

ANNUAL REPORT 2021

 Soil
Heroes
Foundation



FOREWORD

Never did the great challenges of our time converge as strongly as on our plates. If we want to pass on a healthy planet to future generations, we must switch to a sustainable food system that respects people, animals and the planet.

Current food production systems are the main driver for 70% of biodiversity loss and over 25% of greenhouse gas emissions globally. At the same time, a growing world population is putting pressure on existing farmlands to feed more mouths, creating a negative feedback loop of agricultural intensification and the so-called “cheap food paradigm”.

It's a scary perspective, but it doesn't have to be that way. More than 50% of the habitable surface on Earth is used for agriculture. This means that if we change the way we farm, we have the power to make a significant positive impact on climate change and other environmental issues, as well as ensure food security globally.

Democratizing regenerative farming practices is one of the keys.

Regenerative farming has many benefits: soil carbon sequestration, water retention, biodiversity enhancement, and a higher nutrient-density in crops and food. It also contributes to major mindset and cultural switches - putting pride back into farming by making farmers the stewards of the land, reconnecting consumers to the food they eat, and fostering healthy, vibrant local communities.

The Soil Heroes Foundation exists to share their knowledge with the world and to call on every citizen to participate in the regenerative movement. With our Open Letter recently published for COP26, we brought this message to the attention of world leaders. We were overwhelmed by the positive feedback and support we

received from prominent organizations in the sustainable food and agriculture space, which only encouraged us to keep pushing.

Time is running out, we have to take action, and everyone has to play their part. Governments can reform misaligned agricultural policies that encourage unsustainable intensification and overuse of natural resources, and start rewarding farmers for the ecosystem services they provide. Companies can start accounting for the cost of environmental degradation from food production and reflect it in market prices, as well as work with farmers in their supply chain to implement regenerative practices. Consumers can start voting with their euros by integrating more plant-based food into their diets and opting for locally-produced food.

“Never doubt that a small group of thoughtful, committed citizens can change the world: indeed, it's the only thing that ever has.” - Margaret Mead

Let's keep fighting the good fight. We will make a difference.



Annelies van der Vorm,
Chairwoman of the Management Board of
the Soil Heroes Foundation



GOVERNANCE

Stichting Soil Heroes Foundation is a Foundation without a profit motive, solely focused on serving the common interest in the transition to regenerative farming.

MISSION STATEMENT

Our mission: To enable the long-term viability of people in harmony with the planet.

Our goal: To stimulate and establish a regenerative society where restoration of soil health, soil biodiversity and the production of food with a higher nutrient density is central.

Overall objective: To catalyze the transition to regenerative farming globally.

Our approach: To support and stimulate regenerative initiatives globally and initiate and innovate ourselves.

EVENTUALLY LEADING TO...

Restored soil health, biodiversity, water and air quality
New and fair business models for farmers
Increased nutritional value in food
A more stable climate and healthy planet.

Stichting Soil Heroes Foundation holds a Golden Share of the Soil Heroes Operations to protect the purpose of the business, restoring soils for people and planet.

MANAGEMENT BOARD

The composition of the Management Board is the following:

- Ms. Alexandra Korijn - Co-founder at New AJE Capital, Board member at Toniic
- Mr. Frederic Hoffmann (Treasurer) - Food & agriculture deal sourcing for GO!, board member of the MAVA Foundation
- Mr. Fernando Russo - Impact investor
- Ms. Annelies van der Vorm (Chairwoman) - Impact investor

A majority of votes applies to decisions made by the Management Board, with each member ha-

ving the right to cast one vote. The Management Board is not authorised to obtain, alienate and encumber registered property, in accordance with the statutes, unless the Supervisory Board has given its approval for this in writing. The Management Board is also not authorised to enter into agreements whereby the Foundation commits itself as guarantor or joint and several debtor.

SUPERVISORY BOARD

The Supervisory Board oversees the broad mission of the Foundation. The Management Board is supervised by the Supervisory Board. In fulfilling this task, the members of the Supervisory Board are guided by the interests of the Foundation.

The composition of the Supervisory Board is the following:

- Ms. Riella Hollander - Director Food and Agriculture, Triodos
- Mr. Ryan Gellert - CEO, Patagonia
- Mr. Henri van Eeghen - CEO, Synergos

EXECUTIVE TEAM

The composition of the Executive Team is the following:

- Ms. Mellany Klompe - co-founder, Soil Heroes
- Ms. Gina Pattisson - Director of Partnerships
- Ms. Emma Crasnier - Executive Assistant

GROWING OUR WAY OUT OF CLIMATE CHANGE



REGENERATIVE AGRICULTURE IS ONE OF THE MOST POWERFUL TOOLS WE HAVE TO FIGHT CLIMATE CHANGE.

OVER THE PAST 150 YEARS, THE AMOUNT OF CARBON IN THE ATMOSPHERE HAS INCREASED BY 30%.

Most scientists believe there is a direct relationship between increased levels of carbon dioxide in the atmosphere and rising global temperature. One proposed method to reduce atmospheric carbon dioxide is to **increase the global storage of carbon in soils.**

Soil organic matter consists of plant and animal residues in decomposition, cells and tissues of soil microbes, and substances that synthesise with soil microbes.

Through photosynthesis, plants assimilate carbon and return some of it to the atmosphere. Soil organic matter is incorporated into the soil via plant residues. Bacteria, fungi, and other soil living organisms break down these elements until only indigestible residues remain. These remains are what we call humus, or stable organic matter. Because no light penetrates the soil, soil living organisms can't use sunlight as an energy source. Therefore, organic matter is the only energy source for many soil living organisms.

With practices like applying biofertilizer or compost, increasing crop diversity, using cover crops or stopping tillage, regenerative agriculture boosts the creation of soil organic matter.

A HIGH LEVEL OF SOIL ORGANIC MATTER DRIVES SOIL CARBON SEQUESTRATION,

which is the long-term storage of carbon in the soil. The primary way that carbon is stored in soils is as soil organic carbon, which is the carbon component of soil organic matter. Soil organic matter is composed mainly of carbon (about 58% of the mass), hydrogen, oxygen, and small amounts of other elements, such as

nitrogen, phosphorous, sulfur, potassium, calcium, and magnesium contained in organic residues.

As soil organic matter is difficult to measure directly, soil scientists tend to measure and report the changes in soil organic carbon stocks. **Currently, soils contain approximately 75% of land-based carbon – three times more than the amount stored in living plants and animals.** Soil organic matter is considered the largest terrestrial carbon pool.

CARBON CAN REMAIN STORED IN SOILS UNDER THE FORM OF SOIL ORGANIC CARBON FOR MILLENNIA OR BE QUICKLY RELEASED BACK INTO THE ATMOSPHERE.

In agricultural systems, **the amount and length of time carbon is stored is determined predominantly by how the soil resource is managed.** Carbon is released when soil is turned upside down, during tillage for instance. It is therefore very important to limit soil disturbance to a minimum, or not to touch the soil at all. Because it focuses on reducing soil disturbance, regenerative farming can increase soil carbon sequestration and help mitigate climate change. **The average storage capacity of a hectare of regenerative farmland is 2 tons of CO₂.**

Because half of the land that can support plant life on Earth has been converted to agriculture, **soils have lost 50 to 70% of the carbon they once held.** A study estimated that **with better management, global croplands have the potential to store an additional 1.85 gigaton of carbon each year.** Knowing that 1 ton of soil organic carbon (solid form) amounts to 3.67 ton of CO₂ (gas form), this is **as much as what the global transportation sector emits annually.**



ECOSYSTEM SERVICES, EXPLAINED

The benefits of regenerative farming go beyond carbon. The same regenerative farming practices that improve soil carbon sequestration also improve soil's water holding capacity, nurture biodiversity, and increase the nutrient density in crops and food.

CARBON STORAGE

When farmers switch to being regenerative, they increase carbon in their soil through practices like growing cover crops, incorporating straws and crop residues, and applying organic solid manure.

Other regenerative practices like no-till or shallow tillage, prevent soil organic carbon loss (when soil is turned upside down, carbon is released into the atmosphere) and allow soil biology to thrive, in turn improving their capacity to digest and store more carbon into the soil.

BIODIVERSITY

Through the use of pesticides and herbicides, saline fertilizers and the reliance on monoculture, conventional agriculture eliminates underground biodiversity. With practices like no-till, applying biofertilizer or compost, mulching crop residues into the soil, regenerative farming nurtures a fantastic web of soil microorganisms.

Regenerative agriculture contributes to a welcoming habitat for above-soil biodiversity like insects, birds, and small mammals. These species play an important role in natural pollination and natural pest control. Practices such as incorporating landscape elements, field margins, and biodiversity lanes, encourage biodiversity to thrive.

WATER RETENTION

With practices like no tillage, growing cover crops or crop cohabitation, regenerative agriculture contributes to building soil structure (increasing the size and number of the pores). Leaving plant residues on the soil after harvest also protects the soil from sealing and crusting by raindrop impact, thereby enhancing rainwater infiltration and reducing runoff.

When soils hold more water, they become more resilient to extreme weather events like droughts. It reduces the need for irrigation. Water retention is the most valuable ecosystem services for farmers because it helps stabilize food production.

NUTRIENT DENSITY

Regenerative farming can contribute to food security by providing more stable food supplies, but it also has the potential to increase the nutrient-density in crops and food. There is little literature published on the topic, which is why we are doing a proof of practice project on our Experience Farm, to provide scientific evidence that regenerative crops (in turn, our food) hold more nutrients than conventional ones (see page 13).

Increasing the nutrient density of the food is also beneficial for farmers. With a higher nutrient density, the storage longevity of harvests increases (longer shelf life) which can balance farmers' revenue throughout the year.



OUR



MISSION

**WE EMPOWER FARMERS TO PLAY
A PART IN THE FIGHT AGAINST
CLIMATE CHANGE BY BUILDING
THE HEALTH OF SOIL.**

1.

PROVIDING PROOF OF PRACTICE

Farmers need to see that it works

2.

**SHARING KNOWLEDGE &
PRACTICAL TOOLS**

Farmers need to know what to do

3.

BUILDING COMMUNITY

Farmers need to feel part of a bigger
whole



PROOF OF PRACTICE PROJECTS

OUR EXPERIENCE FARM

Klompe Landbouw is a third-generation Dutch family farm located on the island of Hoeksche Waard, 20km south of Rotterdam.

OUT OF THE 360 HECTARES OF THE FARM, 200 HECTARES ARE NOW FARMED REGENERATIVELY, UP FROM 120 HECTARES LAST YEAR.

This makes the Klompe Farm one of the largest experiments for regenerative farming in Europe, knowing that the average size for farms is 100 hectares.

Jeroen and Mellany Klompe have been front-runner regenerative farmers for more than 10 years. Besides being a farmer, Jeroen is an impact entrepreneur (Rechtstreeks, Pymwymic and Tomasu). Mellany has a background in environmental science. She previously worked for the Dutch Waterboards and different local governments agencies. She is also on the board of the Collective Cooperative for Hoeksche Waard. In this role she has been a driver in creating more than 800km of field margins and biodiversity lanes on the island to promote natural pest control, pollination and biodiversity.

The Klompe family grows 13 types of crops on their farm, including potatoes, onions, corn, brown beans, kidney beans, soybeans, several types of wheat, poppy seed, carrots, grass seed/rape seeds, oats, buckwheat, quinoa, sorghum, green beans and garden beans.



BIODIVERSITY

The two grants we received from Patagonia funded several activities:

- The **expansion of field margins around the plots and biodiversity lanes in-between the fields**, and the measurement of the effect on biodiversity levels and crop resilience.
- The experiment of **brewing 10 different recipes of homemade biofertilizer** and drawing conclusions on which one(s) is (are) the most suited for different purposes, including biodiversity enhancement, natural pest control, natural pollination and soil and crop resilience.
- Combining different crops on the same plot with **lane farming**.
- Starting a companion cropping field experience.

EXPANDING FIELD EDGES

We have grown a variety of field edges on several plots of the Klompe Farm, accounting for more than 10% of the plots' surface. There are two types of field edges:

- **Perennial field edges:** for these we used a mix of grass herbs – flowers from April to July and grass and clover all year round.
- **Annual field edges:** for these we used a mix of flowers specifically chosen to attract natural “pest controllers” insects, wild bees and bumblebees. The flowers blossom from June to November and provide habitat and protection to birds, insects and small mammals.

The results were more than satisfying:

- **No aphids were found in our potato fields.** Aphids are soft-bodied insects that suck on plant sap. While a few aphids here and there don't cause a major problem, large populations of aphids draining the sap of the plants can cause them to yellow, wilt and wither. Thanks to enhanced natural pest control, we didn't have to use any artificial insecticides to protect our crops from aphids.
- **Natural pollination caused yields to increase by more than 40%.**
- We saw a **significant increase in bird, insect, bee, bumblebee, butterfly and small mam-**

patagonia

mal populations on our fields.

DEVELOPING BEST PRACTICES FOR HOMEMADE BIOFERTILIZER

We experimented with different biofertilizer recipes, tracking parameters like costs, length of brewing process, and ease of application. The outcome of this trial is a shortlist of three recipes which we will produce in large volumes during the upcoming season and apply on some of our fields, monitoring the effect on soil and crops. Next season, we will continue to replace artificial inputs with these biofertilizers on other plots. During the trial, we witnessed the big potential of biofertilizer: it is possible to create biofertilizer recipes for specific purposes like increasing natural plant resilience, stimulating plant growth or boosting soil fertility.

LANE FARMING

We began lane farming in the winter of 2020/2021, on a 20-hectares plot. We started by planting six lanes of cover crops side to side at a width of six meters, and used six different seed mixes.

Jeroen handles one of our biofertilizer preparations.



During Spring 2021 we continued lane farming but alongside harvested crops: two types of wheat, naked oats, soybeans, rice, and more experimental crops. In between these cash crops we interleaved biodiversity lanes – planting a mix of wildflowers and grass herbs to provide a welcoming habitat for insects, birds, and small mammals.

We were blown away by the results of this first experiment:

- **All crops remained healthy and strong.** The most impressive were the soybeans: they produced tall, healthy plants, producing a lot of biomasses, compared with a monocrop plot.
- **We didn't have to use any artificial fertilizer** on any crops.
- Once, we had an invasion of snails in the soybean lane. We applied a homemade liquid mixture made of boiled garlic and it completely chased away the snails!
- We noticed that **the growth of each crop was highly dependent on the type of cover crop that was grown on the same lane the previous season:** the growth of crops planted subsequently to a nitrogen-fixing cover crop was the highest; and the growth of crops planted subsequently to a cover crop including some grass-herb was the lowest. It seems like the remainders of grass represented too much of a competition for the following crops. On the lanes where we planted wheat following a cover crop including grass, the wheat did not survive, and we ended up with a grass lane.
- Alongside natural pest control and natural pollination, **biodiversity lanes are highly appreciated by birds.** We decided to maintain these lanes during the whole winter.
- Due to Covid-19 we were not able to organize as many farm tours as we initially planned. Yet we often shared our experience via social media, digital lectures, and panel discussions. In total we took part in 26th online events.

COMPANION CROPPING

On a pilot plot of 10 hectares we started growing leguminous crops together with potatoes. This is called companion cropping, as the two crop reinforce and protect each other. The leguminous crop captures nitrogen in the soil, in a way that potatoes can't, and therefore provides a natural nitrogen supplement to potatoes. As a result, we

had to apply less external artificial nitrogen input on the plot. The seeding of the potatoes and leguminous crop took place at the same time and depth, directly after mulching the winter cover crops and doing shallow tillage (10cm deep). For both crops we used the direct seeding method.

The results were satisfying considering the circumstances:

- We had a very cold and wet spring season. This made it difficult for the potatoes to start growing properly.
- The leguminous crop had less difficulties with the cold and wet spring season and began sprouting much earlier.
- To prevent competition from the leguminous crop we needed to mow it regularly to give the potatoes extra "space" to grow.
- Next year we will try again. Hopefully with a better spring season we can have an alignment on the growing process between the leguminous crop and the potatoes.

CHALLENGES

Field margins

When it comes to field margins, the biggest challenge for a farmer is actually having dedicated space in order to implement them. In the area where the Klompe Farm is located, land is very expensive. The direct benefits of field margins on crop resilience and yields can take some time to show. On average the "reach" of a field edge regarding natural pest control is about 150 meters. That means that the natural pest control insects that are attracted by the field edge will wander move up to 150 meters away from the field edge, but not further (with the exception of bees and bumblebees that have a bigger range of movement). So, to protect the whole surface of a plot, you need to integrate biodiversity lanes every 300 meters. Dedicating that amount of space, which is not «immediately productive», can feel like a sacrifice to some farmers.

Another challenge is to design the seed mix. Every two weeks, a new plant species needs to bloom in order to make the nectar and pollen available for the insects. So, the seed mix has to be thoughtfully designed using the flowering calendar.

Biofertilizer

A base knowledge of your soil's health is a prerequisite. Biofertilizer is made from a recipe that objectively feeds the soil with whatever it lacks.

When it comes to brewing homemade biofertilizer, the biggest challenge for a farmer is **time management**. The process starts with a "mother culture". The fermentation process takes 6 weeks. After that you can start brewing, which takes about 30 to 52 days of fermentation. The process needs to be planned for in advance and integrated into the farm management plan, in order to have the biofertilizer ready at the right time.

Brewing homemade biofertilizer requires to develop **deep knowledge of the soil**, in order to know what is lacking and to adapt the recipe accordingly to supply what is most needed.

Overall, homemade biofertilizer is **much cheaper than artificial inputs**. However, it requires a substantial amount of time, effort and knowledge.

Lane farming

In lane farming, a big challenge lies in **the choice of the cover crop** that is planted before the cash crop on the same lane. We discovered that cover crop mixes including grass/grass herbs are a big competition for wheat and prevent it from growing.

To execute lane farming you need GPS/CTF tools and not every farmer has this equipment a they require **high financial investment**. Also, existing machinery needs to be modified to fit the width of the lanes. For example, all tractors, seeding machines and harvesting machines must have the same width. The tractors at the Klompe Farm had their width adjusted from 2-10 meters to a universal 3 meters.

Companion cropping

For companion cropping, the biggest challenge for a farmer is simply the weather... and this is outside our control. When spring provides warm and not too wet weather the potatoes will grow as fast as the companion crop. Otherwise, the companion crop will likely grow faster. The next challenge will be how to manage mechanical

weeding during the growing season between the companion crop and weeds.

LESSONS LEARNED

Field margins and biodiversity lanes contribute to building resilience in the farm ecosystem but don't directly increase farm profitability. The seed mixes that we chose to sow are relatively expensive. In order for the field edges expansion to be a success, farmers need to find a sponsor (like Patagonia for us) or a business model to support these extra costs. Otherwise, it is difficult for the benefits (savings on artificial inputs) to equal the costs (purchase of seed mix).

Flower field edges are easier to implement in the farm management plan compared to biodiversity lanes – they require less "sacrifice" in terms of field surface. As side note: the cultural benefits of flower field margins are huge! We received a lot of enthusiastic comments from farm visitors on how beautiful and pleasant to look at our field edges are.

We are barely halfway through the trial of homemade biofertilizer brewing, so there is still a lot to explore and learn on this topic. Specifically, we need to find the best way possible to produce biofertilizer in big batches. For optimal results, the biofertilizer needs to be sprayed every two weeks on the fields, so we need to develop the appropriate infrastructure to increase our production capacity in order to sustain this application rhythm.

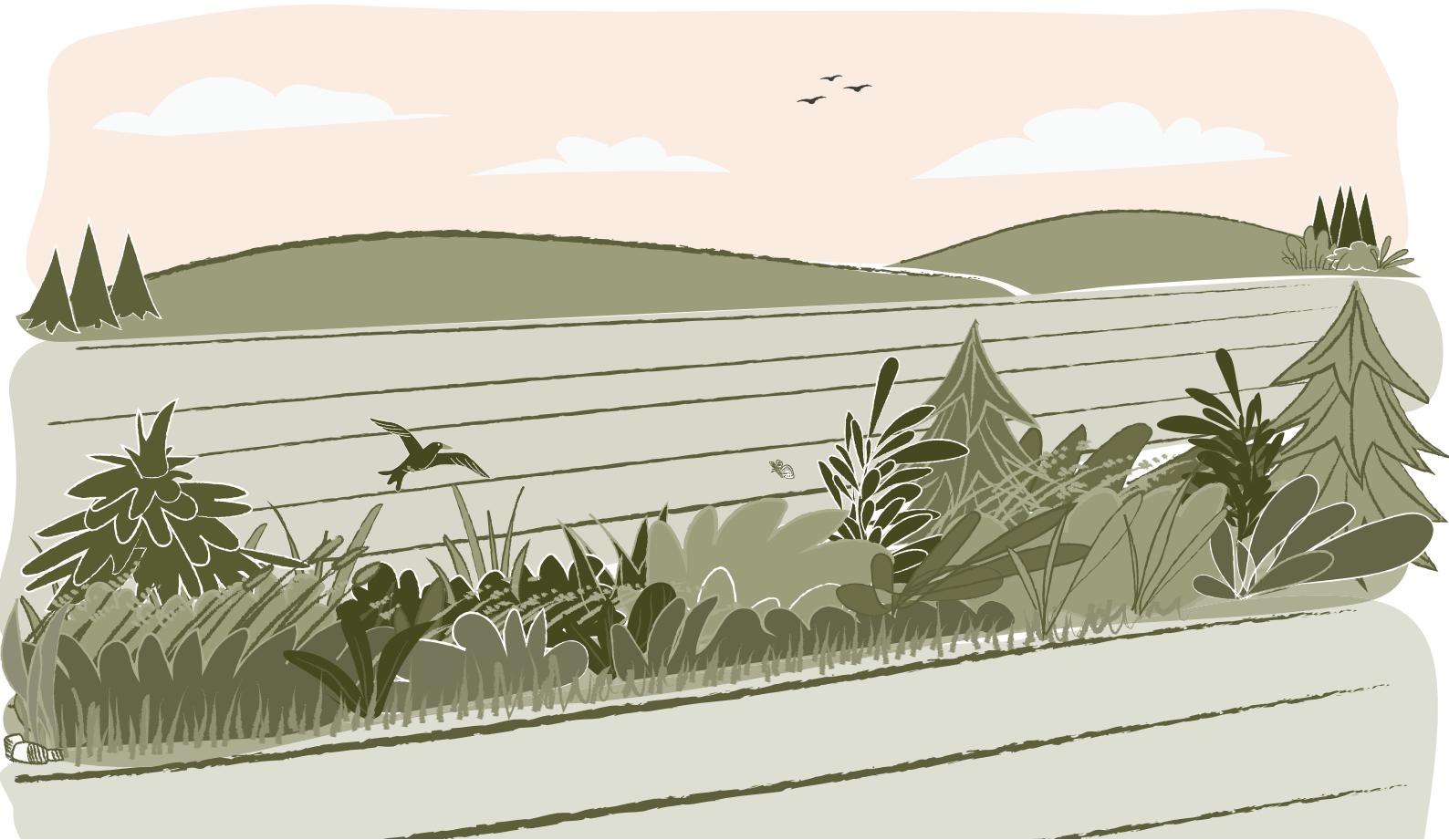
In lane farming, our main takeaway is to not use grass in cover crops when the next cash crop is wheat.

Lane farming enables natural pest control; therefore, crops are less frequently sick compared to the monocrop plots. The biodiversity lanes are highly appreciated by insects, bees, and birds (alongside the purpose for natural pest control and natural pollination).

Unfortunately, this year's weather conditions weren't ideal to assess the full potential of companion cropping. We will try again next year and hope for better weather conditions to bring this experiment to fruition.



Lane farming on the Experience Farm.



WATER RETENTION



Europees Landbouwfonds
voor Plattelandsontwikkeling
Europa investeert
in zijn platteland



WAGENINGEN
UNIVERSITY & RESEARCH



waterschap
Hollandse Delta

Simply defined, soil water retention capacity (also called water holding capacity) is the amount of water that soil can hold for crop use.

Soil moisture forms a buffer against flooding, and water capacity in subsoil is a major factor for plant growth. Changes in soil water retention capacity depend on the proportions of the textural components (sand, clay, silt) and the soil organic carbon content. Soil organic matter can absorb up to twenty times its weight in water!

With this project we want to **prove to farmers that adopting regenerative farming practices will solve their most pressing issue: soil's capacity to retain water.**

Increasing soil's water retention capacity is vital for farmers because it improves soil and crops' resilience to droughts and floods, reducing the need for irrigation and stabilizing food production. By providing evidential proof that changing their farming practices will improve water retention in soils, we can hugely accelerate the adoption of regenerative practices that are better for people and the planet – combatting climate change, preserving biodiversity and improving farmers' livelihoods.

To measure soil health improvement, we created an indicator called the **Soil Health Index (SHI)**, which combines three indicators of soil physics (aggregate stability, rooting and bulk density), three indicators of soil chemistry (pH, total nitrogen stock and available plant) and three indicators of soil biology (organic matter content, soil respiration and SOC content). To gather the data needed to calculate the SHI, we have developed a proprietary data collection protocol called Timestamp 0. This protocol has been designed to be cheap and easy to perform for farmers. Timestamp 0 relies on soil sampling, satellite imagery, but takes also into account farm management data like organic amendments application, crop rotation plan, green manure application etc. It is important to involve farmers in this data collection and analysis protocol, because better knowledge of their soil characteristics will empower them to select the most adapted regenerative practices.

The water retention research takes place on a surface covering 70 hectares of the Experience Farm, of which 40 hectares are farmed regeneratively and 30 hectares are farmed conventionally. This research project is led in collaboration with the research department of Wageningen University, and both the SHI and Timestamp 0 have been developed jointly.





In particular, the research takes place on three distinctive sets of plots: the first one has been farmed regeneratively since 2019, the second one since 2020, and the third set of plots is farmed regeneratively to serve as a comparison. NB: because these plots are all part of the same farm, it is possible that some regenerative practices could have effects beyond the boundaries of the regenerative plots. This is not taken into account in this study.

In 2021, we already started observing differences in the data collected on the different plots. This data shows a difference in parameters that directly affect soil's capacity to retain water:

- **Soil compaction:** in conventional plots, soil compaction starts to appear at about 35cm deep, while in regenerative plots soil compaction starts to appear at about 55cm deep.
- **Soil aggregates:** soil aggregates stability is a good indicator of the capacity of the soil to resist disturbance. We observed that the aggregate stability is higher in regenerative plots than in conventional plot, although the gap is less important than for soil compaction. We observed an especially big difference for soil fine particles, which are the ones that reacts the fastest to degradation. Further research should confirm this observation.

After collecting the first data, we performed an

initial simulation in which we projected the evolution of the water retention capacity of soils if the agricultural practices remained the same on all plots. This simulation showed that the water retention capacity of the conventional plots would decline by 3,1% over 5 years, while it would increase by 10,8% in regenerative plots over the same period. The simulation shows that the net difference between conventional and regenerative agriculture in terms of water retention capacity is 13,9%.

The research will run over three more years, in order to confirm these first conclusions. In three years, we will publish an open-source scientific report showcasing the evidence that soil health improves when farmed regeneratively, with a primary focus on water retention. We will share the knowledge acquired during these years of field research with our network through workshops, webinars and farm tours.

The goal is also to share the instructions for Timestamp 0 and the SHI with our network of partner farmers, to enable them to better understand their soil characteristics and act accordingly. This open-source approach will enable us to get feedback from the farmers using the protocol and improve it.



NUTRITION

This is a joint project by:



ABOUT THE PROJECT

Regenerative farming has many benefits: soil carbon sequestration, water retention, biodiversity enhancement... It also contributes to major mindset and cultural switches - putting pride back into farming by making farmers the stewards of the land, reconnecting consumers to the food they eat, and fostering healthy, vibrant local communities.

But what if regenerative farming was also good for our health?

The goal of this collaborative research project is to provide scientific evidence that regenerative farming practices have a positive impact on the nutrient-density in soil, crops, and food. The research will focus on answering the three following questions:

1. Does regenerative agriculture lead to a higher nutrient-density in food than conventional agriculture?
2. Which regenerative interventions/practices have the most significant impact on the nutrient-density of crops and food?
3. More specifically, what is the influence of regenerative lane farming vs. regenerative mono-cropping on the nutrient-density of crops and food?

METHODOLOGY

The research will take place on a five-year time-frame. At the start and at the end of the research period, we will perform a set of measurements on

soil and soil biology properties. These measurements include:

- **Timestamp 0:** this is Soil Heroes' proprietary soil sampling methodology. We analyze four key categories: physics, chemistry, biology, and soil management. We look at parameters including soil organic matter, bulk density, penetrometry, earthworms and in-depth moisture.
- **Redox formula:** this measures the intensity of the exchange of nutrients between plants and soil, characterized by the transfer of electrons between soil and plants.
- **Nutrient analysis:** analysis of the nutrients available in the soil.
- **Biomaker analysis:** analysis of the level of soil biology: bacteria, fungi, nematodes, and protozoa.

By comparing results between the first year and the fifth year, we will be able to showcase the changes in soil carbon content, water retention and biodiversity, that have resulted from the implementation of regenerative practices.

Then, throughout the five-year research period, we will perform another set of measurement on the plants, periodically (every two weeks), to monitor the changes in nutrient-density.

IMPACT OF THE RESEARCH ON FARM MANAGEMENT PLAN

To compare the impact of regenerative farming vs. conventional farming on nutrient-density, we will analyze crops and food from a plot that is farmed regeneratively vs. a plot that is farmed conventionally.

To assess the respective impact of different regenerative practices on nutrient-density, we will

take a separate plot and divide it in different lanes:

- One lane with holistic regenerative farming (no tillage, cover crops and organic amendments);
- One lane with only cover crops and organic amendments but deep tillage;
- One lane with no tillage and cover crops but no organic amendments;
- One lane with organic amendments and no tillage but no cover crops.

TIMELINE FOR EXECUTION

Phase 1 (Q1 – Q2 2022)

- Define the set of data needed for Timestamp 0 (T0) and Timestamp 3 (T3, which will be collected after 3 years).
- Develop protocols to define nutrient levels and the correlation between soil and crop.
- Develop plan to execute the data collection protocol.

Phase 2 (Q2 2022-Q3 2024)

- Perform data analysis, combining satellite and digital data.
- Share our knowledge and experience with a larger audience through different vehicles, online and physical lectures.

Phase 3. (Q3 2024 – Q4 2024)

- Deliver evidence / report
- Share our knowledge and experience with a larger audience through different vehicles: online and physical lectures.

EXPECTED SYSTEMIC IMPACT OF THE PROJECT

Our goal is to change the dominant mindset in the

food and agriculture industry and drive systemic change.

This research will make the benefits of regenerative agriculture visible and measurable, setting up a practical example that regenerative agriculture is good for our health, as well as good for soil health. We want to accelerate the understanding and acceptance of regenerative agriculture among key stakeholders across the food supply chain (farmers, agri-food businesses, policymakers, consumers). We believe this will encourage farmers to adopt nature-inclusive farming practices.

We expect this research to convince food buyers that they can do good by helping farmers in their supply chain change their farming practices, and to put joy and pride back into farming by showing that farmers really are the key to feeding a growing world population with healthy, nutrient-dense food.

Additionally, connecting the dots between soil health and human health has the capacity to unlock real market opportunities for regeneratively-grown produce.

Finally, farmers will also benefit from increasing the nutrient density of the food they grow. Studies indicate that an improvement in nutrient density in soil and crops increases their resilience to external disruptions, which reduces the need for artificial inputs, and stabilizes food production, therefore evening out revenue for farmers. With a higher nutrient density, the storage longevity of harvests also increases (longer « shelf life ») which evens out farmers' revenue streams throughout the year.





« With the Regenerative Agriculture Experience Field, we aim to make the benefits of regenerative agriculture visible and measurable, setting up a practical example that regenerative agriculture restores soil health effectively. We believe this will encourage farmers to adopt nature-inclusive farming practices and drive systemic change. »

- Jeroen and Mellany Klompe, owners of the Klompe Farm and co-founders of Soil Heroes



KNOWLEDGE & PRACTICAL TOOLS



Based on the procedures executed on our Experience Farm, we were able to support several European farmers in performing the Timestamp 0 protocol on their fields. On the pictures above, you can see Leandro, Soil Heroes' Chief Soil Officer, and Fred Krefting, performing the Timestamp 0 protocol on Showsley Estate.

Additionally, thanks to the knowledge we developed on our Experience Farm, we were able to provide advice to the farmers in our network about which regenerative practices would best work with their geographic area, soil type and weather conditions, and how to best integrate them in their farm management plan.

We also participated in many learning and

knowledge-sharing sessions:

- With students from the University of Luzerne in Switzerland
- At Groundswell, the biggest event for regenerative farming in Europe
- Within the FABulous Farmers initiative, focused on functional agro-biodiversity
- Within panel discussions hosted by the European Commission and Agri-Food Canada, the Forum for the Future of Agriculture, the RISE Foundation (Rural Investment for a Sustainable Europe)
- We continued our collaboration with experts from the University of Amsterdam and the University of Wageningen



BUILDING COMMUNITY



€ 1.313,00

committed on a goal of €30.000

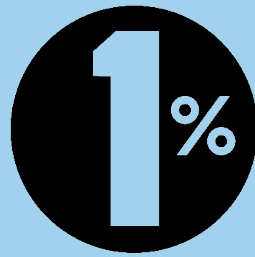
6 contributors

We created a donation page for the Soil Heroes Foundation website, and received the first donations in. Each donor will receive a set of stickers from the Soil Heroes Foundation, and donors above 500€ will be invited for a farm tour.



We participated in Groundswell, the Regenerative Agriculture Show and Conference, that takes place each year in the UK.

We became a nonprofit partner of the 1% for the Planet network, an international organization connecting companies which contribute at least one percent of their annual sales to environmental causes with nonprofit organizations working to solve environmental challenges.



FOR THE PLANET



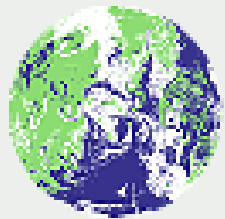
CARBON8 presents | Regener8 interviews the founders of Soilheroes

Mellany and Jeroen were interviewed by Carbon8, an Australian organization supporting farmers in their regenerative transition.

We participated in more than

36

external events, including 5 webinars and 4 panel discussions.



UN CLIMATE CHANGE CONFERENCE UK 2021

IN PARTNERSHIP WITH UNFCCC

We published an Open Letter on the eve of COP26, urging world leaders to put soil health and transitioning to regenerative agriculture on a global scale higher up on the agenda of the conference.

Our demands included reforming misaligned and distortive agricultural policies that encourage unsustainable intensification and the overuse of natural resources, shifting subsidies and financial incentives away from rewarding quantity over quality, and defining a common understanding and definition of regenerative agriculture across participating countries, to inform national agriculture policies as part of the national climate plans.



Investing in Regenerative Agriculture and Food podcast

129 Mellany Kloppe, leading regen farmer going all in on nutrient density

Join now!

A conversation with Mellany Kloppe, co-founder of Soil Heroes and director of the Soil Heroes Foundation about how measuring nutrient density is key towards having our farmers as well as consumers on board with regenerative transition.

Mellany, Director of the Soil Heroes Foundation, recorded a podcast with Koen van Seijen in his now famous 'Investing in Regenerative Agriculture and Food podcast'. Listen to the full episode [here](#).



We collaborated with Google Arts & Culture to showcase the power of Soil in line with COP26 in November.

Using video, illustrations, and good old-fashioned 'heart-led' storytelling, we told the vibrant stories of soil and the important role it plays for life on Earth.

Visit the digital platform [here](#).

We joined the '4 per 1000' Initiative, launched by France during COP21. It federates voluntary stakeholders of the public and private sectors, with the aim to demonstrate that agriculture, and in particular agricultural soils can play a crucial role in mitigating climate change and ensuring food security.

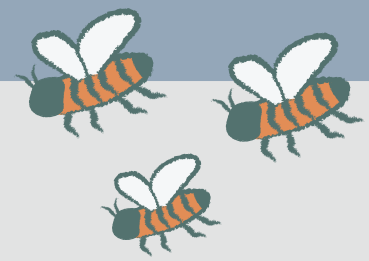


We hosted more than

25

farm tours on our Experience Farm.

The Rt. Hon. Alok Sharma MP
House of Commons
London
SW1A 0AA



Copied to:
Rt. Hon. Alok Sharma MP, President of COP26, and Peter Hill, CEO of COP26

Monday, October 25th, 2021

Dear Rt. Hon. Alok Sharma MP, President of COP26,

We sincerely thank you for all the work you are doing to bring hope to a future that can feel bleak and uncertain. At the same time, we urge you to make building soil health and transitioning to regenerative agriculture a more serious priority on the COP26 agenda.

Agricultural lands occupy 40-50% of the world's land surface¹. And although modern agriculture is one of the major contributors to global greenhouse gas emissions, it doesn't have to be that way. When we farm with nature, we draw down greenhouse gases, including CO₂, and keep them there. More than that, regenerative practices ensure that carbon plays a crucial role in building healthy soil, which in turn holds and filtrates more water, reducing flooding and drought, and putting essential nutrients back into our food supply.

In 2018, agriculture and related land-use emissions accounted for more than 17% of global GHG emissions from all sectors². But transitioning the global agricultural system to regenerative practices can sequester on average 2.3 tons of CO₂ per hectare³. This is an enormous opportunity to take excess carbon from the air and use it to bring desertified land back to life. The UK government is already paving the way by recognizing the potential of soil carbon sequestration to help achieve their Net Zero Strategy. Indeed, the maximum technical potential of soil carbon storage for the UK land surface is estimated to be 15.7 MtCO₂ per year in 2050⁴.

For the health of people and the planet and for good business, we collectively request that the following topics be included in the COP26 discussions:

- 1. The reformation of misaligned agricultural policies that encourage unsustainable intensification and the overuse of natural resources.** Quality of food should be rewarded as well as quantity.
- 2. A way to reward farmers for the ecosystem services they provide by implementing regenerative practices on their land.** These services include carbon sequestration, water security, biodiversity, and nutrient-dense food. The rewards should be based on the tangible positive outcomes of regenerative practices.
- 3. How to account for the costs of environmental degradation resulting from food production and reflecting it in food prices.**
- 4. The creation of a shared understanding and commonly accepted definition of regenerative farming and the core practices it encompasses.**

In the last decades, our food system has been following the "cheaper food paradigm" with a goal of producing more food at a lower cost, leading to an increase in inputs like fertilizers, pesticides, energy, land, and water. We have entered a vicious cycle. The lower price of food creates a bigger demand for produce, leading to the intensification of unsustainable farming practices and further land clearance. If we hope to secure a better future for our home planet, we must come to terms with the true cost of our current food production. And then we must change.





The conventional agriculture system does not ensure food security in vulnerable communities or fair relationships between small producers and big corporations. It destroys our arable land at a rate of 23 hectares a minute⁵ and emits a significant share of global GHG emissions. But it is not just human survival that is threatened by the way we farm. Our global food system is the primary driver of biodiversity loss. Agriculture alone is the main threat for 24,000 to 28,000 species – 86% of all species at risk of extinction.

The implications of this degeneration are clear. If we are to genuinely achieve our goal of limiting global warming to 1.5°C by the end of the century, then we must put excess carbon in the soil where it belongs.

Our unnecessary reliance on tilling and synthetic inputs means that our soils have lost 50 to 70% of the carbon they once held. But with better management, global croplands could store an additional 1.85 gigaton of carbon each year⁶. Considering that 1 ton of soil organic carbon amounts to 3.67 tons of CO₂, this means that agricultural land could sequester as much carbon as the global transportation sector emits annually. The challenge may be great, but the solutions are already here.

A recent Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming of 1.5°C has already identified four broad options to help the agricultural sector mitigate GHG emissions:

1. Introduce farm practices that reduce agricultural non-carbon dioxide emissions, including methane and nitrous oxide.
2. Introduce practices to remove CO₂ from the atmosphere and store it in vegetation and soil, as well as practices that reduce emissions from the degradation and removal of these carbon stocks.
3. Introduce measures that encourage consumers to shift to healthier, lower emission diets.
4. Introduce measures that reduce product losses along food supply chains and food waste by consumers.

The full deployment of the first two sets of measures would make agriculture close to carbon-neutral, relying on supply-side alone.

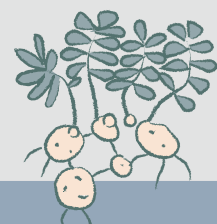
The COP Presidency made a promise in the COP26 agenda “to raise ambition on tackling the drivers of climate change and biodiversity loss, mobilize financing to protect and restore critical ecosystems, and kick-start a just rural transition towards sustainable land use to benefit people, climate and nature”.

To make this promise count, world leaders must fully recognize the impact of conventional agriculture, particularly the “cheap food paradigm”, as a significant driver of climate change, soil degradation, and biodiversity loss. Putting soil health and regenerative agriculture higher up on the agenda of the UNFCCC COP26 will encourage world leaders to act appropriately for a safer and greener future. It will also empower farmers to become stewards of their land and become part of the fight against climate breakdown.

The climate crisis is already here. But the solutions are right beneath our feet, and it’s time to put them at the forefront of the COP26 agenda.

With kind regards,

Soil Heroes and co-signatories



Sources

- 1- Smith, P., D. Martino, Z. Cai, D. Gwary, H. Janzen, P. Kumar, B. McCarl, S. Ogle, F. O'Mara, C. Rice, B. Scholes, O. Sirotenko, 2007: Agriculture. In Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [B. Metz, O.R. Davidson, P.R. Bosch, R. Dave, L.A. Meyer (eds)], Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- 2- Food and Agriculture Organization of the United Nations, Emissions due to Agriculture, Global, regional, and country trends, 2000-2018
- 3- Wageningen University report: Options for Carbon Sequestration in Dutch Agriculture and Nature (Jan Peter Lesschen, Hanneke Heesmans, Janet Mol-Dijkstra, Anne van Doorn, Eric Verkaik, Isabel van den Wyngaert en Peter Kuikma)
- 4 - Greenhouse gas removal methods and their potential UK deployment, a report published for the Department of Business, Energy and Industrial Strategy by Element Energy and the UK Center for Ecology and Hydrology
- 5 - The UN Environmental Programme, 2018
- 6 - Zomer, R.J., Bossio, D.A., Sommer, R. et al. Global Sequestration Potential of Increased Organic Carbon in Cropland Soils. Sci Rep 7, 15554 (2017)

CO-SIGNATORIES OF OUR OPEN LETTER FOR COP26



Triodos Bank



SUSTAINABLE SOILS ALLIANCE

Climate Neutral Group for better business



Mindful Chef



Groundswell



Huel

NURTURE BRANDS



Soilmentor



NEW AJE CAPITAL



Wide Open Agriculture



BSAG Baltic Sea Action Group

Gaiago



SMART CLOUD FARMING



CPCCF



patagonia



SYNERGOS



SOUTH 40



GROUNDLED



wij•land SOILCAPITAL



reNature.



PRESS COVERAGE

 Farmers Weekly

6 companies offering carbon-based payments to arable farmers

Soil Heroes. Dutch farmer Jeroen Klompe is the driving force behind Soil Heroes. It has developed pilot projects in Germany, Austria, Belgium...

16 Jun 2021



 Farmers Weekly

How a carbon pilot is opening up a direct market for farmers

The pilot project, due to run for at least five years on the farm, is with Dutch start-up Soil Heroes, set up by Dutch farmer Jeroen Klompe.

22 Jun 2021



5. Soil Heroes

Dutch farmer Jeroen Klompe is the driving force behind Soil Heroes. It has developed pilot projects in Germany, Austria, Belgium and, most recently, the UK, as well as on his own farm in the Netherlands. Local buyers pay for carbon offsets and for other ecosystem services, such as biodiversity provision.

Baseline soil and biodiversity assessments are taken at the project start, and again after five years. Growers commit as a minimum to reducing tillage and growing at least five species of cover crops.

Changes in ecosystem services are calculated annually using Soil Heroes' hybrid model, which specifically focuses on soil carbon.

One unique feature of Soil Heroes is the direct one-to-one relationship between the farmer and buyer, which the firm hopes will lead to a farm's produce being used within the buyer's supply chains.

Very few farmers have so far been paid for sequestering carbon within an arable rotation, but opportunities are beginning to open up, both globally and in the UK.

Carl Krefting, who farms about 400ha at Showsley Farm, near Towcester, Northamptonshire, is one of the first in the UK to enter into a project where commercial companies are paying for both carbon offsets and additional ecosystem service benefits.

See also: [Fermenting organic matter better for soil health than composting](#)

The pilot project, due to run for at least five years on the farm, is with Dutch start-up Soil Heroes, set up by Dutch farmer Jeroen Klompe.

He has 10 years' experience of farming regeneratively on his own farm in Hoekschewaard, south of Rotterdam.

 Rijnmond

High tech-snuifjes helpen boer uit Mijnsheerenland aan 'wow

...

Bij aardappelboer Jeroen Klompe uit Mijnsheerenland wordt hypermodern geboerd. "We kunnen producten verkopen die écht smaak hebben en een..."

15 Jul 2019



 Akkerwijzer.nl

Mijn Keus: John Deere op breed spoor

Jeroen Klompe gelooft namelijk dat een goede bodem de basis is voor een goed gewas. „En een gezond gewas is de basis voor gezond voedsel en zo voor gezonde..."

5 Apr 2021



 Hoeksche Nieuws

Mellany Klompe: De sleutel ligt in de natuur!

In de Hoeksche Waard is er een pilot in uitvoering en met middelen van de Regio Deal. Mede-initiatiefneemster Mellany Klompe van Klompe Landbouw...

7 Jun 2021



Foto Gemeente HW

Eén van de doelen binnen de programmlijn Agrifood is kennis en ervaring opdoen in het verbeteren van de bodemkwaliteit. In de Hoeksche Waard is er een pilot in uitvoering en met middelen van de Regio Deal. Mede-initiatiefneemster Mellany Klompe van Klompe Landbouw bereidt een projectaanvraag voor om het succes een vervolg te geven.

We are calling on [#worldleaders](#) to act.

Tomorrow is the start of the 26th United Nations Climate Change Conference ([#COP26](#)).

At COP21 in Paris in 2015, participating countries agreed to limit [#globalwarming](#) to less than 2°C above pre-industrial levels and to aim for 1.5°C. Each country committed to national plans setting out how they would reduce their emissions, known as Nationally Determined Contributions (NDCs).

Each country will bring their updated plans (NDCs) for reducing emissions and combatting climate change to COP26. But so far, the NDCs have fallen far short of the mark in reaching the 1.5°C target. COP26 needs to be the moment that governments commit to going further to secure a safer future for the planet and for us all.

[#SoilHealth](#) ought to be central in the plans for all NDCs; a means for drawing down greenhouse gases, stabilizing flooding and water availability and increasing the level of natural nutrients in our supply chains whilst also producing food on the land in their country. But it isn't.

Together with a bunch of brilliant [#partners](#), we are urging world leaders to put soil health and transitioning to regenerative agriculture on a global scale higher up on the agenda of the upcoming COP26 conference agenda.

👉 Go read the full list of demands we have addressed to world leaders: <https://lnkd.in/eBR9Gp3z>

👉 Share it to show your support!

Sustainable Food Trust Sustainable Soils Alliance Nurture Brands Huel Groundswell Agriculture Ltd Farm Carbon Toolkit La Falize Bodemzicht SOIL4CLIMATE INC Investing in Regenerative Agriculture and Food Banque Triodos A Team Foundation Mindful Chef Toast Ale Hoeksche Waard Nieuws

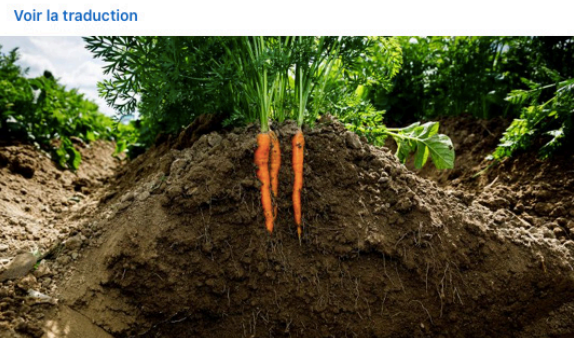
[#soilhealth](#) [#regenerativeagriculture](#) [#regenerativefarming](#) [#wakeupcall](#) [#openletter](#) [#timetoact](#) [#climatechange](#) [#biodiversityloss](#) [#joinus](#)

[Voir la traduction](#)



Triodos Bank - "World leaders need to make regenerative agriculture part of COP26 agenda"

Thank you for your support.
<https://lnkd.in/dPH-PdrA>



"World leaders need to make regenerative agriculture part of COP26 agenda"

triodos.com • Lecture de 1 min

Leandro Barbieri et 180 autres personnes

13 commentaires

OUR AUDIENCE INSTAGRAM 991 LINKEDIN 2519 FACEBOOK 426

SOCIAL MEDIA

A SELECTION OF SOME OF OUR BEST POSTS THIS YEAR

"The future of farming, to be perfectly honest, is slightly worrying. It's really important that we start to change and look at how we can do things differently."

- Fred Krefting, son of a regenerative farmer in Northamptonshire, UK

soilheroes • S'abonner

soilheroes The topic of succession is crucial in the life of a farmer. Soil is an asset that can be passed through generations, hence the importance of caring for the soil to increase its value over time.

Our friends Carl and Fred Krefting, father and son, shared their journey of passing down knowledge while transitioning to regenerative agriculture on their farm in Northamptonshire, UK. You can listen to them on [@GoogleArtsCulture](#). Link in bio.

44 J'aime
16 NOVEMBRE

New Heroes have joined the movement!

soilheroes • S'abonner

soilheroes When we published our Open Letter to [#COP26](#) world leaders last week, we were far from imagining the enthusiasm and support we would receive from committed organizations all around the globe.

A few days and many of emails later, we are proud to re-publish this Open Letter with more signatures.

Cheers to the new co-signatories: [@patagonia](#) [@rhizoterra](#) [@grandgarten](#) [@regenerationinternational](#) [@balticseaactiongroup](#) [@soilwatchco](#) [@ecosystemservicestradinginitiative](#) [@thesoilxperts](#) [@galago_deutschland](#) [@paneco_ambiente](#) [@zerofoodprint](#)

Aimé par [bodemzicht_farm_et](#) et 1 078 autres personnes

5 NOVEMBRE

One teaspoon of healthy soil holds up to one billion living organisms, including several yards of fungal filaments, several thousand protozoa and scores of nematodes.

soilheroes • S'abonner

soilheroes All of this in ONE. SINGLE. TEASPOON.

Soil biodiversity contributes to decomposition of biomass into soil organic matter, but also to making nutrients available for plants to grow healthy.

Healthy plants lead to healthy food, healthy people and a healthy planet.

[#teaspoon](#) [#healthysoil](#) [#biodiversity](#) [#soilbiodiversity](#) [#microorganisms](#) [#healthypeople](#) [#healthyplants](#)

92 J'aime
29 OCTOBRE

Biodiversity is found above and below the soil surface. It plays a huge role in managing pests and disease in a natural way. Without functioning biodiversity, farmers have to use huge amounts of synthetic fertilizers and pesticides, which further damage the soil.

Hear top-notch soil experts, including Charles Massy, Jill Clapperton, and our very own **Mellany Klompe-Vonk**, talk about the benefits of biodiversity for farmers on **Google Arts & Culture**: <https://lnkd.in/eREWw2GF>.

#soilhealth #regenerativefarming #naturalresources #climatechange #climatesolution #ecosystem #biodiversity #soilbiodiversity #pestcontrol #diseasecontrol #orchestra

[Voir la traduction](#)



Leandro Barbieri et 79 autres personnes

8 commentaires



"There is so much magic in soil that we don't fully understand it yet."

- Jeroen Klompe, Dutch regenerative farmer and co-founder of Soil Heroes



soilheroes · S'abonner

soilheroes Do we even need to introduce Jeroen Klompe? ... 4th generation farmer, pioneer of regenerative agriculture, owner of Klompe Farm and co-founder of Soil Heroes, Jeroen has a lot of strings to his bow.

For him, the biggest thing that prevents farmers from transitioning to regenerative agriculture is the "fear of the unknown". It takes a change of mindset, which also requires overcoming cultural barriers and beliefs that have been perpetuated for generations. Education, research, and above all, the power of community, are key to make farmers feel they are part of a bigger movement.

36 J'aime
IL Y A 2 JOURS

Ajouter un commentaire... Publier



"Agriculture has caused the loss of around 130 billion tons of carbon to the atmosphere. And that's one of the key reasons why we are now in the Anthropocene crisis."

- Charles Massy, Australian regenerative farmer, scientist, and author



soilheroes Regenerative agriculture is a global movement.

From his farm in New South Wales, Dr. Charles Massy is a leader for the movement. He believes that we have entered the 'Anthropocene', a new era where human activity has a sincere impact on the balance of the Earth's natural ecosystems. We are creating the conditions of our own extinction. For us to move forward, we need to radically change the way we live and farm.

Read more on @GoogleArtsCulture. Link in bio.

#soilhealth #regenerativefarming

48 J'aime
IL Y A 7 JOURS

Ajouter un commentaire... Publier



"The cure for depression is action."

- Yvon Chouinard, Founder of Patagonia



soilheroes We don't know what is ahead of us. We don't know how groundbreaking the outcome of this conference will be.

But what we do know for sure is that we will keep pushing for a deeper commitment from world leaders to create change within our food and farming systems.

First and foremost, we will keep pushing for a transition to regenerative agriculture across the globe. This will require significant effort and investment, but it is an investment in our future, and the future of our planet.

We are thankful for all the partners that

31 J'aime
12 NOVEMBRE

Ajouter un commentaire... Publier

How can we put our money to work in **#regenerativeagriculture**?

This **#SoilHero** certainly has the answer!

Koen van Seijen is a Senior Manager at **Tonic** and the founder of the Investing in Regenerative Agriculture and Food podcast. He is a business advisor for Soil Heroes.

He is convinced that we need to radically change the way we manage **#land** but also other **#ecosystems** (seas, forests and more) over the next ten to fifteen years, in order to have a real impact on **#climate** (co2 drawdown), human health (nutrient dense food), social welfare (well paid meaningful jobs) and biodiversity.

#regenerativefarming #humanhealth #soilhealth #climatechange #carbondrawdown #socialwelfare #biodiversity

[Voir la traduction](#)



Robert Reed, Marketing Development Manager, Soil Heroes
"Farming is the frontier where human-kind's economic growth mindset and need for sustenance, meet the natural laws of interconnectivity, rhythm, and transmutation – that's why it's so fascinating."



soilheroes · S'abonner

soilheroes [GET TO KNOW OUR TEAM]

Say hello to Rob, our Marketing Development Manager and one of the latest additions to the Soil Heroes team.

To read more about why Rob equally admires a philosopher, a footballer and a comedian, sign up to receive our next newsletter!

16 sem

25 J'aime
30 JUILLET

Ajouter un commentaire... Publier



Koen van Seijen, Advisor, Soil Heroes
"95% of our food comes from soil. We need to radically change the way we manage land. We have amazing examples from all over the world of people managing their land to regenerate soils, local communities and the whole ecosystem. Our challenge: how can we scale and replicate these to really have an impact on climate, human health, livelihoods and biodiversity?"



Jeroen Klompe et 171 autres personnes

16 commentaires

A YEAR IN REVIEW

THE IMPORTANT DATES OF 2021

JANUARY

Funding from WWF Netherlands is approved (10,000€)



MARCH

We join the 4 per 1000 Initiative as a partner



MARCH

Submission of first Patagonia grant report

APRIL

Launch of the donation page on the Soil Heroes Foundation website

11, 12, 13 JUNE

Participation in Groundswell, the Regenerative Agriculture Show and Conference



AUGUST

We join the 1% for the Planet network as a nonprofit partner



FOR THE PLANET



SEPTEMBER

Team trip to the UK to meet up with our new team members and perform the Timestamp 0 on Showsley Estate

SEPTEMBER

Submission of the second Patagonia grant report, marking the end of Patagonia's financial support

SEPTEMBER

Funding from the Treebeard Trust for the Google Arts & Culture platform is approved (3,000€)



SEPTEMBER

Release of the Soil Heroes Foundation presentation video on YouTube

OCTOBER

Publication of our Open Letter for COP26



NOVEMBER

Funding from Agrifood is approved (€91,700)

NOVEMBER

Funding from Stichting DOEN is approved (250,000€)



NOVEMBER

Launch of the Google Arts & Culture x Soil Heroes educative platform





THE JOURNEY AHEAD

REGENERATIVE AGRICULTURE TOOLKIT

Earlier this year, we published the first layer of our Guidebook for Regenerative Agriculture, presenting what we see as the 20 most efficient and effective regenerative farming practices. These practices are explained in a digestible way for anyone who wants to deepen their knowledge of regenerative agriculture.

Next year we want to publish the second and third layer, which will be more specifically designed for an audience of farmers and will include practical instructions and tips on how to implement these practices on the field (financial investment, headcount, recipes, time...). We also want to publish a Regenerative Agriculture Manifesto which will be designed for an audience of businesses, to take them on the first step of their journey towards integrating regenerative agriculture practices into their supply chain.

Finally, we want to enrich the Regenerative Agriculture Toolkit for farmers with tutorial articles and videos on topics including how to brew their own biofertilizer, how to pick their seed mix for a cover crop or a biodiversity lane, and other regenerative agriculture practices.

PROOF OF PRACTICE PROJECTS

In January 2022, we will start our research project on nutrition in collaboration with Rhizoterra. We have almost closed the funding for this project, which means that we can start and are confident in finding the remaining funds.. The date that the project commences will depend on travel restrictions as Dr Jill Clapperton wants to visit us and deliver the calibrated handheld spectrometer in person. We hope that she will visit us next summer at the latest. In 2022 we will also continue with the water retention proof of practice project.

FUNDING

We are looking for new funding partners to take over the funding that we received from Patagonia and enable us to continue with our experiments with lane farming and companion cropping. We also want to further diversify the types of crops we are growing and monitor the impact on above-ground and below-ground biodiversity.

We are also looking for funding partners to scale our organizational capacity. As a small team we would benefit from some external support on marketing and communication activities (copywriting, content creation...).

Finally, in 2022 we will start fundraising for the Experience Center.

MARKETING & COMMUNICATION

On marketing and communication the Soil Heroes Foundation is part of the Soil Heroes Family and therefore has to align on the guidelines of the company on brand identity. In 2022 Soil Heroes will embark will merge the two existing websites into a new website.

The year ahead holds its share of challenges but also new exciting opportunities. To stay up to date with our latest development and progress, you can follow us on social media:



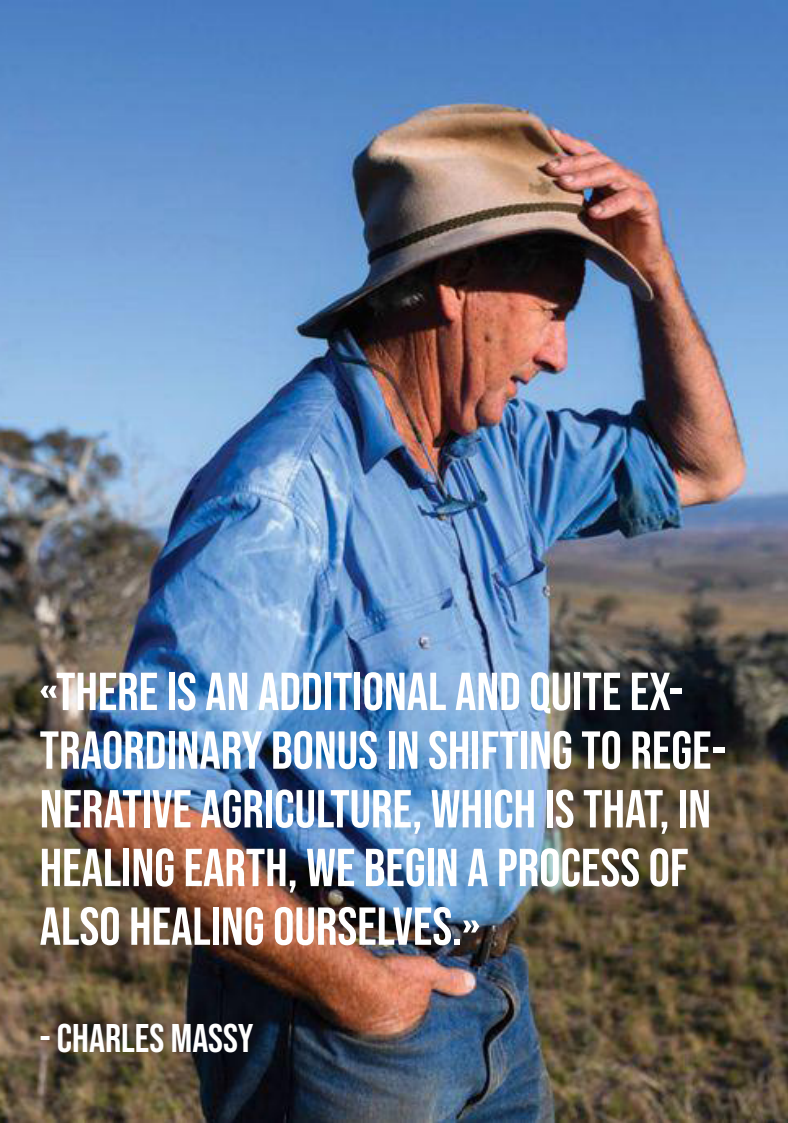
@soilheroes



Soil Heroes

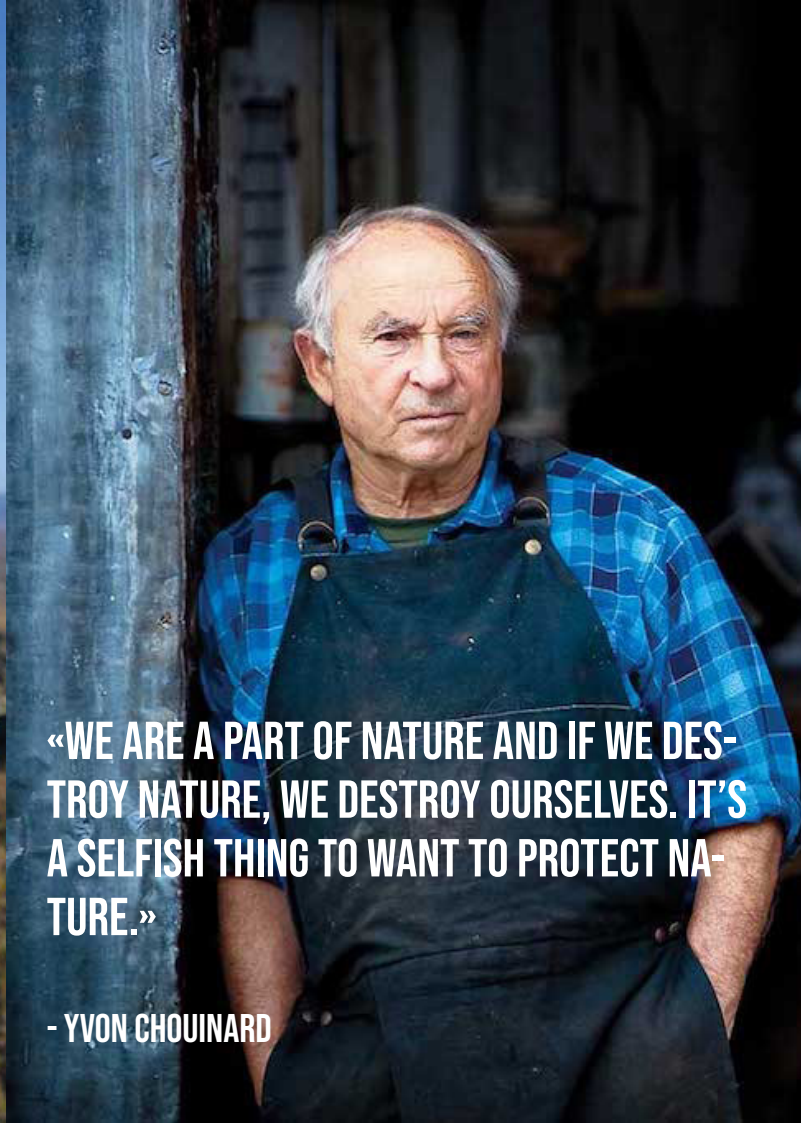


Soil Heroes



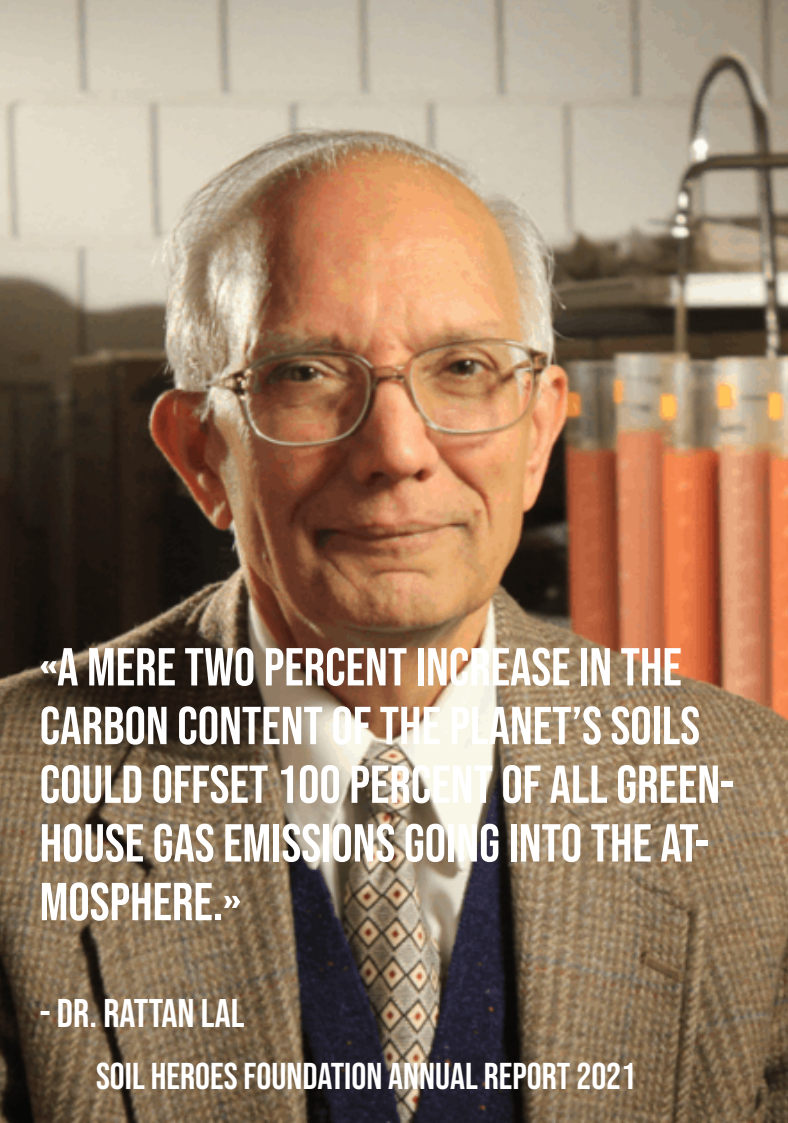
«THERE IS AN ADDITIONAL AND QUITE EXTRAORDINARY BONUS IN SHIFTING TO REGENERATIVE AGRICULTURE, WHICH IS THAT, IN HEALING EARTH, WE BEGIN A PROCESS OF ALSO HEALING OURSELVES.»

- CHARLES MASSY



«WE ARE A PART OF NATURE AND IF WE DESTROY NATURE, WE DESTROY OURSELVES. IT'S A SELFISH THING TO WANT TO PROTECT NATURE.»

- YVON CHOUINARD



«A MERE TWO PERCENT INCREASE IN THE CARBON CONTENT OF THE PLANET'S SOILS COULD OFFSET 100 PERCENT OF ALL GREENHOUSE GAS EMISSIONS GOING INTO THE ATMOSPHERE.»

- DR. RATTAN LAL



«MORE THAN A MERE ALTERNATIVE STRATEGY, REGENERATIVE AGRICULTURE REPRESENTS A FUNDAMENTAL SHIFT IN OUR CULTURE'S RELATIONSHIP TO NATURE.»

- CHARLES EISENSTEIN

A SPECIAL THANK YOU TO ALL OUR PARTNERS

patagonia



Europees Landbouwfonds
voor Plattelandsontwikkeling:
Europa investeert
in zijn platteland



UNIVERSITY OF AMSTERDAM



provincie HOLLAND
ZUID



Groundswell
23-24th June 2021
groundswellag.com



waterschap
Hollandse Delta



provincie HOLLAND
ZUID



WAGENINGEN
UNIVERSITY & RESEARCH

THEY ARE THE REAL SOIL HEROES!