Gardening on the Fringe…

of Laramie

March 2012

Moved to their Little-House-on-the-Wind-Blown-Prairie in 2003
Challenges we face when gardening on the fringe (or farther)!

- **Wind!**
  - Formidable foe!
  - Persistently brisk 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
Topography of Location

- Can affect wind, precipitation & temp

Challenges…

Critters!

- Animals, both wild and domestic
  - antelope, deer
  - rabbits, gophers
  - livestock
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…

**Wind!**

- 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!
In stages...

The set up

- Minimal landscaping
- Poor garden, far away, unprotected
- Water inconvenient
- Few existing windbreaks
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
In stages…

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
In stages…

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)
In stages…

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

Began new garden…

- Crops grown (handout)

<table>
<thead>
<tr>
<th>Permanent Bed:</th>
<th>3 Rotating Beds:</th>
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</thead>
<tbody>
<tr>
<td>Asparagus</td>
<td>Carrots</td>
<td>Cabbage</td>
<td>Peas</td>
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<td>Green beans</td>
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<td>Strawberry</td>
<td>Potatoes</td>
<td>Broccoli</td>
<td>Beets</td>
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<td>Scarlet runner</td>
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<td>Black currant</td>
<td>Lettuce</td>
<td>Leeks</td>
<td>Radishes</td>
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<td>Zucchini</td>
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<td>Lillies</td>
<td>Spinach</td>
<td>Onions</td>
<td>Dill</td>
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<td></td>
<td>Tomatoes (leftover)</td>
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<td></td>
<td>Chard</td>
<td>Garlic</td>
<td>Parsley</td>
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<td></td>
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<td>Sweet corn (for fun)</td>
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</tbody>
</table>
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
Happy gardening!
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.


Resources:

- Books (check the Albany County Public Library gardening section)
  - *Gardening in the Mountain West, Vol. 1* – Barbara Hyde
  - *The Progress of a Gardener, Vol. 2* – Barbara Hyde
  - *Rocky Mountain Vegetable Gardening* – Robert Gough/ Cheryl Moore Gough
  - *Square Foot Gardening* - Mel Bartholomew
  - *Lasagna Gardening* - Patricia Lanza
  - Books by Eliot Coleman (particularly good for season extenders)
  - 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 **approximate** veggie planting dates

In some parts of the country you can use season indicators such as lawn green up, leaf-out, 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 1st – Move tomato plants from the house to the greenhouse

June 5 – 10th – 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