Plant Smart Evergreen 2018 Edition





Margaret Rode

Evergreen CO • Grows at 7200ft & Buffalo Pk Community Garden • Makes a mean batch of pesto

Colorado Master Gardener Community Gardener Real Food Lover Teacher/Writer Garden Geek Frugal Gal

{ Introvert }

BUT NOT:

Botanist Horticulture Expert Good at Ornamentals **"Hopeless" is a good word...**

Why We Do This

LOVE

Food that tastes good

Food that hasn't lost most of its nutrition

Food that isn't silently making us sick

Being outdoors and avoiding gyms/exercise classes

Sharing/swapping what we grow with other folks (community)

HATE

Never knowing what's in/on the fruits & veggies we buy at the grocery store.

Paying a zillion dollars for organic brussels sprouts

Eating vegetables that taste like wet cardboard

So much plastic, so much pollution, so much waste

Why We Do This

A University of Texas study analyzed 43 fruits & vegetables from a 50-year period and reported surprising decreases in vitamins, minerals, and protein.

Using USDA data, they found that a serving of broccoli, for example, had 130mg of calcium in 1950. In 2000, the identical quantity typically showed only 48mg of calcium.

What's going on?

To produce more, earn more, and feed more people, the farming industry needs to grow bigger vegetables faster.

The very things that speed growth — selective breeding and synthetic fertilizers reduced absorption of nutrients from the soil into the produce.

Why We Do This

Transporting produce has a downside:

- Many days between picking & arrival at the distribution center
- Days or weeks of storage there
- 1-3 days on display at the grocery store
- Storage in your fridge before consumption

10-80% of certain nutrients, like vitamin C, can be lost in the process (according to multiple studies)

Long story short: More people are choosing to grow things themselves to be sure they're getting more of what they want, and less of what they don't.

Q&A: What About YOU?



WHY WOULD YOU GO TO THE TROUBLE OF "GROWING YOUR OWN"?

Pop Quiz: Which Would Be Better Here?

"Candle Fire" Okra Days to Maturity: 35



"Red Burgundy" Okra Days to Maturity: 60



What we're up against:

...Our Ridiculously Short Growing Season:

Our USDA Hardiness Zone: 3-4

Possible Last Frost Date: June 13 Possible First Frost Date: Sept 8

Typical Frost-free Season

:~87 days 😕

...Our Wildly Unpredictable Growing Conditions

Late and early cold & frosts Late and early snow Mid-summer hailstorms Drying or damaging winds Hungry wildlife all around us

...And if you have a sloping, half-shady gardening area under a pine tree with rocky, alkaline soil... oh, what to do?



Our situation's not better or worse.

It's just different.

It takes a different mindset and a different skill set that anyone can learn.

The Evergreen Gardener's Creed

1. Grow what you love, and what you have the right light, warmth, space, and time for.

2. Take the time to get your soil right for what you want to grow. It's the key to rapid, healthy growth and pest control.

3. Choose the right varieties for HERE. What grows in other places may not thrive here.

4. Start early and finish late. Our seasons are short but there are many ways to extend them.

Q&A: What's Your Biggest Concern?



WHAT'S KEPT YOU FROM TRYING TO GROW EDIBLE THINGS, OR TO GROW MORE OF THEM?

"Degree of Difficulty"

In theory, a person could grow almost anything here, if they had unlimited space, resources, money, time, and desire. In practice, we need to be selective.



"Degree of Difficulty"























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- A. What do I buy most in the produce section? What do I love to eat? What never goes to waste in the fridge?
- **B.** What do I buy a lot, but am worried about all the chemicals they use to grow it conventionally?
- C. Can I grow it here? {+How hard do I want to work?}
- **D.** What's my "short list" and do I have room for it all?
- **E.** What are the best varieties for my own garden's unique conditions and limitations?

CAN I FIND SPACE FOR WHAT I WANT?

Individual beds:

Asparagus, Berries, Garlic Perennial Onions Rhubarb

Containers or interplanted:

Basil, Italian Parsley, Cilantro

Window boxes/Horse troughs:

Lettuces, Spinach, Mache Herbs and Salad Ingredients

Containers:

Cherry Tomatoes, Dwarf Varieties

Rows:

Beans (pole/bush) Beets (golden and red) Cabbage (red) Carrots Cucumbers (pickling) Greens (collards, bok choy) Kale (curly and lacinato) Peas (sugar snap & snow pea) Peppers (hot and sweet) **Potatoes** Summer Squash Tomatoes (paste, 1-2 slicers)

From the "Dirty Dozen" (most heavily laden with pesticides)

- Strawberries
- Spinach
- Nectarines
- Apples
- Peaches
- Pears
- Cherries
- Celery (long season)
- Tomatoes
- Sweet bell peppers
- Potatoes
- Hot Peppers

From the "Clean 15" (less contaminated)

- Sweet Corn
- Cabbage
- Onions
- Sweet peas
- Asparagus
- Eggplant
- Honeydew Melon
- Kiwi
- Cantaloupe
- Cauliflower

THINGS ELK/DEER ARE LESS LIKELY TO OBLITERATE ENTIRELY You can try planting them unprotected or lightly protected. They can also be interplanted with ornamentals to keep HOAs happy.

> Garlic Onions Chives Leeks Rhubarb Horseradish Jerusalem Artichoke Smelly Herbs

2. Get Your Soil Right

Dig deeply and amend it with organic matter like compost or well-aged manure.

Deep/rich/loosened soil = better root growth = healthier, faster-growing plants

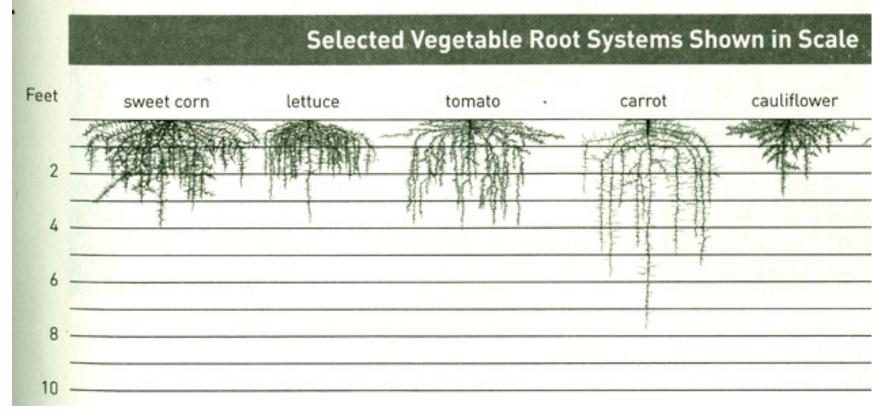
Consider what specific crops need



A digging fork (NOT a pitchfork) is your best friend for loosening and mixing soil without ruining your back.

2. Get Your Soil Right

Why is that important? Vegetable roots want to run DEEP.



2. Get Your Soil Right

Test your soil. It might be inappropriate for what you want to grow in a given spot. OR a few minor additions or changes might make the difference between 2 tomatoes and 100.



Instructions and a priority mail envelope are included. Obtain kits from the Extension office at the Jeffco Fairgrounds, Echter's, or Jared's.

2. Get Your Soil Right: Containers

- Keep some HOAs happy
- Better defend against elk and voles
- Follow the sun

- Control soil qualities to grow picky crops
- Keep your food crops closer to your kitchen



2. Get Your Soil Right: Containers



3. Choose the right plants

EASIEST

Radish Carrots Greens: Kale, Chard, Collards, Bok Choy, etc. Arugula Lettuce Spinach **Beans & Peas Beets** Turnips **Green Onions** Garlic **Most Herbs Strawberries**

SECOND EASIEST

Tomatoes (the right varieties) Potatoes Parsnip Summer Squash Cucumber Cabbage Broccoli SUPERGARDENER BADGE, HOT SEASON, AND/OR GOOD LUCK

Sweet Corn Sweet Potato Watermelon Large Winter Squash

BIT OF WORK, BUT WORTH IT

Peppers Eggplant Asparagus Melons (tiny!) Pumpkins (small or Northern Bush) Brussels Sprouts

3. Choose the best varieties for our area

We're always hoping for varieties that are:

- Short "days to maturity"
- Cool-weather tolerant if possible
- Appropriate for the space you have (shady, sunny, etc.)



Ding ding ding ding ding! Candle Fire Okra has a 35-day growth cycle rather than 60 days.

"Aurora" Season: 65 days Determinate (compact)



"Yellow Brandywine" Season: 90-100 days Indeterminate (Not compact)



HINT: HOW MUCH SPACE DO YOU HAVE? NOT MUCH? USE TALL CAGES OR CHOOSE DETERMINATE.

"Moskvich" Season: 55-60 days Indeterminate Very cold tolerant



"Black Sea Man" Season: 75-80 days Determinate Sensitive to Frost

"Yellow Brandywine" Season: 90-100 days Indeterminate Heat/drought tolerant



"King of the North"

"Heirloom. The best red bell pepper we know for northern gardeners where the seasons are cool and short..... Great sweet flavor. Stock from Waterville, Maine. 70 days from transplant."



"Miniature Chocolate Bell"

"Heirloom. Short, stocky plants covered with lovely 2" long miniature bell peppers with an excellent fresh flavor. Family heirloom from Ohio.....Great for salads. 95 days from transplant."



"Candy Mountain" Corn

"Open-Pollinated. Matures: 70 Days. Montana. A super-sweet offspring perfect for mountain gardeners. This is the only non-hybrid supersweet we know of...Tender golden kernels on impressive 8-10" ears."



"Golden Jubilee" Corn

"Hybrid. Matures: 90-105 days. The grandpa of hybrid corn. Golden Jubilee is ...excellent for late summer enjoyment. Stalks reach 6 feet tall, and the 8 1/2-9" inch ears have deep, tender yellow kernels."



"Kinko"

"Open pollinated, 55 days. Early, absolutely delicious, crisp and sweet—no matter how long they hold in the ground. 6" tapered roots grow in any soil. Divine."

"Interceptor F1"

"F1 Hybrid. 120-125 days. Long and slender Imperator-type carrot, will grow to 12" or more in proper growing conditions. Roots stay slender ... and will not crack. Good resistance to storage diseases. "





"Northern Pickling" Cuke

"Open pollinated. 48 Days. Crunchy goodness on vigorous vines that load up even at elevation. For pickling, salads or snacks, this one will deliver."



"Mini-Munch" Cuke

"F1 Hybrid. 75-80 days. Crisp and delicious. Fruits are best harvested when 3 inches long, just right for a tasty single serving. Excellent candidate for containers."



Tree Fruit: Can I Grow Any Here?

Honey Crisp Apple

Hardy to -30°F. Max elevation: 8500 Fruit stores well, 5 mos or more. Great sub-acid flavor and crispness. Winter hardy & vigorous, introduced by the University of Minnesota in 1990. Needs a pollinating partner.



Redhaven Peach

Hardy to -20°F. Max elevation: 6000 Heavy-bearing, cold hardy, juicy, sweet and very tasty, just right for fresh eating, canning or freezing. This freestone peach ripens early in the season. Self-pollinating.



Favorite Additions to Ornamental Beds

Candle Fire Okra



Colorful Lettuce Pairings





Bright Lights Chard

Garlic Chives

Dazzling Blue Kale







Q&A: Teach Me Something



...ABOUT ORNAMENTALS. WHAT SHOULD I PLANT AMONGST THE VEGGIES?

4. Start Early and Finish Late

Start with seedlings (either your own or purchased) and protect them in various ways in order to get them out earlier. OR...

Start seeds with protection in the garden.

At the end of the season, use the same protection methods to keep them bearing longer, rather than getting killed by the first frost...remember after that, we usually have several additional weeks of growing time!



Start your seeds under lights. Grow lights are widely available these days in Colorado...

There are many ways to protect your plants from late/early frosts and freezes, hail damage, and wind.



This bed has been fitted with short "hoops" made from black plastic irrigation tubing, and covered with mesh against hail. You can also put plastic on early/late.

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Rubbermaid containers...mini-greenhouses!

There are many ways to protect your plants from late/early frosts and freezes, hail damage, and wind.



24" rebar ½"
+
Black PVC sprinkler
host cut into lengths
+
6 mil plastic from the
paint department

Total cost ~ \$3.00/bed

There are many ways to protect your plants from late/early frosts and freezes, hail damage, and wind.



24" rebar ½" stakes
+
10' Electrical conduit
+
6 mil plastic from the paint department



Milk jugs with the bottoms cut out can make the perfect minipersonal greenhouses for each of your seedlings. Surround with mulch, and cover with hoops, and you can usually start at least 2 to 3 weeks earlier outdoors.

4. Start Early and Finish Late (Thermal Mass)



Beds made of stone warm up far faster every spring, and retain more heat in the fall, extending your season. And they're beautiful.

Milk jugs filled with water are warmed by the sun all day, and release that warmth all night. Similar benefits can come from bricks painted black, dark stones, and black PVC pipe filled with sand.

Evergreen Community Gardens at Buchanan and Buffalo Park

Come visit! Yes, INSIDE the fence!

All plots are filled for 2018, but both are maintaining a waiting list.

Contact:

Email: <u>garden@evergreeneasy.org</u> Facebook: Evergreen Community Garden and Buffalo Park Community Garden

Some Terrific Seed Sources:

http://www.pennandcordsgarden.com/miss-penns-mountainseeds.html http://seedstrust.com http://groworganic.com http://highmowingseeds.com http://botanicalinterests.com http://territorialseed.com http://sustainableseedco.com http://rareseeds.com http://potatogarden.com (Colorado organic seed potatoes)

http://thegarlicstore.com (Organic seed garlic)

Some Terrific Seedling Sources:

Front Range Organic Gardeners Seedling Sale

Saturday May 19, 2018 • 9-1pm • St. John's School & Church/Denver

Denver Botanic Gardens Seedling Sale

Friday-Saturday May 11-12, 2018 (free Gardens admission too)

Penn Parmenter, mountain garden goddess

Friday-Sunday April 27-29 classes at Denver Botanic Gardens, will bring seedlings and she teaches GREAT workshops

Farmers' markets

Local (higher-altitude) nurseries

Natural Grocers (tomatoes/tomatillos/peppers)

Your neighbors



You can do this.



Thanks.