



On the Matter of Organic Matter

One of the Soil's Greatest MVPs



What Is Organic Matter?

Organic matter is a large source of carbon-based compounds that are found within natural, engineered, terrestrial and aquatic environments.

It encompasses living organisms (i.e., plants, animals, microorganisms, etc.) as well as matter that has decayed to the point of not being recognizable, but not completely, like humus (which can no longer decay).

It is an organic compound that is formed by living parts (i.e., macro and micro life), soil microbes, and/or non-living structures (e.g., dead plants and fecal inputs, like worm castings).



Why Is Organic Matter Important?

Organic matter plays a crucial role in the ecological processes of regenerative agriculture. The following are some key relationships:

Soil Health and Structure

Organic matter helps bind soil particles together, improving porosity and soil structure. Improved soil structure also enhances water infiltration and retention, thereby reducing the need for frequent irrigation and improving the plants' ability to survive drought conditions.

Microbial Activity

Healthy soils rich in organic matter provide a food source and habitat for diverse microbial communities and are essential for nutrient cycling, disease suppression and overall soil fertility.

Nutrient Cycling

Organic matter is a source of essential nutrients, like nitrogen, phosphorus and potassium, which are crucial for plant growth.

Why Is Organic Matter Important?

Organic matter plays a crucial role in the ecological processes of regenerative agriculture. The following are some key relationships:

Erosion Control

By improving soil structure and water retention, organic matter helps reduce soil erosion caused by wind and water.

Carbon Sequestration

Organic matter is primarily carbon-based, and once it becomes stable, it turns into sequestered carbon in the soil.

Biodiversity

Increased organic matter supports a diverse range of soil organisms, which in turn supports above-ground biodiversity.

Organic Matter Ranges

Although the upper limits of what constitutes good soil are not entirely known, the following will provide a basic guideline of current organic matter ranges.

(Note: highly sandy soils will have less organic matter whereas higher clay soils will have more organic matter).

Organic Matter Ranges	
Less than 2%	Very Low
2-4%	Low
4-6%	Medium
6 to 8%	High
Greater than 8%	Very High



In Conclusion

There are many cascading effects that result from fostering a healthy amount of organic matter in your soil, from soil structure to microbial populations and beyond. Organic matter is a building block that - when managed with regenerative organic principles - can support healthy soil and strong food systems.

Links for More Information

01

[Digging into Canadian Soils: Soil Organic Matter \(Book Chapter\)](#)

02

[Soil Organic Matter Indicator](#)

03

[Soil Erosion \(Article\)](#)

04

[Soil organic matter: Everything you need to know about organic matter on your farm \(Video\)](#)

05

[Organic Matter with Ag PhD \(Video\)](#)

06

[Soil Organic Matter with Renaldo Arroyo \(Video\)](#)



**Thank You
for Reading!**

