Transitioning to No -Till can be challenging...



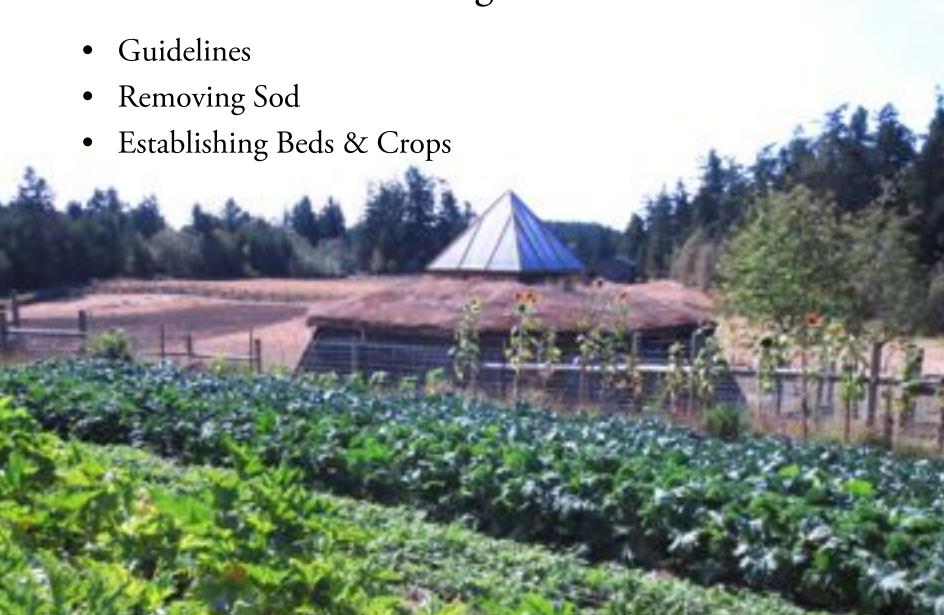
...but rewarding...



...and, eventually, less work.







Guidelines

- A) Start slowly & small
- B) Have a short term & long term plan
- C) Choose something that you can succeed at
- D) Be patient & have realistic expectations
- E) Incorporate no/reduced-till into existing practices
- F) Prioritize minimizing soil disturbance & long term health of soil
- G) In a new site or poorly performing one focus on building fertility & weed management prior to planting a cash crop

H) Establish beds after the site has been well prepared (removing rocks and sod)



- I) Base bed widths on your long term plans and use of equipment
- J) Once established avoid all compaction of beds with foot / equipment

Removing Sod

- 1. Biological approach (for pasture)
- 2. Mechanical approach (hand or tractor)
- 3. Using commercial or organic mulching



1.Biological Approach

 Broadcast seeds for plants that will out-compete the sod or will establish themselves within the sod



 More appropriate for pasture or areas in the garden that are not being used for cash crops • Consider using pigs to root out sod in small fenced areas, one section at a time





• The advantage of pigs over mechanical methods: they eat the roots and add manure!

2. Mechanical Approach

• Undercut sod to a maximum of two inches deep.

By hand using a hoe or a broad pick.



By tractor using a spread cultivator with a broad knife, or a sod cutter



- Remove sod and rake out surface roots
- Plant aggressive cover crop that will suppress grass
- Don't plant cash crop until sod is under control
- Repeat method if necessary



3. Mulching

Place cardboard, plastic or biodegradable mulch on top of sod



- OR on top of man-made mulch apply thick layer (min 6") of organic mulch (straw, woodchips etc) & punch holes through organic and man-made mulch for transplants
- After 2 years remove all mulch, rake out sod roots & plant cover crop before continuing with cash crops

Establishing Beds



• Bed width determined by operation and use of equipment



• Strip planting is an alternative to narrow beds and pathways

• Start with easy crops: transplants such as squash, tomatoes, cabbage, broccoli, cauliflower



 Avoid direct seeding crops that are slow germinating until you have gained experience and reduced weed pressure • Establish a ground-cover in paths (permanent or annual)



• Choose a cover-crop that can out-compete weeds but not your crop