

The Silent Feast:

How a Soil Revolution Starts with a Forgotten Carbon



SUPERFOOD FOR SOIL MICROBES



The Challenge

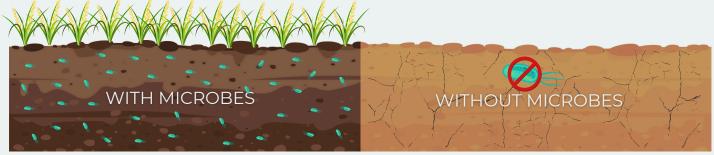
Soil is under pressure like never before.

For generations, building healthy soil was the slow, patient work of a lifetime. A discovery in the heart of farm country is changing everything, offering a future where the soil can heal at the speed it needs to.

The most promising revolution in American agriculture begins not with a seed, but with a feast. A feast for the billions of unseen lives that constitute the very foundation of our food system: **the microbes in the soil.**

For too long, our farming practices have focused on feeding the plant, while the soil itself, a living, breathing ecosystem, has starved. We've mined its wealth, watching organic matter decline and structure weaken, forcing farmers into a costly cycle of chemical inputs in attempt to maintain yields. The soil, quite simply, is tired and in poor health.





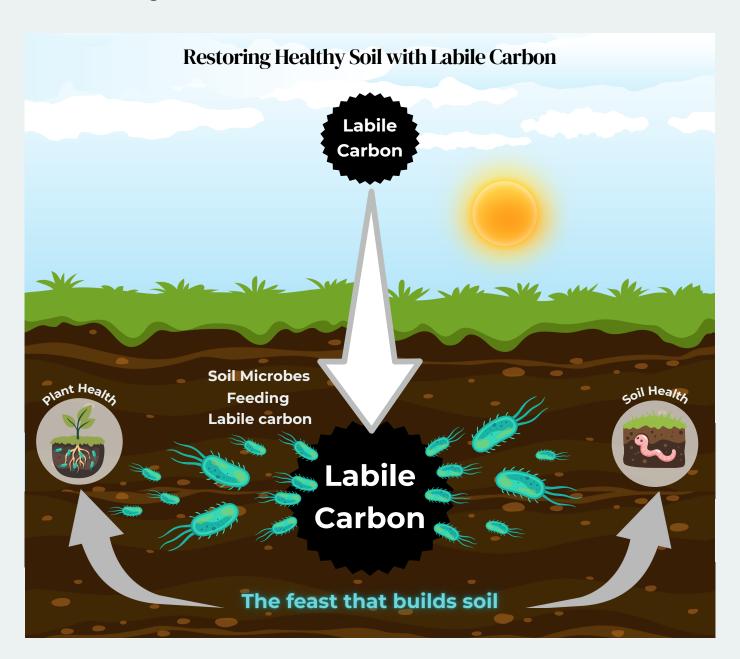




What if we could restore soil health not in decades, but in seasons?

This is no longer a theoretical question.

It's happening in fields from Kansas to Nebraska, thanks to a radical new understanding of microbes's favorite food: **Labile Carbon.**







Not All Carbons Are The Same



The term "carbon farming" is everywhere, but to truly understand the breakthrough of products like SecondHand-Carbon, you must first understand that soil carbon has a language. It has short chain & long chain carbons.





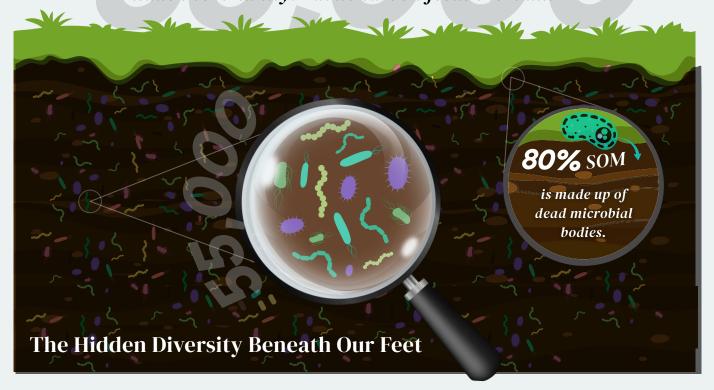


- Crystalline carbon (like biochar) the is slow, deliberate elder. It builds lastina structure, the architecture of the soil, but it doesn't provide any food for microbes.
- Labile carbon is the lively, energetic youth. It's comprised of tiny short chain, easily digestible carbon chains from simple 2-carbon amino acids to longer chains of up to 10,000 carbons that all 55,000 species of soil microbes can immediately consume. It is the building block of all life.





"Soil hosts more than **55,000** species of microbes, nature's greatest hidden community. Labile carbon feeds them all."



When applied to the soil, this labile carbon doesn't just sit there. It ignites a microbial explosion in minutes. Bacteria and fungi, starved for energy, experience a population boom. This well-fed workforce then gets to work doing what it does best: recycling nutrients for plants, building soil aggregates that fight erosion, and, most crucially, creating new soil organic matter (SOM) from dead microbes since as much as 80% of SOM is made up of dead microbial bodies.

"We've been sending the soil ecosystem the wrong ingredients and asking it to cook a five-star meal," explains Dr. Lena Torres, an agroecologist. "Labile carbon is that meal, fully prepared. It's the difference between handing a chef a whole wheat berry and handing them a scoop of finely milled flour. The outcome is the same, but the speed and efficiency are worlds apart."







Why Labile Carbon?

Labile Carbon is a liquid micro-carbon soil amendment made from organic waste through our patented CarbonShred™ hydrothermal process. It delivers a total spectrum of labile carbon and nutrients directly to soil microbes. By feeding the microbiome, Labile Carbon restores fertility, improves water retention, and builds soil organic matter.



Superfood for Soil microbes

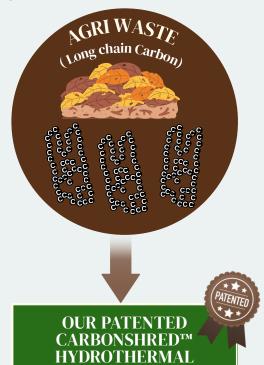
Illustration of SecondHand labile carbon particles glowing in soil as billions of microbes consume them, nourishing plant roots above.

The Journey of Acceleration



Labile Micro-Carbon's power comes from its creation. Through a proprietary patented process, agricultural waste is shredded into carbon chains ranging from simple 2-carbon molecules to long chains of up to 10,000 carbons at the molecular level.

This doesn't just create short chain carbon; it creates a full-spectrum soil superfood:

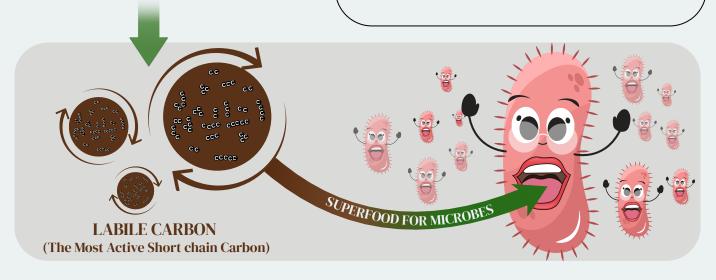


Short-Chain Fatty Acids:

Intense, rapid-burning metabolic fuel that acts like a shot of adrenaline for microbial activity, made up of carbon chains ranging from 2 to 20.

Amino Acids:

The fundamental building blocks of life, delivered pre-digested so microbes can build new cells without expending precious energy, simple 2-carbon chains.

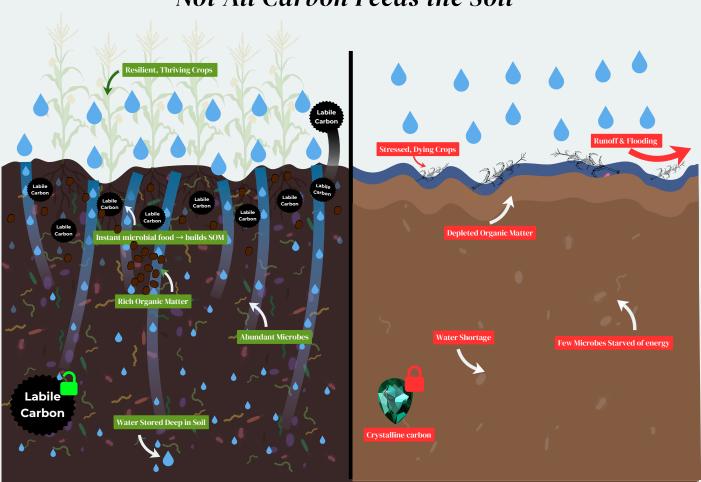


This combination is the key to its unprecedented speed. Traditional methods of building SOM, using cover crops, compost, and reduced tillage, are a slow, virtuous marathon. They work, but they take decades, to show significant results.

Labile Micro-Carbon is a Time Machine. It delivers the finished products of decomposition directly to the soil, bypassing the slow, gradual breakdown process.

Field trials have shown SOM increases of a full percentage or more point in a single growing season after application. In the world of soil science, where progress is often measured in tenths of a percent per decade, this result is staggering.

Not All Carbon Feeds the Soil

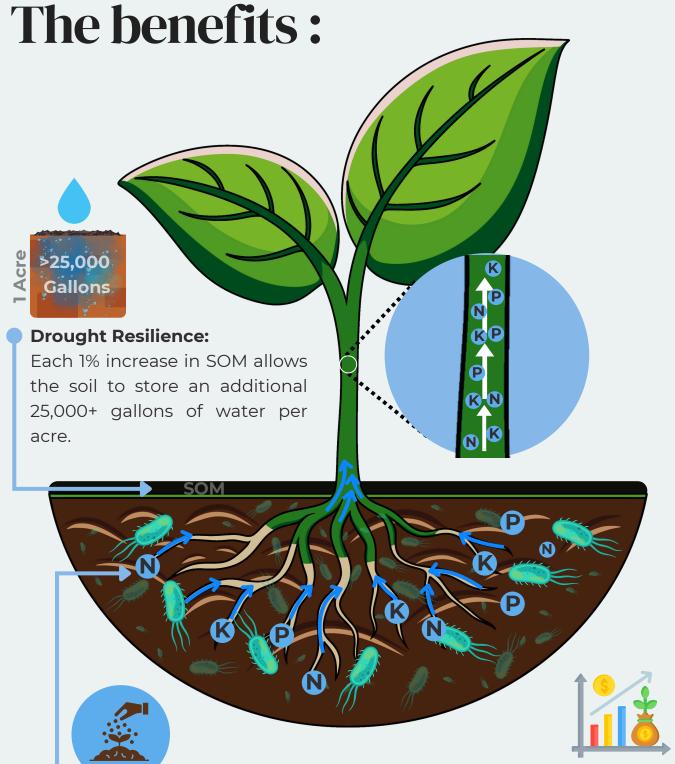


Second-hand labile carbon gives microbes instant food, restoring soil organic matter, water storage, and plant resilience.

Without second-hand labile carbon: Microbes starve, soils lose water, crops struggle.







Reduced Input Costs:

A thriving microbial population unlocks natural nutrients, reducing reliance on synthetic fertilizers.

A Faster Path to Profitability:

Farmers see a return on their soil health investment in the same season, not the next generation.



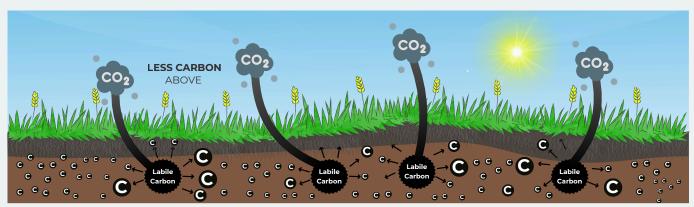


A Deeper Harvest

The implications of this technology ripple far beyond the farm fence.It provides a practical, immediate path for farmers to become the greatest environmental stewards of our time.

Climate Impact:

It offers a rapid, scalable tool to pull carbon from the atmosphere and store it underground in a stable, labile form.



SOIL AS A CARBON SINK

Water Quality:

Healthier soils act as a filter, drastically reducing nutrient runoff into rivers and watersheds by storing more water in the topsoil.







How to Apply SecondHand-Carbon

- Apply using standard equipment: center pivots, sprayers, or irrigation systems.
- At planting: apply the short-chain carbons infurrow, directly beside the seeds as they are placed in the soil.
- After harvest: apply the long-chain carbon product ("slurry") over crop residue. This coats stubble and attracts Trichoderma, a beneficial fungus that boosts nitrogen cycling.



When to Apply SecondHand-Carbon



- Anytime during the year, SecondHand-Carbon is hydrophobic, does not dissolve or evaporate, and stays in the soil until microbes and plants use it.
- Frozen ground: Application in winter (even on snow) helps reduce soil compaction and makes coverage easier to see.
- At planting: Ideal for short-chain carbons, placed in-furrow with the seed.
- After harvest: Ideal for long-chain slurry, speeding residue breakdown and building soil for the next crop.

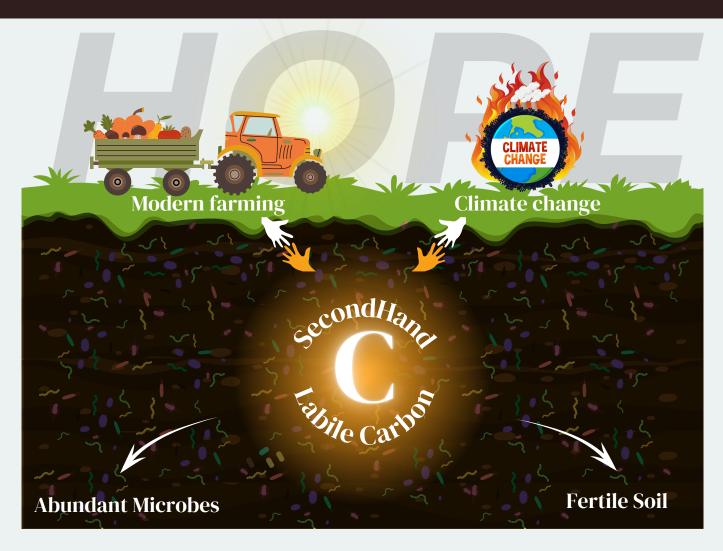




A New Journey Begins...

Industrial farming and a changing climate demand more from soil than ever before.

SecondHand-Carbon is just starting its journey, but our vision is bold: restore life to soils so they can sustain farming, protect water, and store carbon for generations to come.



CONTACT



Robert K Herrington (Founder of SecondHand-Carbon) 3828 SW Lincolnshire Rd Topeka, Kansas 66610 (USA) rherrington@prairiefood.com 785-424-3618