

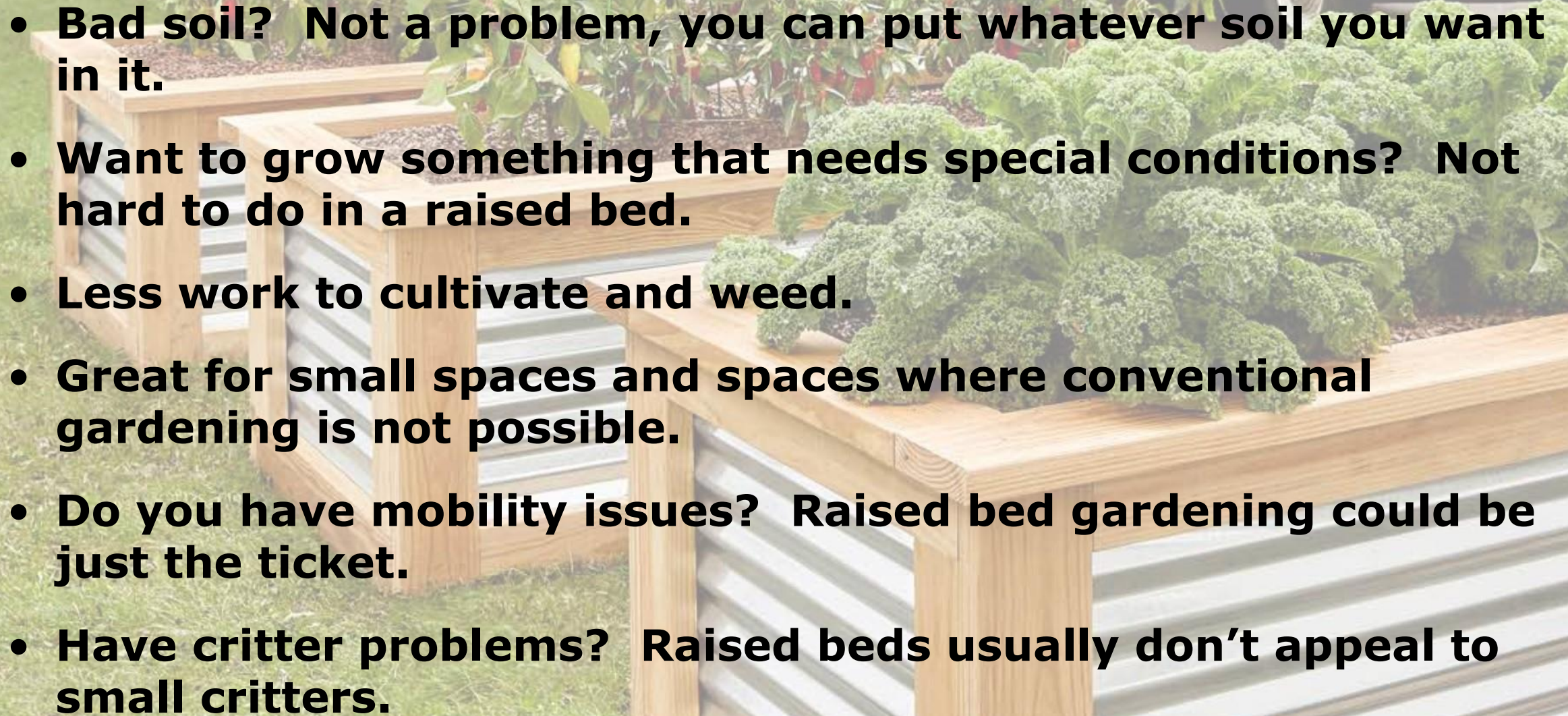


Raised-Bed Gardening in Cheyenne

Tweaks and Tricks

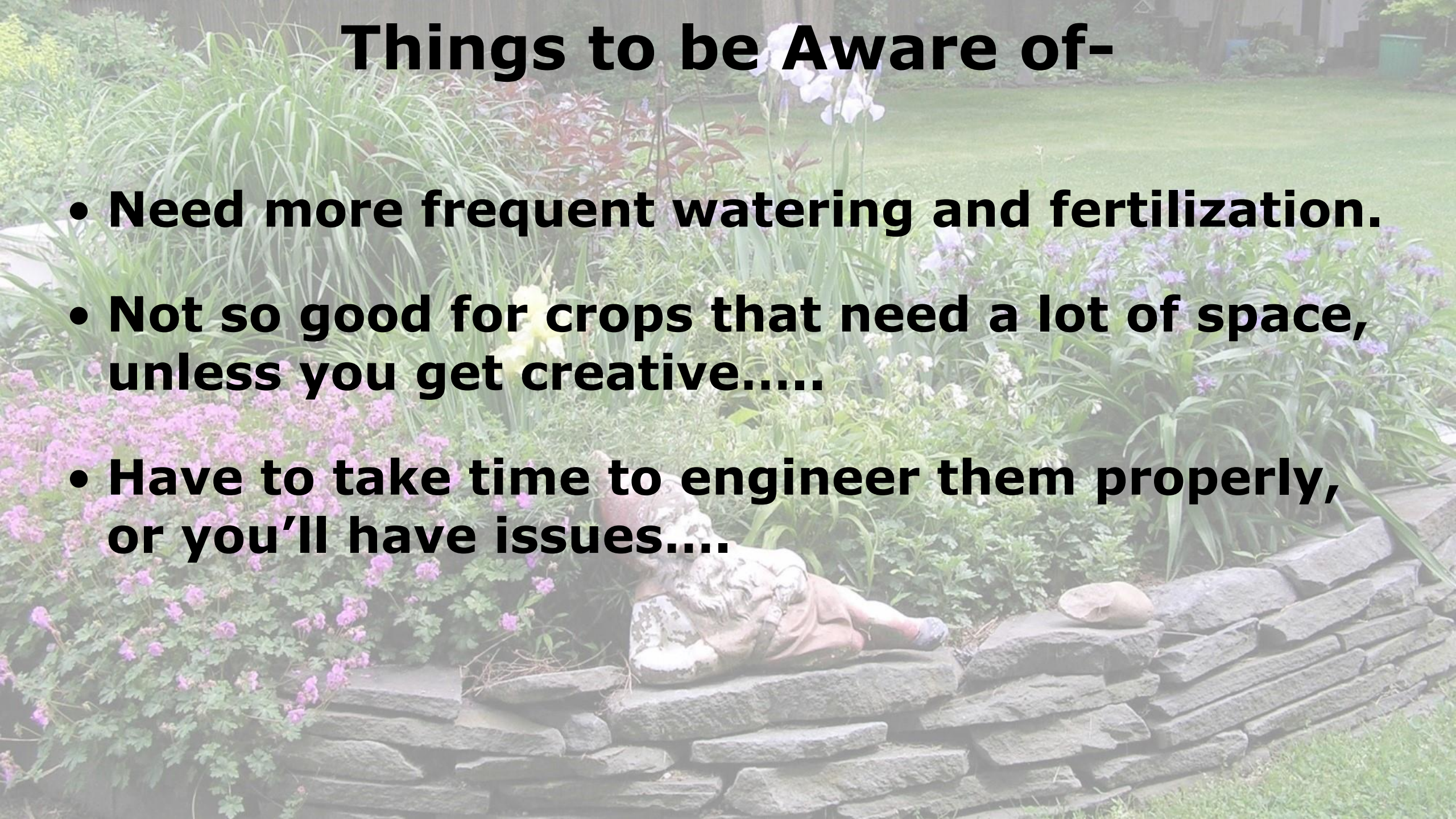
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Why Garden in Raised Beds?

- **Bad soil? Not a problem, you can put whatever soil you want in it.**
 - **Want to grow something that needs special conditions? Not hard to do in a raised bed.**
 - **Less work to cultivate and weed.**
 - **Great for small spaces and spaces where conventional gardening is not possible.**
 - **Do you have mobility issues? Raised bed gardening could be just the ticket.**
 - **Have critter problems? Raised beds usually don't appeal to small critters.**
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Things to be Aware of-

- **Need more frequent watering and fertilization.**
- **Not so good for crops that need a lot of space, unless you get creative.....**
- **Have to take time to engineer them properly, or you'll have issues....**



Types of Raised Beds

Lots of different things can be used for raised beds:

Wood

Tin

Hay bales

Stone

Logs

Bricks

Cinder Blocks

Large pots

'Found' Items (old holey stock tanks, giant tires, construction salvage, etc.)

Raised Bed Checklist

Good drainage.

Most veggies are sun-loving plants, choose an area in full sun (more than 6 hours direct sun a day).

Construct out of non-toxic materials (no railroad ties!)

Close to irrigation water source.

Good access for adding soil, compost, etc.

Good size/shape so that you can reach every part without having to step in.

Watering

Vegetables are NOT drought-tolerant. You will need to water on a regular basis for best results.

Better to water deeply and less frequently than an insufficient amount every day.

How do you know you've watered enough? Your garden soil should be soft enough that a screwdriver will easily push in all the way. How much that is will depend on your soil, do you mulch, how do you apply water, what's the weather, and what your crop is.

Mulch and drip irrigation will help you save big water bucks.

Organic versus Conventional

Organic – Use only natural products, nothing produced synthetically. Look for products with the 'OMRI' label – 'Organic Materials Review Institute', in compliance with USDA's Certified Organic labelling.


Conventional – OK to use artificially-created versions of naturally-occurring plant nutrients, pesticides, etc.

Soil and Soil Amendments

Since you're going through all the work to make raised beds, take advantage of the opportunity to up your garden soil game!

- If you make your own compost, use a 50/50 mix of 'regular' soil and compost to fill your beds.**
- The Cheyenne compost facility makes some pretty good compost if you don't want to make your own.**
- Be careful when purchasing compost...some places use dairy litter, which makes a high-salt compost...always ask for an analysis. (Don't buy any with an electrical conductivity greater than 2,000 mhos/cm – too salty!)**

Soil Amendment (cont.)

- A soil test is a good idea.
 - Western soils DO NOT need:
 - Lime
 - Wood ashes
 - Most Western soils are alkaline, and lime and wood ash are too!
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- A green tractor with a trailer full of wood chips or mulch is driving through a field, kicking up a large cloud of dust. The tractor is moving from right to left across the frame. The background shows a line of bare trees and a hazy sky.

Fertilizer

Intensive planting may require fertilizer for best results.

Much better to use a weak fertilizer on a frequent basis, than to try to fertilize just once during the season. Can always add more!

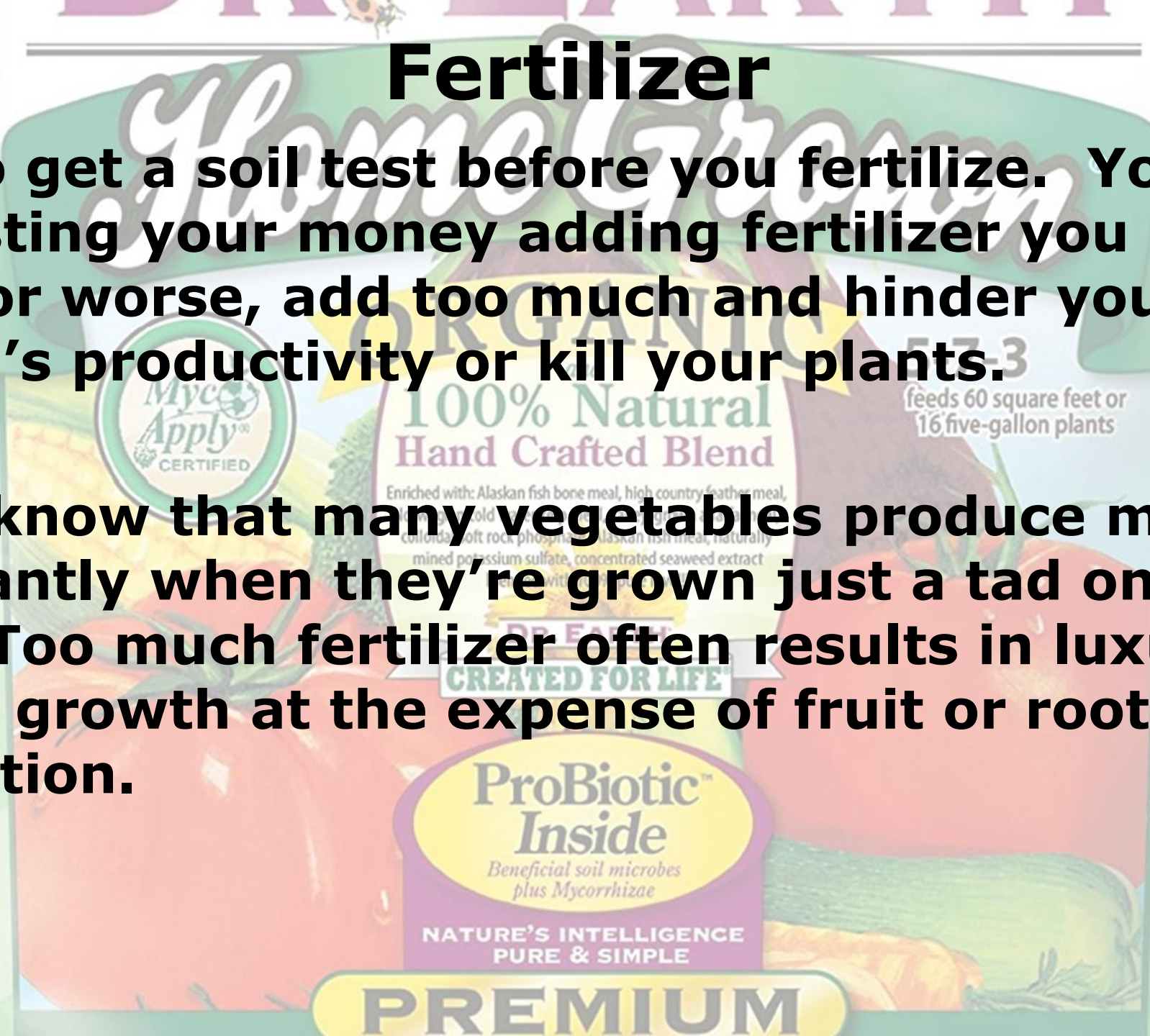
Did you know that if you apply more fertilizer than your plants can immediately use, the portion that they can't use just gets washed away.

Whatever fertilizer you use, DO NOT apply more than the ,says! You'll be wasting your money, and you could burn your plants, greatly reduce your harvest, or pollute groundwater! More IS NOT better!

Fertilizer

Better to get a soil test before you fertilize. You might be wasting your money adding fertilizer you don't need; or worse, add too much and hinder your garden's productivity or kill your plants.

Did you know that many vegetables produce most abundantly when they're grown just a tad on the lean side? Too much fertilizer often results in luxuriant foliage growth at the expense of fruit or root production.



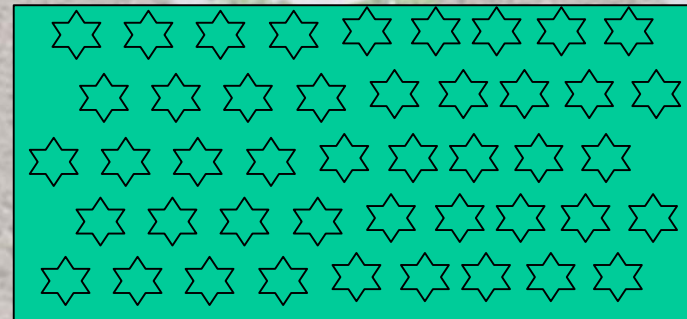
Choosing Plants

- **Pick short-season vegetables. (Generally less than 80 days to harvest).**
- **Choose varieties that handle cooler weather well.**
- **Choose varieties that handle adverse weather conditions well.**
- **Choose smaller plants over really big plants... transplant better, and are less expensive.**



Tips to Cram More Plants in

- **Include trellises on the north side of the beds to grow vining crops up instead of out.**
- **Use staggered block-planting techniques instead of rows...**



- **Pick smaller vegetable varieties.**
 - **Tomato varieties noted as "determinate".**
 - **"Bush" varieties of cucumbers, squash, and melons.**
 - **Plants listed as 'good in containers'.**

Planting Dos

- **Root crops, legumes, corn, and quick-maturing crops such as lettuce and Asian greens are best direct-seeded.**
- **Slower maturing crops such as tomatoes, peppers, melons, and eggplants are best grown from transplants.**
- **Potatoes, strawberries, and onions are best grown from 'sets' or 'seedling' plants.**

Planting Dos

- **Thin seed-grown crops if they come up too thick.**
- **Use black plastic or planter's paper for heat-loving plants...tomatoes, peppers, melons, eggplants, tomatillos.**
- **Mulching thickly with an organic material (leaves, dried grass clippings, pine needles, straw) will save you \$ on your water bill and reduce weeding.**

Planting Don'ts

- **Don't plant seeds too deep...rule of thumb is 2-3 times the seed width.**
- **For transplants, (except tomatoes!) don't plant too deep- plant at same depth as plant is growing in the pot.**
- **For tomatoes, don't plant too shallow- pluck off the bottom 2-4 sets of leaves, and plant so that only the top leaves are above the ground surface.**

Planting Don'ts

- **Don't plant too close...most seed packets and store-bought transplants have spacing recommendations...follow them!**
- **Don't forget to keep seed beds moist (but not soggy- plant roots need oxygen too!) until plants are well established.**
- **Don't forget to weed, every weed in your garden takes food and water away from your crops!**



Pest Control

**Into every garden, a few bugs must fly...
crawl... creep.**

**Just because you see a bug does NOT mean
you should get out the bug spray!**

Learn what it is before you kill it!

If it really is a 'bad' bug, is just one an issue?

Pest Control



If you truly do have a garden pest problem, use the LEAST toxic solution possible.

Use the pest solution that appropriate for the pest that you have.

Read ALL the instructions for the selected pesticide! If a concentrate, mix as directed, and apply at the right time, in the right manner, and at the right time of day.

Good Raised-Bed Gardening Links:

- - Beginner level raised bed construction.

<http://gatheredinthekitchen.com/diy-raised-garden-bed-beginner-level/>

- Raised bed gardening mistakes-

<https://journeywithjill.net/gardening/2018/02/13/7-common-mistakes-in-raised-bed-gardening/>

- Beginning raised bed gardening –

<https://www.gardeners.com/how-to/raised-bed-basics/8565.html>

- Beginning raised bed gardening

<https://www.almanac.com/content/raised-bed-vegetable-garden-layouts>

A photograph of a well-maintained garden. In the foreground, there's a wooden bench on the right and a raised garden bed on the left. The garden is filled with various plants, including purple flowers and green leafy vegetables. A wooden pergola structure is visible in the background, partially covered with vines. The overall scene is vibrant and green.

Questions?