

FROM FARMING TO GARDENING: Bringing Soil Health to Life

Whether you are a farmer with 500 acres or are gardening in the city, Soil is your greatest resource for success. Its health and vitality are essential for healthier food, cleaner water, richer biodiversity and a calmer climate.

*Whether on the farm or in a garden, caring for your soil comes down to six basic principles. These are known as the **6Cs of Soil Health**.*

The 5th C: Crop and Animal Diversity

Optimizing diversity is a key principle in building healthy soils because it fosters a rich and resilient ecosystem underground. Diversity contributes to soil health by increasing microbial diversity, enhancing nutrient cycling, improving soil structure, reducing the incidence of soil-borne diseases and increasing resilience to environmental stresses.

As a gardener, it is important to remember:

Diversity is nature's secret weapon.

If you have a lot of different types of plants above ground, you will end up with a greater diversity of friendly critters, both above and below ground. Different plants tend to attract and nurture different types of critters – almost all of them good for your soil and your plants. Why is diversity so important? Here are two important reasons:

First, you want your workforce of helpful critters to include lots of "specialists". These are critters that are really, really good at specific tasks, such as pollinating your plants (above ground) and protecting them from certain diseases (below ground). The more different types of critters you have in your soil and in your yard, the more likely it will be that your plant can find the help it needs to set fruit on time or to fight off diseases and pests.

Second, you want your workforce to be "resilient". That means it includes critters that do many of the same good things, but under different conditions. One group might work at high temperatures but go to sleep at lower temperatures. Others will prefer dry conditions, some will like wet conditions. If you have good diversity, there will always be the right critter available for the right set of conditions. That way, both your above ground and below ground workforces are producing great results for you and your plants no matter what the weather brings.

Here are some tips for increasing and maintaining high levels of diversity:

- **Rotate your plantings of annuals.** Rotating your plants breaks up the disease cycle and also brings new types of critters to the area each year, keeping diversity levels high.
- **Use compost.** Well-made, mature compost is full of all sorts of helpful critters. In fact, supporting diversity is perhaps compost's greatest strength. Adding it yearly refreshes the pool of "experts" in your soil, so that your plants have a deep pool of potential partners to draw on whenever the need arises.
- **Have some perennials in your garden.** Perennials feed soil critters all year long, even in winter, which helps to maintain diversity and overall soil health.
- **Use native species.** Native plant species will naturally encourage the development of a community of critters, both above and below ground, that is both diverse and well suited for your lawn and garden environment.
- **Have pollinator-friendly plants in your mix.** They will add to the overall health of your lawn and garden ecosystem, plus add their own underground workforce specialists to the mix.

To learn what some Canadian farmers are doing to improve the health of their soils, check out the many great interviews at the Compost Council of Canada's YouTube channel.

For more information, visit www.compost.org.



Crop and animal diversity

... one of the 6 C's for Healthy Soil

Canadian Farmers: *Bringing Soil Health to Life*

The 6Cs of Soil Health: Tackling Climate Change with Soil

Soil is an important ally in tackling climate change, as well as achieving productivity and profitability. Paying attention to the health of the soil realizes a rich harvest of benefits: climate stability, improved water quality, drought resistance, cost savings, healthier food, and a generally more profitable enterprise. It all comes down to six basic practices: **the 6Cs of Soil Health**.

1. **Control Compaction**
2. **Cultivate Carefully**
3. **Continuous Living Plants**
4. **Cover the Soil Constantly**
5. **Crop and Animal Diversity**
6. **Compost and other Soil Improvers**



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