

Community Gardens No-Till Pilot

Starting in 2023 the Deer Valley Gardens on Grant MacEwan Drive and at the Telford Community Gardens the City of Leduc will initiate a "no-till" approach to seasonal maintenance. Under this new standard for maintenance, the Parks department will not perform widespread soil tillage on a seasonal basis. This will allow for improved soil health overall, improved nutrient availability, and reduced weeding demands for gardeners in walkways and between rows.

In addition to the Deer Valley Gardens, any new gardeners at the Telford Gardens and any existing gardeners who opt in will be extended this opportunity.

Why is no-till gardening better?

Soil is a living ecosystem. Regular aggressive tillage causes deterioration of soil biology. Microorganisms in the soil as well as larger organisms such as earthworms and nematodes break down organic matter, turning them into available nutrients for your plants. Tillage exposes these organisms to the air and extreme conditions, killing a large segment of them every time the soil is tilled. This means that the soil ecosystem is constantly playing catch-up resulting in the need to add more nutrients (fertilizer) to achieve desired levels of soil nutrition.

Not tilling the soil yearly means that the weeding you did this year will last, at least in part, until next year! Soil naturally has a "bank" of weed seeds that exist in the soil until conditions are just right for germination. Some of these weed seeds can live dormant in the soil for decades. Each time the soil is tilled, a new batch of these weed seeds are exposed to the perfect conditions for them to germinate and take over your garden plot.

No-till reduces soil compaction! You read that right. Soil microbes, worms and insects in healthy soil create pathways and microenvironments for themselves to live and thrive in. These areas are also pathways for water, air and plant roots. Tillage breaks up these pathways, pulverizing the soil and settling in tighter and more compact than ever. More tillage equals more tillage! It's a vicious cycle.

For more information or for advice on the transition to no-till gardening, call Public Services at 780-980-7133 and check out these resources:

- Living soil, healthy garden
- Transitioning to a no-till garden
- Growing things: No-till gardening can benefit garden and boost production