

THE PERMABED SYSTEM

key crop in centre bed

Organizational Land Patterning

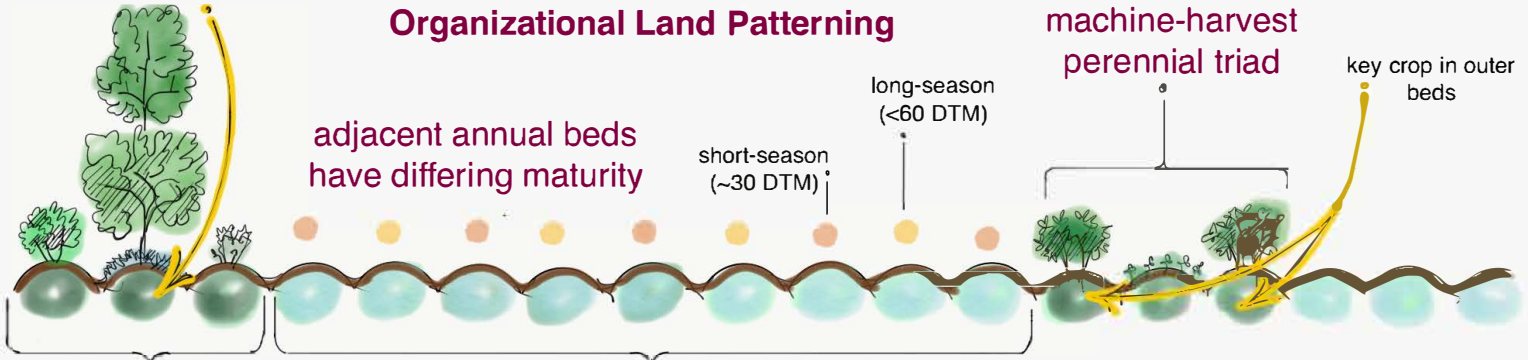
machine-harvest perennial triad

key crop in outer beds

adjacent annual beds have differing maturity

short-season (~30 DTM)

long-season (<60 DTM)

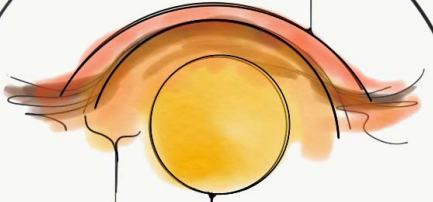


hand-harvested perennial triad

annual plot, three triads, in guild crop rotation

Permabed Zones

operation zone

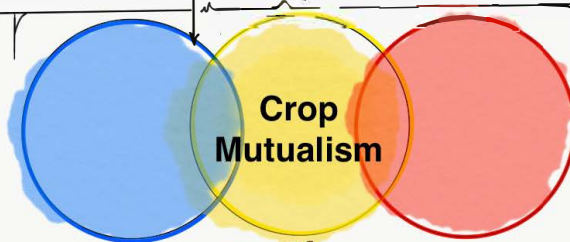


buffer zone

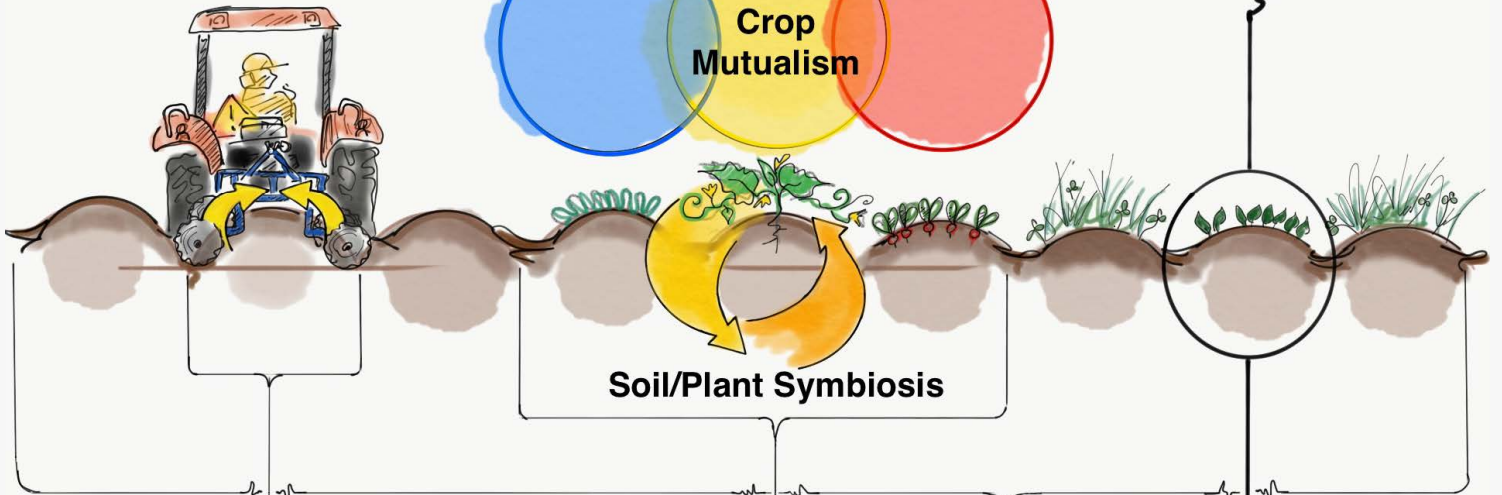
soil conservation core

- *space/time/energy partitioning
- *organized together for efficient field operation
- *organized for crop services and mutual support

Crop Guild



Crop Mutualism



Soil/Plant Symbiosis

3 Scale Management

Permabed (one bed)

Triad (three beds)

Healthy Soil Ecosystem

Permaplot (12 beds)

- *improved nutrient fixation, storage and availability to crops
- *enhanced soil structure— aggregation, tilth and permeability
- *active colonies of mycorrhizal fungi, nitrogen-fixing bacteria, etc.

