

demeter

Steiner's impulse

for agriculture

Agri-Culture
for the Future

demeter – Biodynamic since 1924

The Birth of the Biodynamic Method

Pentecost 1924. Rudolf Steiner holds eight lectures on the prosperity of agriculture at the Koberwitz estate near Breslau.

A group of farmers who felt inspired by anthroposophy urged the visionary thinker to take up the task. They hoped that Steiner would offer concrete assistance for sustainable agriculture. The farmers were concerned that the quality of food, soil fertility and the health of plants and animals had declined considerably.

These ten days were also the birth of modern organic farming. Rudolf Steiner's impulse fell on fertile ground. The Biodynamic principle of considering the farm to be an organism that is as closed as possible has become the foundation of all organic farming: on the farm only as many animals are kept as can be fed with the fodder produced there. In turn, the animals provide sufficient manure to feed these fodder plants.

For 90 years, Demeter farmers and gardeners have been investing all their energy so that mankind can live from what the earth provides. The so-called "Agricultural Course" of Koberwitz is the spiritual foundation of the Biodynamic community on all continents. But what characterises this particular agri/food culture that goes far beyond the simple omission of chemical fertilisers and pesticides or food additives?

The crucial difference is due to a wider understanding of agriculture. In 1924

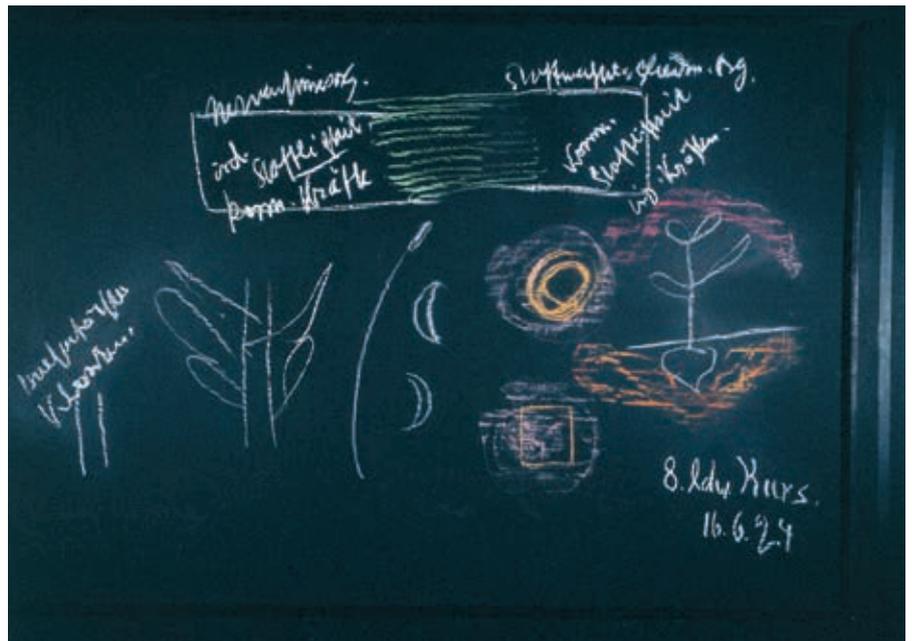


Steiner explained to the practitioners that agriculture is related to the whole cosmos. Through the phenomenon of the tides, many people may already know of its impact on the world, but it is much more

far-reaching and ultimately leads to an understanding, that everything is interconnected. Steiner asked his astonished audience not to simply believe the knowledge that he had gained through clairvoyant research, but rather to research it and try it out in practice.

The experienced farmers on the course immediately did just that. The group which formed, calling itself the research circle of anthroposophical farmers, chose the name of the fertility goddess Demeter for their products only four years later. It signifies still today the bridge to the spiritual dimension of Biodynamics and signals highest quality.

Since the lectures of 1924, Biodynamics has evolved. Men and women on farms and market gardens exchange information about their experiences, research key aspects and ask themselves and others questions of existential importance, which help to advance sustainable food production and at the same time allow the healing of the earth. ■



This blackboard drawing from 16th June 1924 deals with the nature of animal fodder and the farm as an individuality.

Each farm an individual organism

Especially in the case of agriculture, it is apparent that forces must be brought from the spiritual which are quite unknown today and which not only have significance that agriculture will be somewhat improved but also that in general, people's lives – man must indeed live from what the earth bears – are able to continue, on earth in the physical sense.

Rudolf Steiner

Agricultural Course 1924



are again and again aware of the effects of earthly and cosmic forces, whereas other people might come to this realisation through the tides. The fascinating preparation work broadens the perception of relationships in nature and makes it possible to work with these natural forces. It creates free space in the day to day of agricultural life, is not an additional chore, but a chance to connect to the farm organism through finely developed perception. The earth understands Biodynamic players as seeds, full of potential for the future, not a speck of dust in the universe. What might sound rather elevated, is in fact quite down to earth in practice. Many visitors to Demeter farms and gardens perceive a special atmosphere there. This is caused by the individual aspects of the farm organism, through which at a particular spot on the earth exactly the right number of animals are maintained,

their manure ensuring permanent soil fertility and full plant maturity. So the animals get their fodder from the farm and man, food of the highest quality. The values of diversity go even further: Biodynamic agriculture is only a harmonious whole, when the uncultivated areas are also included. ■

At first the quote certainly seems a bit strange. Anyone who enters into it, to explore the content, meets an exciting thought-cosmos that encourages a new way of viewing things. Steiner was convinced that food only achieves the quality that allows people to develop, when all factors are taken into account in its production: cosmic rhythms, the soil as a digestive organ of the plant or as soul forces of the animal. To bring all these aspects together and to order them, he introduced the Biodynamic preparations.

Stimulated by this, and building on a Goethean view of nature, Demeter farmers consider their farms as living, unique organisms. This ideal goes beyond the image of the closed farm system. Each organ needs the others. Each part serves the whole. Human beings, plants, animals and soil work together. Biodynamic practitioners have not only material substances in view, but also formative forces of the cosmos and the rhythmic processes of life. Through their Biodynamic practice, they

A thoroughly healthy farm should be able to produce within itself all that it needs.

Rudolf Steiner

Agricultural Course 1924



A strong community

Demeter is the brand name for products from Biodynamic farming. Only strictly controlled licensees may use the Demeter trademark logo. Without a gap the whole chain, from production to processing, is checked to see if the exacting standards of the Demeter Association are met. In business development meetings, agreements are made on how the work can be further improved.

As an entrepreneurial network the Demeter movement promotes the development of Biodynamic agriculture to secure livelihoods on this earth and to strengthen people in their positive interaction. In cooperation producers, processors, traders and consumers contribute as a partnership to the form and structure of the market. This association strives to keep the people and their needs in mind and at the same time give consideration to environmental, economic and social responsibility in equal measure.

The essence: the Biodynamic preparations

Right from the beginning, the most unusual feature of the Biodynamic method is the preparations. Their use is mandatory for all Demeter operations.

Their manufacture takes substances from the natural world, exposes them to natural forces and then they are fed back into nature in an altered form. The Biodynamic preparations are remedies for the earth.

The compost preparations are prepared from medicinal plants; nettle, yarrow, chamomile, oak bark, dandelion and valerian. For this they are put in sheaths made from animal organs, such as skulls,

intestines or bladders to which the plant material, put simply, has a healing relationship. They are buried in the earth for at least half a year and then added to the manure so that a particularly valuable compost is produced.

The spray preparations are filled in cow horns and buried: horn silica as finely ground quartz and horn manure using cow manure. Both will then be rhythmically stirred in water and sprayed. Horn manure orders and stimulates soil processes and is sprayed preferably when plants are germinating. Horn silica promotes plant growth directed toward the sunlight and is more used toward the end of growth and at plant maturity.

And in fact, in the meantime Australian physicists have shown that quartz can store light and release it back into the ground. The effect of the preparations has been demonstrated many times, although the mode of action is not always clear. In general, a balancing, harmonising effect can be observed: if there is too great a nutrient supply then the preparations suppress the yield, at suboptimal conditions they increase both quality and yield.

The horn manure preparation has a positive effect on soil fertility: high activity of soil organisms, higher biomass content and pronounced root development of plants are among some of the positive outcomes. The effect of the horn silica preparation can best be compared to a sunny, warm summer day. This has been observed especially by gardeners, orchardists and winemakers. They know that the formation of characteristic aromas can be

The compost preparations

They are added in small quantities to manure, composting plant material or liquid slurry and are then spread on the land. They structure the composting process, promote harmonious rotting down and so serve the living structure of the soil. It is proven that they improve the humus and soil structure.



Yarrow preparation – flowers in a deer bladder; promotes the adaptability to local conditions, refreshes, promotes potassium – sulphur processes.

Chamomile preparation – chamomile flowers in a bovine intestine; makes the nitrogen in the manure more stable and durable.



Stinging nettle preparation – stinging nettle simply placed in the earth; promotes soil structure – improves soil fertility.



Oak bark preparation – oak bark in a skull; promotes the formative forces exactly where they are needed to prevent plant diseases, stimulates calcium processes.

Dandelion preparation – dandelion flowers in a cow's mesentery; silicic acid is drawn in.



Valerian preparation – juice or extract of the flowers; comes without an animal sheath, gives the soil the ability deal with phosphorus processes properly, also active in flower and fruit formation.



The spray preparations

Horn manure – horns filled with cow dung. Through the winter half-year in the soil they have time to collect cosmic forces. The fragrant, dark, earthy mass removed from the horns is dynamised in water. It promotes microbial activity, better rooting and water holding capacity of the soil.



Horn silica – finely ground quartz in cow horn. The summer half-year in the soil gives this preparation the ability to mediate light energy and promote harmonious growth and maturation processes, photosynthesis of plants, and their resistance to pests and diseases.



enhanced with it. Analytically it can be shown that shelf life is improved for vegetables in storage, nitrate levels reduced and plant sugars and vitamin content increased. The Biodynamic preparations give back to the cultural landscape some of the forces which are inevitably lost, even with the best management. Thus, management is sustainable – in the truest sense of the word.

Anyone with a trained eye can already see by exact plant observation, that there are differences in the morphology of food plants. Comparisons of garden beans are documented in the research laboratory at the Goetheanum in Dornach (Switzerland): While synthetic nitrogen fertilising causes disorganized, proliferating leaf growth, the biodynamically raised beans strive upwards almost defying gravity in an orderly fashion toward the sun. This harmony in vertical and horizontal spread conveys vitality to the observer and a lust for life. ■

Making the soil alive

One goal of Biodynamics is the enlivening of the land. Only in vital soil can food grow harmoniously.



The farmer feeds the soil life not the plants, Rudolf Steiner taught. In fact he termed the soil an 'organ' of agriculture, the digestive organ of the plant. With this view, Steiner set a counterpoint to the then newly developed industrial nitrogen fertilisation methods. It soon became apparent that these nitrogen salts promote the development of plant mass at the expense of

quality. The Demeter farmer, however, nourishes soil life so that this enlivened soil makes nutrients available to the plant roots.

A diverse crop rotation helps to keep the soil fertile. ■

Respect the integrity of the plant

Since 2008, Demeter Germany has had standards for plant breeding, certifying biodynamically grown vegetables and cereals as the first organic association to do so. They guarantee the highest food quality, the best taste and since they are open pollinated varieties they are able to pass on their good properties to subsequent generations.

This means that seed remains a cultural good, in the responsibility of farmers and gardeners and offers alternatives to the seed industry. Varieties with cytoplasmic male

The whole of the starry heavens is involved in plant growth.

Rudolf Steiner
Agricultural Course 1924



sterility (CMS) have been excluded from Demeter cultivation since 2005. This particular hybrid breeding practice fuses cells from different species and violates the integrity of the plant. Especially when dealing with the plant, Biodynamic farmers and gardeners try to respect cosmic rhythms. There is scientific evidence, for example, that carrot seed sowings before the full moon give good yields and are ideal for storage. ■

Nature is a great totality; forces are working from everywhere. He alone can understand Nature who has an open sense for the manifest working of her force.

Rudolf Steiner
Agricultural Course 1924



Acknowledging the essence of the animal

Demeter is the only organic certifying association whose standards state that livestock is mandatory on farms. Only in exceptional cases can cooperation with another Demeter partner fulfil this requirement; the animal manure is supplied from outside. Animals, especially cows, play a central role in the individuality of the farm organism.

The cows on Demeter farms have horns. Painful dehorning is deliberately not practiced. Horns are highly vascularised and connected to the breathing processes of the ruminant. Their function can be illustrated well by the following observation: The drier and hotter it is and the

richer the fodder is in raw fibre and having correspondingly less energy, the longer the horns of the cows. The wetter and colder it is and the more energy in the fodder, the shorter the horns. Horns are important for both heat regulation and digestion in the cow since they connect these processes to the forces acting around the animals; for this reason ruminants provide the most valuable of all manure.

Forage for Demeter animals is produced on farm or purchased from other Biodynamic farms. Meal made from of animals, additives and preventive medications such as antibiotics or hormones are taboo. What was important not only to Rudolf Steiner was that each animal radiates specific qualities into its environment and this gives shape and form to farm life. Only animals can offer this particular soul component which is so appealing to man in the 21st century. ■

Needless to say, we must arrange things so; we must have enough and the right kind of animals, so as to get enough manure and the right kind for our farm. Or again, we must take care to plant what the animals which we desire to have will like to eat instinctively – what they will seek out for themselves.

Rudolf Steiner
Agricultural Course 1924



Food for body, soul and spirit

Why do we eat? In order to be satisfied, for pleasure, to stay fit?

Or for self-development? Why do Demeter farmers farm biodynamically? In order to produce food? In order to offer food of the highest quality to their animals? In order to contribute to the healing of the earth? For Demeter licensees Biodynamics is a

way to produce a culture with possibilities. Biodynamic farms promote not “just” humus development, animal health and aromatic foods, but also a spiritual dimension to the diet. Doesn't everyone appreciate a meal cooked with love? And don't we feel exactly what food really is good for us? The high quality of raw materials must be maintained and enhanced in Demeter processing, and made available for human

nutrition. Corresponding standards demand craftsmanship from the manufacturer. So Demeter permits only 13 additives (from a total of over 350 allowed in conventional foods and 47 in the EU organic regulations). Instead of synthetic flavourings, pure extracts are used i.e. extracts and concentrates of the respective plants. Nitrites and the homogenisation of milk are taboo.

For decades, scientists have been working to depict Biodynamic quality. Using picture forming methods, inner quality – the characteristics which are species specific – is made visible. Not only can differences between conventional and organic products be seen in the fine filigree images, but also between those cultivated organically and biodynamically. Through formative forces research by Dorian Schmidt, the effects of food on body, soul and spirit can now also be observed. ■



Shaping the future – making space for the new

With Steiner's agricultural impulse of 1924, the Biodynamic method had an inherent orientation to the future from the very beginning. The initiators were aware of the fact that they were contributing to a new culture of agriculture which would bring sustainability to the diet of man and his holistic development.

This continues to concern actors on the Biodynamic stage today. They don't want to see the future as a mere extension of the past, but they want to be open to what lies ahead. There are parallels everywhere: the development of seeds is also dependent on whether a message comes from the future, in the form of pollen. Many people wonder how practical Biodynamic agriculture and the transformation of society can interact. The economic researcher Claus Otto Scharmer, who grew up on a Demeter farm in northern Germany, encouraged the development of the farms into germination centres for a new type of social

You can be effective in your life only if you allow life itself to have an effect on you.

Rudolf Steiner
Agricultural Course 1924



I realize that all of this seems a bit crazy in today's world doesn't it? But think for a moment about all of those things in the world that people considered mad but which were introduced only a few years later.

Rudolf Steiner
Agricultural Course 1924



interaction in communities, cooperation, solidarity forms of agriculture and unusual structures. Many good examples are already moving in this direction. Ten percent of the German Demeter farms are organized as charitable organisations. On numerous farms people with disabilities are integrated into meaningful work. Educational and cultural activities enrich the surrounding area. Acting out of a common consciousness exerts a powerful attraction. This results in farms that practice solidarity agriculture – organized in economic communities or CSA models with their customers. Demeter makes space for participation; in fact it explicitly invites it. Only together can the supply chain be successfully transformed into the value added chain. ■

Steiner's impulses go far beyond agriculture itself

Rudolf Steiner is the spiritual teacher and mentor whose impulses are the most sustainable in everyday reality, of the 21st century. In addition to the Biodynamic method this is most evident in Waldorf education.

It is recognised worldwide, affecting daily life in state schools and at home. Anthroposophical medicine as a complement to conventional medicine recognizes and takes into account the interrelationships between body, soul and spirit, thus fulfilling the desire for holistic treatment. Anthroposophical nutrition persuades

through its principles. It encourages you to observe phenomena and accept your perceptions; it explains modes of action of food and so makes us capable of making decisions. Even in society, in the arts, economics, speech therapy, special education and the natural sciences Steiner's suggestions, which have been developed into stand-alone models, are gaining more and more attention.

All this has the same underlying philosophy – Anthroposophy. Its central thesis is that mankind has a capacity for freedom, embedded as he is in social and environmental responsibility in a world that is an expression of spiritual creation. In Greek 'Anthropos' means man, 'Sophia' wisdom. ■

Demeter-International, the umbrella organisation for certifiers

Demeter International is a confederation of certifying organisations established in 1997 for closer cooperation on many aspects of Biodynamics. There are currently 18 members and five guest members representing more than 170.000 hectares worldwide. Its main tasks are the maintenance of the International Demeter Standards for production and processing as minimum requirements for the world-wide trade of Demeter products and the protection of the trademark itself. It is also involved in certification in countries where no national Demeter certifier operates, support for the wider Biodynamic movement by advancing understanding and acceptance of the method and encourages the establishment of national organisations.

IMPRINT

Published by:
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Photos:
(Pg. 2): © Rudolf Steiner
Archive, Dornach, Rudolf
Steiner (p. 2 and quotations):
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09/2016

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“Agriculture for the future. Biodynamic agriculture today. 90 years since Koberwitz” (ed. Ueli Hurter) The global Biodynamic movement is represented by competent authors in all its diversity in this book. The documentation provides an overview of the core ideas of the Biodynamic method and how they have been developed and implemented in the worldwide Biodynamic movement in the 90 years since Koberwitz.

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The biodynamic preparations in context:
Individual approaches to preparation work
– Case studies of worldwide practice –

Dr. Ambra Sedlmayr, Anke van Leewen, Johanna Schönfelder, Dr. Maja Kolar, Dr. Reto Ingold, Ueli Hurter



A new scientific report from the Section for Agriculture portrays 14 preparation makers from all over the world, presenting their individual path with the biodynamic preparations in the context of their biographies and their social and natural environment. The details of preparation practice can be understood in this wider context and the specific individual gesture of each preparation maker is highlighted, inspiring one's own path with the preparations.

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