weather event	0.75
Loss or limited access to grassland	0.17

2 to 1.5
Very positive

<1.5 to 0.5
Positive

<0.5 to >-0.5
Neutral

-0.5 to <-1.5
Negative

-1.5 to -2
Very negative



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



Inflation & Social Crises: This solution will support the global performance of the farm facing inflation because it increases foal viability, reduces veterinary interventions and medication use, and lowers labor demands—resulting in fewer complications, less economic loss, and reduced environmental impact from pharmaceuticals, all of which contribute to cost efficiency and resilience in a high-cost context.

This solution will support the global performance of the farm facing pandemics because it limits the need for stable visits by staff and veterinarians, reduces human presence and health risks, and supports continuity of care with minimal labor—making it especially valuable when workforce and medical resources are strained.



Welfare & Diseases: This solution will have a significant impact on the global performance of the farm in the face of infectious disease outbreaks, as it supports the protection and maintenance of good animal health—an essential factor in addressing broader health challenges. It also contributes to the farm's global performance by enhancing both socioeconomic performance, as previously explained, and environmental performance, as outlined below.

Furthermore, the solution will make a notable contribution to the farm's global performance in adapting to high welfare standards. By improving animal health, it helps ensure a positive emotional state, free from pain and discomfort. The reduced reliance on medication also supports environmental sustainability, aligning with modern welfare and ecological expectations.



Climate Change & Access to Land: This solution has a positive effect on farms' ability to recover from abnormally high or low temperatures, drought, excessive rain, windstorms, or floods as this solution can help the farmer to save time and money. The solution will limit vet costs and medication use compared to a farm without the solution.

The solution has a neutral effect on the challenge caused by loss/limited access to grassland.

Foaling Monitoring – EasyFoal

Cost-Benefit Analysis

Costs

Socioeconomics:

- Relatively high purchase costs, especially when used with many mares; more economical when combined with other systems (e.g., cameras).
- The system requires sufficient mobile network coverage; operation is problematic in areas with poor or no signal.
- Prices:
 - EasyFoal box (sensor, antenna, accessories): approx. €1,500–2,000.
 - Additional sensors (for multiple mares): €250–300 each.
 - Annual subscription (flat rate, regardless of number of sensors): €100–150.
 - Mobile network costs (SIM card, GSM usage): €2–5 per month.
 - Optional staff training / installation support: €100–300 one-time.



Benefits

- Over 90% of foalings reliably detected.
- Significant reduction in foal and mare losses.
- Savings on veterinary and emergency intervention costs.
- Labor savings due to elimination of continuous monitoring (e.g., night watch).
- Improved rest for horse caretakers through automated monitoring, leading to significant mental and physical health benefits.
- Reduced risk of accidents and enhanced well-being for staff and those around them.
- Less stress and better mental health among stable personnel.
- More positive image of the job and the horse breeding sector overall.
- Opportunity for new business models, such as renting out the devices to other farms.
- Geolocation function provides additional security if the sensor is lost.
- Single antenna supports unlimited number of sensors.

Cost-Benefit Analysis

Costs

Health & Welfare:

- Potential discomfort or irritation caused by the tail-mounted sensor if not correctly fitted or maintained.
- Sometimes, the warning can ring a little bit late when the foal is already engaged.
- Dependence on technology may reduce direct human observation, potentially delaying detection of other health issues not related to foaling.
- Possible false alarms causing unnecessary stress or interventions for mare and caretakers.
- Limited effectiveness in environments with poor mobile network coverage, which could lead to missed alerts and associated welfare risks.

Environmental Sustainability:

- Resource use in manufacturing and disposal of sensors and accessories.



Benefits

- Non-invasive, stress-free monitoring of mares.
- Early detection of foaling onset allows timely assistance.
- Prevention of birthing complications and related injuries.
- Improved survival rates and wellbeing for mares and foals.



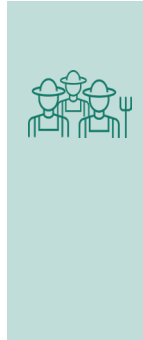
- Sensors have long battery life (~7 years), reducing waste.
- Reusable hardware minimizes electronic waste.
- No chemicals or disposable materials required.
- Reduced emergency treatments lower environmental impact from transport and medical interventions.
- Minimal energy consumption for sensor and antenna operation.

Cost-Benefit Analysis

Costs

Cooperation between farms:

- **Increased coordination effort** for scheduling usage, maintenance, and responsibilities among participating farms.



Benefits

- Sharing equipment can reduce investment costs.

Additional Resources

Websites

- <https://www.easyfoal.com/>
- <https://equipedia.ifce.fr/elevage-et-entretien/elevage/poulain/moyens-de-surveillance-du-poulinage>



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Ideas to Ideas to Animate a Workshop about the Solution

- **Find a sponsor:**
Approach a trader, advisor, or company specializing in horse breeding management, equine health, or animal monitoring systems, ideally one involved with EasyFoil or similar technologies.
- **Select a model farm:**
Identify a breeding farm with mares where EasyFoil is used or willing to host the workshop and demonstrate the system live.
- **Engage participants in practical tasks:**
Include hands-on activities such as fitting the sensor, setting alert recipients, and simulating foaling alerts so participants can experience the system firsthand.

Proposed Workshop Structure for EasyFoil in Horse Stables

1. Introduction to EasyFoil

- What is EasyFoil?
- Key components: tail-mounted sensor, antenna/receiver, alert system.
- Brief overview of other foaling monitoring options for context.

2. Benefits of EasyFoil in Horse Stables

- Early and reliable detection of foaling onset.
- Reduces physical strain by automating monitoring.
- Minimizes foal and mare losses through timely alerts.
- Simple installation with no cabling required.

3. Practical Applications on Horse Farms

- Attaching and securing the sensor (practical exercise).
- Setting up alert recipients (calls, SMS).
- Real-life examples of how EasyFoil supports daily farm routines.

4. How to Choose the Most Suitable System

- Evaluating farm needs: number of mares, farm size, antenna range.
- Types of sensors and antennas available.
- Cost considerations and potential subsidies.

5. Hands-On Demonstration

- Live demonstration of sensor installation.
- Participants simulate foaling alerts.
- Tips on proper sensor handling and maintenance.



6. Maintenance and Troubleshooting

- Cleaning and caring for sensors and antenna.
- Diagnosing connection issues.
- Handling lost or damaged sensors.

7. Case Studies and Real-World Examples

- Testimonials from farms using EasyFoal.
- Integration into farm workflows.
- Challenges faced and solutions found.

8. Cost Analysis and Return on Investment (ROI)

- Initial investment vs. long-term savings on labor and veterinary costs.
- Calculating ROI based on herd size and workload.

9. Q&A Session

- Open floor for questions and experience sharing.
- Address concerns about effectiveness and costs.

10. Wrap-Up and Resources

- Summary of key points.
- Links to further information, supplier contacts, and user communities.
- Information on special offers or discounts through partners.