

GRAZING4AGROECOLOGY

NEWSLETTER NO.3
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Dear readers,

Welcome to our project update. In this edition, we will delve into:

- Global Grazing Insights: A recap of the enlightening "Young Farmers Tour" in Germany, where the next generation of farmers shared knowledge and experiences.
- Consortium Highlights: Stay informed with the latest activities and initiatives from our dedicated project members across the Grazing4AgroEcology consortium.
- Pioneering Pastures: A spotlight on the cutting-edge technologies and advancements being championed by our partner farms, pushing the boundaries of sustainable grazing.
- Climate's Role in Agriculture: A detailed analysis of how varying weather patterns across nations are influencing pasture and farming practices.

Join us as we journey through these pivotal developments shaping the future of sustainable agriculture.



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PARTNERS

INTERNATIONAL GRAZING NETWORK: YOUNG FARMERS TOUR GERMANY



Within the EU funded project “Grazing4AgroEcology” (G4AE), the Centre for Grassland (GLZ) and the Georg-August University of Goettingen (UGOE) organized an international Young Farmers Tour from 21st to 22nd of June 2023. 45 young farmers from 8 European countries gathered in the region of Oldenburg, Germany, to learn and share knowledge about grazing-related topics like Biodiversity, Grassland Management and Virtual Fencing on pastures. Several presentations, workshops, interactive sessions, farm visits and a social event were organized to encourage exchanges and networking between the different nations.



Starting with a farm walk on Syds-Jan Boersma’s pasture-based dairy farm, the group learned about multispecies swards and a pasture management system called “topping”. In this system, the top third of the grass is cut (approx. 12 cm) and left on the pasture for about 12 hours as green fodder. The topping system has proven successful under dry conditions, as feed intake per cow has increased and mature grass is also eaten. Over the years, the farmer has observed that despite heat stress, the milk production remained constant or has even increased with the topping management. Compared with usual grazing management (swards height of max. 10 cm) during droughts, the topping of grass has the advantage of less residuals and less mature grass which can be very susceptible to rust. The farmer stressed that it’s important to make the farm more resilient to crisis, rearing young stock on the farm and keeping the costs low. He has a clear take-home message: “It is better to improve and maintain what you have instead of growing all the time”.

Next station of the tour was Dirk Hanken’s farm, which served as the venue for the Young Farmers Tour. With his scientific approach “Reduction of Greenhouse Gases on peat soils”, Erik Jansen (STOWA & Veenweide Innovatiecentrum, Netherlands) pointed out agricultural possibilities and challenges on peat soils. Caitlin Looney from Teagasc (Ireland) continued with the interactive session “Clover incorporation and benefits”, which included exemplary methods like reseeding and oversowing.

INTERNATIONAL GRAZING NETWORK: YOUNG FARMERS TOUR GERMANY

The following workshop “Pastoral Animal Welfare” by Lisa Oehlert (GLZ) showed the importance of water availability and water quality on pastures. Using a pasture pump, the participants had the chance to simulate the duration and effort it takes for a cow to drink enough water. The first day ended with another farm walk and a social dinner for networking purposes.

Under the topic “Competitiveness and ecological benefits of pasture farms”, the President of the European Grassland Federation Agnes van den Pol-van Dasselaar (AERES, Netherlands) started the second day by talking about European grazing, animal welfare, agroecology on pastures, and biodiversity. Martin Komainda and Friederike Riesch (both UGOE) proceeded with a deeper insight of the “Multifunctionality of biodiversity of grazed grasslands”. With focus on the ecosystem, they informed about the effects of swards composition on milk yield and the functions of multispecies swards.

In the interactive “Virtual Fencing” demonstration (by UGOE), the young farmers got the chance to simulate pasture management with the virtual fence system “NoFence”. By using smartphones and collars for livestock, the participants tested the app-based system and its sound signals as if they were animals passing the virtual fence.

Moving on to the organic dairy farm Butendiek, one of the most innovative grazing farms honored with the Inno4Grass Award, the international group learned about a hay dryer system that generates high quality hay to improve milk quality. The farm walk also included the demonstration of a slurry hose system that improves infrastructure and reduces soil compaction to protect soil quality. The tour ended with a cheese-tasting in the farmer’s own dairy.

The valuable feedback of the young farmers was rather positive and will help with the organization of the next G4AE Young Farmers Tour planned in the Netherlands for 2024.



3RD PROJECT MEETING IN RENNES: A VARIED AGENDA FOR INSPIRATION & PRODUCTIVITY



Between the 19th and 21st of September 2023, the G4AE consortium convened in Rennes, France for the 3rd General Partner Assembly (GPA) Meeting. This gathering, bringing together participants from all eight member states and work packages, allowed for updates on progress, identification of next steps, and collaborative problem-solving.

Meetings of this nature, which feature extended presentations and discussions, can be challenging to maintain focus and productivity. However, we discovered an effective meeting structure at our last meeting in Lisbon! We integrated interactive sessions in between each presentation, allowing small, international groups to brainstorm over different issues. This format proved beneficial in keeping attendees engaged and present.

Credit goes to our French colleagues for organizing a well-planned meeting in Rennes, complemented by an inspiring field visit to a farm utilizing an efficient grazing system, a milking robot, and a unique infrastructure with a tunnel system. The 3-day stay in France concluded with a guided tour of Rennes city and a visit to the Corsair city of Saint Malo, adding to the overall productivity of the gathering.



UPDATES ON PROJECT MEMBERS ACTIVITIES

GERMANY

Second Edition of the German Grazing Days

Between June 21st and 22nd, 2023, the Grünlandzentrum in collaboration with NetzwerkFokusTierwohl orchestrated the "Second Edition of the German Grazing Symposium" in the Oldenburg region of Northern Germany. Drawing a crowd of approximately 200 participants, which included farmers, advisory experts, and association members, the conference facilitated discussions on pasture upkeep across diverse terrains, with an emphasis on peatlands. Participants delved into aspects of pasture quality, infrastructure development, fence building techniques, and the overarching theme of animal health.



ROMANIA

Workshop Sustainable Agri-food Systems

The University of Agricultural Sciences and Veterinary Medicine from Cluj-Napoca hosted the workshop titled "Sustainable agro-food systems" between July 27-29, 2023. This event aimed to promote dialogue and exchange of experiences in the agri-food sector. A highlight of the workshop was the presentation of the "Grazing4AgroEcology" project and the economic and ecological performance of grazing-based farms, as well as animal welfare. The workshop served as a platform for collaboration and innovation, highlighting a sustainable future for the agri-food industry.



FRANCE

On June 29th, the French team convened for their second interaction with the farmer network. This marked their first in-person gathering, allowing for genuine face-to-face interactions.

During the morning, the 11 attending farmers introduced themselves, outlining their farming locations, production types, and delved into the aims and anticipations of the G4AE initiative. The latter part of the morning saw them engaging in an innovation-centric workshop.

Split into two groups, each farmer briefly highlighted their unique innovation. Subsequently, one particular innovation was chosen for deeper exploration by the group, culminating in the creation of an illustrative poster detailing the method and its ramifications across economic, environmental, labor, and animal welfare domains.

The focus turned towards strategies in grazing infrastructure and alternative forage crops to optimise grazing intervals.

PORTUGAL

On May 31st, CONSULAI hosted an event at Monte do Tojal in Évora, uniting young farmers and students from the agricultural sector. With around 35 participants, the day focused on contemporary farming paradigms, emphasising the intersection of productivity and ecology.

Key European projects, H2020 MIXED and Europe G4AE, were highlighted, showcasing the role of collaboration in future agricultural strategies. A special session provided insights into the relationship between soil fertility and extensive grazing.

Monte do Tojal's models, which integrate both productivity and environmental concerns, were also discussed. The day's highlight was a hands-on field trip, enabling participants to witness these practices in action.

The event concluded with a palpable sense of enthusiasm among attendees.

By clicking on the provided [link](#), you can view more details about the event.



THE NETHERLANDS

On June 28, 2023, Joeri Ham's farm in Wijdenes hosted the second Dutch study group session for Grazing4AgroEcology. Guest speakers Siw Fasting from Germany's Grünlandzentrum and Teun van Oosterhout from ZLTO engaged with the 10 attending dairy farmers.



Siw began by introducing dairy farming and grazing practices in Germany, then led an interactive session on adapting to climate change at the farm level.

Following this, Teun explored the results of the Kringloopwijzer, an instrument used to monitor mineral consumption on farms. A notable moment was the farm visit, where Joeri showed his grazing technique, alternating the cows between a new field where the intake would consist of the tips of the grass and a previous field where the intake would be mainly stems thus optimizing the cows' diet



Additionally, the G4AE project was presented at the WeideWijs concluding event in Sint-Gillis-Waas, Belgium. At the event, G4AE flyers were also shared with attendees.

The [brochure](#), Fiches WeideWijs Finaal, is valuable for Dutch-speaking farmers.



INNOVATIVE GRAZING TECHNOLOGIES AND ADVANCEMENTS FROM PARTNER FARMS



GERMANY

VOICES FROM AGRICULTURE: GERMAN FARMERS SHARE INNOVATIONS



In late July, the Grünlandzentrum began filming innovation videos in Germany. These videos showcased farmers, unaccustomed to the spotlight, sharing unique and innovative practices on their farms.



This choice allows him to maximise the feeding potential of his cows with high-quality summer-harvested forage. When grazing season begins, the cows produce milk that integrates a significant amount of fresh grass in their diet.

These innovations span from inventive farm structures to enhanced animal welfare and advanced management systems like the block calving method.

Inspired by a visit to Ireland, German farmer Theis Jansen adopted the block calving system, where all cows give birth within a short timeframe. Unlike many Irish counterparts, Theis opted for autumn calving to sustain his impressive milk yield of 10,000 liters per year.

Theis Jansen's system allows his young cattle to graze all summer. He's refined his calving process over the years, leading to a pattern of 6 months of calving and a 6-month break. While autumn sees a rise in calves and winter is for insemination, the system optimises grazing and maintains large milk yields. This approach also reduces the need for extra feed for new cows during prime grazing times, proving beneficial for his farm.



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FRANCE

DISCUSSING SPRING CALVING AT THE "GAEC VERT DE LAIT" GRASS-ONLY FARM

A trip to the "GAEC Vert de Lait" farm highlighted their unique spring calving system on an entirely grass-fed farm. Located in le Haut Corlay, Franck Le Breton and Maud Cloarec manage 47 cross-bred dairy cows on a 69 ha grassland, practicing agrobiology. Their cows, without any concentrates, produce 190,000 litres of milk annually through grouped spring calvings. This method, uncommon in France, aligns the cows' peak needs with the spring's abundant grass growth. Each cow yields 4,200 litres of milk, maximising grazing.

Consequently, milking stops for January and February, reducing winter workload. They transitioned to this system over four years, previously having year-round calvings. Achieving this required adjusting cows' calving times and culling some from the herd. Success hinges on managing reproduction and grass. Insemination is closely monitored, with heifers calving at 24 months and scans conducted in September. While spring is hectic, summer offers a more relaxed pace, benefiting family life.

PORTUGAL

GET TO KNOW SOCIEDADE AGRÍCOLA VARGAS MADEIRA

On August 11th, Portugal team explored Mértola in the Alentejo region, visiting the prominent Sociedade Agrícola Vargas Madeira, known for its local breed sheep production in Portugal. The farm, spanning 950 hectares within the Guadiana Valley Natural Park, is managed by João Madeira. He shared insights into the farm's evolution, especially in the last five years

Most of the land (85%) is permanent grassland, with a section dedicated to Montado, which faces challenges from climate change. The farm primarily raises the Campaniças sheep breed, with a total of around 2,500 animals, including cattle. Forage production, covering 15% of their land, is vital, with hay and straw crucial for supplementing the nutrition of female animals, especially during key production phases.

João highlighted their shift to rotational grazing in recent years, not for productivity but for better work management. They've subdivided their large lots, previously 25-30 hectares, into more manageable 5-7 hectare sections, each holding 600-750 animals. This change has significantly streamlined their operations.



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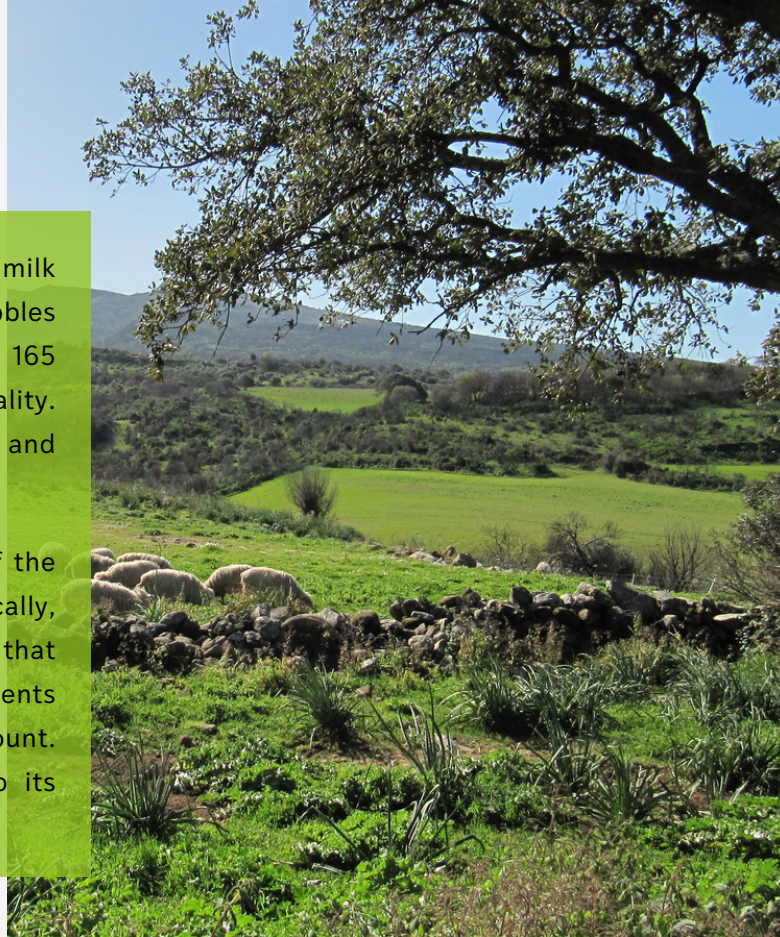
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ITALY

EFFECTIVE MILKING PRACTICES TO PREVENT MASTITIS IN GRAZING SHEEP

Sardinian farmer, Mr. Runchina, oversees a flock of 620 milk sheep that graze on 100 ha of grasslands and stubbles throughout the year. Annually, 500 of these sheep produce 165 tons of milk, sold to a cooperative that values milk quality. Hence, Mr. Runchina prioritises a meticulous milking routine and animal health to ensure top-tier milk.

His primary goal is to prevent mastitis, an inflammation of the mammary gland affecting milk quality and quantity. Historically, his most productive sheep were most susceptible. Given that mastitis, often bacterial, lacks universally effective treatments and can lead to antibiotic resistance, prevention is paramount. Moreover, antibiotic-treated milk isn't marketable due to its impact on cheese production.



Mr. Runchina's prevention strategy includes maintaining clean resting paddocks, regularly cleaning milking equipment, and crucially, disinfecting udders post-milking. Many farmers overlook this last step, but it's vital since the nipple canal remains open post-milking, allowing germ entry. By simply spraying a disinfectant on the udder immediately after milking, he's reduced mastitis cases to just 2-3 annually (0.6%). This quick procedure, taking 5 minutes for every 48 sheep, has led to numerous benefits: controlled somatic cell counts, higher milk prices, increased milk yield, and reduced reliance on antibiotics and veterinary services.

Irish pasture systems have adopted advanced technologies to boost their sustainability and profitability. The Pasturebase platform provides farmers with tools to make specific grassland management decisions, allowing them to input data and receive immediate feedback.



IRELAND

This ensures optimal herbage for livestock and assists in decisions like reseeding. The platform also tracks fertiliser use and fodder plans. Additionally, by incorporating legumes, particularly clovers, there's an increase in animal production and a decrease in chemical nitrogen reliance. In short, Irish pastures are blending technology with natural practices for efficient farming.



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SWEDEN

REFINING GRAZING PRACTICES AT STORA MU FARM IN NORTHERN SWEDEN

Stora Mu, a dairy farm located in northern Sweden, collaborates with the Grazing4AgroEcology project, involving SLU and Svenska Vallföreningen. In mid-July, a group of 30 individuals toured the farm, discussing grazing techniques.



Despite challenges like limited land near the stable and robot milking, the farm seeks to optimise its system.



A notable improvement is the enhanced paddock division. Some visitors shared insights from their advanced grazing systems with multiple paddocks.



The farm's swards are integrated into whole-crop barley, and the group also discussed variety selection.



The tour coincided with the second harvest, showcasing a thriving sward. Additionally, the farm's use of controlled traffic farming (CTF) positively affects red clover longevity.



In summary, Stora Mu farm in Sweden is actively enhancing its grazing system, benefiting from collaborations and innovative practices like CTF.



OPTIMISED POST-HARVEST GRAZING AT TORSLUNDALAMM SHEEP FARM IN SOUTHERN SWEDEN

Torslundalamm, a sheep farm in southern Sweden's Öland island, is focused on developing an efficient paddock system that maximises pasture use, ensuring sufficient grass supply even in drought conditions.



This strategy was shared with about 40 attendees, primarily sheep farmers, during a field walk in early July. The farm allows lambs to graze the sward post the initial harvest. Proper rotation was noted to reduce parasite presence.



The group also discussed the use of various species and mixtures for both grazing and a combined approach of mowing and grazing.



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ROMANIA

GPS TRACKING FOR LIVESTOCK IN ROMANIA'S MOUNTAINOUS REGIONS

In Romania's mountainous terrains, factors like weather, soil, and accessibility challenges limit business activities. Hence, livestock farming remains a popular business choice. Cluj County's mountainous region has many small livestock farms, though their number and size have been declining. While farmers typically own their land, communal pastures, including forested areas, are available for all villagers to graze their livestock.



Farmer Niculina Roba, with 15 hectares of land and 18 cattle, including 8 dairy cows, faced challenges locating her cows in the evening as they grazed across vast distances, sometimes covering 17-18 km daily. To address this, she invested in a GPS monitoring system, costing around 100 euros per unit. This system, comprising a neck device for the animal and a software application, allows Niculina to track her cattle in real-time.



This innovation not only streamlined her farm operations but also ensured the cows' safety. The technology holds potential for wider adoption, especially in areas with expansive grazing lands, and can be particularly useful for monitoring animals with health concerns or those about to give birth.

WEATHER IMPACTS ON PASTURE AND FARMING: A COUNTRY-BY-COUNTRY ANALYSIS

FRANCE

France experienced a uniformly dry June, but the subsequent months brought varied conditions. The North faced a cooler and wetter summer, while the South endured its usual warmth, punctuated by dry periods. Specifically in Brittany, a consistent north-easterly wind until mid-June led to rapid drying of soil and grasslands.

This affected grass growth, prompting many farmers to increase the use of stored feeds like corn silage. By the end of June, grazing activities had significantly reduced. However, the situation improved with the onset of regular rains in July and heavier showers in early August.

These rains not only revived the grasslands, allowing for resumed grazing in August, but also positively impacted maize crops, setting them up for promising yields. By the close of August, earlier drought-related apprehensions in Brittany had largely diminished. For those interested in a deeper dive into France's weather and its impact on agriculture, monthly reports are available from the [Institut de l'Elevage](#).

If you want to know the grass growth forecasts for Brittany over the next week, please find the Forage Observatory produced by the Chamber of Agriculture of Brittany: <https://www.chambres-agriculture-bretagne.fr/synagri/packs-observatoires-des-fourrages>



SWEDEN

This year's cultivation season in Sweden has been notably difficult. Weather conditions took center stage, with an exceptionally dry spring and early summer resulting in reduced forage yields and postponed post-harvest grazing. This led to a clear shortage of fodder. Measures were taken to produce various alternative feeds. Fortunately, the latter part of the summer saw significant rainfall, aiding in the grazing situation in many areas.



The grasslands experienced robust regrowth, offsetting much of the earlier forage shortfall. However, this rain also brought challenges, leading to poor grain quality, problematic threshing conditions, and complex autumn fieldwork.



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ITALY

South Tyrol: Variable weather in South Tyrol led to a strong initial harvest, but subsequent rains affected timing and quality. Later harvests saw improvements, but sporadic cold and storm damages posed challenges. Overall, the year was deemed satisfactory.



Sardinia: The year started promisingly with good growth of permanent pastures. However, heavy autumn rains delayed seeding of annual crops. Spring saw good cereal growth, but May and June rains disrupted mowing and affected grain quality, leading to forage shortages in many farms.



GERMANY

Recent heavy rainfall (190 mm/m² over the past month) and optimal soil moisture have promoted grass growth, paving the way for a successful fourth silage cut. However, in certain areas, the soil's limited carrying capacity poses significant challenges for grassland farmers.

Additionally, the declining quality and taste of grazed grass have led to reduced feed consumption among dairy herds.



IRELAND

This month, Irish farmers wrapped up their silage harvests following an unusually rainy July and August. Currently, the emphasis is on increasing the total herbage volume on farms to prolong the autumn grazing period. Presently, grassland farms are witnessing growth rates of around 60 kg DM/ha/day, with the herbage's dry matter content ranging from 12 to 15% due to the persistent rainfall.



PARTNERS



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