Your Highly Productive Organic Garden Julie Rawson, Many Hands Organic Farm Barre, MA <a href="mailto:farm@mhof.net">farm@mhof.net</a>; 978-257-1192



#### Some General Principles

- Keep the soil covered with hopefully green material – as long in the year as possible
- Minimize disturbance don't kill the mycorhhizae
- Maximize diversity
- Utilize mulches of all types
- Covercrop before, during after the season a diverse mix – legumes, grasses, forbes, brassicas

#### Maximize Photosynthesis

- Feed the plant so that it can feed the soil and nature can set up a symbiotic relationship between the two systems.
  - Food for the plant right out of the starting gate supported by living soil organisms – plants need microbes to digest their food for them
    - Foliar feeding
    - Soil drenches
    - Slow release rock powders

#### **Our Practices**

- Certified organic since 1987
  - Vegetables 2acres
  - Fruit 100 fruit trees
  - 250 meat birds, 125 turkeys, 200 layers, 8 pigs
  - Grassland 7 acres
  - Woods 44 acres
  - Gross revenue in 2021 \$150,000
- Mineral balancing soil amendments as per soil tests annually Logan Labs test –
- No tillage equipment no more than once annual usage of a ripper on tractor tool bar
- Tractor and rotary and hand mowers, rogue hoe
- Heavy usage of mulch in season cardboard, hay, chips, leaves
- Cover crops whenever possible in season, pre-season and post season
- Silage tarps to kill greenery in season and adding new land
- Animal integration post crop
- Perennial strips to maximize biodiversity especially noticed insect/pollinator enhancement
- Extensive use of liquid fertility at planting and weekly in foliar applications—minerals, biostimulants, biologicals - consulting with Advancing Eco Agriculture with their products, Tainio Technology and Crop Health Labs and Nova CropControl in Netherlands

## Help with Reading your Soil Test from Logan Labs

 NOFA/Mass Technical Assistance https://www.nofamass.org/nofa-masstechnical-assistance/

### MHOF Soil applications of dry minerals for 2022

- Boron via solubor
- Redman salt
- Potassium sulfate
- Manganese sulfate
- Zinc sulfate
- Elemental sulfur
- 4 applications for vegetables
- 2 applications for fruit trees and berries

#### Don't forget the rock dust – Rock Dust Local



#### Soil Prep Equipment - Rogue Hoe



#### Rogue Hoe



#### Cardboard mulch before wood chips





## Krischaun spreading wood chips over cardboard



# Mulching grapes – with cardboard and chips





## Mulching – Hay, wood chips, leaves, cardboard, corn stalks, etc., etc.



#### Heavily Mulched parsley and squash



#### Gathering leaves for mulch



#### On the road again



#### Crimson clover inter-planted with Swiss Chard



### Corn with multi-species cover crop – Greencover seed



#### Oats, peas, daikon after potatoes



#### Tomatoes in crimson clover



#### **Using Tarps**



#### Tarps and Black sand bags



#### Pigs on edges and in woods



#### Young turkeys on pasture



#### Turkeys After Crops in Fall



### Chickens coming across crimson under-sow – was basil, peppers, tomatoes, cukes



#### Perennial Strips in vegetable areas



#### Some Products from Advancing Eco Agriculture for Gardeners

- Biocoat Gold \$52.28/lb. seed coat
- Mycogenesis \$97.17/lb.- mix with liquids below for microbial stimulation
- Naturalive Growth \$32.43/Gallon macros
- Naturalive Vitality \$45.92/Gallon micros
- Sea Shield \$22.31/gallon Nitrogen
- Sea Stem \$35.19/gallon Kelp/Seaweed
- Rejuvenate \$41.85 microbe support/sugars





### Squash planted and then heavily mulched



#### The harvest











## Emergency Pepper Frost September 19, 2020

























## Starting Seedlings

- Good quality potting soil we use Ideal Compost products – Mike Lombard
- Lay low on the N and K and focus on the Ca and P for fertility
- Start seeds indoors not too early so they can grow consistently from start to finish, not get leggy, not get root bound, not suffer from lack of sun – 4 weeks in flats ideal
- Start in open flats to enhance soil connection











## Practices to remember

- Multi-species winter kill cover crops late August late September intersown in living crops or on finished crop areas
- Intersown crimson clover and shorter cover crops early under brassicas, tomatoes, corn, etc. to enhance crop health – starting in early July as plants are big enough
- Early cover crops on areas that won't be planted until early June oats and peas
- Use silage tarps strategically throughout the season for succession crops and if grass has gotten ahead of you
- Cardboard and hay over winter when grasses take over and/or improved fertility is particularly wanted
- Leaves, hay and wood chips for mulch
- Maximize keeping the soil covered—living best, or dead as necessary
- Animals in rotation whenever and wherever possible
- Well targeted foliar sprays and soil drenches

