

Love & Carrots

Garden Design, Installation, & Coaching





Gardening in Challenging Spaces

Garden Design, Installation, & Coaching



Outline

- Love & Carrots
- Garden Set Up
 - Sun & Site
 Assessment
 - Soil
 - Water
- Sub-optimal conditions
 - Shady Gardens
 - Small Gardens



What We Do

Design, Installation, Maintenance, Coaching -- Since 2011

Design & Installation

o Over 1000 gardens

Full Service Garden Care

o ~150 Gardens

Garden Coaching

Curriculum-based
 bi-weekly Lessons



Local, Woman Owned & Run, Award Winning



Garden Set Up

Assess your space and optimize garden conditions.

- 1. Sunlight: Maximize Sunlight Hours
- 2. Soil & Nutrients: Optimize your garden set up
- 3. Water: Install Irrigation
- 4. Crops: Guidance & Creativity!
 - Shady Spaces
 - Small Spaces
 - Trouble Shooting



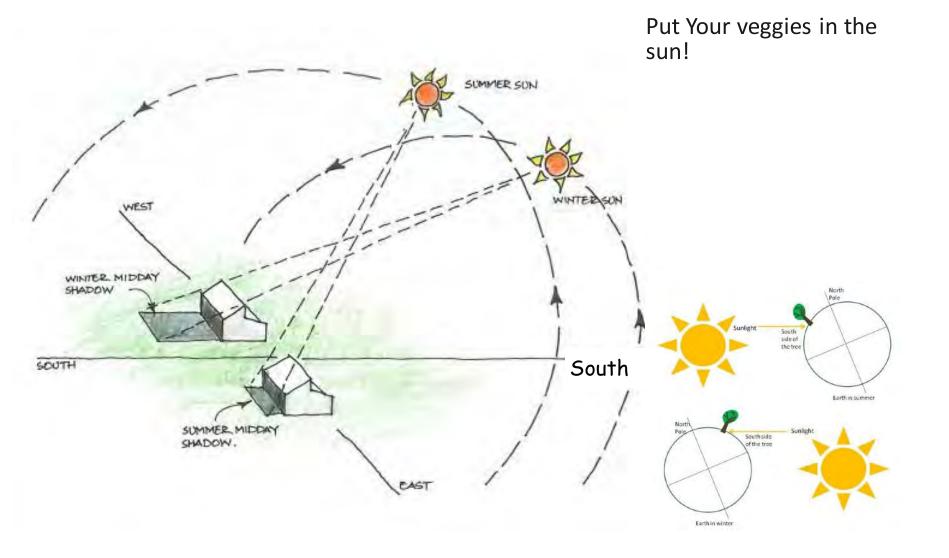
Garden Set Up

Assess your space and optimize garden conditions.

- 1. Sunlight: Maximize Sunlight Hours
- 2. Soil & Nutrients: Optimize your garden set up
- 3. Water: Install Irrigation
- 4. Crops: Guidance & Creativity!
 - Shady Spaces
 - Small Spaces
 - Trouble Shooting



Start with a Site Assessment



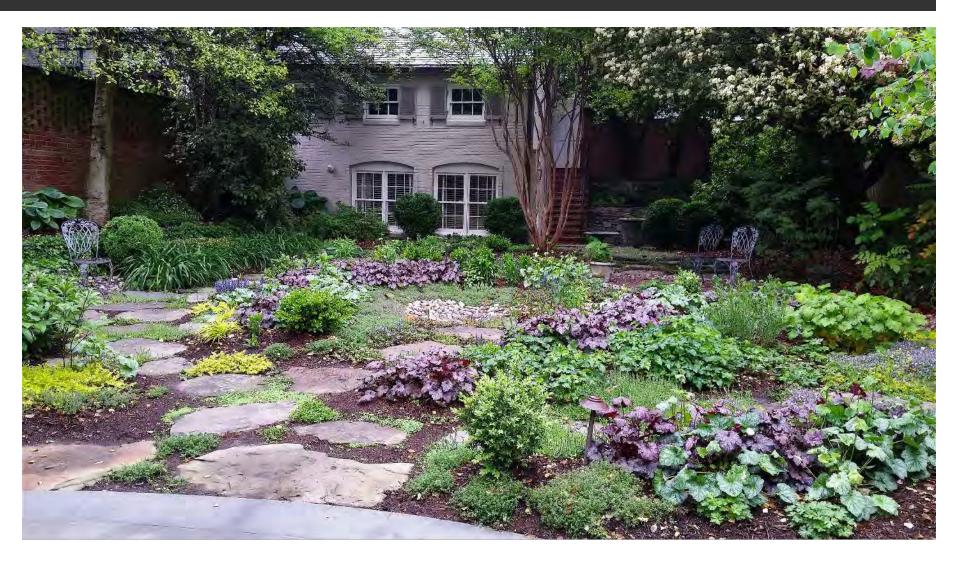
Start with a Site Assessment



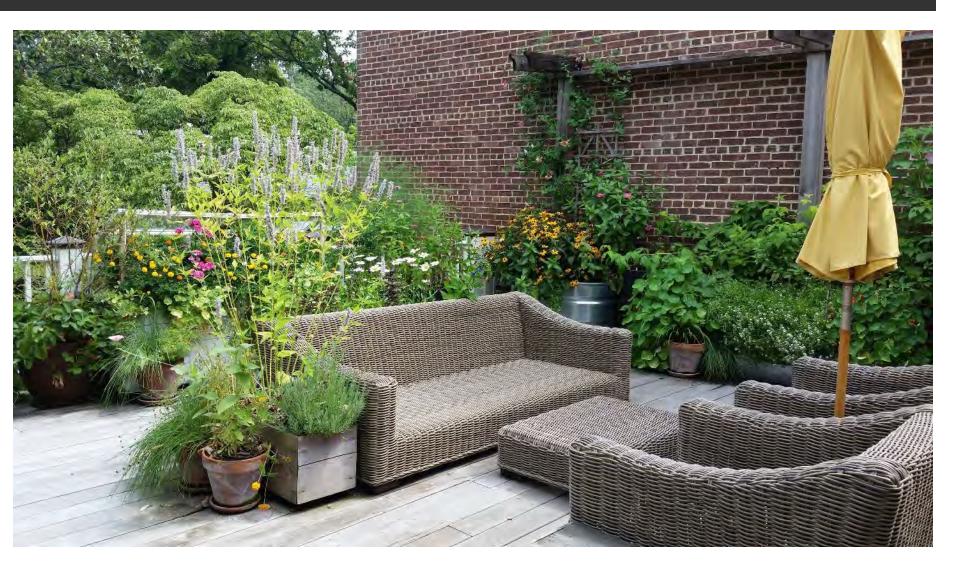
Start with a Site Assessment



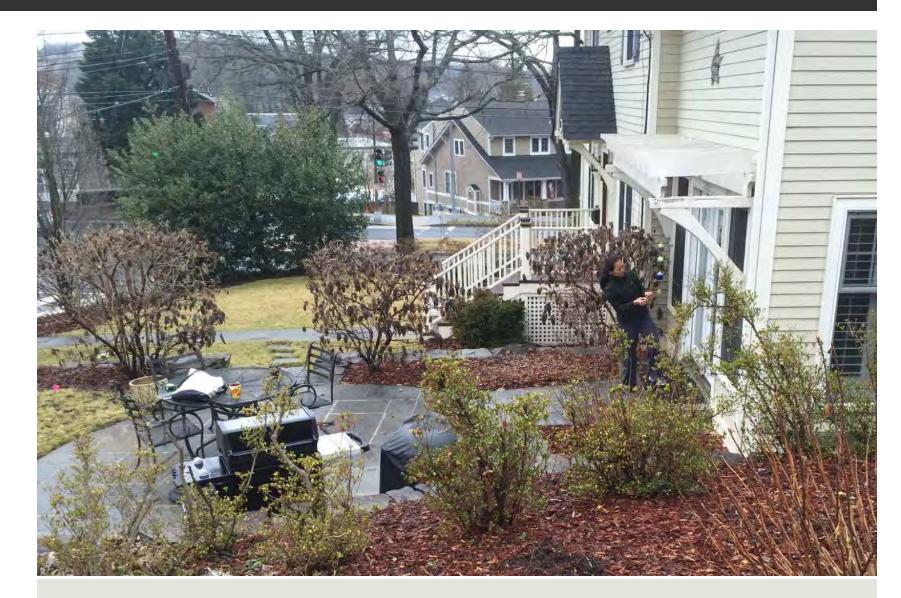
Solar Pathfinder

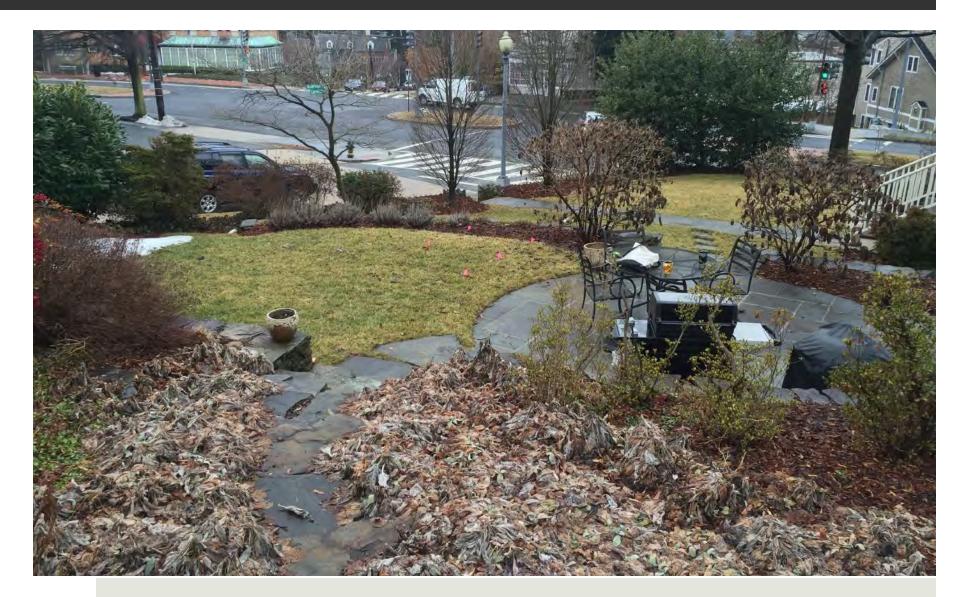


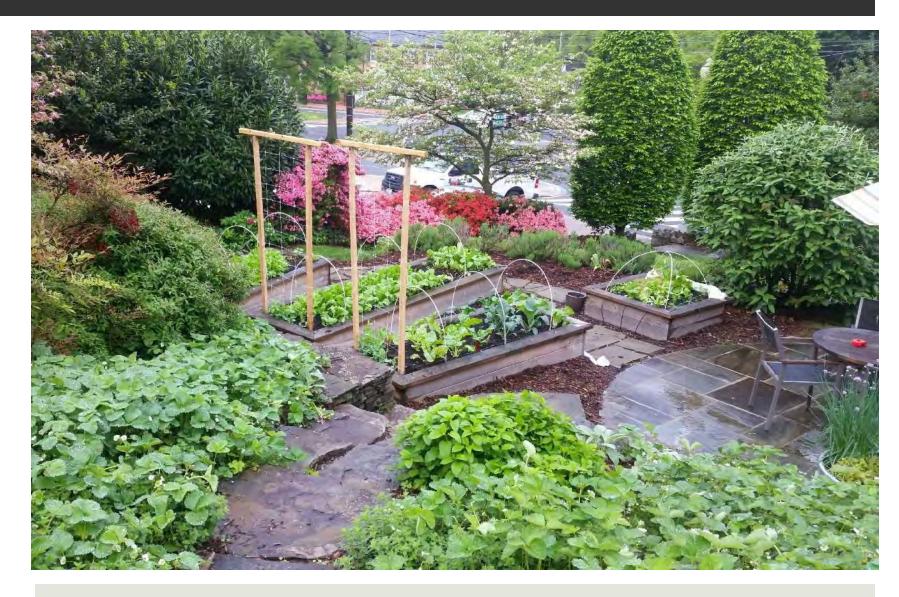












Garden Set Up

Assess your space and optimize garden conditions.

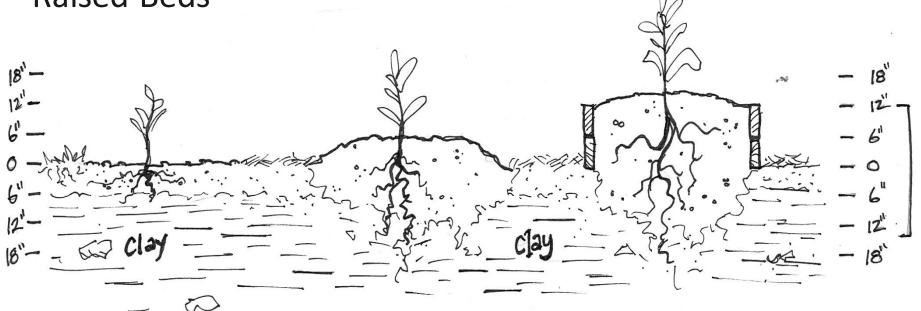
- 1. Sunlight: Maximize Sunlight Hours
- 2. Soil & Nutrients: Optimize your garden set up
- 3. Water: Install Irrigation
- 4. Crops: Guidance & Creativity!
 - Shady Spaces
 - Small Spaces
 - Trouble Shooting



Compost. Compost. Compost



Raised Beds



Improve Soil, Drainage, and Space Efficiency



Improve Soil, Drainage, and Space Efficiency





Improve Soil, Drainage, and Space Efficiency

Use BIG Pots: Avoid getting root bound







Use BIG Pots:

Avoid getting root bound



Garden Set Up

PLAN: Use what you have to optimize garden conditions

- 1. Sunlight: Maximize Sunlight Hours
- 2. Soil & Nutrients: Modify your garden Set Up
- 3. Water: Install Irrigation
- 4. Crops: Guidance&Creativity!
 - Shady Spaces
 - Small Spaces
 - Trouble Shooting

Set Up Irrigation

Irrigation is a great investment

- Timer + mainline and driplines for beds
 - Consistent watering
 - Easily adjustable
 - Flexibility to travel
 - More efficient, less water waste
 - Waters at the root line for best uptake by plants





Watering

- Water regularly
 - In spring, every 2-3 days
 - In summer, every day (possibly 2x per day if extra dry)
- Watering in the morning is best
 - Evening is 2nd best
- Water at the root line, not the foliage
- Underwatering can lead to stressed plants
 - Early fruiting
 - Disease
 - Bolting
 - Plant death



Garden Set Up

PLAN: Use what you have to optimize garden conditions

- 1. Sunlight: Maximize Sunlight Hours
- 2. Soil & Nutrients: Modify your garden Set Up
- 3. Water: Install Irrigation
- 4. Crops: Guidance & Creativity!
 - Shady Spaces
 - Small Spaces
 - Trouble Shooting

Tailor Your Crop List: Continual harvest is best

Vegetables that mature SLOWLY and have LOW yield per square foot are not ideal for small space growing:

Crops to Avoid:

- Carrots
- Beets
- Onions
- Potatoes
- Squash
- Okra
- Corn



Best crops for continual harvest:

- Tomatoes
 - o Cherry tomatoes
 - Look for "determinate" tomato varieties – they are shorter bush-types and don't sprawl as much
- Most herbs
 - Keep perennial herbs in pots (mint, sage, rosemary, oregano, etc)
 - o Basil, cilantro, parsley, dill
- Greens
 - o Swiss Chard
 - o Kale
 - o Collards
 - o Asian Greens
 - o Salad Mixes

- Peppers
 - o Shishito
 - o Lunchbox
 - o Lipstick
- Eggplant
 - o Asian varieties
 - o Patio baby
 - Cucumbers
 - o Diva or pickling varieties
- Beans
 - o Climbing or bush varieties



Progressive Thinning

- Thinning promotes strong growth
- Thin every 2 weeks so that plants are "touching, not crowding"
- Enjoy a microgreen harvest every 2 weeks!
- Crops to thin: salad greens, root crops



Thinning





Cut and Come-Again Greens

Get multiple harvests - cut just above the point of growth for salad greens

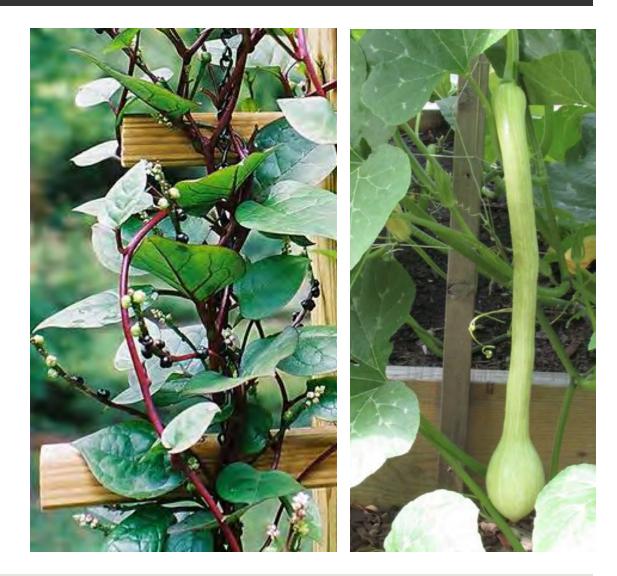


Grow vertically

- Smaller Tomatoes
 - o Determinate varieties
- Climbing Cucurbits
 - o Cucumbers
 - o Tromboncino squash

Pole Beans:

- o Scarlett Runner
- o Blue Lake
- Snap Peas
 - o Sugar Anne
- Malabar Spinach





Undersowing

- Pair light feeders with heavy feeders
- Layer quick growing crops under young slow-growing crops
 - Baby greens under kale
 - Radishes in front of head lettuce or cabbage
 - □ Cilantro under Peppers
- Seed new crops under fading old crops, before they are pulled
 - Cucumbers under Peas
 - Carrots under Tomatoes
 - Lettuce
 - under onions



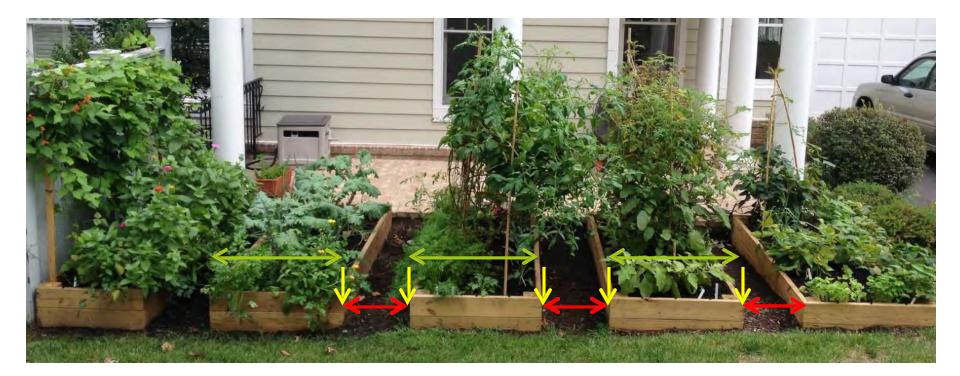


Small Spaces

Maximize Space Efficiency

3 or 4' wide Raised Beds

Narrow Paths: 12" to 18" wide





Urban Farm Design, Installation, & Coaching



Shady Spaces - Tailor your crop list

- >8 hours.....
- Any crops that fit!
- 6 to 8 hours...... Some fruit, herbs, greens
- 4 to 6 hours......
- some non, neros, greens
- Focus on certain herbs and greens

< 4 hours</p>

Get creative





5-6 Hours of Sun

- Cherry Tomatoes
 (only)
 - o Supersweet 100
 - o Sungolds
- Herbs
 - o Oregano
 - o Mint (in pots only!)
 - o Rosemary
 - o Thyme
 - o Chives
 - o Basil
 - o Cilantro
 - o Parsley

- Greens
 - o Swiss Chard
 - o Kale
 - o Collards
 - o Asian Greens

Others

- Scallions
- Tromboncino
 Squash
- Smaller-fruiting
 Peppers



4-5 Hours of Sun

- Herbs
 - o Chives
 - o Basil
 - o Cilantro
 - o Parsley

Greens

- o Salad/Asian Greens
- o Swiss Chard
- o Kale
- o Collards
- Others
 - Scallions

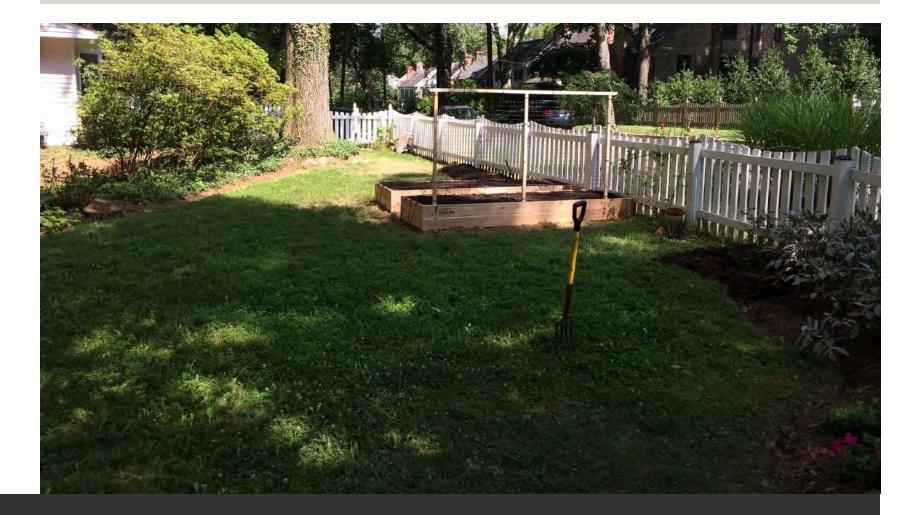
 - Pea shoots



3-4 Hours of Sun

- Mustard greens, Chard, Kale
- Baby lettuces
- Arugula
- Chives, Basil, Parsley
- Scallions
- Expect that your crops will grow slower and will be smaller
- Occasionally you can grow more plants in the same area to compensate for slower growth and smaller maturity size
- Try to maximize early spring growing time before trees leaf out





Season Extension

Garden Design, Installation, & Coaching



Season Extension

- Take advantage of deciduous trees dropping leaves for extra sun
- Use row covers to protect crops from frost
- Plant strategically to ensure late fall harvests





This location gets 8 hours of sunlight from October to late April

Season Extension

- Spring plantings
- Don't wait until May!
 - Peas
 - Arugula
 - 🛛 Spinach
 - Lettuces
 - Scallions
 - 🛛 Turnips, radish

- Fall plantings
 - Plan for fall/winter crops in late summer
 - 🛛 Kale
 - □ Spinach (overwinter)
 - Scallions, leeks
 - 🗌 Turnips, Radish
 - Some lettuces, winter-hardy greens (claytonia, mache)





Small Spaces

Smart succession planting makes the most of your growing space:

- Spring Carrots into Fall Beets, Spring Beets into Fall Carrots
 - Low growing plants, plant on the South side of the garden beds. Space requirements are also similar.
- Spring Greens into Tomatoes
 - Greens produce a quick crop, timed well with tomato planting time.
- Spring Brassicas into Summer Bush Beans, Fall Carrots
 - Seed beans and carrots any time in early Summer, as soon as your brassicas are finished
- Peas into Cucumbers
 - Both grow on a trellis. Peas will finish in the late spring while cucumbers are just starting in early summer.



Garden Design, Installation, & Coaching



Slugs

Effective Slug Control Methods

- Beer traps
- Slug pellets (iron phosphate)
- Dry it out avoid overwatering

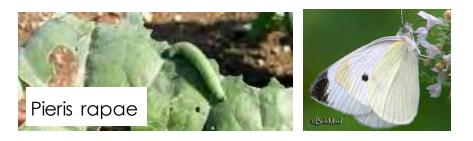
Less Effective Methods

- Copper Strips
- Coffee Grounds
- Cornstarch
- Eggshells or other "rough surfaces"

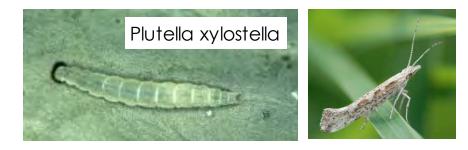


Slug damage: jagged holes on foliage

Cabbage Worms / Loopers / Moths IPM







- Agricultural Fabric (row covers)
- Hand-picking!
- Bacillus thuringiensis (Bt)
 - Toxic to larva when ingested only affects leaf-feeding insects
 - Safe for adult insects
 - Harmless to humans
 - Not to be overused

Bt Application: Timing and location are key

Aphids

- You may notice curling leaves
- Can be grey, black, white, orange
- Tend to attack newest growth
- Control by smushing off by hand, spraying with neem oil
- Spray off with hard jet of water
- Remove heavily infested plants



Recap

- □ For best success, take care when siting your garden consider the conditions year-round sunlight is the number one priority
- Optimize your soil by amending or installing raised beds
- Water consistently and at the soil line, install irrigation if possible
- For small spaces: maximize with crop planning high yield crops are best
- For shady spaces: choose crops that will tolerate low-light conditions, plant more, and prioritize smaller-fruiting varieties
- Identify North in your garden to avoid shading out crops within a bed, and plant strategically
- Extend your season by planting in early spring and planning for the fall

Happy Gardening!



