Gardening on the Fringe... of Laramie

March 2012





Moved to their Little-House-onthe-Wind-Blown-Prairie in 2003



Challenges we face when gardening on the fringe (or farther)!

Wind!

- Formidable foe!
- Persistently <u>brisk</u> from the West

Wind's effects on plants:



- Stresses plants by
 - Creating "wind chill"
 - Drying effect
 - Can pick up debris and abrade plants with it
 - Blows away topsoil

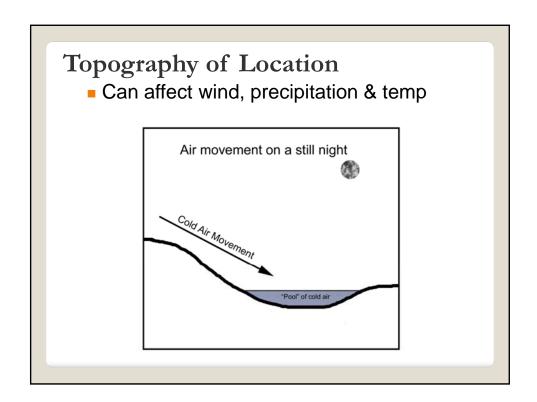
Challenges...

BEING EXPOSED!





- No heat-island effect
- Low temperatures lower than in-town predictions (shorter growing season)
- Accentuated effects of topography





Challenges...

Soil!



- The less-than-desirable kind
 - Alkaline
 - Low in humus (organic matter)
 - From hard-pan caliche-type clay to gravelly alluvial plains

Challenges...

Aridity!

Low precipitation

- + High winds
- + Variable topography and soil type
- = more rapid evaporation of soil moisture

How can we meet these challenges?

Meeting challenges...

Move to a place with a perfect climate.

Ha!



Meeting challenges...

- Learn the characteristics of YOUR site
- Determine which are most challenging
- Prioritize what you most value
- Tackle things in stages
- Keep your budget in mind



Meeting challenges...





- We attempt to slow it down
- Discover and create microclimates
 - With buildings
 - ■With walls & fences
 - ■With plants -
 - ■There is a "science" of windbreaks
 - study up!

Meeting challenges...

Critters!



- "Live and let live" can work with ornamentals
- Doesn't work with vegetables fencing is a must!
- Most can be fenced out
- Fence your priorities



Meeting challenges...

Soil! (for veggies)



- Most soils improved by adding humus
- Know your soil type
 - Get it tested or consult knowledgeable locals for improvement tips
- Construct raised beds & fill with "topsoil" and humus.

Challenges...

Aridity!

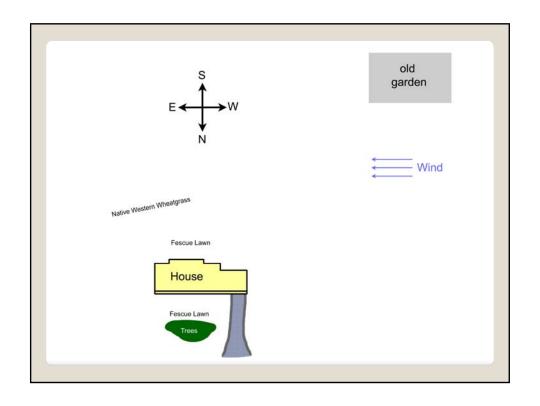
- Temper wind
- Improve soil
- Wise use of water
- Use mulch



How did they tackle their challenges?

In Stages!





On the veggie front...

- Built greenhouse (tomatoes a must!)
- Used old garden while...
- Collecting humus-building materials:
 - Aged manure w/ bedding
 - Leaves from town
- Grass clippings
- Peat moss (bales)
- Mushroom compost

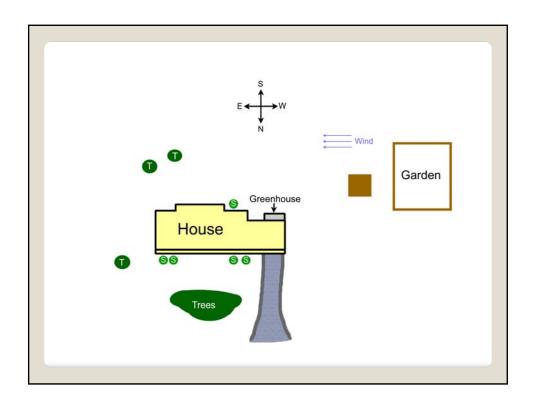


In stages...

Began new garden...

- Relocated water line (aridity)
- Built "stockade" fence (40 x 48')
 - -6-foot-tall fence (wind & critters)
 - Chicken wire fencing to exclude tunneling critters
 - Cedar planks





Began new garden...

- Built raised beds (soil)
 - Prepared soil dug a bit, tilled a bit
 - Cheap 12" x 8' slab lumber (allowed to cure)
 - Beds 4' wide x 32' long
 - Landscaping posts to anchor
 - Reduced labor by fitting size of beds to size of materials



Began new garden...

- Prepared material for raised beds (soil)
 - Soil from old garden
 - Aged manure plus bedding
 - Leaves
 - Grass clippings
 - Pine needles (for potato patch)



Began new garden...

- Started planting
 - One permanent bed
 - Three rotating beds (change crops each year to minimize disease issues)
 - CAUTION! False Spring! (Soil temp is important)
 - Water

In stages... Began new garden... Crops grown (handout) **Permanent** 3 Rotating Bed: **Beds:** Asparagus Carrots Cabbage Peas Green beans Broccoli Strawberry Potatoes **Beets** Scarlet runner Radishes Black Lettuce Leeks Zuchinni currant Lillies Spinach Onions Dill **Tomatoes** (leftover) Chard Garlic Sweet corn Parsley (for fun)





Other keys to successful veggies:

- Choose varieties adapted to our climate
- Use row covers to extend the season
- Watch the weather
- Watch for weeds & pests (row cover)
- Keep improving your soil by adding composted organic matter each year







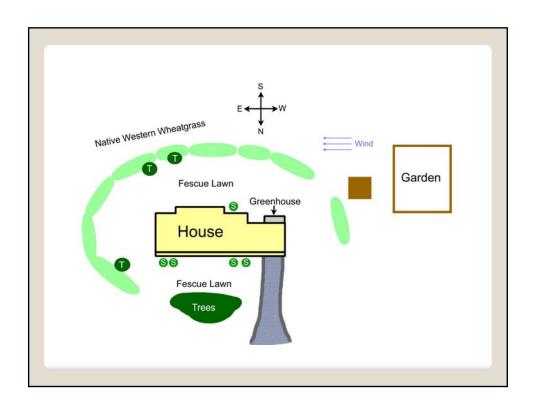
In stages...

Greenhouse...

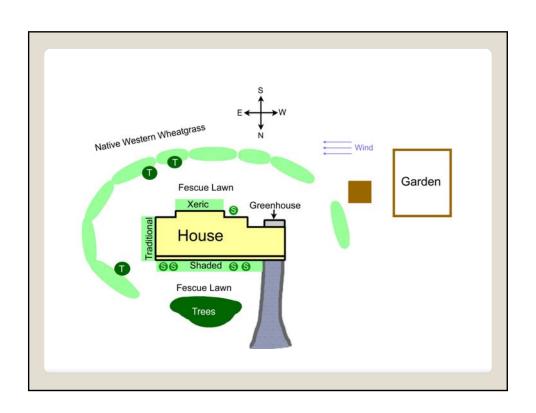
- ■Tomatoes & cucumbers
- Used jugs of water to retain solar heat
- •Used space heater for emergencies (a couple times in Oct), timer, 2 am – dawn
- Cover plants in spring if needed bubble wrap or 2 layers Remay



In stages... On the ornamental front... -Started creating beds -Chose plants for the periphery (unprotected) that don't need luxury accommodations



In stages... On the ornamental front... -Utilized microclimates created by the house, garden fence and shed (N, E, S, W) -Improved soil on N and E side

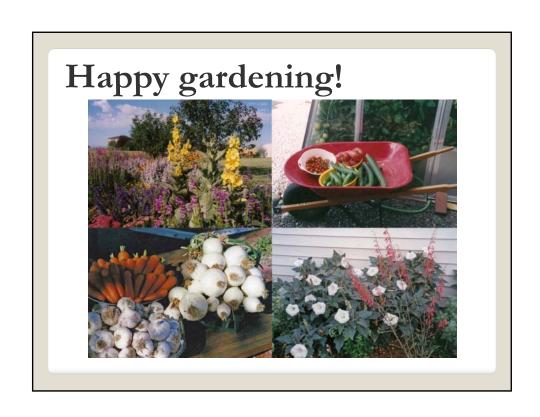




In Summary... On the ornamental front...

- Utilize microclimates
- Choose plants for the conditions
- Shelter begets shelter





Some Gardening on the Fringe talk notes

Fencing: alternative fencing options include snowfencing with wire metal posts, hogwire, strawbales, chickenwire with metal posts (the usefulness of each of these depends on what you are trying to fence out – wind, type of critter, etc.)

Raised beds can be made out of: strawbales (they will eventually decay), wood boards, logs, cinder blocks, sandstone or limestone blocks or "wafers" dry-laid or mortared.

"Instant" grow bag vegetable gardens can be used while you are working at improving your soil.

Started many of my plants from seeds (Thompson & Morgan, Wildseed Farms). Plants from Bluestone Perennials (3 packs of starter sized plants), local & Ft. Collins nurseries, and Laramie Garden Club Plant Sale.

Resources:

- Books (check the Albany County Public Library gardening section)
 - o Gardening in the Mountain West, Vol. 1 Barbara Hyde
 - o The Progress of a Gardener, Vol. 2 Barbara Hyde
 - o Rocky Mountain Vegetable Gardening Robert Gough/ Cheryl Moore Gough
 - o Square Foot Gardening Mel Bartholomew
 - o Lasagna Gardening Patricia Lanza
 - o Books by Eliot Coleman (particularly good for season extenders)
 - o Zone 4 Magazine
- Back issues of Organic Gardening and Mother Earth News magazines (at the ACPL)
- Seed catalogs (e.g., Johnny's Selected Seeds; http://www.johnnyseeds.com/) both in print and online have a lot of information about growing edibles.
- Vegetables for Beginning Gardeners of Laramie Laramie Local Foods brochure
- Barnyards and Backyards (http://barnyardstobackyards.com/; see the "Gardening" topic on the Resources page)

Footnote - This presentation was not intended to be in an official instruction booklet. My methods have been haphazard at best. Please consult knowledgeable professionals and your neighbors. Read a lot, "borrow" ideas and adapt them to your needs. My intent in this presentation was to illustrate that gardening can be modestly successful in exposed locations and to encourage you to formulate a few ideas of **your** own to fit **your** property's challenges and your budget and energy level.

- Patience and determination are required there are few guarantees don't give up!
- Rome wasn't built in a day it took 7 days. Your challenges are likely to take up to 7 seasons to resolve.
- Remember the gardener's motto: "Try again next year!" ©

Gardening on the Fringe's usual <u>approximate</u> veggie planting dates

In some parts of the country you can use season indicators such as lawn green up, leafout, lilac bloom, and bulb and perennial growth to clue you in as to when it's time to plant your vegetables. These work pretty well in areas such as the Midwest. **Here our temperatures are more volatile so you have to use care with these indicators.** The vegetable stockade has its own microclimate. Soil temperature is important in the planting and growth of a variety of vegetables. Workability of the soil is an important indicator that Jan uses, combined with her level of impatience. You'll be more successful if you don't succumb to early-season optimism by planting during a "false spring" warm spell. Wait a little longer!

April 1st week – Garlic outside and tomatoes in the house under lights

April 21st – 30th – Peas, onion sets, radishes, spinach, lettuce, sweet peas (ornamental)

May 1st week – Peas (shelling, snap and snow), lettuce, radishes

May 7 -15th – Chard, carrots, beets

May 15th – Pre-sprout a few corn and pole bean seeds in peat pots in the house

May 15 – 21st - Beets, cabbage, broccoli (direct seeded), more peas

June 1^{st} – Move tomato plants from the house to the greenhouse

June $5 - 10^{th}$ – Set out cabbage and broccoli plants (protect by covering with milk jugs with the bottoms cut out), seed pre-sprouted corn (protect with row covers) and beans (protect well)

June 10 – tomato plants (leftover ones from green house) protected with walls-o-water (if don't use these protective devices then wait until June 15-21)

June 15 – Seed green beans (wait a week if you don't use protection)

June 15-21 – Plant out pre-sprouted corn in peat pots (started in the house), protect them

Ornamentals -

Plants that can make it with minimal assistance in the perimeter beds:

Perennials:

Achillea (Yarrow)

Campanula 'Blue Clips'

Corrastrum

Columbine

Coreopsis

Daisy Fleabane (Erigeron)

Dianthus (Sweet William & Cheddar Pinks)

Echinacea (Purple Coneflower)

Gaillardia

Gloriosa Daisies

Golden Rod

Heliopsis (rough sunflower)

Hollyhocks

Iceland Poppy

Lambs Ears

Penstemon - various

Rudbekia 'Golden Glow'

Russian Sage

Salvia plumosa

Scabiosa

Sedum – Autumn Joy

Verbascum – Caution, self-seeds a lot!!

Self-seeding Annuals:

Poppies, California & Shirley

Coreopsis (Tickseed)

Mexican hat

Bulbs:

Daffodils

Tulips

Alliums

Lilies

Northside of house (shaded, more moist improved soil):

Perennials:

Alchemilla (Lady's Mantle)

Bleeding Heart

Campanula (Canterbury Bell, peachleaf Bellflower)

Columbine

Delphinium

Foxglove – yellow perennial

Iceland poppies Lamium - 'Orchid Frost' and 'Herman's Pride' Ligularia (The Rocket) Monkshood Primula **Shasta Daisies** Vines – Clematis

Annuals:

Alyssum

Pansies/violets

Bulbs:

Lilies

Southside (xeric):

Perennials:

Artemisia 'Powis Castle'

Datura

Dianthus (Cheddar Pinks)

Hardy Geranium (Lancastnense)

Penstemons

Phlox subulata (Creeping phlox)

Pussytoes Sedums

Bulbs:

Snow crocus Species tulips Dwarf narcissus

Anemone (Windflower)

East-side of house (sheltered, more moist improved soil, afternoon shade):

Perennials:

Clematis vines

Coreopsis 'Moonbeam'

Coralbells Phlox 'David'

Sweet peas

Roses – Rugosa, hardy

Annuals:

Alyssum

Bulbs:

Lilies