

Successes & Failures of Various Sustainable Farm Techniques in Urban Gardening

FRIENDS
OF THE
NATIONAL
ARBORETUM





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Washington Youth Garden – Garden CoManagers

Agenda



- Check-in
- Sustainable Practices
 - No-till/Deep mulch
compost/Cover Crop
 - Companion Planting
 - Understanding Your Pests
 - Vertical Planting
- Q&A



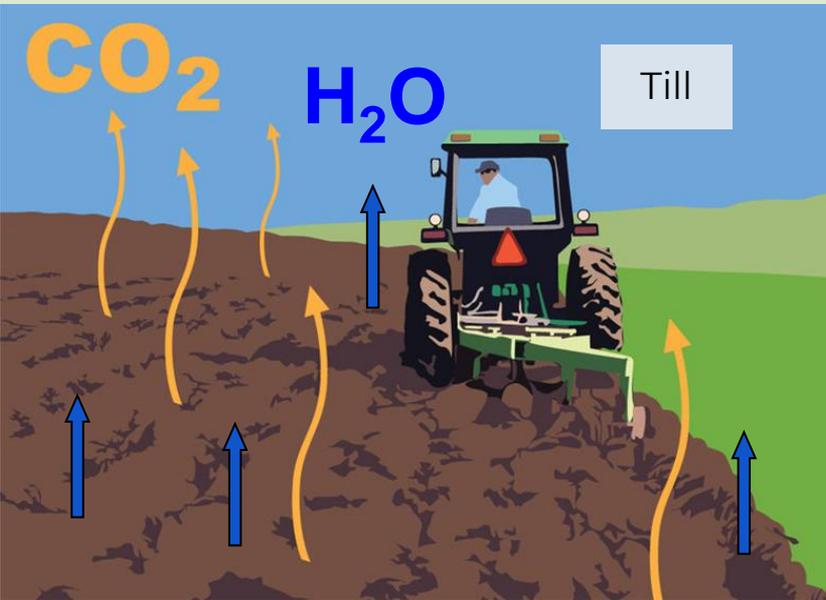
How to best care for the land in the most time-efficient way?

Sustainable Gardening Practices

- No-till
- Mulch
- Crop rotation
- Companion planting
- Physical barriers (row cover, netting, fencing)
- Perennials and native plants
- Understanding pests and challenges
- Vertical growing



No-till



Deep Mulch Compost



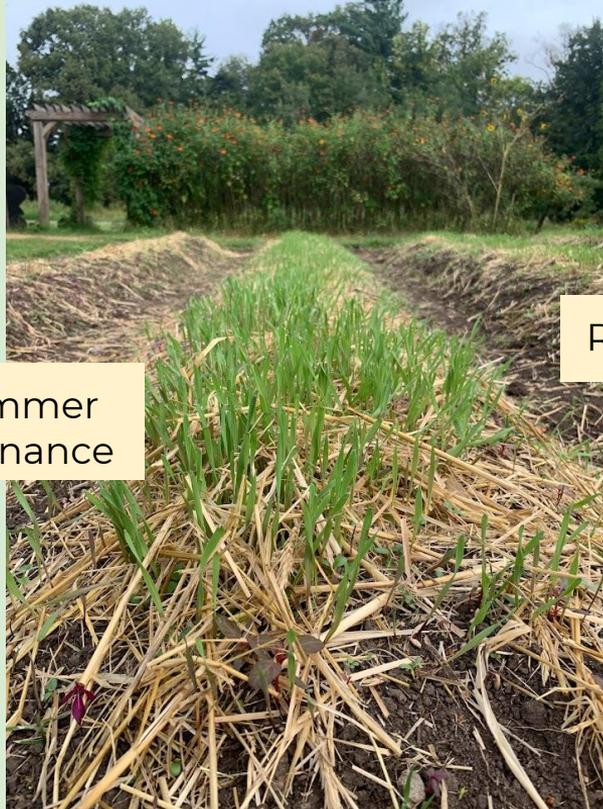
Cover Crops



Sun hemp

Helpful for Summer
with no maintenance

Buckwheat



Rye

-Over-wintering
-Pea shoot snack in
spring!



Field peas

Companion planting

Tomatoes
Marigolds
Basil



Bush Beans
Cucumbers



Understanding Pests

- First...understanding your environment!
- Challenges: Climate Change, multiple life cycles in one season
- Successes: researching seeds of varieties of crops that are adaptable to your location & space, using multiple methods together (vertical planting), using physical barriers like row cover



Vine borer



Vertical Growing

- Space saver, increases air flow which helps with pests and fungus
- Maximizing space you have, choosing the right crops for your garden goal
- Trellis design/materials used
- Relationship with companion planting
- Working with nature/succession planning



A group of people are working in a garden, spreading soil. In the foreground, a woman in a colorful shirt and a wide-brimmed hat is using a shovel to dig into a large pile of dark soil. To her right, a blue wheelbarrow is filled with soil. In the background, another woman in a black shirt and jeans is using a shovel to load soil into a blue wheelbarrow. A third woman in a white shirt is standing in the distance. The garden is lush with green plants and trees. A central text box with a white background and black text reads "Material Resources".

Material Resources

- **COMPOST:**

- Veteran Compost \$35/cubic yard + delivery fee <https://www.veterancompost.com/our-products/>
- City of College Park: \$28.00 per cubic yard including tax. Anyone (residents or non-residents) can purchase – If you have a truck we will load it, or you can dig your own. Mon-Fri 8:00-11:30 am & 1:00 - 3:00 p.m. <https://www.collegeparkmd.gov/compost>

- **TOPSOIL & MULCH:** Merrifield Garden Center; can deliver a maximum of 12 cubic yards on one truck <https://www.merrifieldgardencenter.com/product-category/landscape-delivery/>

- **HORSE MANURE:** Rock Creek Park Horse Center

- **BLOOM:** Class A composted humanure - DC's finest! <https://bloomsoil.com/>

- **STRAW BALES:** Todd Greenstone \$8/bale if you pick up <http://www.toddgreenstonecustomfarming.com/hay-and-straw-for-sale>

- **SEEDS:** Share-a-Seed – Free seed exchange in DC; Instagram: @share_a_seed <https://www.slowfooddc.org/share-a-seed>

Community Resources

- For hands-on garden experience at WYG: We have volunteer hours Tues, Thurs, and Sat mornings 9-12pm starting in April
 - WYG does seedling/compost/straw donation every Spring & now Fall!
- Tool rentals: <http://dugnetwork.org/garden-supplies-2/#Tool%20Rentals>
- Slow Food, many other orgs do a seed swaps in the Spring & Fall (Plantita Power, DOL, DC Mutual Aid Apothecary)
- Monthly Outdoor Learning Gathering that are virtual in winter/in a different school garden and give practical tips on gardening and garden-based learning (find out about these through Sprout it Out and the google group)
- [No-Till Growers resource](#)



Q&A



Mulch



Mulch vs. No Mulch

Moisture Retention and Yields

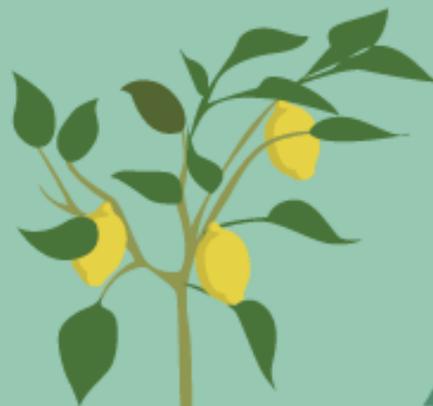
Plants grown with mulch produce higher yields than plants grown without.



Mulch



10% of rainwater evaporates



No Mulch

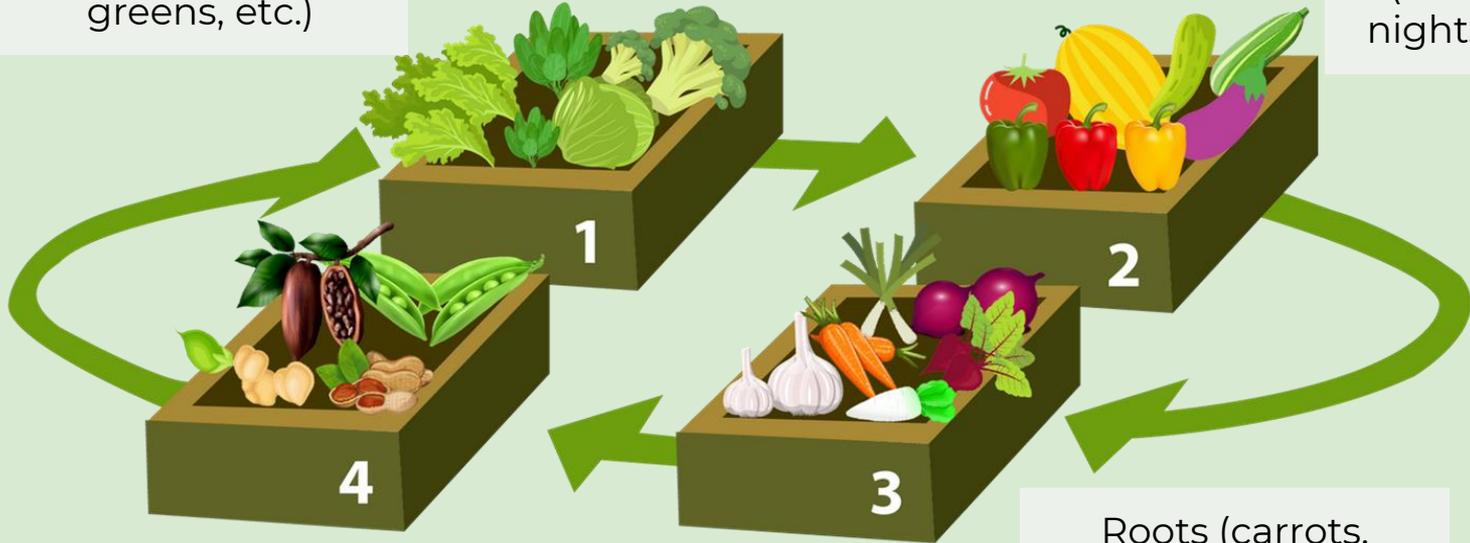
Up to 80% of rainwater evaporates



Crop rotation

Brassicas
(kale, broccoli, leafy
greens, etc.)

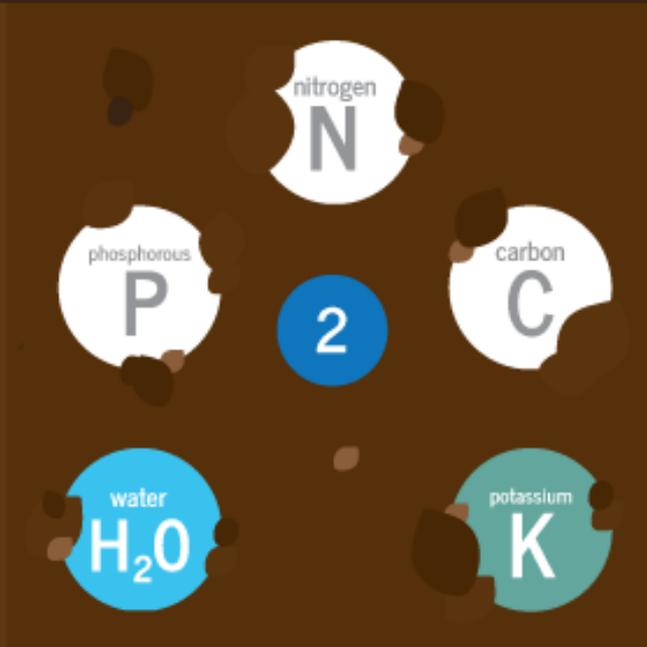
Fruits
(cucurbits/
nightshades)



Roots (carrots,
onions, garlic, etc.)

Legumes (beans,
peas, etc.)

THE BENEFITS OF CROP ROTATION



- 1 Reduces pressure from pests and diseases.
- 2 Prevents exhausting soils.
- 3 Can help with weed control.

Physical barriers

Row cover
PVC pipe



Bird netting



Perennials and native plants

