



04/28/2023

Pore Space & Tilth

For years you have heard us talk about 3 Pillars of Regenerative Farming: **1)** Manage air and water in the soil, **2)** Manage crop residues, and **3)** Manage crop fertility. Top down or bottom up, these principles work together and provide amazing differences in building healthy soil. Resulting pore space from bio-active soil is a game changer....***Tilth!***

Stable pore space is the result of bio-active soil forming aggregates. Biologically created aggregates are the desired effect of a community of soil organisms. If we have a tight compacted block of solid soil, we have a soil that is very difficult to farm. If we manage that compacted soil we can flocculate the clays and aggregate the soil into a tilthy friendly soil to work with.

In an aggregated soil that has crumb structure, the surface area of the soil aggregates has been measured as high as 9 square miles per square yard of soil surface! Clumping/aggregating the soil into a tilthy root media really does amazing things!

Providing proper fertility is necessary to give your crop proper nutrition for growth which in turn provides carbonaceous root exudates to feed microbial life at the rhizosphere(root) interface to degrade residues and enhance nutrient cycling. The microbial life causes aggregation of the soil which increases air and water in your soil; this will increase your aerobic zone for your crops to thrive!

What are the benefits of an aggregated soil with pore space?

- Greatly improves water use efficiency
 - Drains better
 - Reduce irrigation needs
 - Holds water better (Yes, you really can drain better and hold more moisture due to microaggregates and micropores with their water holding characteristics.)
- Keeps the crop cooler during summer heat
- Reduce water and wind erosion
- Allows gases such as carbon dioxide & air to move in and out of the soil
- Increases the community of microorganisms
- Reduces bulk density; resulting in less compaction

How can I improve pore space in my soils?

Recycling residue, adding carbon, trace minerals, and live microbials to your fertility programs will make a significant difference.

A few proven products are:

[MVP](#) - A diverse live microbial

[Activator II](#) and [Trace Pak](#) – carbons and traces

[Pillar 15](#) and [PKT Blend 18](#) – carbons and traces

[Residue WS](#)– accelerates breakdown of residues=building OM

There are many other blends and programs to incorporate food sources with your fertilizers to turbocharge your soil building journey.

Consult your [AgriEnergy Dealer](#) or representative to talk about increasing your soil's pore space to build soil health.

Additional Information can be found on our website by clicking the below links:

[Products](#)

[Literature](#)

[Video Series - Biological Farming](#)

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