No Till for the Home Garden

BY KEVIN MARINI,
UCCE PLACER-NEVADA
What is No Till Gardening exactly?

- Methods that reduce or eliminate the breaking up and turning over of the soil – MINIMIZE SOIL DISRUPTION

- Planting in an “unprepared” seed bed (Ex. No Till Drill)

- Using available organic materials to smother/cover ground
What is No Till Gardening exactly?

- Pioneers of no till:
  - Masanobu Fukuoka – “Do Nothing Farming”
  - Esther Deans
  - Ruth Stout

- Also known as:
  - “Lasagna Gardening”
  - “Sheet Composting”
  - “Sheet Mulching”
  - “Lazy gardening” 😊
No Till Farming: Acreage Increasing Nationwide

No-till pumpkins, such as these at the Upper Mountain Research Station at Laurel Springs, will be grown again next year to be compared to conventionally grown pumpkins. (Photo courtesy of Greg Hoyt)
Advantages of No Till Gardening

- Reduces compaction; improves drainage
- Increases Organic Matter (OM)
- Nurtures soil biology and maintains it
- Reduces erosion
- Conserves moisture long term
Disadvantages of No Till Gardening

- **Farming scale**: herbicide use same or increased
- Need organic materials (greens + browns)
- May increase pest pressure (gophers, snails, bermudagrass)
- Need water to break down materials piled up
No Till Methods

- Quick and Easy
- Middle Ground
- Long Term Success
- Utilizing Cover crops
- Hugelkultur
No Till Methods

- Quick and Easy
  - Define new bed edges
  - Mow plant material
  - Cover/smother with thick sheets of newspaper
  - Apply topsoil blend on top of newspaper
  - Water, plant, water, mulch

ANY ISSUES WITH THIS METHOD??
No Till Methods

- Middle Ground
  - Build bed in Fall
  - Use multiple layers:
    - Cardboard, manure, straw, wood chips, grass clippings
  - Cover with thick mulch and overwinter
  - In Spring, gently pull back mulch and plant

ANY ISSUES WITH THIS METHOD??
No Till Methods

- **Long Term Success**
  - Initial Soil Analysis, incorporation of amendments with one-time soil digging
  - Control of perennial weeds prior to piling organic materials
  - Initial bed overwinters then regularly planted

ANY ISSUES WITH THIS METHOD??
No Till Methods

- Using Cover Crops
  - Great to use to transition to no till
  - Grow, cut and cover
  - Depending on season, may have to wait to plant into
No Till Methods

- **Using Cover Crops**
  - Seed frost sensitive cover crop in Fall (ex. Oats)
  - First freeze kills plants and provide cover over winter
  - Plant through residue in Spring
No Till Methods

- **Hugelkultur**

  - “Hill Culture” - using wood logs/branches as base; matures to provide nutrients/water retention
No Till Methods

- Hugelkultur
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- GREAT Resource to explore: goodearthcentre.org

Two year funded Organic No Till Research study on farm