

REBUILDING AMERICAN SOILS NATURALLY



A single teaspoon of healthy soil is home to more living organisms than the entire human population on Earth.

What Is Biochar?

Biochar is an **organic, carbon rich, charcoal-like, soil amendment** made from **organic matter/biomass.** Biochar is not a fertilizer, but it plays a crucial role in retaining nutrients and moisture within the soil. Additionally, it provides a habitat for numerous beneficial soil microorganisms that are recognized for enhancing soil and plant health. Under optimal conditions, this can lead to faster and larger plant growth.

Why Do We Need Biochar?

To replenish and rebuild soil health to help grow more crops.

How Is Biochar Made? Organic waste/biomass is heated in a specialized oven called a "pyrolyzer" which is deprived of oxygen and heated to 900-1200+ degrees. The extreme heat burns off volatile compounds, plant disease, and bad bacteria, resulting in a stable, nutrientrich, high-carbon product.

Role In Combating Climate Change:

When buried in the soil, biochar transforms carbon into a stable solid that can remain stored for many years. This process allows plants to act as a natural carbon removal system and sequestering it in the ground.







The Amazon's Secret | Biochar's Deep Roots

Biochar has been utilized in agriculture for more than 2,500 years and is increasingly recognized today as a safe and sustainable soil enhancer. Its origins date back to the Brazilian Amazon Basin, where ancient tribes developed terra preta, or "black earth." These soils, enriched with biochar, organic waste, and bones, are still considered some of the most fertile on the planet.



Biochar Close Up

The distinctive honeycomb-like structure of biochar plays a crucial role in restoring and maintaining healthy soil, while also preventing soil compaction. It enhances nutrient and water retention and can provide a habitat for beneficial microbial communities!

Healthy soil plays a vital role in supporting flourishing plants by providing them with essential water, oxygen, and nutrients.

Why Use Biochar?

- Biochar significantly **improves soil quality** for the long term.
- Its unique honeycomb structure naturally aerates the soil, allowing oxygen to reach the roots and preventing soil compaction that can suffocate plants. This creates an optimal environment for beneficial bacteria and fungi, fostering plant growth.
- Biochar **encourages the presence of "good" microbes** that nurture healthy ecosystems, rather than those that lead to disease.
- Enhances soil fertility and health, providing seedlings with a strong foundation.
- Supports water conservation. Biochar's porous design **helps retain moisture,** minimizing the need for frequent watering, especially during dry spells.
- Contributes to higher crop yields.
- **Eco-Friendly:** The carbon within biochar can stay in the soil for a prolonged duration, preventing its release into the atmosphere and contributing to the **reversal of climate change.**

Using Biochar in Farms & Gardens

- For optimal results, apply biochar in the early spring.
- Combine biochar with fertilizer or compost to charge it with nutrients; allow it to sit for 10 days for the best effect.
- Soak biochar beforehand to improve moisture retention.
- Integrate it into the soil by sprinkling, burying, or mixing it with compost or seeds.
- Aim for a mixture of 5-10% biochar within the top 6 inches of soil; start at 5% and adjust as necessary.
- For new plantings, blend it into the top 4-6 inches of soil.
- Water thoroughly for 5-7 days after application to help settle the biochar and minimize the need for frequent watering.





For more information, visit revivesoils.com

Soil is essential for gardening and consists of organic matter, microorganisms, minerals, nutrients, and water. The absence of any of these elements can prevent soil from being an effective growing medium.