

# Intensive Gardening 

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## Classes $\mathbb{C}$ Handouts

WITC Classes (click here for registration information)
All are on Thursday, 10:00 to Noon Webinars

- Feb 11, 2021-Intensive Gardening

Handouts (click on the title for the PDF file):
Intensive Gardening PowerPoint Notes, Intensive Gardening Comparisons, Crop Rotations and Plants for Small Gardens, Square Foot Gardening Basics

- Mar 4-Mixed Borders
- Mar 25 -Ornamental Edibles


## Objectives

- Advantages of Intensive Gardening
- Space Saving Techniques
- Planning
o Plants
- Common Problems
- Tips for Success



## Introductions

## Your Goals for the Class?

## Advantages of Small Spaces

- Much less up-front investment
- Areas fill in faster
o Require less maintenance
- Can be re-worked
o Many plants do well in containers and raised beds

- Can be closer to you


## Space Saving Techniques

o Intense

- Vertical
- Using smaller furniture, dwarf plants
- Multi-functional uses



## Developing Small Spaces

o Single theme, function, focal point

- Add perspective to make tiny areas appear larger
- Go vertical
- Bright colors in foreground
o Break it up



## Intense Techniques

- Raised Beds
o Terraces
o Square Foot
o Lasagna
o Straw Bale
o Succession
o Interplanting
- Containers
- Small sizes


## Raised Beds



- Basic unit of intensive gardening
o Concentrate soil in small areas
o Usually 3-4 feet wide \& long
o Form of wide-bed gardening



## Square Foot Gardening

o Based on Mel Bartholomew's book

- A unique system to grow using $20 \%$ of the space, $10 \%$ of the water, $5 \%$ of the seeds, and $2 \%$ of the work of conventional
 gardens


## Square Foot Basics

1. Layout: arrange your garden in squares
2. Boxes: build boxes
3. Aisles: space boxes 3' apart
4. Soil: $1 / 3$ each blended compost, peat moss, and coarse vermiculite
5. Grid: place on top of box

## Square Foot Basics

6. Care: never walk on soil
7. Select: plant using $1,4,9$ or 16 plants per square foot
8. Plant: Plant on a pinch per hold, transplants in a depression
9. Water: by hand of sun-warmed water
10. Harvest: when you finish harvesting, add compost and replant with a new crop

## Lasagna Gardening



- Book by Patricia Lanza
- Organic, Layering method to create better soil
- Close planting and generous mulching


## Lasagna Basics

- Begin by covering any area with $1 / 4$ " wet newspaper
- Build layer on top with thin layer of peat moss \&water
- Spread organic materials, alternate layers of green and brown for 12-20"
- Cover with a layer of compost and plant.



## Straw Bale

o Is a version of hydroponic gardening

- Bale is growing medium, add water and high nitrogen fertilizer
- Nicely elevated
o Grow annuals and vegetables



## Straw Bale Basics

- Saturate bales with water for a few days
- Add high nitrogen fertilizer in 2 applications in a week
- Bale will heat up, temperature will start to drop in about 10 days
o Once bale is about soil temp, dress with potting soil on top
o Make a depression on top for plants or seeds
o Best for low growing plants


## Questions?

## Have you used one of the techniques?

## Succession Planting

- Planting after spots are vacated by spent plants
o Variation: "relaying" consisting of multiple plantings of one crop to provide continuous harvest
- Cool season crops are followed by warm season crops then by another cool season crop
o Starting seeds for transplanting is key in our short gardening season to be successful


## Interplanting

- Growing two or more types of vegetables in same space
- Needs careful planning on factors of growth pattern, nutrition and water needs, length of
 growing periods


## Interplanting Basics

o Plant long-season plants with shortseason: ex. carrots and radishes

- Smaller plants with larger plants: ex. Radishes at the base of beans
- Shade tolerant plants in shadow of taller plants: ex. Lettuce with the tomatoes
o Heavy feeders with less needy plants: ex. Cabbages with lettuce


## Containers

- Anything can be a container
- Drainage holes on side or bottom, if on bottom container should be elevated
o Don't underestimate the size of the mature plant, select dwarf varieties
o Use a lightweight, porous growing medium
o Fertilizer is a must during the growing season
o Water thoroughly, best in the morning


## Container Advantages


o Can be used almost anywhere
o Can move plants to take advantage of weather conditions
o Little maintenance
o Attractive

## Container Limitations

- Require more water
o Frequent watering leach nutrients so need to fertilize
o Vine crops difficult to grow
o Large containers are heavy



## Reuse

o Coffee cans, kiddie pools, washtubs

- Caution on reusing tires or anything that used petroleum due to heavy metals
o Clean with solution of 1 part bleach to 9 parts water



## Container Types

- Clay - porous, breakable, cool, dry quickly
o Stone - frost proof, heavy, cool
- Ceramic - expensive, breakable
- Metal - rust, hot
o Wood- recommend nontreated or add plastic liner
- Plastic - lightweight, inexpensive
- Planting pouches








## Container Tips

- For a natural look, plant odd numbers
- Choose different heights and varied foliage
- OK to crowd for instant impact
- Plant similar need plants together





# Questions/Comments <br> Any unique container ideas that you would like to share? 

## Vertical Techniques

o Trellis
o Walls
o Inverted

- Espalier
- Stacked



## Trellis

o Use for vining crops: pole beans, gourds, squash, cucumbers, peas, tomatoes
o Adds vertical interest in the garden



## Living Walls

o Strong wall and mounting system
o Firm backing

- Moisture barrier
o Planting layers
- Openings for plants
o Irrigation system





## Inverted/Hanging

- Need strong hanging structure
- Same soil mix, watering as in containers
- Some plants to try: cucumbers, tomatoes, peppers, eggplants, beans



## Espalier Techniques

- Practice of controlling plant growth so it grows relatively flat on a structure such as a wall, fence or trellis
- Is high maintenance, pick a slow growing plant such as apple, crabapple, juniper, viburnum


## Stacked Techniques



## Planning

- Soil
o Crop Rotation
- Spacing: wide-row, skip rows use beds
o Fertilizing
- Water
- Light



## Plants


o Dwarf, compact varieties

- Always be planting something
- Expand growing season
o Amend soil with each planting with compost


## Use Mini-Veggies


'On Deck' is first sweet corn developed for container gardening. The 45' plants produce 2 to 3 bicolored ears per stalk. Wait until the soil temperature is 55 degrees F. or above to plant; then sow 9 seeds per 24-inch container.

## Dwarf Varieties

o Mini-hostas

- Dwarf shrubs
- Slow growing varieties (often dwarfs are just slowgrowing plants)



## Top Economic Value

| Tomatoes | Onions |
| :--- | :--- |
| Leaf Lettuce | Turnips |
| Summer Squash | Edible pea pods |
| Beans (pole, bush) | Beets |
| Carrots | Cucumbers |
| Peppers | Broccoli |
| Head Lettuce | Swiss Chard |

## Common Problems

- Drainage
- Not enough light
- Too much nitrogen
- Too much/too little water
- Low/high temperature
- Air Circulation
o Insects

- Diseases


## Tips for Success

- Select compact, dwarf, and mini varieties
- Choose super productive plants, avoid ones that mature slowly
- Break up open areas so a small space seems larger
- Create a view with an arbor, pergola or small trees
- Use color-place bold colors in front - they will catch your attention, the rest beyond will recede helping it feel larger


## Books

o All New Square Foot Gardening, Mel Bartholomew

- Lasagna Gardening, Patricia Lanza
- Straw Bale Gardens, Joel Karsten
- The Complete Idiot's Guide to Small Space Gardens, Chris McLauglin


## UW-Extension Resources

https://learningstore.extension.wisc.edu/
o "Container Gardening", A3382
o "Specialized Gardening Techniques" A3384
o "Trellising, Staking, and Caging" A3933
o "Vegetable Cultivars and Planting Guide for Wisconsin Gardens" A1653

## Thank You

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