

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.

Farmers across Canada are increasingly aware of the importance of soil health and are implementing key practices to build healthier soil and all the benefits which are then delivered.

It all comes down to six basic principles, whether on the farm or in a garden.

*These are known as the
6Cs of Soil Health.*

The 1st C: Control Compaction

Soil becomes compacted when downward pressure compresses the soil's structure, reducing or eliminating pore spaces. These spaces are where water and air are held; eliminating them turns soil from a sponge-like material into something more closely resembling a brick. Since both soil organisms and plant roots need water and air to thrive, compacted soils are unhealthy and unproductive. For a farmer, compacted soils, impermeable to rainfall, result in increased flooding, loss of expensive inputs through run-off, and increased surface water pollution.

As a Gardener, it is important to remember to:

Watch where you walk.

The weight – downward pressure – of our walking compresses soil's structure, leaving little room for the underground pathways that roots, water, air and soil critters need to travel.

While soils can easily handle the odd footstep or wheelbarrow rut, repeated walking on soil results in the kind of thing you see with any well-worn forest or meadow pathway – a hard surface that rejects water and plant roots alike.

Here are some ideas on how to control compaction in your garden or your yard.

- **Add compost each year**, in the spring or fall. Compost feeds the critters that consistently work to build your soil's sponge-like structure
- **Disturb the soil as little as possible.** Digging, roto-tilling, turning the soil over – all gradually destroy the lovely sponge structure of your soil.
- **Keep the same pathways year after year** and cover them with wood, bricks, or stone. Or, you can add compost and grass seed in the fall and turn your garden pathways into grass ways. Grass has a huge root system that helps soil resist compaction.
- **Be careful when you add fertilizer (synthetic or organic).** More is not always better. Too much nitrogen, for instance, can attract weeds and reduce organic matter, which leads to compaction. Soil tests are helpful, but so is common sense. Don't over-feed, practice the 6 Cs, and your lawn and plants will thrive.

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.



Control Compaction ... 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**



Agriculture and
Agri-Food Canada

Agriculture et
Agroalimentaire Canada

Funding for this project in part has been provided by
Agriculture and Agri-Food Canada through the AgriCommunication Program.

For more info, visit www.compost.org