

Best Practice examples on natural carbon sinks in agriculture

Category: Model farm

Field: Extensively managed grasslands



Name	Brockenbauer – from farm to fork
Country	Germany
Biogeographical Region	Continental
Region	Uplands “Harz”, Sachsen-Anhalt
Type of farm	cattle farming and sucker cow husbandry
Legal organisation	Family business, 3 families (Uwe & Susann Thielecke + 2 daughters)
Best practice	<ul style="list-style-type: none"> - Extensive management of protected grasslands as natural carbon sinks with the resilient and modest old breed “Harzer Rotes Höhenvieh”/ Harz Red Mountain Cattle - Holistic farm concept with organic farming and organic butchery with on-farm slaughtering and direct marketing of the meat products including a farm restaurant and a farm shop
Landscape/ Eco system type / protected area	<ul style="list-style-type: none"> - Grasslands in uplands, 500m ASL - 118 ha in Natura 2000 area, - 314 ha in nature conservation area (e.g. Naturschutzgebiet Harzer Bachtäler) - 444 ha in Landscape Protection Area
Size / Scope	<ul style="list-style-type: none"> - 444 ha
Agricultural Use	<ul style="list-style-type: none"> - 317 ha pastures, 127 ha meadows, mainly cattle farming (173 animals) and sucker cow husbandry (173 animals), - 6 goats, 14 pigs, 50 poultry

Best practice – model farm, effective: 24.10.24



Measures addressing climate	<ul style="list-style-type: none"> - Extensively managed grasslands functions as natural carbon sink. - Animals are exclusively fed with own hay and fermentation hay, no additional grain is purchased - No/short transport routes - Renewable energies is produced through a wood heating system, heat recovery and photovoltaics
Measures addressing biodiversity, water, soil	<ul style="list-style-type: none"> - Organic farming: no fertilizers, herbicides and pesticides protect the water quality - The parcels are on average 4ha (span: 0.1317 ha - 26 ha) The heterogeneous management of the grassland parcels fosters biodiversity - Rotational grazing protects the soil
Involved Stakeholders/ Partners	<ul style="list-style-type: none"> - Cooperation with hotels, butchers, universities, other agricultural businesses, associations, chambers of crafts, business consultants, trading companies. - Cooperation with the regional Landcare association and the landscape conservation associations to exchange experience in meadow maintenance.
Funding / Financing	<ul style="list-style-type: none"> - Agriculture in the Upper Harz region is not economically viable without public funding. They receive CAP payments (pillar 1, AECM, funding for old breeds). - The butcher's, steakhouse and farm shop are financially successful branches of the business thanks to intensive marketing, a good personnel policy and a forward-looking business management approach, which can survive without funding. - The family started without savings and financed everything from loans and funding from the investment bank. They achieved saving of financial resources by eliminating intermediaries. For the organic butchery they received public funding.
Transferability	<ul style="list-style-type: none"> - <i>"Our farm concept could be transferred one-to-one to other farms, provided the farm managers are prepared to take the financial risk, undergo continuous professional training, enter into co-operations and firmly believe that they can do it!"</i>, Uwe Thielecke - The involvement of expert consultants is essential

Description



Brockenbauer family in a TV show (from left to right): Uwe Thielecke (father), Julia Thielecke (daughter), Moderator, Marvin Freystein (son in law), Johann Lafer (television cook), Susann Thielecke (mother) and Sarah Thielecke (daughter) © Brockenbauer

The suckler cows curiously stretch their bright pink noses towards the camera and wag their almost white tails. The mother cows, on the other hand, are unimpressed and graze peacefully on the green mountain meadows. The animals belong to an endangered livestock species, the Harz red cattle (German: Harzer Rotes Höhenvieh). It is a frugal breed, undemanding and very resilient - an ideal breed for a low mountain region about which the saying goes: six months of winter and six months of cold.

The model farm

The Thielecke family's farm "Brockenbauer" is located in Tanne, a quiet holiday resort, idyllically situated at 500 metres above sea level near the mountain "Brocken" in the heart of the Harz Mountains, Germany.

After the reunification of eastern and western Germany, the family built up a holistic farm concept centred around the Harz red cattle from scratch. It all began with the first Harz cow calf called "Elsa", which Susann gave to her husband Uwe for his 30th birthday. Today, the Brockenbauer organic farm is the largest breeding farm of Red Mountain cattle in the world.

The Thielecke family farms a total of 444 hectares of Upper Harz mountain meadows with 173 suckler cows and cattle each. The grazing and mowing areas are almost entirely located in nature conservation, water protection and landscape conservation areas. Sophisticated pasture management is essential for the sustainable management of the land.

"We limit the size of the individual herds to around 25 animals plus calves and a bull. This allows us to avoid trampling damage on the pastureland," explains farmer Thielecke. The meadows are mowed late, with a cutting height of at least 10 cm, and fertilisation is carried out exclusively

Best practice – model farm, effective: 24.10.24

with the farm's own cattle manure. *"Due to climatic disadvantages in the cold Harz Mountains, we can generate a maximum of one grassland cut or graze a maximum of three times in good years."* Many areas can only be grazed due to steep slopes, marshy areas and remote locations. Nevertheless, no grain is bought in during the winter; instead, the animals are fed exclusively with the farm's own hay and fermented hay. The animals cope well with this. The herds are only given lickstones with selenium. *"This is important for bone formation and fertility. Selenium deficiency can also lead to udder inflammation. We commissioned a feed analysis, which revealed a good supply of nutrients, but a lack of selenium. This is due to the geological conditions here in the Harz Mountains."*



© Brockenbauer

But it is not only the precious mountain meadows that are looked after with particular care. Animal welfare is a top priority at Brockenbauer. All calves stay with their mothers for eight to nine months and are also allowed to keep their white horns with black tips, which are characteristic of the breed. The animals calve for the first time at 30 months at the earliest - on average, the first calving age is even 36-40 months. The older animals, which calve less frequently, are also valued by their owners. *"They know the land and bring calm to the herd. That helps us with our work,"* explains the Brocken farmer. *"Our oldest cow was 23 years old and still had a calf at 22. Harz Red Mountain cattle are a particularly long-lived breed. The cows also calve easily and are very maternal."* Nevertheless, the herd remains calm as Uwe Thielecke approaches a mother cow with a newborn. *"For us, a peaceful character is a selection criterion for breeding. It is important that we can approach the newborns in the herd without stress, for example to attach ear tags,"* says Thielecke.

In addition to the Harz Red Mountain cattle, the Brockenbauer also preserves other old livestock breeds that are threatened with extinction: The Harz goat, the Harz fox and the

Angler saddle pig, a robust German pig breed with particularly fatty meat. The farm also makes a active contribution to climate protection with renewable energies - through a wood heating system, heat recovery and photovoltaics.

The idea - everything from a single source

But what makes the farm special is not just the rearing of Harz Red Mountain cattle and the protection of the valuable mountain meadows. The Thielecke family has realised a complete value chain on their farm. When Uwe and Susann Thielecke's two daughters decided that their professional future should lie on the farm, the family fulfilled a long-cherished dream: they set up an organic butcher's shop on the farm with its own slaughterhouse and a catering experience including a farm shop. Everything from a single source, from farm to fork.

"The biggest challenge for us was that we had no financial backing and built up the business from nothing,"

says Thielecke. They took out loans and applied for funding from the investment bank to set up the new branches of the business. This way, the family manages without intermediaries. The added value remains on the farm and gives rise to new co-operations, including with hotels and other butchers from the region. Apprenticeships have also been created and secured on the farm. Another advantage of having several branches of the business is resilience: if one branch of the business is less profitable at certain times, for example due to restrictions during the pandemic, the overall profitability of the business is secured by other areas.



The farm shop with products from the Harz red cattle, © Brockenbauer

Best practice – model farm, effective: 24.10.24

Not only the three families benefit from the successful concept. Attracted by the impressive Harz Red Mountain cattle and the mountain meadows they keep open, guests can enjoy the farm's excellent products directly on site in the farm's own café and steakhouse.

Slaughtering on the farm eliminates the stress of transporting the animals. The whole animal is utilised in the organic butchery. The beef is matured in modern, fully automated Dry Age maturing cells. The Brockenbauer offers a tour of the farm every Saturday, including sausage tasting. The farm shop is also open on Sundays as it is linked to the restaurant opening times. The Brockenbauer's products can also be ordered online - the range is varied: German corned beef, boiled beef in beef broth, beef ham with sea salt, or would you prefer the "Tote Oma/ Death grandmother" style black pudding? The newsletter provides information about special offers and new delicacies. The recipe for success works. Meanwhile, Brockenbauer products are also sold nationally and internationally.

The farm won an award 2021 in the category 'Holistic-farm Concept' in Landcare Germany's ideas competition: Organic Farms in the Low Mountain Ranges of Germany'.



Presentation of the award to the winning idea 'Brockenbauer' in Category I 'Whole-farm Concept' in the DVL's 'Model Organic Farms in the Low Mountain Ranges of Germany' ideas competition. ©: D. Lohwasser, DVL, 2022

Author: Corinna Friedrich, Landcare Germany