

What is No-Till & How Do I Do it in My Garden?

Ellen Drews, Farm Manager

Astarte Farm

No-Till Core Concepts and Resources

Benefits of No-Till

- 1. More diverse soil life (larger bodied, and longer-living creatures such as fungi and worms)
- 2. More resilient soil for both droughts and floods (because of air channels left by decaying roots)
- 3. More resilient soil for plant health (like probiotics for your plants)
- 4. Carbon sequestration (carbon stays in place instead of reacting with oxygen in air)

When in doubt, return to these core concepts for no-till gardening

- 1. Keep the soil covered with mulch, living plants, or decaying plants
- 2. Leave roots in the soil: chop veggies at soil level to remove
- 3. Add compost and amendments to the top of the bed and let the worms, fungi, and other creatures stir them in for you over time.
- 4. If you need to loosen or add air at first, use a pitchfork and "rock" it gently to lift the soil without turning
- 5. Transplant or seed your next crop into the residue of the last: it's counterintuitive at first, but it works just fine!

Terminology

Tillage: stirring or turning over the soil, often with a plow or rototiller.

Mulch: leaves, woodchips, cardboard, compost, or other plant material you put on top

of your bed to keep weeds out and keep the soil moist

Lasagne Method: layering materials including cardboard, compost, and sometimes straw, to build

soil in place and create new garden beds

Occultation tarps: Black and/or solid tarps that block light from reaching the soil surface. They

prevent plants from photosynthesizing underneath, so they run out of energy

and die in place.

Solarization tarps: Clear plastic tarps that trap heat energy from the sun and cause the plants

underneath to die from overheating. You must seal the edges of the tarp for this

to be effective.



Resources for more information:

- No-Till Gardening for a Resilient Future yearlong class by Rose Cherneff located at Astarte Farm
- <u>Astarte Farm</u> on Instagram and <u>No Till, No Spray Adventures in Massachusetts</u> by Dan Pratt on YouTube
- No Till Growers podcast/YouTube channel/No-Till handbook
- Charles Dowding books on "No Dig" Gardening and his YouTube videos as well
- Ruth Stout's book Gardening without Work
- Masanobu Fukuoka *One-Straw Revolutionary* for theory and inspiration :)
- Helen Atthowe's <u>The Ecological Farm</u> book for the nitty-gritty science behind all these techniques

Where to Find Astarte Produce:

- River Valley Co-op
- On-Farm through our CSA
- Northampton: <u>Dirty Truth</u>, <u>Homestead</u>, <u>Hungry Ghost Bread</u>
- Easthampton: Daily Operation, Vegan Pizza Land
- South Deerfield: Atlas Farmstand
- Amherst: The Humble Peach, The Archives, Wheelhouse Catering
- Turners' Falls: The Upper Bend

Email: ellen@astartefarm.com

Website: https://www.astartefarm.com/

YouTube: https://www.youtube.com/channel/UC8VkHQ_lggsoBySQL8TDmKQ

Facebook: https://www.facebook.com/astartefarmhadley
Instagram: https://www.instagram.com/astartefarm/
CSA Signups: https://www.astartefarm.com/csa