

Intensive Gardening

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Advantages, Space Saving Techniques, Planning, Plants, Common Problems, Tips for Success

Advantages of Small Spaces

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

Space Saving Techniques : Intense, Vertical, Using smaller furniture, dwarf plants

Developing Small Spaces

- Single theme, function, focal point
- Add perspective to make tiny areas appear larger
- Go vertical
- Bright colors in foreground
- Break it up

Intense Techniques: Raised Beds, Terraces, Square Foot, Lasagna, Straw Bale, Succession, Interplanting, Containers, small sizes

Raised Beds

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

Square Foot Gardening

- 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

- Layout: arrange your garden in squares
- Boxes: build boxes
- Aisles: space boxes 3' apart
- Soil: 1/3 each blended compost, peat moss, and coarse vermiculite
- Grid: place on top of box
- Care: never walk on soil
- Select: plant using 1,4,9 or 16 plants per square foot
- Plant: Plant on a pinch per hold, transplants in a depression
- Water: by hand of sun-warmed water

- Harvest: when you finish harvesting, add compost and replant with a new crop
- www.squarefootgardening.com

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 ¼" 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

- Is a version of hydroponic gardening
- Bale is growing medium, add water and high nitrogen fertilizer
- Nicely elevated
- 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
- Once bale is about soil temp, dress with potting soil on top
- Make a depression on top for plants or seeds
- Best for low growing plants

Succession Planting

- Planting after spots are vacated by spent plants
- 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
- 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

- Plant long-season plants with short-season: 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
- 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
- Don't underestimate the size of the mature plant, select dwarf varieties
- Use a lightweight, porous growing medium
- Fertilizer is a must during the growing season
- Water thoroughly, best in the morning

Container Limitations

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

Reuse

- Coffee cans, kiddie pools, washtubs
- Caution on reusing tires or anything that used petroleum due to heavy metals
- Clean with solution of 1 part bleach to 9 parts water

Container Types

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

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

Vertical Techniques : Trellis, Walls, Inverted, Espalier, Stacked

Trellis

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

Living Walls

- Strong wall and mounting system
- Firm backing
- Moisture barrier
- Planting layers

- Openings for plants
- 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

Planning

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

Plants

- Dwarf, compact varieties
- Always be planting something
- Expand growing season
- Amend soil with each planting with compost

Use Mini-Veggies: 'On Deck' is first sweet corn developed for container gardening. The 4-5' 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

- Mini-hostas
- Dwarf shrubs
- Slow growing varieties (often dwarfs are just slow-growing plants)

Top Economic Value: Tomatoes, Onions, Leaf & Head Lettuce, Turnips, Summer squash, edible pea pods, beans (pole, bush), Beets, Carrots, Cucumbers, Peppers, Broccoli, Swiss Chard

Common Problems

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

- *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 McLaughlin

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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